# Prisma P

**Catalogue 2019**
Cubicles up to 4000 A

se.com

Life Is On Schneider Electric

# Content Prisma P


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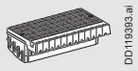


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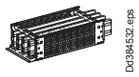


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A

# Prisma overview

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# Prisma G Pack 160 enclosures Pack 250 enclosures up to 630 A IP30, IP40, IP41, IP43, IP55

160 A

250 A

630 A

- Schools
- Small shops
- Hotels, etc.

## Pack

- Small companies
- Buildings
- Offices
- Laboratories
- Healthcare centres
- Hotels
- Supermarkets
- Malls, etc.

## Prisma G

# Prisma P cubicles up to 4000 A IP30, IP31, IP55

The optimised, tested and IEC compliant solution, for low voltage electrical distribution and control switchboards.

4000 A

- Hospitals
- Data centres
- Logistics centres
- Shopping centres
- Offices buildings
- Medium industrial solutions

## Prisma P

## Energy management has never been simpler

Smart Panels connect you to energy savings in three steps.

### 1. Measure

Embedded and stand-alone metering & control capabilities

- Embedded and stand-alone metering
- Control capabilities

### 2. Connect

- Integrated communication interfaces
- Ready to connect to energy management platforms

### 3. Act

- Data-driven energy efficiency actions
- Real time monitoring and control
- Access to energy and site information through on-line services

Tested, Validated, Documented Smart Panels architecture

Smart Panels have been certified via Schneider Electric's "TVDA" quality process

Tested in performance labs by experts, in the most common configuration

Validated full functional compatibility of devices

Documented, with user guide, predefined CAD panel designs & wiring diagrams

# The switchboard, central to the electrical installation

Both the point of arrival of energy and a device for distribution to the site applications, the LV switchboard is the intelligence of the system, central to the electrical installation.

It plays an essential role in the availability of electric power, while meeting the needs of personal and property safety. Its definition, design and installation are based on precise rules; there is no place for improvisation. The IEC 61439 standard aims to better define "low-voltage switchgear and controlgear assemblies", ensuring that the specified performances are reached. It specifies in particular:

- the responsibilities of each player, distinguishing those of the original equipment manufacturer; the organization that performed the original design and associated verification of an assembly in accordance with the standard, and of the assembly manufacturer - the organization taking responsibility for the finished assembly;
- the design and verification rules, constituting a benchmark for product certification.

All the component parts of the electrical switchboard are concerned by the IEC 61439 standard. Equipment produced in accordance with the requirements of this switchboard standard ensures the safety and reliability of the installation.

A switchboard must comply with the equirements of standard IEC 61439-1 and 2 to guarantee the safety and reliability of the installation. Managers of installations, fully aware of the professional and legal liabilities weighing on their company and on themselves, demand a high level of safety for the electrical installation.

What is more, the serious economic consequences of prolonged halts in production mean that the electrical switchboard must provide excellent continuity of service, whatever the operating conditions.

## The Schneider Electric solution

- Specify switchboards that comply with standard IEC 61439-1 and 2.
- Guarantee a level of safety that has been 100 % tested, from the day the switchboard is installed and throughout its service life.
- Ensure a lasting investment through easy upgrading of the installation in compliance with the standard.
- Guarantee that the switchboard complies with the technical specifications.

## Prisma tested switchboards

### The conformity of the switchboard has been tested and proven.

A Prisma switchboard is:

- made up of Schneider Electric low-voltage devices and components that all comply with the applicable standards;
- based on configurations in our catalogue;
- made up of Prisma and Linergy mechanical and electrical components that have been subjected to the verification of original equipment manufacturer;
- mounted and wired by a panelbuilder in compliance with professional standards;
- subjected to the individual verification.

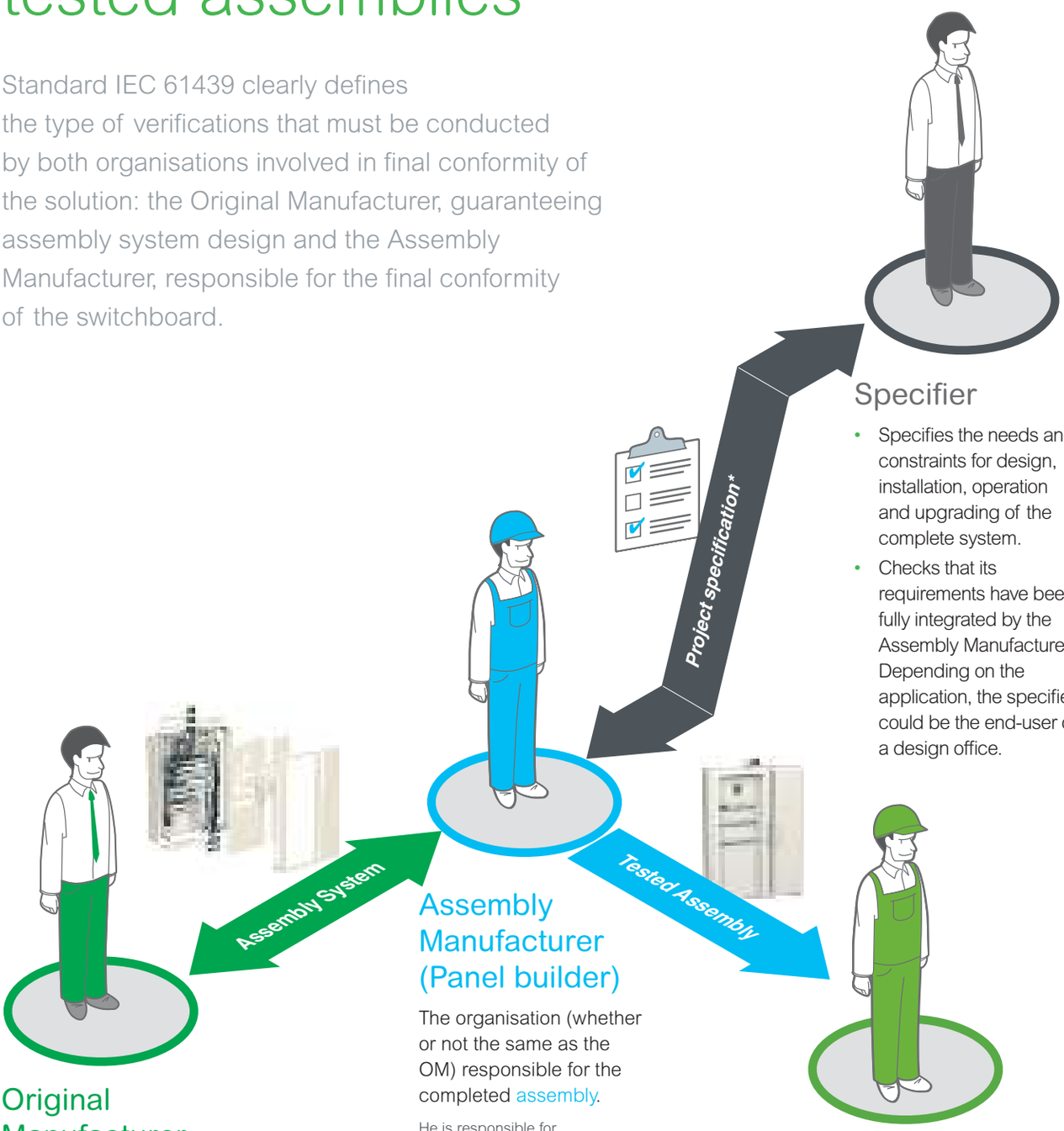
Schneider Electric makes available to the panelbuilder everything required to create tested Prisma switchboards, including the basic configurations in the low voltage distribution catalogue, all the documentation for switchboard design and mounting, calculation and design software, etc.

Panelbuilders can demonstrate conformity with standard IEC 61439-1 and 2 by presenting the declarations or certificates of conformity for type tests carried out by independent laboratories (ASEFA, ASTA, etc.) and supplied by Schneider Electric. The panelbuilder is responsible for the individual routine verification and delivers the corresponding declarations of conformity.

# Original Manufacturer and Assembly Manufacturer: Both involved in tested assemblies

Standard IEC 61439 clearly defines the type of verifications that must be conducted by both organisations involved in final conformity of the solution: the Original Manufacturer, guaranteeing assembly system design and the Assembly Manufacturer, responsible for the final conformity of the switchboard.






## Specifier

- Specifies the needs and constraints for design, installation, operation and upgrading of the complete system.
- Checks that its requirements have been fully integrated by the Assembly Manufacturer. Depending on the application, the specifier could be the end-user or a design office.

## Assembly Manufacturer (Panel builder)

The organisation (whether or not the same as the OM) responsible for the completed assembly.

He is responsible for "Routine verifications" on each panel produced, according to the standard. If he derivates from the instructions of the original manufacturer he has to carry out again design verifications.

## Original Manufacturer

The organisation that has carried out the original design and the associated verification of an assembly system.

He is responsible for the "Design verifications" listed by IEC 61439-2 including many electrical tests.

## End-User

Should ask for a certified LV switchboard.

By systematically requesting routine verifications, he ensures that the assembly system used is compliant.

Schneider Electric has developed a specification guide.

# The main 10 functions of standard IEC 61439

For each of the following 10 functions, the standard IEC 61439 requires design verifications from the system manufacturer - mainly through type-tests - and routine verifications on each panel from the Panel Builder to achieve 3 basic goals: safety, continuity of service and compliance with end-user requirements.

## Safety

### Voltage stresses withstand capability

To withstand long term voltages, and transient and temporary overvoltages according to the insulation coordination principles and requirements.

### Current-carrying capability

To protect against burns and to withstand temperature rise:

- when any circuit is continuously loaded, alone, to the specified current
- when the assembly is loaded to the specified current according to the specified load pattern (between circuits and/or as a function of the time).

### Short-circuit withstand capability

To withstand the stresses resulting from the prospective short-circuit current and from the associated data (High forces between conductors, temp. rise in a very short time, air ionization, overpressure).

### Protection against electric shock

- Hazardous-live-parts not to be accessible (basic protection)
- Accessible conductive parts not to become hazardous-live (fault protection).

### Protection against risk of fire or explosion

- Resistance to internal glowing elements

**Note:** protection of persons, and optional protection of the assembly, against arcing due to internal fault can be specified through a "special test" according to IEC 61641.

## Continuity of service

### Maintenance and modification capability

Capability to preserve continuity of supply without impairing safety during assembly maintenance or modification

- Electrical condition of the assembly or various circuits
- Speed of exchange of the functional units
- Test facilities…

### Electro-Magnetic compatibility

To properly function (immunity) and not to generate EM disturbances (emission) in specified environmental conditions:

- Industrial networks or locations (Environment A)
- Domestic, commercial, and light industrial locations (Environment B).

## Compliance with end-user requirements

### Capability to operate the electrical installation

To properly function, according to:

- The electrical diagram of the overall system and related information (voltages, coordination…)
- The specified operating facilities (e.g. free or restricted access to Man Machine Interfaces, isolation of the outgoing circuits…).

### Capability to be installed on site

- To withstand handling, transport, storage… and installation constraints
- Capability to be erected and connected (type of enclosure, type, material and cross sectional areas of external conductors).

### Protection of the assembly against mechanical and atmospheric environmental conditions

- Presence of water or solid foreign bodies (IP according to IEC 60529)
- External mechanical impacts (optional IK according to IEC 62262)
- Indoor or outdoor installation (humidity, UV).

## IEC 61439-1 paragraph 11.4

### Protection against electric shocks and integrity of protection circuits

The following should be checked visually:

- presence of protective shields against direct and indirect contacts on live parts;
- presence of the PE conductor.

The continuity of protection circuits is ensured by compliance with the assembly instructions delivered with each product.

## IEC 61439-1 paragraph 11.5

### Integration of incorporated components

The assembly manufacturer must comply with the instructions of the original equipment manufacturer for installation and wiring of the components used.

## IEC 61439-1 paragraph 11.6

### Internal electric circuits and connections

Schneider Electric recommends marking the nut with a tinted acrylic lacquer, indelible and temperature-resistant.

This allows:

- not only self-checking to check effective tightening to torque;
- but also identification of any loosening.

## IEC 61439-1 paragraph 11.9

### Dielectric properties

The main circuits, and the auxiliary and control circuits connected to the main circuit, shall be subjected to the test voltage in accordance.

## IEC 61439-1 paragraph 11.10

### Wiring, operating performance and function

Verification of wiring and marking conformity with the drawings, parts list and diagram.

# Standard individual check sheet

in accordance with the IEC 61439-1 and 2 standard from the assembly manufacturer (panelbuilder)

B

Job No.: .....

Switchboard No.: .....

Drawing No./Rev. No.: .....

| | Chapter | Verified |
|---|---|---|
| Degrees of protection provided by enclosures | **11.2** | ☐ |
| Insulation clearances and creepage distances | **11.3** | ☐ |
| Protection against electric shocks and integrity of protection circuits | **11.4** | ☐ |
| Integration of incorporated components | **11.5** | ☐ |
| Internal electric circuits and connections | **11.6** | ☐ |
| Terminals for external conductors | **11.7** | ☐ |
| Mechanical operation | **11.8** | ☐ |
| Dielectric properties | **11.9** | ☐ |
| Wiring, operating performance and function | **11.10** | ☐ |

Date of verification:

..... / ..... /.....

Verifications performed by:

.....

# Develop your business efficiency

## Switchboards that are safe…

With Prisma P you can be sure to build 100% Schneider Electric switchboards that are safe, optimised:

- All components (switchgear, distribution blocks, prefabricated connections, etc.) are perfectly rated and coordinated to work together.
- All switchboard configurations, even the most demanding ones, have been tested.

You can prove that your switchboard meets the current standards, at any time.

You can be sure to build a reliable electrical installation and give your customers full satisfaction in terms of dependability and safety for people and the installation.

Tested low voltage switchboard, IEC 61439-1&2 compliant.

- Available power
- Safety of people and property
- Controlled costs and delivery times
- Upgradeability

# with our functional LV systems

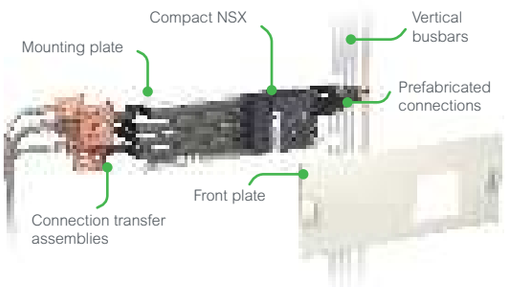
## … optimised and upgradeable

With Prisma P you can build just the right switchboard for your customer, sized precisely to fit costs and needs. With this complete, prefabricated and tested system, it's easy to upgrade your installation and still maintain the original performance levels.

- The cubicles combine easily with switchboards already in service.
- Devices can be replaced or added at any time.

## Straightforward organisation to make your job easier

The switchboard is structured by zones dedicated to switchgear, busbars, cables, etc.




The functional units are naturally stacking in the switchboard.

Each configuration is tested for improved safety.

Temperature rise test in laboratory.

## Readily available close by

The kit concept makes handling and transport easier and you get to benefit from Schneider Electric's efficient international logistics. Your distributor, selected by Schneider Electric, can give you the very best advice.

# Electrical switchboards up to 4000 A

The Prisma P functional system can be used for all types of low-voltage distribution switchboards (main, subdistribution and final) up to 4000 A, in commercial and industrial environments.

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## Switchboard design is very simple

### 1. A metal structure

The switchboard is made up of one or more frameworks combined side-by-side or back-to-back, on which a complete selection of cover panels and doors can be mounted.

### 2. A distribution system

Horizontal busbars or vertical busbars positioned in a lateral compartment or at the rear of the cubicle are used to distribute electricity throughout the switchboard.

### 3. Complete functional units

- a dedicated mounting plate for device installation
- a front plate to block direct access to live parts
- prefabricated busbar connections
- devices for on-site connections.

Each functional unit contributes to a function in the switchboard.

The functional units are modular and are arranged rationally.

The system includes everything required for functional unit mounting, supply and onsite connection.

The components of the Prisma P and those of the functional units in particular have been designed and tested taking into account device characteristics.

This design approach ensures a high degree of reliability in system operation and optimum safety for personnel.

## Assets of Prisma P switchboards

### 1. A dependable electrical installation

The total compatibility of Schneider Electric devices with the Prisma P is a key advantage in ensuring a high level of installation dependability.

### 2. An upgradeable electrical installation

Thanks to modular design, Prisma P switchboards can be modified easily to integrate new functional units as needed.

Maintenance operations, carried out with the switchboard de-energised, are fast and straight-forward due to easy access to devices.

### 3. Total safety for personnel

Work in a switchboard must be carried out by authorised persons in compliance with all applicable safety regulations.

To increase the safety of personnel, devices are installed behind protective front plates; only the operating handles are accessible.

Additional internal protection (partitions, barriers) is available to create form 2, 3 or 4 separation to protect against direct contacts with live parts.

Terminal shields are mandatory for installation of Compact NSX and INS/INV devices in Prisma P enclosures.

# Electrical switchboards up to 4000 A

System design has been validated by type tests as per standards IEC 61439-1 and 2 and benefits from the combined experience of Schneider Electric customers over many years.

## Electrical characteristics

Complying with standards IEC 62208 and EN 62208:

- rated insulation level of main busbars: 1000 V
- InA : 4000 A
- rated peak withstand current Ipk: 220 kÂ
- rated short-time withstand current Icw: 100 kA rms / 1 second
- frequency: 50/60 Hz
- voltage Ue = 690 V under conditions

## Mechanical characteristics

- Steel sheet metal
- Cataphoresis treatment + hot-polymerised polyester epoxy powder, white colour RAL 9001
- Can be dismantled
- Can be combined side-by-side and back-to-back
- Degree of protection:
  - IP30: with IP30 cover panels including a door or a cover frame
  - IP31: with IP30 cover panels including a door + gasket
  - IP55: with IP55 cover panels
- Degree of protection against mechanical impacts:
  - IIK07: with cover frame
  - IK08: with IP30 door
  - IK10: with IP55 door
- Framework dimensions:
  - four widths:
    - W = 300: cable compartment
    - W = 400: cable compartment or device compartment
    - W = 650: device compartment or cable compartment
    - W = 800: device compartment with busbar compartment or cable compartment
  - two depths: 400, 600 mm
  - height: 2000 mm.
- Indoor cubicles.

See "How to assemble an electrical switchboard"
Guide DESW043EN

Electrical switchboards built using the Prisma P functional system and Schneider Electric recommendations fully comply with international standards IEC 61439-1 and 2.

# Prisma PH - LV switchboards for harsh environments up to 4000 A

When demanding applications and severe conditions require the best, assure your success with Prisma PH.

PD391268b_SE.eps

PD391264b_SE.eps

## Technical characteristics

- High grade steel, durable epoxy painting techniques and ingenious design for a remarkable robustness.
- Steel sheet metal, thickness 1.5 mm on panels and 1.8 mm on doors.
- Electrophoresis treatment and hot-polymerised polyester epoxy powder.
- White color RAL 9001.
- Degree of protection: IP55 (IEC 60529).
- Degree of protection against mechanical impacts: IK10 with door (IEC 62262).
- Frame dimensions:
  - 2 widths:
    - 700 mm (for functional units)
    - 300 mm (for vertical busbars and cables ducts)
  - 2 depths:
    - 500 mm (up to 1600 A)
    - 800 mm (up to 4000 A)
  - height: 2000 mm.

## Reinforced solution for low voltage switchboards up to 4000 A

More than Prisma, Prisma PH contributes to safety of persons as well as to reliability and continuity of service of the electrical installation. Thanks to its reinforced metal structure, it combines outstanding robustness with versatility and flexibility, by resisting to harsh environments and heavy loads. Prisma PH is ready to perform in any condition.

As Prisma, Prisma PH is a solution of kit cubicles for low voltage electrical distribution switchboards:

- the components (switchgear, busbars, etc.) are designed for joint operation
- all the most demanding switchboard configurations have been tested and are IEC standard compliant.

## Total safety and reliability

Prisma PH is designed to operate up to 4000 A.

It is fully tested to perform in extreme conditions, and fully compliant with standards IEC 61439-1 and 2, IEC 62208.

Prisma PH withstands seismic vibrations (Standard EDF CRT91C11200, AS1170, EAK 2000, ENDESA 1986, RPA 99 2003, Gore GR 63, Turkish Seismic Code, GOST 17516.1-90).

Seismic tests are performed by an external laboratory, CESI Labs. All documentation required by local authorities and customers in order to get the approval are available.

Seismic resistance for civil installations: 0.7 g APN (rms) and 3.5 g peak, without any extra accessories.

# Solutions for continuity of service in electrical installations with Prisma



## The right level of continuity of service

All organizations have some sensitivity to the continuity of service of electrical power.
For some power is a vital component to their ongoing success and viability.
The required level of continuity of service must be considered for each application so that the electrical installation can be optimised accordingly.

The stakes of continuity of service are high. Even a brief electrical distribution failure can have serious consequences on many activities.

### Continuity of service solutions for Operation, Maintenance, Evolution

All solutions proposed comply with standards EN 61439-1 and EN 61439-2.
The system solutions proposed include Schneider Electric products exclusively to fully ensure compatibility and operation.
To ensure safety, solutions with switchgear mounted on plug-in bases, withdrawable chassis and disconnectable or withdrawable mounting plates include safety trip levers that open the circuit breaker if it is removed in closed position.

## For highest continuity of services

### Functional units with devices on live-disconnectable mounting plates

Disconnectable IS 223:
(correspondence with standard IEC 61439-2: WFD)

- High continuity of service
- Maximum time to restore power after maintenance: 1 CEhour
- Live upgrading.

### Functional units with devices on live-withdrawable mounting plates

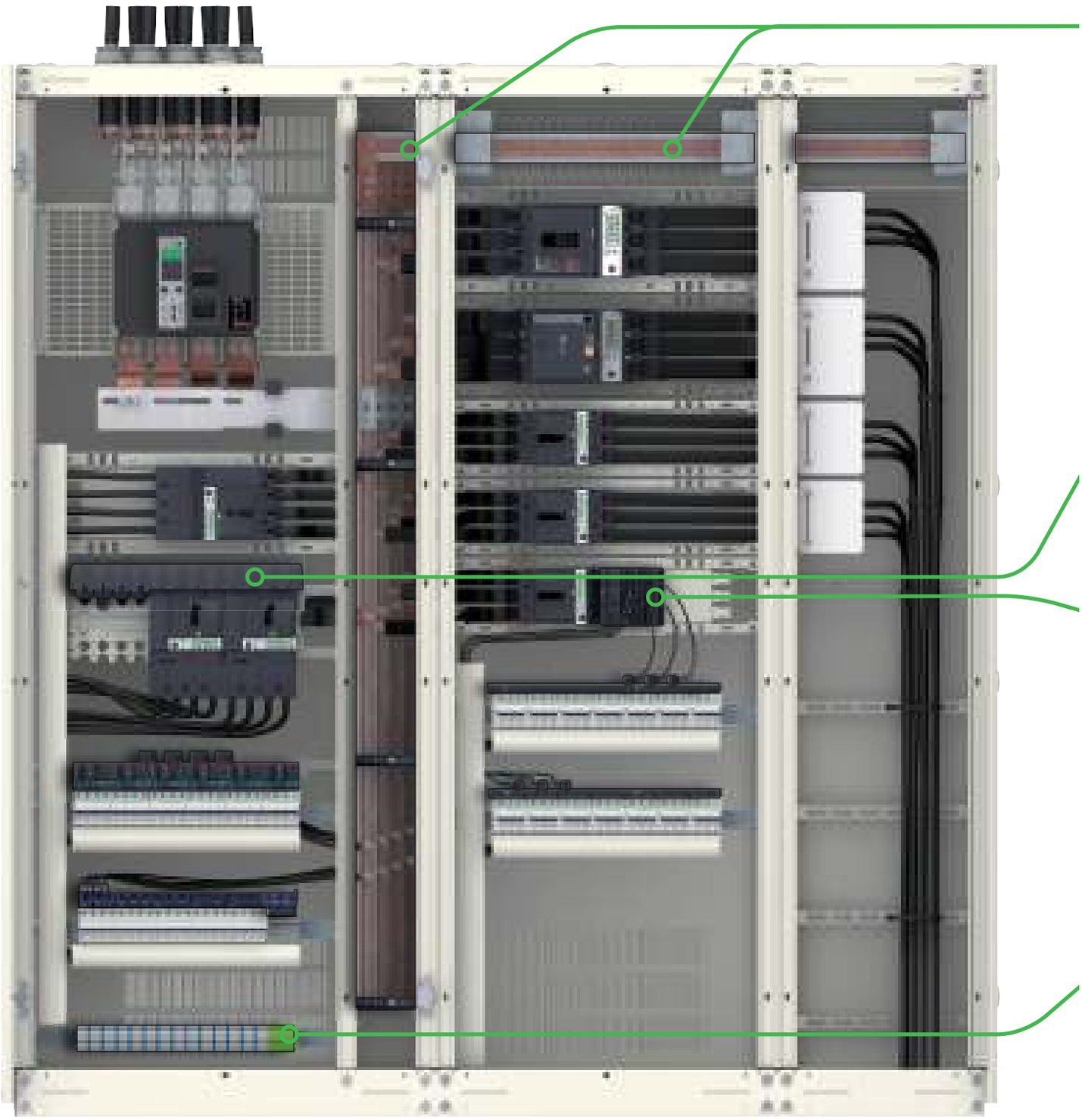
Disconnectable IS 233: (correspondence with standard IEC 61439-2 : WWW)

- High continuity of service
- Maximum time to restore power after maintenance: 1/4 h
- Live upgrading.

See Linergy HK “Hot plug distribution”

- Quick connections
- Panel easily upgradeable
- Reliable “hot plug” modification or upgrade (LVYED213001EN).

# Linergy offers you smart power network



# solutions for your switchboard.



## Linergy LGY / LGYE / BS

Power busbars

- Solutions available up to 4000 A
- Connection everywhere without drilling (with LGY and LGYE profile)

☞ *page G-2 to G-5*

## Linergy FC

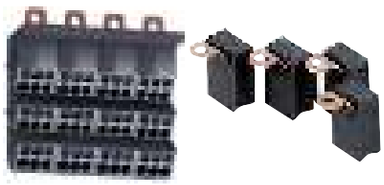
Quick distribution blocks

- Compact NSXm (4 x 4P / 5 x 3P) solution
- Compact NSX (3 x 4P / 4 x 3P) solution
- Reliable connection
- Quick connection system dedicated to Compact NSXm up to 160A / Compact NSX up to 250 A

☞ *pages G-18, G-20*

## Linergy DP

Distribution blocks

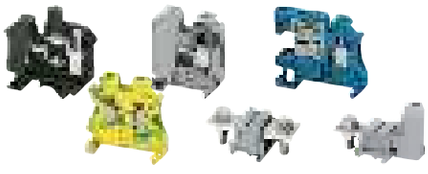


- Simplicity of use
- Quick connection system dedicated to Compact NSXm up to 160A / Compact NSX up to 250 A

☞ *pages G-16, G-17*

## Linergy TR

Terminal blocks and bars



- Simplicity of use
- Consistency and cross-functionality guaranteed

☞ *page G-42*

# Secure power distribution and monitoring solution for operating theatres

To ensure the safety of patients, the availability and quality of electric power are essential. The electrical installations of operating theatres should enable the continuity of healthcare in all circumstances.

## A solution you can trust…

- All the components of this solution are designed, manufactured, and tested by Schneider Electric to operate together and be implemented by trained and approved partners.
- Schneider Electric provides maintenance plans and operating procedures linked to this solution.
- Schneider Electric ensure the continuity of the components throughout the installation's life.

## … thanks to secure power distribution…

- The solution Schneider Electric incorporates an isolation transformer and a continuous insulation monitor in compliance with the required standards to ensure the supply of power to medical equipement in the event of a first insulation fault.
- The continuity of the electric power supply is ensured thanks to total coordination of all the Schneider Electric components, including and uninterruptible power supply.
- The Schneider Electric solution is designed, wired and tested to attenuate electromagnetic disturbances in accordance with the IEC 60364-4-4-44 standard.

## … to event monitoring and traceability

The Schneider Electric solution incorporates a monitoring system to:

- inform maintenance and medical personnel in real time in the event of an electrical fault in the operarting room
- monitor the operating room environment and record all environmental events and data
- provide data to the hospital building management system.

To know more, see the solution guide, ref. DESWED109024.

## Enhancing patient safety

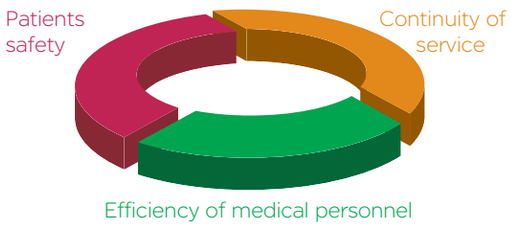
Ensuring the satisfactory operation of operating room is essential for a hospital.

## Ensuring continuity of electrical service

Because nothing must disturb the medical team during operations.

## Improving the efficiency of hospital personnel

A controllable environment and perfectly functioning equipment mean more comfort.



# Green Premium™

## Endorsing eco-friendly products in the industry

Green Premium™ Product

Green Premium is the only label that allows you to effectively develop and promote an environmental policy whilst preserving your business efficiency. This ecolabel guarantees compliance with up-to-date environmental regulations, but it does more than this.

Over 75% of Schneider Electric manufactured products have been awarded the Green Premium ecolabel

Discover what we mean by green …

**Check your products!**

Schneider Electric's Green Premium ecolabel is committed to offering transparency, by disclosing extensive and reliable information related to the environmental impact of its products:

### RoHS

Schneider Electric products are subject to RoHS requirements at a worldwide level, even for the many products that are not required to comply with the terms of the regulation. Compliance certificates are available for products that fulfil the criteria of this European initiative, which aims to eliminate hazardous substances.

### REACh

Schneider Electric applies the strict REACh regulation on its products at a worldwide level, and discloses extensive information concerning the presence of SVHC (Substances of Very High Concern) in all of its products.

### PEP: Product Environmental Profile

Schneider Electric publishes complete set of environmental data, including carbon footprint and energy consumption data for each of the lifecycle phases on all of its products, in compliance with the ISO 14025 PEP ecopassport program. PEP is especially useful for monitoring, controlling, saving energy, and/or reducing carbon emissions.

### EoLI: End of Life Instructions

Available at the click of a button, these instructions provide:

- Recyclability rates for Schneider Electric products.
- Guidance to mitigate personnel hazards during the dismantling of products and before recycling operations.
- Parts identification for recycling or for selective treatment, to mitigate environmental hazards/ incompatibility with standard recycling processes.

# Standards and certifications

# Contents


## Standards and tested switchboards

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## Thermal characteristics of switchboards

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C

# Standards

## Regional standardization systems

Standards and tested switchboards

## IEC international standards

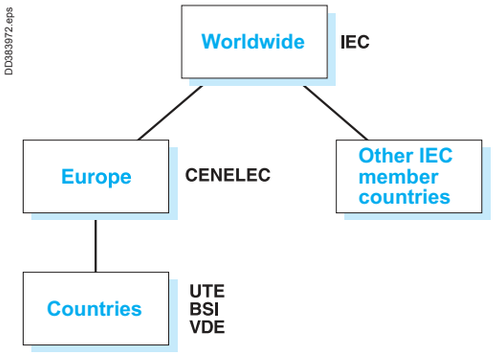
**IEC member countries**

| | |
|---|---|
| Argentina | Luxemburg |
| Australia | Malaysia |
| Austria | Mexico |
| Belarus | Netherlands |
| Belgium | New Zealand |
| Brazil | Norway |
| Bulgaria | Pakistan |
| Canada | Poland |
| China | Portugal |
| Croatia | Rumania |
| Czech Rep. | Russia |
| Denmark | Singapore |
| Egypt | Slovakia |
| Finland | Slovenia |
| France | South Africa |
| Germany | Spain |
| Greece | Sweden |
| Hungary | Switzerland |
| India | Thailand |
| Indonesia | Turkey |
| Iran | Ukraine |
| Ireland | United Kingdom |
| Israel | United States |
| Italy | Yugoslavia |
| Japan | |
| Korea (Rep. of) | |

The IEC (International Electrotechnical Commission) is a worldwide organisation for standardisation comprising all national electrotechnical committees (IEC National Committees).

The object of the IEC is to promote international cooperation on all questions concerning standardisation in the electrical and electronic fields.
To that end, the IEC publishes International Standards.
Their preparation is entrusted to technical committees and any IEC National Committee interested in the subject dealt with may participate in the preparatory work.

## Local standards




**CEI / IEC**
Commission Electrotechnique Internationale
**CENELEC**
Comité Européen de Normalisation ELECtrotechnique
**UTE**
Union Technique de l'Électricité
**VDE**
Verband der Elektrotechnik, Elektronik und Informationstechnik e.v. (German electrotechnical, electronics and computer technology standardisation organisation)
**BSI**
British Standards Institution

**In Europe**
The IEC documents are first studied by CENELEC, which establishes:
- either a European standard (EN), often identical to the IEC standard, which then becomes the applicable national standard in all the member countries
- or, in the event of differences, a harmonisation document (HD).

**Other IEC member countries**
Each country is autonomous and can accept the IEC standard as the national standard, with or without modifications.
Even though they are IEC members, countries such as Japan and the United States continue to develop their own standardisation systems.

**Countries without a standardisation system**
It is possible to refer to an IEC standard in the framework of a project.

# Standards
## Standards types

## Standards and tested switchboards

### The different types of standards

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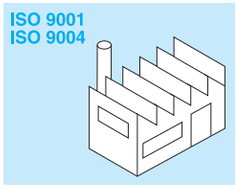


Design and manufacture.

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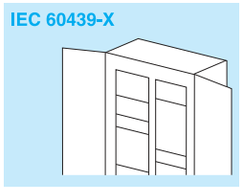


Switchgear and controlgear assemblies.

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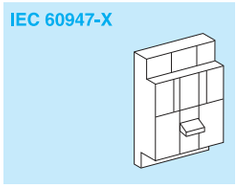


Switchgear and controlgear.

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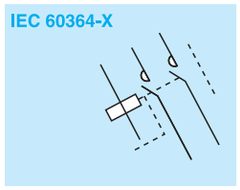


Installation.

There are different types of standards, including:
- management standards
- installation standards
- product standards.

### Management standards

**ISO 9004**: Quality-management systems - guidelines for performance improvements. Used in setting up a quality-management system.

**ISO 9001**: Quality management systems - requirements. Used for certification audits.
**ISO 14004**: Environmental-management systems. General guidelines on the principles, systems and supporting techniques.
**ISO 14001**: Environmental-management systems. Specification with guidance for use
- The majority of Schneider Electric development centres and factories are certified ISO 9001 and ISO 14001.

### Installation standards

The set of IEC 60364-X standards defines the main principles and rules on:
- determining general characteristics of installations
- protection
- selection and installation of equipment
- verification and maintenance of installations.

### Product standards

They apply to devices or assemblies and are aimed at ensuring correct operation and safety of the concerned products.
- standards on low-voltage switchgear and controlgear:
  - IEC 60947-1: general rules
  - IEC 60947-2: circuit breakers
  - IEC 60947-3: switches and disconnectors
  - IEC 60947-4: contactors
  - IEC 62208: empty enclosures.
- standards on low-voltage switchgear and controlgear assemblies:
  - IEC 61439-1: general rules
  - IEC 61439-2: power switchgear and controlgear assemblies
  - IEC 61439-3: distribution boards
  - IEC 61439-4: assemblies for construction sites
  - IEC 61439-5: assemblies for power distribution
  - IEC 61439-6: busbar trunking systems.

Regulations in a given country may make certain standards legally binding and may also create additional safety requirements.

In addition to providing proof of the conformity of its quality-management system, a product manufacturer can demonstrate the quality of products by providing proof that the design and manufacture comply with the requirements in the applicable standard.
Proof of conformity may be a declaration by the manufacturer or a certificate supplied by an independent organisation.

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# Standards

## Standards and tested switchboards

### CE marking

CE marking is a regulatory symbol attributed under the sole responsibility of the manufacturer and intended for the verification authorities of the European countries that enforce the European regulations.
It allows free circulation of a product in the European Union and certifies that it complies with the basic requirements in all the applicable European directives.
CE marking is not a quality symbol and does not indicate conformity with a standard.

The CE declaration is intended exclusively for the authorities in charge of verifying compliance with the applicable regulations and it is drafted, signed and held for presentation to the authorities by the manufacturer.
For the Prisma P range, the declaration is the responsibility of the Schneider Electric unit that has designed and developed the product.
For LV switchboards, the declaration is the responsibility of the panelbuilder.

The following products receive CE marking:
- all products that are liable to endanger the safety of persons, animals and property (LV directive)
- all products likely to emit electromagnetic disturbances above a standardised threshold or to be disturbed during operation (EMC directive).

Consequences:
- the Prisma P range falls under the LV directive only
- LV switchboards are covered by the LV directive and may also fall under the EMC directive, depending on the type of devices incorporated.

CE

For the Prisma P range, CE marking is applied:
- on the packing of “mechanical” components
- on the product itself for “electrical” components.

For the LV assemblies created by the panelbuilder, CE marking is applied:
- on the packing
- on the rating plate (if applicable)
- on one of the documents accompanying the switchboard when it is shipped.

# Standards

## Standards and tested switchboards

### Degree of protection

Standard IEC 60364-5-51 lists and codifies a large number of external influences to which electrical installations can be subjected, including the presence of water, solid objects, shocks, vibrations, corrosive substances, etc.

### IP code

Standard IEC 60529 (IP code, February 2001) indicates the degrees of protection provided by an enclosure for electrical devices against access to hazardous parts, against penetration of solid foreign objects and against penetration of water.

These standards do not apply for the protection against the risks of explosion or conditions such a humidity, corrosive vapour, fungus or vermin.

The IP code is made up of two characteristic numerals and can include an additional letter when the actual protection for persons against access to the hazardous parts is better than that indicated by the first numeral.

The first numeral characterises the protection provided against the ingress of solid foreign objects and the protection of persons.

The second numeral characterises the protection provided against the ingress of water with harmful effects.

C

| 1st numeral | | | 2nd numeral | |
|---|---|---|---|---|
| | **Protection of persons** | **Protection against ingress of solid objects** | | **Protection against ingress of water** |
| **1** | Protected against access with back of hand | Protection against solid foreign objects larger than 50 mm | **1** | Protected against vertically dripping water (condensation) |
| **2** | Protected against access with a finger | Protection against solid foreign objects larger than 12.5 mm | **2** | Protected against dripping water up to 15° from vertical |
| **3** | Protected against access with a tool | Protection against solid foreign objects larger than 2.5 mm | **3** | Protected against spraying water up to 60° from vertical |
| **4** | Protected against access with a wire | Protection against solid foreign objects larger than 1 mm | **4** | Protected against splashing water from all directions |
| **5** | Protected against access with a wire | Protected against dust (dust protected) | **5** | Protected against water jets from all directions |
| **6** | Protected against access with a wire | Dust tight | **6** | Protected against powerful water jets from all directions |
| | | | **7** | Protected against the effects of temporary immersion in water |
| | | | **8** | Protected against the effects of continuous immersion in water |
| | | | **9** | Protected against close-range high pressure, high temperature spray downs |

## Standards and tested switchboards

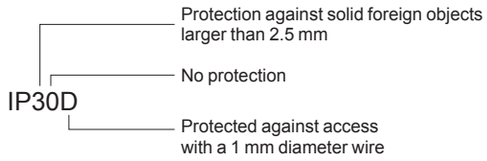
### Additional letter

The additional letter is used only if the actual protection of persons is higher than that indicated by the first characteristic numeral of the IP code.

| Additional letter | Protection |
|---|---|
| A | Protected against access with back of hand |
| B | Protected against access with a 12 mm diameter finger |
| C | Protected against access with a 2.5 mm diameter tool |
| D | Protected against access with a 1 mm diameter wire |

If only the protection of persons is of interest, the two characteristic numerals are replaced by the letter “X”, e.g. IPXXB.

**Illustration of the above explanations:**




**Remarks**

- The degree of protection IP must always be read and understood numeral by numeral and not as a whole.
For example, an IP31 wall-mount enclosure is suitable for an environment that requires a minimum degree of protection IP21. However an IP30 wall-mount enclosure is not suitable.
- the degrees of protection indicated in this catalogue are valid for the enclosures as presented. However, the indicated degree of protection is guaranteed only when installation and device mounting are carried out in accordance with professional standards that conserve the initial degree of protection.

### IK code

Standard IEC 62262 defines an IK code characterising the capacity of products to resist mechanical impacts from all sides.

| IK code | Impact energy (joules) |
|---|---|
| 01 | 0.14 |
| 02 | 0.2 |
| 03 | 0.35 |
| 04 | 0.5 |
| 05 | 0.7 |
| 06 | 1 |
| 07 | 2 |
| 08 | 5 |
| 09 | 10 |
| 10 | 20 |

IK codes can be selected according to the risks of impacts on a given site.

| | Site | Recommended IK |
|---|---|---|
| No risk of major impact | Technical premises | 07 |
| Significant risk of impact that can damage devices | Hallways | 08 (switchboard with door) |
| Maximum risk of impact that can damage the switchboard | Workshops | 10 |

# Properties of metal enclosures

## Enclosure characteristics

### Anti-corrosion withstand

Schneider Electric enclosures comply with standard IEC 62208, EN 50298 for empty enclosures. The sheet metal used for Schneider Electric enclosures receives an anti-corrosion cataphoresis primer treatment and a coating of a thermosetting, polyester-resinmodified epoxy powder for colour and appearance.
This two-coat system provides excellent finish and corrosion protection.
The characteristics of this coating are much better than those of traditional epoxy powders:
- improved colour stability
- wider operating temperature range.

### Mechanical properties of frame

| **Static load on doors, wall-mounted and floor-standing enclosures and cubicles** | |
|---|---|
| Cubicle | 400 kg |
| Cubicle door | 12 kg |

C

### Mechanical properties of powder coated surfaces

| **Test conditions<br>Test piece made of 1 mm thick steel sheet, degreased, iron phosphated, final rinsing with 100 kΩ cm DI water, 15 microns of anti-corrosion electrophoresis treatment and 35 microns of powder paint.** | | |
|---|---|---|
| Adhesion (cross-hatch and pull-off) | class 0 required | (ISO 2409) |
| Impact strength (1) | > 1 kg/50 cm | (ISO 6272) |
| Mandrel bending test (2) | < 10 mm | (ISO 6860) |
| Persoz hardness | 300 s | (ISO 1522) |

(1) No cracking of the paint film after dropping a weight of 1 kg on the test piece from a height of 50 cm.
(2) Film cracks over a length of 10 mm maximum.

### Artificial ageing test on powder coating

**Test conditions:**

**Two tests carried out on the same 1 mm thick steel sheet test piece.**
- cyclical damp-heat test:
  - as per standard IEC 68-2-30
  - six 24-hour cycles at temperatures higher than 40 °C
- continuous resistance to neutral salt mist:
  - the tests were carried out over a period of 400 hours, far more than the 48 hours required by the standard for indoor installations
  - as per standard IEC 68-2-11 and ISO 7253
  - 400 hours without blistering for normal surface on test piece
  - 250 hours for a scratched surface.

**Evaluation of corrosion as per ISO 4628:**
- adhesion: class ≤ 1
- blistering: degree 1 dim.1
- rusting: Ri 1
- cracking: class 1
- flaking imp. 1 dim. 1

propagation of corrosion under scratch with respect to the scratch axis: 3 mm max.

## Chemical properties of powder coating

**Tests carried out at ambient temperature on phosphated test pieces coated with a 150 to 200 micron film.**

| Test duration (months) | | | 2 | 4 | 6 | 8 | 10 | 12 |
|---|---|---|---|---|---|---|---|---|
| Acids | | Concentration | | | | | | |
| | Acetic | 20 % | | | | | | |
| | Sulphuric | 30 % | | | | | | |
| | Nitric | 30 % | | | | | | |
| | Phosphoric | 30 % | | | | | | |
| | Hydrochloric | 30 % | | | | | | |
| | Lactic | 10 % | | | | | | |
| | Citric | 10 % | | | | | | |
| Bases | Soda | 10 % | | | | | | |
| | Ammonia | 10 % | | | | | | |
| Water | Distilled water | | | | | | | |
| | Seawater | | | | | | | |
| | Tap water | | | | | | | |
| | Diluted bleach | | | | | | | |
| Solvents | Petrol | | | | | | | |
| | High alcohols | | | | | | | |
| | Aliphatics | | | | | | | |
| | Aromatics | | | | | | | |
| | Ketones, esters | | | | | | | |
| | Tri-perchlorethylene | | | | | | | |

Film intact.

Film damaged (blisters, yellowing, loss of shine).

# Thermal management of switchboards
## General



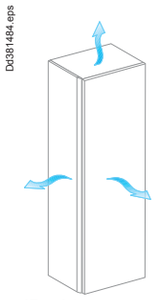
## Thermal characteristics of switchboards

A switchboard is designed for operation under normal ambient conditions.
Most devices do not operation correctly outside a temperature range of -10 and +70 °C.
It is therefore important to maintain the switchboard internal temperature within this temperature range by:
- correctly sizing the switchboard during design
- correcting the temperature using suitable means.

## Management of the internal temperature

**Cooling**
There are a number of way to dissipate heat from the switchboard.
The drawings below present the various means.

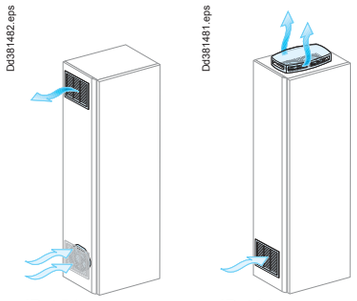
**Convection**




IP > 31 IP ⩽ 31

Ensured naturally in Prisma P enclosures.

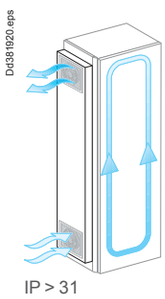
**Forced-air ventilation**




IP ⩽ 54 IP ⩽ 31

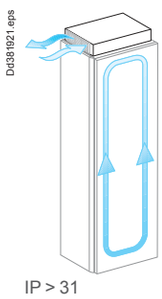
Using fans, it significantly increases the thermal capacity of an enclosure.

**Forced-air ventilation with air-air exchanger**




IP > 31
On special request.

**Forced convection and cooling**




IP > 31

For these extreme cases, many installers prefer to set up the switchboards with other electrotechnical and electronic devices in air-conditioned electrical rooms.

**Heating**
The means employed to raise the internal temperature in a switchboard is a resistor-based heater, used to:
- avoid condensation by limiting variations in temperature
- ensure that the switchboard does not freeze.

# Thermal management of switchboards
## General

### Thermal characteristics of switchboards

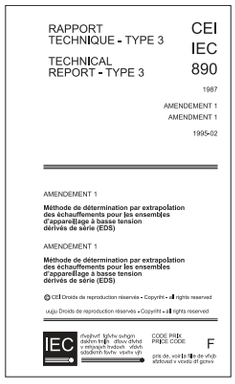
## Calculation of the internal temperature

Calculation of the temperature is the means to check that the enclosure can evacuate the dissipated power of the installed devices.

**Important note**

**Correct thermal management of the switchboard depends on compliance with the installation requirements for the distribution system (power circuits).**
Incorrect installation will have major consequences on the connected device, but almost none on the internal temperature of the enclosure.
Once the circuit has been correctly sized, it is necessary to check whether the assembly (devices + distribution system + cables) have a level of dissipated power P(W) ≤ the P(W) that the enclosure can handle.

DD381401.eps


RAPPORT TECHNIQUE - TYPE 3
TECHNICAL REPORT - TYPE 3
CEI IEC 890
1987
AMENDEMENT 1
AMENDMENT 1
1995-02
AMENDEMENT 1
Méthode de détermination par extrapolation des échauffements pour les ensembles d'appareillage à basse tension dérivés de série (EDS)
AMENDEMENT 1
Méthode de détermination par extrapolation des échauffements pour les ensembles d'appareillage à basse tension dérivés de série (EDS)
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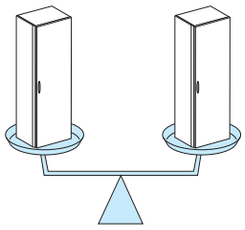
IEC
CODE PRIX PRICE CODE
F

**Method defined by IEC 890 technical report**
This IEC guide for switchboards proposes a calculation method to determine three levels of internal temperature, depending on the dissipated power of the devices and distribution blocks installed in the switchboard.
Users can consult this document when it is necessary to determine precisely the internal temperature in view of optimising the switchboard.

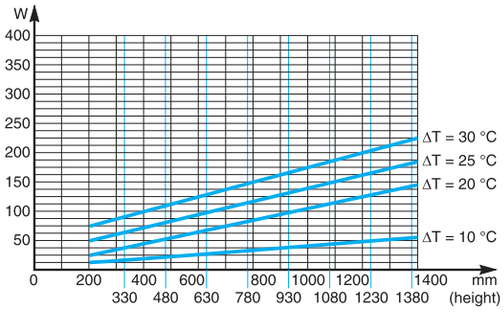
On request, Schneider Electric can carry out a thermal study to check that the installed assembly and the thermal capacity of the enclosure are compatible.

DD381350.eps



**Comparative method**
A number of qualified and tested configurations serve as the basis for indicating the thermal capacity of Prisma P enclosures.
This is en empirical means to check whether the dissipated power of the desired configuration is close to that of a tested configuration.

DD382422.eps



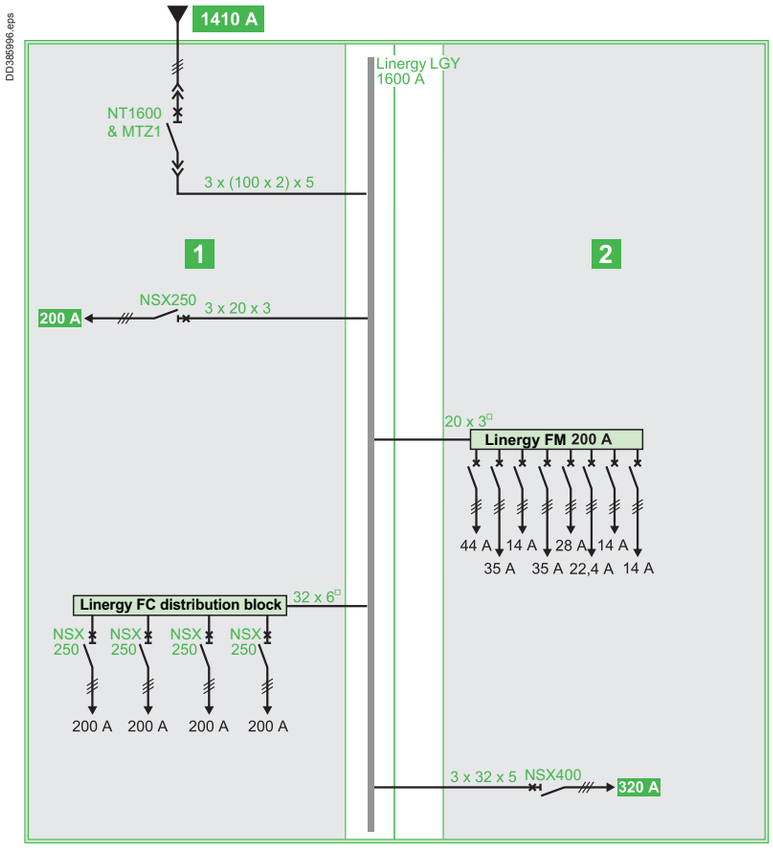

**Method using charts taking into account enclosure characteristics**
To speed up calculations, Schneider Electric produces charts based on the company's experience and a number of assumptions on the installation.
They can be used sufficiently precisely to determine the variations in temperature and the dissipated-power levels for the different types of wall-mounted enclosures, floor-standing enclosures and cubicles.

For details on the calculation of the dissipated power in the device zone, see page C-12.

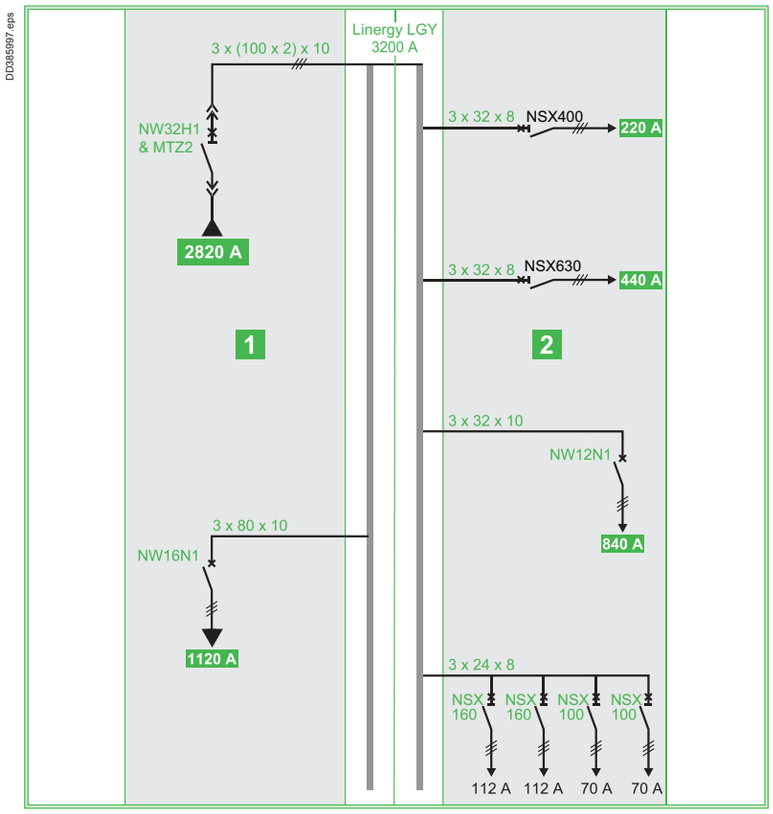
# Thermal management of switchboards
## Comparative method

### Thermal characteristics of switchboards

**Two cubicles with busbar compartment, 800 mm wide, 400 mm deep, IP30**
Diversity factor: 0.7 and 0.8
Ambient temperature around the switchboard: 35 °C
Cubicle 1: P(W) of device zone = 580 W
Cubicle 2: P(W) of device zone = 180 W




**Two cubicles with busbar compartment, 800 mm wide, 1000 mm deep, two 300 mm wide ducts, IP30**
Diversity factor: 0.7
Ambient temperature around the switchboard: 35 °C
Cubicle 1: P(W) of device zone = 880 W
Cubicle 2: P(W) of device zone = 330 W

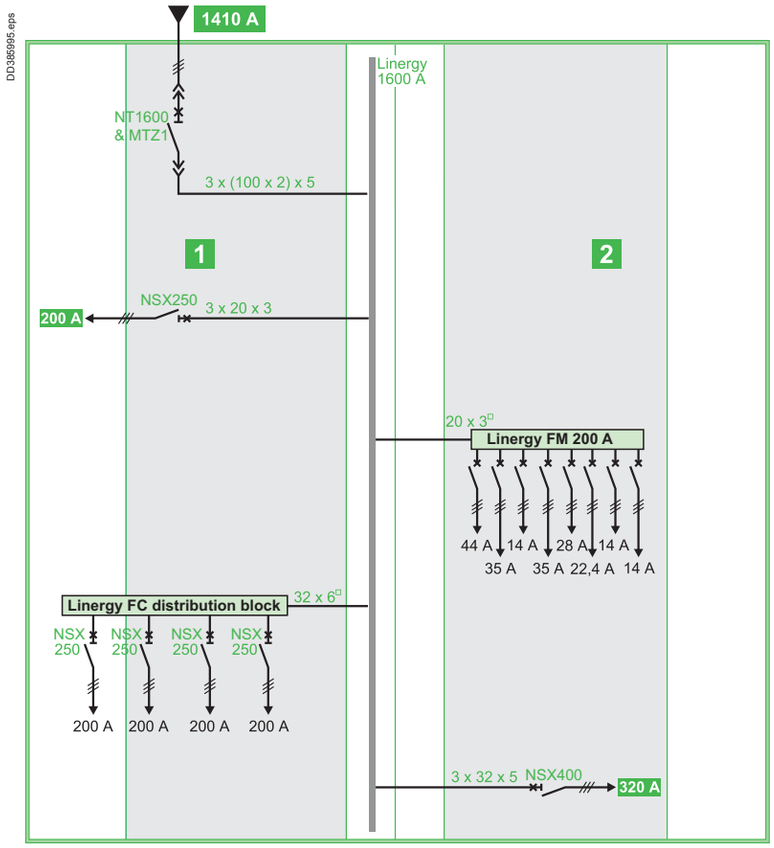



C

# Thermal management of switchboards
## Example

### Thermal characteristics of switchboards

**Two cubicles with busbar compartment, 800 mm wide, 1000 mm deep, two 300 mm wide ducts, IP30**
Diversity factor: 0.7
Ambient temperature around the switchboard: 35 °C
Cubicle 1: P(W) of device zone = 580 W
Cubicle 2: P(W) of device zone = 180 W




### Application of the diversity factor

In the configuration below, the standardised diversity factor (K div.) for a total of 14 outgoing circuits is 0.6, i.e. 60 % of In for each outgoing circuit.
Schneider Electric prefers a more conservative approach and therefore divides the installation into four main circuits:

- Compact NSX250
- 200 A Linergy FM: 8 outgoers ➡ K div. = 0.7
- Linergy FC: 4 outgoers ➡ K div. = 0.8
- Compact NSX400.

1 Compact NSX250 + 1 Linergy FM 200 A + 1 Linergy FC + 1 Compact NSX400 ➡ 4 outgoers, i.e. a diversity factor of 0.8.
As a result, the current flowing in each circuit is at least 70 % and up to 80 % of In.

### Calculation of the power dissipated by devices in the incoming cubicle

Dissipated power of the NT1600 & MTZ1 indicated by the manufacturer: 460 W. The power dissipated by the connections is approximately 30 % of the device P(W):
0.3 x 460 = 138 W.
Power of circuit breaker + connections = 460 + 138 = 598 W at 1600 A.
For $I^2$ (the Watts are proportional to the square of the current) at 1410 A (In of the incoming device):

Dissipated power of the Compact NSX250 indicated by the manufacturer: 42 W.
Dissipated power of the connections: 0.3 x 42 = 12.6 W.
Power of circuit breaker + connections = 42 +12.6 = 54.6 W at 250 A.
For 200 A (the tested value):

$$\frac{54.6}{250^2} \times 200^2 = 35 \text{ W}$$

Dissipated power of the Linergy FC and its four Compact NSX250 circuit breakers:

4 x 35 W (same calculation as above) = 140 W

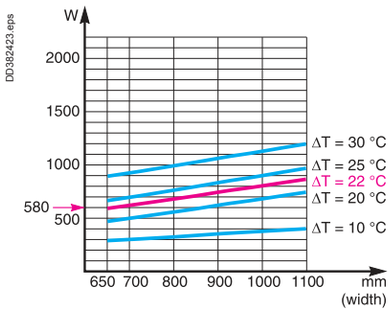
Sum of the dissipated power in the incoming cubicle:

P(W) = 405 + 35 +140 = **580 W**

# Thermal management of switchboards
## Example

### Thermal characteristics of switchboards

Once the dissipated power of the devices has been determined and the enclosure with its IP selected, transfer the results (sum of the dissipated power and width of the device zone) to the chart corresponding to the enclosure IP.




Draw a line parallel to the others on the chart and read the corresponding difference in temperature.
For the given example, the heat rise is 22 °C at mid-height in the enclosure.
The internal temperature = external temperature + heat rise
= 35 °C + 22 °C = 57 °C
57 °C < 60 °C stipulated by the standard, i.e. the result is acceptable for an IP3 cubicle.
This gives roughly: Internal temperature = 60 °C at mid-height in the enclosure for a low IP value.
Internal temperature = 70 °C at mid-height in the enclosure for a high IP value.

C

# Thermal management of switchboards
## Charts

For the enclosures not mentioned on the previous pages, use the equation:

$$\Delta T = \frac{P}{S \times K}$$

**ΔT:** internal temperature - external temperature
**P:** power dissipated by the devices, connections and busbars (in Watts)
**S:** total free surface area of the enclosure (expressed in m²)
**K:** thermal-conduction coefficient of the material (W/m² °C)

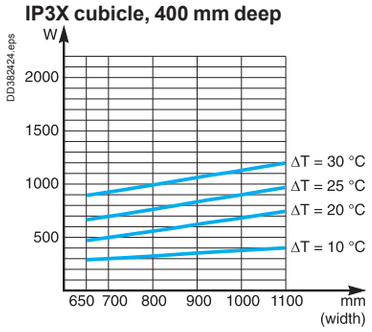
K = 5.5 W/m² °C for painted sheet metal.

**Note:** the dissipated power of each device is provided by the manufacturer. Add approximately 30 % to account for the connections and the busbars.

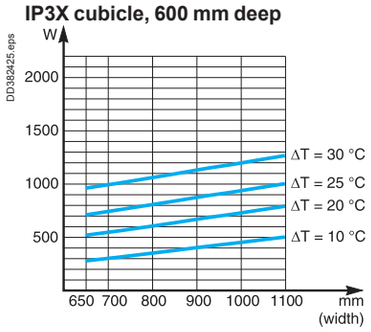
## Thermal characteristics of switchboards

Test conditions: the cubicle is on the floor against a wall, the indicated internal heat rise is that measured at mid-height in the enclosure.

**IP3X cubicle, 400 mm deep**

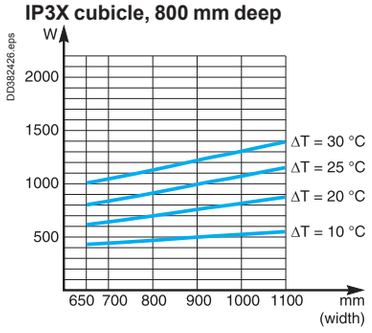



**IP3X cubicle, 600 mm deep**

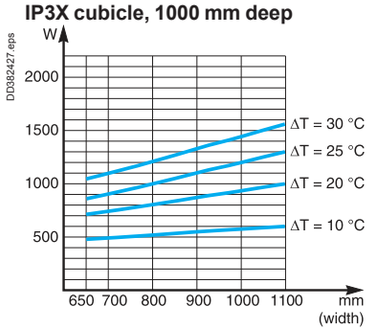



Prisma P has been tested in a laboratory for a seismic withstand. The switchboards have been tested according to the standards IEC60068-3-3 & 2-57.

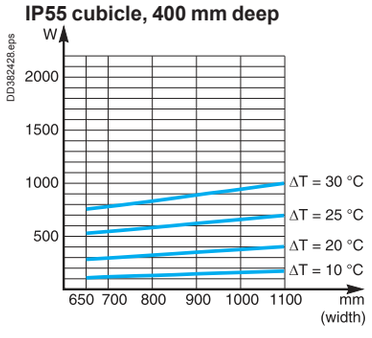
**IP3X cubicle, 800 mm deep**



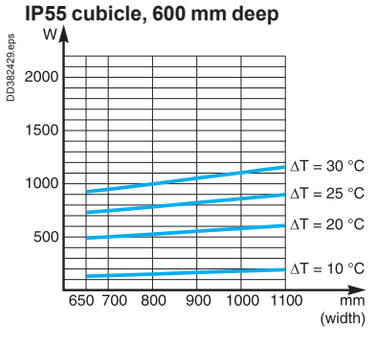

**IP3X cubicle, 1000 mm deep**



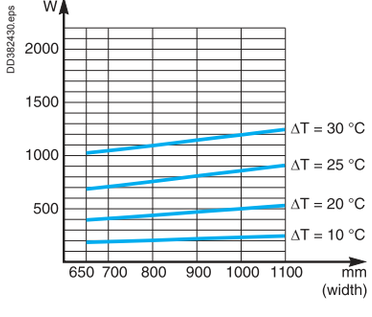

**IP55 cubicle, 400 mm deep**



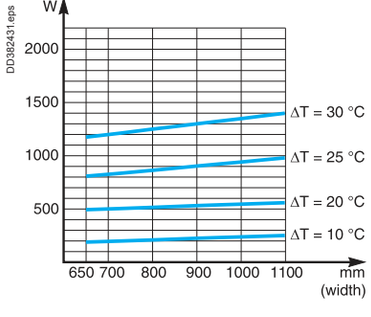

**IP55 cubicle, 600 mm deep**




**IP55 cubicle, 800 mm deep**




**IP55 cubicle, 1000 mm deep**



# Thermal management of switchboards
## Ventilation

### Thermal characteristics of switchboards

The air enters the lower section via the fans and exits the upper section:
- through a ventilated roof
- or through a ventilation opening.

The air throughput of the fans is determined by the equation:

$$D = 3.1 \times \left( \frac{P}{\Delta T} - KS \right)$$

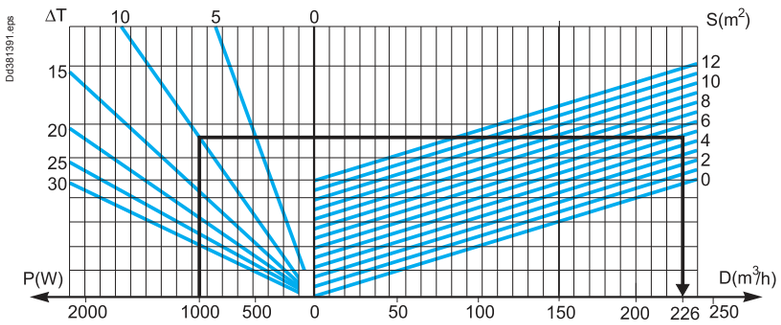
The chart below can be used to determine the necessary throughput, based on the dissipated power, the difference in temperature (internal - external) and the exposed surface area of the enclosure.

**Example**
Consider an IP3X cubicle, 650 mm wide and 400 mm deep, containing components (devices, connections, busbars, etc.) dissipating 1000 W.
The ambient temperature around the cubicle is 50 °C.
Given that the average temperature at mid-height should not exceed 60 °C, the difference in temperature ΔT is equal to 60 - 50 = 10 °C.
The exposed surface of the cubicle (non adjacent to a wall or other cubicle) is 4.46 m².
(back = 1.3 m², front = 1.3 m², roof = 0.26 m², side panels = 1.6 m²).
What is the necessary throughput of the ventilation system?
The throughput can be calculated as:

$$D = 3.1 \times \left( \frac{1000}{10} - 5.5 \times 4.46 \right)$$

D = 234 m³/h.
In the range of Prisma P accessories, select a system with a throughput of 300 m³/h.
Ref: **08710**

In the duct 150mm & 300mm = no need cross members
In the duct 400mm without devices = no need cross members




**Calculation data**
**P:** power dissipated by the devices, connections and busbars (in Watts)
**Pr:** power of the heating resistor (in Watts)
**Tm:** maximum internal temperature in the device zone (in °C)
**Ti:** average internal temperature (in °C)
**Te:** average external temperature (in °C)
**ΔTm** = Tm – Te
**ΔT** = Ti– Te
**S:** total free surface area of the enclosure (expressed in m²)
**K:** thermal-conduction coefficient of the material (W/m² °C)
K = 5.5 W/m² °C for painted sheet metal
**D:** ventilation throughput (in m³/h)

**Note:** The dissipated power of each device is provided by the manufacturer. Add approximately 30 % to account for the connections and the busbars.

# Thermal management of switchboards
## Heating

### Thermal characteristics of switchboards

The heating resistor, placed in the bottom of the switchboard, maintains the internal temperature 10 °C higher than the external temperature. When the switchboard is not in operation, the heater compensates the dissipated power normally emitted by the switchboard.
The power of the heating resistor is calculated:
- using the equation: Pr = (ΔT x S x K) - P
- or using the charts below, based on the exposed surface area of the enclosure and the desired difference in temperature.

**Chart to determine the heating resistor for small wall-mounted enclosures (exposed surfaces ≤ 1 m²)**

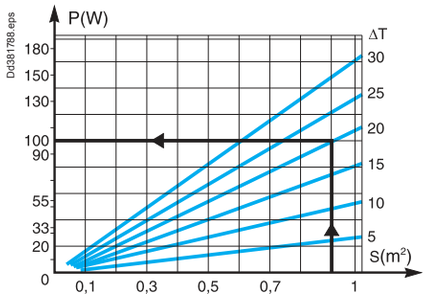
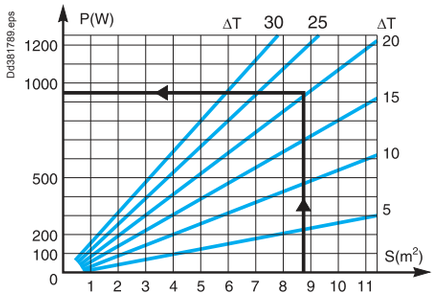



**Chart to determine the heating resistor for all types of enclosures and cubicles**




**Calculation data**
**P:** power dissipated by the devices, connections and busbars (in Watts)
**Pr**: power of the heating resistor (in Watts)
**Tm:** maximum internal temperature in the device zone (in °C)
**Ti:** average internal temperature (in °C)
**Te:** average external temperature (in °C)
**ΔTm** = Tm – Te
**ΔT** = Ti– Te
**S**: total free surface area of the enclosure (expressed in m²)
**K**: thermal-conduction coefficient of the material (W/m² °C)
**K** = 5.5 W/m² °C for painted sheet metal
**D**: ventilation throughput (in m³/h).

**Note:** The dissipated power of each device is provided by the manufacturer. Add approximately 30 % to account for the connections and the busbars.

# Prisma P Seismic
## Specific application



## Seismic zone

Around the world can be found different zones with a specific seismic risk.
These zones have been classified according to the Uniform Building Code (UBC).

Zone 0 | Zone 1 | Zone 2 | Zone 3 | Zone 4

C

### Switchboard qualification

Tests are carried out on switchboards to ensure that they operate correctly (structural and functional integrity) under severe earthquake conditions and meet specific safety requirements.
The tests carried out to qualify these switchboards are described in the international standard IEC 60068-3-3.

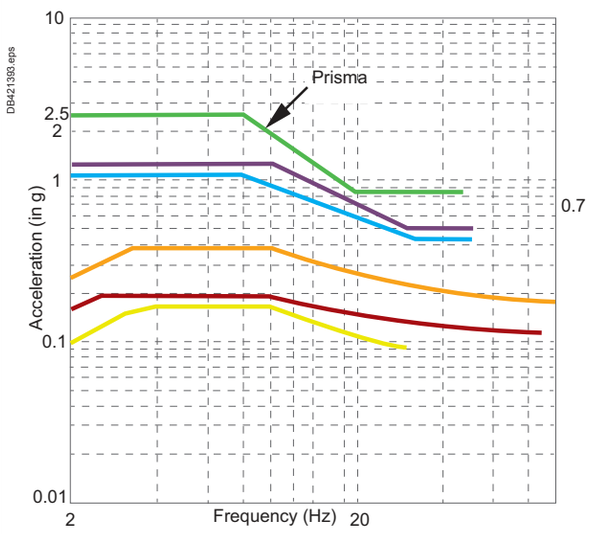
### Classification

From weak to strong earthquakes, Prisma P has been tested in the following ground accelerations to guarantee the right performance on seismic risk.

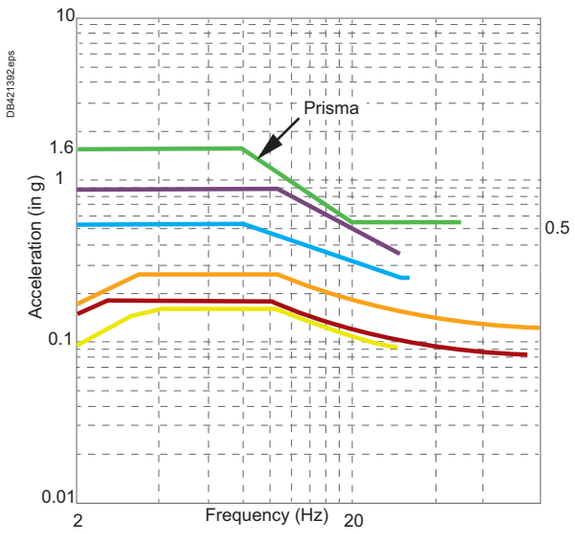
| IEC 60068 -3-3 Ground acceleration | Seismic characteristics | | | |
|---|---|---|---|---|
| References | General description | Richter scale magnitude | MSK Intensity | UBC Zone |
| AG2 | Intensity from weak to average | < 5 .5 | < VIII | 0 / 1 |
| AG3 | Intensity from average to strong | 5.5 to 7.0 | VIII to IX | 2 / 3 |
| AG5 | Intensity from strong to very strong | > 7.0 | > IX | 4 |

Prisma P is compliant up to level AG5 from IEC 60068-3-3 (2.5 g) :

Compare Prisma switchboard performances with seismic standards
Damping 5% - **horizontal**




Compare Prisma switchboards performances with seismic standards
Damping 5% - **vertical**




| | Country | Standard | Parameters |
|---|---|---|---|
| | Prisma P | IEC60068-3-3 | Up to level AG5 |
| | Russia | GOST 17516.1-90 | Civil Market (Seismic intensity 8, all installation levels) or (Up to Seismic Intensity 9, Level 1 only) |
| | Chile | ENDESA 1986 | All seismic categories |
| | Turkey | Seismic Turkish Code 2009 | All seismic zones, all site class |
| | Greece | EAK 2000 | All soil types, Worst case |
| | Australia | AS1170 | All soil types, Worst case |
| | UBC | 1997-AC156 | Zone 4 - Ground Level |

# Prisma P Seismic
Seismic kit

Specific application

## Reinforcement

Prisma P seismic cubicles are 2.5 g compliant.
Special parts have been created, specific reinforced side panels and bottom reinforcement brackets.

### Reinforced side panels

Ref: 08765
To respect seismic withstand, use side panels in IP55 version (even with an IP30 switchboard).

### Seismic reinforcement brackets

Ref: 08710
Foot part to be added in each bottom angle to reinforce the structure.

## Seismic Kit with cross-members

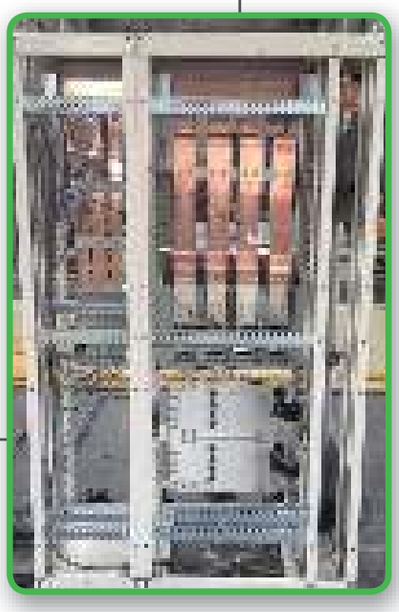
With ducts 150 mm & 300 mm = cross-members not needed
With duct 400 mm without devices = cross-members not needed

### For the cubicles

Ref: 03587 x2 or 08774 x1

- 1 cross-member at the top, on the rear upright
- 1 cross-member in the middle, on the rear upright
- 2 cross-members at the bottom, on the rear uprights.

**Nota :** Cross-members must be added in a rear compartment in case of depth 1000 mm.



# Prisma P Seismic
## Installation conditions

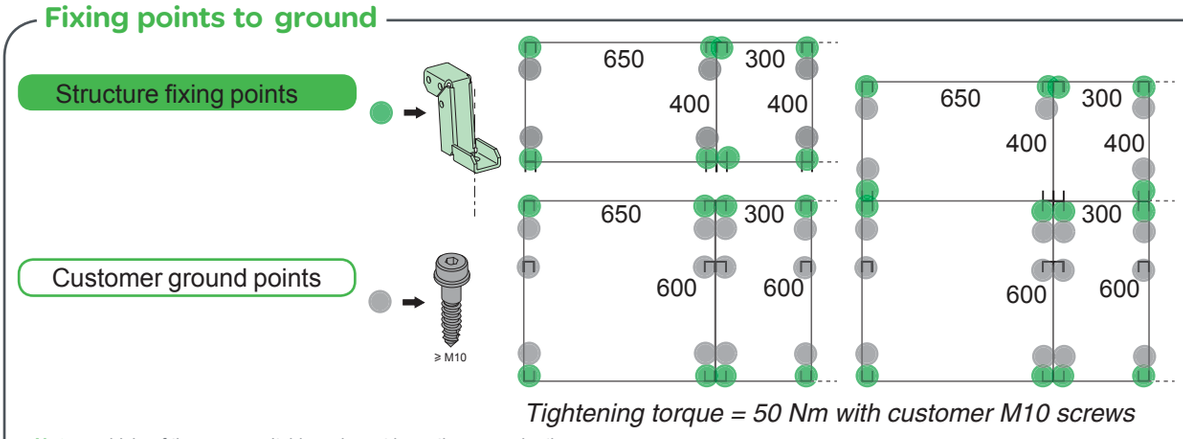
Specific application



### Prisma P cubicle frames

Prisma P cubicle frames have to be assembled according to the mounting instructions (04696505) and must respect the tightening torque and association screws position.
Functional units have to be assembled according to the mounting instructions supplied with each reference.

### Fixing points to ground




*Tightening torque = 50 Nm with customer M10 screws*

**Nota :** cubicle of the same switchboard must have the same depth
Refer to QGH13690 leaflet for compliant assembly

### Sizes to respect

Dimensional specifications have to be taken into account for the switchboard sizes and busbar ratings.

Switchboard sizes:

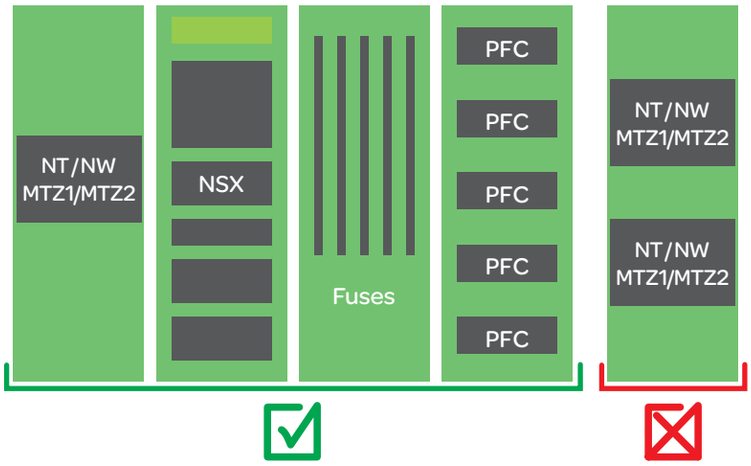
- > Minimum switchboard width (1) = 1200 mm
- > Minimum cubicle depth = 400 mm
- > Height = 2000 mm

**Nota:** Seismic switchboards must not be installed with any plinth.
**(1)** Switchboard must be equipped with horizontal busbars

Maximum busbar ratings:

| | 3P | 4P |
|---|---|---|
| Horizontal Linergy BS | 2b 80 x 10 | 2b 80 x 10 |
| Horizontal Linergy LGYE | LGYE 4000 | LGYE 4000 |

### Devices installation limit




**Nota:** Seismic cubicles not not exceed the unit weight of 350 kg, devices and busbars included.

Yes
- > Cable entry : top/bottom
- > Transparent door
- > IP 30/31
- > IP55

No
- > Connection to busways
- > Plinth 100 mm or 2 x 100 mm

| ***NOTICE*** |
|---|
| **HAZARD OF STRUCTURAL FAILURE** |
| Seismic cubicles must have the same depth. Plinths are not allowed in seismic configurations |
| **Failure to follow these instructions can result in equipment damage** |

# Selection guide

Version : 8.0 - 10/10/2019
160E4000

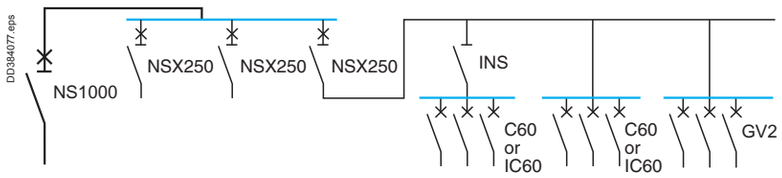
# Contents

Select a cubicle configuration D-2

D

# Select a cubicle configuration

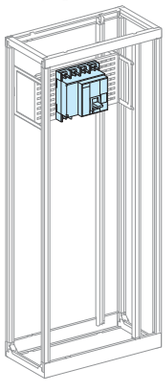
## Starting with the electrical diagram: IP30 switchboard





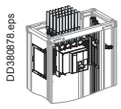

## Install the incomer

See page E-2

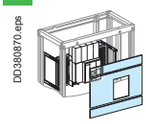



Order
- connection components
- mounting plates and front plates
- busbar connections.

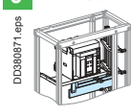
**1** Front conn. using cables




**2** Device installation




**3** Linergy LGY BB conn.




| Device | | Fixed device | |
|---|---|---|---|
| | | NS630b/1000 | NS1250/1600 |
| Arc chute screen | 3P | 33596 | |
| | 4P | 33597 | |
| Vertical connection adapters | 3P | 33642 | |
| | 4P | 33643 | |
| Front connection cover | | 04851 | |

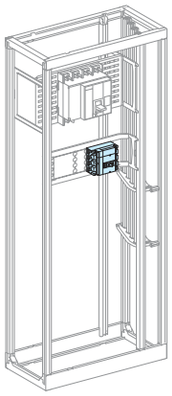
| Mounting | | Front connection with cables | |
|---|---|---|---|
| Device | | Fixed device | |
| | | NS630b/1000 | NS1250/1600 |
| Number of devices per row | | 1 | 1 |
| No. of vertical modules | | 12 | 14 |
| Mounting plates | | 03482 | 03482 |
| Front plates [No. of vertical modules] | upstream | 03802 [2] | 03804 [4] |
| | with cut-out | 03690 or 03701 [7] | |
| | downstream | 03803 [3] | 03803 [3] |

| Device | | Fixed device | |
|---|---|---|---|
| | | NS630b/1250 | NS1600 |
| Connection type | | Front connection delivered with the device | |
| Busbars connection | | For Linergy LGY busbars: prefabricated connection | |
| | 3P | 04485 | 04487 |
| | 4P | 04486 | 04488 |
| Cover for busbars connection Linergy LGY, LGYE, BS | | 04926 | |



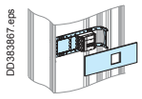
## Install the Compact devices

See page E-20



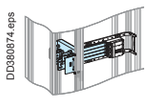

Order
- mounting plates and front plates
- busbar connections
- connection accessories.

**1** Installation




**2** Linergy LGY BB conn.

**3** Connection



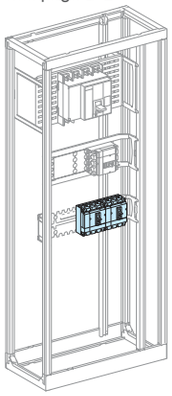

| Device | | Toggle | |
|---|---|---|---|
| | | NSX100/250, Vigi NSX100/250 | |
| | | 3P | 4P |
| Number of device per row | | 1 | 1 |
| No. of vertical modules | | 3 | 4 |
| Mounting plates | | 03411 | 03412 |
| Front plates [No. of vertical modules] | with cut-out | 03604 [3] | 03606 [4] |

| Device | | Linergy LGY | |
|---|---|---|---|
| | | Toggle | |
| | | NSX100/250, Vigi NSX100/250 | |
| | | 3P | 4P |
| Prefabricated connection | | 04423 | 04424 |

| Device | | Toggle | | |
|---|---|---|---|---|
| | | NSX100/160 | Vigi NSX100/160 | NSX250 |
| Number of device per row | | 3/4 | 3/4 | 3/4 |
| No. of vertical modules | | 6 | 8 | 7 |
| Mounting plates | | 03420 | 03420 | 03420 |
| Front plates [No. of vertical modules] | with cut-out | 03243 [5] | 03241 [7] | 03243 [5] |
| | downstream | 03801 [1] | 03801 [1] | 03802 [2] |

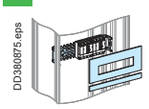


See page D-2

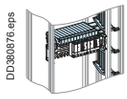



Order
- mounting plates and front plates
- distribution block
- connection accessories.

**1** Installation




**2** Linergy LGY BB conn.



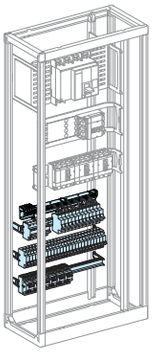

**3** Connection

| Device | | Toggle | | | |
|---|---|---|---|---|---|
| | | NSX100/160 | Vigi NSX100/160 | NSX250 | Vigi NSX250 |
| Number of device per row | | 3/4 | 3/4 | 3/4 | 3/4 |
| No. of vertical modules | | 6 | 8 | 7 | 9 |
| Mounting plates | | 03420 | 03420 | 03420 | 03420 |
| Front plates [No. of vertical modules] | with cut-out | 03243 [5] | 03241 [7] | 03243 [5] | 03241 [7] |
| | downstream | 03801 [1] | 03801 [1] | 03802 [2] | 03802 [2] |

| Device | | Linergy LGY | | | |
|---|---|---|---|---|---|
| | | Toggle | | | |
| | | NSX100/160, Vigi NSX100/160 | | NSX250, Vigi NSX250 | |
| | | 3P | 4P | 3P | 4P |
| Number of devices | | 4 | 3 | 4 | 3 |
| Linergy FC distribution blocks (with connection) | | 04403 | 04404 | 04403 | 04404 |

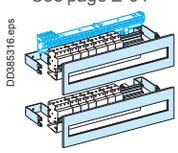
| Device | | Toggle | | | |
|---|---|---|---|---|---|
| | | NSX100/160, Vigi NSX100/160 | | NSX250, Vigi NSX250 | |
| | | 3P | 4P | 3P | 4P |
| Front connection long terminal shields | | LV429517 | LV429518 | LV429517 | LV429518 |
| Rear connection short terminal shields | | LV429515 | LV429516 | LV429515 | LV429516 |

## Install the modular devices



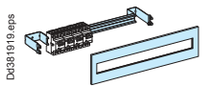

Order the mounting plates and front plates taking into account:
- supply to the rows
- cable running.

**1** Acti 9
See page E-64




| Device | All modular devices | Modular devices ≤ 40 A |
|---|---|---|
| Rail length (modules of 9 mm) | 48 | 48 |
| No. of vertical modules | 4 | 3 |
| Rail (48 modules of 9 mm) | 03401 | 03401 |
| Modular front plates | 03204 [4] | 03203 [3] |
| Blanking plate strip | 03220 | 03220 |
| Blanking plate divisible | 03221 | 03221 |

**2** GV2 circuit breaker
See page E-63




| Device | Circuit breaker | |
|---|---|---|
| | GV2RT - GV2ME - GV2LE | GV3 |
| No. of vertical modules | 3 | 5 |
| Useful length of rail (mm) | 432 | |
| Modular rail (adjustable) | 03401 | 03402 |
| Front plates with cut-out [No. of vert mod] | 03203 [3] | 03205 [5] |

Linergy FH comb busbar see page G-30 to G-36
Cable running see page F-26

## Determine the size of the switchboard

- count the number of modules occuped
- determine the number of cubicles
- order the additional plain front plate.

**32 modules**

**1 cubicle**

Plain front plate
See page F-22

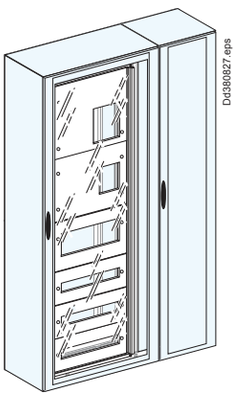
The capacity of a cubicle is 36 modules.

| Device | Plain front plate W = 500 mm | | | | | |
|---|---|---|---|---|---|---|
| | H = 50 mm | H = 100 mm | H = 150 mm | H = 200 mm | H = 250 mm | H = 300 mm |
| [No. of vert mod] | [1] | [2] | [3] | [4] | [5] | [6] |
| Cat. no | 03801 | 03802 | 03803 | 03804 | 03805 | 03806 |



## Select the enclosures

See page F-1




**1** Frameworks

**2** Hinged front plate support frame

**3** Doors

**4** Rear panels

**5** Side panels

**6** Roofs

**7** Plinth, gland plates, finishing parts, etc.

| Device | 300 | 400 | 650 | 800 | 800 (650 + 150) |
|---|---|---|---|---|---|
| | Base frame | | | | |
| Cat. no | 08403 | 08404 | 08406 | 08408 | 08407 |

| Device | 400 | 650 |
|---|---|---|
| | Hinged front plate support frame | |
| Cat. no | 08564 | 08566 |

| Device | W = 300 | W = 400 | W = 650 | W = 800 |
|---|---|---|---|---|
| Plain door | 08513 | 08514 | 08516 | 08518 |
| Transparent door | - | 08534 | 08536 | 08538 |

| Dimensions | W = 300 mm | W = 400 mm | W = 650 mm | W = 800 mm |
|---|---|---|---|---|
| Rear panels | 08733 | 08734 | 08736 | 08738 |

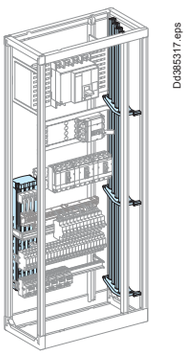
| Dimensions | D = 400 mm | D = 600 mm |
|---|---|---|
| Side panels | 08750 | 08760 |

| Dimensions | W = 300 mm | W = 400 mm | W = 650 mm | W = 800 mm |
|---|---|---|---|---|
| Plain roof D = 400 mm | 08433 | 08434 | 08436 | 08438 |
| Plain roof D = 600 mm | 08633 | 08634 | 08636 | 08638 |



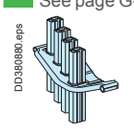
## Plan the distribution system

See page G-1




Linergy LGY busbars

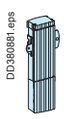
**1**
See page G-4




| Intensity (A) | Linergy LGY profils for table | | Number of busbars supports Icw (kA rms/1s) | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | IP ≤ 31 | IP > 31 | 25 | 30 | 40 | 50 | 60 | 65 | 75 | 85 |
| 630 | 04502 | | | | | | | | | |
| | | 04503 | | | | | | | | |
| 800 | 04503 | | | | | | | | | |
| | | 04504 | | 3 | | | | | | |
| 1000 | 04504 | | | | | | | | | |

| Designation C | at. No. |
|---|---|
| Busbar support | 04851 |

**2** Linergy BW busbars
See page G-14




| Linergy BW busbars | | 160 A | 250 A | 400 A | 630 A |
|---|---|---|---|---|---|
| 3P | W = 1000 mm | 04111 | 04112 | 04113 | 04114 |
| | W = 1400 mm | 04116 | 04117 | 04118 | 04119 |
| 4P | W = 1000 mm | 04121 | 04122 | 04123 | 04124 |
| | W = 1400 mm | 04126 | 04127 | 04128 | 04129 |

# Prisma P
# Functional units

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NSX 400/630 - Vertical mounting E-25
NSX 100 to 630 - Vertical mounting W = 400 mm E-30
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E

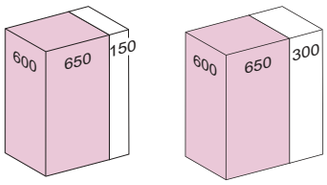
# Masterpact MTZ2 08 to 32

## Cables connection

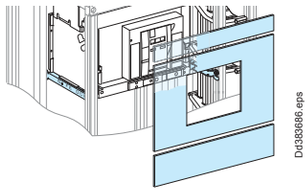
### Fixed, withdrawable



## Mounting

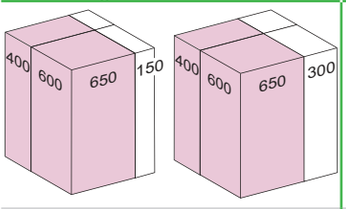



## Front connection

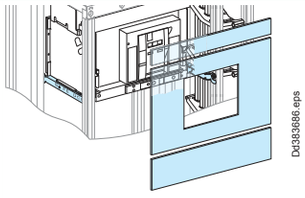



| Devices | | Fixed device | | Withdrawable device | |
|---|---|---|---|---|---|
| | | **MTZ2 08/16** | **MTZ2 20/32** | **MTZ2 08/16** | **MTZ2 20/32** |
| Number of devices per row | | 1 | 1 | 1 | 1 |
| No. of vertical modules (1) | | **18** | **19** | **19** | **20** |
| Mounting plates | | **03500** | **03500** | **03500** | **03500** |
| Front plates [No. of vertical modules] | upstream | **03804** [4] | **03805** [5] | **03804** [4] | **03805** [5] |
| | with cut-out | **03711** [9] | **03711** [9] | **03710** [10] | **03710** [10] |
| | downstream | **03805** [5] | **03805** [5] | **03805** [5] | **03805** [5] |

## Mounting



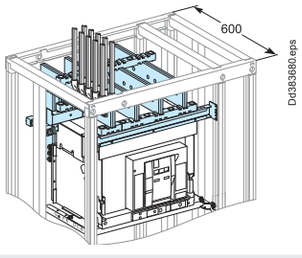

## Rear connection

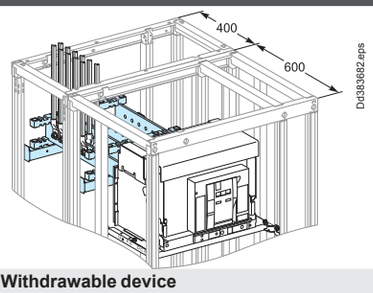



| Devices | | Fixed device | | Withdrawable device | |
|---|---|---|---|---|---|
| | | **MTZ2 08/16** | **MTZ2 20/32** | **MTZ2 08/16** | **MTZ2 20/32** |
| Number of devices per row | | 1 | 1 | 1 | 1 |
| No. of vertical modules | | **14** | **14** | **15** | **15** |
| Mounting plates | | **03500** | **03500** | **03500** | **03500** |
| Front plates [No. of vertical modules] | with cut-out | **03711** [9] | **03711** [9] | **03710** [10] | **03710** [10] |
| | downstream | **03805** [5] | **03805** [5] | **03805** [5] | **03805** [5] |

## Connection

## Upstream on incomer




| Devices | | Fixed device | Withdrawable device |
|---|---|---|---|
| | | **MTZ2 08/32** | **MTZ2 08/32** |
| Type of terminals | | Vertical rear connections supplied with the device | |
| Connection | | must be made (2) | |
| Front connection | bar supports | 2 x **04694** + **04678** | |
| | cables cover | **04861** | |
| Rear connection | bar supports | 2 x **04694** | |
| | cables cover | **04863** | |

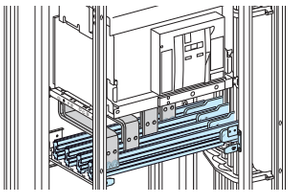
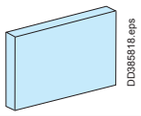
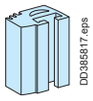
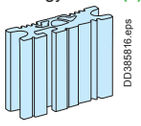
**(1)** For downstream connection with copper.
For downstream prefabricated connection with Linergy LGYE, 1 additional module is required only for MTZ2 3200A. Select downstream plain front plate (**03806**).
**(2)** Connection to be made according to the busbar drawings supplied by Schneider Electric.

# Masterpact MTZ2 08 to 32

## Cables connection

### Fixed, withdrawable



| Distribution | | Downstream on Linergy LGY, LGYE or BS busbars | | | | | |
|---|---|---|---|---|---|---|---|
| | |  DD385815.eps | | | | | |
| **Devices** | | **Fixed and withdrawable** | | **Fixed and withdrawable** | | **Fixed and withdrawable** | |
| | | **MTZ2 08/16** | | **MTZ2 20/25** | | **MTZ2 32** | |
| | | **3P** | **4P** | **3P** | **4P** | **3P** | **4P** |
| Type of terminals | | Front connections supplied with the device. | | | | | |
| For vertical busbar Linergy BS  DD385818.eps | Connection | Must be made according to the busbar drawings supplied by Schneider Electric. | | | | | |
| | Joint | - | - | Order one joint per phase: 1 joint for busbars, W = 50/60 mm (**04640**), 1 joint for busbars, W = 80/100 mm (**04641**). | | | |
| | Free support | 2 x **04662**<br>For Icw ⩾ 75 kA rms, add an additional free support **04662**. | | | | | |
| | Cover | **04926** + **04927** | | | | | |
| For vertical busbar Linergy LGY  DD385817.eps | Connection | **04493** | **04494** | must be made according to the busbar drawings supplied by Schneider Electric. | | | |
| | Joint | **04683** | **04684** | - | | | |
| | Free support | - | - | 2 x **04662**<br>For Icw ⩾ 75 kA rms, add an additional free support **04662**. | | | |
| | Cover | **04925** + **04928** | | **04926** + **04927** | | | |
| For vertical busbar Linergy LGYE (1)  DD385816.eps | Connection | - | - | **04495** | **04496** | **04497** (2) | **04498** (2) |
| | Joint | - | - | 3 x **04685** | 4 x **04685** | 3 x **04687** | 4 x **04687** |
| | Cover | **04925** + **04928** | | | | | |

**(1)** For LGYE 08/25, use a duct W = 150 mm. For LGYE 32/40, use a duct W = 300 mm.
**(2)** One additional module is required, select **03806** plain front plate for downstream.

**Note:** to make measurements:
Install the CTs preferably upstream, on the supply terminal extension bars or install the CTs on the horizontal busbars (busbar connection). In this case, add one module and a plain front plate (**03801**) or install a Micrologic control unit capable of displaying the values.
Selection of busbars: Linergy LGY *> page G-4*, Linergy LGYE *> page G-5*, Linergy BS *> page G-6*.

E

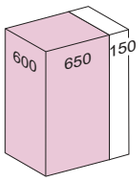
# Masterpact MTZ2 08 to 32

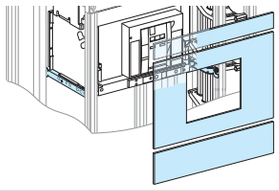
## Canalis connection

### Fixed, withdrawable



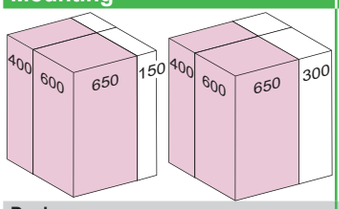
## Mounting — Front connection

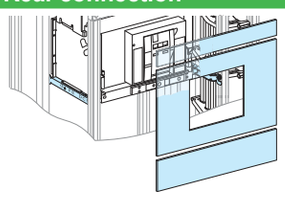



| Devices | | Fixed device | | Withdrawable device | |
|---|---|---|---|---|---|
| | | **MTZ2 08/16** | **MTZ2 20/32** | **MTZ2 08/16** | **MTZ2 20/32** |
| Number of devices per row | | 1 | 1 | 1 | 1 |
| No. of vertical modules **(1)** | | **27** | **28** | **27** | **28** |
| Mounting plates | | **03500** | **03500** | **03500** | **03500** |
| Front plates [No. of vertical modules] | upstream | **03805** [5]<br>2 x **03804** [8] | 2 x **03805** [10]<br>**03804** [4] | 3 x **03804** [12] | **03805** [5]<br>2 x **03804** [8] |
| | with cut-out | **03711** [9] | **03711** [9] | **03710** [10] | **03710** [10] |
| | downstream | **03805** [5] | **03805** [5] | **03805** [5] | **03805** [5] |

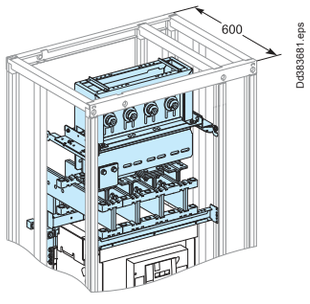
## Mounting — Rear connection

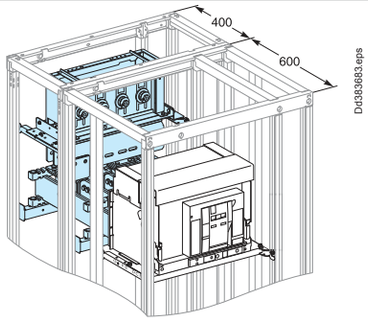



| Devices | | Fixed device | | Withdrawable device | |
|---|---|---|---|---|---|
| | | **MTZ2 08/16** | **MTZ2 20/32** | **MTZ2 08/16** | **MTZ2 20/32** |
| Number of devices per row | | 1 | 1 | 1 | 1 |
| No. of vertical modules | | **16** | **16** | **17** | **17** |
| Mounting plates | | **03500** | **03500** | **03500** | **03500** |
| Front plates [No. of vertical modules] | upstream | **03804** [4]<br>+ **03803** [3] | **03804** [4]<br>+ **03803** [3] | **03804** [4]<br>+ **03803** [3] | **03804** [4]<br>+ **03803** [3] |
| | with cut-out | **03711** [9] | **03711** [9] | **03710** [10] | **03710** [10] |

## Connection — Upstream on incomer




| Devices | | Fixed device | | | | | | Withdrawable device | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | **MTZ2 08/16** | | **MTZ2 20/25** | | **MTZ2 32** | | **MTZ2 08/16** | | **MTZ2 20/25** | | **MTZ2 32** | |
| Type of terminals | | Vertical rear connections supplied with the device | | | | | | | | | | | |
| Canalis support | | **03561** | | | | | | | | | | | |
| Canalis interface **(2)** | | 3P | 4P | 3P | 4P | 3P | 4P | 3P | 4P | 3P | 4P | 3P | 4P |
| | | **04715** | **04716** | **04725** | **04726** | **04735** | **04736** | **04715** | **04716** | **04725** | **04726** | **04735** | **04736** |
| Front connection | Bar supports | 2 x **04694** + **04678** | | | | | | | | | | | |
| | Extension bars | must be made **(3)** | | | | | | | | | | | |
| | Canalis Cover | **04871** + **04861** | | | | | | | | | | | |
| Rear connection | Bar supports | 2 x **04694** | | | | | | | | | | | |
| | Extension bars | must be made **(3)** | | | | | | | | | | | |
| | Canalis Cover | **04871** + **04863** | | | | | | | | | | | |

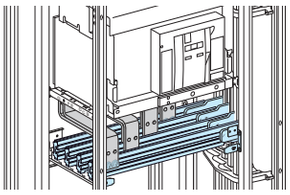
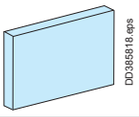
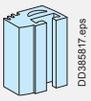
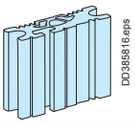
**(1)** For downstream connection with copper.
For downstream prefabricated connection with Linergy LGYE, 1 additional module is required only for MTZ2 3200A. Select downstream plain front plate (**03806**).
**(2)** To tight the screws of the Canalis interface use the special tool **87808**.
**(3)** Connection to be made according to the busbar drawings supplied by Schneider Electric.

# Masterpact MTZ2 08 to 32

## Canalis connection

### Fixed, withdrawable



| Distribution | | Downstream on Linergy LGY, LGYE or BS busbars | | | | | |
|---|---|---|---|---|---|---|---|
| | |  DD388815.eps | | | | | |
| **Fixed / withdrawable devices** | | **MTZ2 08/16** | | **MTZ2 20/25** | | **MTZ2 32** | |
| | | **3P** | **4P** | **3P** | **4P** | **3P** | **4P** |
| Type of terminals | | Front connections supplied with the device. | | | | | |
| For vertical busbar Linergy BS  DD388818.eps | Connection | Must be made according to the busbar drawings supplied by Schneider Electric. | | | | | |
| | Joint | - | - | Order one joint per phase: 1 joint for busbars, W = 50/60 mm (**04640**), 1 joint for busbars, W = 80/100 mm (**04641**). | | | |
| | Free support | 2 x **04662**<br>For Icw ≥ 75 kA rms, add an additional free support **04662**. | | | | | |
| | Cover | **04926** + **04927** | | | | | |
| For vertical busbar Linergy LGY  DD388817.eps | Connection | **04493** | **04494** | must be made according to the busbar drawings supplied by Schneider Electric. | | | |
| | Joint | **04683** | **04684** | - | | | |
| | Free support | - | - | 2 x **04662**<br>For Icw ≥ 75 kA rms, add an additional free support **04662**. | | | |
| | Cover | **04925** + **04928** | | **04926** + **04927** | | | |
| For vertical busbar Linergy LGYE **(1)**  DD388816.eps | Connection | - | - | **04495** | **04496** | **04497** **(2)** | **04498** **(2)** |
| | Joint | - | - | 3 x **04685** | 4 x **04685** | 3 x **04687** | 4 x **04687** |
| | Cover | **04925** + **04928** | | | | | |

**(1)** For LGYE 08/25, use a duct W = 150 mm. For LGYE 32/40, use a duct W = 300 mm.
**(2)** One additional module is required, select **03806** plain front plate for downstream.

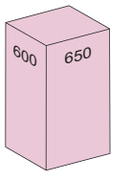
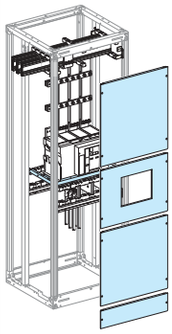
**Note:** to make measurements:
Install the CTs preferably upstream, on the supply terminal extension bars or install the CTs on the horizontal busbars (busbar connection). In this case, add one module and a plain front plate (**03801**) or install a Micrologic control unit capable of displaying the values.
Selection of busbars: Linergy LGY *> page G-4*, Linergy LGYE *> page G-5*, Linergy BS *> page G-6*.

# Masterpact MTZ2 08 to 40

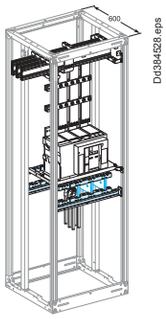
## Dedicated cubicle - W = 650 mm

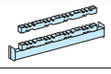
### Fixed, withdrawable



| Mounting | Dedicated cubicle |
|---|---|
|  |  |

| Devices | | Fixed device | | Withdrawable device | |
|---|---|---|---|---|---|
| | | **MTZ2 08/32** | **MTZ2 40** (2) | **MTZ2 08/32** | **MTZ2 40** (2) |
| Number of devices per row | | 1 | (2) | 1 | (2) |
| No. of vertical modules | | **36** | (2) | **36** | (2) |
| Mounting plates | | **03500** | (2) | **03500** | (2) |
| Front plates [No. of vertical modules] | upstream (1) | **03808** [12] | (2) | **03808** [12] | (2) |
| | with cut-out | **03711** [9] | (2) | **03710** [10] | (2) |
| | downstream | **03808** [12] **+ 03803** [3] | (2) | **03808** [12] **+ 03802** [2] | (2) |

| Connection | Upstream with bottom cables |
|---|---|
| |  |

| Fixed / withdrawable devices | | MTZ2 08/32 | MTZ2 40 (2) |
|---|---|---|---|
| Type of terminals | | Vertical rear connectors | (2) |
| Terminal extension bars for connection | | must be made (3) | (2) |
| Terminal extension bar supports |  | **04694** x 2 | (2) |
| Cables cover | | **04861** | (2) |

**(1)** One or two 3-module front plates for 72 x 72 and 96 x 96 mm measurement devices can be installed just above the cut-out front plate:
- 1 3-module front plate + 1 plain front plate **03807** (9 modules)
- 2 3-module front plates + 1 plain front plate **03806** (6 modules)

**(2)** Contact Schneider Electric for 4000 A dedicated cubicle.
**(3)** Connection to be made according to the busbar drawings supplied by Schneider Electric.

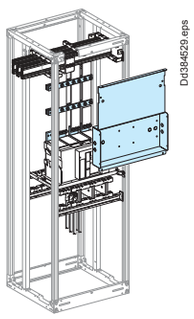
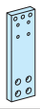
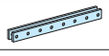
Human-switchboard interface > *page E-67*.

# Masterpact MTZ2 08 to 40

## Dedicated cubicle - W = 650 mm

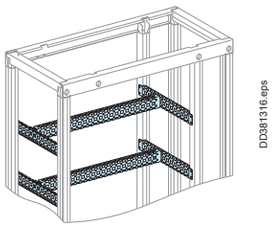
### Fixed, withdrawable

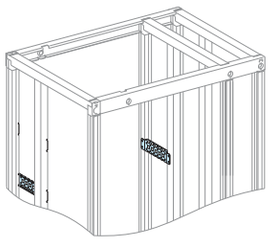


| Distribution | Downstream up links on horizontal busbars | | | | | | |
|---|---|---|---|---|---|---|---|
| | Linergy LGYE | | | | Linergy BS | | |
| | |  DD384529.eps | | | | | |
| **Fixed / withdrawable devices** | **MTZ2 08/16** | **MTZ2 20/25** | **MTZ2 32** | **MTZ2 40 (1)** | **MTZ2 08/25** | **MTZ2 32** | **MTZ2 40 (1)** |
| Type of terminals  | Front connection | | | | Front connection | | |
| Spacing rods for flat bars  | **04690** x 2 | **04690** x 2 | **04690** x 2 | - | **04690** x 2 | **04690** x 2 | - |
| Connection | Connection must be made (2) | | | | Connection must be made (2) | | |
| horizontal 3200 A | - | | | | **04637** (3) | **04637** (3) | - |
| mouting hardware | - | | | | - | **04642** | - |
| Busbar cover (4) | **04860** | **04860** | **04860** | - | **04860** | **04860** | - |

E

## Accessories

 DD381316.eps

 DD381581.eps

| | Cross-members | |
|---|---|---|
| Catalogue number | **03584** | **03586** |
| Characteristics | Set of 2<br>For 650 mm wide and 400 mm deep cubicle | Set of 2<br>W = 200 mm, can be added to the 400 mm cross-members for frameworks that are 600 mm deep. They can also be installed separately |

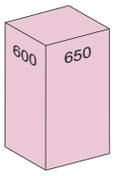
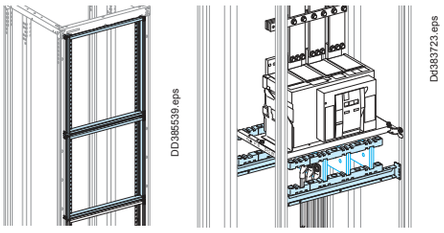
**(1)** Contact Schneider Electric for 4000 A dedicated cubicle.
**(2)** Connection to be made according to the busbar drawings supplied by Schneider Electric.
**(3)** Catalogue number 04637 includes 1 connection only. Order 1 connection per phase.
**(4)** The cover is compulsory behind front plates designed for measurement devices.

# Masterpact MTZ2 08 to 32

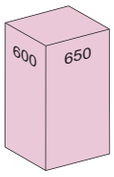
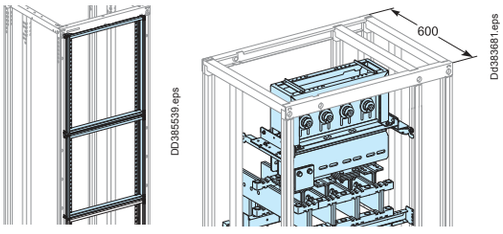
## Partial front plate support frames

### Withdrawable



| Mounting | Front connection with cables in dedicated cubicle |
|---|---|
|  |  |

| Devices | | Withdrawable device |
|---|---|---|
| | | **MTZ2 08/32** |
| No. of vertical modules | | **36** (3) |
| Mounting plates | | **03500** |
| Front plates [No. of vertical modules] | upstream | 2 x **03806** [12] |
| | with cut-out | **03709** [10] |
| | downstream | 2 x **03806** [12] |
| 1/3 front plate support frame | | **08560** (1) + 2 x **08562** (2) |
| Cover | | **04861** |

| Mounting | Canalis front connection |
|---|---|
|  |  |

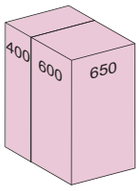
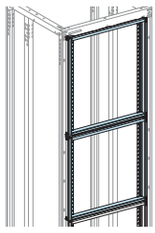
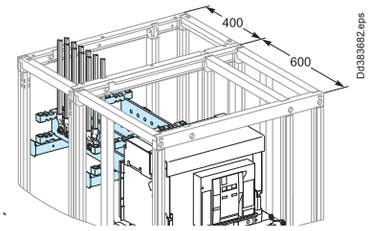
| Devices | | Withdrawable device | |
|---|---|---|---|
| | | **MTZ2 08/16** | **MTZ2 20/32** |
| No. of vertical modules | | **27** (3) | **28** (3) |
| Mounting plates | | **03500** | **03500** |
| Front plates [No. of vertical modules] | upstream | 3 x **03804** [12] | 2 x **03805** [10] + **03802** [2] |
| | with cut-out | **03709** [10] | **03710** [10] |
| | downstream | **03804** [4] | **03804** [4] |
| 1/3 front plate support frame | | **08560** (1) + 2 x **08562** (2) | **08560** (1) + 2 x **08562** (2) |
| Cover | | **04861** | **04861** |

# Masterpact MTZ2 08 to 32

## Partial front plate support frames

### Withdrawable



| Mounting | Rear connection with cables |
|---|---|
|  |   |

| Devices | | Withdrawable device |
|---|---|---|
| | | **MTZ2 08/32** |
| No. of vertical modules | | **15** (3) |
| Mounting plates | | **03500** |
| Front plates [No. of vertical modules] | upstream | - |
| | with cut-out | **03709** [10] |
| | downstream | **03804** [4] |
| 1/3 front plate support frame | | **08560** (1) + 2 x **08562** (2) |

**(1)** 1/3 front plate support frame 10 modules.
**(2)** 1/3 front plate support frame 12 modules.
**(3)** Modularity includes the space of one module between each front plate support frame.

E

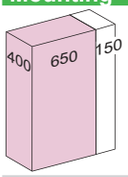
# Masterpact MTZ1 06 to 16

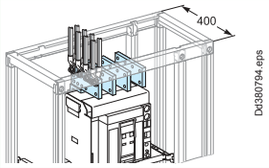
## Cables connection

### Toggle, motor mechanism - Fixed, withdrawable



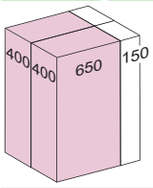
## Mounting — Front connection with cables

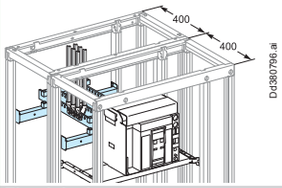



| Devices | | Fixed device | | Withdrawable device | |
|---|---|---|---|---|---|
| | | MTZ1 06/10 | MTZ1 12/16 | MTZ1 06/10 | MTZ1 12/16 |
| Number of devices per row | | 1 | 1 | 1 | 1 |
| No. of vertical modules | | **12** | **14** | **13** | **15** |
| Mounting plates | | **03484** | **03484** | **03483** | **03483** |
| Front plates [No. of vertical modules] | upstream | **03802** [2] | **03804** [4] | **03802** [2] | **03804** [4] |
| | with cut-out | **03692** [7] | **03692** [7] | **03691** [8] | **03691** [8] |
| | downstream | **03803** [3] | **03803** [3] | **03803** [3] | **03803** [3] |

## Mounting — Rear connection with cables



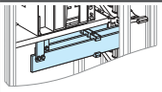



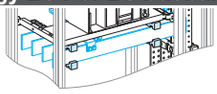

| Devices | | Fixed device | Withdrawable device |
|---|---|---|---|
| | | MTZ1 06/16 | MTZ1 06/16 |
| Number of devices per row | | 1 | 1 |
| No. of vertical modules | | **11** | **11** |
| Mounting plates | | **03484** | **03483** |
| Front plates [No. of vertical modules] | upstream | **03801** [1] | - |
| | with cut-out | **03692** [7] | **03691** [8] |
| | downstream | **03803** [3] | **03803** [3] |

## Connection — Upstream on incomer

| Devices | | Fixed device | | | | Withdrawable device | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | MTZ1 06/10 | | MTZ1 12/16 | | MTZ1 06/10 | | MTZ1 12/16 | |
| | | 3P | 4P | 3P | 4P | 3P | 4P | 3P | 4P |
| Front connection | type of terminals | Front connections supplied with the device | | | | | | | |
| | vert. connection adapters | **33642** (1) | **33643** (1) | **33642** (1) | **33643** (1) | **33642** (1) | **33643** (1) | **33642** (1) | **33643** (1) |
| | cable-lug adapters | Direct | | **33644** (1) | **33645** (1) | Direct | | **33644** (1) | **33645** (1) |
| | spacing rods | - | | **04691** | | - | | **04691** | |
| | arc-chute cover | **47335** | **47336** | **47335** | **47336** | - | | | |
| | cables cover | **04852** | | | | | | | |
| Rear connection | type of terminals | Vertical rear connections supplied with the device | | | | | | | |
| | terminal extension bar support | 2 x **04693** | | | | | | | |
| | cables cover | **04854** | | | | | | | |
| | extension bars | must be made (2) | | | | | | | |

## Distribution — Downstream on Linergy LGY or BS busbars




| Devices | | Fixed device | | | | Withdrawable device | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | MTZ1 06/12 | | MTZ1 16 | | MTZ1 06/12 | | MTZ1 16 | |
| | | 3P | 4P | 3P | 4P | 3P | 4P | 3P | 4P |
| Type of terminals | | Front connections supplied with the device | | | | | | | |
| Prefabricated connection to busbars | Linergy LGY | **04475** | **04476** | **04489** | **04490** | **04477** | **04478** | **04491** | **04492** |
| | Linergy BS | must be made (2) | | | | | | | |
| | | add free supports: 2 x **04662** | | | | | | | |
| Cover for busbars connection | | **04926** | | | | | | | |

**(1)** Vertical connection adapters and cable-lug adapters and CT, are not compatible with input voltage ≥ 440V due to mandatory barriers installation (**33648** or **33768**)
**(2)** Connection to be made according to the busbar drawings supplied by Schneider Electric.

**Note:** to make measurements: install the CTs on the horizontal busbars (busbar connection); in this case, an additional module is required; add a plain front plate (**03801**) or install a Micrologic control unit capable of displaying the values.
Selection of busbars: Linergy LGY > *page G-4*, Linergy LGYE > *page G-5*, Linergy BS > *page G-6*.

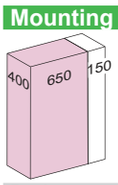
# Masterpact MTZ1 06 to 16

## Canalis connection

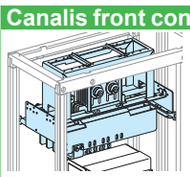
### Toggle, motor mechanism - Fixed, withdrawable



## Mounting

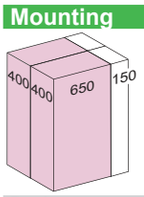



## Canalis front connection

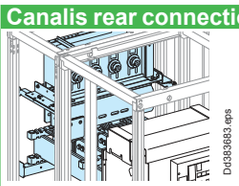



| Devices | | Fixed device | | Withdrawable device | |
|---|---|---|---|---|---|
| | | MTZ1 06/12 | MTZ1 16 | MTZ1 06/12 | MTZ1 16 |
| Number of devices per row | | 1 | - | 1 | - |
| No. of vertical modules | | **17** | - | **18** | - |
| Mounting plates | | **03484** | - | **03483** | - |
| Front plates | upstream | **03804** [4] **+ 03803** [3] | - | **03804** [4] **+ 03803** [3] | - |
| [No. of vertical modules] | with cut-out | **03692** [7] | - | **03691** [8] | - |
| | downstream | **03803** [3] | - | **03803** [3] | - |

## Mounting




## Canalis rear connection




| Devices | | Fixed device | Withdrawable device |
|---|---|---|---|
| | | MTZ1 06/16 | MTZ1 06/16 |
| Number of devices per row | | 1 | 1 |
| No. of vertical modules | | **16** | **16** |
| Mounting plates | | **03484** | **03483** |
| Front plates | upstream | **03806** [6] | **03805** [5] |
| [No. of vertical modules] | with cut-out | **03692** [7] | **03691** [8] |
| | downstream | **03803** [3] | **03803** [3] |

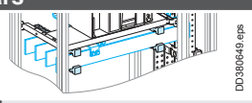
## Connection

## Upstream on incomer

| Devices | | Fixed device | | | | Withdrawable device | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | MTZ1 06/12 | | MTZ1 16 | | MTZ1 06/12 | | MTZ1 16 | |
| | | 3P | 4P | 3P | 4P | 3P | 4P | 3P | 4P |
| Canalis support | | **03561** | | | | | | - | |
| Canalis interface **(1)** | | **04703** | **04704** | **04703** | **04704** | **04703** | **04704** | **04703** | **04704** |
| Front connection | Type of terminals | Front connections supplied with the device | | | | | | | |
| | Canalis/device connection | **04711** | **04712** | - | | **04711** | **04712** | - | |
| | Arc-chute cover | **47335** | **47336** | - | | **-** | | - | |
| | Canalis cover | **04871** + **04852** | | - | | **04871** + **04852** | | - | |
| Rear connection | Type of terminals | Vertical rear connections supplied with the device | | | | | | | |
| | Terminal extension bar support | 2 x **04693** | | | | | | **-** | |
| | Canalis/device connection | **04713** | **04714** | **04713** | **04714** | **04713** | **04714** | **04713** | **04714** |
| | Cable cover | **04871** + **04854** | | | | | | | |
| | Extension bars | must be made **(2)** | | | | | | | |

## Distribution

## Downstream on Linergy LGY or BS busbars




| Devices | | Fixed device | | | | Withdrawable device | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | MTZ1 06/12 | | MTZ1 16 | | MTZ1 06/12 | | MTZ1 16 | |
| | | 3P | 4P | 3P | 4P | 3P | 4P | 3P | 4P |
| Type of terminals | | Front connections supplied with the device | | | | | | | |
| Prefabricated connection to busbars | Linergy LGY | **04475** | **04476** | **04489** | **04490** | **04477** | **04478** | **04491** | **04492** |
| | Linergy BS | must be made **(2)**<br>add free supports: 2 x **04662** | | | | | | | |
| Cover for busbars connection | | **04926** | | | | | | | |

**(1)** To tight the screws of the Canalis interface use the special tool **87808**.
**(2)** Connection to be made according to the busbar drawings supplied by Schneider Electric.
**Note:** to make measurements: install the CTs on the horizontal busbars (busbar connection); in this case, an additional module is required; add a plain front plate (**03801**) or install a Micrologic control unit capable of displaying the values.
Selection of busbars: Linergy LGY *> page G-4*, Linergy LGYE *> page G-5*, Linergy BS *> page G-6*.

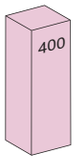
# Masterpact MTZ1 06 to 16

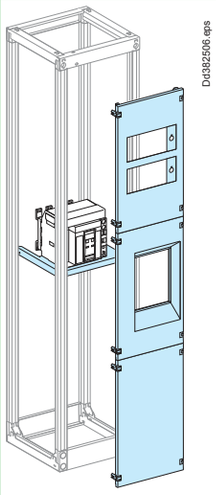
## Dedicated cubicle 3P - W = 400 mm

Fixed, withdrawable



## Mounting



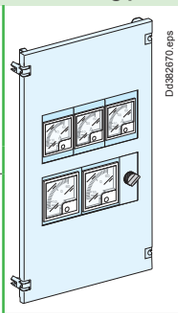




| Devices | | Fixed device | Withdrawable device |
|---|---|---|---|
| | | **MTZ1 06 to MTZ1 16** | |
| Number of devices per cubicle | | 1 | 1 |
| No. of vertical modules | | **37** | **37** |
| Mounting plates | | **03489** | **03488** |
| Front plates [No. of vertical modules] | with cut-out | **03698** [11] | **03699** [11] |
| | upstream **(1)** cut-out for 72 x 72 or 96 x 96 mm | **03723** [13] | **03723** [13] |
| | or plain | **03722** [13] | **03722** [13] |
| | downstream **(1)** plain | **03722** [13] | **03722** [13] |

## Measurement-device installation

Measurement devices are installed on a front plate (**03723**) using plastic mounting plates with cut-outs. The front plate can hold:

- six 72 x 72 mm cases
- or four 96 x 96 mm cases + 2 switches.

| Number and type of devices per row | Metal front plate with cut-out | No. of vertical modules | Plastic mounting plates with cut-out | Blanking plate or device support |
|---|---|---|---|---|
| **Mounting on interface with plastic mounting plates** | | | | |
| **3** x 72 x 72 Vigirex and other devices 72 x 72 without switch |   | 13 | **03902** | To blank-off or install:<br>- from 1 to 4 buttons Ø 16 or 22 mm<br>- 1 device 45 x 45 **03900** |
| **2** x 96 x 96 Power Meter and other devices 96 x 96 with switch | | | **03903** | To blank-off or install:<br>- 1 to 4 buttons Ø 16 or 22 mm<br>- 1 device 45 x 45<br>- 1 device 72 x 72 **03901** |
| **03723** | | | | |
| Characteristics | ■ Installation of three devices (72 x 72 mm cases) using plastic mounting plates (**03902**) and two devices (96 x 96 mm cases) + a switch using plastic mounting plates (**03903**) on a hinged front plate (**03723**)<br>■ The plain mounting plates have knock-outs for lamps, pushbuttons, switches or devices.<br>Knock-outs for 03900: 4 Ø 16 mm, 5 Ø 22 mm or one for a 45 x 45 mm device.<br>Knock-outs for 03901: 4 Ø 16 mm, 5 Ø 22 mm or one for a 45 x 45 or 72 x 72 mm device. | | | |

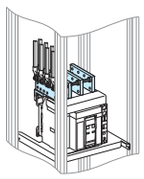
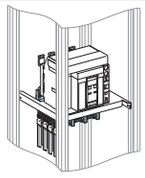
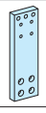
**(1)** Hinged or reversible (left or right-hand opening) front plates connect directly to the framework, without a front-plate support frame.

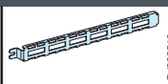
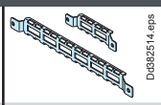
# Masterpact MTZ1 06 to 16

## Dedicated cubicle 3P - W = 400 mm

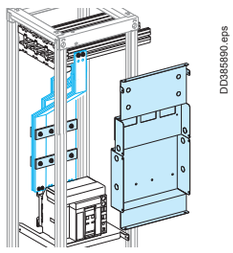
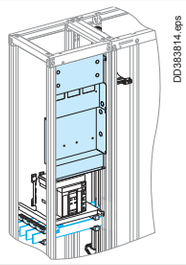
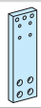
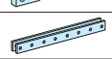
### Fixed, withdrawable



| Connection | Upstream on incomer | |
|---|---|---|
| |  Dd382672_1.eps |  Dd382669.eps |
| **Devices** | **Fixed device** | **Withdrawable device** |
| | **MTZ1 06 to MTZ1 16** | |
| Type of terminals  | Front connection | Front connection |
| Arc-chute cover | **47335** | **-** |
| Vert. conn. adapters | **33642** (1) | **33642** (1) |
| Cable-lug adapters | **33644** (1) | **33644** (1) |
| Spacing rods | **04691** | **04691** |

| Accessories | | | |
|---|---|---|---|
| |  Dd382513.eps |  Dd382514.eps | |
| | **W = 400** | **D = 400** | **D = 600** |
| 4 cable tie supports for framework | **08774** | **08794** | **08794 + 08796** |

(1) Vertical connection adapters and cable-lug adapters are not compatible with input voltage ⩾ 500 V.

| Distribution | Downstream on horizontal busbars | | Downstream on vertical busbars |
|---|---|---|---|
| | Linergy LGYE | Linergy BS | Linergy LGY or BS |
| |  DD385890.eps | |  DD383814.eps |
| **Fixed / withdrawable devices** | **MTZ1 06 to MTZ1 16** | | **MTZ1 06 to MTZ1 16** |
| Type of terminals  | Front connection | Front connection | Front connection |
| Support  | 2 x **04692** For MTZ1 H1 & H2<br>3 x **04692** For MTZ1 H3 | 2 x **04692** For MTZ1 H1 & H2<br>3 x **04692** For MTZ1 H3 | **04662** |
| Barrier (1) | **04855** | **04855** | **04855** |
| Horizontal-busbar connections | must be made (2) | must be made (2) | - |
| 10 mm thickness bars | - | **04636** (3) | - |
| Vertical-busbar connections | - | - | must be made (2) |
| Free support | - | - | **04662** |

(1) A barrier must be installed behind front plate **03723** when measurement devices are installed.
(2) Connection to be made according to the busbar drawings supplied by Schneider Electric.
(3) Catalogue number **04636** includes 1 connection only. Order 1 connection per phase.

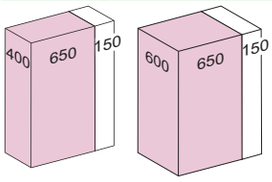
# Compact NS1600b to 3200

## Cables connection

### Fixed

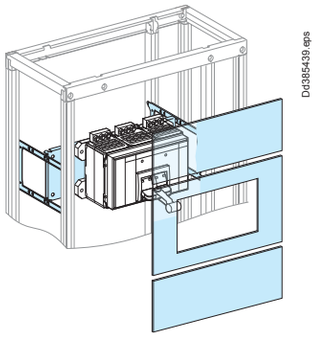


## Mounting




NS1600b NS2000/3200

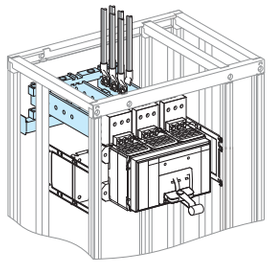
## Front connection




| Devices | | Fixed device | |
|---|---|---|---|
| | | **NS1600b** | **NS2000/3200** |
| Number of devices per row | | 1 | 1 |
| No. of vertical modules | | **14** | **16** |
| Mounting plates | | **03501** | **03501** |
| Front plates [No. of vertical modules] | upstream | **03802** [2] | **03802** [2] |
| | with cut-out | **03716** [8] | **03716** [8] |
| | downstream | **03804** [4] | **03806** [6] |

## Connection

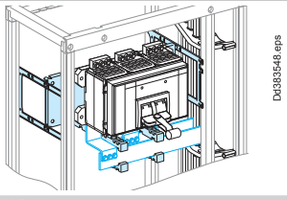
## Upstream on incomer




| Fixed devices | | NS1600b/2500 | NS3200 |
|---|---|---|---|
| Type of terminals | | Front connections supplied with the device | |
| Vertical-connection adapters | 3P | **33975** | **33975** |
| | 4P | **33976** | **33976** |
| Terminal extension bar support | | **04694** | |
| Extension bars | | must be made (1) | |

## Distribution

## Downstream on Linergy LGY, LGYE or BS busbars




| Fixed devices | NS1600b | NS2000/2500 | NS3200 |
|---|---|---|---|
| Type of terminals | Front connections supplied with the device | | |
| Busbars connection | must be made (1) (2) | | |
| Free support for busbars connection | 2 x **04662** | | |
| Cover for busbars connection | **04926** | **04926** | **04926** |
| Additional cover | - | **04927** | **04927** |

(1) Connection to be made according to the busbar drawings supplied by Schneider Electric. LGYE: +17.5 mm than BS.
(2) For the connection to flat busbars > 1600 A, order one joint per phase:
- 1 joint for busbars, W = 50/60 mm (**04640**)
- 1 joint for busbars, W = 80/100 mm (**04641**)

**Note:** to make measurements:
- install the CTs on the horizontal busbars (busbar connection); in this case, an additional module is required; add a plain front plate (**03801**)
- or install a Micrologic control unit capable of displaying the values.

Selection of busbars: Linergy LGY > *page G-4*, Linergy LGYE > *page G-5*, Linergy BS > *page G-6*.

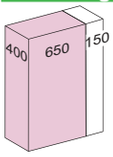
# Compact NS630b to NS1600

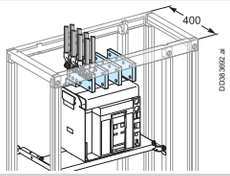
## Cables connection

### Toggle, rotary handle, motor mechanism - Fixed, withdrawable



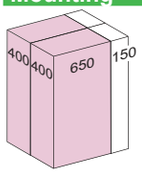
## Mounting — Front connection with cables

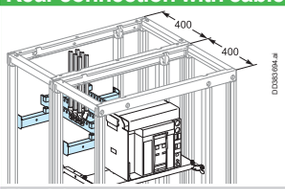



| Devices | | Fixed device | | Withdrawable device | |
|---|---|---|---|---|---|
| | | NS630b/1000 | NS1250/1600 | NS630b/1000 | NS1250/1600 |
| Number of devices per row | | 1 | 1 | 1 | 1 |
| No. of vertical modules | | **12** | **14** | **13** | **15** |
| Mounting plates | | **03482** | **03482** | **03483** | **03483** |
| Front plates | upstream | **03802** [2] | **03804** [4] | **03802** [2] | **03804** [4] |
| [No. of vertical modules] | with cut-out | **03690 or 03701 (1)** [7] | | **03691** [8] | **03691** [8] |
| | downstream | **03803** [3] | **03803** [3] | **03803** [3] | **03803** [3] |

## Mounting — Rear connection with cables



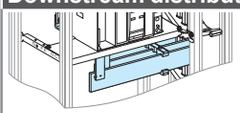



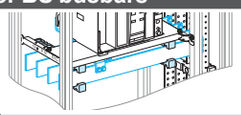

| Devices | | Fixed device | Withdrawable device |
|---|---|---|---|
| | | NS630b/1600 | NS630b/1600 |
| Number of devices per row | | 1 | 1 |
| No. of vertical modules | | **10** | **11** |
| Mounting plates | | **03482** | **03483** |
| Front plates | with cut-out | **03690** or **03701 (1)** [7] | **03691** [8] |
| [No. of vertical modules] | downstream | **03803** [3] | **03803** [3] |

## Connection — Upstream on incomer

| Devices | | Fixed device | | | | Withdrawable device | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | NS630b/1000 | | NS1250/1600 | | NS630b/1000 | | NS1250/1600 | |
| | | 3P | 4P | 3P | 4P | 3P | 4P | 3P | 4P |
| Front connection | Type of terminals | Front connections supplied with the device | | | | | | | |
| | Vertical connection adapters | **33642 (3)** | **33643 (3)** | **33642 (3)** | **33643 (3)** | **33642 (3)** | **33643 (3)** | **33642 (3)** | **33643 (3)** |
| | Cable-lug adapters | Direct | | **33644 (3)** | **33645 (3)** | Direct | | **33644 (3)** | **33645 (3)** |
| | Spacing rods | - | | **04691 (3)** | | - | | **04691 (3)** | |
| | Arc-chute cover | **33596** | **33597** | **33596** | **33597** | - | | | |
| | Cables cover | **04851** | | | | **04852** | | | |
| Rear connection | Type of terminals | Vertical rear connections supplied with the device | | | | | | | |
| | Terminal extension bar support | 2 x **04693** | | | | | | | |
| | Cables cover | **04853** | | | | **04854** | | | |
| | Extension bars | must be made **(2)** | | | | | | | |

## Connection — Downstream distribution via Linergy LGY or BS busbars




| Devices | Fixed device | | | | Withdrawable device | | | |
|---|---|---|---|---|---|---|---|---|
| | NS630b/1250 | | NS1600 | | NS630b/1250 | | NS1600 | |
| | 3P | 4P | 3P | 4P | 3P | 4P | 3P | 4P |
| Type of terminals | Front connections supplied with the device | | | | | | | |
| Busbars connection | For Linergy LGY busbars: prefabricated connection | | | | | | | |
| | **04485** | **04486** | **04487** | **04488** | **04477** | **04478** | **04491** | **04492** |
| | | | | | Can be reversed for upstream supply | | | |
| | For Linergy BS busbars: must be made **(2)**. | | | | | | | |
| Free support for busbars connection | For Linergy BS busbars: 2 x **04662** | | | | | | | |
| Cover for busbars connection | **04926** | | | | | | | |

**(1)** For devices with toggle or rotary handle catalogue number **03690**, with a motor mechanism catalogue number **03701**.
**(2)** Connection to be made according to the busbar drawings supplied by Schneider Electric.
**(3)** Vertical connection adaptaters and cable-lug adapters and CT, are not compatible with input voltage ⩾ 500V due to mandatory barriers installation (**33648** or **33768**).

**Note:** to make measurements:
- install a Micrologic control unit capable of displaying the values.
- or install the CTs on the horizontal busbars; in this case, an additional module is required; add a plain front plate downstream (03801).

Selection of busbars: Linergy LGY > *page G-4*, Linergy LGYE > *page G-5*, Linergy BS > *page G-6*.

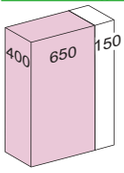
# Compact NS630b to 1600

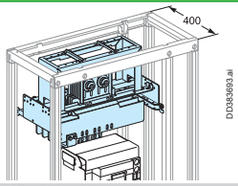
## Canalis connection

### Toggle, rotary handle, motor mechanism - Fixed, withdrawable



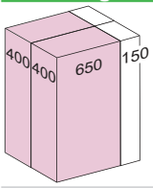
## Mounting — Canalis front connection

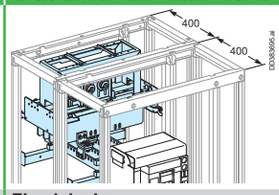



| Devices | | Fixed device | | Withdrawable device | |
|---|---|---|---|---|---|
| | | NS630b/1250 | NS1600 | NS630b/1250 | NS1600 |
| Number of devices per row | | 1 | - | 1 | - |
| No. of vertical modules | | **17** | **-** | **18** | **-** |
| Mounting plates | | **03482** | **-** | **03483** | **-** |
| Front plates | upstream | **03804** [4] + **03803** [3] | - | **03804** [4] + **03803** [3] | - |
| [No. of vertical modules] | with cut-out | **03690 or 03701 (1)** [7] | - | **03691** [8] | - |
| | downstream | **03803** [3] | **-** | **03803** [3] | **-** |

## Mounting — Canalis rear connection



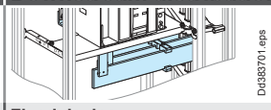



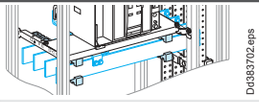

| Devices | | Fixed device | Withdrawable device |
|---|---|---|---|
| | | NS630b/1600 | NS630b/1600 |
| Number of devices per row | | 1 | 1 |
| No. of vertical modules | | **16** | **16** |
| Mounting plates | | **03482** | **03483** |
| Front plates | upstream | **03806** [6] | **03805** [5] |
| [No. of vertical modules] | with cut-out | **03690** or **03701 (1)** [7] | **03691** [8] |
| | downstream | **03803** [3] | **03803** [3] |

## Connection — Upstream on incomer

| Devices | | Fixed device | | Withdrawable device | |
|---|---|---|---|---|---|
| | | NS630b/1600 | | NS630b/1600 | |
| | | 3P | 4P | 3P | 4P |
| Canalis support | | **03561** | - | - | - |
| Canalis interface **(2)** | | **04703** | **04704** | **04703** | **04704** |
| Front connection | Type of terminals | Front connections supplied with the device | | | |
| | Canalis/device | **04711** | **04712** | **04711** | **04712** |
| | Arc-chute cover | **33596** | **33597** | - | |
| | Canalis cover | **04871** + **04851** | | **04871** + **04852** | |
| Rear connection | Type of terminals | Vertical rear connections supplied with the device | | | |
| | Terminal extension bar support | 2 x **04693** | | | |
| | Extension bars | must be made **(3)** | | | |
| | Canalis/device connection | **-** | **-** | **04713** | **04714** |
| | Canalis cover | **04871** + **04854** | | **04871** + **04854** | |

## Connection — Downstream distribution via Linergy LGY or BS busbars




| Devices | Fixed device | | | | Withdrawable device | | | |
|---|---|---|---|---|---|---|---|---|
| | NS630b/1250 | | NS1600 | | NS630b/1250 | | NS1600 | |
| | 3P | 4P | 3P | 4P | 3P | 4P | 3P | 4P |
| Type of terminals | Front connections supplied with the device | | | | | | | |
| Busbars connection | For Linergy LGY busbars: prefabricated connection | | | | | | | |
| | **04485** | **04486** | **04487** | **04488** | **04477** Can be reversed for upstream supply | **04478** | **04491** | **04492** |
| | For Linergy BS busbars: must be made **(3)** | | | | | | | |
| Free support for busbars connection | For Linergy BS busbars: 2 x **04662** | | | | | | | |
| Cover for busbars connection | **04926** | | | | | | | |

**(1)** For devices with toggle or rotary handle catalogue number **03690**, with a motor mechanism catalogue number **03701**.
**(2)** To tight the screws of the Canalis interface use the special tool **87808**.
**(3)** Connection to be made according to the busbar drawings supplied by Schneider Electric.

Note: to make measurements:
- install a Micrologic control unit capable of displaying the values.
- or install the CTs on the horizontal busbars; in this case, an additional module is required; add a plain front plate downstream (**03801**).

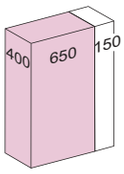
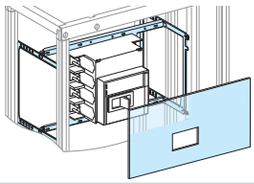
Selection of busbars: Linergy LGY *> page G-4*, Linergy LGYE *> page G-5*, Linergy BS *> page G-6*.

# Compact NS630b to 1000

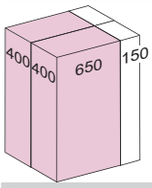
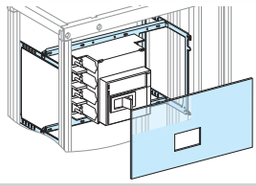
## Horizontal mounting

### Toggle, rotary handle - Fixed

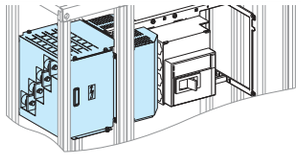


| Mounting | Front connection |
|---|---|
|  |  |

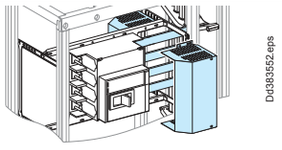
| Devices | Fixed device |
|---|---|
| | **NS630b/1000** |
| Number of devices per row | 1 |
| No. of vertical modules | **7** (1) |
| Mounting plates | **03480** |
| Front plates with cut-outs | **03687** |

| Mounting | Rear connection |
|---|---|
|  |  |

| Devices | Fixed device |
|---|---|
| | **NS630b/1000** |
| Number of devices per row | 1 |
| No. of vertical modules | **7** (1) |
| Mounting plates | **03480** |
| Front plates with cut-outs | **03687** |

| Connection | Upstream on incomer |
|---|---|
| |  |

| Fixed devices | NS630b/1000 | |
|---|---|---|
| | **3P** | **4P** |
| Type of terminals front connection | Front connections supplied with the device | |
| rear connection | Vertical rear connections supplied with the device | |
| Connection transfert assembly for front connection | **04483** | **04484** |
| | If cubicle w300 mm then 3x300 mm², if cubicle w400 mm then 4x300 mm², same concept for 185 mm².<br>Three 300 mm² or six 185 mm² cables can be connected per phase with lugs that are not of the two-metal type. | |
| Cover rear connection | **04844** | |

| Connection | Downstream via Linergy LGY, LGYE or BS busbars |
|---|---|
| |  |

| Fixed devices | NS630b/1000 | |
|---|---|---|
| | **3P** | **4P** |
| Type of terminals | Front connections supplied with the device | |
| Busbars connection | For Linergy LGY busbars: prefabricated connection | |
| | **04473** | **04474** |
| | must be made. For Linergy LGYE (> *page G-13*) and Linergy BS busbars | |
| Cover for busbars connection | **04842** | |
| Arc-chute cover | **33596** | **33597** |

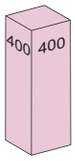
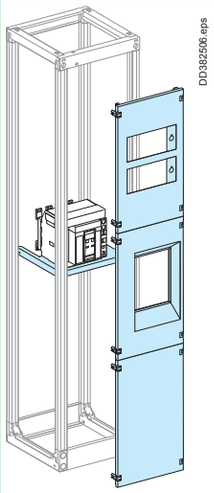
(1) Mounting of **03480** + connection transfert assembly **04483** or **04484** needs 8 vertical modules (use of one complementary front plate 1 module **03801**) at the bottom of the functional unit.
Selection of busbars: Linergy LGY > *page G-4*, Linergy LGYE > *page G-5*, Linergy BS > *page G-6*.

# Compact NS630b to 1600

## Dedicated cubicle - W = 400 mm

### Fixed, withdrawable



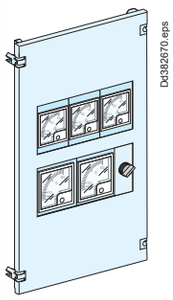
| Mounting | Toggle, rotary handle and motor mechanism |
|---|---|
|   |   |

| Devices | | Fixed device | Withdrawable device |
|---|---|---|---|
| | | **NS630b/1600 3/4P** | **NS630b/1600 3P** |
| Number of devices per cubicle | | 1 | 1 |
| No. of vertical modules | | **37** | **37** |
| Mounting plates | | **03487** | **03488** |
| Front plates [No. of vertical modules] | with cut-out | **03697** [11] | **03699** [11] |
| | upstream **(1)** with cut-out for 72 x 72 or 96 x 96 mm meters | **03723** [13] | **03723** [13] |
| | or plain | **03722** [13] | **03722** [13] |
| | downstream **(1)** plain | **03722** [13] | **03722** [13] |

## Measurement-device installation

Measurement devices are installed on a front plate (**03723**) using plastic mounting plates with cut-outs. The front plate can hold:

- six 72 x 72 mm cases
- or four 96 x 96 mm cases + 2 switches.

| Number and type of devices per row | Metal front plate with cut-out | No. of vertical modules | Plastic mounting plates with cut-out | Blanking plate or device support |
|---|---|---|---|---|
| **Mounting on an interface with plastic mounting plates** | | | | |
| **3** x 72 x 72 Vigirex and other devices 72 x 72 without switch |   | 13 | | To blank-off or install:<br>- from 1 to 4 buttons Ø 16 or 22 mm<br>- 1 device 45 x 45 |
| | | | **03902** | **03900** |
| **2** x 96 x 96 Power Meter and other devices 96 x 96 with switch | | | | To blank-off or install:<br>- from 1 to 4 buttons Ø 16 or 22 mm<br>- 1 device 45 x 45<br>- 1 device 72 x 72 |
| | **03723** | | **03903** | **03901** |
| Characteristics | ■ Installation of three devices (72 x 72 mm cases) using plastic mounting plates (**03902**) and two devices (96 x 96 mm cases) + a switch using plastic mounting plates (**03903**) on a hinged front plate (**03723**)<br>■ The plain mounting plates have knock-outs for lamps, pushbuttons, switches or devices.<br>Knock-outs for 03900: 4 Ø 16 mm, 5 Ø 22 mm or one for a 45 x 45 mm device.<br>Knock-outs for 03901: 4 Ø 16 mm, 5 Ø 22 mm or one for a 45 x 45 or 72 x 72 mm device. | | | |

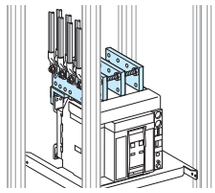
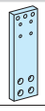
**(1)** Hinged or reversible (left or right-hand opening) front plates connect directly to the framework, without a front-plate support frame.

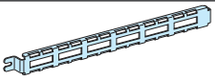
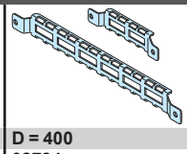
# Compact NS630b to 1600

## Dedicated cubicle - W = 400 mm

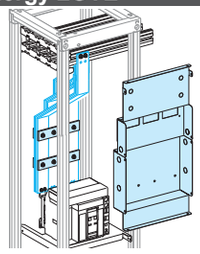
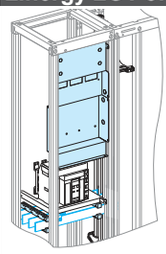
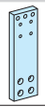
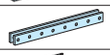
### Fixed, withdrawable



| Connection | Upstream on incomer | | |
|---|---|---|---|
| |  | | |
| **Devices** | **Fixed device** | | **Withdrawable device** |
| | **NS630b/1600** | | |
| | **3P** | **4P** | **3P** |
| Type of terminals  | Front connection | | Front connection |
| Arc-chute cover | **33596** | **33597** | - |
| Vert. conn. adapters | **33642** (1) | **33643** (1) | **33642** (1) |
| Cable-lug adapters | **33644** (1) | **33645** (1) | **33644** (1) |
| Spacing rods | **04691** | | **04691** |

| Accessories | | | |
|---|---|---|---|
| |  |  | |
| | **W =400** | **D = 400** | **D = 600** |
| 4 cable tie supports for framework | **08774** | **08794** | **08794 + 08796** |

(1) Vertical connection adapters and cable-lug adapters are not compatible with input voltage ⩾ 500 V.

| Distribution | Connection to horizontal busbars Linergy LGYE | | Linergy BS | | Connection to vertical busbars Linergy LGY or BS | |
|---|---|---|---|---|---|---|
| |  | | | |  | |
| **Devices** | **Fixed** | **Withdrawable** | **Fixed** | **Withdrawable** | **Fixed** | **Withdrawable** |
| | **NS630b/1600 3P/4P** | **NS630b/1600 3P** | **NS630b/1600 3P/4P** | **NS630b/1600 3P** | **NS630b/1600 3P/4P** | **NS630b/1600 3P** |
| Type of terminals  | Front connection | Front connection | Front connection | Front connection | Front connection | Front connection |
| Support  | 2 x **04692** | 2 x **04692** | 2 x **04692** | 2 x **04692** | - | - |
| Barrier (1) | **04855** | **04855** | **04855** | **04855** | **04855** | **04855** |
| Horizontal-busbar connections | must be made (2) | | - | - | - | - |
| 50/60/80 | - | - | **04636** (3) | **04636** | - | - |
| Vertical-busbar connections | - | - | - | - | must be made (2) | |
| Free support | - | - | - | - | **04662** | |

(1) A barrier must be installed behind front plate **03723** when measurement devices are installed.
(2) Connection to be made according to the busbar drawings supplied by Schneider Electric.
(3) Catalogue number **04636** includes 1 connection only. Order 1 connection per phase.

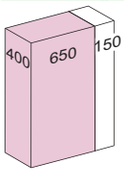
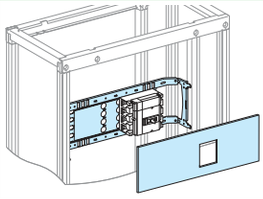
Connection device/horizontal busbar to make by customer.
Busbar selection Linergy BS to make connection: *> page G-3 and page G-6*.
Busbar selection Linergy LGYE or LGY: *> page G-2 and page G-4*.

# Compact, Compact Vigi (ELCB) and VigiCompact NSX 100 to 630

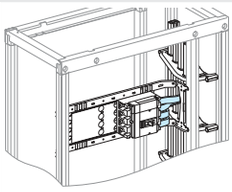
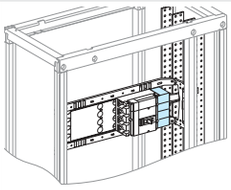
## Horizontal mounting

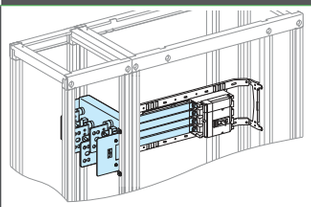
### Toggle - Fixed

Designed for PowerTag NSX
Circuit breakers

| Mounting | Horizontal fixed |
|---|---|
|   |   |

| Devices | Toggle | | | | | |
|---|---|---|---|---|---|---|
| | NSX (1) / NSX Vigi (ELCB) (1) / Vigi NSX 100/160/250 | | NSX (1) / NSX Vigi (ELCB) (1) 400/630 | | Vigi NSX 400/630 | |
| | 3P | 4P | 3P | 4P | 3P | 4P |
| Number of devices per row | 1 | 1 | 1 | 1 | 1 | 1 |
| PowerTag NSX compatibility | ✓ | ✓ | ✓ | ✓ | - | - |
| No. of vertical modules | 3 | 4 | 4 | 5 | 4 | 5 |
| Mounting plates | 03411 | 03412 | 03451 | 03452 | 03451 | 03452 |
| Front plates with cut-out | 03604 (2) | 03606 (2) | 03643 | 03644 | 03643 | 03644 |

| Connection | Upstream from lateral busbars | | | |
|---|---|---|---|---|
| Fixed devices | NSX / NSX Vigi (ELCB) / Vigi NSX 100/160/250 | | NSX / NSX Vigi (ELCB) / Vigi NSX 400/630 | |
| | 3P | 4P | 3P | 4P |
| **Linergy LGY** | | | | |
| |   | | | |
| Prefabricated connection | 04423 (4) | 04424 (4) | 04453 | 04454 |
| **Linergy BS, LGYE** | | | | |
| |   | | | |
| Connection | must be made (3) | | | |
| Long terminal shields | LV429517 | LV429518 | LV432593 | LV432594 |

| Connection | Downstream distribution |
|---|---|
| |   |

| Fixed devices | | NSX / NSX Vigi (ELCB) 100/250 | | Vigi NSX100/250 | | NSX / NSX Vigi (ELCB) 400/630 | | Vigi NSX400/630 | |
|---|---|---|---|---|---|---|---|---|---|
| | | 3P | 4P | 3P | 4P | 3P | 4P | 3P | 4P |
| Front connection | long terminal shields | LV429517 | LV429518 | LV429517 | LV429518 | LV432593 | LV432594 | LV432593 | LV432594 |
| Connection transfer assembly | connection | 04425 | 04426 | 04429 (5) | 04430 (5) | 04455 | 04456 | 04459 (5) | 04460 (5) |
| | connection with PowerTag NSX | 04425 | 04426 | - | - | 04459 (5) | 04460 (5) | - | - |
| | long terminal shields | - | - | LV429517 | LV429518 | - | - | LV432593 | LV432594 |
| Rear connection | short terminal shields | LV429515 (4) | LV429516 (4) | LV429515 (4) | LV429516 (4) | LV432591 (4) | LV432592 (4) | LV432591 (4) | LV432592 (4) |
| | short rear connectors | LV429235 | | LV429235 | | LV432475 | | LV432475 | |
| | long rear connectors | LV429236 | | LV429236 | | LV432476 | | LV432476 | |

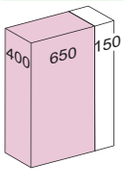
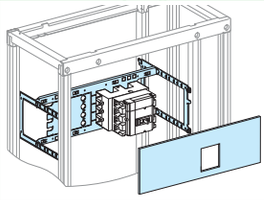
(1) Metering and signaling features (ammeter…) can be added. Mounted on a Compact NSX, it has the same size than a Compact Vigi NSX. Refer to the corresponding column.
(2) Compatible with FDM121.
(3) Connections must be made with insulated flexible bars > *page G-22*.
(4) Compatible with Linergy LGYE vertical busbar.
(5) Complete the connection with insulated flexible bars (not supplied).

# Compact, Compact Vigi (ELCB) and VigiCompact NSX 100 to 630

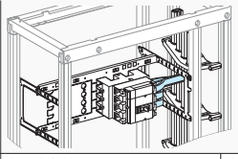
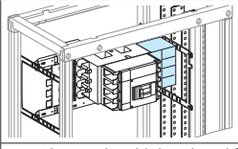
## Horizontal mounting

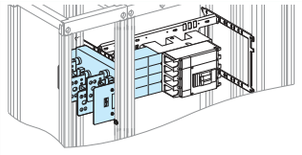
### Toggle - Plug-in



| Mounting | Horizontal plug-in |
|---|---|
|   |   |

| Devices | | Toggle | | | |
|---|---|---|---|---|---|
| | | NSX (1) / NSX Vigi (ELCB) (1) / Vigi NSX 100/160/250 | | NSX (1) / NSX Vigi (ELCB) (1) / Vigi NSX 400/630 | |
| | | 3P | 4P | 3P | 4P |
| Number of devices per row | | 1 | 1 | 1 | 1 |
| No. of vertical modules | | 3 | 4 | 4 | 5 |
| Mounting plates | | 03413 | 03414 | 03453 | 03454 |
| Front plates | with cut-out | 03604 (2) | 03606 (2) | 03643 | 03644 |

| Connection | Upstream from lateral busbars | | | |
|---|---|---|---|---|
| Plug-in devices | NSX / NSX Vigi (ELCB) / Vigi NSX 100/160/250 | | NSX / NSX Vigi (ELCB) / Vigi NSX 400/630 | |
| | 3P | 4P | 3P | 4P |
| **Linergy LGY** | | | | |
| |   | | | |
| Prefabricated connection | 04431 (3) | 04432 (3) | 04461 | 04462 |
| Short terminal shields on device | LV429515 | LV429516 | LV432591 | LV432592 |
| **Linergy BS, LGYE** | | | | |
| |   | | | |
| Connection | must be made with insulated flexible bars > page G-22. | | | |
| Connection adapter for plug-in base | LV429306 | LV429307 | LV432584 | LV432585 |
| Long terminal shields on plug-in base | LV429517 | LV429518 | LV432593 | LV432594 |
| Short terminal shields on device | LV429515 | LV429516 | LV432591 | LV432592 |

| Connection | | Downstream distribution | | | |
|---|---|---|---|---|---|
| | |   | | | |
| Plug-in devices | | NSX / NSX Vigi (ELCB) / Vigi NSX 100/160/250 | | NSX / NSX Vigi (ELCB) / Vigi NSX 400/630 | |
| | | 3P | 4P | 3P | 4P |
| Front connection | connection adapter for plug-in base | LV429306 | LV429307 | LV432584 | LV432585 |
| | short terminal shields on device | LV429515 | LV429516 | LV432591 | LV432592 |
| | long terminal shields on plug-in base | LV429517 | LV429518 | LV432593 | LV432594 |
| Connection transfer assembly | connection | 04429 (4) | 04430 (4) | 04459 (4) | 04460 (4) |
| | connection adapter for plug-in base | LV429306 | LV429307 | LV432584 | LV432585 |
| | short terminal shields | LV429515 | LV429516 | LV432591 | LV432592 |
| | long terminal shields | LV429517 | LV429518 | LV432593 | LV432594 |
| Rear connection | short terminal shields | 2 x LV429515 | 2 x LV429516 | 2 x LV432591 | 2 x LV432592 |
| | short rear connectors | LV429235 | LV429235 | LV432475 | LV432475 |
| | long rear connectors | LV429236 | LV429236 | LV432476 | LV432476 |
| | connection adapter for plug-in base | LV429306 | LV429307 | LV432584 | LV432585 |

(1) Metering and signaling features (ammeter…) can be added. Mounted on a Compact NSX, it has the same size than a Compact Vigi NSX. Refer to the corresponding column.
(2) Compatible with FDM121.
(3) Compatible with Linergy LGYE vertical busbar.
(4) Complete the connection with insulated flexible bars (not supplied).

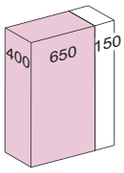
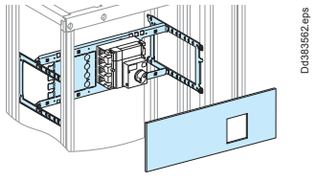
E

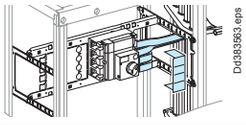
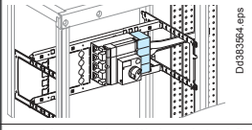
# Compact, Compact Vigi (ELCB) and VigiCompact NSX 100 to 630

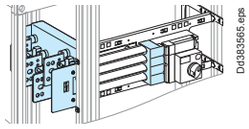
## Horizontal mounting

### Rotary handle, motor mechanism - Fixed

Designed for PowerTag NSX
Circuit breakers

| Mounting | Horizontal Fixed | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
|  |  | | | | | | | | | |
| **Devices** | **Rotary handle, motor mechanism** | | | | | | | | | |
| | **NSX (1) / NSX Vigi (ELCB) (1) 100/160/250** | | **Vigi NSX 100/160/250** | | **NSX (1) / NSX Vigi (ELCB) (1) 400/630** | | | | **Vigi NSX 400/630** | |
| | | | | | rotary handle | | motor mechanism | | rotary handle | |
| | **3P** | **4P** | **3P** | **4P** | **3P** | **4P** | **3P** | **4P** | **3P** | **4P** |
| Number of devices per row | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| PowerTag NSX compatibility | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | - | - |
| No. of vertical modules | **3** | **4** | **3** | **4** | **4** | **5** | **4** | **5** | **4** | **5** |
| Mounting plates | **03413** | **03414** | **03413** | **03414** | **03453** | **03454** | **03453** | **03454** | **03453** | **03454** |
| Fixing kit for control support | - | - | - | - | - | - | **03460** | **03460** | - | - |
| Front plates with cut-out | **03604 (2)** | **03606 (2)** | **03604 (2)** | **03606 (2)** | **03643** | **03644** | **03643** | **03644** | **03643** | **03644** |
| Collar | - | - | **LV429285** | **LV429285** | - | - | **LV429285** | **LV429285** | **LV429285** | **LV429285** |

| Connection | Upstream from lateral busbars | | | |
|---|---|---|---|---|
| **Fixed devices** | **NSX / NSX Vigi (ELCB) / Vigi NSX 100/160/250** | | **NSX / NSX Vigi (ELCB) / Vigi NSX 400/630** | |
| | **3P** | **4P** | **3P** | **4P** |
| **Linergy LGY** | | | | |
| |  | | | |
| Connection | **04427 (3)** | **04428 (3)** | must be made with insulated flexible bars > *page G-22* **(4)**. | |
| Long terminal shields | - | | **LV432593** | **LV432594** |
| **Linergy BS, LGYE** | | | | |
| |  | | | |
| Connection | must be made with insulated flexible bars > *page G-22*. | | | |
| Long terminal shields | **LV429517** | **LV429518** | **LV432593** | **LV432594** |

| Connection | Downstream distribution | | | |
|---|---|---|---|---|
| |  | | | |
| **Fixed devices** | **NSX / NSX Vigi (ELCB) / Vigi NSX** | | | |
| | **100/160/250** | | **400/630** | |
| | **3P** | **4P** | **3P** | **4P** |
| Front connection — long terminal shields | **LV429517** | **LV429518** | **LV432593** | **LV432594** |
| Connection transfer assembly — connection with or without PowerTag NSX | **04429 (5)** | **04430 (5)** | **04459 (5)** | **04460 (5)** |
| Connection transfer assembly — long terminal shields | **LV429517** | **LV429518** | **LV432593** | **LV432594** |
| Rear connection — short terminal shields | **LV429515** | **LV429516** | **LV432591** | **LV432592** |
| Rear connection — short rear connectors | **LV429235** | | **LV432475** | |
| Rear connection — long rear connectors | **LV429236** | | **LV432476** | |

**(1)** Metering and signaling features (ammeter…) can be added. Mounted on a Compact NSX, it has the same size than a Compact Vigi NSX. Refer to the corresponding column.
**(2)** Compatible with FDM121.
**(3)** Compatible with Linergy LGYE vertical busbar.
**(4)** To be made according to the busbar drawings supplied by Schneider Electric.
**(5)** Complete the connection with insulated flexible bars (not supplied).

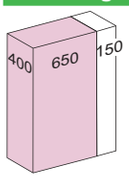
# Compact, Compact Vigi (ELCB) and VigiCompact NSX 100 to 630

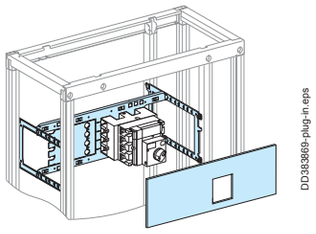
## Horizontal mounting

### Rotary handle, motor mechanism - Plug-in



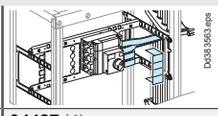
| Mounting | Horizontal plug-in |
|---|---|



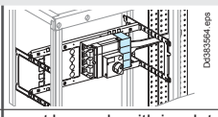




| Devices | Rotary handle, motor mechanism | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | NSX (1) / NSX Vigi (ELCB) (1) 100/160/250 | | Vigi NSX 100/160/250 | | NSX (1) / NSX Vigi (ELCB) (1) 400/630 | | Vigi NSX 400/630 rotary handle NSX400/630 motor mechanism | |
| | 3P | 4P | 3P | 4P | 3P | 4P | 3P | 4P |
| Number of devices per row | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| No. of vertical modules | 3 | 4 | 3 | 4 | 4 | 5 | 4 | 5 |
| Mounting plates | 03413 | 03414 | 03413 | 03414 | 03453 (2) | 03454 (2) | 03453 (2) | 03454 (2) |
| Front plates with cut-out | 03604 (3) | 03606 (3) | 03604 (3) | 03606 (3) | 03643 | 03644 | 03643 | 03644 |
| Collar | - | - | LV429285 | LV429285 | - | - | LV429285 | LV429285 |

| Connection | Upstream from lateral busbars | | | |
|---|---|---|---|---|
| Plug-in devices | NSX / NSX Vigi (ELCB) / Vigi NSX 100/160/250 | | NSX / NSX Vigi (ELCB) / Vigi NSX 400/630 | |
| | 3P | 4P | 3P | 4P |
| **Linergy LGY** | | | | |

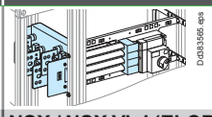



| | | | | |
|---|---|---|---|---|
| Connection | 04427 (4) | 04428 (4) | must be made with insulated flexible bars > page G-22 (5) | |
| Short terminal shields | LV429515 | LV429516 | LV432591 | LV432592 |
| Long terminal shields | - | | LV432593 | LV432594 |
| Connection adapter for plug-in base | LV429306 | LV429307 | LV432584 | LV432585 |
| **Linergy BS, LGYE** | | | | |




| | | | | |
|---|---|---|---|---|
| Connection | must be made with insulated flexible bars > page G-22. | | | |
| Short terminal shields | LV429515 | LV429516 | LV432591 | LV432592 |
| Long terminal shields | LV429517 | LV429518 | LV432593 | LV432594 |
| Connection adapter for plug-in base | LV429306 | LV429307 | LV432584 | LV432585 |

| Connection | Downstream distribution |
|---|---|




| Plug-in devices | | NSX / NSX Vigi (ELCB) / Vigi NSX 100/160/250 | | NSX / NSX Vigi (ELCB) / Vigi NSX 400/630 | |
|---|---|---|---|---|---|
| | | 3P | 4P | 3P | 4P |
| Front connection | long terminal shields | LV429517 | LV429518 | LV432593 | LV432594 |
| | short terminal shields | LV429515 | LV429516 | LV432591 | LV432592 |
| | connection adapter for plug-in base | LV429306 | LV429307 | LV432584 | LV432585 |
| Connection transfer assembly | connection | 04429 (6) | 04430 (6) | 04459 (6) | 04460 (6) |
| | long terminal shields | LV429517 | LV429518 | LV432593 | LV432594 |
| | short terminal shields | LV429515 | LV429516 | LV432591 | LV432592 |
| Rear connection | short terminal shields | 2 x LV429515 | 2 x LV429516 | 2 x LV432591 | 2 x LV432592 |
| | short rear connectors | LV429235 | | LV432475 | |
| | long rear connectors | LV429236 | | LV432476 | |
| | connection adapter for plug-in base | LV429306 | LV429307 | LV432584 | LV432585 |

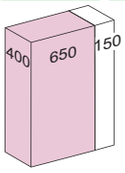
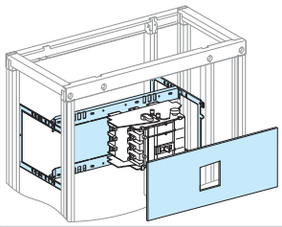
(1) Metering and signaling features (ammeter…) can be added. Mounted on a Compact NSX, it has the same size than a Compact Vigi NSX. Refer to the corresponding column.
(2) Catalogue number **03460** is recommended when installing an NSX with a motor mechanism.
(3) Compatible with FDM121.
(4) Compatible with Linergy LGYE vertical busbar.
(5) To be made according to the busbar drawings supplied by Schneider Electric.
(6) Complete the connection with insulated flexible bars (not supplied).

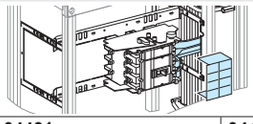
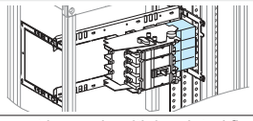
# Compact, Compact Vigi (ELCB) and VigiCompact NSX 100 to 630

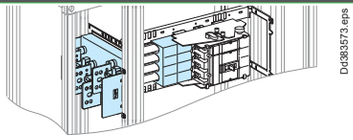
## Horizontal mounting

### All controls - Withdrawable



| Mounting | Horizontal withdrawable | | | |
|---|---|---|---|---|
|  |  | | | |
| **Devices** | **All controls** | | | |
| | **NSX / NSX Vigi (ELCB) 100/160/250 (1)** | **Vigi NSX 100/160/250** | **NSX / NSX Vigi (ELCB) 400/630 (1)** | **Vigi NSX 400/630** |
| Number of devices per row | 1 | 1 | 1 | 1 |
| No. of vertical modules (1) | **5** | **5** | **6** | **6** |
| Mounting plates | **03415** | **03415** | **03462 (2)** | **03462 (2)** |
| Front plates with cut-out | **03618** | **03618** | **03657** | **03657** |
| Collar | **LV429284** | **LV429285** | **LV432534** | **LV429285** |
| Locking kit (3) | **LV429286** | **LV429286** | **LV429286 (4)** | **LV429286 (4)** |

| Connection | Upstream from lateral busbars | | | |
|---|---|---|---|---|
| **Withdrawable devices** | **NSX / NSX Vigi (ELCB) / Vigi NSX 100/160/250** | | **NSX / NSX Vigi (ELCB) / Vigi NSX 400/630** | |
| | **3P** | **4P** | **3P** | **4P** |
| **Linergy LGY** | | | | |
| |  | | | |
| Prefabricated connection for toggle | **04431** | **04432** | **04461** | **04462** |
| Prefabricated connection for rotary handle & motor mechanism | **04427 (5)** | **04428 (5)** | must be made with insulated flexible bars *> page G-22* **(6)**. | |
| Connection adapter for plug-in base | - | - | **LV432584 (7)** | **LV432585 (7)** |
| Short terminal shields | **LV429515** | **LV429516** | **LV432591** | **LV432592** |
| Long terminal shields | - | | **LV432593 (7)** | **LV432594 (7)** |
| **Linergy BS, LGYE** | | | | |
| |  | | | |
| Connection | must be made with insulated flexible bars *> page G-22*. | | | |
| Connection adapter for plug-in base | **LV429306** | **LV429307** | **LV432584 (7)** | **LV432585 (7)** |
| Short terminal shields | **LV429515** | **LV429516** | **LV432591** | **LV432592** |
| Long terminal shields | **LV429517** | **LV429518** | **LV432593 (7)** | **LV432594 (7)** |

| Connection | Downstream distribution | | | |
|---|---|---|---|---|
| |  | | | |
| **Withdrawable devices** | **NSX / NSX Vigi (ELCB) / Vigi NSX 100/160/250** | | **NSX / NSX Vigi (ELCB) / Vigi NSX 400/630** | |
| | **3P** | **4P** | **3P** | **4P** |
| Front connection — connection adapter for plug-in base | **LV429306** | **LV429307** | **LV432584** | **LV432585** |
| Front connection — long terminal shields | **LV429517** | **LV429518** | **LV432593** | **LV432594** |
| Front connection — short terminal shields | **LV429515** | **LV429516** | **LV432591** | **LV432592** |
| Connection transfer assembly — connection | **04429 (8)** | **04430 (8)** | **04459 (8)** | **04460 (8)** |
| Connection transfer assembly — connection adapter for plug-in base | **LV429306** | **LV429307** | **LV432584** | **LV432585** |
| Connection transfer assembly — long terminal shields | **LV429517** | **LV429518** | **LV432593** | **LV432594** |
| Connection transfer assembly — short terminal shields | **LV429515** | **LV429516** | **LV432591** | **LV432592** |
| Rear connection — short terminal shields | 2 x **LV429515** | 2 x **LV429516** | 2 x **LV432591** | 2 x **LV432592** |
| Rear connection — short rear connectors | **LV429235** | **LV429235** | **LV432475** | **LV432475** |
| Rear connection — long rear connectors | **LV429236** | **LV429236** | **LV432476** | **LV432476** |
| Rear connection — connection adapter for plug-in base | **LV429306** | **LV429307** | **LV432584** | **LV432585** |

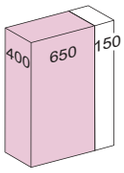
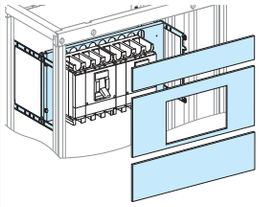
**(1)** Metering and signaling features (ammeter…) can be added. Mounted on a Compact NSX, it has the same size than a Compact Vigi NSX. Refer to the corresponding column.
**(1)** Catalogue number **03460** is recommended when installing an NSX with a motor mechanism.
**(3)** If mounting several above one another chassis + form 3b + chassis locking kit **LV429286**, the number of vertical modules must be increased by 2 ; it is necessary to add a 2 modules front plate **03802**.
**(4)** Not compatible with NSX630.
**(5)** Compatible with Linergy LGYE vertical busbar.
**(6)** To be made according to the busbar drawings supplied by Schneider Electric.
**(7)** Only for Rotary handle and motor mechanism.
**(8)** Complete the connection with insulated flexible bars (not supplied).

# Compact, Compact Vigi (ELCB) and VigiCompact NSX 400/630

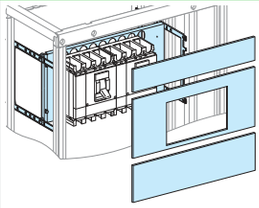
## Vertical mounting

### Toggle - Fixed

Designed for PowerTag NSX
Circuit breakers

| Mounting | | Vertical fixed | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
|  | |  | | | | | | | |
| **Devices** | | **Toggle** | | | | | | | |
| | | **NSX / NSX Vigi (ELCB) 400** (1) | | **Vigi NSX 400** | | **NSX / NSX Vigi (ELCB) 630** (1) | | **Vigi NSX 630** | |
| Number of devices per row | | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 |
| PowerTag NSX compatibility | | ✓ | | ✓ | | ✓ | | ✓ | |
| No. of vertical modules | | **11** or **13** | | **13** or **15** | | **13** or **15** | | **15** or **17** | |
| Mounting plates | | **03461** | | **03461** | | **03461** | | **03461** | |
| Front plates [No. of vertical modules] | upstream | **03801** [1] | **03802** [2] | - | **03802** [2] | **03802** [2] | **03803** [3] | **03801** [1] | **03803** [3] |
| | with cut-out | **03275** [9] | **03663** [7] | **03297** [11] | **03666** [9] | **03275** [9] | **03663** [7] | **03297** [11] | **03666** [9] |
| | downstream | **03801** [1] | **03802** [2] | **03802** [2] | **03802** [2] | **03802** [2] | **03803** [3] | **03803** [3] | **03803** [3] |
| | downstream with PowerTag NSX | **03803** [3] | **03804** [4] | **03804** [4] | **03804** [4] | **03804** [4] | **03805** [5] | **03805** [5] | **03805** [5] |

| Connection | | Upstream from lateral busbars - Linergy LGY, BS, LGYE | | | |
|---|---|---|---|---|---|
| | | | | | |
| **Fixed devices** | | **NSX / NSX Vigi (ELCB) / Vigi NSX 400** | | **NSX / NSX Vigi (ELCB) / Vigi NSX 630** | |
| | | **3P** | **4P** | **3P** | **4P** |
| Front connection | connection | must be made with insulated flexible bars > *page G-22*. (2) | | | |
| | long terminal shields | **LV432593** | **LV432594** | **LV432593** | **LV432594** |
| Rear connection | short terminal shields | **LV432591** | **LV432592** | **LV432591** | **LV432592** |
| | short rear connectors | **LV432475** | | **LV432475** | |
| | long rear connectors | **LV432476** | | **LV432476** | |

| Connection | | Downstream distribution | | | |
|---|---|---|---|---|---|
| | |  | | | |
| **Fixed devices** | | **NSX / NSX Vigi (ELCB) / Vigi NSX 400** | | **NSX / NSX Vigi (ELCB) / Vigi NSX 630** | |
| | | **3P** | **4P** | **3P** | **4P** |
| Front connection | long terminal shields | **LV432593** | **LV432594** | **LV432593** | **LV432594** |
| Rear connection (3) | short terminal shields | **LV432591** | **LV432592** | **LV432591** | **LV432592** |
| | short rear connectors | **LV432475** | | **LV432475** | |
| | long rear connectors | **LV432476** | | **LV432476** | |

**(1)** Metering and signaling features (ammeter…) can be added. Mounted on a Compact NSX, it has the same size than a Compact Vigi NSX. Refer to the corresponding column.
**(2)** Connection to be made according to the busbar drawings supplied by Schneider Electric.
**(3)** Size reduced to one module downstream.

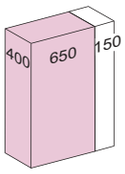
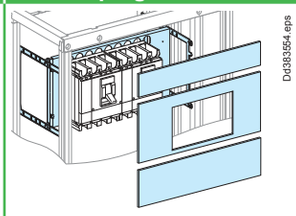
E

# Compact, Compact Vigi (ELCB) and VigiCompact NSX 400/630

## Vertical mounting

### Toggle - Plug-in

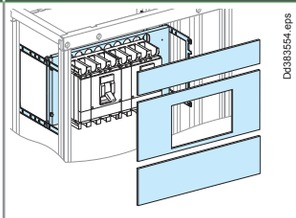


| Mounting | Vertical plug-in |
|---|---|
|   |   |

| Devices | | Toggle | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | NSX / NSX Vigi (ELCB) 400 (1) | | Vigi NSX 400 | | NSX / NSX Vigi (ELCB) 630 (1) | | Vigi NSX 630 | |
| Number of devices per row | | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 |
| Mounting plates | | 03461 | | 03461 | | 03461 | | 03461 | |
| Front plates [No. of vertical modules] | upstream | 03801 [1] | 03802 [2] | - | 03802 [2] | 03802 [2] | 03803 [3] | 03801 [1] | 03803 [3] |
| | with cut-out | 03275 [9] | 03663 [7] | 03297 [11] | 03666 [9] | 03275 [9] | 03663 [7] | 03297 [11] | 03666 [9] |
| | downstream | 03801 [1] | 03802 [2] | 03802 [2] | 03802 [2] | 03802 [2] | 03803 [3] | 03803 [3] | 03803 [3] |

| Connection | Upstream from lateral busbars - Linergy LGY, BS, LGYE |
|---|---|
| | |

| Plug-in devices | | NSX / NSX Vigi (ELCB) / Vigi NSX 400 | | NSX / NSX Vigi (ELCB) / Vigi NSX 630 | |
|---|---|---|---|---|---|
| | | 3P | 4P | 3P | 4P |
| Front connection | connection | must be made with insulated flexible bars > *page G-22*.(2) | | | |
| | long terminal shields | LV432593 | LV432594 | LV432593 | LV432594 |
| | short terminal shields | LV432591 | LV432592 | LV432591 | LV432592 |
| | connection adapter for plug-in base | LV432584 | LV432585 | LV432584 | LV432585 |
| Rear connection | short terminal shields | 2 x LV432591 | 2 x LV432592 | 2 x LV432591 | 2 x LV432592 |
| | short rear connectors | LV432475 | | LV432475 | |
| | long rear connectors | LV432476 | | LV432476 | |
| | connection adapter for plug-in base | LV432584 | LV432585 | LV432584 | LV432585 |

| Connection | Downstream distribution |
|---|---|
| |   |

| Plug-in devices | | NSX / NSX Vigi (ELCB) / Vigi NSX 400 | | NSX / NSX Vigi (ELCB) / Vigi NSX 630 | |
|---|---|---|---|---|---|
| | | 3P | 4P | 3P | 4P |
| Front connection | connection adapter for plug-in base | LV432584 | LV432585 | LV432584 | LV432585 |
| | short terminal shields on device | LV432591 | LV432592 | LV432591 | LV432592 |
| | long terminal shields on plug-in base | LV432593 | LV432594 | LV432593 | LV432594 |
| Rear connection (3) | short terminal shields | 2 x LV432591 | 2 x LV432592 | 2 x LV432591 | 2 x LV432592 |
| | short rear connectors | LV432475 | | LV432475 | |
| | long rear connectors | LV432476 | | LV432476 | |
| | connection adapter for plug-in base | LV432584 | LV432585 | LV432584 | LV432585 |

(1) Metering and signaling features (ammeter…) can be added. Mounted on a Compact NSX, it has the same size than a Compact Vigi NSX. Refer to the corresponding column.
(2) Connection to be made according to the busbar drawings supplied by Schneider Electric.
(3) Size reduced to one module downstream.

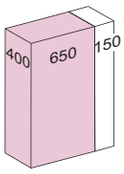
# Compact, Compact Vigi (ELCB) and VigiCompact NSX 400/630

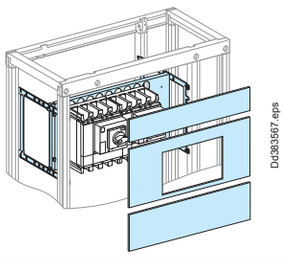
## Vertical mounting

### Rotary handle, motor mechanism - Fixed

Designed for PowerTag NSX
Circuit breakers

| Mounting | Vertical fixed |
|---|---|




| Devices | | Rotary handle, motor mechanism | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | NSX / NSX Vigi (ELCB) 400 (1) | | Vigi NSX 400 Rotary handle | | NSX / NSX Vigi (ELCB) 630 (1) | | Vigi NSX 630 Rotary handle | |
| Number of devices per row | | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 |
| PowerTag NSX compatibility | | ✓ | | ✓ | | ✓ | | ✓ | |
| No. of vertical modules | | **11** or **13** | | **13** or **15** | | **13** or **15** | | **15** or **17** | |
| Mounting plates | | **03461** (2) | | **03461** | | **03461** (2) | | **03461** | |
| Front plates [No. of vertical modules] | upstream | **03801** [1] | **03802** [2] | - | **03802** [2] | **03802** [2] | **03803** [3] | **03801** [1] | **03803** [3] |
| | with cut-out | **03275** [9] | **03663** [7] | **03297** [11] | **03666** [9] | **03275** [9] | **03663** [7] | **03297** [11] | **03666** [9] |
| | downstream | **03801** [1] | **03802** [2] | **03802** [2] | **03802** [2] | **03802** [2] | **03803** [3] | **03803** [3] | **03803** [3] |
| | downstream with PowerTag NSX | **03803** [3] | **03804** [4] | **03804** [4] | **03804** [4] | **03804** [4] | **03805** [5] | **03805** [5] | **03805** [5] |
| Collar | | - | | **LV429285** | | - | | **LV429285** | |
| IP40 escutcheons | | - | | **LV429316** (3) | | - | | **LV429316** (3) | |

| Connection | Upstream from lateral busbars - Linergy LGY, BS, LGYE |
|---|---|

| Fixed devices | | NSX / NSX Vigi (ELCB) / Vigi NSX 400/630 | |
|---|---|---|---|
| | | 3P | 4P |
| Front connection | connection | must be made with insulated flexible bars > *page G-22* (4) | |
| | long terminal shields | **LV432593** | **LV432594** |
| Rear connection | short terminal shields | **LV432591** (5) | **LV432592** (5) |
| | short rear connectors | **LV432475** | |
| | long rear connectors | **LV432476** | |

| Connection | Downstream distribution |
|---|---|

| Fixed devices | | NSX / NSX Vigi (ELCB) / Vigi NSX 400/630 | |
|---|---|---|---|
| | | 3P | 4P |
| Front connection | long terminal shields | **LV432593** | **LV432594** |
| Rear connection (4) | short terminal shields | **LV432591** | **LV432592** |
| | short rear connectors | **LV432475** | |
| | long rear connectors | **LV432476** | |

(1) Metering and signaling features (ammeter…) can be added. Mounted on a Compact NSX, it has the same size than a Compact Vigi NSX. Refer to the corresponding column.
(2) Catalogue number **03460** is recommended when installing an NSX with a motor mechanism.
(3) For ammeter, take **LV429285** + **LV429318** catalogue numbers.
(4) Connection to be made according to the busbar drawings supplied by Schneider Electric.
(5) Size reduced to one module downstream.

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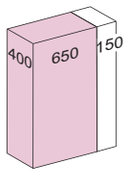
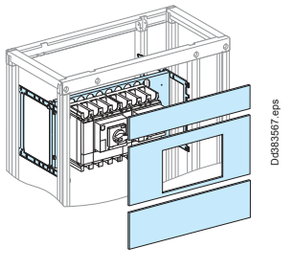
# Compact, Compact Vigi (ELCB) and VigiCompact NSX 400/630

## Vertical mounting

### Rotary handle, motor mechanism - Plug-in



| Mounting | Vertical plug-in |
|---|---|
|  |  |

| Devices | | Rotary handle, motor mechanism | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | NSX / NSX Vigi (ELCB) 400 (1) | | Vigi NSX400 Rotary handle | | NSX / NSX Vigi (ELCB) 630 (1) | | Vigi NSX630 Rotary handle | |
| Number of devices per row | | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 |
| No. of vertical modules | | 11 | | 13 | | 13 | | 15 | |
| Mounting plates | | 03461 (2) | | 03461 | | 03461 (2) | | 03461 | |
| Front plates [No. of vertical modules] | upstream | 03801 [1] | 03802 [2] | - | 03802 [2] | 03802 [2] | 03803 [3] | 03801 [1] | 03803 [3] |
| | with cut-out | 03275 [9] | 03663 [7] | 03297 [11] | 03666 [9] | 03275 [9] | 03663 [7] | 03297 [11] | 03666 [9] |
| | downstream | 03801 [1] | 03802 [2] | 03802 [2] | 03802 [2] | 03802 [2] | 03803 [3] | 03803 [3] | 03803 [3] |
| Collar | | - | | LV429285 | | - | | LV429285 | |
| IP40 front-panel escutcheons | | - | | LV429316 (3) | | - | | LV429316 (3) | |

| Connection | Upstream from lateral busbars - Linergy LGY, BS, LGYE | |
|---|---|---|
| | | |
| **Plug-in devices** | **NSX / NSX Vigi (ELCB) / Vigi NSX 400/630** | |
| | **3P** | **4P** |
| Front connection — connection | must be made with insulated flexible bars > *page G-22* **(4)** | |
| Front connection — long terminal shields | **LV432593** | **LV432594** |
| Front connection — short terminal shields | **LV432591** | **LV432592** |
| Front connection — connection adapter for plug-in base | **LV432584** | **LV432585** |
| Rear connection — short terminal shields | 2 x **LV432591** (5) | 2 x **LV432592** (5) |
| Rear connection — short rear connectors | **LV432475** | |
| Rear connection — long rear connectors | **LV432476** | |
| Rear connection — connection adapter for plug-in base | **LV432584** | **LV432585** |

| Connection | Downstream distribution | |
|---|---|---|
| | | |
| **Plug-in devices** | **NSX / NSX Vigi (ELCB) / Vigi NSX 400/630** | |
| | **3P** | **4P** |
| Front connection — long terminal shields | **LV432593** | **LV432594** |
| Front connection — short terminal shields | **LV432591** | **LV432592** |
| Front connection — connection adapter for plug-in base | **LV432584** | **LV432585** |
| Rear connection (5) — short terminal shields | 2 x **LV432591** | 2 x **LV432592** |
| Rear connection (5) — short rear connectors | **LV432475** | |
| Rear connection (5) — long rear connectors | **LV432476** | |
| Rear connection (5) — connection adapter for plug-in base | **LV432584** | **LV432585** |

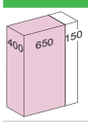
**(1)** Metering and signaling features (ammeter…) can be added. Mounted on a Compact NSX, it has the same size than a Compact Vigi NSX. Refer to the corresponding column.
**(2)** Catalogue number **03460** is recommended when installing an NSX with a motor mechanism.
**(3)** For ammeter, take **LV429285** + **LV429318** catalogue numbers.
**(4)** Connection to be made according to the busbar drawings supplied by Schneider Electric.
**(5)** Size reduced to one module downstream.

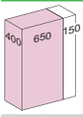
# Compact, Compact Vigi (ELCB) and VigiCompact NSX 100 to 630

## Vertical mounting

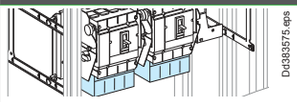
### All controls - Withdrawable



| Mounting | Vertical withdrawable | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| |  | | | | | | | |
| **Devices** | **All controls** | | | | | | | |
| | **NSX / NSX Vigi (ELCB)** (1) | | | | | | | |
| | **100/160** | **250** | **400** | **400** toggle | **400** rotary handle + motor mechan. | **630** | **630** toggle | **630** rotary handle + motor mechan. |
| Number of devices per row | 2 | 2 | 2 | 1 | 1 | 2 | 1 | 1 |
| No. of vertical modules | **8** | **9** | **11** | **11** | **11** | **13** | **13** | **13** |
| Mounting plates | **03421** | **03421** | **03461** (2) | **03461** | **03461** (2) | **03461** (2) | **03461** | **03461** (2) |
| Front plates [No. of vertical modules] upstream | **03802** [2] | **03802** [2] | **03802** [2] | **03801** [1] | **03801** [1] | **03803** [3] | **03802** [2] | **03802** [2] |
| Front plates [No. of vertical modules] with cut-out | **03243** [5] | **03243** [5] | **03663** [7] | **03275** [9] | **03275** [9] | **03663** [7] | **03275** [9] | **03275** [9] |
| Front plates [No. of vertical modules] downstream | **03801** [1] | **03802** [2] | **03802** [2] | **03801** [1] | **03801** [1] | **03803** [3] | **03802** [2] | **03802** [2] |
| Collar | **LV429284** (3) | **LV429284** (3) | **LV432534** (3) | **LV432534** | - | **LV432534** (3) | **LV432534** | - |

| Mounting | Vertical withdrawable | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| |  | | | | | | | | | |
| **Devices** | **All controls** | | | | | | | | | |
| | **Vigi NSX 100/160** | **Vigi NSX 250** | **Vigi NSX 400** toggle | | **Vigi NSX 400** rotary handle + motor mechanism | | **Vigi NSX 630** toggle | | **Vigi NSX 630** rotary handle + motor mechanism | |
| Number of devices per row | 2 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 |
| No. of vertical modules | **10** | **11** | **13** | | **13** | | **15** | | **15** | |
| Mounting plates | **03421** | **03421** | **03461** | **03461** | **03461** | **03461** | **03461** | **03461** | **03461** | **03461** |
| Front plates [No. of vertical modules] upstream | **03802** [2] | **03802** [2] | - | **03802** [2] | - | **03802** [2] | **03801** [1] | **03803** [3] | **03801** [1] | **03803** [3] |
| Front plates [No. of vertical modules] with cut-out | **03244** [7] | **03244** [7] | **03297** [11] | **03666** [9] | **03297** [11] | **03666** [9] | **03297** [11] | **03666** [9] | **03297** [11] | **03666** [9] |
| Front plates [No. of vertical modules] downstream | **03801** [1] | **03802** [2] | **03802** [2] | **03802** [2] | **03802** [2] | **03802** [2] | **03803** [3] | **03803** [3] | **03803** [3] | **03803** [3] |
| Collar | **LV429285** + **LV429284** (3) | **LV429285** + **LV429284** (3) | **LV429285** + **LV432534** (3) | | **LV429285** | | **LV429285** + **LV432534** | | **LV429285** | |

| Connection | Upstream from lateral busbars - Linergy LGY, BS, LGYE | | | |
|---|---|---|---|---|
| **Withdrawable devices** | **NSX / NSX Vigi (ELCB) / Vigi NSX 100/160/250** | | **NSX / NSX Vigi (ELCB) / Vigi NSX 400/630** | |
| | **3P** | **4P** | **3P** | **4P** |
| Front conn. connection | must be made with insulated flexible bars *> page G-22*. | | | |
| Front conn. long terminal shields | **LV429517** | **LV429518** | **LV432593** | **LV432594** |
| Front conn. short terminal shields | **LV429515** | **LV429516** | **LV432591** | **LV432592** |
| Front conn. connection adapter for plug-in base | **LV429306** | **LV429307** | **LV432584** | **LV432585** |
| Rear conn. short terminal shields | 2 x **LV429515** | 2 x **LV429516** | 2 x **LV432591** | 2 x **LV432592** |
| Rear conn. short rear connectors | **LV429235** | **LV429235** | **LV432475** | **LV432475** |
| Rear conn. long rear connectors | **LV429236** | **LV429236** | **LV432476** | **LV432476** |
| Rear conn. connection adapter for plug-in base | **LV429306** | **LV429307** | **LV432584** | **LV432585** |

| Connection | Downstream distribution | | | |
|---|---|---|---|---|
| | |  | | |
| **Withdrawable devices** | **NSX / NSX Vigi (ELCB) / Vigi NSX 100/160/250** | | **NSX / NSX Vigi (ELCB) / Vigi NSX 400/630** | |
| | **3P** | **4P** | **3P** | **4P** |
| Front conn. connection adapter for plug-in base | **LV429306** | **LV429307** | **LV432584** | **LV432585** |
| Front conn. short terminal shields on device | **LV429515** | **LV429516** | **LV432591** | **LV432592** |
| Front conn. short terminal shields on plug-in base | **LV429517** | **LV429518** | **LV432593** | **LV432594** |
| Rear conn. short terminal shields | 2 x **LV429515** | 2 x **LV429516** | 2 x **LV432591** | 2 x **LV432592** |
| Rear conn. short rear connectors | **LV429235** | **LV429235** | **LV432475** | **LV432475** |
| Rear conn. long rear connectors | **LV429236** | **LV429236** | **LV432476** | **LV432476** |
| Rear conn. connection adapter for plug-in base | **LV429306** | **LV429307** | **LV432584** | **LV432585** |

(1) Metering and signaling features (ammeter…) can be added. Mounted on a Compact NSX, it has the same size than a Compact Vigi NSX. Refer to the corresponding column.
(2) Catalogue number **03460** is recommended when installing an NSX with a motor mechanism.
(3) For devices with toggle only.

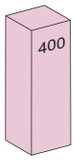
# Compact, Compact Vigi (ELCB) and VigiCompact NSX 100 to 630

## Vertical mounting - W = 400 mm

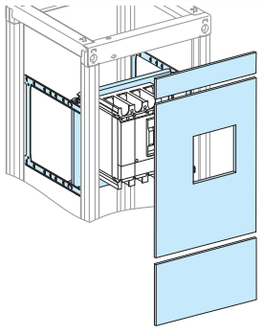
### All controls - Fixed, plug-in

Designed for PowerTag NSX
Circuit breakers

## Mounting



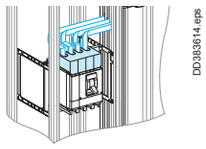

## Device vertical, front connection




| Devices | | Fixed | | Fixed | Fixed / Plug-in (1) | Fixed / Plug-in (1) |
|---|---|---|---|---|---|---|
| | | NSX / NSX Vigi (ELCB) 100/250 (2) | | Vigi NSX 100/250 | NSX / NSX Vigi (ELCB) 400/630 (2) | Vigi NSX 400/630 |
| | | Toggle | Rotary handle Motor mechanism | Toggle | Toggle, Rotary handle Motor mechanism | Toggle |
| Number of devices per row | | 1 | 1 | 1 | 1 | 1 |
| PowerTag NSX compatibility | | ✓ | ✓ | ✓ | ✓ (1) | ✓ (1) |
| No. of vertical modules | | **9** or **10** | **9** or **10** | **11** or **12** | **12** or **14** | **14** or **16** |
| Mounting plates | | **03050** | **03051** | **03050** | **03487** | **03487** |
| Adapter Prisma G | | **03596** | **03596** | **03596** | - | - |
| Front plates [No. of vertical modules] | with cut-out | **03253** [9] | **03253** [9] | **03293** [11] | **03283** [12] | **03299** [10] |
| | downstream | - | - | - | - | **03814** [4] |
| | downstream with PowerTag NSX | **03811** [1] | **03811** [1] | **03811** [1] | **03812** [2] | **03816** [6] |
| Collar | | - | - | - | **LV432534** | **LV432534** |

## Connection

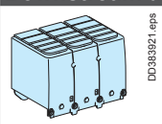
## Upstream from lateral busbars - Linergy LGY, BS, LGYE




| Devices | | Fixed device | | | | Plug-in device | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | NSX / NSX Vigi (ELCB) / Vigi NSX 100/160/250 | | 400/630 | | NSX / NSX Vigi (ELCB) / Vigi NSX 100/160/250 | | 400/630 | |
| | | 3P | 4P | 3P | 4P | 3P | 4P | 3P | 4P |
| Connection | | must be made with insulated flexible bars > *page G-22* and according to the drawings supplied by Schneider Electric. | | | | | | | |
| Front connection | connection adapter for plug-in base | - | | - | | **LV429306** | **LV429307** | **LV432584** | **LV432585** |
| | short terminal shields | - | | - | | **LV429515** | **LV429516** | **LV432591** | **LV432592** |
| | ong terminal shields | **LV429517** | **LV429518** | **LV432593** | **LV432594** | **LV429517** | **LV429518** | **LV432593** | **LV432594** |

## Connection

## Downstream distribution




| Devices | | Fixed device | | | | Plug-in device | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | NSX / NSX Vigi (ELCB) / Vigi NSX 100/160/250 | | 400/630 | | NSX / NSX Vigi (ELCB) / Vigi NSX 100/160/250 | | 400/630 | |
| | | 3P | 4P | 3P | 4P | 3P | 4P | 3P | 4P |
| Front connection | short terminal shields | - | | - | | **LV429515** | **LV429516** | **LV432591** | **LV432592** |
| | long terminal shields | **LV429517** | **LV429518** | **LV432593** | **LV432594** | **LV429517** | **LV429518** | **LV432593** | **LV432594** |
| | connection adapter for plug-in base | - | | - | | **LV429306** | **LV429307** | **LV432584** | **LV432585** |
| Rear connection | short terminal shields | **LV429515** | **LV429516** | **LV432591** | **LV432592** | 2 x **LV429515** | 2 x **LV429516** | 2 x **LV432591** | 2 x **LV432592** |
| | short rear connectors | **LV429235** | **LV429235** | **LV432475** | **LV432475** | **LV429235** | **LV429235** | **LV432475** | **LV432475** |
| | long rear connectors | **LV429236** | **LV429236** | **LV432476** | **LV432476** | **LV429236** | **LV429236** | **LV432476** | **LV432476** |
| | connection adapter for plug-in base | - | | - | | **LV429306** | **LV429307** | **LV432584** | **LV432585** |

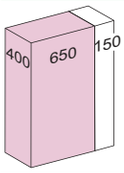
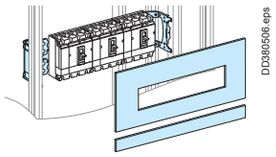
**(1)** PowerTag NSX is not compatible with plug-in mounting
**(2)** Metering and signaling features (ammeter…) can be added. Mounted on a Compact NSX, it has the same size than a Compact Vigi NSX. Refer to the corresponding column.

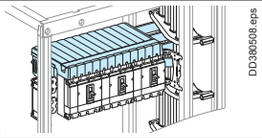
# Compact, Compact Vigi (ELCB) and VigiCompact NSX 100/160/250

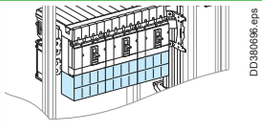
## Vertical mounting

### Toggle - Fixed

Designed for PowerTag NSX
Circuit breakers

| Mounting | | Vertical fixed | | | |
|---|---|---|---|---|---|
|  | |  | | | |
| **Devices** | | **Toggle** | | | |
| | | **NSX/ NSX Vigi (ELCB) 100/160** (1) | **Vigi NSX 100/160** | **NSX/ NSX Vigi (ELCB) 250** (1) | **Vigi NSX 250** |
| Number of devices per row | | 3 x 4P or 4 x 3P | 3 x 4P or 4 x 3P | 3 x 4P or 4 x 3P | 3 x 4P or 4 x 3P |
| PowerTag NSX compatibility | | ·)) | ·)) | ·)) | ·)) |
| No. of vertical modules | | **6** or **7** | **8** | **7** or **8** | **9** |
| Mounting plates | | **03420** | **03420** | **03420** | **03420** |
| Front plates [No. of vertical modules] | with cut-out | **03243** [5] | **03241** [7] | **03243** [5] | **03241** [7] |
| | downstream | **03801** [1] | **03801** [1] | **03802** [2] | **03802** [2] |
| | downstream with PowerTag NSX | **03802** [2] | **03802** [2] | **03803** [3] | **03803** [3] |

| Connection | | Upstream from lateral busbars | | |
|---|---|---|---|---|
| | |  | | |
| **Fixed devices** | | **NSX / NSX Vigi (ELCB) / Vigi NSX100/160/250** | | |
| | | **3P** | **4P** | |
| **Linergy FC connection to busbars** | | | | |
| Linergy LGY | Linergy FC distribution blocks (with connection) | **04403** | **04404** | |
| Linergy BS, LGYE | Linergy FC distribution blocks (without connection) (2) | **04407** | **04408** | |
| **Other connections to busbars** | | | | |
| Front connection with cable (3) | long terminal shields | **LV429517** | **LV429518** | |
| Rear connection with cable | short terminal shields | **LV429515** | **LV429516** | |
| | short rear connectors | **LV429235** | | |
| | long rear connectors | **LV429236** | | |
| **Accessories** | | | | |
| Linergy FC tooth-caps | | **04809** | | |
| Divisible blanking plate | | **03249** | | |
| Divisible blanking plate + electronic trip unit | | **03222** | | |

| Connection | | Downstream distribution | | |
|---|---|---|---|---|
| | |  | | |
| **Fixed devices** | | **NSX / NSX Vigi (ELCB) / Vigi NSX 100/160/250** | | |
| | | **3P** | **4P** | |
| Front connection | long terminal shields | **LV429517** | **LV429518** | |
| Rear connection (4) | short terminal shields | **LV429515** | **LV429516** | |
| | short rear connectors | **LV429235** | | |
| | long rear connectors | **LV429236** | | |

(1) Metering and signaling features (ammeter…) can be added. Mounted on a Compact NSX, it has the same size than a Compact Vigi NSX. Refer to the corresponding column.
(2) Flexible bars on Linergy LGYE to be made according drawings supplied by Schneider Electric.
(3) For the Compact NSX100/250, the number of modules indicated is for supply via a Linergy FC distribution block.
For supply via cables, two additional modules are required; add an upstream plain front plate (**03802**).
(4) Size reduced to one module downstream.

E

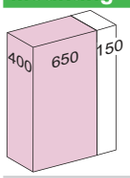
# Compact, Compact Vigi (ELCB) and VigiCompact NSX 100/160/250

## Vertical mounting

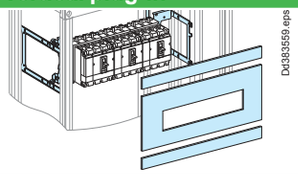
### Toggle - Plug-in



## Mounting



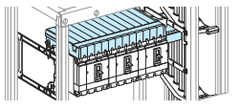

## Vertical plug-in




| Devices | | Toggle | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | NSX / NSX Vigi (ELCB) 100/160 (1) | | Vigi NSX 100/160 | | NSX / NSX Vigi (ELCB) 250 (1) | | Vigi NSX 250 | |
| Number of devices per row | | 3 x 4P or 4 x 3P | | 3 x 4P or 4 x 3P | | 3 x 4P or 4 x 3P | | 3 x 4P or 4 x 3P | |
| No. of vertical modules | | 9 | 7 | 11 | 9 | 10 | 8 | 12 | 10 |
| Mounting plates | | 03421 (2) | 03423 (3) | 03421 (2) | 03423 (3) | 03421 (2) | 03423 (3) | 03421 (2) | 03423 (3) |
| Front plates [No. of vertical modules] | upstream | 03801 [1] + 03802 [2] | 03801 [1] | 03801 [1] + 03802 [2] | 03801 [1] | 03801 [1] + 03802 [2] | 03801 [1] | 03801 [1] + 03802 [2] | 03801 [1] |
| | with cut-out | 03243 [5] | 03243 [5] | 03241 [7] | 03241 [7] | 03243 [5] | 03243 [5] | 03241 [7] | 03241 [7] |
| | downstream | 03801 [1] | 03801 [1] | 03801 [1] | 03801 [1] | 03802 [2] | 03802 [2] | 03802 [2] | 03802 [2] |

## Connection

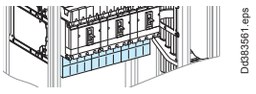
## Upstream from lateral busbars




| Plug-in devices | | NSX / NSX Vigi (ELCB) / Vigi NSX 100/160/250 | |
|---|---|---|---|
| | | 3P | 4P |
| **Linergy FC connection to busbars** | | | |
| Linergy LGY | Linergy FC distribution blocks (with connection) | 04405 (4) | 04406 (4) |
| | Connection adapter for plug-in base | LV429306 | LV429307 |
| Linergy BS, LGYE | Linergy FC distribution blocks (without connection) (5) | 04407 | 04408 |
| | Connection adapter for plug-in base | LV429306 | LV429307 |
| **Connection to lateral busbars with insulated flexible bars** | | | |
| Front connection | connection | must be made with insulated flexible bars > page G-22. | |
| | long terminal shields | LV429517 | LV429518 |
| | short terminal shields | LV429515 | LV429516 |
| | connection adapter for plug-in base | LV429306 | LV429307 |
| Rear connection | short terminal shields | 2 x LV429515 | 2 x LV429516 |
| | short rear connectors | LV429235 | |
| | long rear connectors | LV429236 | |
| | connection adapter for plug-in base | LV429306 | LV429307 |
| **Accessories** | | | |
| Linergy FC tooth-caps | | 04809 | |
| Divisible blanking plate | | 03249 | |
| Divisible blanking plate + electronic trip unit | | 03222 | |

## Connection

## Downstream distribution




| Plug-in devices | | NSX100/160, Vigi NSX100/160/250 | |
|---|---|---|---|
| | | 3P | 4P |
| Front connection | connection adapter for plug-in base | LV429306 | LV429307 |
| | short terminal shields on device | LV429515 | LV429516 |
| | long terminal shields on plug-in base | LV429517 | LV429518 |
| Rear connection (6) | short terminal shields | 2 x LV429515 | 2 x LV429516 |
| | short rear connectors | LV429235 | |
| | long rear connectors | LV429236 | |
| | connection adapter for plug-in base | LV429306 | LV429307 |

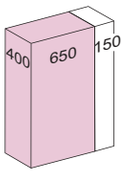
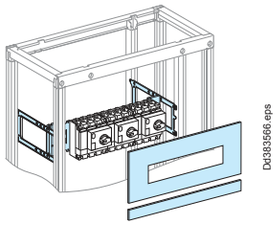
(1) Metering and signaling features (ammeter…) can be added. Mounted on a Compact NSX, it has the same size than a Compact Vigi NSX. Refer to the corresponding column.
(2) Not compatible with Linergy FC distribution block.
(3) Compatible with Linergy FC distribution block.
(4) Catalogue number **04924** is recommended when installing those references.
(5) Flexible bars on Linergy LGYE to be made according drawings supplied by Schneider Electric.
(6) Size reduced to one module downstream.

# Compact, Compact Vigi (ELCB) and VigiCompact NSX 100/160/250

## Vertical mounting

### Rotary handle, motor mechanism - Fixed

Designed for PowerTag NSX
Circuit breakers

| Mounting | Vertical fixed |
|---|---|
|  |  |

| Devices | | Rotary handle, motor mechanism | | | |
|---|---|---|---|---|---|
| | | NSX / NSX Vigi (ELCB) 100/160 (1) | Vigi NSX 100/160 | NSX / NSX Vigi (ELCB) 250 (1) | Vigi NSX 250 |
| Number of devices per row | | 3 x 4P or 4 x 3P | 3 x 4P or 4 x 3P | 3 x 4P or 4 x 3P | 3 x 4P or 4 x 3P |
| PowerTag NSX compatibility | | ✓ | ✓ | ✓ | ✓ |
| No. of vertical modules (2) | | **6** or **7** | **8** or **9** | **7** or **8** | **9** or **10** |
| Mounting plates | | **03422** | **03422** | **03422** | **03422** |
| Front plates [No. of vert. mod.] | with cut-out | **03243** [5] | **03244** [7] | **03243** [5] | **03244** [7] |
| | downstream | **03801** [1] | **03801** [1] | **03802** [2] | **03802** [2] |
| | downstream with PowerTag NSX | **03802** [2] | **03802** [2] | **03803** [3] | **03803** [3] |
| Collar | | - | **LV429285** | - | **LV429285** |
| IP40 front-panel escutcheons | | - | **LV429316** (3) | - | **LV429316** (3) |

| Connection | Upstream from lateral busbars | |
|---|---|---|
| | | |
| **Fixed devices** | **NSX / NSX Vigi (ELCB) / Vigi NSX100/160/250** | |
| | **3P** | **4P** |
| **Linergy FC connection to busbars** | | |
| Linergy LGY — Linergy FC distribution blocks (with connection) | **04405** (4) | **04406** (4) |
| Linergy BS, LGYE — Linergy FC distribution blocks (without connection) (5) | **04407** | **04408** |
| **Accessories** | | |
| Linergy FC tooth-caps | **04809** | |
| Divisible blanking plate | **03249** | |
| Blanking plate fract. + electronic trip unit | **03222** | |

| Connection | Downstream distribution | |
|---|---|---|
| | | |
| **Fixed devices** | **NSX / NSX Vigi (ELCB) / Vigi NSX100/160/250** | |
| | **3P** | **4P** |
| Front connection — long terminal shields | **LV429517** | **LV429518** |
| Rear connection (6) — short terminal shields | **LV429515** | **LV429516** |
| short rear connectors | **LV429235** | |
| long rear connectors | **LV429236** | |

(1) Metering and signaling features (ammeter…) can be added. Mounted on a Compact NSX, it has the same size than a Compact Vigi NSX. Refer to the corresponding column.
(2) For the Compact NSX100/250, the number of modules indicated is for supply via a Linergy FC distribution block.
For supply via cables, two additional modules are required; add an upstream plain front plate (**03802**).
(3) For ammeter, take **LV429285** + **LV429318** catalogue numbers.
(4) Catalogue number **04924** is recommended when installing those references.
(5) Flexible bars on Linergy LGYE to be made according drawings supplied by Schneider Electric.
(6) Size reduced to one module downstream.

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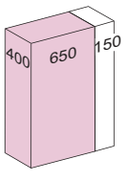
# Compact, Compact Vigi (ELCB) and VigiCompact NSX 100/160/250

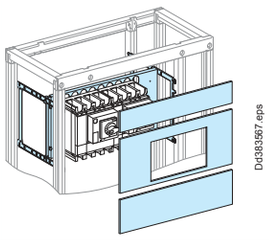
## Vertical mounting

### Rotary handle, motor mechanism - Plug-in



| Mounting | Vertical plug-in |
|---|---|




| Devices | | Rotary handle, motor mechanism | | | |
|---|---|---|---|---|---|
| | | NSX / NSX Vigi (ELCB) (1) 100/160 | Vigi NSX 100/160 | NSX / NSX Vigi (ELCB) (1) 250 | Vigi NSX 250 |
| Number of devices per row | | 3 x 4P or 4 x 3P | 3 x 4P or 4 x 3P | 3 x 4P or 4 x 3P | 3 x 4P or 4 x 3P |
| No. of vertical modules (2) | | **7** | **9** | **8** | **10** |
| Mounting plates | | **03421** | **03421** | **03421** | **03421** |
| Front plates [No. of vertical modules] | upstream | **03801** [1] | **03801** [1] | **03801** [1] | **03801** [1] |
| | with cut-out | **03243** [5] | **03244** [7] | **03243** [5] | **03244** [7] |
| | downstream | **03801** [1] | **03801** [1] | **03802** [2] | **03802** [2] |
| Collar | | - | **LV429285** | - | **LV429285** |
| IP40 escutcheons | | - | **LV429316** (3) | - | **LV429316** (3) |

| Connection | Upstream from lateral busbars | |
|---|---|---|

| Plug-in devices | | NSX / NSX Vigi (ELCB) / Vigi NSX100/160/250 3P | 4P |
|---|---|---|---|
| **Linergy FC connection to busbars** | | | |
| Linergy LGY | Linergy FC distribution blocks (with connection) | **04405** (4) | **04406** (4) |
| | Connection adapter for plug-in base | **LV429306** | **LV429307** |
| Linergy BS, LGYE | Linergy FC distribution blocks (without connection) (5) | **04407** | **04408** |
| Connection adapter for plug-in base | | **LV429306** | **LV429307** |
| **Accessories** | | | |
| Linergy FC tooth-caps | | **04809** | |
| Divisible blanking plate | | **03249** | |
| Blanking plate fract. + electronic trip unit | | **03222** | |

| Connection | Downstream distribution | |
|---|---|---|

| Plug-in devices | | NSX / NSX Vigi (ELCB) / Vigi NSX100/160/250 3P | 4P |
|---|---|---|---|
| Front connection | long terminal shields | **LV429517** | **LV429518** |
| | short terminal shields | **LV429515** | **LV429516** |
| | connection adapter for plug-in base | **LV429306** | **LV429307** |
| Rear connection (6) | short terminal shields | 2 x **LV429515** | 2 x **LV429516** |
| | short rear connectors | **LV429235** | |
| | long rear connectors | **LV429236** | |
| | connection adapter for plug-in base | **LV429306** | **LV429307** |

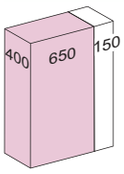
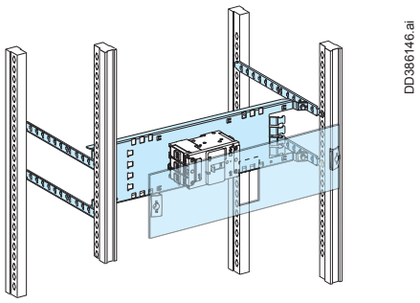
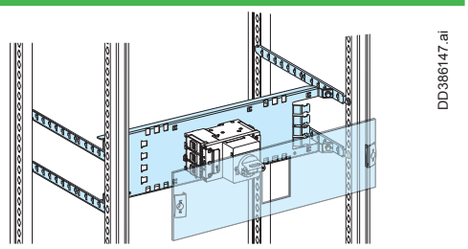
(1) Metering and signaling features (ammeter…) can be added. Mounted on a Compact NSX, it has the same size than a Compact Vigi NSX. Refer to the corresponding column.
(2) For the Compact NSX100/250, the number of modules indicated is for supply via a Linergy FC distribution block.
For supply via cables, two additional modules are required; add an upstream plain front plate (**03802**).
(3) For ammeter, take **LV429285** + **LV429318** catalogue numbers.
(4) Catalogue number **04924** is recommended when installing those references.
(5) Flexible bars on Linergy LGYE to be made according drawings supplied by Schneider Electric.
(6) Size reduced to one module downstream.

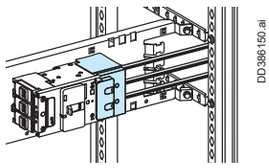
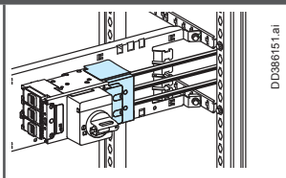
# Compact and Compact Vigi (ELCB) NSXm up to 160

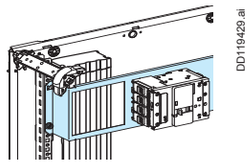
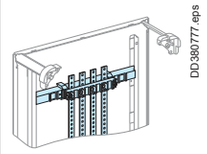
## Horizontal mounting

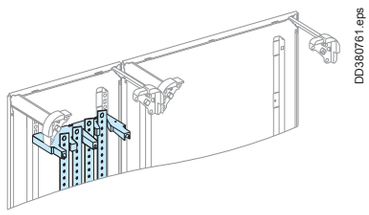
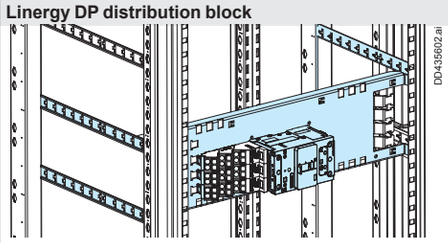
## Toggle, rotary handle - Fixed



| Mounting | Horizontal fixed | | |
|---|---|---|---|
|  |  | |  |
| **Devices** | **Toggle** | | **Direct rotary handle** |
| | **NSXm** | **NSXm Vigi (ELCB)** | **NSXm** |
| Number of devices per row | 1 x 3P or 4P | 1 x 3P or 4P | 1 x 3P or 4P |
| No. of vertical modules | **3** | **3** | **3** |
| Mounting plates | **03409** | **03409** | **03409** |
| Front plates with cut-out [No. of vertical modules] | **03330** [3] | **03330** [3] | **03331** [3] |

| Connection | Upstream from lateral Linergy LGY, BS, LGYE busbars | | | |
|---|---|---|---|---|
| |  | |  | |
| **Devices** | **Toggle** | | **Direct rotary handle** | |
| | **NSXm, NSXm Vigi (ELCB)** | | **NSXm** | |
| | **3P** | **4P** | **3P** | **4P** |
| Connection | Connections must be made | | Connections must be made | |
| Long terminal shields | **LV426912** | **LV426913** | **LV426912** | **LV426913** |

| Connection | Downstream distribution | |
|---|---|---|
| | **Insulated Linergy BW busbars** | **Rear Linergy BS busbars** |
| |  |  |
| Busbars | **Linergy BW** *> page G-16* | **04191** + copper bars *> page G-27* |
| Prefabricated connection | **04021**, **04145**, **04146**, **04148** | **04030** |

| Connection | Downstream distribution | |
|---|---|---|
| | **Linergy BS multi-stage busbars** | **Linergy DP distribution block** |
| |  |  |
| Busbars / Distribution block | **04192** + copper bars *> pages G-10, G-11* | **04038**, **04039** *> page G-17* |
| Prefabricated connection | Connection must be made | |

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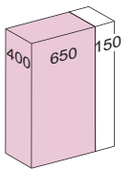
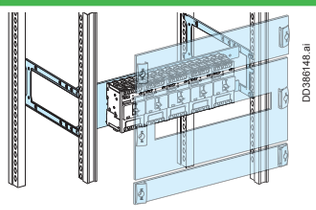
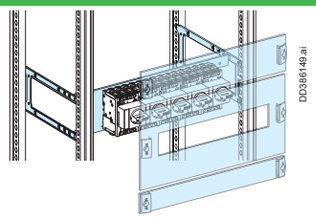
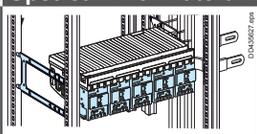
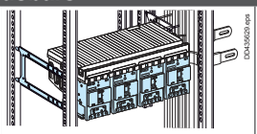
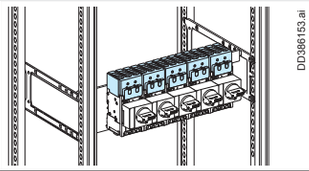
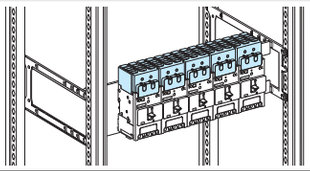
# Compact and Compact Vigi (ELCB) NSXm up to 160

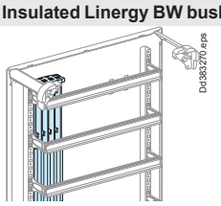
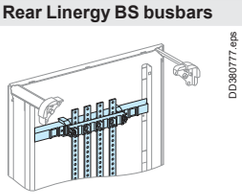
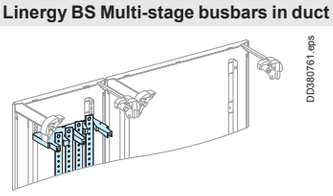
## Vertical mounting

## Toggle, rotary handle - Fixed



| Mounting | | Vertical fixed | | |
|---|---|---|---|---|
|  | |  | |  |
| **Devices** | | **Toggle** | | **Direct rotary handle** |
| | | **NSXm** | **NSXm Vigi (ELCB)** | **NSXm** |
| Number of devices per row | | 5 x 3P or 4 x 4P | 4 x 3P or 4P | 5 x 3P or 4 x 4P |
| No. of vertical modules (1) | | **5** | **5** | **5** |
| Mounting plates | | **03410** | **03406** | **03410** |
| Front plates [No. of vertical modules] | With cut-out | **03205** [5] | **03205** [5] | **03226** [5] **- 3P**<br>**03227** [5] **- 4P** |
| | Upstream | **03802** [2] | **03802** [2] | **03802** [2] |
| | Downstream | **03801** [1] | **03801** [1] | **03801** [1] |

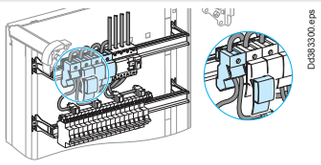
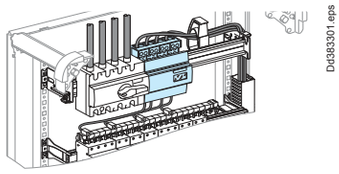
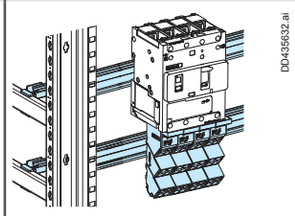
| Connection | | Upstream from lateral Linergy LGY, BS, LGYE busbars | | | |
|---|---|---|---|---|---|
| | |  | |  | |
| **Devices** | | **NSXm, Toggle/Direct rotary handle - with Everlink lug** | | **NSXm Vigi (ELCB), Toggle/Direct rotary handle - with Everlink lug** | |
| **Number of poles** | | **3P** | **4P** | **3P** | **4P** |
| Number of devices per row | | 5 x 3P | 4 x 4P | 4 x 3P | 4 x 4P |
| **Linergy FC connection to busbars** | | | | | |
| (With connection) | Linergy LGY | **04410** | **04411** | **04416** | **04411** |
| | Linergy BS, LGYE | **04412** | **04413** | **04417** | **04413** |
| (Without connection) | Linergy BS, LGYE, LGY | **04419** | **04420** | **04418** | **04420** |
| Mounting plates | | **03416** | **03416** | **03416** | **03416** |
| Front plates [No. of vertical modules] | With cut-out | **03205** [5] | **03205** [5] | **03205** [5] | **03205** [5] |
| | Downstream | **03802** [2] | **03802** [2] | **03802** [2] | **03802** [2] |
| Tooth-caps [No. of tooth-caps] | | **04810** [12] | **04810** [12] | **04810** [12] | **04810** [12] |
| **Accessories** | | | | | |
| | |  | |  | |
| Connection | | Connections must be made | | Connections must be made | |
| Long terminal shields | | **LV426912** | **LV426913** | **LV426912** | **LV426913** |
| Blanking plate | Strip | **03220** | **03220** | **03220** | **03220** |
| | Divisible | **03221** | **03221** | **03221** | **03221** |

| Connection | Downstream distribution | | |
|---|---|---|---|
| | **Insulated Linergy BW busbars** | **Rear Linergy BS busbars** | **Linergy BS Multi-stage busbars in duct** |
| |  |  |  |
| Busbars | **Linergy BW** *> page G-14* | **04191** + copper bars *> page G-9* | **04192** + copper bars *> pages G-10, G-11* |
| Connection | **04030**, **04145**, **04146**, **04147**, **04148** | **04145**, **04146** (centred device) | Must be made |

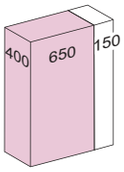
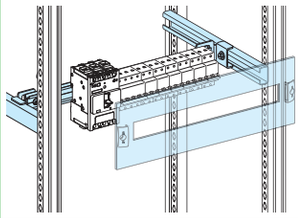
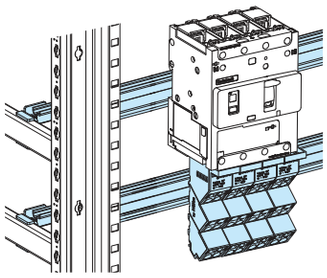
(1) For Compact NSXm up to 160, the number of modules indicated is for supply via a Linergy FC distribution block. For supply via cables, two additional modules are required; add an upstream plain front plate (03802).

# Compact and Compact Vigi (ELCB) NSXm up to 160
## Vertical mounting
## Toggle, rotary handle - Fixed



| Connection | Downstream distribution | | | |
|---|---|---|---|---|
| | Distribution block Linergy DX1P, 160 A | Distribution block Linergy DX 4P, 125 A/160 A | | Distribution block Linergy DP 3P/4P |
| |  |  | |  |
| Distribution block | **04031** *> page G-24* | **04045** *> page G-24* | **04046** *> page G-24* | **04038**, **04039** *> page G-17* |
| Connection | **04149** | **04047** | included | |
| Rail | | | | **03402** (W650) |

# Compact and Compact Vigi (ELCB) NSXm up to 160
## Modular devices 160 A

| Mounting | | Modular rail | |
|---|---|---|---|
|  | |  | |
| **Devices** | | **Toggle** | |
| | | **NSXm** | **NSXm Vigi (ELCB)** |
| Number of devices per row | | 5 x 3P or 4 x 4P | 4 x 3P or 4P |
| No. of vertical modules | | **5** (1) | **5** (2) |
| Rail [48 module of 9mm] | | **03402** (adjustable) (3) | **03402** (adjustable) (3) |
| Modular front plates | With cut out | **03205** | **03205** |
| Blanking plate | Strip | **03220** | **03220** |
| | Divisible | **03221** | **03221** |
| Connection | |  | |
| Rail | | **03402** (W650) | |

(1) With Linergy DP, the number of vertical modules will be 7.

(2) With Linergy DP, the number of vertical modules will be 8.

(3) Can be completed by a rail (cat no. **04226**) + raiser (cat no. **04225**) to install modular devices.

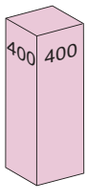
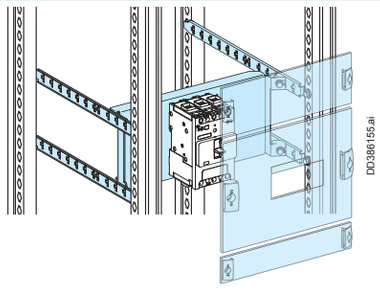
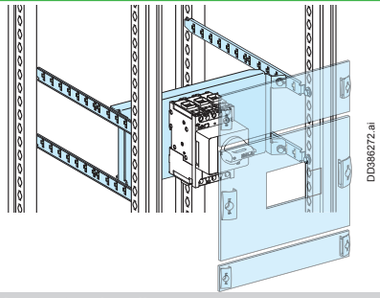
**Note:** Width of NSXm 160 circuit breaker:
- NSXm 160 - 3P - 9 modules
- NSXm 160 - 4P - 12 modules
- NSXm VIGI 160 - 3P or 4P - 12 modules

# Compact and Compact Vigi (ELCB) NSXm up to 160

## Vertical mounting - W = 400 mm

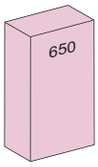
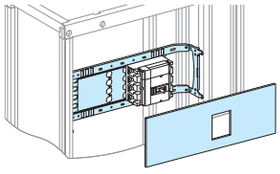
## Toggle, rotary handle - Fixed



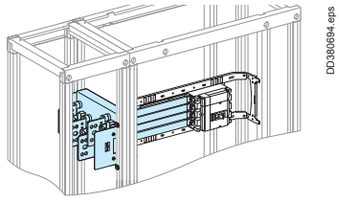
| Mounting | Vertical Fixed | | |
|---|---|---|---|
|   |   | |   |
| **Devices** | **Toggle** | | **Direct rotary handle** |
| | **NSXm** | **NSXm Vigi (ELCB)** | **NSXm** |
| Number of devices per row | 1 x 3P or 4P | 1 x 3P or 4P | 1 x 3P or 4P |
| No. of vertical modules | **8** | **8** | **8** |
| Mounting plates | **03405** | **03405** | **03405** |
| Front plates [No. of vertical modules] – With cut out | **03225** [5] | **03225** [5] | **03225** [5] |
| Front plates [No. of vertical modules] – Upstream | **03812** [2] | **03812** [2] | **03812** [2] |
| Front plates [No. of vertical modules] – Downstream | **03811** [1] | **03811** [1] | **03811** [1] |

# Easypact CVS100/630
## Horizontal fixed mounting
## Toggle



| Mounting | Horizontal fixed | | | |
|---|---|---|---|---|
|   |   | | | |
| **Devices** | **Toggle** | | | |
| | **Easypact CVS100/250<br>Easypact Vigi CVS100/250** | | **Easypact CVS400/630<br>Easypact Vigi CVS400/630** | |
| | **3P** | **4P** | **3P** | **4P** |
| Number of devices per row | 1 | 1 | 1 | 1 |
| No. of vertical modules | **3** | **4** | **4** | **5** |
| Mounting plates | **03411** | **03412** | **03451** | **03452** |
| Front plates with cut-out | **03611** | **03612** | **03651** | **03652** |

| Connection | Upstream from lateral Linergy LGY, BS, LGYE busbars | | | |
|---|---|---|---|---|
| | | | | |
| | **Easypact CVS100/250<br>Easypact Vigi CVS100/250** | | **Easypact CVS400/630<br>Easypact Vigi CVS400/630** | |
| | **3P** | **4P** | **3P** | **4P** |
| Connection | must be made with insulated flexible bars *> page G-22*. | | | |
| Long terminal shields | **LV429517** | **LV429518** | **LV432593** | **LV432594** |

| Connection | Downstream distribution | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| |   | | | | | | | | |
| | | **Easypact CVS100/250** | | **Easypact Vigi CVS100/250** | | **Easypact CVS400/630** | | **Easypact Vigi CVS400/630** | |
| | | **3P** | **4P** | **3P** | **4P** | **3P** | **4P** | **3P** | **4P** |
| Front connection | long terminal shields | **LV429517** | **LV429518** | **LV429517** | **LV429518** | **LV432593** | **LV432594** | **LV432593** | **LV432594** |
| Connection transfer assembly | connection | **04429 (1)** | **04430 (1)** | **04429 (1)** | **04430 (1)** | **04459 (1)** | **04460 (1)** | **04459 (1)** | **04460 (1)** |
| | long terminal shields | **LV429517** | **LV429518** | **LV429517** | **LV429518** | **LV432593** | **LV432594** | **LV432593** | **LV432594** |
| Rear connection | short terminal shields | **LV429515** | **LV429516** | **LV429515** | **LV429516** | **LV432591** | **LV432592** | **LV432591** | **LV432592** |
| | short rear connectors | **LV429235** | | **LV429235** | | **LV432475** | | **LV432475** | |
| | long rear connectors | **LV429236** | | **LV429236** | | **LV432476** | | **LV432476** | |

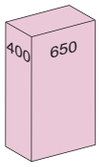
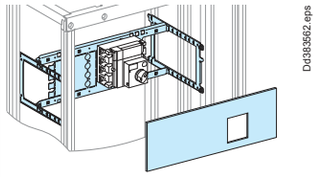
**(1)** No connection.

E

# Easypact CVS100/630

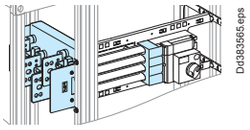
## Horizontal fixed mounting
## Rotary handle



| Mounting | Horizontal fixed |
|---|---|
|   |   |

| Devices | Rotary handle | | | |
|---|---|---|---|---|
| | Easypact CVS100/250<br>Easypact Vigi CVS100/250 | | Easypact CVS400/630<br>Easypact Vigi CVS400/630 | |
| | 3P | 4P | 3P | 4P |
| Number of devices per row | 1 | 1 | 1 | 1 |
| No. of vertical modules | 3 | 4 | 4 | 5 |
| Mounting plates | 03413 | 03414 | 03453 | 03454 |
| Front plates with cut-out | 03604 | 03606 | 03643 | 03644 |
| Collar (1) | LV429285 | LV429285 | LV429285 + LV429527 | LV429285 + LV429527 |

| Connection | Upstream from lateral Linergy LGY, BS, LGYE busbars | | | |
|---|---|---|---|---|
| | | | | |
| | Easypact CVS100/250<br>Easypact Vigi CVS100/250 | | Easypact CVS400/630<br>Easypact Vigi CVS400/630 | |
| | 3P | 4P | 3P | 4P |
| Connection | must be made with insulated flexible bars > page G-22 | | | |
| Long terminal shields | LV429517 | LV429518 | LV432593 | LV432594 |

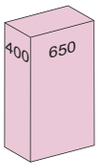
| Connection | | Downstream distribution | | | |
|---|---|---|---|---|---|
| | |   | | | |
| | | Easypact CVS100/250<br>Easypact Vigi CVS100/250 | | Easypact CVS400/630<br>Easypact Vigi CVS400/630 | |
| | | 3P | 4P | 3P | 4P |
| Front connection | long terminal shields | LV429517 | LV429518 | LV432593 | LV432594 |
| Connection transfer assembly | connection | 04429 (2) | 04430 (2) | 04459 (2) | 04460 (2) |
| | long terminal shields | LV429517 | LV429518 | LV432593 | LV432594 |
| Rear connection | short terminal shields | LV429515 | LV429516 | LV432591 | LV432592 |
| | short rear connectors | LV429235 | | LV432475 | |
| | long rear connectors | LV429236 | | LV432476 | |

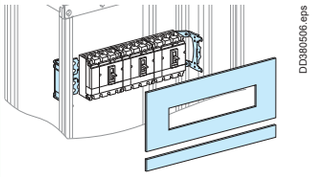
**(1)** On Vigi CVS only.
**(2)** No connection.

# Easypact CVS100/630
## Vertical fixed mounting
## Toggle



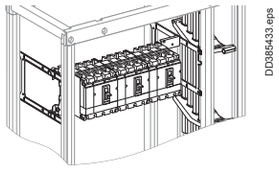
| Mounting | Vertical fixed |
|---|---|



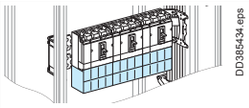

| Devices | | Toggle | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | Easypact CVS100/250 | | Easypact Vigi CVS100/250 | | Easypact CVS400/630 | | Easypact Vigi CVS400/630 | |
| | | 3P | 4P | 3P | 4P | 3P | 4P | 3P | 4P |
| Number of devices per row | | 4 | 3 | 4 | 3 | 1 | | 1 | |
| No. of vertical modules | | 9 | | 11 | | 13 | | 15 | |
| Mounting plates | | 03420 | | 03420 | | 03461 | | 03461 | |
| Front plates [No. of vertical modules] | upstream | 03802 [2] | | 03802 [2] | | 03802 [2] | | 03801 [1] | |
| | with cut-out | 03243 [5] | | 03241 [7] | | 03273 [9] | | 03276 [11] | |
| | downstream | 03802 [2] | | 03802 [2] | | 03802 [2] | | 03803 [3] | |

| Connection | Upstream from lateral Linergy LGY, BS, LGYE busbars |
|---|---|




| | | Easypact CVS100/250 | | Easypact Vigi CVS100/250 | | Easypact CVS400/630 | |
|---|---|---|---|---|---|---|---|
| | | 3P | 4P | 3P | 4P | 3P | 4P |
| Number of devices per row | | 3/4 | | | | 1 | |
| Connection | | must be made with insulated flexible bars > page G-22. | | | | | |
| Front connection | long terminal shields | LV429517 | LV429518 | LV429517 | LV429518 | LV432593 | LV432594 |
| Rear connection | short terminal shields | LV429515 | LV429516 | LV429515 | LV429516 | LV432591 | LV432592 |
| | short rear connectors | LV429235 | | LV429235 | | LV432475 | |
| | long rear connectors | LV429236 | | LV429236 | | LV432476 | |
| Divisible blanking plate | | 03249 | | 03249 | | 03249 | |
| Divisible blanking plate + electronic trip unit | | 03222 | | 03222 | | 03222 | |

| Connection | Downstream distribution |
|---|---|




| | | Easypact CVS100/160, Easypact Vigi CVS100/160 | | Easypact CVS250, Easypact Vigi CVS250 | |
|---|---|---|---|---|---|
| | | 3P | 4P | 3P | 4P |
| Front connection | long terminal shields | LV429517 | LV429518 | LV429517 | LV429518 |
| Rear connection | short terminal shields | LV429515 (1) | LV429516 (1) | LV429515 (1) | LV429516 (1) |
| | short rear connectors | LV429235 | | LV429235 | |
| | long rear connectors | LV429236 | | LV429236 | |

(1) Size reduced one module downstream.

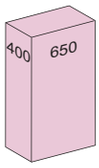
E

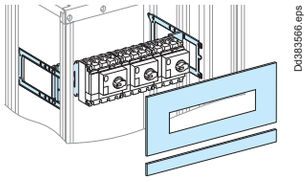
# Easypact CVS100/630

## Vertical fixed mounting
## Rotary handle



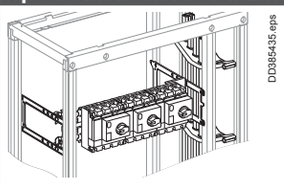
| Mounting | Vertical fixed |
|---|---|



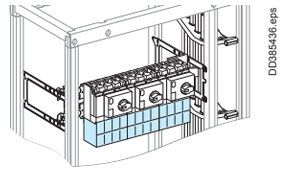

| Devices | | Rotary handle | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | Easypact CVS100/250 | | Vigi CVS100/250 | | Easypact CVS400/630 | | Easypact Vigi CVS400/630 | |
| | | 3P | 4P | 3P | 4P | 3P | 4P | 3P or 4P | 3P or 4P |
| Number of devices per row | | 4 | 3 | 4 | 3 | 1 | | 1 | 2 |
| No. of vertical modules | | **9** | | **11** | | **13** | | **15** | **13** |
| Mounting plates | | **03422** | | **03422** | | **03461** | | **03461** | **03461** |
| Front plates [No. of vertical modules] | upstream | **03802** [2] | | **03802** [2] | | **03802** [2] | | **03802** [2] | **03802** [2] |
| | with cut-out | **03243** [5] | | **03244** [7] | | **03275** [9] | | **03297** [11] | **03665** [9] |
| | downstream | **03802** [2] | | **03802** [2] | | **03802** [2] | | **03802** [2] | **03802** [2] |
| Collar | | - | | **LV429285** | | - | | - | - |

| Connection | Upstream from lateral Linergy LGY, BS, LGYE busbars |
|---|---|




| | | Easypact CVS100/250 | | Vigi CVS100/250 | | Easypact CVS400/630 | |
|---|---|---|---|---|---|---|---|
| | | 3P | 4P | 3P | 4P | 3P | 4P |
| Number of devices per row | | 3/4 | | | | 1 | |
| Connection | | must be made with insulated flexible bars *> page G-22*. | | | | | |
| Front connection | long terminal shields | **LV429517** | **LV429518** | **LV429517** | **LV429518** | **LV432593** | **LV432594** |
| Rear connection | short terminal shields | **LV429515** | **LV429516** | **LV429515** | **LV429516** | **LV432591** | **LV432592** |
| | short rear connectors | **LV429235** | | **LV429235** | | **LV432475** | |
| | long rear connectors | **LV429236** | | **LV429236** | | **LV432476** | |
| Divisible blanking plate | | **03249** | | **03249** | | **03249** | |
| Divisible blanking plate + electronic trip unit | | **03222** | | **03222** | | **03222** | |

| Connection | Downstream distribution |
|---|---|




| Fixed device | | Easypact CVS100/250, Easypact Vigi CVS100/250 | | Easypact CVS400/630, Easypact Vigi CVS400/630 | |
|---|---|---|---|---|---|
| | | 3P | 4P | 3P | 4P |
| Front connection | long terminal shields | **LV429517** | **LV429518** | **LV432593** | **LV432594** |
| Rear connection | short terminal shields | **LV429515** (1) | **LV429516** (1) | **LV432591** (1) | **LV432592** (1) |
| | short rear connectors | **LV429235** | | **LV432475** | |
| | long rear connectors | **LV429236** | | **LV432476** | |

**(1)** Size reduced one module downstream.

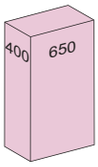
# Easypact EZC100, EZC200, EZCV250, EZC400, EZC630

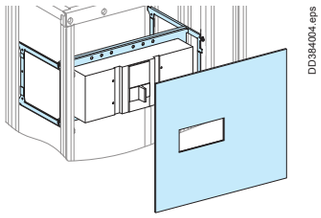
## Horizontal / Vertical mounting

## Toggle



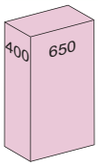
| Mounting | Horizontal fixed |
|---|---|

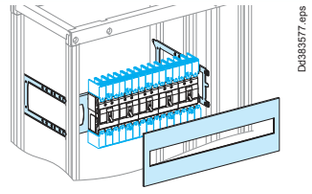



| Devices | Toggle | | | |
|---|---|---|---|---|
| | Easypact EZC250<br>Easypact EZCV250 | | Easypact EZC400/630 | |
| | 3P | 4P | 3P | 4P |
| Number of devices per row | 1 | | 1 | |
| No. of vertical modules | **4** | | **4** | **5** |
| Mounting plates | **03504** | **03504** | **03451** | **03452** |
| Front plates with cut-out | **03304** | **03304** | **03651** | **03652** |
| Long terminal shields | **EZETSHD3P** (1) | **EZETSHD4P** (1) | **LV432593** | **LV432594** |

| Mounting | Vertical fixed |
|---|---|




| Devices | Toggle | | | | | | |
|---|---|---|---|---|---|---|---|
| | Easypact EZC100 | | | Easypact EZC250<br>Easypact EZCV250 | | Easypact EZC400/630 | |
| | 1P | 3P | 4P | 3P | 4P | 3P | 4P |
| Number of devices per row | 15 | 5 | 3 | 4 | 3 | 1 | |
| No. of vertical modules | **5** | | | **7** | | **13** | |
| Mounting plates | **03502** | | | **03504** | | **03461** | |
| Front plates [No. of vertical modules] upstream | - | | | - | | **03802** [2] | |
| Front plates [No. of vertical modules] with cut-out | **03303** [5] | | | **03305** [7] | | **03273** [9] | |
| Front plates [No. of vertical modules] downstream | - | | | - | | **03802** [2] | |
| Long terminal shields | - | **EZATSHD3P** (1) | **EZATSHD4P** (1) | **EZETSHD3PN** (1) | **EZETSHD4PN** (1) | **LV432593** | **LV432594** |
| Divisible blanking plate | **03249** | | | **03249** | | **03249** | |

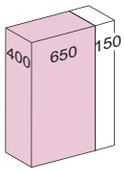
**(1)** Set of 2.

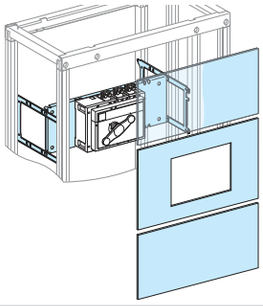
E

# Compact INS-INV630b to 1600
# Compact INS-INV2000-2500
## Vertical fixed mounting



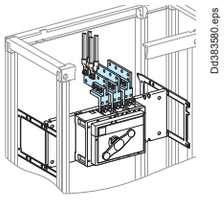
| Mounting | Vertical fixed |
|---|---|



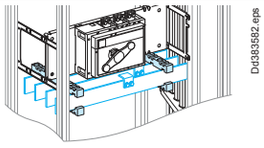

| Devices | | Fixed device | | | |
|---|---|---|---|---|---|
| | | INS-INV630b/1600 | | INS-INV2000/2500 | |
| | | 3P | 4P | 3P | 4P |
| Number of devices per row | | 1 | | 1 | |
| No. of vertical modules | | **14** | | **16** | |
| Mounting plates | | **03501** | | **03501** | |
| Front plates [No. of vertical modules] | upstream | **03804** [4] | | **03803** [3] | |
| | with cut-out | **03713** [6] | **03714** [6] | **03715** [10] | |
| | downstream | **03804** [4] | | **03803** [3] | |
| Characteristics | | Depending on the type of front connection, an INS-INV2000-2500 can be mounted in a 400 mm or 600 mm deep enclosure. For rear connection, a 600 mm deep enclosure is required. | | | |

| Connection | Upstream on incomer |
|---|---|




| Fixed device | INS-INV630b/1600 | | INS-INV2000/2500 | |
|---|---|---|---|---|
| | 3P | 4P | 3P | 4P |
| Vertical connection adapters | **31301** (1) | **31302** (1) | **33975** (1) | **33976** (1) |
| Cable-lug adapters | **33644** (1) | **33645** (1) | - | - |
| Connection | - | | must be made | |
| Terminal extension bar support | - | | **04694** | **04694** |

| Connection | Downstream distribution via Linergy LGY, LGYE, or BS busbars |
|---|---|

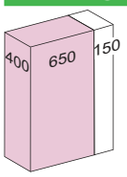
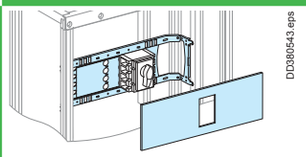
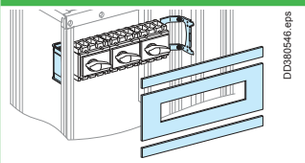


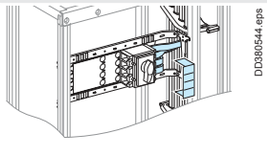
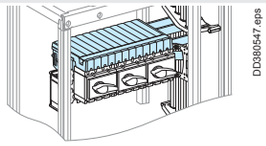
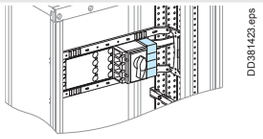
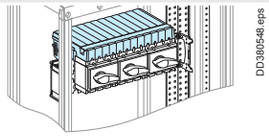

| Fixed device | INS-INV630b/1600 | | INS-INV2000/2500 | |
|---|---|---|---|---|
| | 3P | 4P | 3P | 4P |
| Connection LGY | **04481** | **04482** | - | |
| Connection BS, LGYE | must be made (3) | | must be made (3) | |
| Cover for busbars connection | **04926** (2) | | **04926** (2) | |
| Free support | - | | 2 x **04662** | |

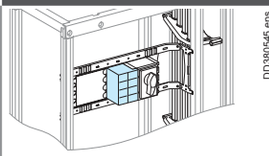
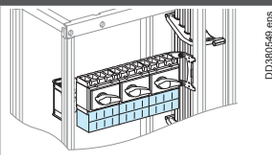
(1) Vertical connection adapters and cable-lug adapters are not compatible with input voltage ⩾ 500 V.
(2) Partitioning of devices must be made.
(3) Connection to be made according to the busbar drawings supplied by Schneider Electric.
Selection of busbars: Linergy LGY > *page G-4*, Linergy LGYE > *page G-5*, Linergy BS > *page G-6*.

# Compact INS-INV250 to 630
## Horizontal / Vertical fixed mounting

Designed for PowerTag NSX
Switch-disconnectors

| Mounting | | Horizontal fixed | | Vertical fixed | | |
|---|---|---|---|---|---|---|
|  | |  | |  | | |
| **Devices** | | **Fixed device** | | | | |
| | | **INS-INV250** | **INS-INV320/630** | **INS-INV250** | **INS-INV320/400** | **INS-INV500/630** |
| Number of devices per row | | 1 | 1 | 1 \| 2/3 | 1 | 1 |
| PowerTag NSX compatibility | | ✓ | ✓ | ✓ | ✓ | ✓ |
| No. of vertical modules | | **4** | **5** | **7** or **8** (1) | **10** or **12** | **11** or **13** |
| Mounting plates | | **03412** | **03452** | **03420** | **03461** | **03461** |
| Front plates [No. of vertical modules] | upstream | - | - | **03801** [1] | - | **03801** [1] |
| | with cut-out | **03617** [4] | **03658** [5] | **03248** [5] \| **03620** [5] | **03274** [10] | **03274** [10] |
| | downstream | - | - | **03801** [1] | - | - |
| | downstream with PowerTag NSX | - | - | **03802** [2] | **03802** [2] | **03802** [2] |

| Connection | Upstream via lateral busbars | | | |
|---|---|---|---|---|
| **Fixed device** | **INS-INV250** **3P** \| **4P** | **INS-INV320/630** | **INS-INV250** | **INS-INV320/630** |
| **Linergy LGY** | | | | |
| |  | |  | |
| Prefabricated connection | **04427** (2) \| **04428** (2) | must be made (3) | - | must be made (3) |
| Distribution block Linergy FC | - | | **04404** | - |
| Long terminal shields | - | **LV432594** | - | **LV432594** |
| **Linergy BS, LGYE** | | | | |
| |  | |  | |
| Connection | must be made (3) | | - | |
| Linergy FC distribution blocks (without connection) | - | | **04408** | must be made |
| Long terminal shields | **LV429518** | **LV432594** | - | **LV432594** |
| **Accessories** | | | | |
| Linergy FC tooth-caps | - | | **04809** | |

| Connection | | Downstream distribution | | | |
|---|---|---|---|---|---|
| | |  | |  | |
| **Fixed device** | | **INS-INV250** | **INS-INV320/630** | **INS-INV250** | **INS-INV320/630** |
| Front connection | long terminal shields | **LV429518** | **LV432594** | **LV429518** | **LV432594** |
| Rear connection (4) | short terminal shields | **LV432516** | **LV432592** | **LV432516** | **LV432592** |
| | short rear connectors | **LV429235** | **LV432475** | **LV429235** | **LV432475** |
| | long rear connectors | **LV429236** | **LV432476** | **LV429236** | **LV432476** |

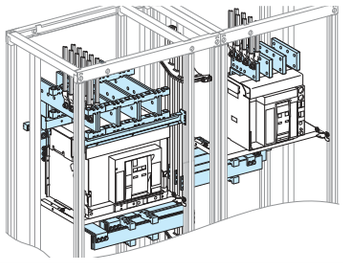
**(1)** For the Compact INS-INV250, the number of modules indicated is for supply via a Linergy FC distribution block.
For supply via cables, two additional modules are required; add an upstream plain front plate (**03802**).
**(2)** Compatible with Linergy LGYE vertical busbar.
**(3)** To be made according to the busbar drawings supplied by Schneider Electric.
**(4)** For rear connection, size reduced one module; a plain downstream front plate (**03801**) is not needed.

# Source-changeover

## Possible combinations Compact NSX100/630, NS630b/1600, Masterpact NT06/16, NW08/32

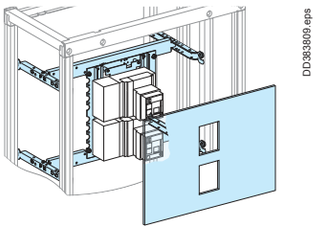


### Manual source-changeover

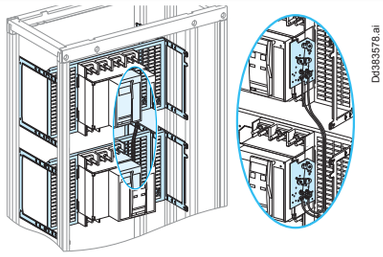



| Type of device | Type of interlocking | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | Complete assembly | Toggle | Keylock | Rotary handle | On base plate | Cable-type with 2 devices side-by-side (2) | Cable-type with 3 devices side-by-side (2) | Cable-type with 2 devices one above another |
| **INS250** (rating 100 to 250) | | | | | | | | |
| **INV100 to INV250** (1) | | | | | | | | |
| **INS320 to INS630** | | | | | | | | |
| **INV320 to INV630** (1) | | | | | | | | |
| **NSX100 to NSX250** | | | | | | | | |
| **NSX400 to NSX630** | | | | | | | | |
| **NS630b to NS1600** | | | | | | | | |
| **NT06 to 16** | | | | | | | | |
| **NW08 to 32** | | | | | | | | |

### Remote-operated source-changeover systems - Mechanical interlocking system




| Devices | Combination of Compact NSX "S1" and "S2" devices | | | | |
|---|---|---|---|---|---|
| "S1" | "S2" | | | | |
| | NSX100 | NSX160 | NSX250 | NSX400 | NSX630 |
| **NSX100 Rating 12.5...100 A** | | | | | |
| **NSX160 Rating 12.5...160 A** | | | | | |
| **NSX250 Rating 12.5...250 A** | | | | | |
| **NSX400 Rating 160...400 A** | | | | | |
| **NSX630 Rating 250...630 A** | | | | | |




| Devices | Combination of “S1” and “S2” devices, Interlocking via cables | | |
|---|---|---|---|
| "S1" | "S2" | | |
| | NS630b to NS1600 | NT06 to 16 | NW08 to 40 |
| **NS630b to NS1600** | | | |
| **NT06 to 16** | | | |
| **NW08 to 40** | | | |

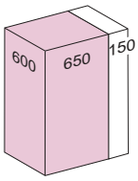
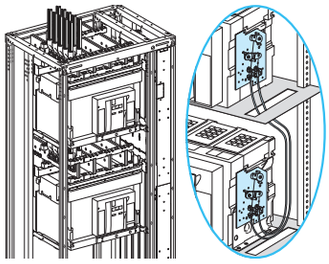
(1) Visible break function.
(2) In 2 or 3 cubicles.

Possible combinations.

# Manual or remote-operated or automatic source-changeover

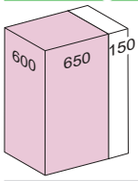
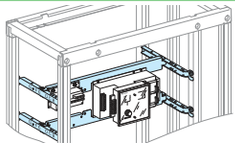
## Masterpact NW08/32, front connection S1 device identical to S2 device

Source-changeover

| Mounting | Front connection with cables | | | |
|---|---|---|---|---|
|  |  | | | |
| **Devices** | **Fixed device** | | **Withdrawable device** | |
| Number of devices per row | 2 | 2 | 2 | 2 |
| Number of vertical modules | **31** | **34** | **33** | **36** |
| Mounting plates | **03500** | **03500** | **03500** | **03500** |
| | **S1 device** | | | |
| | **NW08/16** | **NW20/32** | **NW08/16** | **NW20/32** |
| Front plates [No. of vertical modules] upstream | **03804** [4] | **03805** [5] | **03804** [4] | **03805** [5] |
| Front plates [No. of vertical modules] with cut-out | **03711** [9] | **03711** [9] | **03710** [10] | **03710** [10] |
| Front plates [No. of vertical modules] downstream | **03805** [5] | **03806** [6] | **03805** [5] | **03806** [6] |
| | **S2 device** | | | |
| | **NW08/16** | **NW20/32** | **NW08/16** | **NW20/32** |
| Front plates [No. of vertical modules] upstream | - | - | - | - |
| Front plates [No. of vertical modules] with cut-out | **03711** [9] | **03711** [9] | **03710** [10] | **03710** [10] |
| Front plates [No. of vertical modules] downstream | **03804** [4] | **03805** [5] | **03804** [4] | **03805** [5] |

| Connection | | | | |
|---|---|---|---|---|
| | | | | |
| **Devices** | **Fixed device** | | **Withdrawable device** | |
| | **S1 device** | | | |
| | **NW08/16** | **NW20/32** | **NW08/16** | **NW20/32** |
| Upstream connection | Vertical rear connections supplied with the device | | | |
| Connection | must be made **(1)** | | | |
| | **S2 device** | | | |
| | **NW08/16** | **NW20/32** | **NW06/10** | **NW20/32** |
| Downstream connection | Vertical rear connections supplied with the device | | | |
| Connection | must be made **(1)** | | | |

| Distribution | Linergy LGY, LGYE or BS busbars |
|---|---|
| | Selection of busbars: Linergy LGY *> page G-4*, Linergy LGYE *> page G-5*, Linergy BS *> page G-6*. |
| | **S1 device** |
| Upstream connection | Front connections supplied with the device |
| Connection | must be made **(1)** |
| | **S2 device** |
| Downstream connection | Front connections supplied with the device |
| Connection | must be made **(1)** |

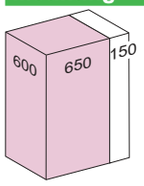
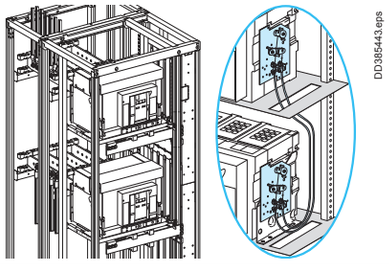
| Mounting | Controller outside the device zone |
|---|---|
|  |  |
| **Devices** | |
| | **UA or BA controller** |
| Number of devices per row | 1 |
| Number of vertical modules | **4** |
| Mounting plates | **03417** |
| Front plates with cut-out [No. of vertical mod.] | **03671** [4] |
| Characteristics | When a UA, BA or UA150 automatic controller is added together with an ACP mounting plate, the sources can be controlled automatically according to a number of programmed operating modes. |

**(1)** Connection to be made according to the busbar drawings supplied by Schneider Electric.

# Manual or remote-operated or automatic source-changeover

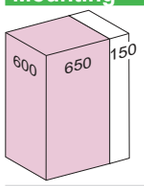
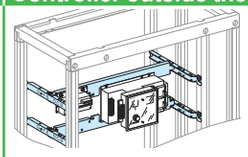
## Masterpact NW08/32, rear connection S1 device identical to S2 device

Source-changeover

| Mounting | Rear connection with cables | | | |
|---|---|---|---|---|
|  |  | | | |
| **Devices** | **Fixed device** | | **Withdrawable device** | |
| Number of devices per row | 2 | 2 | 2 | 2 |
| Number of vertical modules | **23** | **24** | **25** | **26** |
| Mounting plates | **03500** | **03500** | **03500** | **03500** |
| | **S1 device** | | | |
| | **NW08/16** | **NW20/32** | **NW08/16** | **NW20/32** |
| Front plates [No. of vertical modules] upstream | - | - | - | - |
| Front plates [No. of vertical modules] with cut-out | **03711** [9] | **03711** [9] | **03710** [10] | **03710** [10] |
| Front plates [No. of vertical modules] downstream | **03805** [5] | **03806** [6] | **03805** [5] | **03806** [6] |
| | **S2 device** | | | |
| | **NW08/16** | **NW20/32** | **NW08/16** | **NW20/32** |
| Front plates [No. of vertical modules] upstream | - | - | - | - |
| Front plates [No. of vertical modules] with cut-out | **03711** [9] | **03711** [9] | **03710** [10] | **03710** [10] |
| Front plates [No. of vertical modules] downstream | - | - | - | - |

| Connection | | | | |
|---|---|---|---|---|
| | | | | |
| **Devices** | **Fixed device** | | **Withdrawable device** | |
| | **S1 device** | | | |
| | **NW08/16** | **NW20/32** | **NW08/16** | **NW20/32** |
| Upstream connection | Vertical rear connections supplied with the device | | | |
| Connection | must be made **(1)** | | | |
| | **S2 device** | | | |
| | **NW08/16** | **NW20/32** | **NW06/10** | **NW20/32** |
| Downstream connection | Vertical rear connections supplied with the device | | | |
| Connection | must be made **(1)** | | | |

| Distribution | Linergy LGY, LGYE or BS busbars |
|---|---|
| | Selection of busbars: Linergy LGY *> page G-4*, Linergy LGYE *> page G-5*, Linergy BS *> page G-6*. |
| | **S1 device** |
| Upstream connection | Front connections supplied with the device |
| Connection | must be made **(1)** |
| | **S2 device** |
| Downstream connection | Front connections supplied with the device |
| Connection | must be made **(1)** |

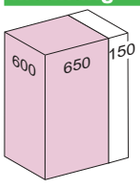
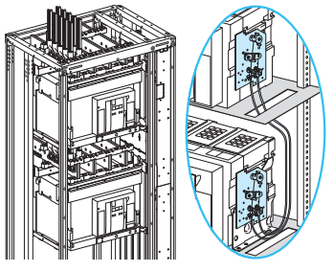
| Mounting | Controller outside the device zone |
|---|---|
|  |  |
| **Devices** | |
| | **UA or BA controller** |
| Number of devices per row | 1 |
| Number of vertical modules | **4** |
| Mounting plates | **03417** |
| Front plates [No. of vertical mod.] with cut-out | **03671** [4] |
| Characteristics | When a UA, BA or UA150 automatic controller is added together with an ACP mounting plate, the sources can be controlled automatically according to a number of programmed operating modes. |

**(1)** Connection to be made according to the busbar drawings supplied by Schneider Electric.

# Manual or remote-operated or automatic source-changeover

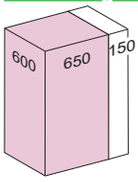
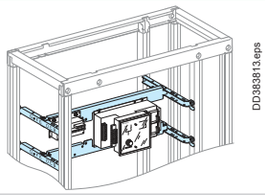
## Masterpact NW08/32, front connection S1 device different to S2 device

### Source-changeover

| Mounting | Front connection with cables | | | |
|---|---|---|---|---|
|  |  | | | |
| **Devices** | **Fixed device** | | **Withdrawable device** | |
| Number of devices per row | 2 | 2 | 2 | 2 |
| Number of vertical modules | **33** | **33** | **35** | **35** |
| Mounting plates | **03500** | **03500** | **03500** | **03500** |
| | **S1 device** | | | |
| | **NW08/16** | **NW20/32** | **NW08/16** | **NW20/32** |
| Front plates [No. of vertical modules] upstream | **03804** [4] | **03805** [5] | **03804** [4] | **03805** [5] |
| Front plates [No. of vertical modules] with cut-out | **03711** [9] | **03711** [9] | **03710** [10] | **03710** [10] |
| Front plates [No. of vertical modules] downstream | **03806** [6] | **03806** [6] | **03806** [6] | **03806** [6] |
| | **S2 device** | | | |
| | **NW20/32** | **NW08/16** | **NW20/32** | **NW08/16** |
| Front plates [No. of vertical modules] upstream | - | - | - | - |
| Front plates [No. of vertical modules] with cut-out | **03711** [9] | **03711** [9] | **03710** [10] | **03710** [10] |
| Front plates [No. of vertical modules] downstream | **03805** [5] | **03804** [4] | **03805** [5] | **03804** [4] |

| Connection | | | | |
|---|---|---|---|---|
| | | | | |
| **Devices** | **Fixed device** | | **Withdrawable device** | |
| | **S1 device** | | | |
| | **NW08/16** | **NW20/32** | **NW08/16** | **NW20/32** |
| Upstream connection | Vertical rear connections supplied with the device | | | |
| Connection | must be made **(1)** | | | |
| | **S2 device** | | | |
| | **NW08/16** | **NW20/32** | **NWT06/10** | **NW20/32** |
| Downstream connection | Vertical rear connections supplied with the device | | | |
| Connection | must be made **(1)** | | | |

| Distribution | Linergy LGY, LGYE or BS busbars |
|---|---|
| | Selection of busbars: Linergy LGY > *page G-4*, Linergy LGYE > *page G-5*, Linergy BS > *page G-6*. |
| | **S1 device** |
| Upstream connection | Front connections supplied with the device |
| Connection | must be made **(1)** |
| | **S2 device** |
| Downstream connection | Front connections supplied with the device |
| Connection | must be made **(1)** |

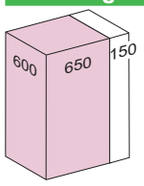
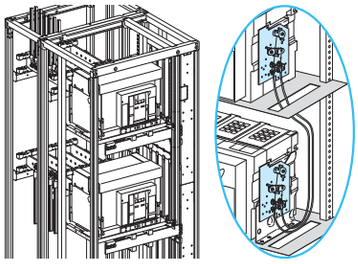
| Mounting | Controller outside the device zone |
|---|---|
|  |  |
| **Devices** | |
| | **UA or BA controller** |
| Number of devices per row | 1 |
| Number of vertical modules | **4** |
| Mounting plates | **03417** |
| Front plates with cut-out [No. of vertical mod.] | **03671** [4] |
| Characteristics | When a UA, BA or UA150 automatic controller is added together with an ACP mounting plate, the sources can be controlled automatically according to a number of programmed operating modes. |

**(1)** Connection to be made according to the busbar drawings supplied by Schneider Electric.

# Manual or remote-operated or automatic source-changeover

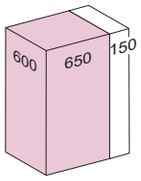
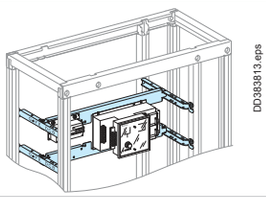
## Masterpact NW08/32, rear connection S1 device different to S2 device

Source-changeover

| Mounting | Rear connection with cables | | | |
|---|---|---|---|---|
|   |   | | | |
| **Devices** | **Fixed device** | | **Withdrawable device** | |
| Number of devices per row | 2 | 2 | 2 | 2 |
| Number of vertical modules | **24** | **24** | **26** | **26** |
| Mounting plates | **03500** | **03500** | **03500** | **03500** |
| | **S1 device** | | | |
| | **NW08/16** | **NW20/32** | **NW08/16** | **NW20/32** |
| Front plates [No. of vertical modules] upstream | - | - | - | - |
| Front plates [No. of vertical modules] with cut-out | **03711** [9] | **03711** [9] | **03710** [10] | **03710** [10] |
| Front plates [No. of vertical modules] downstream | **03806** [6] | **03806** [6] | **03806** [6] | **03806** [6] |
| | **S2 device** | | | |
| | **NW08/16** | **NW20/32** | **NW08/16** | **NW20/32** |
| Front plates [No. of vertical modules] upstream | - | - | - | - |
| Front plates [No. of vertical modules] with cut-out | **03711** [9] | **03711** [9] | **03710** [10] | **03710** [10] |
| Front plates [No. of vertical modules] downstream | - | - | - | - |

| Connection | | | | |
|---|---|---|---|---|
| | | | | |
| **Devices** | **Fixed device** | | **Withdrawable device** | |
| | **S1 device** | | | |
| | **NW08/16** | **NW20/32** | **NW08/16** | **NW20/32** |
| Upstream connection | Vertical rear connections supplied with the device | | | |
| Connection | must be made **(1)** | | | |
| | **S2 device** | | | |
| | **NW08/16** | **NW20/32** | **NW06/10** | **NW20/32** |
| Downstream connection | Vertical rear connections supplied with the device | | | |
| Connection | must be made **(1)** | | | |

| Distribution | Linergy LGY, LGYE or BS busbars |
|---|---|
| | Selection of busbars: Linergy LGY *> page G-4*, Linergy LGYE *> page G-5*, Linergy BS *> page G-6*. |
| | **S1 device** |
| Upstream connection | Front connections supplied with the device |
| Connection | must be made **(1)** |
| | **S2 device** |
| Downstream connection | Front connections supplied with the device |
| Connection | must be made **(1)** |

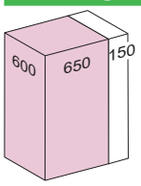
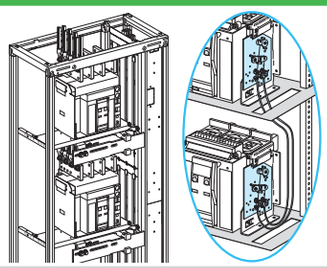
| Mounting | Controller outside the device zone |
|---|---|
|   |   |
| **Devices** | |
| | **UA or BA controller** |
| Number of devices per row | 1 |
| Number of vertical modules | **4** |
| Mounting plates | **03417** |
| Front plates [No. of vertical mod.] with cut-out | **03671** [4] |
| Characteristics | When a UA, BA or UA150 automatic controller is added together with an ACP mounting plate, the sources can be controlled automatically according to a number of programmed operating modes. |

**(1)** Connection to be made according to the busbar drawings supplied by Schneider Electric.

# Manual or remote-operated or automatic source-changeover

## Masterpact NT06/16, front connection S1 device identical to S2 device

Source-changeover

| Mounting | Front connection with cables |
|---|---|
|  |  |

| Devices | | Fixed device | | Withdrawable device | |
|---|---|---|---|---|---|
| Number of devices per row | | 2 | 2 | 2 | 2 |
| Number of vertical modules | | **24** | **28** | **26** | **30** |
| Mounting plates | | **03484** | **03484** | **03483** | **03483** |
| | | **S1 device** | | | |
| | | **NT06/10** | **NT12/16** | **NT06/10** | **NT12/16** |
| Front plates [No. of vertical modules] | upstream | **03802** [2] | **03804** [4] | **03802** [2] | **03804** [4] |
| | with cut-out | **03692** [7] | **03692** [7] | **03691** [8] | **03691** [8] |
| | downstream | **03803** [3] | **03803** [3] | **03803** [3] | **03803** [3] |
| | | **S2 device** | | | |
| | | **NT06/10** | **NT12/16** | **NT06/10** | **NT12/16** |
| Front plates [No. of vertical modules] | upstream | **03803** [3] | **03803** [3] | **03803** [3] | **03803** [3] |
| | with cut-out | **03692** [7] | **03692** [7] | **03691** [8] | **03691** [8] |
| | downstream | **03802** [2] | **03804** [4] | **03802** [2] | **03804** [4] |

E

## Connection

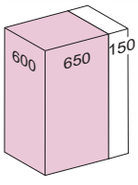
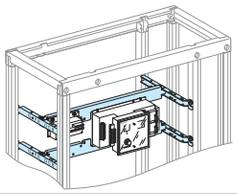
| Devices | Fixed device | | | | Withdrawable device | | | |
|---|---|---|---|---|---|---|---|---|
| | NT06/10 | | NT12/16 | | NT06/10 | | NT12/16 | |
| | 3P | 4P | 3P | 4P | 3P | 4P | 3P | 4P |
| **S1 device** | | | | | | | | |
| Upstream connection | Front connections supplied with the device | | | | | | | |
| Vertical connection adapters | **33642** | **33643** | **33642** | **33643** | **33642** | **33643** | **33642** | **33643** |
| **S2 device** | | | | | | | | |
| Downstream connection | Front connections supplied with the device | | | | | | | |
| Vertical connection adapters | **33642** | **33643** | **33642** | **33643** | **33642** | **33643** | **33642** | **33643** |

## Distribution

**Linergy LGY, LGYE or BS busbars**

Selection of busbars: Linergy LGY *> page G-4*, Linergy LGYE *> page G-5*, Linergy BS *> page G-6*.

| | |
|---|---|
| **S1 device** | |
| Upstream connection | Front connections supplied with the device |
| Connection | must be made |
| **S2 device** | |
| Downstream connection | Front connections supplied with the device |
| Connection | must be made |

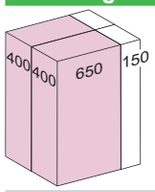
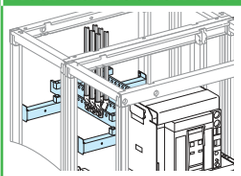
| Mounting | Outside the device zone |
|---|---|
|  |  |

| Devices | | |
|---|---|---|
| | | **UA or BA controller** |
| Number of devices per row | | 1 |
| Number of vertical modules | | **4** |
| Mounting plates | | **03417** |
| Front plates [No. of vertical mod.] | with cut-out | **03671** [4] |
| Characteristics | | When a UA, BA or UA150 automatic controller is added together with an ACP mounting plate, the sources can be controlled automatically according to a number of programmed operating modes. |

# Manual or remote-operated or automatic source-changeover

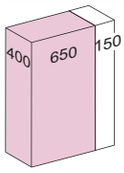
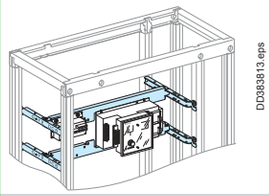
## Masterpact NT06/16, rear connection S1 device identical to S2 device

Source-changeover

| Mounting | | Rear connection with cables | |
|---|---|---|---|
|  | |  | |
| **Devices** | | **Fixed device** | **Withdrawable device** |
| Number of devices per row | | 2 | 2 |
| Number of vertical modules | | **22** | **22** |
| Mounting plates | | **03484** | **03483** |
| | | **S1 device** | |
| | | **NT06/16** | **NT06/16** |
| Front plates [No. of vertical modules] | upstream | **03801** [1] | - |
| | with cut-out | **03692** [7] | **03691** [8] |
| | downstream | **03803** [3] | **03803** [3] |
| | | **S2 device** | |
| | | **NT06/16** | **NT06/16** |
| Front plates [No. of vertical modules] | upstream | **03803** [3] | **03803** [3] |
| | with cut-out | **03692** [7] | **03691** [8] |
| | downstream | **03801** [1] | - |

| Connection | | |
|---|---|---|
| | | |
| **Devices** | **Fixed device** | **Withdrawable device** |
| | **NT06/16** | **NT06/16** |
| **S1 device** | | |
| Upstream connection | Vertical rear connections supplied with the device | |
| Connection | must be made | |
| **S2 device** | | |
| Downstream connection | Vertical rear connections supplied with the device | |
| Connection | must be made | |

| Distribution | Linergy LGY, LGYE or BS busbars |
|---|---|
| | Selection of busbars: Linergy LGY *> page G-4*, Linergy LGYE *> page G-5*, Linergy BS *> page G-6*. |
| **S1 device** | |
| Upstream connection | Front connections supplied with the device |
| Connection | must be made |
| **S2 device** | |
| Downstream connection | Front connections supplied with the device |
| Connection | must be made |

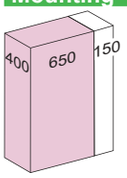
| Mounting | | Controller outside the device zone |
|---|---|---|
|  | |  |
| **Devices** | | |
| | | **UA or BA controller** |
| Number of devices per row | | 1 |
| Number of vertical modules | | **4** |
| Mounting plates | | **03417** |
| Front plates [No. of vertical mod.] | with cut-out | **03671** [4] |
| Characteristics | | When a UA, BA or UA150 automatic controller is added together with an ACP mounting plate, the sources can be controlled automatically according to a number of programmed operating modes. |

# Manual or remote-operated or automatic source-changeover

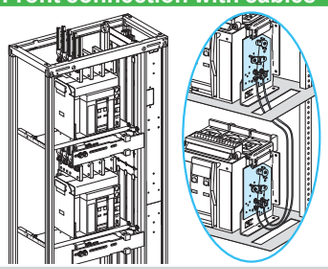
## Masterpact NT06/16, front connection S1 device different to S2 device

Source-changeover

### Mounting




### Front connection with cables




| Devices | | Fixed device | | Withdrawable device | |
|---|---|---|---|---|---|
| Number of devices per row | | 2 | 2 | 2 | 2 |
| Number of vertical modules | | **26** | **26** | **28** | **28** |
| Mounting plates | | **03484** | **03484** | **03483** | **03483** |
| | | **S1 device** | | | |
| | | **NT12/16** | **NT06/10** | **NT12/16** | **NT06/10** |
| Front plates [No. of vertical modules] | upstream | **03804** [4] | **03802** [2] | **03804** [4] | **03802** [2] |
| | with cut-out | **03692** [7] | **03692** [7] | **03691** [8] | **03691** [8] |
| | downstream | **03803** [3] | **03803** [3] | **03803** [3] | **03803** [3] |
| | | **S2 device** | | | |
| | | **NT06/10** | **NT12/16** | **NT06/10** | **NT12/16** |
| Front plates [No. of vertical modules] | upstream | **03803** [3] | **03803** [3] | **03803** [3] | **03803** [3] |
| | with cut-out | **03692** [7] | **03692** [7] | **03691** [8] | **03691** [8] |
| | downstream | **03802** [2] | **03804** [4] | **03802** [2] | **03804** [4] |

### Connection

| Devices | Fixed device | | | | Withdrawable device | | | |
|---|---|---|---|---|---|---|---|---|
| | **NT06/10** | | **NT12/16** | | **NT06/10** | | **NT12/16** | |
| | **3P** | **4P** | **3P** | **4P** | **3P** | **4P** | **3P** | **4P** |
| **S1 device** | | | | | | | | |
| Upstream connection | Front connections supplied with the device | | | | | | | |
| Vertical connection adapters | **33642** | **33643** | **33642** | **33643** | **33642** | **33643** | **33642** | **33643** |
| **S2 device** | | | | | | | | |
| Downstream connection | Front connections supplied with the device | | | | | | | |
| Vertical connection adapters | **33642** | **33643** | **33642** | **33643** | **33642** | **33643** | **33642** | **33643** |

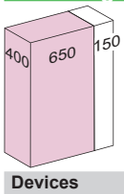
### Distribution

### Linergy LGY, LGYE or BS busbars

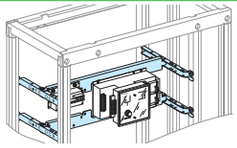
Selection of busbars: Linergy LGY > *page G-4*, Linergy LGYE > *page G-5*, Linergy BS > *page G-6*.

| | |
|---|---|
| **S1 device** | |
| Upstream connection | Front connections supplied with the device |
| Connection | must be made |
| **S2 device** | |
| Downstream connection | Front connections supplied with the device |
| Connection | must be made |

### Mounting



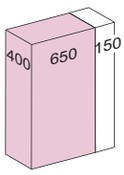
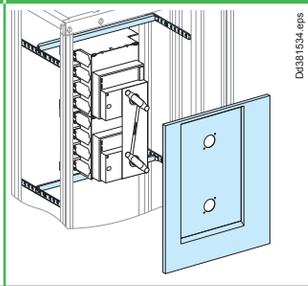

### Controller outside the device zone




| Devices | |
|---|---|
| | **UA or BA controller** |
| Number of devices per row | 1 |
| Number of vertical modules | **4** |
| Mounting plates | **03417** |
| Front plates [No. of vertical mod.] with cut-out | **03671** [4] |
| Characteristics | When a UA, BA or UA150 automatic controller is added together with an ACP mounting plate, the sources can be controlled automatically according to a number of programmed operating modes. |

# Manual or remote-operated or automatic source-changeover
## Compact NS630b to 1000

Source-changeover

| Mounting | Horizontal |
|---|---|
|  |  |

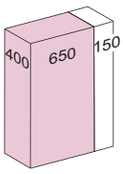
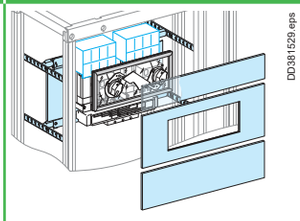
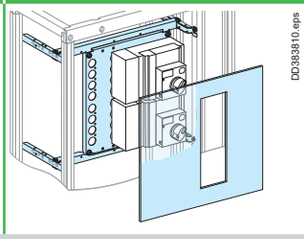
| Devices | | | |
|---|---|---|---|
| | | **NS630b/1000** | |
| | | **3P** | **4P** |
| Number of devices per row | | 2 | |
| Number of vertical modules | | **13** | |
| Mounting plates | | **03491** | |
| Front plates [No. of vertical modules] | upstream | - | |
| | with cut-out | **03695** [13] | |
| | downstream | - | |
| Mechanical interlock | | **33890** | **33890** |
| Characteristics | | **Interlocking of direct rotary handles.**<br>The devices are equipped with a direct rotary handle. | |

| Connection | Downstream distribution |
|---|---|
| | |

| Type of connected devices | | Compact NS630b/1000 | |
|---|---|---|---|
| | | **3P** | **4P** |
| Front connection | long terminal shields | **33628** x 2 | **33629** x 2 |

# Manual source-changeover
## Compact NSX100/630



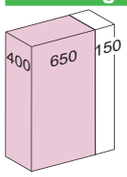
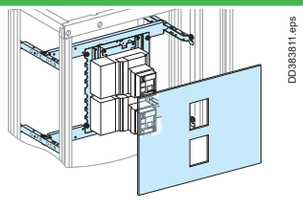
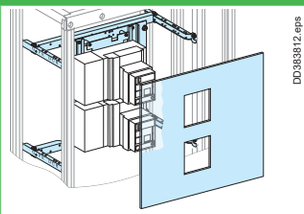
| Mounting | | Vertical | | Horizontal | |
|---|---|---|---|---|---|
|  | |  | |  | |
| **Devices** | | | | | |
| | | **NSX100/250** | | **NSX400/630** | |
| | | **3P** | **4P** | **3P** | **4P** |
| Number of devices per row | | 2 | | 2 | |
| Number of vertical modules | | **10** | | **10** | |
| Mounting plates | | **03428** | | **03458** | |
| Front plates [No. of vertical modules] | upstream | **03802** [2] | | - | |
| | with cut-out | **03245** [5] | | **03659** [10] | |
| | downstream | **03803** [3] | | - | |
| Mechanical interlock | | **LV429369** | **LV429369** | **LV432621** | **LV432621** |
| Characteristics | | **Interlocking of rotary handles**<br>The devices are equipped with a rotary handle.<br>They are mounted on a dedicated mounting plate. | | | |

| Connection | | Downstream distribution | | | |
|---|---|---|---|---|---|
| | | | | | |
| **Type of connected devices** | | **Compact NSX100/250** | | **Compact NSX400/630** | |
| | | **3P** | **4P** | **3P** | **4P** |
| Front conn. | long terminal shields | **LV429517** | **LV429518** | **LV432593** | **LV432594** |
| | for spreader | - | - | **LV432595** | **LV432596** |
| Coupling accessory | | **LV429358** | **LV429359** | **LV432619** | **LV432620** |
| Rear conn. | short terminal shields | **LV429515** | **LV429516** | **LV432591** | **LV432592** |

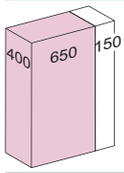
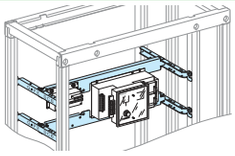
E

# Remote-operated source-changeover
## Compact NSX100/630

Source-changeover

| Mounting | Horizontal | |
|---|---|---|
|  |  |  |
| **Devices** | | |
| | **NSX100/250** | **NSX400/630** |
| Number of devices per row | 2 | 2 |
| Number of vertical modules | **8** | **10** |
| Mounting plates | **03417** (1) | **03457** (2) |
| Front plates with cut-out [No. of vertical mod.] | **03616** [8] | **03656** [10] |
| Characteristics | The devices are equipped with motor mechanisms. | |

| Connection | Downstream distribution | | | |
|---|---|---|---|---|
| | | | | |
| **Type of connected devices** | **Compact NSX100/250** | | **Compact NSX400/630** | |
| | **3P** | **4P** | **3P** | **4P** |
| Front connection long terminal shields | **LV429517** | **LV429518** | **LV432593** | **LV432594** |
| for spreader | **-** | **-** | **LV432595** | **LV432596** |
| Coupling accessory | **LV429358** | **LV429359** | **LV432619** | **LV432620** |
| Rear connection short terminal shields | **LV429515** | **LV429516** | **LV432591** | **LV432592** |

| Mounting | Controller |
|---|---|
|  |  |
| **Devices** | |
| | **UA or BA controller** |
| Number of devices per row | 1 |
| Number of vertical modules | **4** |
| Mounting plates | **03417** |
| Front plates with cut-out [No. of vertical mod.] | **03671** [4] |
| Characteristics | When a UA, BA or UA150 automatic controller is added together with an ACP mounting plate, the sources can be controlled automatically according to a number of programmed operating modes. |

**(1)** Order mounting plate + IVE electrical interlocking unit for NSX100/250 (cat. no. **LV29350** for AC or **LV29351** for DC version).
**(2)** Order mounting plate + IVE electrical interlocking unit for NSX400/630 (cat. no. **LV32610** for AC or **LV32611** for DC version).

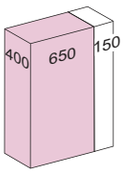
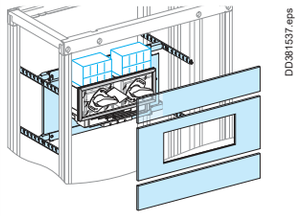
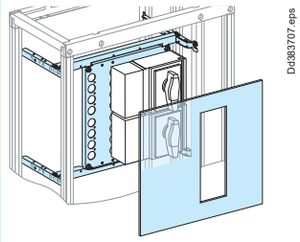
Incoming and busbar connections to be made.

# Manual source-changeover

## Compact INS-INV250 to 630

## Front direct rotary handle



| Mounting | Front vertical rotary handle | Front horizontal rotary handle |
|---|---|---|
|  |  |  |

| Devices | | Mechanical interlocking | |
|---|---|---|---|
| | | **INS-INV250** | **INS-INV320/630** |
| Number of devices per row | | 2 | 2 |
| Number of vertical modules | | **9** | **10** |
| Mounting plates | | **03428** | **03458** |
| Front plates [No. of vertical modules] | upstream | **03802** [2] | - |
| | with cut-out | **03235** [5] | **03659** [10] |
| | downstream | **03802** [2] | - |
| Mechanical interlock | | **31073** | **31074** |

## Distribution

| Type of connected devices | | Compact INS-INV250 | | Compact INS-INV320/630 | |
|---|---|---|---|---|---|
| | | 3P | 4P | 3P | 4P |
| Front conn. | long terminal shields | 2 x **LV429518** | 2 x **LV429518** | - | |
| | long terminal shields 45 mm | - | | 2 x **LV432594** | 2 x **LV432594** |
| Coupling accessory | | **LV429359** | **LV429359** | **LV432620** | **LV432620** |

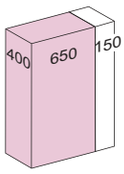
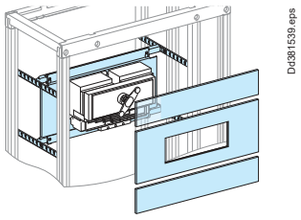
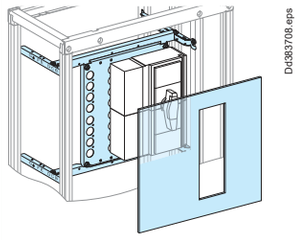
E

# Manual source-changeover

## Compact INS-INV250 to 630

## Complete assembly device



| Mounting | Vertical complete assembly | Horizontal complete assembly |
|---|---|---|
|   |   |   |

| Devices | | Complete source-changeover assembly | |
|---|---|---|---|
| | | **INS-INV250** | **INS-INV320/630** |
| Number of devices per row | | 1 | 1 |
| Number of vertical modules | | **9** | **10** |
| Mounting plates | | **03428** | **03458** |
| Front plates [No. of vertical modules] | upstream | **03802** [2] | - |
| | with cut-out | **03247** [5] | **03661** [10] |
| | downstream | **03802** [2] | - |

## Distribution

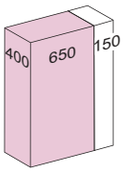
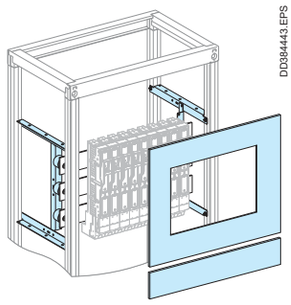
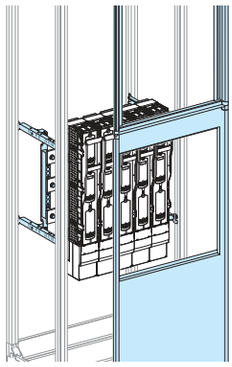
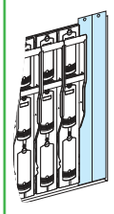
| Type of connected devices | | Compact INS-INV250 | | Compact INS-INV320/630 | |
|---|---|---|---|---|---|
| | | **3P** | **4P** | **3P** | **4P** |
| Front conn. | long terminal shields | 2 x **LV429518** | 2 x **LV429518** | - | |
| | long terminal shields 45 mm | - | | 2 x **LV432594** | 2 x **LV432594** |
| Coupling accessory | | **LV429359** | **LV429359** | **LV432620** | **LV432620** |
| Complete source-changeover assembly | 100 A | **31140** | **31141** | | |
| | 160 A | **31144** | **31145** | | |
| | 200 A | **31142** | **31143** | | |
| | 250 A | **31146** | **31147** | | |
| | 320 A | | | **31148** | **31149** |
| | 400 A | | | **31150** | **31151** |
| | 500 A | | | **31152** | **31153** |
| | 630 A | | | **31154** | **31155** |

# Fupact ISFL

## Vertical / 3P

## Determining the busbars



| Mounting | Through cut-out front plate | Through a 2/3 cut-out front plate | | | Accessories |
|---|---|---|---|---|---|
|  |  |  | | |  |
| **Devices** | | | | | |
| | **ISFL160** | **ISFL160** | **ISFL250/400/630** | **ISFL 1250** | |
| Number of devices per row | 9 | 10 | 5 | 2 | - |
| Number of vertical modules | **11** | **24** | **24** | **24** | - |
| Mounting plates | **03545** + (1) | **03546** + (1) | **03546** (1) + (2) | **03546** + (2) | - |
| Length adapter | - | + 5 x **LV480870** (2) | - | - | - |
| Conversion kit for direct conn. | - | + 5 x **LV480854** (2) | - | - | - |
| Front plates with cut-out | **03736** [11] | - | - | - | - |
| [No. of vertical mod.] FAV 2/3 | - | **03735** [24 + 12] | **03735** [24 + 12] | **03735** [24 +12] | - |
| Side frame door cut-out | **LV480868**<br>**LV480869** | **LV480868**<br>**LV480869** | **LV480868**<br>**LV480869** | **LV480868**<br>**LV480869** | - |
| Blanking plate | **03740** | **03740** | **03741** (3) | 2 x **03741** | - |
| Busbars cover | - | - | - | - | **04860** |
| Characteristics | ■ The fuses are installed on the horizontal bars which are in turn supported by a mounting plate<br>■ The front plates are secured to the hinged front plate support frame.<br>■ The front may be covered either by a cover frame or a plain or transparent door.<br>■ Current transformers can be installed behind ISFL fuse-switch-disconnectors. | ■ The fuses are installed on the horizontal bars which are in turn supported by a mounting plate<br>■ The front of the cubicle is made up of two parts:<br>□ 2/3 cut-out front plate allowing introduction of the fuses<br>□ 1/3 front plate support frame (12 modules) cat. number **08562** on which the functional units are mounted<br>■ The front may be covered either by a cover frame or a plain or transparent door.<br>■ Current transformers can be installed behind ISFL fuse-switch-disconnectors. | | | |

| Connection | Direct |
|---|---|
| | |
| **Devices** | |
| | **ISFL160/630** |
| Connection | By cables or directly on the busbars with clamp fixing or pressure fixing |

| Distribution | |
|---|---|
| | |
| **Devices** | |
| | **ISFL160/630** |
| Downstream connection | With cable |

(1) The bars are made by the customer: for choice of bars > *pages G-2 to G-13*.
(2) Adaptation accessories **LV480870** + **LV480855** used to:
■ install two ISFL160 devices on a mounting plate **03546**
■ mix ISFL devices.
(3) Use 2 blanking plates per device.

**Note:**
■ for ISFL160, by fixing screws only.
■ for determining the busbar > *page I-57*.

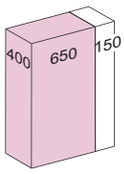
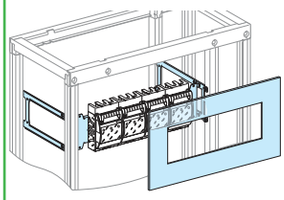
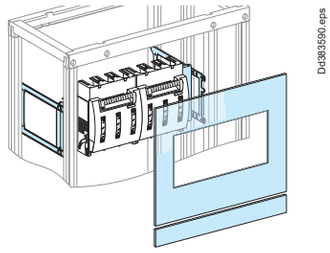
# Fupact ISFT

## Vertical / 3P

## Installation on mounting plate or busbars

## Determining the busbars

Fusegear/Switch-disconnector

| Mounting | On base plate | On busbars |
|---|---|---|
|   |     | |

| Devices | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | ISFT100 | ISFT100N | ISFT160 | ISFT250 | ISFT400 | ISFT630 | ISFT100N | ISFT160 |
| Number of devices per row | | 5 | 8 | 4 | 2 | 2 | 1 | 6 | 4 |
| Number of vertical modules | | **6** | **8** | **6** | **9** | **9** | **10** | **8** | **6** |
| Mounting plates | | **03554** | **03553** | **03556** | **03557** | **03557** | **03557** | **03555** | **03555** |
| Front plates [No. of vertical mod.] | with cut-out | **03320** [6] | **03325** [8] | **03321** [6] | **03322** [9] | **03323** [9] | **03324** [8] | **03325** [8] | **03321** [6] |
| | downstream | - | - | - | - | - | **03802** [2] | - | - |

| Connection | Direct |
|---|---|
| | |

| Devices | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | ISFT100 | ISFT100N | ISFT160 | ISFT250 | ISFT400 | ISFT630 | ISFT100N | ISFT160 |
| Connection | must be made | | | | | | | |
| | Downstream, with cable or flexible bars | | | | | | | |
| Long terminal shields | - | **LV480756** | **LV480819** | **LV480824** | **LV480827** | **LV480831** | - | **LV480819** |

| Distribution | | |
|---|---|---|
| | | |

| | | | |
|---|---|---|---|
| Linergy FH | for 2 devices | **49861** | **LV480811** |
| | for 3 devices | **49862** | **LV480812** |
| | for 4 devices | **49863** | **LV480813** |
| Set of 3 connectors (25 to 95 mm²) | | **49865** | **LV480818** |
| Set of 3 distribution connectors 3 x 10 mm² | | **49860** | **LV480814** |

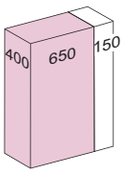
**Note:** for determining the busbar *> page I-57*.

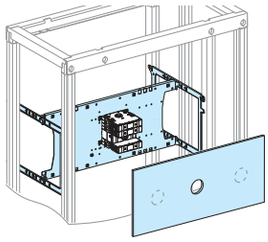
# Fupact INF

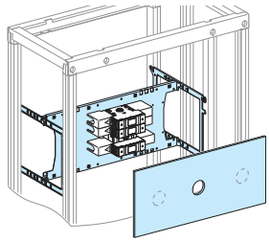
## Horizontal / Vertical
## Extended rotary handle

Fusegear/Switch-disconnector

| Mounting | Horizontal |
|---|---|

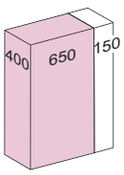


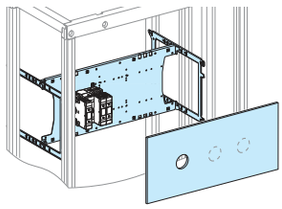



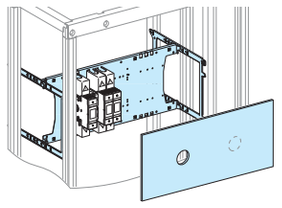




| Devices | | | | | | | |
|---|---|---|---|---|---|---|---|
| | INF32/40 3P/4P | INF63 3P/4P | INF100/160 3P/4P | INF200 3P/4P | INF250 3P/4P | INF400 3P/4P | INF600/800 3P/4P |
| Number of devices per row | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Number of vertical modules | **3** | **5** | **5** | **7** | **7** | **8** | **11** |
| Mounting plates | **03540** | **03541** | **03541** | **03534** | **03534** | **03535** | **03536** |
| Front plates with cut-out | **03313** | **03314** | **03314** | **03727** | **03727** | **03729** | **03730** |

| Mounting | Vertical |
|---|---|



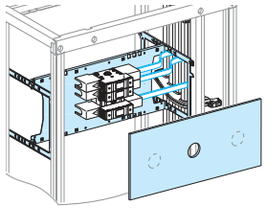



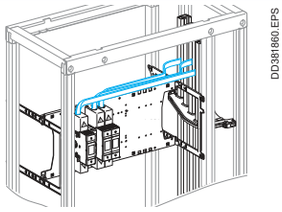

| Devices | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | | INF32/40 3P | INF32/40 4P | INF63 3P | INF63 4P | INF100/160 3P/4P | INF200 3P/4P | INF250 3P/4P | INF400 3P/4P | INF600/800 3P/4P |
| Number of devices per row | | 4 | 3 | 3 | 2 | 2 | 1 | 1 | 1 | 1 |
| Number of vertical modules | | **3** | | **5** | | **5** | **9** | **9** | **9** | **11** |
| Mounting plates | | **03540** | | **03541** | | **03541** | **03537** | **03537** | **03537** | **03537** |
| Front plates [No. of vertical mod.] | upstream | - | | - | | - | **03801** [1] | **03801** [1] | **03801** [1] | **03802** [2] |
| | with cut-out | **03312** [3] | **03313** [3] | **03314** [5] | **03315** [5] | **03315** [5] | **03728** [6] | **03728** [6] | **03728** [6] | **03728** [6] |
| | downstream | - | | - | | - | **03802** [2] | **03802** [2] | **03802** [2] | **03803** [3] |

| Connection | Direct |
|---|---|

| Devices | | | | | | |
|---|---|---|---|---|---|---|
| | INF32/40 3P/4P | INF63 3P/4P | INF100/160 3P/4P | INF200 3P/4P | INF250 3P/4P | INF400 3P/4P | INF600/800 3P/4P |
| Short terminal shields | - | - | **LV480444** (1) | **LV480550** (1) | **LV480552** (1) | **LV480554** (1) | **LV480556** (1) |
| Long terminal shields | - | - | **LV480445** (1) | **LV480551** (1) | **LV480553** (1) | **LV480555** (1) | **LV480557** (1) |

| Distribution | Lateral busbars |
|---|---|



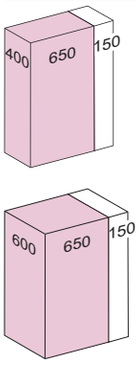
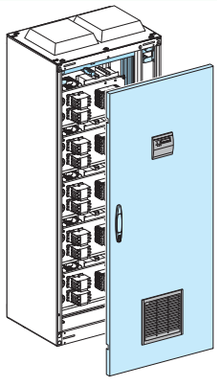
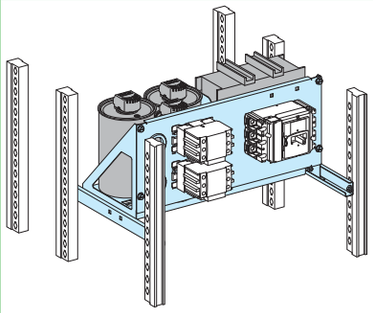



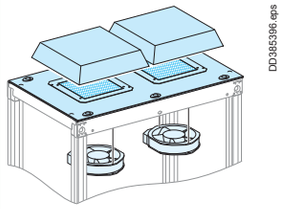

| | **Linergy LGYE, Linergy LGY** or **Linergy BS busbars** (2) |
|---|---|
| Busbars connection | Must be made |

**(1)** Set of 1: 3 x 3P, 4 x 4P.
**(2)** Selection of flexible bars for the connection Fupact INF ⩽ 630 A: *> page I-57.*

E

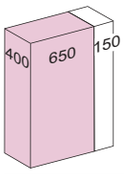
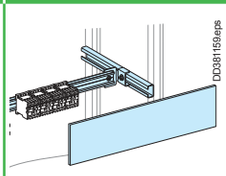
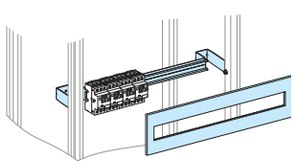
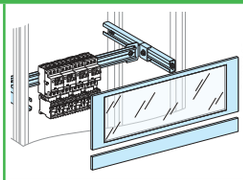
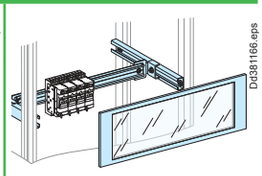
Others

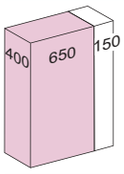
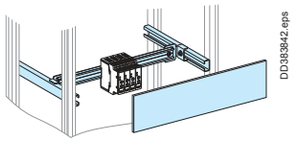
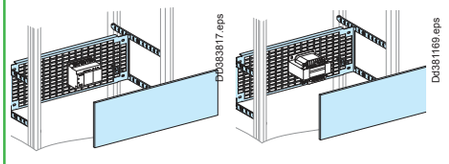
| Mounting | Door with cut-outs | Mounting plate |
|---|---|---|
|  |  |  |
| Catalogue number | **03970** | **03979** |
| Characteristics | Special standard cover panels are used.<br>However, a special IP30 door is used (W650 mm with hinges on left only) that has cut-outs, one for the VarplusLogic power factor controller and another in the bottom for a filter. | The mounting plates are designed for installation of capacitors, contactors and devices protecting against internal faults.<br>The power factor correction modules are installed horizontally in the cubicle.<br>Gasket gland plate NSYTPV is necessary for mounting plate wiring. |

| Mounting | Ventilation accessories | | | | | | |
|---|---|---|---|---|---|---|---|
| | | |  | | | | |
| Cover panels | Roof with cut-out | | Fan + top hood | Top hood without fan | Outlet grill | Fan with filter | Spare filter |
| | D = 400 mm | D = 600 mm | | | | | |
| Catalogue number | **08478** | **08678** | **NSYCVF575M230MB** | **NSYCAC228RMB** | **NSYCAG291LPF** | **NSYCVF850M230PF** | **NSYCAF228R** |
| Characteristics | A roof with a cut-out ensures natural ventilation of the equipment.<br>It can also be equipped with two fans. | | **Fan characteristics**<br>■ Power: 85 W<br>■ Input voltage: 230 V<br>■ Throughput via outlet grill:<br>□ with 1 outlet grill: 350 $m^3$/hr<br>□ Free with filter: 575 $m^3$/hr<br>■ Noise level: 64 dB.<br>**Top hood characteristics**<br>■ Material: steel<br>■ Finishing parts: painted with epoxy-polyester resin, textured RAL 9003, white<br>■ IP54<br>■ Fixing to the top by means of caged nuts and special screws | ■ Material: steel<br>■ Finishing parts: painted with epoxy-polyester resin, textured RAL 7035 grey<br>■ IP54<br>■ Fixing to the top by means of caged nuts and special screws | ■ Material: Injected thermoplastic (ASA PC). self-extinguishing according to UL 94 V-0<br>■ RAL 9003, white<br>■ IP54 | ■ Power: 150/195 W<br>■ Input voltage: 207 V... 244 V (230 V)<br>■ Throughput via outlet grill:<br>□ with 1 outlet grill ($m^3$/h):<br>718 (50 Hz)<br>568 (60 Hz)<br>■ Free with filter:<br>838 (50 Hz)<br>803 (60 Hz)<br>■ Noise level: 76/75 dB | For outlet grill or filter IP54, cut-out 228 x 228 mm |

| Configuration | 200 kvar | 500 kvar |
|---|---|---|
| **Door** | | |
| Catalogue number | **03970 + 01110** | **03970 + 01110** |
| Designation | W650 door IP30 with cut-out + W150 wicket door | W650 door IP30 with cut-out + W150 wicket door |
| **For front** | | |
| Catalogue number | **NSYCVF850M230PF** | **NSYCAG291LPF** |
| Designation | Fan with filter | Outlet grill |
| **For rear** | | |
| Catalogue number | **08748** | **08749** + **NSYCAG291LPF** |
| Designation | W800 Rear panel IP55 | W800 Rear panel IP55 cut-out + outlet grill |
| **Roof** | | |
| Catalogue number | **08478** or **08678** | **08478** or **08678** |
| Designation | Roof with cut-out | Roof with cut-out |
| **On roof** | | |
| Catalogue number | **NSYCAC228RMB** x 2 | **NSYCVF575M230MB** x 2 |
| Designation | 2 top hood without fan IP54 | 2 fans + top hood IP54 |
| **Mounting plate** | | |
| Catalogue number | **03979** | **03979** |
| Designation | Mounting plate | Mounting plate |

## Others

| Mounting | On a modular rail | | | | | | |
|---|---|---|---|---|---|---|---|
|  |  |  |  |  | | | |
| **Devices** | **Contactor** | **Circuit breaker** | | | **Circuit breaker + contactor** | **TeSys** | |
| | **Series D and K ≤ 40 A contactors** | **GV2RT-GV2ME-GV2LE** | **GV2L-GV2P** | **GV3** | **GV2 + Series D and K ≤ 40 A contactors** | **TeSys modèle U** | |
| Number of vertical modules | **3** | **3** | **3** | **5** | **5** | **5** | **4 (1)** |
| Useful length of rail (mm) | 432 | 432 | | | 432 | 432 | |
| Modular rail (adjustable) | **03402** | **03401 (2)** | **03402** | **03402** | **03402** | **03402** | |
| Front plates [No. of vertical mod.] plain | **03803** [3] | - | | | - | - | **03804** [4] |
| transparent | - | - | | | **03342** [4] | - | ou **03342** [4] |
| with cut-out | - | **03203** [3] | **03203** [3] | **03205** [5] | - | **03205** [5] | - |
| downstream | - | - | | | **03801** [1] | - | |
| Characteristics | - | Width of devices without lateral auxiliaries: 45 mm. | | | | | |

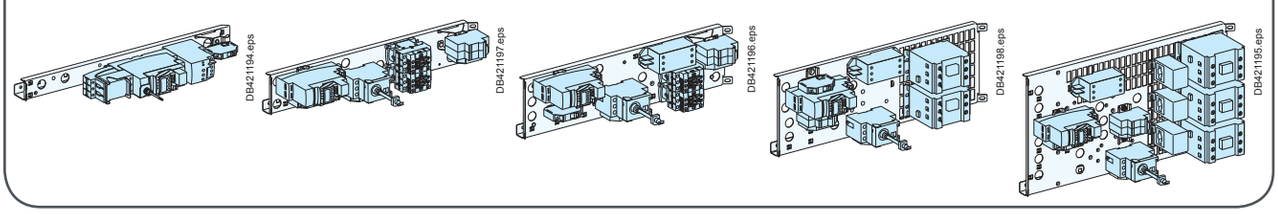
| Mounting | On a modular rail | | | | On a base plate | |
|---|---|---|---|---|---|---|
|  |  | | | |  | |
| **Devices** | **Soft starters ATS01** | | | | | **LV/LV transformer** |
| | **ATS01N103/106FT** | **ATS01N109/112FT ATS01N206 to 212** | **ATS01N222 to 232** | **ATS01N230LY ATS01N244LY ATS01N244Q** | **ATS01N272LY ATS01N285LY ATS01N272Q ATS01N285Q** | **ABL6-TS/TD up to 2500 VA ABL6-RT up to 960 W ABL6-RF up to 480 W** |
| Number of vertical modules | **4** | **5** | **6** | **5** | **6** | **4** |
| Useful length of rail (mm) | 432 | 432 | 432 | 432 | - | - |
| Modular rail (adjustable) | **03402** | **03402** | **03402** | **03402** | - | - |
| Slotted mounting plates | - | - | - | - | **03572** | **03571** |
| Front plate plain [No. of vertical mod.] | **03804** [4] | **03805** [5] | **03806** [6] | **03805** [5] | **03806** [6] | **03804** [4] |
| Characteristics | Width of devices (mm) | | | | | - |
| | 22.5 | 45 | 45 | 180 | 180 | |

**(1)** Version without communication module, auxiliary contact and reversing module.
**(2)** Non-adjustable.

Dedicated mounting plate for Motor Control functional units.
5 commercial references from 1 to 6 modules mounting plates are installed in 650 mm wide cubicle.

- Easy installation
- Switchboard upgradeability
- Mounting plate optimal stacking density
- Functional units reliability.

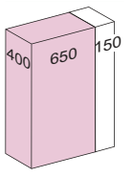
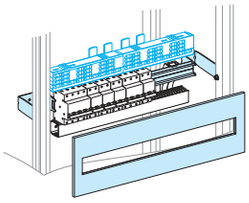
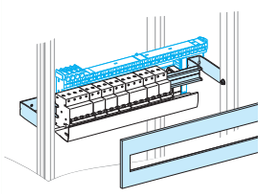
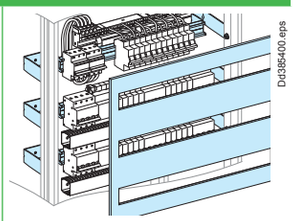
See Prisma MCC catalogue DESW049EN.



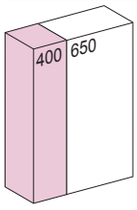
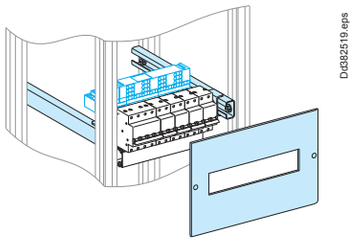
# Modular devices

## Acti 9 ⩽ 63 A

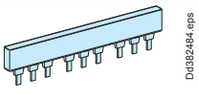
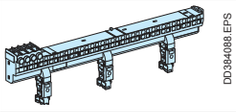
### Circuit breakers

| Mounting | Horizontal distances between centres: 200 mm | Horizontal distances between centres: 150 mm | |
|---|---|---|---|
|  |  |  |  |

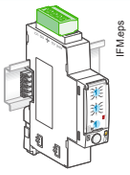
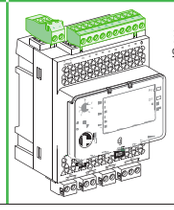
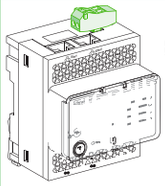
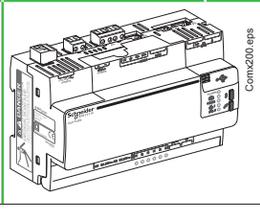
| Devices | | All modular devices | Modular devices ⩽ 40 A | |
|---|---|---|---|---|
| Rail length (modules of 9 mm) | | 48 | 48 | 48 |
| No. of vertical modules | | **4** (1) | **3** | **8** |
| Rail (48 modules of 9 mm) | | **03401** | **03401** | 3 x **03401** |
| Modular front plates | | **03204** | **03203** | **03223** |
| Blanking plate | strip | **03220** | **03220** | **03220** |
| | divisible | **03221** | **03221** | **03221** |

| Mounting | Horizontal distances between centres: 200 mm | Horizontal distances between centres: 150 mm |
|---|---|---|
|  |  | |

| Devices | | All modular devices | Modular devices ⩽ 40 A |
|---|---|---|---|
| Rail length (modules of 9 mm) | | 20 | 20 |
| No. of vertical modules | | **4** | **3** |
| Rail (20 modules of 9 mm) | | **03404** (adjustable) | **03404** (adjustable) |
| Modular front plates | | **03214** [4] | **03213** [3] |
| Blanking plate | strip | **03220** | **03220** |
| | divisible | **03221** | **03221** |

| Connection | Linergy FH comb busbar | Distribution block Linergy FM 63 to 200 A row |
|---|---|---|
| |  |  |
| **Type of connected devices** | **According devices** | **All type** |
| Comb busbars / distribution blocks | *> page G-30* | *> page G-27* |

Linergy TR Terminal blocks: *> page G-42*.

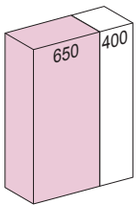
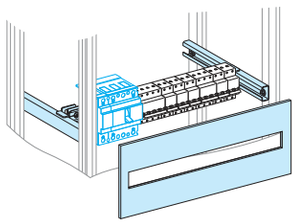
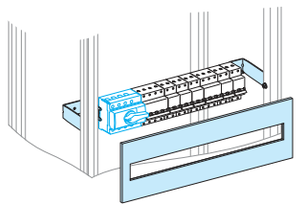
| | EnerlinX devices | | | | |
|---|---|---|---|---|---|
| | IFM | I/O module | IFE | ComX200 | ComX510 |
| |  |  |  |  | |
| No. of vertical modules | **4** | | | | |
| Rail | **03401 / 03404** | | | | |
| Modular front plates | **03204 / 03214** | | | | |
| Characteristics | Installation by clip on a modular rail. | | | | |

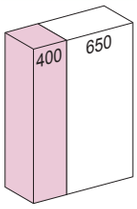
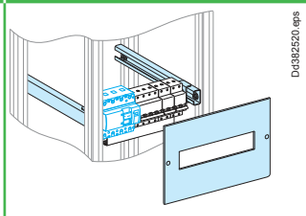
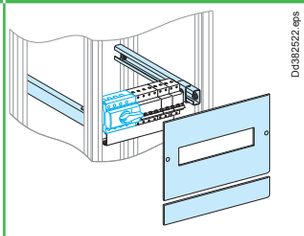
**(1)** For a modular row with a 160 A (half row) and 200 A Linergy FM distribution block positioned directly below a non-modular mounting-plate (Compact, etc.), or at the top of a switchboard, add one additional module (i.e. 4+1) and a plain upstream front plate (**03801**).

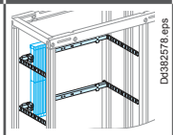
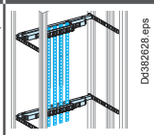
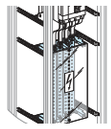
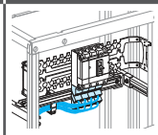
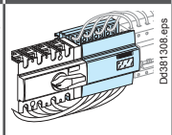
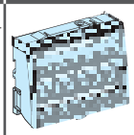
# Modular devices

## 80/160 A switchboard incomer



| Mounting | Circuit breakers | | Switch-disconnectors | |
|---|---|---|---|---|
|  |  | |  | |
| **Devices** | **NG160, NG160NA Vigi NG160** | **NG125, NG125NA,Vigi NG125, C120, Vigi C120, iC120, Vigi iC120** | **Compact INS40/160** | **Compact INS-INV100/160 with long terminal shields** |
| No. of vertical modules | **5** | **5** | **4** | **5** |
| Rail (48 modules of 9 mm) | **03402** (adjustable) (1) **+ 04227** | **03401** | **03401** | **03401** |
| Modular front plates | **03205** | **03205** | **03204** | **03205** |
| Blanking plate strip | **03220** | | **03220** | |
| divisible | **03221** | | **03221** | |

| Mounting | Circuit breakers | Switch-disconnectors | |
|---|---|---|---|
|  |  |  | |
| **Devices** | **NG160, NG160NA, NG125, NSA125/160** | **INS-INV40/160** | **INS-INV100/160 with long terminal shields** |
| No. of vertical modules | **5** | **4** | **5** |
| Rail (20 modules of 9 mm) | **03404** (adjustable) (2) | **03404** (adjustable) | **03404** (adjustable) |
| Front plates [No. of vertical modules] modular | **03214** [4] | **03214** [4] | **03214** [4] |
| downstream | **03811** [1] | - | **03811** [1] |
| Blanking plate strip | **03220** | **03220** | **03220** |
| divisible | **03221** | **03221** | **03221** |

| Connection | Insulated Linergy BW busbars | Rear Linergy BS busbars | Linergy BS multi-stage busbars | Linergy DP 1P, 160 A distribution block | Linergy DX 4P, 160 A distribution block | Linergy DS multi-stage distribution |
|---|---|---|---|---|---|---|
| |  |  |  |  |  |  |
| **Type of connected devices** | **All type** | **All type** | **All type** | **All type** | **All type** | **All type** |
| Distribution block / busbars | *> page G-14* | *> page G-9* | *> page G-11* | *> page G-16* | *> page G-24* | *> page G-28* |
| Connection | *> page G-15* | must be made | must be made | *> page G-16* | *> page G-24* | must be made |

**(1)** Can be completed by a rail + raiser (cat. no. **04227**) to instal modular devices on.
**Note:** width of NG160 circuit breakers: NG160 3P: 10 modules / NG160 4P: 14 modules
Vigi NG160 3P: 24 modules / Vigi NG160 4P: 27 modules
width of NG125 circuit breakers: NG125 3P: 9 modules / NG125 4P: 12 modules
Vigi NG125 3P ⩽ 63 A: fixed sensitivity 18 modules
adjustable sensitivity 20 modules
> 63 A: fixed sensitivity 20 modules
adjustable sensitivity 20 modules
Vigi NG125 4P ⩽ 63 A: fixed sensitivity 21 modules
adjustable sensitivity 23 modules
> 63 A: fixed sensitivity 23 modules
adjustable sensitivity 23 modules
C120 or iC120 3P: 9 modules / C120 or iC120 4P: 12 modules
Vigi C120 or iC120 3P: 19 modules / Vigi C120 or iC120 4P: 22 modules
width of devices: INS-INV40/80: width 10 modules
INS-INV100/160: width 15 modules.

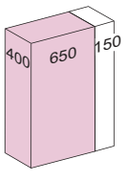
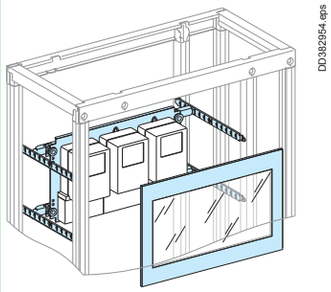
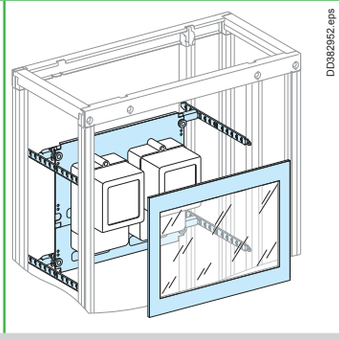
**(2)** Can be completed by a rail + raiser (**04227**) to instal modular devices on.
**Note:** to mix an NSA125/160 circuit breaker with Multi 9 or Acti 9 modular devices, order (with the device) the symmetrical rail + raiser set (**28041**).
Width of devices: NSA125/160 3P: 10 modules / NSA125/160 4P: 14 modules.

# Metering

## Single-phase and 3-phase kilowatt-hour meters

### Class 1 & 2

Others

| Mounting | Behind front plate | |
|---|---|---|
|  |  |  |

| Devices | | Meter and connection block | |
|---|---|---|---|
| | | **Single-phase (Ph + N)** | **3-phase (3 Ph + N)** |
| Number of devices per row | | 3 | 2 |
| Number of vertical modules | | **6** | **9** |
| Mounting plates | | **03157** | **03152** |
| Front plates [No. of vertical mod.] | transparent | **03343 [6]** | **03344 [9]** |
| | or plain | **03806 [6]** | **03807 [9]** |
| Insulating plate | | **03154** | **03154** |
| Adapter | | **03595** | **03595** |
| Accessories | | M5 spacers for mounting plate > page F-23 | |

**Note:** meters can be installed at different levels on the functional uprights of frameworks.

# Metering and human-switchboard interface
## PowerLogic™ Meters

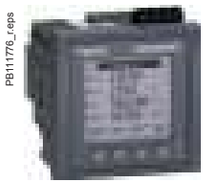


## Presentation

### PowerLogic™ Meters

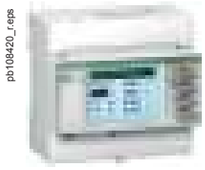
Schneider Electric provides these tools via the world's most advanced energy intelligence technology: PowerLogic. The PowerLogic range of meters help manage all energy assets, every second of the day.

### PowerLogic PM5000 series




The ideal fit for cost management applications, the PowerLogic™ PM5000 power meter provides :
- > Sub-billing/tenant metering
- > Equipment sub-billing
- > Energy cost allocation
- > Track real-time power conditions
- > Monitor control functions
- > Provide basic power quality values
- > Monitor equipment and network status.

### Acti 9 iEM2000 & iEM3000 series




The Acti 9 iEM2000 & iEM3000 energy meter series offers a cost-attractive, competitive range of DIN rail-mounted energy meters ideal for :
- > Bill checking to verify that you are only charged for the energy you use
- > Sub billing individual tenants for their energy consumption, including WAGES
- > Aggregation of energy consumption, including WAGES, and allocating costs per area, per usage, per shift, or per time within the same facility
- > Basic metering of electrical parameters to better understand the behavior of your electrical distribution system.

Combined with communication systems, like Smart Link, the Acti 9 iEM2000 & iEM3000 series makes it easy to integrate electrical distribution measurements into facility management systems. It's the right energy meter at the right price for the right job.

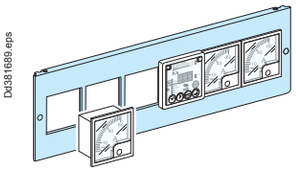
**Possible installation**

| Cat. number | 03904 | 03928 | 03910 | 03911 | 03913 | 03912 | 03914 |
|---|---|---|---|---|---|---|---|
| Front plate frame support (08566) | ■ | ■ | ■ | ■ | ■ | ■ | ■ |
| L300/L400 with cut-out (08593, 08594) | ■ | ■ | ■ | ■ | ■ | - | - |

**Note:** device mounting on door: earthing braid (cat. no. **08910**) or earthing wire (cat. no. **08911**) mandatory.

## Installation in a switchboard

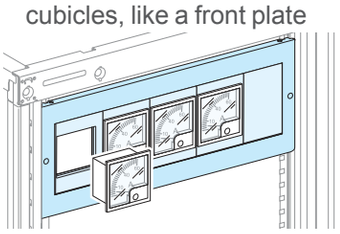
**On a metal front plate with cut-outs, H = 150 mm (3 modules)**




- > Devices are attached directly to the metal front plate.
- > Blanking plates are available to blank off any unused locations.
- > Economical solution.

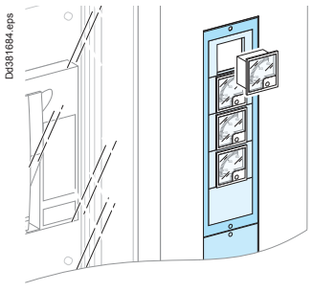
1

- > In the device zone of enclosures and cubicles, like a front plate



2

- > On a door with cut-outs in a 300 or 400 mm wide cubicle
- > On a inclined visor



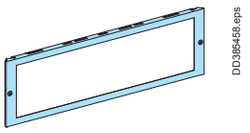
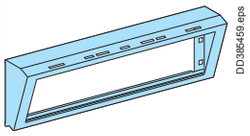
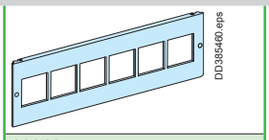
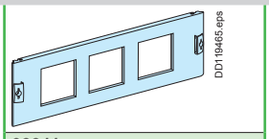
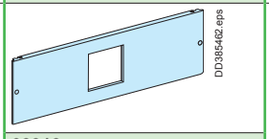
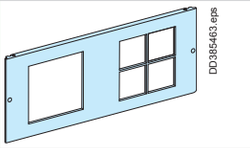
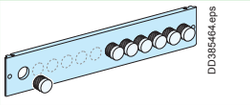
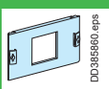
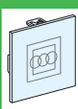

The degree of protection for installed devices is IP30.

Notes:
- To maintain the IP55 degree of protection, the measurement devices must be installed behind a transparent door. If they are installed on a plain door, use the corresponding mounting plates.
- With a power voltage > SELV (12 V), devices on front plates must be mounted with a front plate hinge kit (cat no. 08585). The earthing braid must be connected to the front plate frame support (cat no. 08566, 08564, 08560, 08562 or else).
- With a power voltage > SELV (12 V) and a supply protection > 16 A, in addition to the preceding rule, the front plate frame support (cat no. 08566, 08564, 08560, 08562 or else) must be connected to the cubicle frame, using an earthing braid (cat no. 08910 or 08911). (standard NF / EN 61439-1 2011 edition).

E

# Metering and human-switchboard interface

## Others

| Number and type of devices per row | Metal front plate with cut-out | No. of vertical mod. | Plastic mounting plates with cut-out | Blanking plate or devices support |
|---|---|---|---|---|
| **W650 Mounting on an interface with plastic mounting plates** | | | | |
| 5 x 72 x 72 Vigirex and others devices 72 x 72 |  DD385458.eps | 3 | DD385465.eps<br>**03902** | DD385466.eps<br>To blank-off or install:<br>- 1 to 4 Ø 16 or 22 mm buttons<br>- 1 device, 45 x 45<br>**03900** |
| 4 x 96 x 96 Power Meter and others devices 96 x 96 | **03904** | | DD385467.eps<br>**03903** | DD385468.eps<br>To blank-off or install:<br>-1 to 4 Ø 16 or 22 mm buttons<br>- 1 device, 45 x 45<br>- one 72 x 72 device<br>**03901** |
| **W650 Mounting on an inclined visor by 30° with plastic mounting plates** | | | | |
| 5 x 72 x 72 Vigirex and others devices 72 x 72 |  DD385459.eps | 3 | DD385465.eps<br>**03902** | DD385466.eps<br>To blank-off or install:<br>- 1 to 4 Ø 16 or 22 mm buttons<br>- 1 device, 45 x 45<br>**03900** |
| 4 x 96 x 96 Power Meter and others devices 96 x 96 | **03928** (1) | | DD385467.eps<br>**03903** | DD385468.eps<br>To blank-off or install:<br>-1 to 4 Ø 16 or 22 mm buttons<br>- 1 device, 45 x 45<br>- one 72 x 72 device<br>**03901** |
| **W650 Direct mounting on a metal front plate with cut-outs** | | | | |
| **72 x 72 device** | | | | |
| 6 x 72 x 72 Vigirex and others devices 72 x 72 |  DD385460.eps | 3 | Direct mounting<br>- | DD385469.eps<br>To blank-off or install:<br>- 1 or 2 Ø 22 mm buttons<br>- 1 device, 45 x 45<br>**03907** |
| | **03910** | | | |
| **96 x 96 device** | | | | |
| 3x 96 x 96 Power Meter and others devices 96 x 96 |  DD119465.eps | 3 | Direct mounting<br>- | DD385470.eps<br>To blank-off or install:<br>- 1 or 2 Ø 22 mm buttons<br>- 1 device, 45 x 45<br>- one 72 x 72 device<br>**03908** |
| | **03911** | | | |
| 1 x 96 x 96 Power Meter and others devices 96 x 96 |  DD385462.eps | 3 | Direct mounting<br>- | DD385470.eps<br>To blank-off or install:<br>- 1 or 2 Ø 22 mm buttons<br>- 1 device, 45 x 45<br>- one 72 x 72 device<br>**03908** |
| | **03913** | | | |
| **144 x 144 device + 72 x 72 devices** | | | | |
| 1 x 144 x 144 + 4 x 72 x 72 144 x 144 device + devices 72 x 72 |  DD385463.eps | 4 | Direct mounting<br>- | DD385469.eps<br>To blank-off or install:<br>- 1 or 2 Ø 22 mm buttons<br>- 1 device, 45 x 45<br>**03907** |
| | **03912** | | | |
| **W650 Pushbuttons and lamps Ø 22 mm** | | | | |
| 12 x Ø 22 mm |  DD385464.eps | 2 | Direct mounting<br>- | - |
| | **03914** | | | |
| **W400 Front plate** | | | | |
| 1 x 96 x 96 Power Meter and others devices 96 x 96 |  DD385860.eps | 3 | Direct mounting<br>- |  DD385470.eps<br>To blank-off or install:<br>- 1 or 2 Ø 22 mm buttons<br>- 1 device, 45 x 45<br>- one 72 x 72 device<br>**03908** |
| | **03923** | | | |

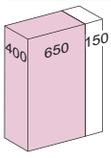
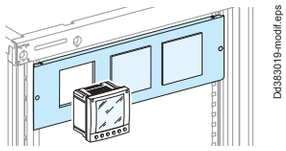
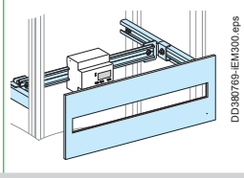
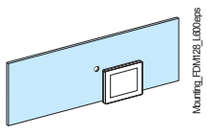
**(1)** The visor (cat. no. **03928**) can be installed on a plain door with cut-out.

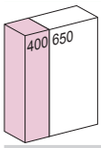
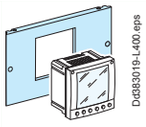
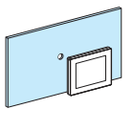
# Metering and human-switchboard interface

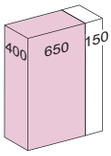
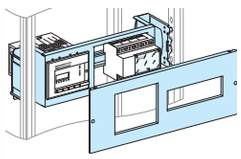
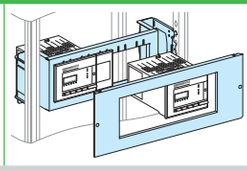
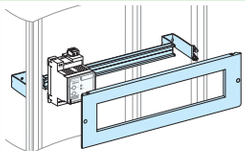
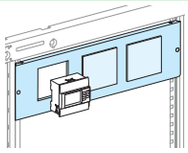
## PowerLogic™ Meters

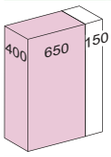
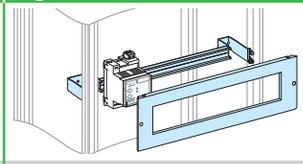
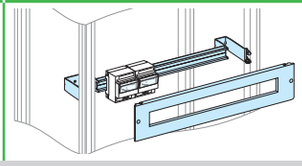
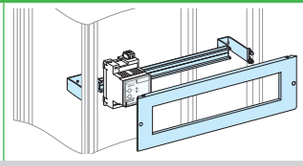
## Vigilohm, Vigirex

Others

| Mounting | | Powerlogic system | | | | |
|---|---|---|---|---|---|---|
|  | |  | |  |  | |
| **Devices** | | | | | | |
| | | **FDM121, PM5000 & PM8000 series** (2) | | **PM3000 series, IEM2000 & iEM3000 series** | **FDM128** (1) | **PM5RD, PM89RD96, PM5563RD** (3) |
| | | 1 device | 3 devices | | | |
| Number of vertical mod. | | **3** | **3** | **3 or 4** | **4** | **4** |
| DIN rail | | - | - | **03402** | - | **03402** |
| Front plates [No. of vert. modules] | transparent | - | | **03342** [4] | - | - |
| | plain | - | | - | **03804** [4] | **03804** [4] |
| | with cut-out | **03913** [3] | **03911** [3] | **03203** [3] | - | - |
| Front plate | | with cut-out for devices 96 x 96 | | | hole ø 22 mm to be stamped | hole ø 30 mm to be stamped |

| Mounting | | Powerlogic system | | |
|---|---|---|---|---|
|  | |  |  | |
| **Devices** | | | | |
| | | **FDM121, PM5000 series, PM8000 series** (2) | **FDM128** (1) | **PM5RD, PM89RD96, PM5563RD** (3) |
| Number of vertical mod. | | **3** | **4** | **4** |
| DIN rail | | - | - | **03404** |
| Front plates [No. of vert. modules] | with cut-out | **03923** [3] | - | - |
| | plain | - | **03814** [4] | **03814** [4] |
| Front plate | | with cut-out for devices 96 x 96 | hole ø 22 mm to be stamped | hole ø 30 mm to be stamped |

| Mounting | | Vigilohm | | | |
|---|---|---|---|---|---|
|  | |  |  |  |  |
| **Devices** | | | | | |
| | | **IM400** with 3 **XD301** or with 1 or 2 **IFL12** | **2 x IM400** | **IM10, IM10H, IM20, IM20H HV-IM20, HV-IM400, IM9, IM9-OL** | **IM10 / IM10H IM20 / IM20H** |
| Number of vertical mod. | | **6** | **6** | **3** | **3** |
| Modular rail | | - | | **03401** | - |
| Mounting plates | | **03930** | **03931** | - | - |
| Front plates with cut-outs | | **03932** | **03933** | **03203** | **03911** |
| Characteristics | | Installation in the device compartment | | | |

| Mounting | | Vigirex | Acti 9 | |
|---|---|---|---|---|
|  | |  |  |  |
| **Devices** | | | | |
| | | **RH10/RH21/RH99/RH197M relays** | **Lamps, pushbuttons** | **Ammeter, voltmeter** |
| Number of vertical mod. | | **3** | **2** | **3** |
| Modular rail | | **03401** | **03401** | **03401** |
| Front plates with cut-outs | | **03203** | **03202** | **03203** |
| Blanking plate | strip | **03220** | **03220** | **03220** |
| | divisible | **03221** | **03221** | **03221** |
| Characteristics | | Installation in the device compartment | | |

**(1)** For 72 x 72 mm cases *> page E-67.*

**(2)** Only for flush-mounted versions of PM5000 series and PM8000 series.

**(3)** Only for remote-display versions of PM5000 series and PM8000 series.

# Prisma P cubicles

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## Enclosures

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C

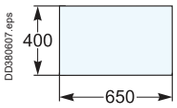
## 400 mm deep switchboard

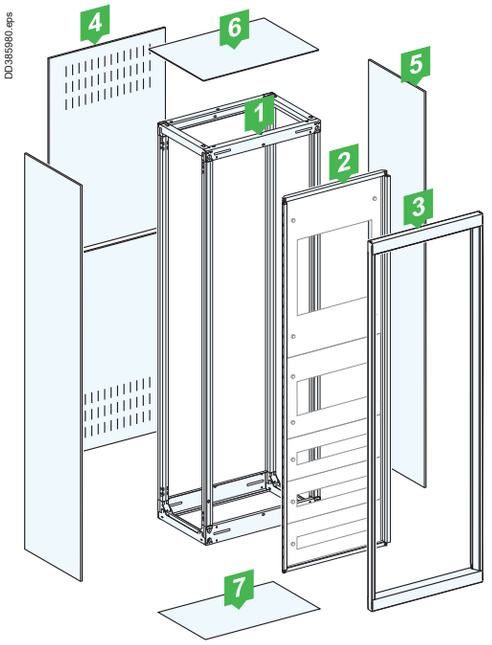
For switchboards with front connections.
- front panels

Any of the following can be installed in front of the hinged front plate frame support:
- ☐ a transparent door (IP30 or IP55)
- ☐ a plain door (IP30 or IP55)
- ☐ a fixed cover frame (IP30)
- rear panel = screw-on panel
- side panels = set of two panels
- plain roof
- gland plates (plain or in two parts).

***Parts list for switchboard 1***

| | | |
|---|---|---|
| 1 | ***08406:*** | framework, W = 650, D = 400, H = 2000 |
| 2 | ***08566:*** | front plate frame support, W = 650 |
| 3 | ***08576:*** | cover frame, W = 650 |
| 4 | ***08736:*** | rear panel,W= 650 (two half panels) |
| 5 | ***08750:*** | set of two side panels, D = 400 |
| 6 | ***08436:*** | plain roof, W = 650, D = 400 |
| 7 | ***08486:*** | plain gland plate, W = 650, D = 400 |




Switchboard 1 - IP30 cubicle with cover frame,W = 650.

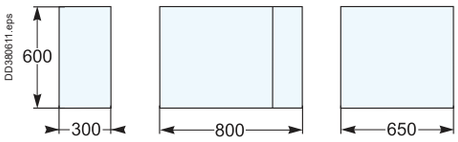
## 600 mm deep switchboard

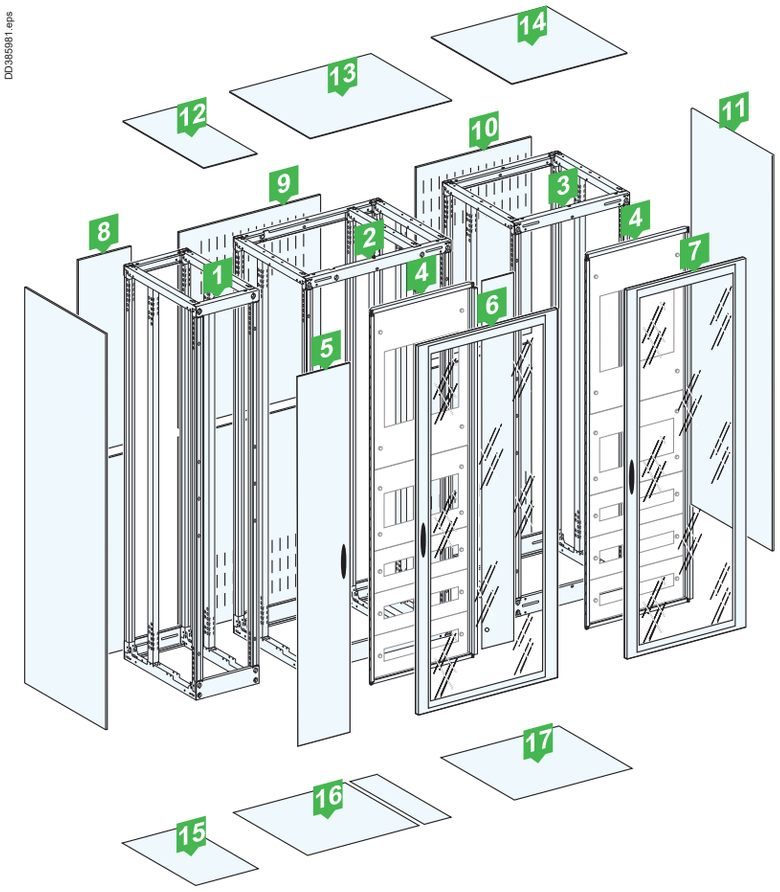
For switchboards with front connections.
- front panels

Any of the following can be installed in front of the hinged front plate frame support:
- ☐ a transparent door (IP30 or IP55)
- ☐ a plain door (IP30 or IP55)
- ☐ a fixed cover frame (IP30)
- rear panel = screw-on panel
- side panels = set of two panels
- plain roof
- gland plates (plain or in two parts).

***Parts list for switchboard 2***

| | | |
|---|---|---|
| 1 | ***08603:*** | framework, W = 300, D = 600, H = 2000 |
| 2 | ***08607:*** | framework, W = 800, D = 600, H = 2000 |
| 3 | ***08606:*** | framework, W = 650, D = 600, H = 2000 |
| 4 | ***08566:*** | front plate frame support, W = 650 |
| 5 | ***08513:*** | plain door, W = 300 |
| 6 | ***08538:*** | transparent door, W = 800 (supplied with barrier for busbar compartment, W =150) |
| 7 | ***08536:*** | transparent door, W = 650 |
| 8 | ***08733:*** | rear panel, W = 300 (two half panels) |
| 9 | ***08738:*** | rear panel, W = 800 (two half panels) |
| 10 | ***08736:*** | rear panel,W = 650 (two half panels) |
| 11 | ***08760:*** | set of two side panels, D = 600 |
| 12 | ***08633:*** | plain roof, W = 300, D = 600 |
| 13 | ***08638:*** | plain roof, W = 800, D = 600 |
| 14 | ***08636:*** | plain roof, W = 650, D = 600 |
| 15 | ***08683:*** | plain gland plate, W = 300, D = 600 |
| 16 | ***08687:*** | plain gland plate, W = 800, D = 600 |
| 17 | ***08686:*** | plain gland plate, W = 650, D = 600. |




Switchboard 2 - combination of IP30 cubicles with transparent doors.

## 800 mm deep switchboard

Made up of two cubicles back-to-back.
Rear connections are possible.

- front panels

Any of the following can be installed in front of the hinged front plate frame support:

- ☐ a transparent door (IP30 or IP55)
- ☐ a plain door (IP30 or IP55)
- ☐ a fixed cover frame (IP30)
- rear panel = screw-on panel
- side panels = set of two panels
- plain roof
- gland plates (plain or in two parts).

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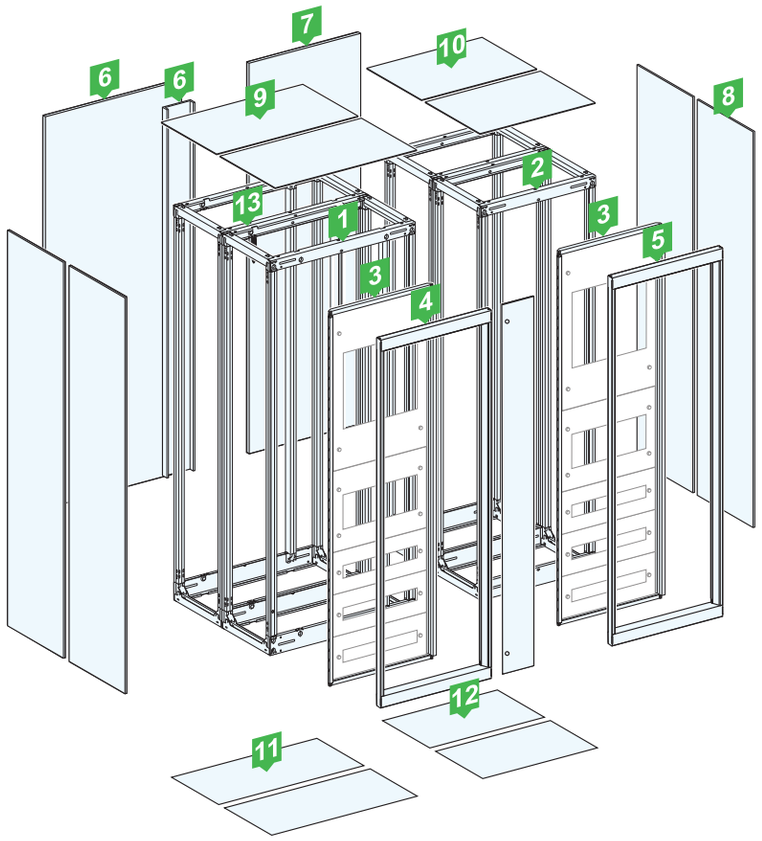


Combination of IP30 cubicles with cover frames.

***Parts list for switchboard 3***

| | | |
|---|---|---|
| 1 | ***08407 x 2 :*** | 2 frameworks, W = 800, D = 400, H = 2000 |
| 2 | ***08406 x 2 :*** | 2 frameworks, W = 650, D = 400, H = 2000 |
| 3 | ***08566:*** | front plate frame support, W = 650 |
| 4 | ***08578:*** | fixed cover frame, W = 800 (supplied with a wicket door, W = 150) |
| 5 | ***08576:*** | cover frame, W = 650 |
| 6 | ***08518:*** | plain door, W = 800 (supplied with barrier for busbar compartment, W= 150) |
| 7 | ***08516:*** | plain door, W = 650 |
| 8 | ***08750 x 2 :*** | 2 sets of two side panels D = 400 |
| 9 | ***08438 x 2 :*** | 2 plain roofs, W = 800, D = 400 |
| 10 | ***08436 x 2 :*** | 2 plain roofs, W = 650, D = 400 |
| 11 | ***08487 x 2 :*** | 2 plain gland plate, W = 800, D = 400 |
| 12 | ***08486 x 2 :*** | 2 plain gland plate, W = 650, D = 400 |
| 13 | ***08719 x 2 :*** | double depth combination kit |

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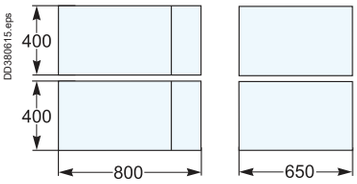


F

## 1000 mm deep switchboard

Made up of two cubicles back-to-back.
Rear connections are possible.

- front panels

Any of the following can be installed in front of the hinged front plate frame support:

- □ a transparent door (IP30 or IP55)
- □ a plain door (IP30 or IP55)
- □ a fixed cover frame (IP30)
- rear panel = screw-on panel
- side panels = set of two panels
- plain roof
- gland plates (plain or in two parts).

***Parts list for switchboard 4***

| | | |
|---|---|---|
| 1 | ***08607:*** | framework, W = 800, D = 600, H = 2000 |
| 2 | ***08606:*** | framework, W = 650, D = 600, H = 2000 |
| 3 | ***08407:*** | framework, W = 800, D = 400, H = 2000 |
| 4 | ***08406:*** | framework, W = 650, D = 400, H = 2000 |
| 5 | ***08566:*** | front plate frame support, W = 650 |
| 6 | ***08538:*** | transparent door, W =800 (supplied with barrier for busbar compartment, W =150) |
| 7 | ***08536:*** | transparent door, W =650 |
| 8 | ***08518:*** | plain door, W = 800 (supplied with barrier for busbar compartment, W= 150) |
| 9 | ***08516:*** | plain door, W = 650 |
| 10 | ***08760:*** | set of two side panels, D = 600 |
| 11 | ***08750:*** | set of two side panels, D = 400 |
| 12 | ***08638:*** | plain roof, W = 800, D = 600 |
| 13 | ***08636:*** | plain roof, W = 650, D = 600 |
| 14 | ***08438:*** | plain roof, W = 800, D = 400 |
| 15 | ***08436:*** | plain roof, W = 650, D = 400 |
| 16 | ***08687:*** | plain gland plate, W = 800, D = 600 |
| 17 | ***08686:*** | plain gland plate, W = 650, D = 600 |
| 18 | ***08487:*** | plain gland plate, W = 800, D = 400 |
| 19 | ***08486:*** | plain gland plate, W = 650, D = 400 |
| 20 | ***08719:*** | double depth combination kit |

***Parts list for switchboard IP55***

| | | |
|---|---|---|
| 1 | ***08607:*** | framework, W = 800, D = 600, H = 2000 |
| 2 | ***08606:*** | framework, W = 650, D = 600, H = 2000 |
| 3 | ***08407:*** | framework, W = 800, D = 400, H = 2000 |
| 4 | ***08406:*** | framework, W = 650, D = 400, H = 2000 |
| 5 | ***08566:*** | front plate frame support, W = 650 |
| 6 | ***08548:*** | transparent door, W = 800 (supplied with barrier for busbar compartment, W = 150) |
| 7 | ***08546:*** | transparent door, W = 650 |
| 8 | ***08528:*** | plain door, W = 800 (supplied with barrier for busbar compartment, W = 150) |
| 9 | ***08526:*** | plain door, W = 650 |
| 10 | ***08765:*** | set of two side panels, D = 600 |
| 11 | ***08755:*** | set of two side panels, D = 400 |
| 12 | ***08658:*** | plain roof, W = 800, D = 600 |
| 13 | ***08656:*** | plain roof, W = 650, D = 600 |
| 14 | ***08458:*** | plain roof, W = 800, D = 400 |
| 15 | ***08456:*** | plain roof, W = 650, D = 400 |
| 16 | ***08687:*** | plain gland plate, W = 800, D = 600 |
| 17 | ***08686:*** | plain gland plate, W = 650, D = 600 |
| 18 | ***08487:*** | plain gland plate, W = 800, D = 400 |
| 19 | ***08486:*** | plain gland plate, W = 650, D = 400 |
| 20 | ***08719 x 2:*** | double depth combination kit |
| 21 | ***08717 x 2:*** | IP55 sealing kit for side-by-side combinations |

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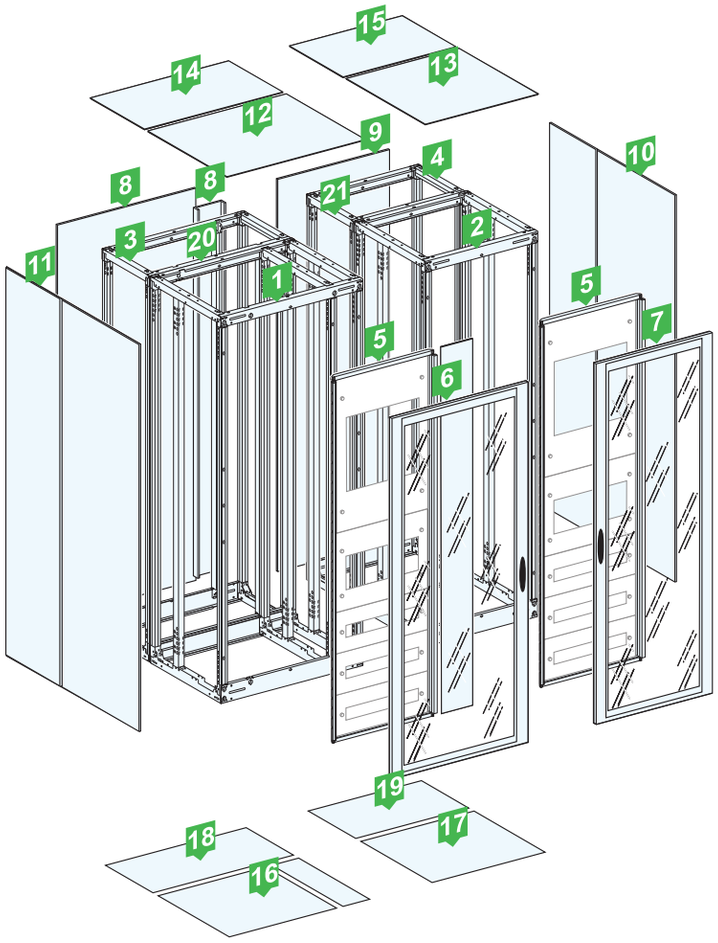


Combination of cubicles with transparent doors.

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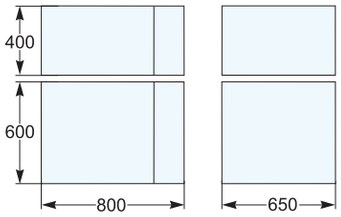
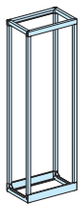
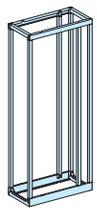
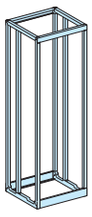
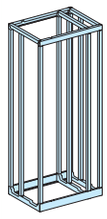
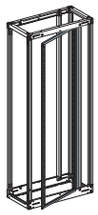


# Cubicles
## Frameworks

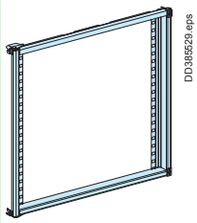
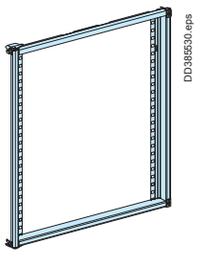


| Mounting | Frameworks | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | |  | |  | | |  | |  |
| Width (mm) | 300 | 400 | 650 | 800 | 800 (650 + 150) | 300 | 400 | 650 | 800 | 800 (650 + 150) |
| | Depth 400 mm | | | | | Depth 600 mm | | | | |
| Cat. no. | 08403 | 08404 | 08406 | 08408 | 08407 | 08603 | 08604 | 08606 | 08608 | 08607 |
| Composition | 2 frames | | | | | | | | | 3 frames |
| | - | | | | + 2 additional uprights | equipped with intermediate uprights for the mounting plates | | | | |
| | ■ 4 cross-pieces.<br>■ Mounting hardware.<br>■ Framework combinations | | | | | | | | | |
| Characteristics | ■ Cubicles can be combined side-by-side and back-to-back.<br>■ Can be equipped with IP30 or IP55 cover panels.<br>**Note:** for the 800 mm width, the busbar compartment can be on the left or right | | | | | | | | | |

| Mounting | Hinged front plate frame support | |
|---|---|---|
| | |  |
| Width (mm) | 400 | 650 |
| | | |
| Cat. no. | 08564 | 08566 |
| Characteristics | ■ Reversible for left or right-hand opening.<br>■ Secured at two points.<br>**Note:** can be mounted on 650 mm and 800 mm (650 + 150) wide cubicles. | |

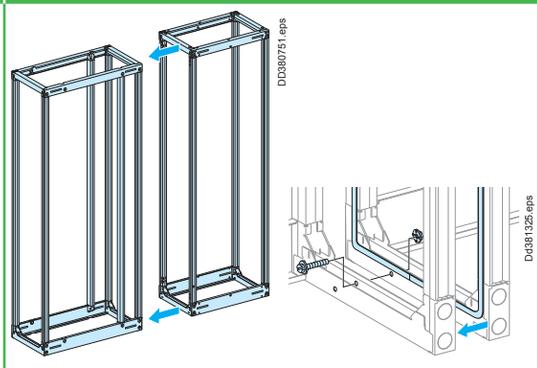
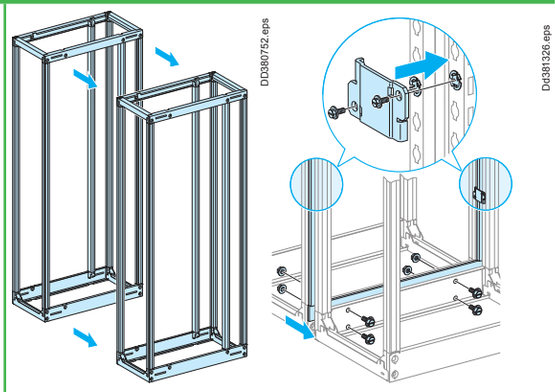
### Partial hinged cover-frame supports

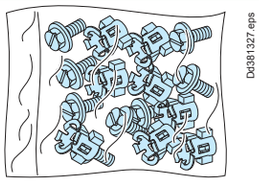
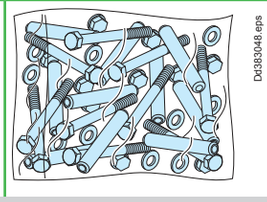
*> page E-8*.

| Mounting | Partial hinged cover-frame supports | |
|---|---|---|
| |  |  |
| Width (mm) | 650 | |
| | 10 modules | 12 modules |
| Cat. no. | 08560 | 08562 |
| Characteristics | ■ For drawout Masterpact NW, when hinged front plate frame support is left -hand opening. | ■ Use for Fupact ISFL configurations.<br>■ For drawout Masterpact NW, when hinged front plate frame support is left-hand opening. |

# Cubicles
## Frameworks

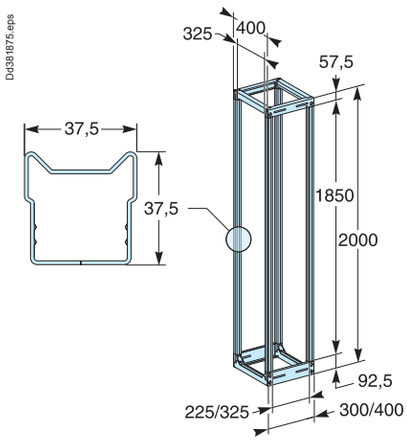


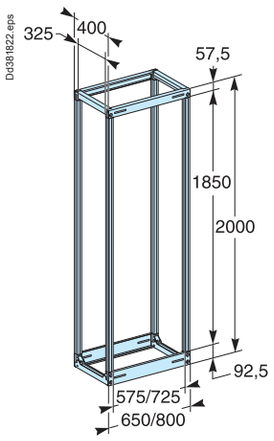
| | Framework combinations | |
|---|---|---|
| |   |   |
| **Type** | **Side-by-side** | **Back-to-back** |
| | **IP55 sealing kit** | **Double depth combination kit** |
| Cat. no. | **08717** | **08719** |
| Characteristics | The 650 and 800 mm wide frameworks are supplied with a combination kit comprising six M6 bolts.<br>To maintain the IP55 degree of protection, an optional gasket must be installed between the combined cubicles. | The kit is made up of:<br>■ a set of hardware for the mechanical connections between the cross-pieces<br>■ two assembly plates to connect the uprights<br>■ the IP55 sealing kit. |

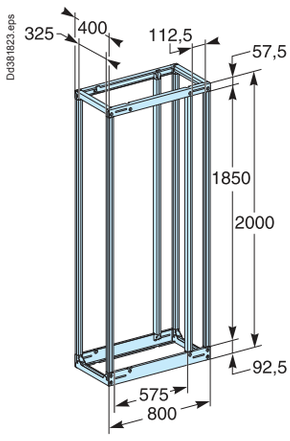
| | Accessories | |
|---|---|---|
| |   |   |
| **Type** | **Commodities** | |
| | **Fixing screws and nuts** | |
| Cat. no. | **08921** | **08718** |
| Characteristics | Set of 20 screws + wing nuts for framework | Set of 10 screws + combination accessories |

## Dimensions

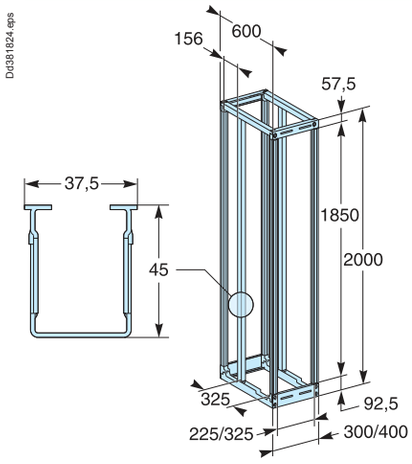
### Frameworks, D = 400 mm

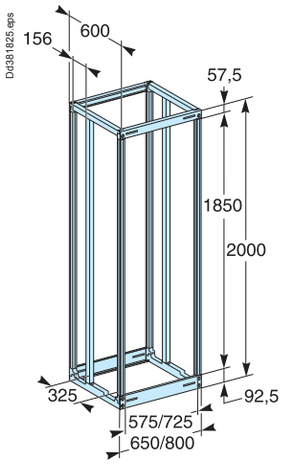


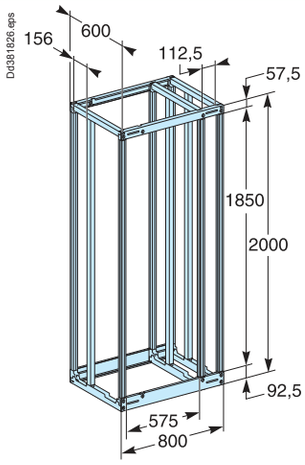



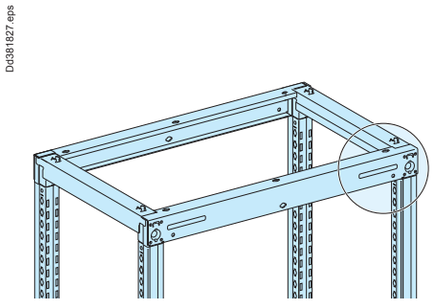



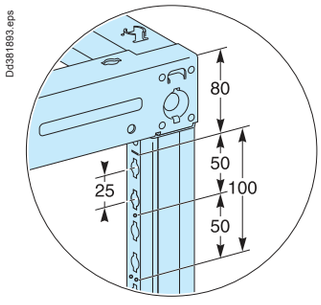

### Frameworks, D = 600 mm



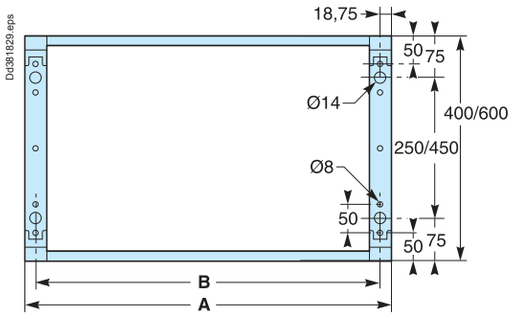



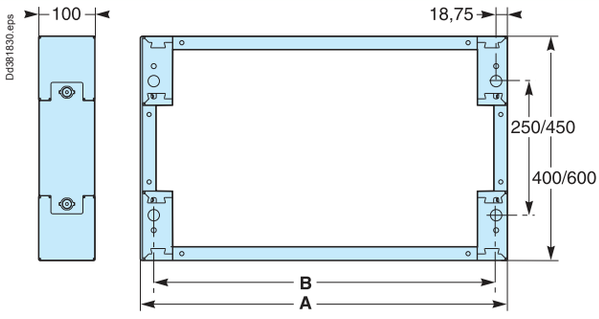




### Fixing to floor

#### Without plinth




#### With plinth



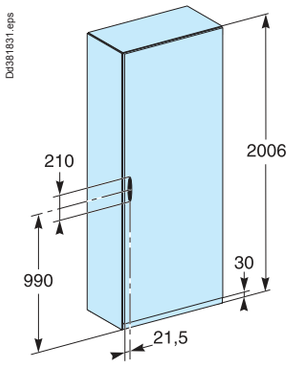

| A | B |
|---|---|
| 300 | 262.5 |
| 400 | 362.5 |
| 650 | 612.5 |
| 800 | |

F

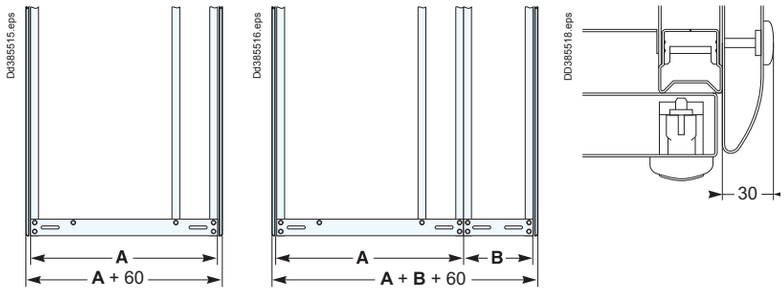
## Dimensions

### Cubicle with cover panels

#### Height

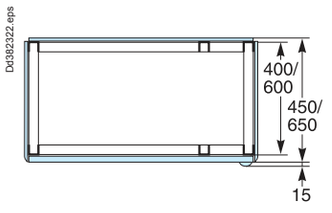



#### Width

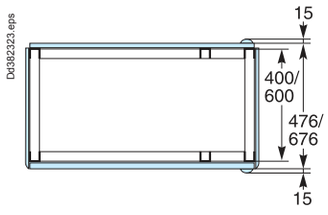


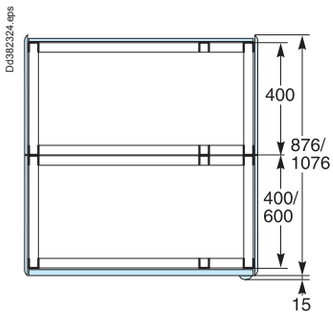

### Depth

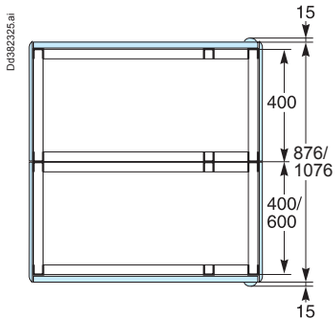
#### Door in front and panel in rear




#### Doors front and rear

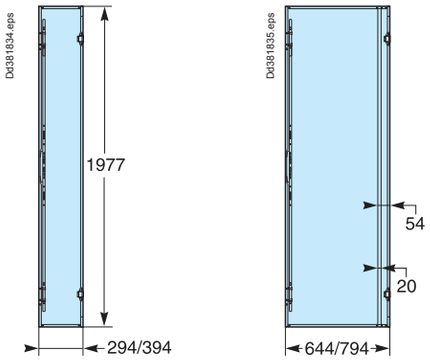


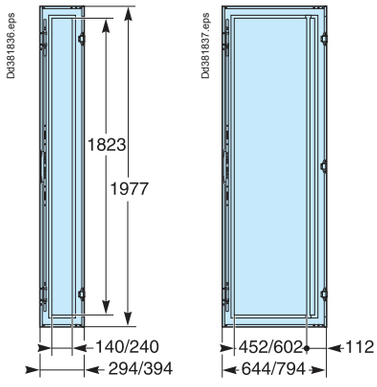



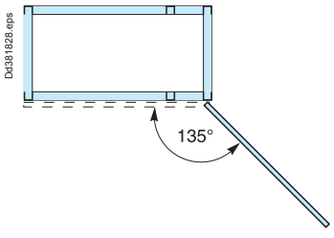

### Door

#### IP30 door

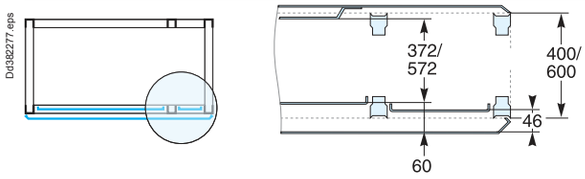



#### IP55 door



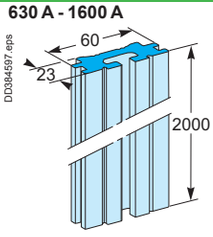

### Available space behind door



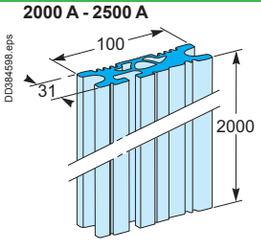
## Dimensions

### Linergy LGYE busbars

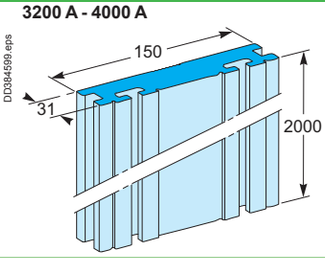
**630 A - 1600 A**



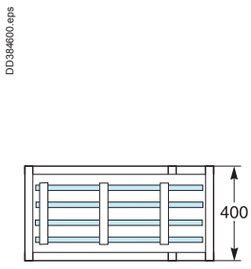

**2000 A - 2500 A**

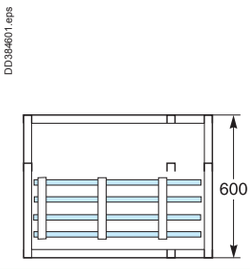


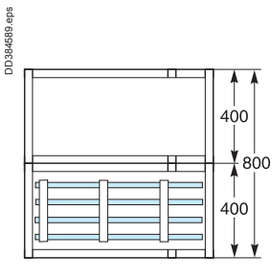

**3200 A - 4000 A**

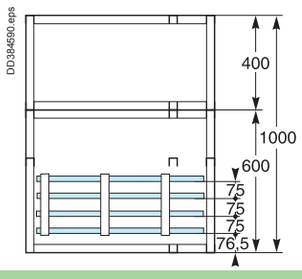



### Layout of horizontal Linergy LGYE busbars



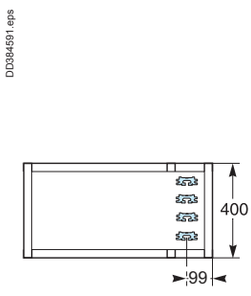



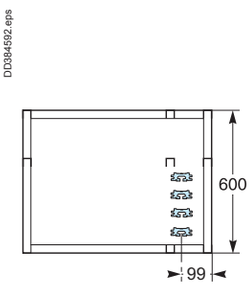



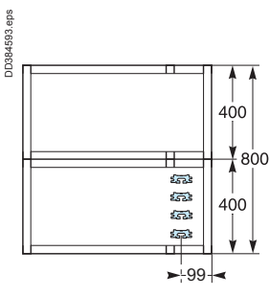



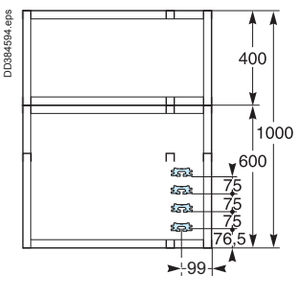

### Layout of vertical Linergy LGYE busbars

**630 A - 1600 A**

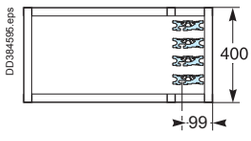


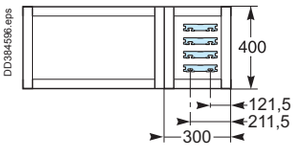



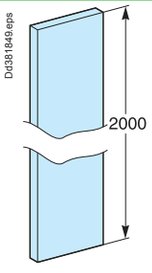

**2000 A - 2500 A**

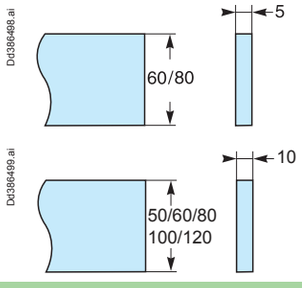



**3200 A - 4000 A**

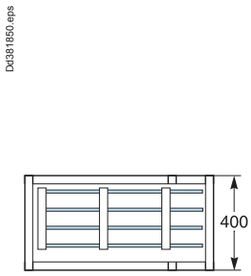


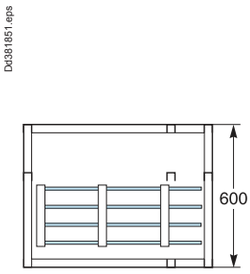

### Horizontal Linergy BS busbars

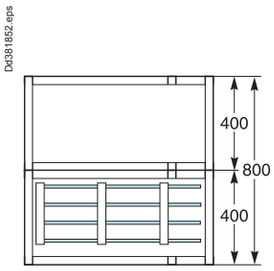


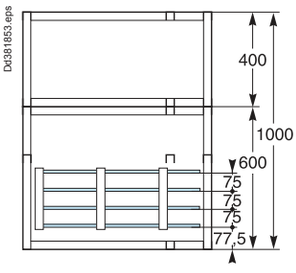




### Layout of horizontal Linergy BS busbars



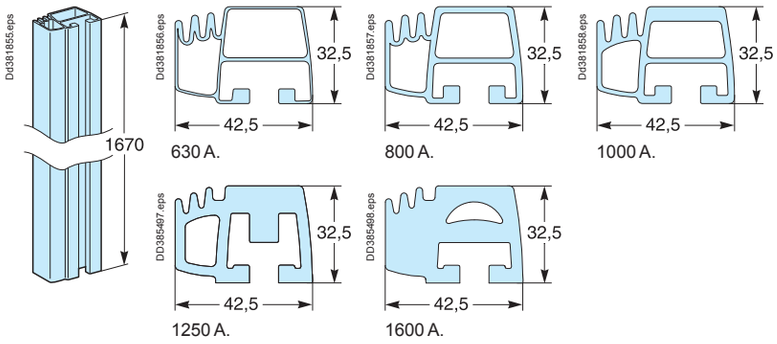



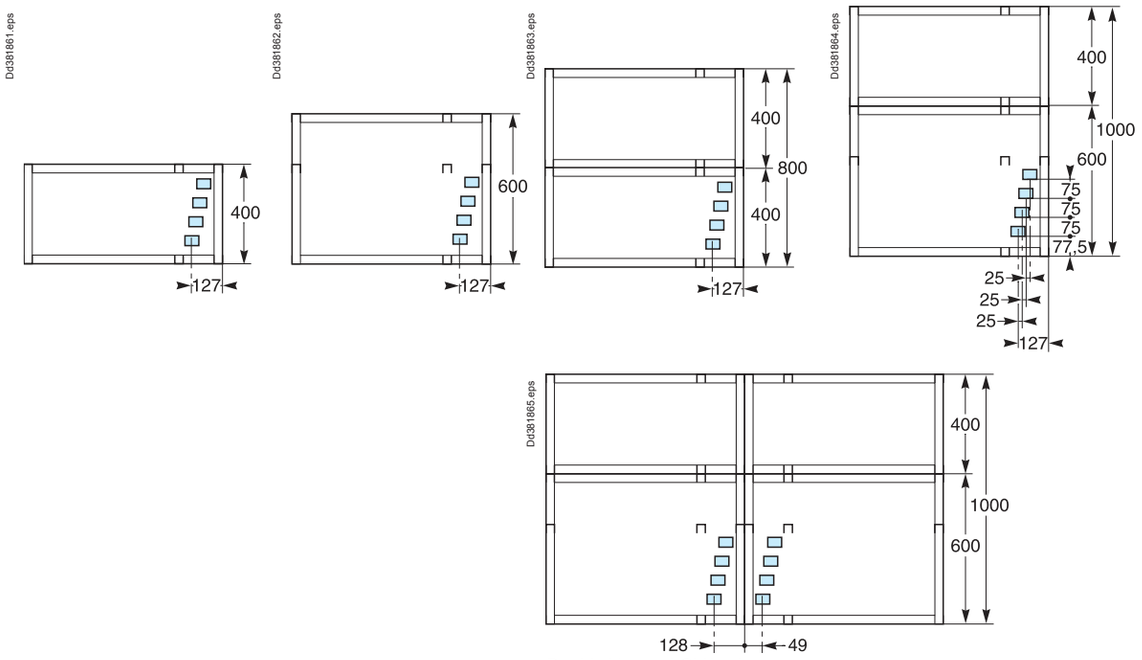

F

## Dimensions

### Vertical Linergy LGY busbars

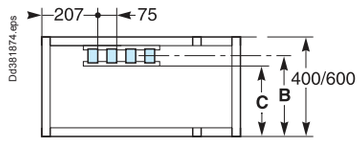



### Layout of Linergy LGY busbars




*Double Linergy LGY busbars*

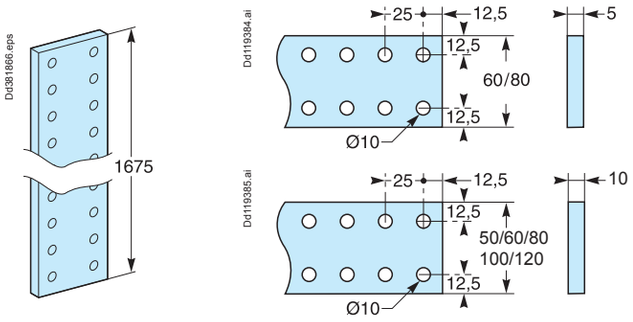
### Layout of rear Linergy BS busbars



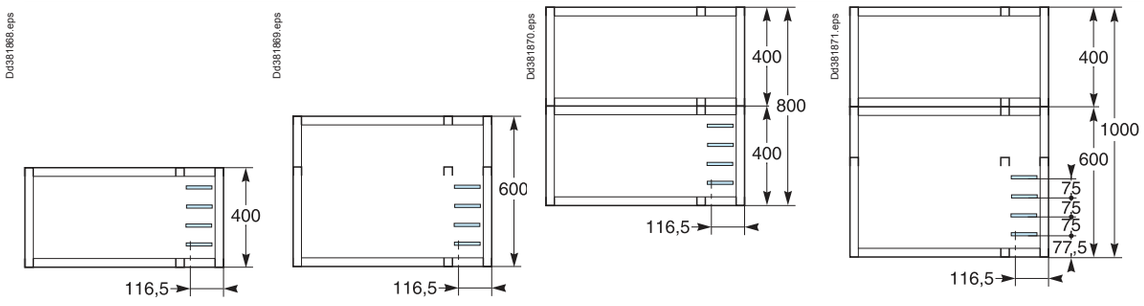

| | | |
|---|---|---|
| D = 400 mm | **B** | 284 |
| | **C** | 242 |
| D = 600 mm | **B** | 484 |
| | **C** | 442 |

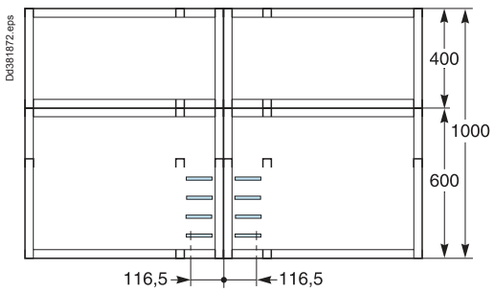
## Dimensions

### Vertical Linergy BS busbars



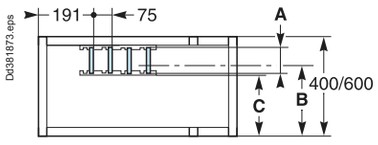

### Layout of lateral Linergy BS busbars




*Double Linergy BS busbars.*

### Layout of rear Linergy BS busbars

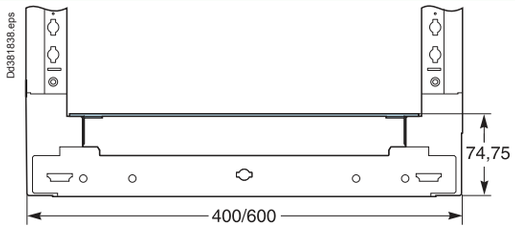


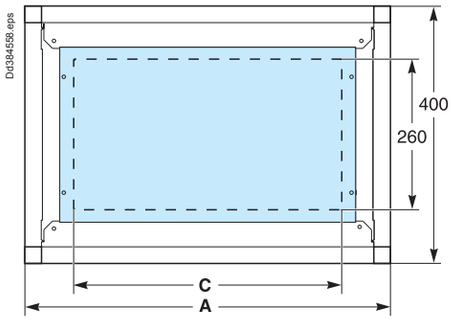

| | | A | | |
|---|---|---|---|---|
| | | 50 | 60 | 80 |
| D = 400 mm | B | 284 | 274 | 254 |
| | C | 250 | 240 | 220 |
| D = 600 mm | B | 484 | 474 | 454 |
| | C | 450 | 440 | 420 |

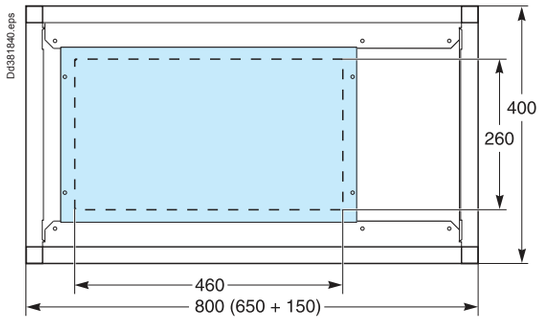
## Dimensions

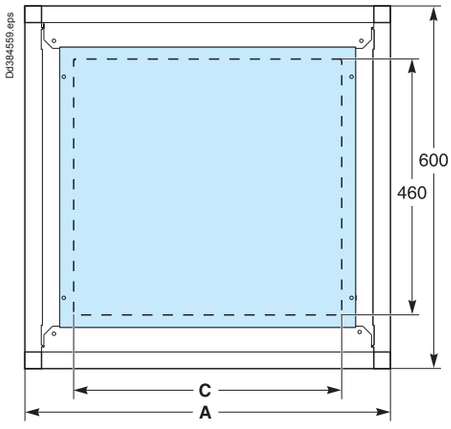
### Plain gland plates

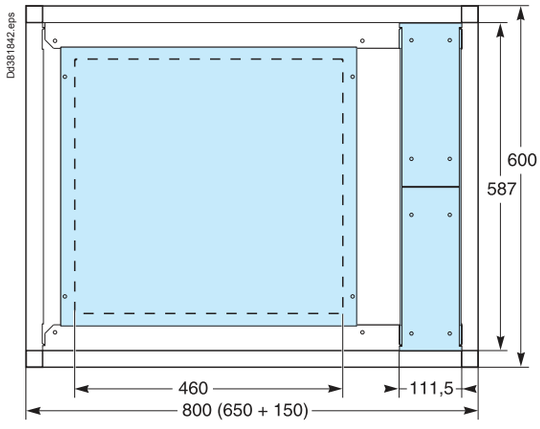
| A | C |
|---|---|
| 300 | 110 |
| 400 | 210 |
| 650 | 460 |
| 800 | 610 |



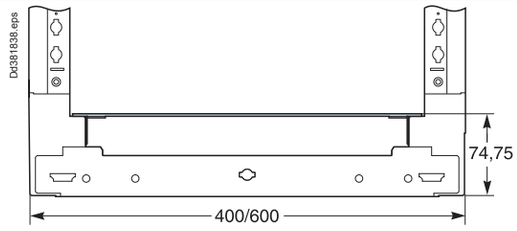



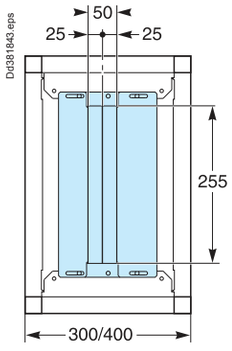



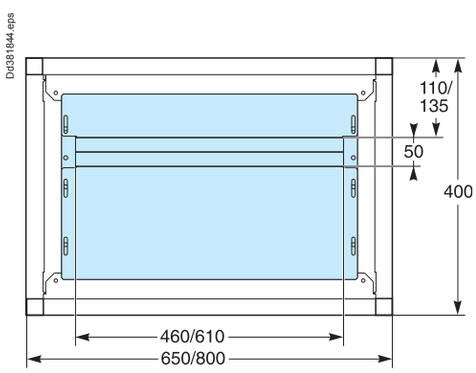



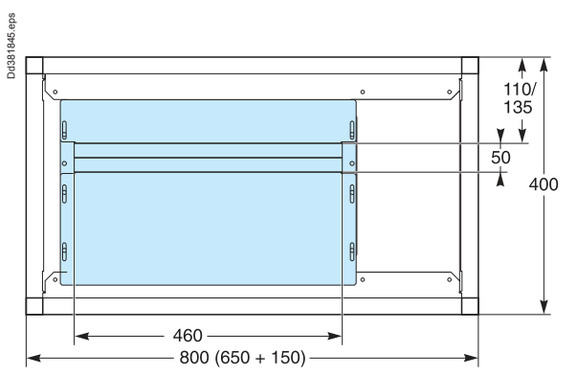
## Dimensions

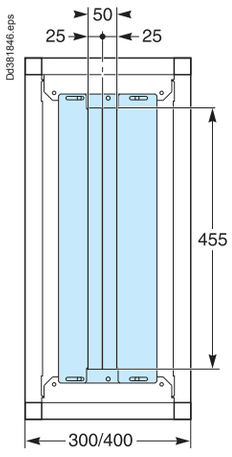
### Two-part gland plates

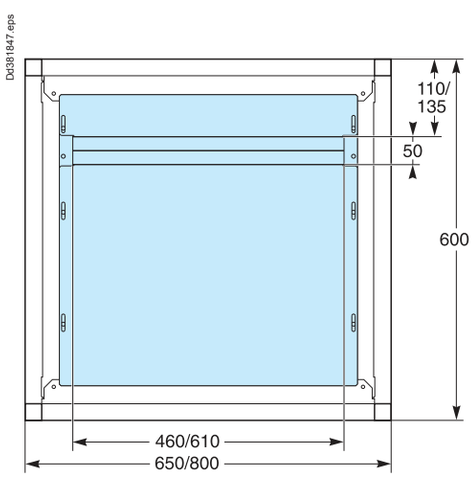


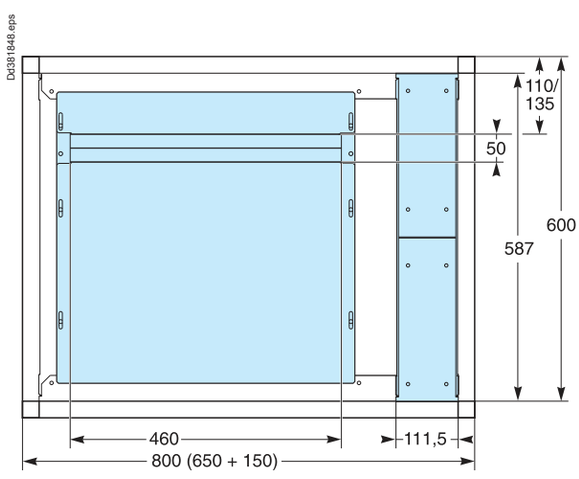



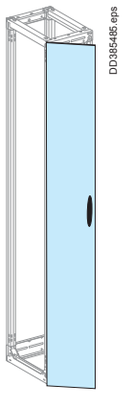
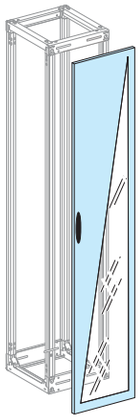
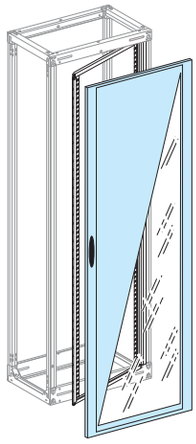
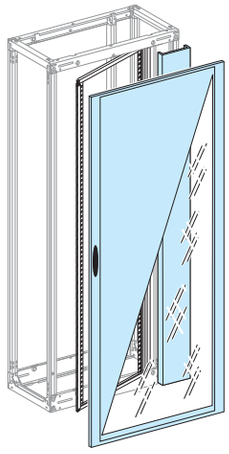



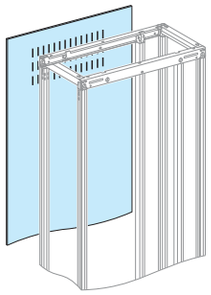
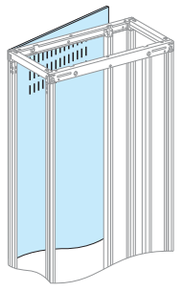




F

# Cubicles
## IP30/31 cover panels



| Mounting | Front doors | | | |
|---|---|---|---|---|
| |  DD385485.eps |  DD119390.ai |  DD119388.ai |  DD119389.ai |
| **Dimensions (mm)** | **W = 300** | **W = 400** | **W = 650** | **W = 800** |
| Plain door | **08513** | **08514** | **08516** | **08518** |
| Transparent door | **-** | **08534** | **08536** | **08538** |
| Door with cut-out | **08593** | **08594** | **-** | **-** |
| Reinforced plain door | **-** | | **01224** | **01225** |
| Characteristics | ■ Reversible for left or right-hand opening IP31.<br>■ Equipped with a handle and keylock (key 405).<br>■ Plain door are IK08 with 2 hinges.<br>■ Reinforced plain door are IK10 with 3 hinges.<br>■ Transparent door are IK10 with 2 hinges.<br>For other possibilities > pagpage F-28.<br>**Note:** the door with cut-out can be equipped with front plates for 72 x 72 or 96 x 96 instruments *> page E-67*.<br>The 800 mm door is supplied with a 150 mm barrier for the side compartment, plus a finishing accessory to improve the appearance of the upright. | | | |
| Cover frame | - | **08574** | **08576** | **08578** (1) |

| Mounting | Rear panels | | | |
|---|---|---|---|---|
| |  DD380603.eps | |  Dd385486.eps | |
| **Dimensions (mm)** | **W = 300** | **W = 400** | **W = 650** | **W = 800** |
| Rear panel | **08733** | **08734** | **08736** | **08738** |
| Characteristics | ■ Made up of two half panels with vents.<br>■ Supplied with quarter-turn fasteners. | | | |

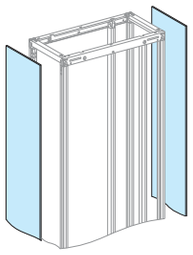
**(1)** For 800 mm wide frameworks, the 650 mm frame is supplied with a plain wicket door, 150 mm wide.

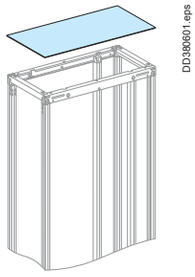
# Cubicles

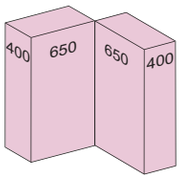
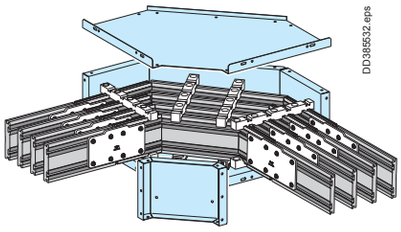
## IP30/31 cover panels

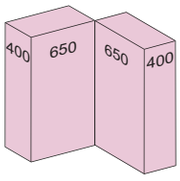
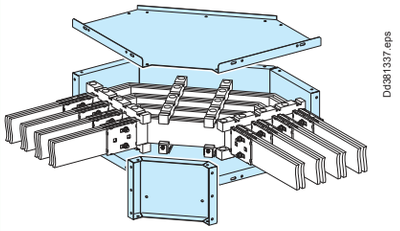
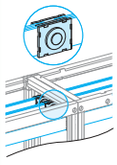
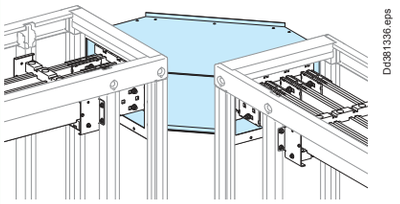
### Right angle kit



| Mounting | Side panels | |
|---|---|---|
| |  DD380600.eps | |
| **Dimensions (mm)** | **D = 400** | **D = 600** |
| Side panels | **08750** | **08760** |
| Characteristics | Supplied with quarter-turn fasteners. | |

| Mounting | Roof | | | |
|---|---|---|---|---|
| |  DD380601.eps | | | |
| **Dimensions (mm)** | **W = 300** | **W = 400** | **W = 650** | **W = 800** |
| Plain roof D = 400 mm | **08433** | **08434** | **08436** | **08438** |
| Plain roof D = 600 mm | **08633** | **08634** | **08636** | **08638** |
| Characteristics | ■ Supplied with quarter-turn fasteners for mounting on the framework<br>■ With markings for cut-outs, if necessary. | | | |
| IP31 sealing kit | **08711** | | | |
| Characteristics | The kit is made up of a self-adhesive gasket that attaches to the roof and a deflector.<br>It ensures the IP31 degree of protection for a 650 or 800 mm wide cubicle, or for two cubicles (800 + 400) when they are equipped with plain or transparent front doors. | | | |

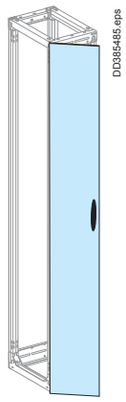
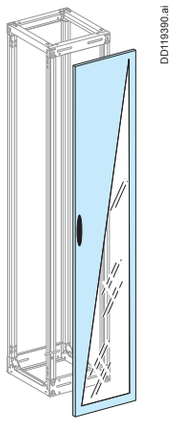
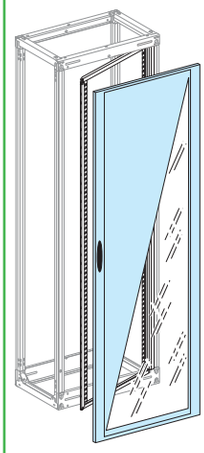
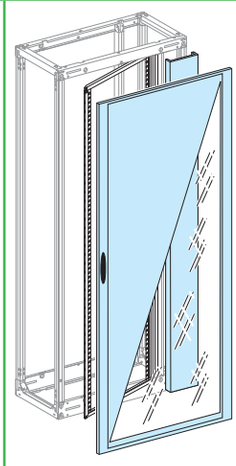
| kit IP30 for Linergy LGYE | Right-angle | Fish plates kit | | |
|---|---|---|---|---|
|   |  DD385532.eps | | | |
| | | **630-1600 A** | **2000-2500 A** | **3200-4000 A** |
| cat. number | **08712** | 2 x **04610** | 2 x **04611** | 2 x **04613** |
| Characteristics | ■ Metal duct with busbar supports<br>■ Used to create and protect the connection of horizontal busbars between two cubicles installed at right angles.<br>■ This kit needs a Linergy LGYE busbar of 1080 mm length. | ■ Order the additional joint kit, comprising the 4 copper connections and mounting hardware: | | |

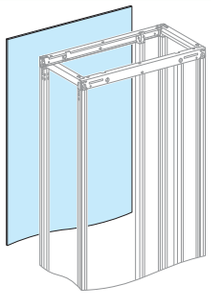
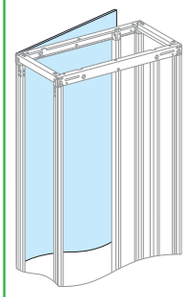
| kit IP30 for Linergy BS | Right-angle | Fish plates kit | |
|---|---|---|---|
|   |  Dd381337.eps |  | |
| | | **bars H 50/60** | **bars H 80/100** |
| cat. number | **08713** | 2 x**04640** | 2 x**04641** |
| Characteristics | ■ Metal duct<br>■ Used to create and protect the connection of horizontal busbars between two cubicles installed at right angles. | Order:<br>■ fixed support 2 x **04664** (if 100 x 10 bar, add 2 x **04671**)<br>■ free support 2 x **04662** (if 100 x 10 bar, add 2 x **04671**) | |
| |  Dd381336.eps | | |

F

# Cubicles
## IP55 cover panels

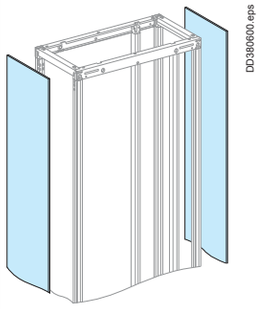
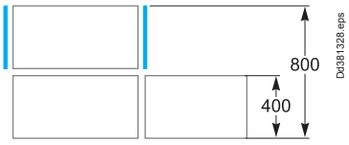


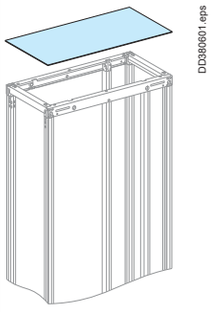
| Mounting | Front doors | | | |
|---|---|---|---|---|
| |   |   |   |   |
| **Dimensions (mm)** | **W = 300** | **W = 400** | **W = 650** | **W = 800** |
| Plain door | **08523** | **08524** | **08526** | **08528** |
| Transparent door | | **08544** | **08546** | **08548** |
| Characteristics | ■ Equipped with a factory-mounted polyurethane (PUR) gasket, IP55.<br>■ Reversible for left or right-hand opening<br>■ Equipped with a handle and keylock (key 405).<br>For other possibilities *> page F-28*.<br>For IP55 rated configurations, front or rear mounted doors, it is necessary to follow the temperature derating tables, to ensure a convenient installation of devices.<br>**Note:** the 800 mm door is supplied with a 150 mm barrier for the side compartment, plus a finishing accessory to improve the appearance of the upright. | | | |

| Mounting | Rear panels | | | |
|---|---|---|---|---|
| |   | |   | |
| **Dimensions (mm)** | **W = 300** | **W = 400** | **W = 650** | **W = 800** |
| Rear panel | **08743** | **08744** | **08746** | **08748** |
| Characteristics | ■ Equipped with a factory-mounted polyurethane (PUR) gasket<br>■ Supplied with mounting hardware.<br>■ One-piece, reinforced panel designed to ensure the degree of protection. | | | |

# Cubicles
## IP55 cover panels



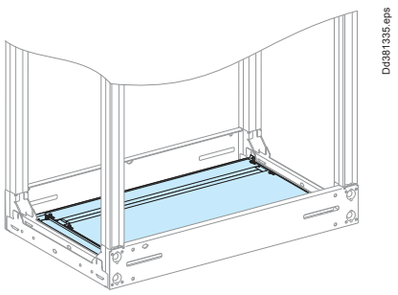
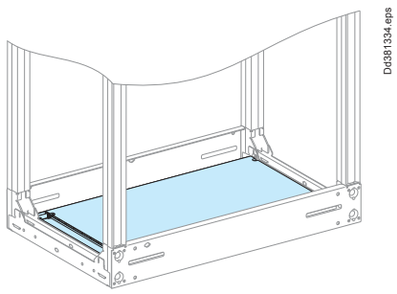
| Mounting | Side panels | |
|---|---|---|
| |  DD380600.eps | |
| **Dimensions (mm)** | **D = 400** | **D = 600** |
| Side panels | **08755** | **08765** |
| Characteristics | ■ Equipped with a factory-mounted polyurethane (PUR) gasket<br>■ Supplied with mounting hardware. | |
| Side panels for "L" combinations | **08756** | - |
| Characteristics | Left or right combinations of two cubicles with different depths (400 + 400 or 400 + 600).<br>These panels simply replace the standard side panels. | |
| |   Dd381328.eps | Dd381329.eps |

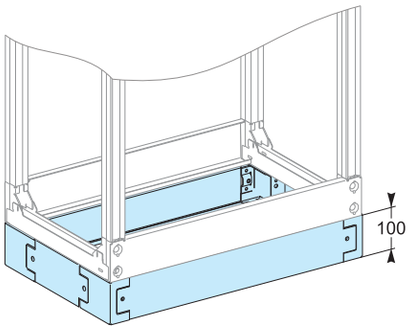
| Mounting | Roof | | | |
|---|---|---|---|---|
| |  DD380601.eps | | | |
| **Dimensions (mm)** | **W = 300** | **W = 400** | **W = 650** | **W = 800** |
| Plain roof D = 400 mm | **08453** | **08454** | **08456** | **08458** |
| Plain roof D = 600 mm | **08653** | **08654** | **08656** | **08658** |
| Characteristics | ■ Equipped with a factory-mounted polyurethane (PUR) gasket<br>■ Supplied with mounting hardware.<br>■ With markings for clear identification of cable-running zones, if necessary. | | | |

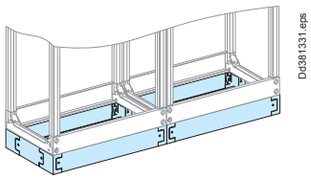
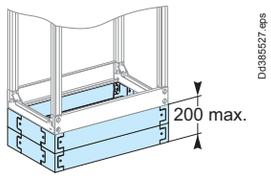
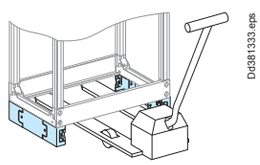
F

# Cubicles
## Plinth



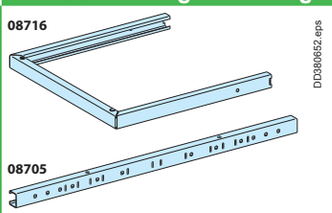
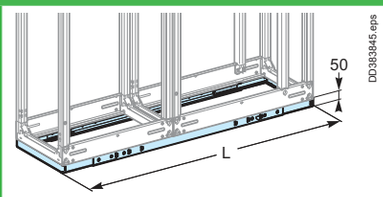
| Mounting | Two-part gland plates | | IP55, gland plates | |
|---|---|---|---|---|
| |  | |  | |
| **Degree of protection** | **IP30/IP31** | | **IP55** | |
| **Dimensions (in mm)** | **D400** | **D600** | **D400** | **D600** |
| W = 300 mm | **08493** | **08693** | **08483** | **08683** |
| W = 400 mm | **08494** | **08694** | **08484** | **08684** |
| W = 650 mm | **08496** | **08696** | **08486** | **08686** |
| W = 800 mm (650 + 150) | **08497** | **08697** | **08487** | **08687** |
| W = 800 mm | **08498** | **08698** | **08488** | **08688** |

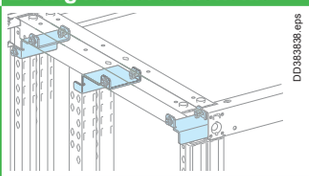
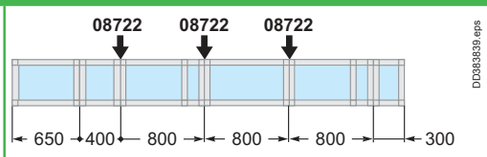
| Mounting | Plinth H = 100 mm |
|---|---|
| |   |

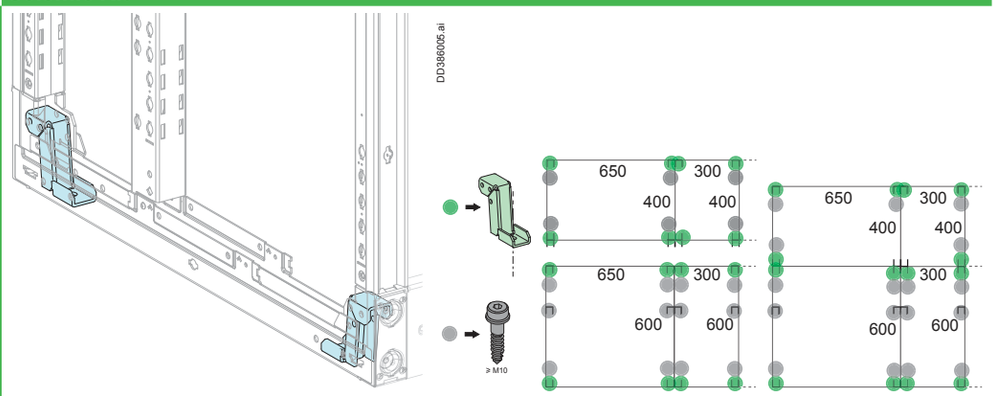
| Dimensions (mm) | W = 300 | W = 400 | W = 650 | W = 800 | D = 400 | D = 600 |
|---|---|---|---|---|---|---|
| Four corner posts + two cross-pieces (front and rear) | **08723** | **08724** | **08726** | **08728** | - | - |
| Two side plates | - | - | - | - | **08720** | **08721** |
| Characteristics | The plinth is made up of two catalogue numbers:<br>■ one catalogue number comprising four corner posts + two cross-pieces (front and rear), that can be used in side-by-side combinations or stacked to form a plinth 200 mm high (maximum)<br>■ one catalogue number comprising two side plates (400 or 600 mm).<br>Each catalogue number is supplied with the necessary hardware. | | | | | |
| Examples |  Side-by-side combination of two cubicles with a plinth. | |   Two stacked plinths. | |  The front and rear cross-pieces can be easily removed for a pallet-mover. | |

# Cubicles
## Cubicle handling and Lifting reinforcement kit



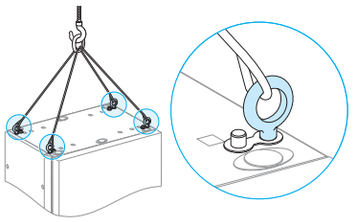
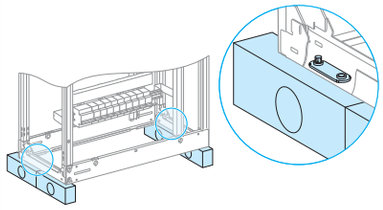
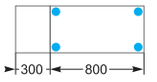
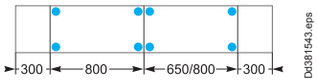
| Mounting | Cubicle handling and rolling base | | | | |
|---|---|---|---|---|---|
| |  | |  | | |
| **Dimensions (mm)** | **D = 400** | **D = 600** | **L1200 to L1900** | **L2000 to L2550** | **L2650 to L3050** |
| 2 cubicle handling base end-pieces | **08714** | **08716** | - | - | - |
| Cubicle handling | - | - | **08705** | **08706** | **08707** |
| Characteristics | This type of base is designed to avoid any risk of cubicle deformation during transport and handling.<br>Five different catalogue numbers offer 27 width possibilities (1200 to 3050 mm) for 400 and 600 mm deep cubicles.<br>■ Two catalogue numbers each include 2 end-pieces for handling bases for 400 and 600 mm deep cubicles respectively and the corresponding mounting hardware.<br>■ Three catalogue numbers each include 2 lengths for the sides of handling bases for 1200 to 3050 mm wide cubicles respectively and the corresponding mounting hardware.<br>Handling bases can be used for both side-by-side and back-to-back cubicle combinations.<br>In this case, the mounting hardware for one of the sets is used. | | | | |

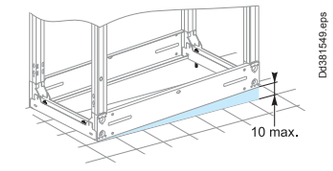
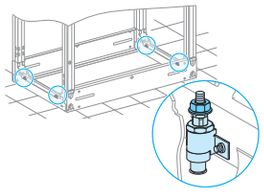
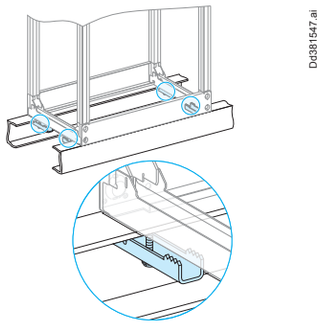
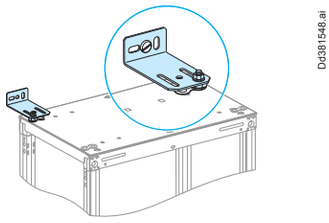
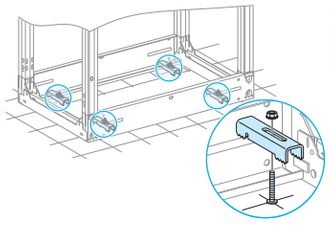
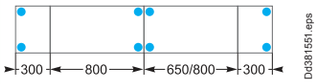
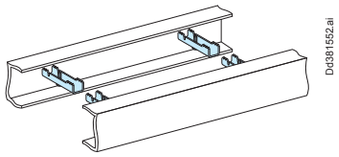
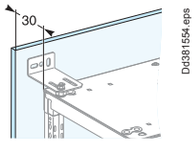
| Mounting | Lifting reinforcement kit | |
|---|---|---|
| |  |  |
| **Dimensions (mm)** | **D = 400, D = 600** | |
| Lifting reinforcement kit | **08722** | |
| Characteristics | Kit 08722 is recommended for lifting combined cubicles and can be used together with handling base end-pieces 08714 or 08716 for severe transport or handling conditions.<br>Catalogue number 08722 includes 3 reinforcement brackets for 400 or 600 mm deep cubicles and the corresponding mounting hardware. | |

| Mounting | Seismic Kit |
|---|---|
| |  <br>Foot part to be added in each bottom angle to reinforce the structure. |
| Reinforcement bracket | **08710** |
| Characteristics | Catalog number ref 08710 includes 1 reinforcement bracket and 4 M6 screws.<br>■ Plinths are not allowed with seismic kits. |

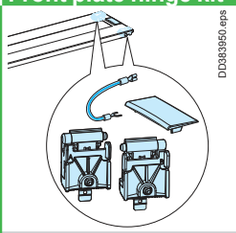
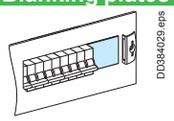
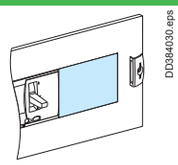
| Type of cubicle | W300 | | W400 | | W650 | | W650 + W150 | |
|---|---|---|---|---|---|---|---|---|
| | **D = 400** | **D = 600** | **D = 400** | **D = 600** | **D = 400** | **D = 600** | **D = 400** | **D = 600** |
| Framework | **08403** | **08603** | **08404** | **08604** | **08406** | **08606** | **08407** | **08607** |
| Reinforcement bracket | **08710** x 4 | | | | **08710** x 4 | | **08710** x 6 | |
| Longitudinal cross men | **08773** | | **08774** | | **03587** x 2 | | | |
| Lateral cross member | **03584** x 2 | **03584** x 2 + **03586** x 2 | **03584** x 2 | **03584** x 2 + **03586** x 2 | **03584** x 2 | | **03584** x 2 + **03586** x 2 | |
| M10 screw (not supplied) | 4 | 6 | 4 | 6 | 4 | | 6 | |
| Side panels IP55 mandatory for IP30 and IP55 configurations | **08755** | **08765** | **08755** | **08765** | **08755** | **08765** | **08755** | **08765** |

## Enclosures

| Mounting | Lifting rings | Framework stabiliser kit |
|---|---|---|
| |  Dd381541.ai |  DD383846.ai |
| Cat. no. | **08700** | **08701** |
| Characteristics | ■ Set of four lifting rings screwed to the framework.<br>■ Use a set of lifting rings for each framework (W = 650 and 800 mm) containing devices.<br>■ When two cubicles with devices have been combined, use a lifting beam.<br>■ can be installed and removed without removing the roof<br>■ even if they are left attached, the switchboard conserves its original degree of protection.<br>  Dd381542.eps<br>  Dd381543.eps<br>Positions of the lifting rings for two combined cubicles containing devices.<br>In this case, a liftingbeam must be used. | ■ Made up of four blocks under the framework<br>■ Suitable for all types of cubicles, whatever the width and depth<br>■ Increases the stability of the cubicle during mounting of devices<br>■ Makes possible cubicle handling using a pallet mover or a forklift<br>■ Protects the front, side and rear cover panels during handling<br>■ Can be reused. |

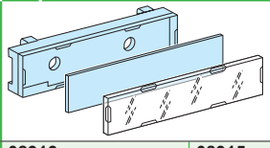
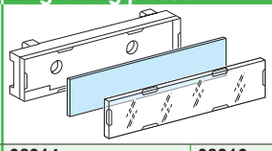
| Mounting | Levelling kit | False floor fixing kit | Floor/wall fixing kit |
|---|---|---|---|
| |  Dd381549.eps<br>  Dd381550.ai |  Dd381547.ai |  Dd381548.ai<br>  Dd381553.ai |
| Cat. no. | **08702** | **08703** | **08704** |
| Characteristics | ■ Set of 4 fixtures<br>■ can be installed at any time, even when the cubicle is already in position<br>■ maximum adjustment range = 10 mm<br>■ secures the cubicle to the floor.<br>  Dd381551.eps<br>Recommended positions of the fixtures for combined cubicles. | ■ Made up of four independent clamps<br>■ clamp on:<br>□ “U” sections: H = 175 mm, W = 70 mm<br>□ “I” sections: H = 120 mm, W = 64 mm<br>■ clamp travel = 11 mm.<br>  Dd381552.ai | ■ Made up of two brackets and four clamps<br>■ can be used to offset the switchboard fixing points for easier access<br>■ the wall brackets ensure sufficient wall clearance (at least 30 mm) for natural convection.<br>  Dd381554.eps |

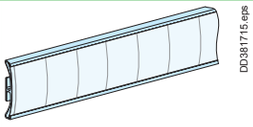
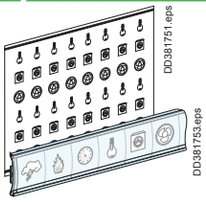
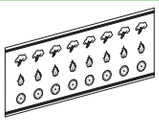
## Front plate accessories, blanking plates

| Used for | Front plate hinge kit | Blanking plates | | | |
|---|---|---|---|---|---|
| |  |  | |  | |
| | | For modular devices | | For Compact NSX100/250 | |
| Cat. no. | **08585** (1) | **03220** | **03221** | **03249** | **03222** |
| Characteristics | ■ Set of 2 hinges<br>■ 1 earthing braid | ■ Strip<br>■ H = 46 mm, L = 1 m | ■ Divisible<br>■ Set of 4<br>■ H = 46 mm, L = 90 mm<br>■ White RAL 9001 | ■ Divisible<br>■ H = 85 mm, L = 147 mm<br>■ Blanc RAL 9001 | ■ Divisible + electronic trip unit |

**(1)** With a power voltage > SELV (12 V), devices on front plates must be mounted with a front plate hinge kit (cat no. 08585). The earthing braid must be connected to the front plate frame support (cat no. **08566**, **08564**, **08560**, **08562** or else).
With a power voltage > SELV (12 V) and a supply protection > 16 A, in addition to the preceding rule, the front plate frame support (cat no. **08566**, **08564**, **08560**, **08562** or else) must be connected to the cubicle frame, using an earthing braid (cat no. **08910** or **08911**). (standard NF / EN 61439-1 2011 edition).

## Identification labels

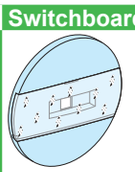
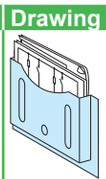
| Used for | Clip-on labels | | | Engraving plates | | |
|---|---|---|---|---|---|---|
| |  | | |  | | |
| Cat. no. | **08913** | **08915** | **08917** | **08914** | **08916** | **08918** |
| Dimensions (mm) | 18 x 35 | 18 x 72 | 25 x 85 | 18 x 35 | 18 x 72 | 25 x 85 |
| Characteristics | ■ Set of 12.<br>■ The clip-on support is supplied with a paper label and a transparent cover.<br>■ It clips onto the front plate horizontally or vertically and can be screwed to any support (plain door, plain front plate, etc.). | | | ■ Set of 12.<br>■ Simply replace the paper labels. | | |

| Used for | Adhesive labels | | | | Symbol sheets | |
|---|---|---|---|---|---|---|
| |  | | | |  |  |
| Cat. no. | **08905** | **08906** | **08903** | **08904** | **13735** | **13736** |
| Dimensions (mm) | 24 x 180 | 36 x 180 | 24 x 432 | 36 x 432 | | |
| Characteristics | ■ Set of 12.<br>■ The adhesive label holders are supplied with a paper label and a transparent cover | | | | ■ Set of ten symbol sheets.<br>■ Standard symbols:<br>□ loads: sockets, lights, heating units, etc.<br>□ rooms: bedroom, bathroom, etc. | ■ Set of ten symbol sheets<br>■ Special symbols:<br>□ loads: lightning arrestor, gate, swimming pool, etc.<br>□ rooms: technical room, computer room, etc |

## Adhesive labels for mimic diagrams

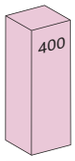
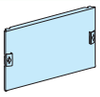
| Used for | Lines | Outgoing arrows | Incoming arrows | Transformers | Earth symbols |
|---|---|---|---|---|---|
| Cat. no. | **01005** | **01006** | **01007** | **01008** | **01009** |
| Characteristics | 900 mm long and 7 mm thick<br>Set of 10 | | | | |

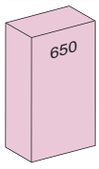
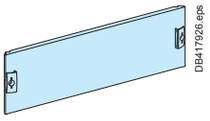
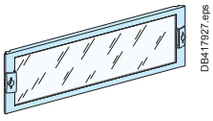
## Accessories

| Used for | Switchboard identification plate | Drawing holder | Touch-up accessories |
|---|---|---|---|
| |  |  | |
| Cat. no. | **08900** | **08963** | **08961** |
| Characteristics | Color: RAL 9001 | Color: RAL 9001 | Color: RAL 9001 |

# Reserve space

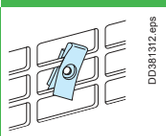
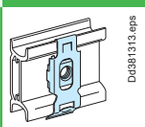
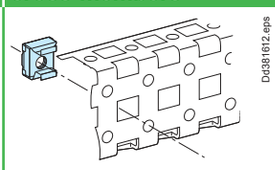
## Others

| | Reserve space | | | | | | | |
|---|---|---|---|---|---|---|---|---|
|   |   | | | | | | | |
| | **Plain front plate W = 250 mm** | | | | | | | |
| | **H = 50 mm** | **H = 100 mm** | **H = 150 mm** | **H = 200 mm** | **H = 250 mm** | **H = 300 mm** | **H = 450 mm** | **H = 600 mm** |
| [No. of vertical mod.] | [1] | [2] | [3] | [4] | [5] | [6] | [9] | [13] |
| Catalogue number | **03811** | **03812** | **03813** | **03814** | **03815** | **03816** | **03817** | **03722** |
| | | | | | | | | |
| | **Transparent front plate W = 250 mm** | | | | | | | |
| [No. of vertical mod.] | - | - | - | [4] | - | [6] | [9] | - |
| Catalogue number | - | - | - | **03352** | - | **03353** | **03354** | - |

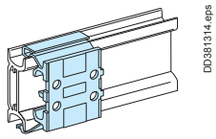
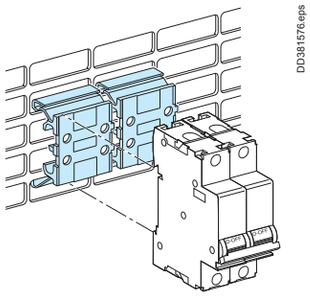
| | Reserve space | | | | | | | |
|---|---|---|---|---|---|---|---|---|
|   |   | | | | | | | |
| | **Plain front plate W = 500 mm** | | | | | | | |
| | **H = 50 mm** | **H = 100 mm** | **H = 150 mm** | **H = 200 mm** | **H = 250 mm** | **H = 300 mm** | **H = 450 mm** | **H = 600 mm** |
| [No. of vertical mod.] | [1] | [2] | [3] | [4] | [5] | [6] | [9] | [12] |
| Catalogue number | **03801** | **03802** | **03803** | **03804** | **03805** | **03806** | **03807** | **03808** |
| |   | | | | | | | |
| | **Transparent front plate W = 500 mm** | | | | | | | |
| [No. of vertical mod.] | - | - | - | [4] | - | [6] | [9] | [12] |
| Catalogue number | - | - | - | **03342** | - | **03343** | **03344** | **03345** |

Others

## Clip-nuts

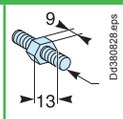
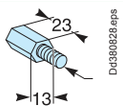
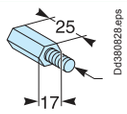
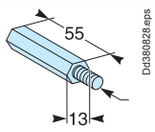
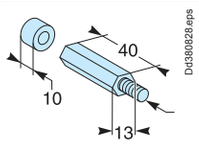
| Mounting | For slotted mounting plates | For modular rails | For lateral and longitudinal cross-members |
|---|---|---|---|
| |  DD381312.eps |  Dd381313.eps |  Dd381612.eps |
| M4 | **03180** | **03164** | **-** |
| M5 | **03181** | **03165** | **-** |
| M6 | **03182** | **03166** | **03194** |
| Characteristics | Set of 20<br>Mounting of various devices | Set of 20<br>Mounting of various devices | Set of 20<br>Mounting in cubicles |

## Pratic raiser

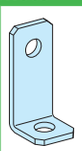
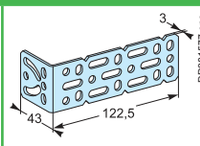
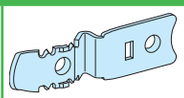
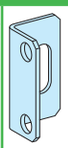
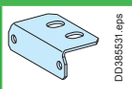
| Raiser | |
|---|---|
| |  DD381314.eps  DD381576.eps |
| Catalogue number | **04224** |
| Characteristics | Set of 5<br>Height 10 mm, wide 27 mm<br>Color: RAL 9001, insulating material |

F

## Hexagonal spacers

| Hexagonal spacers | | | | | |
|---|---|---|---|---|---|
| |   Dd380828.eps |   Dd380828.eps |   Dd380828.eps |   Dd380828.eps |   Dd380828.eps |
| M5 | **03185** | **03186** | **-** | **03187** | **-** |
| M6 | **03195** | **03196** | **03198** | **03197** | **-** |
| M8 | **-** | **-** | **-** | **-** | **03199** |
| Characteristics | Height: 9 mm<br>Set of 4 | Height: 23 mm<br>Set of 4 | Height: 25 mm<br>Set of 4 | Height: 55 mm<br>Set of 4 | Height: 40 + 10 mm<br>Set of 4 |

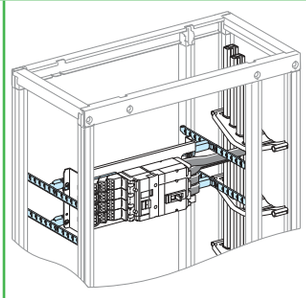
## Universal angle brackets

| Universal angle brackets | | | | | |
|---|---|---|---|---|---|
| |  DD383657.eps |   DD381577.eps |  DD382920.eps |  DD383078.eps |  DD385531.eps |
| Catalogue number | **03580** | **03581** | **03582** | **03583** | **04667** |
| Characteristics | Set of 4 + vis | Set of 2 | 6 universal inserts | Set of 6 | Set of 2 |

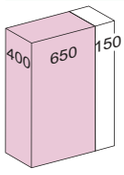
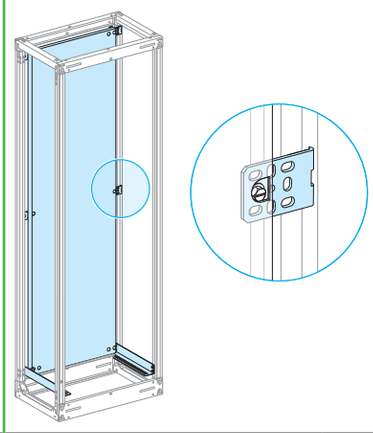
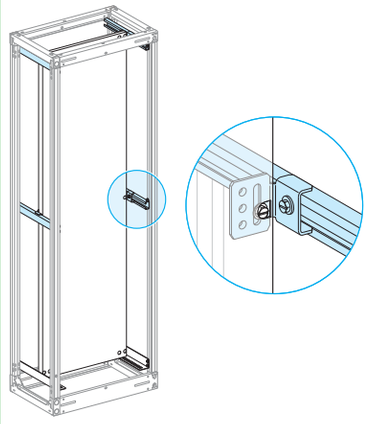
# Universal adapter
## Prisma G adapter
## Mounting on a plain backplate

Others

## Prisma G adapter

| | W = 500 | W = 250 |
|---|---|---|
| |  DD3381603.eps | |
| Catalogue number | **03595** | **03596** |
| Characteristics | For installation in a device compartment W = 650 mm | For installation in a device compartment W = 400 mm |
| | Kit with four lateral and two longitudinal cross-members that can be depth adjusted.<br>Installation of components, notably the functional mounting plates, the Linergy BW insulated busbars and the 400 A rear Linergy BS busbars. | |

## Mounting on a plain backplate

| Mounting | Plain backplate | | Slide rails + angle brackets |
|---|---|---|---|
|   |  Dd3381174.ai | |  Dd3381309.ai |
| Catalogue number | **03570** | **03569** | **03593** |
| Characteristics | 36 modules 510 mm wide<br>for installation in a device compartment W = 650 mm or W = 800 mm (650 + 150) | 36 modules 660 mm wide<br>for installation for a cubicle W = 800 mm | Set of 2<br>for the installation and depth adjustment |

**Note:** the adapter **03595** can be used for all mounting plates, except **03030**.
The Linergy BW busbars can be positioned to the left, middle or right of the modular row.
Depth adjustable, the busbars can be supplied by a Compact INS-INV switch-disconnector or a fixed/withdrawable Compact NSX circuit breaker, whatever the type of operating system (toggle, rotary handle, motor mechanism).
For Linergy BW busbars, order two adapters (**03595** x 2).

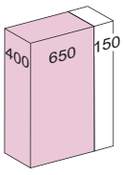
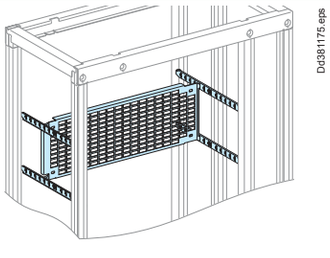
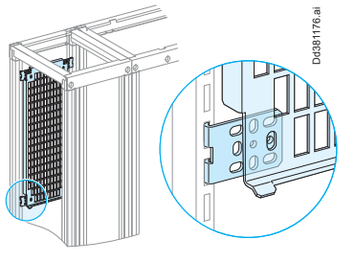
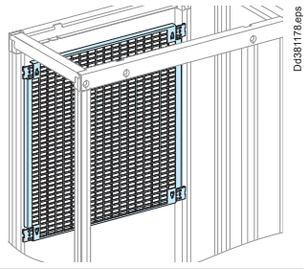
# Others devices

## Mounting on a slotted plate

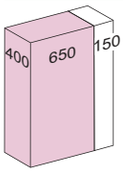
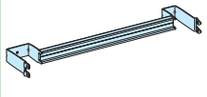
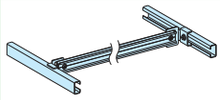
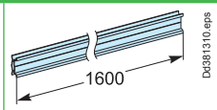
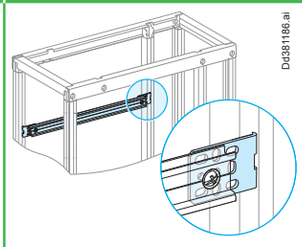
## Mounting on a modular rail



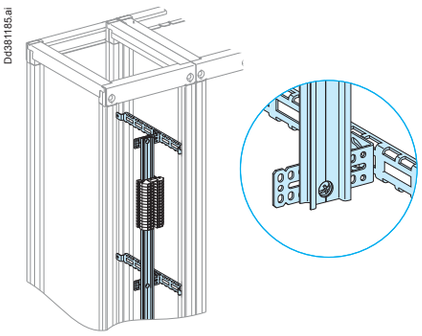
## Mounting on a slotted plate

| Mounting | Slotted mounting plates + lateral cross-members | | Slotted mounting plate without lateral cross-members |
|---|---|---|---|
|  |   | |  |
| Catalogue number | **03571** | **03572** | **03574** |
| Number of vertical modules | 4 | 6 | 12 |
| Height (mm) | 200 | 300 | 600 |
| 2 universal angle brackets | - | 2 x **03581** | - |
| Characteristics | **Installation**<br>■ either in the device zone on the four lateral cross-members (depth adjustment is possible)<br>■ or vertically at the rear of a cable compartment, W = 300 mm (03571)<br>or W = 400 mm (03572). | | Galvanised, slotted metal mounting plate<br>Supplied with four angle brackets, they connect directly to the rear of a framework, W = 650 mm or 800 mm (650 + 150 mm)<br>The mounting plate can also be installed using two sets of two slide rails (03593 x 2) for depth adjustment. |

## Mounting on a modular rail

| Mounting | Modular rails | | | Modular rail W = 650 mm |
|---|---|---|---|---|
|  |  |  |  |  |
| Catalogue number | **03401** | **03402** | **04226** (1) | **03590** |
| Characteristics | Useful length: 432 mm | Useful length: 432 mm<br>Modular rail (adjustable) | Set of 2 rails, useful length: 1600 mm with 4 holes, Ø 6.4 mm, 450 mm between centres | W = 650 mm<br>Supplied with two angle brackets for mounting on the framework |

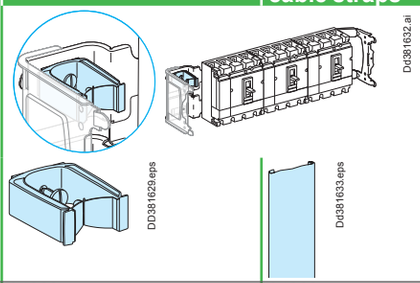
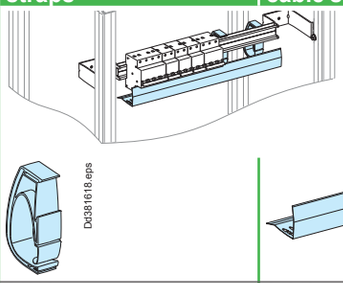
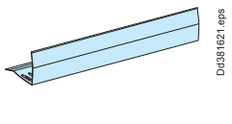
**(1)** Example of a Linergy busbars installed in a busbar compartment, on a modular rail cat. no. **04226** + **03581** + **08794**: *> page G-40*.



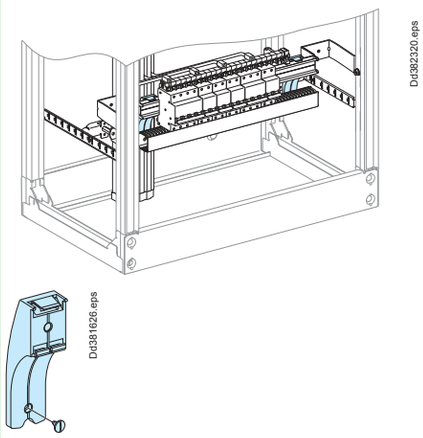
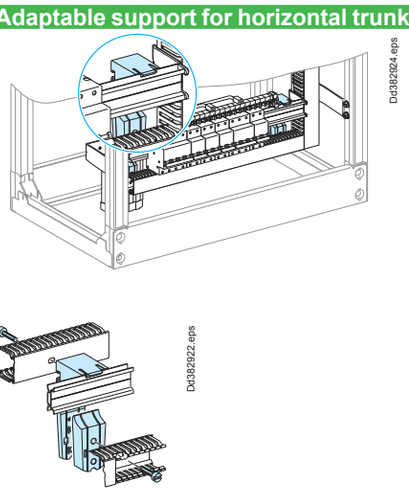

F

Others

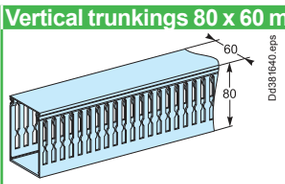
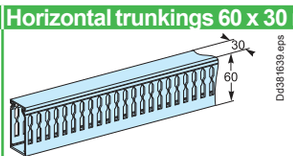
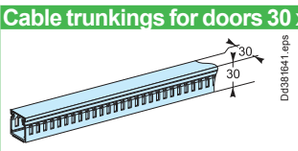
## Straps and covers

| Type | Vertical cable straps | Covers for vertical cable straps | Horizontal cable straps | Covers for horizontal cable straps |
|---|---|---|---|---|
| |  |  |  |  |
| Catalogue number | **04262** | **04263** | **04239** | **04243** |
| Characteristics | Set of 12 | Set of 2 x 1 m | Set of 12<br>Horizontal cable straps have the same capacity as 60 x 30 mm trunking. | Set of 4 covers of 430 mm |

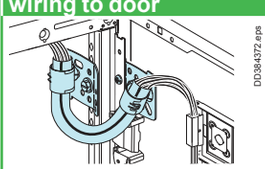
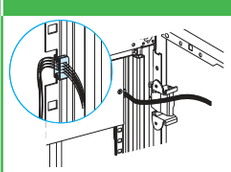
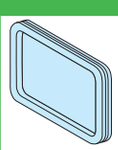
## Trunking supports

| Type | Horizontal trunking supports | Adaptable support for horizontal trunking |
|---|---|---|
| |  |  |
| Catalogue number | **04255** | **04256** |
| Characteristics | Set of 12 | Set of 10<br>Aligns the cover of a horizontal trunking section (H = 60 or 80 mm) with that of a vertical trunking section (H = 80 mm)<br>**Note:** not designed for use with Pack enclosures. |

## Trunkings

| Type | Vertical trunkings 80 x 60 mm | Horizontal trunkings 60 x 30 mm | Cable trunkings for doors 30 x 30 mm |
|---|---|---|---|
| |  |  |  |
| Catalogue number | **04267** | **04257** | **04233** |
| Characteristics | Set of 18<br>L = 2000 mm | Set of 4<br>L = 450 mm<br>Supplied with supports | Set of 30 adhesive trunkings<br>30 x 30 mm<br>L = 2000 |

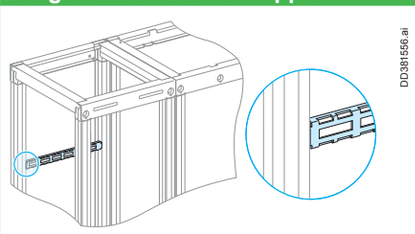
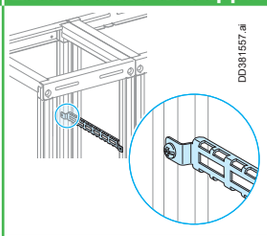
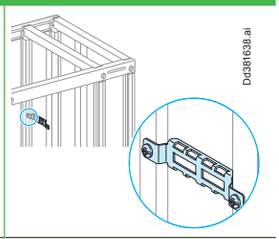
## Cable trunkings for doors, grommets

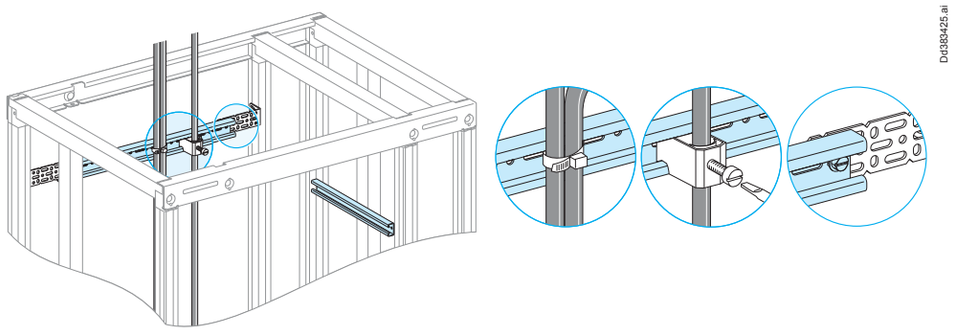
| Type | Flexible trunkings for wiring to door | Grommets | | |
|---|---|---|---|---|
| |  |  |  | |
| Catalogue number | **04235** | **04234** | **01215** | **08748** |
| Characteristics | W = 500 mm, inner Ø = 19 mm | Set of 10.<br>For wiring through front. | 5 square grommets 70 x 40. | 50 grommets Ø22 mm. |

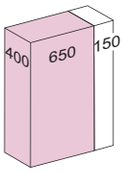
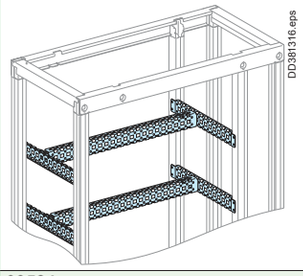
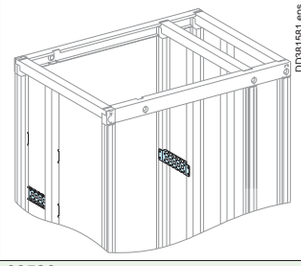
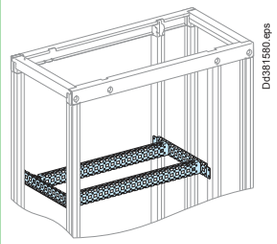
# Connection accessories

## Cable-tie supports, lateral and longitudinal cross-members



| Mounting | Longitudinal cable-tie supports | | | | Lateral cable-tie supports | |
|---|---|---|---|---|---|---|
| |   | | | |   |   |
| Catalogue number | **08773** | **08774** | **08776** | **08778** | **08794** | **08796** |
| Characteristics | W = 300 mm | W = 400 mm | W = 650 mm | W = 800 mm | D = 400 mm | D = 200 mm |
| | Set of 4, supplied with the necessary hardware for connection to the framework. Cable-tie supports are used to correctly position the cables in the connection compartment. | | | | For frameworks that are 400 mm deep, assign a 400 mm deep support to a 200 mm deep support. | |

| Mounting | C-shaped cable-tie supports |
|---|---|
| |   |
| Catalogue number | **08783** |
| Characteristics | C-shaped 1600 mm long support, supplied with hardware for mounting on universal angle brackets and modular rails, that can be cut to length as needed.<br>Can be secured to:<br>■ universal angle bracket 03581 (for the longitudinal support)<br>■ universal angle bracket 03582 (for the lateral support)<br>■ modular rail 03593 (for depth adjustment). |

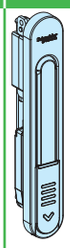
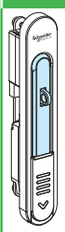
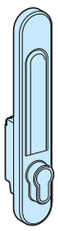
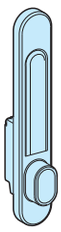
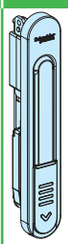
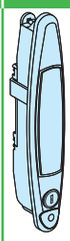
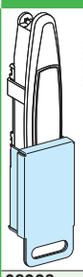
| Mounting | Lateral cross-members | | Longitudinal cross-members |
|---|---|---|---|
|   |   |   |   |
| Catalogue number | **03584** | **03586** | **03587** |
| Characteristics | Set of 2<br>W = 400 mm: for frameworks that are 400 mm deep | Set of 2<br>W = 200 mm: can be added to the 400 mm crossmembers for frameworks that are 600 mm deep. They can also be installed separately. | Set of 2<br>W = 650 mm<br>They are connected directly to the framework (W = 650 mm). They can also be mounted on the lateral cross-members. |
| | Metallics, they offer numerous positioning holes for easier installation. | | |

F

# Door handles and locks



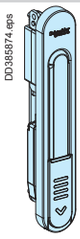
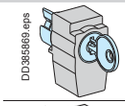
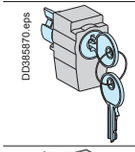
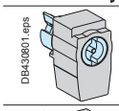
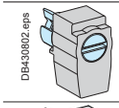
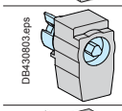
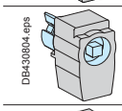
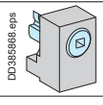
## Handles and padlocking

| | Rotary handle | Padlocking hole dia 8 mm | EURO handle | ASSA/ ABLOY handle | RAL 7016 rotary handle | RAL 7016 handle | Padlocking |
|---|---|---|---|---|---|---|---|
| |  DD385874.eps |  DD385903.eps |  Dd119386.ai |  Dd119387.ai |  DD385874.eps |  DD383883.eps |  DD383885.eps |
| Cat. no. | **01219** | **07938** | **07932** | **07933** | **07931** | **08931** | **08938** |
| Characteristics | New rotary handle for Prisma P | For new rotary handle | Supplied without barrel | Supplied without barrel | Supplied with barrel lock (key no. 405) RAL 7016 | Supplied with barrel lock (key no. 405) RAL 7016 | For existing handle |

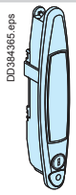
## Barrel locks, inserts

The barrel locks and inserts below can be mounted on handle 08931 and on all the door handles of the Prisma P range after removing the standard barrel lock (key no. 405).

### Barrels & inserts for rotary handle

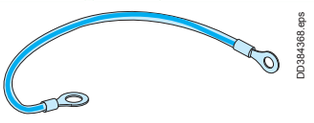
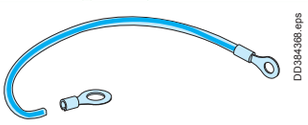
| | Characteristics | | Catalogue numbers |
|---|---|---|---|
|  DD385874.eps |  DD385869.eps 1 key no. 405 | | **07940** |
| |  DD385870.eps 2 keys no. 455 | | **07941** |
| | 2 keys no. 1242E | | **07942** |
| | 2 keys no. 3113A | | **07943** |
| | 2 keys no. 2433A | | **07944** |
| | 2 keys no.2432E | | **07956** |
| |  DB430801.eps DIN double bar insert | | **07945** |
| |  DB430802.eps Screwdriver slot insert | | **07946** |
| |  DB430803.eps Male triangle insert | 6.5 mm | **07947** |
| | | 7 mm | **07948** |
| | | 8 mm | **07949** |
| | | 9 mm | **07950** |
| |  DB430804.eps Male square insert | 6 mm | **07951** |
| | | 7 mm | **07952** |
| | | 8 mm | **07953** |
| |  DD385868.eps Female square insert | 6 mm | **07955** |

### Barrels & inserts for handle

| | Characteristics | | Catalogue numbers |
|---|---|---|---|
|  DD384365.eps | DD384366.eps 1 key no. 405 | | **08940** |
| | DD381203.eps 2 keys no. 455 | | **08941** |
| | 2 keys 1242E | | **08942** |
| | 2 keys 3113A | | **08943** |
| | 2 keys 2433A | | **08944** |
| | 2 keys 2432E | | **08956** |
| | DD384366.eps DIN double bar insert | | **08945** |
| | DD384366.eps Screwdriver slot insert | | **08946** |
| | DD384366.eps Male triangle insert | 6.5 mm | **08947** |
| | | 7 mm | **08948** |
| | | 8 mm | **08949** |
| | | 9 mm | **08950** |
| | DD384366.eps Male square insert | 6 mm | **08951** |
| | | 7 mm | **08952** |
| | | 8 mm | **08953** |
| | DD384366.eps Female square insert | 6 mm | **08955** |

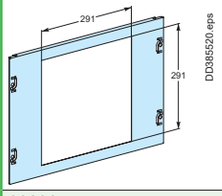
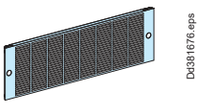
## Earthing braid

Earthing braid is used to earth a door or wicket door with devices.

| | Earthing braid, 6 mm² | Earthing wire, 6 mm² |
|---|---|---|
| |  DD384368.eps |  DD384368.eps |
| Catalogue numbers | **08910** | **08911** |
| Characteristics | Equipped with a 4 mm diameter lug at one end and a 6 mm diameter lug on the other. W = 200 mm. | Equipped with a 5 mm diameter lug at one end and a 6 mm diameter lug on the other. W = 200 mm |

# Ventilation accessories
## Panel installation

Others

| Front plate | For fan and grill | Ventilated front plate | |
|---|---|---|---|
| |   |   | |
| Cat. no. | **03890** | **03891** | **03895** |
| Height | 7 modules<br>H = 350 mm | 1 vertical module,<br>H = 50 mm | 3 vertical modules,<br>H = 150 mm |
| Characteristics | Front plate with cut-out.<br>Degree of protection: IP30. | Degree of protection: IP30.<br>Located at the top and bottom of the switchboard, ventilated front plates facilitate natural convection in the switchboard. | |
| Surface area of the openings | - | 80 $cm^2$ | 250 $cm^2$ |

| Forced-air ventilation | | 38 $m^3$/hr | 85 $m^3$/hr | 165 $m^3$/hr | 300 $m^3$/hr | 560 $m^3$/hr | 850 $m^3$/hr |
|---|---|---|---|---|---|---|---|
| | | | | | | | |
| Cat. no. | | **NSYCVF38M230PF** | **NSYCVF85M230PF** | **NSYCVF165M230PF** | **NSYCVF300M230PF** | **NSYCVF560M230PF** | **NSYCVF850M230PF** |
| Unimpeded throughput via filter ($m^3$/hr) | 50 Hz | 38 | 85 | 165 | 300 | 562 | 838 |
| | 60 Hz | 39 | 98 | 193 | 350 | 586 | 803 |
| Throughput via outlet grill ($m^3$/hr) | 50 Hz | 25 | 63 | 153 (1) | 260 | 473 | 718 |
| | 60 Hz | 26 | 72 | 171 (1) | 307 | 477 | 568 |
| Power drawn (W) (max. intensity (A)) | | 4,5/4,8 (0,16/0,17) | 17/15 (0.121/0.097) | 16.3/14.3 (0.12/0.94) | 36/37 (0.171/0.16) | 68/85 (0.52/0.370) | 150/195 (0.65/0.85) |
| Noise level (dB (A)) | | 40/41 | 46/49 | 50/51 | 55/56 | 59/59 | 76/75 |
| External dimensions (cutting) | | 137 x 117 x 49 (92 x 92) | 170 x 150 x 62 (125 x 125) | 268 x 248 x 104 (223 x 223) | 268 x 248 x 116 (223 x 223) | 336 x 316 x 161 (291 x 291) | 336 x 316 x 162 (291 x 291) |
| Weight (kg) | | 0,220 | 0.780 | 1.140 | 1.3 | 3.2 | 4.1 |
| Operating temperature | | -10...+70 °C | -20...+60 °C | -20...+60 °C | -10...+70 °C | -15...+60 °C | -15...+60 °C |

| Outlet grill | | | | | | | |
|---|---|---|---|---|---|---|---|
| Cat. no. | | **NSYCAG92LPF** | **NSYCAG125LPF** | **NSYCAG223LPF** | **NSYCAG223LPF** | **NSYCAG291LPF** | **NSYCAG291LPF** |

| Filters for outlet grill | | | | | | |
|---|---|---|---|---|---|---|
| | | | | | | |
| G2 M1 standard filters | **NSYCAF92** | **NSYCAF125** | **NSYCAF223** | **NSYCAF223** | **NSYCAF291** | **NSYCAF291** |
| G3 M1 fine filters | - | **NSYCAF125T** | **NSYCAF223T** | **NSYCAF223T** | **NSYCAF291T** | **NSYCAF291T** |
| Characteristics | Set of 5 (for replacement)<br>Synthetic filters | | | | | |

| EMC cover | | | | | | |
|---|---|---|---|---|---|---|
| Cat. no. | - | **NSYCAP125LE** | **NSYCAP223LE** | **NSYCAP223LE** | **NSYCAP291LE** | **NSYCAP291LE** |

**(1)** For 2 outlet grills 161 (50 Hz) / 175 (60 Hz).
**Nota :** For other usage voltage like 50V or 110V, see Universal Enclosures catalog, cat. no. UE12MK01EN.

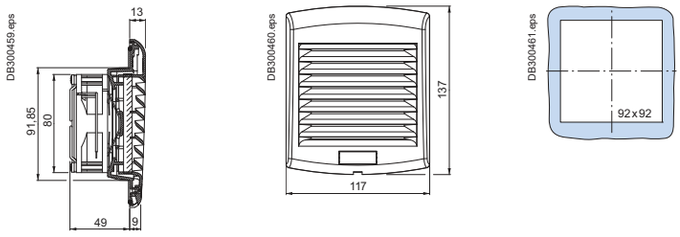
F

# Ventilation accessories
## Panel installation

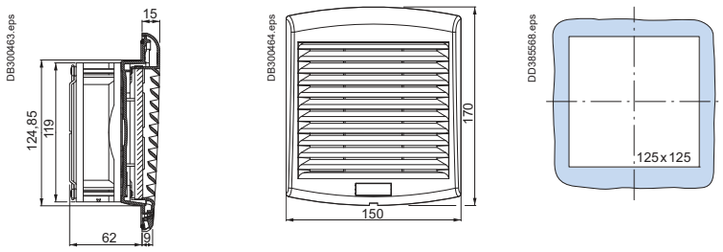
Others

### Dimensions

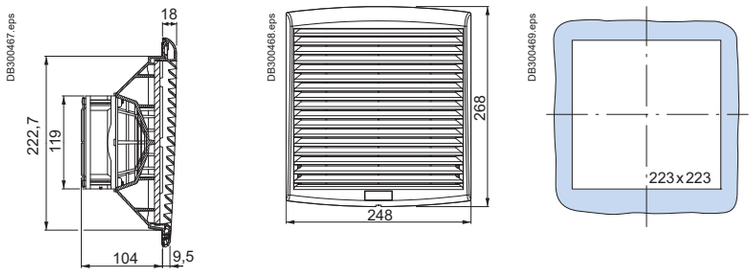
**NSYCVF38M230PF**



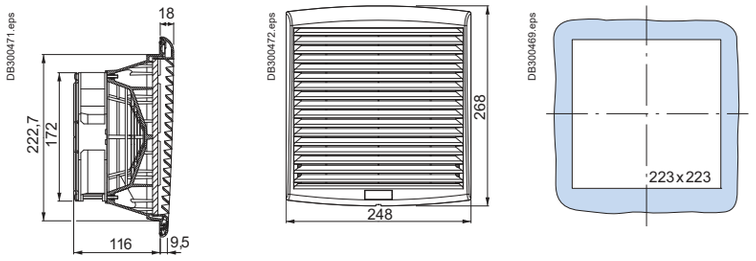

**NSYCVF85M230PF**




**NSYCVF165M230PF**

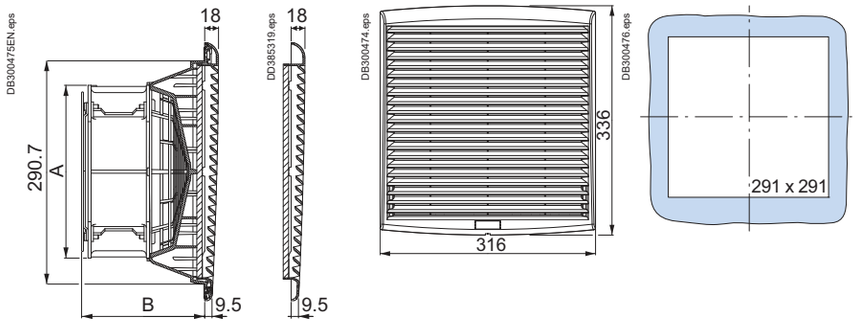



**NSYCVF300M230PF**



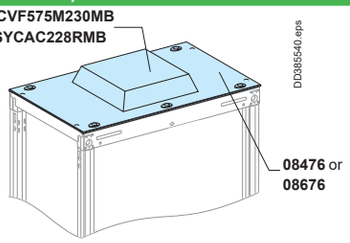
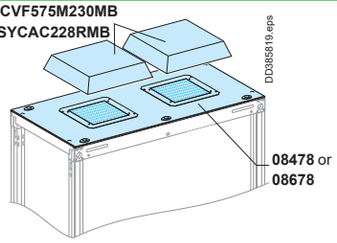

**NSYCVF560M230PF - NSYCVF850M230PF**

| A | B | Cat. no. |
|---|---|---|
| 225 | 160.5 | **NSYCVF560M230PF** |
| 280 | 192 | **NSYCVF850M230PF** |



# Ventilation accessories
## Roof installation



| Roof ventilation | Width 650, IP31 | | Width 800, IP54 | |
|---|---|---|---|---|
| | **NSYCVF575M230MB** or **NSYCAC228RMB**<br>  | | 2 x **NSYCVF575M230MB** or 2 x **NSYCAC228RMB**<br>  | |
| **Roof with a cut-out** | **D = 400 mm** | **D = 600 mm** | **D = 400 mm** | **D = 600 mm** |
| Catalogue numbers | **08476** | **08676** | **08478** | **08678** |
| Characteristics | IP31 | IP31 | IP54 | IP54 |
| **Forced ventilation top hood with fan** | | | | |
| Catalogue numbers | **NSYCVF575M230MB** | | | |
| Characteristics | **Fan characteristics**<br>■ Power: 85 W<br>■ Input voltage: 230 V<br>■ Throughput via outlet grill :<br>□ with 1 outlet grill: 350 $m^3$/hr<br>□ Free with filter: 575 $m^3$/hr<br>□ Finishing parts: painted with epoxy-polyester resin, textured RAL 9003 white<br>■ Noise level: 64 dB. | | | |
| **Natural ventilation top hood without fan** | | | | |
| Catalogue numbers | **NSYCAC228RMB** | | | |
| Characteristics | ■ Material: steel<br>■ Finishing parts: painted with epoxy-polyester resin, textured RAL 9003 white<br>■ IP54<br>■ Fixing to the top by means of caged nuts and special screws | | | |
| Air-flow cross section = 304 $cm^2$ without electrical fan | | | 2 x 304 $cm^2$ | |

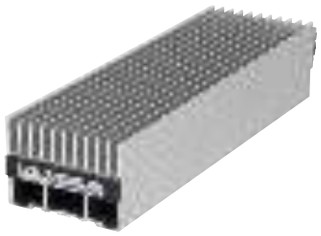
F

# Ventilation accessories
## Heat

Others

## Resistors

Resistors prevent condensation, corrosion and superficial leakage currents.They maintain a positive temperature in the enclosures and cubicles when external temperatures drop very low.
- Install heaters according to the desired power level at the bottom of the enclosure
- Respect a safety area of a least 10 cm around the device
- The heaters must be installed with a thermal controller to control the temperature or the humidity inside the enclosure.
- The enclosure must be sealed to prevent the entry of air from the outside.
- An electrical protection device must be installed on the supply side of the unit.
- Surface temperature limited to 75 °C when the ambient temperature is -5 °C.
- Heaters equipped with a power cable with a length of 500 mm with silicon insulation, or with a connection terminal block.

| | Aluminium PTC resistors | | | | | Resistive heaters with fan | |
|---|---|---|---|---|---|---|---|
| |  PB501146_32.eps | | | | | PB501025.eps | |
| | Power cord | | Terminal block | | | Terminal block | |
| Cat. no. | NSYCR10WU2 | NSYCR20WU2 | NSYCR55WU2 | NSYCR100WU2 | NSYCR150WU2 | NSYCR250W230VV | NSYCR400W230VV |
| Power rating (W) | 10 | 25 | 55 | 90 | 150 | 250 | 400 |
| Voltage (V) | 110-250 AC | 110-250 AC | 110-250 AC | 110-250 AC | 110-250 AC | 230 AC | 230 AC |
| Characteristics | ■ Vertical mounting.<br>■ Aluminium case with fins.<br>■ Temperature:<br>□ turns off at 60 °C,<br>□ turns on at 25-30 °C (temperature of the resistor itself).<br>■ Equipped with a symetrical | | | | | ■ Vertical mounting.<br>■ Aluminium case with fins.<br>■ Temperature:<br>□ turns off at 60 °C,<br>□ turns on at 25-30 °C (temperature of the resistor itself).<br>■ Equipped with a symetrical | |

## Thermofan

| | Thermofan |
|---|---|
| | PB501154_R.eps |
| | Terminal block |
| Cat. no. | NSYCRP1W230VTVC |
| Power rating (W) | 400/550 |
| Voltage (V) | 230 AC |
| Characteristics | ■ Combination of a resistance heater and an axial motor to ensure uniform heating of the enclosure.<br>■ Fixing by clip on a DIN rail.<br>■ Thermostat adjustable from 0…+60 °C.<br>■ Visual operation indicator. |

## Regulating

The thermostat can control the temperature inside electrical switchboards in conjunction with heating resistors and fans.
This thermostat can control the activation of a fan and a heater and regulate their temperature independently.

| | Mecanical thermostats | | Electronical thermostats | | |
|---|---|---|---|---|---|
| | PB501172_R.eps | PB501162_30.eps | PB502513.eps | | |
| | **Thermostat with OF contact** | **Double thermostat** | **Electronical thermostat** | **Electronic hygrotherm** | **Electronic hygrostat** |
| Cat. no. | **NSYCCOTHI** | **NSYCCOTHD** | **NSYCCOTH230VID** | **NSYCCOHYT230VID** | **NSYCCOHY230VID** |
| Colour of the button | Black | ■ Red: with normally closed contact (NC) for controlling the resistance heaters.<br>■ Blue: with normally open contact (NO) for controlling the fans, signalling systems or alarms. | - | - | - |
| Contact | Inverse, forced rupture | 1 with normally closed contact (NC),<br>1 with normally open contact (NO),<br>forced rupture | Free with zero potential | | |
| Internal sensor element | Bimetal | | Internal temperature sensor | - | Internal humidity sensor |
| Switching capacity | 250 V AC ; 10 A (resistive load) | 250 V AC ; 10 A<br>120 V AC ; 15 A<br>250 V AC/120 V AC : 2 A (inductive load cos Ø= 0,6)<br>30 W DC | - | - | - |
| Max interrupting capacity with direct current | 250 V AC 4 A (charge inductive Ø = 0,6)<br>30 W DC | - | - | - | - |
| Connection | Four 2.5 mm² terminals | Six 2.5 mm² terminals | 2 x 2.5 mm² (input voltage) + 2 relays (2 x 2.5 mm² + 2 x 2.5 mm²) | 2 x 2.5 mm² (input voltage) + 2 relays (2 x 2.5 mm² + 2 x 2.5 mm²) | 2 x 2.5 mm² (input voltage) + 1 relay (2 x 2.5 mm²) |
| Dimensions (mm) | 67 x 50 x 44 | 60 x 33 x 43 | - | - | - |
| Weight (g) | 100 | 40 | - | - | - |
| Hysteresis | 7° K | 7° K | Programmed 2 °K | 3 % | 3 % |
| Temperature setting range | +5...+60 °C | 0...+60 °C | -40 °C…+80 °C | -40 °C…+80 °C | -40 °C…+80 °C, humidity setting range:20 %…80 % |
| Characteristics | ■ Ingress protection rating: IP20.<br>■ Contact resistance: < 10 mΩ.<br>■ Service life: > 100 000 cycles.<br>■ Fixing:by clip on a 35-mm DIN rail<br>■ Case : plastic UL 94 V-0, light grey.<br>■ Operating temperature : -20...+80 °C (-4...+176 °F).<br>■ Display : °C/°F.<br>■ Max. command intensity: (NC) 5 A (NO) 10 A. | | ■ Ingress protection rating: IP20.<br>■ Certification : UL/UR.<br>■ Fixing: 4 different methods: on DIN rail, Spacial SF profile, on VDI cross-rail or on mounting plate<br>■ Boîtier : plastique UL 94 V-0, gris clair.<br>■ Operating temperature : -40 °C…+80 °C.<br>■ Display : °C/°F.<br>■ Max. command intensity: 8 (5) A 230 V AC / 5 A 30 V DC. | | |

| | PTC external temperature sensor (double insulation) |
|---|---|
| | PB501175_R.eps |
| Cat. no. | **NSYCCASTE** |
| Characteristics | ■ Sensor operation or reading range: -30 °C…+80 °C.<br>■ IP67.<br>■ Thermostat installation tips: the thermostat should be installed at the top of the enclosure (the hottest place). See the various operating modes of each thermostat to choose the one that best meets your needs.<br>■ Hygrostat installation tips: the hygrostat should be installed at the bottom of the enclosure. 60 % RH is the optimum value in the enclosure. |

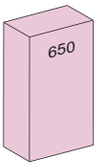
## Thermal management of switchboards

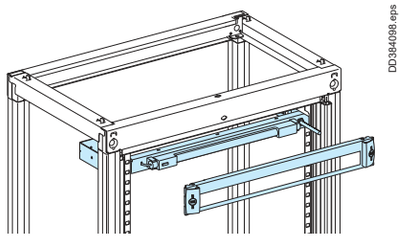
*> page C-9.*

Others

## Lighting system

### Fixed lighting

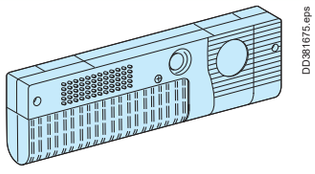



| | |
|---|---|
| Catalogue number | **08964** |
| Presentation | This system is generally used to illuminate the front of a switchboard.<br>■ The kit is made up of:<br>□ a base<br>□ a neon tube<br>□ a front plate with cut-out (1 module)<br>□ a door contact. |
| Characteristics | ■ Supply voltage: 220/240 V<br>■ Power rating: 8 W<br>■ Height: 1 vertical module (50 mm) |

## Switchboard portable lamp

### Switchboard portable lamp




| | |
|---|---|
| Catalogue number | **08965** |
| Presentation | ■ Lamp with a magnetic base for installation behind a door or directly on the cubicle framework.<br>■ Supplied without a power cord.<br>■ H x W x D: 90 x 345 x 42 |
| Characteristics | ■ Supply voltage: 220/240 V<br>■ Power rating: 11 W<br>■ Lamp: picoline OSRAM 8W (supplied)<br>■ Class 2<br>■ IP20 |

# Linergy distribution systems

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**Linergy LGY**
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G

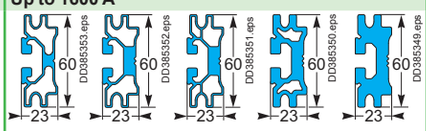
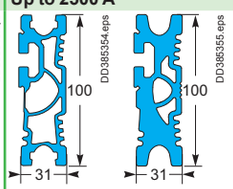
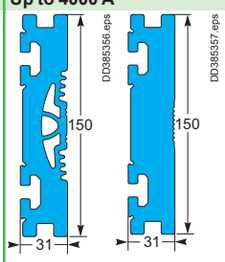
# Linergy LGYE

## Horizontal profiles up to 4000 A

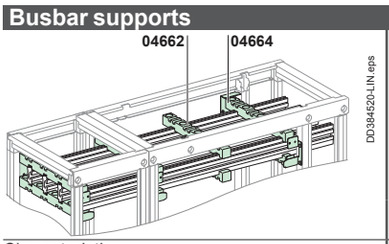
### 400 mm deep installation

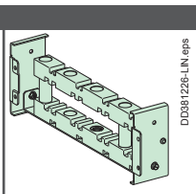
Power busbars

## Linergy LGYE profiles

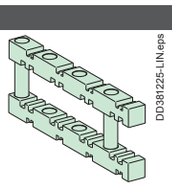
| Installation | | Up to 1600 A | | | | | Up to 2500 A | | Up to 4000 A | |
|---|---|---|---|---|---|---|---|---|---|---|
| Linergy profiles, 2000 mm length | |  | | | | |  | |  | |
| | | 630 A | 800 A | 1000 A | 1250 A | 1600 A | 2000 A | 2500 A | 3200 A | 4000 A |
| Permissible current for an ambient temperature of 35 °C around the switchboard | IP ≤ 31 | 630 A | 800 A | 1000 A | 1250 A | 1650 A | 2000 A | 2440 A | 3200 A | 3620 |
| | IP > 31 | 530 A | 680 A | 850 A | 1050 A | 1480 A | 1650 A | 2100 A | 2800 A | 3350 |
| Number of profiles per phase | | 1 | | | | | | | | |
| Total number of vertical modules (50 mm) | | 3 | | | | | 3 | | 4 | |
| **Catalogue numbers** | | **04560** | **04561** | **04562** | **04563** | **04564** | **04565** | **04566** | **04567** | **04568** |

## Busbar supports

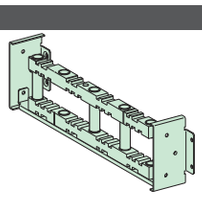


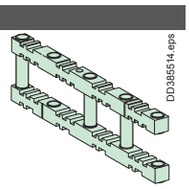

Fixed support **04664**




Free support **04662**



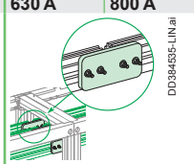
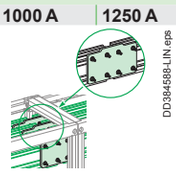
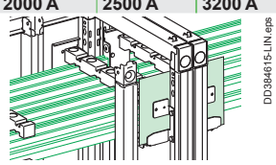

Fixed support **04665**




Free support **04678**

| | | | | | | |
|---|---|---|---|---|---|---|
| Characteristics | | | Two fixed supports for 650 mm or 650 + 150 mm wide Prisma P frameworks and one fixed support for 300/400 mm wide Prisma P frameworks are mandatory. If more supports are required, use free supports.<br>**Note:** in case of 600 mm depth with 115 mm between centers, replace **04664** fixed support by **04665** and **04662** free support by **04678**. | | | |
| In cubicle W = 650 or W = 650+150 busbar supports 75 mm between centres | Number of supports depending on Icw (kA rms/1 s) | ≤ 15 | 2 | | | |
| | | ≤ 25 | 2 | | | |
| | | ≤ 30 | 2 | | | |
| | | ≤ 40 | - | 2 | | |
| | | ≤ 50 | - | 2 | | |
| | | ≤ 60 | - | 2+1 | 2 | |
| | | ≤ 65 | - | 2+1 | | |
| | | ≤ 75 | - | 2+1 | | |
| | | ≤ 85 | - | 2+1 | | |
| | | ≤ 100 | - | | 2+2 | |
| | **Catalogue numbers** | Fixed support | **04664** | | **04664** + **04671** (1) (hardware) | **04664** + **04646** (2) (hardware) |
| | | Free support | **04662** | | **04662** + **04671** (1) (hardware) | **04662** + **04646** (2) (hardware) |
| In duct W = 300 busbar supports 75 mm between centres | Number of supports depending on Icw (kA rms/1 s) | ≤ 60 | 1 | | | |
| | | ≤ 85 | 1 + 1 | | | |
| | | ≤ 100 | - | | 1 + 1 | |
| | **Catalogue numbers** | Fixed support | **04664** | | **04664** + **04671** (1) (hardware) | **04664** + **04646** (2) (hardware) |
| | | Free support | **04662** | | **04662** + **04671** (1) (hardware) | **04662** + **04646** (2) (hardware) |
| In duct W = 400 busbar supports 75 mm between centres | Number of supports depending on Icw (kA rms/1 s) | ≤ 50 | 1 | | | |
| | | ≤ 85 | 1 + 1 | | | |
| | | ≤ 100 | - | | 1 + 1 | |
| | **Catalogue numbers** | Fixed support | **04664** | | **04664** + **04671** (1) (hardware) | **04664** + **04646** (2) (hardware) |
| | | Free support | **04662** | | **04662** + **04671** (1) (hardware) | **04662** + **04646** (2) (hardware) |

## Joints

| | Up to 1600 A | | | | | Up to 2500 A | | Up to 4000 A | |
|---|---|---|---|---|---|---|---|---|---|
| | 630 A | 800 A | 1000 A | 1250 A | 1600 A | 2000 A | 2500 A | 3200 A | 4000 A |
| |  *04620* | |  *04623* | | |  *04624* | | | |
| **Catalogue numbers** | 3 x **04620** (3P)<br>4 x **04620** + **04624** (4P) | | | | | 3 x **04621** (3P)<br>4 x **04621** + **04624** (4P) | | 3 x **04623** (3P)<br>4 x **04623** + **04624** (4P) | |
| Note | **04624** is mandatory in case of jointed 4P Linergy LGYE busbars installations and must be installed only at the junction on side-by-side frameworks combination. When installed at the bottom of cubicles, the busbars must be partitioned. | | | | | | | | |

**(1) 04671**: mounting hardware for bars or profile H = 100 or 120 mm. Contains 2 threaded rods and 4 insulators.
**(2) 04646**: mounting hardware for bars or profile H = 150 mm. Contains 2 threaded rods and 2 insulators.
**Note:** for accessories *> page G-13*.

# Linergy BS

## Horizontal busbars up to 4000 A

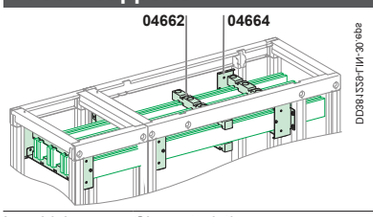
### 400 mm deep installation

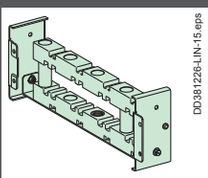
Power busbars

## Flat bars

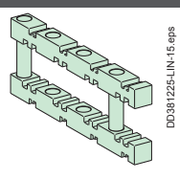
| Installation | | Up to 1600 A | | | | Up to 4000 A | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Copper without holes, 2000 mm length | | | | | | | | | | | |
| Permissible current for an ambient temperature of 35 °C around the switchboard | IP ≤ 31 | 800 A | 1000 A | 1400 A | 1800 A | 1800 A | 2050 A | 2300 A | 2820 A | 3300 A | 3760 A |
| | IP > 31 | 750 A | 900 A | 1250 A | 1600 A | 1600 A | 1850 A | 2000 A | 2500 A | 2900 A | 3340 A |
| Size of bars (mm) | | 60 x 5 | 80 x 5 | 60 x 5 | 80 x 5 | 80 x 10 | 50 x 10 | 60 x 10 | 80 x 10 | 100 x 10 | 120 x 10 |
| Number of bars per phase | | 1 | 1 | 2 | 2 | 1 | 2 | 2 | 2 | 2 | 2 |
| Total number of vertical modules (50 mm) | | 3 | | | | | | | | | 4 |
| **Catalogue numbers** | | **04536** | **04538** | **04536** | **04538** | **04548** | **04545** | **04546** | **04548** | **04550** | **04552** |

## Busbar supports

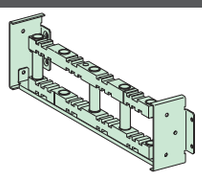


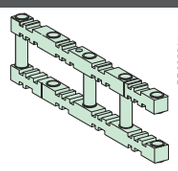

Fixed support **04664**




Free support **04662**



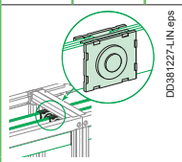
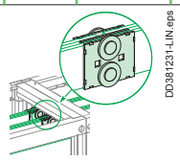
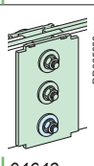

Fixed support **04665**




Free support **04678**

| | | | | | |
|---|---|---|---|---|---|
| In cubicle W = 650 or W = 650+150 busbar supports 75 mm between centres | Characteristics | | Two fixed supports for 650 mm, 650 + 150 mm wide frameworks and one fixed support for 300/400 mm wide Prisma P frameworks are mandatory. If more supports are required, use free supports.<br>**Note:** in case of 600 mm depth with 115 mm between centers, replace **04664** fixed support by **04665** and **04662** free support by **04678**. | | |
| | Number of supports depending on Icw (kA rms/1 s) | ≤ 15 | 2 | | |
| | | ≤ 25 | 2+1 | 2 | |
| | | ≤ 30 | 2+1 | 2 | |
| | | ≤ 40 | 2+1 | | |
| | | ≤ 50 | - | 2+1 | 2 |
| | | ≤ 60 | - | 2+1 | |
| | | ≤ 65 | - | 2+1 | |
| | | ≤ 75 | - | 2+2 | 2+1 |
| | | ≤ 85 | - | - | 2+1 |
| | **Catalogue numbers** Fixed support | | **04664** | **04664** | **04664** + **04671** (1) (hardware) |
| | **Catalogue numbers** Free support | | **04662** | **04662** | **04662** + **04671** (1) (hardware) |
| In duct W = 300 busbar supports 75 mm between centres | Number of supports depending on Icw (kA rms/1 s) | ≤ 30 | 1 | | |
| | | ≤ 50 | 1 + 1 | 1 | |
| | | ≤ 85 | - | 1 + 1 | |
| | **Catalogue numbers** Fixed support | | **04664** | **04664** | **04664** + **04671** (1) (hardware) |
| | **Catalogue numbers** Free support | | **04662** | **04662** | **04662** + **04671** (1) (hardware) |
| In duct W = 400 busbar supports 75 mm between centres | Number of supports depending on Icw (kA rms/1 s) | ≤ 25 | 1 | | |
| | | ≤ 40 | 1 + 1 | 1 | |
| | | ≤ 50 | 1 + 1 | | |
| | | ≤ 85 | - | 1 + 1 | |
| | **Catalogue numbers** Fixed support | | **04664** | **04664** | **04664** + **04671** (1) (hardware) |
| | **Catalogue numbers** Free support | | **04662** | **04662** | **04662** + **04671** (1) (hardware) |

## Joints

| Installation | | Up to 1600 A | | | | Up to 4000 A | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 1 bar per phase | | 2 bars per phase | | 1 bar per phase | 2 bars per phase | | | | |
| Size of bars (mm) | | 60 x 5 | 80 x 5 | 60 x 5 | 80 x 5 | 80 x 10 | 50 x 10 | 60 x 10 | 80 x 10 | 100 x 10 | 120 x 10 |
| Sliding joints with torque nut | |   *04640* | | |   *04641* | | | | |   *04643* | |
| **Catalogue numbers (1 joint per phase)** | | **04640** | **04641** | **04640** | **04641** | **04641** | **04640** | **04640** | **04641** | **04641** | **04643** |
| Note | | when installed at the bottom of cubicles, the busbars must be partitioned. | | | | | | | | | |

**(1) 04671**: mounting hardware for bars or profile H = 100 or 120 mm. Containt 2 threaded rods and 4 insulators.

G

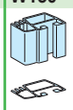
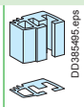
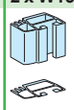
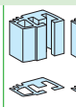
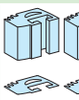
# Linergy LGY

## Lateral profiles up to 3200 A

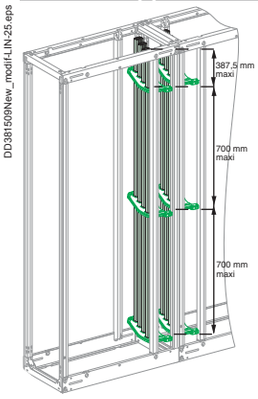
### 400 mm deep installation

Power busbars

## Linergy LGY profiles

| | | Up to 1600 A (simple busbars) | | | | | Up to 3200 A (double busbars) | | |
|---|---|---|---|---|---|---|---|---|---|
| **In duct** | | **W150** | | | | | **2 x W150** | | |
| Linergy profiles, 1670 mm length | |  DD381233-LIN-7.eps | DD381234-LIN-7.eps | DD381235-LIN-7.eps |  DD385495.eps | DD385496.eps |  DD381235-LIN-7.eps |  DD385495.eps |  DD385496.eps |
| | | **630 A** | **800 A** | **1000 A** | **1250 A** | **1600 A** | **2 x 1000 A** | **2 x 1250 A** | **2 x 1600 A** |
| Permissible current for an ambient temperature of 35 °C around the switchboard | IP ⩽ 31 | 680 A | 840 A | 1040 A | 1290 A | 1650 A | 2000 A | 2500 A | 3200 A |
| | IP > 31 | 590 A | 760 A | 950 A | 1170 A | 1480 A | 1820 A | 2260 A | 2920 A |
| Number of profiles per phase | | 1 | | | | | 2 | | |
| **Catalogue numbers** | | **04502** | **04503** | **04504** | **04505** | **04506** | **04504** | **04505** | **04506** |

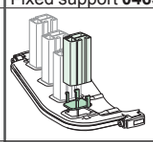
## Busbar supports



DD380741-LIN.eps

Fixed support **04651**

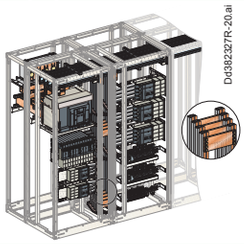
Characteristics


DD380742-LIN-12.eps

An end stop must be installed on the bottom support: **01109** (set of 12).

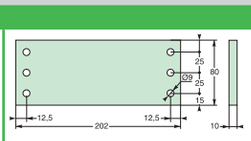
| | | | | |
|---|---|---|---|---|
| Number of supports depending on Icw (kA rms/1 s) | ⩽ 25 | 3 | | 2 x 3 |
| | ⩽ 30 | - | 3 | 2 x 3 |
| | ⩽ 40 | - | 3 | 2 x 3 |
| | ⩽ 50 | - | 4 | 2 x 3 |
| | ⩽ 60 | - | 5 | 2 x 4 |
| | ⩽ 65 | - | 5 | 2 x 4 |
| | ⩽ 75 | - | 7 | 2 x 5 |
| | ⩽ 85 | - | 8 | 2 x 5 |
| **Catalogue numbers** | Fixed support | **04651** | | |
| | Chock | **01109** | | |

## Equipotential links


DG382327R-20.ai

3 equipments must be installed between the busbars.

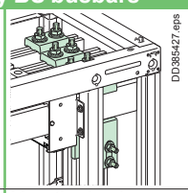
-



DD382576-LIN-30.eps

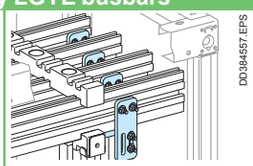
Connection made with a flat 80 x 10 mm busbar between 2 W150 ducts

## Connections to the horizontal Linergy BS busbars


DD385427.eps

| | | | | | |
|---|---|---|---|---|---|
| Characteristics | | | Mounting hardware supplied. Order 1 link per phase | | |
| **Cat. no. according to horizontal busbar size** | Thickness 5 mm | | **04634** (1000 A) | **04635** (1600 A) | **-** |
| | Thickness 10 mm | W ⩽ 80 mm | **04636** | | 2 x **04636** |
| | | W 100 mm | **04636** + **04642** (2) | | 2 x **04636** + 2 x **04642** |
| | | W 120 mm | **04638** | | 2 x **04638** |

## Connections to the horizontal Linergy LGYE busbars


DD384557.EPS

⩽ 1600 A

| | |
|---|---|
| Characteristics | Supplied with mounting hardware.<br>Catalogue numbers include 1 connection only: 1 connection per phase. |
| **Cat. no. according to horizontal busbar size** | **04602** (vertical connection)<br>**04603** (vertical shifted connection) (1) |

(1) Dedicated connection **04603** for Linergy LGYE busbar in 150 mm duct with horizontal jointing
(2) **04642**: mounting hardware for bars > 80 mm. Comprises 2 threaded rods.

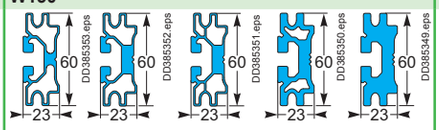
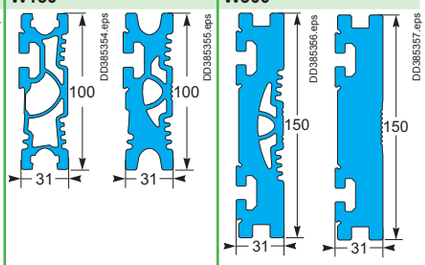
# Linergy LGYE

## Lateral profiles up to 4000 A

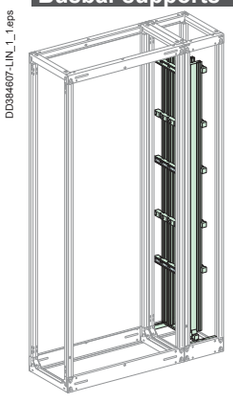
### 400 mm deep installation

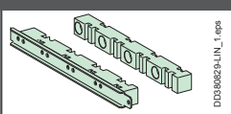
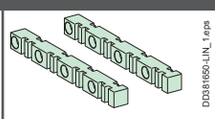
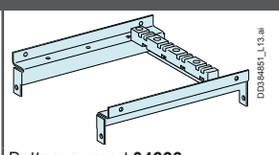
Power busbars

## Linergy LGYE profiles

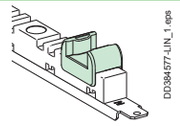
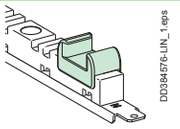
| | | Linergy profile, 2000 mm length (1) | | | | | Linergy profile, 1625 mm length | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| **In duct** | | **W150** | | | | | **W150** | | **W300** | |
| Linergy profile | |  | | | | |  | | | |
| | | **630 A** | **800 A** | **1000 A** | **1250 A** | **1600 A** | **2000 A** | **2500 A** | **3200 A** | **4000 A** |
| Permissible current for an ambient temperature of 35 °C around the switchboard | IP ≤ 31 | 630 A | 800 A | 1000 A | 1250 A | 1650 A | 2000 A | 2440 A | 3200 A | 3620 |
| | IP > 31 | 530 A | 680 A | 850 A | 1050 A | 1480 A | 1650 A | 2100 A | 2800 A | 3350 |
| Length to cut for side mounting | | 1675 mm | | | | | - | | - | |
| Number of profiles per phase | | 1 | | | | | | | | |
| **Catalogue numbers** | | **04560** | **04561** | **04562** | **04563** | **04564** | **04507** | **04508** | **04509** | **04510** |

## Busbar supports

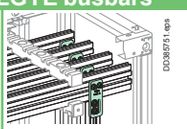
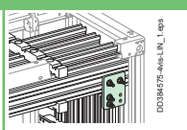
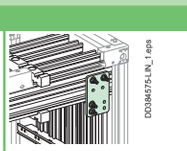


| | | Fixed support **04661** | Free support **04662** | Bottom support **04666** |
|---|---|---|---|---|
| | |  |  |  |
| Characteristics | | Attach directly to the framework.<br>Three fixed supports are required to maintain the busbars.<br>If more than three supports are required, use additional free supports.<br>The bottom support maintains the bars in position.<br>It is not considered a busbar support.<br>**Note:** in case of 600 mm depth with 115 mm between centers, replace **04661** fixed support by **04668**, free support **04662** by **04678** and bottom support **04663** or **04666** by **04673**. | | |
| Number depending on Icw (kA rms/1 s) | ≤ 30 | 3 | | |
| | ≤ 40 | - | 3+2 | 3 |
| | ≤ 50 | - | 3+2 | 3 |
| | ≤ 60 | - | 3+2 | 3 |
| | ≤ 65 | - | 3+2 | |
| | ≤ 75 | - | 3+4 | 3+2 |
| | ≤ 85 | - | 3+4 | |
| | ≤ 100 | - | | 3+6 |
| In duct W150, W = 300 busbar supports 75 mm between centres — **Catalogue numbers** | Fixed support | **04661** | **04661** + **04671** (2) | **04661** + **04646** (3) |
| | Free support | **04662** | **04662** + **04671** (2) | **04662** + **04646** (3) |

## Busbars chocks

| | | | Chocks installed on a bottom support **04658** | Chocks installed on a bottom support **04659** |
|---|---|---|---|---|
| | | |  |  |
| Characteristics | | | The bottom support maintains the sections in position.<br>It is not considered a busbar support. | |
| In duct W150, W = 300 — **Catalogue numbers** | Bottom support | | **04663** | **04666** + **04661** |
| | Chocks | | **04658** | **04659** |

## Connections to the horizontal Linergy LGYE busbars

| | 630 to 1600 A | 2000 to 2500 A | 3200 to 4000 A |
|---|---|---|---|
| |  |  |  |
| Characteristics | Supplied with mounting hardware.<br>Catalogue numbers include 1 connection only: 1 connection per phase. | | |
| **Cat. no. according to horizontal busbar size** | **04602** (straight connection)<br>**04603** (shifted connection) | **04604** (short connection)<br>**04605** (long connection) | **04607** |

(1) Linergy LGYE profiles up to 1600 A must be cut at the dimension of the cubicle : 1625 mm
(2) **04671**: mounting hardware for bars or profile H = 100 or 120 mm. Containt 2 threaded rods and 4 insulators.
(3) **04646**: mounting hardware for bars or profile H = 150 mm. Containt 2 threaded rods and 3 insulators

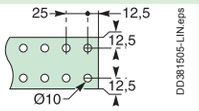
# Linergy BS

## Lateral flat busbars up to 4000 A

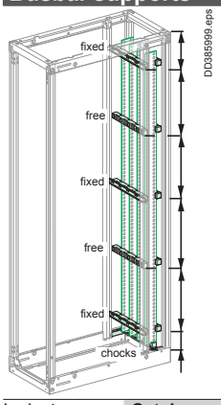
### 400 mm deep installation

Power busbars

## Flat bars

| | | Up to 1600 A | | | | Up to 4000 A | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **In duct** | | **W150** | | | | **W150** | | | | | | **2 x W150** | **W300** | |
| Copper with holes, 1675 mm length |  | | | | | | | | | | | | | |
| Permissible current for an ambient temperature of 35 °C around the switchboard | IP ⩽ 31 | 800 A | 1000 A | 1400 A | 1800 A | 1200 A | 1400 A | 1800 A | 2050 A | 2300 A | 2820 A | 3200 A | 3200 A | 3760 A |
| | IP > 31 | 750 A | 900 A | 1250 A | 1600 A | 1080 A | 1250 A | 1600 A | 1850 A | 2000 A | 2500 A | 2820 A | 2820 A | 3340 A |
| Size of bars (mm) | | 60 x 5 | 80 x 5 | 60 x 5 | 80 x 5 | 50 x 10 | 60 x 10 | 80 x 10 | 50 x 10 | 60 x 10 | 80 x 10 | 80 x 10 | 100 x 10 | 120 x 10 |
| Number of bars per phase | | 1 | | 2 | | 1 | | | 2 | | | | | |
| **Catalogue numbers** | | **04516** | **04518** | **04516** | **04518** | **04525** | **04526** | **04528** | **04525** | **04526** | **04528** | **04528** | **04550** (1) | **04552** (1) |

## Busbar supports



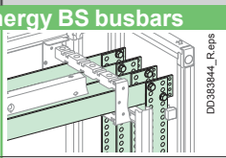

Description

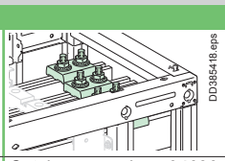
Drilled bars.
Three fixed supports are required to maintain the busbars. If more than three supports are required, use additional free supports.
The bottom support maintains the bars in position.
It is not considered a busbar support.
**Note:** In case of 600 mm depth with 115 mm between centers, replace 04661 fixed support by **04668** and **04662** free support by **04678** and **04663** or **04666** bottom support by **04673**.

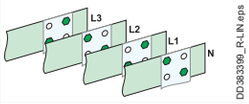
| Number of supports depending on Icw (kA rms/1 s) | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | ⩽ 15 | 3 | | | | 3 | | | | | | 2 x 3 | | |
| | ⩽ 25 | 3+2 | | 3 | | 3 | | | | | | 2 x 3 | | |
| | ⩽ 30 | 3+2 | | | | 3+2 | | | | | 3 | 2 x 3 | | |
| | ⩽ 40 | 3+4 | | 3+2 | | 3+2 | | | | | | 2 x 3 | | |
| | ⩽ 50 | - | | 3+4 | | 3+2 | | | | | | 2 x 3 | | |
| | ⩽ 60 | - | | | | 3+4 | | | | | 3+2 | 2 x 3+2 | | |
| | ⩽ 65 | - | | | | 3+4 | | | | | 3+2 | 2 x 3+2 | | |
| | ⩽ 75 | - | | | | - | 3+6 | | 3+4 | | | 2 x 3+2 | | |
| | ⩽ 85 | - | | | | - | | | | 3+4 | | 2 x 3+2 | | |

| In duct W150, W = 300 busbar supports 75 mm between centres | **Catalogue numbers** | | | |
|---|---|---|---|---|
| | Fixed support | **04661** | 2 x **04661** | **04661** + **04671** |
| | Free support | **04662** | 2 x **04662** | **04662** + **04671** |
| | Bottom support | **04663** | 2 x **04663** | **04666** + **04661** |

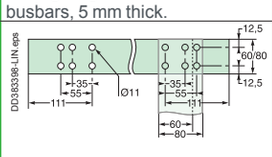
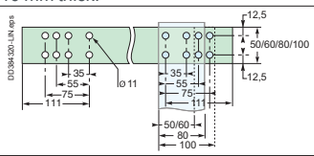
## Connections to the horizontal Linergy BS busbars





| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Characteristics | | For busbars with 75 mm between centres, the bars must fully overlap. To satisfy safety clearances, the assembly points on adjacent bars must be staggered as shown above.  | | | | Catalogue numbers **04636** and **04637** include 1 connection only. Order 1 connection per phase. Reference **04642** consists of 2 M8 x 140 screws which can replace the original M8 x 120 screws. | | | | | | | | |
| | | 1 bar per phase | | 2 bars per phase | | 1 bar per phase | | | 2 bars per phase | | | double BB | 2 bars per phase | |
| Size of vertical bars (mm) | | 60 x 5 | 80 x 5 | 60 x 5 | 80 x 5 | 50 x 10 | 60 x 10 | 80 x 10 | 50 x 10 | 60 x 10 | 80 x 10 | 80 x 10 | 100 x 10 | 120 x 10 |
| Catalogue number of the connecting part according to the size of the horizontal bars | ⩽ 80 mm | **04782** | | | | **04636** | | **04637** | **04637** | | | 2 x **04637** | **04645** | **04645** |
| | 100 mm | **04782** | | | | **04636 + 04642** | | **04637 + 04642** | **04637 + 04642** | | | 2 x **04637** + 2 x **04642** | **04645** | **04645** |
| | 120 mm | **04782** | | | | **04638** | | **04638** | **04638** | | | 2 x**04638** | **04645** | **04645** |

**(1)** Copper plain bars, 2000 mm length.

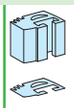
| | Drilling diagram for horizontal busbars, 5 mm thick. | Drilling diagram for horizontal busbars, 10 mm thick. |
|---|---|---|
| |  |  |

**Note:** for more information *> page J-3.*

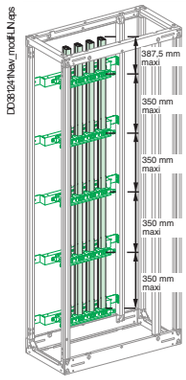
# Linergy LGY
## Rear profiles up to 1600 A

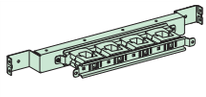
Power busbars

### Linergy LGY profiles

| | | | | | | |
|---|---|---|---|---|---|---|
| | | **Up to 1600 A** | | | | |
| **At the rear of the cubicle** | | **W650** | | | | |
| Linergy profile, 1670 mm length | | DD381233-LIN-7.eps | DD381234-LIN-7.eps | DD381235-LIN-7.eps | DD385495.eps |  DD385496.eps |
| | | **630 A** | **800 A** | **1000 A** | **1250 A** | **1600 A** |
| Permissible current for an ambient temperature of 35 °C around the switchboard | IP ⩽ 31 | 680 A | 840 A | 1040 A | 1290 A | 1650 A |
| | IP > 31 | 590 A | 760 A | 950 A | 1170 A | 1480 A |
| Number of profiles per phase | | 1 | | | | |
| **Catalogue numbers** | | **04502** | **04503** | **04504** | **04505** | **04506** |

### Busbar supports

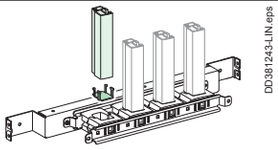




DD381242-LIN.eps

Fixed support **04652**

| | | | | | |
|---|---|---|---|---|---|
| Number of supports depending on Icw (kA rms/1 s) | ⩽ 25 | 3 | | | |
| | ⩽ 30 | - | 4 | | |
| | ⩽ 40 | - | | 5 | |
| | ⩽ 50 | - | | | 7 |

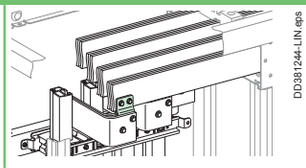
Characteristics


DD381243-LIN.eps

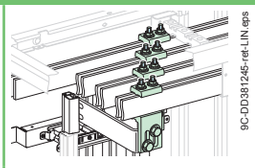
Stop to be installed on the bottom support. **01109** (set of 12).

| | | |
|---|---|---|
| **Catalogue numbers** | Fixed support | **04652** |
| | Chock | **01109** |

### Connections to the horizontal Linergy BS flat busbars


DD381244-LIN.eps

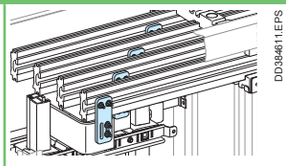
Connection **04635** to horizontal busbars 5 mm thick.


9C-DD381245-ret-LIN.eps

Connection **04636** to horizontal busbars 10 mm thick.

| | | | |
|---|---|---|---|
| Characteristics | | | Mounting hardware supplied, order 1 connection per phase.<br>For part of the connection, flexible insulated busbars are needed. |
| **Cat. no. according to horizontal busbar size** | Thickness 5 mm | | **04635** |
| | Thickness 10 mm | W ⩽ 80 mm | **04636** |
| | | W > 80 mm | **04636 + 04642** |

### Connections to the horizontal Linergy LGYE flat busbars


DD384611.EPS

Connection **04602** to horizontal Linergy LGYE busbars 5 mm thick.

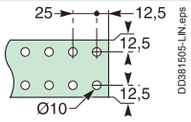
| | |
|---|---|
| Characteristics | Mounting hardware supplied, order 1 connection per phase.<br>For part of the connection, flexible insulated busbars are needed. |
| **Catalogue numbers** | **04602** |

G

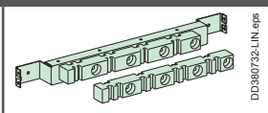
# Linergy BS
## Rear busbars up to 1600 A

Power busbars

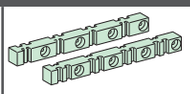
## Flat bars

| | | Up to 1600 A | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **At the rear of the cubicle** | | **L650** | | | | | | |
| Copper with holes, 1670 mm length |   | | | | | | | |
| | | **800 A** | **1000 A** | **1400 A** | **1800 A** | **1000 A** | **1200 A** | **1600 A** |
| Permissible current for an ambient temperature of 35 °C around the switchboard | IP ≤ 31 | 800 A | 1000 A | 1400 A | 1800 A | - | - | - |
| | IP > 31 | 750 A | 900 A | 1250 A | 1600 A | 1080 A | 1250 A | 1600 A |
| Size of bars (mm) | | 60 x 5 | 80 x 5 | 60 x 5 | 80 x 5 | 50 x 10 | 60 x 10 | 80 x 10 |
| Number of bars per phase | | 1 | | 2 | | 1 | | |
| **Catalogue numbers** | | **04516** | **04518** | **04516** | **04518** | **04525** | **04526** | **04528** |

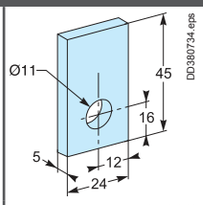
## Busbar supports



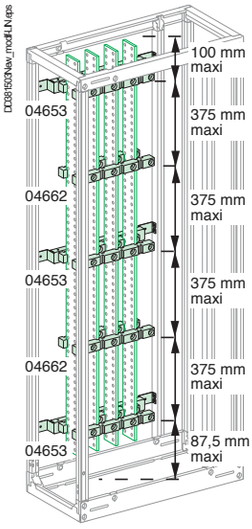

Fixed busbar supports **04653**

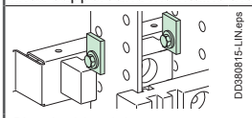
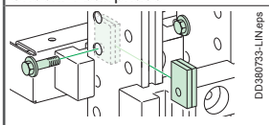



Free busbar supports **04662**

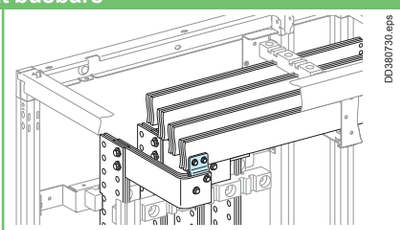



Mounting chocks **04669**




| | | |
|---|---|---|
| Characteristics | | Three fixed supports cat. no. 04653 are required to maintain the busbars.<br>If more than three supports are required, use additional free supports cat. no. 04662.<br>A metal mounting chock, cat. no. 04669 (set of 100) 5 mm thick, is screwed to the bar. It rests on a fixed support and maintains the position of the bar. |
| | |   Chock: 1 bar/phase |
| | |   Chock: 2 bars/phase |
| Number of supports depending on Icw (kA rms/1 s) | ≤ 15 | 3 / 3 |
| | ≤ 25 | 3+2 / 3 / 3 |
| | ≤ 30 | 3+2 / 3+2 |
| | ≤ 40 | 3+4 / 3+2 / 3+2 |
| | ≤ 50 | - / 3+4 / 3+2 |
| | ≤ 60 | - / 3+4 |
| | ≤ 65 | - / 3+4 |
| | ≤ 75 | - / - / 3+6 |
| | ≤ 85 | - / - |
| **Catalogue numbers** | | **04653** (fixed) + **04662** (free) + **04669** (chock) |

## Connections to the horizontal Linergy BS flat busbars




Connection **04636** to horizontal busbars Thickness 5 mm

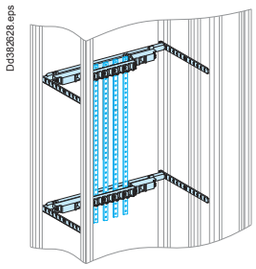
Connection **04636** to horizontal busbars Thickness 10 mm

| | | | |
|---|---|---|---|
| Characteristics | | | For part of the connection, flexible insulated busbars are needed.<br>Catalogue numbers **04635** and **04636** include 1 connection only = 1 connection per phase.<br>Reference 04642 consists of 2 M8 x 140 screws which can replace the original M8 x 120 screws. |
| **Cat. no. according to horizontal busbar size** | Thickness 5 mm | | **04635** |
| | Thickness 10 mm | W ≤ 80 mm | **04636** (1) |
| | | W > 80 mm | **04636** + **04642** (1) |

(1) To be made.

# Linergy BS
## Rear busbars up to 630 A



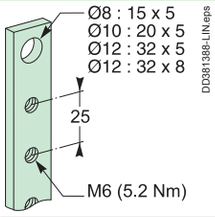



## IEC 61439-1 & 2

### Description

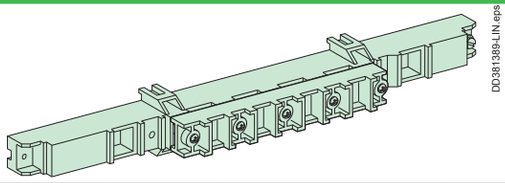
The busbar can be 3-pole or 4-pole with ratings between 160 A and 630 A.
2 lengths are available: 1000 and 1400 mm, which can be cut as required.
The number of supports depends on the installation maximum rated current.
The insulating supports can receive a fifth bar, 15 x 5 mm or 20 x 5 mm, to create an earth bar.

## 160 to 400 A copper busbars



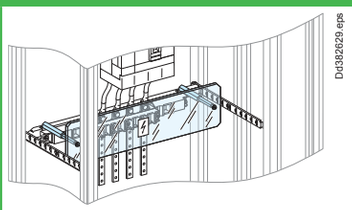

| | | 160 A | 250 A | 400 A | 630 A |
|---|---|---|---|---|---|
| Rated peak withstand current | (Ipk) | 30 kÂ | 40 kÂ | 55 kÂ | 77 kÂ |
| Rated insulation voltage | (Ui) | 1000 V AC | 1000 V AC | 1000 V AC | 1000 VAC |
| Rated short-time current | (Icc) | 150 kA | 150 kA | 150 kA | 150 kA |
| Thermal stress | (I²t) | 1.000 x $10^8$ | 1.690 x $10^8$ | 6.250 x $10^8$ | 1.225 x $10^8$ |
| Conductor cross-section | | 15 x 5 mm | 20 x 5 mm | 32 x 5 mm | 32 x 8 mm |
| Installation | | Threaded M6 holes every 25 mm all the way up<br>Connection by: 16 to 50 mm² flexible cables with crimped lugs | | | |
| Set of | | 4 | | | |
| **Length (mm)** | | **1000** | **1400** | **1000** | **1400** | **1000** | **1400** | **1400** |
| **Catalogue numbers** | | **04161** | **04171** | **04162** | **04172** | **04163** | **04173** | **04174** |

## Insulating busbar support




| | | | | | |
|---|---|---|---|---|---|
| Distance between supports depending on Icw/Ipk (1) | ≤ 10 kA eff / 1 s | 450 mm | 450 mm | 450 mm | 450 mm |
| | ≤ 13 kA eff / 1 s | - | 450 mm | 450 mm | 450 mm |
| | ≤ 15 kA eff / 1 s | - | 450 mm | 450 mm | 450 mm |
| | ≤ 20 kA eff / 1 s | - | - | 300 mm | 300 mm |
| | ≤ 25 kA eff / 1 s | - | - | 225 mm | 225 mm |
| | ≤ 30 kA eff / 1 s | - | - | - | 225 mm |
| | ≤ 35 kA eff / 1 s | - | - | - | 175 mm |
| Installation | | On the rear uprights<br>Screwed onto a solid or pre-slotted plate (fixing centres 450 x 200 mm) | | | |
| **Catalogue numbers** | | **04191** | **04191** | **04191** | **LGY4193** |

## IPxxB insulating protective shield

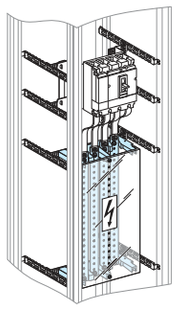



| | |
|---|---|
| Length | 470 mm |
| Height | 100 mm |
| Composition | Supplied with fixings. |
| **Catalogue numbers** | **04198** |

**Note:** electrical characteristics *> page G-41.*
**(1)** Linergy FM 200 A distribution blocks with connections ref. **04029** can act as intermediate supports (max. distance apart 200 mm) in addition to the support ref. **04191** at the top and bottom.

# Linergy BS
## Multi-stage busbars up to 630 A



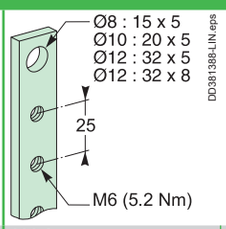



## IEC 61439-1 & 2

### Description

Multi-stage busbars are installed in a sheath W = 400 mm.
We strongly recommend dividing the current between 2 cubicles or enclosures joined on either sides.
All the connection points are easily accessible from the front.
The busbar orientation makes them easier to tighten and facilitates running the cables between them.
The current can be 3-pole or 4-pole with ratings between 160 A and 630 A.
2 lengths are available: 1000 and 1400 mm, which can be cut as required.
The number of supports depends on the installation maximum rated current.

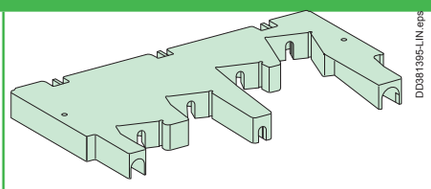
## 160 to 630 A copper busbars




| | | 160 A | 250 A | 400 A | 630 A |
|---|---|---|---|---|---|
| Rated peak withstand current | (Ipk) | 30 kÂ | 40 kÂ | 55 kÂ | 55 kÂ |
| Rated insulation voltage | (Ui) | 750 V AC | 750 V AC | 750 V AC | 750 V AC |
| Rated short-time current | (Icc) | 150 kA | 150 kA | 150 kA | 150 kA |
| Thermal stress | ($I^2$.t) | 1.000 x $10^8$ | 1.690 x $10^8$ | 4.000 x $10^8$ | 6.250 x $10^8$ |
| Supply at incoming terminals | | Connection by: 16 to 50 $mm^2$ flexible cables with crimped lugs. | | | |
| Conductor cross-section | | 15 x 5 mm | 20 x 5 mm | 32 x 5 mm | 32 x 8 mm |
| Installation | | Flat copper busbar with threaded M6 holes every 25 mm all the way up. | | | |
| Set of | | 4 | | | |

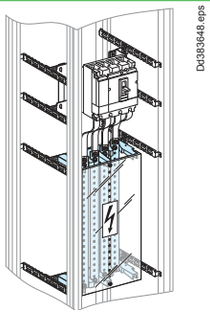
| **Width (mm)** | **1000** | **1400** | **1000** | **1400** | **1000** | **1400** | **1000** | **1400** |
|---|---|---|---|---|---|---|---|---|
| **Catalogue numbers** | **04161** | **04171** | **04162** | **04172** | **04163** | **04173** | To be made | **04174** |

## Insulating busbar support




| | | | | | |
|---|---|---|---|---|---|
| Distance between supports depending on Icw/Ipk | ≤ 10 kA rms/ 1 s / 30 kÂ | 450 mm | 450 mm | 450 mm | 450 mm |
| | ≤ 13 kA rms/ 1 s / 40 kÂ | - | 450 mm | 450 mm | 450 mm |
| | ≤ 15 kA rms/ 1 s / 40 kÂ | - | | 450 mm | 450 mm |
| | ≤ 20 kA rms/ 1 s / 45 kÂ | - | - | 300 mm | 300 mm |
| | ≤ 25 kA rms/ 0.6 s / 55 kÂ | - | - | 300 mm | - |
| | ≤ 25 kA rms/ 1 s / 55 kÂ | - | - | - | 300 mm |
| Installation | | Installation on functional uprights of duct (Prisma).<br>Screwed onto a solid or pre-slotted plate (450 x 200 mm fixing centres) | | | |
| **Catalogue numbers** | | **04192** | **04192** | **04192** | **04192** |

## IPxxB insulating protective shield




| | |
|---|---|
| Width | 250 mm |
| Height | 1500 mm |
| Composition | Fixing accessories supplied with support cat. no. **04192.** |
| **Catalogue numbers** | **04197** |

**Note:** electrical characteristics *> page G-41.*

# Linergy BS
## Multi-stage distribution block up to 630 A



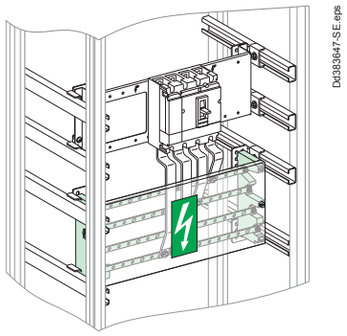
PB502514_60.eps

## IEC 61439-1 & 2

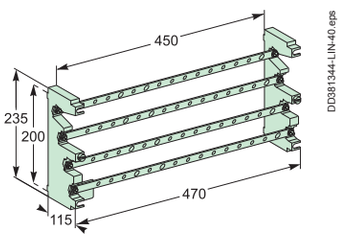
### Description

The distribution block can be installed horizontally in the device zone or vertically in the 300 mm wide duct of enclosures and cubicles.
The distribution block is made up of:
- two staggered supports made of an insulating material
- four slanted copper bars with holes every 25 mm.

## Multi-stage distribution block



DD383647-SE.eps

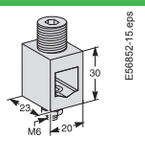
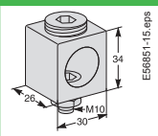
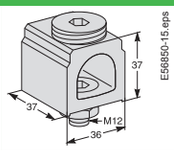
| | | 160 A | 250 A | 400 A | 630 A |
|---|---|---|---|---|---|
| Rated peak withstand current | (Ipk) | 30 kÂ | 40 kÂ | 55 kÂ | 55 kÂ |
| Rated insulation voltage | (Ui) | 750 V AC | | | |
| Rated operational voltage | (Ue) | 440 V AC | | | |
| Rated impulse withstand voltage | (Uimp) | 8 kV | | | |
| Rated short-time current | (Icc) | 150 kA | 150 kA | 150 kA | 150 kA |
| Thermal stress | ($I^2.t$) | 1.000 x $10^8$ | 1.690 x $10^8$ | 4.000 x $10^8$ | 6.250 x $10^8$ |
| Total connection capacity | | 4 incomers per phase: Ø12.2 mm clearance holes<br>13 outgoers per phase 16 to 50 $mm^2$: M6 tapped holes | | | |
| Busbar cross-section | | 15 x 5 mm | 20 x 5 mm | 32 x 5 mm | 32 x 8 mm |
| Dimensions (mm) | |  | | | |
| Installation | | Screwed onto a solid or pre-slotted plate (fixing centres 450 x 200 mm)<br>Screwed to an adapter cat. no. **03595**. | | | |
| Composition | | 2 multi-stage supports made of an insulating material<br>4 slanted copper busbars, with holes every 25 mm<br>1 pack of 36 M6 x 16 screws + contact washers<br>1 IPxxB front insulating shield | | | |
| **Catalogue numbers** | | **04052** | **04053** | **04054** | **04055** |



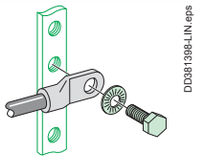
DD381344-LIN-40.eps

G

## Incomer accessories

| |  |  |  |
|---|---|---|---|
| | **Connectors for copper or aluminium cables** | | |
| Rated operational current at 40 °C (Ie) | 160 A | 250 A | 400 A |
| Supply at incoming terminals | 70 mm² cables | 16 to 185 mm² cables | 70 to 300 mm² cables |
| Composition | Supplied with fixings at busbar end. | | |
| Set of | 4 | | |
| **Catalogue numbers** | **07051** | **07052** | **07053** |

## Outgoer accessories

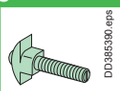
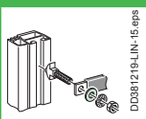
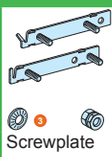
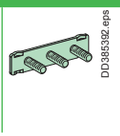
| |  | |
|---|---|---|
| | **Class 8.8 fixing accessories** | |
| Composition | 20 M6 x 20 screws + 20 nuts<br>+ 40 contact washers | 40 M6 x 16 screws<br>+ 40 contact washers |
| **Catalogue numbers** | **04194** | **04195** |

**Note:** electrical characteristics *> page G-41*.

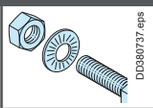
# Linergy Busbars
## Accessories

Power busbars

### Accessories

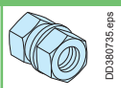
| |  Linergy connection hardware | |  Steel flat washers | | | Brass flat washers | Markers |  Screwplate | |  |
|---|---|---|---|---|---|---|---|---|---|---|
| Cat. no. | **04766** | **04767** | **04772** | **04773** | **04774** | **04775** | **04794** | **01130** | **04768** | **04769** |
| Characteristics | L 25 mm | L 39 mm | 20 mm ext. Ø | 24 mm ext. Ø | 28 mm ext. Ø | 20 mm ext. Ø | | 2 studs | 2 studs | 3 studs |
| | Set of 20: 20 bolts + 20 nuts + 20 contact washers, class 8.8. The screws slide into the profile and are then locked in the desired position. | | M8 set of 20 | | | M8 sold in lots of 20 for connection of ≤ 25 mm² lugs to Linergy | 12 clip-on supports + N, L1, L2, L3, PE, PEN labels | Linergy LGYE busbars connection kit spare part | Set of 12 flat plates with 2 studs + 24 torque nuts + 24 contact washers The plates slide along the profile. | Set of 8 flat plates with 3 studs + 24 torque nuts + 24 contact washers The plates slide along the profile. |

### M8 bolts



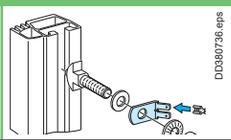
| | | | |
|---|---|---|---|
| Linergy BS, 20 bolts class 8.8 | Characteristics | | Set of 20 bolts + 20 nuts + 40 contact washers. |
| | **Catalogue numbers** | M8 x 20 | **04782** |
| | | M8 x 25 | **04783** |
| | | M8 x 30 | **04784** |
| | | M8 x 35 | **04785** |
| | | M8 x 40 | **04786** |
| | | M8 x 45 | **04787** |
| | | M8 x 50 | **04788** |

### Torque nuts



| | | |
|---|---|---|
| 20 M8 torque nuts | Characteristics | Can be used to obtain the correct tightening torque (28 Nm) recommended by the manufacturer, without using a torque wrench. Torque nuts may be used for all electrical connections. |
| | **Catalogue numbers** | **04759** |

### Voltage tap-offs



| | | |
|---|---|---|
| 20 Voltage tap-offs M10 pour 2 clips 6.35 | Characteristics | For small lugs (on low-current cables or measurement tap-offs), insert a conducting washer (cat. no. 04775) between the busbar and the lug. |
| | **Catalogue numbers** | **04229** |

### Connections on Linergy LGYE & LGY

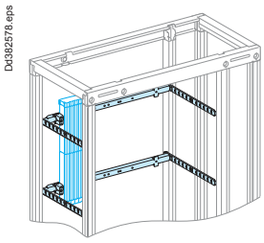
| InA (A) | | Connecting to Linergy LGYE | Connecting to Linergy LGY |
|---|---|---|---|
| 0 to 630 | Cable - Insulated flexible bars | 25 mm Linergy connection hardware used | 25 mm Linergy connection hardware used |
| 800 to 1250 | 5 mm bars | 25 mm Linergy connection hardware used | 25 mm Linergy connection hardware used |
| 1600 to 2500 | 5 mm or 10 mm bars | Use of the 2 studs flat plate | 39 mm Linergy connection hardware used |
| 3200 to 4000 | 10 mm bars | Use of the 3 studs flat plate | - |

**Note:** Jointing between 2 busbars (horizontal/vertical or horizontal/horizontal) must be mandatory done with studs plates.

G

# Linergy BW
## Insulated busbars up to 630 A

Power busbars




## Description

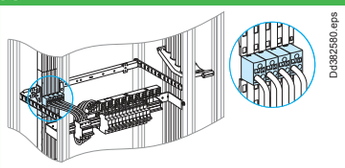
- Compact busbar, **IPxxB**, ready for installation (supplied complete with supports and end caps)
- Shaped busbar, threaded M6 with 25-mm pitch, can be cut with 200-mm pitch (150 mm for the 125 A)
- Busbar installed on insulating supports, screwed onto the rear uprights
- Wide selection of tested pre-wired connectors
- Clip-on covers to protect against direct contact (IPxxB). Can easily be cut to allow connections to pass through to the switchgear
- Ends protected by end caps.

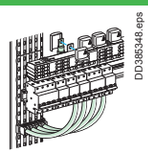
Linergy BW (160 to 630 A) is fully compatible with seismic constraints. Just add a seismic kit (**04130**) to Linergy BW 160/250/400.

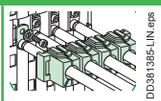
## Linergy BW busbars

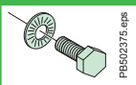
| | | 125 A (1) | | 160 A | | 250 A | | 400 A | | 630 A | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Rated peak withstand current | (Ipk) | 20 kÂ | | 30 kÂ | | 30 kÂ | | 52.5 kÂ | | 52.5 kÂ | |
| Rated insulation voltage | (Ui) | 500 V AC | | 750 V AC | | 750 V AC | | 750 V AC | | 1000 V AC | |
| Rated impulse withstand voltage | (Uimp) | 8 kV | | 8 kV | | 8 kV | | 8 kV | | 8 kV | |
| Rated short-time current | (Icc) | 50 kA | | 150 kA | | 150 kA | | 150 kA | | 150 kA | |
| Thermal stress | (I².t) | 7.225 x $10^7$ | | 1.000 x $10^8$ | | 1.690 x $10^8$ | | 4.000 x $10^8$ | | 6.250 x $10^8$ | |
| **Width (mm)** | | **450** | **750** | **1000** | **1400** | **1000** | **1400** | **1000** | **1400** | **1000** | **1400** |
| **Catalogue numbers** | **3P** | **04103** | **04107** | **04111** | **04116** | **04112** | **04117** | **04113** | **04118** | **04114** | **04119** |
| | **4P** | **04104** | **04108** | **04121** | **04126** | **04122** | **04127** | **04123** | **04128** | **04124** | **04129** |

## Accessories



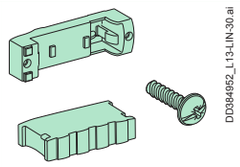



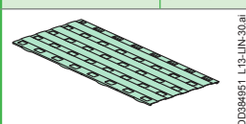




| | **IPxxB tap-off terminals** | | **200 A connections** | **IPxxB insulating covers** | **Class 8.8 fixing accessories** |
|---|---|---|---|---|---|
| | 12 terminals<br>For 6 mm² (32 A max.) and 10 mm² cable (40 A max.)<br>Ui: 750 V<br>In: 55 A max.(2) | 12 terminals<br>For one 1 to 16 mm² cable<br>Ui: 750 V<br>In: 55 A max. with one cable | | Covers which can be clipped on and cut to size are used to isolate the connectors of a connection with cables of cross-section 10 to 25 mm². | M6 x 12 + 20 M6 contact washers. |
| Used for connecting | ■ All switchgear equipped with enclosed terminals<br>■ Linergy FM 160/200 A | ■ All switchgear equipped with enclosed terminals<br>■ Linergy FM 63/80/160/200 A | ■ Linergy FM 200 A | | |
| Set of | 12 | 12 | 4 | 8 | 20 |
| **Cat. no.** | **04151** | **04152** | **04021** | **04150** | **04158** |

## Spare parts




| | | **Busbar supports Linergy BW** | | | | |
|---|---|---|---|---|---|---|
| Rated operational current at 40 °C | (Ie) | 125 A | 160 A | 250 A | 400 A | 630 A |
| Composition | | 2 busbar supports + 2 end caps + packet of fixing accessories. | | | | |
| **Catalogue numbers** | | - | **01210** | **01210** | **01210** | **01211** |

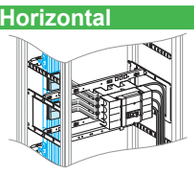



| | **IPxxB clip-on covers** | | | | |
|---|---|---|---|---|---|
| Width (mm) | 200 | | | | |
| Set of | 2 | | | | |
| **Catalogue numbers** | - | **01201** | **01201** | **01201** | **01201** |

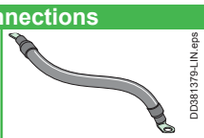
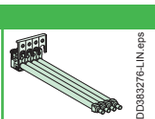
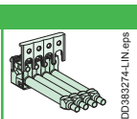
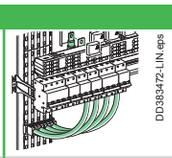
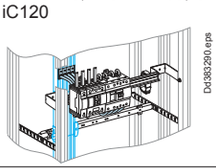
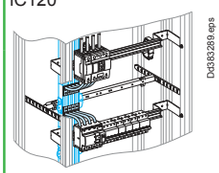
**Note:** electrical characteristics *> page G-41*.
**(1)** Not compatible with seismic kit *> page C-17*,"Seismic Kit", page F-19
**(2)** Imax = 55 A for connected cables.

# Linergy BW
## Insulated busbars up to 630 A

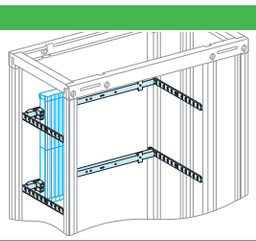
### Power busbars

| Mounting | Vertical | | | | | Horizontal | | |
|---|---|---|---|---|---|---|---|---|
| | | | | | |  | | |
| | **Universal power supply units without connection** | | **Connections for universal power supply block** | | | **Universal power supply units with connections** | | |
| Devices | **Fixed**<br>■ NSX100/250 horizontal rotary handle or motor mechanism<br>■ Fupact INF100/160 vertical, Fupact ISFT100/250 | **Fixed**<br>■ NSX400/630 with or without Vigi in cubicle<br>■ INS-INV320/630 | **Fixed**<br>■ NSX100/250 toggle in cubicle<br>■ INS-INV250 vertical | **Fixed**<br>■ NSX100/250 with or without Vigi in duct<br>■ INS-INV250 vertical in duct | **Fixed**<br>■ NSX400/630 with or without Vigi in duct<br>■ INS-INV320/630 in duct | **Fixed**<br>■ NSX100/250 horizontal with or without Vigi<br>■ INS-INV250 horizontal | **Fixed**<br>■ NSX400 horizontal<br>■ INS-INV320/400 horizontal | **Fixed**<br>■ NSX630 horizontal<br>■ INS-INV500/630 horizontal |
| **Cat. no.** | **04061** | **04074** | **04062** | **04064** | **04073** | **04060** | **04070** | **04071** |
| Devices | **Plug-in base**<br>■ NSX100/250 horizontal rotary handle or motor mechanism<br>■ Fupact INF100/160 vertical, Fupact ISFT100/250 | **Plug-in base**<br>■ NSX400/630 with or without Vigi in cubicle<br>■ INS-INV320/630 | To be made<br>Insulated flexible bars | | | **Plug-in base**<br>■ NSX100/250 horizontal rotary handle or motor mechanism in cubicle<br>■ Fupact INF100/160 vertical, Fupact ISFT100/250 | **Plug-in base**<br>■ NSX400/630 with or without Vigi in cubicle<br>■ INS-INV320/630 in cubicle | Insulated flexible bars<br>To be made |
| **Cat. no.** | **04061** | **04074** | *> page G-22* | | | **04061** | **04074** | *> page G-22* |
| Devices | **Withdrawable**<br>■ NSX100/250 horizontal rotary handle or motor mechanism in cubicle<br>■ Fupact INF100/160 vertical, Fupact ISFT100/250 | **Withdrawable**<br>■ NSX400/630 with or without Vigi in cubicle<br>■ INS-INV320/630 in cubicle | To be made<br>Insulated flexible bars | | | **Withdrawable**<br>■ NSX100/250 horizontal rotary handle or motor mechanism in cubicle<br>■ Fupact INF100/160 vertical, Fupact ISFT100/250 | **Withdrawable**<br>■ NSX400/630 with or without Vigi in cubicle<br>■ INS-INV320/630 in cubicle | Insulated flexible bars<br>To be made |
| **Cat. no.** | **04061** | **04074** | *> page G-22* | | | **04061** | **04074** | *> page G-22* |

### Prefabricated connections

| |  | |  |  |  |
|---|---|---|---|---|---|
| | **Connections** | | **IPxxB 3/4P monobloc conn.** | **IPxxB 3/4P monobloc conn.** | **Connections** |
| | 35 mm² ferrule + 45° angled | 45 mm² ferrule + connectors | Quick connection on the busbar equipped with a male ferrule for enclosed terminals. Neutral identified by the colour blue. | | - |
| Rated operational (Ie) current at 40 °C | 125 A | 160 A | 160 A | 160 A | 200 A |
| Width | 230 mm | 250 mm | 440 mm | 150 mm | - |
| Used for connecting | ■ NG125, INS-INV with enclosed terminals cat. no. **28947** or **28948** | ■ INS-INV160, NG125, NG160 | ■ NG160 (located on left-hand side), Vigi NG160 (located in the middle),<br>■ NG125, INS-INV160, C120, iC120<br>  | ■ NG160 (located on left-hand side), NG125, INS160, C120, iC120<br>  | ■ Linergy FM 200 A |
| Set of | 4 | 4 | 1 | 1 | 4 |
| **Catalogue numbers** | **04145** | **04146** | **04148** | **04147** | **04021** |

### Adaptation



| | |
|---|---|
| Characteristics | Prisma G adapter W = 500 mm |
| **Catalogue numbers** | 2 x **03595** |

### Seismic kit for Linergy BW 160 up to 400 A (1)

| | |
|---|---|
| | Use the seismic kit **04130** when using Linergy BW |
| **Catalogue numbers** | **04130** |

**Note:** electrical characteristics *> page G-41*.
**Note:** the adapter **03595** can be used for all mounting plates, except **03030**.
**(1)** Not compatible with Linergy BW 125 A.

# Linergy DP

## Quick distribution blocks - Compact NSX and INS-INV up to 250 A

## IEC 60947-7-1, IEC 61439-1 and 2

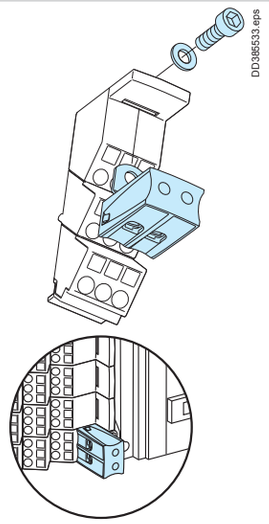
### Description

- The Linergy DP quick distribution block is designed for installation directly downstream of Compact NSX and INS-INV up to 250 A. It can also be clipped onto a modular rail.

### Advantages

- It is quick to mount in the horizontal position. Electrical connections are made directly to the device terminals.
- It is the same width as the devices and does not take up any additional space in the switchboard.
- The connection terminals are slanted to facilitate cable entry and avoid exceeding the bending radius of the flexible and rigid cables.

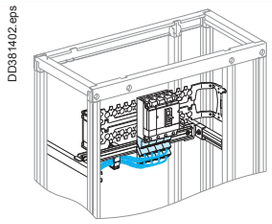
| Quick distribution blocks for Compact devices | | | | Additional block |
|---|---|---|---|---|
| **Number of poles** | | **3P** | **4P** | **3P/4P** |
| | | PB111454-15-r.eps | PB111455-15-r.eps | PB502519-11_r.eps |
| Rated operational current | (Ie) | 250 A | 250 A | 250 A |
| Rated peak withstand current | (Ipk) | 30 kA | 30 kA | 30 kA |
| Rated short-time current with upstream protection of 150 kA Icc | (Icc) | 150 kA | 150 kA | 150 kA |
| Thermal stress | ($I^2$.t) | 7.225 x $10^7$ | 7.225 x $10^7$ | |
| Total connection capacity, outgoing terminals | | 27 connections:<br>6 x $10^2$/phase<br>3 x $16^2$/phase | 36 connections:<br>6 x $10^2$/phase<br>3 x $16^2$/phase | 2 connections:<br>2 x $35^2$/pole |
| Incomer terminals | | 1 cable lug 120 mm² per pole | | |
| Dimensions (H x W x D) | | 105 x 138 x 63 | 140 x 138 x 64 | |
| Installation | | On mounting plate or DIN rail | | On mounting plate |
| Product certifications | | ASEFA | | |
| Standard for installation inside Prisma | | IEC 61439-1-2 | | |
| Glow-wire 60695-2-11 | | 960 °C | | |
| **Catalogue numbers** | | **04033** | **04034** | **04155 (3P)**<br>**04156 (4P)** |



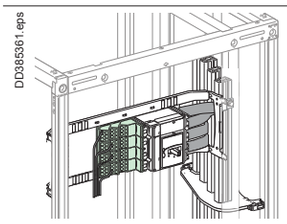

## Technical Data

| **Common characteristics** | | |
|---|---|---|
| Rated conditional short-circuit current of an assembly | (Isc) | The reinforced breaking capacity due to cascading in circuit-breaker combinations is maintained.<br>The worst-case situations have been tested. |
| Rated insulation voltage | (Ui) | 750 V AC |
| Rated operational voltage | (Ue) | 690 V AC |
| Rated impulse withstand voltage | (Uimp) | 8 kV |
| Network frequency | | 50/60 Hz |
| Degree of protection | | IPxxB |
| Degree of pollution | | 3 |
| Overvoltage category | | III |
| **Additional technical characteristics** | | |
| Reference temperature | | 40 °C |
| Operating temperature | | -25 °C to 55 °C |

## Installation




It can also be mounted downstream of vertically mounted **Compact NSX100/250 and Compact INS-INV250** devices in the enclosures.
In this case, the Linergy DP is mounted on a depth-adjustable modular rail.




Directly on the mounting plates of horizontally mounted **Compact NSX100/250 and Compact INS-INV250** devices in the enclosures.

For details on mounting plates, refer *pages E-20, E-21, E-22, E-23,* and *E-24.*

**Note:** Electrical characteristics *> page G-41.*

# Linergy DP

## Quick distribution blocks - Compact NSXm up to 160 A



DD435603.eps

## IEC 60947-7-1, IEC 61439-1 and 2

### Description

- The Linergy DP quick distribution block is designed for installation directly downstream of Compact NSXm up to 160 A. It can also be clipped onto a modular rail.

### Advantages

- It is quick to mount in the horizontal position. Electrical connections are made directly to the device terminals.
- It is the same width as the devices and does not take up any additional space in the switchboard.
- The connection terminals are slanted to facilitate cable entry and avoid exceeding the bending radius of the flexible and rigid cables.

## Quick distribution blocks for Compact devices

| Number of poles | | 3P | 4P |
|---|---|---|---|
| | | DD435604.eps | DD435605.eps |
| Rated operational current | (Ie) | 160 A | 160 A |
| Rated peak withstand current | (Ipk) | 20 kA | 20 kA |
| Rated short-time current | (Icc) | 70 kA | 70 kA |
| Thermal stress | ($I^2$.t) | 4.7 x $10^6$ $A^2S$ | 4.7 x $10^6$ $A^2S$ |
| Total connection capacity, outgoing terminals | | 18 connections:<br>4 x $10^2$/phase<br>2 x $16^2$/phase | 24 connections:<br>4 x $10^2$/phase<br>2 x $16^2$/phase |
| Incomer terminals | | 1 cable lug 70 $mm^2$ per pole | |
| Dimensions (H x W x D) | | 140 X 81 X 58 mm | 140 X 108 X 58 mm |
| Installation | | On mounting plate or DIN rail | |
| Product certifications | | ASEFA | |
| Standard for installation inside Prisma | | IEC 61439-1-2 | |
| Glow-wire 60695-2-11 | | 960 °C | |
| **Catalogue numbers** | | **04038** | **04039** |

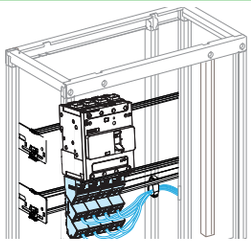
G

## Technical Data

| | | |
|---|---|---|
| **Common characteristics** | | |
| Rated conditional short-circuit current of an assembly | (Isc) | The reinforced breaking capacity due to cascading in circuit-breaker combinations is maintained.<br>The worst-case situations have been tested. |
| Rated insulation voltage | (Ui) | 800 V AC |
| Rated operational voltage | (Ue) | 690 V AC |
| Rated impulse withstand voltage | (Uimp) | 8 kV |
| Network frequency | | 50/60 Hz |
| Degree of protection | | IPxxB |
| Degree of pollution | | 3 |
| Overvoltage category | | III |
| **Additional technical characteristics** | | |
| Reference temperature | | 40 °C |
| Operating temperature | | -25 °C to 55 °C |

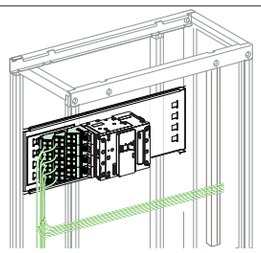
## Installation

DD435606.eps



It can also be mounted downstream of vertically mounted **Compact NSXm** devices in the enclosures.
In this case, the Linergy DP is mounted on a depth-adjustable modular rail.

DD435607.eps



Directly on the mounting plates of horizontally mounted **Compact NSXm** devices in the enclosures.

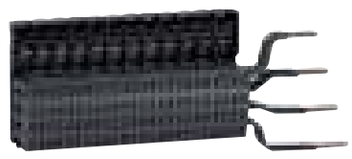
For details on mounting plates, refer *page E-35*.

**Note:** Electrical characteristics > *page G-41*.

# Linergy FC
## Feeders for Compact NSX and INS-INV up to 250 A

Device feeders

PB502507-48_r.eps


PB502363-48_r.eps

## IEC 61439-1 and 2

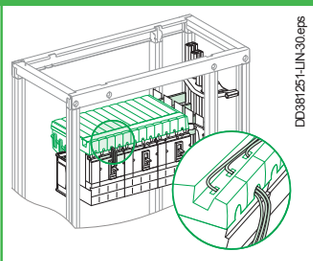
### Description

Linergy FC is an insulated horizontal distribution block. It connects directly to the mounting plate and can supply:

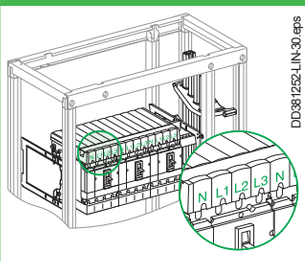
- Three 4P and four 3P Compact NSX circuit breakers, whatever the ratings (100, 160 or 250 A), the operating systems (toggle, rotary handle, motor mechanism), whether fixed or plug-in, front or rear connection (the circuit breakers must be equipped with long terminal shields downstream)
- Three 4P or four 3P Compact INS-INV switch-disconnectors, whatever the ratings (100, 160 or 250 A), whether front or rear connection.
- The design and small size blend thoroughly with the devices.
- It can be supplied by Linergy BS or Linergy LGY busbars positioned to the left or right.
- Fully insulated, Linergy FC helps to protect life and property. Numerous and well distributed vents ensure natural convection and optimum cooling of the conductors.
- The circuit breakers can be easily connected from the front. It is simple to interchange a device or to add a device in a reserve slot.
- There are markings (N, L1, L2, L3) on the front and the sides for the phases.
- The running of auxiliary cables between the devices and the corresponding terminal blocks is also taken into account. Spacious trunking is built into the blocks for the auxiliary wiring.

| | **Compact NSX100/250 & INS-INV250 - Toggle, fixed** | | **Compact NSX100/250 - Rotary handle, motor mechanism, fixed, Compact NSX100/250 - All controls, withdrawable** | | **Compact NSX100/250 & INS-INV250 - All controls, fixed and withdrawable** | |
|---|---|---|---|---|---|---|
| | PB502507-48_r.eps | | DD435608.eps | | PB502508-32_r.eps | |
| | **Linergy FC with prefabricated connections by insulated flexible bars (1)** | | **Linergy FC with prefabricated connections (1)** | | **Linergy FC without prefabricated connections (1)** | |
| **Number of poles** | **3P** | **4P** | **3P** | **4P** | **3P** | **4P** |
| Connection to | Linergy LGY busbars | | Linergy BS, Linergy LGY or Linergy LGYE busbars | | Linergy BS, Linergy LGY or Linergy LGYE busbars | |
| Number of devices | 4 | 3 | 4 | 3 | 4 | 3 |
| Composition | Self-adhesive labels to mark the phases for connections to the busbars. | | | | | |
| **Mounting plates** | | | | | | |
| Toggle, Fixed, NSX100/250 | **03420** | **03420** | **03420** | **03420** | **03420** | **03420** |
| Toggle, Plug-in, NSX100/250 | **03421** | **03421** | **03421** | **03421** | **03421** | **03421** |
| Rotary handle, motor mechanism, Fixed, NSX100/250 | **03422** | **03422** | **03422** | **03422** | **03422** | **03422** |
| **Cat. no.** | **04403** | **04404** | **04405** | **04406** | **04407 (2)** | **04408 (2)** |

## Implementation

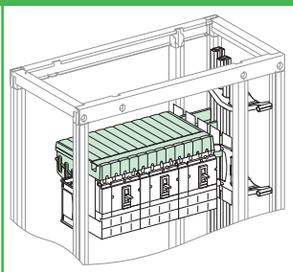

DD381251-LIN-30.eps

Auxiliary wires running in the built-in trunking.



DD381252-LIN-30.eps

Phase marking on the front of the distribution block.

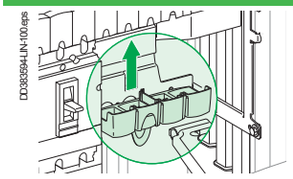

DD381250-LIN.eps

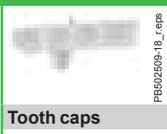
(1) The connection of a Linergy FC distribution block using pre-wired connectors or insulated flexible bars is not compatible with Form 2 partitioning (**04922**). In this case, use the form 2 restoration kit (**04924**).
(2) For the connection, use insulated flexible bars, 32 x 8mm cat. no. **04753**; Each connection must not be longer than 500 mm. This size is validated with Schneider Electric insulated flexible bars.

# Linergy FC
## Feeders for Compact NSX and INS-INV up to 250 A



## Accessories




| | |
|---|---|
| | **Tooth caps**<br>The caps block off the reserve terminals on a Linergy FC distribution block.<br>Made of an insulating material, they simply clip on from the front. |
| **Catalogue numbers** | **04809** |

## Characteristics

| **Common characteristics** | | |
|---|---|---|
| Rated operational current at 40° | (Ie) | Distribution-block derating follows the normal derating curves of Compact NSX and INS-INV |
| Rated conditional short-circuit current of an assembly | (Isc) | The reinforced breaking capacity due to cascading in circuit breaker combinations is maintained.<br>The worst-case situations have been tested.<br>The electrical characteristics are perfectly compatible with the connected devices.<br>Neither the temperature derating curves nor the performance levels of the circuit breakers and switch-disconnectors are altered. |
| Rated insulation voltage | (Ui) | 750 V AC |
| Rated operational voltage | (Ue) | 690 V AC |
| Rated impulse withstand voltage | (Uimp) | 8 kV |
| Rated peak withstand current | (Ipk) | 50 kA rms |
| Rated short-time current with upstream protection of 85 kA Icc | (Icc) | 85 kA |
| Thermal stress | ($I^2t$) | $2.500 \times 10^7$ |
| Rated conditional short-circuit current of an assembly | | Short-circuit withstand current compatible with the breaking capacity of the Compact NSX circuit breakers connected to the distribution block. |

## Linergy FC selection table for special cases

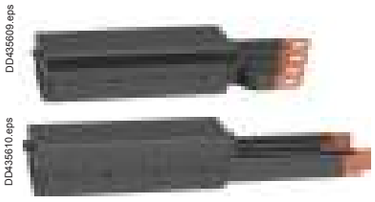
For most installations, the temperature around the switchboard is 40 °C, corresponding to an average temperature of 60 °C inside the switchboard.
Under certain conditions, the temperature inside the switchboard may be different.

| **(A) Rated operational current as a function of the temperature inside the switchboard** | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Temperature (°C) | | 40 | 45 | 50 | 55 | 60 | 65 | 70 |
| $I_{nc}$ (A) | 3P | 800 | 800 | 775 | 750 | 725 | 700 | 675 |
| | 4P | 675 | 675 | 655 | 635 | 615 | 595 | 570 |

To obtain the maximum permissible current for the linergy FC, apply the diversity factor K:
- Linergy FC 3P: K = 0.8
- Linergy FC 4P: RDF = 0.9.

# Linergy FC
## Feeders for Compact NSXm up to 160 A

Device feeders




## IEC 61439-1 and 2

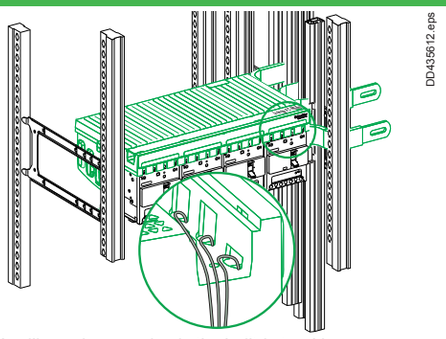
### Description

Linergy FC is an insulated horizontal distribution block. It connects directly to the mounting plate and can supply:

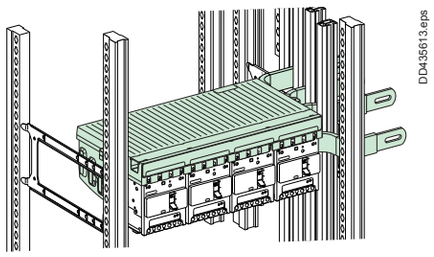
- Four 4P and five 3P Compact NSXm circuit breakers (four 3P and 4P for Compact NSXm Vigi), whatever the ratings (63, 100 or 160 A) with toggle and direct rotary handle operating mechanism.
- The design and small size blend thoroughly with the devices.
- It can be supplied by Linergy BS, Linergy LGYE and Linergy LGY busbars positioned to the left or right.
- Fully insulated, Linergy FC helps to protect life and property. Numerous and well distributed vents ensure natural convection and optimum cooling of the conductors.
- The circuit breakers can be easily connected from the front. It is simple to interchange a device or to add a device in a reserve slot.
- There are markings (N, L1, L2, L3) on the front and the sides for the phases.
- The running of auxiliary cables between the devices and the corresponding terminal blocks is also considered. Spacious trunking is built into the blocks for the auxiliary wiring.

| | **Compact NSXm - Toggle (with Everlink terminal)** | | **Compact NSXm - Toggle/ DRH (with Everlink terminal)** | | | |
|---|---|---|---|---|---|---|
| | | | | | | |
| | **Linergy FC with prefabricated connections by insulated flexible bars (1)** | | **Linergy FC with prefabricated connections (1)** | | **Linergy FC without prefabricated connections (1)** | |
| **Number of poles** | **3P** | **4P** | **3P** | **4P** | **3P** | **4P** |
| Connection to | Linergy LGY busbars | | Linergy BS and Linergy LGYE busbars | | | |
| Number of devices | 5 (2) | 4 | 5 (2) | 4 | 5 (2) | 4 |
| Mounting plates | **03416** | **03416** | **03416** | **03416** | **03416** | **03416** |
| **Cat. no.** | **04410**<br>**04416** (3) | **04411** | **04412**<br>**04417** (3) | **04413** | **04419**<br>**04418** (3) | **04420** |

## Implementation

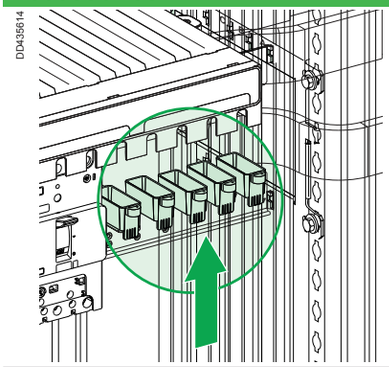


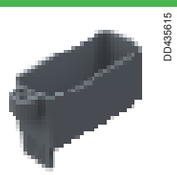

Auxiliary wires running in the built-in trunking.




(1) The connection of a Linergy FC distribution block using pre-wired connectors or insulated flexible bars is not compatible with Form 2 partitioning (**04922**). In this case, use the form 2 restoration kit (**04924**).
(2) Linergy FC configuration having NSXm with Vigi can mount four devices in a row for both 3P and 4P.
(3) The catalogue reference number is used only with NSXm Vigi.

## Accessories




**Tooth caps**

The caps block off the reserve terminals on a Linergy FC distribution block.
Made of an insulating material, they simply clip on and install the screw from the front.

| Catalogue numbers | 04810 |
|---|---|

## Characteristics

### Common characteristics

| | | |
|---|---|---|
| Rated operational current at 40° | (Ie) | Distribution-block derating follows the normal derating curves of Compact NSXm |
| Rated conditional short-circuit current of an assembly | (Isc) | The reinforced breaking capacity due to cascading in circuit breaker combinations is maintained.<br>The worst-case situations have been tested.<br>The electrical characteristics are perfectly compatible with the connected devices.<br>Neither the temperature derating curves nor the performance levels of the circuit breakers and switch-disconnectors are altered. |
| Rated insulation voltage | (Ui) | 800 V AC |
| Rated operational voltage | (Ue) | 690 V AC |
| Rated impulse withstand voltage | (Uimp) | 8 kV |
| Rated peak withstand current | (Ipk) | 18 kA |
| Rated short-time current with upstream protection of 85 kA Icc | (Icc) | 50 kA |
| Thermal stress | ($I^2.t$) | 4.5 x $10^6 A^2S$ |
| Rated conditional short-circuit current of an assembly | | Short-circuit withstand current compatible with the breaking capacity of the Compact NSXm circuit breakers connected to the distribution block. |

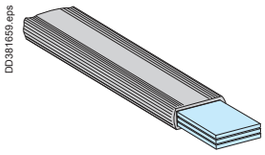
## Linergy FC selection table for special cases

For most installations, the temperature around the switchboard is 40 °C, corresponding to an average temperature of 60 °C inside the switchboard.
Under certain conditions, the temperature inside the switchboard may be different.

### (A) Rated operational current as a function of the temperature inside the switchboard

| Ambient Air Temperature outside panel (°C) | | 35 | 40 | 45 | 50 |
|---|---|---|---|---|---|
| IP31 (A) | 3P | 600 | 575 | 550 | 525 |
| | 4P | 500 | 480 | 460 | 440 |
| IP55 (A) | 3P | 515 | 500 | 475 | 450 |
| | 4P | 460 | 440 | 420 | 400 |

# Insulated flexible bars




## Secondary distribution

The insulated flexible bars are tested in a type-tested switchboard environment. Their design takes into account the switchboard architecture where they are often in close proximity to a protection device (circuit breaker or fuse) with significant heat losses.
The sizes for the flexible bars indicated below take into account the heat losses of Schneider Electric devices in a Prisma switchboard.

## Characteristics

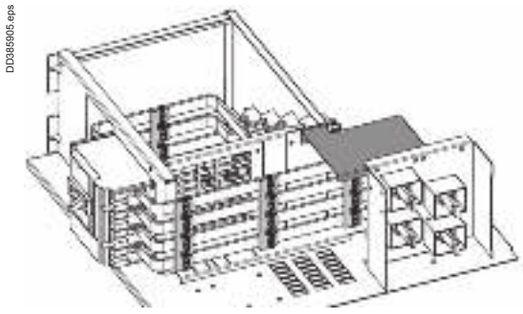
| | |
|---|---|
| Length | 1800 mm |
| Rated insulation voltage (Ui) | 1000 V |
| Maximum withstand temperature for the insulating material | 125 °C |

## Connection between device and busbars

The flexible bars are determined taking into account the connected device, whatever the internal temperature of the switchboard.
The bar sizes indicated below take into account the derating curves of devices.

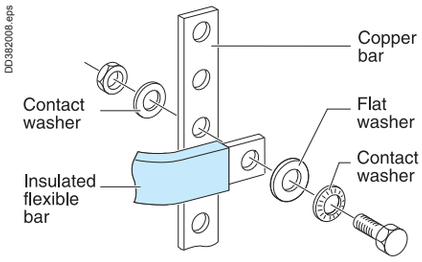
| Devices | Size (mm) | Catalogue number |
|---|---|---|
| NSX100 | 20 x 2 | **04742** |
| NSX160/250 | 20 x 3 (1) | **04743** |
| NSX400 | 32 x 5 | **04751** |
| NSX630 | 32 x 8 (2) | **04753** |
| NSX100 ELCB | 20 x 2 | **04742** |
| NSX160/250 ELCB | 20 x 3 (1) | **04743** |
| NSX400 ELCB | 32 x 5 | **04751** |
| NSX630 ELCB | 32 x 8 (2) | **04753** |
| INS-INV125/160 | 20 x 2 | **04742** |
| INS-INV250 | 20 x 3 | **04743** |
| INS-INV400 | 32 x 5 | **04751** |
| INS-INV630 | 32 x 6 | **04752** |
| FM 200 A Linergy | 20 x 3 | **04743** |
| FC 3P Linergy | 32 x 8 (2) (3) (4) | **04753** |
| FC 4P Linergy | 32 x 8 (2) (3) (4) | **04753** |
| Fupact 250 | 24 x 5 | **04746** |
| Fupact 400 | 32 x 5 | **04751** |
| Fupact 630 | 32 x 8 (2) | **04753** |
| Easypact CVS100 | 20 x 2 | **04742** |
| Easypact CVS160/250 | 20 x 3 (1) | **04743** |
| Easypact CVS400 | 32 x 5 | **04751** |
| Easypact CVS630 | 32 x 8 (2) | **04753** |

**(1)** To connect a Compact NSX250 and NSX150 ELCB to Linergy BW busbars, use a 24 x 5 mm flexible bar (**04746**).
**(2)** The insulated flexible bars is not compatible with Form 2 partitioning (**04922**).
In this case, use the form 2 restoration kit **04924** *> page H-5*.
**(3)** In case of use of 32 x 6 insulated flexible bar, please contact Schneider Electric.
**(4)** Max length 500 mm per connection




The references **87646** (3P) and **87647** (4P) can be used up to 250 A, when binding of insulated flexible bars, to withstand Icw.

**Nota :** For NSXm connection, there is no flat insulated flexible bar available. Choose a cable prefabricated connection *> page E-35 and page E-36*




## Connection between busbars

Copper flexible bars are designed for connections between busbars taking into account the following characteristics:

- a maximum temperature of 60 °C inside the switchboard. This corresponds to the average temperature inside a switchboard for an ambient temperature of 35 °C
- the maximum withstand temperature for the insulating material is 125 °C.

| Ie (1) max | Size (mm) | Catalogue numbers |
|---|---|---|
| 200 A | 20 x 2 | **04742** |
| 250 A | 20 x 3 | **04743** |
| 400 A | 24 x 5 | **04746** |
| 520 A | 32 x 5 | **04751** |
| 580 A | 32 x 6 | **04752** |
| 660 A | 32 x 8 | **04753** |

**(1)** Rated operational current.

## Designing connections

*> page G-22.*

G

# Linergy DX
## Quick distribution blocks

### IEC 60947-7-1, CEI 61439-2

### Description

- Downstream circuits are connected from the front, to spring terminals.
- Contact pressure automatically adapts to the size of the conductor.
- Contacts are insensitive to vibrations and thermal variations.
- Only one cable (flexible or rigid) can be inserted per terminal.

## Quick distribution blocks

| Number of poles | | 4P, upstream incoming | 4P, downstream incoming |
|---|---|---|---|
| | | | |
| Rated operational current at 40° | (Ie) | 63 A | 63 A |
| Rated conditional short-circuit current of an assembly | (Isc) | The reinforced breaking capacity due to cascading in circuit breaker combinations is maintained.<br>The worst-case situations have been tested.<br>150 kA with upstream protection of 150 kA Icc | |
| Rated peak withstand current | (Ipk) | 10 kA | 10 kA |
| Rated insulation voltage | (Ui) | 500 V AC | 500 V AC |
| Rated operational voltage | (Ue) | 440 V AC | 440 V AC |
| Rated impulse withstand voltage | (Uimp) | 6 kV | 6 kV |
| Rated short-time current | (Icc) | 150 kA | 150 kA |
| Thermal stress | ($I^2.t$) | 9.03 x $10^6$ | 9.03 x $10^6$ |
| Rated operational frequency | | 50/60 Hz | 50/60 Hz |
| Degree of protection | | IPxxB | IPxxB |
| Incoming terminals | | 1 tunnel terminal 25²/phase | 1 tunnel terminal 25²/phase |
| Total connection capacity, outgoing terminals | | 24 connections:<br>4 x 6²/phase<br>12 x 6²/neutre | 24 connections:<br>4 x 6²/phase<br>12 x 6²/neutre |
| Dimensions (H x W x D) | | 96.5 x 72 x 62<br>8 x 9 mm pitch | 96.5 x 72 x 62<br>8 x 9 mm pitch |
| Installation | | Clipped onto a DIN rail | Clipped onto a DIN rail |
| Others | | | |
| Standard for installation inside Prisma | | IEC 61439-2 | IEC 61439-2 |
| Glow-wire 60695-2-11 | | 960 °C | 960 °C |
| Degree of pollution | | 3 | 3 |
| **Catalogue numbers** | | **04040** | **04041** |

## Accessories

| | | | |
|---|---|---|---|
| **Catalogue numbers** | | - | - |

# Linergy DX
## Quick distribution blocks

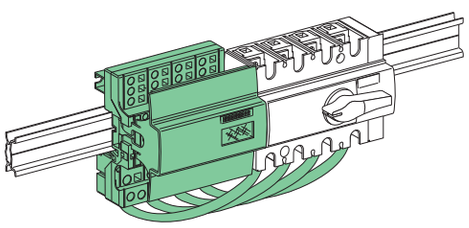


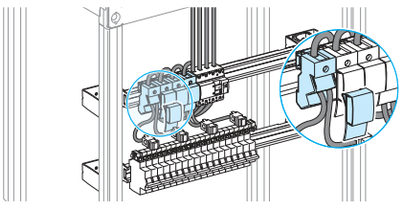
### Advantages

- A reliable electrical connection, no maintenance required (tightness guaranteed over time).
- Quick connection.
- Easy phase balancing.
- Ease of rewiring if the switchboard is expanded or modified.

| | 4P | | 1P |
|---|---|---|---|
| | PB111415-19_r.eps | DD386251.eps | PB111453-8-r.eps |
| | 125 A | 160 A | 160 A |
| | The reinforced breaking capacity due to cascading in circuit breaker combinations is maintained.<br>The worst-case situations have been tested.<br>150 kA with upstream protection of 150 kA Icc | | |
| | 20 kA | 20 kA | 24 kA |
| | 750 V AC | 750 V AC | 750 V AC |
| | 690 V AC | 690 V AC | 690 V AC |
| | 8 kV | 8 kV | 8 kV |
| | 150 kA | 150 kA | 150 kA |
| | 2.025 x $10^7$ | 2.025 x $10^7$ | 3.025 x $10^7$ |
| | 50/60 Hz | 50/60 Hz | 50/60 Hz |
| | IPxxB | IPxxB | IPxxB |
| | 1 tunnel terminal 35²/phase | Supplied with a prefabricated flexible connection equipped with tunnel terminals (for INS-INV100/160 use adaptator **28947** (3P) **28948** (4P) | 1 tunnel terminal 70²/phase |
| | 52 connections:<br>7 x 4²/phase<br>3 x 6²/phase<br>2 x 10²/phase<br>1 x 16²/phase (screw terminal) | 52 connections:<br>7 x 4²/phase<br>3 x 6²/phase<br>2 x 10²/phase<br>1 x 16²/phase (screw terminal) | 6 connections:<br>6 x 16²/phase |
| | 127 x 108 x 48<br>12 x 9 mm pitch | 127 x 108 x 48<br>12 x 9 mm pitch | 95 x 36 x 70<br>4 x 9 mm pitch |
| | Screwed to plain or slotted backplate or onto DIN rail | Screwed to plain or slotted backplate or onto DIN rail | Onto DIN rail |
| | Possible to combine 2 terminal blocks<br>(2nd terminal block supplied from enclosed terminals in the 1st, Imax of 2nd terminal block: 80 A) | | |
| | IEC 61439-2 | IEC 61439-2 | IEC 61439-2 |
| | 960 °C | 960 °C | 960 °C |
| | 3 | 3 | 3 |
| | **04045** | **04046** (1) | **04031** |

| | | | |
|---|---|---|---|
| | 4 x 125 A flexible connections, L = 240 mm with 1 end fitting for tunnel terminals. | | 4 x 160 A flexible connections, L = 380 mm with 2 x 45 mm² end fittings for tunnel terminals. |
| | **04047** (1) | - | **04149** |

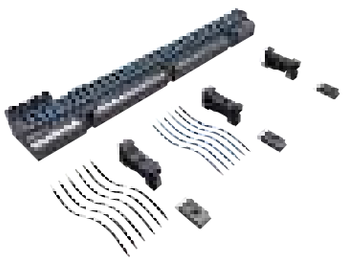

PB502370-55.eps


Dd383654.eps

**Note:** electrical characteristics > *page G-41*.
**(1)** To be adapted with reference **28947** and **28948** fir INS-INV160.

# Linergy FM
## Quick device feeders

### Device feeders



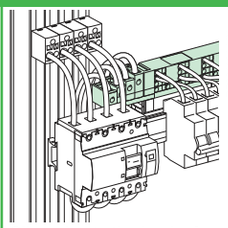

### Description

- Distribution over full rows of modular devices.
- The distribution block is generally supplied by busbars in enclosures and cubicles.
- Easy phase balancing.
- Mix of devices and functions in the same row.
- Installation ≥ 160 A: clipped onto the back of a modular rail or screwed onto a solid or pre-slotted plate.

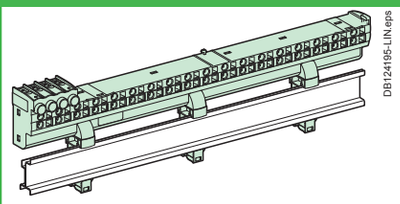
## Distribution blocks

| **Number of poles** | | | **4P** | **4P** |
|---|---|---|---|---|
| | | | | |
| | | | **63 A** | **80 A** |
| Rated peak withstand current | | (Ipk) | 15 kA | 16 kA |
| Rated conditional short-circuit current of an assembly | | (Isc) | The cascading reinforced breaking capacity when combining circuit breakers is maintained. The worst-case scenarios have been tested. The characteristics are exactly right for the connected devices. Circuit breakers and switches still have their temperature derating curves, and their whole performance is maintained.<br>150 kA with upstream protection of 150 kA Icc | |
| Rated insulation voltage | | (Ui) | 500 V AC | 500 V AC |
| Rated voltage | | (Ue) | 440 V AC | 440 V AC |
| Rated impulse withstand voltage | | (Uimp) | 6 kV | 6 kV |
| Maximum current | | (Imax) | - | - |
| Thermal stress | | (I²t) | 9.03 x $10^6$ | 9.03 x $10^6$ |
| Rated operational frequency | | | 50/60 Hz | |
| Degree of protection | | | IPxxB | IP20 |
| Width | 9 mm modules | | 24 | 48 |
| | 18 mm modules | | 12 | 24 |
| Supply at incoming terminals | | | Enclosed terminals for cables up to 25 mm² | Enclosed terminals for cables up to 25 mm² |
| Downstream connection capacity, cable to be used without ferrules | Max. 4 mm² | Phase | 2 | - |
| | | Neutral | 4 | - |
| | Max. 6 mm² | Phase | 2 | - |
| | | Neutral | 4 | - |
| | Max. 10 mm² | Phase | - | 18 |
| | | Neutral | - | 18 |
| Accessories included | Pre-stripped copper connections | | 10 x 4 mm² + 6 x 6 mm² (W = 100 mm) | 12 blue + 12 black |
| | Protection cover | | - | - |
| | Fixings | | - | - |
| **Catalogue numbers** | | | **04008** | **04000** |

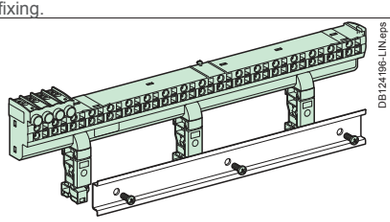
## Installation




Clipped onto the back of a modular rail, or screw fixing.



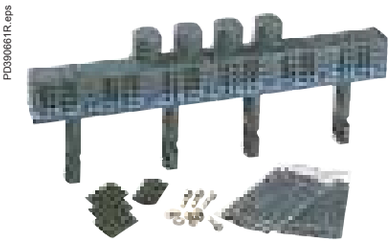

Clipped onto the back of a modular rail, or screw fixing.




Can be mounted in Pragma Evolution enclosures and in Prisma Pack 160.

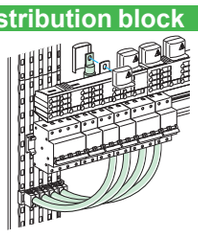
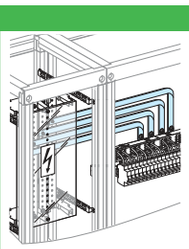
# Linergy FM
## Quick device feeders






| | 4P | 2P | 3P | 4P | 4P |
|---|---|---|---|---|---|
| | PB502500-18_r.eps | PB502499-23_r.eps | PB502498-27_r.eps | PB502497-27-r.eps | PB502501-27_r.eps |
| | **160 A** | **200 A** | **200 A** | **200 A** | **200 A** |
| | 27 kA | 25 kA | 25 kA | 30 kA | 20 kA |
| | The cascading reinforced breaking capacity when combining circuit breakers is maintained. The worst-case scenarios have been tested. The characteristics are exactly right for the connected devices. Circuit breakers and switches still have their temperature derating curves, and their whole performance is maintained.<br>150 kA with upstream protection of 150 kA Icc | | | | |
| | 750 V AC | 750 V AC | 750 V AC | | 750 V AC |
| | 690 V AC | 690 V AC | 690 V AC | | 690 V AC |
| | 8 kV | 8 kV | 8 kV | | 8 kV |
| | 50 A for feeder for 10 $mm^2$ cable/63 A for feeder for 2 10 $mm^2$ cables | | | | |
| | $3600 \times 10^7$ | $3600 \times 10^7$ | $3600 \times 10^7$ | | $3600 \times 10^7$ |
| | 50/60 Hz | | | | |
| | IPxxB | | | | |
| | 24 | 48 | | | 72 |
| | 12 | 24 | | | 36 |
| | Direct onto the row by cable 50 $mm^2$ with crimped lug, or flexible bar 20 x 3 from busbar with prefabricated connection | | | | - |
| | - | - | | | - |
| | - | - | | | - |
| | - | - | | | - |
| | - | - | | | - |
| | 6 | 12 | | | - |
| | 6 | 18 | | | - |
| | 20 x 4 $mm^2$ + 6 x 6 $mm^2$ (W = 100 mm) | | | | - |
| | For rows (IPxxB) | - | | | - |
| | For rows | - | | | - |
| | **04018** (1) | **04012** (1) (2) | **04013** (1) | **04014** (1) (2) | **04026** (1) |

## Connections to the distribution block

| |  DD386348.eps |  Dd383655.eps | | |
|---|---|---|---|---|
| | 4P 200 A connection (supplied with fixings) | 4P 200 A connection (supplied with fixings) | 4P 200 A connection (supplied with fixings) | 4P 160 A connection for Linergy FM 1/2 row |
| Allows power supply from | Linergy BW busbars | Linergy BS busbar | Rear Linergy BS busbar | Devices |
| **Catalogue numbers** | **04021** | **04024** | **04029** | **04030** |

## Spare parts

| | PB502502-8_r.eps |
|---|---|
| | 4 covers for 160/200 A Linergy FM rows |
| **Catalogue numbers** | **01202** |

**Note:** electrical characteristics *> page G-41*.
**(1)** Cable to be used without tip.
**(2)** Use Linergy FM 200 (**04012** and **04014**) in Direct Current is possible. It is mùandatory to locate on the device the nature of the terminals ⊕ and ⊖ at upstream and downstream. For more information, please contact our customer service.

# Linergy DS
## Screw distribution blocks



PB111254-30_1.eps

PB111253-30_1.eps

## IEC/EN 60947-7-1, IEC/EN 61439-1 & 2

### Description

- Single-pole or four-pole distribution block that can be installed on a standard DIN rail or on a mounting plate.
- Compatible with Prisma G and P, Pragma, Mini Pragma and Resbo series switchboards.
- Incomers and feeders are connected to screw terminals that accept rigid or flexible cables with ferrule.
- Optional: additional neutral terminal strip for four-pole distribution block.

### Avantages

- Simplified power supply for main incomers.
- Easy phase balancing.
- Easy, effortless cabling due to excellent accessibility.
- Visible cabling.
- Insulation between phases.
- The single-pole distribution blocks are adjacent and bridgeable via the second incoming hole for parallel connection.

**Screw distribution blocks**

| **Number of poles** | | **1P** | | | **4P** |
|---|---|---|---|---|---|
| | | PB111250-20_1.eps | PB111251-20_1.eps | PB111252-20_1.eps | PB111243-20_1.eps |
| Rating | | 125 A | 160 A | 250 A | 100 A |
| Total connection capacity | | 10 | 13 | 14 | 4 x 7 |
| **Terminal capacity** | | | | | |
| Diameter | | 2 x Ø9.5 mm | 2 x Ø12 mm | 1 x Ø15.3 mm | 2 x Ø7.5 mm |
| | | 2 x Ø7.5 mm | 3 x Ø7.5 mm | 1 x Ø10 mm | 5 x Ø5.5 mm |
| | | 6 x Ø5.8 mm | 8 x Ø5.8 mm | 4 x Ø6 mm | - |
| | | - | - | 8 x Ø7.5 mm | - |
| Rated peak withstand current (Ipk) | Ipk/60 ms | 25 kÂ | 36 kÂ | 60 kÂ | 14 kÂ |
| | Ipk/6 ms | - | - | - | 24 kÂ |
| Rated short-time withstand current (Icc) (IEC/EN 60947-7-1) | | 36 kA | 36 kA | 36 kA | 20 kA |
| Width (number of 9 mm pitches) | | 3 | 4 | 5 | 8 |
| Dimensions (H x W x D) | | 85 x 27 x 50.5 | 85 x 36 x 50.5 | 85 x 45 x 50.5 | 100 x 71 x 50.5 |
| Weight (g) | | 125 | 163 | 239 | 210 |
| Neutral terminal strip (optional) | | - | - | - | **LGYN1007** |
| **Catalogue numbers** | | **LGY112510** | **LGY116013** | **LGY125014** | **LGY410028** |

# Linergy DS
## Screw distribution blocks

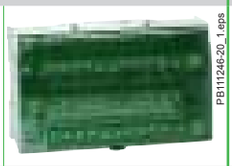


DB406005_1.eps

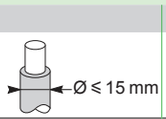
On **LGY412560** and **LGY416048** references.
Input cabling facilitated by side terminals.

## Technical data

| Common characteristics | |
|---|---|
| **In compliance with IEC/EN 60947-7-1 and IEC/EN 61439-1 & 2** | |
| Rated insulation voltage (Ui) | 500 V AC |
| Rated operational voltage (Ue) | 230 V AC (L/N)<br>440 V AC (L/L) |
| Rated impulse withstand voltage (Uimp) | 8 kV |
| Rated conditional short-circuit current of an assembly | Up to the breaking capacity of Schneider Electric feeder circuit breakers, even in cascading configuration |
| Network frequency | 50/60 Hz |
| Degree of pollution | 3 |
| Overvoltage category | III |
| **Additional technical characteristics** | |
| Reference temperature | 40 °C |
| Operating temperature | -25 °C to 55 °C |
| Dielectric withstand (IEC/EN 60947-1) | 2500 V AC |

| | | | | Neutral terminal strip | | |
|---|---|---|---|---|---|---|
| | PB111244-20_1.eps | PB111245-20_1.eps |  PB111246-20_1.eps | PB111247-20_1.eps | PB111248-20_1.eps | PB111249-20_1.eps |
| | 125 A | | 160 A | 100 A | 125 A | |
| | 4 x 12 | 4 x 15 | 4 x 12 | 7 | 12 | 15 |
| | | | | | | |
| | 1 x Ø9 mm | 1 x Ø9.5 mm | 1 x Ø12 mm | 2 x Ø7.5 mm | 1 x Ø9 mm | 1 x Ø9.5 mm |
| | 7 x Ø7.5 mm | 3 x Ø8.5 mm | 3 x Ø9 mm | 5 x Ø5.5 mm | 7 x Ø7.5 mm | 3 x Ø8.5 mm |
| | 4 x Ø6.5 mm | 11 x Ø6.5 mm | 8 x Ø7.5 mm | - | 4 x Ø6.5 mm | 11 x Ø6.5 mm |
| | - | - | - | - | - | - |
| | 18 kÂ | 18 kÂ | 22 kÂ | - | - | - |
| | 26 kÂ | 28 kÂ | 36 kÂ | - | - | - |
| | 36 kA | 36 kA | 36 kA | - | - | - |
| | 14 | 20 | 18 | 7 | 14 | 17 |
| | 100 x 126 x 50.5 | 100 x 162 x 50.5 | 100 x 174 x 50.5 | 20 x 70 x 35 | 20 x 125 x 35 | 20 x 155 x 35 |
| | 390 | 559 | 567 | 63 | 111 | 149 |
| | **LGYN12512** | **LGYN12515** | **LGYN12512** | - | - | - |
| | **LGY412548** | **LGY412560** | **LGY416048** | **LGYN1007** | **LGYN12512** | **LGYN12515** |

## Terminal technical data

| **Type** | **PZ2 screw** | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Diameter | Ø5.5 mm | Ø5.8 mm | Ø6 mm | Ø6.5 mm | Ø7.5 mm | Ø8.5 mm | Ø9 mm | Ø9.5 mm |
| Section rigid cable | 1.5 to 16 mm² | 1.5 to 16 mm² | 1.5 to 16 mm² | 1.5 to 16 mm² | 2.5 to 25 mm² | 6 to 35 mm² | 10 to 35 mm² | 10 to 35 mm² |
| Section flexible cable or with ferrule | 1.5 to 10 mm² | 1.5 to 10 mm² | 1.5 to 10 mm² | 1.5 to 10 mm² | 1.5 to 16 mm² | 4 to 25 mm² | 4 to 25 mm² | 6 to 35 mm² |
| Tightening torque | 2 N.m | 2 N.m | 2 N.m | 2 N.m | 2 N.m | 2 N.m | 2.5 N.m | 2.5 N.m |
| **Type** | **HC screw** | | | | | | | |
| Diameter | Ø9.5 mm | Ø10 mm | Ø12 mm | | Ø15.3 mm | | | |
| Section rigid cable | 10 to 35 mm² | 1.5 to 50 mm² | 25 to 70 mm² |  Ø ≤ 15 mm | 35 to 120 mm² | | | |
| Section flexible cable or with ferrule | 6 to 35 mm² | 1.5 to 35 mm² | 16 to 50 mm² | | 25 to 95 mm² | | | |
| Tightening torque | 8 N.m | 4 N.m | 1P: 9 N.m | 4P: 5 N.m | 14 N.m | | | |

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# Linergy FH

## Comb busbar for 27 mm pitch for C120, NG125

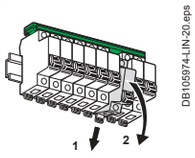
## IEC 60664-1

### Description

Comb busbars make it easier to install C120 and NG125 circuit breaker.
- Supplied with 2 lateral end-caps, to reinforce copper bars insulating (IP2).
- Allowing circuit identification.
- Easy cut to length thanks to cutting marks on the insulating material and copper bars.

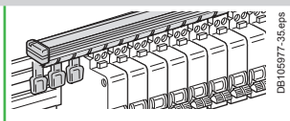
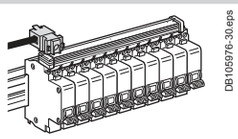
| C120, NG125 | 27 mm poles, cuttable | | | |
|---|---|---|---|---|
| **Number of poles** | **1P** | **2P** | **3P** | **4P** |
| | | | | |
| | Each com busbar reference includes:<br>■ 1 x single or 2 pole comb busbar + 8 tooth-caps + 2 side plates<br>■ 1 x 3 or 4 pole comb busbar + 4 tooth-caps + 2 side plates<br>To insulate teeth that have been left free can be insulated by tooth-caps | | | |
| Rated operational current to 40 °C (Ie) | 125 A (63 A max by outgoer) | | | |
| Rated conditional short-circuit current of an assembly (Isc) | Compatible with the breaking capacity of C120 and NG125 circuit breakers | | | |
| Rated insulation voltage (Ui) | 620 V AC | | | |
| Rated voltage (Ue) | 500 V AC | | | |
| Degree of pollution | 3 | | | |
| Fire resistance to IEC 695-2-1 | Self-extinguishing 960 °C, 30 s | | | |
| Colour | RAL 7016 (anthracite grey) | | | |
| **Use** | | | | |
| | Power supply by connector recommended | | | |
| Number of 27 mm modules | 16 | 16 | 15 | 16 |
| Set of | 1 | | | |
| **Catalogue numbers** | **14811** | **14812** | **14813** | **14814** |

## Installation




Comb busbars allow dismountability of switchgear.

## Accessories

| **Number of poles** | **1P, 2P, 3P, 4P** | |
|---|---|---|
| | | |
| | **Tooth caps** | **Insulated connector** |
| | | Compatible with all Schneider Electric comb busbars<br>Clip onto the comb busbar's insulating material, which gives them very great stability<br>Receive clip-on markers allowing circuit identification |
| **Use** | | |
| | | For 25 $mm^2$ semi-rigid cable |
| Set of | 20 | 4 |
| **Catalogue numbers** | **14818** | **14885** |
| **Installation** | | |
| |   |   |

# Linergy FH
## Comb busbar for 18 mm pitch for Acti 9

PB502379-30.eps

## IEC 60947-7-1, IEC 61439-2

### Description

Comb busbars make it easier to install Acti 9 circuit breakers.
- Can be sawn and cut in a single pass, with a metal saw (the end-caps are compulsory after cutting).
- Supplied with two lateral end-caps to reinforce copper bars insulating (IP2) except for 57 module references.The side plates are compulsory after cutting.
- Easy cut to length thanks to cutting marks on the insulating material and copper bars.
- The phases are identified by symbols on each side of the comb busbar for installation in all positions.
- The special comb busbars for circuit breakers with 9 mm auxiliaries have a 9 mm gap for inserting iOF and iSD.

| Acti 9 | 18 mm poles, cuttable | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Number of poles** | **1P** | **2P** | **3P** | **4P** | **3 (N+P)** | **Aux+1P** | **Aux+2P** | **Aux+3P** | **Aux+4P** | **3 (Aux+1P)** | **3 (Aux+N+1P)** |
| | PB110252-65.eps | | | | | | | | | | |
| Rated operational current at 40 °C (Ie) | 100 A | | | | | | | | | | |
| Rated conditional short-circuit current of an assembly (Isc) | Compatible with the breaking capacity of Acti 9 circuit breakers | | | | | | | | | | |
| Rated insulation voltage (Ui) | 500 V AC | | | | | | | | | | |
| Rated voltage (Ue) | 415 V AC | | | | | | | | | | |
| Degree of pollution | 3 | | | | | | | | | | |
| Fire resistance to IEC 695-2-1 | Self-extinguishing 960 °C, 30 s | | | | | | | | | | |
| Colour | RAL 7016 (anthracite grey) | | | | | | | | | | |
| **Use** | | | | | | | | | | | |
| | Power supply by connector recommended | | | | | | | | | | |
| Type | L1… | L1L2… | L1L2L3… | NL1L2L3… | NL1NL2… …NL3 | AuxL1… | AuxL1L2… | AuxL1L2L3 | AuxNL1… …L2L3 | AuxL1… …AuxL2… …AuxL3 | AuxL1… …AuxL2… …AuxL3 |
| Set of | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| **Catalogue numbers** | | | | | | | | | | | |
| 6 modules of 18 mm | **A9XPH106** | - | - | - | - | - | - | - | - | - | - |
| 12 modules of 18 mm | **A9XPH112** | **A9XPH212** | **A9XPH312** | **A9XPH412** | **A9XPH512** (1) | - | - | - | - | - | - |
| 18 modules of 18 mm | - | - | - | - | **A9XPH518** (1) | - | - | - | - | - | - |
| 24 modules of 18 mm | **A9XPH124** | **A9XPH224** | **A9XPH324** | **A9XPH424** | **A9XPH524** (1) | - | - | - | - | - | - |
| 57 modules of 18 mm | **A9XPH157** | **A9XPH257** | **A9XPH357** | **A9XPH457** | **A9XPH557** (1) | **A9XAH157** | **A9XAH257** | **A9XAH357** | **A9XAH457** | **A9XAH657** | **A9XAH557** (1) |

**(1)** This comb busbar is only compatible in top feeding for simple lug devices and bottom feeding on double lug devices.

G

## Installation

PB110290-20.eps

PB110793-20.eps

## Accessories

| **Number of poles** | **1P** | **2P** | **3P** | **4P** | **-** | **-** | **-** |
|---|---|---|---|---|---|---|---|
| | DB404806.eps | | | | DB404808.eps | PB110258-7.eps | PB110259-7.eps |
| | **Side plates** | | | | **Tooth covers** | **Connectors** | |
| | | | | | | **Monoconnect** | **Double terminals** |
| | Lateral end-caps providing IP20 protection | | | | To insulate teeth that have been left free | Comb busbar power supply. Horizontal incomer on each side. For 35 mm² cable. Tightening torque 4 N.m PB108138-20.eps | |
| Set of | 10 | 10 | 10 | 10 | 20 | 4 | 4 |
| **Catalogue numbers** | **A9XPE110** | **A9XPE210** | **A9XPE310** | **A9XPE410** | **A9XPT920** | **A9XPCM04** | **A9XPCD04** |

# Linergy FH
## Comb busbar for 18 mm pitch for Acti 9

Device feeders

IEC 60947-7-1, IEC 61439-2

PB502380-30.eps

### Description

- Comb busbars make it easier to install Acti 9 circuit breakers.
- The phases are identified by symbols on each side of the comb busbar for installation in all positions.

| Acti 9 | 18 mm poles, not cuttable | | | | |
|---|---|---|---|---|---|
| **Number of poles** | **1P** | **2P** | **3P** | **4P** | **3 (N + P)** |
| | PB110231-15.eps | | | | |
| Rated operational current to 40 °C (Ie) | 100 A | | | | |
| Rated conditional short-circuit current of an assembly (Isc) | Compatible with the breaking capacity of Acti 9 circuit breakers | | | | |
| Rated insulation voltage (Ui) | 500 V AC | | | | |
| Rated voltage (Ue) | 415 V AC | | | | |
| Degree of pollution | 3 | | | | |
| Fire resistance to IEC 695-2-1 | Self-extinguishing 960 °C, 30 s | | | | |
| Colour | RAL 7016 (anthracite grey) | | | | |
| **Use** | | | | | |
| | Power supply by connector recommended | | | | |
| Type | L1 | L1L2 | L1L2L3 | NL1L2L3 | NL1NL2NL3 |
| Set of | 1 | 1 | 1 | 1 | 1 |
| **Catalogue numbers** 12 modules of 18 mm | **A9XPM112** | **A9XPM212** | **A9XPM312** | **A9XPM412** | **A9XPM512** (1) |

## Installation

PB110290-25.eps

PB110793-25.eps

## Accessories

PB110257-10.eps

PB110258-7.eps

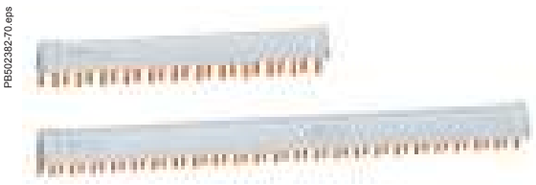
PB110259-7.eps

| | **Tooth caps** | **Connectors** | |
|---|---|---|---|
| | | **Monoconnect** | **Double terminals** |
| | To insulate teeth that have been left free | Comb busbar power supply | |
| **Use** | | | |
| | | Horizontal incomer on each side<br>For 35 mm² cable<br>Tightening torque 4 N.m | |
| Set of | 20 | 4 | 4 |
| **Catalogue numbers** | **A9XPT920** | **A9XPCM04** | **A9XPCD04** |
| **Installation** | | | |
| | PB108162-35.eps | PB108164-35.eps | |

(1) This comb busbar is only compatible in top feeding for simple lug devices and bottom feeding on double lug devices.

# Linergy FH
## Comb busbar for 9 mm pitch for Acti 9, C60






## IEC 60439-1

### Description

Comb busbars ensure:
- Easy, reliable mounting of 1P+N and 3P+N, TL, CT, ID, V, BP and Cm switchgear: tooth positioning opposite the device terminals is ensured by indexing of copper parts.

C60/ID Group Feeder comb busbars contain two different parts:
- connection of Group Feeder switchgear: C60 (3P + N) or ID (3P + N) circuit breaker in 18 mm modules, powered by cables, through the bottom, directly by the terminals
- connection of Acti 9 switchgear in 9 mm modules.

| **Acti 9 L + N** | | **9 mm poles, cuttable** | | | | | |
|---|---|---|---|---|---|---|---|
| **Number of poles** | | **1P + N** | | | **3P + N** | | |
| | | DB123729.eps<br>21501 | | | DB123730.eps<br>21505 | | |
| | | Complete comb busbars (supplied with 4 side plates and 1 tooth cap) | | | | | |
| Rated operational current to 40 °C | (Ie) | 80 A | | | | | |
| Rated conditional short-circuit current of an assembly | (Isc) | Compatible with the breaking capacity of Acti 9 C60 and circuit breakers | | | | | |
| Rated insulation voltage | (Ui) | 440 V AC | | | | | |
| Rated voltage | (Ue) | 230 V AC (P + N) - 400 V AC (3P + N) | | | | | |
| Rated impulse withstand voltage | (Uimp) | 6 kV | | | | | |
| Degree of protection | | IP20 | | | | | |
| Degree of pollution | | 3 | | | | | |
| Fire resistance to IEC 695-2-1 | | Self-extinguishing 960 °C, 30 s | | | | | |
| Colour | | RAL 7035 | | | | | |
| Number of 18 mm modules | Comb busbar | 12 | 18 | 24 | 12 | 18 | 24 |
| | Tooth cap | 3 | 3 | 6 | 3 | 3 | 6 |
| **Catalogue numbers** | | **21501** | **19512** | **21503** | **21505** | **19516** | **21507** |
| **Comb busbars alone** | | | | | | | |
| Number of 18 mm modules | Comb busbar | 48 | | | 48 | | |
| **Catalogue numbers** | | **21089** | | | **21093** | | |

| **C60/ID Group Feeder comb busbars alone** | | | | |
|---|---|---|---|---|
| **Number of poles** | | **3P + N** | | |
| | | PB502506-60-r.eps | | |
| Rated operational current to 40 °C | (Ie) | 80 A | | |
| Rated conditional short-circuit current of an assembly | (Isc) | Compatible with the breaking capacity of Schneider Electric circuit breakers | | |
| Rated insulation voltage | (Ui) | 440 V AC | | |
| Rated voltage | (Ue) | 230 V AC (P + N) - 400 V AC (3P + N) | | |
| Rated impulse withstand voltage | (Uimp) | 6 kV | | |
| Degree of protection | | IP20 | | |
| Degree of pollution | | 3 | | |
| Fire resistance to IEC 695-2-1 | | Self-extinguishing 960 °C, 30 s | | |
| Colour | | RAL 7035 | | |
| Number of 18 mm modules | | 12 | 48 | 48 |
| Power supply | | Through left-hand | Through left-hand | Through right-hand |
| **Catalogue numbers** | | **10545** | **10546** | **10547** |

| **Accessories** | | | | | |
|---|---|---|---|---|---|
| **Number of poles** | **1P + N** | **3P + N** | | | |
| | DB123732.eps | | DB123733.eps | | DB123731.eps |
| | **Side plates** | | **Tooth caps (3 x 18-mm modules)** | **Tooth caps (1 x 18-mm modules)** | **Connectors (grey)** |
| Set of | 40 | | 12 | 10 | 4 |
| **Catalogue numbers** | **21094** | **21095** | **21096** | **10405** | **21098** |

G

# Linergy FH
## Comb busbar for 9 mm pitch for Acti 9



PB502383-10.eps

## IEC 60439-1

### Description

- Connection of Clario, Prodis and Librio switchgear in 9 mm modules.
- The special comb busbars for circuit breaker have a gap of 9 mm for inserting OF, SD, OF-SD/OF auxiliaries.
- The comb busbars for 3P + N circuit breakers and auxiliaries are compatible with Prisma switchboard.
- 1P+N comb busbars are compatible with Prisma and Pragma 24.

| Acti 9 | | 9 mm poles, cuttable | | | |
|---|---|---|---|---|---|
| **Number of poles** | | **1P + N** | **3P + N** | **1P + N** | **3P + N** |
| | | PB110801-10.eps A9N21036 | | | |
| | | **Comb busbars** | | **DPN Vigi comb busbars** | |
| Rated operational current to 40 °C | (Ie) | 63 A | | | |
| Rated conditional short-circuit current of an assembly | (Isc) | Compatible with the breaking capacity of Acti 9 circuit breakers | | | |
| Rated insulation voltage | (Ui) | 500 V AC | | | |
| Rated voltage | (Ue) | 230 V AC (P + N) - 400 V AC (3P + N) | | | |
| Degree of protection | | IP20 | | | |
| Degree of pollution | | 3 | | | |
| Fire resistance to IEC 695-2-1 | | Self-extinguishing 960 °C, 30 s | | | |
| Colour | | RAL 7035 | | | |
| Number of 18 mm modules | | 56 | 56 | 56 | 56 |
| **Catalogue numbers** | | **A9N21035** | **A9N21036** | **A9N21037** | **A9N21038** |

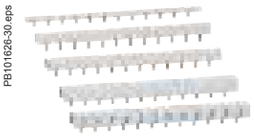
| Accessories | | | | | |
|---|---|---|---|---|---|
| **Number of poles** | **1P + N** | **3P + N** | | | |
| | PB110804-10.eps | | PB110805-10.eps | PB110806-10.eps | PB110807-10.eps |
| | **Side plates** | | **Connectors (grey)** | **Neutral connectors (blue)** | **Tooth cap (1 x 18 mm module)** |
| Set of | 20 | | 10 | 10 | 10 |
| **Catalogue numbers** | **A9N21039** | **A9N21040** | **A9N21041** | **A9N21042** | **A9N21050** |

# Linergy FH

## Horizontal comb busbar for 18 mm pitch for Domae



IEC 60439-1, IEC 60664



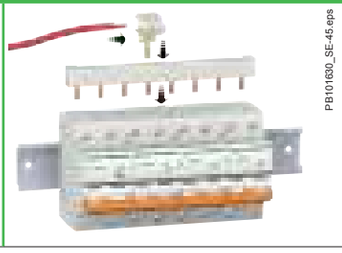

### Description

Comb busbars:

- Comb busbars ensure: Easy, reliable mounting of 1P+N and 3P+N, TL, CT, ID, V, BP and Cm switchgear: tooth positioning opposite the device terminals is ensured by indexing of copper parts
- Can be sawn and cut in a single pass, with a metal saw (the end-caps are compulsory after cutting).
- A re supplied with 2 (IP20) lateral end-caps (mandatory).
- Teeth that have been left free can be insulated by tooth-caps.

| **Domae** | | | **18 mm poles, cuttable** | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Number of poles** | | | **1P** | | **2P** | | **3P** | | **4P** | | **3P (N + P)** |
| | | | | | | | | | | | |
| Rated operational current to 40 °C | (Ie) | | 63 A | | | | | | | | |
| Rated conditional short-circuit current of an assembly | (Isc) | | Compatible with the breaking capacity of circuit breakers | | | | | | | | |
| Rated insulation voltage | (Ui) | | 500 V AC | | | | | | | | |
| Rated voltage | (Ue) | L/N | 230 V AC | | | | | | | | |
| | | L/L | 400 V AC | | | | | | | | |
| Degree of pollution | | | 3 | | | | | | | | |
| Fire resistance to IEC 695-2-1 | | | Auto-extinguible to 850 °C 30 secondes | | | | | | | | |
| Colour | | | RAL 7035 | | | | | | | | |
| Power supply | | | By 16 mm² semi-rigid cables or 10 mm² flexible cables | | | | | | | | |
| | | | By connector | | | | | | | | |
| Number of 18 mm modules | | | 12 | 57 | 12 | 57 | 12 | 57 | 12 | 57 | 57 |
| **Catalogue numbers** | | | **10387** | **10388** | **10389** | **10390** | **10391** | **10392** | **10393** | **10394** | **10395** |

## Installation

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## Accessories

| **Type** | **Connectors (4 x 35 mm²)** | **Side plates (2 phases)** | **Side plates (3 phases)** | **Side plates (4 phases)** | **Tooth caps** |
|---|---|---|---|---|---|
| Set of | 1 | 10 | 10 | 10 | 10 |
| **Catalogue numbers** | **10397** | **10398** | **10399** | **10405** | **10396** |

# Linergy FH

## Horizontal biconnect comb busbar for 18 mm pitch

## IEC 60664-1

### Description

- Distribution and sub-distribution of the electric power supply.
- Fast assembly and disassembly of connected devices.

| Comb horizontal bi-connection | 18 mm poles, cuttable | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Number of poles** | **1P** | | | **2P** | | | **3P** | | | **4P** | | |
| | PB110876-25.eps | | | PB110879-25.eps | | | PB110882-25.eps | | | PB110885-25.eps | | |
| Rated operational current to 40 °C (Ie) | 63 A | | | | | | | | | | | |
| Rated conditional short-circuit current of an assembly (Isc) | Compatible with the breaking capacity of circuit breakers | | | | | | | | | | | |
| Rated insulation voltage (Ui) | 500 V AC | | | | | | | | | | | |
| Rated voltage (Ue) L/N | 230 V AC | | | | | | | | | | | |
| L/L | 400 V AC | | | | | | | | | | | |
| Degree of pollution | 3 | | | | | | | | | | | |
| Fire resistance to IEC 695-2-1 | Self-extinguishing 960 °C, 30 s | | | | | | | | | | | |
| Colour | RAL 7035 (grey) | | | | | | | | | | | |
| **Use** | | | | | | | | | | | | |
| | Power supply: directly on terminal (25 mm² rigid or 16 mm² flexible) or by connector (35 mm² rigid or 25 mm² flexible with ferrule) | | | | | | | | | | | |
| Type | L1 | | | L1L2 | | | L1L2L3 | | | L1L2L3L4 | | |
| Number of 18 mm modules | 12 | 18 | 57 | 12 | 18 | 57 | 12 | 18 | 57 | 12 | 18 | 57 |
| Set of | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| **Catalogue numbers** | **R9XFH112** | **R9XFH118** | **R9XFH157** | **R9XFH212** | **R9XFH218** | **R9XFH257** | **R9XFH312** | **R9XFH318** | **R9XFH357** | **R9XFH412** | **R9XFH418** | **R9XFH457** |

## Installation

| Comb busbars horizontal bi-connection | 18 mm poles, cuttable | | |
|---|---|---|---|
| **Number of poles** | **4P** | | |
| | PB110888-30.eps | PB110889-30.eps | |
| Rated operational current to 40 °C (Ie) | 63 A | | |
| Rated conditional short-circuit current of an assembly (Isc) | Compatible with the breaking capacity of Schneider Electric circuit breakers | | |
| Rated insulation voltage (Ui) | 500 V AC | | |
| Rated voltage (Ue) L/N | 230 V AC | | |
| L/L | 400 V AC | | |
| Degree of pollution | 3 | | |
| Fire resistance to IEC 695-2-1 | Self-extinguishing 960 °C, 30 s | | |
| Colour | RAL 7035 (grey) | | |
| **Use** | | | |
| Type | NL1L2L3L4 - NL1NL2NL3 | NL1NL2NL3 | |
| Number of 18 mm modules | 18 | 18 | 57 |
| Set of | 1 | 1 | 1 |
| **Catalogue numbers** | **R9XFH518G** | **R9XFH518** | **R9XFH557** |

## Installation

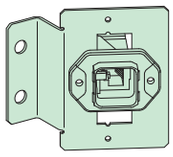
## Accessories

| **Number of poles** | **1P** | **2P** | **3P** | **4P** | | |
|---|---|---|---|---|---|---|
| | PB110895-10.eps | | | | PB110898-25.eps | PB110899-10.eps |
| | **Side plates** | | | | **Tooth caps** | **Connectors** |
| Set of | 10 | | | | 20 | 4 |
| **Catalogue numbers** | **R9XE110** | **R9XE210** | **R9XE310** | **R9XE410** | **R9XT20** | **R9XFC04** |

## Connectors

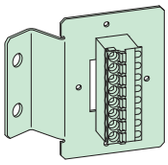
For plug & play interconnection between electrical switchboard for control and communication wires.

DD385854.ai



| RJ45 female-female connector with mounting plate | | |
|---|---|---|
| Connector type | | 8 wires RJ45; 1 Gbps |
| For ethernet cable | | CAT5e SFTP (IEC 11801) or higher |
| Degree of protection | | IP67 for direct mount |
| Dimensions (H x W x D) | (mm) | 75 x 70 x 45 |
| **Catalogue number** | | **LGY4230** |

DD385855.ai



| 8P male-female connector with mounting plate | | |
|---|---|---|
| Rated operational current at 40 °C | (Ie) | 12 A |
| Rated operational voltage | (Ue) | 320 V |
| Rated impulse withstand voltage | (Uimp) | 4 kV |
| Connection method | | Push-in spring connection |
| Connection capacity | Input | 8 |
| | Output | 8 |
| Dimensions (H x W x D) | (mm) | 75 x 70 x 45 |
| Wire size | | 0.2 to 2.5 $mm^2$ |
| **Catalogue number** | | **LGY4231** |

XB5_633_CPSCT16028A_24.eps

ZBSP2_24.ai

| USB and RJ45 ports | | | | | |
|---|---|---|---|---|---|
| Description | Panel-mounted USB and RJ45 ports in 22.5 mm hole with notch | | | | |
| Interface type | USB interface, jack type A | Ethernet interface, RJ45 jack | Plastic protection cover IP65/ IP67 | Rigid plastic protection cover IP65/ IP67 | Metal protection cover IP65/ IP67/IP69K |
| Connection type | USB port 3.0 A-A | RJ45 port Cat. 6 | Ø 22 mm/0.866 in. USB and RJ45 ports | | |
| Others characteristics | IP20 IP65, IP67, IP69K with protection cover | | Black quantity:10 | Transparent quantity:1 | Silver quantity:1 |
| **Catalogue number** | **XB5PUSB3** | **XB5PRJ45** | **ZBSP1** | **ZBSP2** | **ZBSP3** |

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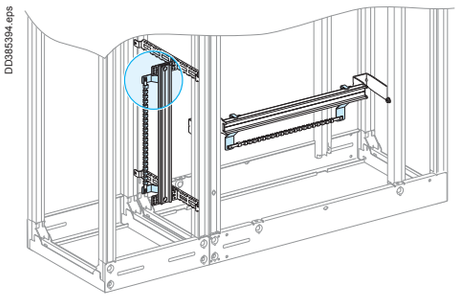
# Linergy TB
## Earth bars

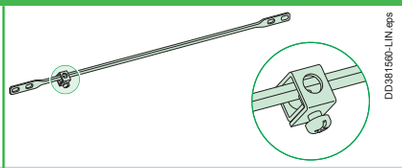





## Description

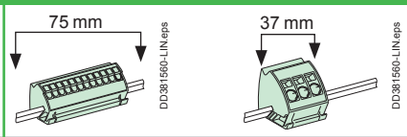
This range of earth bars is installed:
- in the duct which can constitute a dedicated area, completely separate from the equipment
- or in the switchgear compartment, at the top or the bottom .

## Fast-connecting earth bar



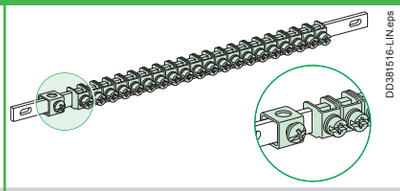

| | Copper earth bar |
|---|---|
| Cross-section (mm) | 12 x 3 |
| Effective length (mm) | 330 |
| Total length (mm) | 450 |
| Composition | Copper bar with 1 terminal 16 to 35 mm² |
| **Catalogue numbers** | **04201** |

## Accessories



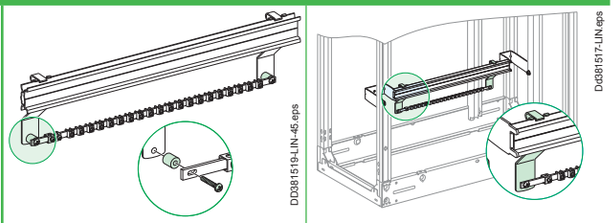

| | Earth blocks with terminals | |
|---|---|---|
| | Spring-fixing (clip onto the earth bar) | |
| Total connection capacity | 12 x 4 mm² | 3 x 16 mm² |
| Composition | 4 earth blocks | 4 earth blocks |
| **Catalogue numbers** | **04214** | **04215** |

## Accessories



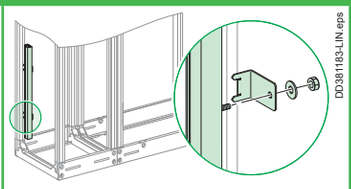

| | Copper earth bar with jumper | |
|---|---|---|
| Total connection capacity | 40 x 2.5 to 16 mm² | 20 x 2.5 to 16 mm² |
| Cross-section (mm) | 12 x 3 | 12 x 3 |
| Length (mm) | 450 | 200 |
| Composition | 40 jumpers and a terminal (16 to 35 mm²) | 20 jumpers and a terminal (16 to 35 mm²) |
| **Catalogue numbers** | **04200** | **04202** |

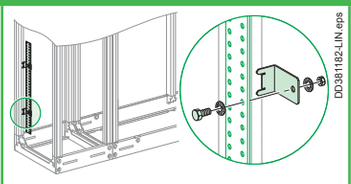
## Accessories

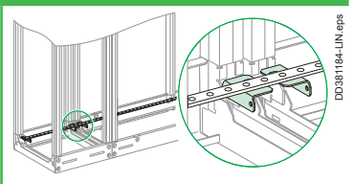



| | Neutral bar | Earth bar |
|---|---|---|
| | Converts an earth bar to a neutral bar | |
| Composition | 2 insulating spacers | 2 supports for earth bar on modular rail |
| **Catalogue numbers** | **04210** | **04205** |

## PE conductor



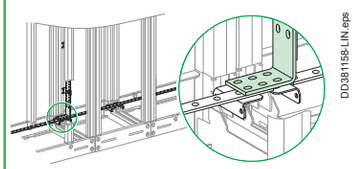




| | | Vertical PE conductor with Linergy LGY profile (W = 1670 mm) | | | Vertical PE conductor with Linergy BS busbar (W = 1675 mm) | | Horizontal PE conductor with Linergy BS busbar | |
|---|---|---|---|---|---|---|---|---|
| Rated short-time current | (Isc) | ⩽ 65 | > 65... ⩽ 80 | = 100 | ⩽ 40 | > 40 | ⩽ 40 | > 40 |
| Permissible current | (A) | 630 | 800 | 1250 | 400 | 600 | 400 | 600 |
| Bar size | (mm) | | | | 25 x 5 | 50 x 5 | 25 x 5 | 50 x 5 |
| Characteristics | | | | | Drilled flat bar Ø10.6 mm (one 10.6 mm hole every 25 mm along the entire length) | Drilled flat bar Ø10.6 mm (two 10.6 mm hole every 25 mm along the entire length) | | |
| **Catalogue numbers** | | **04502** | **04503** | **04505** | **04512** | **04515** | **04512** | **04515** |

## Support selection

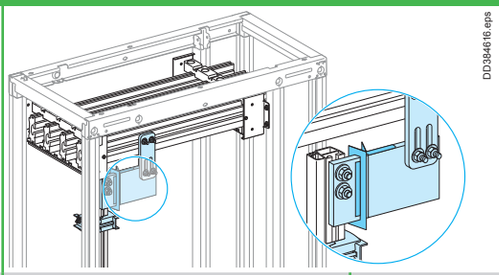
| | | | | |
|---|---|---|---|---|
| Composition | | Three supports for one vertical PE (supplied with PE marking) to secure to the framework | Three supports for one vertical PE (supplied with PE marking) to secure to the framework | Two supports for one horizontal PE |
| **Catalogue numbers** | | **04657** | **04657** | **04667** |

## Connection between PE conductors




| | | Connection plates for horizontal/vertical PE bars | Linergy connection hardware |
|---|---|---|---|
| Composition | | 2 copper angle brackets | 20 M8 bolts (W = 25 mm) + 20 nuts + 20 contact washers for connection to cable lugs or flexible bars |
| **Catalogue numbers** | | **04672** | **04766** |

## PEN conductor

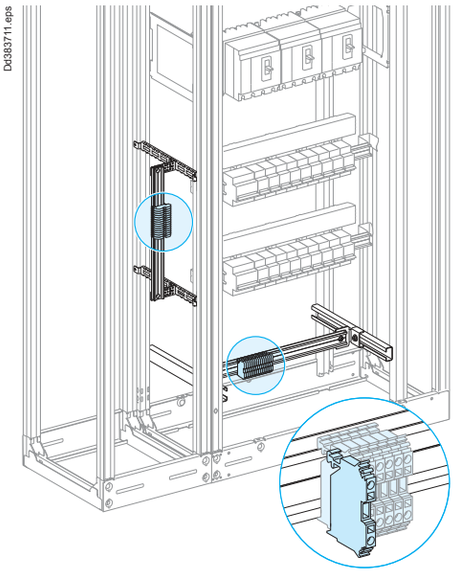



| | | Linergy TB PEN installation kit with LGY vertical profile | 1600 A connection 10 mm horizontal busbar with Linergy LGY profile | Linergy LGYE vertical connection 1600 A |
|---|---|---|---|---|
| **Catalogue numbers** | | **04656** | **04636** | **04602** |

**Note:** for further details *> page I-10*.

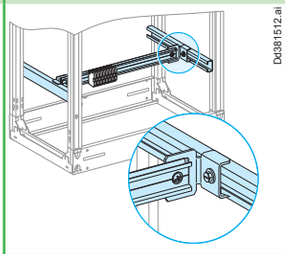
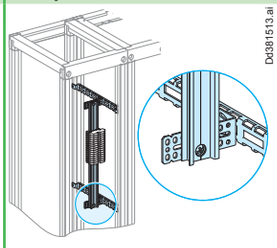
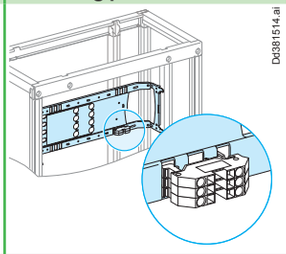
# Linergy TB terminal block support






## Introduction

In Prisma P cubicles, terminal blocks are commonly installed in a lateral compartment, generally 300 or 400 mm wide.
They may also be installed at the top or bottom of the cubicle.

| | Installation at top or bottom of a cubicle | Installation in a lateral compartment | Installation on a device mounting plate |
|---|---|---|---|
| |   |   |   |
| Modular rail, depth adjustable (W = 432 mm) | **03402** | – | – |
| 2 modular rails W = 1600 mm | **04226** | **04226** | – |
| 2 universal angle brackets | **03581** | **03581** | – |
| Set of two lateral cross-members W = 400 mm | **03584** | – | – |
| Characteristics | Terminal blocks are grouped on modular rails that can be depth adjusted behind a plain front plate. | The terminal block is generally installed in the cable compartment, W = 300 or 400 mm.<br>The terminal blocks clip onto a modular rail. The rail is secured to cable-tie supports using universal angle brackets for precise positioning of the terminal blocks. | Terminal blocks can be directly installed on the mounting plates for horizontally mounted Compact NSX100/630 and vertically mounted Compact NS630b/1600 for connection of auxiliary wires. |

| Width of standard terminal blocks | | | | |
|---|---|---|---|---|
| Max. cable CSA (mm²) | 4 | 6 | 10 | 16 |
| Width of terminal block (mm) | 6 | 8 | 10 | 12 |

| Height required in switchboard | | | | |
|---|---|---|---|---|
| Max. cable CSA (mm²) | 4 | 6 | 10 | 16 |
| No. of vertical modules | 3 | 3 | 5 | 6 |
| Plain front plate | **03803** | **03803** | **03805** | **03806** |

# Designing connection ⩽ 630 A
## Auxiliary connections

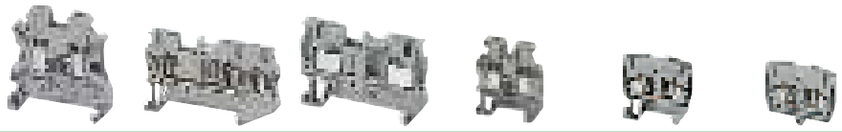
### Electrical characteristics

| Device | Ambient temperature around the switchboard | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 25°C | | 30°c | | 35°C | | 40°C | | 45°C | | 50°C | |
| | IP ⩽ 31 | IP > 31 | IP ⩽ 31 | IP > 31 | IP ⩽ 31 | IP > 31 | IP ⩽ 31 | IP > 31 | IP ⩽ 31 | IP > 31 | IP ⩽ 31 | IP > 31 |
| | Rated current of a circuit $I_{nc}$ (A) | | | | | | | | | | | |
| **Linergy BW** | | | | | | | | | | | | |
| Insulated bus bar Linergy BW 125A | 134 | 125 | 129 | 120 | 125 | 116 | 120 | 111 | 116 | 106 | 110 | ■ |
| Insulated bus bar Linergy BW 160A | 171 | 160 | 166 | 154 | 160 | 148 | 154 | 142 | 148 | 135 | 142 | ■ |
| Insulated bus bar Linergy BW 250 | 267 | 250 | 259 | 241 | 250 | 231 | 241 | 222 | 231 | 211 | 222 | ■ |
| Insulated bus bar Linergy BW 400A | 428 | 400 | 414 | 385 | 400 | 370 | 385 | 355 | 370 | 338 | 355 | ■ |
| Insulated bus bar Linergy BW 630A | 673 | 630 | 652 | 607 | 630 | 583 | 607 | 558 | 583 | 532 | 558 | ■ |
| **Linergy BS** | | | | | | | | | | | | |
| Rear flat busbars 160 A | 171 | 160 | 166 | 154 | 160 | 148 | 154 | 142 | 148 | 135 | 142 | ■ |
| Rear flat busbars 250 A | 267 | 250 | 259 | 241 | 250 | 231 | 241 | 222 | 231 | 211 | 222 | ■ |
| Rear flat busbars 400 A | 428 | 400 | 414 | 385 | 400 | 370 | 385 | 355 | 370 | 338 | 355 | ■ |
| Rear flat busbars 630 A | 673 | 630 | 652 | 607 | 630 | 583 | 607 | 558 | 583 | 532 | 558 | ■ |
| **Linergy BS** | | | | | | | | | | | | |
| Multi-stage busbars 160 A | 171 | 160 | 166 | 154 | 160 | 148 | 154 | 142 | 148 | 135 | 142 | ■ |
| Multi-stage busbars 250 A | 267 | 250 | 259 | 241 | 250 | 231 | 241 | 222 | 231 | 211 | 222 | ■ |
| Multi-stage busbars block 400A | 428 | 400 | 414 | 385 | 400 | 370 | 385 | 355 | 370 | 338 | 355 | ■ |
| Multi-stage busbars block 630 A | 673 | 630 | 652 | 607 | 630 | 583 | 607 | 558 | 583 | 532 | 558 | ■ |
| **Linergy BS** | | | | | | | | | | | | |
| Multi-stage distribution block 160 A | 171 | 160 | 166 | 154 | 160 | 148 | 154 | 142 | 148 | 135 | 142 | ■ |
| Multi-stage distribution block 250 A | 267 | 250 | 259 | 241 | 250 | 231 | 241 | 222 | 231 | 211 | 222 | ■ |
| Multi-stage distribution block 400A | 428 | 400 | 414 | 385 | 400 | 370 | 385 | 355 | 370 | 338 | 355 | ■ |
| Multi-stage distribution block 630 A | 673 | 630 | 652 | 607 | 630 | 583 | 607 | 558 | 583 | 532 | 558 | ■ |
| **Linergy DX** | | | | | | | | | | | | |
| Quick distribution block Linergy DX 4P 125A | 134 | 125 | 129 | 120 | 125 | 116 | 120 | 111 | 116 | 106 | 111 | ■ |
| Quick distribution block Linergy DX 4P 160A | 171 | 160 | 166 | 154 | 160 | 148 | 154 | 142 | 148 | 135 | 142 | ■ |
| Quick distribution block Linergy DX 1P 1P 160A | 171 | 160 | 166 | 154 | 160 | 148 | 154 | 142 | 148 | 155 | 142 | ■ |
| **Linergy DP** | | | | | | | | | | | | |
| Quick distribution block Linergy DP 3P-4P 160A | 160 | 160 | 155 | 155 | 150 | 150 | 145 | 145 | 140 | 140 | 135 | ■ |
| Quick distribution block Linergy DP 3P-4P 250A | 267 | 250 | 259 | 241 | 250 | 231 | 241 | 222 | 231 | 211 | 222 | ■ |
| **Linergy FM** | | | | | | | | | | | | |
| Quick device feeders Linergy FM 4P 63A | 67 | 63 | 65 | 61 | 63 | 58 | 61 | 56 | 58 | 53 | 56 | ■ |
| Quick device feeders Linergy FM 4P 80A | 86 | 80 | 83 | 77 | 80 | 74 | 77 | 71 | 74 | 68 | 71 | ■ |
| Quick device feeders Linergy FM 4P 160A | 171 | 160 | 166 | 154 | 160 | 148 | 154 | 142 | 148 | 135 | 142 | ■ |
| Quick device feeders Linergy FM 2P 200A | 214 | 200 | 207 | 193 | 200 | 185 | 193 | 177 | 185 | 169 | 177 | ■ |
| Quick device feeders Linergy FM 3P 200A | 214 | 200 | 207 | 193 | 200 | 185 | 193 | 177 | 185 | 169 | 177 | ■ |
| Quick device feeders Linergy FM 4P 200A | 214 | 200 | 207 | 193 | 200 | 185 | 193 | 177 | 185 | 169 | 177 | ■ |
| Quick device feeders Linergy FM 4P 200A (36 modules) | 214 | 200 | 207 | 193 | 200 | 185 | 193 | 177 | 185 | 169 | 177 | ■ |

■ Check the concordance between Linergy derating value and upstream protection device derating value.

# Linergy TR
## Terminal blocks

Secondary distribution



| | | | Connection technology | | | | | |
|---|---|---|---|---|---|---|---|---|
| **Type of terminal block** | **Cross section area** | **Color** | **Screw tech** | **Spring tech** | **Push-in tech** | **Miniature screw for 15 mm DIN rail** | **Miniature spring for 15 mm DIN rail** | **Miniature spring for direct mount** |
| Passthrough | 2.5 mm² (2 pts) | Grey | NSYTRV22 | NSYTRR22 | NSYTRP22 | NSYTRV22M | NSYTRR22M | NSYTRR22MF |
| | | Blue | NSYTRV22BL | NSYTRR22BL | NSYTRP22BL | NSYTRV22MBL | NSYTRR22MBL | NSYTRR22MFBL |
| | | Orange | NSYTRV22AR | NSYTRR22AR | NSYTRP22AR | - | - | NSYTRR22MFF* |
| | 2.5 mm² (3 pts) | Grey | NSYTRV23 | NSYTRR23 | NSYTRP23 | - | - | - |
| | | Blue | NSYTRV23BL | NSYTRR23BL | NSYTRP23BL | - | - | - |
| | | Orange | - | NSYTRR23AR | NSYTRP23AR | - | - | - |
| | 2.5 mm² (4 pts) | Grey | NSYTRV24 | NSYTRR24 | NSYTRP24 | - | NSYTRR24M | NSYTRR24M |
| | | Blue | NSYTRV24BL | NSYTRR24BL | NSYTRP24BL | - | NSYTRR24MBL | NSYTRR24MBL |
| | 2.5 mm² (4 pts, 2 levels) | Grey | NSYTRV24D | NSYTRR24D | NSYTRP24D | - | - | - |
| | | Blue | NSYTRV24DBL | NSYTRR24DBL | NSYTRP24DBL | - | - | - |
| | 2.5 mm² (6 pts, 3 levels) | Grey | NSYTRV26T | NSYTRR26T | NSYTRP26T | - | - | - |
| | | Blue | NSYTRV26TBL | NSYTRR26TBL | NSYTRP26TBL | - | - | - |
| | 4 mm² (2 pts) | Grey | NSYTRV42 | NSYTRR42 | NSYTRP42 | NSYTRV42M | - | - |
| | | Blue | NSYTRV42BL | NSYTRR42BL | NSYTRP42BL | NSYTRV42MBL | - | - |
| | | Orange | NSYTRV42AR | NSYTRR42AR | - | - | - | - |
| | 4 mm² (3 pts) | Grey | NSYTRV43 | NSYTRR43 | NSYTRP43 | - | - | - |
| | | Blue | NSYTRV43BL | NSYTRR43BL | NSYTRP43BL | - | - | - |
| | 4 mm² (4 pts) | Grey | NSYTRV44 | NSYTRR44 | NSYTRP44 | - | - | - |
| | | Blue | NSYTRV44BL | NSYTRR44BL | NSYTRP44BL | - | - | - |
| | 4 mm² (4 pts, 2 levels) | Grey | NSYTRV44D | NSYTRR44D | - | - | - | - |
| | | Blue | NSYTRV44DBL | NSYTRR44DBL | - | - | - | - |
| | 6 mm² (2 pts) | Grey | NSYTRV62 | NSYTRR62 | - | - | - | - |
| | | Blue | NSYTRV62BL | NSYTRR62BL | - | - | - | - |
| | 10 mm² (2 pts) | Grey | NSYTRV102 | NSYTRR102 | - | - | - | - |
| | | Blue | NSYTRV102BL | NSYTRR102BL | - | - | - | - |
| | 16 mm² (2 pts) | Grey | NSYTRV162 | NSYTRR162 | - | - | - | - |
| | | Blue | NSYTRV162BL | NSYTRR162BL | - | - | - | - |
| Earth protection | 2.5 mm² (2 pts) | Green/Yellow | NSYTRV22PE | NSYTRR22PE | NSYTRP22PE | NSYTRV22MPE | NSYTRR22MPE | - |
| | 2.5 mm² (3 pts) | Green/Yellow | NSYTRV23PE | NSYTRR23PE | NSYTRP23PE | - | - | - |
| | 2.5 mm² (4 pts) | Green/Yellow | NSYTRV24PE | NSYTRR24PE | NSYTRP24PE | - | - | - |
| | 4 mm² (2 pts) | Green/Yellow | NSYTRV42PE | NSYTRR42PE | NSYTRP42PE | NSYTRV42MPE | - | - |
| | 4 mm² (3 pts) | Green/Yellow | NSYTRV43PE | NSYTRR43PE | NSYTRP43PE | - | - | - |
| | 4 mm² (4 pts) | Green/Yellow | NSYTRV44PE | NSYTRR44PE | NSYTRP44PE | - | - | - |
| | 6 mm² (2 pts) | Green/Yellow | NSYTRV62PE | NSYTRR62PE | - | - | - | - |
| | 10 mm² (2 pts) | Green/Yellow | NSYTRV102PE | NSYTRR102PE | - | - | - | - |
| | 16 mm² (2 pts) | Green/Yellow | NSYTRV162PE | NSYTRR162PE | - | - | - | - |
| Knife Disconnect | 2.5 mm² (2 pts) | Grey | NSYTRV22SC | NSYTRR22SC | NSYTRP22SC | - | - | - |
| | | Orange | NSYTRV22ST (1) | NSYTRR22SCAR | - | - | - | - |
| | 2.5 mm² (3 pts) | Grey | - | NSYTRR23SC | NSYTRP23SC | - | - | - |
| | | Orange | - | NSYTRR23SCAR | - | - | - | - |
| | 2.5 mm² (2 levels) | Grey | NSYTRV24SCD | NSYTRR24SCD | - | - | - | - |
| Fuse Disconnect | 4 mm² (2 pts) 5 x 20 mm fuse | Black | NSYTRV42SF5 | - | - | - | - | - |
| | | Black (12 V) | NSYTRV42SF5LD (2) | - | - | - | - | - |
| | | Black (230 V) | NSYTRV42SF5LA (2) | - | - | - | - | - |
| Basic Disconnect (3) | 4 mm² (2 pts) | Grey | NSYTRV42TB | NSYTRR42TB | NSYTRP42TB | - | - | - |
| Measuring transducer | 6 mm² (2 pts) Disconnect | Grey | NSYTRV62TTD | - | - | - | - | - |
| | 6 mm² (2 pts) | Grey | NSYTRV62TT | - | - | - | - | - |
| | 6 mm² (2 pts) | Green/Yellow | NSYTRV62TTPE | - | - | - | - | - |

* Grey terminal with flange.

(1) Grey disconnect terminal with 2 test points.
(2) With light indicator.
(3) Fuse or component carrier not supplied.

# Linergy TR
## Terminal blocks

Secondary distribution

| | Accessories | | | | | Cable ends compatible with all technologies | |
|---|---|---|---|---|---|---|---|
| | Miniature spring for direct mount | End plate for screw TBs | End plate for spring TBs | End plate for push-in TBs | Plug-in bridge | Marking strips 10 characters | Wires corss section area | References |
| | NSYTRR22MP | NSYTRAC22 | NSYTRACR22 | NSYTRACR22 | NSYTRAL22 | NSYTRABF510 | 0.5 mm² | DZ5CE005 |
| | NSYTRR22MPBL | NSYTRAC22BL | NSYTRACR22BL | NSYTRACR22BL | NSYTRAL23 | NSYTRABF520 | | DZ5CA005 |
| | - | - | - | | NSYTRAL24 | NSYTRABF530 | 0.75 mm² | DZ5CE007 |
| | - | NSYTRAC23 | NSYTRACR23 | NSYTRACR23 | NSYTRAL25 | NSYTRABF540 | | DZ5CA007 |
| | - | - | NSYTRACR23BL | NSYTRACR23BL | NSYTRAL210 | NSYTRABF550 | 1 mm² | DZ5CE010 |
| | - | - | - | - | NSYTRAL210BL | NSYTRAB560 | | DZ5CA010 |
| | NSYTRR24MP | NSYTRAC24 | NSYTRACR24 | NSYTRACR24 | NSYTRAL210GR | NSYTRAB570 | 1.5 mm² | DZ5CE015 |
| | NSYTRR24MPBL | - | NSYTRACR24BL | NSYTRACR24BL | NSYTRAL220 | NSYTRAB580 | | DZ5CA015 |
| | - | NSYTRACE24 | NSYTRACRE24 | NSYTRACRE24 | | NSYTRAB590 | 2.5 mm² | DZ5CE025 |
| | - | - | - | - | | NSYTRAB5100 | | DZ5CA025 |
| | - | NSYTRACE26 | NSYTRACRE26 | NSYTRACPE26 | | NSYTRAB51100 | 4 mm² | DZ5CE042 |
| | - | - | - | - | | | | DZ5CA042 |
| | - | NSYTRAC22 | NSYTRACR42 | NSYTRACR42 | NSYTRAL42 | NSYTRAB610 | 6 mm² | DZ5CE062 |
| | - | NSYTRAC22BL | - | - | NSYTRAL43 | NSYTRAB620 | | DZ5CA062 |
| | - | - | - | - | NSYTRAL44 | NSYTRAB630 | 10 mm² | DZ5CE102 |
| | - | NSYTRAC23 | NSYTRACR43 | NSYTRACP43 | NSYTRAL45 | NSYTRAB640 | | DZ5CA102 |
| | - | - | - | - | NSYTRAL410 | ... | 16 mm² | DZ5CE162 |
| | - | NSYTRAC24 | NSYTRACR44 | NSYTRACP44 | NSYTRAL410BL | NSYTRAB690 | | DZ5CA162 |
| | - | - | - | - | NSYTRAL410GR | NSYTRAB6100 | 25 mm² | DZ5CE252 |
| | - | NSYTRACE24 | NSYTRACRE44 | - | NSYTRAL420 | NSYTRAB61100 | | DZ5CA253 |
| | - | - | - | - | | | 35 mm² | DZ5CE352 |
| | - | NSYTRAC22 | NSYTRACR62 | - | NSYTRAL62 | NSYTRAB810 | | DZ5CA352 |
| | - | NSYTRAC22BL | - | - | NSYTRAL65 | NSYTRAB820 | 50 mm² | DZ5CE502 |
| | - | NSYTRAC22 | NSYTRACR102 | - | NSYTRAL102 | NSYTRAB1010 | | DZ5CA502 |
| | - | NSYTRAC22BL | - | - | | NSYTRAB1020 | | |
| | - | NSYTRAC162 | NSYTRACR162 | - | NSYTRAL162 | NSYTRAB1010 | | |
| | - | - | - | - | | NSYTRAB1020 | | |
| | - | NSYTRAC22 | NSYTRACR22 | NSYTRACR22 | | | | |
| | - | NSYTRAC23 | NSYTRACR23 | NSYTRACR23 | | | | |
| | - | NSYTRAC24 | NSYTRACR24 | NSYTRACR24 | | | | |
| | - | NSYTRAC22 | NSYTRACR42 | NSYTRACR42 | | | | |
| | - | NSYTRAC23 | NSYTRACR43 | NSYTRACP43 | | | | |
| | - | NSYTRAC24 | NSYTRACR44 | NSYTRACP44 | | | | |
| | - | NSYTRAC22 | NSYTRACR62 | - | | | | |
| | - | NSYTRAC22 | NSYTRACR102 | - | | | | |
| | - | NSYTRAC162 | NSYTRACR162 | - | | | | |
| | - | NSYTRAC23 | NSYTRACR23 | NSYTRACPK22 | | | | |
| | - | NSYTRAC23 | - | - | | | | |
| | - | - | NSYTRACR24 | NSYTRACPK23 | | | | |
| | - | - | - | - | | | | |
| | - | NSYTRACED24 | Included | - | | | | |
| | - | Included | - | - | | | | |
| | - | Included | - | - | | | | |
| | - | Included | - | - | | | | |
| | - | Included | Included | NSYTRACR42 | | | | |
| | - | NSYTRACT22 | - | - | | | | |
| | - | NSYTRACT22 | - | - | | | | |
| | - | NSYTRACT22 | - | - | | | | |

DZ5CE*** = standard insulated cable ends.
DZ5CA*** = markable insulated cable ends.

G

# Functionnal partitioning

Version : 8.0 - 10/10/19
160E8000

# Contents



## Main distribution

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**Other partitions** **H-8**

# IS Service Indices
## Presentation



## What is the service index?

- The service index is a tool for characterizing the functional units of low voltage switchboards.
- It allows users to express their needs in relation to the switchboard lifecycle (operation, maintenance, evolution) to meet the requirements of their site.

## How is it characterized?

- The SI is a value expressed in a three digits format (from 1 to 3) which respectively translate the level of:
  - operation,
  - maintenance,
  - and evolution of the LV switchboard
- The value 1 offers the lowest service index and the value 3 the highest service index.
- The minimum index is 111 and the maximum is 333.

**Note:** The service index may be different in the same switchboard, for incomers or outgoings, in order to meet the customer needs.

| | **1st digit**<br>Exploitation<br>The exploitation includes all the operations on the installation likely to be carried out by personnel electrician or non-electrician. | **2nd digit**<br>Maintenance<br>Maintenance includes the maintenance operations, repair and control operations to sustain the characteristics of the switchboard. Assured by qualified personnel, they go from diagnosis to defective parts replacement. | **3rd digit**<br>Upgrade<br>Upgrade is an adaptation of the installation by adding or replacing components.<br>Some upgrades require an interruption of the functional unit concerned: power increase, change of technology, etc.<br>Other evolutions can be done without interruption of the functional unit: addition of outgoings, etc. |
|---|---|---|---|
| **1** | I accept that this operation will cause the complete shutdown of the switchboard. | I accept the complete stop of the switchboard. | I accept the complete stop of the switchboard. |
| **2** | I want this operation to result only in the complete shutdown of the only functional unit (1) concerned. | I want a limited interruption to the functional unit (1) concerned only. The refitting will be done by an intervention on the connections. | I want that the possible interruption be limited to the functional unit (1) concerned only.<br>A stock of some predefined functional units is assured. |
| **3** | I want that this operation only stops the power of the functional unit (1) concerned, but enables automation tests that allow testing the installation in full size before restarting. | I want a limited interruption to the functional unit (1) concerned only. The refitting will be done without any intervention on the connections. | I want an operation limited to the functional unit (1) concerned, with no interruption of the switchboard.<br>The evolution is free, within the limits imposed by the switchboard manufacturer. |

(1) Functional unit: part of an assembly comprising all the mechanical and electrical components that contribute to the performance of a single feature.

## Service indices achievable in Prisma Plus P

### IS 211
Fixed

**IS 211**
functional unit equipped with fixed circuit breakers

### IS 231 or 232
Plug-in base

**IS 231**
functional unit equipped with a plug-in circuit-breaker

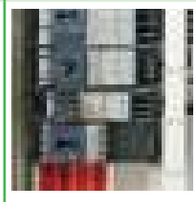
**IS 232**
reserve functional unit equipped with an empty plug-in base

### IS 331 or 332
Withdrawable on chassis

**IS 331**
functional unit equipped with a withdrawable circuit breakers on chassis

**IS 332**
reserve functional unit equipped with an empty chassis

### IS 223
Scalable system under power



**IS 233**
possible under conditions. Consult us

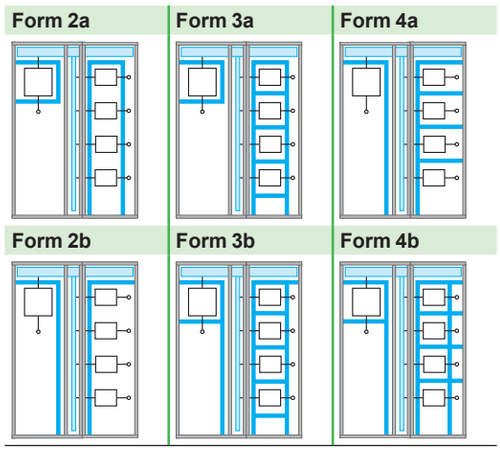
# Forms partitioning
## Presentation



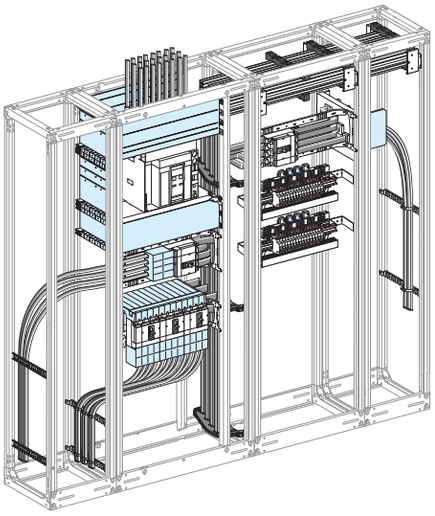
## What are the forms?

- The forms are metal partitions or molded material, removable by using tools or keys, which ensure the protection of operators against direct contact with power conductors when working on low voltage switchboards.
- They also protect internal elements of the switchboard against external aggressions (dust, pests, water ...).
- These forms are graduated from 1 to 4, with indices “a” or “b”. Their use contributes to the level of service continuity required by the user.
- Forms have a cumulative effect (a higher form integrates the characteristics of the forms that precede it).
- The choice of a form is the subject to an agreement between the manufacturer and the user.
- The electrical panel must comply with the degree of protection IP 2X, according to standard IEC 61439-1 & 2.

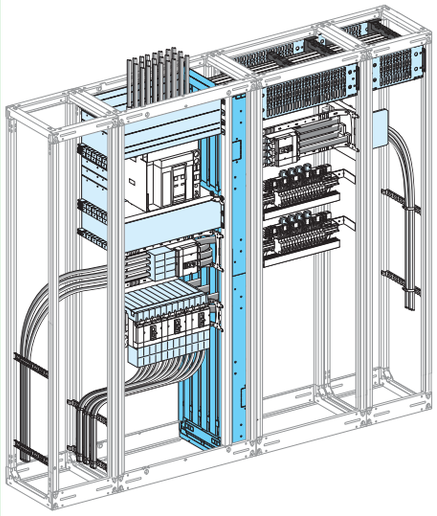
**Prisma P offers solutions for forms 1, 2a, 2b, 3a, 3b, 4a, 4b.**



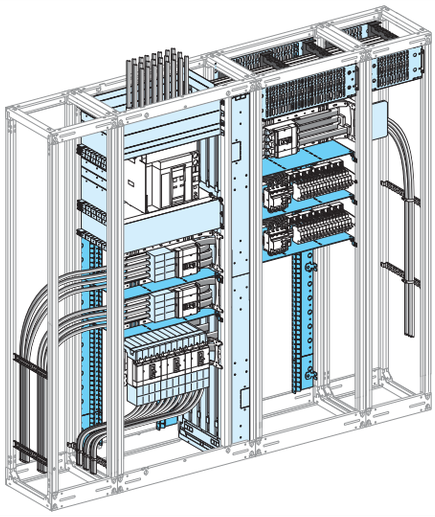

**Form 1**
No internal separation



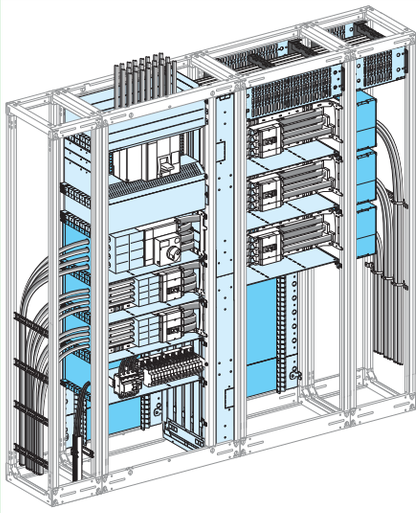
**Form 2**
Separation between horizontal busbars, vertical busbars and functional units



**Form 3**
Form 2 + separation of functional units from one another



**Form 4**
Form 3 + separation of the terminals of the functional units from one another



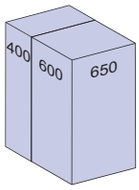
H

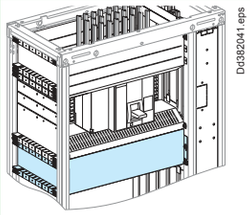
# Form 1 partitioning

## Covering the supply terminals on the incoming device

Main distribution

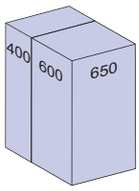
### Covering of the connection between an incoming device and lateral busbars

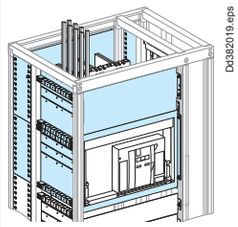


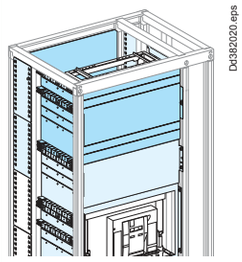

| | Masterpact MTZ2 | Masterpact MTZ1 | Compact NS630b/1600 | Compact NS1600b/3200 (1) | Compact INS-INV630b/2500 |
|---|---|---|---|---|---|
| Cover with copper connection | 04926 | 04926 | 04926 | 04926 | 04926 |
| Additional cover | 04927 | - | - | - | - |
| Cover with Linergy LGYE connection | 04925 | 04925 | - | - | - |
| Additional cover | 04928 | - | - | - | - |

### Front connection with cables



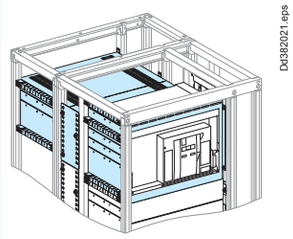




### Canalis front connection

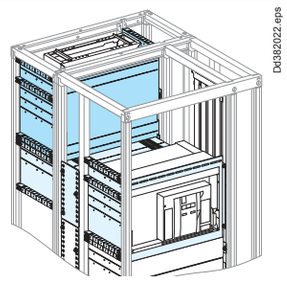



| Devices | Fixed or withdrawable device | | Fixed | With-drawable | Fixed or withdrawable device | | Fixed | With-drawable |
|---|---|---|---|---|---|---|---|---|
| | Masterpact | | Compact | | Masterpact | | Compact | |
| | MTZ2 | MTZ1 | NS630b/1600 | NS630b/1600 | MTZ2 | MTZ1 | NS630b/1600 | NS630b/1600 |
| Cover | 04861 | 04852 | 04851 | 04852 | 04861 | 04852 | 04851 | 04852 |
| Canalis additional cover | - | - | - | - | 04871 | 04871 | 04871 | 04871 |

### Rear connection with cables




### Canalis rear connection



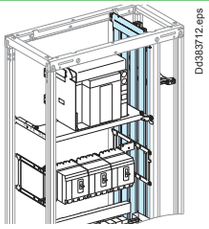
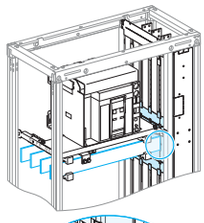
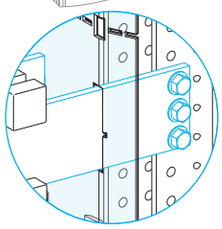
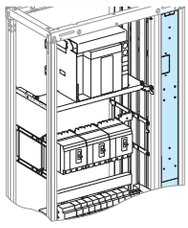
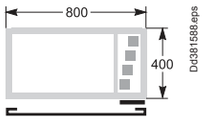
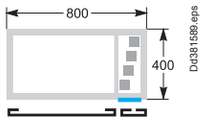
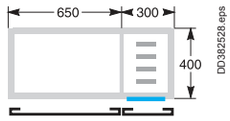

| Devices | Fixed or withdrawable device | | Fixed | With-drawable | Fixed or withdrawable device | | Fixed | With-drawable |
|---|---|---|---|---|---|---|---|---|
| | Masterpact | | Compact | | Masterpact | | Compact | |
| | MTZ2 | MTZ1 | NS630b/1600 | NS630b/1600 | MTZ2 | MTZ1 | NS630b/1600 | NS630b/1600 |
| Cover | 04863 | 04854 | 04853 | 04854 | 04863 | 04854 | 04853 | 04854 |
| Canalis additional cover | - | - | - | - | 04871 | 04871 | 04871 | 04871 |

(1) For more information > *page E-14*.

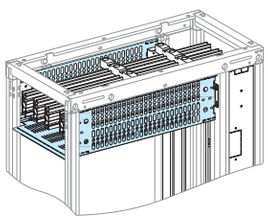
## Main distribution

### Lateral partitioning

- Made of:
  - four supports that clip to the framework
  - five extruded slats that clip to the supports
  - two metal plates at the top and bottom that can be cut out to pass a PE or PEN conductor, or one or two 30 x 60 mm trunking sections
- Compliance with standard IEC 695.2.1 concerning withstand to fire.

| | Side barrier | Restoration kit | Front or rear barrier | |
|---|---|---|---|---|
| |  Dd383712.eps |  DD385402.eps  |  Dd383714.eps  Dd381588.eps  Dd381588.eps |  DD382528.eps |
| | | | **W = 150 mm** | **W = 300 mm** |
| **Characteristics** | ■ Vertical barrier made of insulating slats<br>■ can be installed on both sides of Linergy BS or Linergy LGY busbars<br>■ The space between the slats is sufficient for prefabricated connections (one copper bar, 5 or 10 mm thick, or insulated flexible bars) or for cables up to 35 mm², while maintaining the degree of protection IP2X | ■ This kit enables passage of the connection between a device > 1600 A (MTZ2, INS-INV) and lateral vertical busbars.<br>■ It is made up of an insulated plate (six modules high = 300 mm) that can be cut as required, supplied with supports and the necessary hardware.<br>■ Has to be use with MTZ2 interlocking mounting plate | Can be installed in the front and rear of the busbar compartment. Protects against direct contact with the busbars.<br>This barrier is not required in front when the cubicle is equipped with a plain or transparent door.<br>□ For 800 mm cubicles :<br>□ the door is systematically supplied with a barrier.<br>□ the cover frame is supplied with a wicket door, W = 150 mm, on which devices can be mounted. A front barrier is indispensable.<br>■ A barrier is required at the rear of the busbar compartment in cubicles that are 600,800 and 1000 mm deep. | |
| **Catalogue number** | **04922** | **04924** | **04921** | **04920** |

DD384521.EPS



### Horizontal partitioning

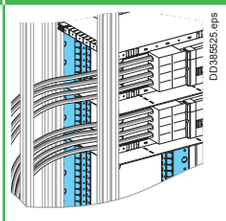
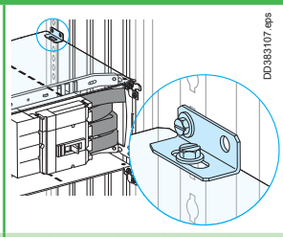
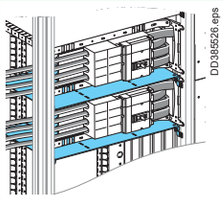
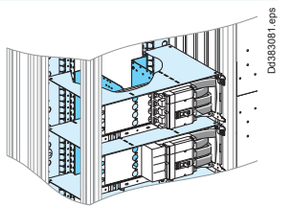
- Set of two barriers (front and rear), plus a slotted rear panel for efficient natural convection in the switchboard.
- The set can be used to partition horizontal busbars installed at the top or bottom of the cubicle.
- The space required for the busbars is not increased.

| | | Linergy LGYE | | | | Linergy BS | | |
|---|---|---|---|---|---|---|---|---|
| | | Top position | | Bottom position | | Top position | | Bottom position |
| | In | ⩽ 2500 A | ⩾ 3200 A | ⩽ 2500 A | ⩾ 3200 A | ⩽ 3200 A | 4000 A | ⩽ 3200 A |
| Nb of module | | 3 | 4 | 3 | 4 | 3 | 4 | 3 |
| **D400** | | | | | | | | |
| Cover | W = 300 | **04973** | **04963** | **04973 + 04915** | **04963 + 04915** | **04973** | **04963** | **04973 + 04915** |
| | W = 400 | **04974** | **04964** | **04974 + 04915** | **04964 + 04915** | **04974** | **04964** | **04974 + 04915** |
| | W650 | **04976** | **04966** | **04976 + 04919** | **04966 + 04919** | **04976** | **04966** | **04976 + 04919** |
| | W650 + 150 | **04976** | **04966** | **04976 + 04919** | **04966 + 04919** | **04976** | **04966** | **04976 + 04919** |
| | W800 | **04978** | **04968** | **04978 + 04919** | **04968 + 04919** | **04978** | **04968** | **04978 + 04919** |
| **D600** | | | | | | | | |
| Cover | W = 300 | **04983** | **04963** | **04983 + 04915** | **04963 + 04915** | **04983** | **04963** | **04983 + 04915** |
| | W = 400 | **04984** | **04964** | **04984 + 04915** | **04964 + 04915** | **04984** | **04964** | **04984 + 04915** |
| | W650 | **04986** | **04966** | **04986 + 04919** | **04966 + 04919** | **04986** | **04966** | **04986 + 04919** |
| | W650 + 150 | **04986** | **04966** | **04986 + 04919** | **04966 + 04919** | **04986** | **04966** | **04986 + 04919** |
| | W800 | **04988** | **04968** | **04988 + 04919** | **04968 + 04919** | **04988** | **04968** | **04988 + 04919** |

**Note:** when the busbars are at the bottom of the cubicle, gland plates are mandatory *> page F-18*.
**Note:** to protect horizontal busbars installed at the bottom of the cubicle, the slotted horizontal panel must be replaced by a plain barrier.(**04915** or **04919**) and add a free support **04662**.

## Main distribution

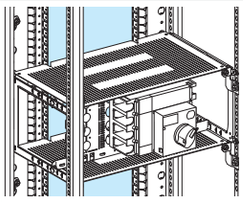
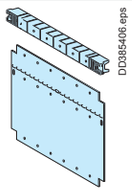
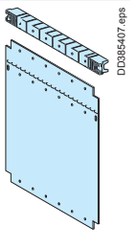
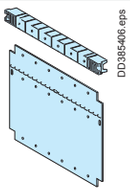
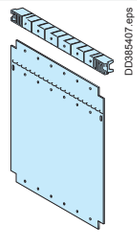
### Form 3 partitioning

| | Front connection | | | Rear connection | |
|---|---|---|---|---|---|
| |  |  |  |  | |
| | **Rear support for partitions W = 650 mm** | **6 universal angle brackets** | **Horizontal metal partition W = 650 mm** | **Rear connection** | |
| Characteristics | Two uprights secured to the framework (400 mm deep) or to the intermediate uprights (600 mm deep frameworks). | A set of brackets can be used to install partial Form 3 partitioning in the cubicle.It does not take up any useful space in the switchboard. | A horizontal metal partition can be used to physically separate functional units from one another. It does not take up any useful space in the switchboard. | Vertical partitions (two cat. no. per functional unit) | |
| | | | | 3 to 4 modules | 5 to 6 modules |
| **Catalogue numbers** | **04943** | **03583** | **04901** | **04955** | **04956** |

## Main distribution

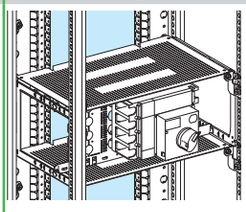
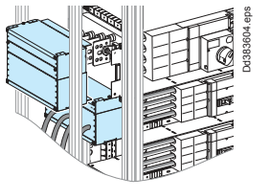
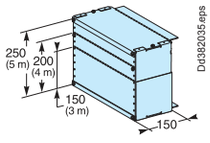
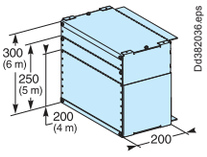
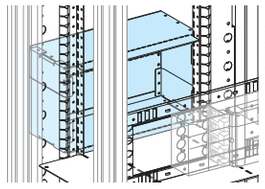
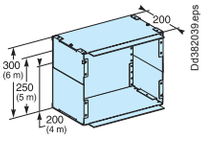
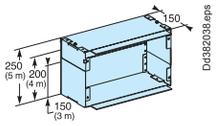
### Form 4a partitioning

**Forme 4 - direct connection to the device**

| | Front connection | | | Rear connection | |
|---|---|---|---|---|---|
| |   |   |   |   |   |
| | **Backplate** | **Gland plate** | | | |
| Characteristics | ■ a backplate (one cat. no. per cubicle) made up to two metal half panels mounted on the rear supports for Form 3 partitions. This backplate is not indispensable for 400 mm deep frameworks | ■ a plastic gland plate that can be easily cut out (one for each functional unit) and is mounted on the framework. | | ■ a gland plate at the rear of each functional unit. It is connected directly to the rear supports for Form 3 partitions | |
| | | 3 to 4 modules | 5 to 6 modules | 3 to 5 modules | 4 to 6 modules |
| **Catalogue numbers** | **04946** | **04951** | **04952** | **04951** | **04952** |

### Form 4b partitioning

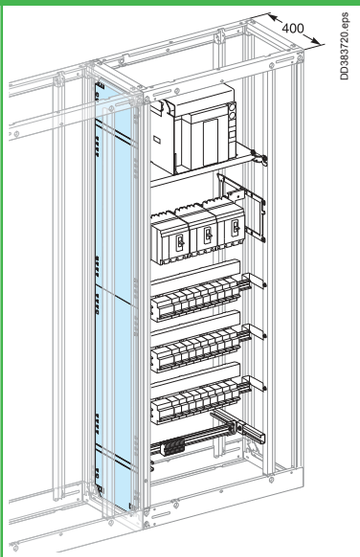
**Forme 4b - connection transfer**

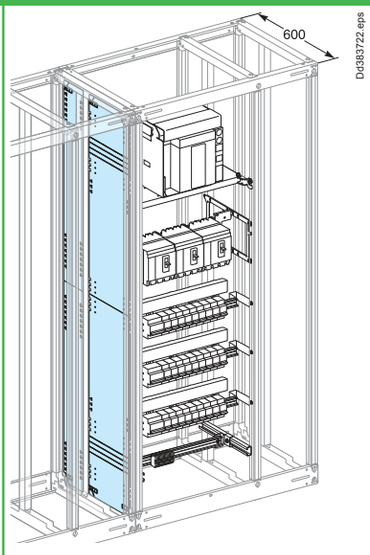
| | In a lateral compartment | | | At the rear of the cubicle | |
|---|---|---|---|---|---|
| |   |       | |     |   |
| | **Backplate** | **Cover** | | | |
| Characteristics | ■ a backplate (one cat. no. per cubicle) made up to two metal half panels mounted on the rear supports for Form 3 partitions. This backplate is not indispensable for 400 mm deep frameworks | ■ a cover with plastic gland plates that can be easily cut out on the side and bottom. | | ■ It comprises two height-adjustable metal flanges and plastic gland plates that can be easily cut out at the rear and bottom. | |
| | | 3 to 5 modules W150 | 4 to 6 modules W200 | 3 to 5 modules | 4 to 6 modules |
| **Catalogue numbers** | **04946** | **04953** | **04954** | **04953** | **04954** |

H

## Main distribution

### Inter-cubicle partition




| | D400 | D600 |
|---|---|---|
| Characteristics | Metal partition, used to separate two adjacent cubicles.<br>It is made up of two panels, each 850 mm high.<br>The top and bottom ends have knock-outs for busbars, PE/PEN conductors or auxiliary wiring.<br>Supplied with the necessary supports and hardware, the partition is mounted on the framework and does not hinder installation of the functional mounting plates. | |
| **Catalogue numbers** | **04911** | **04911 + 04931** |

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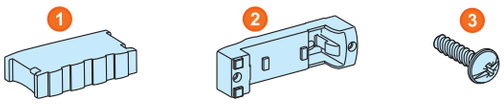
# After-sales accessories

## Spare parts

### Linergy BW busbar accessories

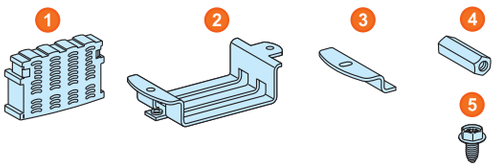
**Linergy BW accessories, 160/400 A** — **01210**

DD385483.eps



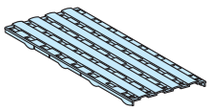
1. 2 end plugs
2. 2 angle brackets support
3. 2 screws

**Accessoires Linergy BW 630 A** — **01211**



1. 2 end plugs
2. 2 metal angle brackets
3. 2 brackets for support
4. 2 hexagonal blocks
5. 2 self-tapping screws

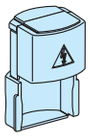
**2 IPxxB clipon covers for Linergy BW, 160 to 400 A** — **01201**



### Linergy FM busbar accessories (IP30)

**4 terminal covers for 200 A Linergy FM** — **01202**

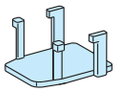
DD384561.EPS



### Linergy busbar accessories (IP30)

**12 chocks for Linergy busbars** — **01109**

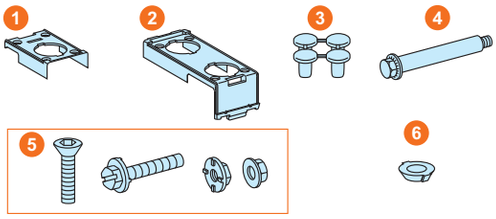
DD384574.EPS



### Framework accessories

**Framework accessories** — **01104**

DD384562.EPS



1. 4 top sealing components
2. 4 bottom sealing components
3. 4 bottom cross-piece plugs
4. 2 adjacent mounting spacer tubes
5. 2 mounting hardware
6. 12 conical washers

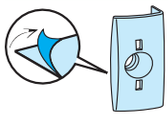
I

## Spare parts

### Front-plate accessories

**20 self adhesive front plate grips** — **01093**

DD384564.EPS



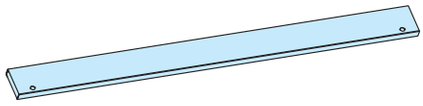
**10 sets of 2 grips quarter turn** — **01094**

DD384582.eps

### Accessory

**Plain wicket door, W = 150 mm** — **01110**

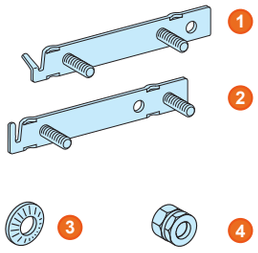
DD384585.EPS



### Linergy LGYE busbar accessories

**Linergy LGYE connection screwplate kit** — **01130**

DD385499.eps

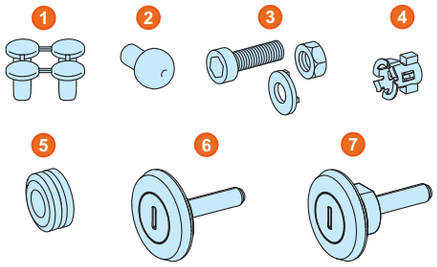



1. 4 plates for 2000 - 4000 A joint
2. 4 flat plates for 3200 - 4000 A connection
3. 16 conical contact washer Ø8
4. 16 torque nut M8

### Rear accessories

**Accessories IP55** — **01101**

DD385379.eps




1. 4 IP55 framework plugs
2. 4 stop doors
3. base + screw + washer + nut
4. 8 cage nuts
5. 3 white grommet plugs
6. 2 IP55 roof and rear panel fixing systems
7. 6 IP55 rear panel fixing systems

**Rear panel accessories** — **01106**

DD385977.eps

1. 8 IP30 rear panel fixing systems
2. 2 IP30 roof and rear panel fixing systems

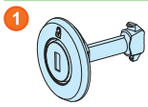
# After-sales accessories

## Spare parts

### Side panel accessories

**Side panel accessories** — **01100**

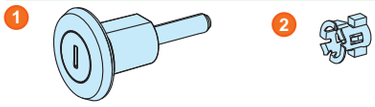
DD385979.eps



1. 16 fixing system IP30

**Accessories for IP55 side panel** — **01102**

DD384568.EPS



1. 16 fixing system IP55
2. 16 cage nuts

**Accessories for IP55 roof** — **01103**

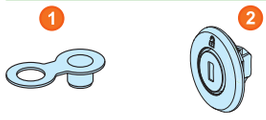
DD385380.eps

1. 4 lifting ring plugs
2. 6 cage nuts
3. 6 mounting sets of screw fixing IP55 for roof

### Roof accessories

**Roof accessories** — **01112**

DD385978.eps

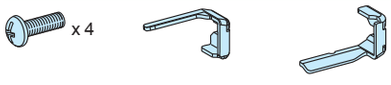


1. 4 lifting ring plugs
2. 6 IP30 roof and rear panel fixing systems

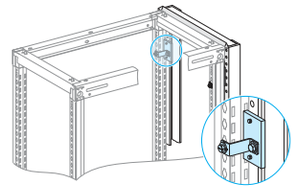
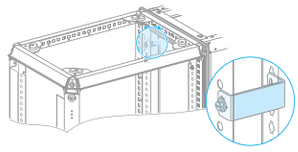
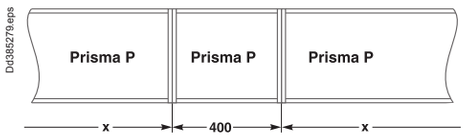
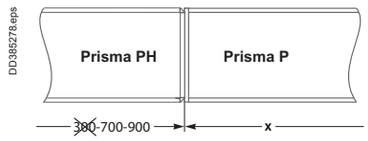
### Front plate support frames

**Front plate support striker kit for 08564 - 08566** — **01123**

DD384571.EPS




### Side-by-side combination kit

| | Prisma P/Prisma P | PrismaP/Prisma PH |
|---|---|---|
| | Dd382926.eps  | DD383847.eps  |
| Catalogue number | **01199** | **01198** |
| Characteristics | ■ To add a Prisma P cubicle to an existing Prisma installation, use the combination kit and a 400 mm wide frame.   | ■ Prisma PH/Prisma P side-by-side combination kit<br>**Note:** When combining Prisma PH and Prisma P IP55 enclosures, use the IP55 sealing kit for side-by-side combinations (**08717**) together with the side-by-side combination kit (**01198**).   |

I

## Spare parts

### Framework accessories

#### Framework accessories

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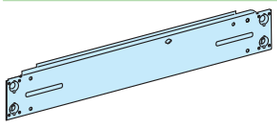


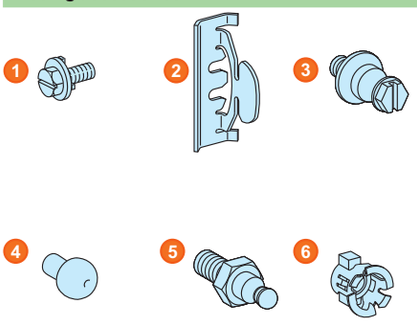
| | |
|---|---|
| Frame bottom cross-member W400 to use with 08564 | **01119** (1) |
| Frame bottom cross-member W650 to use with 08566 | **01120** (1) |
| Frame bottom cross-member W150+650 to use with 08566 | **01121** (1) |
| Frame bottom cross-member W650+150 to use with 08566 | **01122** (1) |

(1) Spare parts on stock in RAL 9001 only.

### Door accessories

#### Closing accessories — 01105

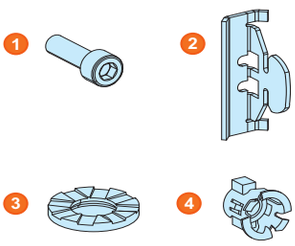
DD384617.eps



1. 4 screws THF M6 x 16
2. 4 door strikes
3. 3 1/4 turn studs
4. 2 stop doors
5. 3 hinge pins
6. 7 captive nuts for frame

#### Door strike IP30/55 Ipc Arc — 01124

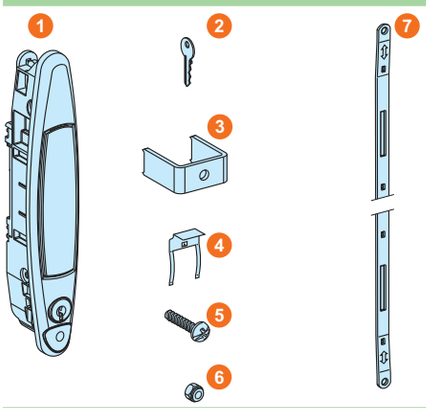
DD435601.eps



1. 4 screws MSC HXG SK M6 x 20
2. 4 door strike stoppers
3. 4 washers
4. 4 captive nuts for frame

#### Retrofit handle — 01221

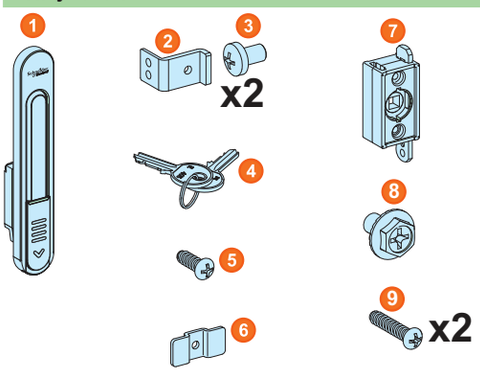
DD384573.EPS



1. 1 handle
2. 1 key no. 405
3. 1 handle staple
4. 1 shifting fork
5. 1 Pozidriv screw for handle staple
6. 2 nuts + washer with teeth
7. 2 control rods

#### Rotary handle — 01219

DD385874.eps




1. Handle housing block
2. P adapter link part, T = 3mm
3. Screw, pan head, M5x8
4. The key of 405
5. 1 crosshead screw
6. Omega fix part, T = 2mm
7. Driver block
8. Hex locking screw, M6x10
9. Self tapping screw, pan head, ST4.2x20

# Optimise electrical networks
## Improving power quality



To improve power quality, Schneider Electric proposes two power-factor correction systems, VarplusCan. Both are designed for optimum installation in Prisma P.

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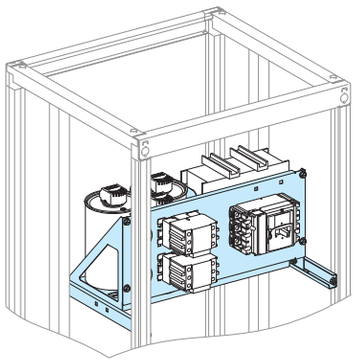

Prisma P enclosures are designed for installation of the new VarplusCan power factor correction modules that improve the quality of the electrical distribution system and reduce consumption of reactive energy.
The modules are made up of capacitors, contactors and devices protecting against internal faults.

### Installation

*> page E-62* for information on installation in the enclosure.

The modules can be supplied by vertical busbars, e.g. Linergy.

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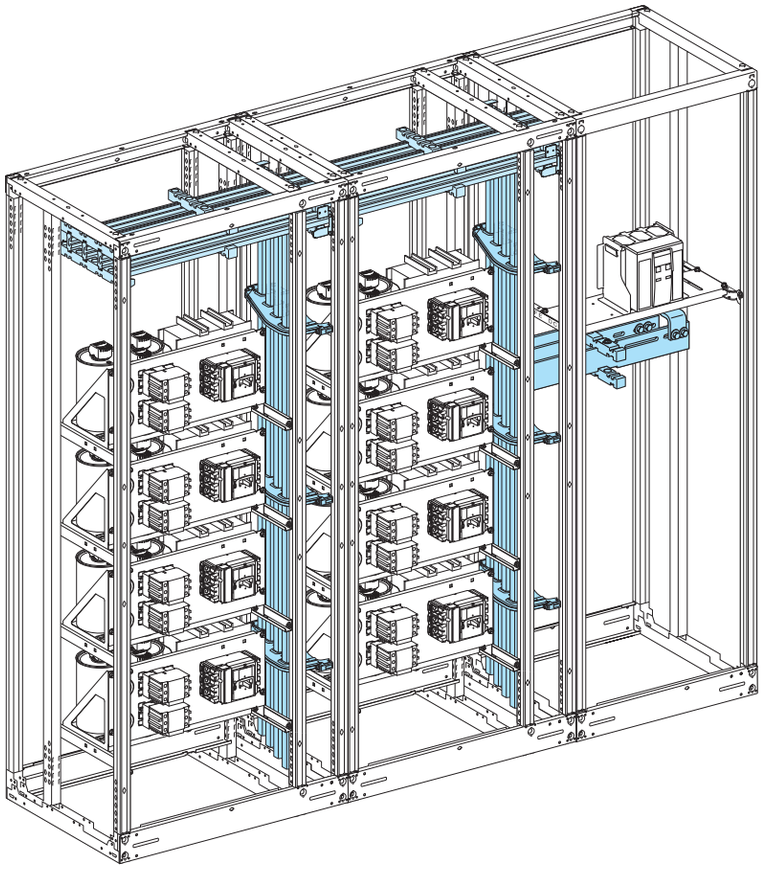


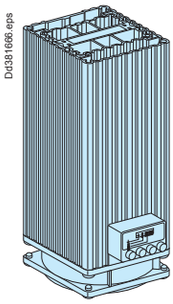
# Optimise electrical networks

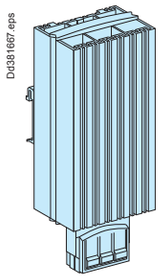
## Additional equipment to optimise electrical installations



During design or during subsequent operation, electrical installations are increasingly outfitted with components designed to optimise energy consumption.
With Prisma P, most of these products can already be added to the switchboard.
By limiting the temperature within the switchboard, it is possible to extend the life of the equipment and optimise its use.
In addition, electricity consumption is reduced because equipment in good condition has lower losses.

### Heaters



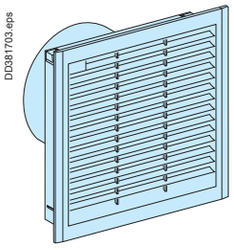



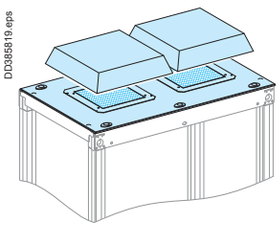

Heaters contribute to equipment optimisation by limiting condensation, corrosion and, above all, leakage currents along surfaces.

#### Installation and characteristics

*> page F-32*

### Fans



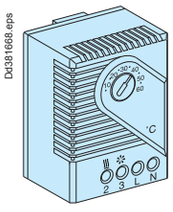




Several types of fans are available: enclosure wall or roof-mount versions. They are particularly useful for switchboards installed in temperate environments or when the degree of protection of the enclosure is high (IP55).

#### Installation and characteristics

*> page F-31*.

### Thermostat

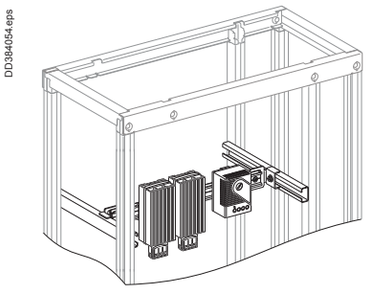



Thermostats are used to limit the temperature inside switchboards when heaters and fans are installed, thus reducing heat losses.

#### Installation and characteristics

*> page F-33*.

### Installation




Heaters and thermostats simply clip onto a modular rail.

See Universal Enclosures catalog, cat. no. **UE12MK01EN**.

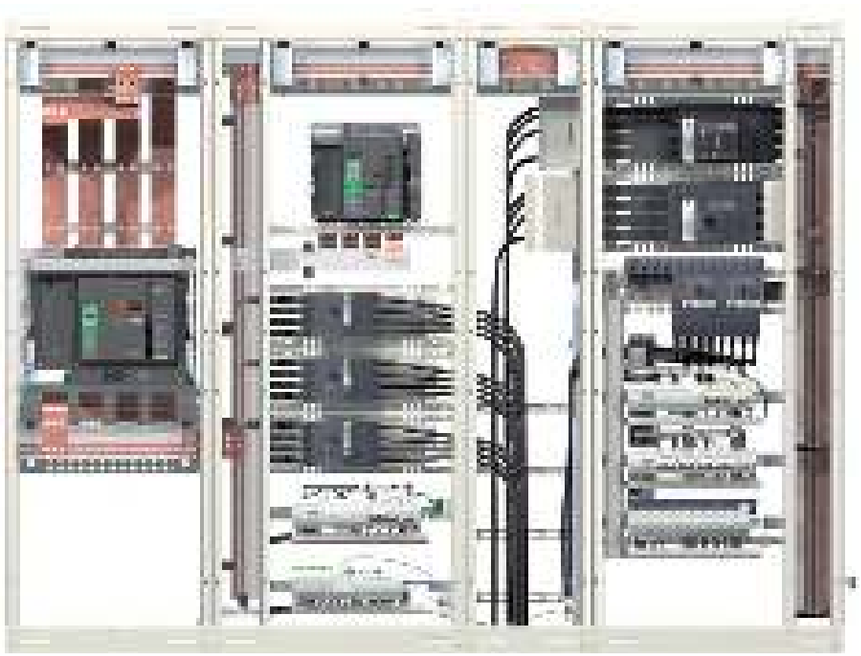
# Designing Prisma P power circuits
## Presentation and approach

### Electrical characteristics

Prisma P takes into account the installation and connection conditions of Schneider Electric devices. The entire installation complies with standard IEC 60439-1. The result is a type tested switchboard.

In the following pages you will find a number of examples, validated for Prisma P switchboards, intended to assist in determining the busbars as well as the upstream and downstream connections for the installation.
The examples assume that the devices have already been selected.
A complete process involves a number of steps before making final choices (transformer, conductors, protection, etc.).
Schneider Electric offers a number of tools to assist in designing a complete installation (technical guides, software).

PB116588.eps



### Busbar sizing

The factors that must be taken into account in determining the size of busbars include:
- the diversity factor.

Not all the loads supplied by a set of busbars are used at full rated load or at the same time. The diversity factor is the means to determine the maximum load current used to size the busbars.
**Standard IEC 61439-1 and 2 §4.7 specifies the table below.**

| Number of circuits | Diversity factor |
|---|---|
| 2 and 3 | 0,9 |
| 4 and 5 | 0,8 |
| 6 and 9 | 0,7 |
| 10 and more | 0,6 |

- the degree of protection IP.
- the ambient temperature around the switchboard.

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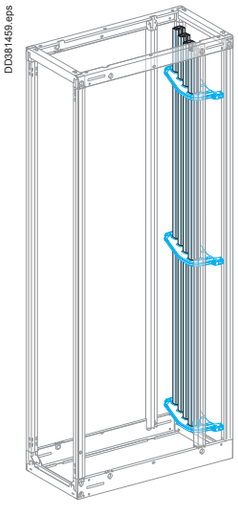
# Designing Prisma P power circuits
## Presentation and approach



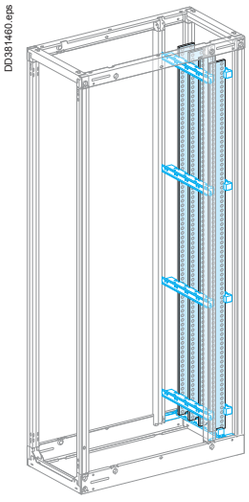
### Busbars




The maximum load current for a set of busbars is a function of the thermal environment.
The type and the size of the conductors must be determined in view of carrying the required currents taking into account the temperatures reached in the switchboard. These conductors are subjected to additional heat rise caused by the flowing current (joule effect) and the connected devices.
The temperatures reached by the conductors and the insulating materials, etc. must not exceed the maximum temperatures for which the products were designed.
Schneider Electric busbars and distribution blocks are sized to operate without any particular constraints for the assemblies in Prisma P switchboards operating under normal environmental conditions (standard switchboard configuration, 35 °C outside the switchboard, etc.).

To determine **Linergy LGY busbars** or **Linergy LGYE** required
*> pages I-12, I-14 and I-15*.
They can be used to determine:
- the type of Linergy LGY busbars or Linergy LGYE, as a function of:
  - the current
  - the IP value
  - the ambient temperature around the switchboard
  - ICW/1s.

- Linergy LGY busbars: I ⩽ 1600 A
- Double Linergy LGY busbars: 1600 A < I ⩽ 3200 A
- Linergy LGYE busbars: ⩽ 4000 A.




To determine the required Linergy BS busbars:
horizontal busbars *> page I-13*
vertical busbars *> page I-16*.
They can be used to determine:
- the permissible current as a function of:
  - the size of the busbars
  - the number of bars
  - the ambient temperature around the switchboard
  - the IP value
  - ICW/1s.

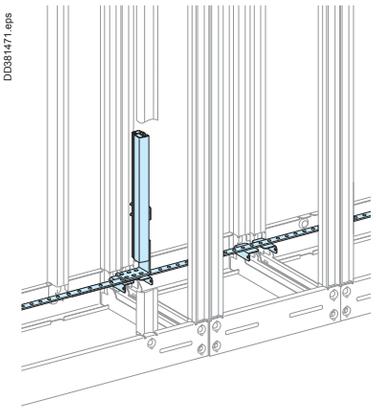
- Linergy BS copper busbars 5 mm thick: I ⩽ 1600 A.
- Linergy BS copper busbars 10 mm thick: I ⩽ 3200 A.

### Connection of devices ⩾ 630 A and busbar connections

To determine the size of upstream and downstream connections for devices
*> page I-39*.
They can be used to determine:
- the size of copper busbars
- the maximum permissible current.

As a function of:
- the type of circuit breaker
- the IP value
- the ambient temperature around the switchboard
- the type of installation.

## Designing the PE protective conductor




The protective conductor must be sufficiently sized and securely installed in the switchboard to accept the thermal and electrodynamic constraints of the fault current.
It must be connected to the exposed conductive parts of the switchboard.
It must be accessible to enable connections both in the factory and on site.

### Optimised calculation method

Use the calculation equation indicated in standard IEC 61439-1 & 2:

$$S_{PE} = \frac{\sqrt{I^2 t}}{k}$$

- SPE: cross-sectional area of the PE in mm²
- I: value of the phase-to-earth fault current = 60 % of the value of the phasetophase fault current (IEC 61439-1 §8.2.4.2)
- t: time the fault current flows in seconds
- k: coefficient that depends on the type of metal, k = 143 for a copper conductor with PVC insulation.

**Example:**

- Ilsc = 36 kA rms C the value of the phase-to-earth fault current = 60 % of the value of the phase-to-phase fault current (standard IEC 61439-1 and 2 § 8.4.3.2.3 and 10.11.5.6), i.e.: 36 x 0.6 = 21.6 kA
- maximum time delay for the control unit: 0,5 s
- k = 143 for copper conductors with PVC insulation.

The calculation is therefore:

$$S_{PE} = \frac{\sqrt{21600^2 \times 0{,}5}}{143} = 106{,}8\ mm^2$$

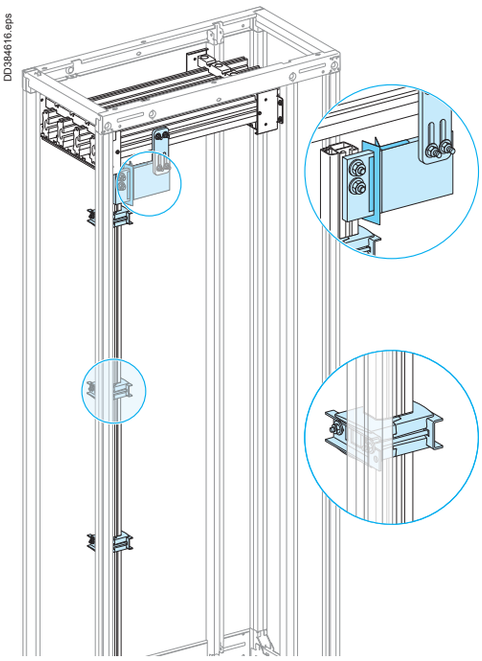
The PE conductor must therefore be a 25 x 5 mm bar (= 125 mm2).

### Simplified method (based on the equation above)

Use the table below to determine the size of the PE conductor as a function of device short-circuit current Isc.

| Size of PE conductor | All Schneider Electric devices | |
|---|---|---|
| Icc ≤ 40 kA | 1 Linergy BS bar, 25 x 5 mm | |
| Icc ≤ 65 kA | 1 Linergy BS bar, 50 x 5 mm | Linergy LGY 630 - **04502** |
| Icc > 65 kA but < 80 kA | 1 Linergy BS bar, 50 x 5 mm | Linergy LGY 800 - **04503** |
| Icc = 100 kA | 1 Linergy BS bar, 50 x 5 mm | Linergy LGY 1000 - **04505** |

## Implementing the PEN protective conductor




The size of the PEN is determined in the same manner as a neutral conductor, i.e.:
- for copper single-phase circuits or sized ≤ 16mm², it must be the same size as the phase conductors
- for copper three-phase circuits sized > 16 mm², it can be:
  - the same size as the phase conductors
  - smaller on the condition that:
    - the current likely to flow in the neutral during normal operation is less than the permissible current for the conductor
    - the power rating of single-phase loads does not exceed 10 % of the total rating.

The conductor must be accessible to enable connections both in the factory and on site, as well as checks on the tightness of connections.

### Practical guidelines to install PEN

According to standard IEC 61439-1 and 2, the practical guidelines for implementing the PEN are the following:
- at the entry to the assembly, the PEN connection must be next to the phase connections
- within the assembly, the PEN does not need to be insulated from the exposed conductive parts (except on sites where there is a risk of fire or explosion)
- the size of the conductor must be at least equal to that of the neutral
- the size must remain constant throughout the main busbars
- the change from a TNC to a TNS system must take place at a single point in the switchboard, via a marked neutral-disconnection bar that is accessible and can be dismantled to facilitate the impedance measurement of the fault loop
- after the TNS creation point, it is forbidden to recreate a TNC system.

The PE and the neutral must meet their specific requirements.

### Linergy LGY PEN kit

*> page G-39*

# Designing horizontal busbars
## Linergy LGYE

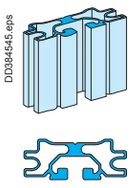
### Electrical characteristics

### Permissible current and selection of Linergy LGYE busbars
### Up to 4000 A

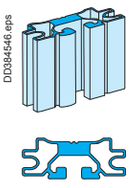
#### Linergy LGYE section

| Type of bars | Permissible current (A) | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Ambient temperature around the switchboard | | | | | | | | | | | |
| | 25 °C | | 30 °C | | 35 °C | | 40 °C | | 45 °C | | 50 °C | |
| Size per phase | IP ⩽ 31 | IP > 31 | IP ⩽ 31 | IP > 31 | IP ⩽ 31 | IP > 31 | IP ⩽ 31 | IP > 31 | IP ⩽ 31 | IP > 31 | IP ⩽ 31 | IP > 31 |
| Linergy LGYE 630 | 680 | 580 | 650 | 550 | 630 | 530 | 590 | 500 | 550 | 470 | 520 | ■ |
| Linergy LGYE 800 | 860 | 740 | 830 | 710 | 800 | 680 | 750 | 630 | 700 | 600 | 660 | ■ |
| Linergy LGYE 1000 | 1080 | 920 | 1040 | 884 | 1000 | 850 | 940 | 790 | 880 | 750 | 830 | ■ |
| Linergy LGYE 1250 | 1350 | 1150 | 1300 | 1100 | 1250 | 1050 | 1170 | 1000 | 1100 | 930 | 1020 | ■ |
| Linergy LGYE 1600 | 1730 | 1580 | 1690 | 1530 | 1650 | 1480 | 1550 | 1380 | 1450 | 1300 | 1350 | ■ |
| Linergy LGYE 2000 | 2200 | 1810 | 2100 | 1730 | 2000 | 1650 | 1900 | 1560 | 1810 | 1480 | 1720 | ■ |
| Linergy LGYE 2500 | 2640 | 2230 | 2540 | 2160 | 2440 | 2100 | 2310 | 2000 | 2240 | 1930 | 2120 | ■ |
| Linergy LGYE 3200 | 3400 | 3020 | 3300 | 2900 | 3200 | 2800 | 3040 | 2660 | 2890 | 2520 | 2750 | ■ |
| Linergy LGYE 4000 | 3800 | 3510 | 3710 | 3430 | 3620 | 3350 | 3450 | 3180 | 3280 | 3020 | 3120 | ■ |

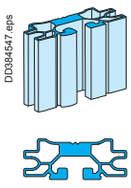
■ Connection impossible due to the operating-temperature limits of the devices installed in the switchboard.



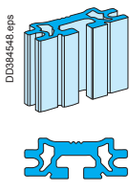

Section 630 A.
Cat. No. 04560.



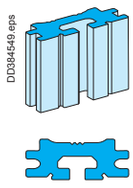

Section 800 A.
Cat. No. 04561.



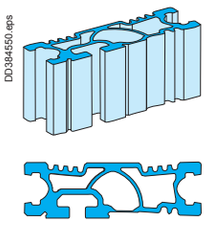

Section 1000 A.
Cat. No. 04562.



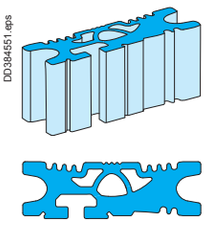

Section 1250 A.
Cat. No. 04563.



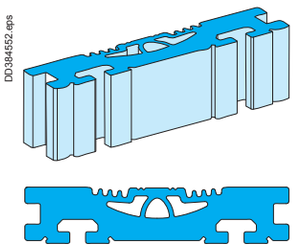

Section 1600 A.
Cat. No. 04564.



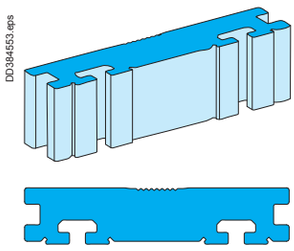

Section 2000 A.
Cat. No. 04565.




Section 2500 A.
Cat. No. 04566.




Section 3200 A.
Cat. No. 04567.




Section 4000 A.
Cat. No. 04568.

# Designing horizontal busbars
## Linergy BS



### Permissible current and selection of horizontal busbar

The goal is to optimise busbar size according to the installation and operating criteria.

## Up to 1600 A

### Linergy BS bars, 5 mm thick

| Type of bars | Permissible current (A) | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Ambient temperature around the switchboard | | | | | | | | | | | |
| | 25 °C | | 30 °C | | 35 °C | | 40 °C | | 45 °C | | 50 °C | |
| Size per phase | IP ⩽ 31 | IP > 31 | IP ⩽ 31 | IP > 31 | IP ⩽ 31 | IP > 31 | IP ⩽ 31 | IP > 31 | IP ⩽ 31 | IP > 31 | IP ⩽ 31 | IP > 31 |
| 1 Linergy BS bar, 60 x 5 | 890 | 840 | 850 | 790 | 800 | 750 | 760 | 700 | 710 | 650 | 660 | ■ |
| 1 Linergy BS bar, 80 x 5 | 1130 | 1050 | 1080 | 990 | 1000 | 900 | 970 | 870 | 910 | 810 | 860 | ■ |
| 2 Linergy BS bars, 60 x 5 | 1580 | 1420 | 1500 | 1350 | 1400 | 1250 | 1350 | 1180 | 1260 | 1090 | 1180 | ■ |
| 2 Linergy BS bars, 80 x 5 | 2010 | 1820 | 1920 | 1720 | 1800 | 1600 | 1720 | 1510 | 1610 | 1390 | 1510 | ■ |

■ Connection impossible due to the operating-temperature limits of the devices installed in the switchboard.

## Up to 3200 A

### Linergy BS bars, 10 mm thick

| Type of bars | Permissible current (A) | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Ambient temperature around the switchboard | | | | | | | | | | | |
| | 25 °C | | 30 °C | | 35 °C | | 40 °C | | 45 °C | | 50 °C | |
| Size per phase | IP ⩽ 31 | IP > 31 | IP ⩽ 31 | IP > 31 | IP ⩽ 31 | IP > 31 | IP ⩽ 31 | IP > 31 | IP ⩽ 31 | IP > 31 | IP ⩽ 31 | IP > 31 |
| 1 Linergy BS bar, 50 x 10 | 1330 | 1220 | 1260 | 1160 | 1200 | 1080 | 1130 | 1010 | 1060 | 940 | 990 | ■ |
| 1 Linergy BS bar, 60 x 10 | 1550 | 1400 | 1470 | 1320 | 1400 | 1250 | 1320 | 1160 | 1240 | 1070 | 1160 | ■ |
| 1 Linergy BS bar, 80 x 10 | 1990 | 1800 | 1890 | 1700 | 1800 | 1600 | 1700 | 1500 | 1600 | 1390 | 1500 | ■ |
| 2 Linergy BS bars, 50 x 10 | 2270 | 2090 | 2160 | 1980 | 2050 | 1850 | 1930 | 1740 | 1810 | 1610 | 1690 | ■ |
| 2 Linergy BS bars, 60 x 10 | 2550 | 2270 | 2420 | 2140 | 2300 | 2000 | 2170 | 1870 | 2030 | 1720 | 1900 | ■ |
| 2 Linergy BS bars, 80 x 10 | 3110 | 2820 | 2970 | 2660 | 2820 | 2500 | 2660 | 2330 | 2500 | 2160 | 2330 | ■ |
| 2 Linergy BS bars, 100 x 10 | 3650 | 3280 | 3490 | 3100 | 3300 | 2900 | 3130 | 2720 | 2950 | 2510 | 2750 | ■ |
| 2 Linergy BS bars, 120 x 10 | 4160 | 3760 | 3960 | 3550 | 3760 | 3340 | 3560 | 3100 | 3340 | 2880 | 3120 | ■ |

■ Connection impossible due to the operating-temperature limits of the devices installed in the switchboard.

**Example:**
Two 50 x 10 mm bars can be used for a 2160 A current with an IP ⩽ 31 and an ambient temperature of 30 °C around the switchboard.
Where possible, use of 10 mm bars is worthwhile in terms of the In/Isc:
- gain in time during switchboard mounting given, where applicable, the lesser number of bars installed
- for short-circuits, the rigidity of the bars means fewer busbar supports.

Recommendation:
Use 5 mm bars for In ⩽ 1600 A and low Icw values (40 kA rms).
Use 10 mm bars for In > 1600 A and medium to high Icw values (> 40 kA rms).

**Note:** the values indicated above have been validated for Prisma P switchboards.

# Designing vertical busbars
## Linergy LGY

### Electrical characteristics

### Permissible current and selection of Linergy LGY busbars

The goal is to optimise busbar size according to the installation and operating criteria.

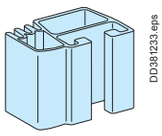
## Up to 3200 A

### Linergy LGY section

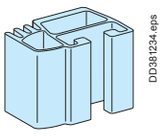
| Type of bars | Permissible current (A) | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Ambient temperature around the switchboard | | | | | | | | | | | |
| | 25 °C | | 30 °C | | 35 °C | | 40 °C | | 45 °C | | 50 °C | |
| | IP ⩽ 31 | IP > 31 | IP ⩽ 31 | IP > 31 | IP ⩽ 31 | IP > 31 | IP ⩽ 31 | IP > 31 | IP ⩽ 31 | IP > 31 | IP ⩽ 31 | IP > 31 |
| Linergy LGY 630 | 750 | 680 | 710 | 630 | 680 | 590 | 630 | 550 | 590 | 530 | 550 | ■ |
| Linergy LGY 800 | 920 | 840 | 880 | 800 | 840 | 760 | 800 | 720 | 760 | 680 | 720 | ■ |
| Linergy LGY 1000 | 1140 | 1040 | 1090 | 990 | 1040 | 950 | 990 | 900 | 950 | 850 | 900 | ■ |
| Linergy LGY 1250 | 1410 | 1290 | 1350 | 1230 | 1290 | 1170 | 1230 | 1100 | 1170 | 1050 | 1100 | ■ |
| Linergy LGY 1600 | 1800 | 1650 | 1720 | 1580 | 1650 | 1480 | 1580 | 1390 | 1480 | 1320 | 1390 | ■ |
| Linergy LGY 2000 (2 x 1000) | 2200 | 2000 | 2100 | 1900 | 2000 | 1820 | 1900 | 1720 | 1820 | 1620 | 1720 | ■ |
| Linergy LGY 2500 (2 x 1250) | 2740 | 2500 | 2620 | 2380 | 2500 | 2260 | 2380 | 2120 | 2260 | 2020 | 2120 | ■ |
| Linergy LGY 3200 (2 x 1600) | 3480 | 3200 | 3340 | 3060 | 3200 | 2920 | 3060 | 2780 | 2920 | 2640 | 2780 | ■ |

■ Connection impossible due to the operating-temperature limits of the devices installed in the switchboard.

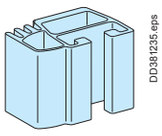
**Example:**
A Linergy LGY channelled bar can be used for a 1650 A current with an IP ⩽ 31 and an ambient temperature around the switchboard of 35 °C.



Section 630 A.
Cat. No. 04502.



Section 800 A.
Cat. No. 04503.



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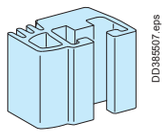
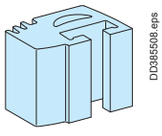


Section 1250 A.
Cat. No. 04505.



Section 1600 A.
Cat. No. 04506.

**Note:** the values indicated above have been validated for Prisma P switchboards.

# Designing vertical busbars
## Linergy LGYE

### Electrical characteristics

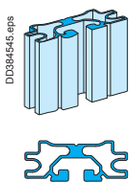
### Permissible current and selection of Linergy LGYE busbars

## Up to 4000 A

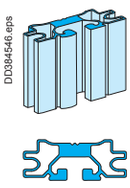
### Linergy LGYE section

| Type of bars | Permissible current (A) | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Ambient temperature around the switchboard | | | | | | | | | | | |
| | 25 °C | | 30 °C | | 35 °C | | 40 °C | | 45 °C | | 50 °C | |
| Size per phase | IP ≤ 31 | IP > 31 | IP ≤ 31 | IP > 31 | IP ≤ 31 | IP > 31 | IP ≤ 31 | IP > 31 | IP ≤ 31 | IP > 31 | IP ≤ 31 | IP > 31 |
| Linergy LGYE 630 | 680 | 580 | 650 | 550 | 630 | 530 | 590 | 500 | 550 | 470 | 520 | ■ |
| Linergy LGYE 800 | 860 | 740 | 830 | 710 | 800 | 680 | 750 | 630 | 700 | 600 | 660 | ■ |
| Linergy LGYE 1000 | 1080 | 920 | 1040 | 884 | 1000 | 850 | 940 | 790 | 880 | 750 | 830 | ■ |
| Linergy LGYE 1250 | 1350 | 1150 | 1300 | 1100 | 1250 | 1050 | 1170 | 1000 | 1100 | 930 | 1020 | ■ |
| Linergy LGYE 1600 | 1730 | 1580 | 1690 | 1530 | 1650 | 1480 | 1550 | 1380 | 1450 | 1300 | 1350 | ■ |
| Linergy LGYE 2000 | 2200 | 1810 | 2100 | 1730 | 2000 | 1650 | 1900 | 1560 | 1810 | 1480 | 1720 | ■ |
| Linergy LGYE 2500 | 2640 | 2230 | 2540 | 2160 | 2440 | 2100 | 2310 | 2000 | 2240 | 1930 | 2120 | ■ |
| Linergy LGYE 3200 | 3400 | 3020 | 3300 | 2900 | 3200 | 2800 | 3040 | 2660 | 2890 | 2520 | 2750 | ■ |
| Linergy LGYE 4000 | 3800 | 3510 | 3710 | 3430 | 3620 | 3350 | 3450 | 3180 | 3280 | 3020 | 3120 | ■ |

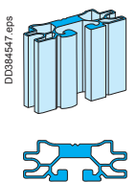
■ Connection impossible due to the operating-temperature limits of the devices installed in the switchboard.



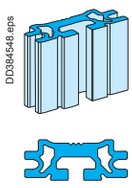

Section
630 A.
Cat. No. 04560.




Section 800 A.
Cat. No. 04561.




Section 1000 A.
Cat. No. 04562.




Section 1250 A.
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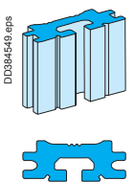


Section 1600 A.
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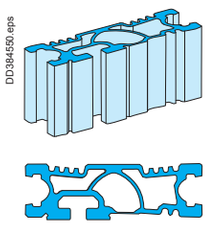


Section 2000 A.
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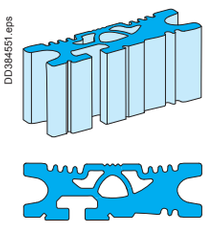
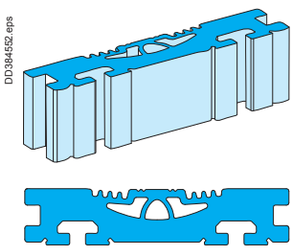
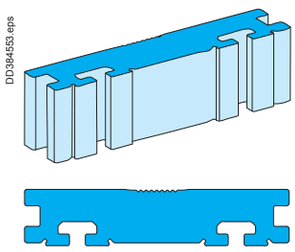



Section 2500 A.
Cat. No. 04566.




Section 3200 A.
Cat. No. 04567.




Section 4000 A.
Cat. No. 04568.

I

# Designing vertical busbars
## Linergy BS

## Electrical characteristics

### Permissible current and selection of vertical busbar

The goal is to optimise busbar size according to the installation and operating criteria.

## Up to 1600 A

### Linergy BS bars, 5 mm thick

| Type of bars | Permissible current (A) | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Ambient temperature around the switchboard | | | | | | | | | | | |
| | 25 °C | | 30 °C | | 35 °C | | 40 °C | | 45 °C | | 50 °C | |
| Size per phase | IP ⩽ 31 | IP > 31 | IP ⩽ 31 | IP > 31 | IP ⩽ 31 | IP > 31 | IP ⩽ 31 | IP > 31 | IP ⩽ 31 | IP > 31 | IP ⩽ 31 | IP > 31 |
| 1 Linergy BS bar, 60 x 5 | 890 | 840 | 850 | 790 | 800 | 750 | 760 | 700 | 710 | 650 | 660 | ■ |
| 1 Linergy BS bar, 80 x 5 | 1130 | 1050 | 1080 | 990 | 1000 | 900 | 970 | 870 | 910 | 810 | 860 | ■ |
| 2 Linergy BS bars, 60 x 5 | 1580 | 1420 | 1500 | 1350 | 1400 | 1250 | 1350 | 1180 | 1260 | 1090 | 1180 | ■ |
| 2 Linergy BS bars, 80 x 5 | 2010 | 1820 | 1920 | 1720 | 1800 | 1600 | 1720 | 1510 | 1610 | 1390 | 1510 | ■ |

■ Connection impossible due to the operating-temperature limits of the devices installed in the switchboard.

## Up to 3200 A

### Linergy BS bars, 10 mm thick

| Type of bars | Permissible current (A) | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Ambient temperature around the switchboard | | | | | | | | | | | |
| | 25 °C | | 30 °C | | 35 °C | | 40 °C | | 45 °C | | 50 °C | |
| Size per phase | IP ⩽ 31 | IP > 31 | IP ⩽ 31 | IP > 31 | IP ⩽ 31 | IP > 31 | IP ⩽ 31 | IP > 31 | IP ⩽ 31 | IP > 31 | IP ⩽ 31 | IP > 31 |
| 1 Linergy BS bar, 50 x 10 | 1330 | 1220 | 1260 | 1160 | 1200 | 1080 | 1130 | 1010 | 1060 | 940 | 990 | ■ |
| 1 Linergy BS bar, 60 x 10 | 1550 | 1400 | 1470 | 1320 | 1400 | 1250 | 1320 | 1160 | 1240 | 1070 | 1160 | ■ |
| 1 Linergy BS bar, 80 x 10 | 1990 | 1800 | 1890 | 1700 | 1800 | 1600 | 1700 | 1500 | 1600 | 1390 | 1500 | ■ |
| 1 Linergy BS bar, 100 x 10 | 2370 | 2150 | 2260 | 2030 | 2150 | 1900 | 2030 | 1780 | 1900 | 1650 | 1780 | ■ |
| 2 Linergy BS bars, 50 x 10 | 2270 | 2090 | 2160 | 1980 | 2050 | 1850 | 1930 | 1740 | 1810 | 1610 | 1690 | ■ |
| 2 Linergy BS bars, 60 x 10 | 2550 | 2270 | 2420 | 2140 | 2300 | 2000 | 2170 | 1870 | 2030 | 1720 | 1900 | ■ |
| 2 Linergy BS bars, 80 x 10 | 3110 | 2820 | 2970 | 2660 | 2820 | 2500 | 2660 | 2330 | 2500 | 2160 | 2330 | ■ |
| 2 x 1 Linergy BS bar, 80 x 10 | 3540 | 3200 | 3370 | 3020 | 3200 | 2820 | 3020 | 2650 | 2840 | 2450 | 2650 | ■ |
| 2 Linergy BS bars, 100 x 10 | 3650 | 3280 | 3490 | 3100 | 3300 | 2900 | 3130 | 2720 | 2950 | 2510 | 2750 | ■ |
| 2 Linergy BS bars, 120 x 10 | 4160 | 3760 | 3960 | 3550 | 3760 | 3340 | 3560 | 3100 | 3340 | 2880 | 3120 | ■ |

■ Connection impossible due to the operating-temperature limits of the devices installed in the switchboard.

**Example**
Two 80 x 10 mm bars can be used for a 2820 A current with an IP ⩽ 31 and an ambient temperature of 35°C around the switchboard.
Two 80 x 10 mm bars installed separately in two busbar compartments can be used for a 3200 A current with an IP ⩽ 31 and an ambient temperature of 35°C around the switchboard.

**Note:** the values indicated above have been validated for Prisma P switchboards.

# Designing rear busbars
## Linergy LGYE, Linergy BS

### Electrical characteristics

### Permissible current and selection of vertical busbar

The goal is to optimise busbar size according to the installation and operating criteria.

## Up to 1600 A

### Linergy LGY section

| Type of bars | Permissible current (A) | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Ambient temperature around the switchboard | | | | | | | | | | | |
| | 25 °C | | 30 °C | | 35 °C | | 40 °C | | 45 °C | | 50 °C | |
| | IP ⩽ 31 | IP > 31 | IP ⩽ 31 | IP > 31 | IP ⩽ 31 | IP > 31 | IP ⩽ 31 | IP > 31 | IP ⩽ 31 | IP > 31 | IP ⩽ 31 | IP > 31 |
| Linergy LGY 630 | 750 | 680 | 710 | 630 | 680 | 590 | 630 | 550 | 590 | 530 | 550 | ■ |
| Linergy LGY 800 | 920 | 840 | 880 | 800 | 840 | 760 | 800 | 720 | 760 | 680 | 720 | ■ |
| Linergy LGY 1000 | 1140 | 1040 | 1090 | 990 | 1040 | 950 | 990 | 900 | 950 | 850 | 900 | ■ |
| Linergy LGY 1250 | 1410 | 1290 | 1350 | 1230 | 1290 | 1170 | 1230 | 1100 | 1170 | 1050 | 1100 | ■ |
| Linergy LGY 1600 | 1800 | 1650 | 1720 | 1580 | 1650 | 1480 | 1580 | 1390 | 1480 | 1320 | 1390 | ■ |

■ Connection impossible due to the operating-temperature limits of the devices installed in the switchboard.

## Up to 1600 A

### Linergy BS bars, 5 mm thick

| Type of bars | Permissible current (A) | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Ambient temperature around the switchboard | | | | | | | | | | | |
| | 25 °C | | 30 °C | | 35 °C | | 40 °C | | 45 °C | | 50 °C | |
| Size per phase | IP ⩽ 31 | IP > 31 | IP ⩽ 31 | IP > 31 | IP ⩽ 31 | IP > 31 | IP ⩽ 31 | IP > 31 | IP ⩽ 31 | IP > 31 | IP ⩽ 31 | IP > 31 |
| 1 Linergy BS bar, 60 x 5 | 890 | 840 | 850 | 790 | 800 | 750 | 760 | 700 | 710 | 650 | 660 | ■ |
| 1 Linergy BS bar, 80 x 5 | 1130 | 1050 | 1080 | 990 | 1000 | 900 | 970 | 870 | 910 | 810 | 860 | ■ |
| 2 Linergy BS bars, 60 x 5 | 1580 | 1420 | 1500 | 1350 | 1400 | 1250 | 1350 | 1180 | 1260 | 1090 | 1180 | ■ |
| 2 Linergy BS bars, 80 x 5 | 2010 | 1820 | 1920 | 1720 | 1800 | 1600 | 1720 | 1510 | 1610 | 1390 | 1510 | ■ |

■ Connection impossible due to the operating-temperature limits of the devices installed in the switchboard.

## Up to 3200 A

### Linergy BS bars, 10 mm thick

| Type of bars | Permissible current (A) | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Ambient temperature around the switchboard | | | | | | | | | | | |
| | 25 °C | | 30 °C | | 35 °C | | 40 °C | | 45 °C | | 50 °C | |
| Size per phase | IP ⩽ 31 | IP > 31 | IP ⩽ 31 | IP > 31 | IP ⩽ 31 | IP > 31 | IP ⩽ 31 | IP > 31 | IP ⩽ 31 | IP > 31 | IP ⩽ 31 | IP > 31 |
| 1 Linergy BS bar, 50 x 10 | 1330 | 1220 | 1260 | 1160 | 1200 | 1080 | 1130 | 1010 | 1060 | 940 | 990 | ■ |
| 1 Linergy BS bar, 60 x 10 | 1550 | 1400 | 1470 | 1320 | 1400 | 1250 | 1320 | 1160 | 1240 | 1070 | 1160 | ■ |
| 1 Linergy BS bar, 80 x 10 | 1990 | 1800 | 1890 | 1700 | 1800 | 1600 | 1700 | 1500 | 1600 | 1390 | 1500 | ■ |
| 2 Linergy BS bars, 80 x 10 | 2270 | 2090 | 2160 | 1980 | 2050 | 1850 | 1930 | 1740 | 1810 | 1610 | 1690 | ■ |
| 2 Linergy BS bars, 60 x 10 | 2550 | 2270 | 2420 | 2140 | 2300 | 2000 | 2170 | 1870 | 2030 | 1720 | 1900 | ■ |
| 2 Linergy BS bars, 80 x 10 | 3110 | 2820 | 2970 | 2660 | 2820 | 2500 | 2660 | 2330 | 2500 | 2160 | 2330 | ■ |

■ Connection impossible due to the operating-temperature limits of the devices installed in the switchboard.

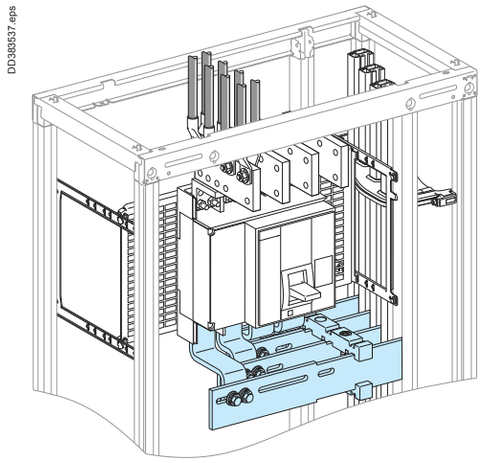
**Note:** the values indicated above have been validated for Prisma P switchboards.

# Designing connections between a device and busbars
## Prefabricated connections for Compact NS630b to NS1600



## Compact NS630b to NS1600
## Vertical mounting

Front or rear connection
Top or bottom incoming
Vertical busbars on the left or right
Linergy LGY busbars




Using the data below, it is possible to determine the permissible current for a prefabricated connection between a vertical Compact NS630b/NS1600, fixed or withdrawable, and Linergy LGY busbars depending on the ambient temperature around the switchboard and the IP value.

## Fixed

### Prefabricated connection

| Device and cat. no. | | Permissible current (A) | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Ambient temperature around the switchboard | | | | | | | | | | | |
| | | 25 °C | | 30 °C | | 35 °C | | 40 °C | | 45 °C | | 50 °C | |
| | | IP ⩽ 31 | IP > 31 | IP ⩽ 31 | IP > 31 | IP ⩽ 31 | IP > 31 | IP ⩽ 31 | IP > 31 | IP ⩽ 31 | IP > 31 | IP ⩽ 31 | IP > 31 |
| NS630b | 3P cat. no. **04485** | 630 | 630 | 630 | 630 | 630 | 630 | 630 | 630 | 630 | 630 | 630 | ■ |
| | 4P cat. no. **04486** | | | | | | | | | | | | |
| NS800 | 3P cat. no. **04485** | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | ■ |
| | 4P cat. no. **04486** | | | | | | | | | | | | |
| NS1000 | 3P cat. no. **04485** | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | ■ |
| | 4P cat. no. **04486** | | | | | | | | | | | | |
| NS1250 | 3P cat. no. **04485** | 1250 | 1250 | 1250 | 1250 | 1250 | 1250 | 1250 | 1200 | 1250 | 1150 | 1200 | ■ |
| | 4P cat. no. **04486** | | | | | | | | | | | | |
| NS1600 | 3P cat. no. **04487** | 1600 | 1550 | 1600 | 1500 | 1550 | 1450 | 1500 | 1400 | 1450 | 1350 | 1400 | ■ |
| | 4P cat. no. **04488** | | | | | | | | | | | | |

■ Connection impossible due to the operating-temperature limits of the devices installed in the switchboard.

## Withdrawable

### Prefabricated connection

| Device and cat. no. | | Permissible current (A) | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Ambient temperature around the switchboard | | | | | | | | | | | |
| | | 25 °C | | 30 °C | | 35 °C | | 40 °C | | 45 °C | | 50 °C | |
| | | IP ⩽ 31 | IP > 31 | IP ⩽ 31 | IP > 31 | IP ⩽ 31 | IP > 31 | IP ⩽ 31 | IP > 31 | IP ⩽ 31 | IP > 31 | IP ⩽ 31 | IP > 31 |
| NS630b | 3P cat. no. **04477** | 630 | 630 | 630 | 630 | 630 | 630 | 630 | 630 | 630 | 630 | 630 | ■ |
| | 4P cat. no. **04478** | | | | | | | | | | | | |
| NS800 | 3P cat. no. **04477** | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | ■ |
| | 4P cat. no. **04478** | | | | | | | | | | | | |
| NS1000 | 3P cat. no. **04477** | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | ■ |
| | 4P cat. no. **04478** | | | | | | | | | | | | |
| NS1250 | 3P cat. no. **04477** | 1250 | 1250 | 1250 | 1250 | 1250 | 1250 | 1250 | 1200 | 1250 | 1150 | 1200 | ■ |
| | 4P cat. no. **04478** | | | | | | | | | | | | |
| NS1600 | 3P cat. no. **04491** | 1560 | 1480 | 1520 | 1430 | 1480 | 1380 | 1430 | 1330 | 1380 | 1280 | 1330 | ■ |
| | 4P cat. no. **04492** | | | | | | | | | | | | |

■ Connection impossible due to the operating-temperature limits of the devices installed in the switchboard.

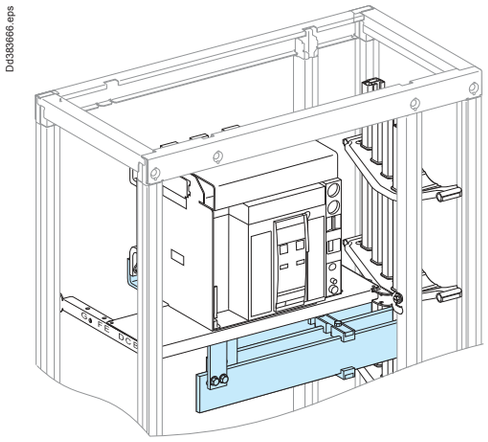
**Example:**
For a fixed Compact NS1600, 4P, where the ambient temperature around the switchboard is 35°C and the IP > 31:
the maximum permissible current for the prefabricated connection (04488) is 1450 A.

# Designing connections between a device and busbars
## Prefabricated connections for Masterpact 06-16

Electrical characteristics

### Masterpact NT 06 to 16
### Masterpact MTZ1 06 to 16
### Vertical mounting

Front or rear connection
Top or bottom incoming
Vertical busbars on the left or right
Linergy LGY busbars




Using the data below, it is possible to determine the permissible current for a prefabricated connection between a vertical Masterpact NT06/NT16, fixed or drawout, and Linergy LGY busbars depending on the ambient temperature around the switchboard and the IP value.

## Fixed

### Prefabricated connection

| Device and cat. no. | | Permissible current (A) | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Ambient temperature around the switchboard | | | | | | | | | | | |
| | | 25 °C | | 30 °C | | 35 °C | | 40 °C | | 45 °C | | 50 °C | |
| | | IP ⩽ 31 | IP > 31 | IP ⩽ 31 | IP > 31 | IP ⩽ 31 | IP > 31 | IP ⩽ 31 | IP > 31 | IP ⩽ 31 | IP > 31 | IP ⩽ 31 | IP > 31 |
| NT06 & MTZ1 | 3P cat. no. **04475** | 630 | 630 | 630 | 630 | 630 | 630 | 630 | 630 | 630 | 630 | 630 | ■ |
| | 4P cat. no. **04476** | | | | | | | | | | | | |
| NT08 & MTZ1 | 3P cat. no. **04475** | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | ■ |
| | 4P cat. no. **04476** | | | | | | | | | | | | |
| NT10 & MTZ1 | 3P cat. no. **04475** | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | ■ |
| | 4P cat. no. **04476** | | | | | | | | | | | | |
| NT12 & MTZ1 | 3P cat. no. **04475** | 1250 | 1250 | 1250 | 1250 | 1250 | 1250 | 1250 | 1200 | 1250 | 1150 | 1200 | ■ |
| | 4P cat. no. **04476** | | | | | | | | | | | | |
| NT16 & MTZ1 | 3P cat. no. **04489** | 1600 | 1570 | 1600 | 1520 | 1570 | 1470 | 1520 | 1420 | 1470 | 1370 | 1420 | ■ |
| | 4P cat. no. **04490** | | | | | | | | | | | | |

■ Connection impossible due to the operating-temperature limits of the devices installed in the switchboard.

## Withdrawable

### Prefabricated connection

| Device and cat. no. | | Permissible current (A) | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Ambient temperature around the switchboard | | | | | | | | | | | |
| | | 25 °C | | 30 °C | | 35 °C | | 40 °C | | 45 °C | | 50 °C | |
| | | IP ⩽ 31 | IP > 31 | IP ⩽ 31 | IP > 31 | IP ⩽ 31 | IP > 31 | IP ⩽ 31 | IP > 31 | IP ⩽ 31 | IP > 31 | IP ⩽ 31 | IP > 31 |
| NT06 & MTZ1 | 3P cat. no. **04477** | 630 | 630 | 630 | 630 | 630 | 630 | 630 | 630 | 630 | 630 | 630 | ■ |
| | 4P cat. no. **04478** | | | | | | | | | | | | |
| NT08 & MTZ1 | 3P cat. no. **04477** | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | ■ |
| | 4P cat. no. **04478** | | | | | | | | | | | | |
| NT10 & MTZ1 | 3P cat. no. **04477** | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | ■ |
| | 4P cat. no. **04478** | | | | | | | | | | | | |
| NT12 & MTZ1 | 3P cat. no. **04477** | 1250 | 1250 | 1250 | 1250 | 1250 | 1250 | 1250 | 1200 | 1250 | 1150 | 1200 | ■ |
| | 4P cat. no. **04478** | | | | | | | | | | | | |
| NT16 & MTZ1 | 3P cat. no. **04491** | 1560 | 1480 | 1520 | 1430 | 1480 | 1380 | 1430 | 1330 | 1380 | 1280 | 1330 | ■ |
| | 4P cat. no. **04492** | | | | | | | | | | | | |

■ Connection impossible due to the operating-temperature limits of the devices installed in the switchboard.

**Example:**
For a drawout Masterpact NT16 , 4P, where the ambient temperature around the switchboard is 35°C and the IP > 31: the maximum permissible current for the prefabricated connection (04492) is 1380 A.

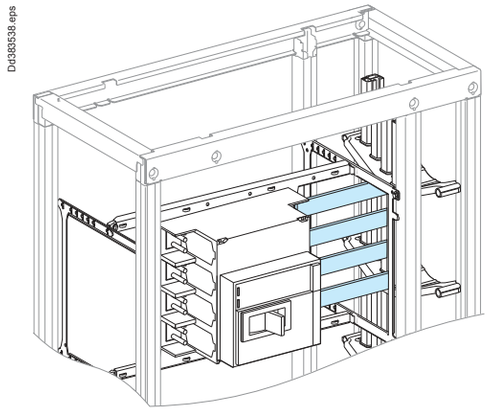
**Note:** the values indicated above have been validated for Prisma P switchboards.

# Designing connections between a device and busbars
## Prefabricated connections for Compact NS630b to NS1000



## Compact NS630b à NS1000
## Horizontal mounting

Front or rear connection
Left or right incoming
Linergy LGY vertical busbars




Using the data below, it is possible to determine the permissible current for a prefabricated connection between a horizontal Compact NS630b/NS1600, fixed or withdrawable, and Linergy LGY busbars depending on the ambient temperature around the switchboard and the IP value.

## Fixed

### Prefabricated connection

| Device and cat. no. | | Permissible current (A) | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Ambient temperature around the switchboard | | | | | | | | | | | |
| | | 25 °C | | 30 °C | | 35 °C | | 40 °C | | 45 °C | | 50 °C | |
| | | IP ⩽ 31 | IP > 31 | IP ⩽ 31 | IP > 31 | IP ⩽ 31 | IP > 31 | IP ⩽ 31 | IP > 31 | IP ⩽ 31 | IP > 31 | IP ⩽ 31 | IP > 31 |
| NS630b | 3P cat. no. **04473** | 630 | 630 | 630 | 630 | 630 | 630 | 630 | 630 | 630 | 630 | 630 | ■ |
| | 4P cat. no. **04474** | | | | | | | | | | | | |
| NS800 | 3P cat. no. **04473** | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | ■ |
| | 4P cat. no. **04474** | | | | | | | | | | | | |
| NS1000 | 3P cat. no. **04473** | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | ■ |
| | 4P cat. no. **04474** | | | | | | | | | | | | |

■ Connection impossible due to the operating-temperature limits of the devices installed in the switchboard.

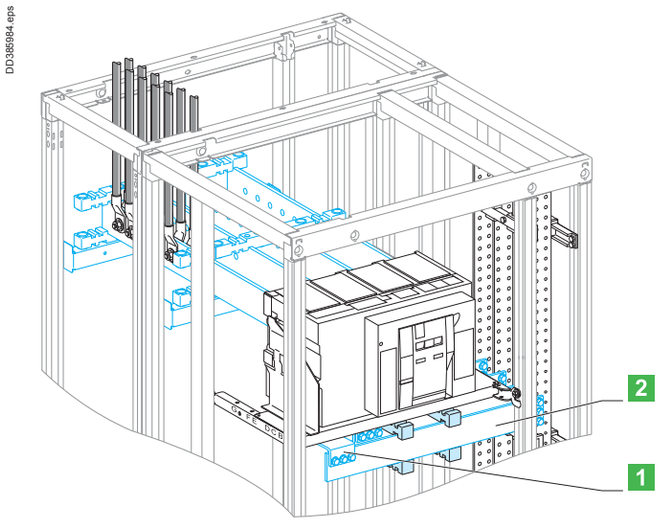
**Note:** the values indicated above have been validated for Prisma P switchboards.

# Designing connections between a device and busbars
## Fixed Masterpact 08-16



### Masterpact NW 08 to 16
### Masterpact MTZ2 08 to 16
### Fixed

Vertical busbars on the left or right
Linergy LGY, BS busbars
Connections drawings supplied by Schneider Electric




**1** Liaison
**2** Horizontal link.

Using the data below, it is possible to determine the size of the copper bars and the maximum permissible currents when making the connections to busbars for a vertical, fixed Masterpact NW08/16, front or rear connection, taking into account the ambient temperature around the switchboard and the IP value.

## Connection

### Flat bars, 5 mm thick

| Device | | Permissible current (A) | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Ambient temperature around the switchboard (1) | | | | | | | | | | | |
| | | 25 °C | | 30 °C | | 35 °C | | 40 °C | | 45 °C | | 50 °C | |
| | | IP ≤ 31 | IP > 31 | IP ≤ 31 | IP > 31 | IP ≤ 31 | IP > 31 | IP ≤ 31 | IP > 31 | IP ≤ 31 | IP > 31 | IP ≤ 31 | IP > 31 |
| NW08 & MTZ2 | Size per phase | 1b 80 x 5 | 1b 80 x 5 | 1b 80 x 5 | 1b 80 x 5 | 1b 80 x 5 | 1b 80 x 5 | 1b 80 x 5 | 1b 80 x 5 | 1b 80 x 5 | 1b 80 x 5 | 1b 80 x 5 | ■ |
| | I (A) | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | |
| NW10 & MTZ2 | Size per phase | 1b 80 x 5 | 1b 80 x 5 | 1b 80 x 5 | 1b 80 x 5 | 1b 80 x 5 | 1b 80 x 5 | 1b 80 x 5 | 1b 80 x 5 | 1b 80 x 5 | 1b 80 x 5 | 1b 80 x 5 | ■ |
| | I (A) | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | |
| NW12 & MTZ2 | Size per phase | 2b 80 x 5 | 2b 80 x 5 | 2b 80 x 5 | 2b 80 x 5 | 2b 80 x 5 | 2b 80 x 5 | 2b 80 x 5 | 2b 80 x 5 | 2b 80 x 5 | 2b 80 x 5 | 2b 80 x 5 | ■ |
| | I (A) | 1250 | 1250 | 1250 | 1250 | 1250 | 1250 | 1250 | 1250 | 1250 | 1250 | 1250 | |
| NW16 & MTZ2 | Size per phase | 2b 80 x 5 | 2b 80 x 5 | 2b 80 x 5 | 2b 80 x 5 | 2b 80 x 5 | 2b 80 x 5 | 2b 80 x 5 | 2b 80 x 5 | 2b 80 x 5 | 2b 80 x 5 | 2b 80 x 5 | ■ |
| | I (A) | 1600 | 1600 | 1600 | 1570 | 1600 | 1520 | 1570 | 1470 | 1520 | 1420 | 1470 | |

## Horizontal link

### Flat bars, 5 mm thick

| Device | | Permissible current (A) | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Ambient temperature around the switchboard | | | | | | | | | | | |
| | | 25 °C | | 30 °C | | 35 °C | | 40 °C | | 45 °C | | 50 °C | |
| | | IP ≤ 31 | IP > 31 | IP ≤ 31 | IP > 31 | IP ≤ 31 | IP > 31 | IP ≤ 31 | IP > 31 | IP ≤ 31 | IP > 31 | IP ≤ 31 | IP > 31 |
| NW08 & MTZ2 | Size per phase | 1b 80 x 5 | 1b 80 x 5 | 1b 80 x 5 | 1b 80 x 5 | 1b 80 x 5 | 1b 80 x 5 | 1b 80 x 5 | 1b 80 x 5 | 1b 80 x 5 | 1b 80 x 5 | 1b 80 x 5 | ■ |
| | I (A) | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | |
| NW10 & MTZ2 | Size per phase | 1b 80 x 5 | 1b 80 x 5 | 1b 80 x 5 | 1b 80 x 5 | 1b 80 x 5 | 1b 80 x 5 | 1b 80 x 5 | 1b 80 x 5 | 1b 80 x 5 | 1b 80 x 5 | 1b 80 x 5 | ■ |
| | I (A) | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | |
| NW12 & MTZ2 | Size per phase | 2b 80 x 5 | 2b 80 x 5 | 2b 80 x 5 | 2b 80 x 5 | 2b 80 x 5 | 2b 80 x 5 | 2b 80 x 5 | 2b 80 x 5 | 2b 80 x 5 | 2b 80 x 5 | 2b 80 x 5 | ■ |
| | I (A) | 1250 | 1250 | 1250 | 1250 | 1250 | 1250 | 1250 | 1250 | 1250 | 1250 | 1250 | |
| NW16 & MTZ2 | Size per phase | 2b 80 x 5 | 2b 80 x 5 | 2b 80 x 5 | 2b 80 x 5 | 2b 80 x 5 | 2b 80 x 5 | 2b 80 x 5 | 2b 80 x 5 | 2b 80 x 5 | 2b 80 x 5 | 2b 80 x 5 | ■ |
| | I (A) | 1600 | 1600 | 1600 | 1570 | 1600 | 1520 | 1570 | 1470 | 1520 | 1420 | 1470 | |

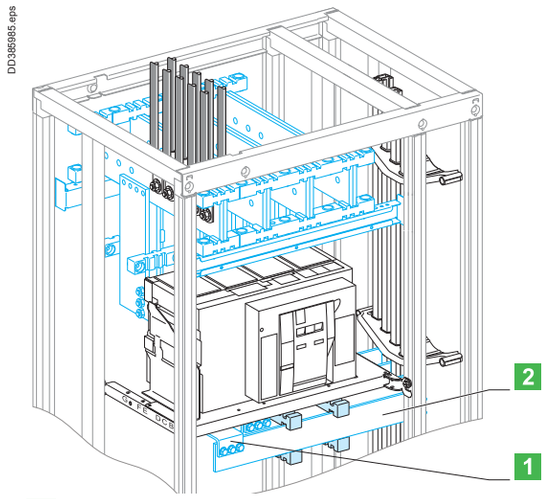
■ Connection impossible due to the operating-temperature limits of the devices installed in the switchboard.
(1) In the case of a door mounted at the rear of cubicle, add 10 °C.
**Note:** the values indicated above have been validated for Prisma P switchboards.

# Designing connections between a device and busbars
## Fixed Masterpact 08-32

Electrical characteristics

### Masterpact NW 08 to 32
### Masterpact MTZ2 08 to 32
### Fixed

Vertical busbars on the left or right
Linergy LGYE, LGY, BS busbars
Connections drawings supplied by Schneider Electric




1 Connection.

2 Horizontal link.

Using the data below, it is possible to determine the size of the copper bars and the maximum permissible currents when making the connections to busbars for a vertical, fixed Masterpact NW08/32, front or rear connection, taking into account the ambient temperature around the switchboard and the IP value.

## Connection

### Flat bars, 10 mm thick

| Device | | Permissible current (A) | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Ambient temperature around the switchboard | | | | | | | | | | | |
| | | 25 °C | | 30 °C | | 35 °C | | 40 °C | | 45 °C | | 50 °C | |
| | | IP ≤ 31 | IP > 31 | IP ≤ 31 | IP > 31 | IP ≤ 31 | IP > 31 | IP ≤ 31 | IP > 31 | IP ≤ 31 | IP > 31 | IP ≤ 31 | IP > 31 |
| NW08 & MTZ2 | Size per phase | 1b 80 x 10 | 1b 80 x 10 | 1b 80 x 10 | 1b 80 x 10 | 1b 80 x 10 | 1b 80 x 10 | 1b 80 x 10 | 1b 80 x 10 | 1b 80 x 10 | 1b 80 x 10 | 1b 80 x 10 | ■ |
| | I (A) | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | |
| NW10 & MTZ2 | Size per phase | 1b 80 x 10 | 1b 80 x 10 | 1b 80 x 10 | 1b 80 x 10 | 1b 80 x 10 | 1b 80 x 10 | 1b 80 x 10 | 1b 80 x 10 | 1b 80 x 10 | 1b 80 x 10 | 1b 80 x 10 | ■ |
| | I (A) | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | |
| NW12 & MTZ2 | Size per phase | 1b 80 x 10 | 1b 80 x 10 | 1b 80 x 10 | 1b 80 x 10 | 1b 80 x 10 | 1b 80 x 10 | 1b 80 x 10 | 1b 80 x 10 | 1b 80 x 10 | 1b 80 x 10 | 1b 80 x 10 | ■ |
| | I (A) | 1250 | 1250 | 1250 | 1250 | 1250 | 1250 | 1250 | 1250 | 1250 | 1250 | 1250 | |
| NW16 & MTZ2 | Size per phase | 1b 80 x 10 | 1b 80 x 10 | 1b 80 x 10 | 1b 80 x 10 | 1b 80 x 10 | 1b 80 x 10 | 1b 80 x 10 | 1b 80 x 10 | 1b 80 x 10 | 1b 80 x 10 | 1b 80 x 10 | ■ |
| | I (A) | 1600 | 1600 | 1600 | 1570 | 1600 | 1520 | 1570 | 1470 | 1520 | 1420 | 1470 | |
| NW20 & MTZ2 | Size per phase | 2b 80 x 10 | 2b 80 x 10 | 2b 80 x 10 | 2b 80 x 10 | 2b 80 x 10 | 2b 80 x 10 | 2b 80 x 10 | 2b 80 x 10 | 2b 80 x 10 | 2b 80 x 10 | 2b 80 x 10 | ■ |
| | I (A) | 2000 | 2000 | 2000 | 2000 | 2000 | 2000 | 2000 | 1950 | 2000 | 1900 | 1950 | |
| NW25 & MTZ2 | Size per phase | 2b 80 x 10 | 2b 80 x 10 | 2b 80 x 10 | 2b 80 x 10 | 2b 80 x 10 | 2b 80 x 10 | 2b 80 x 10 | 2b 80 x 10 | 2b 80 x 10 | 2b 80 x 10 | 2b 80 x 10 | ■ |
| | I (A) | 2500 | 2500 | 2500 | 2500 | 2500 | 2460 | 2500 | 2380 | 2500 | 2300 | 2460 | |
| NW32 & MTZ2 | Size per phase | 3b 80 x 10 | 3b 80 x 10 | 3b 80 x 10 | 3b 80 x 10 | 3b 80 x 10 | 3b 80 x 10 | 3b 80 x 10 | 3b 80 x 10 | 3b 80 x 10 | 3b 80 x 10 | 3b 80 x 10 | ■ |
| | I (A) | 3200 | 3000 | 3170 | 2910 | 3080 | 2820 | 3000 | 2730 | 2910 | 2630 | 2820 | |

■ Connection impossible due to the operating-temperature limits of the devices installed in the switchboard.

## Horizontal link

### Flat bars, 10 mm thick

| Device | | Permissible current (A) | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Ambient temperature around the switchboard | | | | | | | | | | | |
| | | 25 °C | | 30 °C | | 35 °C | | 40 °C | | 45 °C | | 50 °C | |
| | | IP ≤ 31 | IP > 31 | IP ≤ 31 | IP > 31 | IP ≤ 31 | IP > 31 | IP ≤ 31 | IP > 31 | IP ≤ 31 | IP > 31 | IP ≤ 31 | IP > 31 |
| NW08 & MTZ2 | Size per phase | 1b 60 x 10 | 1b 60 x 10 | 1b 60 x 10 | 1b 60 x 10 | 1b 60 x 10 | 1b 60 x 10 | 1b 60 x 10 | 1b 60 x 10 | 1b 60 x 10 | 1b 60 x 10 | 1b 60 x 10 | ■ |
| | I (A) | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | |
| NW10 & MTZ2 | Size per phase | 1b 60 x 10 | 1b 60 x 10 | 1b 60 x 10 | 1b 60 x 10 | 1b 60 x 10 | 1b 60 x 10 | 1b 60 x 10 | 1b 60 x 10 | 1b 60 x 10 | 1b 60 x 10 | 1b 60 x 10 | ■ |
| | I (A) | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | |
| NW12 & MTZ2 | Size per phase | 1b 60 x 10 | 1b 60 x 10 | 1b 60 x 10 | 1b 60 x 10 | 1b 60 x 10 | 1b 60 x 10 | 1b 60 x 10 | 1b 60 x 10 | 1b 60 x 10 | 1b 60 x 10 | 1b 60 x 10 | ■ |
| | I (A) | 1250 | 1250 | 1250 | 1250 | 1250 | 1250 | 1250 | 1250 | 1250 | 1250 | 1250 | |
| NW16 & MTZ2 | Size per phase | 1b 80 x 10 | 1b 80 x 10 | 1b 80 x 10 | 1b 80 x 10 | 1b 80 x 10 | 1b 80 x 10 | 1b 80 x 10 | 1b 80 x 10 | 1b 80 x 10 | 1b 80 x 10 | 1b 80 x 10 | ■ |
| | I (A) | 1600 | 1600 | 1600 | 1570 | 1600 | 1520 | 1570 | 1470 | 1520 | 1420 | 1470 | |
| NW20 & MTZ2 | Size per phase | 2b 60 x 10 | 2b 60 x 10 | 2b 60 x 10 | 2b 60 x 10 | 2b 60 x 10 | 2b 60 x 10 | 2b 60 x 10 | 2b 60 x 10 | 2b 60 x 10 | 2b 60 x 10 | 2b 60 x 10 | ■ |
| | I (A) | 2000 | 2000 | 2000 | 2000 | 2000 | 2000 | 2000 | 1950 | 2000 | 1900 | 1950 | |
| NW25 & MTZ2 | Size per phase | 2b 80 x 10 | 2b 80 x 10 | 2b 80 x 10 | 2b 80 x 10 | 2b 80 x 10 | 2b 80 x 10 | 2b 80 x 10 | 2b 80 x 10 | 2b 80 x 10 | 2b 80 x 10 | 2b 80 x 10 | ■ |
| | I (A) | 2500 | 2500 | 2500 | 2500 | 2500 | 2460 | 2500 | 2380 | 2500 | 2300 | 2460 | |
| NW32 & MTZ2 | Size per phase | 2b 100 x 10 | 2b 100 x 10 | 2b 100 x 10 | 2b 100 x 10 | 2b 100 x 10 | 2b 100 x 10 | 2b 100 x 10 | 2b 100 x 10 | 2b 100 x 10 | 2b 100 x 10 | 2b 100 x 10 | ■ |
| | I (A) | 3200 | 3000 | 3170 | 2910 | 3080 | 2820 | 3000 | 2730 | 2910 | 2630 | 2820 | |

■ Connection impossible due to the operating-temperature limits of the devices installed in the switchboard.

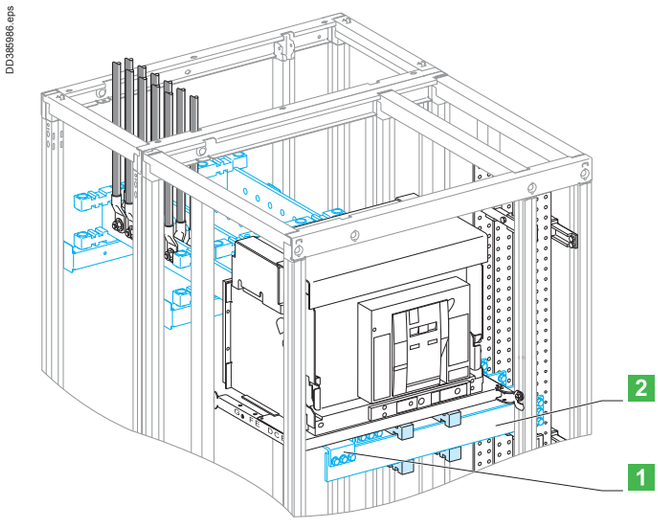
**Note:** the values indicated above have been validated for Prisma P switchboards.

# Designing connections between a device and busbars
## Drawout Masterpact 08-16



### Masterpact NW 08 to 16
### Masterpact MTZ2 08 to 16
### Drawout

Vertical busbars on the left or right
Linergy LGY, BS busbars
Connections drawings supplied by Schneider Electric




**1** Connection.

**2** Horizontal link.

Using the data below, it is possible to determine the size of the copper bars and the maximum permissible currents when making the connections to busbars for a vertical, drawout Masterpact NW08/16, front or rear connection, taking into account the ambient temperature around the switchboard and the IP value.

## Connection

### Flat bars, 5 mm thick

| Device | | Permissible current (A) | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Ambient temperature around the switchboard (1) | | | | | | | | | | | |
| | | 25 °C | | 30 °C | | 35 °C | | 40 °C | | 45 °C | | 50 °C | |
| | | IP ⩽ 31 | IP > 31 | IP ⩽ 31 | IP > 31 | IP ⩽ 31 | IP > 31 | IP ⩽ 31 | IP > 31 | IP ⩽ 31 | IP > 31 | IP ⩽ 31 | IP > 31 |
| NW08 & MTZ2 | Size per phase | 1b 80 x 5 | 1b 80 x 5 | 1b 80 x 5 | 1b 80 x 5 | 1b 80 x 5 | 1b 80 x 5 | 1b 80 x 5 | 1b 80 x 5 | 1b 80 x 5 | 1b 80 x 5 | 1b 80 x 5 | ■ |
| | I (A) | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | |
| NW10 & MTZ2 | Size per phase | 1b 80 x 5 | 1b 80 x 5 | 1b 80 x 5 | 1b 80 x 5 | 1b 80 x 5 | 1b 80 x 5 | 1b 80 x 5 | 1b 80 x 5 | 1b 80 x 5 | 1b 80 x 5 | 1b 80 x 5 | ■ |
| | I (A) | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | |
| NW12 & MTZ2 | Size per phase | 2b 80 x 5 | 2b 80 x 5 | 2b 80 x 5 | 2b 80 x 5 | 2b 80 x 5 | 2b 80 x 5 | 2b 80 x 5 | 2b 80 x 5 | 2b 80 x 5 | 2b 80 x 5 | 2b 80 x 5 | ■ |
| | I (A) | 1250 | 1250 | 1250 | 1250 | 1250 | 1230 | 1250 | 1200 | 1230 | 1160 | 1200 | |
| NW16 & MTZ2 | Size per phase | 2b 80 x 5 | 2b 80 x 5 | 2b 80 x 5 | 2b 80 x 5 | 2b 80 x 5 | 2b 80 x 5 | 2b 80 x 5 | 2b 80 x 5 | 2b 80 x 5 | 2b 80 x 5 | 2b 80 x 5 | ■ |
| | I (A) | 1560 | 1480 | 1520 | 1430 | 1480 | 1380 | 1430 | 1330 | 1380 | 1280 | 1330 | |

■ Connection impossible due to the operating-temperature limits of the devices installed in the switchboard.

## Horizontal link

### Flat bars, 5 mm thick

| Device | | Permissible current (A) | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Ambient temperature around the switchboard | | | | | | | | | | | |
| | | 25 °C | | 30 °C | | 35 °C | | 40 °C | | 45 °C | | 50 °C | |
| | | IP ⩽ 31 | IP > 31 | IP ⩽ 31 | IP > 31 | IP ⩽ 31 | IP > 31 | IP ⩽ 31 | IP > 31 | IP ⩽ 31 | IP > 31 | IP ⩽ 31 | IP > 31 |
| NW08 & MTZ2 | Size per phase | 1b 80 x 5 | 1b 80 x 5 | 1b 80 x 5 | 1b 80 x 5 | 1b 80 x 5 | 1b 80 x 5 | 1b 80 x 5 | 1b 80 x 5 | 1b 80 x 5 | 1b 80 x 5 | 1b 80 x 5 | ■ |
| | I (A) | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | |
| NW10 & MTZ2 | Size per phase | 1b 80 x 5 | 1b 80 x 5 | 1b 80 x 5 | 1b 80 x 5 | 1b 80 x 5 | 1b 80 x 5 | 1b 80 x 5 | 1b 80 x 5 | 1b 80 x 5 | 1b 80 x 5 | 1b 80 x 5 | ■ |
| | I (A) | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | |
| NW12 & MTZ2 | Size per phase | 2b 80 x 5 | 2b 80 x 5 | 2b 80 x 5 | 2b 80 x 5 | 2b 80 x 5 | 2b 80 x 5 | 2b 80 x 5 | 2b 80 x 5 | 2b 80 x 5 | 2b 80 x 5 | 2b 80 x 5 | ■ |
| | I (A) | 1250 | 1250 | 1250 | 1250 | 1250 | 1230 | 1250 | 1200 | 1230 | 1160 | 1200 | |
| NW16 & MTZ2 | Size per phase | 2b 80 x 5 | 2b 80 x 5 | 2b 80 x 5 | 2b 80 x 5 | 2b 80 x 5 | 2b 80 x 5 | 2b 80 x 5 | 2b 80 x 5 | 2b 80 x 5 | 2b 80 x 5 | 2b 80 x 5 | ■ |
| | I (A) | 1560 | 1480 | 1520 | 1430 | 1480 | 1380 | 1430 | 1330 | 1380 | 1280 | 1330 | |

■ Connection impossible due to the operating-temperature limits of the devices installed in the switchboard.
**(1)** In the case of a door mounted at the rear of cubicle, add 10 °C.

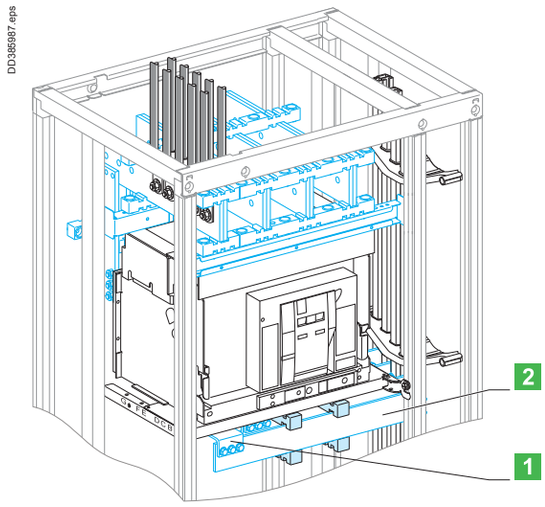
**Note:** the values indicated above have been validated for Prisma P switchboards.

# Designing connections between a device and busbars
## Drawout Masterpact 08-32



### Masterpact NW 08 to 32
### Masterpact MTZ2 08 to 32
### Drawout

Vertical busbars on the left or right
Linergy LGYE, LGY, BS busbars
Connections drawings supplied by Schneider Electric




**1** Connection.

**2** Horizontal link.

Using the data below, it is possible to determine the size of the copper bars and the maximum permissible currents when making the connections to busbars for a vertical, drawout Masterpact NW08/32, front or rear connection, taking into account the ambient temperature around the switchboard and the IP value.

## Connection

### Flat bars, 10 mm thick

| Device | | Permissible current (A) | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Ambient temperature around the switchboard | | | | | | | | | | | |
| | | 25 °C | | 30 °C | | 35 °C | | 40 °C | | 45 °C | | 50 °C | |
| | | IP ≤ 31 | IP > 31 | IP ≤ 31 | IP > 31 | IP ≤ 31 | IP > 31 | IP ≤ 31 | IP > 31 | IP ≤ 31 | IP > 31 | IP ≤ 31 | IP > 31 |
| NW08 & MTZ2 | Size per phase | 1b 80 x 10 | 1b 80 x 10 | 1b 80 x 10 | 1b 80 x 10 | 1b 80 x 10 | 1b 80 x 10 | 1b 80 x 10 | 1b 80 x 10 | 1b 80 x 10 | 1b 80 x 10 | 1b 80 x 10 | ■ |
| | I (A) | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | |
| NW10 & MTZ2 | Size per phase | 1b 80 x 10 | 1b 80 x 10 | 1b 80 x 10 | 1b 80 x 10 | 1b 80 x 10 | 1b 80 x 10 | 1b 80 x 10 | 1b 80 x 10 | 1b 80 x 10 | 1b 80 x 10 | 1b 80 x 10 | ■ |
| | I (A) | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | |
| NW12 & MTZ2 | Size per phase | 1b 80 x 10 | 1b 80 x 10 | 1b 80 x 10 | 1b 80 x 10 | 1b 80 x 10 | 1b 80 x 10 | 1b 80 x 10 | 1b 80 x 10 | 1b 80 x 10 | 1b 80 x 10 | 1b 80 x 10 | ■ |
| | I (A) | 1250 | 1250 | 1250 | 1210 | 1250 | 1180 | 1210 | 1140 | 1180 | 1100 | 1140 | |
| NW16 & MTZ2 | Size per phase | 1b 80 x 10 | 1b 80 x 10 | 1b 80 x 10 | 1b 80 x 10 | 1b 80 x 10 | 1b 80 x 10 | 1b 80 x 10 | 1b 80 x 10 | 1b 80 x 10 | 1b 80 x 10 | 1b 80 x 10 | ■ |
| | I (A) | 1560 | 1480 | 1520 | 1430 | 1480 | 1380 | 1430 | 1330 | 1380 | 1280 | 1330 | |
| NW20 & MTZ2 | Size per phase | 2b 80 x 10 | 2b 80 x 10 | 2b 80 x 10 | 2b 80 x 10 | 2b 80 x 10 | 2b 80 x 10 | 2b 80 x 10 | 2b 80 x 10 | 2b 80 x 10 | 2b 80 x 10 | 2b 80 x 10 | ■ |
| | I (A) | 2000 | 2000 | 2000 | 1950 | 2000 | 1900 | 1950 | 1830 | 1900 | 1760 | 1830 | |
| NW25 & MTZ2 | Size per phase | 2b 80 x 10 | 2b 80 x 10 | 2b 80 x 10 | 2b 80 x 10 | 2b 80 x 10 | 2b 80 x 10 | 2b 80 x 10 | 2b 80 x 10 | 2b 80 x 10 | 2b 80 x 10 | 2b 80 x 10 | ■ |
| | I (A) | 2470 | 2280 | 2410 | 2210 | 2350 | 2140 | 2280 | 2070 | 2210 | 2000 | 2140 | |
| NW32 & MTZ2 | Size per phase | 3b 80 x 10 | 3b 80 x 10 | 3b 80 x 10 | 3b 80 x 10 | 3b 80 x 10 | 3b 80 x 10 | 3b 80 x 10 | 3b 80 x 10 | 3b 80 x 10 | 3b 80 x 10 | 3b 80 x 10 | ■ |
| | I (A) | 2960 | 2730 | 2890 | 2630 | 2820 | 2530 | 2730 | 2450 | 2630 | 2370 | 2530 | |

■ Connection impossible due to the operating-temperature limits of the devices installed in the switchboard.

## Horizontal link

### Flat bars, 10 mm thick

| Device | | Permissible current (A) | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Ambient temperature around the switchboard | | | | | | | | | | | |
| | | 25 °C | | 30 °C | | 35 °C | | 40 °C | | 45 °C | | 50 °C | |
| | | IP ≤ 31 | IP > 31 | IP ≤ 31 | IP > 31 | IP ≤ 31 | IP > 31 | IP ≤ 31 | IP > 31 | IP ≤ 31 | IP > 31 | IP ≤ 31 | IP > 31 |
| NW08 & MTZ2 | Size per phase | 1b 60 x 10 | 1b 60 x 10 | 1b 60 x 10 | 1b 60 x 10 | 1b 60 x 10 | 1b 60 x 10 | 1b 60 x 10 | 1b 60 x 10 | 1b 60 x 10 | 1b 60 x 10 | 1b 60 x 10 | ■ |
| | I (A) | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | |
| NW10 & MTZ2 | Size per phase | 1b 60 x 10 | 1b 60 x 10 | 1b 60 x 10 | 1b 60 x 10 | 1b 60 x 10 | 1b 60 x 10 | 1b 60 x 10 | 1b 60 x 10 | 1b 60 x 10 | 1b 60 x 10 | 1b 60 x 10 | ■ |
| | I (A) | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | |
| NW12 & MTZ2 | Size per phase | 1b 60 x 10 | 1b 60 x 10 | 1b 60 x 10 | 1b 60 x 10 | 1b 60 x 10 | 1b 60 x 10 | 1b 60 x 10 | 1b 60 x 10 | 1b 60 x 10 | 1b 60 x 10 | 1b 60 x 10 | ■ |
| | I (A) | 1250 | 1250 | 1250 | 1210 | 1250 | 1180 | 1210 | 1140 | 1180 | 1100 | 1140 | |
| NW16 & MTZ2 | Size per phase | 1b 80 x 10 | 1b 80 x 10 | 1b 80 x 10 | 1b 80 x 10 | 1b 80 x 10 | 1b 80 x 10 | 1b 80 x 10 | 1b 80 x 10 | 1b 80 x 10 | 1b 80 x 10 | 1b 80 x 10 | ■ |
| | I (A) | 1560 | 1480 | 1520 | 1430 | 1480 | 1380 | 1430 | 1330 | 1380 | 1280 | 1330 | |
| NW20 & MTZ2 | Size per phase | 2b 60 x 10 | 2b 60 x 10 | 2b 60 x 10 | 2b 60 x 10 | 2b 60 x 10 | 2b 60 x 10 | 2b 60 x 10 | 2b 60 x 10 | 2b 60 x 10 | 2b 60 x 10 | 2b 60 x 10 | ■ |
| | I (A) | 2000 | 2000 | 2000 | 1950 | 2000 | 1900 | 1950 | 1830 | 1900 | 1760 | 1830 | |
| NW25 & MTZ2 | Size per phase | 2b 80 x 10 | 2b 80 x 10 | 2b 80 x 10 | 2b 80 x 10 | 2b 80 x 10 | 2b 80 x 10 | 2b 80 x 10 | 2b 80 x 10 | 2b 80 x 10 | 2b 80 x 10 | 2b 80 x 10 | ■ |
| | I (A) | 2470 | 2280 | 2410 | 2210 | 2350 | 2140 | 2280 | 2070 | 2210 | 2000 | 2140 | |
| NW32 & MTZ2 | Size per phase | 2b 100x10 | 2b 100x10 | 2b 100x10 | 2b 100x10 | 2b 100x10 | 2b 100x10 | 2b 100x10 | 2b 100x10 | 2b 100x10 | 2b 100x10 | 2b 100x10 | ■ |
| | I (A) | 2960 | 2730 | 2890 | 2630 | 2820 | 2530 | 2730 | 2450 | 2630 | 2370 | 2530 | |

■ Connection impossible due to the operating-temperature limits of the devices installed in the switchboard.

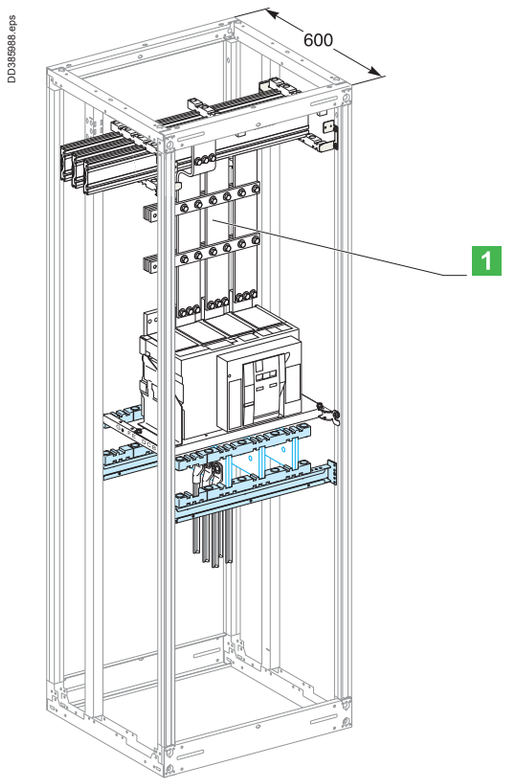
**Note:** the values indicated above have been validated for Prisma P switchboards.

# Designing connections between a device and busbars
# Dedicated cubicle
## Fixed Masterpact 08-32



### Masterpact NW 08 to 32
### Masterpact MTZ2 08 to 32
### Fixed

Dedicated cubicle
Linergy LGYE, BS busbars
Connections drawings supplied by Schneider Electric




## Connection

### Flat bars, 10 mm thick

| Device | | Permissible current (A) | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Ambient temperature around the switchboard | | | | | | | | | | | |
| | | 25 °C | | 30 °C | | 35 °C | | 40 °C | | 45 °C | | 50 °C | |
| | | IP ≤ 31 | IP > 31 | IP ≤ 31 | IP > 31 | IP ≤ 31 | IP > 31 | IP ≤ 31 | IP > 31 | IP ≤ 31 | IP > 31 | IP ≤ 31 | IP > 31 |
| NW08 & MTZ2 | Size per phase | 1b 80 x 10 | 1b 80 x 10 | 1b 80 x 10 | 1b 80 x 10 | 1b 80 x 10 | 1b 80 x 10 | 1b 80 x 10 | 1b 80 x 10 | 1b 80 x 10 | 1b 80 x 10 | 1b 80 x 10 | ■ |
| | I (A) | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | |
| NW10 & MTZ2 | Size per phase | 1b 80 x 10 | 1b 80 x 10 | 1b 80 x 10 | 1b 80 x 10 | 1b 80 x 10 | 1b 80 x 10 | 1b 80 x 10 | 1b 80 x 10 | 1b 80 x 10 | 1b 80 x 10 | 1b 80 x 10 | ■ |
| | I (A) | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | |
| NW12 & MTZ2 | Size per phase | 1b 80 x 10 | 1b 80 x 10 | 1b 80 x 10 | 1b 80 x 10 | 1b 80 x 10 | 1b 80 x 10 | 1b 80 x 10 | 1b 80 x 10 | 1b 80 x 10 | 1b 80 x 10 | 1b 80 x 10 | ■ |
| | I (A) | 1250 | 1250 | 1250 | 1250 | 1250 | 1250 | 1250 | 1250 | 1250 | 1250 | 1250 | |
| NW16 & MTZ2 | Size per phase | 1b 80 x 10 | 1b 80 x 10 | 1b 80 x 10 | 1b 80 x 10 | 1b 80 x 10 | 1b 80 x 10 | 1b 80 x 10 | 1b 80 x 10 | 1b 80 x 10 | 1b 80 x 10 | 1b 80 x 10 | ■ |
| | I (A) | 1600 | 1600 | 1600 | 1570 | 1600 | 1520 | 1570 | 1470 | 1520 | 1420 | 1470 | |
| NW20 & MTZ2 | Size per phase | 2b 80 x 10 | 2b 80 x 10 | 2b 80 x 10 | 2b 80 x 10 | 2b 80 x 10 | 2b 80 x 10 | 2b 80 x 10 | 2b 80 x 10 | 2b 80 x 10 | 2b 80 x 10 | 2b 80 x 10 | ■ |
| | I (A) | 2000 | 2000 | 2000 | 2000 | 2000 | 2000 | 2000 | 1950 | 2000 | 1900 | 1950 | |
| NW25 & MTZ2 | Size per phase | 2b 80 x 10 | 2b 80 x 10 | 2b 80 x 10 | 2b 80 x 10 | 2b 80 x 10 | 2b 80 x 10 | 2b 80 x 10 | 2b 80 x 10 | 2b 80 x 10 | 2b 80 x 10 | 2b 80 x 10 | ■ |
| | I (A) | 2500 | 2500 | 2500 | 2500 | 2500 | 2460 | 2500 | 2380 | 2500 | 2300 | 2460 | |
| NW32 & MTZ2 | Size per phase | 3b 80 x 10 | 3b 80 x 10 | 3b 80 x 10 | 3b 80 x 10 | 3b 80 x 10 | 3b 80 x 10 | 3b 80 x 10 | 3b 80 x 10 | 3b 80 x 10 | 3b 80 x 10 | 3b 80 x 10 | ■ |
| | I (A) | 3200 | 3000 | 3170 | 2910 | 3080 | 2820 | 3000 | 2730 | 2910 | 2630 | 2820 | |

■ Connection impossible due to the operating-temperature limits of the devices installed in the switchboard.

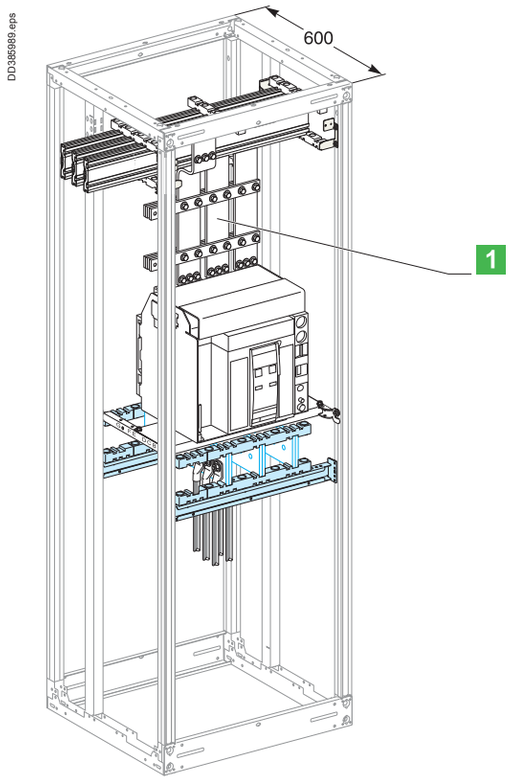
**Note:** contact Schneider Electric for 4000 A dedicated cubicle

# Designing connections between a device and busbars
# Dedicated cubicle
## Drawout Masterpact 08-32



### Masterpact NW 08 to 32
### Masterpact MTZ2 08 to 32
### Drawout

Dedicated cubicle
Linergy LGYE, BS busbars
Connections drawings supplied by
Schneider Electric




## Connection

### Flat bars, 10 mm thick

| Device | | Permissible current (A) | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Ambient temperature around the switchboard | | | | | | | | | | | |
| | | 25 °C | | 30 °C | | 35 °C | | 40 °C | | 45 °C | | 50 °C | |
| | | IP ≤ 31 | IP > 31 | IP ≤ 31 | IP > 31 | IP ≤ 31 | IP > 31 | IP ≤ 31 | IP > 31 | IP ≤ 31 | IP > 31 | IP ≤ 31 | IP > 31 |
| NW08 & MTZ2 | Size per phase | 1b 80 x 10 | 1b 80 x 10 | 1b 80 x 10 | 1b 80 x 10 | 1b 80 x 10 | 1b 80 x 10 | 1b 80 x 10 | 1b 80 x 10 | 1b 80 x 10 | 1b 80 x 10 | 1b 80 x 10 | ■ |
| | I (A) | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | |
| NW10 & MTZ2 | Size per phase | 1b 80 x 10 | 1b 80 x 10 | 1b 80 x 10 | 1b 80 x 10 | 1b 80 x 10 | 1b 80 x 10 | 1b 80 x 10 | 1b 80 x 10 | 1b 80 x 10 | 1b 80 x 10 | 1b 80 x 10 | ■ |
| | I (A) | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | |
| NW12 & MTZ2 | Size per phase | 1b 80 x 10 | 1b 80 x 10 | 1b 80 x 10 | 1b 80 x 10 | 1b 80 x 10 | 1b 80 x 10 | 1b 80 x 10 | 1b 80 x 10 | 1b 80 x 10 | 1b 80 x 10 | 1b 80 x 10 | ■ |
| | I (A) | 1250 | 1250 | 1250 | 1210 | 1250 | 1180 | 1210 | 1140 | 1180 | 1100 | 1140 | |
| NW16 & MTZ2 | Size per phase | 1b 80 x 10 | 1b 80 x 10 | 1b 80 x 10 | 1b 80 x 10 | 1b 80 x 10 | 1b 80 x 10 | 1b 80 x 10 | 1b 80 x 10 | 1b 80 x 10 | 1b 80 x 10 | 1b 80 x 10 | ■ |
| | I (A) | 1560 | 1480 | 1520 | 1430 | 1480 | 1380 | 1430 | 1330 | 1380 | 1280 | 1330 | |
| NW20 & MTZ2 | Size per phase | 2b 80 x 10 | 2b 80 x 10 | 2b 80 x 10 | 2b 80 x 10 | 2b 80 x 10 | 2b 80 x 10 | 2b 80 x 10 | 2b 80 x 10 | 2b 80 x 10 | 2b 80 x 10 | 2b 80 x 10 | ■ |
| | I (A) | 2000 | 2000 | 2000 | 1950 | 2000 | 1900 | 1950 | 1830 | 1900 | 1760 | 1830 | |
| NW25 & MTZ2 | Size per phase | 2b 80 x 10 | 2b 80 x 10 | 2b 80 x 10 | 2b 80 x 10 | 2b 80 x 10 | 2b 80 x 10 | 2b 80 x 10 | 2b 80 x 10 | 2b 80 x 10 | 2b 80 x 10 | 2b 80 x 10 | ■ |
| | I (A) | 2470 | 2280 | 2410 | 2210 | 2350 | 2140 | 2280 | 2070 | 2210 | 2000 | 2140 | |
| NW32 & MTZ2 | Size per phase | 3b 80 x 10 | 3b 80 x 10 | 3b 80 x 10 | 3b 80 x 10 | 3b 80 x 10 | 3b 80 x 10 | 3b 80 x 10 | 3b 80 x 10 | 3b 80 x 10 | 3b 80 x 10 | 3b 80 x 10 | ■ |
| | I (A) | 2960 | 2730 | 2890 | 2630 | 2820 | 2530 | 2730 | 2450 | 2630 | 2370 | 2530 | |

■ Connection impossible due to the operating-temperature limits of the devices installed in the switchboard.

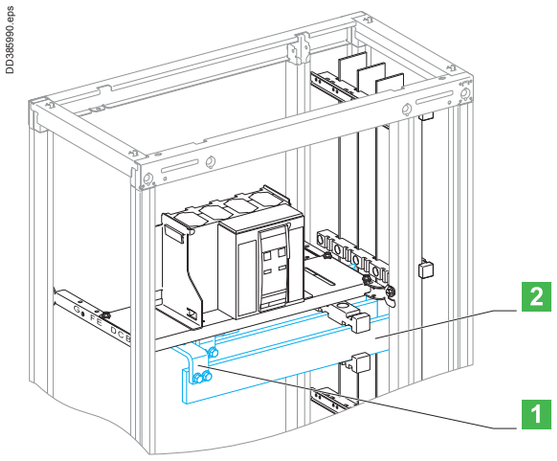
**Note:** contact Schneider Electric for 4000 A dedicated cubicle

# Designing connections between a device and busbars
## Fixed Masterpact 06-16



### Masterpact NT 06 to 16
### Masterpact MTZ1 06 to 16
### Fixed

Vertical busbars on the left or right
Linergy BS busbars
Connections drawings supplied by Schneider Electric




1 Connection.
2 Horizontal link.

Using the data below, it is possible to determine the size of the copper bars and the maximum permissible currents when making the connections to busbars for a vertical, fixed Masterpact NT06/NT16, taking into account the ambient temperature around the switchboard and the IP value.

## Connection

### Flat bars, 5 mm thick

| Device | | Permissible current (A) | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Ambient temperature around the switchboard | | | | | | | | | | | |
| | | 25 °C | | 30 °C | | 35 °C | | 40 °C | | 45 °C | | 50 °C | |
| | | IP ⩽ 31 | IP > 31 | IP ⩽ 31 | IP > 31 | IP ⩽ 31 | IP > 31 | IP ⩽ 31 | IP > 31 | IP ⩽ 31 | IP > 31 | IP ⩽ 31 | IP > 31 |
| NT06 & MTZ1 | Size per phase | 1b 50 x 5 | 1b 50 x 5 | 1b 50 x 5 | 1b 50 x 5 | 1b 50 x 5 | 1b 50 x 5 | 1b 50 x 5 | 1b 50 x 5 | 1b 50 x 5 | 1b 50 x 5 | 1b 50 x 5 | ■ |
| | I (A) | 630 | 630 | 630 | 630 | 630 | 630 | 630 | 630 | 630 | 630 | 630 | |
| NT08 & MTZ1 | Size per phase | 2b 50 x 5 | 2b 50 x 5 | 2b 50 x 5 | 2b 50 x 5 | 2b 50 x 5 | 2b 50 x 5 | 2b 50 x 5 | 2b 50 x 5 | 2b 50 x 5 | 2b 50 x 5 | 2b 50 x 5 | ■ |
| | I (A) | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | |
| NT10 & MTZ1 | Size per phase | 2b 50 x 5 | 2b 50 x 5 | 2b 50 x 5 | 2b 50 x 5 | 2b 50 x 5 | 2b 50 x 5 | 2b 50 x 5 | 2b 50 x 5 | 2b 50 x 5 | 2b 50 x 5 | 2b 50 x 5 | ■ |
| | I (A) | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | |
| NT12 & MTZ1 | Size per phase | 3b 50 x 5 | 3b 50 x 5 | 3b 50 x 5 | 3b 50 x 5 | 3b 50 x 5 | 3b 50 x 5 | 3b 50 x 5 | 3b 50 x 5 | 3b 50 x 5 | 3b 50 x 5 | 3b 50 x 5 | ■ |
| | I (A) | 1250 | 1250 | 1250 | 1250 | 1250 | 1250 | 1250 | 1250 | 1250 | 1200 | 1250 | |
| NT16 & MTZ1 (1) | Size per phase | 4b 50 x 5 | 4b 50 x 5 | 4b 50 x 5 | 4b 50 x 5 | 4b 50 x 5 | 4b 50 x 5 | 4b 50 x 5 | 4b 50 x 5 | 4b 50 x 5 | 4b 50 x 5 | 4b 50 x 5 | ■ |
| | I (A) | 1600 | 1570 | 1600 | 1520 | 1570 | 1470 | 1520 | 1420 | 1470 | 1370 | 1420 | |

■ Connection impossible due to the operating-temperature limits of the devices installed in the switchboard.

## Horizontal link

### Flat bars, 5 mm thick

| Device | | Permissible current (A) | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Ambient temperature around the switchboard | | | | | | | | | | | |
| | | 25 °C | | 30 °C | | 35 °C | | 40 °C | | 45 °C | | 50 °C | |
| | | IP ⩽ 31 | IP > 31 | IP ⩽ 31 | IP > 31 | IP ⩽ 31 | IP > 31 | IP ⩽ 31 | IP > 31 | IP ⩽ 31 | IP > 31 | IP ⩽ 31 | IP > 31 |
| NT06 & MTZ1 | Size per phase | 1b 60 x 5 | 1b 60 x 5 | 1b 60 x 5 | 1b 60 x 5 | 1b 60 x 5 | 1b 60 x 5 | 1b 60 x 5 | 1b 60 x 5 | 1b 60 x 5 | 1b 60 x 5 | 1b 60 x 5 | ■ |
| | I (A) | 630 | 630 | 630 | 630 | 630 | 630 | 630 | 630 | 630 | 630 | 630 | |
| NT08 & MTZ1 | Size per phase | 1b 80 x 5 | 1b 80 x 5 | 1b 80 x 5 | 1b 80 x 5 | 1b 80 x 5 | 1b 80 x 5 | 1b 80 x 5 | 1b 80 x 5 | 1b 80 x 5 | 1b 80 x 5 | 1b 80 x 5 | ■ |
| | I (A) | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | |
| NT10 & MTZ1 | Size per phase | 2b 50 x 5 | 2b 50 x 5 | 2b 50 x 5 | 2b 50 x 5 | 2b 50 x 5 | 2b 50 x 5 | 2b 50 x 5 | 2b 50 x 5 | 2b 50 x 5 | 2b 50 x 5 | 2b 50 x 5 | ■ |
| | I (A) | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | |
| NT12 & MTZ1 | Size per phase | 2b 60 x 5 | 2b 60 x 5 | 2b 60 x 5 | 2b 60 x 5 | 2b 60 x 5 | 2b 60 x 5 | 2b 60 x 5 | 2b 60 x 5 | 2b 60 x 5 | 2b 60 x 5 | 2b 60 x 5 | ■ |
| | I (A) | 1250 | 1250 | 1250 | 1250 | 1250 | 1250 | 1250 | 1250 | 1250 | 1200 | 1250 | |
| NT16 & MTZ1 | Size per phase | 2b 80 x 5 | 2b 80 x 5 | 2b 80 x 5 | 2b 80 x 5 | 2b 80 x 5 | 2b 80 x 5 | 2b 80 x 5 | 2b 80 x 5 | 2b 80 x 5 | 2b 80 x 5 | 2b 80 x 5 | ■ |
| | I (A) | 1600 | 1570 | 1600 | 1520 | 1570 | 1470 | 1520 | 1420 | 1470 | 1370 | 1420 | |

■ Connection impossible due to the operating-temperature limits of the devices installed in the switchboard.
(1) Make the neutral connection with two bars, 50 x 5 mm.
**Note:** the values indicated above have been validated for Prisma P switchboards.

# Designing connections between a device and busbars
## Fixed Masterpact 06-16



## Connection

### Flat bars, 10 mm thick

| Device | | Permissible current (A) | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Ambient temperature around the switchboard | | | | | | | | | | | |
| | | 25 °C | | 30 °C | | 35 °C | | 40 °C | | 45 °C | | 50 °C | |
| | | IP ⩽ 31 | IP > 31 | IP ⩽ 31 | IP > 31 | IP ⩽ 31 | IP > 31 | IP ⩽ 31 | IP > 31 | IP ⩽ 31 | IP > 31 | IP ⩽ 31 | IP > 31 |
| NT06 & MTZ1 | Size per phase | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | ■ |
| | I (A) | 630 | 630 | 630 | 630 | 630 | 630 | 630 | 630 | 630 | 630 | 630 | |
| NT08 & MTZ1 | Size per phase | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | ■ |
| | I (A) | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | |
| NT10 & MTZ1 | Size per phase | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | ■ |
| | I (A) | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | |
| NT12 & MTZ1 | Size per phase | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | ■ |
| | I (A) | 1250 | 1250 | 1250 | 1250 | 1250 | 1250 | 1250 | 1250 | 1250 | 1180 | 1230 | |
| NT16 & MTZ1 (1) | Size per phase | 2b 50 x 10 | 2b 50 x 10 | 2b 50 x 10 | 2b 50 x 10 | 2b 50 x 10 | 2b 50 x 10 | 2b 50 x 10 | 2b 50 x 10 | 2b 50 x 10 | 2b 50 x 10 | 2b 50 x 10 | ■ |
| | I (A) | 1600 | 1570 | 1600 | 1520 | 1570 | 1470 | 1520 | 1420 | 1470 | 1370 | 1420 | |

■ Connection impossible due to the operating-temperature limits of the devices installed in the switchboard.

## Horizontal link

### Flat bars, 10 mm thick

| Device | | Permissible current (A) | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Ambient temperature around the switchboard | | | | | | | | | | | |
| | | 25 °C | | 30 °C | | 35 °C | | 40 °C | | 45 °C | | 50 °C | |
| | | IP ⩽ 31 | IP > 31 | IP ⩽ 31 | IP > 31 | IP ⩽ 31 | IP > 31 | IP ⩽ 31 | IP > 31 | IP ⩽ 31 | IP > 31 | IP ⩽ 31 | IP > 31 |
| NT06 & MTZ1 | Size per phase | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | ■ |
| | I (A) | 630 | 630 | 630 | 630 | 630 | 630 | 630 | 630 | 630 | 630 | 630 | |
| NT08 & MTZ1 | Size per phase | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | ■ |
| | I (A) | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | |
| NT10 & MTZ1 | Size per phase | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | ■ |
| | I (A) | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 960 | 1000 | |
| NT12 & MTZ1 | Size per phase | 1b 60 x 10 | 1b 60 x 10 | 1b 60 x 10 | 1b 60 x 10 | 1b 60 x 10 | 1b 60 x 10 | 1b 60 x 10 | 1b 60 x 10 | 1b 60 x 10 | 1b 60 x 10 | 1b 60 x 10 | ■ |
| | I (A) | 1250 | 1250 | 1250 | 1250 | 1250 | 1210 | 1250 | 1160 | 1210 | 1180 | 1230 | |
| NT16 & MTZ1 | Size per phase | 1b 80 x 10 | 1b 80 x 10 | 1b 80 x 10 | 1b 80 x 10 | 1b 80 x 10 | 1b 80 x 10 | 1b 80 x 10 | 1b 80 x 10 | 1b 80 x 10 | 1b 80 x 10 | 1b 80 x 10 | ■ |
| | I (A) | 1600 | 1570 | 1600 | 1520 | 1570 | 1470 | 1520 | 1420 | 1470 | 1370 | 1420 | |

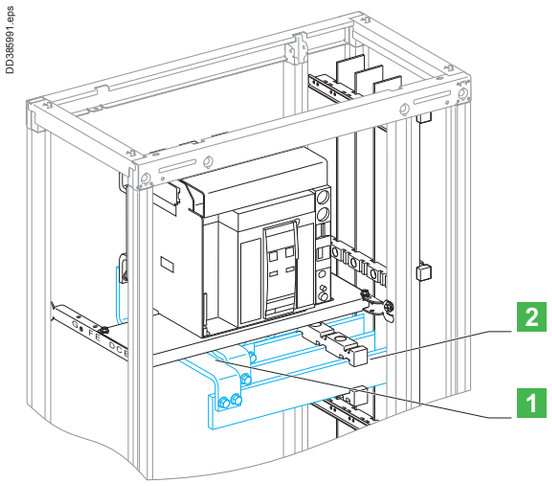
■ Connection impossible due to the operating-temperature limits of the devices installed in the switchboard.
**(1)** Make the neutral connection with one bar, 50 x 10 mm.
**Note:** the values indicated above have been validated for Prisma P switchboards.

# Designing connections between a device and busbars
## Drawout Masterpact 06-16



### Masterpact NT 06 to 16
### Masterpact MTZ1 06 to 16
### Drawout

Vertical busbars on the left or right
Linergy BS busbars
Connections drawings supplied by Schneider Electric




1 Connection.
2 Horizontal link.

Using the data below, it is possible to determine the size of the copper bars and the maximum permissible currents when making the connections to busbars for a vertical, drawout Masterpact NT06/NT16, taking into account the ambient temperature around the switchboard and the IP value.

## Connection

### Flat bars, 5 mm thick

| Device | | Permissible current (A) | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Ambient temperature around the switchboard | | | | | | | | | | | |
| | | 25 °C | | 30 °C | | 35 °C | | 40 °C | | 45 °C | | 50 °C | |
| | | IP ≤ 31 | IP > 31 | IP ≤ 31 | IP > 31 | IP ≤ 31 | IP > 31 | IP ≤ 31 | IP > 31 | IP ≤ 31 | IP > 31 | IP ≤ 31 | IP > 31 |
| NT06 & MTZ1 | Size per phase | 1b 50 x 5 | 1b 50 x 5 | 1b 50 x 5 | 1b 50 x 5 | 1b 50 x 5 | 1b 50 x 5 | 1b 50 x 5 | 1b 50 x 5 | 1b 50 x 5 | 1b 50 x 5 | 1b 50 x 5 | ■ |
| | I (A) | 630 | 630 | 630 | 630 | 630 | 630 | 630 | 630 | 630 | 630 | 630 | |
| NT08 & MTZ1 | Size per phase | 2b 50 x 5 | 2b 50 x 5 | 2b 50 x 5 | 2b 50 x 5 | 2b 50 x 5 | 2b 50 x 5 | 2b 50 x 5 | 2b 50 x 5 | 2b 50 x 5 | 2b 50 x 5 | 2b 50 x 5 | ■ |
| | I (A) | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | |
| NT10 & MTZ1 | Size per phase | 2b 50 x 5 | 2b 50 x 5 | 2b 50 x 5 | 2b 50 x 5 | 2b 50 x 5 | 2b 50 x 5 | 2b 50 x 5 | 2b 50 x 5 | 2b 50 x 5 | 2b 50 x 5 | 2b 50 x 5 | ■ |
| | I (A) | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 960 | 1000 | |
| NT12 & MTZ1 | Size per phase | 3b 50 x 5 | 3b 50 x 5 | 3b 50 x 5 | 3b 50 x 5 | 3b 50 x 5 | 3b 50 x 5 | 3b 50 x 5 | 3b 50 x 5 | 3b 50 x 5 | 3b 50 x 5 | 3b 50 x 5 | ■ |
| | I (A) | 1250 | 1250 | 1250 | 1250 | 1250 | 1230 | 1250 | 1180 | 1230 | 1130 | 1180 | |
| NT16 & MTZ1 (1) | Size per phase | 4b 50 x 5 | 4b 50 x 5 | 4b 50 x 5 | 4b 50 x 5 | 4b 50 x 5 | 4b 50 x 5 | 4b 50 x 5 | 4b 50 x 5 | 4b 50 x 5 | 4b 50 x 5 | 4b 50 x 5 | ■ |
| | I (A) | 1560 | 1430 | 1520 | 1430 | 1480 | 1380 | 1430 | 1330 | 1380 | 1280 | 1330 | |

■ Connection impossible due to the operating-temperature limits of the devices installed in the switchboard.

## Horizontal link

### Flat bars, 5 mm thick

| Device | | Permissible current (A) | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Ambient temperature around the switchboard | | | | | | | | | | | |
| | | 25 °C | | 30 °C | | 35 °C | | 40 °C | | 45 °C | | 50 °C | |
| | | IP ≤ 31 | IP > 31 | IP ≤ 31 | IP > 31 | IP ≤ 31 | IP > 31 | IP ≤ 31 | IP > 31 | IP ≤ 31 | IP > 31 | IP ≤ 31 | IP > 31 |
| NT06 & MTZ1 | Size per phase | 1b 60 x 5 | 1b 60 x 5 | 1b 60 x 5 | 1b 60 x 5 | 1b 60 x 5 | 1b 60 x 5 | 1b 60 x 5 | 1b 60 x 5 | 1b 60 x 5 | 1b 60 x 5 | 1b 60 x 5 | ■ |
| | I (A) | 630 | 630 | 630 | 630 | 630 | 630 | 630 | 630 | 630 | 630 | 630 | |
| NT08 & MTZ1 | Size per phase | 1b 80 x 5 | 1b 80 x 5 | 1b 80 x 5 | 1b 80 x 5 | 1b 80 x 5 | 1b 80 x 5 | 1b 80 x 5 | 1b 80 x 5 | 1b 80 x 5 | 1b 80 x 5 | 1b 80 x 5 | ■ |
| | I (A) | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | |
| NT10 & MTZ1 | Size per phase | 2b 50 x 5 | 2b 50 x 5 | 2b 50 x 5 | 2b 50 x 5 | 2b 50 x 5 | 2b 50 x 5 | 2b 50 x 5 | 2b 50 x 5 | 2b 50 x 5 | 2b 50 x 5 | 2b 50 x 5 | ■ |
| | I (A) | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 960 | 1000 | |
| NT12 & MTZ1 | Size per phase | 2b 60 x 5 | 2b 60 x 5 | 2b 60 x 5 | 2b 60 x 5 | 2b 60 x 5 | 2b 60 x 5 | 2b 60 x 5 | 2b 60 x 5 | 2b 60 x 5 | 2b 60 x 5 | 2b 60 x 5 | ■ |
| | I (A) | 1250 | 1250 | 1250 | 1250 | 1250 | 1230 | 1250 | 1180 | 1230 | 1130 | 1180 | |
| NT16 & MTZ1 | Size per phase | 2b 80 x 5 | 2b 80 x 5 | 2b 80 x 5 | 2b 80 x 5 | 2b 80 x 5 | 2b 80 x 5 | 2b 80 x 5 | 2b 80 x 5 | 2b 80 x 5 | 2b 80 x 5 | 2b 80 x 5 | ■ |
| | I (A) | 1560 | 1430 | 1520 | 1430 | 1480 | 1380 | 1430 | 1330 | 1380 | 1280 | 1330 | |

■ Connection impossible due to the operating-temperature limits of the devices installed in the switchboard.
(1) Make the neutral connection with two bars, 50 x 5 mm.
**Note:** the values indicated above have been validated for Prisma P switchboards.

# Designing connections between a device and busbars
## Drawout Masterpact 06-16



## Connection

### Flat bars, 10 mm thick

| Device | | Permissible current (A) | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Ambient temperature around the switchboard | | | | | | | | | | | |
| | | 25 °C | | 30 °C | | 35 °C | | 40 °C | | 45 °C | | 50 °C | |
| | | IP ≤ 31 | IP > 31 | IP ≤ 31 | IP > 31 | IP ≤ 31 | IP > 31 | IP ≤ 31 | IP > 31 | IP ≤ 31 | IP > 31 | IP ≤ 31 | IP > 31 |
| NT06 | Size per phase | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | ■ |
| | I (A) | 630 | 630 | 630 | 630 | 630 | 630 | 630 | 630 | 630 | 630 | 630 | |
| NT08 | Size per phase | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | ■ |
| | I (A) | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | |
| NT10 | Size per phase | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | ■ |
| | I (A) | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 960 | 1000 | |
| NT12 | Size per phase | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | ■ |
| | I (A) | 1250 | 1250 | 1250 | 1250 | 1250 | 1210 | 1250 | 1160 | 1210 | 1110 | 1160 | |
| NT16 (1) | Size per phase | 2b 50 x 10 | 2b 50 x 10 | 2b 50 x 10 | 2b 50 x 10 | 2b 50 x 10 | 2b 50 x 10 | 2b 50 x 10 | 2b 50 x 10 | 2b 50 x 10 | 2b 50 x 10 | 2b 50 x 10 | ■ |
| | I (A) | 1560 | 1430 | 1520 | 1430 | 1480 | 1380 | 1430 | 1330 | 1380 | 1280 | 1330 | |

■ Connection impossible due to the operating-temperature limits of the devices installed in the switchboard.

## Horizontal link

### Flat bars, 10 mm thick

| Device | | Permissible current (A) | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Ambient temperature around the switchboard | | | | | | | | | | | |
| | | 25 °C | | 30 °C | | 35 °C | | 40 °C | | 45 °C | | 50 °C | |
| | | IP ≤ 31 | IP > 31 | IP ≤ 31 | IP > 31 | IP ≤ 31 | IP > 31 | IP ≤ 31 | IP > 31 | IP ≤ 31 | IP > 31 | IP ≤ 31 | IP > 31 |
| NT06 | Size per phase | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | ■ |
| | I (A) | 630 | 630 | 630 | 630 | 630 | 630 | 630 | 630 | 630 | 630 | 630 | |
| NT08 | Size per phase | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | ■ |
| | I (A) | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | |
| NT10 | Size per phase | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | ■ |
| | I (A) | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 960 | 1000 | |
| NT12 | Size per phase | 1b 60 x 10 | 1b 60 x 10 | 1b 60 x 10 | 1b 60 x 10 | 1b 60 x 10 | 1b 60 x 10 | 1b 60 x 10 | 1b 60 x 10 | 1b 60 x 10 | 1b 60 x 10 | 1b 60 x 10 | ■ |
| | I (A) | 1250 | 1250 | 1250 | 1250 | 1250 | 1210 | 1250 | 1160 | 1210 | 1110 | 1160 | |
| NT16 | Size per phase | 1b 80 x 10 | 1b 80 x 10 | 1b 80 x 10 | 1b 80 x 10 | 1b 80 x 10 | 1b 80 x 10 | 1b 80 x 10 | 1b 80 x 10 | 1b 80 x 10 | 1b 80 x 10 | 1b 80 x 10 | ■ |
| | I (A) | 1560 | 1430 | 1520 | 1430 | 1480 | 1380 | 1430 | 1330 | 1380 | 1280 | 1330 | |

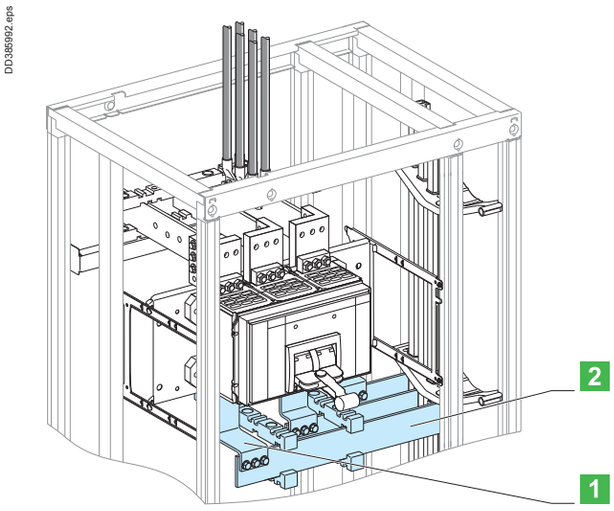
■ Connection impossible due to the operating-temperature limits of the devices installed in the switchboard.
**(1)** Make the neutral connection with one bar, 50 x 10 mm.
**Note:** The values indicated above have been validated for Prisma P switchboards.

# Designing connections between a device and busbars
## Fixed Compact NS1600b to NS3200



### Compact NS1600b/3200 Fixed

Vertical busbars on the left or right
Linergy LGY busbars, BS
Busbar drawings supplied by Schneider Electric




1 Connection.
2 Horizontal link.

Using the data below, it is possible to determine the size of the copper bars and the maximum permissible currents when making the connections to busbars for a vertical, fixed Compact NS1600b/3200, front or rear connection, taking into account the ambient temperature around the switchboard and the IP value.

## Connection

### Flat bars, 10 mm thick

| Device | | Permissible current (A) | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Ambient temperature around the switchboard | | | | | | | | | | | |
| | | 25 °C | | 30 °C | | 35 °C | | 40 °C | | 45 °C | | 50 °C | |
| | | IP ⩽ 31 | IP > 31 | IP ⩽ 31 | IP > 31 | IP ⩽ 31 | IP > 31 | IP ⩽ 31 | IP > 31 | IP ⩽ 31 | IP > 31 | IP ⩽ 31 | IP > 31 |
| NS1600b | Size per phase | 1b 80 x 10 | 1b 80 x 10 | 1b 80 x 10 | 1b 80 x 10 | 1b 80 x 10 | 1b 80 x 10 | 1b 80 x 10 | 1b 80 x 10 | 1b 80 x 10 | 1b 80 x 10 | 1b 80 x 10 | ■ |
| | I (A) | 1560 | 1480 | 1520 | 1430 | 1480 | 1380 | 1430 | 1330 | 1380 | 1280 | 1330 | |
| NS2000 | Size per phase | 2b 80 x 10 | 2b 80 x 10 | 2b 80 x 10 | 2b 80 x 10 | 2b 80 x 10 | 2b 80 x 10 | 2b 80 x 10 | 2b 80 x 10 | 2b 80 x 10 | 2b 80 x 10 | 2b 80 x 10 | ■ |
| | I (A) | 2000 | 2000 | 2000 | 1950 | 2000 | 1900 | 1950 | 1830 | 1900 | 1760 | 1830 | |
| NS2500 | Size per phase | 2b 80 x 10 | 2b 80 x 10 | 2b 80 x 10 | 2b 80 x 10 | 2b 80 x 10 | 2b 80 x 10 | 2b 80 x 10 | 2b 80 x 10 | 2b 80 x 10 | 2b 80 x 10 | 2b 80 x 10 | ■ |
| | I (A) | 2470 | 2280 | 2410 | 2210 | 2350 | 2140 | 2280 | 2070 | 2210 | 2000 | 2140 | |
| NS3200 | Size per phase | 3b 80 x 10 | 3b 80 x 10 | 3b 80 x 10 | 3b 80 x 10 | 3b 80 x 10 | 3b 80 x 10 | 3b 80 x 10 | 3b 80 x 10 | 3b 80 x 10 | 3b 80 x 10 | 3b 80 x 10 | ■ |
| | I (A) | 2860 | 2630 | 2790 | 2530 | 2720 | 2430 | 2630 | 2350 | 2530 | 2270 | 2430 | |

■ Connection impossible due to the operating-temperature limits of the devices installed in the switchboard.

## Horizontal link

### Flat bars, 10 mm thick

| Device | | Permissible current (A) | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Ambient temperature around the switchboard | | | | | | | | | | | |
| | | 25 °C | | 30 °C | | 35 °C | | 40 °C | | 45 °C | | 50 °C | |
| | | IP ⩽ 31 | IP > 31 | IP ⩽ 31 | IP > 31 | IP ⩽ 31 | IP > 31 | IP ⩽ 31 | IP > 31 | IP ⩽ 31 | IP > 31 | IP ⩽ 31 | IP > 31 |
| NS1600b | Size per phase | 1b 80 x 10 | 1b 80 x 10 | 1b 80 x 10 | 1b 80 x 10 | 1b 80 x 10 | 1b 80 x 10 | 1b 80 x 10 | 1b 80 x 10 | 1b 80 x 10 | 1b 80 x 10 | 1b 80 x 10 | ■ |
| | I (A) | 1560 | 1480 | 1520 | 1430 | 1480 | 1380 | 1430 | 1330 | 1380 | 1280 | 1330 | |
| NS2000 | Size per phase | 2b 60 x 10 | 2b 60 x 10 | 2b 60 x 10 | 2b 60 x 10 | 2b 60 x 10 | 2b 60 x 10 | 2b 60 x 10 | 2b 60 x 10 | 2b 60 x 10 | 2b 60 x 10 | 2b 60 x 10 | ■ |
| | I (A) | 2000 | 2000 | 2000 | 1950 | 2000 | 1900 | 1950 | 1830 | 1900 | 1760 | 1830 | |
| NS2500 | Size per phase | 2b 80 x 10 | 2b 80 x 10 | 2b 80 x 10 | 2b 80 x 10 | 2b 80 x 10 | 2b 80 x 10 | 2b 80 x 10 | 2b 80 x 10 | 2b 80 x 10 | 2b 80 x 10 | 2b 80 x 10 | ■ |
| | I (A) | 2470 | 2280 | 2410 | 2210 | 2350 | 2140 | 2280 | 2070 | 2210 | 2000 | 2140 | |
| NS3200 | Size per phase | 2b100 x 10 | 2b100 x 10 | 2b100 x 10 | 2b100 x 10 | 2b100 x 10 | 2b100 x 10 | 2b100 x 10 | 2b100 x 10 | 2b100 x 10 | 2b100 x 10 | 2b100 x 10 | ■ |
| | I (A) | 2860 | 2630 | 2790 | 2530 | 2720 | 2430 | 2630 | 2350 | 2530 | 2270 | 2430 | |

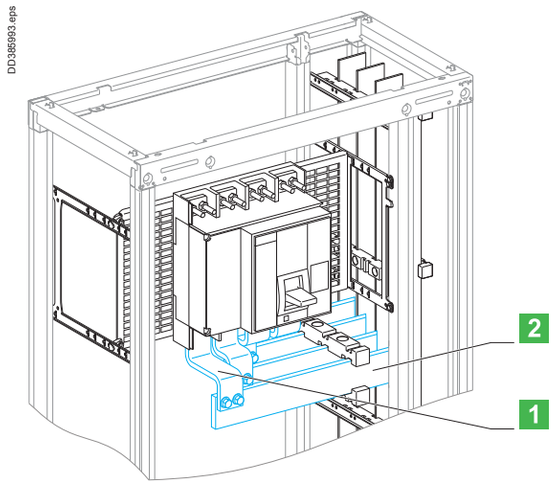
■ Connection impossible due to the operating-temperature limits of the devices installed in the switchboard.
**Note:** the values indicated above have been validated for Prisma P switchboards.

# Designing connections between a device and busbars
## Fixed Compact NS630b to NS1600



### Compact NS630b to NS1600 Fixed

Vertical busbars on the left or right
Linergy BS busbars
Busbar drawings supplied by Schneider Electric




1 Connection.
2 Horizontal link.

Using the data below, it is possible to determine the size of the copper bars and the maximum permissible currents when making the connections to busbars for a vertical, fixed Compact NS630b/NS1600, taking into account the ambient temperature around the switchboard and the IP value.

## Connection

### Flat bars, 5 mm thick

| Device | | Permissible current (A) | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Ambient temperature around the switchboard | | | | | | | | | | | |
| | | 25 °C | | 30 °C | | 35 °C | | 40 °C | | 45 °C | | 50 °C | |
| | | IP ≤ 31 | IP > 31 | IP ≤ 31 | IP > 31 | IP ≤ 31 | IP > 31 | IP ≤ 31 | IP > 31 | IP ≤ 31 | IP > 31 | IP ≤ 31 | IP > 31 |
| NS630b | Size per phase | 1b 50 x 5 | 1b 50 x 5 | 1b 50 x 5 | 1b 50 x 5 | 1b 50 x 5 | 1b 50 x 5 | 1b 50 x 5 | 1b 50 x 5 | 1b 50 x 5 | 1b 50 x 5 | 1b 50 x 5 | ■ |
| | I (A) | 630 | 630 | 630 | 630 | 630 | 630 | 630 | 630 | 630 | 630 | 630 | |
| NS800 | Size per phase | 2b 50 x 5 | 2b 50 x 5 | 2b 50 x 5 | 2b 50 x 5 | 2b 50 x 5 | 2b 50 x 5 | 2b 50 x 5 | 2b 50 x 5 | 2b 50 x 5 | 2b 50 x 5 | 2b 50 x 5 | ■ |
| | I (A) | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | |
| NS1000 | Size per phase | 2b 50 x 5 | 2b 50 x 5 | 2b 50 x 5 | 2b 50 x 5 | 2b 50 x 5 | 2b 50 x 5 | 2b 50 x 5 | 2b 50 x 5 | 2b 50 x 5 | 2b 50 x 5 | 2b 50 x 5 | ■ |
| | I (A) | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 970 | 1000 | |
| NS1250 | Size per phase | 3b 50 x 5 | 3b 50 x 5 | 3b 50 x 5 | 3b 50 x 5 | 3b 50 x 5 | 3b 50 x 5 | 3b 50 x 5 | 3b 50 x 5 | 3b 50 x 5 | 3b 50 x 5 | 3b 50 x 5 | ■ |
| | I (A) | 1250 | 1250 | 1250 | 1250 | 1250 | 1250 | 1250 | 1200 | 1250 | 1150 | 1200 | |
| NS1600 (1) | Size per phase | 4b 50 x 5 | 4b 50 x 5 | 4b 50 x 5 | 4b 50 x 5 | 4b 50 x 5 | 4b 50 x 5 | 4b 50 x 5 | 4b 50 x 5 | 4b 50 x 5 | 4b 50 x 5 | 4b 50 x 5 | ■ |
| | I (A) | 1600 | 1550 | 1600 | 1500 | 1550 | 1450 | 1500 | 1400 | 1450 | 1350 | 1400 | |

■ Connection impossible due to the operating-temperature limits of the devices installed in the switchboard.

## Horizontal link

### Flat bars, 5 mm thick

| Device | | Permissible current (A) | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Ambient temperature around the switchboard | | | | | | | | | | | |
| | | 25 °C | | 30 °C | | 35 °C | | 40 °C | | 45 °C | | 50 °C | |
| | | IP ≤ 31 | IP > 31 | IP ≤ 31 | IP > 31 | IP ≤ 31 | IP > 31 | IP ≤ 31 | IP > 31 | IP ≤ 31 | IP > 31 | IP ≤ 31 | IP > 31 |
| NS630b | Size per phase | 1b 60 x 5 | 1b 60 x 5 | 1b 60 x 5 | 1b 60 x 5 | 1b 60 x 5 | 1b 60 x 5 | 1b 60 x 5 | 1b 60 x 5 | 1b 60 x 5 | 1b 60 x 5 | 1b 60 x 5 | ■ |
| | I (A) | 630 | 630 | 630 | 630 | 630 | 630 | 630 | 630 | 630 | 630 | 630 | |
| NS800 | Size per phase | 1b 80 x 5 | 1b 80 x 5 | 1b 80 x 5 | 1b 80 x 5 | 1b 80 x 5 | 1b 80 x 5 | 1b 80 x 5 | 1b 80 x 5 | 1b 80 x 5 | 1b 80 x 5 | 1b 80 x 5 | ■ |
| | I (A) | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | |
| NS1000 | Size per phase | 2b 50 x 5 | 2b 50 x 5 | 2b 50 x 5 | 2b 50 x 5 | 2b 50 x 5 | 2b 50 x 5 | 2b 50 x 5 | 2b 50 x 5 | 2b 50 x 5 | 2b 50 x 5 | 2b 50 x 5 | ■ |
| | I (A) | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 970 | 1000 | |
| NS1250 | Size per phase | 2b 60 x 5 | 2b 60 x 5 | 2b 60 x 5 | 2b 60 x 5 | 2b 60 x 5 | 2b 60 x 5 | 2b 60 x 5 | 2b 60 x 5 | 2b 60 x 5 | 2b 60 x 5 | 2b 60 x 5 | ■ |
| | I (A) | 1250 | 1250 | 1250 | 1250 | 1250 | 1250 | 1250 | 1200 | 1250 | 1150 | 1200 | |
| NS1600 | Size per phase | 2b 80 x 5 | 2b 80 x 5 | 2b 80 x 5 | 2b 80 x 5 | 2b 80 x 5 | 2b 80 x 5 | 2b 80 x 5 | 2b 80 x 5 | 2b 80 x 5 | 2b 80 x 5 | 2b 80 x 5 | ■ |
| | I (A) | 1600 | 1550 | 1600 | 1500 | 1550 | 1450 | 1500 | 1400 | 1450 | 1350 | 1400 | |

■ Connection impossible due to the operating-temperature limits of the devices installed in the switchboard.
**(1)** Make the neutral connection with two bars, 50 x 5 mm.
**Note:** the values indicated above have been validated for Prisma P switchboards.

# Designing connections between a device and busbars
## Fixed Compact NS630b to NS1600



## Connection

### Flat bars, 10 mm thick

| Device | | Permissible current (A) | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Ambient temperature around the switchboard | | | | | | | | | | | |
| | | 25 °C | | 30 °C | | 35 °C | | 40 °C | | 45 °C | | 50 °C | |
| | | IP ≤ 31 | IP > 31 | IP ≤ 31 | IP > 31 | IP ≤ 31 | IP > 31 | IP ≤ 31 | IP > 31 | IP ≤ 31 | IP > 31 | IP ≤ 31 | IP > 31 |
| NS630b | Size per phase | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | ■ |
| | I (A) | 630 | 630 | 630 | 630 | 630 | 630 | 630 | 630 | 630 | 630 | 630 | |
| NS800 | Size per phase | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | ■ |
| | I (A) | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | |
| NS1000 | Size per phase | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | ■ |
| | I (A) | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 970 | 1000 | |
| NS1250 | Size per phase | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | ■ |
| | I (A) | 1250 | 1250 | 1250 | 1250 | 1250 | 1250 | 1250 | 1180 | 1230 | 1130 | 1180 | |
| NS1600 (1) | Size per phase | 2b 50 x 10 | 2b 50 x 10 | 2b 50 x 10 | 2b 50 x 10 | 2b 50 x 10 | 2b 50 x 10 | 2b 50 x 10 | 2b 50 x 10 | 2b 50 x 10 | 2b 50 x 10 | 2b 50 x 10 | ■ |
| | I (A) | 1600 | 1550 | 1600 | 1500 | 1550 | 1450 | 1500 | 1400 | 1450 | 1350 | 1400 | |

■ Connection impossible due to the operating-temperature limits of the devices installed in the switchboard.

## Horizontal link

### Flat bars, 10 mm thick

| Device | | Permissible current (A) | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Ambient temperature around the switchboard | | | | | | | | | | | |
| | | 25 °C | | 30 °C | | 35 °C | | 40 °C | | 45 °C | | 50 °C | |
| | | IP ≤ 31 | IP > 31 | IP ≤ 31 | IP > 31 | IP ≤ 31 | IP > 31 | IP ≤ 31 | IP > 31 | IP ≤ 31 | IP > 31 | IP ≤ 31 | IP > 31 |
| NS630b | Size per phase | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | ■ |
| | I (A) | 630 | 630 | 630 | 630 | 630 | 630 | 630 | 630 | 630 | 630 | 630 | |
| NS800 | Size per phase | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | ■ |
| | I (A) | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | |
| NS1000 | Size per phase | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | ■ |
| | I (A) | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 970 | 1000 | |
| NS1250 | Size per phase | 1b 60 x 10 | 1b 60 x 10 | 1b 60 x 10 | 1b 60 x 10 | 1b 60 x 10 | 1b 60 x 10 | 1b 60 x 10 | 1b 60 x 10 | 1b 60 x 10 | 1b 60 x 10 | 1b 60 x 10 | ■ |
| | I (A) | 1250 | 1250 | 1250 | 1250 | 1250 | 1250 | 1250 | 1180 | 1230 | 1130 | 1180 | |
| NS1600 | Size per phase | 1b 80 x 10 | 1b 80 x 10 | 1b 80 x 10 | 1b 80 x 10 | 1b 80 x 10 | 1b 80 x 10 | 1b 80 x 10 | 1b 80 x 10 | 1b 80 x 10 | 1b 80 x 10 | 1b 80 x 10 | ■ |
| | I (A) | 1600 | 1550 | 1600 | 1500 | 1550 | 1450 | 1500 | 1400 | 1450 | 1350 | 1400 | |

■ Connection impossible due to the operating-temperature limits of the devices installed in the switchboard.

**(1)** Make the neutral connection with one bar, 50 x 10 mm.

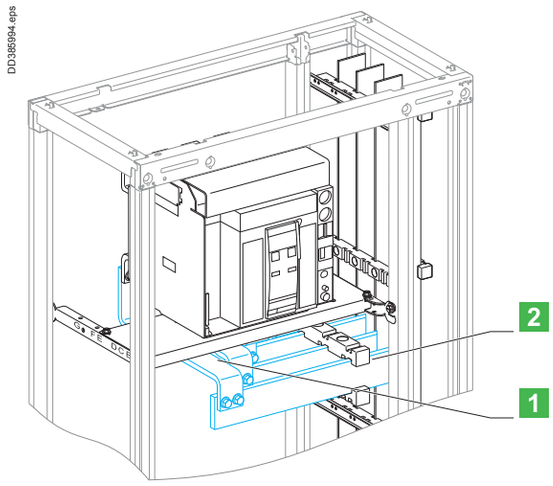
**Note:** the values indicated above have been validated for Prisma P switchboards.

# Designing connections between a device and busbars
## Withdrawable
## Compact NS630b to NS1600



### Compact NS630b to NS1600 Withdrawable

Vertical busbars on the left or right
Linergy BS busbars
Busbar drawings supplied by Schneider Electric




**1** Connection.
**2** Horizontal link.

Using the data below, it is possible to determine the size of the copper bars and the maximum permissible currents when making the connections to busbars for a vertical, withdrawable Compact NS630b/NS1600, taking into account the ambient temperature around the switchboard and the IP value.

## Connection

### Flat bars, 5 mm thick

| Device | | Permissible current (A) | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Ambient temperature around the switchboard | | | | | | | | | | | |
| | | 25 °C | | 30 °C | | 35 °C | | 40 °C | | 45 °C | | 50 °C | |
| | | IP ⩽ 31 | IP > 31 | IP ⩽ 31 | IP > 31 | IP ⩽ 31 | IP > 31 | IP ⩽ 31 | IP > 31 | IP ⩽ 31 | IP > 31 | IP ⩽ 31 | IP > 31 |
| NS630b | Size per phase | 1b 50 x 5 | 1b 50 x 5 | 1b 50 x 5 | 1b 50 x 5 | 1b 50 x 5 | 1b 50 x 5 | 1b 50 x 5 | 1b 50 x 5 | 1b 50 x 5 | 1b 50 x 5 | 1b 50 x 5 | ■ |
| | I (A) | 630 | 630 | 630 | 630 | 630 | 630 | 630 | 630 | 630 | 630 | 630 | |
| NS800 | Size per phase | 2b 50 x 5 | 2b 50 x 5 | 2b 50 x 5 | 2b 50 x 5 | 2b 50 x 5 | 2b 50 x 5 | 2b 50 x 5 | 2b 50 x 5 | 2b 50 x 5 | 2b 50 x 5 | 2b 50 x 5 | ■ |
| | I (A) | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | |
| NS1000 | Size per phase | 2b 50 x 5 | 2b 50 x 5 | 2b 50 x 5 | 2b 50 x 5 | 2b 50 x 5 | 2b 50 x 5 | 2b 50 x 5 | 2b 50 x 5 | 2b 50 x 5 | 2b 50 x 5 | 2b 50 x 5 | ■ |
| | I (A) | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 960 | 1000 | |
| NS1250 | Size per phase | 3b 50 x 5 | 3b 50 x 5 | 3b 50 x 5 | 3b 50 x 5 | 3b 50 x 5 | 3b 50 x 5 | 3b 50 x 5 | 3b 50 x 5 | 3b 50 x 5 | 3b 50 x 5 | 3b 50 x 5 | ■ |
| | I (A) | 1250 | 1250 | 1250 | 1250 | 1250 | 1230 | 1250 | 1180 | 1230 | 1130 | 1180 | |
| NS1600 (1) | Size per phase | 4b 50 x 5 | 4b 50 x 5 | 4b 50 x 5 | 4b 50 x 5 | 4b 50 x 5 | 4b 50 x 5 | 4b 50 x 5 | 4b 50 x 5 | 4b 50 x 5 | 4b 50 x 5 | 4b 50 x 5 | ■ |
| | I (A) | 1560 | 1430 | 1520 | 1430 | 1480 | 1380 | 1430 | 1330 | 1380 | 1280 | 1330 | |

■ Connection impossible due to the operating-temperature limits of the devices installed in the switchboard.

## Horizontal link

### Flat bars, 5 mm thick

| Device | | Permissible current (A) | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Ambient temperature around the switchboard | | | | | | | | | | | |
| | | 25 °C | | 30 °C | | 35 °C | | 40 °C | | 45 °C | | 50 °C | |
| | | IP ⩽ 31 | IP > 31 | IP ⩽ 31 | IP > 31 | IP ⩽ 31 | IP > 31 | IP ⩽ 31 | IP > 31 | IP ⩽ 31 | IP > 31 | IP ⩽ 31 | IP > 31 |
| NS630b | Size per phase | 1b 60 x 5 | 1b 60 x 5 | 1b 60 x 5 | 1b 60 x 5 | 1b 60 x 5 | 1b 60 x 5 | 1b 60 x 5 | 1b 60 x 5 | 1b 60 x 5 | 1b 60 x 5 | 1b 60 x 5 | ■ |
| | I (A) | 630 | 630 | 630 | 630 | 630 | 630 | 630 | 630 | 630 | 630 | 630 | |
| NS800 | Size per phase | 1b 80 x 5 | 1b 80 x 5 | 1b 80 x 5 | 1b 80 x 5 | 1b 80 x 5 | 1b 80 x 5 | 1b 80 x 5 | 1b 80 x 5 | 1b 80 x 5 | 1b 80 x 5 | 1b 80 x 5 | ■ |
| | I (A) | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | |
| NS1000 | Size per phase | 2b 50 x 5 | 2b 50 x 5 | 2b 50 x 5 | 2b 50 x 5 | 2b 50 x 5 | 2b 50 x 5 | 2b 50 x 5 | 2b 50 x 5 | 2b 50 x 5 | 2b 50 x 5 | 2b 50 x 5 | ■ |
| | I (A) | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 960 | 1000 | |
| NS1250 | Size per phase | 2b 60 x 5 | 2b 60 x 5 | 2b 60 x 5 | 2b 60 x 5 | 2b 60 x 5 | 2b 60 x 5 | 2b 60 x 5 | 2b 60 x 5 | 2b 60 x 5 | 2b 60 x 5 | 2b 60 x 5 | ■ |
| | I (A) | 1250 | 1250 | 1250 | 1250 | 1250 | 1230 | 1250 | 1180 | 1230 | 1130 | 1180 | |
| NS1600 | Size per phase | 2b 80 x 5 | 2b 80 x 5 | 2b 80 x 5 | 2b 80 x 5 | 2b 80 x 5 | 2b 80 x 5 | 2b 80 x 5 | 2b 80 x 5 | 2b 80 x 5 | 2b 80 x 5 | 2b 80 x 5 | ■ |
| | I (A) | 1560 | 1430 | 1520 | 1430 | 1480 | 1380 | 1430 | 1330 | 1380 | 1280 | 1330 | |

■ Connection impossible due to the operating-temperature limits of the devices installed in the switchboard.
**(1)** Make the neutral connection with two bars, 50 x 5 mm.
**Note:** the values indicated above have been validated for Prisma P switchboards.

# Designing connections between a device and busbars
## Withdrawable
## Compact NS630b to NS1600



## Connection

### Flat bars, 10 mm thick

| Device | | Permissible current (A) | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Ambient temperature around the switchboard | | | | | | | | | | | |
| | | 25 °C | | 30 °C | | 35 °C | | 40 °C | | 45 °C | | 50 °C | |
| | | IP ≤ 31 | IP > 31 | IP ≤ 31 | IP > 31 | IP ≤ 31 | IP > 31 | IP ≤ 31 | IP > 31 | IP ≤ 31 | IP > 31 | IP ≤ 31 | IP > 31 |
| NS630b | Size per phase | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | ■ |
| | I (A) | 630 | 630 | 630 | 630 | 630 | 630 | 630 | 630 | 630 | 630 | 630 | |
| NS800 | Size per phase | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | ■ |
| | I (A) | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | |
| NS1000 | Size per phase | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | ■ |
| | I (A) | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 960 | 1000 | |
| NS1250 | Size per phase | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | ■ |
| | I (A) | 1250 | 1250 | 1250 | 1250 | 1250 | 1210 | 1250 | 1160 | 1210 | 1110 | 1160 | |
| NS1600 (1) | Size per phase | 2b 50 x 10 | 2b 50 x 10 | 2b 50 x 10 | 2b 50 x 10 | 2b 50 x 10 | 2b 50 x 10 | 2b 50 x 10 | 2b 50 x 10 | 2b 50 x 10 | 2b 50 x 10 | 2b 50 x 10 | ■ |
| | I (A) | 1560 | 1430 | 1520 | 1430 | 1480 | 1380 | 1430 | 1330 | 1380 | 1280 | 1330 | |

■ Connection impossible due to the operating-temperature limits of the devices installed in the switchboard.

## Horizontal link

### Flat bars, 10 mm thick

| Device | | Permissible current (A) | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Ambient temperature around the switchboard | | | | | | | | | | | |
| | | 25 °C | | 30 °C | | 35 °C | | 40 °C | | 45 °C | | 50 °C | |
| | | IP ≤ 31 | IP > 31 | IP ≤ 31 | IP > 31 | IP ≤ 31 | IP > 31 | IP ≤ 31 | IP > 31 | IP ≤ 31 | IP > 31 | IP ≤ 31 | IP > 31 |
| NS630b | Size per phase | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | ■ |
| | I (A) | 630 | 630 | 630 | 630 | 630 | 630 | 630 | 630 | 630 | 630 | 630 | |
| NS800 | Size per phase | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | ■ |
| | I (A) | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | |
| NS1000 | Size per phase | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | ■ |
| | I (A) | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 970 | 1000 | |
| NS1250 | Size per phase | 1b 60 x 10 | 1b 60 x 10 | 1b 60 x 10 | 1b 60 x 10 | 1b 60 x 10 | 1b 60 x 10 | 1b 60 x 10 | 1b 60 x 10 | 1b 60 x 10 | 1b 60 x 10 | 1b 60 x 10 | ■ |
| | I (A) | 1250 | 1250 | 1250 | 1250 | 1250 | 1210 | 1250 | 1160 | 1210 | 1110 | 1160 | |
| NS1600 | Size per phase | 1b 80 x 10 | 1b 80 x 10 | 1b 80 x 10 | 1b 80 x 10 | 1b 80 x 10 | 1b 80 x 10 | 1b 80 x 10 | 1b 80 x 10 | 1b 80 x 10 | 1b 80 x 10 | 1b 80 x 10 | ■ |
| | I (A) | 1560 | 1430 | 1520 | 1430 | 1480 | 1380 | 1430 | 1330 | 1380 | 1280 | 1330 | |

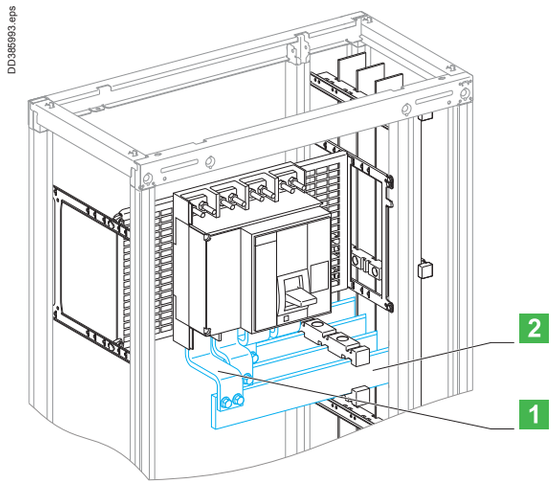
■ Connection impossible due to the operating-temperature limits of the devices installed in the switchboard.
**(1)** Make the neutral connection with one bar, 50 x 10 mm.
**Note:** the values indicated above have been validated for Prisma P switchboards.

# Designing connections between a device and busbars
## Fixed Compact INS-INV630b to 2500



### Compact INS-INV630b to 2500 Fixed

Vertical busbars on the left or right
Linergy LGYE busbar, Linergy BS bars
Busbar drawings supplied by Schneider Electric




1 Connection.
2 Horizontal link.

Using the data below, it is possible to determine the size of the copper bars and the maximum permissible currents when making the connections to busbars for a vertical, fixed Compact, taking into account the ambient temperature around the switchboard and the IP value.

## Connection

### Flat bars, 5 mm thick

| Device | | Permissible current (A) | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Ambient temperature around the switchboard | | | | | | | | | | | |
| | | 25 °C | | 30 °C | | 35 °C | | 40 °C | | 45 °C | | 50 °C | |
| | | IP ≤ 31 | IP > 31 | IP ≤ 31 | IP > 31 | IP ≤ 31 | IP > 31 | IP ≤ 31 | IP > 31 | IP ≤ 31 | IP > 31 | IP ≤ 31 | IP > 31 |
| INS-INV630b | Size per phase | 1b x 50 x 5 | 1b x 50 x 5 | 1b x 50 x 5 | 1b x 50 x 5 | 1b x 50 x 5 | 1b x 50 x 5 | 1b x 50 x 5 | 1b x 50 x 5 | 1b x 50 x 5 | 1b x 50 x 5 | 1b x 50 x 5 | ■ |
| | I (A) | 630 | 630 | 630 | 630 | 630 | 630 | 630 | 630 | 630 | 630 | 630 | |
| INS-INV800 | Size per phase | 2b x 50 x 5 | 2b x 50 x 5 | 2b x 50 x 5 | 2b x 50 x 5 | 2b x 50 x 5 | 2b x 50 x 5 | 2b x 50 x 5 | 2b x 50 x 5 | 2b x 50 x 5 | 2b x 50 x 5 | 2b x 50 x 5 | ■ |
| | I (A) | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | |
| INS-INV1000 | Size per phase | 2b x 50 x 5 | 2b x 50 x 5 | 2b x 50 x 5 | 2b x 50 x 5 | 2b x 50 x 5 | 2b x 50 x 5 | 2b x 50 x 5 | 2b x 50 x 5 | 2b x 50 x 5 | 2b x 50 x 5 | 2b x 50 x 5 | ■ |
| | I (A) | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 970 | 1000 | |
| INS-INV1250 | Size per phase | 3b x 50 x 5 | 3b x 50 x 5 | 3b x 50 x 5 | 3b x 50 x 5 | 3b x 50 x 5 | 3b x 50 x 5 | 3b x 50 x 5 | 3b x 50 x 5 | 3b x 50 x 5 | 3b x 50 x 5 | 3b x 50 x 5 | ■ |
| | I (A) | 1250 | 1250 | 1250 | 1250 | 1250 | 1250 | 1250 | 1200 | 1250 | 1150 | 1200 | |
| INS-INV1600 | Size per phase | 3b x 50 x 5 | 3b x 50 x 5 | 3b x 50 x 5 | 3b x 50 x 5 | 3b x 50 x 5 | 3b x 50 x 5 | 3b x 50 x 5 | 3b x 50 x 5 | 3b x 50 x 5 | 3b x 50 x 5 | 3b x 50 x 5 | ■ |
| | I (A) | 1600 | 1550 | 1600 | 1500 | 1550 | 1450 | 1500 | 1400 | 1450 | 1350 | 1400 | |

■ Connection impossible due to the operating-temperature limits of the devices installed in the switchboard.

## Horizontal link

### Flat bars, 5 mm thick

| Device | | Permissible current (A) | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Ambient temperature around the switchboard | | | | | | | | | | | |
| | | 25 °C | | 30 °C | | 35 °C | | 40 °C | | 45 °C | | 50 °C | |
| | | IP ≤ 31 | IP > 31 | IP ≤ 31 | IP > 31 | IP ≤ 31 | IP > 31 | IP ≤ 31 | IP > 31 | IP ≤ 31 | IP > 31 | IP ≤ 31 | IP > 31 |
| INS-INV630b | Size per phase | 1b x 60 x 5 | 1b x 60 x 5 | 1b x 60 x 5 | 1b x 60 x 5 | 1b x 60 x 5 | 1b x 60 x 5 | 1b x 60 x 5 | 1b x 60 x 5 | 1b x 60 x 5 | 1b x 60 x 5 | 1b x 60 x 5 | ■ |
| | I (A) | 630 | 630 | 630 | 630 | 630 | 630 | 630 | 630 | 630 | 630 | 630 | |
| INS-INV800 | Size per phase | 1b x 80 x 5 | 1b x 80 x 5 | 1b x 80 x 5 | 1b x 80 x 5 | 1b x 80 x 5 | 1b x 80 x 5 | 1b x 80 x 5 | 1b x 80 x 5 | 1b x 80 x 5 | 1b x 80 x 5 | 1b x 80 x 5 | ■ |
| | I (A) | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | |
| INS-INV1000 | Size per phase | 1b x 80 x 5 | 1b x 80 x 5 | 1b x 80 x 5 | 1b x 80 x 5 | 1b x 80 x 5 | 1b x 80 x 5 | 1b x 80 x 5 | 1b x 80 x 5 | 1b x 80 x 5 | 1b x 80 x 5 | 1b x 80 x 5 | ■ |
| | I (A) | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 970 | 1000 | |
| INS-INV1250 | Size per phase | 1b x 80 x 5 | 1b x 80 x 5 | 1b x 80 x 5 | 1b x 80 x 5 | 1b x 80 x 5 | 1b x 80 x 5 | 1b x 80 x 5 | 1b x 80 x 5 | 1b x 80 x 5 | 1b x 80 x 5 | 1b x 80 x 5 | ■ |
| | I (A) | 1250 | 1250 | 1250 | 1250 | 1250 | 1250 | 1250 | 1200 | 1250 | 1150 | 1200 | |
| INS-INV1600 | Size per phase | 2b x 80 x 5 | 2b x 80 x 5 | 2b x 80 x 5 | 2b x 80 x 5 | 2b x 80 x 5 | 2b x 80 x 5 | 2b x 80 x 5 | 2b x 80 x 5 | 2b x 80 x 5 | 2b x 80 x 5 | 2b x 80 x 5 | ■ |
| | I (A) | 1600 | 1550 | 1600 | 1500 | 1550 | 1450 | 1500 | 1400 | 1450 | 1350 | 1400 | |

■ Connection impossible due to the operating-temperature limits of the devices installed in the switchboard.
**Note:** the values indicated above have been validated for Prisma P switchboards.

# Designing connections between a device and busbars
## Fixed Compact INS-INV630b to 2500



## Connection

### Flat bars, 10 mm thick

| Device | | Permissible current (A) | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Ambient temperature around the switchboard | | | | | | | | | | | |
| | | 25 °C | | 30 °C | | 35 °C | | 40 °C | | 45 °C | | 50 °C | |
| | | IP ≤ 31 | IP > 31 | IP ≤ 31 | IP > 31 | IP ≤ 31 | IP > 31 | IP ≤ 31 | IP > 31 | IP ≤ 31 | IP > 31 | IP ≤ 31 | IP > 31 |
| INS-INV630b | Size per phase | 1b x 50 x 10 | 1b x 50 x 10 | 1b x 50 x 10 | 1b x 50 x 10 | 1b x 50 x 10 | 1b x 50 x 10 | 1b x 50 x 10 | 1b x 50 x 10 | 1b x 50 x 10 | 1b x 50 x 10 | 1b x 50 x 10 | ■ |
| | I (A) | 630 | 630 | 630 | 630 | 630 | 630 | 630 | 630 | 630 | 630 | 630 | |
| INS-INV800 | Size per phase | 1b x 50 x 10 | 1b x 50 x 10 | 1b x 50 x 10 | 1b x 50 x 10 | 1b x 50 x 10 | 1b x 50 x 10 | 1b x 50 x 10 | 1b x 50 x 10 | 1b x 50 x 10 | 1b x 50 x 10 | 1b x 50 x 10 | ■ |
| | I (A) | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | |
| INS-INV1000 | Size per phase | 1b x 50 x 10 | 1b x 50 x 10 | 1b x 50 x 10 | 1b x 50 x 10 | 1b x 50 x 10 | 1b x 50 x 10 | 1b x 50 x 10 | 1b x 50 x 10 | 1b x 50 x 10 | 1b x 50 x 10 | 1b x 50 x 10 | ■ |
| | I (A) | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 970 | 1000 | |
| INS-INV1250 | Size per phase | 1b x 50 x 10 | 1b x 50 x 10 | 1b x 50 x 10 | 1b x 50 x 10 | 1b x 50 x 10 | 1b x 50 x 10 | 1b x 50 x 10 | 1b x 50 x 10 | 1b x 50 x 10 | 1b x 50 x 10 | 1b x 50 x 10 | ■ |
| | I (A) | 1250 | 1250 | 1250 | 1250 | 1250 | 1250 | 1250 | 1180 | 1230 | 1130 | 1180 | |
| INS-INV1600 | Size per phase | 2b x 50 x 10 | 2b x 50 x 10 | 2b x 50 x 10 | 2b x 50 x 10 | 2b x 50 x 10 | 2b x 50 x 10 | 2b x 50 x 10 | 2b x 50 x 10 | 2b x 50 x 10 | 2b x 50 x 10 | 2b x 50 x 10 | ■ |
| | I (A) | 1600 | 1550 | 1600 | 1500 | 1550 | 1450 | 1500 | 1400 | 1450 | 1350 | 1400 | |
| INS-INV2000 | Size per phase | 2b x 80 x 10 | 2b x 80 x 10 | 2b x 80 x 10 | 2b x 80 x 10 | 2b x 80 x 10 | 2b x 80 x 10 | 2b x 80 x 10 | 2b x 80 x 10 | 2b x 80 x 10 | 2b x 80 x 10 | 2b x 80 x 10 | ■ |
| | I (A) | 2000 | 2000 | 2000 | 1950 | 2000 | 1900 | 1950 | 1830 | 1900 | 1760 | 1830 | |
| INS-INV2500 | Size per phase | 2b x 80 x 10 | 2b x 80 x 10 | 2b x 80 x 10 | 2b x 80 x 10 | 2b x 80 x 10 | 2b x 80 x 10 | 2b x 80 x 10 | 2b x 80 x 10 | 2b x 80 x 10 | 2b x 80 x 10 | 2b x 80 x 10 | ■ |
| | I (A) | 2470 | 2280 | 2410 | 2210 | 2350 | 2140 | 2280 | 2070 | 2210 | 2000 | 2140 | |

■ Connection impossible due to the operating-temperature limits of the devices installed in the switchboard.

## Horizontal link

### Flat bars, 10 mm thick

| Device | | Permissible current (A) | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Ambient temperature around the switchboard | | | | | | | | | | | |
| | | 25 °C | | 30 °C | | 35 °C | | 40 °C | | 45 °C | | 50 °C | |
| | | IP ≤ 31 | IP > 31 | IP ≤ 31 | IP > 31 | IP ≤ 31 | IP > 31 | IP ≤ 31 | IP > 31 | IP ≤ 31 | IP > 31 | IP ≤ 31 | IP > 31 |
| INS-INV630b | Size per phase | 1b x 50 x 10 | 1b x 50 x 10 | 1b x 50 x 10 | 1b x 50 x 10 | 1b x 50 x 10 | 1b x 50 x 10 | 1b x 50 x 10 | 1b x 50 x 10 | 1b x 50 x 10 | 1b x 50 x 10 | 1b x 50 x 10 | ■ |
| | I (A) | 630 | 630 | 630 | 630 | 630 | 630 | 630 | 630 | 630 | 630 | 630 | |
| INS-INV800 | Size per phase | 1b x 50 x 10 | 1b x 50 x 10 | 1b x 50 x 10 | 1b x 50 x 10 | 1b x 50 x 10 | 1b x 50 x 10 | 1b x 50 x 10 | 1b x 50 x 10 | 1b x 50 x 10 | 1b x 50 x 10 | 1b x 50 x 10 | ■ |
| | I (A) | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | |
| INS-INV1000 | Size per phase | 1b x 50 x 10 | 1b x 50 x 10 | 1b x 50 x 10 | 1b x 50 x 10 | 1b x 50 x 10 | 1b x 50 x 10 | 1b x 50 x 10 | 1b x 50 x 10 | 1b x 50 x 10 | 1b x 50 x 10 | 1b x 50 x 10 | ■ |
| | I (A) | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 970 | 1000 | |
| INS-INV1250 | Size per phase | 1b x 60 x 10 | 1b x 60 x 10 | 1b x 60 x 10 | 1b x 60 x 10 | 1b x 60 x 10 | 1b x 60 x 10 | 1b x 60 x 10 | 1b x 60 x 10 | 1b x 60 x 10 | 1b x 60 x 10 | 1b x 60 x 10 | ■ |
| | I (A) | 1250 | 1250 | 1250 | 1250 | 1250 | 1250 | 1250 | 1180 | 1230 | 1130 | 1180 | |
| INS-INV1600 | Size per phase | 1b x 80 x 10 | 1b x 80 x 10 | 1b x 80 x 10 | 1b x 80 x 10 | 1b x 80 x 10 | 1b x 80 x 10 | 1b x 80 x 10 | 1b x 80 x 10 | 1b x 80 x 10 | 1b x 80 x 10 | 1b x 80 x 10 | ■ |
| | I (A) | 1600 | 1550 | 1600 | 1500 | 1550 | 1450 | 1500 | 1400 | 1450 | 1350 | 1400 | |
| INS-INV2000 | Size per phase | 1b x 80 x 10 | 1b x 80 x 10 | 1b x 80 x 10 | 1b x 80 x 10 | 1b x 80 x 10 | 1b x 80 x 10 | 1b x 80 x 10 | 1b x 80 x 10 | 1b x 80 x 10 | 1b x 80 x 10 | 1b x 80 x 10 | ■ |
| | I (A) | 2000 | 2000 | 2000 | 1950 | 2000 | 1900 | 1950 | 1830 | 1900 | 1760 | 1830 | |
| INS-INV2500 | Size per phase | 2b x 80 x 10 | 2b x 80 x 10 | 2b x 80 x 10 | 2b x 80 x 10 | 2b x 80 x 10 | 2b x 80 x 10 | 2b x 80 x 10 | 2b x 80 x 10 | 2b x 80 x 10 | 2b x 80 x 10 | 2b x 80 x 10 | ■ |
| | I (A) | 2470 | 2280 | 2410 | 2210 | 2350 | 2140 | 2280 | 2070 | 2210 | 2000 | 2140 | |

■ Connection impossible due to the operating-temperature limits of the devices installed in the switchboard.

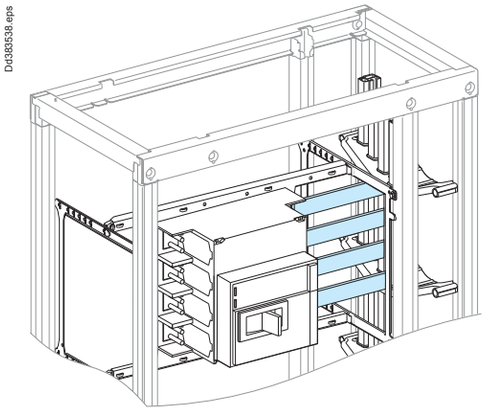
**Note:** the values indicated above have been validated for Prisma P switchboards.

# Designing connections between a device and busbars
## Horizontal, fixed
## Compact NS630b to NS1000



### Compact NS630b to NS1000
### Horizontal mounting

Vertical Linergy LGYE, LGY, BS busbars




Using the data below, it is possible to determine the size of the copper bars and the maximum permissible currents when making the connections to busbars for a horizontal, fixed Compact NS630b/NS1000, taking into account the ambient temperature around the switchboard and the IP value.

### Flat bars, 5 mm thick

| Device | | Permissible current (A) | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Ambient temperature around the switchboard | | | | | | | | | | | |
| | | 25 °C | | 30 °C | | 35 °C | | 40 °C | | 45 °C | | 50 °C | |
| | | IP ≤ 31 | IP > 31 | IP ≤ 31 | IP > 31 | IP ≤ 31 | IP > 31 | IP ≤ 31 | IP > 31 | IP ≤ 31 | IP > 31 | IP ≤ 31 | IP > 31 |
| NS630b | Size per phase | 2b 50 x 5 | 2b 50 x 5 | 2b 50 x 5 | 2b 50 x 5 | 2b 50 x 5 | 2b 50 x 5 | 2b 50 x 5 | 2b 50 x 5 | 2b 50 x 5 | 2b 50 x 5 | 2b 50 x 5 | ■ |
| | I (A) | 630 | 630 | 630 | 630 | 630 | 630 | 630 | 630 | 630 | 630 | 630 | |
| NS800 | Size per phase | 2b 50 x 5 | 2b 50 x 5 | 2b 50 x 5 | 2b 50 x 5 | 2b 50 x 5 | 2b 50 x 5 | 2b 50 x 5 | 2b 50 x 5 | 2b 50 x 5 | 2b 50 x 5 | 2b 50 x 5 | ■ |
| | I (A) | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | |
| NS1000 | Size per phase | 2b 50 x 5 | 2b 50 x 5 | 2b 50 x 5 | 2b 50 x 5 | 2b 50 x 5 | 2b 50 x 5 | 2b 50 x 5 | 2b 50 x 5 | 2b 50 x 5 | 2b 50 x 5 | 2b 50 x 5 | ■ |
| | I (A) | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | |

■ Connection impossible due to the operating-temperature limits of the devices installed in the switchboard.

### Flat bars, 10 mm thick

| Device | | Permissible current (A) | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Ambient temperature around the switchboard | | | | | | | | | | | |
| | | 25 °C | | 30 °C | | 35 °C | | 40 °C | | 45 °C | | 50 °C | |
| NS630b | Size per phase | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | ■ |
| | I (A) | 630 | 630 | 630 | 630 | 630 | 630 | 630 | 630 | 630 | 630 | 630 | |
| NS800 | Size per phase | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | ■ |
| | I (A) | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | |
| NS1000 | Size per phase | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | ■ |
| | I (A) | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | |

■ Connection impossible due to the operating-temperature limits of the devices installed in the switchboard.
**Note:** the values indicated above have been validated for Prisma P switchboards.

# Designing connections ⩽ 630 A
## Device connections



## Flexible copper bars with an insulating sheath

### Switchboards that comply with standard IEC 61439-1/2

It is imperative to use the values indicated below that have been validated for the installation of devices in Prisma switchboards.
The parameters determining the size of flexible bars are:
- ■ the environment in which the devices are installed:
- □ position in the enclosure
- □ dimensions of other conductors in the circuit
- □ ambient temperature around the switchboard
- ■ the characteristics of the connected devices:
- □ device heat losses
- □ the type of installation (horizontal or vertical)
- □ the type of device (fixed or withdrawable).

Only the equipment manufacturer with in-depth knowledge on:
- ■ the characteristics of the installed devices
- ■ the configuration of the installation in the enclosure can provide the correct sizes of flexible bars for a given permissible current.

Insulated, flexible bars make for easy, fast and flexible implementation up to 630 A, but higher ratings require sizes that cancel these advantages.
For high Isc values, it is advised to use rigid bars which require fewer supports.

### Insulated flexible bars are better than cables, they offer:

- ■ better insulation temperature withstand (125 °C for bars, 105 °C for cables) and a larger exchange surface for an equivalent size, i.e. a smaller size for a given current
- ■ greater rigidity offering better electrodynamic characteristics for short-circuit currents
- ■ no intermediate parts (lugs) for a direct connection between the device and the busbars therefore less temperature rise and less risk of error
- ■ fast implementation of prefabricated connections already cut to length, formed and drilled.
- ■ length limited to 500 mm.

**Technical characteristics**
- ■ thickness of the insulation: variable depending on the bar size, 2 mm on average
- ■ rated insulation level Ui = 1000 V
- ■ impulse withstand voltage Uimp = 12 kV
- ■ maximum withstand temperature of insulating material = 125 °C.

## Connection

In all cubicles with IP ⩽ 55 :
- ■ the switchboard internal temperature is 60 °C
- ■ the withstand temperature of the insulating material is 125 °C.

If the withstand temperature of the insulation is only 105 °C,
use the next largest size of flexible bar given for standard insulated flexible bars (withstand temperature = 125 °C)
The bar sizes indicated below take into account the derating curves of devices.

### Connection of devices to busbars

| Device | INS-INV125 | INS-INV160 | INS-INV250 | INS-INV320 INS-INV400 | INS-INV500 INS-INV630 | INF250 ISFT250 | INF400 ISFT400 | INF630 ISFT630 |
|---|---|---|---|---|---|---|---|---|
| S (mm) | 20 x 2 | 20 x 2 | 20 x 3 | 32 x 5 | 32 x 6 | 24 x 5 | 32 x 5 | 32 x 8 |

### Connection of distribution blocks to busbars

| Distribution block | Linergy FM 200 A | Linergy FC 3P | Linergy FC 4P |
|---|---|---|---|
| S (mm) | 20 x 3 | 32 x 8 | 32 x 8 |

### Connection of disconnectors, Linergy TB, connections, busbars to busbars

| I max. (60 °C) | 200 A | 250 A | 400 A | 400 A | 480 A | 520 A | 580 A | 660 A |
|---|---|---|---|---|---|---|---|---|
| S (mm) | 20 x 2 | 20 x 3 | 24 x 5 | 24 x 5 | 24 x 6 | 32 x 5 | 32 x 6 | 32 x 8 |

**Note:** The values indicated above have been validated for Prisma P switchboards.

# Designing connections ⩽ 630 A

## Compact circuit breakers NSX100 to NSX630

## Insulated flexible copper bars (1)

Electrical characteristics

## Compact NSX100 to NSX630

### Insulated flexible copper bars (withstand temperature = 125 °C)

We recommend insulated flexible copper bars for Compact NSX connections from 100 to 630 A

| Devices | | Permissible current (A) | | | | | |
|---|---|---|---|---|---|---|---|
| | | Ambient temperature around the switchboard | | | | | |
| | | 25 °C | 30 °C | 35 °C | 40 °C | 45 °C | 50 °C |
| **IP ⩽ 31** | | | | | | | |
| NSX100 TMD-TMG | Size per phase | 20 x 2 | 20 x 2 | 20 x 2 | 20 x 2 | 20 x 2 | 20 x 2 |
| | $I_{nc}$ (A) | 100 | 100 | 100 | 97.5 | 95 | 92.5 |
| NSX125 TMD-TMG | Size per phase | 20 x 2 | 20 x 2 | 20 x 2 | 20 x 2 | 20 x 2 | 20 x 2 |
| | $I_{nc}$ (A) | 125 | 125 | 125 | 122 | 119 | 115 |
| NSX160 (2) TMD-TMG | Size per phase | 20 x 3 | 20 x 3 | 20 x 3 | 20 x 3 | 20 x 3 | 20 x 3 |
| | $I_{nc}$ (A) | 160 | 160 | 160 | 156 | 152 | 148 |
| NSX250 (2) TMD-TMG | Size per phase | 20 x 3 | 20 x 3 | 20 x 3 | 20 x 3 | 20 x 3 | 20 x 3 |
| | $I_{nc}$ (A) | 250 | 244 | 238 | 231 | 225 | 219 |
| NSX100 STR | Size per phase | 20 x 2 | 20 x 2 | 20 x 2 | 20 x 2 | 20 x 2 | 20 x 2 |
| | $I_{nc}$ (A) | 100 | 100 | 100 | 100 | 100 | 100 |
| NSX160 STR | Size per phase | 20 x 3 | 20 x 3 | 20 x 3 | 20 x 3 | 20 x 3 | 20 x 3 |
| | $I_{nc}$ (A) | 160 | 160 | 160 | 160 | 160 | 160 |
| NSX250 (3) STR | Size per phase | 20 x 3 | 20 x 3 | 20 x 3 | 20 x 3 | 20 x 3 | 20 x 3 |
| | $I_{nc}$ (A) | 250 | 245 | 237 | 230 | 225 | 220 |
| NSX400B/F/N/H/S/L fixed | Size per phase | 32 x 5 | 32 x 5 | 32 x 5 | 32 x 5 | 32 x 5 | 32 x 5 |
| | $I_{nc}$ (A) | 400 | 400 | 400 | 390 | 380 | 370 |
| NSX400B/F/N/H/S/L with Vigi NSX400B/F/N/H/S/L ELCB | Size per phase | 32 x 5 | 32 x 5 | 32 x 5 | 32 x 5 | 32 x 5 | 32 x 5 |
| | $I_{nc}$ (A) | 400 | 390 | 380 | 370 | 360 | 350 |
| NSX400B/F/N/H/S/L withdrawable | Size per phase | 32 x 5 | 32 x 5 | 32 x 5 | 32 x 5 | 32 x 5 | 32 x 5 |
| | $I_{nc}$ (A) | 400 | 390 | 380 | 370 | 360 | 350 |
| NSX630B/F/N/H/S/L fixed | Size per phase | 32 x 6 | 32 x 6 | 32 x 6 | 32 x 6 | 32 x 6 | 32 x 6 |
| | $I_{nc}$ (A) | 630 | 615 | 600 | 585 | 570 | 550 |
| NSX630B/F/N/H/S/L with Vigi or withdrawable NSX630B/F/N/H/S/L ELCB | Size per phase | 32 x 8 | 32 x 8 | 32 x 8 | 32 x 8 | 32 x 8 | 32 x 8 |
| | $I_{nc}$ (A) | 570 | 550 | 535 | 520 | 505 | 490 |
| **IP > 31** | | | | | | | |
| NSX100 TMD-TMG | Size per phase | 20 x 2 | 20 x 2 | 20 x 2 | 20 x 2 | 20 x 2 | 20 x 2 |
| | $I_{nc}$ (A) | 100 | 100 | 100 | 97.5 | 95 | 92.5 |
| NSX125 TMD-TMG | Size per phase | 20 x 2 | 20 x 2 | 20 x 2 | 20 x 2 | 20 x 2 | 20 x 2 |
| | $I_{nc}$ (A) | 125 | 125 | 125 | 122 | 119 | 115 |
| NSX160 (2) TMD-TMG | Size per phase | 20 x 3 | 20 x 3 | 20 x 3 | 20 x 3 | 20 x 3 | 20 x 3 |
| | $I_{nc}$ (A) | 160 | 160 | 160 | 156 | 152 | 148 |
| NSX250 (2) TMD-TMG | Size per phase | 20 x 3 | 20 x 3 | 20 x 3 | 20 x 3 | 20 x 3 | 20 x 3 |
| | $I_{nc}$ (A) | 238 | 231 | 225 | 219 | 213 | 207 |
| NSX100 STR | Size per phase | 20 x 2 | 20 x 2 | 20 x 2 | 20 x 2 | 20 x 2 | 20 x 2 |
| | $I_{nc}$ (A) | 100 | 100 | 100 | 100 | 100 | 100 |
| NSX160 STR | Size per phase | 20 x 3 | 20 x 3 | 20 x 3 | 20 x 3 | 20 x 3 | 20 x 3 |
| | $I_{nc}$ (A) | 160 | 160 | 160 | 160 | 160 | 160 |
| NSX250 (3) STR | Size per phase | 20 x 3 | 20 x 3 | 20 x 3 | 20 x 3 | 20 x 3 | 20 x 3 |
| | $I_{nc}$ (A) | 237 | 230 | 225 | 220 | 215 | 210 |
| NSX400B/F/N/H/S/L fixed | Size per phase | 32 x 5 | 32 x 5 | 32 x 5 | 32 x 5 | 32 x 5 | 32 x 5 |
| | $I_{nc}$ (A) | 400 | 400 | 400 | 390 | 380 | 370 |
| Vigi NSX400B/F/N/H/S/L NSX400B/F/N/H/S/L Vigi (ELCB) | Size per phase | 32 x 5 | 32 x 5 | 32 x 5 | 32 x 5 | 32 x 5 | 32 x 5 |
| | $I_{nc}$ (A) | 400 | 390 | 380 | 370 | 360 | 350 |
| NSX400B/F/N/H/S/L withdrawable | Size per phase | 32 x 5 | 32 x 5 | 32 x 5 | 32 x 5 | 32 x 5 | 32 x 5 |
| | $I_{nc}$ (A) | 400 | 390 | 380 | 370 | 360 | 350 |
| NSX630B/F/N/H/S/L fixed | Size per phase | 32 x 6 | 32 x 6 | 32 x 6 | 32 x 6 | 32 x 6 | 32 x 6 |
| | $I_{nc}$ (A) | 600 | 585 | 570 | 550 | 535 | 520 |
| NSX630B/F/N/H/S/L withdrawable Vigi NSX630B/F/N/H/S/L NSX630B/F/N/H/S/L Vigi (ELCB) | Size per phase | 32 x 8 | 32 x 8 | 32 x 8 | 32 x 8 | 32 x 8 | 32 x 8 |
| | $I_{nc}$ (A) | 535 | 520 | 505 | 490 | 475 | 420 |

**Note:** the values indicated above have been validated for Prisma P switchboards.
**(1)** We recommend insulated flexible copper bars instead of copper cables for all NSX100 to NSX630 connection.
**(2)** For a withdrawable NSX160/250 equipped with a Vigi or NSX Vigi 160/250 (ELCB) or an insulation-monitoring module, multiply the In values by 0.9 .
**(3)** For a withdrawable NSX250 equipped with Vigi or NSX Vigi 250 (ELCB) or an insulation-monitoring module, multiply the In values by 0.86.

To connect a Compact NSX250 and NSX Vigi 250 ELCB to a Linergy BW busbars, use a 24 x 5 flexible bar cat. no. **04746**.

# Designing connections ⩽ 630 A
## Compact circuit breakers NSX100 to NSX250
## Copper cable



### Cables: pratical guidelines

This section doesn't concern customer's loads connection (see IEC 61439-1, IEC 60364).
Schneider Electric provides cabling recommendations according to the rating of the circuit breaker.
The size of cables must be selected according to:
- the level of current
- the ambient temperature around the conductors
- the degree of protection for the switchboard.

The tables below take into account the installation conditions for each type of device (permissible temperature at connection terminals, etc.).
They follow the temperature derating values for installed devices in all cubicles with cover panels rated IP ⩽ 55.
- switchboard internal temperature 60 °C
- connections using copper cables.

The withstand temperature of insulating material of cable = 105°C.
The withstand voltage of insulating material of cable ⩾ 1000 V.

## Compact NSX100 to NSX250

### Copper cable, withstand temperature = 105 °C

| Devices | | Permissible current (A) | | | | | |
|---|---|---|---|---|---|---|---|
| | | Ambient temperature around the switchboard | | | | | |
| | | 25 °C | 30 °C | 35 °C | 40 °C | 45 °C | 50 °C |
| **IP ⩽ 31** | | | | | | | |
| NSX100 TMD-TMG | Size per phase | 50 mm² | 50 mm² | 50 mm² | 50 mm² | 50 mm² | 50 mm² |
| | $I_{nc}$ (A) | 100 | 100 | 100 | 97.5 | 95 | 92.5 |
| NSX125 TMD-TMG | Size per phase | 70 mm² | 70 mm² | 70 mm² | 70 mm² | 70 mm² | 70 mm² |
| | $I_{nc}$ (A) | 125 | 125 | 125 | 122 | 119 | 115 |
| NSX160 (1) TMD-TMG | Size per phase | 95 mm² | 95 mm² | 95 mm² | 95 mm² | 95 mm² | 95 mm² |
| | $I_{nc}$ (A) | 160 | 160 | 160 | 156 | 152 | 148 |
| NSX250 (1) TMD-TMG | Size per phase | 120 mm² | 120 mm² | 120 mm² | 120 mm² | 120 mm² | 120 mm² |
| | $I_{nc}$ (A) | 250 | 244 | 238 | 231 | 225 | 219 |
| NSX100 STR | Size per phase | 50 mm² | 50 mm² | 50 mm² | 50 mm² | 50 mm² | 50 mm² |
| | $I_{nc}$ (A) | 100 | 100 | 100 | 100 | 100 | 100 |
| NSX160 STR | Size per phase | 95 mm² | 95 mm² | 95 mm² | 95 mm² | 95 mm² | 95 mm² |
| | $I_{nc}$ (A) | 160 | 160 | 160 | 160 | 160 | 160 |
| NSX250 (2) STR | Size per phase | 120 mm² | 120 mm² | 120 mm² | 120 mm² | 120 mm² | 120 mm² |
| | $I_{nc}$ (A) | 250 | 245 | 237 | 230 | 225 | 220 |
| **IP > 31** | | | | | | | |
| NSX100 TMD-TMG | Size per phase | 50 mm² | 50 mm² | 50 mm² | 50 mm² | 50 mm² | 50 mm² |
| | $I_{nc}$ (A) | 100 | 100 | 100 | 97.5 | 95 | 92.5 |
| NSX125 TMD-TMG | Size per phase | 70 mm² | 70 mm² | 70 mm² | 70 mm² | 70 mm² | 70 mm² |
| | $I_{nc}$ (A) | 125 | 125 | 125 | 122 | 119 | 115 |
| NSX160 (1) TMD-TMG | Size per phase | 95 mm² | 95 mm² | 95 mm² | 95 mm² | 95 mm² | 95 mm² |
| | $I_{nc}$ (A) | 160 | 160 | 160 | 156 | 152 | 148 |
| NSX250 (1) TMD-TMG | Size per phase | 120 mm² | 120 mm² | 120 mm² | 120 mm² | 120 mm² | 120 mm² |
| | $I_{nc}$ (A) | 237 | 230 | 225 | 220 | 215 | 210 |
| NSX100 STR | Size per phase | 50 mm² | 50 mm² | 50 mm² | 50 mm² | 50 mm² | 50 mm² |
| | $I_{nc}$ (A) | 100 | 100 | 100 | 100 | 100 | 100 |
| NSX160 STR | Size per phase | 95 mm² | 95 mm² | 95 mm² | 95 mm² | 95 mm² | 95 mm² |
| | $I_{nc}$ (A) | 160 | 160 | 160 | 160 | 160 | 160 |
| NSX250 (2) STR | Size per phase | 120 mm² | 120 mm² | 120 mm² | 120 mm² | 120 mm² | 120 mm² |
| | $I_{nc}$ (A) | 237 | 230 | 225 | 220 | 215 | 210 |

**(1)** For a withdrawable NSX160/250 equipped with a Vigi or NSX Vigi 160/250 (ELCB) or an insulation-monitoring module, multiply the In values by 0.9.
**(2)** For a withdrawable NSX250 equipped with a Vigi or NSX Vigi 250 (ELCB) or an insulation-monitoring module, multiply the In values by 0.86.
**Note:** the values indicated above have been validated for Prisma P switchboards.
**Note:** Schneider Electric recommends connecting Compact NSX400/630 circuit breakers with insulated flexible bars or rigid bars > *page I-40*.

# Designing connections ⩽ 630 A
## Compact circuit breakers NSXm up to 160
## Copper cable

Electrical characteristics

## Compact NSXm up to 160

### Copper cable, withstand temperature = 105°C

| Devices | | Permissible current (A) | | | | | |
|---|---|---|---|---|---|---|---|
| | | Ambient temperature around the switchboard | | | | | |
| | | 25 °C | 30 °C | 35 °C | 40 °C | 45 °C | 50 °C |
| **IP ⩽ 31** | | | | | | | |
| NSXm100 | Size per phase (mm²) | 50 | 50 | 50 | 50 | 50 | 50 |
| | $I_{nc}$ (A) | 100 | 100 | 96 | 94 | 90 | 87 |
| NSXm125 | Size per phase (mm²) | 70 | 70 | 70 | 70 | 70 | 70 |
| | $I_{nc}$ (A) | 125 | 125 | 120 | 117 | 113 | 109 |
| NSXm160 | Size per phase (mm²) | 95 | 95 | 95 | 95 | 95 | 95 |
| | $I_{nc}$ (A) | 160 | 155 | 149 | 144 | 139 | 133 |
| NSXm 100 ELCB | Size per phase (mm²) | 50 | 50 | 50 | 50 | 50 | 50 |
| | $I_{nc}$ (A) | 100 | 100 | 100 | 100 | 96 | 93 |
| NSXm 160 ELCB | Size per phase (mm²) | 95 | 95 | 95 | 95 | 95 | 95 |
| | $I_{nc}$ (A) | 160 | 155 | 150 | 145 | 140 | 135 |
| **IP > 31** | | | | | | | |
| NSXm100 | Size per phase (mm²) | 50 | 50 | 50 | 50 | 50 | 50 |
| | $I_{nc}$ (A) | 100 | 100 | 96 | 94 | 90 | 87 |
| NSXm125 | Size per phase (mm²) | 70 | 70 | 70 | 70 | 70 | 70 |
| | $I_{nc}$ (A) | 125 | 120 | 117 | 113 | 109 | 104 |
| NSXm160 | Size per phase (mm²) | 95 | 95 | 95 | 95 | 95 | 95 |
| | $I_{nc}$ (A) | 160 | 155 | 149 | 144 | 139 | 133 |
| NSXm 100 ELCB | Size per phase (mm²) | 50 | 50 | 50 | 50 | 50 | 50 |
| | $I_{nc}$ (A) | 100 | 100 | 100 | 100 | 96 | 93 |
| NSXm 160 ELCB | Size per phase (mm²) | 95 | 95 | 95 | 95 | 95 | 95 |
| | $I_{nc}$ (A) | 160 | 155 | 150 | 145 | 140 | 135 |

**Note:** the values indicated above have been validated for Prisma P switchboards.

# Designing cable connections
## Tubular lugs



### Tubular lugs for incoming connection blocks

Maximum size of lugs for connection to the different incoming connection blocks.

| | *Standard Cu lugs* | *Narrow Cu lugs* | *Narrow bimetal lugs* |
|---|---|---|---|
| Incoming connection block for Compact NSX-INS-INV250 supplied via the top or the bottom, cat. no. 04066 et 04067 | 150 mm² | 240 mm² | 185 mm² |
| In-duct incoming connection block for Compact NSX630 supplied via the top or the bottom cat. no. 04076 | 240 mm² | 300 mm² | 300 mm² |

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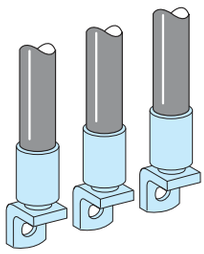


### Narrow bimetal lugs

**Cat. no. selection**

| *Cat. no.* | *Cable size (mm²)* | *Quantity* |
|---|---|---|
| **Lugs for aluminium cable (1)** | | |
| **29504** | 150 | 3 |
| **29505** | 150 | 4 |
| **29506** | 185 | 3 |
| **29507** | 185 | 4 |
| **32504** | 240 | 3 |
| **32505** | 240 | 4 |
| **32506** | 300 | 3 |
| **32507** | 300 | 4 |

### Customer connection of devices ≥ 630 A

Maximum size and number of cables for connection to terminal extension bars (according to busbar drawing supplied) for customer connection of Compact NSX and Masterpact NT/NW and NT devices.

| | *Cable size (mm²)* | *Quantity* |
|---|---|---|
| **Size and number of cables** | | |
| Copper lugs | 300 | 12 |
| Bimetal lugs | 240 | 12 |

I

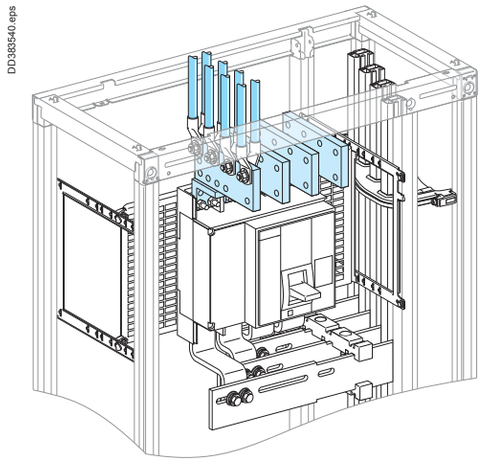
**(1)** Supplied with 2 or 3 interphase barriers.

# Designing customer connections
## Prefabricated connections for Compact NS630b to NS1600



## Compact NS630b to NS1600

Vertical mounting
Front or rear connection
Incoming via top or bottom




Using the data below, it is possible to determine the permissible current for a prefabricated connection between a vertical Compact NS630b/NS1600, fixed or withdrawable, and Linergy busbars depending on the ambient temperature around the switchboard and the IP value.

## Fixed

### Prefabricated connections

| Device and cat. no. | | Permissible current (A) | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Ambient temperature around the switchboard | | | | | | | | | | | |
| | | 25 °C | | 30 °C | | 35 °C | | 40 °C | | 45 °C | | 50 °C | |
| | | IP ⩽ 31 | IP > 31 | IP ⩽ 31 | IP > 31 | IP ⩽ 31 | IP > 31 | IP ⩽ 31 | IP > 31 | IP ⩽ 31 | IP > 31 | IP ⩽ 31 | IP > 31 |
| NS630b | 3P cat. no. **33642** | 630 | 630 | 630 | 630 | 630 | 630 | 630 | 630 | 630 | 630 | 630 | ■ |
| | 4P cat. no. **33643** | | | | | | | | | | | | |
| NS800 | 3P cat. no. **33642** | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | ■ |
| | 4P cat. no. **33643** | | | | | | | | | | | | |
| NS1000 | 3P cat. no. **33642** | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | ■ |
| | 4P cat. no. **33643** | | | | | | | | | | | | |
| NS1250 | 3P réf.**33642 + 33644** | 1250 | 1250 | 1250 | 1250 | 1250 | 1250 | 1250 | 1200 | 1250 | 1150 | 1200 | ■ |
| | 4P réf.**33643 + 33645** | | | | | | | | | | | | |
| NS1600 | 3P réf.**33642 + 33644** | 1600 | 1550 | 1600 | 1500 | 1550 | 1450 | 1500 | 1400 | 1450 | 1350 | 1400 | ■ |
| | 4P réf.**33643 + 33645** | | | | | | | | | | | | |

■ Connection impossible due to the operating-temperature limits of the devices installed in the switchboard.

## Withdrawable

### Prefabricated connections

| Device and cat. no. | | Permissible current (A) | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Ambient temperature around the switchboard | | | | | | | | | | | |
| | | 25 °C | | 30 °C | | 35 °C | | 40 °C | | 45 °C | | 50 °C | |
| | | IP ⩽ 31 | IP > 31 | IP ⩽ 31 | IP > 31 | IP ⩽ 31 | IP > 31 | IP ⩽ 31 | IP > 31 | IP ⩽ 31 | IP > 31 | IP ⩽ 31 | IP > 31 |
| NS630b | 3P cat. no. **33642** | 630 | 630 | 630 | 630 | 630 | 630 | 630 | 630 | 630 | 630 | 630 | ■ |
| | 4P cat. no. **33643** | | | | | | | | | | | | |
| NS800 | 3P cat. no. **33642** | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | ■ |
| | 4P cat. no. **33643** | | | | | | | | | | | | |
| NS1000 | 3P cat. no. **33642** | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | ■ |
| | 4P cat. no. **33643** | | | | | | | | | | | | |
| NS1250 | 3P réf.**33642 + 33644** | 1250 | 1250 | 1250 | 1250 | 1250 | 1250 | 1250 | 1200 | 1250 | 1150 | 1200 | ■ |
| | 4P réf.**33643 + 33645** | | | | | | | | | | | | |
| NS1600 | 3P réf.**33642 + 33644** | 1560 | 1480 | 1520 | 1430 | 1480 | 1380 | 1430 | 1330 | 1380 | 1280 | 1330 | ■ |
| | 4P réf.**33643 + 33645** | | | | | | | | | | | | |

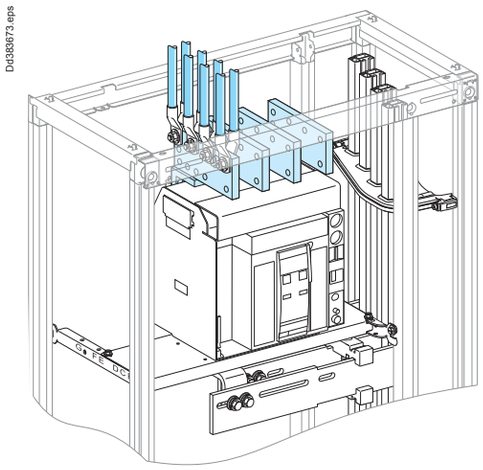
■ Connection impossible due to the operating-temperature limits of the devices installed in the switchboard.

**Note:** the values indicated above have been validated for Prisma P switchboards.

# Designing customer connections
## Prefabricated connections for Masterpact 06-16



### Masterpact NT 06 to 16
Vertical mounting
Front or rear connection
Incoming via top or bottom




Using the data below, it is possible to determine the permissible current for a prefabricated connection between a vertical Masterpact NT06/NT16, fixed or drawout, and Linergy busbars depending on the ambient temperature around the switchboard and the IP value.

## Fixed

### Prefabricated connections

| Device and cat. no. | | Permissible current (A) | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Ambient temperature around the switchboard | | | | | | | | | | | |
| | | 25 °C | | 30 °C | | 35 °C | | 40 °C | | 45 °C | | 50 °C | |
| | | IP ≤ 31 | IP > 31 | IP ≤ 31 | IP > 31 | IP ≤ 31 | IP > 31 | IP ≤ 31 | IP > 31 | IP ≤ 31 | IP > 31 | IP ≤ 31 | IP > 31 |
| NT06 | 3P cat. no. **33642** | 630 | 630 | 630 | 630 | 630 | 630 | 630 | 630 | 630 | 630 | 630 | ■ |
| | 4P cat. no. **33643** | | | | | | | | | | | | |
| NT08 | 3P cat. no. **33642** | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | ■ |
| | 4P cat. no. **33643** | | | | | | | | | | | | |
| NT10 | 3P cat. no. **33642** | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | ■ |
| | 4P cat. no. **33643** | | | | | | | | | | | | |
| NT12 | 3P réf.**33642 + 33644** | 1250 | 1250 | 1250 | 1250 | 1250 | 1250 | 1250 | 1200 | 1250 | 1150 | 1200 | ■ |
| | 4P réf.**33643 + 33645** | | | | | | | | | | | | |
| NT16 | 3P réf.**33642 + 33644** | 1600 | 1570 | 1600 | 1520 | 1570 | 1470 | 1520 | 1420 | 1470 | 1370 | 1420 | ■ |
| | 4P réf.**33643 + 33645** | | | | | | | | | | | | |

■ Connection impossible due to the operating-temperature limits of the devices installed in the switchboard.

## Withdrawable

### Prefabricated connections

| Device and cat. no. | | Permissible current (A) | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Ambient temperature around the switchboard | | | | | | | | | | | |
| | | 25 °C | | 30 °C | | 35 °C | | 40 °C | | 45 °C | | 50 °C | |
| | | IP ≤ 31 | IP > 31 | IP ≤ 31 | IP > 31 | IP ≤ 31 | IP > 31 | IP ≤ 31 | IP > 31 | IP ≤ 31 | IP > 31 | IP ≤ 31 | IP > 31 |
| NT06 | 3P cat. no. **33642** | 630 | 630 | 630 | 630 | 630 | 630 | 630 | 630 | 630 | 630 | 630 | ■ |
| | 4P cat. no. **33643** | | | | | | | | | | | | |
| NT08 | 3P cat. no. **33642** | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | ■ |
| | 4P cat. no. **33643** | | | | | | | | | | | | |
| NT10 | 3P cat. no. **33642** | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | ■ |
| | 4P cat. no. **33643** | | | | | | | | | | | | |
| NT12 | 3P réf.**33642 + 33644** | 1250 | 1250 | 1250 | 1250 | 1250 | 1250 | 1250 | 1200 | 1250 | 1150 | 1200 | ■ |
| | 4P réf.**33643 + 33645** | | | | | | | | | | | | |
| NT16 | 3P réf.**33642 + 33644** | 1560 | 1480 | 1520 | 1430 | 1480 | 1380 | 1430 | 1330 | 1380 | 1280 | 1330 | ■ |
| | 4P réf.**33643 + 33645** | | | | | | | | | | | | |

■ Connection impossible due to the operating-temperature limits of the devices installed in the switchboard.
**Note:** the values indicated above have been validated for Prisma P switchboards.

# Designing customer connections
## Connection transfer assembly for fixed Compact NS630b to NS1000



### Compact NS630b to NS1000, fixed

Horizontal mounting
Front or rear connection
Installation on the left or right

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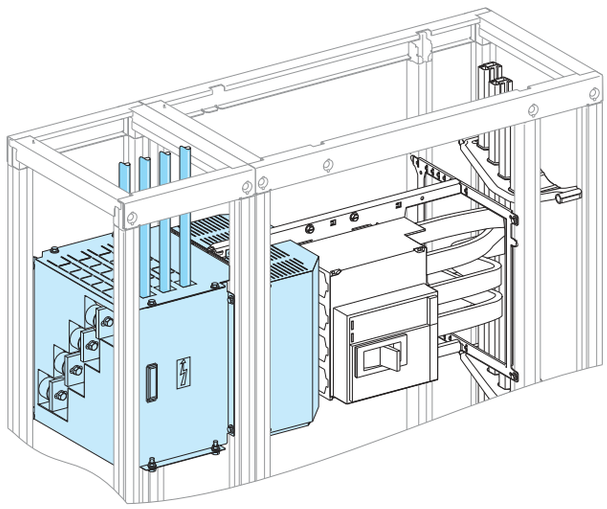


Using the data below, it is possible to determine the permissible current for a prefabricated connection between a horizontal, fixed Compact NS630b/NS1000 and Linergy busbars depending on the ambient temperature around the switchboard and the IP value.

### Connection transfer assemblies

| Device and cat. no. | | Permissible current (A) | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Ambient temperature around the switchboard | | | | | | | | | | | |
| | | 25 °C | | 30 °C | | 35 °C | | 40°C | | 45 °C | | 50 °C | |
| | | IP ⩽ 31 | IP > 31 | IP ⩽ 31 | IP > 31 | IP ⩽ 31 | IP > 31 | IP ⩽ 31 | IP > 31 | IP ⩽ 31 | IP > 31 | IP ⩽ 31 | IP > 31 |
| NS630b | 3P cat. no. **04483** | 630 | 630 | 630 | 630 | 630 | 630 | 630 | 630 | 630 | 630 | 630 | ■ |
| | 4P cat. no. **04484** | | | | | | | | | | | | |
| NS800 | 3P cat. no. **04483** | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | ■ |
| | 4P cat. no. **04484** | | | | | | | | | | | | |
| NS1000 | 3P cat. no. **04483** | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | ■ |
| | 4P cat. no. **04484** | | | | | | | | | | | | |

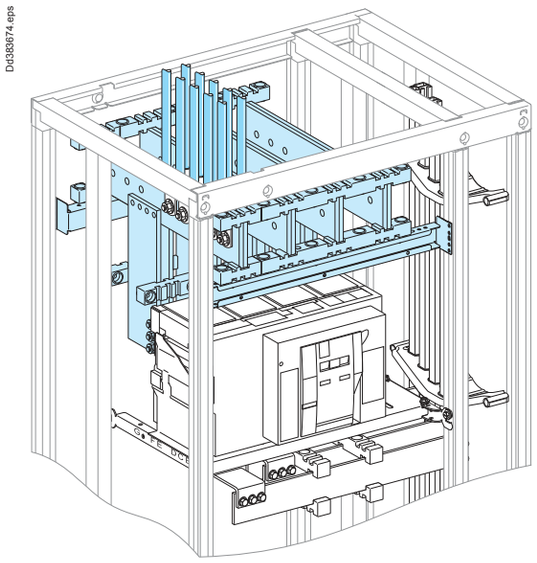
■ Connection impossible due to the operating-temperature limits of the devices installed in the switchboard.
**Note:** the values indicated above have been validated for Prisma P switchboards.

# Designing customer connections
## Fixed Masterpact 08-16



### Masterpact NW 08 to 16 Fixed

Vertical mounting
Front or rear connection
Incoming via top or bottom
Busbar drawings supplied by Schneider Electric




Using the data below, it is possible to determine the size of the copper bars and the maximum permissible currents when making a front or rear customer connection for a vertical, fixed Masterpact NT06/NT16, taking into account the ambient temperature around the switchboard and the IP value.
Connection to be made according to the busbar drawings supplied.
For connection cable cross-sections and quantities > page I-43.

## Customer connection

### Flat bars, 5 mm thick

| Device | | Permissible current (A) | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Ambient temperature around the switchboard | | | | | | | | | | | |
| | | 25 °C | | 30 °C | | 35 °C | | 40°C | | 45 °C | | 50 °C | |
| | | IP ≤ 31 | IP > 31 | IP ≤ 31 | IP > 31 | IP ≤ 31 | IP > 31 | IP ≤ 31 | IP > 31 | IP ≤ 31 | IP > 31 | IP ≤ 31 | IP > 31 |
| NW08 | Size per phase | 2b 60 x 5 | 2b 60 x 5 | 2b 60 x 5 | 2b 60 x 5 | 2b 60 x 5 | 2b 60 x 5 | 2b 60 x 5 | 2b 60 x 5 | 2b 60 x 5 | 2b 60 x 5 | 2b 60 x 5 | ■ |
| | I (A) | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | |
| NW10 | Size per phase | 2b 60 x 5 | 2b 60 x 5 | 2b 60 x 5 | 2b 60 x 5 | 2b 60 x 5 | 2b 60 x 5 | 2b 60 x 5 | 2b 60 x 5 | 2b 60 x 5 | 2b 60 x 5 | 2b 60 x 5 | ■ |
| | I (A) | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | |
| NW12 | Size per phase | 2b 80 x 5 | 2b 80 x 5 | 2b 80 x 5 | 2b 80 x 5 | 2b 80 x 5 | 2b 80 x 5 | 2b 80 x 5 | 2b 80 x 5 | 2b 80 x 5 | 2b 80 x 5 | 2b 80 x 5 | ■ |
| | I (A) | 1250 | 1250 | 1250 | 1250 | 1250 | 1250 | 1250 | 1250 | 1250 | 1250 | 1250 | |
| NW16 | Size per phase | 2b 80 x 5 | 2b 80 x 5 | 2b 80 x 5 | 2b 80 x 5 | 2b 80 x 5 | 2b 80 x 5 | 2b 80 x 5 | 2b 80 x 5 | 2b 80 x 5 | 2b 80 x 5 | 2b 80 x 5 | ■ |
| | I (A) | 1600 | 1600 | 1600 | 1570 | 1600 | 1520 | 1570 | 1470 | 1520 | 1420 | 1470 | |

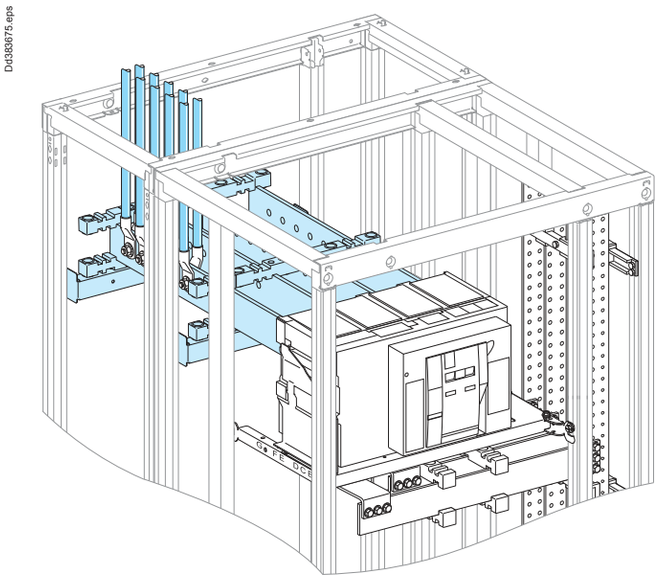
■ Connection impossible due to the operating-temperature limits of the devices installed in the switchboard.
**Note:** the values indicated above have been validated for Prisma P switchboards.

# Designing customer connections
## Fixed Masterpact 08-40



### Masterpact NW 08 to 40 Fixed

Vertical mounting
Front or rear connection
Incoming via top or bottom
Busbar drawings supplied by Schneider Electric




## Customer connection

### Flat bars, 10 mm thick

| Device | | Permissible current (A) | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Ambient temperature around the switchboard | | | | | | | | | | | |
| | | 25 °C | | 30 °C | | 35 °C | | 40°C | | 45 °C | | 50 °C | |
| | | IP ⩽ 31 | IP > 31 | IP ⩽ 31 | IP > 31 | IP ⩽ 31 | IP > 31 | IP ⩽ 31 | IP > 31 | IP ⩽ 31 | IP > 31 | IP ⩽ 31 | IP > 31 |
| NW08 | Size per phase | 1b 60 x 10 | 1b 60 x10 | 1b 60 x 10 | 1b 60 x10 | 1b 60 x 10 | 1b 60 x10 | 1b 60 x 10 | 1b 60 x10 | 1b 60 x 10 | 1b 60 x10 | 1b 60 x 10 | ■ |
| | I (A) | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | |
| NW10 | Size per phase | 1b 60 x 10 | 1b 60 x10 | 1b 60 x 10 | 1b 60 x10 | 1b 60 x 10 | 1b 60 x10 | 1b 60 x 10 | 1b 60 x10 | 1b 60 x 10 | 1b 60 x10 | 1b 60 x 10 | ■ |
| | I (A) | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | |
| NW12 | Size per phase | 1b 60 x 10 | 1b 60 x10 | 1b 60 x 10 | 1b 60 x10 | 1b 60 x 10 | 1b 60 x10 | 1b 60 x 10 | 1b 60 x10 | 1b 60 x 10 | 1b 60 x10 | 1b 60 x 10 | ■ |
| | I (A) | 1250 | 1250 | 1250 | 1250 | 1250 | 1250 | 1250 | 1250 | 1250 | 1250 | 1250 | |
| NW16 | Size per phase | 1b 80 x 10 | 1b 80 x 10 | 1b 80 x 10 | 1b 80 x 10 | 1b 80 x 10 | 1b 80 x 10 | 1b 80 x 10 | 1b 80 x 10 | 1b 80 x 10 | 1b 80 x 10 | 1b 80 x 10 | ■ |
| | I (A) | 1600 | 1600 | 1600 | 1570 | 1600 | 1520 | 1570 | 1470 | 1520 | 1420 | 1470 | |
| NW20 | Size per phase | 2b 80 x 10 | 2b 80 x 10 | 2b 80 x 10 | 2b 80 x 10 | 2b 80 x 10 | 2b 80 x 10 | 2b 80 x 10 | 2b 80 x 10 | 2b 80 x 10 | 2b 80 x 10 | 2b 80 x 10 | ■ |
| | I (A) | 2000 | 2000 | 2000 | 2000 | 2000 | 2000 | 2000 | 1950 | 2000 | 1900 | 1950 | |
| NW25 | Size per phase | 2b100 x 10 | 2b100 x 10 | 2b100 x 10 | 2b100 x 10 | 2b100 x 10 | 2b100 x 10 | 2b100 x 10 | 2b100 x 10 | 2b100 x 10 | 2b100 x 10 | 2b100 x 10 | ■ |
| | I (A) | 2500 | 2500 | 2500 | 2500 | 2500 | 2460 | 2500 | 2380 | 2500 | 2300 | 2460 | |
| NW32 | Size per phase | 2b120 x 10 | 2b120 x 10 | 2b120 x 10 | 2b120 x 10 | 2b120 x 10 | 2b120 x 10 | 2b120 x 10 | 2b120 x 10 | 2b120 x 10 | 2b120 x 10 | 2b120 x 10 | ■ |
| | I (A) | 3200 | 3000 | 3170 | 2910 | 3080 | 2820 | 3000 | 2730 | 2910 | 2630 | 2820 | |
| NW40 | Size per phase | (2) | (2) | (2) | (2) | (2) | (2) | (2) | (2) | (2) | (2) | (2) | ■ |
| | I (A) (1) | | | | | | | | | | | | |

■ Connection impossible due to the operating-temperature limits of the devices installed in the switchboard.

### Canalis connection

For Canalis connections, apply the appropriate derating coefficient K.

| Device | NW08 | NW10 | NW12 | NW16 | NW20 | NW25 | NW32 |
|---|---|---|---|---|---|---|---|
| Derating coefficient K | 1 | 1 | 1 | 0,98 | 0,98 | 0,97 | 0,97 |

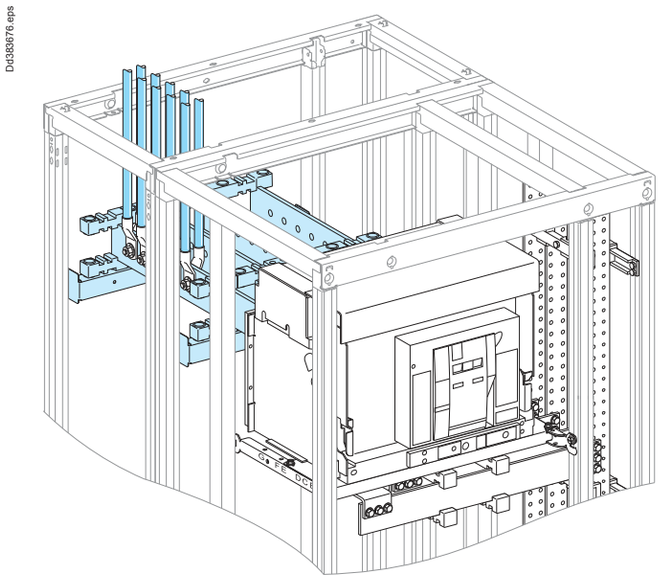
(1) For NW40 IP >31, performances realized with forced ventilation.
(2) Contact Schneider Electric for 4000 A dedicated cubicle.
**Note:** the values indicated above have been validated for Prisma P switchboards.

# Designing customer connections
## Drawout Masterpact 08-16



### Masterpact NW 08 to 16 Drawout

Vertical mounting
Front or rear connection
Incoming via top or bottom
Busbar drawings supplied by Schneider Electric




Using the data below, it is possible to determine the size of the copper bars and the maximum permissible currents when making a front or rear customer connections to busbars for a vertical, drawout Masterpact NT08/NT16, taking into account the ambient temperature around the switchboard and the IP value.
Connection to be made according to the busbar drawings supplied.
For connection cable cross-sections and quantities > page I-43.

## Customer connection

### Flat bars, 5 mm thick

| Device | | Permissible current (A) | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Ambient temperature around the switchboard | | | | | | | | | | | |
| | | 25 °C | | 30 °C | | 35 °C | | 40 °C | | 45 °C | | 50 °C | |
| | | IP ≤ 31 | IP > 31 | IP ≤ 31 | IP > 31 | IP ≤ 31 | IP > 31 | IP ≤ 31 | IP > 31 | IP ≤ 31 | IP > 31 | IP ≤ 31 | IP > 31 |
| NW08 | Size per phase | 2b 60 x 5 | 2b 60 x 5 | 2b 60 x 5 | 2b 60 x 5 | 2b 60 x 5 | 2b 60 x 5 | 2b 60 x 5 | 2b 60 x 5 | 2b 60 x 5 | 2b 60 x 5 | 2b 60 x 5 | ■ |
| | I (A) | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | |
| NW10 | Size per phase | 2b 60 x 5 | 2b 60 x 5 | 2b 60 x 5 | 2b 60 x 5 | 2b 60 x 5 | 2b 60 x 5 | 2b 60 x 5 | 2b 60 x 5 | 2b 60 x 5 | 2b 60 x 5 | 2b 60 x 5 | ■ |
| | I (A) | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | |
| NW12 | Size per phase | 2b 80 x 5 | 2b 80 x 5 | 2b 80 x 5 | 2b 80 x 5 | 2b 80 x 5 | 2b 80 x 5 | 2b 80 x 5 | 2b 80 x 5 | 2b 80 x 5 | 2b 80 x 5 | 2b 80 x 5 | ■ |
| | I (A) | 1250 | 1250 | 1250 | 1250 | 1250 | 1230 | 1250 | 1200 | 1230 | 1160 | 1200 | |
| NW16 | Size per phase | 2b 80 x 5 | 2b 80 x 5 | 2b 80 x 5 | 2b 80 x 5 | 2b 80 x 5 | 2b 80 x 5 | 2b 80 x 5 | 2b 80 x 5 | 2b 80 x 5 | 2b 80 x 5 | 2b 80 x 5 | ■ |
| | I (A) | 1560 | 1480 | 1520 | 1430 | 1480 | 1380 | 1430 | 1330 | 1380 | 1280 | 1330 | |

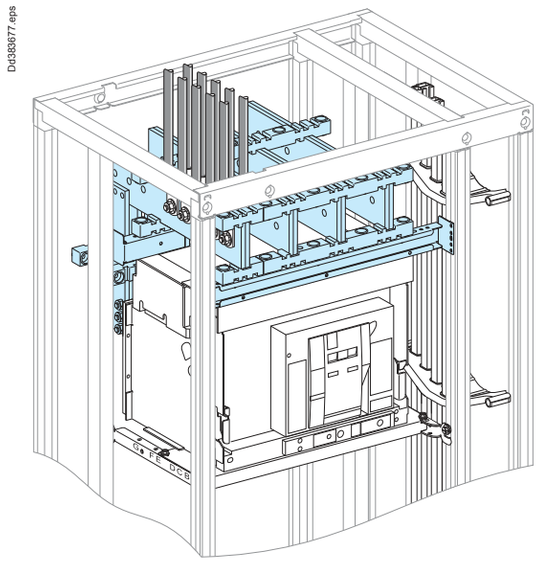
■ Connection impossible due to the operating-temperature limits of the devices installed in the switchboard.
**Note:** the values indicated above have been validated for Prisma P switchboards.

# Designing customer connections
## Masterpact 08-40 withdrawable



### Masterpact NW 08 to 40 Drawout

Vertical mounting
Front or rear connection
Incoming via top or bottom
Busbar drawings supplied by Schneider Electric




## Customer connection

### Flat bars, 10 mm thick

| Device | | Permissible current (A) | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Ambient temperature around the switchboard | | | | | | | | | | | |
| | | 25 °C | | 30 °C | | 35 °C | | 40 °C | | 45 °C | | 50 °C | |
| | | IP ⩽ 31 | IP > 31 | IP ⩽ 31 | IP > 31 | IP ⩽ 31 | IP > 31 | IP ⩽ 31 | IP > 31 | IP ⩽ 31 | IP > 31 | IP ⩽ 31 | IP > 31 |
| NW08 | Size per phase | 1b 60 x 10 | 1b 60 x 10 | 1b 60 x 10 | 1b 60 x 10 | 1b 60 x 10 | 1b 60 x 10 | 1b 60 x 10 | 1b 60 x 10 | 1b 60 x 10 | 1b 60 x 10 | 1b 60 x 10 | ■ |
| | I (A) | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | |
| NW10 | Size per phase | 1b 60 x 10 | 1b 60 x 10 | 1b 60 x 10 | 1b 60 x 10 | 1b 60 x 10 | 1b 60 x 10 | 1b 60 x 10 | 1b 60 x 10 | 1b 60 x 10 | 1b 60 x 10 | 1b 60 x 10 | ■ |
| | I (A) | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | |
| NW12 | Size per phase | 1b 60 x 10 | 1b 60 x 10 | 1b 60 x 10 | 1b 60 x 10 | 1b 60 x 10 | 1b 60 x 10 | 1b 60 x 10 | 1b 60 x 10 | 1b 60 x 10 | 1b 60 x 10 | 1b 60 x 10 | ■ |
| | I (A) | 1250 | 1250 | 1250 | 1210 | 1250 | 1180 | 1210 | 1140 | 1180 | 1100 | 1140 | |
| NW16 | Size per phase | 1b 80 x 10 | 1b 80 x 10 | 1b 80 x 10 | 1b 80 x 10 | 1b 80 x 10 | 1b 80 x 10 | 1b 80 x 10 | 1b 80 x 10 | 1b 80 x 10 | 1b 80 x 10 | 1b 80 x 10 | ■ |
| | I (A) | 1560 | 1480 | 1520 | 1430 | 1480 | 1380 | 1430 | 1330 | 1380 | 1280 | 1330 | |
| NW20 | Size per phase | 2b 80 x 10 | 2b 80 x 10 | 2b 80 x 10 | 2b 80 x 10 | 2b 80 x 10 | 2b 80 x 10 | 2b 80 x 10 | 2b 80 x 10 | 2b 80 x 10 | 2b 80 x 10 | 2b 80 x 10 | ■ |
| | I (A) | 2000 | 2000 | 2000 | 1950 | 2000 | 1900 | 1950 | 1830 | 1900 | 1760 | 1830 | |
| NW25 | Size per phase | 2b100 x 10 | 2b100 x 10 | 2b100 x 10 | 2b100 x 10 | 2b100 x 10 | 2b100 x 10 | 2b100 x 10 | 2b100 x 10 | 2b100 x 10 | 2b100 x 10 | 2b100 x 10 | ■ |
| | I (A) | 2470 | 2280 | 2410 | 2210 | 2350 | 2140 | 2280 | 2070 | 2210 | 2000 | 2140 | |
| NW32 | Size per phase | 2b120 x 10 | 2b120 x 10 | 2b120 x 10 | 2b120 x 10 | 2b120 x 10 | 2b120 x 10 | 2b120 x 10 | 2b120 x 10 | 2b120 x 10 | 2b120 x 10 | 2b120 x 10 | ■ |
| | I (A) | 2960 | 2730 | 2890 | 2630 | 2820 | 2530 | 2730 | 2450 | 2630 | 2370 | 2530 | |
| NW40 | Size per phase | (2) | (2) | (2) | (2) | (2) | (2) | (2) | (2) | (2) | (2) | (2) | ■ |
| | I (A) (1) | | | | | | | | | | | | |

■ Connection impossible due to the operating-temperature limits of the devices installed in the switchboard.

### Canalis connection

For Canalis connections, apply the appropriate derating coefficient K.

| Device | NW08 | NW10 | NW12 | NW16 | NW20 | NW25 | NW32 |
|---|---|---|---|---|---|---|---|
| **Derating coefficient K** | 1 | 1 | 1 | 0,98 | 0,98 | 0,97 | 0,97 |

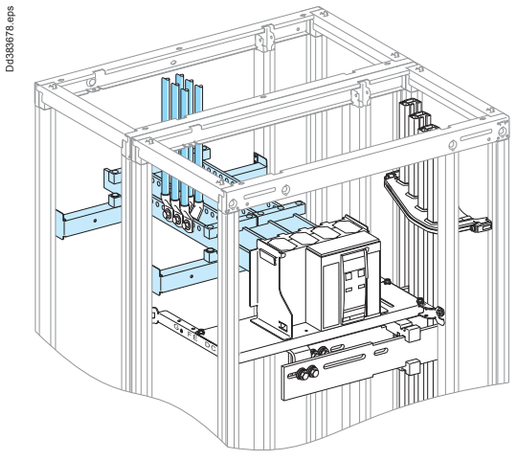
**(1)** For NW40 IP >31, performances realized with forced ventilation.
**(2)** Contact Schneider Electric for 4000 A dedicated cubicle.
**Note:** the values indicated above have been validated for Prisma P switchboards.

# Designing customer connections
## Fixed Masterpact 06-16



### Masterpact NT 06 to 16 Fixed

Rear connection
Incoming via top or bottom
Busbar drawings supplied by Schneider Electric




Using the data below, it is possible to determine the size of the copper bars and the maximum permissible currents when making a front or rear customer connections to busbars for a vertical, fixed Masterpact NT06/NT16, taking into account the ambient temperature around the switchboard and the IP value.
Connection to be made according to the busbar drawings supplied.
For connection cable cross-sections and quantities > page I-43.

## Customer connection

### Flat bars, 5 mm thick

| Device | | Permissible current (A) | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Ambient temperature around the switchboard | | | | | | | | | | | |
| | | 25 °C | | 30 °C | | 35 °C | | 40°C | | 45 °C | | 50 °C | |
| | | IP ≤ 31 | IP > 31 | IP ≤ 31 | IP > 31 | IP ≤ 31 | IP > 31 | IP ≤ 31 | IP > 31 | IP ≤ 31 | IP > 31 | IP ≤ 31 | IP > 31 |
| NT06 | Size per phase | 1b 60 x 5 | 1b 60 x 5 | 1b 60 x 5 | 1b 60 x 5 | 1b 60 x 5 | 1b 60 x 5 | 1b 60 x 5 | 1b 60 x 5 | 1b 60 x 5 | 1b 60 x 5 | 1b 60 x 5 | ■ |
| | I (A) | 630 | 630 | 630 | 630 | 630 | 630 | 630 | 630 | 630 | 630 | 630 | |
| NT08 | Size per phase | 1b 80 x 5 | 1b 80 x 5 | 1b 80 x 5 | 1b 80 x 5 | 1b 80 x 5 | 1b 80 x 5 | 1b 80 x 5 | 1b 80 x 5 | 1b 80 x 5 | 1b 80 x 5 | 1b 80 x 5 | ■ |
| | I (A) | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | |
| NT10 | Size per phase | 2b 50 x 5 | 2b 50 x 5 | 2b 50 x 5 | 2b 50 x 5 | 2b 50 x 5 | 2b 50 x 5 | 2b 50 x 5 | 2b 50 x 5 | 2b 50 x 5 | 2b 50 x 5 | 2b 50 x 5 | ■ |
| | I (A) | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | |
| NT12 | Size per phase | 2b 80 x 5 | 2b 80 x 5 | 2b 80 x 5 | 2b 80 x 5 | 2b 80 x 5 | 2b 80 x 5 | 2b 80 x 5 | 2b 80 x 5 | 2b 80 x 5 | 2b 80 x 5 | 2b 80 x 5 | ■ |
| | I (A) | 1250 | 1250 | 1250 | 1250 | 1250 | 1250 | 1250 | 1250 | 1250 | 1200 | 1250 | |
| NT16 | Size per phase | 2b 100 x 5 | 2b 100 x 5 | 2b 100 x 5 | 2b 100 x 5 | 2b 100 x 5 | 2b 100 x 5 | 2b 100 x 5 | 2b 100 x 5 | 2b 100 x 5 | 2b 100 x 5 | 2b 100 x 5 | ■ |
| | I (A) | 1600 | 1570 | 1600 | 1520 | 1570 | 1470 | 1520 | 1420 | 1470 | 1370 | 1420 | |

■ Connection impossible due to the operating-temperature limits of the devices installed in the switchboard.

## Customer connection

### Flat bars, 10 mm thick

| Device | | Permissible current (A) | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Ambient temperature around the switchboard | | | | | | | | | | | |
| | | 25 °C | | 30 °C | | 35 °C | | 40°C | | 45 °C | | 50 °C | |
| | | IP ≤ 31 | IP > 31 | IP ≤ 31 | IP > 31 | IP ≤ 31 | IP > 31 | IP ≤ 31 | IP > 31 | IP ≤ 31 | IP > 31 | IP ≤ 31 | IP > 31 |
| NT06 | Size per phase | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | ■ |
| | I (A) | 630 | 630 | 630 | 630 | 630 | 630 | 630 | 630 | 630 | 630 | 630 | |
| NT08 | Size per phase | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | ■ |
| | I (A) | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | |
| NT10 | Size per phase | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | ■ |
| | I (A) | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | |
| NT12 | Size per phase | 1b 80 x 10 | 1b 80 x 10 | 1b 80 x 10 | 1b 80 x 10 | 1b 80 x 10 | 1b 80 x 10 | 1b 80 x 10 | 1b 80 x 10 | 1b 80 x 10 | 1b 80 x 10 | 1b 80 x 10 | ■ |
| | I (A) | 1250 | 1250 | 1250 | 1250 | 1250 | 1250 | 1250 | 1250 | 1250 | 1180 | 1230 | |
| NT16 | Size per phase | 1b100 x 10 | 1b100 x 10 | 1b100 x 10 | 1b100 x 10 | 1b100 x 10 | 1b100 x 10 | 1b100 x 10 | 1b100 x 10 | 1b100 x 10 | 1b100 x 10 | 1b100 x 10 | ■ |
| | I (A) | 1600 | 1570 | 1600 | 1520 | 1570 | 1470 | 1520 | 1420 | 1470 | 1370 | 1420 | |

■ Connection impossible due to the operating-temperature limits of the devices installed in the switchboard.

### Canalis connection

For Canalis connections, apply the appropriate derating coefficient K.

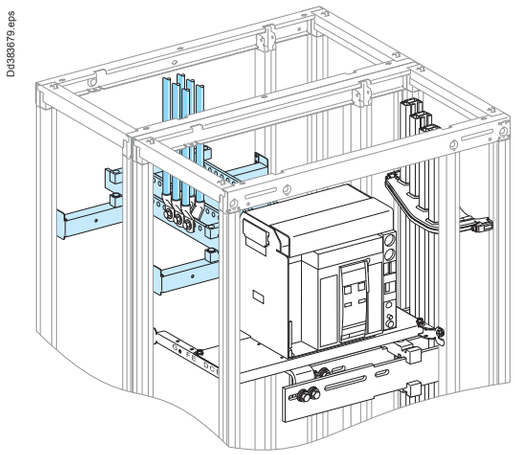
| Device | NT06b | NT08 | NT10 | NT12 | NT16 |
|---|---|---|---|---|---|
| Derating coefficient K | 1 | 1 | 1 | 1 | 0,98 |

**Note:** the values indicated above have been validated for Prisma P switchboards.

# Designing customer connections
## Drawout Masterpact 06-16



## Masterpact NT 06 to 16
Rear connection
Incoming via top or bottom
Busbar drawings supplied by
Schneider Electric




Using the data below, it is possible to determine the size of the copper bars and the maximum permissible currents when making a customer connections to busbars for a vertical, drawout Masterpact NT06/NT16, taking into account the ambient temperature around the switchboard and the IP value.
Connection to be made according to the busbar drawings supplied.
For connection cable cross-sections and quantities > page I-43.

## Customer connection
### Flat bars, 5 mm thick

| Device | | Permissible current (A) | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Ambient temperature around the switchboard | | | | | | | | | | | |
| | | 25 °C | | 30 °C | | 35 °C | | 40°C | | 45 °C | | 50 °C | |
| | | IP ⩽ 31 | IP > 31 | IP ⩽ 31 | IP > 31 | IP ⩽ 31 | IP > 31 | IP ⩽ 31 | IP > 31 | IP ⩽ 31 | IP > 31 | IP ⩽ 31 | IP > 31 |
| NT06 | Size per phase | 1b 60 x 5 | 1b 60 x 5 | 1b 60 x 5 | 1b 60 x 5 | 1b 60 x 5 | 1b 60 x 5 | 1b 60 x 5 | 1b 60 x 5 | 1b 60 x 5 | 1b 60 x 5 | 1b 60 x 5 | ■ |
| | I (A) | 630 | 630 | 630 | 630 | 630 | 630 | 630 | 630 | 630 | 630 | 630 | |
| NT08 | Size per phase | 1b 80 x 5 | 1b 80 x 5 | 1b 80 x 5 | 1b 80 x 5 | 1b 80 x 5 | 1b 80 x 5 | 1b 80 x 5 | 1b 80 x 5 | 1b 80 x 5 | 1b 80 x 5 | 1b 80 x 5 | ■ |
| | I (A) | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | |
| NT10 | Size per phase | 2b 50 x 5 | 2b 50 x 5 | 2b 50 x 5 | 2b 50 x 5 | 2b 50 x 5 | 2b 50 x 5 | 2b 50 x 5 | 2b 50 x 5 | 2b 50 x 5 | 2b 50 x 5 | 2b 50 x 5 | ■ |
| | I (A) | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 960 | 1000 | |
| NT12 | Size per phase | 2b 80 x 5 | 2b 80 x 5 | 2b 80 x 5 | 2b 80 x 5 | 2b 80 x 5 | 2b 80 x 5 | 2b 80 x 5 | 2b 80 x 5 | 2b 80 x 5 | 2b 80 x 5 | 2b 80 x 5 | ■ |
| | I (A) | 1250 | 1250 | 1250 | 1250 | 1250 | 1230 | 1250 | 1180 | 1230 | 1130 | 1180 | |
| NT16 | Size per phase | 2b 100 x 5 | 2b 100 x 5 | 2b 100 x 5 | 2b 100 x 5 | 2b 100 x 5 | 2b 100 x 5 | 2b 100 x 5 | 2b 100 x 5 | 2b 100 x 5 | 2b 100 x 5 | 2b 100 x 5 | ■ |
| | I (A) | 1560 | 1430 | 1520 | 1430 | 1480 | 1380 | 1430 | 1330 | 1380 | 1280 | 1330 | |

■ Connection impossible due to the operating-temperature limits of the devices installed in the switchboard.

## Customer connection
### Flat bars, 10 mm thick

| Device | | Permissible current (A) | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Ambient temperature around the switchboard | | | | | | | | | | | |
| | | 25 °C | | 30 °C | | 35 °C | | 40°C | | 45 °C | | 50 °C | |
| | | IP ⩽ 31 | IP > 31 | IP ⩽ 31 | IP > 31 | IP ⩽ 31 | IP > 31 | IP ⩽ 31 | IP > 31 | IP ⩽ 31 | IP > 31 | IP ⩽ 31 | IP > 31 |
| NT06 | Size per phase | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | ■ |
| | I (A) | 630 | 630 | 630 | 630 | 630 | 630 | 630 | 630 | 630 | 630 | 630 | |
| NT08 | Size per phase | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | ■ |
| | I (A) | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | |
| NT10 | Size per phase | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | ■ |
| | I (A) | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 960 | 1000 | |
| NT12 | Size per phase | 1b 80 x 10 | 1b 80 x 10 | 1b 80 x 10 | 1b 80 x 10 | 1b 80 x 10 | 1b 80 x 10 | 1b 80 x 10 | 1b 80 x 10 | 1b 80 x 10 | 1b 80 x 10 | 1b 80 x 10 | ■ |
| | I (A) | 1250 | 1250 | 1250 | 1250 | 1250 | 1210 | 1250 | 1160 | 1210 | 1110 | 1160 | |
| NT16 | Size per phase | 1b100 x 10 | 1b100 x 10 | 1b100 x 10 | 1b100 x 10 | 1b100 x 10 | 1b100 x 10 | 1b100 x 10 | 1b100 x 10 | 1b100 x 10 | 1b100 x 10 | 1b100 x 10 | ■ |
| | I (A) | 1560 | 1430 | 1520 | 1430 | 1480 | 1380 | 1430 | 1330 | 1380 | 1280 | 1330 | |

■ Connection impossible due to the operating-temperature limits of the devices installed in the switchboard.

## Canalis connection
For Canalis connections, apply the appropriate derating coefficient K.

| Device | NT06 | NT08 | NT10 | NT12 | NT16 |
|---|---|---|---|---|---|
| **Derating coefficient K** | 1 | 1 | 1 | 1 | 0,98 |

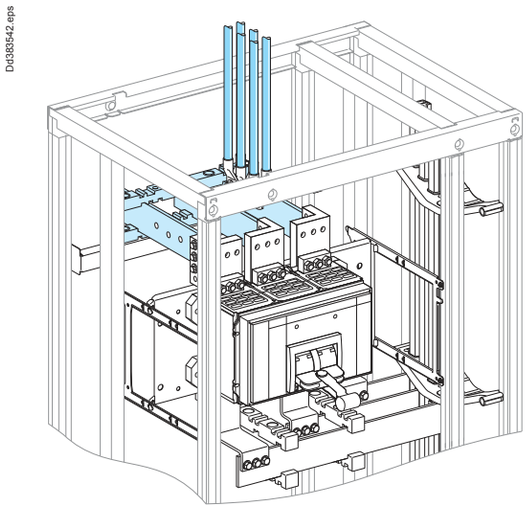
**Note:** the values indicated above have been validated for Prisma P switchboards.

# Designing customer connections
## Fixed Compact NS1600b to NS3200



## Compact NS1600b/3200 fixed

Front or rear connection
Incoming via top or bottom
Busbar drawings supplied by
Schneider Electric




Using the data below, it is possible to determine the size of the copper bars and the maximum permissible currents when making a front or rear customer connections to busbars for a vertical, fixed Compact NS1600b/NS3200, taking into account the ambient temperature around the switchboard and the IP value.
Connection to be made according to the busbar drawings supplied.
For connection cable cross-sections and quantities > page I-43.

## Customer connection

### Flat bars, 10 mm thick

| Device | | Permissible current (A) | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Ambient temperature around the switchboard | | | | | | | | | | | |
| | | 25 °C | | 30 °C | | 35 °C | | 40°C | | 45 °C | | 50 °C | |
| | | IP ≤ 31 | IP > 31 | IP ≤ 31 | IP > 31 | IP ≤ 31 | IP > 31 | IP ≤ 31 | IP > 31 | IP ≤ 31 | IP > 31 | IP ≤ 31 | IP>31 |
| NS1600b | Size per phase | 1b 80 x 10 | 1b 80 x 10 | 1b 80 x 10 | 1b 80 x 10 | 1b 80 x 10 | 1b 80 x 10 | 1b 80 x 10 | 1b 80 x 10 | 1b 80 x 10 | 1b 80 x 10 | 1b 80 x 10 | ■ |
| | I (A) | 1560 | 1480 | 1520 | 1430 | 1480 | 1380 | 1430 | 1330 | 1380 | 1280 | 1330 | |
| NS2000 | Size per phase | 2b 80 x 10 | 2b 80 x 10 | 2b 80 x 10 | 2b 80 x 10 | 2b 80 x 10 | 2b 80 x 10 | 2b 80 x 10 | 2b 80 x 10 | 2b 80 x 10 | 2b 80 x 10 | 2b 80 x 10 | ■ |
| | I (A) | 2000 | 2000 | 2000 | 1950 | 2000 | 1900 | 1950 | 1830 | 1900 | 1760 | 1830 | |
| NS2500 | Size per phase | 2b100 x 10 | 2b100 x 10 | 2b100 x 10 | 2b100 x 10 | 2b100 x 10 | 2b100 x 10 | 2b100 x 10 | 2b100 x 10 | 2b100 x 10 | 2b100 x 10 | 2b100 x 10 | ■ |
| | I (A) | 2470 | 2280 | 2410 | 2210 | 2350 | 2140 | 2280 | 2070 | 2210 | 2000 | 2140 | |
| NS3200 | Size per phase | 2b120 x 10 | 2b120 x 10 | 2b120 x 10 | 2b120 x 10 | 2b120 x 10 | 2b120 x 10 | 2b120 x 10 | 2b120 x 10 | 2b120 x 10 | 2b120 x 10 | 2b120 x 10 | ■ |
| | I (A) | 2860 | 2630 | 2790 | 2530 | 2720 | 2430 | 2630 | 2350 | 2530 | 2270 | 2430 | |

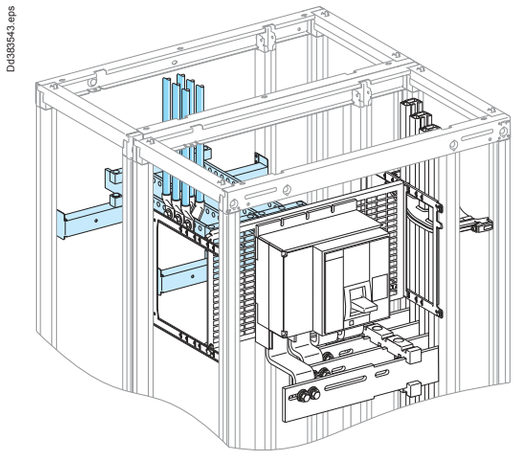
■ Connection impossible due to the operating-temperature limits of the devices installed in the switchboard.
**Note:** the values indicated above have been validated for Prisma P switchboards.

# Designing customer connections
## Fixed Compact NS630b to NS1600



## Compact NS630b to NS1600 Fixed

Rear connection
Incoming via top or bottom
Busbar drawings supplied by Schneider Electric




Using the data below, it is possible to determine the size of the copper bars and the maximum permissible currents when making a rear customer connection for a vertical, fixed Compact NS630b/NS1600, taking into account the ambient temperature around the switchboard and the IP value.
Connection to be made according to the busbar drawings supplied.
For connection cable cross-sections and quantities > page I-43.

## Customer connection

### Flat bars, 5 mm thick

| Device | | Permissible current (A) | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Ambient temperature around the switchboard | | | | | | | | | | | |
| | | 25 °C | | 30 °C | | 35 °C | | 40°C | | 45 °C | | 50 °C | |
| | | IP ⩽ 31 | IP > 31 | IP ⩽ 31 | IP > 31 | IP ⩽ 31 | IP > 31 | IP ⩽ 31 | IP > 31 | IP ⩽ 31 | IP > 31 | IP ⩽ 31 | IP > 31 |
| NS630b | Size per phase | 1b 60 x 5 | 1b 60 x 5 | 1b 60 x 5 | 1b 60 x 5 | 1b 60 x 5 | 1b 60 x 5 | 1b 60 x 5 | 1b 60 x 5 | 1b 60 x 5 | 1b 60 x 5 | 1b 60 x 5 | ■ |
| | I (A) | 630 | 630 | 630 | 630 | 630 | 630 | 630 | 630 | 630 | 630 | 630 | |
| NS800 | Size per phase | 1b 80 x 5 | 1b 80 x 5 | 1b 80 x 5 | 1b 80 x 5 | 1b 80 x 5 | 1b 80 x 5 | 1b 80 x 5 | 1b 80 x 5 | 1b 80 x 5 | 1b 80 x 5 | 1b 80 x 5 | ■ |
| | I (A) | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | |
| NS1000 | Size per phase | 2b 50 x 5 | 2b 50 x 5 | 2b 50 x 5 | 2b 50 x 5 | 2b 50 x 5 | 2b 50 x 5 | 2b 50 x 5 | 2b 50 x 5 | 2b 50 x 5 | 2b 50 x 5 | 2b 50 x 5 | ■ |
| | I (A) | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 970 | 1000 | |
| NS1250 | Size per phase | 2b 80 x 5 | 2b 80 x 5 | 2b 80 x 5 | 2b 80 x 5 | 2b 80 x 5 | 2b 80 x 5 | 2b 80 x 5 | 2b 80 x 5 | 2b 80 x 5 | 2b 80 x 5 | 2b 80 x 5 | ■ |
| | I (A) | 1250 | 1250 | 1250 | 1250 | 1250 | 1250 | 1250 | 1200 | 1250 | 1150 | 1200 | |
| NS1600 | Size per phase | 2b 100 x 5 | 2b 100 x 5 | 2b 100 x 5 | 2b 100 x 5 | 2b 100 x 5 | 2b 100 x 5 | 2b 100 x 5 | 2b 100 x 5 | 2b 100 x 5 | 2b 100 x 5 | 2b 100 x 5 | ■ |
| | I (A) | 1600 | 1550 | 1600 | 1500 | 1550 | 1450 | 1500 | 1400 | 1450 | 1350 | 1400 | |

■ Connection impossible due to the operating-temperature limits of the devices installed in the switchboard.

## Customer connection

### Flat bars, 10 mm thick

| Device | | Permissible current (A) | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Ambient temperature around the switchboard | | | | | | | | | | | |
| | | 25 °C | | 30 °C | | 35 °C | | 40°C | | 45 °C | | 50 °C | |
| | | IP ⩽ 31 | IP > 31 | IP ⩽ 31 | IP > 31 | IP ⩽ 31 | IP > 31 | IP ⩽ 31 | IP > 31 | IP ⩽ 31 | IP > 31 | IP ⩽ 31 | IP > 31 |
| NS630b | Size per phase | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | ■ |
| | I (A) | 630 | 630 | 630 | 630 | 630 | 630 | 630 | 630 | 630 | 630 | 630 | |
| NS800 | Size per phase | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | ■ |
| | I (A) | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | |
| NS1000 | Size per phase | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | ■ |
| | I (A) | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 970 | 1000 | |
| NS1250 | Size per phase | 1b 80 x 10 | 1b 80 x 10 | 1b 80 x 10 | 1b 80 x 10 | 1b 80 x 10 | 1b 80 x 10 | 1b 80 x 10 | 1b 80 x 10 | 1b 80 x 10 | 1b 80 x 10 | 1b 80 x 10 | ■ |
| | I (A) | 1250 | 1250 | 1250 | 1250 | 1250 | 1250 | 1250 | 1180 | 1230 | 1130 | 1180 | |
| NS1600 | Size per phase | 1b100 x 10 | 1b100 x 10 | 1b100 x 10 | 1b100 x 10 | 1b100 x 10 | 1b100 x 10 | 1b100 x 10 | 1b100 x 10 | 1b100 x 10 | 1b100 x 10 | 1b100 x 10 | ■ |
| | I (A) | 1600 | 1550 | 1600 | 1500 | 1550 | 1450 | 1500 | 1400 | 1450 | 1350 | 1400 | |

■ Connection impossible due to the operating-temperature limits of the devices installed in the switchboard.

### Canalis connection

For Canalis connections, apply the appropriate derating coefficient K.

| Device | NS630b | NS800 | NS1000 | NS1250 | NS1600 |
|---|---|---|---|---|---|
| **Derating coefficient K** | 1 | 1 | 1 | 1 | 0,98 |

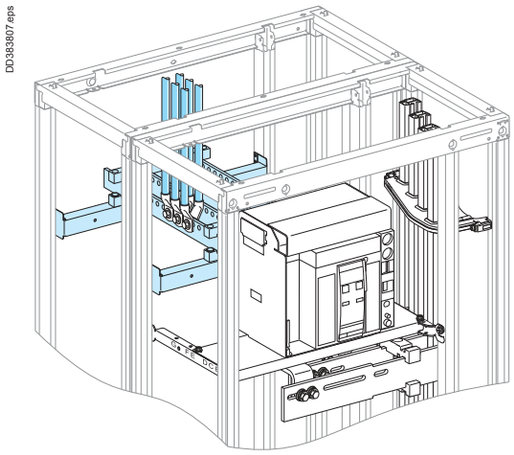
**Note:** the values indicated above have been validated for Prisma P switchboards.

# Designing customer connections
## Withdrawable Compact NS630b to NS1600



### Compact NS630b to NS1600 Withdrawable

Rear connection
Incoming via top or bottom
Busbar drawings supplied by Schneider Electric




Using the data below, it is possible to determine the size of the copper bars and the maximum permissible currents when making a rear customer connection for a vertical, withdrawable Compact NS630b/NS1600, taking into account the ambient temperature around the switchboard and the IP value.
Connection to be made according to the busbar drawings supplied.
For connection cable cross-sections and quantities > page I-43.

## Customer connection

### Flat bars, 5 mm thick

| Device | | Permissible current (A) | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Ambient temperature around the switchboard | | | | | | | | | | | |
| | | 25 °C | | 30 °C | | 35 °C | | 40°C | | 45 °C | | 50 °C | |
| | | IP ⩽ 31 | IP > 31 | IP ⩽ 31 | IP > 31 | IP ⩽ 31 | IP > 31 | IP ⩽ 31 | IP > 31 | IP ⩽ 31 | IP > 31 | IP ⩽ 31 | IP > 31 |
| NS630b | Size per phase | 1b 60 x 5 | 1b 60 x 5 | 1b 60 x 5 | 1b 60 x 5 | 1b 60 x 5 | 1b 60 x 5 | 1b 60 x 5 | 1b 60 x 5 | 1b 60 x 5 | 1b 60 x 5 | 1b 60 x 5 | ■ |
| | I (A) | 630 | 630 | 630 | 630 | 630 | 630 | 630 | 630 | 630 | 630 | 630 | |
| NS800 | Size per phase | 1b 80 x 5 | 1b 80 x 5 | 1b 80 x 5 | 1b 80 x 5 | 1b 80 x 5 | 1b 80 x 5 | 1b 80 x 5 | 1b 80 x 5 | 1b 80 x 5 | 1b 80 x 5 | 1b 80 x 5 | ■ |
| | I (A) | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | |
| NS1000 | Size per phase | 2b 50 x 5 | 2b 50 x 5 | 2b 50 x 5 | 2b 50 x 5 | 2b 50 x 5 | 2b 50 x 5 | 2b 50 x 5 | 2b 50 x 5 | 2b 50 x 5 | 2b 50 x 5 | 2b 50 x 5 | ■ |
| | I (A) | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 960 | 1000 | |
| NS1250 | Size per phase | 2b 80 x 5 | 2b 80 x 5 | 2b 80 x 5 | 2b 80 x 5 | 2b 80 x 5 | 2b 80 x 5 | 2b 80 x 5 | 2b 80 x 5 | 2b 80 x 5 | 2b 80 x 5 | 2b 80 x 5 | ■ |
| | I (A) | 1250 | 1250 | 1250 | 1250 | 1250 | 1230 | 1250 | 1180 | 1230 | 1130 | 1180 | |
| NS1600 | Size per phase | 2b 100 x 5 | 2b 100 x 5 | 2b 100 x 5 | 2b 100 x 5 | 2b 100 x 5 | 2b 100 x 5 | 2b 100 x 5 | 2b 100 x 5 | 2b 100 x 5 | 2b 100 x 5 | 2b 100 x 5 | ■ |
| | I (A) | 1560 | 1430 | 1520 | 1430 | 1480 | 1380 | 1430 | 1330 | 1380 | 1280 | 1330 | |

■ Connection impossible due to the operating-temperature limits of the devices installed in the switchboard.

## Customer connection

### Flat bars, 10 mm thick

| Device | | Permissible current (A) | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Ambient temperature around the switchboard | | | | | | | | | | | |
| | | 25 °C | | 30 °C | | 35 °C | | 40°C | | 45 °C | | 50 °C | |
| | | IP ⩽ 31 | IP > 31 | IP ⩽ 31 | IP > 31 | IP ⩽ 31 | IP > 31 | IP ⩽ 31 | IP > 31 | IP ⩽ 31 | IP > 31 | IP ⩽ 31 | IP > 31 |
| NS630b | Size per phase | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | ■ |
| | I (A) | 630 | 630 | 630 | 630 | 630 | 630 | 630 | 630 | 630 | 630 | 630 | |
| NS800 | Size per phase | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | ■ |
| | I (A) | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | |
| NS1000 | Size per phase | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | ■ |
| | I (A) | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 960 | 1000 | |
| NS1250 | Size per phase | 1b 80 x 10 | 1b 80 x 10 | 1b 80 x 10 | 1b 80 x 10 | 1b 80 x 10 | 1b 80 x 10 | 1b 80 x 10 | 1b 80 x 10 | 1b 80 x 10 | 1b 80 x 10 | 1b 80 x 10 | ■ |
| | I (A) | 1250 | 1250 | 1250 | 1250 | 1250 | 1210 | 1250 | 1160 | 1210 | 1110 | 1160 | |
| NS1600 | Size per phase | 1b100 x 10 | 1b100 x 10 | 1b100 x 10 | 1b100 x 10 | 1b100 x 10 | 1b100 x 10 | 1b100 x 10 | 1b100 x 10 | 1b100 x 10 | 1b100 x 10 | 1b100 x 10 | ■ |
| | I (A) | 1560 | 1430 | 1520 | 1430 | 1480 | 1380 | 1430 | 1330 | 1380 | 1280 | 1330 | |

■ Connection impossible due to the operating-temperature limits of the devices installed in the switchboard.

### Canalis connection

For Canalis connections, apply the appropriate derating coefficient K.

| Device | NS630b | NS800 | NS1000 | NS1250 | NS1600 |
|---|---|---|---|---|---|
| **Derating coefficient K** | 1 | 1 | 1 | 1 | 0,98 |

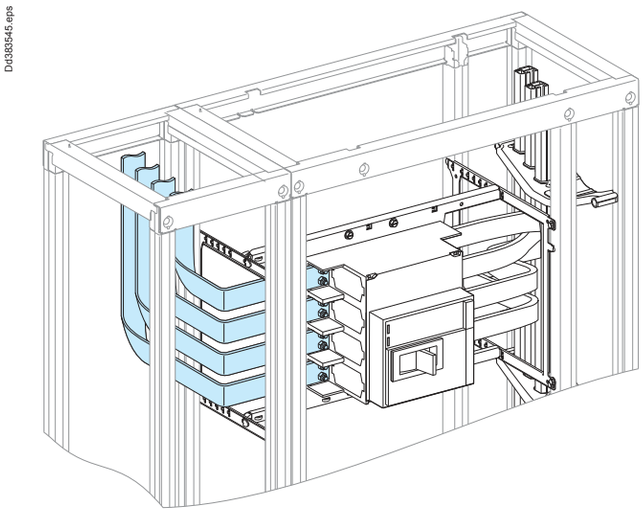
**Note:** the values indicated above have been validated for Prisma P switchboards.

# Designing customer connections
## Fixed Compact NS630b to NS1000 Horizontal mounting



## Compact NS630b to NS1000

Horizontal mounting
Front connection
Incoming via top or bottom
Installation on the left or right




Using the data below, it is possible to determine the size of the copper bars and the maximum permissible currents when making the connections to busbars for a horizontal, fixed Compact NS630b/NS1600, taking into account the ambient temperature around the switchboard and the IP value.
Connection to be made according to the busbar drawings supplied.

## Customer connection

### Flat bars, 5 mm thick

| Device | | Permissible current (A) | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Ambient temperature around the switchboard | | | | | | | | | | | |
| | | 25 °C | | 30 °C | | 35 °C | | 40°C | | 45 °C | | 50 °C | |
| | | IP ≤ 31 | IP > 31 | IP ≤ 31 | IP > 31 | IP ≤ 31 | IP > 31 | IP ≤ 31 | IP > 31 | IP ≤ 31 | IP > 31 | IP ≤ 31 | IP > 31 |
| NS630b | Size per phase | 2b 50 x 5 | 2b 50 x 5 | 2b 50 x 5 | 2b 50 x 5 | 2b 50 x 5 | 2b 50 x 5 | 2b 50 x 5 | 2b 50 x 5 | 2b 50 x 5 | 2b 50 x 5 | 2b 50 x 5 | ■ |
| | I (A) | 630 | 630 | 630 | 630 | 630 | 630 | 630 | 630 | 630 | 630 | 630 | |
| NS800 | Size per phase | 2b 50 x 5 | 2b 50 x 5 | 2b 50 x 5 | 2b 50 x 5 | 2b 50 x 5 | 2b 50 x 5 | 2b 50 x 5 | 2b 50 x 5 | 2b 50 x 5 | 2b 50 x 5 | 2b 50 x 5 | ■ |
| | I (A) | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | |
| NS1000 | Size per phase | 2b 50 x 5 | 2b 50 x 5 | 2b 50 x 5 | 2b 50 x 5 | 2b 50 x 5 | 2b 50 x 5 | 2b 50 x 5 | 2b 50 x 5 | 2b 50 x 5 | 2b 50 x 5 | 2b 50 x 5 | ■ |
| | I (A) | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | |

■ Connection impossible due to the operating-temperature limits of the devices installed in the switchboard.

### Flat bars, 10 mm thick

| Device | | Permissible current (A) | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Ambient temperature around the switchboard | | | | | | | | | | | |
| | | 25 °C | | 30 °C | | 35 °C | | 40°C | | 45 °C | | 50 °C | |
| NS630b | Size per phase | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | ■ |
| | I (A) | 630 | 630 | 630 | 630 | 630 | 630 | 630 | 630 | 630 | 630 | 630 | |
| NS800 | Size per phase | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | ■ |
| | I (A) | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | |
| NS1000 | Size per phase | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | 1b 50 x 10 | ■ |
| | I (A) | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | |

■ Connection impossible due to the operating-temperature limits of the devices installed in the switchboard.
**Note:** the values indicated above have been validated for Prisma P switchboards.

# Designing busbars
## Fupact INF, ISFT, ISFL Linergy BS busbars

## Electrical characteristics

### Permissible current and selection of horizontal Linergy BS busbars

The goal is to optimise busbar size according to the installation and operating criteria.

## Horizontal Linergy BS busbars
## Fupact INF/ISFT/ISFL
### Linergy BS bars, 5 mm thick

| Type of bars | Permissible current (A) | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Ambient temperature around the switchboard | | | | | | | | | | | |
| | 25 °C | | 30 °C | | 35 °C | | 40 °C | | 45 °C | | 50 °C | |
| Size per phase | IP ⩽ 31 | IP > 31 | IP ⩽ 31 | IP > 31 | IP ⩽ 31 | IP > 31 | IP ⩽ 31 | IP > 31 | IP ⩽ 31 | IP > 31 | IP ⩽ 31 | IP > 31 |
| 1 Linergy BS bar, 60 x 5 | 800 | 750 | 760 | 700 | 710 | 650 | 660 | 600 | 610 | 550 | 560 | ■ |
| 1 Linergy BS bar, 80 x 5 | 1000 | 910 | 970 | 860 | 910 | 810 | 860 | 750 | 810 | 700 | 750 | ■ |
| 2 Linergy BS bars, 60 x 5 | 1400 | 1250 | 1320 | 1160 | 1250 | 1070 | 1160 | 980 | 1070 | 880 | 980 | ■ |
| 2 Linergy BS bars, 80 x 5 | 1700 | 1500 | 1600 | 1400 | 1500 | 1280 | 1400 | 1160 | 1280 | 1030 | 1160 | ■ |

■ Connection impossible due to the operating-temperature limits of the devices installed in the switchboard.

### Linergy BS bars, 10 mm thick

| Type of bars | Permissible current (A) | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Ambient temperature around the switchboard | | | | | | | | | | | |
| | 25 °C | | 30 °C | | 35 °C | | 40 °C | | 45 °C | | 50 °C | |
| Size per phase | IP ⩽ 31 | IP > 31 | IP ⩽ 31 | IP > 31 | IP ⩽ 31 | IP > 31 | IP ⩽ 31 | IP > 31 | IP ⩽ 31 | IP > 31 | IP ⩽ 31 | IP > 31 |
| 1 Linergy BS bar, 50 x 10 | 1150 | 1000 | 1080 | 930 | 1000 | 850 | 930 | 760 | 850 | 670 | 760 | ■ |
| 1 Linergy BS bar, 60 x 10 | 1400 | 1250 | 1320 | 1160 | 1250 | 1070 | 1160 | 980 | 1070 | 880 | 980 | ■ |
| 1 Linergy BS bar, 80 x 10 | 1700 | 1500 | 1600 | 1400 | 1500 | 1280 | 1400 | 1160 | 1280 | 1030 | 1160 | ■ |
| 2 Linergy BS bars, 50 x 10 | 1940 | 1690 | 1840 | 1560 | 1700 | 1420 | 1560 | 1270 | 1420 | 1100 | 1270 | ■ |
| 2 Linergy BS bars, 60 x 10 | 2170 | 1900 | 2040 | 1750 | 1900 | 1590 | 1750 | 1420 | 1590 | 1240 | 1420 | ■ |
| 2 Linergy BS bars, 80 x 10 | 2670 | 2340 | 2500 | 2160 | 2340 | 1970 | 2160 | 1770 | 1970 | 1550 | 1770 | ■ |
| 2 Linergy BS bars, 100 x 10 | 3120 | 2750 | 2930 | 2520 | 2750 | 2310 | 2520 | 2070 | 2310 | 1820 | 2070 | ■ |

■ Connection impossible due to the operating-temperature limits of the devices installed in the switchboard.

## Rear horizontal Linergy BS bars
## Fupact ISFT/ISFL
### Linergy BS bars, 10 mm thick

| Device | | Permissible current (A) | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Ambient temperature around the switchboard | | | | | | | | | | | |
| | | 25 °C | | 30 °C | | 35 °C | | 40 °C | | 45 °C | | 50 °C | |
| | Size per phase | IP ⩽ 31 | IP > 31 | IP ⩽ 31 | IP > 31 | IP ⩽ 31 | IP > 31 | IP ⩽ 31 | IP > 31 | IP ⩽ 31 | IP > 31 | IP ⩽ 31 | IP > 31 |
| ISFT 160 | 1 bar Linergy BS 30 x 10 | 730 | 680 | 680 | 630 | 630 | 570 | 570 | 510 | 510 | 450 | 450 | ■ |
| ISFL 160 | 1 bar Linergy BS 60 x 10 | 1400 | 1250 | 1320 | 1160 | 1250 | 1070 | 1160 | 980 | 1070 | 880 | 980 | ■ |
| | 1 bar Linergy BS 80 x 10 | 1700 | 1500 | 1600 | 1400 | 1500 | 1280 | 1400 | 1160 | 1280 | 1030 | 1160 | ■ |
| ISFL 250/400/630 | 1 bar Linergy BS 80 x 10 | 1700 | 1500 | 1600 | 1400 | 1500 | 1280 | 1400 | 1160 | 1280 | 1030 | 1160 | ■ |
| | 1 bar Linergy BS 100 x 10 | 2050 | 1800 | 1930 | 1680 | 1800 | 1540 | 1680 | 1400 | 1540 | 1240 | 1400 | ■ |
| | 1 bar Linergy BS 120 x 10 | 2390 | 2100 | 2250 | 1950 | 2100 | 1800 | 1950 | 1630 | 1800 | 1440 | 1630 | ■ |

■ Connection impossible due to the operating-temperature limits of the devices installed in the switchboard.

# Designing busbars
## Fupact INF, ISFT Vertical Linergy LGYE, LGY busbars



### Permissible current and selection of Linergy LGYE busbars
The goal is to optimise busbar size according to the installation and operating criteria.

### Vertical Linergy LGYE busbars
### Fupact INF/ISFT

| Type of bars | Permissible current (A) | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Ambient temperature around the switchboard | | | | | | | | | | | |
| | 25 °C | | 30 °C | | 35 °C | | 40 °C | | 45 °C | | 50 °C | |
| Size per phase | IP ⩽ 31 | IP > 31 | IP ⩽ 31 | IP > 31 | IP ⩽ 31 | IP > 31 | IP ⩽ 31 | IP > 31 | IP ⩽ 31 | IP > 31 | IP ⩽ 31 | IP > 31 |
| Linergy LGYE 630 | 650 | 550 | 630 | 510 | 590 | 480 | 550 | 460 | 530 | 440 | 460 | ■ |
| Linergy LGYE 800 | 840 | 720 | 800 | 700 | 760 | 660 | 720 | 610 | 680 | 580 | 640 | ■ |
| Linergy LGYE 1000 | 1040 | 900 | 990 | 870 | 950 | 830 | 900 | 770 | 850 | 730 | 800 | ■ |
| Linergy LGYE 1250 | 1290 | 1120 | 1230 | 1080 | 1170 | 1030 | 1100 | 970 | 1050 | 910 | 980 | ■ |
| Linergy LGYE 1600 | 1580 | 1390 | 1480 | 1320 | 1390 | 1250 | 1320 | 1180 | 1250 | 1110 | 1180 | ■ |
| Linergy LGYE 2000 | 1900 | 1720 | 1820 | 1620 | 1720 | 1520 | 1620 | 1420 | 1520 | 1320 | 1420 | ■ |
| Linergy LGYE 2500 | 2290 | 1890 | 2190 | 1840 | 2070 | 1770 | 1960 | 1680 | 1880 | 1590 | 1780 | ■ |
| Linergy LGYE 3200 | 3060 | 2780 | 2920 | 2640 | 2780 | 2500 | 2640 | 2360 | 2500 | 2220 | 2360 | ■ |
| Linergy LGYE 4000 | 3320 | 3050 | 3240 | 2950 | 3140 | 2850 | 2970 | 2700 | 2800 | 2540 | 2650 | ■ |

■ Connection impossible due to the operating-temperature limits of the devices installed in the switchboard.

### Lateral Linergy LGY busbars
### Fupact INF/ISFT

| Type of bars | Permissible current (A) | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Ambient temperature around the switchboard | | | | | | | | | | | |
| | 25 °C | | 30 °C | | 35 °C | | 40 °C | | 45 °C | | 50 °C | |
| Size per phase | IP ⩽ 31 | IP > 31 | IP ⩽ 31 | IP > 31 | IP ⩽ 31 | IP > 31 | IP ⩽ 31 | IP > 31 | IP ⩽ 31 | IP > 31 | IP ⩽ 31 | IP > 31 |
| Linergy LGY 630 | 680 | 590 | 630 | 550 | 590 | 530 | 550 | 500 | 530 | 460 | 460 | ■ |
| Linergy LGY 800 | 840 | 760 | 800 | 720 | 760 | 680 | 720 | 640 | 680 | 600 | 640 | ■ |
| Linergy LGY 1000 | 1040 | 950 | 990 | 900 | 950 | 850 | 900 | 800 | 850 | 750 | 800 | ■ |
| Linergy LGY 1250 | 1290 | 1170 | 1230 | 1100 | 1170 | 1030 | 1100 | 970 | 1050 | 910 | 980 | ■ |
| Linergy LGY 1600 | 1580 | 1390 | 1480 | 1320 | 1390 | 1250 | 1320 | 1180 | 1250 | 1110 | 1180 | ■ |
| Linergy LGY 2000 (2 x 1000) | 1900 | 1720 | 1820 | 1620 | 1720 | 1520 | 1620 | 1420 | 1520 | 1320 | 1420 | ■ |
| Linergy LGY 2500 (2 x 1250) | 2380 | 2120 | 2260 | 2020 | 2120 | 1900 | 2020 | 1780 | 1900 | 1660 | 1780 | ■ |
| Linergy LGY 3200 (2 x 1600) | 3060 | 2780 | 2920 | 2640 | 2780 | 2500 | 2640 | 2360 | 2500 | 2220 | 2360 | ■ |

■ Connection impossible due to the operating-temperature limits of the devices installed in the switchboard.

Electrical characteristics

## Lateral Linergy BS busbars

## Fupact INF/ISFT

### Linergy BS bars, 5 mm thick

| Type of bars | Permissible current (A) | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Ambient temperature around the switchboard | | | | | | | | | | | |
| | 25 °C | | 30 °C | | 35 °C | | 40 °C | | 45 °C | | 50 °C | |
| Size per phase | IP ⩽ 31 | IP > 31 | IP ⩽ 31 | IP > 31 | IP ⩽ 31 | IP > 31 | IP ⩽ 31 | IP > 31 | IP ⩽ 31 | IP > 31 | IP ⩽ 31 | IP > 31 |
| 1 Linergy BS bar, 60 x 5 | 800 | 750 | 760 | 700 | 710 | 650 | 660 | 600 | 610 | 550 | 560 | ■ |
| 1 Linergy BS bar, 80 x 5 | 1000 | 910 | 970 | 860 | 910 | 810 | 860 | 750 | 810 | 700 | 750 | ■ |
| 2 Linergy BS bars, 60 x 5 | 1400 | 1250 | 1320 | 1160 | 1250 | 1070 | 1160 | 980 | 1070 | 880 | 980 | ■ |
| 2 Linergy BS bars, 80 x 5 | 1700 | 1500 | 1600 | 1400 | 1500 | 1280 | 1400 | 1160 | 1280 | 1030 | 1160 | ■ |

■ Connection impossible due to the operating-temperature limits of the devices installed in the switchboard.

### Linergy BS bars, 10 mm thick

| Type of bars | Permissible current (A) | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Ambient temperature around the switchboard | | | | | | | | | | | |
| | 25 °C | | 30 °C | | 35 °C | | 40 °C | | 45 °C | | 50 °C | |
| Size per phase | IP ⩽ 31 | IP > 31 | IP ⩽ 31 | IP > 31 | IP ⩽ 31 | IP > 31 | IP ⩽ 31 | IP > 31 | IP ⩽ 31 | IP > 31 | IP ⩽ 31 | IP > 31 |
| 1 Linergy BS bar, 50 x 10 | 1150 | 1000 | 1080 | 930 | 1000 | 850 | 930 | 760 | 850 | 670 | 760 | ■ |
| 1 Linergy BS bar, 60 x 10 | 1400 | 1250 | 1320 | 1160 | 1250 | 1070 | 1160 | 980 | 1070 | 880 | 980 | ■ |
| 1 Linergy BS bar, 80 x 10 | 1700 | 1500 | 1600 | 1400 | 1500 | 1280 | 1400 | 1160 | 1280 | 1030 | 1160 | ■ |
| 2 Linergy BS bars, 50 x 10 | 1940 | 1690 | 1810 | 1560 | 1700 | 1420 | 1560 | 1270 | 1420 | 1100 | 1270 | ■ |
| 2 Linergy BS bars, 60 x 10 | 2170 | 1900 | 2040 | 1750 | 1900 | 1590 | 1750 | 1420 | 1590 | 1240 | 1420 | ■ |
| 2 Linergy BS bars, 80 x 10 | 2670 | 2340 | 2500 | 2160 | 2340 | 1970 | 2160 | 1770 | 1970 | 1550 | 1770 | ■ |
| 2 x 1 Linergy BS bar, 80 x 10 | 3020 | 2650 | 2840 | 2450 | 2650 | 2230 | 2450 | 2010 | 2230 | 1760 | 2010 | ■ |

■ Connection impossible due to the operating-temperature limits of the devices installed in the switchboard.

# Selection of enclosures according to the premises

## Enclosure characteristics

The IP and IK degrees of protection provided by an enclosure must be specified as a function of the various external influences defined by standard IEC 30364-5-51, in particular:

- presence of foreign solid bodies (code AE)
- presence of water (code AD)
- mechanical stress (code not specified)
- capability of persons (code BA)
- ...

**Prisma P switchboards are designed for indoor installation.**
Unless the rules, standards and regulations of a specific country stipulate otherwise, Schneider Electric recommends the following IP and IK values based on French guide UTE C 15-103 (March 2004).

## Using the table

1. Opposite the relevant premises, read the recommended IP and IK values.
2. The ■ symbol indicates the enclosure or cubicle satisfying the criteria of the UTE guide.
   Any enclosure or cubicle with a higher degree of protection can also be used.
3. If several degrees of protection are possible (refer to the standard for more details) and the □ and ■ symbols are indicated (e.g. 24□/25■), enclosures that correspond to the higher degree of protection (■) are suitable for the lower degree of protection (□).

| Type of premises | Enclosure | | | | | | |
|---|---|---|---|---|---|---|---|
| | Cubicle | | | | | | |
| | | | with fixed frame | with door + IP30 cover | with door + gasket + IP30 cover | | with door + IP55 cover |
| | Min. IP/IK required | | IP30/IK07 | IP30/IK08 | IP31/IK08 | IP43/IK08 | IP55/IK10 |
| | IP | IK | | | | | |
| **Domestic or comparable premises or locations** | | | | | | | |
| Porch | 24 | 07 | | | | | ■ |
| Bathrooms (see washrooms) | | | | | | | |
| Bicycles, motorcycles, tricycles, etc. (premises for) | 20 | 07 | ■ | | | | |
| Water, sewer and heating connections | 23 | 02 | | | | ■ | |
| Laundries | 21 | 02 | | | ■ | | |
| Cellars, garages, furnace rooms | 20 | 02/07 | ■ | | | | |
| Bedrooms | 20 | 02 | ■ | | | | |
| Trash rooms | 25 | 07 | | | | | ■ |
| Halls in cellars | 20 | 07 | | | | | |
| Courtyards | 24/25 | 02/07 | | | | | ■ |
| Kitchens | 20 | 02 | ■ | | | | |
| Shower rooms (see washrooms) | | | | | | | |
| Indoor stairways and alleys | 20 | 02/07 | ■ | | | | |
| Outdoor stairways and outdoor alleys without roofs | 24 | 07 | | | | | |
| Outdoor alleys with roofs | 21 | 02 | | | ■ | | |
| Attics (roof space) | 20 | 02 | ■ | | | | |
| Garden shelters | 24/25 | 02/07 | | | | | ■ |
| Latrines | 20 | 02 | ■ | | | | |
| Dustbin rooms | 25 | 02/07 | | | | | ■ |
| Ironing room | 20 | 02 | ■ | | | | |
| Access ramps to garages | 25 | 07 | | | | | ■ |

No applicable

# Selection of enclosures according to the premises

## Enclosure characteristics

| Type of premises | | Enclosure | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | | Cubicle | | with fixed frame | with door + IP30 cover | with door + gasket + IP30 cover | | with door + IP55 cover |
| | | Min. IP/IK required | | IP30/IK07 | IP30/IK08 | IP31/IK08 | IP43/IK08 | IP55/IK10 |
| | | IP | IK | | | | | |
| Washrooms, rooms containing a bathtub or shower | volume 0 | 27 | 02 | | | | | |
| | volume 1 | 24 | 02 | | | | | ■ |
| | volume 2 | 23 | 02 | | | | ■ | |
| | volume 3 | 21 | 02 | | | ■ | | |
| Lounges, living rooms, etc | | 20 | 02 | ■ | | | | |
| Drying rooms | | 21 | 02 | | | ■ | | |
| Covered terraces | | 21 | 02 | | | ■ | | |
| WCs | | 20 | 02 | ■ | | | | |
| Verandas | | 20 | 02 | ■ | | | | |
| Crawl spaces | | 23 | 07 | | | | | |
| **Commercial premises and adjoining areas** | | | | | | | | |
| Gunsmiths (storage area, workshop) | | 30 | 08 | | ■ | | | |
| Laundries (wash room) | | 24 | 07 | | | | | ■ |
| Butchers | shop | 24 | 07 | | | | | ■ |
| | cold room ≤ -10 °C | 23 | 07 | | | | ■ | |
| Bakers, cake shops (kitchens) | | 50 | 07 | | | | | ■ |
| Coffee roasters | | 21 | 02 | | | ■ | | |
| Coal, wood, oil | | 20 | 08 | | ■ | | | |
| Delicatessen (production) | | 24 | 07 | | | | | ■ |
| Sweets (production) | | 20 | 02 | ■ | | | | |
| Shoe repair shops | | 20 | 02 | ■ | | | | |
| Dairies | | 24 | 02 | | | | | ■ |
| Hardware stores (storage areas for chemicals and paint) | | 33 | 07 | | | | ■ | |
| Wood workers | | 50 | 07 | | | | | ■ |
| Art galleries | | 20 | 02/07 | ■ | | | | |
| Florists | | 24 | 07 | | | | | ■ |
| Furriers | | 20 | 07 | ■ | | | | |
| Fruit and vegetable merchants | | 24 | 07 | | | | | ■ |
| Grain shops | | 50 | 07 | | | | | ■ |
| Bookshops, stationers | | 20 | 02 | ■ | | | | |
| Motorcycle and bicycle repairs and accessories | | 20 | 08 | | ■ | | | |
| Messenger services | | 20 | 08 | | ■ | | | |
| Furniture shops (antiques, secondhand) | | 20 | 07 | ■ | | | | |
| Glass and mirror merchants (workshop) | | 20 | 07 | ■ | | | | |
| Wallpaper shop (storage area) | | 20 | 07 | ■ | | | | |
| Cosmetics shop (storage area) | | 20 | 02 | ■ | | | | |
| Chemists (storage area) | | 20 | 02 | ■ | | | | |
| Photographers (dark room) | | 23 | 02 | | | | ■ | |
| Plumbers (storage area) | | 20 | 08 | | ■ | | | |
| Fishmongers | | 25 | 07 | | | | | ■ |
| Dry cleaners | | 23 | 02 | | | | ■ | |
| Hardware stores (without paint, chemicals, etc.) | | 20 | 07 | ■ | | | | |
| Locksmiths | | 20 | 07◻/08■ | ■ | ■ | | | |
| Vintners, spirits | | 20 | 07 | ■ | | | | |
| Interior decorator (carding) | | 50 | 07 | | | | | ■ |
| Tailors, clothing retailers (storage area) | | 20 | 02 | ■ | | | | |
| Pet care | | 35 | 07 | | | | | ■ |

No applicable

# Selection of enclosures according to the premises

## Enclosure characteristics

| Type of premises | | | Enclosure | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | Cubicle | | with fixed frame | with door + IP30 cover | with door + gasket + IP30 cover | | with door + IP55 cover |
| | | | Min. IP/IK required | | IP30/IK07 | IP30/IK08 | IP31/IK08 | IP43/IK08 | IP55/IK10 |
| | | | IP | IK | | | | | |
| Shared premises of buildings open to the general public | | storage rooms | 20 | 08 | | ■ | | | |
| | | packing rooms | 20 | 08 | | ■ | | | |
| | | archive rooms | 20 | 02 | ■ | | | | |
| | | film and magnetic media storage | 20 | 02 | ■ | | | | |
| | | linen rooms | 20 | 02 | ■ | | | | |
| | | laundry rooms | 24 | 07 | | | | | ■ |
| | | misc. shops | 21 | 07/08 | | | ■ | | |
| | | kitchens (large) | | | | | | | |
| J | Reception old and handicapped people | | 20 | 02 | ■ | | | | |
| L | Lecture halls, meeting rooms, auditoriums, halls used for several purposes | halls | 20 | 02/07 | ■ | | | | |
| | | stage areas | 20 | 08 | | ■ | | | |
| | | scenery storage rooms | 20 | 08 | | ■ | | | |
| | | costume rooms | 20 | 07 | ■ | | | | |
| M | Retail premises, shopping malls | sales premises | 20 | 08 | | ■ | | | |
| | | areas for storage and handling of packing | 20 | 08 | | ■ | | | |
| N | Restaurants and cafes | | 20 | 08 | | ■ | | | |
| O | Hotels and boarding houses | | 20 | 02 | ■ | | | | |
| P | Dance halls and gaming parlours | | 20 | 07 | ■ | | | | |
| R | Teaching establishments, holiday camps | classrooms | 20 | 02 | ■ | ■ | | | |
| | | dormitories | 20 | 08 | | ■ | | | |
| S | Libraries and documentation centres | | 20 | 02 | ■<br>■ | | | | |
| T | Exhibitions | halls and rooms | 20 | 02 | ■ | | | | |
| | | areas for reception of equipment and merchandise | 20 | 07 | ■ | | | | |
| U | Healthcare establishments | bedrooms | 20 | 02 | ■ | | | | |
| | | incineration | 21 | 07/08 | | | ■ | | |
| | | operating rooms | 20 | 07 | ■ | | | | |
| | | centralised sterilisation | 24 | 02/07 | | | | | ■ |
| | | pharmacies and labs with more than 10 l of inflammable liquids | 21 ▫/23 ▪ | 02 ▫/07 ▪ | | | ■ | ■ | |
| V | Places of worship | | 20 | 02 | ■ | | | | |
| W | Administrative premises, banks | | 20 | 02 | ■ | | | | |
| X | Indoor sports facilities | halls | 20 | 07 ▫/08 ▪ | ■ | ■ | | | |
| | | premises containing refrigeration facilities | 21 | 08 | | | ■ | | |
| Y | Museums | | 20 | 02 | ■ | | | | |
| PA | Covered open air facilities | | 23 ▫/25 ▪ | 08 ▫/10 ▪ | | | | ■ | ■ |
| CTS | Marquees and tents | | 44 | 08 | | | | | ■ |
| SG | Inflatable structures | | 44 | 08 | | | | | ■ |
| PS | Covered parking lots | | 21 | 08 ▫/10 ▪ | | | ■ | | ■ |

# Selection of enclosures according to the premises

## Enclosure characteristics

| Type of premises | | Enclosure | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | | Cubicle | | with fixed frame | with door + IP30 cover | with door + gasket + IP30 cover | | with door + IP55 cover |
| | | Min. IP/IK required | | IP30/IK07 | IP30/IK08 | IP31/IK08 | IP43/IK08 | IP55/IK10 |
| | | IP | IK | | | | | |
| **Technical premises** | | | | | | | | |
| Battery rooms | | 23 | 02/07 | | | | ■ | |
| Lifts (machine rooms and pulley rooms) | | 20 | 07▫/08▪ | ■ | ■ | | | |
| Electrical rooms | | 20 | 07 | ■ | | | | |
| Control rooms | | 20 | 02 | ■ | | | | |
| Workshops | | 21▫/23▪ | 07▫/08▪ | | | ■ | ■ | |
| Laboratories | | 21▫/23▪ | 02▫/07▪ | | | ■ | ■ | |
| Air conditioning washers | | 24 | 07 | | | | | ■ |
| Garages (used exclusively for parking vehicles) of an area not exceeding 100 m² | | 21 | 07 | | | ■ | | |
| Machine rooms | | 31 | 07/08 | | | ■ | | |
| Water pressurisers | | 23 | 07/08 | | | | ■ | |
| **Boiler houses and adjoining premises (power in excess of 70 kW)** | | | | | | | | |
| Boiler rooms | coal fuel | 51▫/61▪ | 07▫/08▪ | | | | | ■ |
| | other fuel | 21 | 07/08 | | | ■ | | |
| | electrical | 21 | 07/08 | | | ■ | | |
| Fuel storage areas | coal | 50▫/60▪ | 08 | | | | | ■ |
| | oil | 20 | 07▫/08▪ | ■ | ■ | | | |
| | liquefied gas | 20 | 07▫/08▪ | ■ | ■ | | | |
| Cinder tips | | 50 | 08 | | | | | ■ |
| Pump rooms | | 21▫/23▪ | 07▫/08▪ | | | ■ | ■ | |
| Pressure reduction rooms (gas) | | 20 | 07▫/08▪ | ■ | ■ | | | |
| Steam or hot water facilities | | 21▫/23▪ | 07▫/08▪ | | | ■ | ■ | |
| Expansion vessel room | | 21 | 02 | | | ■ | | |
| **Garages and car parks of an area exceeding 100 m²** | | | | | | | | |
| Parking lots | | 21 | 07▫/10▪ | | | ■ | | ■ |
| Carwash areas (inside premises) | | 25 | 07 | | | | | ■ |
| Petrol stations | inside | 21 | 07 | | | ■ | | |
| | outside | | | | | | | |
| Lubrication areas | | 23 | 08 | | | | ■ | |
| Battery recharging areas | | 23 | 07 | | | | ■ | |
| Workshops | | 21 | 08 | | | ■ | | |
| **Public building (other than for the general public)** | | | | | | | | |
| Offices | | 20 | 02 | ■ | | | | |
| Libraries | | 20 | 02 | ■ | | | | |
| Archives | | 20 | 02 | ■ | | | | |
| Computer rooms | | 20 | 02 | ■ | | | | |
| Design offices | | 20 | 02 | ■ | | | | |
| Rooms containing reprographic machines | | 20 | 02 | ■ | | | | |
| Sorting rooms | | 20 | 07 | ■ | | | | |
| Refectories in restaurants or canteens | | 21 | 07 | | | ■ | | |
| Large kitchens | | | | | | | | |
| Sports rooms | | 20 | 07▫/08▪ | ■ | ■ | | | |
| Barracks | | 20 | 07 | ■ | | | | |
| Meeting rooms | | 20 | 02 | ■ | | | | |
| Waiting rooms, lounges, halls | | 20 | 02 | ■ | | | | |
| Medical consulting rooms, not fitted with specific equipment | | 20 | 02 | ■ | | | | |
| Demonstration and exhibition rooms | | 20 | 02/07 | ■ | | | | |

No applicable

# Selection of enclosures according to the premises

## Enclosure characteristics

| Type of premises | | Enclosure | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | | Cubicle | | with fixed frame | with door + IP30 cover | with door + gasket + IP30 cover | | with door + IP55 cover |
| | | Min. IP/IK required | | IP30/IK07 | IP30/IK08 | IP31/IK08 | IP43/IK08 | IP55/IK10 |
| | | IP | IK | | | | | |
| **Farm premises or locations** | | | | | | | | |
| Alcohol (storage) | | 23 | 07 | | | | ■ | |
| Closed cattle sheds | | 35 | 07 | | | | | ■ |
| Laundries | | 24 | 07 | | | | | ■ |
| Wood storage rooms | | 30 | 10 | | | | | ■ |
| Threshing floors | | 50 | 07 | | | | | ■ |
| Distilling cellars | | 23 | 07 | | | | ■ | |
| Vat rooms (wine) | | 23 | 07 | | | | ■ | |
| Courtyards | | 35 | 07 | | | | | ■ |
| Poultry barns | | 35 | 07 | | | | | ■ |
| Stables | | 35 | 07 | | | | | ■ |
| Fertiliser (storage) | | 50 | 07 | | | | | ■ |
| Stables | | 35 | 07 | | | | | ■ |
| Manure heaps | | 24 | 07 | | | | | ■ |
| Haylofts | | 50 | 07 | | | | | ■ |
| Haystacks, forage (storage) | | 50 | 07 | | | | | ■ |
| Granaries, barns | | 50 | 07 | | | | | ■ |
| Straw (storage) | | 50 | 07 | | | | | ■ |
| Greenhouses | | 23 | 07 | | | | ■ | |
| Grain silos | | 50 | 07 | | | | | ■ |
| Milking rooms | | 35 | 07 | | | | | ■ |
| Pig sties | | 35 | 07 | | | | | ■ |
| Chicken houses | | 35 | 07 | | | | | ■ |
| **Miscellaneous installations** | | | | | | | | |
| Fair facilities | | 33 | 08 | | | | ■ | |
| Water treatment facilities | | 24/25 | 07/08 | | | | | ■ |
| **Thermodynamic installations, air-conditioned rooms and cold rooms** | | | | | | | | |
| Height above ground | from 0 to 1.10 m | 25 | 07 | | | | | ■ |
| | from 1.10 to 2 m | 24 | 07 | | | | | ■ |
| | above 2 m under evaporator or water drain pipe | 21 | 07 | | | ■ | | |
| | ceiling and up to 10 cm underneath | 23 | 07 | | | | ■ | |
| Temperature ≤ -10 °C | | 23 | 07 | | | | ■ | |
| Compressor | room | 21 | 08 | | | ■ | | |
| | integral unit located outside or on a terrace | 34 | 08 | | | | | |

No applicable

# Selection of enclosures according to the premises

## Enclosure characteristics

| Type of premises | Enclosure | | | | | | |
|---|---|---|---|---|---|---|---|
| | Cubicle | | with fixed frame | with door + IP30 cover | with door + gasket + IP30 cover | | with door + IP55 cover |
| | Min. IP/IK required | | IP30/IK07 | IP30/IK08 | IP31/IK08 | IP43/IK08 | IP55/IK10 |
| | IP | IK | | | | | |
| **Industrial facilities** | | | | | | | |
| Slaughter houses | 55 | 08 | | | | | ■ |
| Batteries (manufacture) | 33 | 07 | | | | ■ | |
| Acid (manufacture and storage) | 33 | 07 | | | | ■ | |
| Alcohol (manufacture and storage) | 33 | 07 | | | | ■ | |
| Aluminium (manufacture and storage) | 51 | 08 | | | | | ■ |
| Livestock (raising, fattening and sale) | 45 | 07 | | | | | ■ |
| Asphalt and bitumen storage | 53 | 07 | | | | | ■ |
| Wool beating and carding | 50 | 08 | | | | | ■ |
| Industrial laundry | 24/25 | 07 | | | | | ■ |
| Wood (processing) | 50 | 08 | | | | | ■ |
| Meat packers | 24/25 | 07 | | | | | ■ |
| Bakeries | 50 | 07 | | | | | ■ |
| Breweries | 24 | 07 | | | | | ■ |
| Brickworks | 53 | 08 | | | | | ■ |
| Rubber (production and processing) | 54 | 07 | | | | | ■ |
| Carbide (manufacture and storage) | 51 | 07 | | | | ■ | ■ |
| Ammunition factories | 53 | 08 | | | | | ■ |
| Carton board (production) | 33 | 07 | | | | ■ | |
| Quarries | 55 | 08 | | | | | ■ |
| Celluloid (manufacture of objects) | 30 | 08 | | ■ | | | |
| Cellulose (manufacture) | 34 | 08 | | | | | ■ |
| Coal (depots) | 53 | 08 | | | | | ■ |
| Pork products | 24/25 | 07 | | | | | ■ |
| Boiler-making works | 30 | 08 | | ■ | | | |
| Lime kilns | 50 | 08 | | | | | ■ |
| Rag (storage) | 30 | 07 | ■ | | | | |
| Chlorine (manufacture and storage) | 33 | 07 | | | | ■ | |
| Chrome-plating | 33 | 07 | | | | ■ | |
| Cement works | 50 | 08 | | | | | ■ |
| Coking plant | 53 | 08 | | | | | ■ |
| Adhesives (production) | 33 | 07 | | | | | |
| Bottling lines | 35 | 08 | | | | | ■ |
| Liquid fuels (storage) | 31▫/33▪ | 08 | | | ■ | | |
| Fats (processing) | 51 | 07 | | | | | ■ |
| Leather (tanning and storage) | 31 | 08 | | | ■ | | |
| Copper (ore processing) | 31 | 08 | | | ■ | | |
| Paint stripping | 54 | 08 | | | | ■ | ■ |
| Detergents (manufacture) | 53 | 07 | | | | ■ | ■ |
| Distilleries | 33 | 07 | | | | ■ | |
| Electrolysis | 33 | 08 | | | | ■ | |
| Ink manufacturing | 31 | 07 | | | ■ | | ■ |
| Fertilisers (manufacture and storage) | 53 | 07 | | | | | ■ |
| Explosives (manufacture and storage) | 55 | 08 | | | | | ■ |
| Iron (production and processing) | 51 | 08 | | | | | ■ |
| Spinning mills | 50 | 07 | | | | | ■ |
| Furriers (beating process) | 50 | 07 | | | | | ■ |
| Cheese factories | 25 | 07 | | | | | ■ |
| Gas (production and storage) | 31 | 08 | | | ■ | | |
| Tar (processing) | 33 | 05 | | | | ■ | |
| Seed production | 50 | 07 | | | | | ■ |
| Metal engraving | 33 | 07 | | | | ■ | |
| Oils (extraction) | 31 | 07 | | | ■ | | |
| Petroleum products (manufacture) | 33▫/34▪ | 08 | | | | ■ | ■ |
| Printworks | 20 | 08 | | | | | |

# Selection of enclosures according to the premises

## Enclosure characteristics

| Type of premises | Enclosure | | | | | | |
|---|---|---|---|---|---|---|---|
| | Cubicle | | | | | | |
| | | | with fixed frame | with door + IP30 cover | with door + gasket + IP30 cover | | with door + IP55 cover |
| | Min. IP/IK required | | IP30/IK07 | IP30/IK08 | IP31/IK08 | IP43/IK08 | IP55/IK10 |
| | IP | IK | | | | | |
| **Industrial establishments (continued)** | | | | | | | |
| Dairies | 25 | 07 | | | | | ■ |
| Public wash-houses | 25 | 07 | | | | | ■ |
| Liqueurs (production) | 21 | 07 | | | ■ | | |
| Halogenated liquids (use) | 21 | 08 | | | ■ | | |
| Inflammable products (storage and workshops where they are used) | 21 | 08 | | | ■ | | |
| Magnesium (production, storage and use) | 31 | 08 | | | ■ | | |
| Machine rooms | 20 | 08 | | ■ | | | |
| Plastics (production) | 51 | 08 | | | | | ■ |
| Cabinet makers | 50 | 08 | | | | | ■ |
| Metals (processing) | 31▫/33▪ | 08 | | | ■ | ■ | |
| Combustion engines (testing of) | 30 | 08 | | ■ | | | |
| Ammunition storage | 33 | 08 | | | | ■ | |
| Nickel (or processing) | 33 | 08 | | | | ■ | |
| Household waste (processing) | 54 | 07 | | | | | ■ |
| Paper (production) | 33▫/34▪ | 07 | | | ■ | ■ | ■ |
| Paper (storage) | 31 | 07 | | | ■ | | |
| Perfume (production and storage) | 31 | 07 | | | ■ | | |
| Pulp mill | 34/35 | 07 | | | | ■ | ■ |
| Paint (production and storage) | 33 | 08 | | | | ■ | |
| Plaster (processing and storage) | 50 | 07 | | | | | ■ |
| Gunpowder factory | 55 | 08 | | | | | ■ |
| Chemicals (production) | 30▫/50▪ | 08 | | ■ | | | ■ |
| Oil refineries | 34/35 | 07 | | | | | ■ |
| Salt preserve factories | 33 | 07 | | | | ■ | |
| Soap (production) | 31 | 07 | | | ■ | | |
| Saw mills | 50 | 08 | | | | | ■ |
| Metalwork shops | 30 | 08 | | ■ | | | |
| Grain or sugar silos | 50 | 07 | | | | | ■ |
| Silk and artificial hair factories | 50 | 08 | | | | | ■ |
| Sodium carbonate (processing and storage) | 33 | 07 | | | | ■ | |
| Sulphur (processing) | 51 | 07 | | | | | ■ |
| Spirits (storage) | 33 | 07 | | | | ■ | |
| Sugar mills | 55 | 07 | | | | ■ | ■ |
| Tanners | 35 | 07 | | | | | ■ |
| Dye works | 35 | 07 | | | | | ■ |
| Textile and fabric (production) | 51 | 08 | | | | | ■ |
| Varnish (production and application) | 33 | 08 | | | | ■ | |
| Glass works | 33 | 08 | | | | ■ | |
| Zinc works | 31 | 08 | | | ■ | | |

No applicable

# After sales tools

Version : 8.0 - 10/10/19
160E10000

# Contents

## Practical information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## Maintenance


| | |
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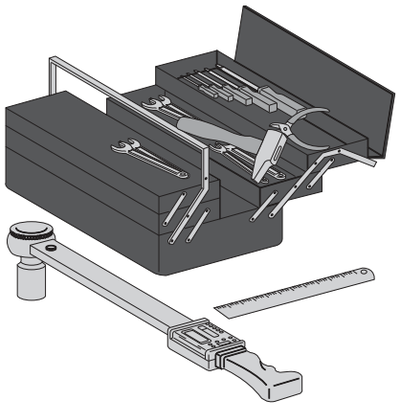
| Corrective maintenance | J-20 |


J

# Tools required for mounting and connection

## Practical information

DD383904.eps



- Vacuum cleaner to clean the switchboards
- Ratchet wrench with sockets
- Torque wrench with sockets and ring bits to tighten the electrical connections to the correct torque (max. torque 50 Nm)
- Open-ended torque wrench
- Open-ended spanners (15 to 27 mm).
- Electrician's knife
- 7, 8, 10, 13, 16, 17 and 19 mm sockets
- Bit holder socket
- 4, 5, 6, 8 and 10 mm hexagonal-head bits
- Pozidriv no. 1, 2 and 3 bits
- Rubber mallet
- Level.
- Measurement and inspection tools and instruments
- Drill
- Semi-circuit nosed pliers
- Cable-tie pliers
- Wire stripper
- Crimping tool
- Diagonal cutter
- Wire cutters
- Flat-nosed pliers
- Bit holder for screwdriver
- Extension
- Electric saw
- Jig saw
- Clamp for cubicle alignment
- Buzzer or tester
- 3, 5, 4, 5.5 and 8 mm flat screwdrivers
- Posidriv no. 2 crosshead screwdriver (to mount handle)
- Hydraulic jacks that can be operated in horizontal position to lift cubicles and move them sideways if necessary.
- Coloured, indelible and temperature resistant acrylic varnish.
- Electric screwdriver

**Note:** a Facom brand torque wrench is available with a capacity of 75 Nm and a thin shape. It is recommended for tightening under difficult access conditions.

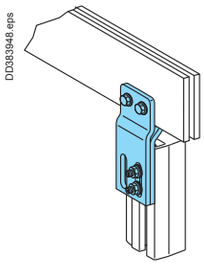
**Part numbers:**

- SP3723 = wrench handle (essential)
- SP3721 = extra-flat ratchet adapter (essential)
- SP3722 = ratchet for ordinary sockets (optional) for mounting on handle SP3723
- SP2709 = extra-flat 13 mm short socket
- SP2709A = extra-flat 13 mm long socket
- SP4369 = extra-flat 16 mm short socket
- SP4370 = extra-flat 16 mm long socket
- SP2710 = extra-flat 17 mm short socket
- SP4371 = extra-flat 19 mm short socket
- SP4372 = extra-flat 19 mm long socket.

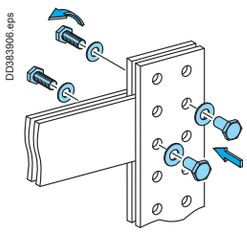
# Connection of horizontal to vertical busbars

## Practical information

Horizontal busbars can be connected to vertical busbars (Linergy LGY or Linergy BS) in two ways:
- in a duct (by a direct connection ordered from the catalogue)
- in the rear (with part of the connection to be fabricated by the installer).




Connection plate
(cat. no. **04635**).

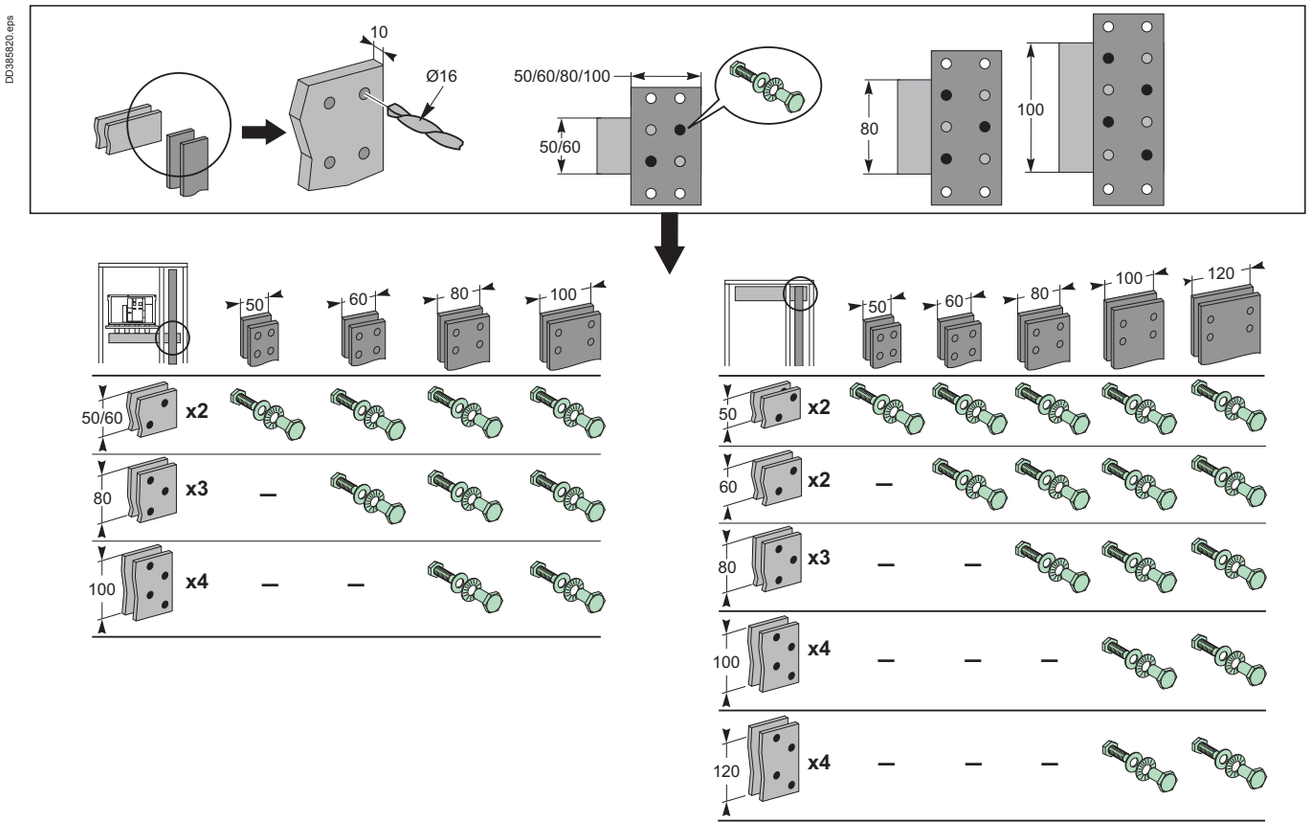



Screw + socket
(cat. no. **04645**).

**5 mm thick horizontal busbars can be connected to vertical busbars using** connection plate 04634 (y 1000 A) or 04635 (> 1000 A) after drilling holes in the horizontal bars.

**10 mm thick horizontal busbars can be connected to vertical busbars in 2 ways:**
- using connection plate 04636 (≤ 1600 A) or 1600 A < 04637 < 2820 A without drilling holes in the horizontal bars
- or with a screw and socket assembly (04645) designed for assembly on a busbar that has already been mounted.

This bolted solution requires:
- holes drilled in the bars (Ø16 mm) for diagonal mounting of the sockets and screws
- conformity with the following mounting rules:
  - respect the overlap length (2.5 to 5 times the bar thickness)
  - tighten to a torque of 50 Nm
  - fit the recommended number of screws, depending on the bar width as explained below.




In practice, the real contact area is limited to regions in which the pressure is applied effectively.
In a bolted overlap assembly, these areas are made up of the areas adjacent to the bolts, and more precisely under the washers.
Salt spray tests have demonstrated these contact areas.
The number of screws thus determines the effective cross-sectional area through which the current flows, which corresponds to the area under the washer (minus the screw hole).
This cross-section area must be close to that of the bar.

**Controlled temperature rise**
Whatever the connection solution used, the quality and reliability of the contact is guaranteed, in particular with respect to temperature rise, as long as assembly is carried out according to our recommendations.

J

# Installation of the current transformer

## Practical information

PD391279.eps

Dismountable vertical busbars.

Choice of a CT model depends on the type of installation:
- insulated cables
- Prisma P vertical busbars
- insulated flexible busbars
- Linergy LGY vertical busbars
- rigid busbars.

When installing a CT, we recommend that you comply with the following mounting rules:
- install current transformers:
  - on an easily dismountable busbars or copper connections
  - between 2 connection points, by joints or bolted connection
- place the current transformer so that the identification markings remain readable.

For large current transformers, a staggered installation is recommended to prevent arcing on fixing screws or excessive spacing between phase conductors.
If they are installed on vertical busbars, secure the current transformers in place to prevent them from slipping downwards (for example using a bolt or a pin)
- when there are several busbars per phase, fit spacers between the busbars in order to:
  - resist the tightening forces when installing the current transformer
  - avoid vibrations that lead to current transformer breakdowns.

PD391280.eps

CT on vertical busbars.

PD391281.eps

Spacers between the bars.

# Installation of the current transformer

## Practical information

Our circuit breakers have trip units with a **built-in ammeter** (see Micrologic catalogue).
Their use eliminates the need for installing a CT on the busbars.

**The CT casing** is a solution for installation of CTs up to 1600 A.
CTs can be installed in the casing (cat. no. 03506).
It is equipped with a frame made up of 2 uprights, adjustable in depth and 2 slotted cross-members to fix the cables, install CTs or install a busbar support with 75 mm spacing.
It is secured in the switchgear compartment of a 400 or 600 mm deep cubicle.

**The 300 mm duct** allows easier mounting of CTs.
To install 2 CTs, downstream from a circuit breaker for example, it is often easier to use a 300 mm wide duct (cat. no. 08403 for 400 mm depth or cat. no. 08603 for 600 mm depth).

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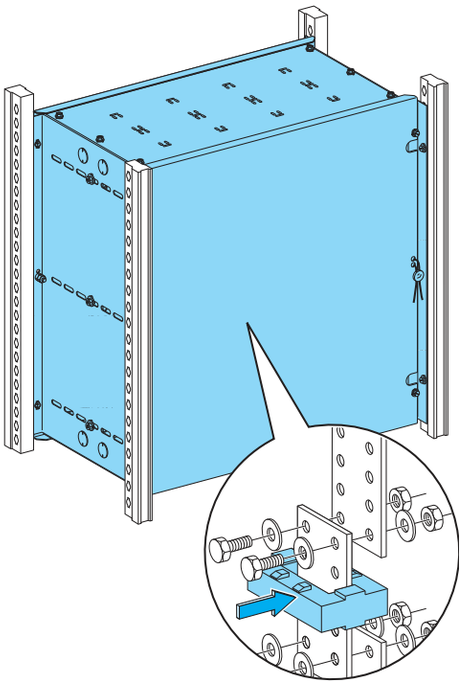

Sealable CT casing with current transformers on bolted connections.

PD391282.eps

CT on circuit breaker downstream connection busbars.

J

# Installation of source changeover systems

## Practical information

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Source changeover system in the same cubicle.

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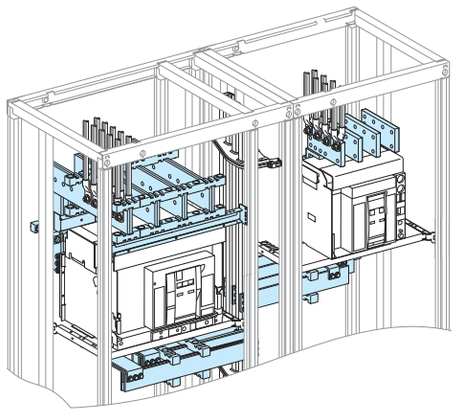

Source changeover system in 2 combined cubicles.

PD391284.eps

### Principle of the Prisma P solution

**Prisma P simplifies the installation of source changeover systems.**
The “source changeover” solution is an integral part of the Prisma P offering and is designed for all installation cases: 2 or 3 devices side by side or 2 superimposed devices.

The page opposite shows a few examples of installation in cubicles:
- 1 normal source/1 replacement source
- 2 normal sources with coupling (priority and non-priority circuits)
- 2 normal sources + 1 replacement source with coupling (priority and non-priority, circuits).

Note that our configuration software can be used to produce the switchboard front panel drawings.

For each source changeover configuration, various combinations of normal and replacement source circuit breakers and switch-disconnectors are possible:
- 1 normal source/1 replacement source:
  - NS630b to NS1600 / NS630b to NS1600
  - NT / NT
  - NT / NW
  - NW / NT
  - NW / NW
- 2 normal sources with coupling:
  - NW / NW / NW
  - NT / NT / NT
  - NW / NW / NW
- 2 normal sources + 1 replacement source with coupling:
NW / NW / NW / NW or NT.

Tables in the catalogue indicate the possible combinations “normal” and “replacement” devices according to the rating as well as the types of interlocking available for the different types of devices.

Highly economical vertical configurations are possible even for the largest devices. In this case, interlocking may be:
- mechanical by cable + motor mechanism
- via rotary handles (for NS630b/1600 only).

To define the number of modules required to install superimposed devices, all you have to do is add up the number of modules required for each device with:
- its connections
- its cover and its partitioning.

# Installation of source changeover systems



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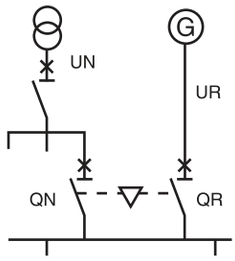
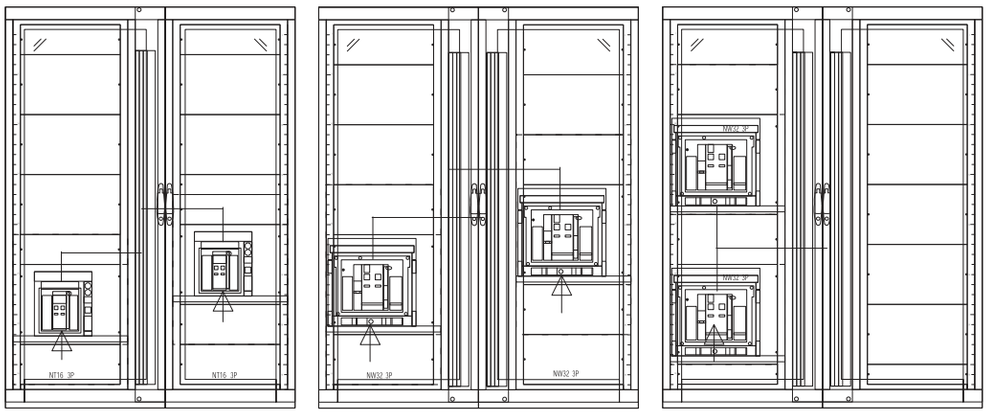
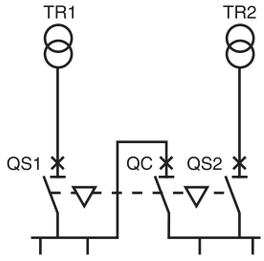
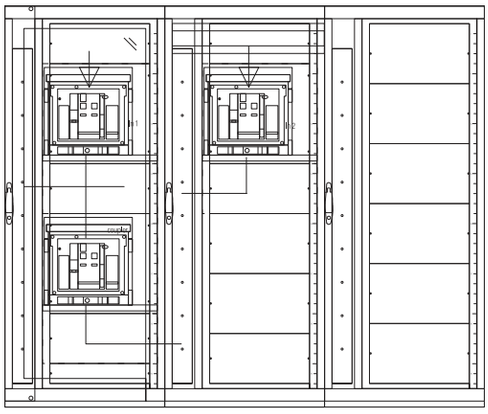


1 normal source
1 replacement source

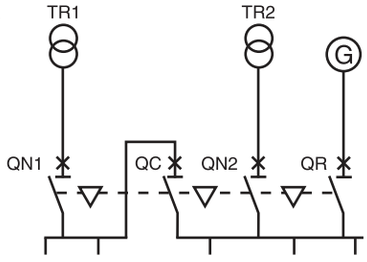
DD210440.eps

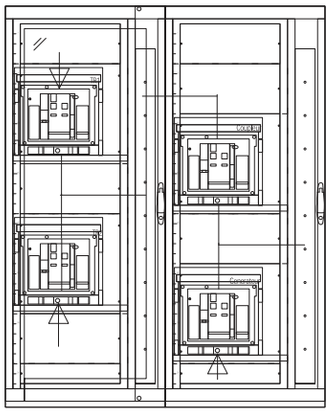


2 normal sources and coupling on busbars

DD210441.eps



2 normal sources
1 replacement source and coupling on busbars

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# Storage recommendations

## Practical information

Cubicles must be stored in upright position in a dry and ventilated location, sheltered from rain, weather, dripping and running water, dust and chemical agents.

Apart from IP55 cubicles, never store enclosures outdoors, even under an awning or tarp.

The cubicles should if possible be left in their packing until they are installed. In this way they are protected against all risks that may be encountered on the site (impacts, splashes, etc.).

Acceptable storage temperatures are -25 °C to +55 °C (or up to +70 °C for short periods not exceeding 24 hours).

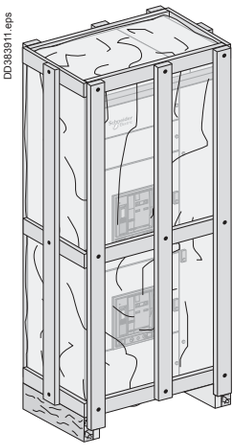
Given their heavy weight, cubicles should be stored on a stable, rigid and flat floor to avoid any risk of tipping during storage or handling.

## Practical information

### Receiving the switchboard

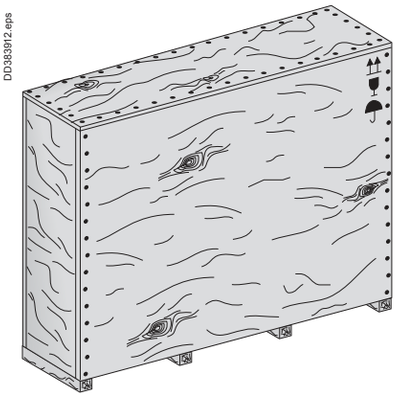
On receipt of the equipment and before handling it, check that the cases and packing materials used for transportation have not been damaged and that all items on the packing list have been effectively delivered.

- Even if the packing appears to be in good condition, do not hesitate to unpack the equipment in the presence of an authorised transport agent.
- Check the contents and weights of the shipping units. Thoroughly check the equipment to make sure that no damage or shocks have occurred that could impair insulation or operation.
- If necessary, check that the information on the switchboard nameplate, located on the incoming cubicle, complies with the information indicated on the delivery slip.
- In case of damage or missing parts, inform the transport agent by registered mail.
- After this inspection, refit the plastic protective cover.




Prisma P switchboards are generally shipped as separate cubicles or in transport units comprising 2 cubicles side by side. Shipping units may exceptionally comprise 3 cubicles (see precautions given in the "On-site handling" chapter).
Each shipping unit is marked with:

- project number
- weight
- packing unit information (packing unit number and total quantity)
- position of the centre of gravity
- storage and handling instructions.

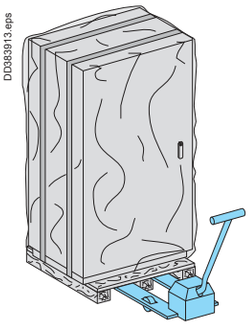



### Standard packing

The cubicles are protected by a plastic cover in a crate.
The following accessories are attached inside the switchboard:

- installation accessories (lifting/fixing cross-members and external fixing lugs)
- preliminary installation accessories: plinth raisers
- horizontal busbar joints (if required)
- additional nuts and bolts and other mounting hardware
- panels to be fitted after on-site connection: canopies, roof panels, gland plates
- a set of drawings
- device user manuals
- a tube of Swiss white varnish.

Large withdrawable or drawout circuit breakers installed at the top of the cubicle (Masterpact and Compact NSX) are generally delivered separately.




### Sea packing

The cubicles are protected by a heat-sealed plastic cover containing desiccant bags and are installed in a ventilated wooden or plywood crate.
As a rule sea crates do not weigh more than 5 tons.

### Sorting

In order to sort the different types of packing material, specific waste recovery bins are required.

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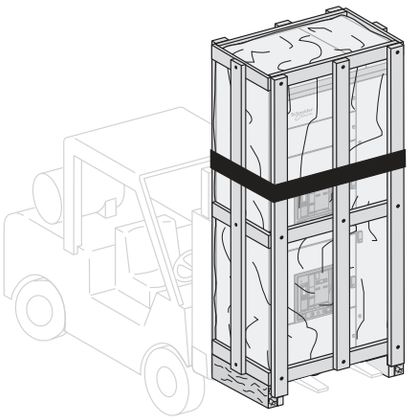

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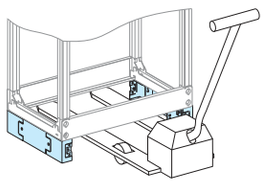

Framework stabiliser.

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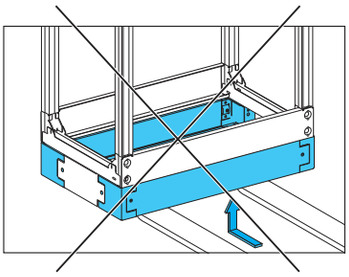

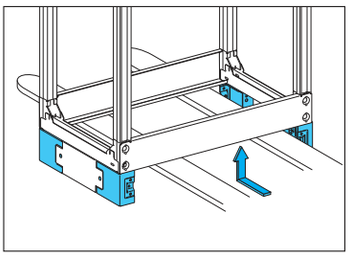

Cubicle with base.

## Practical information

Final unpacking of the equipment will preferably take place just before the switchboard is installed, as close as possible to its final installation location.

As a general guideline, the weight of an average 3200 A cubicle is around 400 kg. Cubicles should always be handled in the **upright position** with care, if possible **by 2 persons**. There is a risk of overtipping the cubicle due to the high position of the centre of gravity.
When moving the cubicles, always turn slowly and smoothly, avoiding all bumps and jerks. Enclosures moved using a forklift truck must be lifted carefully and held in position or fastened to the forklift truck using slings during transport.

### Handling by the bottom

Wooden beams (or framework stabilizers) are generally attached to the base of the cubicle framework. This allows the cubicles to be moved using a pallet mover or forklift truck.

⚠ The forks must be placed symmetrically with respect to the cubicle's axis so as not to distort the base of the frame.

For cubicles fitted with a plinth, the front and rear base panels must be removed to allow insertion of the pallet mover forks.

Cubicles must be lifted with care and held in place during transport by strapping them onto the handling machine, especially for large distances or bumpy terrain.

For a Prisma P switchboard with a busbar compartment, lifting points must be shifted towards the busbars.

## Practical information

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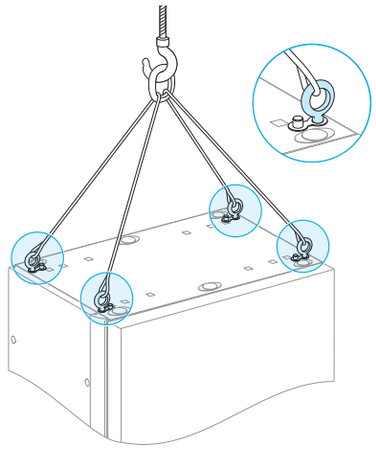

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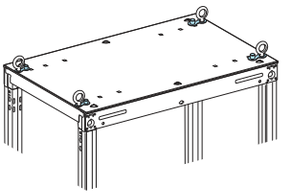

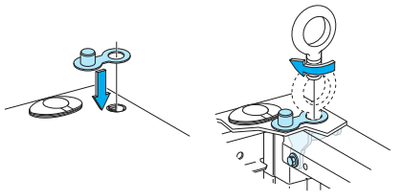

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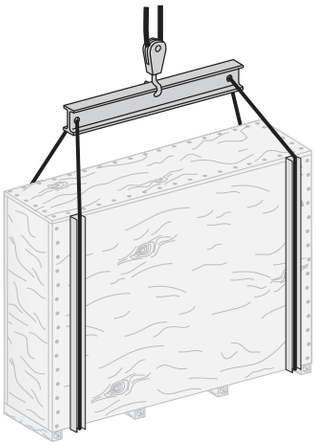

### Handling by the top

**If cranes or overhead hoists are used, only slings that are sufficiently strong and in good condition should be used.**

- The slings must be attached to the 4 cubicle lifting lugs.
- Adjust the length of the slings according to the switchboard dimensions so that the angle formed does not exceed the angle indicated below depending on the switchboard weight. When 2 switchgear cubicles are combined, a lifting beam must be used.
- Never tilt the cubicle during handling.
- Take care to equally distribute the load on the 4 rings.

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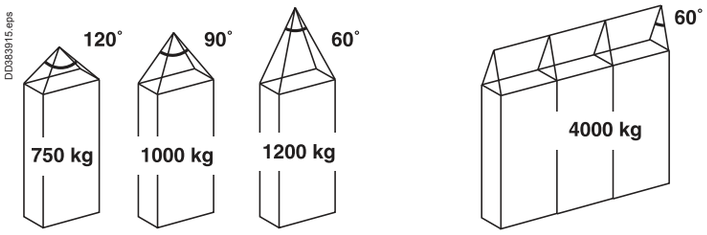


### Position of lifting rings

The lifting rings can be installed and removed without dismantling the roof.
Even with the lifting rings permanently installed, the switchboard retains its original degree of protection.
For combined cubicles, only install lifting rings on cubicles with switchgear.

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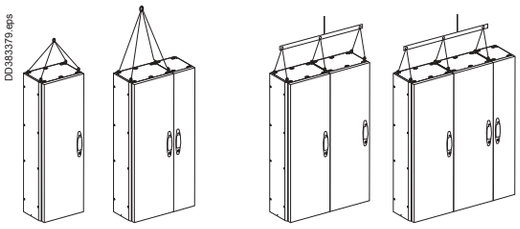

### Lifting several cubicles packed together

In the special case of an assembly with more than 2 cubicles, you must:

- first of all move the assembly in its original packing as close as possible to where it is to be installed
- use a lifting beam and slings to support the switchboard from underneath.

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## Practical information

The cubicles must be loaded vertically (stacking strongly discouraged).
After loading, check that the equipment is firmly secured in the truck to avoid any risk of damage during transport.

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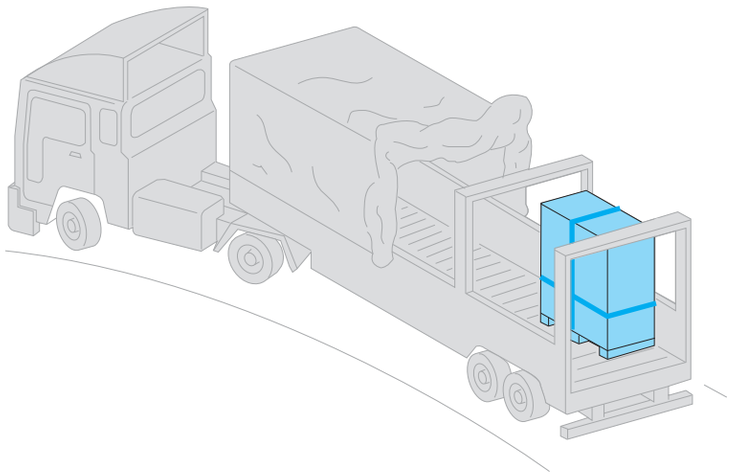

Enclosures supplied as kits should be transported horizontally if possible.

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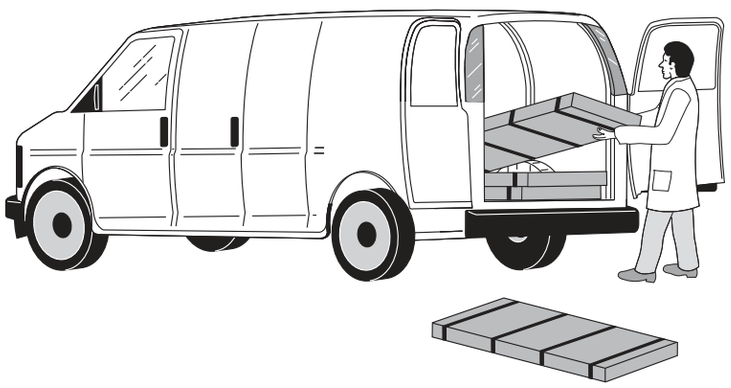
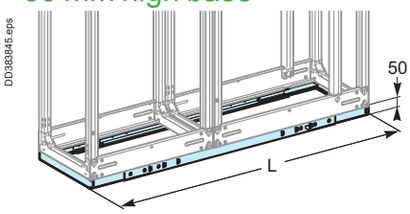


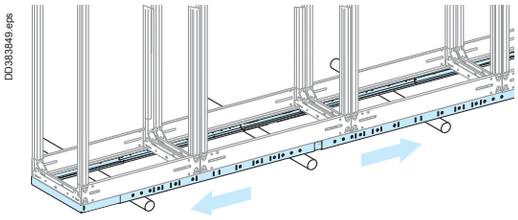
# Cubicle handling and rolling base Lifting reinforcement kit for combined cubicles

## Practical information

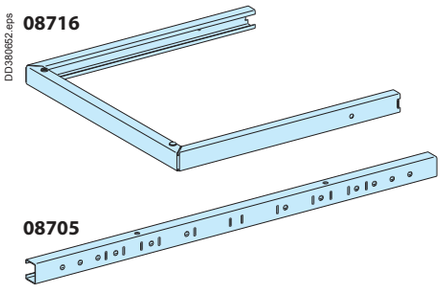
### 50 mm high base




**08714** + **08705**.




Combined cubicles equipped with a handling base can be moved easily and safely on rollers.

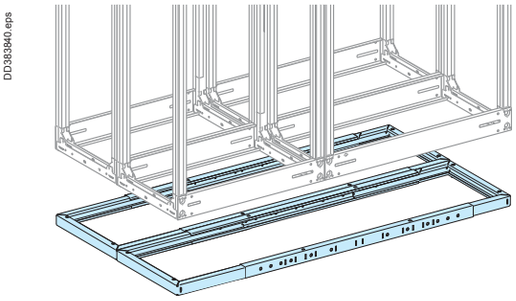



This type of base is designed to increase the rigidity of cubicle frameworks to avoid any risk of deformation during transport and handling.
Five different catalogue numbers offer 27 width possibilities (1200 to 3050 mm) for 400 and 600 mm deep cubicles.

- Two catalogue numbers each include 2 end-pieces for handling bases for 400 and 600 mm deep cubicles respectively and the corresponding mounting hardware.
- Three catalogue numbers each include 2 lengths for the sides of handling bases for 1200 to 3050 mm wide cubicles respectively and the corresponding mounting hardware.

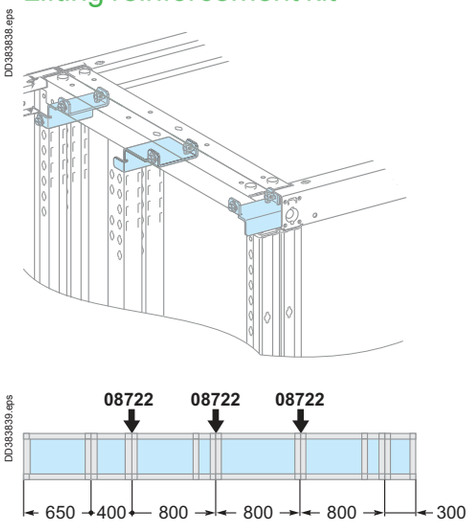
Handling bases can be used for both side-by-side and back-to-back cubicle combinations.
In this case, the mounting hardware for one of the sets is used.

| Designation | | Cat. no. |
|---|---|---|
| 2 cubicle handling base end-pieces | D = 400 mm | **08714** |
| | D = 600 mm | **08716** |
| 2 cubicle handling base side-lengths | W = 1200 to 1900 mm | **08705** |
| | W = 2000 to 2550 mm | **08706** |
| | W = 2650 to 3050 mm | **08707** |




Side-by-side and back-to-back combination of 4 cubicles equipped with a handling base.

### Lifting reinforcement kit




A lifting reinforcement kit should be installed every 800 mm.

- Kit 08722 is recommended for lifting combined cubicles and can be used together with handling base end-pieces 08714 for severe transport or handling conditions.
- Catalogue number 08722 includes 3 reinforcement brackets for 400 or 600 mm deep cubicles and the corresponding mounting hardware.

| Designation | | Cat. no. |
|---|---|---|
| Lifting reinforcement kit for combined cubicles | W = 400/600 mm | **08722** |

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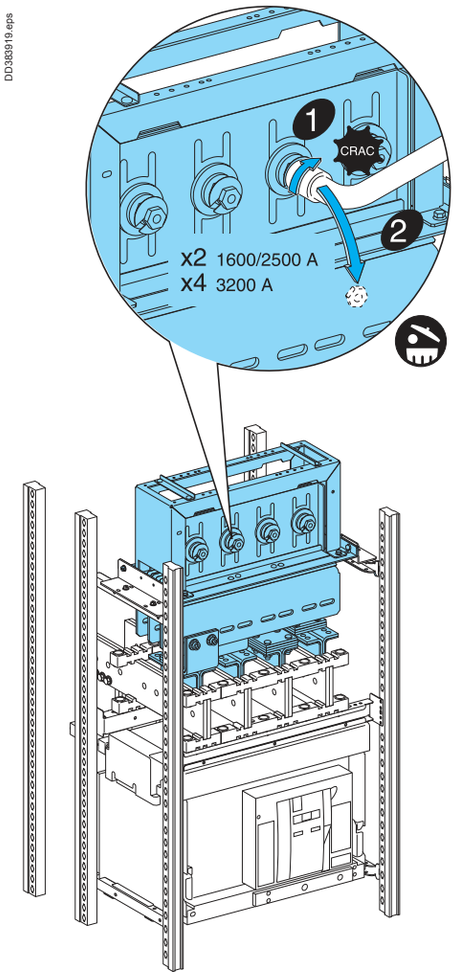
# Connection of busbar trunking

## Practical information

Prisma P switchboards come equipped with a special interface that allows them to be directly connected to Canalis KT trunking.
The electrical connection between the Canalis KT trunking and the Prisma P switchboard is just as easy to carry out as jointing between two busbar trunking sections.
The Canalis KT interface is totally integrated in the Prisma P switchboard volume. It comprises a Canalis KT joint block and interface/circuit breaker connection terminals.




### Trunking connection via the top

- Dismantle the roof.
- Cut out a passage for the busbar trunking.
- Adjust the guides according to the KT width that will be connected.
- Unscrew the junction block screws.
- Ensure that the busbar trunking length to be connected to the switchboard is correctly supported and that it is not resting on the interface.
- Lower the element until it is in contact with the interface frame, without bearing on it.
- Tighten the junction torque nuts. When the head breaks, the torque of 60 Nm has
- been reached.

⚠ In certain cases, it is recommended to only tighten the 2 middle nuts to 60 Nm and the 2 outer nuts to 10 Nm.

- A red plastic washer that is ejected when the head breaks provides visual evidence that the joint tightening operation has been carried out correctly.
- For dismantling or maintenance operations, a second head is available on the nut and can be retightened using a conventional torque wrench. The recommended tightening torque is then 60 Nm.
- Reassemble the roof.

### Sealing kit

- In order to retain the original IP index, use the roof sealing kit ordered with the busbar trunking. This kit guarantees an IP52 degree of protection at the trunking passage.
- The kit is installed by cutting out the roof of the Prisma P switchboard.

This cut-out, which is the same dimension for all Canalis KT busbar trunking ratings, is made using the template delivered with the sealing kit.

## Practical information

To ensure protection of persons, first connect the switchboard protective conductor to the earth electrode.

- Tie the cables as close as possible to the connections to avoid any mechanical stresses on the device terminals. When not using cable glands, also attach the cables near to the cubicle entry point.
- Cables must never be in contact with or passed between live conductors.
- Sharp edges of the framework must be protected where cables pass to avoid damaging the conductors.
- Comply with a minimum radius of curvature of 6 to 8 times the cable outside diameter.
- All power connections must be made with class 8.8 mounting hardware and elastic contact washers, tightened to the torque indicated in the table below.
- When connecting aluminium cables to copper terminals, use bimetal lugs or interfaces.
- Separate the different types of circuits into separate cable bundles (power, control, 48 V, 24 V, DC, AC, etc).

**Cable bundles**

| Cable cross-sectional area ($mm^2$) | Max. number of cables per bundle |
|---|---|
| CSA ≤ 10 | 8 |
| 16 < CSA ≤ 50 | 4 |
| CSA ≥ 50 | Tie individually |

**Tying the cable bundles**

| Type of tie | Maximum Icw (kA/rms 1s) | Distance between ties (mm) |
|---|---|---|
| Width: 4.5 mm<br>Load: 22 kg | 10<br>15<br>20 | 200<br>100<br>50 |
| Width: 9 mm<br>Load: 80 kg | 20<br>25<br>35<br>45 | 350<br>200<br>100<br>70 |

For cable sizes of 50 $mm^2$ or more, use 9 mm wide fixing ties.

**Recommended tightening torque** for mechanical and electrical connections with 8.8 class screws.

| Diameter of screw | Tightening torque (Nm) (with nut + contact washer) |
|---|---|
| M3 | 1.5 |
| M4 | 3.5 |
| M5 | 7 |
| M6 | 13 |
| M8 | 28 |
| M10 | 50 |
| M12 | 75 |

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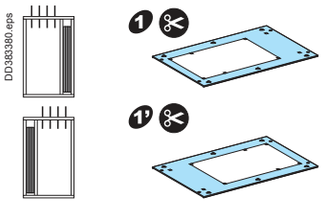
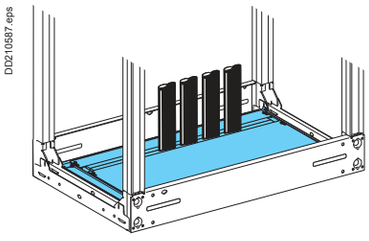
## Practical information




### Connection via the top

- Remove the roof.
- Drill the holes required to install cable glands or grommets.
- Install the cable glands or grommets. They must comply with the switchboard's degree of protection (IP).
- Refit the roof.
- Run the cables through the glands or grommets.
- Run the cables in the intended compartments and secure them to cable tie-bars every 400 mm.
- Crimp the lugs and connect.
- When sealing does not call for cable glands or when sealing is achieved by means of foam, cables can be routed in a rectangular cut-out in the roof.

The removable cross-member simplifies insertion of cables in the cubicle.



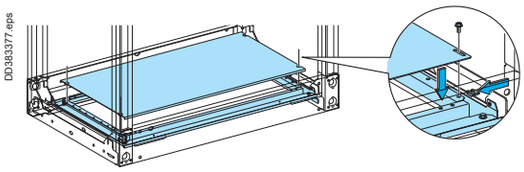

### Connection via the bottom

**Using a 2-part gland plate**

- Drilling is not necessary with this type of gland plate.
- The gland plate avoids producing an induced current.
- The cables are protected by a polyurethane foam seal which provides a sealing function.

**Using a 1-part gland plate**

- Remove the bottom plate.
- Drill the appropriate holes to assemble the cable glands or grommets (1-part gland plates should not be drilled within 30 mm of the edges).
- Install the cable glands or grommets. They must comply with the required degree of protection (IP).
- Refit the bottom plate.
- Run the cables through the glands or grommets.
- Run the cables in the intended compartments and secure them to cable tie-bars every 400 mm.
- If cable glands are not used, it may be easier to prepare the cable terminations outside the switchboard (e.g. lug crimping) and then to drop them inside the cubicle having first disassembled the bottom removable cross-member.

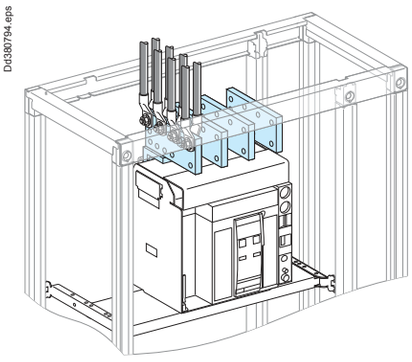



### Covering an incomer

**For Masterpact NW/NT /NS1600b-3200 / Compact NS630b-1600**

- Disassemble the cover plate to access to the device connection terminals.
- Connect the cables, respecting the required electrical clearances.
- Cut out the part of the cover disassembled in order to let the cables pass through it, while preserving the necessary degree of protection.

## Practical information



Removable upper cross-member.

### Connecting to terminal extension bars

- Check that the circuit and switchgear identification indications match.
- When connections are made to terminal extensions made up of several bars for each phase, position the lugs opposite one another and insert copper spacers between the bars.
- Comply with the minimum required electrical clearances between phases of 14 mm (conforming with IEC 60439-1).
- Mark all nuts and the terminal extension bars with a dot of varnish after tightening to the defined torque.
- Remove the top cross-member of the cubicle to simplify connection of the cables to the bars.
- Tie cables of the same phase together.

### Connection directly to device terminals

- When connections are made directly to the switchgear terminals, comply with the tightening torque recommended by the device manufacturer.
- Check that the length of the screws delivered with the switchgear is compatible with the lug thickness.
- Comply with the safety clearances around the switchgear devices, defined by the manufacturer to ensure correct operation.
- Refit the interphase barriers and terminal shields if applicable after connection the power cables.
- For the special case of connection with armoured cable, please consult us.

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Maintenance

## Frequency

- The frequency of preventive maintenance depends primarily on the operating conditions of the electrical switchboard.
- For operating conditions found in normal environments, the frequency should be as indicated in the recommended calendar.
- It may be extended if the switchboard is used in a particularly clean environment and not in an intensive manner.
- It must be reduced if the switchboard is used in a particularly aggressive environment (dust, humidity, corrosive vapours, heat) or is used intensively.
- Recommended calendar

| Type | Action | Frequency |
|---|---|---|
| General inspection | Visual checks and general cleaning.<br>Visual check of busbars.<br>Running tests | Once a year |
| Maintenance on functional units | Inspection of the connections | Every 5 years |
| Maintenance of ventilation system | Cleaning of filters | Every 6 months |
| Maintenance of devices | According to the respective handbooks | |

## General recommendations

Before any intervention on the connections, switch off the functional unit, remove the protective screens and the partitioning sheets and boxes.

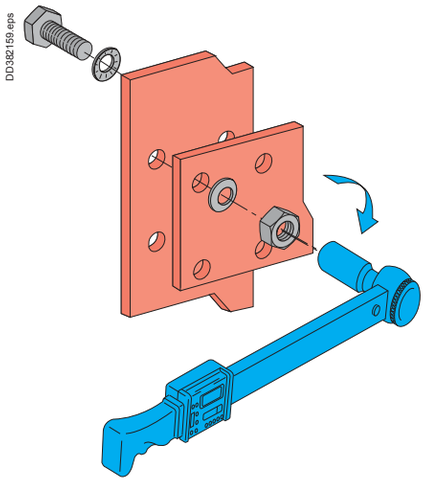
- For interventions on the connections, refer to chapter "Connections", profession Install.
- When reassembling the connections:
  - use new screws, washers, nuts of the same type (class 8.8)
  - tighten to the defined torque (refer to the tightening torques table in the chapter "Connection/Tools required")
  - apply varnish.

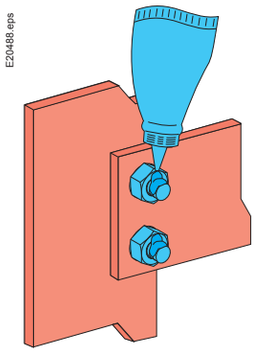
### Method of inspection of the electrical connections

- Connections by lugs or screwed bars: presence of varnish, colour changes of a copper bar.
- Connections by cage type terminals: if necessary, re-screw to the torque defined by the manufacturer to compensate for a possible creep.

**Please ensure that you consult the "General" chapter section dealing with safety instructions.**

Maintenance




## General inspection

### Visual checks and general cleaning of the cubicles

- Check the lack of humidity and foreign bodies inside and outside the switchboard.
- Examine the outer finish. If necessary, touch up any paint scratches and replace any damaged or rusted parts.
- Clean the switchboard, preferably with a vacuum cleaner.
- If necessary, clean the ventilation system and change the filters.

### Visual check of busbars

- Connections do not need to be tightened as they was already be tightened to the tightening torque in worshop and the use of a contact washer compensates for possible creeps due to overheating. The presence of vernish guaranteeing correct tightening torque, is intact.
- The control of busbars connections and outgoing cables connections can be carried when disassembling the protection (out of supply) or if a hot point is detected (infrared control or thermal sensors). A hot point materialises by a change in the copper colour.
- In case of hot point see "Corrective maintenance".
- Check the condition of insulating busbars supports.

## Cleaning of panel ventilation filters

### Standard or fine filters

- Wash with water (preferably using a high-quality detergent).
- It is also possible to remove the dust by tapping, vacuuming or blowing with compressed air.
- If there is any oil or grease, change the filter.

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Maintenance

## General

### General recommendations

- Before any intervention on the connections, switch off the cubicle, remove the protective screens and the partitioning sheets and boxes.
- When reassembling the connections:
- use new screws, washers, nuts of the same type (class 8.8)
- tighten to the defined torque (refer to the tightening torque table in chapter "Connection/Connection of power cables")
- apply varnish.

## Hot point

### Screwed connection

- Identify the cause: generally a loosening connection.
- Dismantle the assembly.
- Clean and rub down surfaces in contact (e.g. sandpaper N° 400).
- Set the connection up.

## Maintenance after a fault has occured

The high currents resulting from a fault cause damage to structures, components, busbars and cables.

**Following a fault, contact your local Schneider Electric office.**

## Troubleshooting and interventions

For any interventions other than those described in this manual, **contact your local Schneider Electric agency.**

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