Experience Efficiency, the Schneider Electric Way

@SE Catalogue

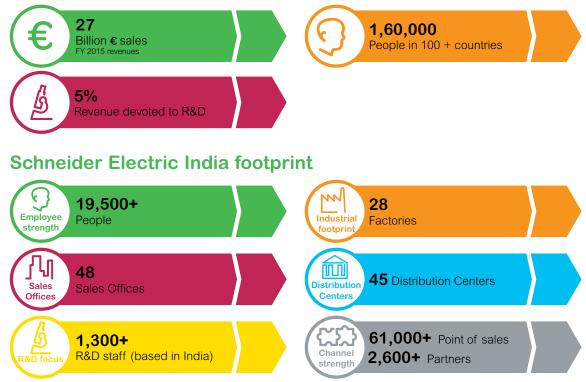


schneider-electric.co.in

Schneider Electric is the global specialist in energy management and automation. With revenues of €27 billion in FY2015, our 160,000 employees serve customers in over 100 countries, helping them to manage their energy and process in ways that are safe, reliable, efficient and sustainable. From the simplest of switches to complex operational systems, our technology, software and services improve the way our customers manage and automate their operations. Our connected technologies will reshape industries, transform cities and enrich lives.

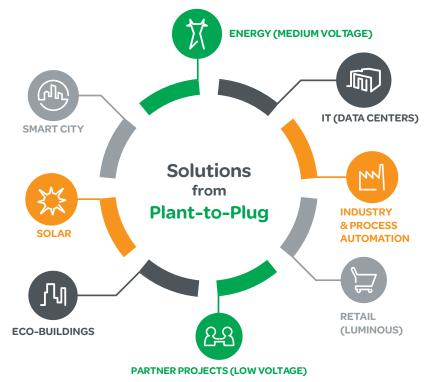
At Schneider Electric, we call this Life Is On.

Schneider Electric Global footprint



Our business offerings

Span the entire spectrum from Plant-to-Plug.





Automation Solutions



Key Offerings Portfolio/Service Portfolio

> Protection IEDs

 Protection relays to fit every application in industrial and distribution utilities: Series10/20/40/80/380,000+ devices delivered since 2000



> Protection IEDs

- Proven and recognized MV & HV suite: Px10, Px20, Px30 & Px40 Platforms. 600,000+ devices delivered since 1997. World leading Arc Protection Specialists
- IEC 61850 Platform: 50 and 200 Series



Scaleable IEC 61850 based Substation Control Systems 600+ in service since 2002



> Feeder Automation

 FLITE & FLAIR
 Fault detectors for overhead and underground networks

 SMART RTU Control units for MV substations and overhead switches with a high level of integrated functions

> Large RTU/Bay Control

 Modular Substation Computer for flexible operation (RTU, Bay Controller etc.)



>MiCOM

- A proven and recognized suite of Extremely High, High and medium voltage IEDs with communication capabilities (Measurement, Protection, Bay controller etc..)
- More than 300 000 MiCOM equipments world-wide since 1997

>SEPAM

• Modular range of digital protection relays. SIL 2 certification for safety and reliability or critical feeders

>VAMP

- Protection @ speed of light
- Accurate and fast Arc fault protection

>MiCOM S1 Studio

• Mimics the real world of electrical systems with its intuitive and versatile user interface and integrated file management facilities

>PACiS 5

- Comprehensive range of Digital Control System for Electrical EHV, HV and MV applications
- > More than 1000 PACiS in service since 2002



Medium Voltage Offerings

PIX Range



- Offerings covering the entire Medium Voltage range upto 33 kV
- Indoor switchgear applications in segments including Industries, Utilities, Power plants and Buildings & Infra
- Compact width of cubicles starting from 600 mm for 11 kV and 1000 mm for 33 kV
- Tested and designed as per latest IEC 62271-100 & 62271-200
- Metal-enclosed switchgear, loss of continuity category LSC 2B-PM, tested for Internal Arc faults, qualification IAC AFLR

Primary Gas Insulated Switchgear



- Modular design, suitable for Single & Double Bus Bar System
- Touch proof, rapid and safe on-site assembly
- User-friendly operator interface with great variety of cable connection options
- GIS (GHA) with no gas handling required at site makes it environment friendly
- Hermetically sealed, gas insulated switchgear with all live parts in protective gas area (WS)
- Rated voltage upto 40.5 kV current upto 4000A (DBB), STC upto 40 kA for 3 sec

BIOSCO IN 10 & BIOSCO IN 16



- Tested as per IEC 62271-202
- Internal Arc tested solutions ensures public and operator safety
- Range IN10 upto 22 kV 1000 kVA, IN 16-upto 33 kV 1600 kVA
- HV side with RMU, LV side with ACB & MCCBs
- Oil type & Dry type Transformer with optional HT metering & LV APFC panel
- Manufactured, assembled and tested in the factory & delivered ready to be connected



Up to 24 kV, 630 A, 21 kA/3s for 11 kV and 20 kA/3s for 11 kV Also, available as 11 kV for 1sec for 11 kV RMU

FBX

- Up to IAC 21 kA, 0.1s AFL for Indoor, 0.2s AFLR for Outdoor
- Available in various versions: Compact (FBX-C), Extensible (FBX-E), Indoor & Outdoor (IP54 protection)
- Manual or Motorized Operation.
- Switching and insulation in sealed-for-life SF6gas tank
- Continuity of service LSC2A
- Compliance to IEC 622271-200 & local standards
- Versatile to fit most applications and also available with FRTU & SCADA connectivity options

Ringmaster



- Touch proof/completely shielded SF6 tank
- Cable testing facility without disconnecting the cables from cable chamber (on customer request)
- Internal arc AFLR of 21 kA 1sec since the pressure relief device is at the top of the tank
- Motorization within a minute and ccomplete isolation from the remote
- Lesser gas leakage points due to moulded construction



 Complete switchrooms comprising both MV & LV Switchgear plus other equipment like UPS, SCADA, VSD etc

E House

- Fully factory equipped and tested, shipped to site in transportable sections
- Economical & FAST Site Installation, simplified commissioning
- Increased RELIABILITY, due to assembly/ testing/quality control in factory
- Reduced exposure to fatal RISKS in unsafe areas
- Less Reduced ENGINEERING costs, civil costs – easy repeatability
- Design engineered by the PRODUCT Specialists



Transformers



• MPT: Minera Power Transformers (from MVA till 100 MVA)

Minera MP oil-immersed medium voltage power transformer is dedicated to all applications up to 100 MVA and is designed to meet your needs.

Our broad range for Minera MP transformers includes:

- Three phase units (single phase available on request)
- Ratings up to 100 MVA, 50 or 60 Hz
- Voltage insulation level up to 170 kV
- Breathing or sealed type
 - A wide range of accessories
 - High capacity cooling options such as ONAN, ONAF, OFAF, OFWF or others upon request
 - Standard or low noise levels
 - Off-circuit tap changer (OCTC) or on load tap changer (OLTC)

Minera Oil - Immersed Distribution Transformers

- Our standard range of Minera transformers is available as:
- Three phase units (single phase available on request)
- With ratings up to 4 000 kVA, 36 kV, 50/60 Hz
- With conservator or hermetically sealed type
- Ground, pad Mounted
- Naturally cooled (ONAN), air forced (ONAF) or other type of cooling upon request
- With normal or low noise or loss levels

Trihal - Dry Type Cast Resin Transformer

- C3*
 - Lowest ambient temperatures :
 - Operation 50°C
 - Storage/Transport 50°C (*C2 Thermal shock test carried out at 50°C)
- E3
 - Nearly Total condensation or heavy pollution or combination of both
 - Abnormal level of humidity up to 95%
 - According to new IEC 60076 16 Standard
- F1

Transformers subject to a fire hazard:

- Self extinguishing transformer fire
- Restricted flammability required
- Limited formation of fumes
- Limited contribution with calorific energy to the source of fire
- ≥5 pC
 - Maximum level of partial discharges measured during special test according to IEC 60076 11 standard
 - Resistant, Safe, Versatile Economic & Compact

Special Transformers in Range

 Furnace Transformers
 Converter Duty/Rectifier Duty/Inverter Transformers

 Aluminum Wound transformers
 With Solar Transformers

 Earthing Transformers
 Vegeta Oil Transformers



Low Voltage Equipment

Blokset, high safety and availability switchboard up to 6300 A

A wide range of solutions:

- > Electrical distribution / PCC
 - For high power incomers or feeders up to 6300 A
 - Withdrawable solution for high availability and safety applications
 - Fixed solutions for economical applications
 - Power factor correction
- > Motor Control Center / MCC
 - Fixed-typed motor control center for economical solution
 - Withdrawable motor control center for high availability and safety applications
 - Solution with motor controller, soft starters and drives
 - Protection levels: IP20, IP31, IP42, IP54
 - Busbar Material Copper / Aluminum
 - Short circuit breaking capacity max is 85kA for 1sec. **
 - Internal Arc of 85kA for 0.4sec**
 - Forms of separation up to Form 1/2b/3b/4b
 - Seismic Zone V

Prisma iPM Switchboards

Developing installation dependability!

IEC 61439-1 & 2 compliant switchboards designed for your safety

- Designed for basic electrical distribution requirements for applications upto 4000A.
- Based on kit based functional architecture complemented with brilliant aesthetics.
- Revolutionary and patented design in Busbars for optimum performance: Linergy busbars.

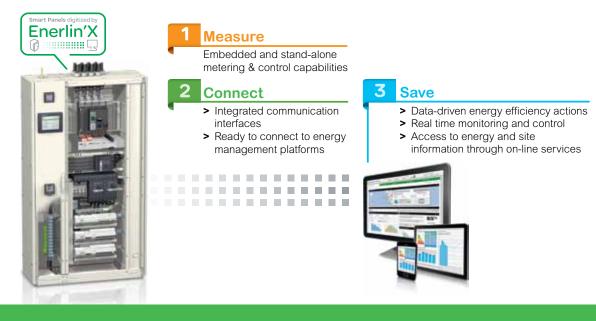




Smart Panels

Connected solutions for Network, Asset and Energy Management

Connect your facility to real savings in **3 Steps**:





Busway Solutions

Wide Range of innovative solutions

> I LINE II - High Power Sandwich Busway



> Canalis - Low and Medium Power Busway



- IP 55
- Tap-off intervals : 500 1000 3000mm KSA (Al) 100A - 1000A
- > KSC (Cu) 100A 800A
 - IP 55
 - Tap-off intervals 1000mm on each face

> Canalis - Lighting Busway



- IP 55
- Flexible Busway
- > KBA 25A / 40A (Single Circuit)
 > KBB 25A / 40A (Double circuit)
 - IP 55
 - Tap off intervals : 500 1000 1500mm







Unique Features

- I LINE II Busway: Superior Dual Housing and 50% Rated Integral Earth -
- Certified Zone 4 seismic compliance.
- ASTA Diamond / KEMA KEUR certified
- Silver plated Bimetal Cladding (Copper contact) on Aluminum Conductor.
- Excellent anti corrosion performance passed 1000 hours of salt test
- Dupont Mylar insulation Excellent di-electric performance
- Canalis range: Automatic shutter for air Insulated range
- Canalis range: Sliding contact Solution
- No Toxic emissions in case of fire
- Energy efficient and ROHS compliant

70000km busway installation across the globe



Low Voltage Products

Masterpact NT/NW ACBs and Compact NSX MCCBs Direct access to energy efficiency!



- > Designed to give You that Xtra bit to make your installations Smarter
 - · Communication ready range to digitize your system
 - Unique plug and play communication architecture accompanied by smart panel display (FDM)
 - Patented ASIC based microprocessor trip units with built in metering functions and advanced protection
 - Patented dual protection settings via rotary dial & keypad
 - Standard web browser & pre-configured software's for detailed analysis
 - Covering all your applications: Distribution, Motor protection, DC circuits, PV, Solar & wind applications.

> EasyPact MVS ACBs and EasyPact CVS MCCBs

Easy choice for reliable performance!





- > Contemporary design with emphasis on safety and reliability
 - ACBs with fault diagnostics last 10 trip history
 - MCCBs with thermal magnetic protection release throughout the range (16A-800A)
 - Common accessories with Masterpact and Compact series of circuit breakers

> Source Changeover System (ATS)

Efficient energy management and continuity of service with Auto source-changeover system.



> Maximum continuity of service

- Energy availability is ensured whatever the external requirements (e.g. high power demand) during operations as well as maintenance period.
- > Optimized energy management
 - Transfer the load to a replacement source according to external requirements.
 - Manage power sources according to power quality and power costs.

- > Simplicity and reliability
 - Simple installation on LV switchboard.
 - System based on pre-tested components.
 - Compliance with IEC 60947-6-1.
- > Range
 - 100A to 6300A.
 - Fixed, Plug in(630A) and Draw out (800A and above) versions.
 - Smart Integration over Communication Network.



Power Control & Protection

> EasyPact TVS



EasyPact TVS 3 Pole Contactor 6A - 630A



EasyPact TVS Control Relay 4 NO/NC Contacts



Overload Relay 0.1A - 630A*





EasyPact TVS MPCB 0.1 - 32A

EasyPact TVS 4 Pole Contactor 16A to 125A AC 1 duty

> TeSys Control and Protection

- Global offer, Conformity to IEC 60947-4-1 & CE marking
- High operational ambient temperature: upto 60°C
- Reliability with tested Fuse less / Fuse Type 2 co-ordination
- Wide variety of accessories for simple adaptation
- Special Wide Band coil (70% to 120% Uc) for 4 pole contactors up to 125 A and 3 pole contactor upto 38A ratings in 220Vac and 415Vac
- Class H insulation for coils
- New AC-3, 6Amp Rating
- 4 pole contractors avilable in 4 NO and 2 NO + 2 NC combination main contact



- > Innovative
 - SoLink-integration system for motor starter up to 30kW/400V in automation environment
- > Reliable
 - Total, type 1, type 2, coordination available
 - High electrical life, higher breaking capacities in starter modules

> Simple

- Ready made connections kits, make wiring simple and easy
- simple panel design as maximum product have standard dimensions

> TE-Start Moter Starters







3 HP-20 HP

Dust and Vermin Resistant Enclosures

- Suitable for Humid, high Temperature and Tropical environment
- Ability to with stand wide voltage fluctuations
- Latest Powder coating technology





Power Quality Solutions



> LV Components

- > LV Capacitors
 - Higher thermal efficiency & enhanced life expectancy
 - Available in standard duty, heavy duty, APP, Gas Impregnated and Energy (MDXL) -Can & Box designs
 - Inbuilt PSD for safe operation
- > APFC Relays
 - Comprehensive range with 6/8/12 stages Dual PF setting
- > Detuned Reactor
 - Compact footprint Low loss design

> Advanced Systems

- > Active Harmonic Filters
 - Performance better than IEEE 519-1992
 - Available in 3ph 3wire & 3ph 4 wire
 - Dual mode operation with PF improvement & harmonic reduction
- > Hybrid Var Compensators
 - Combination of active and passive system ٠ for localised correction at optimum price



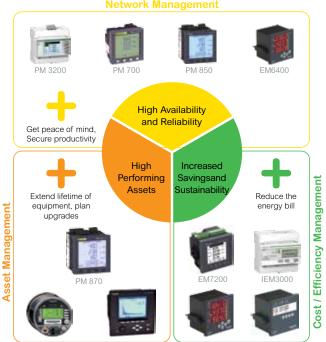
> Systems & Equipments

- > LV APFC Panel
 - Contactor / Thyristor switching
 - Detuned filter panel for harmonic rich environment
 - Standard & Customised designs
- > MV APFC Panel
 - PF improvement for HT loads
 - Long life vacuum contactors
- > MV Capacitors
 - MV fixed capacitor units
 - Delta / Single Star / Double Star • configuration available



Power Monitoring Solutions

A complete offering for energy management



Network Management



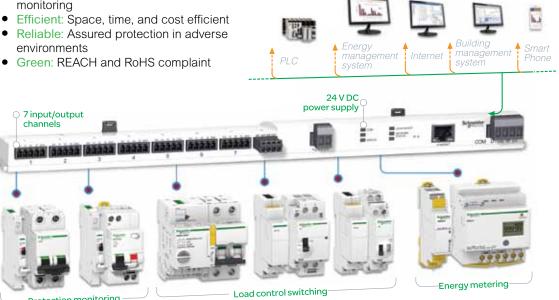
Final Distribution

Unique offers from the Global leader in MCBs, RCDs & Accessories

Acti 9 Communication System

> Industry 1st communicable MCBs & RCDs

- Innovative: Centralized control, local and remote monitoring
- environments
- Green: REACH and RoHS complaint



Protection monitoring

MCBs: 0.5 to 125 A in B,C & D curves with breaking capacity from 10 kA to 50 kA RCDs: RCCBs, RCBOs, Vigi Add on blocks up to 125 A in AC and Si class SPDs: Type 1 and Type 2

Auxiliaries: Communication capable indication and protection auxiliaries

Control & Indication devices: Isolators, Change over switches, Time switches, LED indicators, Meters

Acti 9 **Distribution Boards**

Inspiring the S.M.A.R.T. choice!!!

S	pectacular Design
	Blends seamlessly with interiors
Μ	aximized Wiring Space
	Convenient and Safe wiring
A	daptable
	Total Flexibility for ease of installation and usage
R	obust Architecture
	Perfect blend of Strength & Weight
Τ	echnically Proven
	Safety Guaranteed



Distribution Boards

- Wide range of DBs
- Metal Enclosures, SPN, TPN, PPI, Flexi Tier, VTPN, • Phase Segregated DBs



Wiring Devices



Electrical Switches as Design Elements

Time changes. Technology advances. Lifestyle evolves. So does the idea of perfection. Traditionally furniture & fixtures, lamps, wall colour were matched with overall interior design. In addition to these elements, think of a discreetly placed light switch which matches the interiors. Switch which infuses some character and life into your homes and offices. We can never avoid a wall switch located at eye level and we touch it every day. It can be an avoidable eyesore or a beautiful switch which enhances the interior while allowing you to control electricity safely.

With an in-depth understanding of lifestyle, technology and sustainability, Schneider Electric ensures that our innovative switches add a new dimension to the design of your office and home. A full spectrum of attractive colours, patterns, materials and finishes that will fit in various design concepts, match different decoration context and will enhance the appeal.

Ulti - The ultimate switch

The exquisite blend of design and patented innovation is a modern classic statement of style. With its ultra-clean lines, sleeky chic square profile, perfect round dollies, crystal glass and other plate options Ulti is haute couture of lighting control.

Neo – face the future

A breakthrough in switch design, Neo demonstrates horizontal thinking with unconventional horizontal dollies and layered details and it is the first switch to use LED locators and indicators

ZENcelo – be in-standing

Inspired by the full-flat design that transformed everything from TVs and mobile phones to electric stoves, ZENcelo mechanical switches revolutionized the switch design. Even on switches you never imagined can be full flat. Luxory is no longer designed by price. But by wisdom and style..

Opale – Switches with satin finish

A range designed by international designers keeping in mind the local market and its specific needs. Unique satin finish make it unique switch in sea of me too

Livia – switch to the extra ordinary

The soft white texture with high gloss finish makes LIVIA effortlessly chic in a trendy ambience and ornamental to a traditional interior style. This new range of effervescent switches and sockets blend in to stand out.



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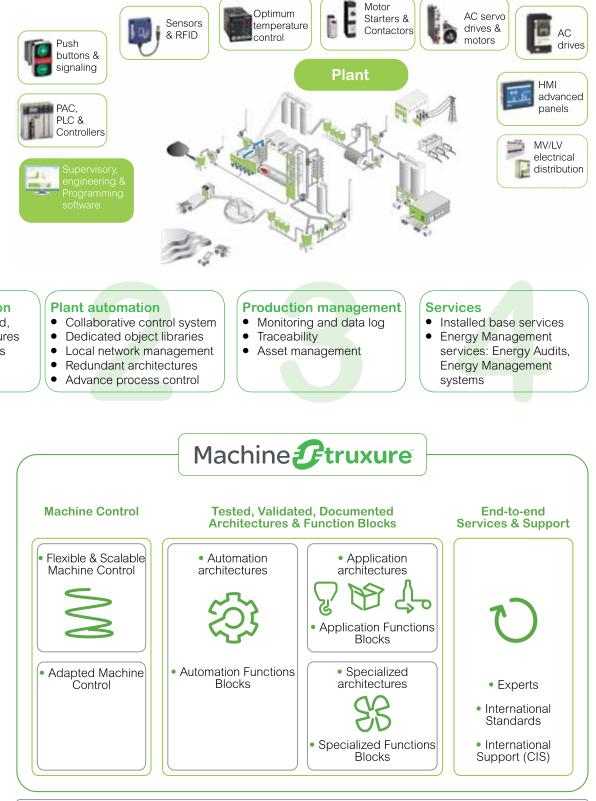






Overview

A complete offer for industrial plants and end users



Machine automation

- Tested, Documented,
Validated Architectures• C
- Application Libraries
- Machine safety

•

Energy Efficiency - EE Safety Solutions

NN ndusti

Innovation

Control & Signaling



Control: Schneider Electric Control has a reputation for performance and guality, and is the global market leader for push buttons, switches and pilot lights, an offer now reinforced with truly innovative biometric switches and battery-less and wireless pushbuttons

Relays: Relays refer to a wide offer range for switching control circuit, from simple switching up to processing control on the base of electromechanical and electronic technologies

Signaling: Signaling Products allow you to know the status of the machine at any moment in a large distance with a 360° visibility. As the specialist in operator interface, Schneider Electric offers you diversified visual and audible signaling solutions

HMI



HMI Schneider is a comprehensive, rugged, Open Ended interface and Industrial PC offer to meet your requirement in a wide variety of applications with its extensive capabilities which manages all vital features as Visualization, Control, Supervision, Diagnostic, Monitoring and Data Logging with Easy Preventive and Best fit for Industrial Automation

Telemetry and Remote SCADA



Accutech - Rapid-deploy, self contained, battery-powered Wireless Instruments

SCADAPACK - Scalable, Smart RTU, Modbus-centric and DNP3/IEC60870centric

TRIO - Licensed/license-free radios for serial and Ethernet communication ClearSCADA - Object oriented, wide area SCADA for critical, Infrastructures in WWW, O&G and Electrical Energy, integrated SCADA and ready to use Telemetry features, Wide range of open protocols and interfaces: DNP3, IEC60870-5, WITS, Modbus, OPC, SQL

Drives for Machines



Altivar Machine Range from 0.18 KW to 15 KW •

- For superior performance, safety, compactness & application oriented features
- Designed for ambient temperature of 50°
- Programmable via Bluetooth avoiding cables
- Simple Loader & Multi Loader for easy parameter upload without powering on drive

ATV212 0.77 KW to 75 KW, ATV61 0.37 KW to 630 KW & ATV71 0.37 KW to

• So Move Mobile parameterization software for cell phones

Designed for ambient temperature of 50 Degrees.

Dual Port 1 for Graphic Display & 1 for BMS Integration*

Drives for Utility, Buildings & Process





ATV212



• Closed Loop Motor Control*** • Syncronusy & Acsyncronus Motor control***

Dedicated for HVAC* & Pumping**

Multi Motor Control*** •

550 KW

•

• •

• **Application Specific functions**

*Only ATV212 **Only ATV212 & ATV61 ***ATV71 only



Engineered Drive Systems

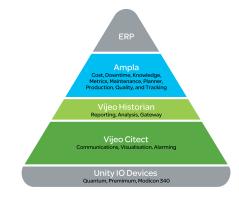


Medium Voltage Drive Range



- Drive system offer up to 2400 kW
 - Solution for robust environmental condition with Liquid cooled drive
- Ready to Use Compact engineered panels with Innovative 'Separate Air Flow Duct' for panel cooling
- Compact size with swivelling door arrangement
- Easy Maintenance with drawout type Drive Mounting
- Reduction in CAPEX and OPEX with Intelligent Cooling Technology
- MV drive range up to 16200 kVA
- Multi-level technology for perfect sine wave
- Compact design with integrated input transformer
- Built - in 30 mins UPS backup (control system)
- Cooling for supply derived from main incoming transformer
- Comfort: Large touchscreen HMI, simple software
- Low dv/dt, up to 2000m motor cable length
- Robust 2mm enclosure, certified IP 31, IP 41, IP 42 •

SCADA MES



MES - Ampla helps monitor and improve operational effectiveness (OEE, KPI) via modules -Downtime, Production, Metrics, Inventory with Genealogy and Tracking, Energy, Quality, Planner & Recipe, Maintenance, Knowledge and Cost

HISTORAIN - Vijeo Historian integrates plant with business applications and Microsoft Office. It is 100% pure Microsoft® SQL Server® historian containing Powerful, easy-to-use reporting tools and Intuitive visualization and analysis tool, (Process Analyst). Offers out-of-the-box sample reports, such as energy reports & alarm management reports based on EEMUA 191 guidelines

SCADA - Vijeo Citect is an object based SCADA that offers Scalable, Flexible and Reliable Standalone/ Client Server architecture with Redundancy. It provides seamless dataflow with Communication Driver Support for more than 100 hardware manufacturers and Support for Industry Standard Protocols Ascii, BacNet, DNP 3.0, EIB, IEC870-5, Modbus, OPC, Profibus, SNMP

Automation Control System



Schneider Electric Modicon controllers are synonymous with innovation in Automation world with major milestones as 1st Programmable Logic Controller 084 (PLC), 1st PLC with PID loop, Innovator of Modbus (Modicon Bus) communication Protocol, 1st Hotstanby Control System (584PLC), 1st Micro Controller, 1st Controller with ethernet link, 1st controller with High speed deterministic networking (Modbus Plus), Web enabled Controllers. With the innovative legacy Schneider now offers solution as per international standards for continuous or Batch Process through Plant Expert System (PES) and for traditional PLC system through Control platform of Quantum, Premium, M340, Adantys I/O. In order to keep People, environment and equipment in safe condition Schneider Electric has come up with safety control system in accordance to Sil 0 to Sil 4 standards of TUV/IEC. We today provide fully tested architected solution suitable to your needs

Solutions for Packaging Machines



Range Pac Drive M offer includes C200/C400/C800 Motion controllers including drive & motor USP

- Specialist in Packaging solutions & world leader to deliver solutions •
 - Integrated Motion & logic control Foundation for uniform solutions
- Fully integrated software tool having modular type with integrated templates
- Programming simulation without real axis
- PacML Compliance to adhere Packaging standard under OMAC



Schneider Electric IT Business

Schneider Electric IT Business India, a global leader in critical power and cooling services, provides industry leading hardware, software, and services designed to ensure availability and higher energy efficiency across the residential, business network, data center, and manufacturing environments. Backed by the strength, experience, and wide network of Schneider Electric's Critical Power & Cooling Services, Schneider Electric IT Business India delivers well planned, flawlessly installed and maintained solutions throughout their lifecycle. Through its unparalleled commitment to innovation, the company delivers energy efficient solutions for critical technology and industrial applications.

Adaptable & Flexible Power Protection

Discover our best-in-class UPS solutions:

- Back UPS (0.6 kVA to 1.5 kVA)
- Smart UPS (3 kVA to 20 kVA) Online & Line Interactive

Single Phase



Back UPS Pro

Smart UPS

- Three-phase UPS Symmetra, MGE Galaxy
- Distribution - Modular, Configurable, Cabinet

3-Phase





Symmetra PX

Rack Enclosures for Mission Critical Equipment

Rack technology that maintains airflow, delivers effective cooling and can ensure longevity of the equipment is here to help manage data centers in the best manner possible.

Racks and Accessories:

- NetShelter SX
- NetShelter CX
- Wall Mount cabinet Flexibox

Racks

- **Open Networking Racks** •
- Rack Mount Transfer Switches (Automatic transfer Switch)





NetShelter SX







Impress

Meteretd PDU Switched Rack PDU





Best-of-Breed Cooling Solutions for Rack-Row-Room-Buildings

With the size and number of data centers on the rise worldwide, there is an increasing need for intelligent cooling solutions to optimize power consumption. Schneider Electric brings you high-performance cooling solutions for applications across IT, Industrial and Facility Applications.

Rack

- Rack Air Distribution
- InRow SC

- InRow Chilled Water
- InRow Direct Expansion
- InRow Pumped Refrigerant •
- **Thermal Containment** •
 - - Automatic Floor
 - Pressurisation System





Chillers Uniflair















Row



In Row RD

Room

- Amico
- Leonardo
- UniSplit ٠
- Active Floor





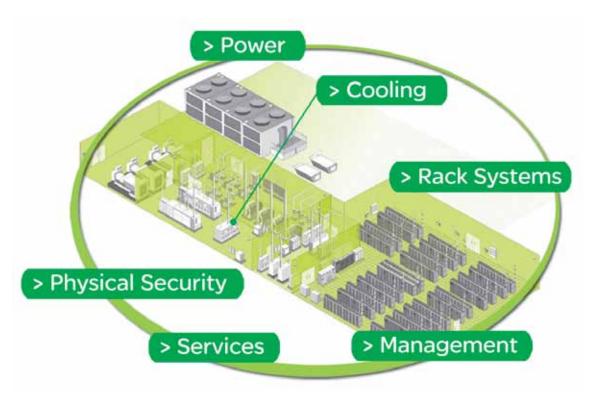


- Rack LCD Consoles
- Netbotz Access control for Rack enclosures
- PDUs Basic, Switched, Metered

Management



Datacenter Solutions



We know data centres-

from rack to row to room to building!

Only Schneider Electric has proven expertise in every domain that supports the IT equipment: power, cooling, rack systems, security, and management.

Schneider Electric can design and build data centres from rack to row to room to building. What this means is that we uniquely understand that data centres comprise interconnected environments across the Data Centre Physical Infrastructure (DCPI). It integrates power, cooling, physical security, and rack systems and is monitored and managed via software solutions and professional services.

Physical Security - Schneider Electric's single-seat view Includes access control and surveillance across one or multiple facilities

Services - Schneider Electric's professional services provide one point of 'contact for data centre planning, building, and operation

Management - The ultimate connection, Schneider Electric's exclusive 4 Integrated software architecture removes management "silos" for greater energy awareness and efficiency and higher availability across the DCPI

Power - The Schneider Electric power domain connects It all - from generators, transformers, and switchgear to UPSs, breakers, and PDUs - to deliver cross-vendor interoperability

Cooling - Our Integrated solutions combine chillers, perimeter cooling, hot aisle containment, and rowbased options to maximize efficiency and guarantee availability

Rack Systems - Interconnected, any-IT vendor-compatible rack enclosures, accessories, and air containment solutions easily support all your HD processing needs

StruxureWare for Datacenters



End-to-end data center infrastructure management (DCIM) software for monitoring, control of power, cooling, security and energy usage from the building through IT systems.

- Real-time data embedded in intelligent Data Center model
- Leading DCIM platform recognised by the analyst community
- Patented 3D cooling technology for locating hot spots and identifying excessive cooling
- Uniquely integrated with virtualisation management ensuring high availability •
- Certified field service •

厕 IT

Data Center Energy Management Services

Our comprehensive data center service portfolio

Schneider Electric has perfected the data centre design and build process through science and real-world applications of our thought leadership Now you can benefit from our proven methodology, which Is founded on years of experience and industry insights. Our design and build process costs less, takes much less time to execute, and requires fewer resources to manage. We integrate design and construction services for streamlined schedules, better cost control and reduction of unforeseen problems. In addition, you can count on our integrated verification testing, which checks the system as a whole, before your data centre goes on-line.



Our complete data centre project

- Analysts
- Assessment
- Planning & Consulting
- Design
- Architecture/Engineering •
- Project Management
 - Equipment Sourcing & Scheduling
 - Construction
 - Installation
 - Assembly & Start-up
 - Commissioning
 - Integration
- Service Plans service portfolio includes

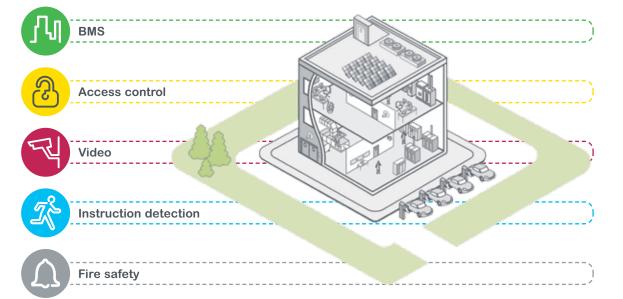
- Integrated Monitoring
 - Building automation
 - IT Floor
 - Power quality
- Security
- Training
- Asset Planning

Product Based Services

- Installation Services
- Preventive Maintenance
- Remote Monitoring Services
- Service Plans
- Battery Replacement Services



Complete offer for integrated building management system



Building Management Systems



Andover Continuum Single source solution for HVAC and electronic access control



Smart Struxure Solution

Smart Struxure Lite

Buildings

A SmartStruxure[™] solution enables you to monitor, measure, and eliminate waste throughout your building's lifespan, saving you money.

A Smart Struxure Lite solution for Small



TAC I/NET Maximum system reliability and security optimized for YOUR building management



TAC Vista

Integration, intelligence and TCP/ IP deliver a smarter Building Energy Management System

Video Solutions



BU4, BU5 & BU6 Series Bullet Cameras Indoor and Outdoor Analog Bullet Cameras with IR



C20 Series High Resolution Color, Day/Night with WDR Camera



Camclosure IS50/IS51 Series Outdoor Fixed Mini Domes



Esprit SE Integrated PTZ and Pressurized Camera Systems



Exsite Series Explosion Proof PTZ and Fixed Analog Cameras



FD1, FD2 and FD5 Fixed Dome Series Entry Level and General Purpose Indoor & Outdoor Fixed Dome

Cameras



Sarix IE Series Environmental Domes 0.5-3.1MP High-Performance Low-Light Domes with H.264 and Auto Back Focus



Sarix IM Series Environmental Mini Domes

0.5-1.3MP Value-Driven, Compact Low-Light IP66 Rated Domes with H.264 and Auto Focus





Sarix IL 10 Series Box Camera 1 MPX, 720P, H.264, color, indoor IP Cameras with fixed focus



Sarix IM Series Vandal Resistant Mini Domes 0.5-1.3MP Value-Driven, Low-Light Rugged Domes with H.264 and Auto Focus



Sarix IL 10 Series Mini Dome Camera 1 MPX, 720P, H.264, color, indoor IP cameras with fixed focus



ExSite IP Series Explosion Proof PTZ and Fixed IP Cameras



Sarix ID Series Indoor Domes 0.5-3.1MP High-Performance Low-Light Domes with H.264 and Auto Back Focus



Sarix IM Series Mini Domes 0.5-1.3MP Value-Driven, Compact Low-Light Domes with H.264 and Auto Focus



Sarix IM-E Series Environmental Mini Domes with SureVision 0.5-1.2MP IP66-Rated Domes with WDR, Low-Light Performance, H.264 and Auto Focus



Sarix IM-V Series Vandal-Resistant Mini Domes with SureVision 0.5-1.2MP Rugges Domes with WDR, Low-Light Performance, H.264 and Auto Focus



Sarix TI Series IP Thermal Camera Thermal Imaging Pan/Tilt & Fixed, Analog & IP Cameras featuring Sarix Technology



Spectra IV IP H.264 High Speed IP Dome Positioning Systems with H.264 and Digital PTZ



Spectra IV SE Horizon Look-Up, High Speed Dome Positioning Systems



Sarix IX Series IP Cameras 0.5-3.1MP Low-Light Box Camera with H.264 and Auto Back Focus



Spectra HD High Definition IP Dome Positioning System



Spectra IV SE & SL High Speed Dome Positioning Systems



Spectra IV SE Pressurized Pressurized, High Speed Dome Positioning Systems



Sarix IX Series IP Cameras with SureVision 0.5-1.2MP Box Cameras with WDR, Low- Light Performance, H.264 and Auto Back Focus



Spectra IV IP High Speed IP Dome Positioning System



Spectra IV SE Heavy Duty Heavy Duty, High Speed Dome Positioning Systems



Spectra IV SE Stainless Steel Stainless Steel, High Speed Dome Positioning Systems



HVAC Control Devices				
	American Access Control Providing the most reliable first line of defense in the safety of your building	e	American HVAC Damper Actuators Superior air control features that helps ensure environmental safety and energy efficiency	
A.	American HVAC Valve Actuators Delivering the most precise control and field flexibility in both retrofit and new construction	×	American HVAC Valves Contributing to energy efficiency and comfort in industrial and commercial buildings across the United States	
and the second s	European HVAC Damper Actuators Reliability is the hallmark of this industry leading range of air control devices		European HVAC Sensors Contemporary design meets high performance across a wide range of sensing applications	
66	European HVAC Valves Dependable, high performance heating and cooling solutions to fit a wide range of European building applications		HVAC Thermostats & Controllers New global offer of SE7000 Room Controllers headline the industry's broadest offer in this	
	American HVAC Sensors Broad off including Temperature, Humidity, Air Quality, and Light Sensors that help optimze building comfort and safety	h	European Access Control Specifically designed to meet the safety needs of a broad range of building applications	



European HVAC Valve Actuators Easy installation and high performance team up to deliver the most efficient and precise control



Lighting and Room Control for **SMART** Spaces

Schneider Electric is the foremost lighting control solution provider across the globe with a comprehensive offer in Lighting Control Automation via multiple technology platforms which are suitable for almost all types of space and premise, irrespective of space type, location, budget, unique application or needs via platforms like.

- > C-Bus: The expert in ambience lighting
- KNX: The standard in interoperability
- > DALI: Optimizing individual control and centralized management
- > Zigbee: Global standard in wireless connectivity and controls

Our unique Sympholux solution remains the optimal way for your business to balance its light and energy needs.



C-Bus, the expert in ambience lighting, is an ideal platform which offers you a complete delivers remarkable levels of lighting control to easily create ideal ambiences in your lobby, restaurants or function centers.

C-Bus based WISER home control solution is a standard in home controls category and



DALI (Digital Addressable Lighting Interface) is a global standard in lighting control and is known for its simplicity to design, Install and Integrate as well as maintain. DALI solution is possible as an independent solution and also a C-Bus or KNX based system giving user the flexibility of selection in initial stages of project.



KNX is the intelligent building control system for all areas @ Home and @ Work. From single-family houses to office complexes, the comprehensive portfolio of KNX solutions from Schneider Electric enables you to achieve flexible, energy efficient, comfortable and safe solutions that are easy to plan, install and operate. KNX offers convincing flexibility and cost efficiency. Whether in new buildings or for retrofitting, in private homes, offices, hotels or public buildings – KNX installations can easily be expanded and adapted again and again to new requirements.

Zigbee based standalone lighting control system Ulti Ezinstall3 is a offer which truly gives the benefit of real retrofit to the user, it is based on a 2 wire system and does not require any special wiring and hence can be used even at advanced stages of completion of residential sites, it uses a patented technology to automatically detect the light source type (Halogen, LED, Incandescent) to smoothly dim the load - which means more flexibility in deciding or changing the lighting loads.

> Merten

I/p Device



> Colored Touch Screen







System Design







Presence with lighting control



Network Connectivity

Digilink

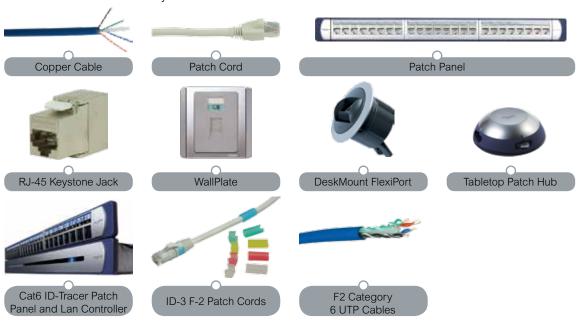
Actassi

Digilink structured cabling solution brings reliability and usability for everyone. Digilink products are UL and ETL verified for safety, performance and QA approved. The solutions are Copper UTP/STP (Cat 6A, 6, 5e+), Fiber Media, Voice Products, Data Center and IPLMS. They bring the advantages of FIRM, LIGHT, SLIM and FAST for SMBs and SMEs.



Actassi is the end-to-end structured cabling solution where connectivity \times superior usability = user delights.

Actassi solutions bring a wide range of benefits to data centers as well as commercial and hotel applications. They are enhanced with 10G and copper/ fiber to support higher volume and speed and have tough cabling that last longer. With smart patching solution you get improved first pass yield and more efficient network management. Ergo-aesthetic terminals lets you connect in style.





Solar Solutions for Utility Scale & Large Commercial



PV Box power conversion system

PV Box is a containerized plug and play power conversion system adapted to customer requirements and local standards. In PV plant installation, it operates between DC field and AC MV grid connection point. The PV Box performs the DC power concentration, the DC/AC conversion and the AC voltage elevation to the grid voltage level. It ensures the protection of maintenance people and the installation against electrical faults such as short-circuit and lightning. The optimized versions of PV Box offer overall BOS cost reduction, enhanced reliability and improvement in deployment speed.

- Product Applications:Large commercial
- Centrlised PV Plants

Conext Core XC series central inverters

The Conext Core XC is designed for high efficiency and flexibility for any PV panel type and installation. The Conext Core XC Series has peak efficiencies of 98.9% and its flexibility allows the inverter to be configured with voltage and power outputs up to 680 kW. The Conext Core XC is designed to allow for DC inputs up to 1000 Vdc for longer string lengths. It contains the latest grid management features to meet global utility requirements.

Product Applications:

- Large commercial
- Centrlised PV Plants

Conext Control

Conext Control is the global and standardized evolutive monitoring solution for large photovoltaic installations. It is designed to operate any site efficiently, provide, the service teams, the means to make prompt decisions and react accordingly.

- **Product Applications:**
- Large commercial
- Centrlised PV Plants





Available in 540, 630 and 680 kW





Solar solutions for residential & small commercial

Conext RL single-phase grid-tie inverter

The Conext RL Inverters are specially designed to maximize yields for a wide range of rooftops of detached houses and multiple dwellings. The rich MPPT features, high energy efficiency, partial shading algorithm and a wide temperature and voltage operating range enables you to maximize your ROI.

Product Applications:

- Flat roofs
- Multiple pitched roofs
- Odd number of modules Different orientations roofs (East-West)

Conext TL three-phase grid-tie inverters

The Conext TL 8, 10, 15 kW and 20 kW grid-tie solar inverters are suited for outdoor use and are the ideal solution for commercial buildings, carports and decentralised PV plants up to the MW range. The inverters provide dual MPP (Maximum Power Point) trackers with a wide voltage range, peak efficiency of greater than 98% for fast ROI.

- **Product Applications:**
- Carports
- Commercial Buildings Decentrised PV Plants



Available 3, 4 and 5 kW

Available in 8, 10, 15 and 20 kW

Off-grid solar & battery backup solutions

Conext SW inverter/charger

Conext[™] SW delivers new value and a new price point to the marketplace. Conext SW is a pure sine wave, inverter/charger system with switchable 50/60 Hz functionality available for both 120/240 VAC or 230 VAC models. Stacking Conext SW units will double the power and available solar charge controllers allow for the integration of solar capacity as required.

Product Applications:

- Off-grid solar • Community electrification
- Residential backup power



Available in 2.5 kW. 3.5 kW. scalable up to 8 kW



Available in 4, 4,5 and 6 kW. scalable up to 36 kW

units, up to 36 kW each, the Conext XW is a scalable system that allows for

the integration of solar capacity as required.

Conext XW inverter/charger (230 V / 50 Hz)

- **Product Applications:**
- Off-grid solar
- Residential, backup power & grid-tie
- Community electrification Small commercial, backup power & grid-tie

Conext[™] XW is an adaptable pure sine wave, single-phase, split-phase or three-phase inverter/charger system with global grid-tie functionality and dual AC power inputs. From single Conext XW units to multiple clusters of



Solar charge controllers

MPPT 80 600 solar charge controller

The MPPT 80 600 Solar Charge Controller offers an industry-first set of integration features and top performance that allows for large PV array systems to be easily installed and connected to the battery bank at the lowest overall cost. Advanced Fast Sweep™ MPPT charging technology helps harvest the most energy available from the PV array, even in partial shade conditions.

Product Applications:

- Off-grid solar
- Residential, backup power & grid-tie
- Community electrification Small commercial, backup power & grid-tie

MPPT 60 150 solar charge controller

The MPPT 60 150 is a photovoltaic (PV) charge controller that tracks the maximum power point of a PV array to deliver the maximum available current for charging batteries. When charging, the MPPT 60 150 regulates battery voltage and output current based on the amount of energy available from the PV array and state-of-charge of the battery.

Product Applications:

- Off-grid solar
 - Residential, backup power Community electrification

C12 PWM charge controller

The C12 charge, controller features three-stage charging, user definable voltage parameters, and automatic equalization. Standard in the C12's load control circuitry are field adjustable low voltage disconnect and reconnect points, along with a five minute low battery disconnect warning. Lighting run time is adjustable from two to eight hours or can be set from dusk to dawn operation.

Product Applications:

- Off-grid solar
- Community electrification

C Series **PWM** charge controller

The C35 and C60 are field configurable for 12 V and 24 V operation. The C40 may be configured for 12 V, 24 V, or 48 V operation. All can be used as a charge, diversion, or load controller and come with a standard multi-color charge status LED face plate.

Product Applications:

- Off-grid solar
- Residential backup power and grid-tie

Residential backup power and grid-tie

Community electrification



Accessories for the Conext SW and Conext inverter/chargers













Access to energy offers overview

A complete set of end to end solutions for communities without access to energy



Mobiya TS 120S Solar portable LED lighting system with cell phone charging option



1.3 billion

people worldwide do not have access to energy¹



Homaya Offers Solar home lighting system, solar home system, charge controller, lamps, etc.





Villaya Water of the Sun Solar water pumping system



\$38 billion

spent annually by low-income consumers worldwide on kerosene for light²



Villaya Battery Charging Station

Decentralized solar microstation to charge 10 batteries simultaneously





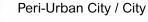
households have access to energy through Schneider Electric™ offers



Remote area

Villaya AC and DC Microgrid Centralized solar mirco offgrid solution. Inverter, Charge Controller, etc.





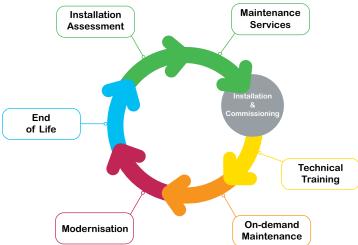
Visit www.schneider electric.com/bipbop

Hugh

Want to learn more?

Village





When it comes to your electrical distribution installation, we can help you:

- > Increase productivity, reliability, and safety
- > Mitigate risk and limit downtime

Comprehensive Installed

Base Services from

Schneider Electric

 Keep equipment up to date and extend its lifespan



equipment

Greater productivity, reliability, and safety

Professional Services

Your trusted energy partner to manage your entire energy lifecycle



Be it an

- Industry Building
- Data center
 Electrical network

Advisory services

- > Energy management strategy
- > ISO 50001 compliance
- > Sustainability reporting
- > Perform, Achieve, Trade (PAT)

Schneider Electric India has executed over 800 energy efficiency and power quality assessments

> Cut costs and increase savings

Improve your return on investment

- Grade-1 Energy Service Company (ESCO) with Bureau of Energy Efficiency Panelist for National Thermal Power Corporation (NTPC)
- Chair positions in Efficiency Valuation Organisation and Green Grid
- > 40+ energy professionals with industrial process and technology expertise
- > 20+ BEE certified Energy Auditors and Certified M&V professionals
- ISO 50001 and LEED APs to partner with you on latest energy standards

Demand services

- > Energy assessment
- > Energy monitoring and analysis
- > Risk assessment and reliability
- > Design and engineering
- > Energy saving retrofit projects
- > Performance contracting

Supply services

- Energy sourcing
- > Rate / Tariff optimisation
- > Demand response services



Schneider Electric India Foundation

Schneider Electric is committed to supporting communities wherever the company operates around the world. Schneider Electric Foundation, under the aegis of the Foundation de France, undertakes concrete, long-term projects that promote:

- The training and integration of young people at the bottom of the pyramid primarily in electrical trades
- > The support to emergency initiatives after natural disasters
- > The awareness-raising to sustainable development through innovative projects.

What we do:

Mission: "Help people to change their lives through access to Energy" Helping Planet and Society through

Education

- Electrician training for unemployed youth
- Scholarship to poor students to pursue engineering degree
- Conserve My Planet Program for School Children



Employment

Electrician training for unemployed youth



Entrepreneurship

• Facilitate trained electricians with a "start up kit" and an entrepreneur training to run their own business



Rural Electrification

 Facilitate access to electricity at very remote areas without grid supply



Emergency during Natural disasters

Our Achievements:

Education

- > 209 electrician training centres across 21 states in India
- > One exclusive women electrician training centre in Chennai
- > 30000+ unemployed youth trained (100000 + Men months of training)
- > 55 scholarships to 17 engineering colleges in India
- > 81 Teacher's mission completed in India
- > 264 schools registered for Conserve My Planet Program
- > 17235 Green Ambassadors enrolled for Conserve My Planet Program
- Employment
 - > 70% trained electricians employed
 - Entrepreneurship
 - > 284 trained entrepreneurs supported to start their own business
- Electrification
 - > 6408 households in 163 remote villages are illuminated by solar home lighting systems. 31896 beneficiaries.

Make the most of your energy

Ahmedabad

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Bangalore

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Bangalore - 560103

Baroda

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Bhubneshwar

Schneider Electric India (P) Ltd. 14. Forest Park, Bhubaneswar - 751009

Chandigarh

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Guwahati

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Vizag

10-1-43, 1st Floor, Ratnam's Executive Centre, Siripuram Fort, CBM Compound, Vishakapatnam - 530 016

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Life Is On

