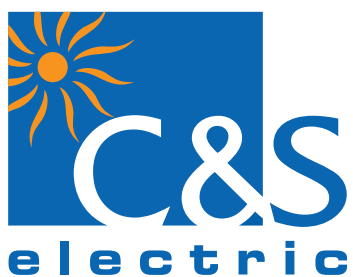




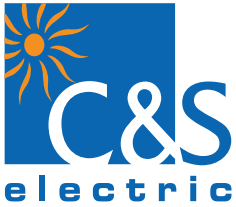
**SWITCH
TO
SWITCHGEAR**



Product Master Catalogue

LV Components Solutions

We touch your electricity everyday!



C&S Electric Ltd. is a leading manufacturer of electrical and electronic equipment in India. It is one of India's largest exporters of industrial switchgear & power busbar products. C&S Electric products are used in applications ranging from power generation, transmission and distribution, protection and final consumption.

C&S Electric has the following product verticals:

- LV Switchgear
- LV Switchboards
- LV & MV Busducts
- LV Bustrunking
- Protection and Measurement Devices

MANUFACTURING FACILITIES



C&S Controlgear Plant at Noida



C&S Switchgear Plant at Noida



World-Class Manufacturing Plants at SIDCUL, Haridwar

MARKET LEADER

C&S is one of the leading supplier in the LV Switchgear business segment and a market leader in the busbar business with more than 50% share in Indian market.

10 MANUFACTURING PLANTS

C&S Electric have 10 state-of-the-art manufacturing facilities in Noida, Haridwar & Guwahati, which are equipped with latest tools and systems to ensure highest level of quality and services.

600+ STOCKISTS

A dedicated network of channel partners, ensuring access to the farthest corners of India, with an obsession for customer services. In addition C&S products are available in 8000+ retail counters nationally.

EXPORTS TO OVER 85 COUNTRIES

C&S exports the entire range of products across all 7 continents, thus reaffirming its position as one of India's largest exporters of industrial electrical products.

5000+ WORKFORCE

5000+ Workforce including over 371 engineers, dedicated sales team of 424 people & millions of satisfied customers.

R&D

4 Govt. approved labs/centres, over 20,000 sqft. space dedicated to R&D, 70 R&D engineers, state of the art testing & design facilities ... & most of the all a passion for innovation & excellence.

Power Distribution Components

WiNmaster3 ACB	A 6-12
WiNmaster2 ACB	A 13-16
AH/AHA ACB	A 17-26
WiNbreak1 MCCB	A 27-33
WiNbreak2 MCCB	A 34-38
WiNbreak MCCB - CS Series	A 39
WiNbreak MCCB - CSC Series	A 40-42
Switch Disconnecter Fuse Unit	A 44
Switch Disconnecter	A 45-48
Changeover Switch	A 49-51
Bypass Switch	A 52-54
PV Switch	A 55
 Automatic Transfer Switch	A 56-57
Fusegear	A 58-60

Power Control Components

Motor Protection Circuit Breaker (MPCB)	B 3-6
robusTa2 Contactor & Overload Relay	B 7-8
Exceed M-range Contactor	B 9
Mini Contactor	B 10-11
Exceed Contactor	B 12-13
robusTa Power Contactor	B 14-21
Capacitor Duty Contactor	B 22
robusTa Overload Relay	B 23
Accessories - robusTa & Exceed Contactor	B 24-27
D Range Contactor, Overload Relay & Accessories	B 28-30
4 Pole & 2 Pole & New Agro 4 Pole Contactor, Overload Relay, Definite Purpose Contactor	B 31-33
Power Contactors ETe Series	B 34-43
Industrial Plug & Socket	B 44-45
Control & Signalling Device	B 46-57

Motor Starters - Industrial & Agro

C 3-18

Protection, Measurement & Control Devices

Digital Panel Meter	D 2
Multi Function Meter	D 2
Power Factor Controller	D 2
Electronic Motor Protection Relay	D 3-5
Electronic Motor Protection Relay-CSMP	D 6
ELR - Earth Leakage Relay	D 7
DG AMF / Synchronizing Controller	D 8
Voltage & Current Monitoring Relay & Timer	D 8

Final Power Distribution Components

Miniature Circuit Breaker, Isolator & MCB Type Changeover Switch	E 2-18
Residual Current Circuit Breaker	E 19-22
RCBO	E 23-24
ACCL	E 25
Distribution Board	E 26-31
Plug & Socket DB	E 32

Type 2 Co-ordination Charts

E 33-36



We touch your **electricity** everyday!



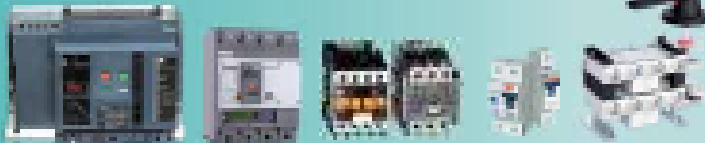
- Air Circuit Breakers
- Moulded Case Circuit Breakers
- Automatic Transfer Switch
- Motor Protection Circuit Breakers
- Power Contactors
- Control & Signalling Devices
- Meters



An IEC 61439
LV Type Tested Assemblies

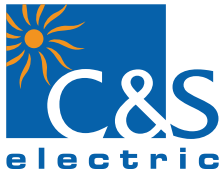
- Air Circuit Breakers
- Moulded Case Circuit Breakers
- Power Contactors

- Residual Current Circuit Breakers
- Miniature Circuit Breaker - DC & AC
- Switch Disconnecter



- Miniature Circuit Breakers
- Residual Current Circuit Breakers
- RCBO
- Modular Switches



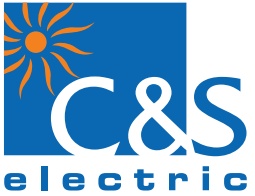


POWER DISTRIBUTION COMPONENTS



- Air Circuit Breakers
- Moulded Case Circuit Breakers
- Switch Disconnecter Fuses
- Switch Disconnectors
- Changeover & Bypass Switches
- Automatic Transfer Switches
- HRC Fuse Links, Fuse Bases & Fuse Holders

We touch your electricity everyday!



Efficient Partner in Power Distribution & Protection



WiNmaster 3

Air Circuit Breaker

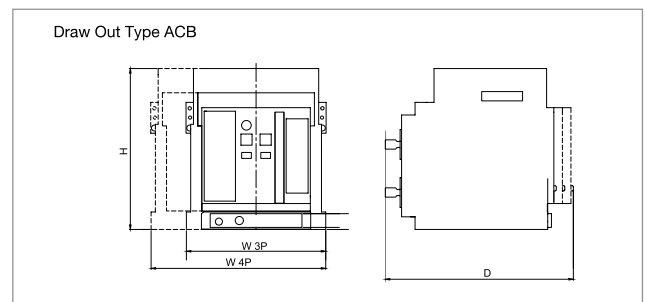
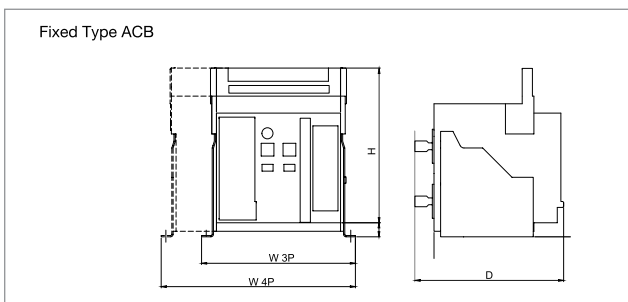
- Rated Operational Voltage upto 800V
- Breaking Capacity upto 100kA
- **Optimized Size** - Uniform Height & Depth across the Frame
- **Quick** - Fastest Opening & Closing Time
- **Truly Modular** - Front Accessible Accessories & SIC
- **Universal Termination** - Terminal orientation convertible as Horizontal / Vertical on site
- No Derating upto 50°C
- Intelligent Micropro3 Release Family
- Multiple Parameter Measurement
- **Condition Monitoring** - Contact Wear Indication, 20 Trip History

We touch your **electricity** everyday!

Technical Characteristics

			FRAME-1							FRAME-2							
Rated Current (A)	In	at 40°C	630	800	1000	1250	1600	2000	2500	800	1000	1250	1600	2000	2500	3200	4000
Neutral Pole			100% In							100% In							
Rated Frequency			50/60							50/60							
Mounting Type			Fixed / Drawout							Fixed / Drawout							
Number of Poles			3P, 4P							3P, 4P							
Rated Insulation Voltage (V)	Ui	V	1250							1250							
Impulse Withstand Voltage (kV)	Uimp	kVp	12							12							
Rated Operational Voltage (V ac 50/60 Hz)	Ue		800							800							
Suitability for Isolation			Yes							Yes							
Degree of Pollution			3							3							
Breaking Capacity			N		S			L		H							
Rated Ultimate Breaking Capacity (kA rms)	Icu	415V ac	50 kA*		65 kA*			80 kA		100 kA							
		690V ac	36 kA*		42 kA*			50 kA		65 kA							
		800V ac	42 kA							50 kA							
Rated Service Breaking Capacity (kA rms)	Ics	415V ac	100%							100%							
		690V ac															
		800V ac															
Rated Short-time Withstand Current (kA rms)	Icw for 1s	415V ac	50 kA		65 kA			65 kA		80kA							
		690V ac	36 kA		42 kA			50 kA		65kA							
		800V ac	42kA							50kA							
Utilisation Category			B							B							
Opening Time			25 msec							25 ms							
Closing Time			60 msec (max)							60 msec (max)							
Service Life-Mechanical	with maintenance		20000							15000							
Service Life-Electrical	with maintenance		20000							15000							
	without maintenance		10000							5000							
Termination Type			Universal							Universal							
EMI / EMC Test (As per IEC 60947-2)																	
Annexure H			Circuit Breakers suitable for IT Systems														
Annexure F			Verification of electronic over current release														
Dimension (mm) (W x H x D)	Fixed	3Pole	362 x 397 x 347							424 x 397 x 347							
		4Pole	457 x 397 x 347							539 x 397 x 347							
	Drawout	3Pole	377 x 433 x 467							435 x 433 x 467 (D=567 for 4000A)							
		4Pole	472 x 433 x 467							550 x 433 x 467 (D=567 for 4000A)							

*630A-1250A *630A-1600A



Protection and Control Units

- Micropro3 - 3.1
- Micropro3 - 4.1
- Micropro3 - 5.1
- Micropro3 - 7.1



A

Micropro3-3.1	Micropro3-4.1	Micropro3-5.1	Micropro3-7.1
Basic LSIG & Neutral Protection	Basic LSIG & Neutral Protection	Basic LSIG & Neutral Protection	Basic LSIG; Neutral & Advance Protection
MCR & HSISC Protection	MCR & HSISC Protection	MCR & HSISC Protection	MCR & HSISC Protection
Thermal Memory for LT & ST	Thermal Memory for LT & ST	Thermal Memory for LT & ST	Thermal Memory for LT & ST
-	Last 20 Trip History	Last 20 Trip History	Last 10 Trip History & 10 Event History
*Remote Reset	*Remote Reset	*Remote Reset	*Remote Reset
-	Single Digital Display	Two Digital Display	LCD Display
Trip Unit Healthy Indication	Trip Unit Healthy Indication	Trip Unit Healthy Indication	Trip Unit Healthy Indication
Self Diagnostics in Test Mode.	Self Diagnostics in Test Mode.	Self Diagnostics in Test Mode.	Self Diagnostics in Test Mode
Self Powered and Compatible with External Auxiliary Power Supply with AC or DC input	Self Powered and Compatible with External Auxiliary Power Supply with AC or DC input	Self Powered and Compatible with External Auxiliary Power Supply with AC & DC input	Self Powered and Compatible with External Auxiliary Power Supply with AC & DC input
LED Indication for Load Current in percentage	Current Measurement.	Current, Voltage, Power, Frequency, and Power factor Measurement	Current, Voltage, Power, Frequency, Energy, Power factor, Harmonics, Power Demand, Current Demand
*Optional feature			Modbus Protocol, ZSI
			Contact wear Indication in percentage
			Total No. of Operations performed
			Bar Representation for Input Current and Voltage on Home Screen

Accessories

MECHANICAL ACCESSORIES

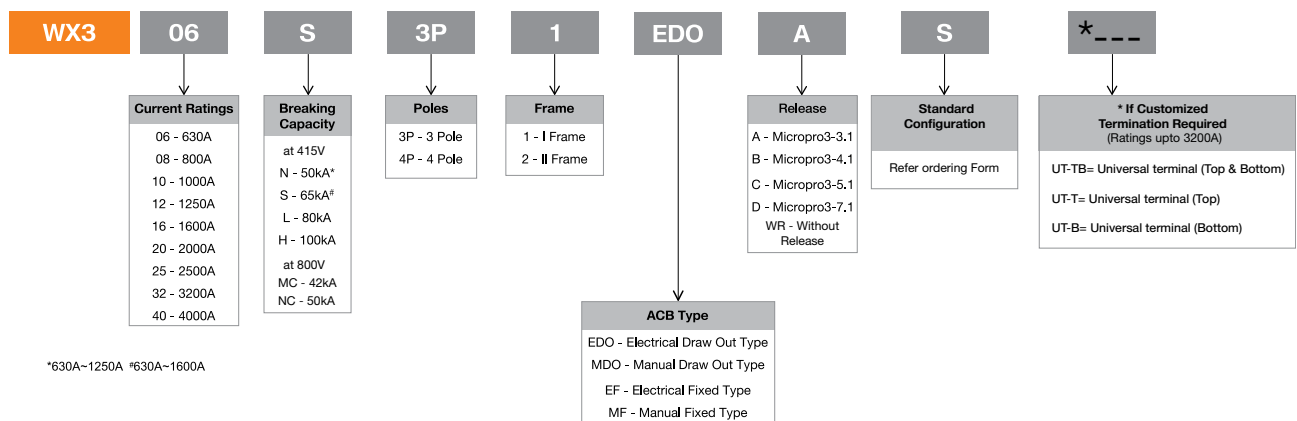
- Mechanical Interlock
 - Keylock
 - Cable Interlock
- Panel door ingress seal (for IP54 Protection)
- Door Interlock
- Phase Barrier
- Mechanical Operation Counter
- Electrical Position Indicator

AUXILIARIES FOR REMOTE OPERATION

- Electrical Spring Charging Device (Motor)
- Opening Release, Closing Release (Continuous Rated Type)
- Under Voltage Release (with / without Time Delay Module)
- Remote reset for Microprocessor Release

Reference Code changes as per the release modification	Ordering Code
Without release ACB	WR
MicroPro3 3.1 (LSING)	A
MicroPro3 4.1 (LSING, LED Display, Current Measurement, Trip History)	B
MicroPro3 5.1 (LSING, 2 LED Display, Current + Voltage + Power Measurement, Trip History,	C
MicroPro3 7.1 (LSING + Advanced Protections, LCD Display, Current + Voltage + Power + Harmonics Measurement, Trip History, ZSI, Communication, Maintenance Indicator)	D

ACB WINmaster3 - Ordering Information



A

Winmaster3 Air Circuit Breakers - Operational Voltage upto 690V

- Range 630A to 4000A
- ACB with Universal Termination*
- Microprocessor release with Individual Fault Annunciation LEDs

3 Pole *MDO Winmaster3 Air Circuit Breakers with Micropro3- 3.1 Release with LSING Protection, Icu=Ics [HSN Code: 8536]

Rating (Amps)	N (50kA @ 415V AC)	S (65kA @ 415V AC)	L (80kA @ 415V AC)	H (100kA @ 415V AC)
630A	WX306N3P1MDOA(S)	WX306S3P1MDOA(S)	WX306L3P1MDOA(S)	WX306H3P2MDOA(S)
800A	WX308N3P1MDOA(S)	WX308S3P1MDOA(S)	WX308L3P1MDOA(S)	WX308H3P2MDOA(S)
1000A	WX310N3P1MDOA(S)	WX310S3P1MDOA(S)	WX310L3P1MDOA(S)	WX310H3P2MDOA(S)
1250A	WX312N3P1MDOA(S)	WX312S3P1MDOA(S)	WX312L3P1MDOA(S)	WX312H3P2MDOA(S)
1600A	-	WX316S3P1MDOA(S)	WX316L3P1MDOA(S)	WX316H3P2MDOA(S)
2000A	-	-	WX320L3P1MDOA(S)	WX320H3P2MDOA(S)
2500A	-	-	WX325L3P1MDOA(S)	WX325H3P2MDOA(S)
3200A	-	-	-	WX332H3P2MDOA(S)
4000A	-	-	-	WX340H3P2MDOA(S)

4 Pole *MDO Winmaster3 Air Circuit Breakers with Micropro3- 3.1 Release with LSING Protection, Icu=Ics [HSN Code: 8536]

Rating (Amps)	N (50kA @ 415V AC)	S (65kA @ 415V AC)	L (80kA @ 415V AC)	H (100kA @ 415V AC)
630A	WX306N4P1MDOA(S)	WX306S4P1MDOA(S)	WX306L4P1MDOA(S)	WX306H4P2MDOA(S)
800A	WX308N4P1MDOA(S)	WX308S4P1MDOA(S)	WX308L4P1MDOA(S)	WX308H4P2MDOA(S)
1000A	WX310N4P1MDOA(S)	WX310S4P1MDOA(S)	WX310L4P1MDOA(S)	WX310H4P2MDOA(S)
1250A	WX312N4P1MDOA(S)	WX312S4P1MDOA(S)	WX312L4P1MDOA(S)	WX312H4P2MDOA(S)
1600A	-	WX316S4P1MDOA(S)	WX316L4P1MDOA(S)	WX316H4P2MDOA(S)
2000A	-	-	WX320L4P1MDOA(S)	WX320H4P2MDOA(S)
2500A	-	-	WX325L4P1MDOA(S)	WX325H4P2MDOA(S)
3200A	-	-	-	WX332H4P2MDOA(S)
4000A	-	-	-	WX340H4P2MDOA(S)

3 Pole *MF Winmaster3 Air Circuit Breakers with Micropro3- 3.1 Release with LSING Protection, Icu=Ics [HSN Code: 8536]

Rating (Amps)	N (50kA @ 415V AC)	S (65kA @ 415V AC)	L (80kA @ 415V AC)	H (100kA @ 415V AC)
630A	WX306N3P1MFA(S)	WX306S3P1MFA(S)	WX306L3P1MFA(S)	WX306H3P2MFA(S)
800A	WX308N3P1MFA(S)	WX308S3P1MFA(S)	WX308L3P1MFA(S)	WX308H3P2MFA(S)
1000A	WX310N3P1MFA(S)	WX310S3P1MFA(S)	WX310L3P1MFA(S)	WX310H3P2MFA(S)
1250A	WX312N3P1MFA(S)	WX312S3P1MFA(S)	WX312L3P1MFA(S)	WX312H3P2MFA(S)
1600A	-	WX316S3P1MFA(S)	WX316L3P1MFA(S)	WX316H3P2MFA(S)
2000A	-	-	WX320L3P1MFA(S)	WX320H3P2MFA(S)
2500A	-	-	WX325L3P1MFA(S)	WX325H3P2MFA(S)
3200A	-	-	-	WX332H3P2MFA(S)
4000A	-	-	-	WX340H3P2MFA(S)

4 Pole *MF Winmaster3 Air Circuit Breakers with Micropro3- 3.1 Release with LSING Protection, Icu=Ics [HSN Code: 8536]

Rating (Amps)	N (50kA @ 415V AC)	S (65kA @ 415V AC)	L (80kA @ 415V AC)	H (100kA @ 415V AC)
630A	WX306N4P1MFA(S)	WX306S4P1MFA(S)	WX306L4P1MFA(S)	WX306H4P2MFA(S)
800A	WX308N4P1MFA(S)	WX308S4P1MFA(S)	WX308L4P1MFA(S)	WX308H4P2MFA(S)
1000A	WX310N4P1MFA(S)	WX310S4P1MFA(S)	WX310L4P1MFA(S)	WX310H4P2MFA(S)
1250A	WX312N4P1MFA(S)	WX312S4P1MFA(S)	WX312L4P1MFA(S)	WX312H4P2MFA(S)
1600A	-	WX316S4P1MFA(S)	WX316L4P1MFA(S)	WX316H4P2MFA(S)
2000A	-	-	WX320L4P1MFA(S)	WX320H4P2MFA(S)
2500A	-	-	WX325L4P1MFA(S)	WX325H4P2MFA(S)
3200A	-	-	-	WX332H4P2MFA(S)
4000A	-	-	-	WX340H4P2MFA(S)

NOTE:

* Universal termination option available upto 3200A
 For ordering EDO ACB replace MDO by EDO in the above reference code.
 For ordering EF ACB replace MF by EF in the above reference code.

Winmaster3 Air Circuit Breakers - Operational Voltage 800V

- Range 630A to 4000A
- ACB with Universal Termination*
- Microprocessor release with Individual Fault Annunciation LEDs

3 Pole MDO Winmaster3 Air Circuit Breakers with Micropro3- 3.1 Release with LSING Protection, Icu=Ics [HSN Code: 8536]

Rating (Amps)	MC (42kA @ 800V AC)	NC (50kA @ 800V AC)
630A	WX306MC3P1MDOA(S)	WX306NC3P2MDOA(S)
800A	WX308MC3P1MDOA(S)	WX308NC3P2MDOA(S)
1000A	WX310MC3P1MDOA(S)	WX310NC3P2MDOA(S)
1250A	WX312MC3P1MDOA(S)	WX312NC3P2MDOA(S)
1600A	WX316MC3P1MDOA(S)	WX316NC3P2MDOA(S)
2000A	WX320MC3P1MDOA(S)	WX320NC3P2MDOA(S)
2500A	WX325MC3P1MDOA(S)	WX325NC3P2MDOA(S)
3200A	-	WX332NC3P2MDOA(S)
4000A	-	WX340NC3P2MDOA(S)

4 Pole MDO Winmaster3 Air Circuit Breakers with Micropro3 - 3.1 Release with LSING Protection, Icu=Ics [HSN Code: 8536]

Rating (Amps)	MC (42kA @ 800V AC)	NC (50kA @ 800V AC)
630A	WX306MC4P1MDOA(S)	WX306NC4P2MDOA(S)
800A	WX308MC4P1MDOA(S)	WX308NC4P2MDOA(S)
1000A	WX310MC4P1MDOA(S)	WX310NC4P2MDOA(S)
1250A	WX312MC4P1MDOA(S)	WX312NC4P2MDOA(S)
1600A	WX316MC4P1MDOA(S)	WX316NC4P2MDOA(S)
2000A	WX320MC4P1MDOA(S)	WX320NC4P2MDOA(S)
2500A	WX325MC4P1MDOA(S)	WX325NC4P2MDOA(S)
3200A	-	WX332NC4P2MDOA(S)
4000A	-	WX340NC4P2MDOA(S)

3 Pole MF Winmaster3 Air Circuit Breakers with Micropro3- 3.1 Release with LSING Protection, Icu=Ics [HSN Code: 8536]

Rating (Amps)	MC (42kA @ 800V AC)	NC (50kA @ 800V AC)
630A	WX306MC3P1MFA(S)	WX306NC3P2MFA(S)
800A	WX308MC3P1MFA(S)	WX308NC3P2MFA(S)
1000A	WX310MC3P1MFA(S)	WX310NC3P2MFA(S)
1250A	WX312MC3P1MFA(S)	WX312NC3P2MFA(S)
1600A	WX316MC3P1MFA(S)	WX316NC3P2MFA(S)
2000A	WX320MC3P1MFA(S)	WX320NC3P2MFA(S)
2500A	WX325MC3P1MFA(S)	WX325NC3P2MFA(S)
3200A	-	WX332NC3P2MFA(S)
4000A	-	WX340NC3P2MFA(S)

4 Pole MF Winmaster3 Air Circuit Breakers with Micropro3- 3.1 Release with LSING Protection, Icu=Ics [HSN Code: 8536]

Rating (Amps)	MC (42kA @ 800V AC)	NC (50kA @ 800V AC)
630A	WX306MC4P1MFA(S)	WX306NC4P2MFA(S)
800A	WX308MC4P1MFA(S)	WX308NC4P2MFA(S)
1000A	WX310MC4P1MFA(S)	WX310NC4P2MFA(S)
1250A	WX312MC4P1MFA(S)	WX312NC4P2MFA(S)
1600A	WX316MC4P1MFA(S)	WX316NC4P2MFA(S)
2000A	WX320MC4P1MFA(S)	WX320NC4P2MFA(S)
2500A	WX325MC4P1MFA(S)	WX325NC4P2MFA(S)
3200A	-	WX332NC4P2MFA(S)
4000A	-	WX340NC4P2MFA(S)

Reference Code changes for ACB with Neutral CT

For ACB with NCT add to the above price of 3 Pole ACB with MP3-3.1	ADD
--	-----

A

Please fill separate sheet for each type of ACB, Tick the box in front of each appropriate item and fill in the blanks.

Customer Name		Order No. & Date		Delivery Date	End User/ Panel Builder Name & Ph. No.
Frame1 ACB	<input type="checkbox"/> 630A <input type="checkbox"/> 1000A <input type="checkbox"/> 1600A <input type="checkbox"/> 2500A <input type="checkbox"/> 800A <input type="checkbox"/> 1250A <input type="checkbox"/> 2000A				Product Code
	Breaking Capacity	630A ~1250A <input type="checkbox"/> 50kA 415V / 36kA 690V	630A ~1600A <input type="checkbox"/> 65kA 415V / 42kA 690V	630A ~2500A <input type="checkbox"/> 80kA 415V / 50kA 690V <input type="checkbox"/> 42kA 800V	
Frame2 ACB	<input type="checkbox"/> 800A <input type="checkbox"/> 1250A <input type="checkbox"/> 2000A <input type="checkbox"/> 3200A <input type="checkbox"/> 1000A <input type="checkbox"/> 1600A <input type="checkbox"/> 2500A <input type="checkbox"/> 4000A				Qty.
	Breaking Capacity	<input type="checkbox"/> 100kA, 415V AC / 65kA 690V <input type="checkbox"/> 50kA, 800V AC			
Variant	<input type="checkbox"/> 3 Pole <input type="checkbox"/> 4 Pole <input type="checkbox"/> Manual <input type="checkbox"/> Electrical <input type="checkbox"/> Fixed <input type="checkbox"/> Drawout				
Standard Configuration	Manual Fixed (MF)	Electrical Fixed (EF)	Manual Drawn Out (MDO)	Electrical Drawn Out (EDO)	
	Microprocessor Release	Microprocessor Release	Microprocessor Release	Microprocessor Release	
	60 Ways SIC (6NO+6NC available on site)	60 Ways SIC (6NO+6NC available on site)	60 Ways SIC (6NO+6NC available on site)	60 Ways SIC (6NO+6NC available on site)	
		Charging Motor		Charging Motor	
		Shunt Release		Shunt Release	
		Closing Coil		Closing Coil	
	RTC & Spring charge indication		RTC & Spring charge indication		
Customized Termination - 630A to 3200A (Termination of 4000A is vertical only)					
<input type="checkbox"/> Top Universal Termination <input type="checkbox"/> Phase Barriers <input type="checkbox"/> Bottom Universal Terminal (Mandatory in case of Horizontal orientation of terminal / busbar) <input type="checkbox"/> Top Flat Terminal <input type="checkbox"/> Bottom Flat Terminal					
Note: In case of customized termination please confirm for Top and Bottom					
Closing Coil			Charging Motor		
110V AC/DC	220V AC/DC	415V AC	110V AC/DC	220V AC/DC	415V AC
24V DC	48V DC				
Shunt Trip Coil			UVT		
110V AC/DC	220V AC/DC	415V AC	100-130V AC	220-250V AC	380-440V AC
24V DC	48V DC		110V DC	220V DC	
			Without Time Delay		With Time Delay
Release	<input type="checkbox"/> MicroPro3-3.1 <input type="checkbox"/> MicroPro3-4.1		<input type="checkbox"/> MicroPro3-5.1 <input type="checkbox"/> MicroPro3-7.1*		<input type="checkbox"/> Without Release
#(Control Voltage)	<input type="checkbox"/> 220V AC <input type="checkbox"/> 110~220V DC		<input type="checkbox"/> 415V AC <input type="checkbox"/> 24V DC		
<input type="checkbox"/> Door Interlock <input type="checkbox"/> Mechanical Interlock Cable Type <input type="checkbox"/> Mechanical Counter <input type="checkbox"/> Key Interlock <input type="checkbox"/> Electrical Position Indication <input type="checkbox"/> Neutral CT <input type="checkbox"/> 1 ACB <input type="checkbox"/> 2 ACB <input type="checkbox"/> 3 ACB <input type="checkbox"/> IP 54 Protection (For Drawout ACB Only) <input type="checkbox"/> Spring charge Ind.(Elec. Only)					
Special Requirement if any					
Notes:					
(1) Please refer to catalogue / Price list for further details of MicroPro3 release					
(2) Neutral CT is required along with Micropro3 release in case ground fault protection is required with 3P ACB and needs to be connected with solid Neutral Link.					
(3) Trip indication switch shall be available by default with ACB equipped with microprocessor release.					

*Only for 220V AC



WiNmaster2

Breaker with intelligence

WiNmaster2 Power Circuit Breakers are a new generation of Air Circuit Breakers having modular construction to offer a truly global product platform meeting IEC, ANSI and UL standards.



CE RoHS Compliant

Range

630A~2500A

Single frame
for
complete
range

Poles

3P & 4P

Versions

Fixed & Drawout
(Mechanical
& Electrical)

$I_{cs}=I_{cu}=I_{cw}$
(for 1 sec)
at 50kA

Intelligent releases

Micropro2 3.1

Micropro2 4.1

Micropro2 7.1

Measurement

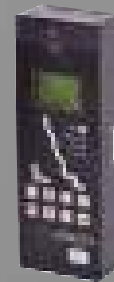
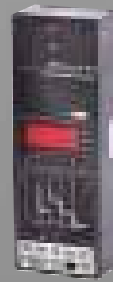
Trip
History

ZSI

Fault
LED retention

Short Circuit
Protection

Communication



WiNmaster2 Air Circuit Breaker

630A-2500A



Features:

- LSING Protection
- Digital Display
- Communication through RS 485 Port
- True RMS Sensing
- Current, Voltage, Power Measurement with Maximeter
- Thermal Memory
- Trip History
- Fault Indication
- Zone Selectivity
- Harmonics

WiNmaster2 Breakers fitted with standard accessories.

Air Circuit Breaker with Intelligent Release Micropro2-3.1

Manual Fixed (MF)

- Microprocessor Release
- Auxiliary Switch 6NO+6NC
- Main CTs
- Terminal Type - Horizontal

Electrical Fixed (EF)

- Microprocessor Release
- Auxiliary Switch 6NO+6NC
- Main CTs
- AC/DC Charging Motor
- Closing Coil
- Shunt Trip
- Terminal Type - Horizontal

Manual Drawout (MDO)

- Microprocessor Release
- Auxiliary Switch 6NO+6NC
- Main CTs
- Safety Shutter
- 60 Way auxiliary isolating contacts
- Terminal Type - Horizontal

Electrical Drawout (EDO)

- Microprocessor Release
- Auxiliary Switch 6NO+6NC
- Main CTs
- Safety Shutter
- 60 Way auxiliary isolating contacts
- AC/DC Charging Motor
- Closing Coil
- Shunt Trip
- Terminal Type - Horizontal

Fixed 3 Pole [HSN Code: 8536]

Rating (Amps)	Breaking Capacity Icu=Ics=Icw (1sec)	Reference
630	50kA	WX06N3P*A(S)
800	50kA	WX08N3P*A(S)
1000	50kA	WX10N3P*A(S)
1250	50kA	WX12N3P*A(S)
1600	50kA	WX16N3P*A(S)
2000	50kA	WX20N3P*A(S)
2500	50kA	WX25N3P*A(S)

Drawout 3 Pole [HSN Code: 8536]

Rating (Amps)	Breaking Capacity Icu=Ics=Icw (1sec)	Reference
630	50kA	WX06N3P*A(S)
800	50kA	WX08N3P*A(S)
1000	50kA	WX10N3P*A(S)
1250	50kA	WX12N3P*A(S)
1600	50kA	WX16N3P*A(S)
2000	50kA	WX20N3P*A(S)
2500	50kA	WX25N3P*A(S)

Fixed 4 Pole [HSN Code: 8536]

Rating (Amps)	Breaking Capacity Icu=Ics=Icw (1sec)	Reference
630	50kA	WX06N4P*A(S)
800	50kA	WX08N4P*A(S)
1000	50kA	WX10N4P*A(S)
1250	50kA	WX12N4P*A(S)
1600	50kA	WX16N4P*A(S)
2000	50kA	WX20N4P*A(S)
2500	50kA	WX25N4P*A(S)

Drawout 4 Pole [HSN Code: 8536]

Rating (Amps)	Breaking Capacity Icu=Ics=Icw (1sec)	Reference
630	50kA	WX06N4P*A(S)
800	50kA	WX08N4P*A(S)
1000	50kA	WX10N4P*A(S)
1250	50kA	WX12N4P*A(S)
1600	50kA	WX16N4P*A(S)
2000	50kA	WX20N4P*A(S)
2500	50kA	WX25N4P*A(S)

Reference Code changes for ACB with Neutral CT

With NCT ordering Code will be	Existing Code	New Code
	WX06N3PMFA(S)	WX06N3PNMFA(S)
	WX06N3PNEFA(S)	WX06N3PNEFA(S)
	WX06N3PNEDOA(S)	WX06N3PNEDOA(S)
	WX06N3PNMDOA(S)	WX06N3PNMDOA(S)

ACB with high end release w.r.t MicroPro2 3.1 ACB

Release	Description	Ordering Code
MicroPro2 3.1	LSIG	A
MicroPro2 4.1	LSING, Thermal Memory, Last Fault Trip History & current display	B
MicroPro2 7.1	LSING, Earth Leakage Protection, Trip History, Over & under voltage/ Frequency, voltage imbalance, current imbalance, Reverse power, Phase Sequence, Leakage Alarm, Current imbalance Protection, Fault Indication, current, voltage and power display with maximeter feature with inbuilt communication	C
Without Release	For ordering ACB without release	C

NOTES:

- 1) While ordering an ACB, the complete catalogue reference by replacing '*' with ACB type: MF-Manual Fixed, EF-Electrical Fixed, MDO-Manual Drawout, EDO-Electrical Drawout
- 2) In TP ACB, if earth fault facility required.
- 3) Other options of terminals are available on request.
- 4) #For ordering replace A with B or C, as per requirement.
- 5) All configurable products are non stockable.

WiNmaster2/3 Air Circuit Breaker Accessories

Main Accessories (Please specify ACB rating & type while placing order)

1. Under Voltage Trip Device [HSN Code: 8538]

Sl. No.	Compatible with	Description	Reference
1.1	WM2/ WM3	Without Delay Common for 630A~4000A	CS-WM2-AUH-V-ABC-**
1.2	WM2/ WM3	With Delay Common for 630A~4000A	CS-WM2-AUH-D-ABC-**

2. Continuous rated Shunt Trip and Closing Coil [HSN Code: 8538]

Sl. No.	Compatible with	Description	Reference
2.1	WM2/ WM3	Shunt Coil Common for 630A~4000A	CS-WM2-AVH-SC-ABC-**
2.2	WM2/ WM3	Closing Coil Common for 630A~4000A	CS-WM2-AVH-CC-ABC-**

3. Accessories [HSN Code: 8538]

Sl. No.	Compatible with	Description	Reference
3.1	WM2 / WM3	Universal Charging Motor-Common for 630A-2500A (for 220VAC/DC)	CS-WM2-AMH-AV-A-M
3.2	WM2 / WM3	Universal Charging Motor-Common for 630A-2500A (for 415VAC)	CS-WM2-AMH-AU-A1-N
3.3	WM2 / WM3	Universal Charging Motor-Common for 630A-2500A (for 110VAC/DC)	CS-WM2-AMH-AS-A1-F
3.4	WM3	Universal Charging Motor for Frame2, Common for 800A-4000A (for 220VAC/DC)	CS-WM3-AMH-AV-A2-M
3.5	WM3	Universal Charging Motor for Frame2, Common for 800A-4000A (for 415VAC)	CS-WM3-AMH-AU-A2-N
3.6	WM3	Universal Charging Motor for Frame2, Common for 800A-4000A (for 110VAC/DC)	CS-WM3-AMH-AS-A2-F
3.7	WM2 / WM3	LIFTER	LIFTER (580x600)* LIFTER-SPL (690x570)*
3.8	WM2 / WM3	Mismatch Prevention Device	CS-WM2-MIP-AB
3.9	WM2	Panel Door Lock (Drawout)	CS-WM2-PDL-AB
3.10	WM2 / WM3	Mechanical interlock for interlocking 2 ACBs (Drawout)	CS-WM2-MIL-HD
3.11	WM2 / WM3	Mechanical interlock for interlocking 2 ACBs (Fixed)	CS-WM2-MIL-HF
3.12	WM2 / WM3	Key Lock (1 Lock + 1 Key)	CS-WM2-AKI-AB
3.13	WM2 / WM3	Key Lock (3 Lock + 2 Key)	CS-WM2-AKI-1-AB
3.14	WM2 / WM3	Key Lock (2 Lock + 1 Key)	CS-WM2-AKI-2-AB
3.15	WM2 / WM3	Mechanical operation counter	CS-WM2-ASC-ABC
3.16	WM2 / WM3	Ready to close contact	CS-WM2-RTC-ABC
3.17	WM2 / WM3	Phase Barrier - 3 Pole (Drawout)	CS-WM2-PB-3P
3.18	WM2 / WM3	Phase Barrier - 4 Pole (Drawout)	CS-WM2-PB-4P
3.19	WM2 / WM3	Mechanical Interlock for 1 to 3 ACBs-Drawout (Cable Interlock)	CS-WM2-MIL3-HD
3.20	WM2 / WM3	Mechanical Interlock for 1 to 3 ACBs - Fixed (Cable Interlock)	CS-WM2-MIL3-HF
3.21	WM2 / WM3	Panel Door Lock (Fixed)	CS-WM2-PDLF-AB
3.22	WM2 / WM3	Phase Barrier- 3Pole (Fixed)	CS-WM2-PBF-3P
3.23	WM2 / WM3	Phase Barrier- 4Pole (Fixed)	CS-WM2-PBF-4P
3.24	WM2 / WM3	Position Indication Switch	CS-WM2-ALB-AB
3.25	WM2 / WM3	Auxiliary Switch	CS-WM2-AXH-6A6B
3.26	WM2 / WM3	IP54 cover for Drawout ACB- Frame-1	CS-WM3-CVRIP54-FR1
3.27	WM3	IP54 cover for Drawout ACB- Frame-2	CS-WM3-CVRIP54-FR2
3.28	WM3	Panel Door Lock (Drawout)	CS-WM3-DOOR-INT-DRAB

* in (mm)

**Options for Coil Voltage

Description	AC Control Voltage			DC Control Voltage			
	110V	220-250V	380-440V	24V	48V	110V	220V
UVT	FA	MA	NA	-	-	FD	MD
Shunt & Closing Coil	100/130V AC/DC	220-250V AC/DC	380V AC	24V DC	28V DC		
	F	M	N	BD	ED		

NOTES: All configurable products are non stockable.



Air Circuit Breaker AH / AHA



RoHS
Compliant

The AH/ AHA series circuit breakers are robust circuit breakers complying to IEC 60947-2 & are equipped with unique 'Slow Close Operation of Contacts'.

Equipped with smart features of advance Micropro-V4*

- Power & Current Measurement
- Individual Fault Annunciation
- ZSI
- Advance Protection
- SCADA compatibility - RS485 Port
- Data Uploading to PC / Laptop through USB port
- Motor Protection
- Temperature Monitoring

Intelligent Protection Releases





Air Circuit Breaker AH / AHA

630A-6300A

(I) ACB with Intelligent Release MicroPro 3.1

Features:

- LSIG Protection
- True RMS Sensing
- Fault Indication

(For standard configuration, please refer AH / AHA ACB Order Form)

LT Air Circuit Breaker fitted with Intelligent Release MicroPro 3.1 [HSN Code: 8536]

Fixed 3 Pole

Rating (Amps)	Breaking Capacity I _{cu} =I _{cs} =I _{cw} (1sec)	Reference
630A	50kA	AHA06N3P*MP3.1(S)
800A	50kA	AHA08N3P*MP3.1(S)
1000A	50kA	AHA10N3P*MP3.1(S)
1250A	50kA	AHA12N3P*MP3.1(S)
1600A	50kA	AHA16N3P*MP3.1(S)
2000A	50kA	AHA20N3P*MP3.1(S)
2500A	50kA	AHA25N3P*MP3.1(S)
3200A	65kA	AH30DCSMP3.1*(S)
4000A	85kA	AH40DCSMP3.1*(S)

Fixed 4 Pole

Rating (Amps)	Breaking Capacity I _{cu} =I _{cs} =I _{cw} (1sec)	Reference
630	50kA	AHA06N4P*MP3.1(S)
800	50kA	AHA08N4P*MP3.1(S)
1000	50kA	AHA10N4P*MP3.1(S)
1250	50kA	AHA12N4P*MP3.1(S)
1600	50kA	AHA16N4P*MP3.1(S)
2000	50kA	AHA20N4P*MP3.1(S)
2500	50kA	AHA25N4P*MP3.1(S)
3200	65kA	AH30D4CSMP3.1*(S)
4000	85kA	AH40D4CSMP3.1*(S)

Drawout 3 Pole

Rating (Amps)	Breaking Capacity I _{cu} =I _{cs} =I _{cw} (1sec)	Reference
630	50kA	AHA06N3P*MP3.1(S)
800	50kA	AHA08N3P*MP3.1(S)
1000	50kA	AHA10N3P*MP3.1(S)
1250	50kA	AHA12N3P*MP3.1(S)
1600	50kA	AHA16N3P*MP3.1(S)
2000	50kA	AHA20N3P*MP3.1(S)
2500	50kA	AHA25N3P*MP3.1(S)
3200	65kA	AHA30S3P*MP3.1(S)
4000	65kA	AHA40S3P*MP3.1(S)
4000	85kA	AH40DCSMP3.1*(S)
5000	85kA	AH50CCSMP3.1*(S)
6300	100kA	AH60CCSMP3.1*(S)

Drawout 4 Pole

Rating (Amps)	Breaking Capacity I _{cu} =I _{cs} =I _{cw} (1sec)	Reference
630	50kA	AHA06N4P*MP3.1(S)
800	50kA	AHA08N4P*MP3.1(S)
1000	50kA	AHA10N4P*MP3.1(S)
1250	50kA	AHA12N4P*MP3.1(S)
1600	50kA	AHA16N4P*MP3.1(S)
2000	50kA	AHA20N4P*MP3.1(S)
2500	50kA	AHA25N4P*MP3.1(S)
3200	65kA	AHA30S4P*MP3.1(S)
4000	65kA	AHA40S4P*MP3.1(S)
4000	85kA	AH40D4CSMP3.1*(S)
5000	85kA	AH50C4CSMP3.1*(S)
6300	100kA	AH60C4CSMP3.1*(S)

630A-6300A

(II) ACB with Thermal Magnetic Release

(For standard configuration, please refer AH / AHA ACB Order Form)

LT Air Circuit Breaker fitted with Thermal Magnetic Release and Standard Accessories, as applicable.

Fixed 3 Pole

Rating (Amps)	Breaking Capacity I _{cu} =I _{cs} =I _{cw} (1sec)	Reference
630	50kA	AHA06N3P*TM(S)
800	50kA	AHA08N3P*TM(S)
1000	50kA	AHA10N3P*TM(S)
1250	50kA	AHA12N3P*TM(S)
1600	50kA	AHA16N3P*TM(S)
2000	50kA	AHA20N3P*TM(S)
2500	50kA	AHA25N3P*TM(S)
3200	65kA	AH30DCSTM*(S)
4000	85kA	AH40DCSTM*(S)

Fixed 4 Pole

Rating (Amps)	Breaking Capacity I _{cu} =I _{cs} =I _{cw} (1sec)	Reference
630	50kA	AHA06N4P*TM(S)
800	50kA	AHA08N4P*TM(S)
1000	50kA	AHA10N4P*TM(S)
1250	50kA	AHA12N4P*TM(S)
1600	50kA	AHA16N4P*TM(S)
2000	50kA	AHA20N4P*TM(S)
2500	50kA	AHA25N4P*TM(S)
3200	65kA	AH30D4CSTM*(S)
4000	85kA	AH40D4CSTM*(S)

Drawout 3 Pole

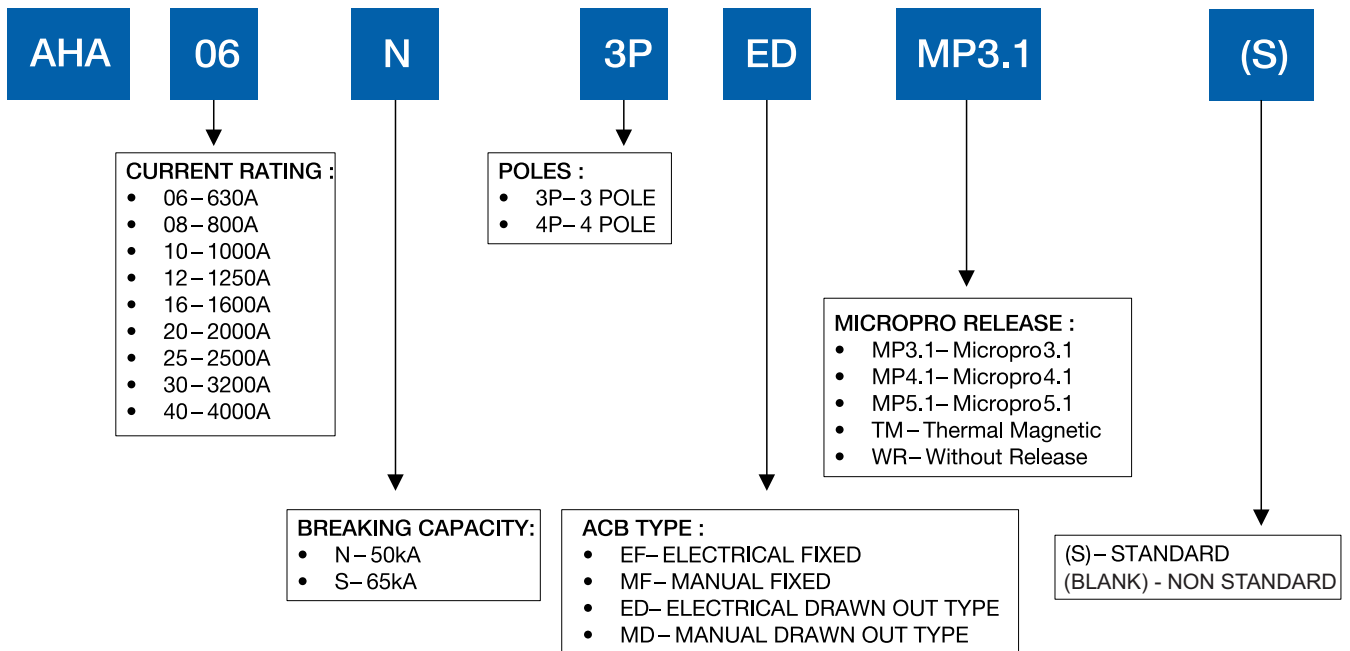
Rating (Amps)	Breaking Capacity I _{cu} =I _{cs} =I _{cw} (1sec)	Reference
630	50kA	AHA06N3P*TM(S)
800	50kA	AHA08N3P*TM(S)
1000	50kA	AHA10N3P*TM(S)
1250	50kA	AHA12N3P*TM(S)
1600	50kA	AHA16N3P*TM(S)
2000	50kA	AHA20N3P*TM(S)
2500	50kA	AHA25N3P*TM(S)
3200	65kA	AHA30S3P*TM(S)
4000	65kA	AHA40S3P*TM(S)
4000	85kA	AH40DCSTM*(S)
5000	85kA	AH50CCSTM*(S)
6300	100kA	AH60CCSTM*(S)

Drawout 4 Pole

Rating (Amps)	Breaking Capacity I _{cu} =I _{cs} =I _{cw} (1sec)	Reference
630	50kA	AHA06N4P*TM(S)
800	50kA	AHA08N4P*TM(S)
1000	50kA	AHA10N4P*TM(S)
1250	50kA	AHA12N4P*TM(S)
1600	50kA	AHA16N4P*TM(S)
2000	50kA	AHA20N4P*TM(S)
2500	50kA	AHA25N4P*TM(S)
3200	65kA	AHA30S4P*TM(S)
4000	65kA	AHA40S4P*TM(S)
4000	85kA	AH40D4CSTM*(S)
5000	85kA	AH50C4CSTM*(S)
6300	100kA	AH60C4CSTM*(S)

NOTES: All configurable products are non stockable.

AHA ACB – ORDERING INFORMATION



Reference changes as per the release modification	Ordering Code
MicroPro 4.1 (LSING, Display, Current Measurement, Trip History, Communication) add to the price of ACB with MP3.1	ADD
MicroPro5.1 (LSING, Display, Current Measurement, Trip History, ZSI, Communication) add to the price of ACB with MP3.1	ADD

NOTES:

- 1) TP ACB if earthfault facility is also available.
- 2) Drawout type ACB with vertical terminal (factory fitted only) is available in ratings 8D~16D/06N-20S (AHA)
- 3) Fixed type ACB with vertical terminal adapter option is available in rating 8D~16D/06N-20S (AHA).
- 4) All configurable products are non stockable.

For ordering ACB without Release following price needs to be reduced as per the rating from the price of ACB with Thermal Magnetic Release.	Remarks
630A-1600A	Reduce
2000A	Reduce
2500A-3200A	Reduce
4000A	Reduce

NOTE:

TP ACB if earthfault facility is also available.
 Drawout type ACB with vertical terminal (factory fitted only) is available in ratings 6D~16D/08N~20S (AHA).

A

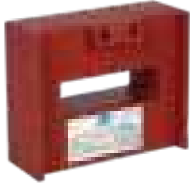
Main Accessories For "AH/AHA" ACB

(Please specify ACB rating & type while placing orders)

4.1 Single Phase Resin Cast CTs for "AH/AHA" ACB for MicroPro 3.1, 4.1 & 5.1 Release

1CT per pole is required. In TP ACB, one additional CT will be required if, Ground Fault Protection is selected.

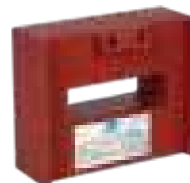
Sl. No.	Type	Description	Phase CT	Neutral CT
4.1.1	-	100/0.2A	CS-WMCT-014	CS-ATBWM-010
4.1.2	-	200/0.2A	CS-WMCT-02	CS-ATBWM-02
4.1.3	-	250/0.2A	CS-WMCT-024	CS-ATBWM-024
4.1.4	-	300/0.2A	CS-WMCT-034	CS-ATBWM-030
4.1.5	-	400/0.2A	CS-WMCT-044	CS-ATBWM-040
4.1.6	6D / 06N	630/0.2A	CS-WMCT-064	CS-ATBWM-060
4.1.7	8D/08N	800/0.2A	CS-WMCT-084	CS-ATBWM-080
4.1.8	10D/10N	1000/0.2A	CS-WMCT-104	CS-ATBWM-110
4.1.9	12D / 12N	1250/0.2A	CS-WMCT-124	CS-ATBWM-120
4.1.10	16D / 16N	1600/0.2A	CS-WMCT-164	CS-ATBWM-160
4.1.11	20N/20S	2000/0.2A	CS-WMCT-220	CS-ATBWM-220
4.1.12	20D	2000/0.2A	CS-ATBWM-220	CS-ATBWM-220
4.1.13	25D / 25N	2500/0.2A	CS-ATBWM-225	CS-ATBWM-225
4.1.14	30S	3200/0.2A	CS-ATBWM-2532	CS-ATBWM-332
4.1.15	30D	3200/0.2A	CS-ATBWM-332	CS-ATBWM-332
4.1.16	40S / 40D	4000/0.2A	CS-ATBWM-440	CS-ATBWM-440
4.1.17	50C	5000/0.2A	CS-ATBWM-550	CS-ATBWM-554
4.1.18	60C	6300/0.2A	CS-ATBWM-660	CS-ATBWM-664



4.2 Single Phase Resin Cast CTs for "AH/AHA" ACB for Thermal release

1 CT per pole is required. In TP ACB, one additional CT will be required if, Ground Fault Protection is selected.

Sl. No.	Type	Description	Phase CT	Neutral CT
4.2.1		100/5A	CS-ATB-014	CS-ATB-010
4.2.2		200/5A	CS-ATB-020	CS-ATB-020N
4.2.2	-	250/5A	CS-ATB-024	CS-ATB-020
4.2.4		300/5A	CS-ATB-034	CS-ATB-030
4.2.5	-	400/5A	CS-ATB-044	CS-ATB-040
4.2.6	6D / 06N	630/5A	CS-ATB-064	CS-ATB-060
4.2.7	8D/08N	800/5A	CS-ATB-084	CS-ATB-080
4.2.8	10D/10N	1000/5A	CS-ATB-104	CS-ATB-110
4.2.9	12D / 12N	1250/5A	CS-ATB-134	CS-ATB-120
4.2.10	16D / 16N	1600/5A	CS-ATB-164	CS-ATB-160
4.2.11	20N/20S	2000/5A	CS-ATB-220	CS-ATB-220
4.2.12	20D	2000/5A	CS-ATB-220	CS-ATB-220
4.2.13	25D / 25N	2500/5A	CS-ATB-225	CS-ATB-225
4.2.14	30S	3200/5A	CS-ATB-2532	CS-ATB-332
4.2.15	30D	3200/5A	CS-ATB-332	CS-ATB-332
4.2.16	40S / 40D	4000/5A	CS-ATB-440	CS-ATB-440
4.2.17	50C	5000/5A	CS-ATB-554	CS-ATB-550
4.2.18	60C	5000/5A	CS-ATB-664	CS-ATB-660



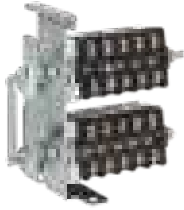
5. Auxiliary Isolating Contact Assembly

Sl. No.	Description	Reference
5.1	24 way 6D-16D/06N-20S, 3P 6D-16D/06N-20S, 4P 20D-25D/25N-30S,3P 20D-25D/25N-30S, 4P 30D-40D/40S, 3P 30D-40D/40S, 4P 50C-60C, 3P 50C-60C, 4P	Set of two contact block on ACB Side & four block on Cradle side CS-AIH-2-116 CS-AIH-2-116 (4P) CS-AIH-2-220 CS-AIH-2-220 (4P) CS-AIH-2-320 CS-AIH-2-320 (4P) CS-AIH-2-440 CS-AIH-2-440 (4P)
5.2	36 way 6D-16D/06N-20S, 3P 6D-16D/06N-20S, 4P 20D-25D/25N-30S,3P 20D-25D/25N-30S, 4P 30D-40D/40S, 3P 30D-40D/40S, 4P 50C-60C, 3P 50C-60C, 4P	Set of three contact block on ACB Side & six block on Cradle side CS-AIH-3-116 CS-AIH-3-116 (4P) CS-AIH-3-220 CS-AIH-3-220 (4P) CS-AIH-3-320 CS-AIH-3-320 (4P) CS-AIH-3-440 CS-AIH-3-440 (4P)

NOTES: All configurable products are non stockable.

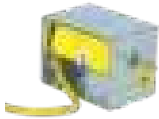
Main Accessories For "AH/AHA" ACB

(Please specify ACB rating & type while placing orders)



6. Auxiliary Switch [HSN Code: 8538]

Sl. No.	Description	Reference	
6.1	5 way (3NO+2NC)	6D-16D/06N-20S	CS-AXH-3A2B-116
		20D-40D/25N-40S	CS-AXH-3A2B-220
6.2	10 way (5NO+5NC)	6D-16D/08N-20S	CS-AXH-5A5B-116
		20D-40D/25N-40S / 50C-60C	CS-AXH-5A5B-220
6.3	14 way (7NO+7NC)	6D-16D/06N-20S	CS-AXH-7A7B-116
		20D-40D/25N-40S / 50C-60C	CS-AXH-7A7B-220



7. UVT Device [HSN Code: 8538]

Sl. No.	Description	Reference
7.1	Compact UVT Coil 6D-16D/06N-20S	CS-AUH-V-A-*
7.2	20D-40D/25N-40S / 50C-60C	CS-AUH-V-B-*



8. Shunt Trip and Closing Coil [HSN Code: 8538]

Sl. No.	Description	Reference
8.1	Shunt Trip 6D-16D/06N-20S	CS-AVH-S-116-*
	20D-40D/25N-40S/50C-60C	CS-AVH-S-220-*
8.2	Closing Coil 6D-16D/06N-20S	CS-AVH-C-116-*
	20D-40D/25N-40S/ 50C-60C	CS-AVH-C-220-*

**Please specify voltage while ordering

**Options for Coils Voltage

Description	AC Control Voltage			DC Control Voltage			
	100-130V	220-250V	380-440V	24V	48V	100-130V	220-250V
UVT	FA	MA	NA	-	-	FD	MD
SHUNT	FA	MA	NA	BD	ED	FD	MD
Closing Coil	FA	MA	NA	BD	ED	FD	MD

A



Sl. No.	Description	Suitable for ACB frame size / rating	
		6D-16D / 06N-20S Reference	20D-40D/25S-40S / 50C-60C Reference
9	OCR (Fault) Alarm Switch (for fault indication in ACB with MP & TM release)	ALA-1	ALA-2
10	Trip Indication Switch (For both manual and Fault indication in ACB)	CS-TIS-1	CS-TIS-2
11	Spring Charged Indication Switch	SCIS-M	SCIS-M2
12	Position Indication Switch (Right side)	ALB-4P-1	ALB-IP-2
13	Position Indication Switch (Left side)	ALB-FR-1-L	ALB-FR-2-L
14	Mechanical operation counter	ASC-1	ASC-2
15	Key Lock (One lock + One key)	AKI-116D	AKI-2D
16	Castle Key Lock-3 Pole	CKI-116 (3P)	CKI-220 (3P)
	Castle Key Lock-4 Pole	CKI-116 (4P)	CKI-220 (4P)
17	Key Interlock (Consisting of 3-Key Locks with 2 Keys (same No.) fitted on 3 ACBs)	AKI-1-1	AKI-1-2
18	Key Interlock (Consisting of 2-Key Locks with 1 Key (same No.) fitted on 2 ACBs)	AKI-2-1	AKI-2-2
19	Short Circuit Contact for Shunting Auxiliary Isolating Contacts when ACB withdrawn	SCC	SCC
20	Rectifier Unit input 240V AC/ output 24V DC, used for Fault LED Retention	CS-ARO-1BMA	CS-ARO-1BMA
21	Mal Insertion Preventor	MIP-NPCIL	MPI-2-NPCL



NOTES: All configurable products are non stockable.

Spares For "AH / AHA" ACB

(Please specify ACB rating & type while placing order for spares)

Sl. No.	Description	Reference
22	Power Supply Module	☒CSPSM-MICROPRO
22.1	Communication Module for Micropro 4.1 & 5.1 Release	CSPSCM-MICROPRO
23	*Auxiliary Isolating Contact Blocks	
	Description	Reference
	Breaker & Cradle Side 12 Way	AIH-BC

NOTES: *Auxiliary Isolating Contact Blocks has to be order together for Cradle & Breaker side.

Sl. No.	Description	Suitable for ACB frame size / rating			
		6D-16D/ 08N-20S (AHA) Reference		20D-25D / 25N-30S Reference	
		Mechanical Interlock		3 Pole	4 Pole
24	Fixed Vertical	MIL-16D3P-VF	MIL-16D4P-VF	MIL-20D3P-VF/4P	MIL-20D4P-VF
25	Fixed Horizontal	MIL-16D3P-HF	MIL-16D4P-HF	MIL-20D3P-HF/4P	MIL-20D4P-HF
26	D/o Vertical	MIL-16D3P-VDO	MIL-16D4P-VDO	MIL-20D3P-VDO/4P	MIL-20D4P-VDO
27	D/o Horizontal)	MIL-16D3P-HDO	MIL-16D4P-HDO	MIL-20D3P-HDO/4P	MIL-20D4P-HDO

Sl. No.	For Air Circuit Breaker	Reference
28	Lifter (for all sizes of ACBs)	LIFTER (580x600)*
		LIFTER-SPL (690x570)*
29	Door Interlock	
30	Door Interlock 6D-16D / 06N-20S (Right side)	DOOR-INT-116
31	Door Interlock	
31.1	Door Interlock (20D-40D) / 25N-40S (Right side)	DOOR-INT-220

Sl. No. 25, 26, 30 & 31 should be ordered with ACB & will come at factory fitted.

32. Vertical Terminal Adapter for AH/AHA Fixed type ACB

Sl. No.	Description	Reference	Qty. Required Per Pole*
32.1	06N-10N	CUADPTR-VC(6D-8D)	1
32.2	10D-12D & 12N	CUADPTR-VC(10D-12D)	1
32.3	16D & 16N-20S	CUADPTR-VC(16D)	1
32.4	20D-25D & 25N	CUADPTR-VC(20D-25D)	1

33. Drawout Mould Base (Cradle Side)

For ACB Rating	Reference	Qty. Required Per Pole*
6D-16D/08N-20S (AHA)	DRMOULD-20S	2
20D	DRMOULD-20D	2
25D/30S (AHA)	DRMOULD-25D	2
30D/40S (AHA)	DRMOULD-30D	1
40D	DRMOULD-40D	1
50C-60C	DRMOULD-60C	1

34. Arcing Contacts (Set of 1 No. Fixed 1 No. Moving)

For ACB Rating	Reference	Qty. Required Per Pole*
6D-8D / 06N-10N	CS-ARCCONT-08D	1
10D-12D / 12N	CS-ARCCONT-12D	1
16D / 16N	CS-ARCCONT-16D	1
20N (Fixed ACB)	CS-ARCCONT-20N	1
20N / 20S (Drawout ACB)	CS-ARCCONT-20S	1
20D	CS-ARCCONT-20D	1
25D / 25N-30S	CS-ARCCONT-25D	1
30D/40S	CS-ARCCONT-30D	1
40D	CS-ARCCONT-40D	1
50C	CS-ARCCONT-50C	1
60C	CS-ARCCONT-60C	1

NOTES: 1. All configurable products are non stockable.
2. *M - Moving, F - Fixed

Spares For "AH/AHA" ACB

(Please specify ACB rating & type while placing order for spares)

35. Main Isolating Contacts (Jaw Contacts)

For ACB Rating	Reference	Qty. Required Per Pole
06N-08N / 10N	CS-MIC-08D(50k)	2
10D-12D / 12N	CS-MIC-12D	2
16D / 16N	CS-MIC-16D	2
20N / 20S	CS-MIC-20S	2
20D	CS-MIC-20D	2
25D / 25N-30S	CS-MIC-25D	2
30D / 40S	CS-MIC-30D	2
40D	CS-MIC-40D	2
50C	CS-MIC-50C	2
60C	CS-MIC-60C	2

36. Main Fixed Contacts (Upper Terminals)

For ACB Rating	Reference	Qty. Required Per Pole*
06N-10N	FIXCONT-08N	1
10D-12D / 12N	FIXCONT-10D-12D	1
16D / 16N	FIXCONT-16D	1
20N(AHA)-Fixed type ACB	FIXCONT-20N	1
20N(AHA)-/20S Drawout ACB	FIXCONT-20S	1
20D	FIXCONT-20D	1
25D / 25N-30S	FIXCONT-25D	1
30D/40S	FIXCONT-30D	1
40D	FIXCONT-40D	1
50C	FIXCONT-50C	1
60C	FIXCONT-60C	1

37. Lower Terminals with fitting plates

For ACB Rating	Reference	Qty. Required Per Pole*
6D-8D / 06N-10N (AHA)	LWR-TRNL-8D	1
10D-12D / 12N (AHA)	LWR-TRNL-12D	1
16D / 16N (AHA)	LWR-TRNL-16D	1
20N (AHA) (Fixed ACB)	LWR-TRNL-20N	1
20N(AHA) / 20S(AHA) (Drawout ACB)	LWR-TRNL-20S	1
20D	LWR-TRNL-20C-20D	1
25D / 25N-30S (AHA)	LWR-TRNL-25C-25D	1
30D / 40S (AHA)	LWR-TRNL-30C-30D	1
40D	LWR-TRNL-40C-40D	1
50C	LWR-TRNL-50C	1
60C	LWR-TRNL-60C	1

38. Cradle Terminal for Drawout AH/AHA ACB

For ACB Rating	Reference	Terminal Configuration	Qty. Required Per Pole*
6D-8D / 06N-10N	CS-CKTTML-08N	Horizontal	1
	CS-CKTTML-08N(V)	Vertical	1
10D-12D / 12N	CS-CKTTML-12D	Horizontal	1
	CS-CKTTML-12D(V)	Vertical	1
16D / 16N	CS-CKTTML-16D	Horizontal	1
	CS-CKTTML-16D(V)	Vertical	1
20N / 20S	CS-CKTTML-20S	Horizontal	1
	CS-CKTTML-20S(V)	Vertical	1
20D	CS-CKTTML-20D	Horizontal	1
	CS-CKTTML-20D(V)	Vertical	1
25D / 25N, 25D / 25N-30S	CS-CKTTML-25D	Horizontal	1
	CS-CKTTML-25D(V)	Vertical	1
30D / 40S	CS-CKTTML-30D	Vertical	1
40D	CS-CKTTML-40D	Vertical	1
50C	CS-CKTTML-50C	Vertical	1
60C	CS-CKTTML-60C	Vertical	1

NOTES: All configurable products are non stockable.

Spares For "AH/AHA" ACB

(Please specify ACB rating & type while placing order for spares)

39. Main Moving Contacts Assembly

For ACB Rating	Reference	Qty. Required Per Pole*
6D-8D	MOVMAIN-06D-08D	1
06N-10N	MOVMAIN-08N	1
10D-20D / 12N	MOVMAIN-10D-12D	1
16D / 16N	MOVMAIN-16D	1
20N (AHA)-(Fixed Type ACB)	MOVMAIN-20N	1
20N (AHA)-20S (Drawout Type ACB)	MOVMAIN-20S	1
20D	MOVMAIN-20D	1
25D / 25N-30S	MOVMAIN-25D	1
30D / 40S	MOVMAIN-30D	1
40D	MOVMAIN-40D	1
50C	MOVMAIN-50C	1
60C	MOVMAIN-60C	1

*** To arrive at total quantity per ACB, multiply by 3 or 4 depending upon number of poles in the ACB.

40. Complete Pole Unit (Common for 3 & 4 Pole ACBs)

Sl. No.	For Air Circuit Breaker	Reference
40.1	Single Pole unit for 08N-10N	CS-CONDUNIT-8N
40.2	Single Pole unit for 10D / 12D & 12N	CS-CONDUNIT-12D
40.3	Single Pole unit for 16D / 16N	CS-CONDUNIT-16D
40.4	Single Pole unit for 20N (AHA)-F■	CS-CONDUNIT-20N
40.5	Single Pole unit for 20N (AHA)-DO■/20S	CS-CONDUNIT-20S
40.6	Single Pole Unit for 20D	CS-CONDUNIT-20D
40.7	Single Pole Unit for 25D / 25N-30S	CS-CONDUNIT-25D
40.8	Single Pole Unit for 30D/40S	CS-CONDUNIT-30D
40.9	Single Pole Unit for 40D	CS-CONDUNIT-40D
40.10	Single Pole Unit for 50C	CS-CONDUNIT-50C
40.11	Single Pole Unit for 60C	CS-CONDUNIT-60C

41. Arc Chutes

For ACB Rating	Reference	Qty. Required Per Pole*
6D-16D/06N-20N	CS-ARCCHT-06D-16D	1
20S	CS-ARCCHT-20S	1
20D	CS-ARCCHT-20D	1
25D/30S	CS-ARCCHT-25D	1
30D/40S	CS-ARCCHT-30D	1
40D	CS-ARCCHT-40D	1
50C	CS-ARCCHT-50C	1
60C	CS-ARCCHT-60C	1

*** To arrive at total quantity per ACB, multiply by 3 or 4 depending upon number of poles in the ACB.

42. Charging Motors (110V AC/DC, 220V AC/DC, 250V AC/DC)

For ACB Rating	Reference
6D-16D / 06N-20S (AHA)	CS-AMH-1
20D-40D/30S-40S(AHA)	CS-AMH-2

43. Control Relay for Charging Motor (110V AC/DC, 220V AC/DC)

For ACB Rating	Reference
6D-16D / 06N-20S (AHA)	CS-AMH-1-AS
20D-40D / 30S-40S (AHA)	CS-AMH-2-AS

NOTES: All configurable products are non stockable.



Spares For "AH/AHA" ACB

(Please specify ACB rating & type while placing order for spares)

Other Spares [HSN Code: 8538]

Sl. No.	Description	Reference
43.1	Micro Switch for Motor cut off 6D-40D/06N-40S /50C-60C	MICROSW *
43.2	Anti-Pumping Relay■ 6D-16D/06N-20S, 3P	CS-ANTPUMPRLY-116
	20D-25D/30S, 3P	CS-ANTPUMPRLY-220
	30D-40D/40S / 50C-60C, 3P	CS-ANTPUMPRLY-320
43.3	Manual Charging Handle 6D-16D/06N-20S	MCLHND-6D-16D
43.4	Manual Charging Handle 20D-40D/25N-40S	MCLHND-20D-40D
43.5	Drawout Handle 6D-16D/06N-20S	DRHND-6D-16D
43.6	Drawout Handle 20D-40D/25N-40S	DRHND-20D-40D
43.7	Magnet Hold Trigger 6D-16D/06N-20S, 3P 6D-16D/06N-20S, 4P	CS-MHT-16D
		CS-MHT-16D-4P
43.8	Magnet Hold Trigger 20D-25D / 25N-30S, 3P 20D-25D / 25N-30S, 4P	CS-MHT-20D-25D3P
		CS-MHT-20D-25D4P
43.9	Magnet Hold Trigger 30D-40D/40S (AHA), 3P 50C-60C 3P	CS-MHT-30D-3P
		CS-MHT-40D-60C3P
43.10	D/O Telescopic Rail (Left) 6D-16D / 06N-20S 20D-25D / 25N-30S 30D-40D /40S	DRTLRAIL (L)-1
		DRTLRAIL (L)-2 DRTLRAIL (L)-3
43.11	D/O Telescopic Rail (Right) 6D-16D / 06N-20S 20D-25D / 25N-30S 30D-40D / 40S	DRTLRAIL (R)-1
		DRTLRAIL (R)-2 DRTLRAIL (R)-3

Note: "****" Please specify ACB rating & type while ordering for spares.

**Options for Anti-Pumping Relay

	24/30V	48V	110V	220V	415V
AC	--	--	FA	MA	NA
DC	BD	ED	FD	MD	-

NOTES:

- 1) All configurable products are non stockable.
- 2) ■Anti-Pumping Relay same code will be applicable for 4P

A

Please fill separate sheet for each type of ACB Tick the box in front of each appropriate item and fill in the blanks.

AH/AHA ACB ORDER FORM																										
Customer Name		Order No & Date		Delivery Date		End User/Panel Builder Name & Phone no.			Qty. (NOS.)																	
PRODUCT REFERENCE		AH <input type="checkbox"/>		AHA <input type="checkbox"/>																						
RATING OF ACB REQUIRED	630A <input type="checkbox"/>		800A <input type="checkbox"/>		1000A <input type="checkbox"/>		1250A <input type="checkbox"/>		1600A <input type="checkbox"/>		2000A <input type="checkbox"/>															
	2500A <input type="checkbox"/>		3200A <input type="checkbox"/>		4000A <input type="checkbox"/>		5000A <input type="checkbox"/>		6300A <input type="checkbox"/>																	
NO. OF POLES	3 POLE <input type="checkbox"/>		4 POLE <input type="checkbox"/>		BREAKING CAPACITY : AH : D			C		(Only for 50C & 60C)																
					AHA : N			S																		
STANDARD CONFIGURATION	MF		EF		MDO		EDO																			
	Release		Release		Release		Release																			
	Power Supply Module (ac/dc)		Power Supply Module (ac/dc)		Power Supply Module (ac/dc)		Power Supply Module (ac/dc)																			
	Aux Switch 4NO + 4NC		Aux Switch 3NO + 4NC		Aux Switch 4NO + 4NC		Aux Switch 4NO + 4NC																			
	Main CTs		Main CTs		Main CTs		Main CT s																			
			Charging Motor		Safety shutter		Charging Motor																			
			Shunt Trip		36 Way Aux Isolating Contacts		Shunt Trip																			
			Closing Coil				Closing Coil																			
			Anti Pumping Relay				Anti Pumping Relay																			
							Safety shutter																			
							36 Way Aux Isolating Contacts																			
	MF		EF		MDO		EDO																			
	Thermal Magnetic Release		Thermal Magnetic Release		Thermal Magnetic Release		Thermal Magnetic Release																			
	Aux Switch 4NO + 4NC		Aux Switch 3NO + 4NC		Aux Switch 3NO + 3NC		Aux Switch 5NO + 6NC																			
	Main CTs		Charging Motor		Main CTs		Main CT s																			
Shunt Trip		Main CTs		Shunt Trip		Safety shutter																				
		Shunt Trip		Safety shutter		Charging Motor																				
		Closing Coil		24 Way Aux Isolating Contacts		Closing Coil																				
		Anti Pumping Relay				Shunt Trip																				
						Anti Pumping Relay																				
						36 Way Aux Isolating Contacts																				
VOLTAGE RATING	Motor --->		<table border="1" style="display: inline-table; border-collapse: collapse;"> <tr> <td>110V</td> <td>AC</td> <td>DC</td> <td></td> </tr> <tr> <td>220V</td> <td>AC</td> <td>DC</td> <td></td> </tr> </table>		110V	AC	DC		220V	AC	DC		Closing Coil -->		<table border="1" style="display: inline-table; border-collapse: collapse;"> <tr> <td>100-130V AC</td> <td>220-250V AC</td> <td>380-440V AC</td> </tr> <tr> <td>24V DC</td> <td>48V DC</td> <td>110V DC</td> <td>220V DC</td> </tr> </table>		100-130V AC	220-250V AC	380-440V AC	24V DC	48V DC	110V DC	220V DC			
	110V	AC	DC																							
220V	AC	DC																								
100-130V AC	220-250V AC	380-440V AC																								
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UVT ---->		<table border="1" style="display: inline-table; border-collapse: collapse;"> <tr> <td>100-130V AC</td> <td>220-250V AC</td> <td>380-440V AC</td> </tr> <tr> <td>110V DC</td> <td>220V DC</td> <td></td> </tr> </table>		100-130V AC	220-250V AC	380-440V AC	110V DC	220V DC		Shunt trip coil -->		<table border="1" style="display: inline-table; border-collapse: collapse;"> <tr> <td>100-130V AC</td> <td>220-250V AC</td> <td>380-440V AC</td> </tr> <tr> <td>24V DC</td> <td>48V DC</td> <td>110V DC</td> <td>220V DC</td> </tr> </table>		100-130V AC	220-250V AC	380-440V AC	24V DC	48V DC	110V DC	220V DC						
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110V DC	220V DC																									
100-130V AC	220-250V AC	380-440V AC																								
24V DC	48V DC	110V DC	220V DC																							
ACCESSORIES	Without Release <input type="checkbox"/>		CT Rating _____ A		Thermal Magnetic : Earth Fault : Req'd. <input type="checkbox"/> Not Req'd. <input type="checkbox"/> CT Rating <input type="checkbox"/> NCT Rating <input type="checkbox"/> Setting of non-adj. Mag. Inst. Trip _____																					
	Thermal Magnetic Release <input type="checkbox"/>		Overload _____ A																							
	MicroPro 3.1 <input type="checkbox"/>		Ground Fault _____ A																							
	MicroPro 4.1 <input type="checkbox"/>		Short Circuit _____ A																							
	MicroPro 5.1 <input type="checkbox"/>		Instantaneous _____ A																							
	Communication Module* (Modbus Protocol) <input type="checkbox"/>		Neutral _____ A																							
ACCESSORIES	Trip Ind. Switch <input type="checkbox"/>		Spring charge Ind. Switch <input type="checkbox"/>		Castle Key Interlock** <input type="checkbox"/>																					
	Position Ind. Switch <input type="checkbox"/>		Mech. Operation Counter <input type="checkbox"/>		Key Interlock : 2 ACB <input type="checkbox"/>		3 ACB <input type="checkbox"/>																			
	Key Lock** <input type="checkbox"/>		Door Interlock <input type="checkbox"/>		Neutral CT <input type="checkbox"/>																					
	OCR Alarm Switch <input type="checkbox"/>		Mechanical Interlock : Hor. <input type="checkbox"/> Ver. <input type="checkbox"/>																							
Special Requirements, If any																										
NOTES:	(1) Neutral CT is required alongwith MicroPro Release having Ground-Fault Protection for 3P ACB, used for 3 phase 3 wire system. This has to be mounted on Earth / NeutralBusbar of Panel.																									
	(2) 220V AC Shunt/Closing.Coil/Motor is provided as standard.																									
	(3) Castle lock is not available for C-type Breaker.																									
(4) For WR ACB, Aux contact shall be 4NO+4NC for MF and 3NO+4NC for EF & 3NO + 3 NC for MDO and 5NO+6NC for EDO.																										
** (Breaker will be fitted either with Key lock or with Castle key interlock)																										
* (220V AC input is required)																										

NOTE: For thermal magnetic EDO ACB with EFR, Aux Contact shall be 4NO+6NC

WiNbreak1

Moulded Case Circuit Breaker

- Complying to IEC 60947-2
- Unique 'Reserve Trip Assembly'
- Suitable for voltage up to 690V / Ui 1000 V AC
- Suitable for Motor loads, Capacitor switching
- 100% Ics value ensuring high performance
- Total Selectivity
- Multiple trip units offering variety of choice for the user
- Available with a 'Single Pole' variant MCCB
- Inbuilt Current Measurement & last trip history
- Complete range of accessories
- Communication*

*For communication Module please contact nearest Branch Office.



WiNbreak1 MCCB



- Conforms to IS/IEC 60947-2
- Ics=100% Icu, 75% Icu
- Range: 16A-630A, 3 & 4 Pole
- Breaking capacity: 10kA to 55kA Max.
- Positive Isolation
- Trip free mechanism
- Neutral with 100% rated current
- Bounce free contact structure
- Wide range of Internal & External Accessories
- SS Enclosure available
- Standard packing includes insulating phase barrier and hardware

FMU (Thermal Magnetic) Release ● Adjustable Overload 80-100% ● Fixed short circuit [HSN Code: 8536]

Size	Rated Current (Amps)	Breaking capacity Icu at 415V AC	3 Pole Reference	4 Pole Reference
Frame 1	16, 20, 25, 32, 40, 50	25kA	CSE1M125FMU3P-*	CSE1M125FMU4P-*
	16, 20, 25, 32, 40, 50	36kA	CSE1NN125FMU3P-*	CSE1NN125FMU4P-*

ATM (Thermal Magnetic) Release ● Adjustable Overload 80-100% ● Adjustable Short Circuit 5-10 In

Size	Rated Current (Amps)	Breaking capacity Icu at 415V AC	3 Pole Reference	4 Pole Reference	
Frame 1	63, 80, 100	25kA	CSE1M125ATM3P-*	CSE1M125ATM4P-*	
	125		CSE1M125ATM3P-*	CSE1M125ATM4P-*	
	160		CSE2M250ATM3P-*	CSE2M250ATM4P-*	
Frame 2	200		CSE2M250ATM3P-*	CSE2M250ATM4P-*	
	250		CSE2M250ATM3P-*	CSE2M250ATM4P-*	
	320		CSE3M400ATM3P-*	CSE3M400ATM4P-*	
Frame 3	350		CSE3M400ATM3P-*	CSE3M400ATM4P-*	
	400		CSE3M400ATM3P-*	CSE3M400ATM4P-*	
	63, 80, 100		36kA	CSE1NN125ATM3P-*	CSE1NN125ATM4P-*
125	CSE1NN125ATM3P-*			CSE1NN125ATM4P-*	
Frame 2	160			CSE2NN250ATM3P-*	CSE2NN250ATM4P-*
	200			CSE2NN250ATM3P-*	CSE2NN250ATM4P-*
Frame 3	320	CSE3NN400ATM3P-*		CSE3NN400ATM4P-*	
	350	CSE3NN400ATM3P-*		CSE3NN400ATM4P-*	
	400	CSE3NN400ATM3P-*		CSE3NN400ATM4P-*	
Frame 4	500	CSE4NN630ATM3P-*		CSE4NN630ATM4P-*	
	630	CSE4NN630ATM3P-*		CSE4NN630ATM4P-*	
Frame 1	63, 80, 100	50kA		CSE1S125ATM3P-*	CSE1S125ATM4P-*
	125			CSE1S125ATM3P-*	CSE1S125ATM4P-*
	160			CSE2S250ATM3P-*	CSE2S250ATM4P-*
Frame 2	200		CSE2S250ATM3P-*	CSE2S250ATM4P-*	
	250		#CSE2SX250ATM3P-*	#CSE2SX250ATM4P-*	
	250		CSE2S250ATM3P-*	CSE2S250ATM4P-*	
Frame 3	320		CSE3S400ATM3P-*	CSE3S400ATM4P-*	
	350		CSE3S400ATM3P-*	CSE3S400ATM4P-*	
	400		CSE3S400ATM3P-*	CSE3S400ATM4P-*	
Frame 4	500		CSE4S630ATM3P-*	CSE4S630ATM4P-*	
	630		CSE4S630ATM3P-*	CSE4S630ATM4P-*	

NOTES :

1. #Icu 50kA(Ics=75% Icu)
2. While Ordering, Replace "A" by Current Rating, followed by 'A' eg., 350A
3. For spreader terminals reference code, please refer page no. 29
4. For 55kA, please contact to nearest branch office.

FTM (Thermal Magnetic) Release ● Fixed Overload ● Fixed short circuit

Size	Rated Current (Amps)	Breaking capacity Icu at 415V AC	2 Pole Reference	3 Pole Reference	4 Pole Reference
Frame1	16, 20, 25, 32, 40, 50, 63, 80, 100, 125	18kA	CSE1L125FTM2P-*	CSE1L125FTM3P-*	CSE1L125FTM4P-*
	16, 20, 25, 32, 40, 50, 63, 80, 100, 125	25kA	CSE1M125FTM2P-*	CSE1M125FTM3P-*	CSE1M125FTM4P-*
	16, 20, 25, 32, 40, 50, 63, 80, 100, 125	36kA	CSE1NN125FTM2P-*	CSE1NN125FTM3P-*	CSE1NN125FTM4P-*
Frame2	125, 160, 200, 250	18kA	CSE2L250FTM2P-*	CSE2L250FTM3P-*	CSE2L250FTM4P-*
	125, 160, 200, 250	25kA	CSE2M250FTM2P-*	CSE2M250FTM3P-*	CSE2M250FTM4P-*
	125, 160, 200, 250	36kA	CSE2NN250FTM2P-*	CSE2NN250FTM3P-*	CSE2NN250FTM4P-*
Frame3	250, 320, 350, 400	18kA	-	CSE3L400FTM3P-*	CSE3L400FTM4P-*
	250, 320, 350, 400	25kA	-	CSE3M400FTM3P-*	CSE3M400FTM4P-*
	250, 320, 350, 400	36kA	-	CSE3NN400FTM3P-*	CSE3NN400FTM4P-*
Frame4	500, 630	18kA	-	CSE4L630FTM3P-*	CSE4L630FTM4P-*
	500, 630	25kA	-	CSE4M630FTM3P-*	CSE4M630FTM4P-*
	500, 630	36kA	-	CSE4NN630FTM3P-*	CSE4NN630FTM4P-*

WiNbreak1 MCCB



Microprocessor Release 'MicroPro WB'

- Conforms to IS/IEC 60947-2
- $I_{cs}=100\%I_{cu}$
- Range: 40A-630A, 3P & 4P
- Breaking capacity: 36kA & 50kA
- Communication*
- Trip History
- LCD: Indication of measurement and information
- Suitable for isolation
- Adjustable over load from 0.4-1.0In
- Adjustable short circuit from 2-12Ir
- Inbuilt ground fault protection available 20% to 100% of In
- Adjustable neutral overload protection available: 50% to 100% of Ir
- Adjustable current imbalance protection available: (30%-70%) of Ir
- Provision of thermal memory: ON/OFF
- View last trip information

[HSN Code: 8536]

ETM (with in-built Earth fault Protection) ● Adjustable Overload 40 - 100% ● Adjustable shortcircuit 2-12 Ir

Size	Release Range (A)	Breaking Capacity Icu at 415V AC	3 Pole - Reference	4 Pole - Reference
Frame 1	16-40	36kA	CSE1NN125ETM3P-40A	CSE1NN125ETM4P-40A
	25-63		CSE1NN125ETM3P-63A	CSE1NN125ETM4P-63A
	40-100		CSE1NN125ETM3P-100A	CSE1NN125ETM4P-100A
	50-125		CSE1NN125ETM3P-125A	CSE1NN125ETM4P-125A
Frame 2	63-160		CSE2NN250ETM3P-160A	CSE2NN250ETM4P-160A
	80-200		CSE2NN250ETM3P-200A	CSE2NN250ETM4P-200A
Frame 3	160-400		CSE3NN400ETM3P-400A	CSE3NN400ETM4P-400A
Frame 4	250-630		CSE4NN630ETM3P-630A	CSE4NN630ETM4P-630A

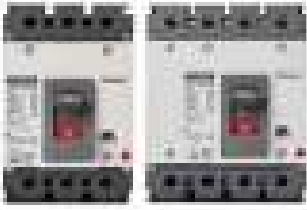
ETM (with in-built Earth fault Protection) ● Adjustable Overload 40-100% ● Adjustable shortcircuit 2-12 Ir ● $I_{cs}=100\%I_{cu}$

Size	Release Range (A)	Breaking Capacity Icu at 415V AC	3 Pole - Reference	4 Pole - Reference
Frame 1	16-40	50kA	CSE1S125ETM3P-40A	CSE1S125ETM4P-40A
	25-63		CSE1S125ETM3P-63A	CSE1S125ETM4P-63A
	40-100		CSE1S125ETM3P-100A	CSE1S125ETM4P-100A
	50-125		CSE1S125ETM3P-125A	CSE1S125ETM4P-125A
Frame 2	63-160		CSE2S250ETM3P-160A	CSE2S250ETM4P-160A
	80-200		CSE2S250ETM3P-200A	CSE2S250ETM4P-200A
	100-250		CSE2S250ETM3P-250A	CSE2S250ETM4P-250A
	100-250		#CSE2SX250ETM3P-250A	#CSE2SX250ETM4P-250A
Frame 3	160-400	CSE3S400ETM3P-400A	CSE3S400ETM4P-400A	
Frame 4	250-630	CSE4S630ETM3P-630A	CSE4S630ETM4P-630A	

NOTE: 1. #Icu 50kA($I_{cs}=75\% I_{cu}$)

2. While ordering, Replace "*" with Current rating
3. For spreader terminals reference code & MRP, please refer page no. 28
4. For 3 Pole ETM (Microprocessor) MCCB one Neutral CT will be required, if ground fault protection is required. For reference & price please refer page 34.
5. *For Communication Module details please contact nearest Branch Office.

WiNbreak1 MCCB - Frame 'S'



- Conforms to IS/IEC 60947-2
- Ics=100%Icu (for 10kA & 18kA), 75% & 50% for 10kA, 75% for 25kA
- Range: 16A-125A
- Breaking Capacity: 10kA, 18kA & 25kA
- Compact Size
- Quick free mechanism
- Precise settings
- Termination possibility for unprepared cables
- Flexibility for installation as Horizontal / Vertical
- Standard packing includes insulating phase barrier and hardware

[HSN Code: 8536]

FMU (Thermal Magnetic) Release ● Adjustable Overload 80-100% ● Fixed short circuit 10In*

Size	Rating Range (A)	Breaking Capacity Icu at 415V AC	3 Pole - Reference	4 Pole - Reference
Frame 'S'	16, 20, 25, 32, 40, 50,	10kA	CSESK125FMU3P-*A	CSESK125FMU4P-*A
	63, 80, 100A		CSESK125FMU3P-*A	CSESK125FMU4P-*A
	125A		CSESK125FMU3P-*A	CSESK125FMU4P-*A
	16, 20, 25, 32, 40, 50,	18kA	CSESL125FMU3P-*A	CSESL125FMU4P-*A
	63, 80, 100A		CSESL125FMU3P-*A	CSESL125FMU4P-*A
	125A		CSESL125FMU3P-*A	CSESL125FMU4P-*A
	16, 20, 25, 32, 40, 50	25kA*	CSESMX125FMU3P-*A	CSESMX125FMU4P-*A
	63, 80, 100A		CSESMX125FMU3P-*A	CSESMX125FMU4P-*A
	125A		CSESMX125FMU3P-*A	CSESMX125FMU4P-*A

NOTES :

1. While Ordering, Replace "*" by Current Rating.
2. * Ics=75%Icu
3. For accessories please refer page No. 28
4. Frame 'S' MCCB with box type terminal is also available on request.
5. *From 63-125A

Single Pole MCCB

- Conforms to IS/IEC 60947-2
- Ics=100%Icu
- Range: 16A-125A
- Breaking capacity: 10kA, 18kA
- Standard packing does not includes Spreader terminals

FTM (Thermal Magnetic) Release ● Fixed Overload ● Fixed short circuit

[HSN Code: 8536]

Size	Rating (A)	Breaking Capacity Icu at 240V AC	Reference
Frame 'S'	16, 20, 25, 32, 40	10kA	CSESK125FTM1P-16A
			CSESK125FTM1P-20A
			CSESK125FTM1P-25A
			CSESK125FTM1P-32A
			CSESK125FTM1P-40A
			CSESK125FTM1P-50A
	50, 63, 80, 100, 125		CSESK125FTM1P-63A
			CSESK125FTM1P-80A
			CSESK125FTM1P-100A
			CSESK125FTM1P-125A

FTM (Thermal Magnetic) Release ● Fixed Overload ● Fixed short circuit

Frame 'S'	16, 20, 25, 32, 40	18kA	CSESL125FTM1P-16A
			CSESL125FTM1P-20A
			CSESL125FTM1P-25A
			CSESL125FTM1P-32A
			CSESL125FTM1P-40A
			CSESL125FTM1P-50A
	50, 63, 80, 100, 125		CSESL125FTM1P-63A
			CSESL125FTM1P-80A
			CSESL125FTM1P-100A
			CSESL125FTM1P-125A



WiNbreak1 MCCB

MCCB for Motor Protection

- Conforms to IS/IEC 60947-2
- Ics=100% Icu
- Range 20A-630A
- Breaking Capacity -50kA
- Upto 50A-Fixed Magnetic setting - Upto 17In
- Adjustable Magnetic setting 6~12In for rating above 50A
- Positive Isolation
- Trip Free mechanism
- Standard packing includes phase barriers and hardware

FM TU (Fixed Magnetic) Release • MTU (Adjustable Magnetic) Release
• Adjustable short circuit upto 6~12In

[HSN Code: 8536]

Size	Breaking Capacity Icu at 415V AC	Rating (A)	3 Pole - Reference
Frame-1	50kA	20	CSE1S125FMTU3P-20A
		32	CSE1S125FMTU3P-32A
		50	CSE1S125FMTU3P-50A
		63	CSE1S125MTU3P-63A
		100	CSE1S125MTU3P-100A
Frame-2	50kA	125	CSE1S125MTU3P-125A
		160	CSE2S250MTU3P-160A
		200	CSE2S250MTU3P-200A
		220	CSE2S250MTU3P-220A
Frame-3	50kA	250	CSE2S250MTU3P-250A
		320	CSE3S400MTU3P-320A
		350	CSE3S400MTU3P-350A
Frame-4	50kA	400	CSE3S400MTU3P-400A
		500	CSE4S630MTU3P-500A
		630	CSE4S630MTU3P-630A

ACCESSORIES

Suitable for use on WB1 MCCBs

MCCB	Shunt Trip (SHT)	Under Voltage Trip (UVT)	Auxiliary Switch (AX)	Alarm Switch (AL)	Combination Switch (AX+AL)
CSES	STW1-S (...V)	-	AXWS-L	ALWS-L	XLWS-L
CSE1	STW1-(...V)	UVTW1-(...V)	AXW1-*	ALW1-*	XLW1-*
CSE2				ALW1-2*	XLW1-2*
CSE3 / CSE4	STW1-3(...V)	UVTW1-3(...V)	AXW1-3*	ALW1-3*	XLW1-3*

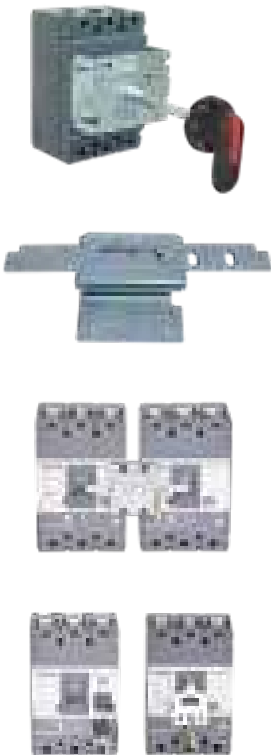
NOTE:

1. Please replace "*" with L as MCCB Left hand side position & R as MCCB right hand position
2. Maximum Possibilities for Internal Accessories
 - a) 3 Pole, MCCB with Thermal Release, Any two accessories can be fitted at one time
 - b) 4 Pole, MCCB with Thermal Release, Any Three accessories can be fitted at one time
 - c) 3 Pole, MCCB with Microprocessor Release, Right hand seat is not available. Hence, one accessory can be fitted at one time
 - d) 4 Pole, MCCB with Microprocessor Release, Any two accessories can be fitted at one time; Right hand seat is not available
 - e) Alarm & combination switch can be fitted in left hand seat only on CSE3-4P Microprocessor Release MCCB
 - f) UVT can be fitted only in left hand seat
 - g) 3 & 4 Pole, CSES MCCB can have Shuntrip fitment only in Right Side pocket
3. For UVT of CSES Fame, please contact to nearest Branch Office
4. Please Replace (...) with voltage rating
5. For 24V & 48V Shunt, please contact to nearest Branch Office

Voltage Selection UVT & Shunt

Size	AC	DC	AC / DC Common
UVT			
CSE1/CSE2	220V, 415V	24V, 48V, 110V, 220V	-
CSE3/CSE4	220V, 415V		220V
Shunt			
CSES	110V, 220V, 415V	110V, 220V	-
CSE1/CSE2	220V, 415V		-
CSE3/CSE4	220V, 415V		24V, 48V, 110V

WiNbreak1 MCCB



Extended Rotary Handle

Suitable for use on WB1 MCCBs	Reference
CSES	EHW1-0T-125
CSE1	EHW1-125
CSE2	EHW1-250
CSE3 / CSE4	EHW1-400-630

Panel Door Mounted Key Lock for Extended Rotary Handle

[HSN Code: 8538]

Suitable for use on WB1 MCCBs	Reference Code
CSE1	EXTKLWB1-125AF-T1
CSE2	EXTKLWB1-250AF-T1
CSE3 / CSE4	EXTKLWB1-400AF-T1

Mechanical Interlock

[HSN Code: 8538]

Suitable for use on WB1 MCCBs	Applied between two MCCBs	
	Reference 3 Pole	Reference 4 Pole
CSE1	MIW1-125-3P	MIW1-125-4P
CSE2	MIW1-250-3P	MIW1-250-4P

Note: For CSE3/CSE4 mechanical interlock, please contact with nearest Branch Office.

Locking Devices*

[HSN Code: 8538]

Suitable for use on MCCBs	Key Lock*		Padlocking	
	Reference	Reference	Reference	Reference
CSE1	KLW1-125		PLW1-125	
CSE2	KLW1-250		PLW1-250	
CSE3 / CSE4	-		PLW1-400	

* Factory fitted only

Spreader Terminals for WB1 MCCB

[HSN Code: 8538]

Suitable for use on MCCBs		Current Rating (A)	Reference	MOQ
CSES	3 Pole	16 , 20, 25, 32, 40, 50, 63, 80, 90, 100, 125	CSET0033	Set of 3
	4 Pole		CSET0044	Set of 4
CSE1	3 Pole	16, 20, 32, 40, 50, 63	CSET1033	Set of 3
CSE1	3 Pole	80, 100, 125	CSET1033C	Set of 3
CSE1	4 Pole	16, 20, 32, 40, 50, 63	CSET1044	Set of 4
CSE1	4 Pole	80, 100, 125	CSET1044C	Set of 4
CSE2	3 Pole	160, 200	CSET2033	Set of 3
CSE2	3 Pole	250	CSET2503-ST	Set of 3
CSE2	4 Pole	160, 200	CSET2044	Set of 4
CSE2	4 Pole	250	CSET2504-ST	Set of 4
CSE3	3 Pole	320, 350, 400	CSET3033	Set of 3
CSE3	4 Pole	320, 350, 400	CSET3044	Set of 4
CSE4	3 Pole	500, 630	CSET4033-WB1	Set of 3
CSE4	4 Pole	500, 630	CSET4044-WB1	Set of 4

SS Enclosure for WB1 MCCB

[HSN Code: 8538]

Size	Suitable for WB1 MCCBs	Reference
FrameS	CSES	CSE-ENCL-125S-3P
	CSES	CSE-ENCL-125S-4P
Frame1	CSE1	CSE-ENCL-125-3P
	CSE1	CSE-ENCL-125-4P
Frame2	CSE2	CSE-ENCL-250-3P
	CSE2	CSE-ENCL-250-4P

NOTES:

- Reference Code is for Enclosure only (without MCCB)
- For Placing an order for MCCB along with Enclosure, please apply prefix E-before MCCB Reference Code. For Price, please contact nearest Branch Office.

Winbreak1 MCCB

Description	Reference
Motor Operator for WB1	
CSE1MOP24VDC	Motor Operator For Winbreak1 (CSE1 24V DC)
CSE1MOP110VAC/DC	Motor Operator For Winbreak1 (CSE1 110V AC/DC)
CSE1MOP220VAC/DC	Motor Operator For Winbreak1 (CSE1 220V AC/DC)
CSE1MOP400VAC	Motor Operator For Winbreak1 (CSE1 400V AC)
CSE2MOP24VDC	Motor Operator For Winbreak1 (CSE2 24V DC)
CSE2MOP110VAC/DC	Motor Operator For Winbreak1 (CSE2 110V AC/DC)
CSE2MOP220VAC/DC	Motor Operator For Winbreak1 (CSE2 220V AC/DC)
CSE2MOP400VAC	Motor Operator For Winbreak1 (CSE2 400V AC)
CSE3/4MOP24VDC	Motor Operator For Winbreak1 (CSE3/4 24V DC)
CSE3/4MOP110VAC/DC	Motor Operator For Winbreak1 (CSE3/4 110V AC/DC)
CSE3/4MOP220VAC/DC	Motor Operator For Winbreak1 (CSE3/4 220V AC/DC)
CSE3/4MOP400VAC	Motor Operator For Winbreak1 (CSE3/4 400V AC)

Earth Fault Relay (Built in CBCT) Suitable for 3 Phase 3 wire distribution network

Rating (Amps)	Earth Fault Relay Setting Range	Reference
32A	3.2~32A	EFR-CBCT125-AF-32
40A	4~40A	EFR-CBCT125-AF-40
63A	6.3~63A	EFR-CBCT125-AF-63
80A	8~80A	EFR-CBCT125-AF-80
100A	10~100A	EFR-CBCT125-AF-100
125A	12.5~125A	EFR-CBCT125-AF-125
200A	20~200A	EFR-CBCT250-AF-200
250A	25~250A	EFR-CBCT250-AF-250
400A	40~400A	EFR-CBCT400-AF-400
630A	63~630A	EFR-CBCT630-AF-630
800A	80~800A	EFR-CBCT800-AF-800
1000A	100~1000A	EFR-CBCT1250-AF-1000
1250A	125~1250A	EFR-CBCT1250-AF-1250

Earth Fault Relay (with NCT) Suitable for 3 Phase 4 wire distribution network

40A	4~40A	EFR125-AF-40(N)
100A	10~100A	EFR125-AF-100(N)
125A	12.5~125A	EFR125-AF-125(N)
200A	20~200A	EFR250-AF-200
250A	25~250A	EFR250-AF-250
400A	40~400A	EFR400-AF-400
630A	63~630A	EFR630-AF-630
800A	80~800A	EFR800-AF-800
1000A	100~1000A	EFR1250-AF-1000
1250A	125~1250A	EFR1250-AF-1250

NCT Winbreak1 ETM (Microprocessor) 3 Pole MCCB if ground fault facility is required

40	40/0.1A	ETMNCT40A
63	63/0.1A	ETMNCT63A
80	80/0.1A	ETMNCT80A
100	100/0.1A	ETMNCT100A
125	125/0.1A	ETMNCT125A
160	160/0.1A	ETMNCT160A
200	200/0.1A	ETMNCT200A
250	250/0.1A	ETMNCT250A
400	400/0.1A	ETMNCT400A



WiNbreak2

An Absolute solution for power distribution

C&S Electric offers innovative, intelligent,
integrated and intuitive solution



Conforms to IS/IEC 60947-2

$I_{cs} = 100\% I_{cu}$

$I_{cw} = 25kA$ for 1s

Range : 800A to 1600A, 3P & 4P

Breaking capacity : 50kA, 70kA & 150kA

U_i : 1000V

U_{imp} : 8kV

N Type
(Normal)



A Type
(Ammeter)



P Type
(Power Meter)



S Type
(Supreme Meter)



WiNbreak2 MCCB (1600AF)

Features:

- LSIG Protection
- Thermal Memory
- Current, Voltage, Power, Energy, Frequency measurement
- Trip History
- Digital Display
- Fault & Event Recording
- Communication
- Harmonics
- True RMS Sensing
- ZSI
- IDMTL Setting
- Self Power
- LED for Tripping Information
- RTC Timer
- Pre Trip Alarm

MCCB with Intelligent Release - N Type

Size	Release Range (A)	Breaking Capacity @ 415VAC	3 Pole Reference	4 Pole Reference
Frame 5	400-800	50kA	CS1000NNG5800A3P	CS1000NNG5800A4P
	500-1000		CS1000NNG51000A3P	CS1000NNG51000A4P
	625-1250		CS1250NNG51250A3P	CS1250NNG51250A4P
	800-1600		CS1600NNG51600A3P	CS1600NNG51600A4P
	400-800	70kA	CS1000HNG5800A3P	CS1000HNG5800A4P
	500-1000		CS1000HNG51000A3P	CS1000HNG51000A4P
	625-1250		CS1250HNG51250A3P	CS1250HNG51250A4P
	800-1600		CS1600HNG51600A3P	CS1600HNG51600A4P

MCCB with high end release w.r.t "Intelligent release - N Type"

Release	
Intelligent release - A Type*	ADD
Intelligent release - P Type*	ADD
Intelligent release - S Type*	ADD

Note : Standard packing includes insulating phase barriers and Hardwares.

Internal Accessories

WB2 MCCBs	Shunt Trip (SHT)	Under Voltage Trip (UVT)	Auxiliary Switch (AX)	Alarm Switch (AL)	Fault Alarm Switch (FAL)*
CS1000-1600	SHT5-T(...V)	UVT5-T(..V)	AX5-T	AL5-T	FAL5-T

Voltage Selection UVT & Shunt

Size	AC	DC	AC / DC Common
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UVT

Frame 5	48V, 380-480V	24-30V, 48-60V	100-130V, 200-250V
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Shunt

Frame 5	48V, 380-480V	24-30V, 48-60V	100-130V, 200-250V
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WB2 MCCBs	Direct Rotary Handle	Direct Rotary Handle with Keylock	Extended Rotary Handle
CS1000-1600	DH5-S	DHK5-S	EH5-S

Mechanical Interlock

WB2 MCCBs	Applied between two MCCBs	
	3 Pole	4 Pole
	Reference	Reference
CS1000-1600	MIT53	MIT54

Padlocking Device

WB2 MCCBs	Fixed Lock	Removable Lock
	Reference	Reference
CS1000-1600	PHL5	PL5

NOTE : Above mentioned products are non stockable.

WiNbreak2 MCCB



- Conforms to IS/IEC 60947-2
- Ics = 100% Icu
- Range: 16A-1600A, 3P & 4P
- Breaking capacity: 50kA, 65kA, 70kA, 85kA & 150kA
- Positive Isolation
- Trip Free Mechanism
- Double contact structure
- Communication compatible
- No Line-load Bias
- Neutral with 100% rated current
- Tripping by pressure
- Current limiting
- Manual, Rotary or Motorized available
- Wide range of internal & external accessories
- Standard packing includes spreaders terminals, insulating phase barriers and hardware

FMU (Thermal Magnetic) Release • Adjustable Overload 80-100% • Fixed short circuit 10 In

Size	Rated Current (Amps)	Breaking capacity Icu at 415V AC	3 Pole Reference	4 Pole Reference
Frame 1	16, 20, 25, 32, 40, 50, 63	50kA	☒ CD100NFMU*3P	☒ CD100NFMU*4P
	80, 100		CD100NFMU*3P	CD100NFMU*4P
Frame 3	300, 400	65kA	☒ CS400NFMU*3P	CS400NFMU*4P
	500, 630		*CS630NFMU*3P	CS630NFMU*4P
Frame 4	800	65kA	☒ CS800NFMU*3P	CS800NFMU*4P

ATU (Thermal Magnetic) Release • Adjustable Overload 80 - 100% • Adjustable Short circuit 5 - 10 In

Size	Rated Current (Amps)	Breaking capacity Icu at 415V AC	3 Pole Reference	4 Pole Reference
Frame 2	125	50kA	CS160NATU*3P	☒ CS160NATU*4P
	160		☒ CS160NATU*3P	☒ CS160NATU*4P
	200		☒ CS250NATU*3P	☒ CS250NATU*4P
	250		CS250NATU*3P	CS250NATU*4P
Frame 3	300, 400	65kA	*CS400NATU*3P	*CS400NATU*4P
	500, 630		*CS630NATU*3P	*CS630NATU*4P
Frame 4	800	65kA	☒ CS800NATU*3P	CS800NATU*4P

ETS (Microprocessor based) Release • Adjustable Overload 40 - 100% • Adjustable shortcircuit 1.5 - 10 In

Size	Rated Current (Amps)	Breaking capacity Icu at 415V AC	3 Pole Reference	4 Pole Reference
Frame 2	40	50kA	CS160NETS*3P	☒ CS160NETS*4P
	80, 160		CS160NETS*3P	☒ CS160NETS*4P
	250		CS250NETS*3P	☒ CS250NETS*4P
Frame 3	400	65kA	CS400NETS*3P	☒ CS400NETS*4P
	630		☒ CS630NETS*3P	☒ CS630NETS*4P
Frame 4	800	65kA	☒ CS800NETS*3P	CS800NETS*4P

☒ non stockable items.

ATU - *Rated Current (Amp) 300, 500 for 3 Pole & 4 Pole are non stockable items.

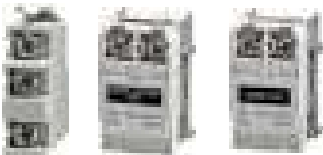
WiNbreak2 MCCB

ETM (Microprocessor Release with in-built Earth fault Protection)
 ● Adjustable Overload 40 - 100% ● Adjustable shortcircuit 1.5 - 10 In

Size	Rated Current (Amps)	Breaking capacity Icu at 415V AC	3 Pole Reference	4 Pole Reference
Frame 3	160	65kA	<input checked="" type="checkbox"/> CS400NETM33160A3PE	CS400NETM33160A4PE
	250		CS400NETM33250A3PE	CS400NETM33250A4PE
	400		CS400NETM33400A3PE	CS400NETM33400A4PE
	630		<input checked="" type="checkbox"/> CS630NETM33630A3PE	CS630NETM33630A4PE
Frame 4	800	65kA	<input checked="" type="checkbox"/> CS800NETM43800A3PE	<input checked="" type="checkbox"/> CS800NETM43800A4PE

NOTE :

1. While ordering replace ""**" by Current Rating
2. Spreader Terminals are not included MCCBs upto 63A
3. For 3 Pole ETM (Microprocessor) MCCB one Neutral CT will be required, ground fault protection is also available.
4. MCCB with Ammeter, ZSI & communication feature is also available.
5. MCCB for Motor Backup Protection is also available.



Accessories

Suitable for use on WB2 MCCBs	Shunt Trip (SHT)	Under Voltage Trip (UVT)	Auxiliary Switch (AX)	Alarm Switch (AL)	Fault Alarm Switch (FAL)*
CD100-CS800	ST-T(..V)	UVT-T(..V)	AX-T	AL-T	FAL-T

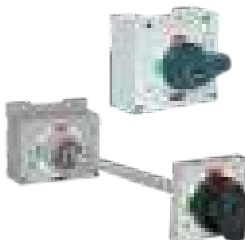
NOTE :

1. The above accessories are common for CD100-CS800
2. FAL (Fault Alarm Switch)* It can be applied to only circuit breakers with electronic trip units
3. Maximum Possibilities for Internal Accessories

Voltage Selection UVT & Shunt

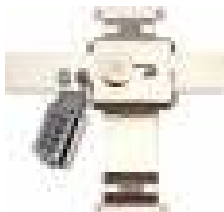
Size	AC	DC	AC / DC Common		
UVT					
Frame 1/2/3/4	380-440V, 440-480V	-	24V, 48V, 110-130V, 200-240VAC/ 250VDC		
Shunt					
Frame 1/2/3/4	380-500V	12V	24V, 48V, 110-130V, 200-240VAC / 250VDC		
	Accessory	CD100	CS160/ 250	CS400 / 630	CS800
Left	AX	-	1	3	3
	AL	1	1	-	-
	SHT / UVT	1	1	1	1
Right	AX	2	1	-	-
	AL	-	-	1	2
	FAL	-	1	1	1

A



Rotary Handle

Suitable for use on WB2 MCCBs	Direct Rotary Handle	Direct Rotary Handle with Keylock	Extended Rotary Handle
CD100	<input checked="" type="checkbox"/> DH1-S	<input checked="" type="checkbox"/> DHK1-S	EH1-S
CS160, CS250	<input checked="" type="checkbox"/> DH2-S	<input checked="" type="checkbox"/> DHK2-S	EH2-S
CS400, CS630	<input checked="" type="checkbox"/> DH3-S	<input checked="" type="checkbox"/> DHK3-S	EH3-S
CS800	<input checked="" type="checkbox"/> DH4-S	<input checked="" type="checkbox"/> DHK4-S	EH4-S



Mechanical Interlock (Used to prevent mechanically closing together)

Suitable for use on WB2 MCCBs	3 Pole Reference	4 Pole Reference
CD100	MIT13	MIT14
CS160, CS250	MIT23	MIT24
CS400, CS630	MIT33	MIT34
CS800	MIT43	MIT44

WiNbreak2 MCCB

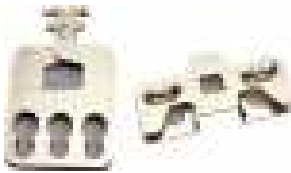


Motor Operator - For remote "ON/OFF" operation only 43.156 [HSN Code: 8538]

Suitable for MCCB Type	Control Voltage	Reference
CD100	<input checked="" type="checkbox"/> 24V DC	MOP1(..V)
	<input checked="" type="checkbox"/> AC100~240V/DC100~220V	
CS160, CS250	<input checked="" type="checkbox"/> 24V DC	MOP2(..V)
	<input checked="" type="checkbox"/> AC110V/DC110V	
	AC230V/DC220V	
CS400, CS630	<input checked="" type="checkbox"/> 24V DC	MOP3(..V)
	<input checked="" type="checkbox"/> AC110V/DC110V	
	AC230V/DC220V	
CS800	<input checked="" type="checkbox"/> 24V DC	MOP4(..V)
	<input checked="" type="checkbox"/> AC110V/DC110V	
	AC230V/DC220V	

*Replace (...V) by require voltage.

Padlocking Device [HSN Code: 8538]



Suitable for use on WB2 MCCBs	Fixed Lock	Removable Lock
	Reference	Reference
CD100	<input checked="" type="checkbox"/> PHL 1	<input checked="" type="checkbox"/> PL 1
CS160, CS250	<input checked="" type="checkbox"/> PHL 2	<input checked="" type="checkbox"/> PL 2
CS400, CS630	<input checked="" type="checkbox"/> PHL 3	<input checked="" type="checkbox"/> PL 3
CS800	<input checked="" type="checkbox"/> PHL 4	<input checked="" type="checkbox"/> PL 4

NCT for WiNbreak2 ETM-Microprocessor (3 Pole MCCB if ground fault facility is required) [HSN Code: 8538]

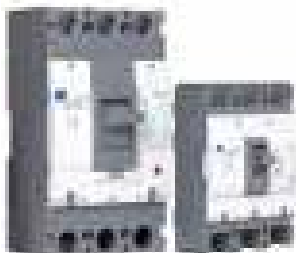
Description	Reference
160/0.1A	<input checked="" type="checkbox"/> NCT-WB2-016
250/0.1A	<input checked="" type="checkbox"/> NCT-WB2-025
400/0.1A	<input checked="" type="checkbox"/> NCT-WB2-040
630/0.1A	<input checked="" type="checkbox"/> NCT-WB2-063
800/0.1A	NCT-WB2-080

Panel Door Mounted Key Lock for Extended Rotary Handle [HSN Code: 8538]

Suitable for WB2 MCCBs	Reference
CD100, CS160, CS250	<input checked="" type="checkbox"/> EXTKLWB2-250AF-T1

non stockable items.

WiNbreak MCCB - CS Series



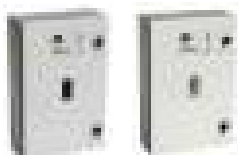
- Conforms to IS/IEC 60947-2
- Range: 15A-400A, 2, 3 & 4 Pole
- Breaking capacity: 10kA, 18kA & 25kA
- Positive Isolation
- Trip free mechanism
- SS Enclosure available
- Standard packing includes Spreader terminals, Insulating phase barriers and Hardwares.

FTM (Thermal Magnetic) Release • Fixed Overload • Fixed short circuit [HSN Code: 8536]

Size	Rated Current (Amps)	Breaking capacity Icu at 415V AC	2 Pole Reference	3 Pole Reference	4 Pole Reference
Frame 1	10, 16, 20, 25, 30, 32, 40, 50, 60, 63□	10kA	☒ CS2A2c*	CS2A3c*	CS2A4c*
	75		CS2A2c*	CS2A3c*	☒ CS2A4c*
	80		CS2A2c*	☒ CS2A3c*	CS2A4c*
	100		CS2A2c*	CS2A3c*	CS2A4c*
	125		-	CS2A3c*	CS2A4c*
Frame 2	16, 20, 25, 30, 32, 40, 50, 60, 63	25kA	CS2B2c*	CS2B3c*	CS2B4c*
	75, 80, 100		CS2B2c*	CS2B3c*	CS2B4c*
Frame 3	125, 140, 160#	18kA	-	*CS3A3c*	CS3A4c*
	200		CS3A2*	CS3A3c*	CS3A4c*
	250		☒ CS3A2*	☒ CS3A3c*	CS3A4c*
	125, 140, 160#	25kA	-	CS3B3c*	CS3B4c*
	200		☒ CS3B2*	CS3B3c*	☒ CS3B4c*
	250		CS3B2*	☒ CS3B3c*	☒ CS3B4c*

NOTES : 1. While ordering replace "*" by current rating. 2. #150A & 175A also available on request.
3. □ Upto 63A Spreader Terminals are not included.

SS Enclosure for WB MCCB [HSN Code: 8538]



Size	Suitable for use on MCCBs	Reference* 3 Pole	Reference* 4 Pole
Frame 1	CS2A	☒ CS-CNM0100020	☒ CS-CNM0100020
Frame 2	CS2B	CS-CNM0100021	CS-CNM0100021
Frame 3	CS3A, CS3B	CS-CNM0100021	CS-CNM0100021

NOTES:

1. *Reference code is for Enclosure only (without MCCB)
2. For placing an order for MCCB along with Enclosure, please apply Prefix **E-** before MCCB Reference Code.

ACCESSORIES [HSN Code: 8538]

Suitable for use on MCCBs	Shunt Trip (SHT)	Auxiliary Switch (AX)	Alarm Switch (AL)	Direct Rotary Handle	Extended Rotary Handle
CS2A..c	ST-A(..V)	ASW-A(*)	ALSW-A(*)	D-35S	CSE-35S
CS2B..c	ST-B(..V)	ASW-B(*)	ALSW-B(*)	D-45S	CSE-45S
CS3A / CS3B..c	ST-C(..V)	ASW-C(*)	ALSW-C(*)	D-55S	CSE-55

NOTES:

1. *Please read R as MCCB left hand side position & T as right hand position
2. For Frame1, Frame 2 & Frame3 shunt trip is available in 12VAC/DC, 24VAC/DC, 48VAC/DC, 110VAC/DC, 220VAC/DC, 415VAC (Replace ST-A(..V) , ST-B(..V) and ST-C(..V) by required voltage)
3. For Frame4 shunt trip is available in 24-48VAC/DC, 100-220VDC, 100-240VAC, 380-550VAC/DC (Replace ST-6A (...V) by required voltage)
4. Rotary Handle for 2 Pole, Frame1 & Frame2 is not available.
5. Maximum possibilities for internal accessories

Frame1, Frame2 & Frame3:

Left hand seat - AX or AL

Right hand seat - AX or AL or SHT

Frame 4:

Left hand seat - 2AX, 2AL and SHT

Right hand seat - 2AX, 2AL and SHT

☒ non stockable items.

WiNbreak MCCB - CSC Series

- Conforms to IS/IEC 60947-2
- Ics=100%Icu
- Range: 15A-1200A, 2, 3 & 4 Pole
- Breaking capacity: 18kA, 26kA, 37kA, 50kA, 65kA & 85kA
- Positive Isolation
- Trip free mechanism
- Wide range of Internal & External Accessories
- SS Enclosure available
- Standard packing includes insulating phase barriers and hardwares



FTM (Thermal Magnetic) Release • Fixed Overload • Fixed short circuit [HSN Code: 8536]

Size	Rated Current (Amps)	Breaking capacity Icu at 415V AC	2 Pole Reference	3 Pole Reference	4 Pole Reference
Frame 1	15, 20, 30, 40, 50	18kA	CSC1S2*	-	-
	60, 75, 100		CSC2N2*	-	-
Frame 3	150, 175	26kA	CSC4N2*	-	-
	200		CSC4N2*	-	-
	250		CSC4N2*	-	-
Frame 2	15, 20, 30, 40, 50, 60	37kA	☒CSC3S2*	-	-
	75, 100		☒CSC3S2*	-	-
	125		CSC3S2*	-	-
Frame 5	500, 630	-	-	CSC6N3*	CSC6N4*
	700, 800		-	CSC6N3*	☒CSC6N4*
Frame 4	300◆	65kA	-	CSC5H3*	☒CSC5H4*
	350, 400◆		-	☒CSC5H3*	☒CSC5H4*
Frame 5	500, 630	-	-	☒CSC6S3*	☒CSC6S4*
	700, 800		-	CSC6S3*	CSC6S4*
Frame 4	300◆	85kA	-	☒CSC5L3*	CSC5L4*
	350, 400◆		-	CSC5L3*	☒CSC5L4*
Frame 5	500, 630	-	-	CSC6L3*	☒CSC6L4*
	700, 800		-	CSC6L3*	CSC6L4*

FTM (Thermal Magnetic) Release • Fixed Overload • Fixed short circuit • Ics=50%Icu [HSN Code: 8536]

Size	Rated Current (Amps)	Breaking capacity Icu at 415V AC	2 Pole Reference	3 Pole Reference	4 Pole Reference
Frame 6	1000◆	65kA	-	CSC7S3*	☒CSC7S4*
	1200◆		-	CSC8S3*	CSC8S4*
Frame 6	1000◆	85kA	-	CSC7L3*	CSC7L4*
	1200◆		-	CSC8L3*	CSC8L4*

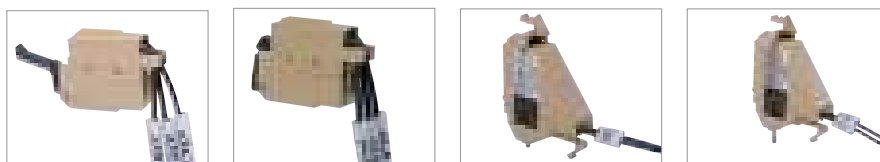
- NOTES :**
1. While Ordering, Replace "*" by Current rating.
 2. ◆Spreader Terminals are included as standard packing.
 3. For Spreader Terminals reference, please refer page 43.

☒ non stockable items.

WiNbreak MCCB - CSC Series

Accessories [HSN Code: 8538]

Suitable for use on WB-CSC MCCBs	Shunt Trip (SHT)	Under Voltage Trip (UVT)	Auxiliary Switch (AX)	Alarm Switch (AL)	Combination Switch (AX + AL)
CSC1, CSC2, CSC3, CSC4	STC(...V)	UVTC-(...V)	AXWC-(*)	ALWC-(*)	XLC-(*)
CSC5, CSC6	ST-6A(...V)	UVT-6A(...V)	ASW-6A	ALSW-6A	-
CSC7, CSC8	ST-7A(...V)	UVT-7A(...V)	ASW-7A	ALSW-7A	-



Rotary Handle [HSN Code: 8538]

Suitable for use on WB-CSC MCCBs	Direct Rotary Handle	Direct Rotary Handle with Key Lock	Extended Rotary Handle
CSC1, CSC2	DHC100	DHCK100	CSE-35S■
			EHC100
CSC3	DHC125	DHCK125	CSE-45S■
			EHC125
CSC4	DHC250	DHCK250	EHC250
CSC5	N70S	-	E70U
CSC6	-	-	E80U

NOTES:

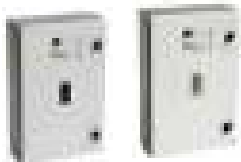
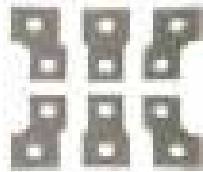
- Please replace "*" with R as MCCB left hand side position & T as MCCB right hand position.
- Left Hand seat is not available in 2 Pole MCCB in Frame 1 & Frame 2
- Rotary Handle for 2 Pole Frame 1 & Frame 2 is not available.
- Conventional type

Selection UVT & Shunt

Accessories	FRAME	AC	DC	AC/DC COMMON
UVT	1, 2, 3	AC 380-440V	-	AC/DC 24V
		AC 440-480V	-	AC/DC 48V
		-	-	AC/DC 100-110V
		-	-	AC/DC 200-220V
	4, 5	AC 380-440V	-	AC/DC 48V
		AC 440-480V	-	100-125VAC/100-110VDC
		-	-	AC 200-240V/ DC 200-220V
	6	-	-	100-110V
		-	-	125V
		-	-	200-220V
		-	-	380-440V
	SHUNT	1, 2, 3	AC 380-450V	DC 12V
AC 440-500V			-	AC/DC 100-130V
-			-	AC/DC 200-250V
4, 5		AC 380-550V	-	AC/DC 24-48V
		-	-	AC 100-240V/ DC 100-220V
6		100-110V	24V	-
		125V	48V	-
		200-220V	100-110V	-
		380-440V	125V	-
		480-550V	200-220V	-

☒ non stockable items.

Winbreak MCCB - CSC Series



Terminal Covers [HSN Code: 8538]

Suitable for use on WB-CSC MCCBs	For Line/Load Side		
	2P Reference	3P Reference	4P Reference
CSC1, CSC2	TCS12	TCS13	TCS14
CSC3	TCS22	TCS23	TCS24
CSC4	TCS33	TCS33	TCS34

Mechanical Interlock [HSN Code: 8538]

Suitable for use on MCCBs	Applied between two MCCBs	
	Reference 3 Pole	Reference 4 Pole
CSC5	MI43S	MI44S
CSC6	MI83S	MI84S

Spreader Terminals [HSN Code: 8538]

Suitable for use on MCCBs	Pole	Current Rating (A)	Reference	MOQ
CSC1, CSC2, CSC3	2 Pole	15, 20, 30, 40, 50, 60	CSET1022	Set of 2
CSC1, CSC2, CSC3	2 Pole	75, 100, 125	CSET1022C	Set of 2
CSC1, CSC2, CSC3	3Pole	15, 20, 30, 40, 50, 60	CSET1033	Set of 3
CSC1, CSC2, CSC3	3Pole	75, 100, 125	CSET1033C	Set of 3
CSC1, CSC2, CSC3	4 Pole	15, 20, 30, 40, 50, 60	CSET1044	Set of 4
CSC1, CSC2, CSC3	4 Pole	75, 100, 125	CSET1044C	Set of 4
CSC4	2 Pole	150, 175, 200	CSET2022	Set of 2
CSC4	2 Pole	250	CSET2502-ST	Set of 2
CSC4	3 Pole	150, 175, 200	CSET2033	Set of 3
CSC4	3 Pole	250	CSET2503-ST	Set of 3
CSC4	4 Pole	150, 175, 200	CSET2044	Set of 4
CSC4	4 Pole	250	CSET2504-ST	Set of 4
CSC5	3 Pole	300, 350, 400	CSET4033	Set of 3
CSC5	4 Pole	300, 350, 400	CSET4044	Set of 4
CSC6	3 Pole	500, 630, 700, 800	CSET8033	Set of 3
CSC6	4 Pole	500, 630, 700, 800	CSET8044	Set of 4

SS Enclosure for WB MCCB [HSN Code: 8538]

Size	Suitable for use on MCCBs	3 Pole Reference*	4 Pole Reference*
Frame 1	CSC1, CSC2	☒CS-CNM0100020	-
Frame 2	CSC3	CS-CNM0100021	-
Frame 3	CSC4	CS-CNM0100021	-
Frame 4	CSC5	☒ENCL-250-400AF3	☒ENCL-250-400AF4
Frame 5	CSC6	☒CS-CNM0100203	-
Frame 6	CSC7, CSC8	☒CS-CNM0100204	-

NOTES:

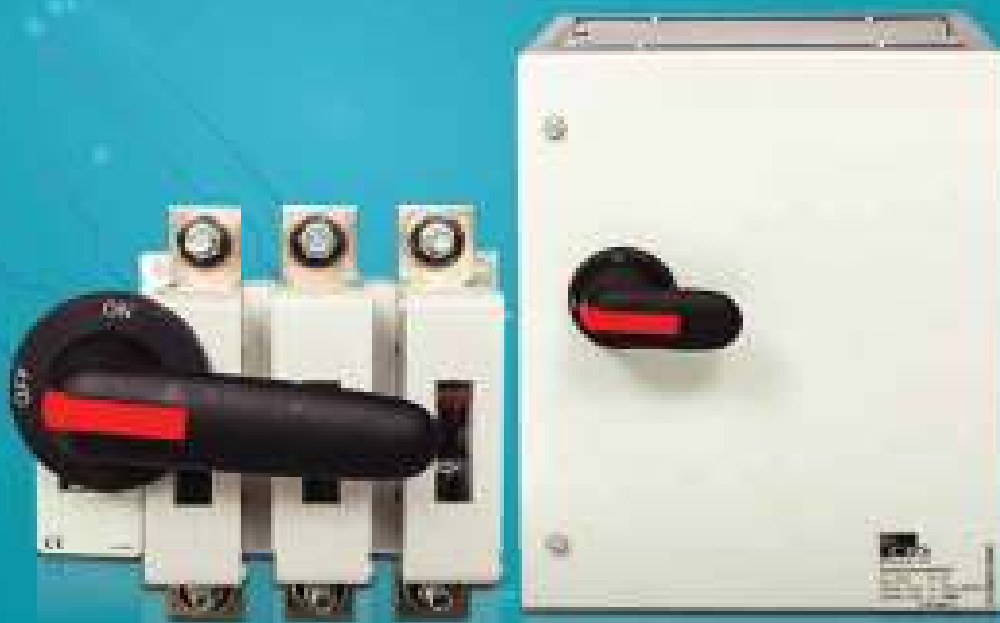
- *Reference code is for Enclosure only (without MCCB)
- For placing an order for MCCB along with Enclosure, please apply Prefix **E-** before MCCB Reference Code.

INDUSTRIAL SWITCHES

SWITCH DISCONNECTORS CHANGEOVER & BYPASS SWITCHES

- On-Load Changeover Switch Without Fuse
- Changeover Switch With Fuse
- Bypass Switch

- Switch Disconnectors
- Range: 25A – 3150A, 2, 3, 4 & 6 Pole
- Changeover & Bypass switches (with & without fuses)
- Range: 63A-3150A, 3P & 4P; 415V, 50Hz



Switch Disconnecter Fuse Unit (without Fuse Links)

- Conforms to IS/IEC 60947-3
- Range: 32-800A, 415V AC 50Hz
- Door Interlock and Padlock facility
- Version: 2P / TP / TPN / 4P
- Modular Construction
- Positive Isolation
- Suitable for DIN & Bolted HRC Fuse Links



Frame Size	Rating Amps	Pole	CSSDF in Open Execution		CSSDF in Sheet Steel Enclosure		Recommended Fuse Links Type (IEC Size)	
			Reference	Reference	Reference	Reference	DIN	BS
			DIN	BS	DIN	BS		
1	32A	2P	CSSDF32D2	CSSDF32B2			CDFL00 32	CTIA-32 (A2)
		TP	CSSDF32D3	CSSDF32B3	☒E-CSSDF32D3	E-CSSDF32B3		
		TPN	CSSDF32D3N	CSSDF32B3N	E-CSSDF32D3N	E-CSSDF32B3N		
		4P	☒CSSDF32D4FN	☒CSSDF32B4FN	E-CSSDF32D4FN	☒E-CSSDF32B4FN		
1	63A	2P	CSSDF63D2	CSSDF63B2			CDFL00 63	CSTIS-63 (A3)
		TP	CSSDF63D3	CSSDF63B3	☒E-CSSDF63D3	E-CSSDF63B3		
		TPN	CSSDF63D3N	CSSDF63B3N	E-CSSDF63D3N	E-CSSDF63B3N		
		4P	CSSDF63D4FN	CSSDF63B4FN	E-CSSDF63D4FN	☒E-CSSDF63B4FN		
2	100A	2P	CSSDF100D2	CSSDF100B2			CSDFL00 100	CTCP-100 (A4)
		TP	CSSDF100D3	CSSDF100B3	E-CSSDF100D3	E-CSSDF100B3		
		TPN	CSSDF100D3N	CSSDF100B3N	E-CSSDF100D3N	E-CSSDF100B3N		
		4P	CSSDF100D4FN	☒CSSDF100B4FN	E-CSSDF100D4FN	☒E-CSSDF100B4FN		
2	125A	2P	CSSDF125D2	CSSDF125B2			CSDFL00 125	CTCP-125 (A4)
		TP	CSSDF125D3	☒CSSDF125B3	☒E-CSSDF125D3	E-CSSDF125B3		
		TPN	CSSDF125D3N	CSSDF125B3N	E-CSSDF125D3N	E-CSSDF125B3N		
		4P	CSSDF125D4FN	CSSDF125B4FN	☒E-CSSDF125D4FN	☒E-CSSDF125B4FN		
2	160A	2P	☒CSSDF160D2	CSSDF160B2			CSDFL00 160	CTF-160 (B2)
		TP	CSSDF160D3	☒CSSDF160B3	E-CSSDF160D3	E-CSSDF160B3		
		TPN	CSSDF160D3N	CSSDF160B3N	E-CSSDF160D3N	☒E-CSSDF160B3N		
		4P	☒CSSDF160D4FN	☒CSSDF160B4FN	E-CSSDF160D4FN	E-CSSDF160B4FN		
3	200A	2P	CSSDF200D2	CSSDF200B2			CDFL1 200 / CSDFL1 200	CTF-200 (B2)
		TP	CSSDF200D3	☒CSSDF200B3	☒E-CSSDF200D3	E-CSSDF200B3		
		TPN	CSSDF200D3N	CSSDF200B3N	E-CSSDF200D3N	E-CSSDF200B3N		
		4P	CSSDF200D4FN	CSSDF200B4FN	☒E-CSSDF200D4FN	E-CSSDF200B4FN		
3	250A	2P	CSSDF250D2	☒CSSDF250B2			CDFL1 250 / CSDFL1 250	CTKF (B3)
		TP	CSSDF250D3	CSSDF250B3	☒E-CSSDF250D3	E-CSSDF250B3		
		TPN	CSSDF250D3N	CSSDF250B3N	E-CSSDF250D3N	E-CSSDF250B3N		
		4P	CSSDF250D4FN	CSSDF250B4FN	☒E-CSSDF250D4FN	E-CSSDF250B4FN		
3	315A	2P	CSSDF315D2	CSSDF315B2			CDFL2 315 / CSDFL2 315	CTKF-315 (B3)
		TP	CSSDF315D3	CSSDF315B3	E-CSSDF315D3	E-CSSDF315B3		
		TPN	CSSDF315D3N	CSSDF315B3N	E-CSSDF315D3N	E-CSSDF315B3N		
		4P	CSSDF315D4FN	CSSDF315B4FN	☒E-CSSDF315D4FN	E-CSSDF315B4FN		
3	400A	2P	☒CSSDF400D2	CSSDF400B2			CDFL2 400 / CSDFL2 400	CTMF-400 (B4)
		TP	CSSDF400D3	☒CSSDF400B3	☒E-CSSDF400D3	E-CSSDF400B3		
		TPN	CSSDF400D3N	CSSDF400B3N	E-CSSDF400D3N	E-CSSDF400B3N		
		4P	CSSDF400D4FN	CSSDF400B4FN	☒E-CSSDF400D4FN	E-CSSDF400B4FN		
4	630A	2P	CSSDF630D2	☒CSSDF630B2			CDFL3 630	CTTM-630 (C2)
		TP	CSSDF630D3	☒CSSDF630B3	E-CSSDF630D3	E-CSSDF630B3		
		TPN	CSSDF630D3N	CSSDF630B3N	E-CSSDF630D3N	☒E-CSSDF630B3N		
		4P	CSSDF630D4FN	CSSDF630B4FN	☒E-CSSDF630D4FN	E-CSSDF630B4FN		
4	800A	2P	CSSDF800D2	CSSDF800B2			-	CTLM-800 (C3)
		TP	☒CSSDF800D3	CSSDF800B3	E-CSSDF800D3	E-CSSDF800B3		
		TPN	CSSDF800D3N	CSSDF800B3N	☒E-CSSDF800D3N	☒E-CSSDF800B3N		
		4P	☒CSSDF800D4FN	CSSDF800B4FN	E-CSSDF800D4FN	E-CSSDF800B4FN		

☒ non stockable items.

Switch Disconnectors (Load Break Switches)

- Conforms to IS/IEC 60947-3
- Range: 25A-400A, 415V AC 50Hz
- Version: TP / 4P
- Compact Construction
- Door Interlock and Padlock facility
- Positive Isolation



Size	Rating Amps	Pole	CSSD In Open Execution	In Sheet Steel Enclosure	
			Reference	Reference	
D-Series	Frame 1	25	3	CSSD25D3	☒E-CSSD25D3
			4	☒CSSD25D4	E-CSSD25D4
	Frame 1	40	3	CSSD40D3	E-CSSD40D3
			4	CSSD40D4	☒E-CSSD40D4
	Frame 2	63	3	CSSD63K3	☒E-CSSD63K3
	Frame 3		4	CSSD63D4	☒E-CSSD63D4
	Frame 3	100		CSSD100D3	E-CSSD100D3
			CSSD100D4	☒E-CSSD100D4	
Frame 3	125	3	CSSD125D3	E-CSSD125D3	
Frame 3		4	CSSD125D4	☒E-CSSD125D4	
NM-Series	Frame 1	125	3	CSSD125NM3	E-CSSD125NM3
			4	CSSD125NM4	E-CSSD125NM4
	Frame 1	160	3	☒CSSD160NM3	E-CSSD160NM3
			4	☒CSSD160NM4	E-CSSD160NM4
	Frame 1	200	3	☒CSSD200NM3	E-CSSD200NM3
			4	CSSD200NM4	E-CSSD200NM4
	Frame 1	250	3	CSSD250NM3	E-CSSD250NM3
			4	CSSD250NM4	☒E-CSSD250NM4
	Frame 2	315	3	CSSD315NM3	E-CSSD315NM3
			4	CSSD315NM4	E-CSSD315NM4
Frame 2	400	3	CSSD400NM3	E-CSSD400NM3	
		4	CSSD400NM4	E-CSSD400NM4	

NOTE:

1. Rotary Handle with door defeat Mechanism / Pistol grip handle is available only for 25-63A.
2. Switch Disconnector with Direct Handle and Extended Terminals are also available.
3. ☒ non stockable items.

Moulded Switches with Plastic Enclosure




Rating Amps	Pole	Colour		Reference
		Box	Handle	
25	3	Grey	Black	EABW CSSD 25 D3
		Yellow	Red	EACL CSSD 25 D3
25	4	Grey	Black	EABW CSSD 25 D4
		Yellow	Red	EACL CSSD 25 D4
40	3	Grey	Black	EABW CSSD 40 D3
		Yellow	Red	EACL CSSD 40 D3
40	4	Grey	Black	EABW CSSD 40 D4
		Yellow	Red	EACL CSSD 40 D4
63	3	Grey	Black	EABW CSSD 63 K3
		Yellow	Red	EACL CSSD 63 K3
63	4	Yellow	Red	ELPCSSDPR63D4
80	3	Yellow	Red	ELPCSSDPR80D3
80	4	Yellow	Red	ELPCSSDPR80D4
100	3	Yellow	Red	ELPCSSDPR100D3
100	4	Yellow	Red	ELPCSSDPR100D4

Accessories Switch Disconnectors Fuse Unit



Key Interlocks (3 Locks - 2 Keys) [HSN Code: 8538]

For Switch Type	Reference
CSSDF 32A - 160A	 CSSDFZW-16
CSSDF 200A - 800A	CSSDFZW-5






Castle Key Locks [HSN Code: 8538]

CSSDF 32A - 160A	CSSDFZW-15
CSSDF 200A - 800A	CSSDFZW-4



Auxiliary Contacts [HSN Code: 8538]

1 NO + 1 NC CSSDF 32A - 63A for 3P	CSSDFZX46
2 NO + 2 NC CSSDF 32A - 63A for 3P	CSSDFZX32
1 NO + 1 NC CSSDF 32A - 63A for 2P & 4P	CSSDFZX46B
2 NO + 2 NC CSSDF 32A - 63A for 2P & 4P	 CSSDFZX32B
1 NO + 1 NC CSSDF 100A - 160A	CSSDFZX1
2 NO + 2 NC CSSDF 100A - 160A	 CSSDFZX16
1 NO + 1 NC CSSDF 200A - 400A	CSSDFZX33
2 NO + 2 NC CSSDF 200A - 400A	CSSDFZX34
1 NO + 1 NC CSSDF 630A - 800A	CSSDFZX35
2 NO + 2 NC CSSDF 630A - 800A	 CSSDFZX36



Handle Mounting Kit (for independent mounting of O/E Switches) [HSN Code: 8538]

CSSDF 200A - 400A	HMK-1-2
CSSDF 630A - 800A	HMK-3-2



Extended Terminals [HSN Code: 8538]

32A-63A	TPN	ET-323	4P	ET-324
100A-160A	TPN	ET-327	4P	ET-328
200A-400A	TPN	ET-329	4P	ET-330



Spare Handle [HSN Code: 8538]


CSSDF 32A-160A (Moulded)	CSWH80S6
CSSDF 200A-400A (Moulded)	CSWH145S12
CSSDF 630A-800A (Moulded)	CSWH220S12

Spare Handle Shaft [HSN Code: 8538]








CSSDF 32A-160A	CSP6x165
CSSDF 200A-800A	CSP12x255

Spare Neutral Links [HSN Code: 8538]



CSSDF 32A-63A	CSSDFZX87
CSSDF 100A-160A	CSSDFZX86
CSSDF 200A-400A	CSSDFZX85
CSSDF 630A-800A	 CSSDFZX88

Spare Poles (Price per Pole) [HSN Code: 8538]

Rating (Amps)	Reference	
	DIN	BS
32	 CSSDF-SP-32D	CSSDF-SP-32B
63	CSSDF-SP-63D	CSSDF-SP-63B
100	CSSDF-SP-100D	CSSDF-SP-100B
125	 CSSDF-SP-125D	CSSDF-SP-125B
160	 CSSDF-SP-160D	CSSDF-SP-160B
200	 CSSDF-SP-200D	CSSDF-SP-200B
250	CSSDF-SP-250D	CSSDF-SP-250B
315	CSSDF-SP-315D	CSSDF-SP-315B
400	 CSSDF-SP-400D	CSSDF-SP-400B
630	 CSSDF-SP-630D	CSSDF-SP-630B
800	CSSDF-SP-800D	 CSSDF-SP-800B

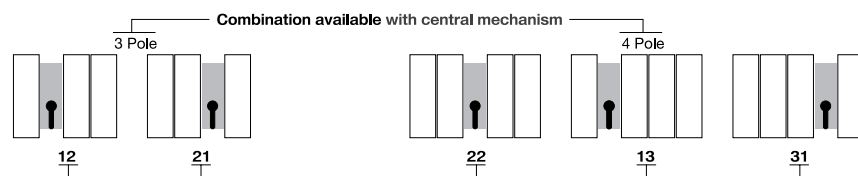
Switch Disconnectors (Load Break Switches)

- Conforms to IS/IEC 60947-3
- Range: 125A-3150A, 415V, 50Hz
- Version: 2P, 3P, 4P
- Modular construction
- Positive Isolation
- Door Interlock and Padlock facility ■



Size	Rating Amps	Pole	CSSD In Open Execution	In Sheet Steel Enclosure	
			Reference	Reference	
DM-Series	Frame 4	3	CSSD63DM3	E-CSSD63DM3	
		4	CSSD63DM4	☒E-CSSD63DM4	
	Frame 4	3	CSSD100DM3	E-CSSD100DM3	
		4	CSSD100DM4	☒E-CSSD100DM4	
	Frame 4	3	CSSD125DM3	E-CSSD125DM3	
		4	CSSD125DM4	☒E-CSSD125DM4	
	Frame 5	160	3	CSSD160DM3	E-CSSD160DM3
			4	CSSD160DM4	E-CSSD160DM4
	Frame 5	200	3	CSSD200DM3	E-CSSD200DM3
			4	CSSD200DM4	E-CSSD200DM4
	Frame 5	250	3	CSSD250DM3	E-CSSD250DM3
			4	CSSD250DM4	E-CSSD250DM4
	Frame 5	315	3	CSSD315DM3	E-CSSD315DM3
			4	CSSD315DM4	E-CSSD315DM4
	Frame 5	400	3	CSSD400DM3	E-CSSD400DM3
			4	CSSD400DM4	E-CSSD400DM4
K-Series	Frame 6	3	CSSD400K3	E-CSSD400K3	
		4	CSSD400K4	E-CSSD400K4	
	Frame 6	630	3	CSSD630K3	E-CSSD630K3
			4	CSSD630K4	E-CSSD630K4
	Frame 6	800	3	CSSD800K3	E-CSSD800K3
			4	CSSD800K4	E-CSSD800K4
P-Series	Frame 7	3	☒CSSD1000P3	E-CSSD1000P3	
		4	CSSD1000P4	E-CSSD1000P4	
	Frame 7	1250	3	☒CSSD1250P3	E-CSSD1250P3
			4	☒CSSD1250P4	E-CSSD1250P4
	Frame 7	1600	3	☒CSSD1600P3	E-CSSD1600P3
			4	☒CSSD1600P4	E-CSSD1600P4
	Frame 8	2000	3	CSSD2000P3	E-CSSD2000P3
			4	CSSD2000P4	E-CSSD2000P4
	Frame 8	2500	3	CSSD2500P3	E-CSSD2500P3
			4	CSSD2500P4	E-CSSD2500P4
	Frame 8	3150	3	CSSD3150P3	E-CSSD3150P3
			4	CSSD3150P4	E-CSSD3150P4

A



NOTES:

'K' series from 1000A to 3150A in open execution is also available.
 Handle colour: Red Knob and Yellow Base (standard) Black Base and Knob on request. ■ upto 800A

Switch Disconnectors (Moulded construction)

Accessories [HSN Code: 8538]

For Switch Type	Reference
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Key Interlocks (3 Locks - 2 Keys)

CSSD 125A-160A	CSSDZW - 16
CSSD 200A-3150A	CSSDZW - 5

Castle Key Locks

CSSD 25A-160A	CSSDZW - 15
CSSD 200A-3150A	CSSDZW - 4

Auxiliary Contacts

1NO+1NC CSSD 25A-40A	3	<input checked="" type="checkbox"/>	CSSDZX49
2NO+2NC CSSD 25A-40A	3	<input checked="" type="checkbox"/>	CSSDZX50
1NO+1NC CSSD 25A-40A	4		CSSDZX87
2NO+2NC CSSD 25A-40A	4	<input checked="" type="checkbox"/>	CSSDZX88
1NO+1NC CSSD 63A	3	<input checked="" type="checkbox"/>	CSSDZX79
2NO+2NC CSSD 63A	3	<input checked="" type="checkbox"/>	CSSDZX80
1NO+1NC CSSD 125A	3	<input checked="" type="checkbox"/>	CSSDZX52
2NO+2NC CSSD 125A	3	<input checked="" type="checkbox"/>	CSSDZX53
1NO+1NC CSSD 63A-125A	4	<input checked="" type="checkbox"/>	CSSDZX55
2NO+2NC CSSD 63A-125A	4	<input checked="" type="checkbox"/>	CSSDZX56
1NO+1NC CSSD 125A-160A (DM)	3/4	<input checked="" type="checkbox"/>	CSSDZX1
2NO+2NC CSSD 125A-160A (DM)	3/4		CSSDZX16
1NO+1NC CSSD 200A-400A (DM)	3/4		CSSDZX37
2NO+2NC CSSD 200A-400A (DM)	3/4		CSSDZX38
1NO+1NC CSSD 630A-800A	3/4	<input checked="" type="checkbox"/>	CSSDZX33
2NO+2NC CSSD 630A-800A	3/4	<input checked="" type="checkbox"/>	CSSDZX34
1NO+1NC CSSD 1000A-3150A	3/4		CSSDZX35
2NO+2NC CSSD 1000A-3150A	3/4	<input checked="" type="checkbox"/>	CSSDZX36

Handle Mounting Kit (for independent mounting of O/E Switches)

CSSD 200A-400A (Compact Series)	HMK-2
CSSD 630A-800A	HMK-1-1
CSSD 1000A-1600A	HMK-3-1

Extended Terminals

125A	TPN	ET-325	4P	ET-326
100A-160A	TPN	ET-327	4P	ET-328
200A-400A	TPN	ET-329	4P	ET-330

Rotary Knob Handles

CSSD 25A-125A (Moulded-Red/Yellow)	<input checked="" type="checkbox"/>	CSSDZX108
CSSD 25A-125A (Moulded-Black)		CSSDZX111BL

Switch Handles

CSSD 200A-800A (Moulded)	CSWH145S12
CSSD 1000A-1600A (Moulded)	CSWH220S12
CSSD 2500A-3150A (Metallic)	CSDA8
CSSD 125A-160A (Moulded)	CSWH80S6
CSSD 200A-315A (Moulded)	<input checked="" type="checkbox"/> CSWH80S8

Switch Handle Shaft

CSSD 25A-125A	<input checked="" type="checkbox"/> CSP5X70
CSSD 125A-160A (DM)	CAP6X165
CSSD 200A-400A (DM)	<input checked="" type="checkbox"/> CSP8X240
CSSD 630A-1600A	CSP12X255
CSSD 2500A-3150A	CSP12X325

Switch Poles (Price per Pole)

125A	CSSD-SP-125DM
160A	CSSD-SP-160DM
200A	<input checked="" type="checkbox"/> CSSD-SP200DM
250A	<input checked="" type="checkbox"/> CSSD-SP250DM
315A	<input checked="" type="checkbox"/> CSSD-SP315DM
400A	<input checked="" type="checkbox"/> CSSD-SP400DM
630A	CSSD-SP630K
800A	<input checked="" type="checkbox"/> CSSD-SP800K
1000A	CSSD-SP1000P
1250A	CSSD-SP1250P
1600A	CSSD-SP1600P

non stockable items.

On Load Changeover Switches

- Conforms to IS/IEC 60947-3
- Range: 63A~3150A, 415V, 50Hz
- Version: 4P
- Modular construction
- Positive Isolation
- Door Interlock and Padlock facility ■



In Open Execution

Size	Rating (Amps)	Pole	Reference	
NM-Series	Frame 1	63	4	CSCS63NM4CO
	Frame 1	100	4	CSCS100NM4CO
	Frame 2	125	4	CSCS125NM4CO
	Frame 2	160	4	CSCS160NM4CO
	Frame 2	200	4	CSCS200NM4CO
	Frame 2	250	4	CSCS250NM4CO
DM-Series	Frame 2	315	4	CSCS315DM4CO
	Frame 2	400	4	CSCS400DM4CO
K-Series	Frame 3	630	4	CSCS630K4CO
	Frame 3	800	4	CSCS800K4CO
P-Series	Frame 4	1000	4	☒CSCS1000P4CO
	Frame 4	1250	4	☒CSCS1250P4CO
	Frame 4	1600	4	☒CSCS1600P4CO
	Frame 5	2000	4	☒CSCS2000P4CO
	Frame 5	2500	4	☒CSCS2500P4CO
	Frame 5	3150	4	☒CSCS3150P4CO

In Sheet Steel Enclosure

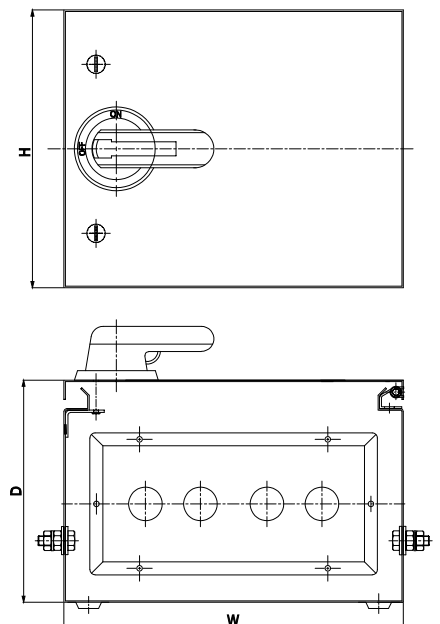
Size	Rating (Amps)	Pole	Reference	
NM-Series	Frame 1	63	4	E-CSCS63NM4CO
	Frame 1	100	4	E-CSCS100NM4CO
	Frame 2	125	4	E-CSCS125NM4CO
	Frame 2	160	4	E-CSCS160NM4CO
	Frame 2	200	4	E-CSCS200NM4CO
	Frame 2	250	4	E-CSCS250NM4CO
DM-Series	Frame 2	315	4	E-CSCS315DM4CO
	Frame 2	400	4	E-CSCS400DM4CO
K-Series	Frame 3	630	4	E-CSCS630K4CO
	Frame 3	800	4	E-CSCS800K4CO
P-Series	Frame 4	1000	4	☒E-CSCS1000P4CO
	Frame 4	1250	4	☒E-CSCS1250P4CO
	Frame 4	1600	4	☒E-CSCS1600P4CO
	Frame 5	2000	4	☒E-CSCS2000P4CO
	Frame 5	2500	4	☒E-CSCS2500P4CO
	Frame 5	3150	4	☒E-CSCS3150P4CO

NOTES:

- 'K' series from 1000A to 3150A in open execution is also available on special request for retrofit orders only.
- Upto 800A

Dimension - Enclosure

Reference	W	H	D
E-CSCS63NM4CO	240	250	180
E-CSCS100NM4CO	240	250	180
E-CSCS125NM4CO	300	360	210
E-CSCS160NM4CO	300	360	210
E-CSCS200NM4CO	300	360	210
E-CSCS250NM4CO	300	360	210
E-CSCS63DM4CO	325	275	220
E-CSCS100DM4CO	325	275	220
E-CSCS125DM4CO	325	275	220
E-CSCS160DM4CO	325	275	220
E-CSCS200DM4CO	400	350	275
E-CSCS250DM4CO	400	350	275
E-CSCS315DM4CO	400	350	275
E-CSCS400DM4CO	400	350	275
E-CSCS630K4CO	500	400	300
E-CSCS800K4CO	500	400	300
E-CSCS1000P4CO	600	550	300
E-CSCS1250P4CO	600	550	300
E-CSCS1600P4CO	600	550	300
E-CSCS2000P4CO	800	600	700
E-CSCS2500P4CO	800	600	700
E-CSCS3150P4CO	800	600	700



☒ non stockable items.

On Load Changeover Switches

Bigger Size Enclosure for Changeover Switches

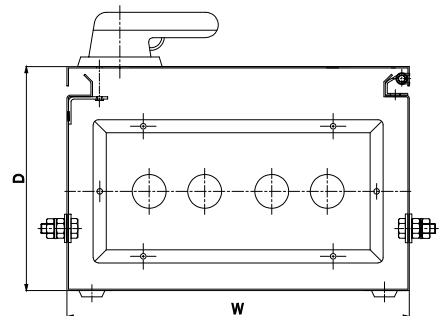
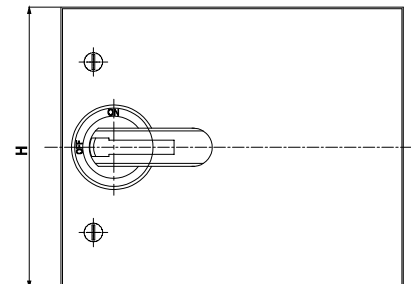
Conformity of Standard	IEC 60947-3															
Rated operational voltage	V	415														
Rated operational frequency	Hz	50 / 60														
Suitability of Isolation	YES															
Pollution degree as per IEC	3															
Ambient / Cubical Service Temp	°C	40														
Parameters / Rating	A	63	100	200	250	315	400	630	800	1000	1250	1600	2000	2500	3150	
Rated Insulation Voltage	V	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	
Dielectric strength	kV	4	4	5	5	5	5	5	5	5	5	5	5	5	5	
Rated Impulse withstand voltage	kV	8	8	8	8	12	12	12	12	12	12	12	12	12	12	
Rated thermal current in amb.40°C	A	63	100	200	250	315	400	630	800	1000	1250	1600	2000	2500	3150	
Rated thermal current in Enclosure	A	63	100	200	250	315	400	630	800	1000	1250	1600	2000	2300	2600	
Rated operational current	AC-22A	A	63	100	200	250	315	400	630	800	1000	1250	1600	2000	2500*	3150*
	AC-23A	A	63	63	200	250	315	400	630	720	800	800	800	-	-	-
Rated short time withstand current (Icw) for 1 sec.	kA	3	3	7	7	8	8	17	17	50	50	50	50	50	50	

*Operational current AC-21-B for 2000-3150A

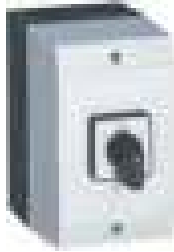
Dimension - Enclosure

Reference	W	H	D
E-CSCS63NM4CO-G	300	400	220
E-CSCS100NM4CO-G	300	400	220
E-CSCS160NM4CO-G	400	500	220
E-CSCS200NM4CO-G	400	500	275
E-CSCS250NM4CO-G	400	600	275
E-CSCS315DM4CO-G	500	600	275
E-CSCS400DM4CO-G	500	700	275
E-CSCS500K4CO-G	600	800	300
E-CSCS630K4CO-G	600	800	300
E-CSCS800K4CO-G	800	1000	300
E-CSCS1000P4CO-G	800	1000	300
E-CSCS1250P4CO-G	800	1000	300
E-CSCS1600P4CO-G	800	1000	300
E-CSCS2000P4CO-G	800	1000	700
E-CSCS2500P4CO-G	800	1000	700
E-CSCS3150P4CO-G	800	1000	700

All Dimensions are in mm



Changeover Switches



Changeover Switch with Plastic Enclosure (Surface Installation)*

Rating Amps	Pole	Reference	Rating Amps	Pole	Reference
10	3	ELPCSCSPR10D3	10	4	ELPCSCSPR10D4
16	3	ELPCSCSPR16D3	16	4	ELPCSCSPR16D4
20	3	ELPCSCSPR20DM3	20	4	ELPCSCSPR20DM4
20	3	ELPCSCSPR20D3	20	4	ELPCSCSPR20D4
32	3	ELPCSCSPR32D3	32	4	ELPCSCSPR32D4
40/50	3	ELPCSCSPR40/50D3	40/50	4	ELPCSCSPR40/50D4
63	3	ELPCSCSPR63D3	63	4	ELPCSCSPR63D4
80	3	ELPCSCSPR80D3	80	4	ELPCSCSPR80D4
100	3	ELPCSCSPR100D3	100	4	ELPCSCSPR100D4

*Available in without Enclosure as well.

ACCESSORIES [HSN Code: 8538]

Auxiliary Contacts for NM Type Changeover

Description	Reference
1NO +1NC for 63~100A	CSCONM1AUX10
1NO +1NC for 125~250A	CSCONM2AUX10

Direct handle Mounting Kit for NM Type Changeover

Rating (Amps)	Reference
63~100A	<input checked="" type="checkbox"/> CSCONM1HMB
125~250A	<input checked="" type="checkbox"/> CSCONM2HMB

Switch Handle Shaft for NM Type Changeover

Rating (Amps)	Reference
63~100A	<input checked="" type="checkbox"/> CSPNM18X80
125~250A	CSPNM28X110

Handle Sub Assembly for NM Type Changeover

Rating (Amps)	Reference
63~100A	CSCONM1H80S8
125~250A	<input checked="" type="checkbox"/> CSCONM2H145S8

A

Bypass Switches

LT Bypass Switch complete with Handle Assembly having Door Interlock and Padlocking arrangement.

In Open Execution [HSN Code: 8536]

Size	Rating (Amps)	Pole	Reference
Frame 1	63	4	CSBS63DM4
	80	4	CSBS80DM4
	100	4	CSBS100DM4
	125	4	CSBS125DM4
	160	4	CSBS160DM4
Frame 2	200	4	CSBS200DM4
	250	4	CSBS250DM4
	315	4	CSBS315DM4
	400	4	CSBS400K4
Frame 3	630	4	CSBS630K4
	800	4	☒CSBS800K4
Frame 4	1000	4	☒CSBS1000P4
	1250	4	☒CSBS1250P4
	1600	4	☒CSBS1600P4

In Sheet Steel Enclosure [HSN Code: 8536]

Size	Rating (Amps)	Pole	Reference
Frame 1	63	4	☒E-CSBS63DM4
	80	4	E-CSBS80DM4
	100	4	☒E-CSBS100DM4
	125	4	☒E-CSBS125DM4
	160	4	☒E-CSBS160DM4
Frame 2	200	4	☒E-CSBS200DM4
	250	4	☒E-CSBS250DM4
	315	4	E-CSBS315DM4
	400	4	E-CSBS400K4
Frame 3	630	4	E-CSBS630K4
	800	4	☒E-CSBS800K4
Frame 4	1000	4	☒E-CSBS1000P4
	1250	4	☒E-CSBS1250P4
	1600	4	☒E-CSBS1600P4

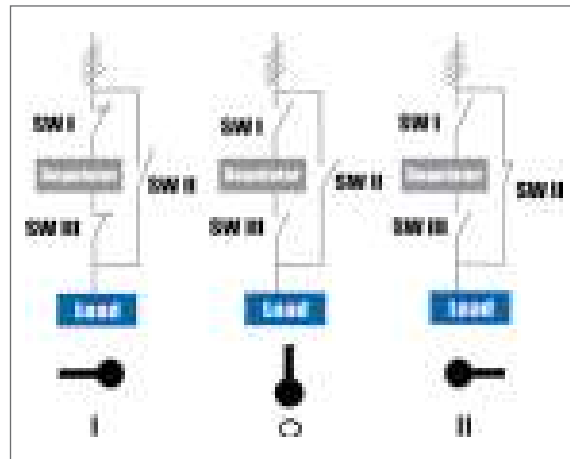
NOTES:

'K' series from 1000A to 1600A is also available on request for retrofit only.
Door interlock & Pad locking arrangements are available upto 800A

Bypass Switch application

Table of Operation

Handle	Switch-I	Switch-II	Switch-III	Remarks
Position-I	ON	OFF	ON	Regulated Supply to Load
Position-O	OFF	OFF	OFF	No Supply, Load as well as Regulator Isolated form incoming source
Position-II	OFF	ON	OFF	Direct Supply, Regulator By-passed & Isolated



Bypass Switches

LT Bypass Switch complete with Handle Assembly having Door Interlock and Padlocking arrangement.

Accessories for Changeover -Type DM/K/P

Auxiliary Contacts [HSN Code: 8538]

Contacts Configuration	For Switch Type	Qty./Switch	Reference
1NO+1NC	CSCS/CSBS 63A-160A Upper CSCF 125A-160A	1	☒CSCSZX1-U
1NO+1NC	CSCS/CSBS 63A-160A Lower CSCF 125A-160A	1	☒CSCSZX1-L
2NO+2NC	CSCS/CSBS 63A-160A Upper CSCF 125A-160A	1	☒CSCSZX3-U
2NO+2NC	CSCS/CSBS 63A-160A Lower CSCF 125A-160A	1	CSCSZX3-L
1NO+1NC	CSCS/CSBS 200A-1600A CSCF 200A-800A	2	CSCSZX2
2NO+2NC	CSCS/CSBS 200A-1600A CSCF 200A-800A	2	CSCSZX4

NOTES: If changeovers switch is required with Auxiliary contacts, please order the same separately.

Spare Poles (Price per Pole) [HSN Code: 8538]

Rating (Amps)	Type	Reference
63	CSCS/CSBS	CSSD-SP-63DM
80	CSCS/CSBS	CSSD-SP-80DM
100	CSCS/CSBS	CSSD-SP-100DM
125	CSCS/CSBS/CSCF	CSSD-SP-125DM
160	CSCS/CSBS/CSCF	CSSD-SP-160DM
200	CSCS/CSBS/CSCF	CSSD-SP200DM
250	CSCS/CSBS/CSCF	CSSD-SP250DM
315	CSCS/CSBS/CSCF	CSSD-SP315DM
400	CSCS/CSBS/CSCF	CSCS-SP400DM
630	CSCS/CSBS/CSCF	CSCS-SP630K
800	CSCS/CSBS/CSCF	CSCS-SP800K
1000	CSCS/CSBS	☒CSCS-SP1000P
1250	CSCS/CSBS	☒CSCS-SP1250P
1600	CSCS/CSBS	☒CSCS-SP1600P

NOTES: For one changeover of 4 pole, 8 Nos of sparepoles are required.

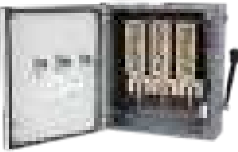
Spare Handle [HSN Code: 8538]

Rating (Amps)	Reference
CSCS/CSBS 63-315A/CSCF125-315A	CCOH145S8
CSCS/CSBS 400A-1600A/CSCF400-800A	CCOH220S12
CSCS 2000A-3150A (Metallic)	CSDA6

Spare Handle Shaft [HSN Code: 8538]

Type	Reference
CSCS 63-315A CSBS 63-315A CSCF125-315A	CSP8X200
CSCS 400A-1600A	CSP12X205
CSCS 2000A-3150A CSBS 400A-1600A CSCF 400A-1600A	☒CSP12X305

☒non stockable items.



Accessories-Changeover Switches (CSSDF) [HSN Code: 8536]

Spare Handles

For Switch Type	Reference
CSSDF 32A - 160A (Moulded)	CCOH80S6
CSSDF 200A - 400A (Moulded)	CCOH220S12
CSSDF 630A - 800A (Metallic)	CSDA6

Accessories-CSSDF Changeover Switches

Operating Mechanism

For Switch Type	Reference
CSSDF 32A-160A	<input checked="" type="checkbox"/> CSSDFZW1
CSSDF 200A-400A	<input checked="" type="checkbox"/> CSSDZW12/1
CSSDF 630A-800A	CSSDZW12

Accessories-Changeover Switch (CSSD) [HSN Code: 8536]

Spare Handles

For Switch Type	Reference
CSSD 25A-125A (Moulded)	CCOH00S6
CSSD 200A-800A (Moulded)	CCOH220S12
CSSD 1000A-3150A (Metallic)	CSDA6

Operating Mechanism [HSN Code: 8536]

For Switch Type	Reference
CSSD 25A - 40A	<input checked="" type="checkbox"/> CSSDZW6
CSSD 63A - 125A (DM type)	<input checked="" type="checkbox"/> CSSDZW6/1
CSSD 200A - 400A (DM type)	<input checked="" type="checkbox"/> CSSDZW11A
CSSD 400A - 800A (K type)	<input checked="" type="checkbox"/> CSSDZW11
CSSD 1000A - 3150A (P type)	<input checked="" type="checkbox"/> CSSDZW12

Switch Fuse Unit: Rewirable with Side Handle [HSN Code: 8536]

Reference	Rating (Amps)	Pole	Rated Voltage
<input checked="" type="checkbox"/> CSRW16P1NS	16	SPN	240 V
<input checked="" type="checkbox"/> CSRW32P1NS	32	SPN	240 V
<input checked="" type="checkbox"/> CSRW16P2S	16	DP	240 V
CSRW32P2S	32	DP	240 V
CSRW32P3NS	32	TPN	415V
CSRW63P3NS	63	TPN	415V
CSRW100P3NS	100	TPN	415V
CSRW200P3NS	200	TPN	415V

Off-Load Changeover Switches [HSN Code: 8536]

Reference	Rating (Amps)	Pole	Rated Voltage
CSCSOF32CO2	32	2	250 V
CSCSOF63CO2	63	2	250 V
CSCSOF32CO4	32	4	415 V
CSCSOF63CO4	63	4	415 V
CSCSOF100CO4	100	4	415 V
CSCSOF200CO4	200	4	415 V
CSCSOF315CO4	315	4	415 V
CSCSOF400CO4	400	4	415 V

Switch Fuse Unit: Rewirable with Front Handle

Rating (Amps)	Pole	Rated Voltage	Reference
32	TPN	415V	CSRW32P3NF
63	TPN	415V	CSRW63P3NF
100	TPN	415V	CSRW100P3NF

PV Switch



Rating: 1000V 400A

Suitable for DC / PV Application

C&S DC Switches are the ideal switch range for photovoltaic applications, with a high DC switching capability, C&S switches have been tested in accordance with IEC60947.3.

Features or Advantages

- High DC switching capability
- Up to 1000V DC operational voltage
- Fault-make load-break switch operation, ideal for DC systems
- Compact size, it can be fitted in compact Combinar box.
- Easy assembly in the combinar box.
- Low power loss
- Provision of Direct handle & Handle with extension shaft of 100mm.
- Excellent tracking resistance of isolation material prevent flashover between different polarity.
- Phase barriers are provided for better clearance & creepage distance.
- Pad lock facilities in "OFF" position
- 1 NO+1 NC Auxiliary contact can be provided as per customer request.

TECHNICAL CHARACTERISTIC

Rated Current	200A	250A	315A	400A
Product Reference	CSSD10PVA200	CSSD10PVA250	CSSD10PVA315	CSSD10PVA400
Rated Voltage (V) DC	1000	1000	1000	1000
Rated Insulation Voltage (V)	1000	1000	1000	1000
Dielectric Strength (kV)	5	5	5	5
Rated Impulse voltage (kV)	12	12	12	12
Rated Thermal current at 40 °C (A)	200	250	315	400
Utilization category	DC-PV1/DC-21B	DC-PV1/DC-21B	DC-PV1/DC-21B	DC-PV1/DC-21B
Mechanical (Nos.)	8000	8000	8000	5000
Electrical (Nos.)	200	200	200	200
No. of poles	4	4	4	4
Rated short time withstand current (Icw) for 1 sec. (kA)	8	8	8	8
Rated short circuit making capacity (Icm) for 50ms	14	14	14	14
Max. copper cable cross-section	95 mm ²	120 mm ²	185 mm ²	240 mm ²
Handle	Direct with Mechanism			
	With Handle Shaft			
Auxiliary contact arrangement	1 NO & 1 NC			
Terminal Bolt Size	M10 X 30	M10 X 30	M10 X 30	M10 X 30
Terminal tightening torque (Nm)	15-27	15-27	15-27	15-27
Operating Torque (Nm)	12	12	12	12
Phase Barrier Material	PA6, GF 30%			
Pole Pitch	50 mm			

Rated Current	Ambient Temperature	200A	250A	315A	400A
Derating Current at Higher Temperature	40°C	200A	250A	315A	400A
	45°C	200A	250A	315A	400A
	50°C	200A	250A	315A	400A
	55°C	200A	250A	315A	400A
	60°C	200A	250A	315A	400A
	65°C	200A	250A	315A	400A
	70°C	200A	250A	315A	400A

A



Automatic Transfer Switch

CATS

Key Features:

- With inbuilt micro processor based AMF controller
- Protection against under/over voltage, Single phase missing
- External indication terminal output for Source healthy and load ON.
- Inbuilt fuse protection to avoid failure of AMF controller
- 3 Position isolation lock for Source I - Off - Source II

Applications:

- Airport and Railways
- IT Malls and Commercial buildings
- Automobile Industries
- Data Centre and Telecommunications
- Oil and Gas Industries
- Manufacturing Industry
- Healthcare
- Banking and Finance

Automatic Transfer Switch

- Confirms IEC-60947-6-1
- Range 40A-3200A
- Utilisation Category AC32B



Size	Rating	Pole	Reference
Frame-1	40A	4	CATS1F40A...
	63A	4	CATS1F63A...
Frame-2	100A	4	CATS2F100A...
	125A	4	CATS2F125A...
Frame-3	160A	4	CATS3F160A...
Frame-4	200A	4	CATS4F200A...
	250A	4	CATS4F250A...
Frame-5	315A	4	CATS5F315A...
	400A	4	CATS5F400A...
	630A	4	CATS5F630A...
Frame-6	800A	4	CATS6F800A...
	1250A	4	CATS6F1250A...
	1600A	4	CATS6F1600A...
	2000A	4	CATS6F2000A...
	2500A	4	CATS6F2500A...
	3200A	4	CATS6F3200A...

NOTE:

While ordering replace ... with 'C' (Top Incoming, Bottom Outgoing) 'R' (Bottom Incoming, Top Outgoing)
Enclosures are available on request upto 630A.

Ordering Information

CATS	1F	40A	-	-
Series	Frame Size	Current Rating	↓	
	1F-Frame1 2F-Frame2 3F-Frame3 4F-Frame4 5F-Frame5 6F-Frame6 7F-Frame7	40A, 63A, 80A 100A, 125A 160A 200A, 250A 315A, 400A, 630A 800A, 1000A, 1250A, 1600A 2000A, 2500A, 3200A	↓	
		↓		
		T (Top Incoming, Bottom Outgoing)		
		B (Bottom Incoming, Top Outgoing)		

A

HRC Fuse Link, Fuse Base & Fuse Holder

Range: 2A-800A

- Conforms to IS 13703-Part 2
- Conforms to IEC 60269-Part 2
- Range: DIN type (6-630A), 500V, AC 50Hz, Bolted type (2-800A), 415V, AC 50Hz
- High breaking capacity: 80kA

DIN Type HRC Fuse Link [HSN Code: 8536]

IS/IEC Size	In A	Reference	MOQ
00	6, 10, 16, 20, 25, 32, 35	CDFL00*	3
	40, 50, 63	CSDFL00*	
	80, 100	CSDFL00*	
	125, 160	CSDFL00*	
1	32, 35, 50, 63	CDFL01*	
	80, 100, 125	CDFL01*	
	160	CDFL01*	
	200	CSDFL1*	
	250	CSDFL1*	
2	100, 125	CDFL02*	
	160, 200	CDFL02*	
	250	CDFL02*	
	315	CSDFL2*	
	400	CSDFL2*	
3	315, 400	CDFL03*	
	500	CDFL3*	
	630	CDFL3*	

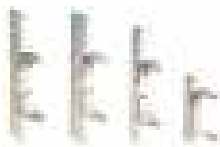
While ordering, replace "*" by current rating.

Fuse Bases for DIN Type Fuse Link (ISI Mark) [HSN Code: 8536]

IS/IEC Size	In A	Reference	MOQ
00	160	CSDFB00	3
1	250	CSDFB1	
2	400	CSDFB2	
3	630	CDFB3	

Solid Link [HSN Code: 8536]

IS/IEC Size	In A	Reference	MOQ
00	160	CDSL00	3
1	250	CDSL1	
2	400	☒ CDSL2	
3	630	☒ CDSL3	



HRC Fuse Link, Fuse Base & Fuse Holder

Range: 2A-800A

Bolted Type HRC Fuse Link

Off Set TAG Type [HSN Code: 8536]

IS/IEC Size	Rating (Amps)	Reference	MOQ
A1	2, 4, 6, 8, 10, 12 & 16	CNIT*	20
	20, 25, & 32	CNIT*	
A2	4, 6,10,16, 20, 25 & 32	CSTIA*	20
A3	32, 40, 50 & 63	CSTIS*	10
A4	50, 63, 80, 100, 125	CTCP*	6
-	125, 160, 200	CTFP*	3



CNS (Off Set) clip in Type [HSN Code: 8536]

IS/IEC Size	In A	Reference	MOQ
F1	2, 4, 6, 8,10,12,16	CNS*	20
F1	20, 25, 32	CNS*	20



Central TAG (2 hole fixing) Type [HSN Code: 8536]

IS/IEC Size	In A	Reference	MOQ
B1	80, 100	CTC*	6
B1	125	CTC*	
B2	125, 160, 200	CTF*	3
B3	250, 300, 315	CTKF*	1
B4	355, 400	CTMF*	



Central TAG (4 Hole Fixing) Type [HSN Code: 8536]

IS/IEC Size	In A	Reference	MOQ
C1	355, 400	CTM*	1
C2	450, 500	CTTM*	
C2	630	CTTM*	
C3	670, 710, 750, 800	CTLM*	



Cylindrical HRC Fuse Link [HSN Code: 8536]

IS/IEC Size	In A	Reference	MOQ
(14*51)	2, 4, 6, 8 & 10	CHF*	20
(14*51)	16, 20 & 25	CHF*	
(14*51)	32 & 40	CHF*	
(14*51)	50	CHF*	
(14*51)	63	CHF*	
(10*38)	2, 4, 6, 8,10 & 16	CGF*	20
(10*38)	20 & 25	CGF*	
(10*38)	32	CGF*	



A

HRC Fuse Link, Fuse Base & Fuse Holder

Range: 2A-800A

HRC Fuse Holder for Bolted Type Fuse Link [HSN Code: 8536]

IS/IEC Size	In A	Reference	MOQ	Reference	MOQ
F1	20	CNS20HN	10	-	-
F1	32	CNS32H	10	-	-
A2	32	CSM32HN	10	-	-
A3	63	CSM63HN	5	-	-
A4	100	-	-	CSM100H*	3
A4	100	-	-	CSM100B*	3

* H-Both side cable B-Top busbar & bottom cable

Fuse Holder for Cylindrical HRC Fuse Link [HSN Code: 8536]

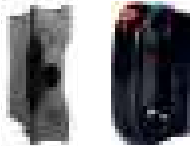
IS/IEC Size	In A	Reference	MOQ
14 x 51	32	CHO32R	10
14 x 51	63	CHC63R	

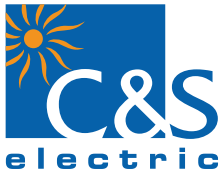
Fuse Puller (for DIN type Fuse Link 6-630Amp) [HSN Code: 8536]

Reference	MOQ
CDFH003	1

Porcelain Rewirable Fuse Holder (Kit-Kat) [HSN Code: 8536]

Reference	Rating (Amps)	Fuse Wire Size (Max.)	MOQ
CSKTRW32	32	22SWG	3
CSKTRW63	63	18SWG	
CSKTRW100	100	14SWG	
CSKTRW200	200	2 X 14SWG	1





POWER CONTROL COMPONENTS



- MPCBs
- Power Contactors
- Overload Relays
- Industrial Plugs & Sockets
- Control & Signalling Devices
- Motor Starters - Industrial
- Motor Starters - Agro

We touch your electricity everyday!



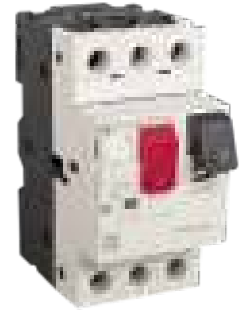
Motor Protection Circuit Breaker

- Conforms to IEC 60947-2
- Overload and Short circuit protection - Toggle and Rotary Type
- Short circuit protection - Rotary Type
- Breaking Capacity upto 100kA
- Finger Safe Terminals
- 35mm DIN rating mounting

exceed

Motor Protection Circuit Breaker

- Conforms to IEC 60947-2
- Overload and Short circuit protection - Toggle and Rotary Type
- Short circuit protection - Rotary Type
- Breaking Capacity upto 100kA
- Finger Safe Terminals
- 35mm DIN rating mounting



exceed Motor Protection Circuit Breaker - Toggle Type [HSN Code: 8536]

Frame	Power Rating 3-Ph motors AC3-Duty 415V, 50/60HZ	Adjustable Range (Amp)	Breaking Capacity(kA) 415V, 50HZ	Reference	MOQ
	KW		With Overload & Short Circuit Protection		
32AF	-	0.1-0.16	100	TCMS-32SE-0.16	1
	-	0.16-0.25	100	TCMS-32SE-0.25	
	-	0.25-0.40	100	TCMS-32SE-0.4	
	-	0.40-0.63	100	TCMS-32SE-0.63	
	-	0.63-1	100	TCMS-32SE-1	
	-	1-1.6	100	TCMS-32SE-1.6	
	0.75	1.6-2.5	100	TCMS-32SE-2.5	
	1.5	2.5-4	100	TCMS-32SE-4	
	2.2	4-6.3	100	TCMS-32SE-6.3	
	4	6-10	100	TCMS-32SE-10	
	5.5	9-14	100	TCMS-32SE-14	
	9	13-18	100	TCMS-32SE-18	
	11	17-23	50	TCMS-32SE-23	
	11	20-25	50	TCMS-32SE-25	
15	24-32	50	TCMS-32SE-32		

Accessories [HSN Code: 8538]

Description	Configuration	Model	MOQ
Front mounted (1Pc) Aux Contact	1NO+1NC	TFXE11	1
Front mounted (1Pc) Aux Contact	2NO	TFXE20	
Left Side Mounted (2Pc) Aux Contact	1NO+1NC	TLXE11	
Left Side Mounted (2Pc) Aux Contact	2NO	TLXE20	
Side mounted (1pc) Fault signal Contact	NO	TLAE11	
Side mounted (1pc) Short circuit signal contact	NO	TLAME11	
Trip + Aux Contact, Left Side mounted (1Pc.)	2NO	TLAXE1010	
	1NO+1NC	TLAXE1001	
	1NC + 1NO	TLAXE0110	
	2NC	TLAXE0101	
Under Voltage (1 pc) Right side Mounted	110-127V50HZ	TRUE110-127V50HZ	
	220-240V50HZ	TRUE220-240V50HZ	
	380-415V50HZ	TRUE380-415V50HZ	
Shunt Trip (1pc) Right side Mounted	110-127V50HZ	TRSE110-127V50HZ	
	220-240V50HZ	TRSE220-240V50HZ	
	380-415V50HZ	TRSE380-415V50HZ	

exceed

Motor Protection Circuit Breaker

exceed Motor Protection Circuit Breaker - Rotary Type [HSN Code: 8536]



Frame	Power Rating 3Ph Motors AC3-duty, 415V,50Hz	Rated Operational Current Ie(A)	Breaking Capacity (kA) 415V, 50Hz	Reference	Adjustable range (Amp)	Reference
				With Short Circuit Protection		With Overload & Short Circuit Protection
32AF	0.02	0.16	100kA	TCMS-32HIR-0.16	0.1-0.16	TCMS-32HR-0.16
	0.06	0.25		TCMS-32HIR-0.25	0.16-0.25	TCMS-32HR-0.25
	0.09	0.4		TCMS-32HIR-0.4	0.25-0.4	TCMS-32HR-0.4
	0.12	0.63		TCMS-32HIR-0.63	0.4-0.63	TCMS-32HR-0.63
	0.25	1		TCMS-32HIR-1	0.63-1	TCMS-32HR-1
	0.55	1.6		TCMS-32HIR-1.6	1-1.6	TCMS-32HR-1.6
	0.75	2.5		TCMS-32HIR-2.5	1.6-2.5	TCMS-32HR-2.5
	1.5	4		TCMS-32HIR-4	2.5-4	TCMS-32HR-4
	2.2	6.3		TCMS-32HIR-6.3A	4-6.3	TCMS-32HR-6.3
	4	10		TCMS-32HIR-10A	6.3-10	TCMS-32HR-10
63AF	9	16	50kA	TCMS-32HIR-16A	10-16	TCMS-32HR-16
	9	20		TCMS-32HIR-20A	16-20	TCMS-32HR-20
	12.5	25		TCMS-32HIR-25A	20-25	TCMS-32HR-25
	15	32		TCMS-32HIR-32A	25-32	TCMS-32HR-32
	7.5	16		TCMS-63HIR-16	11-16	TCMS-63HR-16
	7.5	20		TCMS-63HIR-20	14-20	TCMS-63HR-20
	11	25		TCMS-63HIR-25	18-25	TCMS-63HR-25
	15	32		TCMS-63HIR-32	22-32	TCMS-63HR-32
	18	40		TCMS-63HIR-40	28-40	TCMS-63HR-40
	18	45		TCMS-63HIR-45	36-45	TCMS-63HR-45
	22	50	TCMS-63HIR-50	40-50	TCMS-63HR-50	
	30	63	TCMS-63HIR-63	45-63	TCMS-63HR-63	

ACCESSORIES [HSN Code: 8538]

Description	Configuration	Reference
Front Mounted Auxiliary contacts	1NO+1NC	TFXR11
Left Side Mounted Auxiliary contacts	2NC	TFXR02
Left Side Mounted Auxiliary contacts	1NO+1NC	TLXR11
Left Side Mounted Auxiliary contacts	2NO	TLXR02
"Left Side Mtd Trip ind Aux con (1NC/1NO for OL and 1NO/1NC for SC) for 32AF"	1NO+1NC	TLAR3211
"Left Side Mtd Trip ind Aux con (1NC/1NO for OL and 1NO/1NC for SC) for 63AF"	1NO+1NC	TLAR6311
MPCB Enclosure Frame 32AF	For TCMS-32HIS/32HS	EPH32HRBG
MPCB Enclosure Frame 63AF	For TCMS-63HIS/63HS	EPH63HRBG
Extended RotaryHandle -32AF-IP65	For TCMS-32HIS/32HS	MEH32HR-GB
Extended Rotary Handle -63AF-IP65	For TCMS-63HIS/63HS	MEH63HR-GB
Shunt Release 32AF / 63AF (Right Side Mounting)	20 ~ 24V 50/60Hz	TRSR20-24V 50/60Hz
	40 ~ 48V 50/60Hz	TRSR40-48V 50/60Hz
	100 ~ 127V 50/60Hz	TRSR40-100V 127/60Hz
	200 ~ 240V 50/60Hz	TRSR40-200V 240/60Hz
	365 - 440V 50/60Hz	TRSR40-365V 440/60Hz
Under Voltage Release 32AF/63AF (Right Side Mounting)	24V 50/60Hz	TRUR 50Hz 60Hz 24V
	24V 50Hz / 28V 60Hz	TRUR 50Hz 24V 60Hz 28V
	95V 50Hz / 110V 60Hz	TRUR 50Hz 95V 60Hz 110V
	110V 50Hz / 120V 60Hz	TRUR 50Hz 110V 60Hz 120V
	110-115V 50Hz / 127V 60Hz	TRUR 50Hz 110-115V 60Hz 127V
	180V 50Hz / 208V 60Hz	TRUR 50Hz 180V 60Hz 208V
	190V 50Hz / 220V 60 Hz	TRUR 50Hz 190V 60Hz 220V
	208V 50 Hz / 240V 60 Hz	TRUR 50Hz 208V 60Hz 240V
	230-240V 50Hz / 277V 60Hz	TRUR 50Hz 230-240V 60Hz 277V
	325V 50Hz / 380V 60Hz	TRUR 50Hz 325V 60Hz 380V
	380V 50Hz / 440V 60Hz	TRUR 50Hz 380V 60Hz 440V
400-415V 50Hz / 480V 60Hz	TRUR 50Hz 400-415V 60Hz 480V	
500V 50Hz / 600V 60Hz	TRUR 50Hz 500V 60Hz 600V	

Motor Protection Circuit Breaker

Conforming IS/IEC 60947-1, IS/IEC 60947-2, IS/IEC 60947-4-1

TCMS-Model - Thermal Magnetic [HSN Code: 8536]

■ Adjustable thermal release ■ Magnetic release 13Xle Max. ■ Trip class 10 ■ Ambient temperature compensation ■ Phase failure protection

Frame	Power Rating 3-Ph Motors AC3-duty 415V, 50Hz	Adjustable range (Amp)	Breaking Capacity (kA) 415V, 50Hz	Reference	Breaking Capacity (kA) 415V, 50Hz	Reference	MOQ
	kW		Standard Model/Toggle Switch		High Breaking Capacity/Rotary Handle		
32AF	0.02	0.1-0.16	100	TCMS-32S-0.16	100	TCMS-32H-0.16	1
	0.06	0.16-0.25	100	TCMS-32S-0.25	100	TCMS-32H-0.25	
	0.09	0.25-0.4	100	TCMS-32S-0.4	100	TCMS-32H-0.4	
	0.12	0.4-0.63	100	TCMS-32S-0.63	100	TCMS-32H-0.63	
	0.25	0.63-1	100	TCMS-32S-1	100	TCMS-32H-1	
	0.55	1-1.6	100	TCMS-32S-1.6	100	TCMS-32H-1.6	
	0.75	1.6-2.5	100	TCMS-32S-2.5	100	TCMS-32H-2.5	
	1.5	2.5-4	100	TCMS-32S-4	100	TCMS-32H-4	
	2.2	4-6	100	TCMS-32S-6	100	TCMS-32H-6	
	3	5-8	100	TCMS-32S-8	100	TCMS-32H-8	
	4	6-10	50	TCMS-32S-10	100	TCMS-32H-10	
	5.5	9-13	50	TCMS-32S-13	100	TCMS-32H-13	
	7.5	11-17	20	TCMS-32S-17	50	TCMS-32H-17	
	7.5	14-22	15	TCMS-32S-22	50	TCMS-32H-22	
11	18-26	15	TCMS-32S-26	50	TCMS-32H-26		
15	22-32	15	TCMS-32S-32	50	TCMS-32H-32		
63AF	18.5	28-40	-	-	50	TCMS-63H-40	1
	22	34-50	-	-	50	TCMS-63H-50	
	30	45-63	-	-	50	TCMS-63H-63	
100AF	37	55-75	-	-	75	TCMS-100H-75	1
	45	70-90	-	-	75	TCMS-100H-90	
	45	80-100	-	-	75	TCMS-100H-100	

TCMS-Model - Magnetic (Short Circuit Protection only) [HSN Code: 8536]

■ Without thermal release ■ Magnetic release 13 X le Max.

Frame	Breaking Capacity (kA) at 415V, 50Hz	Power Rating 3-Ph Motors AC3 duty 415V, 50Hz	Rated Operational Current Ie (A)	Reference	MOQ
		kW			
32AF	100	0.02	0.16	TCMS-32HI-0.16	1
	100	0.06	0.25	TCMS-32HI-0.25	
	100	0.09	0.4	TCMS-32HI-0.4	
	100	0.12	0.63	TCMS-32HI-0.63	
	100	0.25	1	TCMS-32HI-1	
	100	0.55	1.6	TCMS-32HI-1.6	
	100	0.75	2.5	TCMS-32HI-2.5	
	100	1.5	4	TCMS-32HI-4	
	100	2.2	6	TCMS-32HI-6	
	100	3	8	TCMS-32HI-8	
	100	4	10	TCMS-32HI-10	
	100	5.5	13	TCMS-32HI-13	
	50	7.5	17	TCMS-32HI-17	
	50	7.5	22	TCMS-32HI-22	
50	11	26	TCMS-32HI-26		
50	15	32	TCMS-32HI-32		
63AF	50	18.5	40	TCMS-63HI-40	1
	50	22	50	TCMS-63HI-50	
	50	30	63	TCMS-63HI-63	
100AF	75	37	75	TCMS-100HI-75	1
	75	45	90	TCMS-100HI-90	
	75	45	100	TCMS-100HI-100	

☒ Non Stockable item

Motor Protection Circuit Breaker

Conforming IS/IEC 60947-1, IS/IEC 60947-2, IS/IEC 60947-4-1

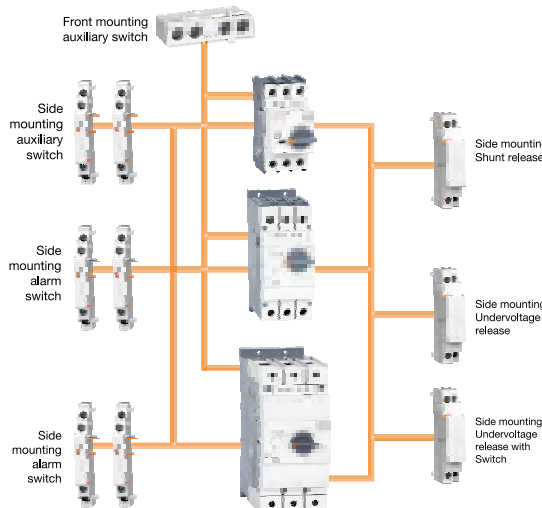


Accessories [HSN Code: 8538]

Description	Configuration	Model	MOQ
Auxiliary switch for front mounting	1NO+1NC	TFX11 (32A)	1
	1NO+1NC	TFX11	
	2NC	TFX02	
	2NO	TFX20	
Auxiliary switch for front side mounting on the left	1NO+1NC	TLX11	
	2NC	☒ TLX02	
	2NO	☒ TLX20	
Any trip alarm switch for side mounting on the left (TCMS-32)	1NO+1NC	TLA11	
	2NC	TLA02	
Any trip alarm switch for side mounting on the left (TCMS-63-100)	1NO+1NC	TLA11(63-100)	
	2NC	TLA02(63-100)	
Magnetic trip alarm switch for side mounting on the left	1NO+1NC	☒ TLAM11	
Shunt release for side mounting on the right	110~127V50Hz	☒ TRS110~127V50Hz	
	220~230V50Hz	☒ TRS220~230V50Hz	
	415~440V50Hz	TRS415~440V50Hz	
Undervoltage release for side mounting on the right	110~127V50Hz	TRU110~127V50Hz	
	220~230V50Hz	☒ TRU220~230V50Hz	
	415~440V50Hz	TRU415~440V50Hz	
Undervoltage release with switch for side mounting on the right	110~127V50Hz	TRUX110~127V50Hz	
	220~230V50Hz	☒ TRUX220~230V50Hz	
	415~440V50Hz	TRUX415~440V50Hz	
Insulation Barrier (for TCMS-100H/100HI only)		☒ TIB100	
Adaptor kit for MPCB + Mini Contactors	TCMS-32S+TC1M06-16	TDA-16SA	
	TCMS-32S+TP1M06-16	TDA-16SD	
	TCMS-32H/32HI+TC1M06-16	TDA-16HA	
	TCMS-32H/32HI+TP1M06-16	☒ TDA-16HD	
Busbar	2 Point	PB322	
		PB632	
	3 Point*	☒ PB323	
		PB633	
MPCB Enclosure (IP 65 Category)	For TCMS-32H/HI	EPH32-65S	
Extended Handle (Door Mounting with Door Interlock, Defeat Interlock & Padlock)	Extension Shaft 115mm		1
	TCMS-32H/HI	MEH32-115	
	TCMS-63H/HI	☒ MEH63-115	
	TCMS-100H/HI	☒ MEH100-115	
	Extension Shaft 315mm		1
	TCMS-32H/HI	MEH32-315	
	TCMS-63H/HI	☒ MEH63-315	
	TCMS-100H/HI	☒ MEH100-315	



B



☒ Non Stockable item



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Contactor 9A~800A



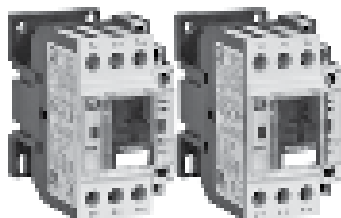
We touch your electricity everyday!

robusta2 Contactor

Global Certification   

Conforming IEC60947-1, IEC60947-4-1 & IEC60947-5-1

Contactors [HSN Code: 8536]



AC1 Duty (A)	AC3 415V Long life			Auxiliary Contacts	Reference	MOQ
	kW	HP	A			
25	2.2	3	7	1 NO+1NC	TC1D0711	1
25	4	5.5	9	1 NO+1NC	TC1D0911	
25	5.5	7.5	12	1 NO+1NC	TC1D1211	
32	9	12	18	1 NO+1NC	TC1D1811	
40	11	15	25	1 NO+1NC	TC1D2511	
50	15	20	32	1 NO+1NC	TC1D3211	
50	18.5	25	38	1 NO+1NC	TC1D3811	

Spare Top Housing for 3P Contactors [HSN Code: 8538]

For Contactor	Reference	MOQ
TC1-D0711	TA5-D0711	1
TC1-D0911	TA5-D0911	
TC1-D1211	TA5-D1211	
TC1-D1811	TA5-D1811	
TC1-D2511	TA5-D2511	
TC1-D3211	TA5-D3211	
TC1-D3811	TA5-D3811	

Coil Surge Suppressor [HSN Code: 8538]

Description	Voltage Ratings	Reference	MOQ
Varistor (AC/DC) Clip on mounting	12~55V 50/60Hz	TAD4VE	10
	56~136V 50/60Hz	TAD4VF	
	137~277V 50/60Hz	TAD4VU	
	278~575V 50/60Hz	TAD4VN	

Spare AC Coils for Contactor [HSN Code: 8538]

Use for Contactor	Reference	MOQ
TC1D07	TX1-D3	1
TC1D09		
TC1D12		
TC1D18		
TC1D25		
TC1D32		
TC1D38		

Mechanical Interlocks-Horizontal Mounted [HSN Code: 8538]

Use of Contactor	Reference	MOQ
TC1D07~TC1D38	LA9-D09978	10

robusta2 Contactor Coils [HSN Code: 8538]

Contactor TC1-D/TX1D3	24V	48V	110V	220V	240V	415V
50 Hz	B5	E5	F5	M5	U5	N5


Thermal Overload Relay [HSN Code: 8536]

Relay setting range (A)	Standard power ratings of 3-Phase Motors 50/60Hz, AC3 Category		Reference	Suitable for Contactor Rating (Amps)	Independent Mounting Kit
	HP	kW			
23-32	20	15	TR2DM32353	32	TA7D3264
30-38	30	22	TR2DM38355	38	

NOTE: robusta 2 Thermal Overload Relay reference TR2DM32353 ~TR2DM38355 can be mounted directly on robusta 2 Contactor without any additional fixing attachment.

How to order:

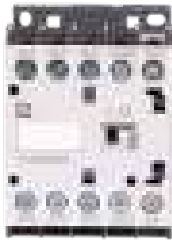
- Select applicable Coil Voltage required for Contactor.
- Complete the code by replacing the form above.
- MOQ- Minimum Order Quantity

* Stock for accessories are subject to availability.  Non Stockable item

Exceed M-range Contactor

Conforming IEC60947-1, IEC60947-4-1 & IEC60947-5-1

- Compact size - Single frame upto 16A
- Application flexibility - AC & DC coil
- Front mounted auxiliary contacts
- Compatible with directly mounted Mini OLR
- IP20 guarded terminals



Control Relays - 16 Amps

[HSN Code: 8536]

Rated Current (Ith)	Contact Configuration	With AC Coil		With DC Coil	
		Reference	MOQ	Reference	MOQ
16	2NO+2NC	TCA2ME22	10	TCA3ME22	10
	3NO+1NC	TCA2ME31		TCA3ME31	
	1NO + 3NC	TCA2ME13		TCA3ME13	
	4NO	TCA2ME40		TCA3ME40	
	4NC	TCA2ME04		TCA3ME04	

■ Please specify Coil Voltage.

Power Contactors - 3 Pole

[HSN Code: 8536]

AC1 Duty A	AC3 415V Long Life			Auxiliary Contacts		With AC Coil		Auxiliary Contacts		With DC Coil	
	kW	HP	A			Reference	MOQ			Reference	MOQ
18	2.2	3	7	1NO	-	TC1ME0710	10	1NO	-	TP1ME0710	10
				-	1NC	TC1ME0701		-	1NC	TP1ME0701	
20	4	5.5	9	1NO	-	TC1ME0910	10	1NO	-	TP1ME0910	10
				-	1NC	TC1ME0901		-	1NC	TP1ME0901	
22	5.5	7.5	12	1NO	-	TC1ME1210	10	1NO	-	TP1ME1210	10
				-	1NC	TC1ME1201		-	1NC	TP1ME1201	
22	7.5	10	16	1NO	-	TC1ME1610	10	1NO	-	TP1ME1610	10
				-	1NC	TC1ME1601		-	1NC	TP1ME1601	

■ Please specify Coil Voltage.

Coil Voltage Codes for Mini Contactors & Control Relays

Contactor	Voltage				
	24	48	110	230	415
AC	B	E	F	P	N
DC	BD	ED	-	-	-

Overload Relays for M-Range Contactors - Direct Mounting

Relay Range (Amps)	Reference	MOQ
0.28 ~ 0.4A	TR2ME0.4A	1
0.4 ~ 0.63A	TR2ME0.63A	
0.56 ~ 0.8A	TR2ME0.8A	
0.8 ~ 1.2A	TR2ME1.2A	
1.2 ~ 1.8A	TR2ME1.8A	
1.8 ~ 2.8A	TR2ME2.8A	
2.8 ~ 4A	TR2ME4A	
4 ~ 6.3A	TR2ME6.3A	
5.6 ~ 8A	TR2ME8A	
7 ~ 10A	TR2ME10A	
8 ~ 12.5A	TR2ME12.5A	
10 ~ 15A	TR2ME15A	
11 ~ 17A	TR2ME17A	

Mechanical Interlocks-Front Mounted

Use For Contactor		Reference	MOQ
AC	DC		
TC1ME07	TP1ME07	TA978MIME	1
TC1ME09	TP1ME09		
TC1ME12	TP1ME12		
TC1ME16	TP1ME16		

Accessories

Add-On-Block

[HSN Code: 8536]

Contact Configuration	Reference	MOQ
1NO+1NC	TA1ME11	
2NC	TA1ME02	
4NO	TA1ME40	
3NO+1NC	TA1ME31	
2NO+2NC	TA1ME22	
1NO+3NC	TA1ME13	
4NC	TA1ME04	

Coil Suppressor

Description	Voltage	Reference	MOQ
Varistor	12-48V AC/12-60V DC	TA980MESVE	10
	50-127V AC/60-180V DC	TA980MESVG	
	130-275V AC/80-300V DC	TA980MESVU	
	277-380V AC/300-510V DC	TA980MESVQ	
	400-510V AC	TA980MESVS	

Mini Contactors

Conforming IEC60947-1, IEC60947-4-1 & IEC60947-5-1



Control Relays - 10 Amps [HSN Code: 8536]

Rated Current (Ith)	Contact Configuration	With AC Coil		With DC Coil	
		Reference	MOQ	Reference	MOQ
10	2 NO+2NC	TCA2-M22	10	TCA3-M22	10
	3 NO+1NC	TCA2-M31		TCA3-M31	
	4 NO	TCA2-M40		TCA3-M40	
	1 NO + 3NC	TCA2-M13		TCA3-M13	
	4 NC	TCA2-M04		TCA3-M04	

Power Contactors - 3 Pole [HSN Code: 8536]



AC1 Duty A	AC3 415V Long Life			Auxiliary Contacts		With AC Coil		Auxiliary Contacts		With DC Coil	
	kW	HP	A			Reference	MOQ			Reference	MOQ
20	2.2	3	6	1NO	-	10	1	1NO	-	10	TP1-M0610
				-	1NC			-	1NC		TP1-M0601
	4	5.5	9	1NO	-			TC1-M0910			
				-	1NC			-	1NC		TP1-M0901
	5.5	7.5	12	1NO	-			TC1-M1210			
				-	1NC			-	1NC		TP1-M1201
	7.5	10	16	1NO	-			TC1-M1610			
				-	1NC			-	1NC		TP1-M1601

Please specify Coil Voltage.

Coil Voltage Codes for Mini Contactors & Control Relays

Contactor	Voltage				
	24	48	110	220	415
AC	B	E	F	M	N
DC	BD	ED	FD	MD	-

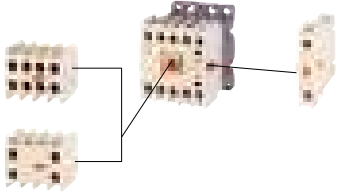
Overload Relays for Mini Contactors - Direct Mounting [HSN Code: 8536]

Relay Range (Amps)	Reference	MOQ	Independent Mounting Kit
0.10 - 0.16	TR2 - M0.14A	1	Reference TA7-M0964
0.16 - 0.25	TR2 - M0.21A		
0.25 - 0.4	TR2 - M0.33A		
0.4 - 0.63	TR2 - M0.52A		
0.63 - 1	TR2 - M0.82A		
1 - 1.6	TR2 - M1.3A		
1.6 - 2.5	TR2 - M2.1A		
2.5 - 4	TR2 - M3.3A		
4 - 6	TR2 - M5A		
5 - 8	TR2 - M6.5A		
6 - 9	TR2 - M7.5A		
7 - 10	TR2 - M8.5A		
9 - 13	TR2 - M11A		
12 - 16	TR2 - M14A		

B

ACCESSORIES

Add-On-Block [HSN Code: 8538]



Contact Configuration		Reference	MOQ
Front Mounted	2NO	TA1-M20	10
	1NO+1NC	TA1-M11	
	2NC	TA1-M02	
	4NO	TA1-M40	
	3NO+1NC	☒ TA1-M31	
	2NO+2NC	TA1-M22	
	1NO+3NC	☒ TA1-M13	
	4NC	TA1-M04	
Side Mounted	1NC	TA8-M01	
	1NO	TA8-M10	



Mechanical Interlocks for Horizontally Mounted [HSN Code: 8538]

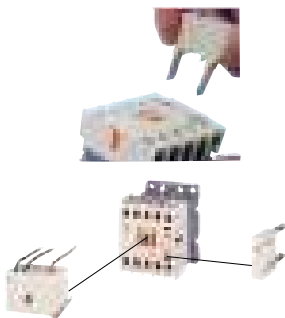
Use For Contactor		Reference	MOQ
AC	DC		
TC1-MS06	TP1-MS06	☒ TA9-M978	1
TC1-MS09	TP1-MS09		
TC1-MS12	TP1-MS12		
TC1-MS16	TP1-MS16		

Electronic Timer [HSN Code: 8538]



Description	Delay	Time	Voltage	Reference
Front Mounting Electronic Timer	ON Delay	0.1-30Sec	AC / DC24-48V	☒ TA2-M/ 1N
	ON Delay	0.1-30Sec	AC110-220V	☒ TA2-M/ 2N
	OFF Delay	0.1-30Sec	AC / DC24-48V	TA3-M/ 1F
	OFF Delay	0.1-30Sec	AC110-220V	TA3-M/ 2F

Coil Suppressor [HSN Code: 8538]



Description	Voltage	Reference	MOQ
Varistor	AC 24-48V	TA9-M980/1	10
	AC 60-127V	TA9-M980/2	
	AC 200-240V	☒ TA9-M980/3	
	DC 12-24V	TA9-M980/4	
	DC 30-72V	TA9-M980/5	
	DC 100-127 V	TA9-M980/6	
	DC 200-250 V	TA9-M980/7	

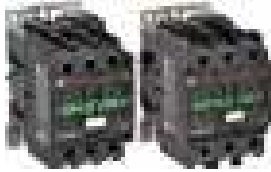
* Stock for accessories are subject to availability. ☒ Non Stockable item

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Exceed Contactor

Conforming IEC60947-1, IEC60947-4-1 & IEC60947-5-1

Exceed 3 Pole Power Contactor rating 6A-95A [HSN Code: 8536]



Size	AC1 Duty A	AC3 415V Long Life			Auxiliary Contacts	With AC Coil		Auxiliary Contacts	With DC Coil		MOQ
		KW	HP	A		Reference	Reference		Reference		
Frame-1	25	2.2	3	6	1NO	TC1D0610E	-	-	1		
					1NC	TC1D0601E	-	-			
		4	5.5	9	1NO	TC1D0910E	1NO	TP1D0910E			
					1NC	TC1D0901E	1NC	TP1D0901E			
	32	5.5	7.5	12	1NO	TC1D1210E	1NO	TP1D1210E			
					1NC	TC1D1201E	1NC	TP1D1201E			
	Frame-2	40	11	15	25	1NO	TC1D2510E	1NO		TP1D2510E	
						1NC	TC1D2501E	1NC		TP1D2501E	
50		15	20	32	1NO	TC1D3210E	1NO	TP1D3210E			
					1NC	TC1D3201E	1NC	TP1D3201E			
Frame-3	60	22	30	40	1NO+1NC	TC1D4011E	1NO+1NC	TP1D4011E			
					1NO+1NC	TC1D5011E	1NO+1NC	TP1D5011E			
	80	25	35	50	1NO+1NC	TC1D6511E	1NO+1NC	TP1D6511E			
					1NO+1NC	TC1D8011E	1NO+1NC	TP1D8011E			
125	45	60	80	1NO+1NC	TC1D9511E	1NO+1NC	TP1D9511E				
				1NO+1NC	TC1D9511E	1NO+1NC	TP1D9511E				

Exceed 4 Pole Power Contactor rating 12A-95A [HSN Code: 8536]

AC1 Duty A	Main Pole Configuration		Reference	MOQ
25	4NO	--	TC1D12004E	5
	2NO	2NC	TC1D12008E	
32	4NO	--	TC1D18004E	
	2NO	2NC	TC1D18008E	
40	4NO	--	TC1D25004E	
	2NO	2NC	TC1D25008E	
60	4NO	--	TC1D40004E	
	2NO	2NC	TC1D40008E	
80	4NO	--	TC1D50004E	
	2NO	2NC	TC1D50008E	
	4NO	--	TC1D65004E	
	2NO	2NC	TC1D65008E	
125	4NO	--	TC1D80004E	
	2NO	2NC	TC1D80008E	
	4NO	--	TC1D95004E	
	2NO	2NC	TC1D95008E	

Wide band Coil available in 50 Hz only

 Non-Standard coil

Note: Stock for accessories are subject to availability


* Available from CR-38A Contactor only.

AC Coil Voltage Codes for Contactors 9A-95A & Control Relays

Contactor	Voltage						
TC1-D	24	48	110	220	235	240	415
50Hz	B5	E5	F5	M5	C5W*	U5	N5
50/60Hz	B7	E7	F7	M7	-	U7	N7

DC Coil Voltage Codes for Contactors 9A-95A & Control Relays

Contactor	Voltage				
TP1-D	24	48	72	110	220
Normal Coil	BD	ED	SD	FD	MD
Wide band Coil#	BW	EW	-	FW	-

- NOTE:**
1. Add Suffix  Coil voltage to complete product code
 2. 235 V (C5W) Coil available only upto 38 Amps (AC3) Contactors.
 3. 22A, 38A & 45A current ratings also available on request.



Exceed Contactor

Global Certification | **RoHS** Compliant

Conforming IEC60947-1, IEC60947-4-1 & IEC60947-5-1

Exceed Contactor 3 Pole: Rating 115 A- 630A [HSN Code: 8536]

AC1 Duty A	AC3 415 V Long Life			With AC Coil	With DC Coil	MOQ
	kW	HP	A	Reference	Reference	
200	59	80	115	LC1FDP115AE	LC1FDP115AE	5
250	80	108	150	LC1FDP150AE	LC1FDP150AE	
275	100	136	185	LC1FDP185AE	LC1FDP185AE	
315	110	148	225	LC1FDP225AE	LC1FDP225AE	
350	140	190	265	LC1FDP265AE	LC1FDP265AE	
400	180	240	330	LC1FDP330AE	LC1FDP330AE	
500	220	300	400	LC1FDP400AE	LC1FDP400AE	
700	280	380	500	LC1FDP500AE	LC1FDP500AE	
1000	375	500	630	LC1FDP630AE	LC1FDP630AE	

Exceed Contactors 4 Pole: Rating AC1 200A ~ 1000A [HSN Code: 8536]

AC1 Duty A	Main Pole Configuration	With AC Coil	With DC Coil	MOQ
		Reference	Reference	
200	4 NO	LC1FDP1154AE	LC1FDP1154AE	5
250	4 NO	LC1FDP1504AE	LC1FDP1504AE	
275	4 NO	LC1FDP1854AE	LC1FDP1854AE	
315	4 NO	LC1FDP2254AE	LC1FDP2254AE	
350	4 NO	LC1FDP2654AE	LC1FDP2654AE	
400	4 NO	LC1FDP3304AE	LC1FDP3304AE	
500	4 NO	LC1FDP4004AE	LC1FDP4004AE	
700	4 NO	LC1FDPM5004AE	LC1FDPM5004AE	
1000	4 NO	LC1FDP6304AE	LC1FDP6304AE	

AC Coil Voltage Codes for Contactors 115A-780A

Contactor	Voltage			
	110	220	240	415
LC1FDP115-225 50Hz	F5	M5	U5	N5
LC1FDP265-780 50/60Hz	F7	M7	U7	N7

DC Coil Voltage Codes for Contactors 115A-780A

Contactor	Voltage			
	24#	48	110	220
LC1FDP	BD	ED	FD	MD

Not available for LCFDP630



robusta Power Contactors

Conforming IEC60947-1, IEC60947-4-1 & IEC60947-5-1



Control Relays - 10 Amps [HSN Code: 8536]



Rated Current(Ie) AC15 at 240V (Amps)	Contact Configuration	With AC Coil		With DC Coil	
		Reference	MOQ	Reference	MOQ
10	2 NO + 2 NC	TCA2-DN22 ■	10	TCA3-DN22 ■	10
	3 NO + 1 NC	TCA2-DN31 ■		TCA3-DN31 ■	
	4 NO	TCA2-DN40 ■		TCA3-DN40 ■	

Power Contactors 3 Pole : Rating 9A ~ 95A [HSN Code: 8536]



Size	AC1 Duty A	AC3 415V Long Life			Auxiliary Contacts		With AC Coil	MOQ	Auxiliary Contacts		With DC Coil	MOQ
		kW	HP	A	Reference	Reference	Reference					
Frame 1	25	4	5.5	9	1NO	-	TC1-D0910 ■	1	1NO	-	TP1-D0910 ■	1
					-	1NC	TC1-D0901 ■		-	1NC	TP1-D0901 ■	
		5.5	7.5	12	1NO	-	TC1-D1210 ■		1NO	-	TP1-D1210 ■	
	-				1NC	TC1-D1201 ■	-		1NC	TP1-D1201 ■		
	32	9	12.5	18	1NO	-	TC1-D1810 ■		1NO	-	TP1-D1810 ■	
					-	1NC	TC1-D1801 ■		-	1NC	TP1-D1801 ■	
11		15	22	1NO	-	TC1-D2210 ■	1NO	-	TP1-D2210 ■			
	-			1NC	TC1-D2201 ■	-	1NC	TP1-D2201 ■				
Frame 2	40	11	15	25	1NO	-	TC1-D2510 ■	1	1NO	-	TP1-D2510 ■	1
					-	1NC	TC1-D2501 ■		-	1NC	TP1-D2501 ■	
	15	20	32	1NO	-	TC1-D3210 ■	1NO		-	TP1-D3210 ■		
				-	1NC	TC1-D3201 ■	-		1NC	TP1-D3201 ■		
	18.5	25	38	1NO	-	TC1-D3810 ■	1NO		-	TP1-D3810 ■		
				-	1NC	TC1-D3801 ■	-		1NC	TP1-D3801 ■		
Frame 3	60	22	30	40	1NO	1NC	TC1-D4011 ■	1	1NO	1NC	TP1-D4011 ■	1
					1NO	1NC	TC1-D4511 ■		1NO	1NC	TP1-D4511 ■	
	80	25	35	50	1NO	1NC	TC1-D5011 ■		1NO	1NC	TP1-D5011 ■	
					1NO	1NC	TC1-D6511 ■		1NO	1NC	TP1-D6511 ■	
	100	37	50	70	1NO	1NC	TC1-D7011 ■		1NO	1NC	TP1-D7011 ■	
					1NO	1NC	TC1-D8011 ■		1NO	1NC	TP1-D8011 ■	
125	45	60	80	1NO	1NC	TC1-D8011 ■	1NO	1NC	TP1-D8011 ■			
				1NO	1NC	TC1-D9511 ■	1NO	1NC	TP1-D9511 ■			

AC Coil Voltage Codes for Contactors 9A-95A & Control Relays

Contactor	Voltage						
	24	48	110	220	235	240	415
TCA2-DN/TC1-D							
50Hz	B5	E5	F5	M5	C5W*	U5	N5
50/60Hz	B7	E7	F7	M7	-	U7	N7

DC Coil Voltage Codes for Contactors 9A-95A & Control Relays

Contactor	Voltage				
	24	48	72	110	220
TCA3-DN/TP1-D					
Normal Coil	BD	ED	SD	FD	MD
Wide band Coil#	BW	EW	-	FW	-

Wide band Coil available in 50 Hz only

Note: Stock for accessories are subject to availability

■ Non-Standard coil

* Available from CR-38A Contactor only.

robusta Power Contactors

Conforming IEC60947-1 & IEC60947-4-1



Power Contactors 4 Pole : Rating AC1 25A ~ 125A [HSN Code: 8536]



AC1 Duty A	AC1 Duty A	Main Pole Configuration		With AC Coil	MOQ	With DC Coil	MOQ	
				Reference		Reference		
Frame 1	25	4NO	--	TC1-D12004 ■	1	TP1-D12004 ■	1	
		2NO	2NC	TC1-D12008 ■		TP1-D12008 ■		
Frame 2	32	4NO	--	TC1-D18004 ■		-		-
		4NO	--	TC1-D25004 ■		TP1-D25004 ■		-
Frame 2	40	2NO	2NC	TC1-D25008 ■		TP1-D25008 ■		-
		4NO	--	TC1-D40004 ■		TP1-D40004 ■		-
Frame 3	60	2NO	2NC	TC1-D40008 ■		TP1-D40008 ■		-
		4NO	--	TC1-D50004 ■		-		-
Frame 3	80	2NO	2NC	TC1-D50008 ■		-		-
		4NO	--	TC1-D65004 ■		TP1-D65004 ■		-
Frame 3	100	2NO	2NC	TC1-D65008 ■		TP1-D65008 ■		-
		4NO	--	TC1-D70004 ■		TP1-D70004 ■		-
Frame 3	125	4NO	--	TC1-D80004 ■	TP1-D80004 ■	-		
		2NO	2NC	TC1-D80008 ■	TP1-D80008 ■	-		
Frame 3	125	4NO	--	TC1-D95004 ■	TP1-D95004 ■	-		
		2NO	2NC	TC1-D95008 ■	TP1-D95008 ■	-		

Power Contactors 4 Pole 4NC : Rating 9A ~ 25A [HSN Code: 8536]

Size	AC1 Duty A	AC3 415 V Long Life			With AC Coil	MOQ
		KW	HP	A	Reference	
Frame 1	25	4	5.5	9	TC1-D09006 ■	10
		5.5	7.5	12	TC1-D12006 ■	
Frame 2	40	11	15	25	TC1-D25006 ■	

AC Coil Voltage Codes for Contactors 9A-95A & Control Relays

Contactor	Voltage						
	24	48	110	220	235	240	415
TCA2-DN/TC1-D							
50Hz	B5	E5	F5	M5	C5W*	U5	N5
50/60Hz	B7	E7	F7	M7	-	U7	N7

DC Coil Voltage Codes for Contactors 9A-95A & Control Relays

Contactor	Voltage				
	24	48	72	110	220
TCA3-DN/TP1-D					
Normal Coil	BD	ED	SD	FD	MD
Wide band Coil#	BW	EW	-	FW	-

Wide band Coil available in 50 Hz only

Note: Stock for accessories are subject to availability

■ Non-Standard coil

* Available from CR-38A Contactor only.

- NOTE:**
1. Add Suffix ■ Coil voltage to complete product code
 2. 235 V (C5W) Coil available only upto 38 Amps (AC3) Contactors.
 3. 22A, 38A & 45A current ratings also available on request.

robust^Ta Power Contactors

Main Technical Data for Contactors, TC1D09A-95A

Type	Description
Number of poles	
Rated insulation Voltage (Ui)	
Conforming to standards	
Approvals	
Degree of protection	
Ambient air temperature (around the device)	Storage
	Operation
Maximum operating altitude	Without derating
Operating positions	Without derating
Shock resistance (1) 1/2 sine wave=11ms	Contactors open
	Contactors closed
Vibration resistance (1) 5 300 Hz	Contactors open
	Contactors closed
Pole Characteristics	
Number of poles	
Rated operational current (Ie) (Ue < 440V)	In AC-3, $\theta < 55$ C
	In AC-1, $\theta < 40$ C
Rated operational voltage (Ue)	Up to
Rated thermal current (Ith)	$\theta < 40$ C
Short circuit protection by fuses U<440V	gI fuses
Average impedance per pole	At Ith and 50Hz
Power dissipation per pole for the above operational currents	AC-1
	AC-3
Cableing	Short-circuit protection by fuses U< 440V
Flexible cable without cable end	1 conductor
	2 conductors
Flexible cable with cable end	1 conductor
	2 conductors
Solid cable without cable end	1 conductor
	2 conductors
Tightening Torque	Power circuit connections
	(1) In the least favourable direction, without change of contact state (coil supplied at Uc)

NOTE: No certification available for 2P contactors & 22A Contactor.

		TC1D09	TC1D12	TC1D18	TC1D22	TC1D25	TC1D32	TC1D38	TC1D40	TC1D50	TC1D65	TC1D80	TC1D95
		2 / 3 / 4	2 / 3 / 4	2 / 3	2 / 3	2 / 3 / 4	2 / 3	2 / 3	2 / 3 / 4	2 / 3 / 4	2 / 3 / 4	2 / 3 / 4	2 / 3 / 4
V		1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000
IEC60947-1,60947-4, EN60947													
UL, CSA, CE													
Protection against direct finger contact													
⊖C		-25 to 70											
⊖C		-5...+55 (0.85-1.1 Uc)											
⊖C		-5 to 70											
m		3000											
+30 possible, in relation to normal vertical mounting plane													
		10g	10g	10g	10g	8g	8g	8g	8g	8g	8g	8g	8g
		15g	15g	15g	15g	15g	15g	15g	10g	10g	10g	10g	10g
		2g	2g	2g	2g	2g	2g	2g	2g	2g	2g	2g	2g
		4g	4g	4g	4g	4g	4g	4g	3g	3g	3g	3g	3g
		2 / 3 / 4	2 / 3 / 4	2 / 3	2 / 3	2 / 3 / 4	2 / 3	2 / 3	2 / 3 / 4	2 / 3 / 4	2 / 3 / 4	2 / 3 / 4	2 / 3 / 4
	A	9	12	18	22	25	32	38	40	50	65	80	95
	A	25	25	32	32	40	50	50	60	80	80	125	125
	V	690	690	690	690	690	690	690	690	690	690	690	690
	A	25	25	32	32	40	50	50	60	80	80	125	125
	A	25	25	32	32	40	50	50	60	80	80	125	125
	mΩ	2.5	2.5	2.5	2.5	2	2	2	1.5	1.5	1	0.8	0.8
	W	1.56	1.56	2.5	2.5	3.2	5	5	5.4	9.6	6.4	12.5	12.5
	W	0.2	0.36	0.8	0.8	1.25	2	2	2.4	3.7	4.2	5.1	7.2
		Min/max c.s.a	Min/max c.s.a	Min/max c.s.a	Min/max c.s.a	Min/max c.s.a	Min/max c.s.a	Min/max c.s.a	Min/max c.s.a	Min/max c.s.a	Min/max c.s.a	Min/max c.s.a	Min/max c.s.a
	mm ²	1/4	1/4	1.5/6	1.5/6	1.5/10	2.5/10	2.5/10	2.5/25	2.5/25	2.5/25	4/50	4/50
	mm ²	1/4	1/4	1.5/6	1.5/6	1.5/6	2.5/10	2.5/10	2.5/16	2.5/16	2.5/16	4/25	4/25
	mm ²	1/4	1/4	1/6	1/6	1/6	1/10	1/10	2.5/25	2.5/25	2.5/25	4/50	4/50
	mm ²	1/2.5	1/2.5	1/4	1/4	1/4	1.5/6	1.5/6	2.5/10	2.5/10	2.5/10	4/16	4/16
	mm ²	1/4	1/4	1.5/6	1.5/6	1.5/6	1.5/10	1.5/10	2.5/25	2.5/25	2.5/25	4/50	4/50
	mm ²	1/4	1/4	1.5/6	1.5/6	1.5/6	2.5/10	2.5/10	2.5/16	2.5/16	2.5/16	4/25	4/25
	N.m	1.2	1.2	1.7	1.7	1.85	2.5	2.5	5	5	5	9	9

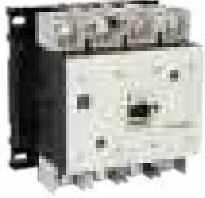
NOTE: LA6DK01 (Mechanical latch block) applicable upto 32A only.

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robust^{Ta} Power Contactors

Conforming IEC60947-1 & IEC60947-4-1

Power Contactors 3 Pole : 115~160A AC3 [HSN Code: 8536]



AC1 Duty A	AC3 415 V Long Life			Auxiliary contacts		With AC Coil	MOQ
	kW	HP	A			Reference	
200A	55	73	115	1NO	1NC	TC1-D115116 ^{■*}	1
	55	73	115	1NO	1NC	TC1-D115111 ^{■*}	
	55	73	120	1NO	1NC	TC1-D120116 ^{■*}	
	55	73	120	1NO	1NC	TC1-D120111 ^{■*}	
	75	101	150	1NO	1NC	TC1-D150116 ^{■*}	
	75	101	150	1NO	1NC	TC1-D150111 ^{■*}	
	75	101	160	1NO	1NC	TC1-D160116 ^{■*}	
	75	101	160	1NO	1NC	TC1-D160111 ^{■*}	

Power Contactors 4 Pole: Rating AC1 200A [HSN Code: 8536]



AC1 Duty A	Main Pole Configuration		With AC Coil	MOQ
			Reference	
200A	4NO	--	TC1-D115004 ^{■*}	1
	4NO	--	TC1-D1150046 ^{■*}	
	4NO	--	TC1-D150004 ^{■*}	
	4NO	--	TC1-D1500046 ^{■*}	

* Busbar connection * Cable connection

Spare main contacts sets (115~160), 3P/4P [HSN Code: 8538]



Arc Chamber

Contactors	Reference	MOQ
TC1D115	TA5 D115118031	1
TC1D120	TA5 D120118031	
TC1D150	TA5 D150118031	
TC1D160	TA5 D160118031	
TC1D115004	TA5 D115804	
TC1D150004	TA5 D150804	

Spare Busbar connection sets (115~160), 3P/4P



Cable connection set 3 & 4 Pole

Contactors	Reference	MOQ
TC1D115	TA9 D11511503	1
TC1D120		
TC1D150		
TC1D160		
TC1D115004	TA9 D115504	
TC1D150004		

Spare Arc Chamber (top housing) for 3P Contactors (115~160)



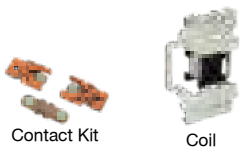
Busbar connection set 3 & 4 Pole

Contactors	Reference	MOQ
TC1D115	TA5 D1151150	1
TC1D120	TA5 D1201150	
TC1D150	TA5 D1501150	
TC1D160	TA5 D1601150	

Spare Coils (115~160), 3 Pole / 4 Pole

AC Coil	Reference	MOQ
50 Hz AC	TX1D8 [■] B5	1
	TX1D8 [■] F5	
	TX1D8 [■] M5	
	TX1D8 [■] N5	

Spare Cable connection sets (115~160), 3P/4P [HSN Code: 8538]



Contact Kit

Coil

Contactors	Reference	MOQ
TC1D115	TA9 D11511603	1
TC1D120		
TC1D150		
TC1D160		
TC1D115004	TA9 D115604	
TC1D150004		

Spare Arc Chamber (top housing) for 4P Contactors (115~160)

Contactors	Reference	MOQ
TC1D115004	TA5 D115450	1
TC1D150004	TA5 D150450	

AC Coil Voltage

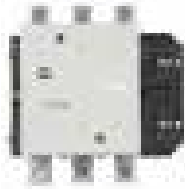
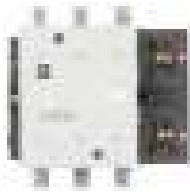
Contactors	Voltage			
	110	24	220	415
50Hz	F5	B5	M5	N5

robusta Power Contactors

Conforming IEC60947-1 & IEC60947-4-1



Power Contactors with Dust Cover 3 Pole [HSN Code: 8536]



AC1 Duty A	AC3 Long Life			With AC Coil	MOQ	With DC Coil	MOQ
	kW	HP	A	Reference		Reference	
200	59	80	115	LC1FDP115A ■	1	LC1FDP115A ■	1
250	80	108	150	LC1FDP150A ■		LC1FDP150A ■	
275	100	136	185	LC1FDP185A ■		LC1FDP185A ■	
275	105	140	200	LC1FDP200A ■		LC1FDP200A ■	
315	110	148	225	LC1FDP225A ■		LC1FDP225A ■	
350	140	190	265	LC1FDP265A ■		LC1FDP265A ■	
350	150	200	300	LC1FDP300A ■		LC1FDP300A ■	
400	180	240	330	LC1FDP330A ■		LC1FDP330A ■	
500	220	300	400	LC1FDP400A ■		LC1FDP400A ■	
600	240	320	460	LC1FDP460A ■		-	
700	280	380	500	LC1FDP500A ■		LC1FDP500A ■	
800	355	430	580	LC1FDP580A ■		-	
1000	375	500	630	LC1FDP630A ■		LC1FDP630A ■	
1600	425	580	780	☒ LC1FDP780A ■		☒ LC1FDP780A ■	
1000	450	610	800	☒ LC1FDP800A ■		☒ LC1FDP800A ■*	

- Power Contactors with dust cover 2 Pole variants available on requests
- Power Contactors with dust cover rating 115-800A are supplied factory assembled complete with No-Volt Coil and auxiliary contact block 2NO+2NC.
- *For DC supply, Bypass rectifier and connect DC supply directly to coil terminals A1-A2

**Hoisting Power Contactors with dust cover
3 Pole: Rating 115A-630A [HSN Code: 8536]**

AC1 Duty A	AC3 415 V Long Life			With AC Coil	MOQ
	kW	HP	A	Reference	
200	59	80	115	LC1FDP115HCA ■	1
250	80	110	150	LC1FDP150HCA ■	
275	100	135	185	LC1FDP185HCA ■	
315	110	150	225	LC1FDP225HCA ■	
350	140	190	265	LC1FDP265HCA ■	
355	150	200	300	LC1FDP300HCA ■	
400	180	220	330	LC1FDP330HCA ■	
500	220	300	400	LC1FDP400HCA ■	
700	280	380	500	LC1FDP500HCA ■	
1000	375	500	630	LC1FDP630HCA ■	

**Power Contactors with dust cover
4 Pole : Rating AC1 200A ~ 1600A [HSN Code: 8536]**

AC1 Duty A	Main Pole Configuration	With AC Coil	With DC Coil	MOQ
		Reference	Reference	
200	4 NO	LC1FDP1154 ■	LC1FDP1154 ■	1
250	4 NO	LC1FDP1504 ■	LC1FDP1504 ■	
275	4 NO	LC1FDP1854 ■	LC1FDP1854 ■	
315	4 NO	LC1FDP2254 ■	LC1FDP2254 ■	
350	4 NO	☒ LC1FDP2654 ■	☒ LC1FDP2654 ■	
400	4 NO	☒ LC1FDP3304 ■	☒ LC1FDP3304 ■	
500	4 NO	☒ LC1FDP4004 ■	☒ LC1FDP4004 ■	
700	4 NO	☒ LC1FDPM5004 ■	☒ LC1FDPM5004 ■	
1000	4 NO	☒ LC1FDP6304 ■	☒ LC1FDP6304 ■	
1600	4 NO	☒ LC1FDP7804 ■	☒ LC1FDP7804 ■	

Minimum Order Qty. for Hoisting Power Contactors will be 10 Nos.

4 Pole Power Contactors with dust cover rating AC1 200-1600A are supplied factory assembled complete with No-Volt Coil and auxiliary contact block 2NO+2NC.

AC Coil Voltage Codes for Contactors 115A~780A

Contactor	Voltage			
	110	220	240 ♦	415
LC1FDP115-225 50Hz	F5	M5	U5	N5
LC1FDP265-780 50/60Hz	F7	M7	U7	N7

♦ Not Available for LC1FDP780

■ Non-Standard coil available on request rating 115#780A

DC Coil Voltage Codes for Contactors 115A~780A

Contactor	Voltage			
	24#	48	110	220
LC1FDP	BD	ED	FD	MD

Not available for LCFDP630 & LC1FDP780

Coil Voltage Codes for Contactor 800A

Contactor	Voltage		
	110/127	220/240	380/400
LC1-FDP - AC	FW*	MW*	QW**
LC1-FDP-DC	FW	MW	QW

*With rectifier DRTE4U **With rectifier DRTE4S

Main Technical Data for Contactors, TC1D115A & TC1D150A

Type	Description	TC1D115A	TC1D150A	
Number of poles		3 / 4	3 / 4	
Environment				
Rated insulation Voltage(Ui)	V	1000		
Conforming to standards		IEC60947-1,60947-4-1		
Degree of protection		Protection against direct finger contact		
Ambient air temperature (around the device)	□C	-60...+80		
	□C	-5...+55(0.8...1.1Uc)		
	□C	-5 to +70, for operation at Uc		
Maximun operating altitude	Without derating	m	3000	
Operating positions	Without derating	□ 30 possible, in relation to normal vertical mounting plane		
Pole Characteristics				
Number of poles		3 / 4	3 / 4	
Rated operational current (Ie) (Ue< 440V)	In AC-3, θ< 55 C	A	115	150
	In AC-1, θ< 40 C	A	200	
Rated operational voltage (Ue)	Up to	V	1000	
Rated thermal current (Ith)	θ<40 C	A	200	
Rated making capacity	I rms conforming to IEC 60947-4	A	1150	1500
Rated breaking capacity	I rms 220-380-415-440V	A	920	1200
Permissible short time rating from cold state, no current flowing for preceding 15 minutes, at θ< 40°C	For 10 s	A	920	1200
Short- circuit protection by fuses U<440V	gl fuses	A	200	
Average impedance per pole	At Ith and 50Hz	mΩ	0.6	
Power dissipation per pole or the above operational currents	AC-1	W	24	
	AC-3	W	7.9	
Cabling	Short-circuit protection by fuses U<440V		Min/max c.s.a	
Flexible cable without cable end	1 conductor	mm ²	10/120	
	2 conductors	mm ²	10/50	
Flexible cable with cable end	1 Conductor	mm ²	10/120	
	2 conductors	mm ²	10/50	
Solid cable without cable end	1 Conductor	mm ²	10/50	
	2 conductors	mm ²	10/120	
Tightening Torque	Power circuit connections	N.m	12	
Rated control circuit Voltage (Uc)	50 Hz coils		25V 415V	
Control Voltage Limits (θ< 55°C)				
50 Hz coils	Operational		0.85...1.1Uc	
	Drop -out		0.2...0.7Uc	
Average consumption at 20° C and at Uc			30 VA	
Mechanical life	Million Operations		8	

NOTE: 3 Pole Contactors are  Certified

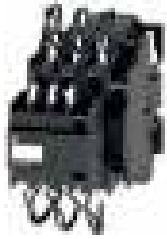
Capacitor Duty Contactors 3 Pole, AC

Conforming IEC60947-1 & IEC60947-4-1



Contactor [HSN Code: 8536]

Size	kVAR Rating	Auxiliary Contacts	Reference	MOQ
Frame 1	7	1NO+1NC	☒TC1D07K11 ■	1
		2NC	TC1D07K02 ■	
	10	1NO+1NC	☒TC1D10K11 ■	
		2NC	TC1D10K02 ■	
	12.5	1NO+1NC	☒TC1D12K11 ■	
		2NC	TC1D12K02 ■	
16.7	1NO+1NC	☒TC1D16K11 ■		
	2NC	TC1D16K02 ■		
Frame 2	20	1NO+1NC	☒TC1D20K11 ■	
		2NC	TC1D20K02 ■	
	25	1NO+1NC	☒TC1D25K11 ■	
		2NC	TC1D25K02 ■	
Frame 3	33.3	1NO+2NC	☒TC1D33K12 ■	
	40	1NO+2NC	☒TC1D40K12 ■	
	50	1 NO+2NC	☒TC1D50K12 ■	
	60	1NO+2NC	☒TC1D60K12 ■	
	75	1NO+2NC	☒TC1D75K12 ■	
	80	1NO+2NC	☒TC1D80K12 ■	
	100	1NO+2NC	☒TC1D100K12 ■	



B

AC Coil Voltage robusta Capacitor Duty Contactors

Contactor	Voltage					
	24	110	220	235	240	415
50Hz	B5	F5	M5	C5W*	U5	N5
50/60Hz	B7	F7	M7	-	U7	N7

* Available upto 25kVAR only.

How to order:

- Select applicable Coil Voltage required for Contactor.
- Complete the code by replacing the ■
- Additional Auxiliary Block, Timers and other accessories are also available.



robusta Overload Relay

Conforming IEC60947-1, IEC60947-4-1 & IEC60947-5-1

GLOBAL CERTIFICATION



Thermal Overload Relays Direct Mounting Trip class 10 [HSN Code: 8536]

Relay Setting Range (Amps)	Standard Power Rating for 3 Ph. Motor at 415V		Reference	Suitable for Contactor Rating (Amps)	Independent Mounting Kit	MOQ	
	HP	kW					
Direct Mounting							
0.10 ~ 0.16	*	*	☒ TRD09301	9	TA7-D0964 [HSN Code: 8538]	1	
0.16 ~ 0.25	*	*	☒ TR2D09302				
0.25 ~ 0.40	*	*	TR2D09303				
0.40 ~ 0.63	*	*	TR2D09304				
0.63 ~ 1.00	0.5	0.37	TR2D09305				
1.00 ~ 1.60	0.75	0.55	TR2D09306				
1.25 ~ 2.00	1	0.75	TR2D093X6				
1.60 ~ 2.50	1.5	1.1	TR2D09307				
2.50 ~ 4.00	2	1.5	TR2D09308				
4.00 ~ 6.00	3	2.2	TR2D09310				
5.50 ~ 8.00	5	3.7	TR2D09312				
7.00 ~ 10.0	5.5	4	TR2D09314				
9.0 ~ 13.0	7.5	5.5	TR2D12316				12
9.0 ~ 14.0	7.5	5.5	TR2D12316X				12
12.0 ~ 18.0	12	9	TR2D18321	18			
14.0 ~ 22.0	12	9	TR2D18321X	18			
17.0 ~ 25.0	15	11	TR2D25322	25			
23.0 ~ 32.0	20	15	TR2D32353	32	TA7-D3264 [HSN Code: 8538]		
28.0 ~ 36.0	25	18	TR2D32355				
23.0 ~ 32.0	20	15	TR2D40353	40	TA7-D4064 [HSN Code: 8538]		
30.0 ~ 40.0	30	22	TR2D40355				
37.0 ~ 50.0	35	25	TR2D65357	50			
48.0 ~ 65.0	40	30	TR2D65359	65			
55.0 ~ 70.0	50	37	TR2D65361				
63.0 ~ 80.0	60	45	TR2D80363	80			
80.0 ~ 93.0	65	49	TR2D95365	95			
Independent Mounting							
65 ~ 105	75	55	LR1F105	-	-	1	
80 ~ 125	80	59	LR1F125				
100 ~ 160	110	80	LR1F160				
125 ~ 200	135	100	LR1F200				
160 ~ 250	175	129	LR1F250				
200 ~ 315	220	160	☒ LR1F315				
250 ~ 400	270	200	☒ LR1F400				
315 ~ 500	350	257	☒ LR1F500				
400 ~ 630	480	355	☒ LR1F630				
500 ~ 800	580	425	☒ LR1F800				
630 ~ 1000	680	500	☒ LR1F1000				

Thermal Overload Relays Protective Shroud for LR1-F105-630 [HSN Code: 8538]

Relay Type	Reference
LR1-F105	☒ LA9F702
LR1-F125	
LR1-F160	
LR1-F200	
LR1-F250	LA9F703
LR1-F315	
LR1-F400	
LR1-F500	
LR1-F630	LA9F704
LR1-F800	

☒ Non Stockable item

Heavy Duty Overload Relays Independent Mounting Trip class 30 [HSN Code: 8536]

Relay Setting Range (Amps)	Reference	MOQ
2.5-4.0	TR6F4	1
4.0-6.3	TR6F6.3	
6.3-10	TR6F10	
8.0-12.5	TR6F12.5	
10-16	TR6F16	
16-25	TR6F25	
25-40	☒ TR6F40	
40-63	☒ TR6F63	
63-100	☒ TR6F100	
100-160	☒ TR6F160	
125-200	☒ TR6F200	
160-250	☒ TR6F250	
250-400	☒ TR6F400	

Accessories for robusTa & ExceedD Contactors



Add-On Block for Contactor Rating 9A-800A [HSN Code: 8538]

Contact Configuration	Reference	MOQ
Front Mounted	1 NO	TA1-DN10*
	1 NC	TA1-DN01*
	2 NO	TA1-DN20
	1 NO+1 NC	TA1-DN11
	2 NC	TA1-DN02
	4 NO	TA1-DN40
	3 NO+1 NC	TA1-DN31
	2 NO+2 NC	TA1-DN22
Side Mounted	1 NO+3 NC	TA1-DN13
	4 NC	TA1-DN04
	1 NO+1 NC	TA8-DN11**
	2 NO	TA8-DN20**

* Suitable for robusTa Contactor rating 25-95A only.

* 25A-38A, 1 Nos can be fitted & for 40-95A, 2 Nos.

** Suitable for robusTa Contactor rating 9-95A only & can be used for TC1-D115-160A

Mechanical Interlocks - Horizontal Mounted [HSN Code: 8538]

Contact Configuration		Reference	MOQ
AC	DC		
TC1-D09	TP1-D09	LA9-D09978	10
TC1-D12	TP1-D12		
TC1-D18	TP1-D18		
TC1-D25	TP1-D25		
TC1-D32	TP1-D32	LA9-D50978	10
TC1-D40	TP1-D40		
TC1-D50	TP1-D50		
TC1-D65	TP1-D65		
TC1-D70	TP1-D70	LA9-D80978	10
TC1-D80	TP1-D80		
TC1-D95	TP1-D95		

Spare AC Coils Control Relay & Contactor 9A-95A [HSN Code: 8538]

Use for Contactor AC	Reference	MOQ
TCA2-DN	TX1-D2 ■	20
TC1-D09		
TC1-D12		
TC1-D18		
TC1-D25	TX1-D4 ■	10
TC1-D32		
TC1-D40	TX1-D6 ■	10
TC1-D50		
TC1-D63		
TC1-D80		
TC1-D95		

Spare DC Coils Control Relay & Contactor 9A-80A [HSN Code: 8538]

Use for Contactor DC	Reference		MOQ
	Normal	Wideband	
TCA3 - DN	TX4-D2 ■	TX5-D2 ■	1
TP1 - D09			
TP1 - D12			
TP1 - D18	TX4-D4 ■	TX5-D4 ■	1
TP1 - D25			
TP1 - D32	TX4-D40 ■	TX5-D40 ■	1
TP1 - D40			
TP1 - D50			
TP1 - D65	TX4-D80 ■	TX5-D80 ■	1
TP1 - D80			
TP1 - D95			

■ Complete the code for Spare Coil by indicating the Coil Voltage required after the reference

NOTE: Stock for accessories are subject to availability

Pneumatic Timer Block-Front Mounted [HSN Code: 8538]

Contact Configuration	Reference	MOQ
ON delay	1 NO+1 NC	TA2-DT0
ON delay	1 NO+1 NC	TA2-DT2
ON delay	1 NO+1 NC	TA2-DT4
OFF delay	1 NO+1 NC	TA3-DR0
OFF delay	1 NO+1 NC	TA3-DR2
OFF delay	1 NO+1 NC	TA3-DR4
Star Delta	1 NO+1 NC	TA2-DS2

Coil Surge Suppressor for Contactor 9-95A [HSN Code: 8538]

Description	Voltage Ratings	Reference	MOQ
Varistor (AC/DC) Clip-on mounting	24-48VAC/DC	TA9AMOV980E	10
	110-240V AC/DC	TA9AMOV980U	
	70-150V AC/DC	TA9AMOV980F	
RC Circuit (AC) Clip-on mounting	24-48V AC	TA9RC980E	10
	110-240V AC	TA9RC980U	
	380-440V AC	TA9RC980N	

Electrical & Mechanical Interlocks-Horizontal Mounted

Use for Contactor		Reference*	MOQ
AC	DC		
TC1-D09	TP1-D09	ELA9-D09978	10
TC1-D12	TP1-D12		
TC1-D18	TP1-D18		
TC1-D25	TP1-D25		
TC1-D32	TP1-D32	ELA9-D50978	10
TC1-D40	TP1-D40		
TC1-D50	TP1-D50		
TC1-D65	TP1-D65	ELA9-D80978	10
TC1-D80	TP1-D80		
TC1-D95	TP1-D95		

ACCESSORIES

**Spare AC Coils for Hoisting Power Contactor
[HSN Code: 8538]**

Contactor	110V	220V	240V	415V
LC1-FDP115HCA	LX9FF110V	LX9FF220V	LX9FF240V	-
LC1-FDP150HCA				
LC1-FDP185HCA	LX9FG110V	LX9FG220V	LX9FG240V	-
LC1-FDP225HCA				
LC1-FDP265HCA	LX9FH1102V	LX9FH2202V	LX9FH2402V	-
LC1-FDP330HCA				
LC1-FDP400HCA	LX9FJ925	LX9FJ931	LX9FJ932	LX9FJ936
LC1-FDP500HCA	LX9FK925	LX9FK931	LX9FK932	LX9FK936
LC1-FDP630HCA	LX9FL924	LX9FL930	LX9FL931	LX9FL936

NOTE: The above Coil includes rectifier price. Standard Packing 1 No.

**Spare AC Coils for Contactors Rating 115-800A
[HSN Code: 8538]**

Contactor	110V	220V	240V	415V
LC1-FDP115A	LX1FF-110V	LX1FF-220V	LX1FF-240V	LX1FF-415V
LC1-FDP150A				
LC1-FDP185A	LX1FG-110V	LX1FG-220V	LX1FG-240V	LX1FG-415V
LC1-FDP200A				
LC1-FDP225A				
LC1-FDP265A				
LC1-FDP300A	LX1FH-1102V	LX1FH-2202V	LX1FH-2402V	LX1FH-4152V
LC1-FDP330A				
LC1-FDP400A	LX1FJ-110V	LX1FJ-220V	LX1FJ-240V	LX1FJ-415V
LC1-FDP500A	LX1FK-110V	LX1FK-220V	LX1FK-240V	LX1FK-415V
LC1-FDP630A	LX1FL-110V	LX1FL-220V	LX1FL-240V	LX1FL-415V
LC1-FDP780A	LX1FX-110V	LX1FX-220V	LX1FX-240V	LX1FX-415V
LC1-FDP800A	LX4F8FWAC	LX4F8MWAC	LX4F8MWAC	LX4F8QWAC*

AC Coils will be suitable for 50Hz only. *Available in 380/400V only

NOTE: The above Coil includes rectifier price. Std. Packing 1 Nos.

**Mechanical Interlocks for Contactor 115A-630A
Vertically/Horizontally Mounted**

Contactor	Reference	MOQ	
Horizontally Mounted			
LC1-FDP115A	LA9-FF970	1	
LC1-FDP150A			
LC1-FDP185A	LA9-FG970		
LC1-FDP200A			
LC1-FDP225A			
LC1-FDP265A			
LC1-FDP300A	LA9-FJ970		
LC1-FDP330A			
LC1-FDP400A			
LC1-FDP500A / LC1-FDPM5004A			
LC1-F630A / LC1-FDP800A			
LC1-F630A / LC1-FDP800A	LA9-FL970		
Vertically Mounted			
LC1-FDP115A	LA9-FF4F		1
LC1-FDP150A			
LC1-FDP185A	LA9-FG4G		
LC1-FDP200A			
LC1-FDP225A			
LC1-FDP265A	LA9-FH4H		
LC1-FDP300A			
LC1-FDP330A			
LC1-FDP400A			
LC1-FDP500A/LC1-FDPM5004A	LA9-FK4K		
LC1-FDP800A/LC1-F630A	LA9-FL4L		
LC1-FDP780A	LA9-FX970		

Note: Stock for accessories are subject to availability

**Spare DC Coils for Contactors Rating 115A-800A
[HSN Code: 8538]**

Contactor	110V	220V	24V	48V
LC1-FDP115A	LX4FF-110V	LX4FF-220V	LX4FF-24V	LX4FF-48V
LC1-FDP150A				
LC1-FDP185A	LX4FG-110V	LX4FG-220V	LX4FG-24V	LX4FG-48V
LC1-FDP225A				
LC1-FDP265A	LX4FH-110V	LX4FH-220V	LX4FH-24V	LX4FH-48V
LC1-FDP330A				
LC1-FDP400A	LX4FJ-110V	LX4FJ-220V	Not Available	LX4FJ-48V
LC1-FDP500A	LX4FK-110V	LX4FK-220V	Not Available	LX4FK-48V
LC1-FDP630A	LX4FL-110V	LX4FL-220V	Not Available	LX4FL-48V
LC1-FDP780A	-	LX4FX-220V	-	-
LC1-FDP800A	LX4F8FWDC	LX4F8MWDC	-	LX4F8QWDC*

NOTE: The above Coil includes rectifier price. Standard Packing 1 No.

*Available in 380/400V only.

**Spare Top Housing for 3P/4P robuTa Contactors
[HSN Code: 8538]**

For Control Relay Contactor	Reference		MOQ
	AC	DC	
For 3 Pole			
TCA2-DN40, TCA3-DN40	TA5-DN40	TA5-DN40 DC	1
TCA2-DN31, TCA3-DN31	TA5-DN31	TA5-DN31 DC	
TCA2-DN22, TCA3-DN22	TA5-DN22	TA5-DN22 DC	
TC1-D0910, TP1-D0910	TA5-D0910	TA5-D0910 DC	
TC1-D0901, TP1-D0901	TA5-D0901	TA5-D0901 DC	
TC1-D1210, TP1-D1210	TA5-D1210	TA5-D1210 DC	
TC1-D1201, TP1-D1201	TA5-D1201	TA5-D1201 DC	
TC1-D1810, TP1-D1810	TA5-D1810	TA5-D1810 DC	
TC1-D1801, TP1-D1801	TA5-D1801	TA5-D1801 DC	
TC1-D2210, TP1-D2210	TA5-D2210	TA5-D2210 DC	
TC1-D2201, TP1-D2201	TA5-D2201	TA5-D2201 DC	
TC1-D2510, TP1-D2510	TA5-D2510	TA5-D2510 DC	
TC1-D2501, TP1-D2501	TA5-D2501	TA5-D2501 DC	
TC1-D3210, TP1-D3210	TA5-D3210	TA5-D3210 DC	
TC1-D3201, TP1-D3201	TA5-D3201	TA5-D3201 DC	
TC1-D3810, TP1-D3810	TA5-D3810	TA5-D3810 DC	
TC1-D3801, TP1-D3801	TA5-D3801	TA5-D3801 DC	
TC1-D4011, TP1-D4011	TA5-D4011	TA5-D4011 DC	
TC1-D5011, TP1-D5011	TA5-D5011	TA5-D5011 DC	
TC1-D6511, TP1-D6511	TA5-D6511	TA5-D6511 DC	
TC1-D7011, TP1-D7011	TA5-D7011	TA5-D6511 DC	
TC1-D8011, TP1-D8011	TA5-D8011	TA5-D8011 DC	
TC1-D9511, TP1-D9511	TA5-D9511	TA5-D9011 DC	
For 4 Pole			
TC1-D09004, TP1-D09004	TA5-D09004	TA5-D09004DC	1
TC1-D09008, TP1-D09008	TA5-D09008	TA5-D09008DC	
TC1-D12004, TP1-D12004	TA5-D12004	TA5-D12004DC	
TC1-D12008, TP1-D12008	TA5-D12008	TA5-D12008DC	
TC1-D25004, TP1-D25004	TA5-D25004	TA5-D25004DC	
TC1-D25008, TP1-D25008	TA5-D25008	TA5-D25008DC	
TC1-D40004, TP1-D40004	TA5-D40004	TA5-D40004DC	
TC1-D40008, TP1-D40008	TA5-D40008	TA5-D40008DC	
TC1-D65004, TP1-D65004	TA5-D65004	TA5-D65004DC	
TC1-D65008, TP1-D65008	TA5-D65008	TA5-D65008DC	
TC1-D80004, TP1-D80004	TA5-D80004	TA5-D80004DC	

ACCESSORIES

Spare Top Housing for 3P exceed Contactors [HSN Code: 8538]

For Control Relay Contactor	Reference	MOQ
	AC	
TCA2-DN40E	TA5-DN40E	1
TCA2-DN31E	TA5-DN31E	
TCA2-DN22E	TA5-DN22E	
TC1D0901E	TA5-D0901E	
TC1D0910E	TA5-D0910E	
TC1D1201E	TA5-D1201E	
TC1D1210E	TA5-D1210E	
TC1D1801E	TA5-D1801E	
TC1D1810E	TA5-D1810E	
TC1D2501E	TA5-D2501E	
TC1D2510E	TA5-D2510E	
TC1D4011E	TA5-D4011E	
TC1D5011E	TA5-D5011E	
TC1D6511E	TA5-D6511E	
TC1D8011E	TA5-D8011E	
TC1D9511E	TA5-D9511E	

Spare Main Contact for 3P Contactors Rating 115A-800A [HSN Code: 8538]

Contactors	Reference	MOQ
LC1-FDP115A	LA5-FF431 (F115)	1
LC1-FDP150A	LA5-FF431 (F150)	
LC1-FDP185A	LA5-FG431 (F185)	
LC1-FDP200A	LA5-FG431 (F200)	
LC1-FDP225A	LA5-FG431 (F225)	
LC1-FDP265A	LA5-FH431 (F265)	
LC1-FDP300A	LA5-FH431 (F300)	
LC1-FDP330A	LA5-F400803 (F330)	
LC1-FDP400A	LA5-F400803 (F400)	
LC1-FDP500A	LA5-F500803 (F500)	
LC1-FDP630A	LA5-F630803 (F630)	
LC1-FDP780A	LA5F780801(F7804)	
LC1-FDP800A	LA5F800803(F800)	

Spare Main Contact Sets for 4P Power Contactors Rating 115A-780A [HSN Code: 8538]

Contactors	Reference	MOQ
LC1-FDP1154A	LA5-FF441 (F1154)	1
LC1-FDP1504A	LA5-FF441 (F1504)	
LC1-FDP1854A	LA5FG441(F1854)	
LC1-FDP2254A	LA5FG441(F2254)	
LC1-FDP2654A	LA5-FH441 (F2654)	
LC1-FDP3304A	LA5-F400804 (F3304)	
LC1-FDP4004A	LA5-F400804 (F4004)	
LC1-FDPM5004A	LA5-F500804 (F5004)	
LC1-FDP6304A	LA5-F630804 (F6304)	
LC1-FDP7804A	LA5-F780801 (F780)	

- Complete spare main contact set available as per pole.
- Main contact set per pole includes (2 Fixed contacts & 1 Moving contact, 2 Deflector, 1 Flat pole spring, 2 Fixing screws, 2 Washer).

* Stock for accessories are subject to availability

Spare Arc Chamber 3P [HSN Code: 8538]

Contactors	Reference	MOQ
LC1-FDP115A	LA5-F11550	1
LC1-FDP150A	LA5-F15050	
LC1-FDP185A	LA5-F18550	
LC1-FDP200A	LA5-F20050	
LC1-FDP225A	LA5-F22550	
LC1-FDP265A	LA5-F26550	
LC1-FDP300A	LA5-F30050	
LC1-FDP330A	LA5-F33050	
LC1-FDP400A	LA5-F40050	
LC1-FDP500A	LA5-F50050	
LC1-FDP630A	LA5-F63050	
LC1-FDP780A	LA5-F780150*	

Spare Arc Chamber 4P [HSN Code: 8538]

Contactors	Reference	MOQ
LC1-FDP1154A	LA5-F115450	1
LC1-FDP1504A	LA5-F150450	
LC1-FDP1854A	LA5-F185450	
LC1-FDP2254A	LA5-F225450	
LC1-FDP2654A	LA5-F265450	
LC1-FDP3304A	LA5-F330450	
LC1-FDP4004A	LA5-F400450	
LC1-FDPM5004A	LA5-F500450	
LC1-FDP6304A	LA5-F630450	
LC1-FDP7804A	LA5-F780150*	
LC1-FDP8004A	LA5-F80050	

*Coil Surge Suppressor - Contactor 115-630A [HSN Code: 8538]

Description	Reference	MOQ
Coil Surge Suppressor for LC1FDP115-630A (3P/4P)	LA9F980(BR)*	5

* Common for Exceed & Robusta Contactors.

* Only for 220V AC

Front Mount Add on block with IP67

Robusta TA2 contactors [HSN Code: 8538]

Reference Item	Pole Configuration	Reference Item	Pole Configuration
TA1DX11	11	TA1DX11 N11	X11 N11
TA1DX20	20	TA1DX11 N20	X11 N20
TA1DX02	02	TA1DX11 N02	X11 N02
TA1DX20 N20	X20 N20	TA1DX02 N11	X02 N11
TA1DX20 N11	X20 N11	TA1DX02 N20	X02 N20
TA1DX20 N02	X20 N02	TA1DX02 N02	X02 N02

**NOTE :- "X" DENOTES IP67
"N" DENOTES NORMAL CONTACTS**


FOR EXAMPLE:- TA1D(X)02(N)20


ADD ON BLOCK SERIES IP67 NORMAL CONTACT

NO CONTACT ('2' NC)
NC CONTACT ('0' NC)

IP [] []

The first digit shows the level of protection against solid objects
The second digit shows the level of protection against liquids

6 Complete dust protection (No ingress of dust) 

7 Protected against submersion in water under defined conditions of pressure and time 

7 Harmful ingress of water when immersed between a depth of 150 to 1000mm (5.9-40 In)

Compatible products

- 9A-800A Robusta &
- Exceed 3 Pole & 4 Pole Contactors
- 9A-90A D-Range Contactors
- 1250A to 2600A Robusta 3 Pole Contactors

Spare AC Coils for Contactors Rating 115A to 2600A

Contactor	110V	220V	240V	415V
LC1-FDP1250A	LX1FL110V	LX1FL220V	LX1FL240V	LX1FL415V
LC1-FDP1400A	LX1FK065V	LX1FK110V	LX1FK127	LX1FK220V
LC1-FDP1700A				
LC1-FDP2100A				
LC1-FDP2600A	LX1FL065V	LX1FL110V	LX1FL127V	LX1FL220V

* For 1400A-2600A 2 Nos required for each contactor
* For 1250A 1 Nos required for each contactor

Spare DC Coils for Contactors Rating 115A to 2600A

Contactor	110V	220V	240V	415V
LC1-FDP1250A	LX4FL110V	LX4FL220V	-	LX4FL48V
LC1-FDP1400A	LX4FK055V	LX4FK110V	-	-
LC1-FDP1700A				
LC1-FDP2100A				
LC1-FDP2600A	LX4FL055V	LX4FL110V	-	-

* For 1400A-2600A 2 Nos required for each contactor
* For 1250A 1 Nos required for each contactor

* Stock for accessories are subject to availability. MOQ- Minimum Order Quantity

B

D Range Contactors & Overload Relays

Conforming IEC60947-1, IEC60947-4-1 & IEC60947-5-1

Power Contactors - 3 Pole, AC [HSN Code: 8536]



Size	AC1 Duty (A)	AC3 415V Long Life			Auxiliary Contacts		Reference	MOQ
		KW	HP	A				
Frame 1	25	4	5.5	9	1NO	-	LC1D093	1
					-	1NC	LC1D099	
	25	5.5	7.5	12	1NO	-	LC1D123	
					-	1NC	LC1D129	
	32	9	12.5	16	1NO	-	LC1D173	
					-	1NC	LC1D179	
	32	11	15	22	1NO	-	LC1D223	
					-	1NC	LC1D229	
Frame 2	40	11	15	25	1NO	-	LC1D253	
					-	1NC	LC1D259	
	50	15	20	32	1NO	-	LC1D323	
					-	1NC	LC1D329	
Frame 3	60	22	30	40	1NO	1NC	LC1D403	
					-	-	LC1D503	
	80	25	35	50	1NO	1NC	LC1D633	
					-	-	LC1D803	
125	45	60	80	1NO	1NC	LC1D803		
				-	-	LC1D803		

Thermal Overload Relays Type LR1-Direct Mounting [HSN Code: 8536]

B



Relay Setting Range (A)	Std. Power Rating for 3 Phase Motor at 415V		Reference	Independent Mounting Kit	MOQ
	HP	KW			
0.10-0.16	*	*	LR1D09301	Reference LA7-D0964 [HSN Code: 8538]	10
0.16-0.25	*	*	LR1D09302		
0.25-0.40	*	*	LR1D09303		
0.40-0.63	*	*	LR1D09304		
0.63-1.00	0.5	0.37	LR1D09305		
1.00-1.60	0.75	0.55	LR1D09306		
1.60-2.50	1.5	1.10	LR1D09307		
2.50-4.00	2.00	1.50	LR1D09308		
4.00-6.00	3.00	2.20	LR1D09310		
5.50-8.00	5.00	3.70	LR1D09312		
7.00-10.0	5.50	4.00	LR1D09314		
10.0-13.0	7.50	5.50	LR1D12316		
13.0-18.0	12.00	9.00	LR1D16321		
18.0-25.0	15.00	11.00	LR1D25322		
23.0-32.0	20.00	15.00	LR1D32353		
28.0-40.0	20.00	15.00	LR1D32355		
23.0-32.0	20.00	15.00	LR1D40353		
30.0-40.0	30.00	22.00	LR1D40355		
38.0-50.0	35.00	25.00	LR1D63357		
48.0-57.0	40.00	30.00	LR1D63359		
57.0-66.0	50.00	37.00	LR1D63361		

* There is no standard power rating for these motors. Select the overload relay in relation to the full load current.

Control Relays 10 Amps [HSN Code: 8536]

Contact Configuration	A.C. Reference	MOQ
2NO+2NC	CA2DN1229	1
3NO+1NC	CA2DN1319	
4NO	CA2DN140	

■ Please specify Coil Voltage.

Thermal OLR Type LR1-Independent Mounting [HSN Code: 8536]

Relay Setting Range A	Std. Power Rating for 3 Phase Motor at 415V		Reference	MOQ
	HP	KW		
66.0 to 80.0	60	45	LR1-D80363	1

Consisting of 1 NO+1 NC make before break contacts.

ACCESSORIES

Add-on-Blocks for D Range Contactors [HSN Code: 8538]

Contactor		Reference	MOQ	
Additional Instantaneous Aux.Contact Blocks	Front Mounted	2NO	LA1D20	20
		1NO+1 NC	LA1D11	
		2NC	LA1D02	
		4NO	LA1D40	
		3NO+1 NC	LA1D31	
		2NO+2NC	LA1D22	
		1NO+3NC	LA1D13	
		4NC	LA1D04	
Overlapping Aux. Contacts	Front Mounted	2NO+2 NC	LA1D1111#	10

■ Please specify Coil Voltage by indicating the Coil Voltage required.
 ** Spare Moulded Base for these Coils has Product code LA7-D40

Spare AC Coil Voltage for D Range Contactors AC (Standard) [HSN Code: 8538]

Use for Contactor AC (Standard)	Reference	MOQ
CA2-DN1	☒ LX1-D09 ■	15
LC1-D09		
LC1-D12		
LC1-D17		
LC1-D25	☒ LX1-D25 ■	10
LC1-D32		
LC1-D40	☒ LX1-D40 ■	10
LC1-D50**		
LC1-D63		
LC1-D80**		

D Range Mechanical Interlocks Horizontally Mounted [HSN Code: 8538]

Use for Contactor AC	Reference	MOQ
LC1-D09	LA9-D09978	10
LC1-D12		
LC1-D17		
LC1-D22		
LC1-D25		
LC1-D32	LA9-D50978	
LC1-D40		
LC1-D50		
LC1-D63	LA9-D80978	
LC1-D80		

Coil Suppressor

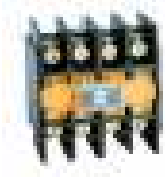
Description	Reference	MOQ
For mounting across coil of contactor upto 80Amp, with C network suitable for <250V AC & <400V AC	LA9-D09980	10

Spare Top Housing 3P

For Control Relay/ Contactor AC	Reference	MOQ
CA2-DN140	LA5-DN140	1
CA2-DN1319	LA5-DN1319	
CA2-DN1229	LA5-DN1229	
LC1-D093	☒ LA5-D093	
LC1-D099	LA5-D099	
LC1-D123	☒ LA5-D123	
LC1-D129	LA5-D129	
LC1-D173	LA5-D173	
LC1-D179	☒ LA5-D179	
LC1-D223	LA5-D223	
LC1-D229	LA5-D229	
LC1-D253	☒ LA5-D253	
LC1-D259	☒ LA5-D259	
LC1-D323	☒ LA5-D323	
LC1-D329	LA5-D329	
LC1-D403	☒ LA5-D403	
LC1-D503	☒ LA5-D503	
LC1-D633	LA5-D633	
LC1-D803	LA5-D803	

* Stock for accessories are subject to availability

ACCESSORIES



Add-on Starting Switch [HSN Code: 8538]

Description	Reference	MOQ
NO starting Switch suitable for direct mounting on Control Relays & Contactors	LA9-D09906	10



Mechanical Latching Blocks

Description for Contractors / Control Relays Type	Reference	MOQ
CA2-DN1 LC1-D09, LC1-D12 LC1-D17, LC1-D25, LC1-D32	<input checked="" type="checkbox"/> LA6-DK01 <input type="checkbox"/>	10

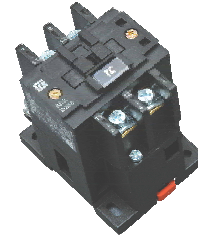
Replace by voltage code

AC Coil Voltage Codes (Standard)

For Mechanical Latching Block	Voltage							
	24	48	72	110	220	240	380	415/440
LA6-DK01	B	E	EN	F	M	U	Q	N

Contactors - 4 Pole & 2 Pole, AC

Conforming IEC60947-1, IEC60947-4-1



Contactors - 4 Pole AC [HSN Code: 8536]

AC3, 415V			Main Poles Configuration	Reference	MOQ
kW	HP	A			
7.5	10	20	4NO	TC1DX204	1
11	15	25	4NO	TC1DX254	
22	30	40	4NO	TC1DX404	

■ Please specify Coil Voltage.

AC Coil Voltage Codes (Standard) for 4 Pole Contactors

Contactor 4P	Voltage			
	110	220	190-400	250-450
TC1-DX204/254	F	M	Q	N

Spare Coil for 4 Pole Contactors [HSN Code: 8538]

Reference	Coil Voltage	MOQ
TX1D20	110/220/190-400/250-450	1

Spare Contact Kit for 4 Pole Contactor [HSN Code: 8538]

Reference	Description	MOQ
TA5DX204	20A Contact Kit, 4-Pole	1
TA5DX254	25A Contact Kit, 4-Pole	
TA5DX404	40A Contact Kit, 4-Pole	

Add-on-Blocks for 4 Pole Contactors [HSN Code: 8538]

Description	Contact Configuration	Reference	MOQ
Front mounted Aux. contact Block	1 NO+1 NC	TA1-DN11A	2

Note : Also available with 2NC.

Mechanical Interlock for 4 Pole Contactors [HSN Code: 8538]

Description	Reference	MOQ
Horizontal Mounted	LA9-D09978	10

Contactors - 2 Pole AC [HSN Code: 8536]

AC1 Duty	AC3 220V AC	Reference	MOQ
	A		
32	20	AC2-D202	2
40	25	AC2-D252	
40	40	AC2-D402	

AC Coil Voltage Codes (Standard) for 2 Pole Contactors

Contactor 2P	Voltage		
	220*	220/240*	380 / 415*
AC2-D2/D3/D4	M5W	MU	QN

* Wide band Coils ■ Please specify Coil Voltage.

Spare Coil for 2 Pole Contactors [HSN Code: 8538]

Reference	Coil Voltage	MOQ
AX1D2 MU	220/240V, 50Hz	5
AX1D2 M	220V, 50Hz	
AX1D2 QN	380/415V, 50Hz	
AX1D2 N	415V, 50Hz	

Spare Contact Kit for 2 Pole Contactor [HSN Code: 8538]

Reference	Description	MOQ
AC5D202	20A Contact Kit, 2-Pole	1
AC5D252	25A Contact Kit, 2-Pole	
AC5D402	40A Contact Kit, 2-Pole	
☒ AC5D2011	20A Contact Kit, 1NO+1NC	

Add-on-Blocks for 2 Pole Contactors [HSN Code: 8538]

Description	Contact Configuration	Reference	MOQ
Front mounted Aux. contact Block	2 NO	LA1-D20A	20
	1 NO+1 NC	LA1-D11A	
	2 NC	☒ LA1-D02A	

Thermal OLR 2 Pole type LR7D-Direct Mounting [HSN Code: 8536]

Relay Setting Range (A)	Reference	Independent Mounting Kit	MOQ
4.0-6.0	LR7D09210	LA7D0964 [HSN Code: 8538]	1
5.5-8.0	LR7D09212		
7.0-10	LR7D09214		
9.0-14	LR7D12216X		
13-18	LR7D16221		
14-22	LR7D16221X		
18-25	LR7D25222		
23-32	LR7D32253		

☒ Non Stockable item

New Agro 4 Pole Contactor Series

Available in 2 Unique flexible models:

- Front opening model

- Rear opening model



- Front mounted Add-on block option.
- Easy field replaceable fixed / moving contact Easy maintenance
- Wide band encapsulated magnet coil. Easy replacement
- Common spare kits, coils, accessories in both models
- Flexible design permits change in coil and contacts locally
- Contactor conforming to IEC 60947-4-1
- Thick inter-phase molding walls with liberal clearance & creepage minimizes phase shorting risk

New Agro Contactors - Front Opening [HSN Code: 8536]

AC1 Duty A	AC3 415V Long life			Reference
	KW	HP	A	
25	7.5	10	16	TC1DXN164*
32	9	12.5	20	TC1DXN204*
40	11	15	25	TC1DXN254*
45	15	20	32	TC1DXN324*
50	18.5	25	40	TC1DXN404*

New Agro Contactors - Rear Opening [HSN Code: 8536]

25	7.5	10	16	TC1DXRN164*
32	9	12.5	20	TC1DXRN204*
40	11	15	25	TC1DXRN254*
45	15	20	32	TC1DXRN324*
50	18.5	25	40	TC1DXRN404*

Spare Contact Kit Codes

Combination	Reference
16A CONTACT KIT, 4 - POLE	TA5DXN164
20A CONTACT KIT, 4 - POLE	TA5DXN204
25A CONTACT KIT, 4 - POLE	TA5DXN254
32A CONTACT KIT, 4 - POLE	TA5DXN324
40A CONTACT KIT, 4 - POLE	TA5DXN404

C&S Standard Coil Voltages

* Coil Code	Coil Voltage	Common for both Front & Rear opening
B	24V, 50 Hz	
E	48V, 50 Hz	
F	110V, 50 Hz	
MU	220/240V, 50 Hz	
QN	380/415V, 50 Hz	

Spare Coil Codes

*Coil Code	Coil Voltage
TX1DN30N	415V 50Hz
TX1DN30Q	380V 50Hz
TX1DN30QN	380/415V 50Hz
TX1DN30M	220V 50Hz
TX1DN30MU	220/240V 50Hz
TX1DN30F	110V 50Hz
TX1DN30E	48V 50Hz
TX1DN30B	24V 50Hz

Auxiliary Block

Combination	Reference
1NO + 1NC	TA1DXN11
2NO	TA1DXN20
2NC	TA1DXN02

- Stock for accessories are subject to availability

* Indicates Coil Code

Definite Purpose Contactor

Conforming IEC60947-1, IEC60947-4-1

GLOBAL CERTIFICATION



Contactor [HSN Code: 8536]



FLA	Resistive AMP Rating	Reference	MOQ
Single Pole (Without Shunt)			
20	30	☒ TCDP201	1
25	30	☒ TCDP251	
30	40	☒ TCDP301	
40	50	☒ TCDP401	
Single Pole (With Shunt)			
25	30	TCDP251S	1
30	40	TCDP301S	
40	50	TCDP401S	
Two Pole			
20	30	TCDP202	1
30	40	TCDP302	
40	50	☒ TCDP402	
Three Pole			
20	30	TCDP203	1
30	40	TCDP303	
40	50	☒ TCDP403	

AC Coil Voltage Codes for Definite Purpose Contactors

Voltage	24VAC	110VAC	240VAC
50Hz	B5	G5	U5
60Hz	B6	G6	U6

DT-Series 4 Pole Rating AC1 25A~63A [HSN Code: 8536]

AC1 Duty A	Main Pole Configuration	With AC Coil	MOQ
		Reference	
25	4 NO	TC1DT254Ne	1
32	4 NO	☒ TC1DT324Ne	
32	2 NO+2 NC	TC1DT328Ne	
40	4 NO	☒ TC1DT404Ne	
50	4 NO	TC1DT504Ne	
45	4 NO	TC1DT45004E	
45	2 NO+2 NC	TC1DT45008E	
50	4 NO	TC1DT50004E	
50	2 NO+2 NC	TC1DT50008E	
63	4 NO	TC1DT63004E	
63	2 NO+2 NC	TC1DT63008E	

AC Coil for 4 Pole Telecom Contactor

Contactor	Voltage			
	230	235	240	415
TC1-DT**Ne				
50Hz	P	C5W	M	N

All coils codes applicable for extra wide band coils.

* Stock for accessories are subject to availability



Power Contactors

ETe Series

Ete Series Contactors developed for the export & domestic overseas market need works at higher elevated temperatures even at 70°C. This series is ideally suited for demanding applications such as steel mills, rock quarries, mines or for any middle horsepower application where a sturdy, durable contactor is need. Contactors being tested & certified with UL 60947 safety standard norms considering the safety will be the important parameter. High performance UL approved raw Materials used to withstand higher 70°C ambient temperature.



UL 60947-4-1
IEC 60947-4-1



RoHS
Compliant

Power Contactor
ETe Series



Global Certification | **RoHS** Compliant

Technical Data for Contactors for Elevated Temperatures - TC1D09A~22A

Type	Description	TC1D0901ETe	-	NC	TC1D1201ETe	-	NC	TC1D1801ETe	-	NC	TC1D2201ETe	-	NC
		TC1D0910ETe	NO	-	TC1D1210ETe	NO	-	TC1D1810ETe	NO	-	TC1D2210ETe	NO	-

Environment

Rated insulation Voltage (Ui)	V	1000	1000	1000	1000
Degree of Protection	Conforming-IEC 60529	IP 20, Protection against direct finger contact			
Ambient air Temperature (around the device)	Storage	-25 to + 70			
	Operation	-5...+70 (0.85...1.1Uc)			
Maximun Operating Altitude	Without derating	3000			
Operating Positions	Without derating	±30° possible, in relation to normal vertical mounting plane			
Shock Resistance (1) 1/2 sine wave = 11ms	Contactur open	10g	10g	10g	10g
	Contactur closed	15g	15g	15g	15g
Vibration Resistance (1) 5...300 Hz	Contactur open	2g	2g	2g	2g
	Contactur closed	4g	4g	4g	4g

Control Circuit Characteristics

Rated Control Circuit Voltage c)	50 or 60 Hz	V	24V...600V	24V...600V	24V...600V	24V...600V
Control Voltage Limits (θ≤70°C)	Operational	0.85...1.1Uc				
	Drop-out	0.2...0.75Uc				
Average consumption at 20°C and at Uc AC 50 Hz	Inrush: 50 Hz coil	VA	70	70	70	70
	50/60 Hz coil	VA	80	80	80	80
	Cosθ		0.75	0.75	0.75	0.75
	Sealed: 50 Hz coil	VA	9	9	9	9
	50/60 Hz coil	VA	10	10	10	10
	Cosθ		0.3	0.3	0.3	0.3
AC 60 Hz Coil	Inrush: 60 Hz coil	VA	80	80	80	80
	50/60 Hz coil	VA	80	80	80	80
	Cosθ		0.75	0.75	0.75	0.75
	Sealed: 60 Hz coil	VA	9.5	9.5	9.5	9.5
	50/60 Hz coil	VA	10	10	10	10
	Cosθ		0.3	0.3	0.3	0.3
Heat Dissipation	50/60 Hz	W	2...3	2...3	2...3	2...3
Operating Time (1)	Closing "C"	ms	12...25	12...25	12...25	12...25
	Opening "O"	ms	4...15	4...15	4...15	4...15
Mechanical Life (mechanical durability) in millions of operating cycles	50 or 60 Hz coil		20	20	16	16
	50/60 Hz coil at 50 Hz		15	15	15	15
Maximun Operating rate at ambient temperature ≤70°C	In operating cycles per hour		1800	1800	1800	1800
Cabeling			Min/max c.s.a	Min/max c.s.a	Min/max c.s.a	Min/max c.s.a
Flexible cabel without cable end	1 or 2 conductors	mm ²	1/4	1/4	1/4	1/4
	1 Conductor	mm ²	1/4	1/4	1/4	1/4
Flexible cabel with cable end	2 Conductors	mm ²	1/2.5	1/2.5	1/2.5	1/2.5
	1 or 2 Conductors	mm ²	1/4	1/4	1/4	1/4
Tightening torques		N.m	1.2	1.2	1.2	1.2

(1) The closing time "C" measured from the moment the coil supply is switched on to initial contact of the main poles. The opening time "O" is measured from the moments from the coil supply is switched off to the moment the main poles saperate.

B

Power Contactor

ETe Series

Pole Characteristics

Number of poles			3P	3P	3P	3P
Continuous Current @ 70°C	Open type	A	25	25	32	32
Rated Operational Current (Ie) (Ue < 440V)	In AC-3, $\theta < 60^\circ\text{C}$	A	9	12	18	22
	In AC-1, $\theta < 70^\circ\text{C}$	A	25	25	32	32
Rated Operational Voltage (Ue)	Up to	V	690	690	690	690
			50 / 60	50 / 60	50 / 60	50 / 60
Rated Thermal Current (Ith)	$\theta < 40^\circ\text{C}$ (Enclosed)	A	25	25	32	32
	$\theta \leq 70^\circ\text{C}$ (Open)	A	25	25	32	32
HP Rating	575- 600 V ac / FLA		7.5/9	10/11	15/17	15/17

Maximum HP Rating @ 70°C

1 Phase	110-120V		0.5	1	1	2
	220-240V		1.5	2	3	3
3 Phase	200-208V		2	3	3	5
	220-240V		2	3	5	7.5
	440-480V		5	7.5	10	15
	575-600V		7.5	10	15	15
Rated Making Capacity	I rms conforming to IEC 60947-4-1	A	250	250	300	300
Rated Breaking Capacity	I rms conforming to IEC 60947-4-1	440V	250	250	300	300
		550V	175	175	250	250
		660-690V	85	85	120	120
Permissible short time rating from cold state, no current flowing for preceding 15 minutes, at $\theta < 40^\circ\text{C}$	For 1 s	A	210	210	240	240
	For 5 s	A	130	130	185	185
	For 10 s	A	105	105	145	145
	For 30 s	A	76	76	105	105
	For 1 min	A	61	61	84	84
	For 3 min	A	44	44	58	58
	For 10 min	A	30	30	40	40
Fuse rating for High Fault short circuit current at 100kA	225% of FLA at 600V Fuse Class J/CC	A	20	20	40	40
Fuse rating Standard Fault short circuit current at 5kA	400% of FLA @600V Fuse Class RK5	A	40	40	80	80
Average Impedance per pole	At Ith and 50Hz	m Ω	2.5	2.5	2.5	2.5
Power Dissipation per pole for the above operational currents	AC-1	W	1.56	1.56	2.5	2.5
	AC-3	W	0.2	0.36	0.8	0.8
			Min/max c.s.a	Min/max c.s.a	Min/max c.s.a	Min/max c.s.a
Cabling	Copper conductors @ 75°C	AWG	18/10	18/10	18/8	18/8
Flexible cabel without cable end	1 Conductor	mm ²	1/4	1/4	1.5/6	1.5/6
	2 Conductors	mm ²	1/4	1/4	1.5/6	1.5/6
Flexible cabel with cable end	1 Conductor	mm ²	1/4	1/4	1/6	1/6
	2 Conductors	mm ²	1/2.5	1/2.5	1/4	1/4
Solid cable without cable end	1 Conductor	mm ²	1/4	1/4	1.5/6	1.5/6
	2 Conductors	mm ²	1/4	1/4	1.5/6	1.5/6
Tightening Torques						
As per UL 60947-4-1	Power circuit connections	lb in	7	7	15	15
As per IEC 60947-4-1	Power circuit connections	N.m	1.2	1.2	1.7	1.7

(1) In the least favourable direction, without change of contact state (coil supplied at Uc)

Power Contactor
ETe Series

Global Certification  



Technical Data for Contactors for Elevated Temperatures - TP1D09A~22A

Description	TP1D0901ETe	-	NC	TP1D1201ETe	-	NC	TP1D1801ETe	-	NC	TP1D2201ETe	-	NC
	TP1D0910ETe	NO	-	TP1D1210ETe	NO	-	TP1D1810ETe	NO	-	TP1D2210ETe	NO	-

Environment

Rated Insulation Voltage (Ui)	V	1000	1000	1000	1000
Degree of Protection	Conforming - IEC 60529	IP 20, Protection against direct finger contact			
Ambient Air Temperature (around the device)	Storage	°C -25 to +70			
	Operation	°C -5...+70 (0.85...1.1Uc)			
Maximun Operating Altitude	Without derating	m 3000			
Operating Positions	Without derating	±30° possible, in relation to normal vertical mounting plane			
Shock Resistance (1) 1/2 sine wave = 11ms	Contactur open	8g	8g	8g	8g
	Contactur closed	11g	11g	11g	11g
Vibration Resistance (1) 5...300 Hz	Contactur open	2g	2g	2g	2g
	Contactur closed	3g	3g	3g	3g

Control Circuit Characteristics

Rated control circuit Voltage (Uc)	DC	V	24V...600V	24V...600V	24V...600V	24V...600V
Control voltage limits (θ≤70°C)	Operational Standard Coil		0.85...1.1Uc			
	Drop-out		0.1...0.75Uc			
Average consumption at 20°C and at Uc	DC Inrush	W	10	10	10	10
	DC Sealed	W	10	10	10	10
Average operating time at Uc	Operating times depends on the types of the contactor electric Megnet and its control mode. The closing time "C" is measured from the moment the coil supply is switched on to initial contact of the main poles. The opening time "O" is measured from the moment the coil supply is switched off to the moment the main poles separate.					
	Closing "C"	ms	40...48	40...48	40...48	40...48
	Opening "O"	ms	6...14	6...14	6...14	6...14

NOTE: The arcing time depends on the circuit switched by poles. For normal 3-phase application, the arcing time is usually less than 10 ms. The load is isolated from the supply after a time equal to the sum of the opening time & the arcing time.

Mechanical Life at UC (mechanical durability) in cycles	in millions of operating cycles	15	15	15	15
Maximun Operating Rate at ambient temperature ≤70°C	In operating cycles per hour	1800	1800	1800	1800

Cabeling

Flexible cabel without cable end	1 Conductor	mm ²	1/4	1/4	1/4	1/4
	2 Conductors	mm ²	1/4	1/4	1/4	1/4
Flexible cabel with cable end	1 Conductor	mm ²	1/4	1/4	1/4	1/4
	2 conductors	mm ²	1/2.5	1/2.5	1/2.5	1/2.5
Solid cable without cable end	1 Conductor	mm ²	1/4	1/4	1/4	1/4
	2 Conductors	N.m	1/4	1/4	1/4	1/4
Tightening Torques	N.m	1.2	1.2	1.2	1.2	

(1) The closing time "C" measured from the moment the coil supply is switched on to initial contact of the main poles. The opening time "O" is measured from the moments from the coil supply is switched off to the moment the main poles saperate.

B

Power Contactor

ETe Series

Pole Characteristics

Number of Poles			3P	3P	3P	3P
Continuous Current @70°C	Open type	A	25	25	32	32
Rated operational current (Ie)	In AC-3, $\theta < 60^\circ\text{C}$	A	9	12	18	22
	In AC-1, $\theta < 70^\circ\text{C}$	A	25	25	32	32
Rated Operational Voltage (Ue)	Up to	V	690	690	690	690
			50 / 60	50 / 60	50 / 60	50 / 60
Rated Thermal Current (Ith)	$\theta < 40^\circ\text{C}$ (Enclosed)	A	25	25	32	32
	$\theta \leq 70^\circ\text{C}$ (Open)	A	25	25	32	32
HP Rating	575- 600 V ac / FLA		5.7/9	10 / 11	15 / 17	15 / 17

Maximum HP Rating @ 70°C

1 Phase	110-120V		0.5	1	1	2
	220-240V		1	2	3	3
3 Phase	200-208V		2	3	3	5
	220-240V		2	3	5	7.5
	440-480V		5	7.5	10	15
	575-600V		7.5	10	15	15
Rated Making Capacity	I rms conforming to IEC 60947-4-1	A	250	250	300	300
Rated Breaking Capacity	I rms conforming to IEC 609474-4-1	440V	250	250	300	300
		550V	175	175	250	250
		660-690V	85	85	120	120
Permissible short time rating from cold state, no current flowing for preceding 15 minutes, at $\theta < 40^\circ\text{C}$	For 1 s	A	210	210	240	240
	For 5 s	A	130	130	185	185
	For 10 s	A	105	105	145	145
	For 30 s	A	76	76	105	105
	For 1 min	A	61	61	84	84
	For 3 min	A	44	44	58	58
	For 10 min	A	30	30	40	40
Fuse rating for High Fault short circuit current at 100kA	400% of FLA @600V Fuse Class RK5	A	20	20	40	40
Fuse rating Standard Fault short circuit current at 5kA	225% of FLA at 600V Fuse Class J/CC	A	40	40	80	80
Average impedance per pole	At Ith and 50Hz	m Ω	2.5	2.5	2.5	2.5
Power Dissipation per pole for the above operational currents	AC-1	W	1.56	1.56	2.5	2.5
	AC-3	W	0.2	0.36	0.8	0.8
			Min/max c.s.a	Min/max c.s.a	Min/max c.s.a	Min/max c.s.a
Cabling	Copper conductors @ 75°C	AWG	18/10	18/10	18/8	18/8
Flexible cabel without cable end	1 Conductor	mm ²	1/4	1/4	1.5/6	1.5/6
	2 Conductors	mm ²	1/4	1/4	1.5/6	1.5/6
Flexible cabel with cable end	1 Conductor	mm ²	1/4	1/4	1/6	1/6
	2 Conductors	mm ²	1/2.5	1/2.5	1/4	1/4
Solid cable without cable end	1 Conductor	mm ²	1/4	1/4	1.5/6	1.5/6
	2 Conductors	mm ²	1/4	1/4	1.5/6	1.5/6
Tightening Torques						
As per UL 60947-4-1	Power circuit connections	lb in	7	7	15	15
As per IEC 60947-4-1	Power circuit connections	N.m	1.2	1.2	1.7	1.7

(1) In the least favourable direction, without change of contact state(coil supplied at Uc)

Power Contactor ETe Series

Global Certification   RoHS Compliant



Technical Data for Contactors for Elevated Temperatures - TC1D50A~95A

Type	Description	TC1D5011ETe	TC1D6511ETe	TC1D8011ETe	TC1D9511ETe
Inbuilt Aux Contacts		1NO+1NC	1NO+1NC	1NO+1NC	1NO+1NC

Environment

Rated Insulation Voltage (Ui)	V	1000	1000	1000	1000
Degree of Protection	Conforming to IEC 60529	IP 20, Protection against direct finger contact			
Ambient Air Temperature (around the device)	Storage	°C -25 to +70			
	Operation	°C -5...+70 (0.85...1.1Uc)			
Maximum Operating Altitude	Without derating	m 3000			
Operating Positions	Without derating	±30° possible, in relation to normal vertical mounting plane			
Shock Resistance (1) 1/2 sine wave = 11ms	Contact open	8g	8g	8g	8g
	Contact closed	10g	10g	10g	10g
Vibration Resistance (1) 5...300 Hz	Contact open	2g	2g	2g	2g
	Contact closed	3g	3g	3g	3g

Control Circuit Characteristics

Rated control circuit Voltage (Uc)	50 or 60 Hz	V	24V...600V		
Control voltage limits (θ≤70°C)	Operational	V	0.85...1.1Uc		
	Drop-out	V	0.2...0.75Uc		

Average consumption at 20°C and at Uc

AC 50Hz	Inrush: 50 Hz coil	VA	200	200	200	200
	50/60 Hz coil	VA	245	245	245	245
	Cosθ		0.75	0.75	0.75	0.75
	Sealed: 50 Hz coil	VA	20	20	20	20
	50/60 Hz coil	VA	26	26	26	26
	Cosθ		0.3	0.3	0.3	0.3
AC 60Hz Coil	Inrush: 60 Hz coil	VA	220	220	220	220
	50/60 Hz coil	VA	245	245	245	245
	Cosθ		0.75	0.75	0.75	0.75
	Sealed: 60 Hz coil	VA	22	22	22	22
	50/60 Hz coil	VA	26	26	26	26
	Cosθ		0.3	0.3	0.3	0.3
Heat Dissipation	50/60 Hz	W	6...10	6...10	6...10	6...10
Operating Time (1)	Closing "C" time	ms	20..35	20..35	20..35	20..35
	Opening "O" time	ms	6..20	6..20	6..20	6..20
Mechanical Life (mechanical durability) in millions of operating cycles	50 or 60 Hz coil		10	10	10	10
	50/60 Hz coil at 50 Hz		4	4	4	4
Maximum Operating rate at ambient temperature ≤70°C	In operating cycles per hour		1800	1800	1800	1800
Cabeling			Min/max c.s.a	Min/max c.s.a	Min/max c.s.a	Min/max c.s.a
Flexible cabel without cable end	1 or 2 conductors	mm ²	1/4	1/4	1/4	1/4
	1 Conductor	mm ²	1/4	1/4	1/4	1/4
Flexible cabel with cable end	2 conductors	mm ²	1/2.5	1/2.5	1/2.5	1/2.5
	1 or 2 Conductors	mm ²	1/4	1/4	1/4	1/4
Solid cable without cable end		mm ²	1/4	1/4	1/4	1/4
Tightening torques		N.m	1.2	1.2	1.2	1.2

(1) The closing time "C" measured from the moment the coil supply is switched on to initial contact of the main poles. The opening time "O" is measured from the moments from the coil supply is switched off to the moment the main poles separate.

B

Power Contactor

ETe Series

Pole Characteristics

Number of poles			3P	3P	3P	3P
Continuous Current @ 70°C	Open Type		75	100	110	110
Rated operational current (Ie) (Ue < 440V)	In AC-3, θ < 60°C	A	50	65	80	95
	In AC-1, θ < 70°C	A	75	100	110	110
Rated operational voltage (Ue)	Up to	V	690	690	690	690
Frequency limits	Of the operational current	Hz	50 / 60	50 / 60	50 / 60	50 / 60
Rated thermal current (Ith)	θ < 40°C (Enclosed) θ ≤ 70°C (Open)	A	75	100	110	110
HP Rating	575- 600 V AC / FLA		41	52	62	62

Maximum HP Rating @ 60°C

1 Phase	110-120V		3	5	7.5	7.5	
	220-240V		7.5	10	15	15	
3 Phase	200-208V		15	20	25	25	
	220-240V		15	20	25	25	
	440-480V		40	50	60	60	
	575-600V		40	50	60	60	
Rated making capacity	I rms conforming to IEC 60947-4-1	A	900	1000	1100	1200	
Rated breaking capacity	I rms conforming to IEC609474-4-1	440V	A	900	1000	1100	1100
		550V	A	900	1000	1000	1100
		660-690V	A	500	630	640	640
Permissible short time rating from cold state, no current flowing for preceding 15 minutes, at θ < 40°C	For 1 s	A	810	900	990	990	
	For 5 s	A	520	660	800	800	
	For 10 s	A	400	520	640	640	
	For 30 s	A	275	340	420	420	
	For 1 min	A	208	260	320	320	
	For 3 min	A	145	175	210	210	
	For 10 min	A	84	110	135	135	
Fuse rating for High Fault short circuit current at 100kA	400% of FLA at 600V Fuse Class J/CC"	A	200	250	300	300	
Fuse rating Standard Fault short circuit current at 5kA for 50 & 65A & 10kA for 80&95A	225% of FLA @600V Fuse Class RK5"	A	110	125	175	175	
Average impedance per pole	At Ith and 50Hz	mΩ	1.5	1	0.8	0.8	
Power dissipation per pole for the above operational currents	AC-1	W	9.6	6.4	12.5	12.5	
	AC-3	W	3.7	4.2	5.1	7.2	
			Min/max c.s.a	Min/max c.s.a	Min/max c.s.a	Min/max c.s.a	
Cablings	Copper conductors @ 75°C	AWG	10/3	10/3	10/2	10/2	
Flexible cabel without cable end	1 conductor	mm ²	2.5/25	4/50	4/50	4/50	
	2 conductors	mm ²	2.5/16	4/25	4/25	4/25	
Flexible cabel with cable end	1 Conductor	mm ²	2.5/25	4/50	4/50	4/50	
	2 conductors	mm ²	2.5/10	4/16	4/16	4/16	
Solid cable without cable end	1 Conductor	mm ²	2.5/25	4/50	4/50	4/50	
	2 conductors	mm ²	2.5/16	4/25	4/25	4/25	
Tightening torques As per UL 60947-4-1	Power circuit connections	lb in	35	35	75	75	
Tightening torques	Power circuit connections	N.m	5	9	9	9	

Power Contactor ETe Series

Global Certification  **RoHS**
Compliant



Technical Data for Contactors for Elevated Temperatures - TP1D50A~95A

Type	Description	TP1D5011ETe	TP1D6511ETe	TP1D8011ETe	TP1D9511ETe
		1 NO+1NC	1 NO+1NC	1 NO+1NC	1 NO+1NC

Environment

Rated insulation Voltage (Ui)	V	1000	1000	1000	1000
Degree of protection	Conforming to IEC 60529	IP 20, Protection against direct finger contact			
Ambient Air Temperature (around the device)	Storage	-25 to +70			
	Operation	-5...+70 (0.85...1.1Uc)			
Maximum operating altitude	Without derating	3000			
Operating positions	Without derating	±30° possible, in relation to normal vertical mounting plane			
Shock Resistance 1/2 sine wave= 11ms	Contacteur open	3g	3g	3g	3g
	Contacteur closed	8g	8g	8g	8g
Vibration Resistance 5...300Hz	Contacteur open	2g	2g	2g	2g
	Contacteur closed	2g	2g	2g	2g

Control Circuit Characteristics

Rated control circuit Voltage (Uc)	DC	V	24V...600V			
Control voltage limits $\theta \leq 70^\circ\text{C}$	Operational Standard Coil		0.85...1.1Uc			
	Drop -out		0.1...0.75Uc			
Average consumption at 20°C and at Uc	DC Inrush	W	22	22	22	22
	DC Sealed	W	22	22	22	22
Average operating time at Uc	Operating times depends on the types of the contactor Electro Magnet and its control mode. The closing time "C" is measured from the moment the coil supply is switched on to initial contact of the main poles. The opening time "O" is measured from the moment the coil supply is switched off to the moment the main poles separate.					
	Closing "C" time	ms	95...130	95...130	95...130	95...130
	Opening "O" time	ms	20...35	20...35	20...35	20...35
NOTE: The arcing time depends on the circuit switched by poles. For normal 3-phase application, the arcing time is usually less than 10 ms. The load is isolated from the supply after a time equal to the sum of the opening time & the arcing time.						
Mechanical life at Uc (mechanical durability)	in millions of operating cycles		15	15	15	-
Maximum Operating rate at ambient temperature $\leq 70^\circ\text{C}$	In operating cycles per hour		1800	1800	1800	1800

Cabeling

Flexible cabel without cable end	1 Conductor	mm ²	1/4	1/4	1/4	1/4
	2 Conductors	mm ²	1/4	1/4	1/4	1/4
Flexible cabel with cable end	1 Conductor	mm ²	1/4	1/4	1/4	1/4
	2 conductors	mm ²	1/2.5	1/2.5	1/2.5	1/2.5
Solid cable without cable end	1 Conductor	mm ²	1/4	1/4	1/4	1/4
	2 Conductors	N.m	1/4	1/4	1/4	1/4
Tightening torques		N.m	1.2	1.2	1.2	1.2

(1) The closing time "C" measured from the moment the coil supply is switched on to initial contacy of the main poles. The opening timt "O" is measured from the moments from the coil supply is switched off to the moment the main poles saperate.

B

Power Contactor

ETe Series

Pole Characteristics

Number of poles			3P	3P	3P	3P
Continuous Current @ 70°C	Open Type		75	100	110	110
Rated operational current (Ie)	In AC-3, $\theta < 60^\circ\text{C}$	A	50	65	80	95
	In AC-1, $\theta < 70^\circ\text{C}$	A	75	100	110	110
Rated insulation voltage (Ue)	Up to	V	690	690	690	690
		Hz	50 / 60	50 / 60	50 / 60	50 / 60
Rated thermal current (Ith)	$\theta < 40^\circ\text{C}$ (Enclosed) $\theta \leq 70^\circ\text{C}$ (Open)	A	75	100	110	110
H.P. Rating	575-600 V ac / FLA		41	52	62	62

Maximum HP Rating @ 70°C

1 Phase	110-120V		3	5	7.5	7.5	
	220-240V		7.5	10	15	15	
3 Phase	200-208V		15	20	25	25	
	220-240V		15	20	25	25	
	440-480V		40	50	60	60	
	575-600V		40	50	60	60	
Rated making capacity	I rms conforming to IEC 60947-4-1	A	900	1000	1100	1200	
Rated breaking capacity	I rms conforming to IEC60947-4-1	440V	A	900	1000	1100	1100
		550V	A	800	900	1000	1100
		660-690V	A	500	630	640	640
Permissible short time rating from cold state, no current flowing for preceding 15 minutes, at $\theta < 40^\circ\text{C}$	For 1 s	A	810	900	990	990	
	For 5 s	A	520	660	800	800	
	For 10 s	A	400	520	640	640	
	For 30 s	A	275	340	420	420	
	For 1 min	A	208	260	320	320	
	For 3 min	A	145	175	210	210	
	For 10 min	A	84	110	135	135	
Fuse rating for High Fault short circuit current at 100kA	400% of FLA at 600V Fuse Class J/CC	A	200	250	300	300	
Fuse rating Standard Fault short circuit current at 5kA	225% of FLA @600V Fuse Class RK5	A	110	125	175	175	
Average impedance per pole	At Ith and 50Hz	m Ω	1.5	1	0.8	0.8	
Power dissipation per pole for the above operational currents	AC-1	W	9.6	6.4	12.5	12.5	
	AC-3	W	3.7	4.2	5.1	7.2	
			Min/max c.s.a	Min/max c.s.a	Min/max c.s.a	Min/max c.s.a	
Cabeling	Copper Conductors @ 75°C	AWG	10/3	10/3	10/2	10/2	
Flexible cabel without cable end	1 Conductor	mm ²	2.5/25	4/50	4/50	4/50	
	2 Conductors	mm ²	2.5/16	4/25	4/25	4/25	
Flexible cabel withcable end	1 Conductor	mm ²	2.5/25	4/50	4/50	4/50	
	2 Conductors	mm ²	2.5/10	4/16	4/16	4/16	
Solid cable without cable end	1 Conductor	mm ²	2.5/25	4/50	4/50	4/50	
	2 conductors	mm ²	2.5/16	4/25	4/25	4/25	
Tightening Torques	Power circuit connections	lb in	35	35	75	75	
		N.m	5	9	9	9	

(1) In the least favourable direction, without change of contact state(coil supplied at Uc)

Power Contactor ETe Series

Global Certification  **RoHS**
Compliant

Compatible Accessories



Auxiliary Contact Block-Side

TA8-DN20
TA8-DN11



Auxiliary Contact Block-Front

TA1-DN01*
TA1-DN10*
TA1-DN11
TA1-DN02
TA1-DN20
TA1-DN40
TA1-DN31
TA1-DN22
TA1-DN13
TA1-DN04

* Can be suitable for 50-95A contactors only



Thermal Overload Relay

TR2D



Timers Front Mounted

0.1-3s TA2-DT0	1-30s TA2-DS2	0.1-3s TA3-DR0
0.1-30s TA2-DT2		0.1-30s TA3-DR2
0.1-180s TA2-DT4		0.1-180s TA3-DR4



Relay Independent Mounting Kit

TA7D



Surge Suppressor

Reference	Voltage Rating
TA9RC980E	24-48V AC
TA9RC980U	110-280V AC
TA9RC980N	380V-440V AC
TA9RC980G	110V-280V AC
TA9RC980C	24-48 AC
TA9RC980P	110-240V AC
TA9MOV980E	24-48V AC/DC
TA9MOV980F	70-110V AC/DC
TA9MOV980U	110-240V AC/DC



Mechanical Interlock

Use for Contactor	Mechanical	Electro Mechanical
TC1D09-D22, TP1D09-22	LA9D09978	ELA9D09978
TC1D50, TP1D50	LA9D50978	ELA9D50978
TC1D65-D95, TP1D65-D95	LA9D80978	ELA9D80978



Spare Coils

Use for Contactor AC	Reference
TC1D0910/01ETe, TC1D1210/01ETe, TC1D1810/01ETe, TC1D2210/01ETe	TX1D2-XX
TP1D0910/01ETe, TP1D1210/01ETe, TP1D1810/01ETe, TP1D2210/01ETe	TX4D2-XX
TC1D5011ETe / TC1D6511ETe/ TC1D8011ETe/TC1D9511ETe	TX1D6-XX
TP1D5011ETe	TX4D40-XX
TP1D6511ETe/ TP1D8011ETe/TP1D9511ETe	TX4D80-XX

XX - Indicates coil voltage code

AC Coil Voltages (Replace XX with voltage)

Voltage	24	48	110	120	208	220	240	277	380	415	440	480	575	600
50 Hz	B5	E5	F5	-	-	M5	U5	-	Q5	N5	R5	-	-	-
60 Hz	B6	E6	F6	G6	L6	M6	U6	W6	Q6	-	R6	T6	S6	X6
50/60 Hz	B7	E7	F7	G7	-	M7	U7	-	Q7	N7	R7	-	-	-

DC Coil Voltages (Replace XX with voltage)

Voltage	24*	48*	110*	120	208	220*	240	277	380
	JD	BD	ED	SD	FD	GD	MD	UD	RD

B

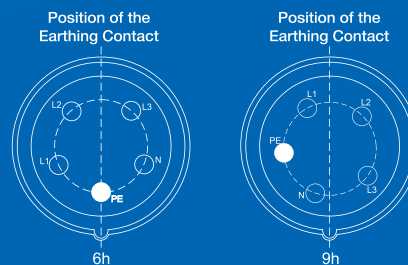
Industrial Plugs & Sockets



BENEFITS

- Safety through interchangeability
- High grade thermo plastic material assures:
 - Exceptional high impact resistance
 - High thermal stability
 - High insulated Quality
 - Good resistance to various chemicals
- Colour codes for easy identification of Plug & Sockets
- Locking device prevent unintended withdrawl

IEC 60309 Series
IP44 & IP67 Protection



Control & Signalling Devices

Metallic & Polycarbonate Series



Push Buttons & Pilot Lamps

- Ø22.5 mm Push Buttons, Emergency Stop PB, Selector switch
Illuminated & Non Illuminated Actuators in Plastic & Metallic variants
- Pilot Lamps in LED / Filament / Neon types
- Push Button Stations 1/2/3/4 ways, IP65 / 166, NEMA-41/X protection
- High Mechanical and Electrical life
- Aesthetic and Elegant outlook
- Wide Range of colors | voltages available

Globally accepted



IEC 60309 Series

[HSN Code: 8536]

IP 44 & IP 67 Versions	Description	Rating (Amp)	Protection Degree	3 PIN, 2P+E 240V AC		4 PIN, 3P+E 415V AC		5 PIN, 3P+N+E 415V AC	
				Code	Reference h	Code	Reference h	Code	Reference h
	Panel Mounting Socket - Splash Proof	16	IP44	CS62205*	6	-	-	CS62210*	6
		32		CS62216*	6	-	-	CS62221*	6
	Panel Mounting Socket - Water Tight	16	IP67	CS62227	6	-	-	CS62232	6
		32		CS62238	6	-	-	CS62243	6
		63		CS63249	6	-	-	CS63254	6
		125		-	-	-	-	CS62262	6
	Surface Mounting Socket - Splash Proof	16	IP44	CS62404	6	-	-	CS62409	6
		32		CS62415	6	-	-	CS62420	6
	Surface Mounting Socket - Water Tight	16	IP67	CS62426	6	-	-	CS62431	6
		32		CS62437	6	CS62283	3	CS62442	6
		63		CS63448	6	-	-	CS63453	6
		125		-	-	-	-	CS63463	6
	Plugs - Splash Proof	16	IP44	CS60004*	6	-	-	CS60009*	6
		32		CS60015*	6	-	-	CS60020*	6
	Plugs - Water Tight	16	IP67	CS60026	6	-	-	CS60031	6
		32		CS60037	6	CS60145	3	CS60042	6
		63		CS61048	6	-	-	CS61053	6
		125		-	-	-	-	CS60061	6
	Surface Mounting Interlocked Switched Socket Outlet - Horizontal	16	IP44	CS66004(H)	6	-	-	CS66109(H)	6
		32		CS66015(H)	6	-	-	CS66020(H)	6
	Surface Mounting Interlocked Switched Socket Outlet - Vertical	16	IP67	CS66200	6	-	-	CS66202	6
		32		CS66201	6	-	-	CS66203	6
	Connector - Splash Proof	16	IP44	CS62004*	6	-	-	CS66215*	-
		32		CS62015*	6	-	-	CS66225*	-
	Connector Water Tight	32	IP67	-	-	CS62128	3	-	-

Note: Plugs & Sockets 3 PIN, 2P+E 240V AC are in Blue color, 5 PIN, 3P+N+E 415V AC are in Red color

[HSN Code: 8536]

AC Distribution Box with Socket	Description	Rating (Amp)	Protection Degree	Code	Reference h
	AC Distribution Box (Includes Socket & Plug)	16A 3P 240V	IP40	CS60045*	6
		32A 3P 240V		CS60046*	6
		32A 5P 415V		CS60047*	6
		63A 5P 415V		CS60048*	6

* Stock for accessories are subject to availability

General Characteristics

Products	Push Buttons, Selector Switches, Key Selector Switches, Latching Mushroom Head Push Buttons, Pilot Lights & Illuminated Push Buttons
Reference Standard	IEC 60947-5-1, EN 60947-5-1, UL 508, CSA C-22-2 n° 14
Approval	cUL, UL, CSA, CE
Protection Degree	IP65 / IP66 according to IEC 60947-1;
Pollution Degree	3
Temperature	-40°C ~ +70°C (Storage) -25°C ~ +70°C (Working)
Vibration Resistance	∅ 60mm Mushroom Head Push Buttons: 8g, Other Push Buttons & Pilot Lights: 15g (40Hz<frequency<500 Hz) conforming to IEC 68-2-6
Shock Resistance	Push Buttons: 70g, Mushroom Head Push Buttons: 15g, Selector Switches: 200g conforming to IEC 68-2-27
Working Position	All working positions are allowed
Mechanical Life Push Buttons	Push Buttons & Selector Switches 1 million operations, Latching Emergency Mushroom 300,000 operations

Contact Elements Characteristics

Rated Thermal Current I_{th}	10A
Rated Insulation Voltage U_i	500V conforming to IEC 60947-1, UL 508 & CSA 22-2 n° 14
Insulation Category	Group C conforming to NF C 20-040, VDE 0110
Operating Force	Push Buttons - 1 'NO' = 10N, 1 'NC' = 8N Additional contacts - 'NO' = +5N, 'NC' = +3N
Dielectric Strength	2.5KV for 1 minute
Insulation Resistance	2M Ohm min (500 VDC)
Initial Contact Resistance	<25 milli Ohm
Short Circuits Protection	10A 500V, Cartridge Fuse g1 or N conforming to IEC 337-1
Cabling/Terminal Capacity	1x0.5mm ² 2x1.5mm ²
Contact Operation	Slow action, Positive Opening
Rated Power	Conforming to IEC 60947-5-1; utilization categories AC 15 & DC 13

DC Supply

Power broken in W
For 1 million operations

Voltage	24V	48V	120V
Inductive Load	65W	48W	40W

AC Ratings, Inductive - NEMA A600

35% Power Factor

Voltage	Make (A)	VA	Break (A)	VA	Continuous carrying (A)	Resistive 75% Power factor Make, Break & continuous (A)
120	60	7200	6	720	10	10
240	30	7200	3	720	10	10
480	15	7200	1.5	720	10	10
600	12	7200	1.2	720	10	10

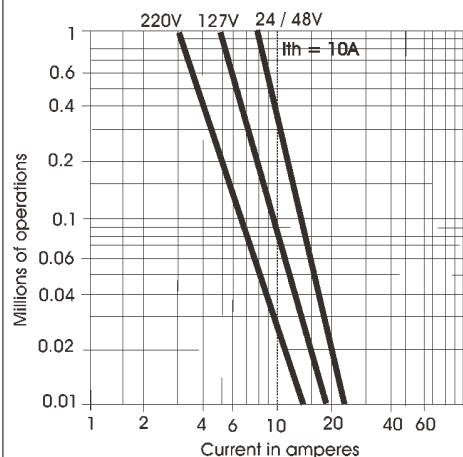
DC Ratings, NEMA Q600

Inductive and resistive

Voltage	Make & Break (Amp.)	Continuous (Amp.)
125	0.55	2.5
250	0.27	2.5
600	0.10	2.5

Standard Contact Blocks













AC Supply (50/60HZ)
∞ Inductive



Push Button: Metallic & Polycarbonate (22.5mm)

[HSN Code: 8536]

Push Button Actuators with Carrier - Non-Illuminated

Description	Reference	
	Metallic	Polycarbonate
 Push Spring Return Push Button	RCB2-BA1O	RCP2-BA1O
	RCB2-BA2●	RCP2-BA2●
	RCB2-BA3●	RCP2-BA3●
	RCB2-BA4●	RCP2-BA4●
	RCB2-BA5●	RCP2-BA5●
	RCB2-BA6●	RCP2-BA6●
 Flush Spring Return Push Button with contact	-	RCP2BA33●
	-	RCP2BA35●
 Projecting Push Button	RCB2-BL1O	RCP2-BL1O
	RCB2-BL2●	RCP2-BL2●
	RCB2-BL3●	RCP2-BL3●
	RCB2-BL4●	RCP2-BL4●
	RCB2-BL5●	RCP2-BL5●
	RCB2-BL6●	RCP2-BL6●
 Mushroom Head Push Button, Spring Return	RCB2-BC2●	RCP2-BC2●
	RCB2-BC3●	RCP2-BC3●
	RCB2-BC4●	RCP2-BC4●
	RCB2-BC5●	RCP2-BC5●
	RCB2-BC6●	RCP2-BC6●
	 Mushroom Head Push Button, Spring Return with contact	-
-		RCP2-BC31●
-		RCP2-BC42●
-		RCP2-BC51●
-		RCP2-BC61●
 Mushroom Head Push \varnothing 40mm Button Stay Put (press to \varnothing 60mm lock, turn to release)	RCB2-BS54●	RCP2BS54●
	RCB2-BS64●	RCP2BS64●
 Mushroom Head Push Button, Push to Stay & Key to release	RCB2-BS14●	RCP2BS14●
 Push Button Stay Put \varnothing 30mm (Press to Lock turn to release)	RCB2-BS44●	RCP2BS44●
Push Button Actuators with Carrier & Contact Element-Non-Illuminated		
 Flush Spring Return Push Button with 1NO Block	RCB2-BA11O	RCP2-BA11O
	RCB2-BA21●	RCP2-BA21●
	RCB2-BA31●	RCP2-BA31●
	RCB2-BA51●	RCP2-BA51●
	RCB2-BA61●	RCP2-BA61●
	RCB2-BA41●	RCP2-BA41●
 Push Button with 1NC Block	RCB2-BA42●	RCP2-BA42●
 Projecting Head Push Button with 1NO Block	RCB2-BA11O	RCP2-BL11O
	RCB2-BA21●	RCP2-BL21●
	RCB2-BA31●	RCP2-BL31●
	RCB2-BA51●	RCP2-BL51●
	RCB2-BA61●	RCP2-BL61●
 Projecting PB with 1NC Block	RCB2-BA41●	RCP2-BL42●

B

Push Button: Metallic & Polycarbonate (22.5mm)

[HSN Code: 8536]

Push Button Actuators - Illuminated Flush without Series Resistor

Description	Reference	
	Metallic	Polycarbonate
Illuminated Actuator, Flush (With BA9 Filament Bulb) 12V, 24V, 48V, 110V AC / DC	RCB2-BW316▲○	RCP2-BW316▲○
	RCB2-BW336▲●	RCP2-BW336▲●
	RCB2-BW346▲●	RCP2-BW346▲●
	RCB2-BW356▲●	RCP2-BW356▲●
	RCB2-BW366▲●	RCP2-BW366▲●
Illuminated Actuator, Flush (With BA9 Neon Bulb) 220V, 380V, 415V AC / DC	RCB2-BW376s▲○	RCP2-BW376▲○
	RCB2-BWN336▲●	RCP2-WN336▲●
	RCB2-BWN346▲●	RCP2-WN346▲●
	RCB2-BWN356▲●	RCP2-WN356▲●

Push Button Actuators - Illuminated Flush

Illuminated Actuator, Flush (with BA9S Filament Bulb, 130V) 220V AC/DC	RCB2-BW317▲○	RCP2BW317▲○
	RCB2-BW337▲●	RCP2-BW337▲●
	RCB2-BW347▲●	RCP2-BW347▲●
	RCB2-BW357▲●	RCP2-BW357▲●
	RCB2-BW367▲●	RCP2-BW367▲●
	RCB2-BW377▲○	RCP2-BW377▲○

LED Type Push Button Actuators - Illuminated Flush

Flush Illuminated with Integral Circuit LED suitable for operating at 240V 220V, 110V, 48V, 24V & 12V	RCB2-BWL337▲●	RCP2-BWL337▲●
	RCB2-BWL347▲●	RCP2-BWL347▲●
	RCB2-BWL357▲●	RCP2-BWL357▲●
Flush Illuminated With Integral Circuit LED suitable for operating at 240V 220V, 110V, 48V, 24V & 12V	RCB2-BWL317▲○	RCP2-BWL317▲○
Flush Illuminated Actuator, with integral circuit LED, suitable for operating at common voltage AC/DC 220V, 110V, 48V, 24V & 12V Also available at operational voltage 240V AC, 220VDC, 110V AC, 110V DC	RCB2-BWL377▲●	RCP2-BWL377▲●
	RCB2-BWL387▲●	RCP2-BWL387▲●
	RCB2-BWL367▲●	RCP2-BWL367▲●

Push Button Actuator-Illuminated Projecting without Series Resistor

Illuminated Actuator, Flush (With BA9 Filament Bulb) 12V, 24V, 48V, 110V AC / DC	RCB2-BW116▲○	RCP2-BW116▲○
	RCB2-BW136▲●	RCP2-BW136▲●
	RCB2-BW146▲●	RCP2-BW146▲●
	RCB2-BW156▲●	RCP2-BW156▲●
Illuminated Actuator, Flush (With BA9 Neon Bulb) 220V, 380V, 415V AC / DC	RCB2-BW166▲●	RCP2-BW166▲●
	RCB2-BW176▲○	RCP2-BW176▲○
	RCB2-BWN136▲●	RCP2-BWN136▲●
	RCB2-BWN146▲●	RCP2-BWN146▲●
	RCB2-BWN156▲●	RCP2-BWN156▲●

Push Button Actuator-Illuminated Projecting without Series Resistor

Illuminated Actuator, Projecting (with BA9S Filament Bulb, 130V) 220V AC/DC	RCB2-BW117▲○	RCP2-BW117▲○
	RCB2-BW137▲●	RCP2-BW137▲●
	RCB2-BW147▲●	RCP2-BW147▲●
	RCB2-BW157▲●	RCP2-BW157▲●
	RCB2-BW167▲●	RCP2-BW167▲●
	RCB2-BW177▲○	RCP2-BW177▲○
	-	RCP2-BW187▲●



Push Button: Metallic & Polycarbonate (22.5mm) [HSN Code: 8536]



LED Type Push Button Actuators-Illuminated Projecting Type of voltage AC/DC to be specified		
Description	Reference	
	Metallic	Polycarbonate
Projecting Illuminated Actuator, with integral LED, suitable for operating at common Voltage AC/DC 110V, 48V, 24V &12V Also available at operational Voltage 240V AC, 220V DC 110V AC, 110V DC	-	RCP2-BWL117▲○
	RCB2-BWL137▲●	RCP2-BWL137▲●
	RCB2-BWL147▲●	RCP2-BWL147▲●
	RCB2-BWL157▲●	RCP2-BWL157▲●
	-	RCP2-BWL177▲○
	-	RCP2-BWL187▲●
	RCB2-BWL167▲●	RCP2-BWL167▲●

Colour Code for Actuator / Lens

Colour Code	1	2	3	4	5	6	7
Colour of Actuator	White	Black	Green	Red	Yellow	Blue	-
Colour of Lens	White	-	Green	Red	Amber	Blue	Clear

▲Add Voltage Code, ❖ Operating voltage available in 240V AC, 110V & 220V DC

Selector Switch

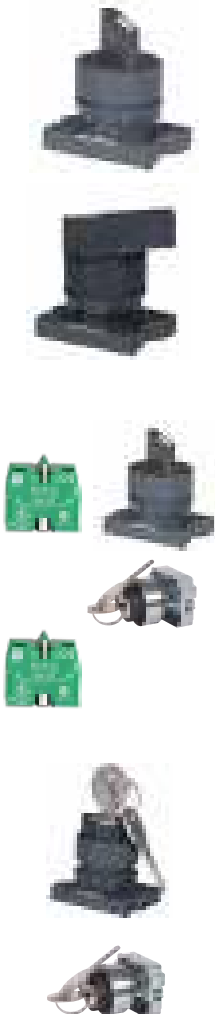
Description	Reference	
	Metallic	Polycarbonate
2-Position Selector Switch (stay put)	RCB2-BD2	RCP2-BD2
3-Position Selector Switch,centre 'OFF' (stay put)	RCB2-BD3	RCP2-BD3
2-Position Selector Switch with extra long knob (stay put)	RCB2-BJ2	RCP2-BJ2
3-Position Selector Switch, with extra long knob centre 'OFF' (stay put)	RCB2-BJ3	RCP2-BJ3
3-Position Selector Switch (Spring Return)	RCB2-BDR2	-
2-Position Selector Switch-extra long knob (Spring Return)	RCB2-BDR3	RCP2-BDR3
3-Position Selector Switch extra long knob (Spring Return)	RCB2-BJR2	-
	RCB2-BJR3	RCP2-BJR3

Selector Switch Actuators with Carrier & Contact Element

2-Position Selector Switch (stay put) with 1NO Block	RCB2-BD21	RCP2-BD21
2-Position Selector Switch, centre 'OFF' (stay put) with NO+NC Block	RCB2-BD25	RCP2-BD25
3-Position Selector Switch, centre 'OFF' (stay put) with NO+NC Block	RCP2-BD35	RCP2-BD35

Key Actuators with Carrier

2-Position Key Switch, Key removable in unactuated position	RCB2-BG2	RCP2-BG2
2-Position Key Switch, Key removable in both position	RCB2-BG4	RCP2-BG4
2-Position Key Switch, Key removable in 'Right Hand' position	RCB2-BG02	RCP2-BG02
2-Position (Spring Return) Key Switch,Key, removable in 'Left Hand' position	RCB2-BG3	-
3-Position Key Switch, Key removable in centre 'OFF' position	RCB2-BG0	RCP2-BG3
3-Position Key Switch, Key removable in all position	RCB2-BG5	RCP2-BG0
3-Position Key Switch, Key removable in 'Left Hand & Right Hand' position	RCB2-BG9	RCP2-BG5
3-Position Key Switch, Key removable in 'Left Hand' position	RCB2-BG09	RCP2-BG9
3-Position Key Switch, Key removable in 'Right Hand' position	RCB2-BG7	RCP2-BG7



Push Button: Metallic & Polycarbonate (22.5mm)

[HSN Code: 8536]

Selector Switch Actuators - Illuminated with series resistor



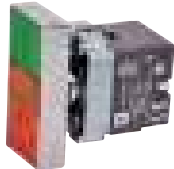
Description	Reference	
	Metallic	Polycarbonate
2-Position Illuminated Selector Switch (with BA9S Filament Bulb 130V) suitable for operation at 220V AC/DC	RCB2-BK1237▲●	-
	RCB2-BK1247▲●	-
	RCB2-BK1257▲●	-
3-Position Illuminated Selector Switch (with BA9S Filament Bulb 130V) suitable for operation at 220V AC/DC	RCB2-BK1337▲●	-
	RCB2-BK1347▲●	-
	RCB2-BK1357▲●	-

Selector Switch Actuators - Illuminated without series resistor



2-Position Illuminated Selector Switch (with BA9S Filament Bulb) 12V, 24V, 48V, 110V AC/DC, 220V DC, 240V AC	RCB2-BK1256▲●	-
3-Position Illuminated Selector Switch (with BA9S Filament Bulb) 12V, 24V, 48V, 110V AC/DC, 220V DC, 240V AC	RCB2-BK1336▲●	-
	RCB2-BK1346▲●	-
	RCB2-BK1356▲●	-
2-Position Illuminated Selector Switch (with LED Bulb) suitable for operation at 12V, 24V, 48V, 110V AC/DC, 220V DC, 240V AC	RCB2-BKL1237▲●	-
	RCB2-BKL1247▲●	-
	RCB2-BKL1257▲●	-
3-Position Illuminated Selector Switch (with LED Bulb) suitable for operation at 12V, 24V, 48V, 110V AC/DC, 220V DC, 240V AC	RCB2-BKL1337▲●	-
	RCB2-BKL1347▲●	-
	RCB2-BKL1357▲●	-

Double Push Button Actuators - Illuminated Flush without Series Resistor



Illuminated Double Push Button, Flush Green & Red Knob marked I&O respectively (with BA9S Neon Bulb) 220V, 380V, 415V AC/DC	RCB2-BWN96▲
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Push Button Actuators with Carrier - Non-Illuminated

Double Push Button, Flush Green & Red Knob marked I&O respectively	RCB2-BA87
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Pilot Lamps with Series Resistor



Description	Reference	
	Metallic	Polycarbonate
Pilot Lamp (with BA9S Filament Bulb 130V) 220V AC / DC	RCB2-BV71▲●	RCP2-BV71▲●
	RCB2-BV73▲●	RCP2-BV73▲●
	RCB2-BV74▲●	RCP2-BV74▲●
	RCB2-BV75▲●	RCP2-BV75▲●
	RCB2-BV76▲●	RCP2-BV76▲●
	RCB2-BV77▲○	RCP2-BV77▲○

Pilot Lamps with Series Resistor & Diode

Pilot Lamp (with BA9S Filament bulb 130V) 220V AC/DC	RCB2-BVD71●	RCP2 BVD71▲●
	RCB2-BVD73▲●	RCP2-BVD73▲●
	RCB2-BVD74▲●	RCP2-BVD74▲●
	RCB2-BVD75▲●	RCP2-BVD75▲●
	RCB2-BVD76▲●	RCP2-BVD76▲●
	RCB2-BVD77▲○	RCP2-BVD77▲○

Push Button: Metallic & Polycarbonate (22.5mm)

[HSN Code: 8536]



Integrated LED Pilot Lamp - Type of voltage AC/DC to be specified

Description	Reference	
	Metallic	Polycarbonate
Integral LED pilot Lamp suitable for operating at common voltage AC/DC 110V, 48V, 24V & 12V Also available at operational voltage 240V AC, 220V DC, 110V AC, 110V DC	RCB7-IVL73▲●	-
	RCB7-IVL74▲●	-
	RCB7-IVL75▲●	-
	RCB7-IVL77▲○	-
	RCB7-IVL78▲●	-
	RCB7-IVL76▲●	-
	RCB7-IVL71▲●	-
Wide range: 12V-240V AC/DC	RCB7-IVL73▲●	-
	RCB7-IVL74▲●	-
	RCB7-IVL75▲●	-
	RCB7-IVL77▲○	-
	RCB7-IVL78▲●	-
	RCB7-IVL76▲●	-
	RCB7-IVL71▲●	-

LED Type Pilot Lamp Type of voltage AC / DC to be specified



Pilot Light with integral circuit LED, suitable for operating at common Voltage AC/DC 110V, 48V, 24V & 12V Also available at operational Voltage 240V AC, 220V DC 110V AC, 110V DC	RCB2-BVL73▲●	RCP2-BVL73▲●
	RCB2-BVL74▲●	RCP2-BVL74▲●
	RCB2-BVL75▲●	RCP2-BVL75▲●
	RCB2-BVL77▲○	RCP2-BVL77▲○
	RCB2-BVL78▲●	RCP2-BVL78▲●
	RCB2-BVL76▲●	RCP2-BVL76▲●
	RCB2-BVL71▲●	RCP2-BVL71▲●

Voltage Code for Pilot Lamps

Voltage	12V*	24V*	48V*	110V*	110VAC	110VDC	125V*	220V*	220VDC	240VAC	415VAC
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▲Add Voltage Code. *For AC/DC

Complete Pilot Light Bodies



Description	Reference	
	Metallic	Polycarbonate
Direct BA 9s Filament Bulb Supplied 12V, 24V, 48V, 110V, 130V AC/DC	RB2BV6*	-
Through Resistor BA 9s, 130 V Filament Bulb supplied 240V AC/DC	RB2BV7	-
Through Resistor & diODE BA 9s, 130 V Filament Bulb supplied: 240V AC	RB2BVD7	-
Via integral Transformer 1.2VA BA9s, 6v Filament Bulb Supplied 110V, 6V AC, 220V, 240V, 6V AC	RB2BV3	-
	RB2BV4	-
Integral Circuit & Cluster LED 12V, 24V, 48V AC/DC 110VAC, 110V DC, 220V DC, 240VAC	RB2BVL71●	-
	RB2BVL73●	-
	RB2BVL74●	-
	RB2BVL75●	-
	RB2BVL76●	-
	RB2BVL77○	-
	RB2BVL78●	-
	RB2BVL78●	-

B

Push Button: Metallic & Polycarbonate (22.5mm)

[HSN Code: 8536]

Push Buttons Additional Accessories

Description	Reference	
	Metallic	Polycarbonate
Reset Extended Actuator Push button - Round Type	RCB2AL8R	-
Reset Extended Actuator Push button - Hex Type	RCB2AL8H	-
Plastic Adopter for 30 mm hole to 22.5 mm.	-	RP2-BZ41M
Metal Adopter for 30 mm hole to 22.5 mm	RB2-BZ41M	-
Recess (Guarded) Push button - Plastic	-	RP2-BA16 ●
	-	RP2-BA26 ●
	-	RP2-BA36 ●
	-	RP2-BA46 ●
	-	RP2-BA56 ●
	-	RP2-BA66 ●

Flashing Buzzer

Intermittent Sounding Flashing Buzzer 15 ~ 20 mA, sound level 80 dB.24V, 48V, 110V AC/DC 240V AC
(* Add Voltage code)

RB2-KS* ●

Contact Elements - NO/NC (Non UL)

Contact Element 1 NO	RE2-BE-101
Contact Element 1 NC	RE2-BE-102

Contact Elements - NO/NC (UL)

Contact Element 1 NO	RB2-BE-101
Contact Element 1 NC	RB2-BE-102

Push Buttons - Add on Block Option (Polycarbonate)

Description	Aux. Contacts	Reference
Max. Aux Contacts (6NO or 6NC)	NO	RB2-BE-101
	NC	RB2-BE-102

Push Buttons - Add on Block Option (Metallic)

Description	Aux. Contacts	Reference
1NO+1NO or 1NC+1NC	NO	RB2-BZ101
	NC	RB2-BZ102
	1NO+1NO	RB2-BZ103
	1NC+1NC	RB2-BZ104
	1NO+1NC	RB2-BZ105

NOTE: At any point of time, the max Aux contacts available for Polycarbonate series is 6NO or 6NC and for Metallic Series it is 1NO+1NO or 1NC+1NC

HOW TO ORDER:

- Actuators, switch elements, lens assemblies can be ordered separately or in combination.
- Basic type designation for actuators is "RB2-B". Numerical colour code is added as a suffix to indicate the colour of the actuator or lens. Remove "*" and put numerical code as indicated below:

Colour Code	1	2	3	4	5	6	7
Colour of Actuator	White	Black	Green	Red	Yellow	Blue	-
Colour of Lens	White	-	Green	Red	Amber	Blue	Clear

- Different suffixes are assigned for flush, projecting, selector actuators etc.
- The type designation for contact element is '1' for NO and '2' for NC.
- Basic type designation for legend plates is "RB2-BY". To complete code with type of inscription please remove "*" and put numerical code as indicated below.

Control Stations - Assembled



Complete Control Stations - Start and Stop Functions Metal & Plastic, Spring Return

Description	Scheme	Colour	Marking on legend	Reference	
				Metallic	Polycarbonate
1 Flush Push Button	NO	3	I START	RC1M 102	RC1P 102
				RC1M 103	RC1P 103
1 Flush Push Button	NC	4	O STOP	RC1M 112	RC1P 112
				RC1M 114	RC1P 114
Latching Push Button	NC	4	STOP	RC1MBS542	RC1PBS542
				RC1MBS142	RC1PYBS542
Mushroom Head Key Switch	NC	4	STOP	-	RC1PBS142
				-	RC1PYBS142
2 Flush Push Button	NO+NC	3	I	RC2M 213	RC2P 213
		4	O		
2 Flush Push Button	NO+NC	3	START	RC2M 215	RC2P 215
		4	STOP		

Complete Control Stations Directional/Movement Control Functions Metal & Plastic, Spring Return

Description	Scheme	Colour	Marking on legend	Reference	
				Metallic	Polycarbonate
2 Flush Push Button	NO+NO	1	↑ ↓	RC 2M 222	RC2P222
		2	Up Down	RC 2M 222A	RC2P222A
		1	↔	RC 2M 223	RC2P223
		2	Right Left	RC 2M 223A	RC2P223A
		1	Open Close	RC 2M 241	RC2P241
		2	Forward Reverse	RC2M222B	RC 2P 222B
3 Flush Push Button	NO+NC +NO	3	Forward Stop Reverse	RC 3M 311	RC3P311
		4	Up Stop Down	RC 3M 321	RC3P321
		3	Right Stop Left	RC 3M 331	RC3P331
			Open Stop Close	RC 3M 341	RC3P341
		1	↕	RC 3M 324	RC3P324
		4	↕	RC 3M 334	RC3P334

Control Stations for Customer Assembly Empty Enclosure, Metal & Plastic

Description		Number of Ways	Reference	
Top	Base		Metallic	Polycarbonate
Yellow		1	-	RC - 1PY
Bone Grey	Jet Black	1	RC - 1M	RC - 1P
		2	RC - 2M	RC - 2P
		3	RC - 3M	RC - 3P
		4	RC - 4M*	RC - 4P

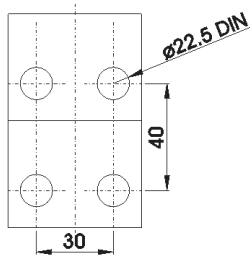
* Empty Enclosure's are available without contact blocks and push buttons and can be assembled with the accessories / spare parts as per specified requirements.

Contact Blocks - Base Mounted For Control Stations Customer Assembly

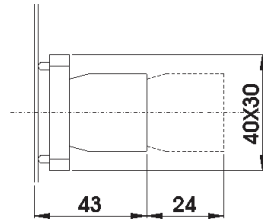
Contact Block (NO)	RB2BE-101BM	RB2BE-101BP
Slow Break (NC)	RB2BE-102BM	RB2BE-102BP

Control and Signalling Units: 22.5mm (Plastic)

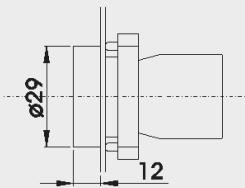
Dimensions/ Complete Units' Reference



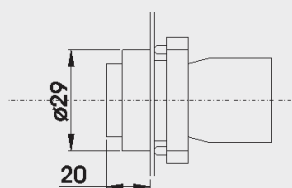
PANEL CUT-OUT
(Thickness: 6mm max.)



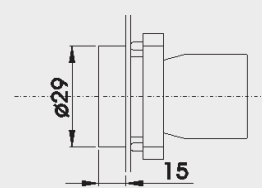
RB2-BE10+RP2-B = RCP2-BZ10*



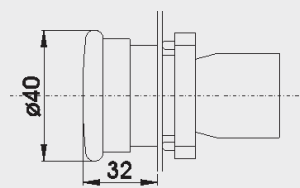
RP2-BA+RP2-BZ10*=RCP2-BA*
RP2-BA334+RP2-BZ10*=RCP2-BA334*



RP2-BL+RP2-BZ10*=RCP2-BL*

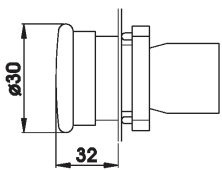


RP2-BA*8+RP2-BZ10*=RCP2-BA*8*



RP2-BC+RP2-BZ10*=RCP2-BC*
RP2-BS54+RP2-BZ10*=RCP2-BS54*

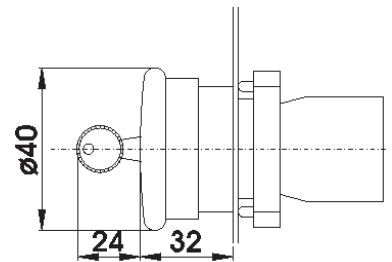
B



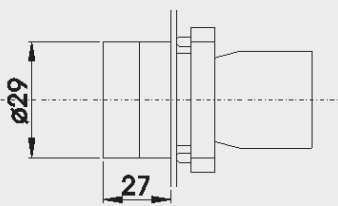
RP2-BS44+RP2-BZ10*=RCP2-BS44*



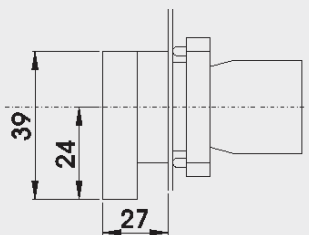
RP2-BR4+RP2-BZ10*=RCP2-BR4*
RP2-BS64+RP2-BZ10*=RCP2-BS64*



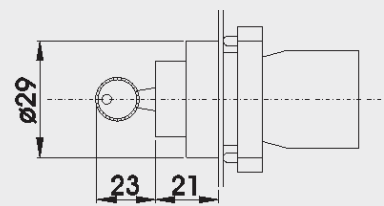
RP2-BS14+RP2-BZ10*=RCP2-BS14*



RP2-BD2+RP2-BZ10*=RCP2-BD2*
RP2-BD3+RP2-BZ10*=RCP2-BD3*

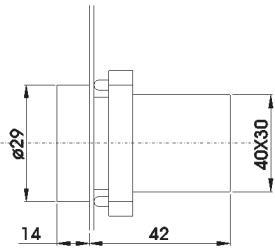


RP2-BJ2+RP2-BZ10*=RCP2-BJ2*
RP2-BJ3+RP2-BZ10*=RCP2-BJ3*

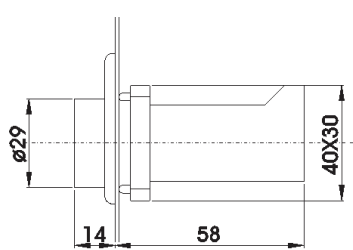


RP2-BG+RP2-BZ10*=RCP2-BG*
(Replace * with code for position of Key removal & operation pattern)

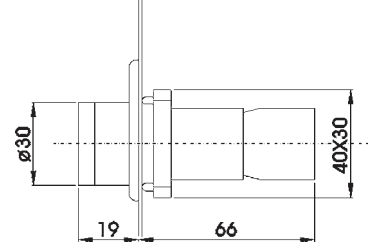
Control & Signalling Units 22.5mm Plastic Without Contact Elements



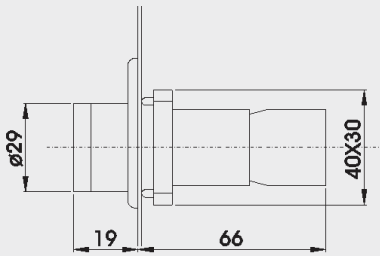
RP2-BV0●+RP2-BV6 = RCP2-BV6●
 RP2-BV0●+RP2-BVN6 = RCP2-BVN6●
 RP2-BV0●+RP2-BV7 = RCP2-BV7●
 RP2-BV0●+RP2-BVD7 = RCP2-BVD7●
 RP2-BVL0●+RP2-BVL7● = RCP2-BVL7●



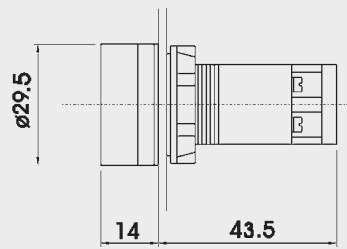
RP2-BV0●+RP2-BV3 = RCP2-BV3●
 RP2-BV0●+RP2-BV4 = RCP2-BV4●



RP2-BW5●+RP2-BW06+RB2-BE10❖ = RCP2-BW5●6❖
 RP2-BW5●+RP2-BW07+RB2-BE10❖ = RCP2-BW5●7❖
 RP2-BW5●+RP2-BWD07+RB2-BE10❖ = RCP2-BWD5●7❖
 RP2-BW5●+RP2-BW06+RB2-BE10❖ = RCP2-BW5●6❖



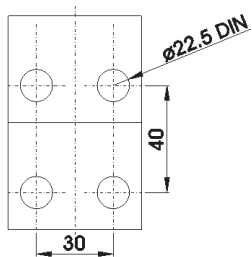
RP2-BW3●+RP2-BW06+RB2-BE10❖ = RCP2-BW3●6❖
 RP2-BW3●+RP2-BW07+RB2-BE10❖ = RCP2-BW3●7❖
 RP2-BW3●+RP2-BWD07+RB2-BE10❖ = RCP2-BWD3●7❖
 RP2-BWL3●+RP2-BWN06●+RB2-BE10❖ = RCP2-BWN3●6❖
 RP2-BWL3●+RP2-BWL7●+RB2-BE10❖ = RCP2-BWL3●7❖
 RP2-BW1●+RP2-BW06+RB2-BE10❖ = RCP2-BW1●6❖
 RP2-BW1●+RP2-BW07+RB2-BE10❖ = RCP2-BW1●7❖
 RP2-BW1●+RP2-BWD07+RB2-BE10❖ = RCP2-BWD1●7❖
 RP2-BWL1●+RP2-BWN06●+RB2-BE10❖ = RCP2-BWN3●6❖
 RP2-BWL1●+RP2-BWL7●+RB2-BE10❖ = RCP2-BWL3●7❖



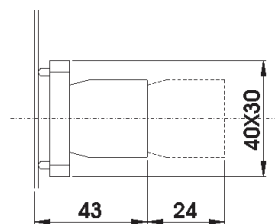
RCP7-IL-7●

Control & Signalling Units: 22.5mm

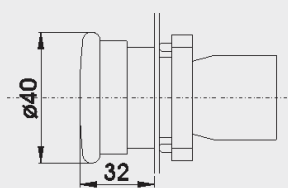
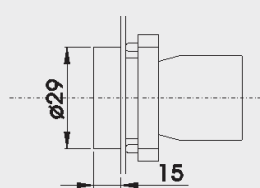
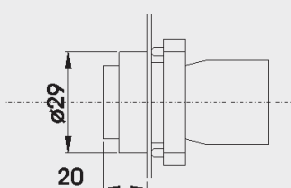
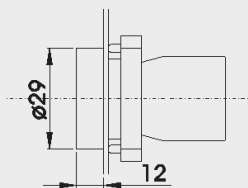
Dimensions/Complete Unit's Reference



PANEL CUT-OUT
(Thickness: 6mm max.)



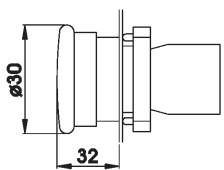
RB2-BE10*+RB2-B = RCB2-BZ10*



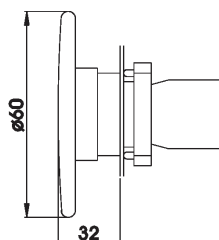
RB2-BA*+RB2-BZ10* = RCB2-BA*
RB2-BA334+RB2-BZ10* = RCB2-BA334*

RB2-BP*+RB2-BZ10* = RCB2-BP*
RB2-BA*8+RB2-BZ10* = RCB2-BA*8*

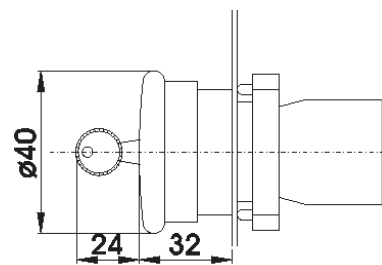
RB2-BC*+RB2-BZ10* = RCB2-BC*
RB2-BS54+RB2-BZ10* = RCB2-BS54*
RB2-BT4+RB2-BZ10* = RCB2-BT4*



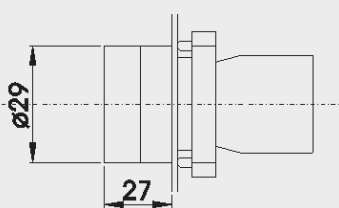
RB2-BS44+RB2-BZ10* = RCB2-BS44*



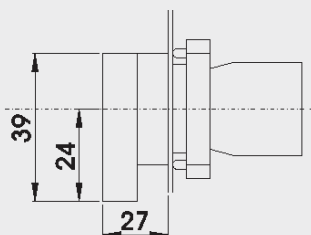
RB2-BR4+RB2-BZ10* = RCB2-BR4*
RB2-BS64+RB2-BZ10* = RCB2-BS64*



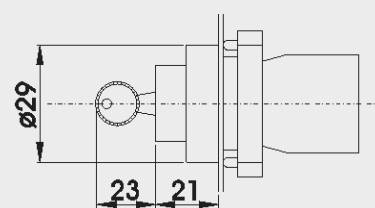
RB2-BS14+RB2-BZ10* = RCB2-BS14*



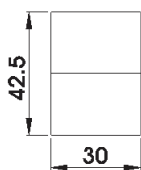
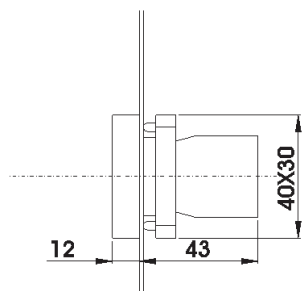
RB2-BD2+RB2-BZ10* = RCB2-BD2*
RB2-BD3+RB2-BZ10* = RCB2-BD3*



RB2-BJ2+RB2-BZ10* = RCB2-BJ2*
RB2-BJ3+RB2-BZ10* = RCB2-BJ3*



RB2-BG*+RB2-BZ10* = RCB2-BG*
(Replace * with code for position of Key removal & operation pattern)

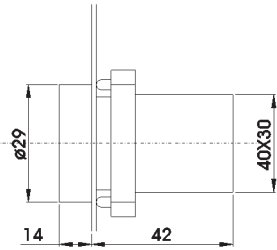


RB2-BA87+RB2-BZ10* = RCB2-BA87*

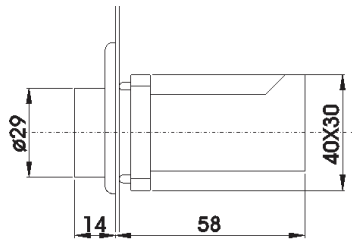
B

Control & Signalling: 22.5mm Metal

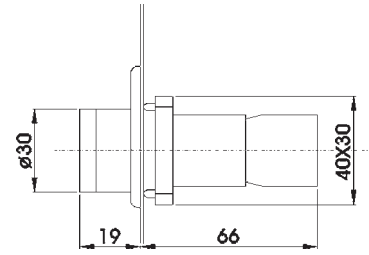
Dimensions/Complete Unit's Reference



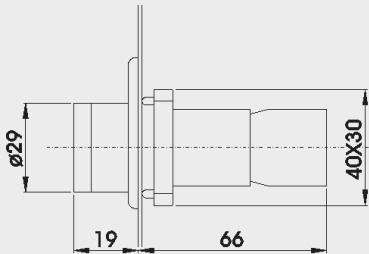
RB2-BV0●+RB2-BV6 = RCB2-BV6●
 RB2-BV0●+RB2-BVN6 = RCB2-BVN6●
 RB2-BV0●+RB2-BV7 = RCB2-BV7●
 RB2-BV0●+RB2-BVD7 = RCB2-BVD7●
 RB2-BVL0●+RB2-BVL7● = RCB2-BVL7●



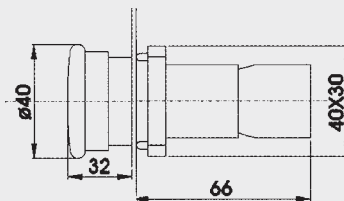
RB2-BV0●+RB2-BV3 = RCB2-BV3●
 RB2-BV0●+RB2-BV4 = RCB2-BV4●



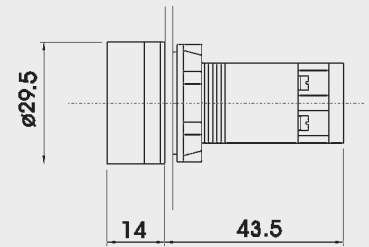
RB2-BW5●+RB2-BW06+RB2-BE10❖ = RCB2-BW5●6❖
 RB2-BW5●+RB2-BW07+RB2-BE10❖ = RCB2-BW5●7❖
 RB2-BW5●+RB2-BWD07+RB2-BE10❖ = RCB2-BWD5●7❖
 RB2-BW5●+RB2-BW06+RB2-BE10❖ = RCB2-BW5●6❖



RB2-BW3●+RB2-BW06+RB2-BE10❖ = RCB2-BW3●6❖
 RB2-BW3●+RB2-BW07+RB2-BE10❖ = RCB2-BW3●7❖
 RB2-BW3●+RB2-BWD07+RB2-BE10❖ = RCB2-BWD3●7❖
 RB2-BWL3●+RB2-BWN06●+RB2-BE10❖ = RCB2-BWN3●6❖
 RB2-BWL3●+RB2-BWL7●+RB2-BE10❖ = RCB2-BWL3●7❖
 RB2-BW1●+RB2-BW06+RB2-BE10❖ = RCB2-BW1●6❖
 RB2-BW1●+RB2-BW07+RB2-BE10❖ = RCB2-BW1●7❖
 RB2-BW1●+RB2-BWD07+RB2-BE10❖ = RCB2-BWD1●7❖
 RB2-BWL1●+RB2-BWN06●+RB2-BE10❖ = RCB2-BWN1●6❖
 RB2-BWL1●+RB2-BWL7●+RB2-BE10❖ = RCB2-BWL1●7❖

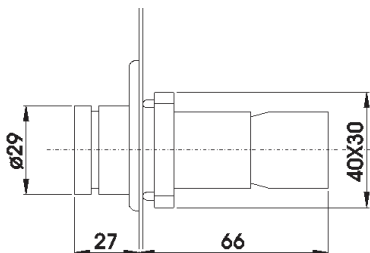


RB2-BW4●+RB2-BW06+RB2-BE10❖ = RCB2-BW4●6❖
 RB2-BW4●+RB2-BW07+RB2-BE10❖ = RCB2-BW4●7❖
 RB2-BW4●+RB2-BWD07+RB2-BE10❖ = RCB2-BWD4●7❖
 RB2-BW4●+RB2-BWN06●+RB2-BE10❖ = RCB2-BWN4●6❖
 RB2-BW4●+RB2-BWL7●+RB2-BE10❖ = RCB2-BWL4●7❖
 RB2-BW6●+RB2-BW06+RB2-BE10❖ = RCB2-BW6●6❖
 RB2-BW6●+RB2-BW07+RB2-BE10❖ = RCB2-BW6●7❖
 RB2-BW6●+RB2-BWD07+RB2-BE10❖ = RCB2-BWD6●7❖
 RB2-BW6●+RB2-BWN06●+RB2-BE10❖ = RCB2-BWN6●6❖
 RB2-BW6●+RB2-BWL7●+RB2-BE10❖ = RCB2-BWL6●7❖

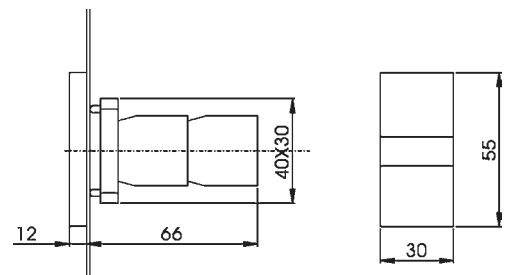


RCB7-ML-7●

B



RB2-BK12●+RB2-BW06+RB2-BE10❖ = RCB2-BK12●6❖
 RB2-BK12●+RB2-BW07+RB2-BE10❖ = RCB2-BK12●7❖
 RB2-BK12●+RB2-BWD07+RB2-BE10❖ = RCB2-BKD12●7❖
 RB2-BK13●+RB2-BW06+RB2-BE10❖ = RCB2-BK13●6❖
 RB2-BK13●+RB2-BW07+RB2-BE10❖ = RCB2-BK13●7❖
 RB2-BK13●+RB2-BWD07+RB2-BE10❖ = RCB2-BKD13●7❖



RB2-BW9+RB2-BW06+RB2-BE10❖ = RCB2-BW96❖
 RB2-BW9+RB2-BW07+RB2-BE10❖ = RCB2-BW97❖
 RB2-BW9+RB2-BWD07+RB2-BE10❖ = RCB2-BWD97❖
 RB2-BW9+RB2-BWN065+RB2-BE10❖ = RCB2-BWN965❖
 RB2-BW9+RB2-BWL75+RB2-BE10❖ = RCB2-BWL975❖

Industrial - Motor Starters



Features

- Conforms to IS 13947-4-1
- 3Ø DOL Starter range: 0.5HP~60HP
- 3Ø Reversing DOL Starter range: 0.5HP~20HP
- 3Ø Star Delta Starter range: 7.5HP~350HP

Custom built Starter solutions with incomer MCCB & Electronic Motor Protection Relay

- 3Ø Intelligent Star Delta Starter range: 40HP~ 350HP
- 3Ø Intelligent Auto Transformer Starter range: 40HP~ 350HP



Industrial Motor Starters – Direct-On-Line

Direct-On-Line Motor Starters in Sheet Steel Enclosures



BE1

Max. Motor Rating (kW) 3 phase 50 Hz					Overload Relay Range (Amps)	Contactor Reference	Contactor AC3 duty Rating	Starter Catalogue Reference	Recommended Back-up HRC Fuse Rating	
208V	240V	415V	480V	660V					(aM)	(gl)
-	-	0.5	-	0.55	0.63~1.00	TC1D12	12A	BE1T1235■305	2	4
-	0.37	0.55	0.75	1.1	1.00~1.60	TC1D12	12A	BE1T1235■306	2	4
0.37	0.75	1.1	1.1	1.5	1.60~2.50	TC1D12	12A	BE1T1235■307	4	6
0.75	1.5	1.5	1.5	3	2.50~4.00	TC1D12	12A	BE1T1235■308	6	10
1.1	2.2	2.2	2.2	4	4.00~6.00	TC1D12	12A	BE1T1235■310	8	16
1.5	3	3.7	3.7	5.5	5.50~8.00	TC1D12	12A	BE1T1235■312	12	20
2.2	4	4	4	7.5	7.00~10.0	TC1D12	12A	BE1T1235■314	12	20
3	5.5	5.5	5.5	10	9.0~13.0	TC1D12	12A	BE1T1235■316	16	25
4	7.5	9	9	15	12.0~18.0	TC1D18	18A	BE1T1835■321	20	32
5.5	11	11	11	18.5	17.0~25.0	TC1D25	25A	BE1T2535■322	25	50
7.5	15	15	15	-	23.0~32.0	TC1D32	32A	BE1T3235■353	40	63
10	18.5	22	22	30	30.0~40.0	TC1D40	40A	BE1T4035■355	63	-
11	22	25	25	37	37.0~50.0	TC1D50	50A	BE1T5035■357	63	-
18.5	25	30	30	50	48.0~65.0	TC1D65	65A	BE1T6535■359	63	-
20	30	37	37	55	55.0~70.0	TC1D65	65A	BE1T6535■361	80	-
22	33	40	40	59	63.0~80.0	TC1D80	80A	BE1T8035■363	80	-

Direct-On-Line Motor Starters in Plastic Enclosures**



LE1D

Max. Motor Rating (kW) 3 phase 50 Hz					Overload Relay Range (Amps)	Contactor Reference	Contactor AC3 duty Rating	Starter Catalogue Reference	Recommended Back-up HRC Fuse Rating	
208V	240V	415V	480V	660V					(aM)	(gl)
-	-	0.5	-	0.55	0.63~1.00	TC1D12	12A	LE1D123■305	2	4
-	0.37	0.55	0.75	1.1	1.00~1.60	TC1D12	12A	LE1D123■306	2	4
0.37	0.75	1.1	1.1	1.5	1.60~2.50	TC1D12	12A	LE1D123■307	4	6
0.75	1.5	1.5	1.5	3	2.50~4.00	TC1D12	12A	LE1D123■308	6	10
1.1	2.2	2.2	2.2	4	4.00~6.00	TC1D12	12A	LE1D123■310	8	16
1.5	3	3.7	3.7	5.5	5.50~8.00	TC1D12	12A	LE1D123■312	12	20
2.2	4	4	4	7.5	7.00~10.0	TC1D12	12A	LE1D123■314	12	20
3	5.5	5.5	5.5	10	9.0~13.0	TC1D12	12A	LE1D123■316	16	25
4	7.5	9	9	15	12.0~18.0	TC1D18	18A	LE1D183■321	20	32
5.5	11	11	11	18.5	17.0~25.0	TC1D25	25A	LE1D253■322	25	50

3 Pole Enclosed, Type 4, Non-Reversing Starters, Plastic Enclosure

Maximum HP Ratings						Catalog Number
1-Phase		3-Phase				
120V	240V	208V	240V	480V	600V	
1	1	3	3	7.5	10	BE1D123XX
1	3	5	5	10	15	BE1D183XX
1.5	3	5	7.5	15	20	BE1D253XX
2	5	7.5	10	20	25	BE1D323XX

* Overload Relay not included.

** Standard Fault Ratings U_L

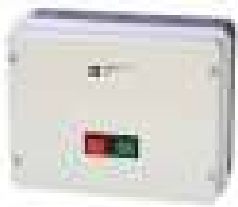
Replace ■ with voltage code from table - 2

Table-2 : ■ -AC Coil Voltages

Volts AC	24	48	110	120	208	220	240	277	380	415	440	480	575	600
50 Hz	B5	E5	F5	-	-	M5	U5	-	Q5	N5	R5	-	-	-
60 Hz	B6	E6	F6	G6	L6	M6	U6	W6	Q6	-	R6	T6	S6	X6
50/60 Hz	B7	E7	F7	G7	-	M7	U7	-	Q7	N7	R7	-	-	-

Industrial Motor Starters - Automatic Star Delta

Semi-Automatic Star Delta Starter with D range Contactor, LRD OLR



Reference	Std. Power Rating for 3 Ph. Motor at 415V		Relay Range Amps
	KW	HP	
BE3-D1735■308SA	3	4	2.5 ~ 4.0
BE3-D1735■310SA	4	5.5	4.0 ~ 6.0
BE3-D1735■312SA	5.5	7.5	5.5 ~ 8.0
BE3-D1735■314SA	9	12	7.0 ~ 10.0
BE3-D1735■316XSA	11	15	9.0 ~ 14.0
BE3-D2535■321SA	15	20	13.0 ~ 18.0
BE3-D2535■322SA	18	25	18.0 ~ 25.0

Automatic Star Delta Starter with T range Contactor, TR2D and LR1F OLR & Electronic Star Delta Timer

Reference	Standard Power Rating for 3 Phase motor at 415V AC		FLC Phase Current	Recommended Back-up HRC Fuse Rating (A)			Contactor				Relay	
	kW	HP		(A)	(aM)	(gI)	Star	Main	Delta	AC3 Rating (A)	Type	Range (A)
BE3-T1835■307	1.5	2	2.3	4	6	TC1D18	TC1D18	TC1D18	18A	TR2D09307	1.6 -2.5	
BE3-T1835■308	3	4	4	6	10	TC1D18	TC1D18	TC1D18	18A	TR2D09308	2.5-4	
BE3-T1835■310	4	5.5	5	8	16	TC1D18	TC1D18	TC1D18	18A	TR2D09308	4-6	
BE3-T1835■312	5.5	7.5	6	12	20	TC1D18	TC1D18	TC1D18	18A	TR2D09310	5.5-8	
BE3-T1835■314	9	12	10	12	20	TC1D18	TC1D18	TC1D18	18A	TR2D09312	7-10	
BE3-T1835■316	11	15	12	16	25	TC1D18	TC1D18	TC1D18	18A	TR2D09314	9-13	
BE3-T2535■321	15	20	16	20	35	TC1D25	TC1D25	TC1D25	25A	TR2D09316	12-18	
BE3-T2535■322	18	25	21	40	50	TC1D25	TC1D25	TC1D25	25A	TR2D25322	17-25	
BE3-T3235■322	22	30	24	40	50	TC1D32	TC1D32	TC1D32	32A	TR2D25322	17-25	
BE3-T3235■353	25	35	30	40	63	TC1D32	TC1D32	TC1D32	32A	TR2D32353	23-32	
BE3-T4035■355	30	40	33	63	100	TC1D40	TC1D40	TC1D40	40A	TR2D40355	30-40	
BE3-T5035■357	45	60	47	63	100	TC1D50	TC1D50	TC1D50	50A	TR2D65357	37-50	
BE3-T6535■359	55	75	58	63	100	TC1D65	TC1D65	TC1D65	65A	TR2D65359	48-65	
BE3-T8035■363	80	107	80	100	160	TC1D80	TC1D80	TC1D80	80A	TR2D80363	63-80	
BE3F115■125	110	150	113	125	200	LC1FDP115A	LC1FDP115A	LC1FDP115A	115A	LR1F125	80-125	
BE3F185■200	160	215	165	200	315	LC1FDP185A	LC1FDP185A	LC1FDP185A	185A	LR1F200	125-200	

NOTE: Replace (■) with coil voltage

Coil Voltage Codes (Standard) for DOL Starters with D range Contactor

Motor Starter	Voltage	
BE1-D	220V	415V
Coil Code	UW	N

** DOL Motor Starter are available only in the above Standard Coil Voltages.

Coil Voltage Codes (Standard) for DOL & Star Delta Starters with D range Contactor

Motor Starter	Voltage	
BE1-D / BE3-F	380#	415
Coil Code	NW	N

Wide Band Coil available for Star Delta Starters upto 40HP only.

How to order Industrial Starter:

- Complete the code by replacing the blue square (■) by the letter(s) corresponding to the Coil Voltage selected.
- Industrial DOL Starters should be selected based on the FLC of Pump/Motor & Coil Voltage required.

How to order Star Delta Starter:

- Complete the code by replacing the blue square (■) by the letter(s) corresponding to the Coil Voltage selected.
- Star Delta starters should be selected based on the FLC of the Pump/Motor phase current (Motor FLC X 0.58) & Coil Voltage required.

Industrial Motor Starters - Semi Automatic Star Delta

Conforming IS/IEC60947-4-1

Semi-Automatic Star Delta Starter with D range Contactor, LR1D OLR

Reference	Std. Power Rating for 3 Ph. Motor at 415V		Relay Range Amps
	kW	HP	
BE3-D1735■308SA	3	4	2.5 ~ 4.0
BE3-D1735■310SA	4	5.5	4.0 ~ 6.0
BE3-D1735■312SA	5.5	7.5	5.5 ~ 8.0
BE3-D1735■314SA	9	12	7.0 ~ 10.0
BE3-D1735■316XSA	11	15	9.0 ~ 14.0
BE3-D2535■321SA	15	20	13.0 ~ 18.0
BE3-D2535■322SA	18	25	18.0 ~ 25.0

Coil Voltage Codes (Standard) for DOL Starters with D range Contactor

Motor Starter	Voltage	
BE1-D	220V	415V
Coil Code	UW	N

** DOL Motor Starter are available only in the above Standard Coil Voltages.

Coil Voltage Codes (Standard) for DOL & Star Delta Starters with D range Contactor

Motor Starter	Voltage	
BE1-D / BE3-D / BE3-F	380#	415
Coil Code	NW	N

Wide Band Coil available for Star Delta Starters upto 40 HP only.

How to order Industrial Starter:

- Complete the code by replacing the blue square (■) by the letter(s) corresponding to the Coil Voltage selected.
- Industrial DOL Starters should be selected based on the FLC of Pump/Motor & Coil Voltage required.

How to order Star Delta Starter:

- Complete the code by replacing the blue square (■) by the letter(s) corresponding to the Coil Voltage selected.
- Star Delta starters should be selected based on the FLC of the Pump/Motor phase current (Motor FLC X 0.58) & Coil Voltage required.

Custom Built Motor Starters Solutions

- **Smart Start Delta Starter rating 40 HP to 150 HP 3 Phase 415V AC**
 - Incomer 3 Pole MCCB, 10~25kA
 - Selection of liberal D range, air break Contactor
 - Electronic motor protection relay with built-in feature having pause of 0.30 sec for motor protection against single phasing
 - Electronic Star Delta Timer
 - Housed in free standing IP 54 sheet steel enclosure with bottom cable entry
 - Optional facility: Water Level Controller also available

- **Intelligent Star Delta Starter rating 40 HP to 350 HP 3 Phase 415V AC**
 - Incomer 3 Pole MCCB, 10~25kA
 - Selection of liberal D range, air break Contactor
 - Digital motor protection Relay type mPro100 with 7 segment display to assure complete motor protection against overload, phase loss, under current, unbalance, motor stall, earth fault, locked rotor
 - Electronic Star Delta Timer
 - Housed in free standing IP 54 sheet steel enclosure with bottom cable entry

- **Intelligent Auto Transformer Starter rating 40 HP to 350 HP 3 Phase 415V AC (closed transition)**
 - Incomer 3 Pole MCCB, 10~25kA
 - Selection of liberal D range, air break Contactor
 - Digital motor protection Relay type mPro100 with 7 segment display to assure complete motor protection against overload, phase loss, under current, unbalance, motor stall, earth fault, lock rotor
 - Auto Transformer, air cooled, 6 starts/hours with built-in thermister having tapping at 50%, 60% & 80% of the rated voltage
 - Electronic Timer for changeover function
 - Housed in free standing IP 54 sheet steel enclosure with bottom cable entry

Non Reversing, Reversing (NEMA Type)



TE1D●



TE2D●



TA9●

3 Pole Enclosed, Type 1, Non-Reversing Starters, Steel Enclosure

Maximum HP Ratings						Catalog Number
1-Phase		3-Phase				
120V	240V	208V	240V	480V	600V	
0.5	1	2	2	5	7.5	TE1D0936■
1	1	3	3	7.5	10	TE1D1236■
1	3	5	5	10	15	TE1D1836■
1.5	3	5	7.5	15	20	TE1D2536■
2	5	7.5	10	20	25	TE1D3236■
3	5	10	10	30	30	TE1D4036■
3	7.5	10	15	30	40	TE1D5036■
5	10	15	20	40	50	TE1D6536■
5	10	20	20	50	60	TE1D8036■

3 Pole Enclosed, Type 1, Reversing Starters, Steel Enclosure

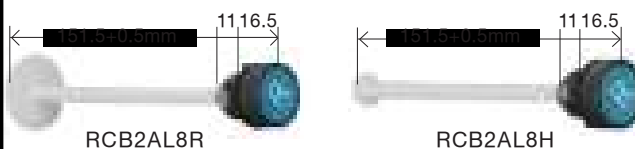
Maximum HP Ratings						Catalog Number
1-Phase		3-Phase				
120V	240V	208V	240V	480V	600V	
0.5	1	2	2	5	7.5	TE2D0936■
1	1	3	3	7.5	10	TE2D1236■
1	3	5	5	10	15	TE2D1836■
1.5	3	5	7.5	15	20	TE2D2536■
2	5	7.5	10	20	25	TE2D3236■
3	5	10	10	30	30	TE2D4036■
3	7.5	10	15	30	40	TE2D5036■
5	10	15	20	40	50	TE2D6536■
5	10	20	20	50	60	TE2D8036■

Push Buttons & Pilot Lights "Quick Kits"

Description	Catalog Number
ON / OFF Selector Switch	TA9C6
Hand-OFF-Auto Selector Switch	TA9C
Red or Green Pilot Light 120V	TA9P12
SMArt / Stop Push Button	TA9A
ON / OFF Selector Switch with Red or Green P / L	TA9C6P12
SMArt / Stop Push Button with Red Light or Green P / L	TA9AP12
Forward / Reverse / Stop Push Buttons	TA9A1
Hand / OFF / Auto Selector Switch with Red or Green P / L 120V	TA9CP12
SMArt / Stop Push Button with Red or Green Transformer P/L 120V	TA9AP5152
Transformer Red or Green Pilot Light 120V	TA9P5152
Hand / OFF / Auto Selector Switch with Red or Green Transformer P / L 120V	TA9CP5152

Reset Extended Push Button

Description	Reference
Reset Extended Push Button (Round Type)	RCB2AL8R
Reset Extended Push Button (Hex Type)	RCB2AL8H



CS1 Series Starters

CS1 Series Starters (DOL & Star Delta) are available with contactors type CS1, CS2 & CS3 having 16A, 25A, 32A AC3 duty. These Starters are specially designed for agricultural use and have following features:

- Conforms to IEC 60947-4-1
- Wide band coil
- Rugged design which is durable and easy for maintenance
- Spares are available across the country
- Elegant powder coated sheet metal box made from 0.8 mm CRCA sheet

3Ø DOL Starters in SS Enclosure [HSN Code: 8536]



Reference	Relay Range (Amp)	Max. Motor Output at 415V, 3 Ph		Std. Pkg. (Nos.)
		kW	HP	
CS1DO■1525NR	1.5~2.5	0.75	1	1
CS1DO■2504NR	2.5~4	1.5	2	
CS1DO■0406NR	4~6.5	3	4	
CS1DO■0610NR	6~10	4.5	6	
CS1DO■0914NR	9~14	5.5	7.5	
CS1DO■1118NR	11~18	5.5	7.5	
CS1DO■1322NR	13~22	5.5	7.5	
CS2DO■1322NR	13~22	5.5	7.5	
CS2DO■2032NR	20~32	5.5	7.5	
CS3DO■2032NR	20~32	5.5	7.5	

3Ø Fully Automatic Star-Delta starters in SS Enclosure [HSN Code: 8536]



Reference	Relay Range (Amp)	Max. Motor Output at 415V, 3Ph		Std. Pkg. (Nos.)
		KW	HP	
CS1SD■0610NR	6~10	7.5	10	1
CS1SD■0914NR	9~14	9.3	12.5	
CS1SD■1118NR	11~18	11	15	
CS1SD■1322NR	13~22	11	15	
CS2SD■1322NR	13~22	11	15	
CS2SD■2032NR	20~32	11	15	
CS3SD■2032NR	20~32	16	22	

3Ø DOL in S.S. Enclosure [HSN Code: 8536]

Incorporating Heavy Duty 4 Pole Contactor type TC1-DX with wide band operating coil, Overload relay type LR3D with manual re-set and yellow flag for trip indication



Reference	Relay Range (Amp)	Standard Power Rating		Std. Pkg. (Nos.)
		kW	HP	
BE1-DXM204■307NR	1.6~2.5	0.75	1	6
BE1-DXM204■308NR	2.5~4	1.1/1.5	1.5/2	
BE1-DXM204■310NR	4~6	2.2	3	
BE1-DXM204■312NR	5.5~8	2.2	3	
BE1-DXM204■314NR	7~10	3.7	5	
BE1-DXM204■316XNR	9~14	3.7/4	5/5.5	
BE1-DXM204■321NR	13~18	5.5	7.5	
BE1-DXM254■321XNR	14~22	7.5	10	
BE1-DXM254■322NR	18~25	10	12	
BE1-DXM404■353NR	23~32	11	15	

Motor Starters

Conforming IS/IEC60947-4-1

3Ø Automatic Star Delta Starter in S.S Enclosure [HSN Code: 8536]

Incorporating Heavy Duty 4 Pole Contactor type TC1-DX with wide band operating coil, Overload relay type LR3D for motor protection & Electronic Star Delta Timer



Reference	Relay Range (Amp)	Std. Power Rating for 3P at 415V		Std. Pkg. (Nos.)
		kW	HP	
BE3-DXM204■308NR	2.5~4	1.5	2	2
BE3-DXM204■310NR	4~6	2.2	3	
BE3-DXM204■312NR	5.5~8	3.7	5	
BE3-DXM204■314NR	7~10	5.5	7.5	
BE3-DXM204■316XNR	9~14	9	12	
BE3-DXM204■321NR	13~18	11	15	
BE3-DXM254■321XNR	14~22	11	15	
BE3-DXM254■322NR	18~25	11	15	
BE3-DXM254■353NR	23~32	15/18	20/25	

3Ø Semi Automatic Star Delta Starter in S.S Enclosure [HSN Code: 8536]

Incorporating Heavy Duty 4 Pole Contactor type TC1-DX with wide band operating coil, Overload relay type LR3D for motor protection



Reference	Relay Range (Amp)	Std. Power Rating for 3P at 415V		Std. Pkg. (Nos.)
		kW	HP	
BE3-DXM204■314SANR	7~10	9	12	2
BE3-DXM204■316XSANR	9~14	11	15	
BE3-DXM204■321SANR	13~18	15	20	
BE3-DXM254■321XSANR	14~22	18	25	
BE3-DXM254■322SANR	18~25	18	25	
BE3-DXM254■353SANR	23~32	22.5	30	

3Ø Submersible Pump Starter Automatic Star Delta in S.S. Enclosure [HSN Code: 8536]

Incorporating Heavy Duty 4 Pole contactor type TC1-DX with wide band operating coil, Overload relay type LR1D with pneumatic timer



Reference	Relay (Amp)	Standard Power Rating		Std. Pkg. (Nos.)
		kW	HP	
BE3-DXM204■307-PTNR	1.6~2.5	1.5	2	1
BE3-DXM204■308-PTNR	2.5~4	3	4	
BE3-DXM204■310-PTNR	4~6	4	5.5	
BE3-DXM204■312-PTNR	5.5~8	5.5	7.5	
BE3-DXM204■316X-PTNR	9~14	11	15	
BE3-DXM204■321-PTNR	13~18	15	20	
BE3-DXM254■321X-PTNR	14~22	18	25	
BE3-DXM254■322-PTNR	18~25	18	25	
BE3-DXM254■353-PTNR	23~32	22.5	30	

Coil Voltage Codes (Standard) for DOL / Star Delta Starters

Coil Voltage (AC) 50Hz	Voltage	
	190~400 Q	250~440 N

Motor Starters

for Domestic & Agro applications



Anmol Motor Starters

- Conforms to IS 13947-4-1
- DOL starter range: 1HP~15HP
- Auto start DOL starter range: 1HP~15HP
- 1Ø DOL starter range : 0.5HP~3HP
- Automatic star delta starter range: 2 HP~25HP
- 3Ø Submersible pump starter range: 2 HP~80 HP
- 1Ø Submersible pump starter range: 0.5 HP~5HP

Submersible Pump Starters

1Ø Submersible Pump Starter-Deluxe Model in S.S. Enclosure

Incorporating Heavy duty 2 Pole Contactor, 2P Overload Relay Type LR7D, Supressed scale Voltmeter & Ammeter with provision of terminals for dry run relay



Reference	Relay Range (Amp)	Std. Power Rating for Single Phase Motor at 220V AC		Capacitor Rating (MFD)		MOQ
		kW	HP	Start	Run	
BE1-SDA2025MU210	4.0-6.0	0.37	0.5	80/100	25	2
BE1-SDA2025MU212	5.5-8.0	0.55	0.75	80/100	36	
BE1-SDA2025MU214	7.0-10.0	0.75	1	100/120	36	
BE1-SDA2025MU214H	7.0-10.0			100/120	50	
BE1-SDA2025MU216X	9.0-14.0			100/120	36	
BE1-SDA2025MU216XM	9.0-14.0			100/120	50	
BE1-SDA2025MU216XTS	9.0-14.0	1.1	1.5	100/120	72	
BE1-SDA2025MU216XH	9.0-14.0			120/150	50	
BE1-SDA2025MU216XA	9.0-14.0			120/150	36+36	
BE1-SDA2025MU221H	13.0-18.0	120/150				
BE1-SDA2525MU222	18.0-25.0	1.5	2	120/150	50+50	
BE1-SDA2525MU221X	14.0-22.0			150/200	36+36	
BE1-SDA2525MU221XTS	14.0-22.0			200/250	45+45	
BE1-SDA2525MU222M	18.0-25.0			150/200	50+50	
BE1-SDA2525MU222H	18.0-25.0	2.2	3	200/250	50+50	
BE1-SDA2525MU222TS	18.0-25.0			200/250	60+60	
BE1-SDA4025MU253	23.0-32.0			3.7	5	

1Ø Submersible Pump Starter-Deluxe Model with Digital Voltage & Ampere Meter in S.S. Enclosure

Incorporating Single Pole Definite purpose contactor, Digital VA meter & Start and Run capacitor with MCB.



Reference	Std. Power Rating for Single Phase Motor at 220V AC		Capacitor Rating (MFD)		C' Curve MCB Rating (A)	MOQ
	KW	HP	Start	Run		
BE1DG251M5W053A06	0.37	0.5	80-100	25	6A	2
BE1DG251M5W751B10	0.55	0.75	40-60	36	10A	
BE1DG251M5W103B10	0.75	1	80-100	36	10A	
BE1DG251M5W102C10	0.75	1	60-80	50	10A	
BE1DG251M5W104B10	0.75	1	100-120	36	10A	
BE1DG251M5W153D16	1.1	1.5	80-100	60	16A	
BE1DG251M5W154C16	1.1	1.5	100-120	50	16A	
BE1DG251M5W154E16	1.1	1.5	100-120	72	16A	
BE1DG251M5W155C16	1.1	1.5	120-150	50	16A	
BE1DG251M5W205E20	1.5	2	120-150	72	20A	
BE1DG251M5W206E20	1.5	2	150-200	72	20A	
BE1DG251M5W304F25	2.2	3	100-120	100	25A	
BE1DG251M5W307G25	2.2	3	200-250	108	25A	

Submersible Pump Starters

1Ø Submersible Pump Starter-Economical Deluxe in S.S. Enclosure

Incorporating 2 Pole Definite Purpose Contactor, 2 Pole Oveload relay type LR7DM, Ammeter, Voltmeter ON/OFF Push Button, Motor ON Indicator with provision of terminal for dry run relay



Reference	Relay Range (Amps)	Std. Power Rating for Single Phase Motor at 220V AC		Capacitor Rating (MFD)		MOQ
		kW	HP	Start	Run	
BE1-SDEDP202U5210	4.0~6.0	0.37	0.5	80/100	25	2
BE1-SDEDP202U5212	5.5~8.0	0.55	0.75	80/100	36	
BE1-SDEDP202U5214	7.0~10	0.75	1.0	100/120	36	
BE1-SDEDP202U5214D2	7.0~10	0.75	1.0	100/120	50	
BE1-SDEDP202U5216XD2	9.0~14	1.1	1.5	120/150	36+36	
BE1-SDEDP202U5216X	9.0~14	1.1	1.5	120/150	50	
BE1-SDEDP202U5221X	14~22	1.5	2.0	150/200	36+36	

1Ø Submersible Pump Starter-Economical Standard in S.S. Enclosure

Incorporating Single Phase Submersible pump control unit with 2 Pole Definite purpose contactor, Dual analog VA meter, Start & Run Capacitor & MCB for short circuit protection.



Reference	Std. Power Rating for Single Phase Motor at 220V AC		Capacitor rating (MFD)		'C' Curve MCB Rating (A)	MOQ
	kW	HP	Start	Run		
BE1-SSCEDP202U5C16	0.75	1	120/150	50	16	2
BE1-SSCEDP202U5C20	1.1	1.5	150/200	72	20	
BE1-SSCEDP202U5C25	1.5	2	200/250	100	25	
BE1-SSCEDP202U5C32	2.2	3	200/250	100	32	
BE1-SSCEDP252U5C32	2.2	3	200/250	100	32	

1Ø Submersible Pump Starter-Economical Standard in S.S. Enclosure

Incorporating 2 Pole Definite Purpose Contactor, Single Pole MCB, Ammeter, ON/OFF Push Button, Motor ON Indicator with provision of terminal for dry run relay



Reference	Std. Power Rating for Single Phase Motor at 220V AC		Capacitor Rating (MFD)	MCB Rating 'C' Curve	MOQ
	kW	HP	Run	10kA	
BE1-SSEDP202U5C16	0.37	0.5	25	16	2
BE1-SSEDP202U5C20	0.55	0.75	36	20	
BE1-SSEDP202U5C25	0.75	1.0	36	25	
BE1-SSEDP202U5C32	1.1	1.5	50	32	
BE1-SSEDP202U5C40	1.5	2.0	36+36	40	

Submersible Pump Starters

1Ø Submersible Pump Starter-Economical Standard in S.S. Enclosure

Incorporating Single Phase Economical Submersible pump control unit with DP Contactor, fixed current relay; Dual analog VA meter & run capacitor.



Reference	Std. Power Rating for Single Phase Motor at 220V AC		Capacitor rating (MFD)		Relay Range (Amp)	MOQ
	kW	HP	Run	Run		
BE1-SSCEDP202U5T6	0.37	0.5	25		6	2
BE1-SSCEDP202U5T6M	0.37	0.5	36		6	
BE1-SSCEDP202U5T8	0.75	1	36		8	
BE1-SSCEDP202U5T8M	0.75	1	50		8	
BE1-SSCEDP202U5T10	0.75	1	36		10	
BE1-SSCEDP202U5T10M	0.75	1	50		10	
BE1-SSCEDP202U5T10H	1.1	1.5	50		10	
BE1-SSCEDP202U5T10HM	1.1	1.5	36+36		10	
BE1-SSCEDP202U5T12	1.1	1.5	50		12	
BE1-SSCEDP202U5T12M	1.1	1.5	36+36		12	
BE1-SSCEDP202U5T12H	1.5	2	50		12	
BE1-SSCEDP202U5T12HM	1.5	2	36+36		12	
BE1-SSCEDP202U5T15	1.5	2	50		15	
BE1-SSCEDP202U5T15M	1.5	2	36+36		15	

1Ø Submersible Pump Starter-Economical Standard in S.S. Enclosure

Incorporating Single Phase Submersible pump control unit with DP Contactor, fixed current relay; Dual analog VA meter & Start and Run Capacitor.



Reference	Std. Power Rating for Single Phase Motor at 220V AC		Capacitor rating (MFD)		Relay Range (Amp)	MOQ
	kW	HP	Start	Run		
BE1-SDEDP202U5T10-H1	0.75	1	120/150	36	10	2
BE1-SDEDP202U5T10-H2	0.75	1	150/200	36	10	
BE1-SDEDP202U5T10-H3	0.75	1	120/150	50	10	
BE1-SDEDP202U5T10-H4	0.75	1	150/200	50	10	
BE1-SDEDP202U5T10M	0.75	1	120/150	60	10	
BE1-SDEDP202U5T10	0.75	1	100/120	50	10	
BE1-SDEDP202U5T15	1.1	1.5	120/150	72	15	
BE1-SDEDP202U5T15-H1	1.1	1.5	150/200	50	15	
BE1-SDEDP202U5T15-H2	1.1	1.5	150/200	36+36	15	
BE1-SDEDP202U5T20-H1	1.5	2	150/200	50	20	
BE1-SDEDP202U5T20-H2	1.5	2	150/200	36+36	20	
BE1-SDEDP202U5T20-H3	1.5	2	200/250	36+36	20	
BE1-SDEDP202U5T20-H4	1.5	2	200/250	100	20	
BE1-SDEDP202U5T20M	1.5	2	150/200	100	20	
BE1-SDEDP202U5T20	1.5	2	150/200	72	20	

Submersible Pump Starters

1Ø Submersible Pump Starter-Standard in S.S. Enclosure

Incorporating DP Contactor, fixed current relay; Digital VA meter & Start and Run Capacitor with MCB.



Reference	Relay Range (Amp)	Std. Power Rating for Single Phase Motor at 220V AC		Capacitor rating (MFD)		'C' Curve MCB Rating (A)	MOQ
		kW	HP	Start	Run		
BE1-SSDCEDP202U5T6	6	0.37	0.5	40/60	36	16	2
BE1-SSDCEDP202U5T8	8	0.55	0.75	60/80	50	20	
BE1-SSDCEDP202U5T8H	8	0.75	1	80/100	60	25	
BE1-SSDCEDP202U5T8HM	8	0.75	1	100/120	72	25	
BE1-SSDCEDP202U5T10	10	0.75	1	80/100	60	25	
BE1-SSDCEDP202U5T10M	10	0.75	1	100/120	72	25	
BE1-SSDCEDP202U5T10M2	10	0.75	1	100/120	50	25	
BE1-SSDCEDP202U5T10M3	10	0.75	1	120/150	36	25	
BE1-SSDCEDP202U5T10H	10	1.1	1.5	100/120	72	32	
BE1-SSDCEDP202U5T10HM	10	1.1	1.5	100/120	100	32	
BE1-SSDCEDP202U5T12	12	1.1	1.5	100/120	72	32	
BE1-SSDCEDP202U5T12M	12	1.1	1.5	100/120	100	32	
BE1-SSDCEDP202U5T12H	12	1.5	2	100/120	72	40	
BE1-SSDCEDP202U5T12HM	12	1.5	2	120/150	125	40	
BE1-SSDCEDP202U5T15	15	1.5	2	100/120	72	40	
BE1-SSDCEDP202U5T15H	15	1.5	2	120/150	125	40	
BE1-SSDCEDP202U5T15M1	15	1.1	1.5	100/120	50	16	
BE1-SSDCEDP202U5T15M2	15	1.5	2	200/250	100	25	
BE1-SSDCEDP202U5T20M2	20	1.5	2	120/150	125	32	
BE1-SSDCEDP202U5T20M1	20	2.2	3	200/250	100+25	40	

HOW TO ORDER STARTER

- Complete the code by replacing the square (■) by the letter(s) corresponding to the Coil Voltage selected.
- Starters / Submersible Pump Starter selection should be based on the FLC of Pump/Motor & Coil Voltage required as per installation.
- Starters / Submersible Pump Starter should be ordered in standard packing for each model.

** Anmol Starters portfolio available in the above standard coil voltage only.

Wide operating band encapsulated coils with its operating range.

Coil Voltage Codes (Standard) for Submersible Pump Starter/DOL/Auto DOL Starter

Coil Voltage (AC) 50HzCoil Code**	Voltage			
	190~400 Q	250~440 N	*300-500 SW	*250~400 NW

Aqua Smart Controller Series for Pumps PPC-20

MAIN FUNCTIONALITIES

- Inbuilt On/Off Delay Timer
- Inbuilt Digital Ammeter
- Inbuilt Digital Volt Meter
- Auto / Manual Mode of Operation
- Suitable for Motor/Pump Up-to 3 HP
- Field Configurable Setting for Protection & Pump parameter
- Elegant Powder Coated sheet metal box made from .8mm CRCA Sheet.

ADVANCED PROTECTION

- Overload
- Lock Rotor
- Stall/Shot Circuit
- Over / Under Voltage
- Under Current / Dry Run



Product Reference	HP Rating	Start Capacitor (275V, 50Hz) MFD	Run Capacitor (440V, 50Hz) MFD
PPC10025X1H05	0.5	80/100	1x25
PPC10036X1H05	0.5	80/100	1x36
PPC12036X1H1	1.0	100/120	1x36
PPC12050X1H1	1.0	100/120	1x50
PPC15036X1H1	1.0	120/150	1x36
PPC15050X1H1	1.0	120/150	1x50
PPC15050X1H1.5	1.5	120/150	1x50
PPC15036X2H1.5	1.5	120/150	2x36
PPC15072X1H1.5	1.5	120/150	1x72
PPC20050X1H1.5	1.5	150/200	1x50
PPC20036X2H1.5	1.5	150/200	2x36
PPC20036X2H2	2.0	150/200	2x36
PPC20072x1H2	2.0	150/200	1x72
PPC25036X2H2	2.0	200/250	2x36
PPC25050X1H2	2.0	200/250	1x50
PPC25072X1H2	2.0	200/250	1x72
PPC25050X2H3	3.0	200/250	2x50

Submersible Pump Starters

Aqua Smart Controller Series For Pumps PPC-100-D

Main Functionalities

- Auto/Manual Start
- ON/OFF push button for manual operation
- Inbuilt Mobile controller unit
- Runtime time scheduler
- Protection setting thru handset
- Rocker Switch (ON/OFF) for switching off panel
- Operational parameter and nature of Fault indications through LCD display.
- Dry run, Locked Rotor, Phase Unbalance, Over/Under Voltage, phase reversal, single phase Protection and other setting
- Battery back-up (24 hrs) for power failure indication to the Farmer
- Adjustable HP setting as per motor rating
- Message response in English or local regional languages
- Easy location & insertion of SIM

Description	Reference	Range	MOQ
3 Phase DOL	BE1SPSDD1810N5WC1	0.5-10HP	1

Aqua Smart Controller Series For Pumps PPC-100

Features & Benefits:

With in-built protections

- Single Phasing
- Overload
- Phase reversal
- Dry run
- Phase imbalance
- Over & under voltage

Digital display of Phase Voltage & Current Run Time scheduler

Description	Reference	Range	MOQ
3 Phase DOL Starter	BE1204PPC-100-DOL	0.5~12HP	1
Star Delta Starter	BE3204PPC-100-SD	5.0-20HP	1



Submersible Pump Starters

SPCS1 Series Starters

SPCS1 Series Submersible Pump Controller is specially designed for Agriculture uses. These are available in DOL & Star Delta models.

- Digital display meter for current and Voltage.
- With Panel ON/OFF Rocker Switch for complete isolation from mains.
- Wide operating voltage band coil to handle adverse condition.
- Rugged design which is durable and easy for maintenance
- In built 3 Position Selector Switch for SPP Auto / SPP Manual / By Pass Selection
- Provides single phasing /Overload /Phase reversal /Unbalance protection.
- Motor 'ON' & 'OFF' Push Buttons.
- Elegant Powder Coated sheet metal box made from .8mm CRCA Sheet.
- Trip LED indicator



3Ø Phase Submersible Pump Starter (DOL)

Reference	Relay Range (Amp)	Max. Motor Output at 415V, 3Ph		MOQ
		kW	HP	
SPSCS1DO■0406	4-6	2.2	3	1
SPSCS1DO■0610	6-10	3.7	5	
SPSCS1DO■0914	9-14	4.5	6	
SPSCS1DO■1118	11-18	5.5	7.5	
SPSCS1DO■1322	13-22	5.5	7.5	
SPSCS2DO■1322	13-22	7.5	10	
SPSCS3DO■2032	20-32	7.5	10	

3Ø Phase Submersible Pump Starter (Star -Delta)

Reference	Relay Range (Amp)	Max. Motor Output at 415V, 3Ph		MOQ
		kW	HP	
SPSCS1SD■0914	9-14	9.3	12.5	1
SPSCS1SD■1118	11-18	11	15	
SPSCS1SD■1322	13-22	11	15	
SPSCS2SD■1322	13-22	11	15	
SPSCS3SD■2032	20-32	16	22	

Coil Voltage

Coil Voltage (AC) 50Hz Coil Code	Voltage	
		190-400 Q

3Ø Submersible Pump Starter DOL - Standard Model

Incorporating Heavy Duty 4 Pole contactor type TC1-DX, overload relay type LR3D, Auto switch with in-built Auto / Manul / Bypass, ON / OFF Rocker switch, Motor ON & Trip LED Indicator with Rigid Busbar

Reference	Relay Range (Amp)	Standard Power Rating		MOQ
		kW	HP	
BE1-SPSSDX204■308-B	2.50-4	1.5	2	2
BE1-SPSSDX204■310-B	4-6	2.2	3	
BE1-SPSSDX204■312-B	5.5-8	2.2	3	
BE1-SPSSDX204■314-B	7-10	3.7	5	
BE1-SPSSDX204■316X-B	9-14	3.7/4	5/5.5	
BE1-SPSSDX204■321-B	13-18	5.5	7.5	
BE1-SPSSDX254■321X-B	14-22	7.5	10	
BE1-SPSSDX254■322-B	18-25	10	12	
BE1-SPSSDX404■353-B	23-32	18.5	15	
BE1-SPSSDX404■353-A4	23-32	18.5	15	
BE1-SPSSDX404■355-B	28-40	22	20	
BE1-SPSSDX404■355-A4	28-40	22	20	



Submersible Pump Starters

3Ø Submersible Pump Starter-DOL Standard

Incorporating Heavy Duty 4 Pole contactor type TC1-DX, overload relay type LR3D, Auto Start switch, 3 position selector switch for SPP Auto/SPP Manual/Manual, On / Off Rocker switch, Motor ON & Trip LED Indicator

Reference	Relay Range (Amp)	Standard Power Rating		MOQ
		kW	HP	
BE1-SPSSDX204■308-RS	2.50-4.00	1.5	2	2
BE1-SPSSDX204■310-RS	4.00-6.00	2.2	3	
BE1-SPSSDX204■312-RS	5.5-8.00	2.2	3	
BE1-SPSSDX204■314-RS	7.00-10.0	3.7	5	
BE1-SPSSDX204■316X-RS	9.00-14.0	3.7/4	5/5.5	
BE1-SPSSDX204■321-RS	13.0-18.0	5.5	7.5	
BE1-SPSSDX254■321X-RS	14.0-22.0	7.5	10	
BE1-SPSSDX254■322-RS	18.0-25.0	10	12	
BE1-SPSSDX404■353-RS	23.0-32.0	11	15	
BE1-SPSSDX404■355-RS	28.0-40.0	15	20	



3Ø Submersible Pump Starter DOL-Deluxe Model [HSN Code: 8536] GST@18%

Incorporating Heavy Duty 4 Pole Contactor type TC1-DX, Overload relay type LR3D, Auto Start Switch, 3 Position selector switch for SPP Auto/SPP Manual / Manual, Voltmeter with Selector Switch, Suppressed scale Ammeter, Motor ON & Trip LED Indicator, TP 'C' curve MCB for short circuit protection

Reference	Relay Range (Amp)	Standard Power Rating		MOQ
		kW	HP	
BE1-SPSDDX204■308	2.5-4.0	1.5	2	2
BE1-SPSDDX204■310	4.0-6.0	2.2	3	
BE1-SPSDDX204■312	5.5-8.0	2.2	3	
BE1-SPSDDX204■314	7.0-10	3.7	5	
BE1-SPSDDX204■316X	9.0-14	3.7/4	5/5.5	
BE1-SPSDDX204■321	13-18	5.5	7.5	
BE1-SPSDDX254■321X	14-22	7.5	10	
BE1-SPSDDX254■322	18-25	10	12	
BE1-SPSDDX404■353	23-32	11	15	
BE1-SPSDDX404■355	28-40	15	20	



3Ø Submersible Pump Starter-DOL Standard

Incorporating Hour meter- Standard Model incorporating Heavy Duty 4 Pole contactor type TC1-DX, overload relay type LR3D, Auto Start switch, 3 position selector switch for SPP Auto/SPP Manual/Manual, Dual Analog VA Meter, Hour meter (To monitor SPCU power ON hours), rocker switch (ON/OFF Switch) Motor ON & Trip LED Indicator.

Reference	Relay Range (Amp)	Standard Power Rating		MOQ
		kW	HP	
☒ BE1-SPSSDX204■308-RH	2.50-4.00	1.5	2	2
☒ BE1-SPSSDX204■310-RH	4.00-6.00	2.2	3	
☒ BE1-SPSSDX204■312-RH	5.5-8.00	2.2	3	
☒ BE1-SPSSDX204■314-RH	7.00-10.0	3.7	5	
☒ BE1-SPSSDX204■316X-RH	9.00-14.0	3.7/4	5/5.5	
☒ BE1-SPSSDX204■321-RH	13.0-18.0	5.5	7.5	
☒ BE1-SPSSDX254■321X-RH	14.0-22.0	7.5	10	
☒ BE1-SPSSDX254■322-RH	18.0-25.0	10	12	
☒ BE1-SPSSDX404■353-RH	23.0-32.0	11	15	
☒ BE1-SPSSDX404■355-RH	28.0-40.0	15	20	



Submersible Pump Starters

3Ø Submersible Pump Starter DOL with Hour Meter Deluxe Model

Incorporating Heavy Duty 4 Pole contactor type TC1-DX, overload relay type LR3D, Auto Start switch, 3 position selector switch for SPP Auto/SPP Manual/Manual, Dual Analog VA Meter, Hour meter (To monitor SPCU power ON hours), Motor ON & Trip LED Indicator, TP 'C' curve MCB for short circuit protection



Reference	Relay Range (Amp)	Standard Power Rating		MOQ
		kW	HP	
BE1-SPSDDX204-308-HM	2.5-4	1.5	2	2
BE1-SPSDDX204-310-HM	4-6	2.2	3	
BE1-SPSDDX204-312-HM	5.5-8	2.2	3	
BE1-SPSDDX204-314-HM	7-10	3.7	5	
BE1-SPSDDX204-316X-HM	9-14	3.7/4	5/5.5	
BE1-SPSDDX204-321-HM	13-18	5.5	7.5	
BE1-SPSDDX254-321X-HM	14-22	7.5	10	
BE1-SPSDDX254-322-HM	18-25	10	12	
BE1-SPSDDX404-353-HM	23-32	11	15	
BE1-SPSDDX404-355-HM	28-40	15	20	

3Ø Submersible Pump Starter Automatic Star Delta - Standard Model

Incorporating Heavy Duty 4 Pole Contactor type TC1-DX, Overload relay type LR3D/LR1D, Auto Start Switch, 3 Position selector switch for SPP Auto/SPP Manual / Manual (AS4), Voltmeter with Selector Switch, Suppressed scale Ammeter, Motor ON & Trip LED indicator with rigid Busbar



Reference	Relay Range (Amp)	Standard Power Rating		MOQ
		kW	HP	
BE3-SPSSDX204-308-B	2.5-4	2.2	3	1
BE3-SPSSDX204-310-B	4-6	3.7	5	
BE3-SPSSDX204-312-B	5.5-8.	4	5.5	
BE3-SPSSDX204-314-B	7-10	5.5	7.5	
BE3-SPSSDX204-316X-B	9-14	7.5/10	10/12	
BE3-SPSSDX204-321-B	13-18	10/11	12/15	
BE3-SPSSDX254-321X-B	14-22	11/15	15/20	
BE3-SPSSDX254-322-B	18-25	15	20	
BE3-SPSSDX254-353-B	23-32	18.5	25	
BE3-SPSSDX254-353-A4	23-32	18.5	25	
BE3-SPSSDX404-355-B	28-40	22	30	
BE3-SPSSDX404-355-A4	28-40	22	30	
BE3-SPSSD6335NW357-A4	38-50	30	40	
BE3-SPSSD6335NW359-A4	48-57	37	50	
BE3-SPSSD8035NW361-A4	57-66	45	60	

Note: 'B' indicates Rigid Busbar version, available from 2.5-25A Relay range (8 models) inside panel 3 Position selector switch for SPP Auto / SPP Manual / Manual.

3Ø Submersible Pump Starter Automatic Start Delta Standard

Incorporating Heavy Duty 4 Pole contactor type TC1-DX, overload relay type LR3D/LR1D, Auto Start switch, 3 position selector switch for SPP Auto/SPP Manual/Manual, On/ Off Rocker switch, voltmeter with selector switch suppressed scale ammeter, Motor ON & Trip LED Indicator



Reference	Relay Range (Amp)	Standard Power Rating		MOQ
		kW	HP	
BE3-SPSSDX204-308-RS	2.50-4.00	2.2	3	1
BE3-SPSSDX204-310-RS	4.00-6.00	3.7	5	
BE3-SPSSDX204-312-RS	5.50-8.00	4	5.5	
BE3-SPSSDX204-314-RS	7.00-10.0	5.5	7.5	
BE3-SPSSDX204-316X-RS	9.00-14.0	7.5/10	10/12	
BE3-SPSSDX204-321-RS	13.0-18.0	10/11	12/15	
BE3-SPSSDX254-321X-RS	14.0-22.0	11/15	15/20	
BE3-SPSSDX254-322-RS	18.0-25.0	15	20	
BE3-SPSSDX254-353-RS	23.0-32.0	18.5	25	
BE3-SPSSDX404-355-RS	28.0-40.0	22	30	
BE3-SPSSDX404-357-RS	38.0-50.0	30	40	
BE3-SPSSD6335NW357-RS	38.0-50.0	30	40	
BE3-SPSSD6335NW359-RS	48.0-57.0	37	50	
BE3-SPSSD8035NW361-RS	57.0-66.0	45	60	
BE3-SPSSD8035NW363-RS	68.0-80.0	55	75	

Submersible Pump Starters

Submersible Pump Starter Automatic Star Delta - Deluxe Model

Incorporating Heavy Duty 4 Pole Contactor type TC1-DX, Overload relay type LR3D/LR1D, Auto Start Switch, 3 Position selector switch for SPP Auto/SPP Manual / Manual, Voltmeter with Selector Switch, Suppressed scale Ammeter, RYB LED Indicator Motor ON & Trip LED Indicator, TP 'C' curve MCB for short circuit protection



Reference	Relay Range (Amp)	Standard Power Rating		MOQ
		kW	HP	
BE3-SPSDDX204■308	2.5-4.0	2.2	3	1
BE3-SPSDDX204■310	4.0-6.0	3.7	5	
BE3-SPSDDX204■312	5.5-8.0	4	5.5	
BE3-SPSDDX204■314	7.0-10	5.5	7.5	
BE3-SPSDDX204■316X	9.0-14	7.5/10	10/12	
BE3-SPSDDX204■321	13-18	10/11	12/15	
BE3-SPSDDX254■321X	14-22	11/15	15/20	
BE3-SPSDDX254■322	18-25	15	20	
BE3-SPSDDX254■353	23-32	18.5	25	
BE3-SPSDDX404■355	28-40	22	30	
BE3-SPSDDX404■357	38-50	30	40	
BE3-SPSDD6335NW357	38-50	30	40	
BE3-SPSDD6335NW359*	48-57	37	50	
BE3-SPSDD8035NW361*	57-66	45	60	
BE3-SPSDD8035SW105	65-105	60	80	

HOW TO ORDER STARTER

- Complete the code by replacing the square (■) by the letter(s) corresponding to the Coil Voltage selected.
- Starters / Submersible Pump Starter selection should be based on the FLC of Pump/Motor & Coil Voltage required as per installation.
- Anmol Starters should be ordered in standard packing for each model.

** Anmol Starters portfolio available in the above standard coil voltage only.

Wide operating band encapsulated coils with its operating range.

Coil Voltage Codes (Standard) for Submersible Pump Starter/DOL/Auto DOL Starter

Coil Voltage (AC) 50HzCoil Code**	Voltage			
	190-400 Q	250-440 N	*300-500 SW	*250-400 NW



Protection **Measurement** & Control Devices



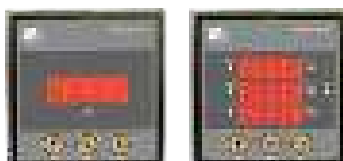
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- Multi Function Meters
- Power Factor Controller
- Power Quality Measurements
- Demand Controller
- Electronic Motor Protection Relay
- Electronic Motor Protection Relay-CSMP
- Earth Leakage Relay
- DG AMF / Synchronizing Controller
- Voltage & Current Monitoring Relay & Timer

We touch your electricity everyday!

Digital Panel Meters

Features

- SMPS Auxiliary supply (35-300 VAC/DC)
- True RMS measurement
- High glow display for distant viewing
- Programmable CT & PT Ratio
- Programmable 1A/5A site selectable
- Accuracy class 1.0 / 0.5
- Auto / Manual display scroll
- Auto scaling of decimal Point

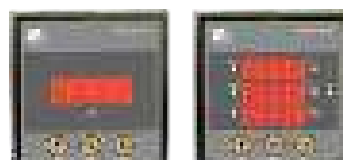


Description	Display	Reference	HSN Code
Single Phase Volt Meter 18-520V	1 Row, 4 Digit	CSM-AT-1-V	85364900
Three Phase Volt Meter 10-300V (L-N), 18-520V (LL)	1 Row, 4 Digit	CSM-AT-3-V	85364900
Three Phase Volt Meter 10-300V (L-N), 18-520V (LL)	3 Row, 4 Digit	CSM-AT-3-V3	85364900
Single Phase Ampere Meter 50mA TO 6.0 A AC	1 Row, 4 Digit	CSM-AT-1-I	85364900
Three Phase Ampere Meter 50mA TO 6.0 A AC	1 Row, 4 Digit	CSM-AT-3-I	85364900
Three Phase Ampere Meter 50mA TO 6.0 A AC	3 Row, 4 Digit	CSM-AT-3-I3	85364900

Multi Function Meters

Features

- SMPS Auxiliary supply (35-300 VAC/DC), True RMS measurement
- High glow display for distant viewing, Programmable CT & PT Ratio
- Programmable 1A/5A site selectable, Accuracy class 1.0 / 0.5, Auto / Manual display scroll
- Auto scaling of decimal Point, Optional RS-485 Modbus Communication



Description	Display	Reference	HSN Code
Single Phase VIF Meter VLN, I, F	1 Row, 4 Digit	CSM-AT-1-VIF	85364900
Three Phase VIF Meter VLN, VLL, I1,I2,I3, F	3 Row, 4 Digit	CSM-AT-3-VIF	85364900
Digital Frequency Meter 40-70 Hz	1 Row, 4 Digit	CSM-AT-F	85364900
Digital RPM Meter 1500 RPM at 50 Hz	1 Row, 4 Digit	CSM-AT-FR	85364900
Digital Hour Meter	1 Row, 4 Digit	CSM-AT-R	85364900
DC Voltmeter 0-200 V	1 Row, 4 Digit	CSM-AT-MDC-V-200	85364900
DC Ampere Meter 75 mV Shunt	1 Row, 4 Digit	CSM-AT-MDC-I-2000	85364900
DC Ampere Meter 75 mV Shunt,	1 Row, 4 Digit	CSM-AT-MDC-I-10000	85364900
Digital RPM Meter 1500 RPM at 10 VDC Or 3000 RPM at 10 VDC	1 Row, 4 Digit	CSM-AT-RPM	85364900

Power Factor Controller

Features

- 6/8/12 Conventional (Contactor switching) Power Factor Controller
- Protection & Indication of abnormal condition such as over/under compensation, over Voltage, over/under Current etc.
- Wide range of CT ratio & Target PF Selection
- Automatic C/K Setup Mode.
- Indication of Active bank through LED's
- Selection of various wiring scheme



Description	Reference	HSN Code
Single CT Input Controller (LED based)		
6 Stage APFC Controller with Single CT Input	CSPF-100-R06-110	85381010
8 Stage APFC Controller with Single CT Input	CSPF-100-R08-110	85381010
12 Stage APFC Controller with Single CT Input	CSPF-100-R12-110	85381010
Single CT Input Controller (LCD based)		
6 Stage APFC Controller with Single CT Input	CSPF-200-R06-220	85381010
8 Stage APFC Controller with Single CT Input	CSPF-200-R08-220	85381010
12 Stage APFC Controller with Single CT Input	CSPF-200-R12-220	85381010

Electronic Motor Protection Relay

Models

mPRO200, mPRO100, mPRO90, mPRO 50

Protection

Overload/ Phase loss/ Locked rotor/ Stall/ Phase reversal/ Current unbalance/ Short circuit/ Under current/ Earthfault (Residual / CBCT) Over temperature, external fault

Features

- Din mount Base & Door mount LCD Display
- High Accurate Compact Multi Protection LV Protection Relay
- Trip Class Selection from 5 to 60
- Can be use in Inverter Circuit (20–200Hz)
- Last 5 fault records / Motor Run hour
- Option Modbus on RS485 or 4–20 mA analog output
- Last 3 START / STOP record
- DI / DO Matrix programmability
- Multiple Reset functions



mPRO200

Description	Reference	Current Range (A)	HSN Code
MPRO-200, Rated current range (5-60A), with internal residual calculation, Aux supply (190-260V AC)	MPRO-200-60-E-00-H-V2	5.0–60	85364900
MPRO-200, Rated current range (1-5A), with internal residual calculation, Aux supply (190-260V AC)	MPRO-200-05-E-00-H-V2	1.0–5.0	85364900
MPRO-200, Rated current range (5-60A), with internal residual calculation, Aux supply (100-160V AC)	MPRO-200-60-E-00-L-V2	5.0–60	85364900
MPRO-200, Rated current range (1-5A), with internal residual calculation, Aux supply (100-160V AC)	MPRO-200-05-E-00-L-V2	1.0–5.0	85364900
MPRO-200, Rated current range (1-5A), with internal residual calculation, 4-20mA output + DI, Aux supply (190-260V AC)	MPRO-200-05-E-A0-H-V2	1.0–5.0	85364900
MPRO-200, Rated current range (1-5A), with internal residual calculation, 4-20mA output + DI, Aux supply (100-160V AC)	MPRO-200-05-E-A0-L-V2	1.0–5.0	85364900
MPRO-200, Rated current range (1-5A), with internal residual calculation, MODBUS RS485+DI, Aux supply (190-260V AC)	MPRO-200-05-E-C0-H-V2	1.0–5.0	85364900
MPRO-200, Rated current range (1-5A), with internal residual calculation, MODBUS RS485+DI, Aux supply (100-160V AC)	MPRO-200-05-E-C0-L-V2	1.0–5.0	85364900
MPRO-200, Rated current range (1-5A), with external CBCT Circular ID=57mm, Plastic casing, Aux Supply (190-260V AC)	MPRO-200-05-Z55-00-H-V2	1.0–5.0	85364900
MPRO-200, Rated current range (1-5A), with external CBCT Circular ID=57mm, Plastic casing, Aux Supply (100-160V AC)	MPRO-200-05-Z55-00-L-V2	1.0–5.0	85364900
MPRO-200, Rated current range (1-5A), with external CBCT Circular ID=57mm, Plastic casing, 4-20mA output + DI, Aux Supply (190-260V AC)	MPRO-200-05-Z55-A0-L-C1-V2	1.0–5.0	85364900
MPRO-200, Rated current range (1-5A), with external CBCT Circular ID=57mm, Plastic casing, 4-20mA output + DI, Aux Supply (100-160V AC)	MPRO-200-05-Z55-A0-L-V2	1.0–5.0	85364900
MPRO-200, Rated current range (1-5A), with external CBCT Circular ID=57mm, Plastic casing, 4-20mA output + DI, Aux Supply (190-260V AC)	MPRO-200-05-Z55-A0-H-V2	1.0–5.0	85364900
MPRO-200, Rated current range (1-5A), with external CBCT Circular ID=57mm, Plastic casing, MODBUS RS485 + DI, Aux Supply (100-160V AC)	MPRO-200-05-Z55-C0-L-V2	1.0–5.0	85364900
MPRO-200, Rated current range (5-60A), with internal residual calculation, 4-20mA output + DI, Aux supply (100-160V AC)	MPRO-200-60-E-A0-L-V2	5.0–60	85364900
MPRO-200, Rated current range (5-60A), with internal residual calculation, 4-20mA output + DI, Aux supply (190-260V AC)	MPRO-200-60-E-A0-H-V2	5.0–60	85364900
MPRO-200, Rated current range (5-60A), with internal residual calculation or external CBCT (field selectable), Aux Supply (85-300V AC/DC)	MPRO-200-60-EZ-00-W-V2	5.0–60	85364900
MPRO-200, Rated current range (5-60A), with internal residual calculation or external CBCT (field selectable), MODBUS RS485, Aux Supply (85-300V AC/DC)	MPRO-200-60-EZ-R0-W-V2	5.0–60	85364900
MPRO-200, Rated current range (5-60A), with internal residual calculation, MODBUS RS485 + DI, Aux supply (190-260V AC)	MPRO-200-60-E-C0-H-V2	5.0–60	85364900
MPRO-200, Rated current range (5-60A), with external CBCT Circular ID=57mm, Plastic casing, 4-20mA output + DI, Aux supply (100-160V AC)	MPRO-200-60-Z55-A0-L-C1-V2	5.0–60	85364900
MPRO-200, Rated current range (5-60A), with external CBCT Circular ID=57mm Plastic casing, 4-20mA + DI, Aux supply (100-160V AC)	MPRO-200-60-Z55-A0-L-V2	5.0–60	85364900
MPRO-200, Rated current range (5-60A), with external CBCT Circular ID=57mm Plastic casing, 4-20mA + DI, Aux supply (190-260V AC)	MPRO-200-60-Z55-A0-H-V2	5.0–60	85364900
MPRO-200, Rated current range (5-60A), with external CBCT Circular ID=57mm Plastic casing, Aux supply (190-260V AC)	MPRO-200-60-Z55-00-H-V2	5.0–60	85364900
MPRO-200, Rated current range (5-60A), with external CBCT Circular ID=57mm Plastic casing, Aux supply (100-160V AC)	MPRO-200-60-Z55-00-L-V2	5.0–60	85364900
MPRO-200, Rated current range (1-5A), with external CBCT Circular ID=92mm, Plastic casing, Aux Supply (190-260V AC)	MPRO-200-05-Z90-00-H-V2	1.0–5.0	85364900
MPRO-200, Rated current range (1-5A), with external CBCT Circular ID=57mm Plastic casing, MODBUS RS485 + DI, Aux Supply (190-260V AC)	MPRO-200-05-Z55-C0-H-V2	1.0–5.0	85364900



mPRO100



mPRO90

Description	Reference	Current Range (A)	HSN Code
MPRO-100, Rated current range (1-5A), with internal residual calculation, Aux Supply (190-260V AC)	MPRO-100-5-E-H-V2	1.0-5.0	85364900
MPRO-100, Rated current range (1-5A), with internal residual calculation, Aux Supply (100-160V AC)	MPRO-100-5-E-L-V2	1.0-5.0	85364900
MPRO-100, Rated current range (5-60A), with internal residual calculation, Aux Supply (190-260V AC)	MPRO-100-60-E-H-V2	5.0-60	85364900
MPRO-100, Rated current range (5-60A), with internal residual calculation, Aux Supply (100-160V AC)	MPRO-100-60-E-L-V2	5.0-60	85364900
MPRO-100, Rated current range (1-5A), with external CBCT circular, ID=57mm, plastic casing, Aux Supply (100-160V AC)	MPRO-100-5-Z55-L-V2	1.0-5.0	85364900
MPRO-100, Rated current range (1-5A), with external CBCT circular, ID=70mm, plastic casing, Aux Supply (100-160V AC)	MPRO-100-5-Z70-L-V2	1.0-5.0	85364900
MPRO-100, Rated current range (1-5A), with external CBCT circular, ID=92mm, plastic casing, Aux Supply (100-160V AC)	MPRO-100-5-Z90-L-V2	1.0-5.0	85364900
MPRO-100, Rated current range (1-5A), with external CBCT circular, ID=120mm, plastic casing, Aux Supply (100-160V AC)	MPRO-100-5-Z120-L-V2	1.0-5.0	85364900
MPRO-100, Rated current range (5-60A), with external CBCT circular, ID=57mm, plastic casing, Aux supply (100-160V AC)	MPRO-100-60-Z55-L-V2	5.0-60	85364900
MPRO-100, Rated current range (5-60A), with external CBCT circular, ID=70mm, plastic casing, Aux supply (100-160V AC)	MPRO-100-60-Z70-L-V2	5.0-60	85364900
MPRO-100, Rated current range (5-60A), with external CBCT circular, ID=92mm, plastic casing, Aux supply (100-160V AC)	MPRO-100-60-Z90-L-V2	5.0-60	85364900
MPRO-100, Rated current range (5-60A), with external CBCT circular, ID=120mm, plastic casing, Aux supply (100-160V AC)	MPRO-100-60-Z120-L-V2	5.0-60	85364900
MPRO-100, Rated current range (1-5A), with external CBCT circular, ID=57mm, plastic casing, Aux Supply (190-260V AC)	MPRO-100-5-Z55-H-V2	1.0-5.0	85364900
MPRO-100, Rated current range (1-5A), with external CBCT Circular ID=70mm, Plastic casing, Aux Supply (190-260V AC)	MPRO-100-5-Z70-H-V2	1.0-5.0	85364900
MPRO-100, Rated current range (1-5A), with external CBCT circular, ID=92 mm, plastic casing, Aux Supply (190-260V AC)	MPRO-100-5-Z90-H-V2	1.0-5.0	85364900
MPRO-100, Rated current range (1-5A), with external CBCT Circular ID=120mm, Plastic casing, Aux Supply (190-260V AC)	MPRO-100-5-Z120-H-V2	1.0-5.0	85364900
MPRO-90, External CT1 Rated current Range (0.2-10A), with internal residual calculation	MPRO-90-CT1-E	0.2-10	85364900
MPRO-90, External CT2 Rated current Range (0.8-25A), with internal residual calculation	MPRO-90-CT2-E	0.8-25	85364900
MPRO-90, External CT3 Rated current Range (2-62.5A), with internal residual calculation	MPRO-90-CT3-E	2.0-62.5	85364900
MPRO-90, External CT4 Rated current Range (4-125A), with internal residual calculation	MPRO-90-CT4-E	4.0-125	85364900
MPRO-90, External CT5 Rated current Range (8-250A), with internal residual calculation	MPRO-90-CT5-E	8.0-250	85364900
MPRO-90, External CT1 Rated current Range (0.2-10A), with internal residual calculation, Star-Delta	MPRO-90-CT1-E-SDT	0.2-10	85364900
MPRO-90, External CT2 Rated current Range (0.8-25A), with internal residual calculation, Star-Delta	MPRO-90-CT2-E-SDT	0.8-25	85364900
MPRO-90, External CT3 Rated current Range (2-62.5A), with internal residual calculation, Star-Delta	MPRO-90-CT3-E-SDT	2.0-62.5	85364900
MPRO-90, External CT4 Rated current Range (4-125A), with internal residual calculation, star-Delta	MPRO-90-CT4-E-SDT	4.0-125	85364900
MPRO-90, External CT5 Rated current Range (8-250A), with internal residual calculation, Star-Delta	MPRO-90-CT5-E-SDT	8.0-250	85364900



Accessories

Description	Reference	HSN Code
Current Transformer Ratio 100/5A, Burden 5VA, Cl.1.0	3-CT-100/5	85043100
Current Transformer Ratio 200/5A, Burden 5VA, Cl.1.0	3-CT-200/5	85043100
Current Transformer Ratio 300/5A, Burden 5VA, Cl.1.0	3-CT-300/5	85043100
Current Transformer Ratio 400/5A, Burden 5VA, Cl.1.0	3-CT-400/5	85043100
Current Transformer Ratio 500/5A, Burden 5VA, Cl.1.0	3-CT-500/5	85043100
Current Transformer Ratio 600/5A, Burden 5VA, Cl.1.0	3-CT-600/5	85043100

ORDERING INFORMATION

mPRO-90

mPRO - 90 - xxx - x - xxx

Protection Model Series

External CT Selection

- CT1 : Rated current Range (0.2-10A)
- CT2 : Rated current Range (0.8-25.0A)
- CT3 : Rated current Range (2.0-62.5A)
- CT4 : Rated current Range (4.0-125A)
- CT5 : Rated current Range (8.0-250A)

Earth Fault

- E : with Internal Residual Calculation

- O : Basic version

- SDT : with In-built STAR-DELTA control

mPRO-100/200-V2

mPRO - xxx - X - X - X - X - V2

Protection Model Series

- 100 : with In-built LED display
- 200 : with Extended LCD display

Rated Current

- 60 : Rated current Range (5-60A)
- 5 : Rated current Range (1-5A)

Earth Fault

- E : with Internal Residual Calculation
- Z55 : with external CBCT - Circular, ID 57 mm (CBCT 55), Plastic casing
- Z70 : with external CBCT - Circular, ID 70 mm (CBCT 70), Plastic casing
- Z90 : with external CBCT - Circular, ID 92 mm (CBCT 90), Plastic casing
- Z120 : with external CBCT - Circular, ID 120 mm (CBCT120), Plastic casing

Output Selection

- 00 : NONE
- A0 : 4-20 mA Output + Digital Input
- 0T : PTC thermistor + Digital Input
- C0 : MODBUS RS485 + Digital Input
- AT : 4-20 mA Output + PTC thermistor + Digital Input
- CT : MODBUS RS485 + PTC thermistor + Digital Input

Auxiliary Supply

- L : 110V AC (100-160V AC)
- H : 220V AC (190-260V AC)

* CBCT Ordering Information (To be selected for mPRO-200-x-Z-x-x model)

CBCT SIZE

- Z55 : Circular, ID 57 mm (CBCT 55), Plastic casing
- Z70 : Circular, ID 70 mm (CBCT 70), Plastic casing
- Z90 : Circular, ID 92 mm (CBCT 90), Plastic casing
- Z120 : Circular, ID 120 mm (CBCT 120), Plastic casing

Electronic Motor Protection Relay - CSMP

Protection

Overload/ Phase loss/ Locked rotor/ Phase reversal/ Current unbalance/ Short circuit/ Under current/ Earthfault

Features

- Detachable Din mount Base & Door mount LED Display
- High Accurate Compact Multi Protection LV Protection Relay
- Trip Class Selection from 5 to 60
- Display of 3 phase RMS Current, % current unbalance
- Looping option is available for FHP motors
- Fault diagnostic by LED indication



Description	Reference	Current Range (A)	HSN Code
Relay CSMPA-80-3SR,80A,100-260VAC	CSMPA-80-3SR,80A,100-260VAC	16-80	85364900
Relay CSMPA-40-3SR,40A,100-260VAC	CSMPA-40-3SR,40A,100-260VAC	8.0-40	85364900
Relay CSMPA-40-3SR,20A,100-260VAC	CSMPA-40-3SR,20A,100-260VAC	4.0-20	85364900
Relay CSMPA-22-3SR,22A,100-260VAC	CSMPA-22-3SR,22A,100-260VAC	4.4-22	85364900
Relay CSMPA-22-3SR,5A,100-260VAC	CSMPA-22-3SR,5A,100-260VAC	1.0-5	85364900
Relay CSMPA-22-3SR,1.5A,100-260VAC	CSMPA-22-3SR,1.5A,100-260VAC	0.3-1.5	85364900
Relay CSMPM-06i-S (2a+1b) AC/DC85-260V 50/60Hz	CSMPM-06i-S(2A+1B)AC/DC85-260V 50/60HZ	0.5-6.0	85364900
Relay CSMPM-06i-SE (2a+1b) AC/DC85-260V 50/60Hz	CSMPM-06i-SE(2A+1B)AC/DC85-260V 50/60HZ	0.5-6.0	85364900
Relay CSMPM-06i-SI (2a+1b) AC/DC85-260V 50/60Hz	CSMPM-06i-SI(2A+1B)AC/DC85-260V 50/60HZ	0.5-6.0	85364900
Relay CSMPM-06i-SM (2a+1b) AC/DC85-60V 50/60Hz	CSMPM-06i-SM(2A+1B)AC/DC85-60V 50/60HZ	0.5-6.0	85364900
Relay CSMPM-06i-SZ (2a+1b) AC/DC85-260V 50/60Hz	CSMPM-06i-SZ(2A+1B)AC/DC85-260V 50/60HZ	0.5-6.0	85364900
Relay CSMPM-06i-SZIA (2a+1b) AC/DC85-260V 50/60Hz	CSMPM-06i-SZIA(2A+1B)AC/DC85-260V50/60HZ	0.5-6.0	85364900
Relay CSMPM-65i-S (2a+1b) AC/DC85-260V 50/60Hz	CSMPM-65i-S(2A+1B)AC/DC85-260V 50/60HZ	5.0-65	85364900
Relay CSMPM-65i-SE (2a+1b) AC/DC85-260V 50/60Hz	CSMPM-65i-SE(2A+1B)AC/DC85-260V 50/60HZ	5.0-65	85364900
Relay CSMPM-65i-SI (2a+1b) AC/DC85-260V 50/60Hz	CSMPM-65i-SI(2A+1B)AC/DC85-260V 50/60HZ	5.0-65	85364900
Relay CSMPM-65i-SM (2a+1b) AC/DC85-260V 50/60Hz	CSMPM-65i-SM(2A+1B)AC/DC85-260V 50/60HZ	5.0-65	85364900
Relay CSMPM-65i-SZ (2a+1b) AC/DC85-260V 50/60Hz	CSMPM-65i-SZ(2A+1B)AC/DC85-260V 50/60HZ	5.0-65	85364900
IMC-IIIIM4852MAC110V50/60Hz	IMC-III-M485-2-MAC110V50/60Hz	6 / 60	85364900
Relay IMP-CNOAC/DC85-245V	IMP-C-NO AC/DC85-245V	10 / 100	85364900
Relay IMP-CA420AC/DC85-245V	IMP-C-A420 AC/DC85-245V	10 / 100	85364900
Relay IMP-C-M485-AC/DC 85-245-40/60	IMP-C-M485-AC/DC 85-245-40/60	10 / 100	85364900
Relay CSMPA-60-T,6A,220VAC	CSMPA-60-T,6A,220VAC	0.5-6.0	85364900
Relay CSMPA-60-T,60A,220VAC	CSMPA-60-T,60A,220VAC	5.0-60	85364900
Relay CSMPA-60-T,60A,110VAC	CSMPA-60-T,60A,110VAC	5.0-60	85364900
Relay CSMPA-60-T,6A,110VAC	CSMPA-60-T,6A,110VAC	0.5-6.0	85364900
Relay CSMPA-60-T,60A,415VAC	CSMPA-60-T,60A,415VAC	5.0-60	85364900
Relay CSMPA-60-T,6A,415VAC	CSMPA-60-T,6A,415VAC	0.5-6.0	85364900

Accessories

Description	Reference	HSN Code
Display Cable-1-1.15 m	ASSY.,(1-1.5)CSMPM	85381090
Display Cable-4 m	ASSY.,(4M)CSMPM	85381090
Z-CTD with ID=30mm	Z-CTD30	85043100
Z-CTD with ID=50mm	Z-CTD50	85043100
Z-CTD with ID=65mm	Z-CTD65	85043100
Z-CTD with ID=80mm	Z-CTD80	85043100

ELR - Earth Leakage Relay

Models

ELR 1.0, ELR 3.0

Protection & Features

- Monitors, Detects & Protects Power system from Earth Leakage Fault
- Wide range of Selectable Earth Leakage Current Setting
- Configurable Earth Leakage Trip time 0-30s
- LED indication for Earth Leakage Fault & Alarm indication
- Trip Circuit Failure Indication
- Last 10 Fault records with date & time
- CBCT measures the leakage current to the highest accuracy
- Flush / DIN Rail mountable based on model selection



ELR 1.0



ELR 3.0

Description	Reference		HSN Code
Earth Leakage Relay ELR1.0 protection series, LED display with panel front mounting, current range (30mA-3A), Aux Supply (85-280V AC / 95-280V DC), CBCT Type Circular, ID 120 mm with plastic casing	ELR1.0-S-03-W-C120	30mA-3A	85364900
Earth Leakage Relay ELR1.0 protection series, LED display with panel front mounting, current range (30mA-3A), Aux Supply (85-280V AC / 95-280V DC), CBCT Type Circular, ID 150 mm Resin Cast	ELR1.0-S-03-W-C150	30mA-3A	85364900
Earth Leakage Relay ELR1.0 protection series, LED display with panel front mounting, current range (30mA-3A), Aux Supply (85-280V AC / 95-280V DC), CBCT Type Circular, ID 200 mm Resin cast	ELR1.0-S-03-W-C200	30mA-3A	85364900
Earth Leakage Relay ELR1.0 protection series, LED display with panel front mounting, current range (30mA-3A), Aux Supply (85-280V AC / 95-280V DC), CBCT Type Circular, ID 57 mm with plastic casing	ELR-1.0-S-03-W-C55	30mA-3A	85364900
Earth Leakage Relay ELR1.0 protection series, LED display with panel front mounting, current range (30mA-3A), Aux Supply (85-280V AC / 95-280V DC), CBCT Type Circular, ID 70 mm with plastic casing	ELR-1.0-S-03-W-C70	30mA-3A	85364900
Earth Leakage Relay ELR1.0 protection series, LED display with panel front mounting, current range (30mA-3A), Aux Supply (85-280V AC / 95-280V DC), CBCT Type Circular, ID 92 mm with plastic casing	ELR-1.0-S-03-W-C90	30mA-3A	85364900
Earth Leakage Relay ELR1.0 protection series, LED display with front panel mounting Current Range (30mA-3A), Aux Supply (85-280V AC/95-280V DC), CBCT Rectangular type ID 300 x 80 (CCT 300) Resin cast	ELR1.0-S-03-W-R300	30mA-3A	85364900
Earth Leakage Relay ELR1.0 protection series, LED display with panel front mounting, current range (300mA-12A), Aux Supply (85-280V AC / 95-280V DC), CBCT Type Circular, ID 92 mm with plastic casing	ELR-1.0-S-12-W-C120	30mA-3A	85364900
Earth Leakage Relay ELR1.0 protection series, LED display with panel front mounting, current range (300mA-12A), Aux Supply (85-280V AC / 95-280V DC), CBCT Type Circular, ID 120 mm with plastic casing	ELR-1.0-S-12-W-C90	30mA-3A	85364900
Earth Leakage Relay ELR3.0 protection series, LCD display with panel front mounting, current range (300mA-12A), Aux Supply (85-280V AC / 95-280V DC), CBCT Type Circular, ID 120 mm with plastic casing	ELR-3.0-L-03-W-C120	30mA-3A	85364900

DG AMF / Synchronizing Controller

Models

EC2, EGA-250, EC-RXA, CD 2.0, CD 5.0



Protection & Features

- Display 3 Phase Mains Parameters: Voltage & Frequency
- Display of 3 Phase Generator Parameters: Voltage, Frequency, Speed, Run Hours
- Multi-genset Synchronizer & Load Share Unit
- Fault record with date & time stamp
- Event record with date & time stamp
- ATS/ATF/ Remote Start Controller/ Engine Controller

Description	Reference	HSN Code
Relay EC2(VER1.10)	EC2(VER1.10)	85364900
Relay EC-RXA_V2	EC-RXA_V2	85364900
Relay EGA-250-0	EGA-250-0	85364900
Relay EC2(VER 2.10)	EC2-V2.10	85364900
AMF Relay CD2.0 with MPU	AMF RELAY CD2.0 WITH MPU	85364900
AMF Relay CD 5.0	AMF Relay CD 5.0	85364900
Relay DG Synchronizer Relay CD5.0 with RS485/Ethernet	DG SYNC RELAY CD5.0 RS485/ETHERNET	85364900
Relay EGC-250-0	EGC-250-0	85364900

Voltage & Current Monitoring Relay & Timer

Model

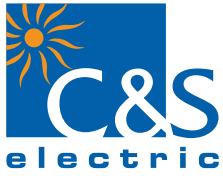
Voltage Monitoring, Current Monitoring & Timers



Protection & features

- 3 Phase Voltage Monitoring
- 1 Phase Current Monitoring
- ON / OFF Delay Timer

Description	Reference	HSN Code
ENYA series- Multifunction Timer,Up to 7 functions,7 time ranges,Wide input voltage range	E1Z1E1024-240VAC/DC VE10 (110204A)	85364900
Monitoring relays - ENYA series, Voltage monitoring in 3- and 1-phase mains	E1YM400VS10 (1340405H)	85364900
Monitoring relays - GAMMA series, AC/DC current monitoring in 1-phase mains	G2IM10AL20,24-240V (2390410)	85364900
ENYA series-Multifunction Timer,Up to 7 functions,7 time ranges,Wide input voltage range	E1ZM10 12-240VAC/DC	85364900
Monitoring relays - ENYA series, Tripping unit for temperature monitoring	E3TF01 230VAC	85364900
Monitoring relays - ENYA series - AC/DC current monitoring in 1-phase mains	E3IM10AL20,230VAC (1341200)	85364900
ENYA series, Timers - Multifunctional,Up to 7 functions,7 time ranges,Wide input voltage range	E1ZMQ10,24-240VAC/DC	85364900
ENYA series- Timers - Asymmetric flasher	E1ZI10 12-240VAC/DC	85364900
Monitoring relays - GAMMA series,Voltage monitoring in 3-phase mains	G2PM690VSY20	85364900
Monitoring relays - GAMMA series, Voltage monitoring in 3-phase mains	G2PM400VSY20(2390504)	85364900
Monitoring relays - GAMMA series,a.c./d.c. current monitoring in 1-phase mains	G2IM5AL20,24-240V	85364900
Monitoring relays - GAMMA series, a.c./d.c. current monitoring in 1-phase mains	G2IM10AL20 24-240V AC/DC	85364900
Monitoring Relays-TR Series	TR2-400VAC(282117)	85364900



FINAL POWER

DISTRIBUTION COMPONENTS



- Miniature Circuit Breakers
- RCCB & Isolators
- RCBO
- MCB Type Changeover Switches
- Distribution Boards

We touch your electricity everyday!

WiNtrip2 MCB & Isolator

Technical Data-MCB & Isolator (AC)

Specifications	WiNtrip2 MCB				WiNtrip2 Isolator	WiNtrip2 Isolator-Double Break
	B	C	D	K		
Type						
Standard Conformity	IEC/EN 60898-1:2015			IS/IEC 60947-2	IEC60947-3	IEC60947-3
Rated Current (In)	6A-63A	0.5A-63A		0.5A-63A	16A-63A	25A-125A
Rated Voltage AC (Ue)	240/415V				240/415V	240/415V
Utilization Category	-			A	AC22A	AC22A
Rated Frequency Hz	50/60Hz				50/60Hz	50/60Hz
Poles (Execution)	1P, 1P+N, 2P, 3P, 3P+N & 4P				1P, 2P, 3P & 4P	1P, 2P, 3P & 4P
Rated Short Circuit Breaking Capacity	6kA / 10kA				-	-
Rated Insulation Voltage (Ui)	660V			500V	660V	660V
Magnetic Release Setting	(3-5) In	(5-10) In	(10-20) In	8 In	-	-
Release	Thermo Magnetic				-	-
Rated Impulse Voltage (Uimp)	4kV			6kV	6kV	6kV
Electrical/Mechanical Life <32A	10000				20000 operations	20000
>32A	20000				10,000	10000
Energy Limiting Class	ELC 3			NA	-	-
Mounting	Clip on Din rail (35x7.5 mm)				Clip on Din rail (35x7.5 mm)	Clip on Din rail (35x7.5 mm)
Line Terminal Capacity	35 mm ²				35 mm ²	50 mm ²
Load Terminal Capacity	35 mm ²				35 mm ²	50 mm ²
Degree of Protection	IP 20				IP 20	IP 20
Circuit Breaker for use in IT Systems	Yes				-	-
Resistance to Shock	40mm free fall				40mm free fall	40mm free fall
Ambient working temperature	-5 to 55°C				-	-
Ambient reference temperature	30°C			40°C	-	-
Installation Position	Vertical / Horizontal				Vertical / Horizontal	Vertical / Horizontal
Bi-connect terminal	Both side				Both side	IEC certificate

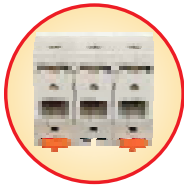
Accessories (Site fit-able)

Description	Product Code	Configuration	Type of contact	Fitment	Module Size	Suitable MCB Rating (A)
Auxiliary Contact	CSMBAXSF1	1NO-1NC	Changeover	Right	9 mm	Wintrip2 0.5-63
Auxiliary Contact	CSMBAXSF2	2NO-2NC	Changeover	Right	9 mm	Wintrip2 0.5-63
Auxiliary Contact	CSMBAXSF11	1NO-1NC	Potential free	Left	18 mm	Wintrip2 0.5-63
Alarm Contact	CSMBALSF1	1 Changeover	Changeover	Right	9 mm	Wintrip2 0.5-63
Shunt Trip	CSMBS012DCSF	-	-	Left	18 mm	Wintrip2 0.5-63
Shunt Trip	CSMBS024DCSF	-	-	Left	18 mm	Wintrip2 0.5-63
Shunt Trip	CSMBS048DCSF	-	-	Left	18 mm	Wintrip2 0.5-63
Shunt Trip	CSMBS220ACSF	-	-	Left	18 mm	Wintrip2 0.5-63

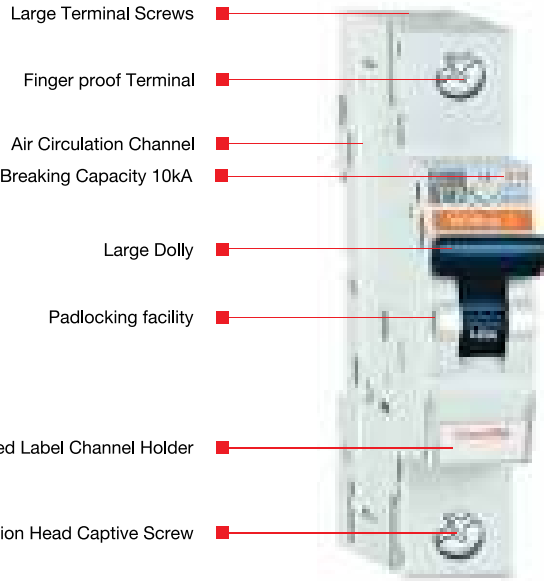
WiNtrip2 Miniature Circuit Breaker



Two stage easy snapping device for Din Rail Mounting

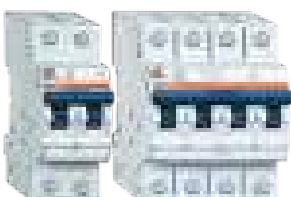
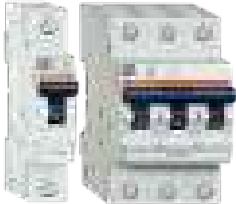


Bi-connect terminals for Cable and Busbar



B-Series
Lighting & Distribution with no Surge Current

[HSN Code: 8536]



Current rating (Amps.)	Product Code	Std. Pkg. (Nos.)
1 Pole		
6	CSMBS1B6	12
10	CSMBS1B10	
16	CSMBS1B16	
20	CSMBS1B20	
25	CSMBS1B25	
32	CSMBS1B32	
40	CSMBS1B40	
50	☒ CSMBS1B50	
63	CSMBS1B63	
1 Pole + N		
6	CSMBS1B6N	6
10	CSMBS1B10N	
16	CSMBS1B16N	
20	CSMBS1B20N	
25	CSMBS1B25N	
32	CSMBS1B32N	
40	CSMBS1B40N	
50	☒ CSMBS1B50N	
63	CSMBS1B63N	
2 Pole		
6	CSMBS2B6	6
10	CSMBS2B10	
16	CSMBS2B16	
20	CSMBS2B20	
25	CSMBS2B25	
32	CSMBS2B32	
40	CSMBS2B40	
50	☒ CSMBS2B50	
63	CSMBS2B63	

Current rating (Amps.)	Product Code	Std. Pkg. (Nos.)
3 Pole		
6	CSMBS3B6	4
10	CSMBS3B10	
16	CSMBS3B16	
20	CSMBS3B20	
25	CSMBS3B25	
32	CSMBS3B32	
40	CSMBS3B40	
50	☒ CSMBS3B50	
63	CSMBS3B63	
3 Pole + N		
6	☒ CSMBS3B6N	3
10	☒ CSMBS3B10N	
16	CSMBS3B16N	
20	☒ CSMBS3B20N	
25	☒ CSMBS3B25N	
32	CSMBS3B32N	
40	CSMBS3B40N	
50	☒ CSMBS3B50N	
63	CSMBS3B63N	
4 Pole		
6	☒ CSMBS4B6	3
10	☒ CSMBS4B10	
16	☒ CSMBS4B16	
20	☒ CSMBS4B20	
25	☒ CSMBS4B25	
32	CSMBS4B32	
40	CSMBS4B40	
50	CSMBS4B50	
63	CSMBS4B63	

☒ Non Stockable item

WiNtrip2 Miniature Circuit Breaker

C-Series

Inductive load with surge current - Motor Circuit Applications

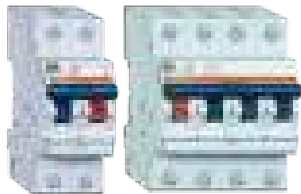
[HSN Code: 8536]



Current rating (Amps.)	Product Code	Std. Pkg. (Nos.)
1 Pole		
0.5	<input checked="" type="checkbox"/> CSMBS1C0.5	12
1	CSMBS1C1	
2	CSMBS1C2	
3	<input checked="" type="checkbox"/> CSMBS1C3	
4	CSMBS1C4	
5	<input checked="" type="checkbox"/> CSMBS1C5	
6	CSMBS1C6	
10	CSMBS1C10	
16	CSMBS1C 16	
20	CSMBS1C20	
25	CSMBS1C25	
32	CSMBS1C32	
40	CSMBS1C40	
50	<input checked="" type="checkbox"/> CSMBS1C50	
63	CSMBS1C63	

Current rating (Amps.)	Product Code	Std. Pkg. (Nos.)
3 Pole		
0.5	<input checked="" type="checkbox"/> CSMBS3C0.5	4
1	<input checked="" type="checkbox"/> CSMBS3C1	
2	CSMBS3C2	
3	<input checked="" type="checkbox"/> CSMBS3C3	
4	<input checked="" type="checkbox"/> CSMBS3C4	
5	CSMBS3C5	
6	CSMBS3C6	
10	CSMBS3C10	
16	CSMBS3C16	
20	CSMBS3C20	
25	CSMBS3C25	
32	CSMBS3C32	
40	CSMBS3C40	
50	CSMBS3C50	
63	CSMBS3C63	

E



Current rating (Amps.)	Product Code	Std. Pkg. (Nos.)
1 Pole + N		
0.5	CSMBS1C0.5N	6
1	<input checked="" type="checkbox"/> CSMBS1C1N	
2	<input checked="" type="checkbox"/> CSMBS1C2N	
3	<input checked="" type="checkbox"/> CSMBS1C3N	
4	CSMBS1C4N	
5	CSMBS1C5N	
6	<input checked="" type="checkbox"/> CSMBS1C6N	
10	CSMBS1C10N	
16	CSMBS1C16N	
20	CSMBS1C20N	
25	<input checked="" type="checkbox"/> CSMBS1C25N	
32	CSMBS1C32N	
40	<input checked="" type="checkbox"/> CSMBS1C40N	
50	<input checked="" type="checkbox"/> CSMBS1C50N	
63	CSMBS1C63N	

Current rating (Amps.)	Product Code	Std. Pkg. (Nos.)
3 Pole + N		
0.5	CSMBS3C0.5N	3
1	CSMBS3C1N	
2	<input checked="" type="checkbox"/> CSMBS3C2N	
3	CSMBS3C3N	
4	CSMBS3C4N	
5	CSMBS3C5N	
6	CSMBS3C6N	
10	<input checked="" type="checkbox"/> CSMBS3C10N	
16	CSMBS3C16N	
20	CSMBS3C20N	
25	CSMBS3C25N	
32	CSMBS3C32N	
40	CSMBS3C40N	
50	<input checked="" type="checkbox"/> CSMBS3C50N	
63	CSMBS3C63N	



Current rating (Amps.)	Product Code	Std. Pkg. (Nos.)
2 Pole		
0.5	CSMBS2C0.5	6
1	<input checked="" type="checkbox"/> CSMBS2C1	
2	CSMBS2C2	
3	<input checked="" type="checkbox"/> CSMBS2C3	
4	CSMBS2C4	
5	CSMBS2C5	
6	CSMBS2C6	
10	CSMBS2C10	
16	CSMBS2C16	
20	CSMBS2C20	
25	CSMBS2C25	
32	CSMBS2C32	
40	CSMBS2C40	
50	<input checked="" type="checkbox"/> CSMBS2C50	
63	CSMBS2C63	

Current rating (Amps.)	Product Code	Std. Pkg. (Nos.)
4 Pole		
0.5	CSMBS4C0.5	3
1	CSMBS4C1	
2	<input checked="" type="checkbox"/> CSMBS4C2	
3	CSMBS4C3	
4	<input checked="" type="checkbox"/> CSMBS4C4	
5	CSMBS4C5	
6	CSMBS4C6	
10	CSMBS4C10	
16	CSMBS4C16	
20	CSMBS4C20	
25	CSMBS4C25	
32	CSMBS4C32	
40	CSMBS4C40	
50	CSMBS4C50	
63	CSMBS4C63	

Non Stockable item

WiNtrip2 Miniature Circuit Breaker

D-Series
High Inductive Load & High Inrush Current

[HSN Code: 8536]



Current rating (Amps.)	Product Code	Std. Pkg. (Nos.)
1 Pole		
0.5	CSMBS1D0.5	12
1	CSMBS1D1	
2	<input checked="" type="checkbox"/> CSMBS1D2	
3	CSMBS1D3	
4	CSMBS1D4	
5	CSMBS1D5	
6	<input checked="" type="checkbox"/> CSMBS1D6	
10	<input checked="" type="checkbox"/> CSMBS1D10	
16	<input checked="" type="checkbox"/> CSMBS1D16	
20	<input checked="" type="checkbox"/> CSMBS1D20	
25	<input checked="" type="checkbox"/> CSMBS1D25	
32	<input checked="" type="checkbox"/> CSMBS1D32	
40	CSMBS1D40	
50	CSMBS1D50	
63	CSMBS1D63	

Current rating (Amps.)	Product Code	Std. Pkg. (Nos.)
3 Pole		
0.5	CSMBS3D0.5	4
1	CSMBS3D1	
2	CSMBS3D2	
3	CSMBS3D3	
4	CSMBS3D4	
5	CSMBS3D5	
6	<input checked="" type="checkbox"/> CSMBS3D6	
10	CSMBS3D10	
16	<input checked="" type="checkbox"/> CSMBS3D16	
20	<input checked="" type="checkbox"/> CSMBS3D20	
25	<input checked="" type="checkbox"/> CSMBS3D25	
32	<input checked="" type="checkbox"/> CSMBS3D32	
40	<input checked="" type="checkbox"/> CSMBS3D40	
50	CSMBS3D50	
63	<input checked="" type="checkbox"/> CSMBS3D63	



Current rating (Amps.)	Product Code	Std. Pkg. (Nos.)
1 Pole + N		
0.5	CSMBS1D0.5N	6
1	CSMBS1D1N	
2	CSMBS1D2N	
3	CSMBS1D3N	
4	CSMBS1D4N	
5	CSMBS1D5N	
6	CSMBS1D6N	
10	CSMBS1D10N	
16	CSMBS1D16N	
20	CSMBS1D20N	
25	CSMBS1D25N	
32	<input checked="" type="checkbox"/> CSMBS1D32N	
40	CSMBS1D40N	
50	CSMBS1D50N	
63	<input checked="" type="checkbox"/> CSMBS1D63N	

Current rating (Amps.)	Product Code	Std. Pkg. (Nos.)
3 Pole + N		
0.5	CSMBS3D0.5N	3
1	CSMBS3D1N	
2	CSMBS3D2N	
3	CSMBS3D3N	
4	CSMBS3D4N	
5	CSMBS3D5N	
6	CSMBS3D6N	
10	CSMBS3D10N	
16	<input checked="" type="checkbox"/> CSMBS3D16N	
20	CSMBS3D20N	
25	<input checked="" type="checkbox"/> CSMBS3D25N	
32	<input checked="" type="checkbox"/> CSMBS3D32N	
40	CSMBS3D40N	
50	CSMBS3D50N	
63	<input checked="" type="checkbox"/> CSMBS3D63N	



Current rating (Amps.)	Product Code	Std. Pkg. (Nos.)
2 Pole		
0.5	<input checked="" type="checkbox"/> CSMBS2D0.5	6
1	CSMBS2D1	
2	<input checked="" type="checkbox"/> CSMBS2D2	
3	CSMBS2D3	
4	<input checked="" type="checkbox"/> CSMBS2D4	
5	CSMBS2D5	
6	<input checked="" type="checkbox"/> CSMBS2D6	
10	<input checked="" type="checkbox"/> CSMBS2D10	
16	<input checked="" type="checkbox"/> CSMBS2D16	
20	<input checked="" type="checkbox"/> CSMBS2D20	
25	<input checked="" type="checkbox"/> CSMBS2D25	
32	<input checked="" type="checkbox"/> CSMBS2D32	
40	CSMBS2D40	
50	CSMBS2D50	
63	<input checked="" type="checkbox"/> CSMBS2D63	

Current rating (Amps.)	Product Code	Std. Pkg. (Nos.)
4 Pole		
0.5	CSMBS4D0.5	3
1	CSMBS4D1	
2	CSMBS4D2	
3	CSMBS4D3	
4	CSMBS4D4	
5	CSMBS4D5	
6	CSMBS4D6	
10	CSMBS4D10	
16	<input checked="" type="checkbox"/> CSMBS4D16	
20	CSMBS4D20	
25	CSMBS4D25	
32	CSMBS4D32	
40	<input checked="" type="checkbox"/> CSMBS4D40	
50	CSMBS4D50	
63	<input checked="" type="checkbox"/> CSMBS4D63	

Non Stockable item



WiNtrip2 Miniature Circuit Breaker

K-Series, 'C' Curve

IS/IEC 60947-2

Inductive load with surge current - Motor Circuit Applications

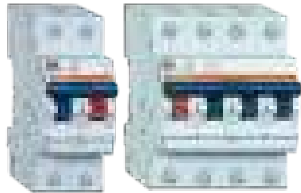
[HSN Code: 8536]



Current rating (Amps.)	Product Code	Std. Pkg. (Nos.)
1 Pole		
0.5	CSMBS1K0.5	12
1	CSMBS1K1	
2	CSMBS1K2	
3	CSMBS1K3	
4	CSMBS1K4	
5	CSMBS1K5	
6	CSMBS1K6	
10	CSMBS1K10	
16	CSMBS1K16	
20	CSMBS1K20	
25	CSMBS1K25	
32	CSMBS1K32	
40	CSMBS1K40	
50	CSMBS1K50	
63	CSMBS1K63	

Current rating (Amps.)	Product Code	Std. Pkg. (Nos.)
3 Pole		
0.5	CSMBS3K0.5	4
1	CSMBS3K1	
2	CSMBS3K2	
3	CSMBS3K3	
4	CSMBS3K4	
5	CSMBS3K5	
6	CSMBS3K6	
10	CSMBS3K10	
16	CSMBS3K16	
20	CSMBS3K20	
25	CSMBS3K25	
32	CSMBS3K32	
40	CSMBS3K40	
50	CSMBS3K50	
63	CSMBS3K63	

E



Current rating (Amps.)	Product Code	Std. Pkg. (Nos.)
1 Pole + N		
0.5	CSMBS1K0.5N	6
1	CSMBS1K1N	
2	CSMBS1K2N	
3	CSMBS1K3N	
4	CSMBS1K4N	
5	CSMBS1K5N	
6	CSMBS1K6N	
10	CSMBS1K10N	
16	CSMBS1K16N	
20	CSMBS1K20N	
25	CSMBS1K25N	
32	CSMBS1K32N	
40	CSMBS1K40N	
50	CSMBS1K50N	
63	CSMBS1K63N	

Current rating (Amps.)	Product Code	Std. Pkg. (Nos.)
3 Pole + N		
0.5	CSMBS3K0.5N	3
1	CSMBS3K1N	
2	CSMBS3K2N	
3	CSMBS3K3N	
4	CSMBS3K4N	
5	CSMBS3K5N	
6	CSMBS3K6N	
10	CSMBS3K10N	
16	CSMBS3K16N	
20	CSMBS3K20N	
25	CSMBS3K25N	
32	CSMBS3K32N	
40	CSMBS3K40N	
50	CSMBS3K50N	
63	CSMBS3K63N	



Current rating (Amps.)	Product Code	Std. Pkg. (Nos.)
2 Pole		
0.5	CSMBS2K0.5	6
1	CSMBS2K1	
2	CSMBS2K2	
3	CSMBS2K3	
4	CSMBS2K4	
5	CSMBS2K5	
6	CSMBS2K6	
10	CSMBS2K10	
16	CSMBS2K16	
20	CSMBS2K20	
25	CSMBS2K25	
32	CSMBS2K32	
40	CSMBS2K40	
50	CSMBS2K50	
63	CSMBS2K63	

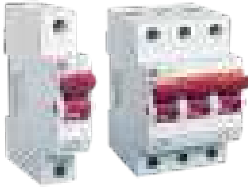
Current rating (Amps.)	Product Code	Std. Pkg. (Nos.)
4 Pole		
0.5	CSMBS4K0.5	3
1	CSMBS4K1	
2	CSMBS4K2	
3	CSMBS4K3	
4	CSMBS4K4	
5	CSMBS4K5	
6	CSMBS4K6	
10	CSMBS4K10	
16	CSMBS4K16	
20	CSMBS4K20	
25	CSMBS4K25	
32	CSMBS4K32	
40	CSMBS4K40	
50	CSMBS4K50	
63	CSMBS4K63	

Non Stockable item

Note: K-Series 'B' Curve is also available.

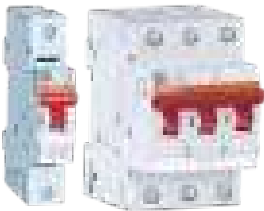
WiNtrip2 Isolator (IEC 60947-3)

[HSN Code: 8536]



Current rating (Amps.)	Product Code	Std. Pkg. (Nos.)
1 Pole		
25	CSMBS1SD25	12
40	CSMBS1SD40	
63	CSMBS1SD63	
80	CSMBS1SD80	
100	CSMBS1SD100	
125	CSMBS1SD125	
2 Pole		
25	CSMBS2SD25	6
40	CSMBS2SD40	
63	CSMBS2SD63	
80	CSMBS2SD80	
100	CSMBS2SD100	
125	CSMBS2SD125	

Current rating (Amps.)	Product Code	Std. Pkg. (Nos.)
3 Pole		
25	CSMBS3SD25	4
40	CSMBS3SD40	
63	CSMBS3SD63	
80	CSMBS3SD80	
100	CSMBS3SD100	
125	CSMBS3SD125	
4 Pole		
25	CSMBS4SD25	3
40	CSMBS4SD40	
63	CSMBS4SD63	
80	CSMBS4SD80	
100	CSMBS4SD100	
125	CSMBS4SD125	



Current rating (Amps.)	Product Code	Std. Pkg. (Nos.)
1 Pole		
25	<input checked="" type="checkbox"/> CSMBS1ISO25	12
40	<input checked="" type="checkbox"/> CSMBS1ISO40	
63	<input checked="" type="checkbox"/> CSMBS1ISO63	
80	CSMBS1ISO80	
100	<input checked="" type="checkbox"/> CSMBS1ISO100	
125	<input checked="" type="checkbox"/> CSMBS1ISO125	
2 Pole		
25	CSMBS2ISO25	6
40	CSMBS2ISO40	
63	CSMBS2ISO63	
80	<input checked="" type="checkbox"/> CSMBS2ISO80	
100	CSMBS2ISO100	
125	CSMBS2ISO125	

[HSN Code: 8536]

Current rating (Amps.)	Product Code	Std. Pkg. (Nos.)
3 Pole		
25	CSMBS3ISO25	4
40	CSMBS3ISO40	
63	CSMBS3ISO63	
80	<input checked="" type="checkbox"/> CSMBS3ISO80	
100	CSMBS3ISO100	
125	<input checked="" type="checkbox"/> CSMBS3ISO125	
4 Pole		
25	<input checked="" type="checkbox"/> CSMBS4ISO25	3
40	CSMBS4ISO40	
63	CSMBS4ISO63	
80	<input checked="" type="checkbox"/> CSMBS4ISO80	
100	CSMBS4ISO100	
125	CSMBS4ISO125	

WiNtrip Miniature Circuit Breaker

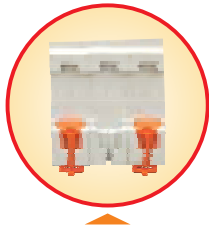
Technical Data - MCB

Specifications	WiNtrip MCB		
Standard Conformity	IS/IEC 60898-1:2015		
Type	B	C	D
Rated Current (In)	6-63A	0.5-63A	0.5-63A
Rated Voltage AC (Ue)	240/415V		
Utilization Category			
Rated Frequency Hz	50/60Hz		
No. of Poles (Execution)	1P, 1P+N, 2P, 3P, 3P+N & 4P		
Rated Short Circuit Breaking Capacity	10kA		
Rated Insulation Voltage (Ui)	(3-5)In	(5-10)In	(10-20)In
Rated Impulse Voltage (Uimp)	4kV		
Electrical Life	10000		
Mechanical Life	20000		
Ambient working temperature	-5°C to +55°C		
Energy Limiting Class	ELC 3		
Mounting	Clip on Din rail (35 mm x 7.5 mm)		
Line Terminal Capacity	35 mm ²		
Degree of Protection	IP 20		
Resistance to Shock	40mm free fall		
Ambient reference temperature	30°C		
Installation Position	Vertical/Horizontal		

Technical Data MCB - Higher Rating

Standard Conformity	IEC 60947-2
Type	'C'
Rated Current (In)	80A, 100A, 125A
Rated Voltage AC (Ue)	240/415V
Utilization Category	A
Rated Frequency Hz	50/60Hz
No. of Poles (Execution)	1P, 1P+N, 2P, 3P, 3P+N & 4P
Rated Short Circuit Breaking Capacity(Icu=Ics)	10KA
Rated Insulation Voltage (Ui)	660
Magnetic Release Setting	8In
Type of Release	Thermal/Magnetic
Rated Impulse Voltage (Uimp)	4KV
Electrical/Mechanical Life	4000 / 15000
Energy Limiting Class	N/A
Mounting	Din rail
Line Terminal Capacity	50 mm ²
Load Terminal Capacity	50 mm ²
Degree of Protection	IP20
Material group	IIIa
Pollution degree	3
Storage Temperature	-5°C to +55°C
Circuit Breaker for use in IT Systems	Yes
Tropicalisation acc.to EN/IEC 60068-2	95%RH at 55°C
Ambient reference Temperature	40°C
Installation Position	Vertical / Horizontal
Auxiliary contacts	Yes
(Shunt Trip)	Yes

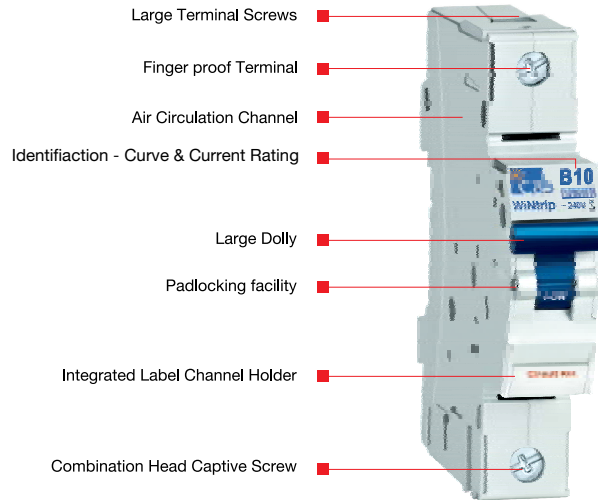
WiNtrip Miniature Circuit Breaker



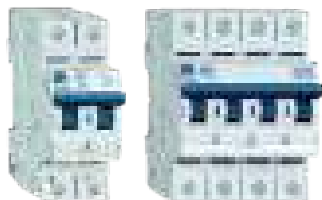
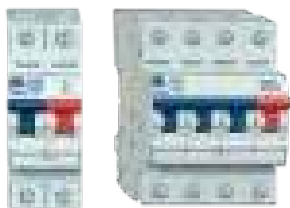
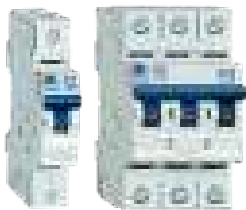
Two stage easy snapping device for Din Rail Mounting



Bi-connect terminals for Cable and Busbar



B-Series Lighting & Distribution with no Surge Current



Current rating (Amps.)	Reference	Std. Pkg. (Nos.)
1 Pole		
6	CSMB1B6	12
10	CSMB1B10	
16	CSMB1B16	
20	CSMB1B20	
25	CSMB1B25	
32	CSMB1B32	
40	CSMB1B40	
50	CSMB1B50	
63	CSMB1B63	
1 Pole + N		
6	CSMB1B6N	6
10	CSMB1B10N	
16	CSMB1B16N	
20	CSMB1B20N	
25	CSMB1B25N	
32	CSMB1B32N	
40	CSMB1B40N	
50	CSMB1B50N	
63	CSMB1B63N	
2 Pole		
6	CSMB2B6	6
10	CSMB2B10	
16	CSMB2B16	
20	CSMB2B20	
25	CSMB2B25	
32	CSMB2B32	
40	CSMB2B40	
50	CSMB2B50	
63	CSMB2B63	

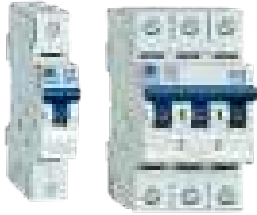
Current rating (Amps.)	Reference	Std. Pkg. (Nos.)
3 Pole		
6	CSMB3B6	4
10	CSMB3B10	
16	CSMB3B16	
20	CSMB3B20	
25	CSMB3B25	
32	CSMB3B32	
40	CSMB3B40	
50	CSMB3B50	
63	CSMB3B63	
3 Pole + N		
6	CSMB3B6N	3
10	CSMB3B10N	
16	CSMB3B16N	
20	CSMB3B20N	
25	CSMB3B25N	
32	CSMB3B32N	
40	CSMB3B40N	
50	CSMB3B50N	
63	CSMB3B63N	
4 Pole		
6	CSMB4B6	3
10	CSMB4B10	
16	CSMB4B16	
20	CSMB4B20	
25	CSMB4B25	
32	CSMB4B32	
40	CSMB4B40	
50	CSMB4B50	
63	CSMB4B63	



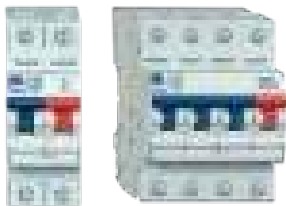
WiNtrip Miniature Circuit Breaker

C-Series

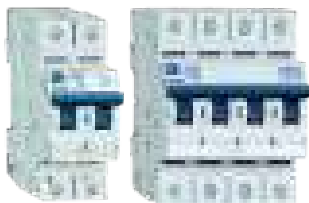
Inductive load with surge current - Motor Circuit Applications



Current rating (Amps.)	Reference	Std. Pkg. (Nos.)
1 Pole		
0.5	CSMB1C0.5	12
1	CSMB1C1	
2	CSMB1C2	
3	CSMB1C3	
4	CSMB1C4	
5	CSMB1C5	
6	CSMB1C6	
10	CSMB1C10	
16	CSMB1C16	
20	CSMB1C20	
25	CSMB1C25	
32	CSMB1C32	
40	CSMB1C40	
50	CSMB1C50	
63	CSMB1C63	



Current rating (Amps.)	Reference	Std. Pkg. (Nos.)
1 Pole + N		
0.5	CSMB1C0.5N	6
1	CSMB1C1N	
2	CSMB1C2N	
3	CSMB1C3N	
4	CSMB1C4N	
5	CSMB1C5N	
6	CSMB1C6N	
10	CSMB1C10N	
16	CSMB1C16N	
20	CSMB1C20N	
25	CSMB1C25N	
32	CSMB1C32N	
40	CSMB1C40N	
50	CSMB1C50N	
63	CSMB1C63N	



Current rating (Amps.)	Reference	Std. Pkg. (Nos.)
2 Pole		
0.5	CSMB2C0.5	6
1	CSMB2C1	
2	CSMB2C2	
3	CSMB2C3	
4	CSMB2C4	
5	CSMB2C5	
6	CSMB2C6	
10	CSMB2C10	
16	CSMB2C16	
20	CSMB2C20	
25	CSMB2C25	
32	CSMB2C32	
40	CSMB2C40	
50	CSMB2C50	
63	CSMB2C63	

Current rating (Amps.)	Reference	Std. Pkg. (Nos.)
3 Pole		
0.5	CSMB3C0.5	4
1	CSMB3C1	
2	CSMB3C2	
3	CSMB3C3	
4	CSMB3C4	
5	CSMB3C5	
6	CSMB3C6	
10	CSMB3C10	
16	CSMB3C16	
20	CSMB3C20	
25	CSMB3C25	
32	CSMB3C32	
40	CSMB3C40	
50	CSMB3C50	
63	CSMB3C63	

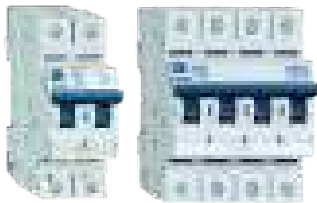
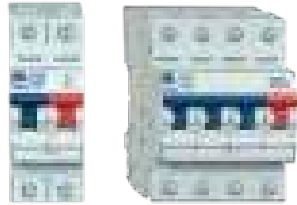
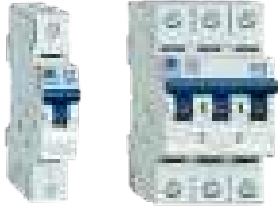
Current rating (Amps.)	Reference	Std. Pkg. (Nos.)
3 Pole + N		
0.5	CSMB3C0.5N	3
1	CSMB3C1N	
2	CSMB3C2N	
3	CSMB3C3N	
4	CSMB3C4N	
5	CSMB3C5N	
6	CSMB3C6N	
10	CSMB3C10N	
16	CSMB3C16N	
20	CSMB3C20N	
25	CSMB3C25N	
32	CSMB3C32N	
40	CSMB3C40N	
50	CSMB3C50N	
63	CSMB3C63N	

Current rating (Amps.)	Reference	Std. Pkg. (Nos.)
4 Pole		
0.5	CSMB4C0.5	3
1	CSMB4C1	
2	CSMB4C2	
3	CSMB4C3	
4	CSMB4C4	
5	CSMB4C5	
6	CSMB4C6	
10	CSMB4C10	
16	CSMB4C16	
20	CSMB4C20	
25	CSMB4C25	
32	CSMB4C32	
40	CSMB4C40	
50	CSMB4C50	
63	CSMB4C63	

WiNtrip Miniature Circuit Breaker

D-Series

High Inductive Load & High Inrush Current

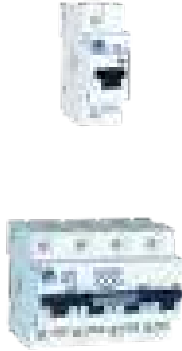


Current rating (Amps.)	Reference	Std. Pkg. (Nos.)
1 Pole		
0.5	CSMB1D0.5	12
1	CSMB1D1	
2	CSMB1D2	
3	CSMB1D3	
4	CSMB1D4	
5	CSMB1D5	
6	CSMB1D6	
10	CSMB1D10	
16	CSMB1D16	
20	CSMB1D20	
25	CSMB1D25	
32	CSMB1D32	
40	CSMB1D40	
50	CSMB1D50	
63	CSMB1D63	
1 Pole + N		
0.5	CSMB1D0.5N	6
1	CSMB1D1N	
2	CSMB1D2N	
3	CSMB1D3N	
4	CSMB1D4N	
5	CSMB1D5N	
6	CSMB1D6N	
10	CSMB1D10N	
16	CSMB1D16N	
20	CSMB1D20N	
25	CSMB1D25N	
32	CSMB1D32N	
40	CSMB1D40N	
50	CSMB1D50N	
63	CSMB1D63N	
2 Pole		
0.5	CSMB2D0.5	6
1	CSMB2D1	
2	CSMB2D2	
3	CSMB2D3	
4	CSMB2D4	
5	CSMB2D5	
6	CSMB2D6	
10	CSMB2D10	
16	CSMB2D16	
20	CSMB2D20	
25	CSMB2D25	
32	CSMB2D32	
40	CSMB2D40	
50	CSMB2D50	
63	CSMB2D63	

Current rating (Amps.)	Reference	Std. Pkg. (Nos.)
3 Pole		
0.5	CSMB3D0.5	4
1	CSMB3D1	
2	CSMB3D2	
3	CSMB3D3	
4	CSMB3D4	
5	CSMB3D5	
6	CSMB3D6	
10	CSMB3D10	
16	CSMB3D16	
20	CSMB3D20	
25	CSMB3D25	
32	CSMB3D32	
40	CSMB3D40	
50	CSMB3D50	
63	CSMB3D63	
3 Pole + N		
0.5	CSMB3D0.5N	3
1	CSMB3D1N	
2	CSMB3D2N	
3	CSMB3D3N	
4	CSMB3D4N	
5	CSMB3D5N	
6	CSMB3D6N	
10	CSMB3D10N	
16	CSMB3D16N	
20	CSMB3D20N	
25	CSMB3D25N	
32	CSMB3D32N	
40	CSMB3D40N	
50	CSMB3D50N	
63	CSMB3D63N	
4 Pole		
0.5	CSMB4D0.5	3
1	CSMB4D1	
2	CSMB4D2	
3	CSMB4D3	
4	CSMB4D4	
5	CSMB4D5	
6	CSMB4D6	
10	CSMB4D10	
16	CSMB4D16	
20	CSMB4D20	
25	CSMB4D25	
32	CSMB4D32	
40	CSMB4D40	
50	CSMB4D50	
63	CSMB4D63	

Higher Rating Miniature Circuit Breakers (IEC 60947-2)

[HSN Code: 8536]



Current rating (Amps.)	Product Code	Std. Pkg. (Nos.)	Current rating (Amps.)	Product Code	Std. Pkg. (Nos.)
1 Pole			3 Pole		
80	CSMBH1C80	3	80	CSMBH3C80	1
100	CSMBH1C100		100	CSMBH3C100	
125	CSMBH1C125		125	CSMBH3C125	
2 Pole			4 Pole		
80	CSMBH2C80	3	80	CSMBH4C80	1
100	CSMBH2C100		100	CSMBH4C100	
125	CSMBH2C125		125	CSMBH4C125	

Accessories (Site fit-able)

Description	Product Code	Configuration	Type of contact	Fitment	Module Size	Suitable MCB Rating (A)
Auxiliary Contact	CSMBAXHSF1	1NO-1NC	Changeover	Right	9 mm	Wintrip2 80-100
Auxiliary Contact	CSMBAXHSF2	2NO-2NC	Changeover	Right	9 mm	Wintrip2 80-100
Alarm Contact	CSMBALHSF1	1 Changeover	Changeover	Right	9 mm	Wintrip2 80-100
Shunt Trip	CSMBHS012DCSF	-	-	Left	18 mm	Wintrip2 80-100
Shunt Trip	CSMBHS024DCSF	-	-	Left	18 mm	Wintrip2 80-100
Shunt Trip	CSMBHS048DCSF	-	-	Left	18 mm	Wintrip2 80-100
Shunt Trip	CSMBHS220ACSF	-	-	Left	18 mm	Wintrip2 80-100

WiNtrip MCB Type Changeover Switch

[HSN Code: 8536]



Description	Pole	Rating (Amps.)	Product Code	Std. Pkg. (Nos.)
2 Pole				
Two way centre OFF Changeover Switch	2	25	CSCOS2P25A	6
Two way centre OFF Changeover Switch	2	40	CSCOS2P40A	
Two way centre OFF Changeover Switch	2	63	CSCOS2P63A	
4 Pole				
Two way centre OFF Changeover Switch	4	25	CSCOS4P25A	3
Two way centre OFF Changeover Switch	4	40	CSCOS4P40A	
Two way centre OFF Changeover Switch	4	63	CSCOS4P63A	

SmartSol Mini MCB DP

[HSN Code: 8536]

Description	Current rating (Amps.)	Reference
DP "C" 6-32A Mini MCB with Enclosure	6-32	CSMBSS2C6-32
SPN "C" 6-32A Mini MCB with Enclosure	6-32	CSMBSS1C6-32*N

WiNtrip1 Miniature Circuit Breaker

Technical Data-MCB

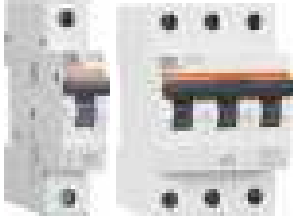
Specifications	WiNtrip1 MCB	
Standard Conformity	IS/IEC 60898-1-2015	
Type	B	C
Rated Current (In)	6-63A	6-63A
Rated Voltage AC (Ue)	240 / 415V	
No. of Poles (Execution)	1P, 2P, 3P, & 4P	
Rated Short Circuit Breaking Capacity	6kA	
Rated Insulation Voltage (Ui)	456V / 660V	
Magnetic Release Setting	(3-5)In	(5-10)In
Rated Impulse Voltage (Uimp)	4kV	
Electrical / Mechanical Life	10000 / 20000	
Ambient Operating Temperature	-5°C to +55°C	
Energy Limiting Class	ELC 3	
Mounting	Dinrail Size 35.5mm	
Line Load Terminal Capacity	25mm ²	
Degree of Protection	IP 20	
Resistance to Shock	40mm free fall	
Ambient reference temperature	30°C	
Installation Position	Vertical / Horizontal	
Storage Temperature	-5°C to +55°C	
Short time withstand Current (Icw)	N/A	
Short Circuit maxing capacity (Icm)	N/A	

WiNtrip1 Miniature Circuit Breaker

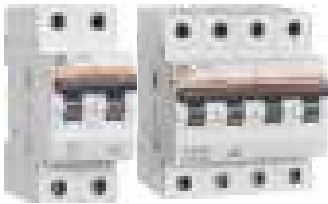
B-Series

Lighting & Distribution with no Surge Current

Current rating (Amps.)	Reference (6kA)	Std. Pkg. (Nos.)
1 Pole		
6	CSMBL1B6	12
10	CSMBL1B10	
16	CSMBL1B16	
20	CSMBL1B20	
25	CSMBL1B25	
32	CSMBL1B32	
40	CSMBL1B40	
50	CSMBL1B50	
63	CSMBL1B63	



Current rating (Amps.)	Reference (6kA)	Std. Pkg. (Nos.)
2 Pole		
6	CSMBL2B6	6
10	CSMBL2B10	
16	CSMBL2B16	
20	CSMBL2B20	
25	CSMBL2B25	
32	CSMBL2B32	
40	CSMBL2B40	
50	CSMBL2B50	
63	CSMBL2B63	



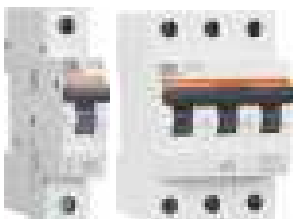
Current rating (Amps.)	Reference (6kA)	Std. Pkg. (Nos.)
3 Pole		
6	CSMBL3B6	4
10	CSMBL3B10	
16	CSMBL3B16	
20	CSMBL3B20	
25	CSMBL3B25	
32	CSMBL3B32	
40	CSMBL3B40	
50	CSMBL3B50	
63	CSMBL3B63	

Current rating (Amps.)	Reference (6kA)	Std. Pkg. (Nos.)
4 Pole		
6	CSMBL4B6	3
10	CSMBL4B10	
16	CSMBL4B16	
20	CSMBL4B20	
25	CSMBL4B25	
32	CSMBL4B32	
40	CSMBL4B40	
50	CSMBL4B50	
63	CSMBL4B63	

C-Series

Inductive load with surge current - Motor Circuit Applications

Current rating (Amps.)	Reference (6kA)	Std. Pkg. (Nos.)
1 Pole		
6	CSMBL1C6	12
10	CSMBL1C10	
16	CSMBL1C16	
20	CSMBL1C20	
25	CSMBL1C25	
32	CSMBL1C32	
40	CSMBL1C40	
40	CSMBL1C40	
40	CSMBL1C40	



Current rating (Amps.)	Reference (6kA)	Std. Pkg. (Nos.)
2 Pole		
6	CSMBL2C6	6
10	CSMBL2C10	
16	CSMBL2C16	
20	CSMBL2C20	
25	CSMBL2C25	
32	CSMBL2C32	
40	CSMBL2C40	
40	CSMBL2C40	
40	CSMBL2C40	



Current rating (Amps.)	Reference (6kA)	Std. Pkg. (Nos.)
3 Pole		
6	CSMBL3C6	4
10	CSMBL3C10	
16	CSMBL3C16	
20	CSMBL3C20	
25	CSMBL3C25	
32	CSMBL3C32	
40	CSMBL3C40	
40	CSMBL3C40	
40	CSMBL3C40	

Current rating (Amps.)	Reference (6kA)	Std. Pkg. (Nos.)
4 Pole		
6	CSMBL4C6	3
10	CSMBL4C10	
16	CSMBL4C16	
20	CSMBL4C20	
25	CSMBL4C25	
32	CSMBL4C32	
40	CSMBL4C40	
40	CSMBL4C40	
40	CSMBL4C40	

WiNtrip Miniature Circuit Breaker



Construction and Feature

- The state of art design
- Elegant appearance; cover and handle in arc shape make comfortable operation.
- Contact position indicating window.
- Transparent cover designed to carry label.
- Handle central staying function for circuit fault indicating.
- In case of overload to protected circuit, MCB handle trips and stays at central position, which enables a quick solution to the faulty line. The handle cannot stay in such position when operated manually.
- Handle padlock device
- MCB handle can be locked either at "ON" position or at "OFF" position to prevent unwanted operation of the product.

Technical Data

- Pole No.: 1P + N
- Rated voltage: AC 230V
- Rated current (A): 1, 2, 3, 4, 6, 10, 16, 20, 25, 32
- Tripping curve: B, C
- Rated service short-circuit capacity: 4500A
- Rated frequency: 50/60Hz
- Electro-mechanical endurance: 4000
- Contact position indication
- Connection terminal: Pillar terminal with clamp
- Connection capacity: Rigid conductor up to 10mm
- Installation:
 - On symmetrical DIN rail 35mm
 - Panel mounting
- Terminal Connection Height: H1=19mm H2=22mm

Current rating (Amps.)	Reference	Description	Std. Pkg. (Nos.)
1	CSMB1C1SM	SPN	12
2	CSMB1C2SM	SPN	
3	CSMB1C3SM	SPN	
4	CSMB1C4SM	SPN	
6	CSMB1C6SM	SPN	
10	CSMB1C10SM	SPN	
16	CSMB1C16SM	SPN	
20	CSMB1C20SM	SPN	
25	CSMB1C25SM	SPN	
32	CSMB1C32SM	SPN	



WiNtrip2 DC MCB

- Range: 6A-40A
- 250V (1 Pole) & 500V (2 Pole)
- Breaking Capacity: 3kA / 6kA
- Standard Conformity: IEC609472;2016



RoHS
Compliant

WiNtrip2 DC MCB (IEC60947-2)

Technical Data - DC MCB

Specifications	1 Pole	2 Pole
Type	Air Break-Dinrail Mounting	Air Break-Dinrail Mounting
Standard Conformity	IEC60947-2:2016	IEC60947-2:2016
Rated Current (In)	6A~40A	6A-40A
Rated Voltage DC (Ue)	250V	500V
Utilization Category	A	A
No. of Poles (Execution)	1P	2P
Magnetic Release Setting	8In	8In
Rated Ultimate Short Circuit Breaking Capacity (Icu)	6kA	3kA
Rated Service Short Circuit Breaking Capacity (Ics)	6kA	3kA
Suitable for Isolation	YES	YES
Rated Insulation Voltage (Ui) DC	660V	660V
Control Type	Toggle	Toggle
Local Signalling	ON / OFF Indication	ON / OFF Indication
Rated Impulse Voltage (Uimp)	4kV	4kV
Electrical/Mechanical Life	5000 / 10000	5000/10000
Mounting Support	35 mm	35 mm
Pollution Degree	3	3
Material Group	IIIa	IIIa
Storage Temperature	-5 to +55°C	-5 to +55°C
Reference Ambient Temperature	40°C	40°C
Dimension mm (L x W x H)	92.6 x 17.8 x 72.5	92.6 x 35.6 x 72.5
Line load Terminals Marked	(Load-ve Top, Line +ve Bottom)	(Load-ve Top, Line +ve Bottom)
Shorting Bar as per C&S/Shorting with flexible copper wire size mm ²	-	Shorting Link SHMT8101 / 10 mm Wire

WiNtrip2 Miniature Circuit Breaker

DC MCB-Series

[HSN Code: 8536]

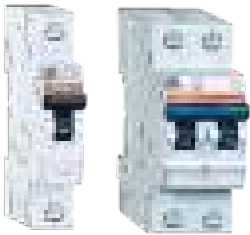
Description	Current rating (Amps.)	Product Code	Std. Pkg. (Nos.)
1 Pole			
DC MCB SP 6A-250V	6	CSMBS1DC6-250	12
DC MCB SP 10A-250V	10	CSMBS1DC10-250	
DC MCB SP 16A-250V	16	CSMBS1DC16-250	
DC MCB SP 20A-250V	20	CSMBS1DC20-250	
DC MCB SP 25A-250V	25	CSMBS1DC25-250	
DC MCB SP 32A-250V	32	CSMBS1DC32-250	
DC MCB SP 40A-250V	40	CSMBS1DC40-250	
Shorting link		SHMT8101	
2 Pole			
DC MCB DP 6A-500V	6	CSMBS2DC6-500	6
DC MCB DP 10A-500V	10	CSMBS2DC10-500	
DC MCB DP 16A-500V	16	CSMBS2DC16-500	
DC MCB DP 20A-500V	20	CSMBS2DC20-500	
DC MCB DP 25A-500V	25	CSMBS2DC25-500	
DC MCB DP 32A-500V	32	CSMBS2DC32-500	
DC MCB DP 40A-500V	40	CSMBS2DC40-500	
Shorting link		SHMT8101	



DC MCB-Series

[HSN Code: 8536]

Current rating (Amps.)	Product Code	Std. Pkg. (Nos.)	Current rating (Amps.)	Product Code	Std. Pkg. (Nos.)
1 Pole			2 Pole		
0.5	<input checked="" type="checkbox"/> CSMBS1DC0.5	12	0.5	CSMBS2DC0.5	6
1	<input checked="" type="checkbox"/> CSMBS1DC1		1	CSMBS2DC1	
2	<input checked="" type="checkbox"/> CSMBS1DC2		2	<input checked="" type="checkbox"/> CSMBS2DC2	
3	CSMBS1DC3		3	CSMBS2DC3	
4	<input checked="" type="checkbox"/> CSMBS1DC4		4	CSMBS2DC4	
5	<input checked="" type="checkbox"/> CSMBS1DC5		5	CSMBS2DC5	
6	CSMBS1DC6		6	CSMBS2DC6	
10	<input checked="" type="checkbox"/> CSMBS1DC10		10	CSMBS2DC10	
16	<input checked="" type="checkbox"/> CSMBS1DC16		16	CSMBS2DC16	
20	<input checked="" type="checkbox"/> CSMBS1DC20		20	CSMBS2DC20	
25	<input checked="" type="checkbox"/> CSMBS1DC25		25	CSMBS2DC25	
32	<input checked="" type="checkbox"/> CSMBS1DC32		32	CSMBS2DC32	
40	<input checked="" type="checkbox"/> CSMBS1DC40		40	<input checked="" type="checkbox"/> CSMBS2DC40	
50	<input checked="" type="checkbox"/> CSMBS1DC50		50	<input checked="" type="checkbox"/> CSMBS2DC50	
63	<input checked="" type="checkbox"/> CSMBS1DC63	63	CSMBS2DC63		

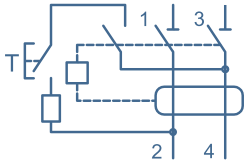


WiNtrip Residual Current Circuit Breaker

Technical Data - RCCB

Specifications		WiNtrip2	WiNtrip
Standards		Confirms to 12640-1:2016, IEC 61008-1:2012	Confirms to 12640-1:2016, IEC 61008-1:2012
Residual tripping characteristics		AC	AC
Tripping time at I_{0n}			
Instantaneous	ms	<40	<40
Selective	ms	>150	>150
Rated current	A	10, 16, 20, 25, 32, 40, 63	10, 16, 20, 25, 32, 40, 63, 80 & 100
Rated residual current (I _{Δn})	mA	30, 100, 300	30, 100, 300
Breaking Capacity	kA	6kA, 10kA	6kA (16-63), 10kA(10-100)
Calibration temperature	°C	30	30
Number of poles versus modules		1	1
Rated voltage Un			
2P AC	V	240	240
4P AC	V	415	415
Frequency	Hz	50 / 60	50
Maximum service voltage U _{bmax}	V	2P=265 / 4P=455	2P=265 /4P=455
Minimum service voltage U _{bmin}	V	2P=100 / 4P=190	2P=100 /4P=190
Power supply		-	Top / Bottom
Rated making and breaking capacity (I _m)	A	upto 40A-500A (63A and above -10I _n)	upto 40-500A (63A and above -10I _n)
Residual making and breaking capacity (I _{Δm})	A	upto 40A-500A (63A and above -10I _n)	upto 40-500A (63A and above -10I _n)
Conditional short-circuit capacity (I _{nc})	kA	6/10	6/10
Conditional residual short-circuit capacity (I _{Δc})	kA	6/10	6/10
Grid distance (safety distance between two devices)	mm	-	35
Isolator application		Yes	Yes
Insulation degree			
Insulation voltage	V (DC)	660	660
Shock voltage (1.2/50μs)	kV	6	6
Insulation resistance	mΩ	1000	1000
Dielectric strength	V	1500	1500
Endurance			
Electrical at Un, I _n		10000	10000
Mechanical at Un, I _n		20000	20000
Protection degree (outside/inside electrical enclosure) with door		IP20	IP20
Self extinguish degree (according to UI94)		V2	V2
Tropicalisation (acc. to EN / IEC 60068-2, DIN 40046)	°C/RH	+55 / 95%	+55 / 95%
Pollution degree (acc. EN / IEC 60947-1)		2	2
Operating temperature	°C	-25 °C to +60°C	-25 °C to +60°C
Storage temperature		-25 °C to +60°C	-25 °C to +60°C
Terminals capacity			
Rigid cable min/max (top)	mm ²	1.5 / 35	1.5 / 35
Flexible cable min / max (top)	mm ²	1.5 / 35	1.5 / 35
Rigid cable min / max (bottom)	mm ²	1.5 / 35	1.5 / 35
Flexible cable min / max (bottom)	mm ²	1.5 / 35	1.5 / 35
(Flexible cable 0.75 / 1 / 1.5mm ² with cable lug)			
Busbars systems			
Pin		Yes	Yes
Fork		Yes	Yes

WiNtrip Residual Current Circuit Breaker



Test Button

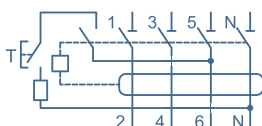


Bi-connect Terminals

Current rating (Amps.)	Product Code	Std. Pkg. (Nos.)
2 Pole, 30mA 10kA [HSN Code: 8536]		
10	CSRB2P10A30-10kA	5
16	CSRB2P16A30-10kA	
20	<input checked="" type="checkbox"/> CSRB2P20A30-10kA	
25	CSRB2P25A30-10kA	
32	CSRB2P32A30-10kA	
40	CSRB2P40A30-10kA	
63	CSRB2P63A30-10kA	
80	<input checked="" type="checkbox"/> CSRB2P80A30-10kA	
100	<input checked="" type="checkbox"/> CSRB2P100A30-10kA	
2 Pole, 100mA 10kA		
10	<input checked="" type="checkbox"/> CSRB2P10A100-10kA	5
16	CSRB2P16A100-10kA	
20	<input checked="" type="checkbox"/> CSRB2P20A100-10kA	
25	CSRB2P25A100-10kA	
32	CSRB2P32A100-10kA	
40	CSRB2P40A100-10kA	
63	CSRB2P63A100-10kA	
80	CSRB2P80A100-10kA	
100	<input checked="" type="checkbox"/> CSRB2P100A100-10kA	
2 Pole, 300mA 10kA		
10	CSRB2P10A300-10kA	5
16	<input checked="" type="checkbox"/> CSRB2P16A300-10kA	
20	CSRB2P20A300-10kA	
25	CSRB2P25A300-10kA	
32	<input checked="" type="checkbox"/> CSRB2P32A300-10kA	
40	<input checked="" type="checkbox"/> CSRB2P40A300-10kA	
63	<input checked="" type="checkbox"/> CSRB2P63A300-10kA	
80	<input checked="" type="checkbox"/> CSRB2P80A300-10kA	
100	CSRB2P100A300-10kA	

Non Stockable item

WiNtrip Residual Current Circuit Breaker



Test Button



Bi-connect Terminals

Current rating (Amps.)	Product Code	Std. Pkg. (Nos.)
4 Pole, 30mA 10kA [HSN Code: 8536]		
10	<input checked="" type="checkbox"/> CSRB4P10A30-10kA	4
16	CSRB4P16A30-10kA	
20	<input checked="" type="checkbox"/> CSRB4P20A30-10kA	
25	CSRB4P25A30-10kA	
32	CSRB4P32A30-10kA	
40	CSRB4P40A30-10kA	
63	CSRB4P63A30-10kA	
80	CSRB4P80A30-10kA	
100	<input checked="" type="checkbox"/> CSRB4P100A30-10kA	
4 Pole, 100mA 10kA		
10	<input checked="" type="checkbox"/> CSRB4P10A100-10kA	4
16	<input checked="" type="checkbox"/> CSRB4P16A100-10kA	
20	CSRB4P20A100-10kA	
25	CSRB4P25A100-10kA	
32	CSRB4P32A100-10kA	
40	CSRB4P40A100-10kA	
63	CSRB4P63A100-10kA	
80	CSRB4P80A100-10kA	
100	CSRB4P100A100-10kA	
4 Pole, 300mA 10kA		
10	<input checked="" type="checkbox"/> CSRB4P10A300-10kA	4
16	<input checked="" type="checkbox"/> CSRB4P16A300-10kA	
20	CSRB4P20A300-10kA	
25	<input checked="" type="checkbox"/> CSRB4P25A300-10kA	
32	<input checked="" type="checkbox"/> CSRB4P32A300-10kA	
40	CSRB4P40A300-10kA	
63	CSRB4P63A300-10kA	
80	<input checked="" type="checkbox"/> CSRB4P80A300-10kA	
100	CSRB4P100A300-10kA	

NOTE:

The industrial MCB will have non-retail (NR) suffix in their part codes.

E

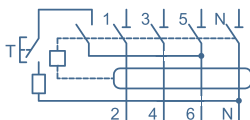
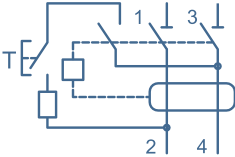
WiNtrip2 Residual Current Circuit Breaker



Bi-connect Terminals



Test Button



Current rating (Amps.)	WiNtrip2		Sensitivity	Std. Pkg. (Nos.)
	Reference (6kA) (AC Type)	Reference (10kA) (AC Type)		
2 Pole				
10	-	CSRBS2P10A30-10kA	30	6
10	-	CSRBS2P10A100-10kA	100	
10	-	CSRBS2P10A300-10kA	300	
16	CSRBS2P16A30	CSRBS2P16A30-10kA	30	
16	CSRBS2P16A100	CSRBS2P16A100-10kA	100	
16	CSRBS2P16A300	CSRBS2P16A300-10kA	300	
25	CSRBS2P25A30	CSRBS2P25A30-10kA	30	
25	CSRBS2P25A100	CSRBS2P25A100-10kA	100	
25	CSRBS2P25A300	CSRBS2P25A300-10kA	300	
32	CSRBS2P32A30	CSRBS2P32A30-10kA	30	
32	CSRBS2P32A100	CSRBS2P32A100-10kA	100	
32	CSRBS2P32A300	CSRBS2P32A300-10kA	300	
40	CSRBS2P40A30	CSRBS2P40A30-10kA	30	
40	CSRBS2P40A100	CSRBS2P40A100-10kA	100	
40	CSRBS2P40A300	CSRBS2P40A300-10kA	300	
63	CSRBS2P63A30	CSRBS2P63A30-10kA	30	
63	CSRBS2P63A100	CSRBS2P63A100-10kA	100	
63	CSRBS2P63A300	CSRBS2P63A300-10kA	300	
80	-	-	30	
80	-	-	100	
80	-	-	300	
100	-	-	30	
100	-	-	100	
100	-	-	300	
4 Pole				
10	-	CSRBS4P10A30-10kA	30	3
10	-	CSRBS4P10A100-10kA	100	
10	-	CSRBS4P12A300-10kA	300	
16	CSRBS4P16A30	CSRBS4P16A30-10kA	30	
16	CSRBS4P16A100	CSRBS4P16A100-10kA	100	
16	CSRBS4P16A300	CSRBS4P16A300-10kA	300	
25	CSRBS4P25A30	CSRBS4P25A30-10kA	30	
25	CSRBS4P25A100	CSRBS4P25A100-10kA	100	
25	CSRBS4P25A300	CSRBS4P25A300-10kA	300	
32	CSRBS4P32A30	CSRBS4P32A30-10kA	30	
32	CSRBS4P32A100	CSRBS4P32A100-10kA	100	
32	CSRBS4P32A300	CSRBS4P32A300-10kA	300	
40	CSRBS4P40A30	CSRBS4P40A30-10kA	30	
40	CSRBS4P40A100	CSRBS4P40A100-10kA	100	
40	CSRBS4P40A300	CSRBS4P40A300-10kA	300	
63	CSRBS4P63A30	CSRBS4P63A30-10kA	30	
63	CSRBS4P63A100	CSRBS4P63A100-10kA	100	
63	CSRBS4P63A300	CSRBS4P63A300-10kA	300	
80	-	-	30	
80	-	-	100	
80	-	-	300	
100	-	-	30	
100	-	-	100	
100	-	-	300	

WiNtrip 2

RCBO

RCCB with
Over-current Protection



- Range: 6-63A, 2P (4 Module) & 4P (8 Module)
- Standard IEC 60947-2 Annexure-B
- RoHS Compliance, conformity to EU RoHS Directive 2015/863/EU
- Ingress Protection: IP20
- Pad locking facility for maintenance and critical loads
- It can withstand abnormal heating and strong impact
- Humidity should not exceeding 50% at 40°C and not exceeding 90% at 25°C
- Pollution degree 2
- Installation class II or III
- Ambient operating temperature 30°C
- The 35 Sq. mm Terminal is designed to incorporate wires of bigger sizes



We touch your electricity everyday!

WiNtrip2 **RCBO** RCCB with Over-Current Protection

RCBO
RCCB with Over-current Protection

Features:

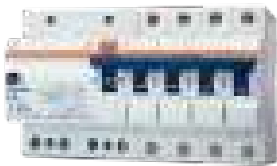
- Range: 6-63A, 2P (4 Module) & 4P (8 Module)
- Standard IEC 60947-2 Annexure-B
- RoHS Compliance, conformity to EU RoHS Directive 2015/863/EU
- Ingress Protection: IP20
- Pad locking facility for maintenance and critical loads
- Humidity should not exceeding 50% at 40 °C and not exceeding 90% at 25 °C
- Pollution degree 2
- Ambient operating temperature 30 °C
- The 35 Sq. mm Terminal is designed to incorporate wires of bigger sizes

2 Pole (4 Module)

Product Code	Std. Pkg.(Nos.)
CSRCBO2PC06A30-10KA	4
CSRCBO2PC10A30-10KA	
CSRCBO2PC16A30-10KA	
CSRCBO2PC20A30-10KA	
CSRCBO2PC25A30-10KA	
CSRCBO2PC32A30-10KA	
CSRCBO2PC40A30-10KA	
CSRCBO2PC63A30-10KA	
CSRCBO2PC06A100-10KA	
CSRCBO2PC10A100-10KA	
CSRCBO2PC16A100-10KA	
CSRCBO2PC20A100-10KA	
CSRCBO2PC25A100-10KA	
CSRCBO2PC32A100-10KA	
CSRCBO2PC40A100-10KA	
CSRCBO2PC63A100-10KA	
CSRCBO2PC06A300-10KA	
CSRCBO2PC10A300-10KA	
CSRCBO2PC16A300-10KA	
CSRCBO2PC20A300-10KA	
CSRCBO2PC25A300-10KA	
CSRCBO2PC32A300-10KA	
CSRCBO2PC40A300-10KA	
CSRCBO2PC63A300-10KA	

4 Pole (8 Module)

Product Code	Std. Pkg. (Nos.)
CSRCBO4PC06A30-10KA	2
CSRCBO4PC10A30-10KA	
CSRCBO4PC16A30-10KA	
CSRCBO4PC20A30-10KA	
CSRCBO4PC25A30-10KA	
CSRCBO4PC32A30-10KA	
CSRCBO4PC40A30-10KA	
CSRCBO4PC63A30-10KA	
CSRCBO4PC06A100-10KA	
CSRCBO4PC10A100-10KA	
CSRCBO4PC16A100-10KA	
CSRCBO4PC20A100-10KA	
CSRCBO4PC25A100-10KA	
CSRCBO4PC32A100-10KA	
CSRCBO4PC40A100-10KA	
CSRCBO4PC63A100-10KA	
CSRCBO4PC06A300-10KA	
CSRCBO4PC10A300-10KA	
CSRCBO4PC16A300-10KA	
CSRCBO4PC20A300-10KA	
CSRCBO4PC25A300-10KA	
CSRCBO4PC32A300-10KA	
CSRCBO4PC40A300-10KA	
CSRCBO4PC63A300-10KA	



E



ACCL

Automatic Changeover with Current Limiter

- Complying to IEC 60947-6 & IEC 60947-3
- Utilization Category AC 32A
- Rating : Mains - 30A, DG - 0.5A-30A
- Individual LED for Mains & DG
- Quick Transfer Time
- Fault Annunciation
- Higher Electrical Life
- Low Blackout Time
- Din Rail Mounting
- Auto Reset Facility
- Can be used for New Installations as Well as for Retrofits

ACCL

[HSN Code: 8536]

Product Code	Mains Rating (Amps.)	Genset Rating (Amps.)
TCALSS005	30	0.5
TCALSS010	30	1
TCALSS015	30	1.5
TCALSS025	30	2.5
TCALSS030	30	3
TCALSS040	30	4
TCALSS050	30	5
TCALSS060	30	6
TCALSS080	30	8
TCALSS090	30	9
TCALSS100	30	10
TCALSS150	30	15
TCALSS200	30	20
TCALSS250	30	25
TCALSS300	30	30

 Non Stockable item

Epitome

IP43 Distribution Boards

for Residential & Industrial applications

- Heavy duty Gasket to inhibit the entry of foreign particles
- Choice of multiple incomers as MCB/Isolator/RCCB
- Adequate wiring space
- Also available with lock & key mechanism for safety

EPITOME IP43 Distribution Boards

[HSN Code: 8537]

Description	Product Code	No. of Modules (Incomer+Outgoing)
SPN Distribution Board		
SPN Double Door 04 Way IP43 DB	CSDBSPNPWXDD04	4
SPN Double Door 06 Way IP43 DB	CSDBSPNPWXDD06	6
SPN Double Door 08 Way IP43 DB	CSDBSPNPWXDD08	8
SPN Double Door 10 Way IP43 DB	CSDBSPNPWXDD10	10
SPN Double Door 12 Way IP43 DB	CSDBSPNPWXDD12	12
SPN Double Door 16 Way IP43 DB	CSDBSPNPWXDD16	16
SPN Double Door 20 Way IP43 DB	CSDBSPNPWXDD20	20
SPN Double Door 24 Way IP43 DB	CSDBSPNPWXDD24	24
TPN Distribution Board		
TPNH Double Door 04 Way IP43 DB	CSDBTPNHPWXDD04	8+12
TPNH Double Door 06 Way IP43 DB	CSDBTPNHPWXDD06	8+18
TPNH Double Door 08 Way IP43 DB	CSDBTPNHPWXDD08	8+24
TPNH Double Door 12 Way IP43 DB	CSDBTPNHPWXDD12	8+36
TPNH Double Door 16 Way IP43 DB	CSDBTPNHPWXDD16	8+48

 Non Stockable item

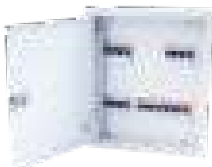
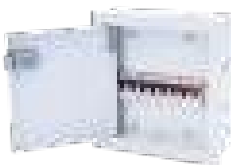
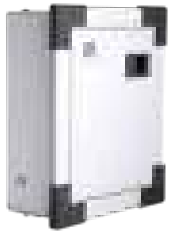
EPiC Distribution Board

[HSN Code: 8537]

Description	Product Code	Total Modules
SPN Distribution Board		
04 Way SPN Single Door	CSDBSPNPESD04	4
06 Way SPN Single Door	CSDBSPNPESD06	6
08 Way SPN Single Door	CSDBSPNPESD08	8
12 Way SPN Single Door	CSDBSPNPESD12	12
16 Way SPN Single Door	CSDBSPNPESD16	16
SPN Distribution Board		
04 Way SPN Double Door	CSDBSPNPEDD04	4
06 Way SPN Double Door	CSDBSPNPEDD06	6
08 Way SPN Double Door	CSDBSPNPEDD08	8
10 Way SPN Double Door	CSDBSPNPEDD10	10
12 Way SPN Double Door	CSDBSPNPEDD12	12
16 Way SPN Double Door	CSDBSPNPEDD16	16
TPN-Horizontal Distribution Board		
04 Way TPNH Single Door	CSDBTPNHPESD04	20
06 Way TPNH Single Door	☒CSDBTPNHPESD06	26
08 Way TPNH Single Door	☒CSDBTPNHPESD08	32
12 Way TPNH Single Door	☒CSDBTPNHPESD12	44
TPN-Horizontal Distribution Board		
04 Way TPNH Double Door	CSDBTPNHPEDD04	20
06 Way TPNH Double Door	CSDBTPNHPEDD06	26
08 Way TPNH Double Door	CSDBTPNHPEDD08	32
12 Way TPNH Double Door	☒CSDBTPNHPEDD12	44
TPN-Vertical Distribution Board		
04 Way TPNH Double Door	☒CSDBTPNVPECGDD04	20
06 Way TPNH Double Door	☒CSDBTPNVPECGDD06	26
08 Way TPNH Double Door	☒CSDBTPNVPECGDD08	32
12 Way TPNH Double Door	☒CSDBTPNVPECGDD12	44

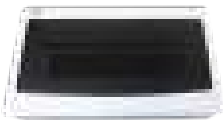
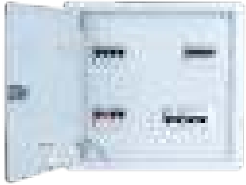
EPiC-F Distribution Board

Description	Product Code	No. of Modules (Incomer+Outgoing)
SPN Distribution Board		
04 Way SPN Single Door	CSDBSPNPSPD04	4
06 Way SPN Single Door	CSDBSPNPSPD06	6
08 Way SPN Single Door	CSDBSPNPSPD08	8
12 Way SPN Single Door	CSDBSPNPSPD12	12
16 Way SPN Single Door	CSDBSPNPSPD16	16
SPN Distribution Board		
04 Way SPN Double Door	CSDBSPNPGDD04	4
06 Way SPN Double Door	CSDBSPNPGDD06	6
08 Way SPN Double Door	CSDBSPNPGDD08	8
10 Way SPN Double Door	CSDBSPNPGDD10	10
12 Way SPN Double Door	CSDBSPNPGDD12	12
16 Way SPN Double Door	CSDBSPNPGDD16	16
TPN-Horizontal Distribution Board		
04 Way TPNH Single Door	CSDBTPNHPSD04	8+12
06 Way TPNH Single Door	☒CSDBTPNHPSD06	8+18
08 Way TPNH Single Door	☒CSDBTPNHPSD08	8+24
12 Way TPNH Single Door	☒CSDBTPNHPSD12	8+36
TPN-Horizontal Distribution Board		
04 Way TPNH Double Door	CSDBTPNHPCGDD04	8+12
06 Way TPNH Double Door	CSDBTPNHPCGDD06	8+18
08 Way TPNH Double Door	CSDBTPNHPCGDD08	8+24
12 Way TPNH Double Door	CSDBTPNHPCGDD12	8+36



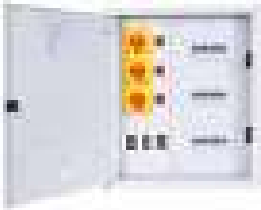
C&S WiNclass Distribution Board (Deep Drawn)

Description	Product Code	No. of Modules (Incomer+Outgoing)
SPN WiNclass Distribution Board [HSN Code: 8537]		
2+04 Way Single Door	CSDBSPNSD04S	2+4
2+08 Way Single Door	CSDBSPNSD08S	2+8
2+12 Way Single Door	CSDBSPNSD12S	2+12
2+14 Way Single Door	CSDBSPNSD16S	2+14
2+04 Way Double Door	CSDBSPNDD04S	2+4
2+08 Way Double Door	CSDBSPNDD08S	2+8
2+12 Way Double Door	CSDBSPNDD12S	2+12
2+14 Way Double Door	CSDBSPNDD16S	2+14
TPN WiNclass Distribution Board		
04 Way Single Door DB	CSDBTPNHSD04S	8+12
06 Way Single Door DB	CSDBTPNHSD06S	8+18
08 Way Single Door DB	CSDBTPNHSD08S	8+24
12 Way Single Door DB	CSDBTPNHSD12S	8+36
16 Way Single Door DB	CSDBTPNHSD16S	8+48
04 Way Double Door DB	CSDBTPNHDD04SN	4+12
04 Way Double Door DB	CSDBTPNHDD04S	8+12
06 Way Double Door DB	CSDBTPNHDD06S	8+18
08 Way Double Door DB	CSDBTPNHDD08S	8+24
12 Way Double Door DB	CSDBTPNHDD12S	8+36
16 Way Double Door DB	CSDBTPNHDD16S	8+48
Polycarbonate Cover Consumer Unit DB		
SPN WC 06 Way SD With Acrylic Door	CSDBSPNSDCA06	6
SPN WC 08 Way SD With Acrylic Door	CSDBSPNSDCA08	8
SPN WC 12 Way SD With Acrylic Door	CSDBSPNSDCA12	12
SPN WC 16 Way SD With Acrylic Door	CSDBSPNSDCA16	16



WiNtrip Distribution Board

Phase Selector Distribution Board - TPN Phase Selector DD DB for incorporating MCB / Isolator / RCCB, equipped with 3 Nos 63A Phase Selector Switches & 3 No Plano Switches [HSN Code: 8537]



Description	Product Code
4 Way DD with 63A Rotary Switch	CSDBPHSCDD04RS63
6 Way DD with 63A Rotary Switch	CSDBPHSCDD06RS63
8 Way DD with 63A Rotary Switch	CSDBPHSCDD08RS63
12 Way DD with 63A Rotary Switch	CSDBPHSCDD12RS63
4 Way DD with 40A Rotary Switch	CSDBPHSCDD04RS40
6 Way DD with 40A Rotary Switch	CSDBPHSCDD06RS40
8 Way DD with 40A Rotary Switch	CSDBPHSCDD08RS40
12Way DD with 40A Rotary Switch	CSDBPHSCDD12RS40
4 Way DD without Rotary Switch	CSDBPHSCDD04
6 Way DD without Rotary Switch	CSDBPHSCDD06
8 Way DD without Rotary Switch	CSDBPHSCDD08
12 Way DD without Rotary Switch	CSDBPHSCDD12

VTPN Distribution Board (with provision for WiNtrip2 MCB)



Description	Product Code	No. of Modules (Incomer+Outgoing)
4 way Double Door	CSDBTPNVDD04S	8+12
6 way Double Door	CSDBTPNVDD06S	8+18
8 way Double Door	CSDBTPNVDD08S	8+24
12 way Double Door	CSDBTPNVDD12S	8+36


VTPN Distribution Board (with provision for MCCB WiNbreak1 as incomer & WiNtrip2 MCB as outgoing)



Description	Product Code
DB MCCB AS I/C 100A DD04 Way	CSDBMCCB125PDD04S
DB MCCB AS I/C 100A DD08 Way	CSDBMCCB125PDD08S
DB MCCB AS I/C 100A DD12 Way	CSDBMCCB125PDD12S
DB MCCB AS I/C 250A DD04 Way	CSDBMCCB250PDD04S
DB MCCB AS I/C 250A DD08 Way	CSDBMCCB250PDD08S
DB MCCB AS I/C 250A DD12 Way	CSDBMCCB250PDD12S

WiNtrip Distribution Board

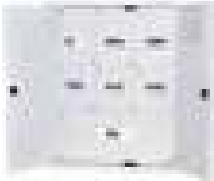
Selection Table for MCCB as Incomer VTPN Distribution Boards

Description	Product Code	Type/Breaking Capacity Ics=100%Icu	MCCB Rating
 CSE1M125ATM3P-*, CSE1M125ATM4P-* CSE1NN125ATM3P-*, CSE1NN125ATM4P-* CSE1NN125ETM3P-*, CSE1NN125ETM4P-* CSE1S125ETM3P-*, CSE1S125ETM4P-*	CSDBMCCB125PDD04S	25kA, 36kA & 50kA	#FMU Release with rating lower than 63A ATM - 63A, 80A, 100A, 125A ETM - 40A, 63A, 100A, 125A
	CSDBMCCB125PDD08S		
	CSDBMCCB125PDD12S		
CSE2M250ATM3P-*, CSE2M250A M4P-* CSE2NN250ATM3P-*, CSE2NN250ATM4P-* CSE2NN250ETM3P-*, CSE2NN250ETM4P-* CSE2S250ETM3P-*, CSE2S250ETM4P-* CSE2SX250ETM3P-*, CSE2SX250ETM4P-* CSE2SX250ATM3P-*, CSE2SX250ATM4P-*	CSDBMCCB250PDD04S	25kA, 36kA & 50kA	ATM - 160A, 200A, 250V ETM - 160V, 200V, 250V
	CSDBMCCB250PDD08S		
	CSDBMCCB250PDD12S		

NOTE: While Ordering, Replace "*" by current Rating. #lower ratings is also available.

7 Segment Distribution Board

[HSN Code: 8537]

Description	Product Code	No. of Modules (Incomer+Outgoing)
 7 Segment TPN DD DB With Provision for FP MCB / Isolator / RCCB as incomer, DP MCB / Isolator / RCCB as sub incomer and SP MCBs as outgoing	<input checked="" type="checkbox"/> CSDB7SEGDD04	8+12+12
	CSDB7SEGDD06	8+12+18
	<input checked="" type="checkbox"/> CSDB7SEGDD08	8+12+24
	<input checked="" type="checkbox"/> CSDB7SEGDD12	8+12+36

Price on request : Prewired Distribution Board fitted with Busbar, Terminal Block for incoming/outgoing phase neutral & Earth duly wired with Provision for ISO/RCCB/MCB as incomer and SP outgoing (without MCBs)

*FLEXI (Tier) DBs (with Metal Door)

[HSN Code: 8537]

Description	Product Code
Flexi DD DB 2 Row 13 Modules	CSDBFLDD2R13
Flexi DD DB 3 Row 13 Modules	CSDBFLDD3R13
Flexi DD DB 4 Row 13 Modules	CSDBFLDD4R13

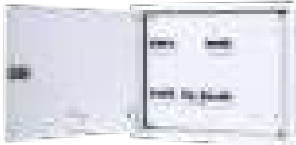
*Without Wire bunch

PPI Distribution Board

[HSN Code: 8537]

Description	Product Code	No. of Modules (Incomer+Outgoing)
4 Way Double Door	<input checked="" type="checkbox"/> CSDBTPNPPIDD04	8+6+12
6 Way Double Door	<input checked="" type="checkbox"/> CSDBTPNPPIDD06	8+6+18
8 Way Double Door	CSDBTPNPPIDD08	8+6+24
12 Way Double Door	CSDBTPNPPIDD12	8+6+36

WiNtrip Distribution Board



Description	Product Code
WiNtrip Telephone & Television Socket Distribution Board [HSN Code: 8537]	
SPN 04 Way Tel & TV Socket DB (2+4)	CSDBSPNDDTELV04
SPN 06 Way Tel & TV Socket DB (2+6)	CSDBSPNDDTELV06
SPN 08 Way Tel & TV Socket DB (2+8)	CSDBSPNDDTELV08
SPN 10 Way Tel & TV Socket DB (2+10)	CSDBSPNDDTELV10
SPN 12 Way Tel & TV Socket DB (2+12)	CSDBSPNDDTELV12
SPN 14 Way Tel & TV Socket DB (2+14)	CSDBSPNDDTELV14
TPN 04 Way Tel & TV Socket DB (8+12)	CSDBTPNDDTELV04
TPN 06 Way Tel & TV Socket DB (8+18)	CSDBTPNDDTELV06
TPN 08 Way Tel & TV Socket DB (8+24)	CSDBTPNDDTELV08
TPN 12 Way Tel & TV Socket DB (8+36)	CSDBTPNDDTELV12

Cable End Box - WiNclass Cable End Box



Description	Product Code
SPN Cable End Box	
SPN 4 Way	CSDBCSPNDD04S
SPN 8 Way	CSDBCSPNDD08S
SPN 12 Way	CSDBCSPNDD12S
SPN 16 Way	CSDBCSPNDD16S
TPNH Cable End Box	
TPNH 4 Way	CSDBCTPNHDD04SN
TPNH 6 Way	CSDBCTPNHDD06S
TPNH 8 Way	CSDBCTPNHDD08S
TPNH 12 Way	CSDBCTPNHDD12S
TPNH 16 Way	CSDBCTPNHDD16S

New C&S / Epic Cable End Box



Description	Product Code
SPN Cable End Box [HSN Code: 8537]	
SPN 4 Way	CSDBCSPNPDD04
TPNH 6 Way	CSDBCSPNPDD06
SPN 8 Way	CSDBCSPNPDD08
SPN 12 Way	CSDBCSPNPDD12
SPN 16 Way	CSDBCSPNPDD16
TPNH Cable End Box	
TPNH 4 Way	CSDBCTPNHPDD04
TPNH 6 Way	CSDBCTPNHPDD06
TPNH 8 Way	CSDBCTPNHPDD08
TPNH 12 Way	CSDBCTPNHPDD12

EpiC TPNV Cable End Box

Description	Product Code
EpiC TPNV Cable End Box [HSN Code: 8537]	
CABLE END BOX FOR CSDBTPNVPEDD 04-12 WAY DB	CSDBCTPNVPEDD

PPI Kit

Description	Product Code
PPI KIT TO CONVERT TPNHP/TPNHPE DD 04 TO DD 02 WAY	CSDBPPPIKT01
PPI KIT TO CONVERT TPNHP/TPNHPE DD 06 TO DD 04 WAY	CSDBPPPIKT02
PPI KIT TO CONVERT TPNHP/TPNHPE DD 08 TO DD 06 WAY	CSDBPPPIKT03
PPI KIT TO CONVERT TPNHP/TPNHPE DD 12 TO DD 10 WAY	CSDBPPPIKT04



WiNtrip Plug and Socket DBs (without MCB)

Powder Coated Sheet Metal Deep Drawn DBs with Plug & Socket including insulated Neutral link, adjustable Din Rail and connecting links.

[HSN Code: 8537]

Description	Product Code	Std. Pkg. (No.s)
10Amp SPN	CSDBPSSPN010	12
20Amp SPN	CSDBPSSPN020	12
20Amp SPN (SP Cutout)	CSDBPSSPN020SP	12
20Amp TPN	CSDBPSTPN020	6
30Amp TPN	CSDBPSTPN030	6

WiNtrip Plug and Sockets (Metal Clad)

10Amp SPN Plug	CSDBPSPN010	36
10Amp SPN Socket	CSDBSSPN010	36
20Amp SPN Plug	CSDBPSPN020	36
20Amp SPN Socket	CSDBSSPN020	36
20Amp TPN Plug	CSDBPTPN020	36
20Amp TPN Socket	CSDBSTPN020	36
30Amp TPN Plug	CSDBPTPN030	36
30Amp TPN Socket	CSDBSTPN030	36

WiNtrip Metal Enclosures (with Din Rail) For Mounting WiNtrip MCBs / RCCBs / Isolators

SP Enclosure	CSDBMCBESP	24
DP Enclosure	CSDBMCBEDP	24
TP Enclosure	CSDBMCBETP	12
FP Enclosure	CSDBMCBEFP	12

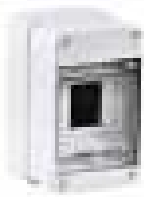
WiNtrip Plastic Enclosure without MCB

Plastic MCB Enclosure SP&DP/STD	CSDBMCBEPDP	-
Plastic MCB Enclosure TP&FP/STD	CSDBMCBEPFP	-

MCB Enclosure IP55

4 Pole Enclosure

MCB Enclosure IP55 04 Way	CSDBEP04	1
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TYPE 2 CO-ORDINATION CHART



Suitable for IE2 and IE3 motors
C&S: DOL - Type-2 Co-ordination chart, Class-10 (Theoretical)
Iq-50 kA @400/415V, 50Hz, Fuse + Contactor + OLR

Motor kW rating IS: 12615	FLA (A)	C&S Contactor	C&S rating (A)	C&S Relay	C&S Relay rating (A)	SCPD -gG	SCPD Rating (A)
0.55	1.70	TC1D0901/10	9	TR2D093X6	1.25-2	CDFL 00 6	6
0.75	2.20	TC1D0901/10	9	TR2D09307	1.6-2.5	CDFL 00 6	6
1.1	2.9	TC1D0901/10	9	TR2D09308	2.5-4	CDFL 00 6	6
1.5	3.8	TC1D0901/10	9	TR2D09308	2.5-4	CDFL 00 10	10
2.2	5.1	TC1D0901/10	9	TR2D09310	4-6	CDFL 00 16	16
3.7	8.1	TC1D1201/10	12	TR2D09314	7-10	CDFL 00 20	20
5.5	11.4	TC1D1801/10	18	TR2D12316	9-13	CDFL 00 25	25
7.5	15.4	TC1D2201/10	22	TR2D18321	12-18	CDFL 00 35	35
11	22	TC1D2501/10	25	TR2D25322	17-25	CDFL 00 50	50
15	30	TC1D3201/10	32	TR2D32353	23-32	CDFL 00 63	63
18.5	36.0	TC1D5011	50	TR2D40355	30-40	CDFL 00 80	80
22	43	TC1D6511	65	TR2D65357	37-50	CDFL 00 80	80
30	56	TC1D7011	70	TR2D65359	48-65	CDFL 00 100	100
37	69	TC1D9511	95	TR2D80363	63-80	CDFL 00 125	125
45	84	LC1FDP115A	115	LR1-F(M)105	65-105	CDFL 00 160	160
55	99	LC1FDP115A	115	LR1-F(M)105	65-105	CDFL 00 160	160
75	134	LC1FDP185A	185	LR1-F200	125-200	CDFL1 250	250
90	164	LC1FDP185A	185	LR1-F200	125-200	CDFL2 315	315
110	204	LC1FDP265A	265	LR1-F250	160-250	CDFL2 315	315
125	234	LC1FDP330A	330	LR1-F315	200-315	CDFL2 315	315
132	247	LC1FDP330A	330	LR1-F315	200-315	CDFL2 315	315
160	288	LC1FDP330A	330	LR1-F315	200-315	CDFL3 500	500
200	348	LC1FDP400A	400	LR1-F400	250-400	CDFL3 630	630
250	435	LC1FDP500A	500	LR1-F500	315-500	CDFL3 630	630

Suitable for IE2 and IE3 motors
C&S: DOL - Type-2 Co-ordination chart, Class-10 (Theoretical)
Iq-50 kA @400/415V, 50Hz, MCCB + Contactor + OLR

Motor kW rating	FLA (A)	C&S Contactor	C&S rating (A)	C&S Relay	C&S rating (A)	Winbreak1 MCCB	MCCB Rating (A)	Setting on Trip Unit (A)
0.37	1.4	TC1D0901/10	9	TR2D09306	1-1.6	CSE1S125FMTU3P-16A	16	350
0.55	1.7	TC1D0901/10	9	TR2D093X6	1.25-2	CSE1S125FMTU3P-16A	16	350
0.75	2.2	TC1D0901/10	9	TR2D09307	1.6-2.5	CSE1S125FMTU3P-16A	16	350
1.1	2.9	TC1D0901/10	9	TR2D09308	2.5-4	CSE1S125FMTU3P-16A	16	350
1.5	3.8	TC1D0901/10	9	TR2D09308	2.5-4	CSE1S125FMTU3P-16A	16	350
2.2	5.1	TC1D1801/10	18	TR2D09310	4-6	CSE1S125FMTU3P-16A	16	350
3.7	8.1	TC1D2501/10	25	TR2D09314	7-10	CSE1S125FMTU3P-16A	16	350
5.5	11.4	TC1D3201/10	32	TR2D12316	9-13	CSE1S125FMTU3P-16A	16	350
7.5	15.4	TC1D3201/10	32	TR2D18321	12-18	CSE1S125FMTU3P-16A	16	350
11	22	TC1D3801/10	38	TR2D25322	17-25	CSE1S125FMTU3P-25A	25	450
15	30	TC1D6511	65	TR2D40353	23-32	CSE1S125FMTU3P-32A	32	600.0
18.5	36	TC1D8011	80	TR2D40355	30-40	CSE1S125FMTU3P-40A	40	600.0
22	43	TC1D9511	95	TR2D65357	37-50	CSE1S125MTU3P-50A	50	600.0
30	56	LC1FDP115A	115	TR2D65359+TA7D4064	48-65	CSE1S125MTU3P-63A	63	800.0
37	69	LC1FDP150A	150	TR2D80363+TA7D4064	63-80	CSE1S125MTU3P-100A	100	960.0
45	84	LC1FDP185A	185	LR1-F(M)105	65-105	CSE1S125MTU3P-100A	100	1200.0
55	99	LC1FDP225A	225	LR1-F(M)105	65-105	CSE1S125MTU3P-125A	125	1350.0
75	134	LC1FDP265A	265	LR1-F200	125-200	CSE2S250MTU3P-160A	160	1920.0
90	164	LC1FDP330A	330	LR1-F200	125-200	CSE2S250MTU3P-200A	200	2400.0
110	204	LC1FDP400A	400	LR1-F250	160-250	CSE2S250MTU3P-250A	250	3000.0
125	234	LC1FDP500A	500	LR1-F315	200-315	CSE3S400MTU3P-320A	320	3456.0
132	247	LC1FDP500A	500	LR1-F315	200-315	CSE3S400MTU3P-320A	320	3456.0
160	288	LC1FDP630A	630	LR1-F315	200-315	CSE3S400MTU3P-350A	350	4200.0
200	348	LC1FDP800A	800	LR1-F400	250-400	CSE3S400MTU3P-400A	400	4800.0
250	435	LC1FDP800A	800	LR1-F500	315-500	CSE4S630MTU3P-500A	500	5400.0

Type 2 Co-ordination Charts

Suitable for IE2 and IE3 motors									
C&S: Star-Delta - Type-2 Co-ordination chart, Class-10 (Theoretical)									
Iq-50 kA @400/415V, 50Hz, Fuse + Contactor + OLR									
Motor kW rating	FLA (A)	C&S Contactor Main/Delta	C&S rating Main / Delta (A)	C&S Contactor Star	C&S rating Star (A)	C&S Relay	C&S rating (A)	SCPD	SCPD Rating (A)
1.5	3.8	TC1D0901/10	9	TC1D0901/10	9	TR2D09307	1.6-2.5	CDFL 00 6	6
2.2	5.1	TC1D0901/10	9	TC1D0901/10	9	TR2D09308	2.5-4	CDFL 00 10	10
3.7	8.1	TC1D0901/10	9	TC1D0901/10	9	TR2D09310	4-6	CDFL 00 10	10
5.5	11.4	TC1D0901/10	9	TC1D0901/10	9	TR2D09312	5.5-8	CDFL 00 16	16
7.5	15.4	TC1D1201/10	12	TC1D0901/10	9	TR2D09314	7-10	CDFL 00 20	20
11	22	TC1D1801/10	18	TC1D1201/10	12	TR2D18321	12-18	CDFL 00 32	32
15	30	TC1D2201/10	22	TC1D1801/10	18	TR2D18321	12-18	CDFL 00 40	40
18.5	36.0	TC1D2501/10	25	TC1D1801/10	18	TR2D25322	17-25	CDFL 00 40	40
22	43	TC1D3201/10	32	TC1D1801/10	18	TR2D32353	23-32	CDFL 00 50	50
30	56	TC1D3801/10	38	TC1D2501/10	25	TR2D32355	28-36	CDFL 00 63	63
37	69	TC1D5011	50	TC1D3201/10	32	TR2D65357	37-50	CDFL 00 80	80
45	84	TC1D6511	65	TC1D3801/10	38	TR2D65357	37-50	CDFL 00 100	100
55	99	TC1D8011	80	TC1D5011	50	TR2D65359	48-65	CDFL 00 100	100
75	134	LC1FDP115A	115	TC1D8011	80	LR1F105	65 - 105	CDFL 00 160	160
90	164	LC1FDP115A	115	TC1D8011	80	LR1F105	65 - 105	CDFL 00 160	160
110	204	LC1FDP150A	150	TC1D9511	95	LR1F105	80 - 125	CDFL1 200	200
125	234	LC1FDP150A	150	TC1D9511	95	LR1F160	100 - 160	CDFL1 250	250
132	247	LC1FDP150A	150	LC1FDP115A	115	LR1F160	100 - 160	CDFL1 250	250
160	288	LC1FDP225A	225	LC1FDP150A	150	LR1F200	125 - 200	CDFL2 315	315
200	348	LC1FDP330A	330	LC1FDP265A	265	LR1F250	160 - 250	CDFL2 400	400
250	435	LC1FDP400A	400	LC1FDP330A	330	LR1F315	200 - 315	CDFL3 500	500
315	548	LC1FDP500A	500	LC1FDP400A	400	LR1F500	315 - 500	CDFL3 630	630
355	618	LC1FDP500A	500	LC1FDP400A	400	LR1F500	315 - 500	CDFL3 630	630
375	653	LC1FDP630A	630	LC1FDP400A	400	LR1F500	315 - 500	CDFL3 630	630

E

Suitable for IE2 and IE3 motors
C&S: Star-Delta - Type-2 Co-ordination chart, Class-10 (Theoretical)
 Iq-50 kA @400/415V, 50Hz, MCCB + Contactor + OLR

Motor kW rating	FLA (A)	C&S Contactor Main/Delta	C&S rating Main/Delta (A)	C&S Contactor Star	C&S rating Star (A)	C&S Relay	C&S rating (A)	Winbreak1 MCCB	MCCB Rating (A)	Setting on Trip Unit (A)
0.75	2.2	TC1D0901/10	9	TC1D0901/10	9	TR2D09306	1-1.6	CSE1S125FMTU3P-16A	16	350
1.1	2.9	TC1D0901/10	9	TC1D0901/10	9	TR2D09307	1.6-2.5	CSE1S125FMTU3P-16A	16	350
1.5	3.8	TC1D0901/10	9	TC1D0901/10	9	TR2D09307	1.6-2.5	CSE1S125FMTU3P-16A	16	350
2.2	5.1	TC1D0901/10	9	TC1D0901/10	9	TR2D09308	2.5-4	CSE1S125FMTU3P-16A	16	350
3.7	8.1	TC1D0901/10	9	TC1D0901/10	9	TR2D09310	4-6	CSE1S125FMTU3P-16A	16	350
5.5	11.4	TC1D0901/10	9	TC1D0901/10	9	TR2D09312	5.5-8	CSE1S125FMTU3P-16A	16	350
7.5	15.4	TC1D1201/10	12	TC1D0901/10	9	TR2D09314	7-10	CSE1S125FMTU3P-16A	16	350
11	22	TC1D1801/10	18	TC1D1201/10	12	TR2D18321	12-18	CSE1S125FMTU3P-32A	32	600
15	30	TC1D2201/10	22	TC1D1801/11	18	TR2D18321	12-18	CSE1S125MTU3P-63A	63	640
18.5	36.0	TC1D2501/10	25	TC1D1801/12	18	TR2D25322	17-25	CSE1S125MTU3P-80A	80	768
22	43	TC1D3201/10	32	TC1D1801/13	18	TR2D32353	23-32	CSE1S125MTU3P-80A	80	960
30	56	TC1D3801/10	38	TC1D2501/14	25	TR2D32355	28-36	CSE1S125MTU3P-100A	100	1200
37	69	TC1D5011	50	TC1D3201/15	32	TR2D65357	37-50	CSE2S250MTU3P-125A	125	1500
45	84	TC1D6511	65	TC1D3801/16	38	TR2D65357	37-50	CSE2S250MTU3P-160A	160	1920
55	99	TC1D8011	80	TC1D5011	50	TR2D65359	48-65	CSE2S250MTU3P-200A	200	2160
75	134	LC1FDP115A	115	TC1D8011	80	LR1F105	65-105	CSE3S400MTU3P-250A	250	3000
90	164	LC1FDP115A	115	TC1D8011	80	LR1F105	65-105	CSE3S400MTU3P-320A	320	3840
110	204	LC1FDP150A	150	TC1D9511	95	LR1F105	80-125	CSE3S400MTU3P-400A	400	4800
125	234	LC1FDP150A	150	TC1D9511	95	LR1F160	100-160	CSE4S500MTU3P-500A	500	5400
132	247	LC1FDP150A	150	LC1FDP115A	115	LR1F160	100-160	CSE4S500MTU3P-500A	500	5400
160	288	LC1FDP225A	225	LC1FDP150	150	LR1F200	125-200	CSE4S500MTU3P-630A	630	6804
200	348	LC1FDP330A	330	LC1FDP265A	265	LR1F250	160-250	CSE4S500MTU3P-630A	630	7560

Product Master Catalogue

DISTRIBUTOR



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PRODUCT MASTER 01/12/2024