RELIABLE ELECTRICAL

Lauritz Knudsen
Electrical & Automation

POWERING A NON-STOP INDIA



Maximum Retail Prices
For Electrical Standard Products
Effective from 15-08-26

Powering a non-stop India with a wide range of solutions

RELIABLE ELECTRICAL

Power Distribution


ACB


MCCB


ATS


Isolator

Motor Management

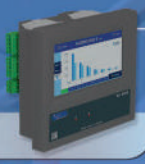

Contactor


Overload Relays


Electronic Motor Protection


Intelligent Motor Protection

Energy Management


Power Quality Analyzer


AHF & ASVG


Capacitor


Capacitor Switching Solution

Home & Distribution


MCB


RCD

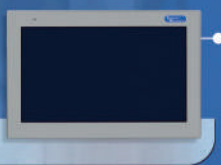

Distribution Board


Switches

Industrial Automation


AC Drives


PLC


HMI


Gateways

Protection Relay


Protection Relays


Insulation Monitoring


Thermal Monitoring

Panel Solutions


IEC Solutions

Hybrid APFC Panel



Software

SMARTCOMM

Design

Electrical Installation Sizing And Simulation

Build

Estimation, Engineering And Quality Check

Commission

Configuration And Testing Of Various Products

Operate

Power Management Software To Connect Electrical Systems And Process Efficiency

Predict

Asset Management and predictive Maintenance

RELIABLE ELECTRICAL

Efficient DC Solutions up to 1500V DC

Applications:

› Battery Energy Storage System
› Central Inverter Application
› EV System

MCCB

› Range from 16A to 800A
› DC Operational Voltages of 1500V, 1000V, 750V, 500V & 250V
› Ambient Temperature Compensated DC Releases
› Internal Accessory Compatibility for all DC Applications
› Service Breaking Capacity Ics upto 50kA



ACB - SD



› Disconnector versions up to 6300A* ›
DC Voltage ratings 1500V#, 1000V, 750V, 500V & 250V
› Service Breaking Capacity Ics upto 100kA

*6300A in two pole series connection for voltage up to 500V DC
#Upcoming version

SWITCH DISCONNECTOR

› Range: 125A to 630A
› Voltage: 1000/1500V DC



MCB



› Conforms to IEC 60947-2 › Current rating upto 63A
› Available in SP/DP and FP versions
› Voltage rating available from 130V DC to 1000V DC

gPV Fuses

› Conforms to IEC 60269-6
› Range: 2A to 32A, 1000V, DC
› Range: 2A to 32A, 1500V, DC
› High breaking capacity: 20kA





TECharge

Powering the **Future of Mobility** with **Integrated EV Charging Solutions**

©2025. ALL RIGHTS RESERVED

KEY FEATURES

» INTEGRATED SYSTEM:

Combines EV Chargers, SmartComm CMS, and TECharge Mobile App for seamless operation

» RATINGS:

AC Chargers 7.4kW and 22kW with Type-2 IEC 62196 connector | 3.3kW Smart Socket

» TAKE CONTROL OF YOUR EV CHARGING NETWORK:

Charging Management Software gives facility managers real-time visibility to proactively manage their network, ensuring reliability and uninterrupted service

» SECURE ACCESS:

RFID authentication and app-based access control to prevent unauthorized usage.

» CUSTOM TARIFF & BILLING:

Enable pay-per-use charging with flexible pricing and secure payment options

» USAGE ANALYTICS DASHBOARD:

Track revenue, session frequency, and user behavior to optimize your operations

Contents

Switching & Control	
Contactors Accessories Spares	0 3
	0 8
Motor Protection Solutions	11
Thermal Overload Relays	
Electronic Motor Protection Relays	
iMMR - Intelligent Motor Management Relay	1 2
Manual Motor Starters	1 4
	1 9
Starters	21
Motor Starters	
Powergear	23
Integrated ATS	
Enclosed Automatic Transfer Switch	
On Load Changeover Switch-Disconnectors	2 7
CZ Bypass Switch & CZ Switch Disconnectors gPV Fuses	2 8
FN Switch Disconnector, Switch Disconnector Fuse & HRC Fuses	2 9
Moulded Case Circuit Breakers	3 0
Sub - Main Distribution Boards	3 3
Air Circuit Breakers	3 4
	3 9
Energy Management	6 8
Power Quality Solutions - Components	70
AHF & ASVG	
Protection Relays	
Metering Devices	8 8
Smartcomm Digital Architecture	9 3
Digital Panel Meters	9 8
SmartComm Edge Gateways & Thermal Monitoring Solutions	103
	104
	108
	113
AC Drives	
Digital Soft Starters	
Automation Solution	
Programmable Logic Controllers (PLC) & Human Machine Interface	
Final Distribution Products	115
	120
	123
	126
Note:	
[Black colour : HSN code]	
Current GST 18%, subject to changes as per Govt. notification	
Discontinued Products/Suggested Alternate Products	**144**

RELIABLE ELECTRICAL

SMARTSHOP

Your Trusted Online Electrical Store

SCAN NOW



BRAND-AUTHORISED SELLERS

WIDE ELECTRICAL RANGE

NATIONWIDE DELIVERY SUPPORT

BULK ORDER DISCOUNTS

Power Contactors

2 Pole
- M N X
- MU-2P

3 Pole
- MO
- MNX
- MI
- MX Power
- ML
- MDX (DC Control/Electronic coil Control)

4 Pole
- MCX

Control Relays (Auxiliary Contactors)

- MX0 (Mini) AC/DC
- MO0 AC/DC

Capacitor Duty Contactors

- MO C

MI Contactors
6-150A, AC-3 Rating



Understanding customer requirements, we make sure that our range of contactors caters to their evolving needs. Considering the changing expectations of customers and a need for an optimum and reliable solution, we introduce MI range of contactors for applications upto 150 A AC3 rating.

Features
- Finger proof terminals upto 40A
- Can be used with existing MN Range of thermal overload relays
- Top mounting add-on blocks possible upto 80A
- Spares available for entire range
- Optimised for AC1/AC3 applications

Applications
- Street lighting
- VFD, Soft Starters applications
- UPS
- Solar and Wind inverters
- Resistive loads
- Battery charging
- Motor Starters

* For accessories and more details please contact nearest branch.

Type	Cat. No.	M.R.P. (`) Per Unit
MI 6 (With 1 NO aux contact) MI	CS90401	Price on Request*
9 (With 1 NO aux contact) MI 12 (With 1 NO aux contact)	CS90402	
MI 18 (With 1 NO aux contact)	CS90403	
MI 22 (With 1 NO aux contact)	CS90404	
MI 25 (With 1 NO aux contact) MI 25	CS90405	
MI 32 MI 40 MI 45 MI 50 MI 70 MI 80 MI 95 MI 120	CS90406	
MI 150	CS92912#	
	CS90407	
	CS90408	
	CS90704	
	CS90705	
	CS90706	
	CS90707	
	CS90724	
	CS90725	
	CS90726	

Notes:
1) Standard coil voltage: 110V, 220V, 240V and 415V, 50Hz
2) For ordering Suffix, please refer page No. 10
3) # For 2 no. of 4 sq. mm wires with lugs in single terminal
4) MI6-25 Available with 1NC on Request

Customer Interaction Center (CIC)
Phone no: 022-6932 7800
Web: www.LK-EA.com | e-mail: CIC@LK-EA.com

3 Pole Power Contactors - Type MNX

Features

- Conforms to IS / IEC 60947-4-1 & IEC 60947-4-1
- Range from 9A – 650A AC-3
- Click fit type construction up to 40A
- Coil on top design in 95A and above
- Spares available for entire range


MNX 22


MNX 40


MNX 80


MNX 140


MNX 250


MNX 650

Size	AC3 Rating (A)	AC1 Rating (A)	Type	Aux. Contacts	Cat. No.	M.R.P. (`) Per Unit	Std. Pkg. (Nos.)
Fr 1	9	25	MNX 9	1 NO	CS94106	1550	20
				1 NC	CS94107	1550	20
	12	30	MNX 12	1 NO	CS94108	1800	20
				1 NC	CS94109	1800	20
	18	30	MNX 18	1 NO	CS94100	2140	20
				1 NC	CS94101	2140	20
	22	32	MNX 22	1 NO	CS94980	2670	20
				1 NC	CS94981	2670	20
Fr 2	25	45	MNX 25	#	CS94110	2730	20
	32	55	MNX 32	#	CS94111	5320	20
	40	55	MNX 40	#	CS94190	7880	20
Fr 3	50	85	MNX 50	#	CS97075	11470	1
	70	100	MNX 70	#	CS97076	16160	1
	80	100	MNX 80	#	CS97077	20170	1
Fr 4	95	160	MNX 95	2 NO + 2 NC	CS94136	33910	1
	110	160	MNX 110	2 NO + 2 NC	CS94137	41370	1
	140	160	MNX 140	2 NO + 2 NC	CS94138	52760	1
Fr 5	185	250	MNX 185	2 NO + 2 NC	CS94139	64390	1
	225	300	MNX 225	2 NO + 2 NC	CS94140	71760	1
	250	300	MNX 250	2 NO + 2 NC	CS94141	80210	1
Fr 6	300	400	MNX 300	2 NO + 2 NC	CS90280	96890	1
	400	425	MNX 400	2 NO + 2 NC	CS94144	140960	1
	550	650	MNX 550	2 NO + 2 NC	CS94145	207040	1 1
	650	800	MNX 650	2 NO + 2 NC	CS96327	309720	

Notes:
1) # Add-on blocks can be ordered separately
2) For ordering MNX/MO add-on aux contact blocks, please refer page No.8
3) For ordering MNX/MO surge suppressor and MNX/MO MIL kit, please refer page No.9
4) For ordering Suffix, please refer page No.10
5) Standard coil voltage: MNX/MO - 110V, 220V, 240V and 415V, 50Hz.

▲ If using 16 sq mm cable for MO 45 use of spreader link kit is mandatory
▲ For ordering spreader link kit for MO 45, Please refer page No.9
* Universal AC/DC electronic coil version

3 Pole Power Contactors - Type MO

Features

- Conforms to IS / IEC 60947-4-1 & IEC 60947-4-1
- Range from 9A - 300A AC-3
- Range 140A-300A available with conventional / universal AC/DC electronic coil version
- Common coil for 50 & 60Hz application
- Low pick-up VA consumption
- Standardized accessories for 9A-110A and 140A-300A range
- Compact dimensions saving panel space
- Suitable for Lug as well as Lugless termination
- RoHS compliant


MO 18


MO 45


MO 70


MO 110


MO 140


MO 250

Size	AC 4 Rating (A)	AC 3e Rating (A)	AC 1 Rating (A)	Type	Aux. Contacts	Cat. No.	M.R.P. (`) Per Unit	Std. Pkg. (Nos.)
Fr 0	9	9	30	MO 9	1 N O	CS94833	2970	10
					1 N C	CS92918	2970	10
	12	12	32	MO 12	1 N O	CS94834	3320	10
					1 N C	CS92919	3320	10
	18	18	32	MO 18	1 N O	CS94835	4010	10
					1NC	CS92920	4010	10
Fr 1	25	25	45	MO 25	#	CS94567	5240	10
	32	32	50	MO 32	#	CS94568	9760	10
	40	40	50	MO 40	#	CS94569	14190	10
	45	45	50	MO 45▲	#	CS94570	20590	10
Fr 2	50	50	100	MO 50	#	CS94572	20900	1
	60	60	100	MO 60	#	CS94573	28560	1
	70	70	100	MO 70	####	CS94574	29100	1
Fr 3	80	80	125	MO 80	2NO+2NC	CS94576	35890	1
	95	95	125	MO 95	2NO+2NC	CS94577	45510	1
	110	110	140	MO 110	2NO+2NC	CS94578	55350	1
Fr 4	140	140	250	MO 140	2NO+2NC	CS95000	71450	1
	185	185	275	MO 185	2NO+2NC	CS95001	90380	1
	225	225	275	MO 225	2NO+2NC	CS95002	97180	1
Fr 4*	140	140	250	MO 140	2NO+2NC	CS95042	93520	1
	185	185	275	MO 185	2NO+2NC	CS95047	125770	1
	225	225	275	MO 225	2NO+2NC	CS95052	129110	1
Fr 5	250	250	400	MO 250	2NO+2NC	CS94441	118090	1
	300	300	500	MO 300		CS94440	141720	1
Fr 5*	250	250	400	MO 250		CS94456	152580	1
	300	300	500	MO 300		CS94464	175700	1



2 Pole Power Contactors - Type MNX

Features

- Conforms to IS / IEC 60947-4-1 & IEC 60947-4-1
- Range from 9A - 650A AC-3
- DC ratings available
- Click fit type construction up to 40A
- Coil on top design in 95A and above
- Common spares and accessories as MNX 3P

Size	AC3 Rating (A)	AC1 Rating (A)	Type	Aux. Contacts	Cat. No.	M.R.P. (`) Per Unit	Std. Pkg. (Nos.)
Fr 1	9	25	MNX 9-2P	1 NO	CS90232	1320	10
	12	30	MNX 12-2P	1 NO	CS90234	1530	10
	18	30	MNX 18-2P	1 NO	CS90236	1820	10
	22	32	MNX 22-2P	1 NO	CS90238	2270	10
Fr 2	25	45	MNX 25-2P	#	CS90240	2320	10
	32	55	MNX 32-2P	#	CS90241	4520	10
	40	55	MNX 40-2P	#	CS90242	6700	10
Fr 3	50	85	MNX 50-2P	#	CS94061	10100	1
	70	100	MNX 70-2P	#	CS94062	14230	1
	80	100	MNX 80-2P	#	CS94063	17900	1
Fr 4	95	160	MNX 95-2P	#	CS94064	28600	1
	110	160	MNX 110-2P	#	CS94065	34900	1
	140	160	MNX 140-2P	#	CS94066	44500	1
Fr 5	185	250	MNX 185-2P	2 NO + 2 NC	CS94978	55700	1
	225	300	MNX 225-2P	2 NO + 2 NC	CS94979	62600	1
	250	300	MNX 250-2P	2 NO + 2 NC	CS90301	69900	1
Fr 6	300	400	MNX 300-2P	2 NO + 2 NC	CS90346	84500	1
	400	425	MNX 400-2P	2 NO + 2 NC	CS94069	123900	1
	550	650	MNX 550-2P	2 NO + 2 NC	CS90243	182100	11
	650	800	MNX 650-2P	2 NO + 2 NC	CS90578	272300	

3 Pole Power Contactors - Type MDX

Features

- Conforms to IS/IEC 60947-4-1 & IEC 60947-4-1
- Range from 9 - 115A AC-3
- Built in surge suppressor for MDX 9 - 115



MDX 25



MDX 38



MDX 115

Size	AC3 Rating (A)	AC1 Rating (A)	Type	Aux. Contacts	Cat. No.	M.R.P. (`) Per Unit	Std. Pkg. (Nos.)
Fr 1 (DC Control Coil)	9	25	MDX 9	1 NO	CS96564	4500	1
	12	28	MDX 12	1 NO	CS96565	5150	1
	18	32	MDX 18	1 NO	CS96566	6140	1
	25	32	MDX 25	1 NO	CS96567	13730	1
Fr 2 (DC Control Coil)	32	56	MDX 32	#	CS96552	17500	1
	38	56	MDX 38	#	CS96553	23220	1
Fr 3 (Electronic Coil-AC/DC)	50	90	MDX 50	#	CS91584	31610	1
	65	110	MDX 65	#	CS91585	35790	1
	80	125	MDX 80	#	CS91586	44390	1
	95	125	MDX 95	#	CS91857	53630	1
	115	125	MDX 115	#	CS91858	60270	1

* MDX Available till stock lasts

Notes:
1) # Add-on blocks can be ordered separately.
2) For ordering MDX/MNX add-on aux contact blocks, please refer page No.8
3) For ordering MNX surge suppressor and MIL kit, please refer page No.9
4) For ordering Suffix, please refer page No.10
5) Standard coil voltage: MDX - 24V, 48V, 115V and 220V DC
6) Standard coil voltage: MNX 2P - 240V, 50Hz
7) For DC power ratings refer catalogue
8) For MDX side add-on and top add-on can not be mounted together

3 Pole Power Contactors - Type MX Mini

Features

- Conforms to IS / IEC 60947-4-1 & IEC 60947-4-1
- AC/DC Contactor in 45mm width
- Base as well as DIN Rail mounting facility
- Built-in Surge Suppressor in MX DC



MX 06

AC3 Rating (A)	AC1 Rating (A)	Type	Aux. Contact	Cat. No.	M.R.P. (`) Per Unit	Std. Pkg. (Nos.)
For AC control (Std. Coil Voltage - 24, 110, 240, 415V, 50Hz)						
6 A	20A	MX 06	1 NO	CS94012	2020	10
6 A	20A	MX 06	1 NC	CS94013	2020	10
9 A	20A	MX 09	1 NO	CS94014	2070	10
9A	20A	MX 09	1 NC	CS94015	2070	10
12A	20A	MX 12	1 NO	CS94016	2290	10
12A	20A	MX 12	1 NC	CS94017	2290	10
For DC control (Std. Coil Voltage - 24, 110, 220V)						
6 A	20A	MX 06	1 NO	CS94021	3120	10
6 A	20A	MX 06	1 NC	CS94022	3120	10
9 A	20A	MX 09	1 NO	CS94023	3310	10
9A	20A	MX 09	1 NC	CS94024	3310	10
12A	20A	MX 12	1 NO	CS94025	3720	10
12A	20A	MX 12	1 NC	CS94026	3720	10

3 Pole Power Contactors - Type ML

Features

- Conforms to IS/IEC 60947-4-1 & IEC 60947-4-1
- Range from 25A- 300A AC-3
- Robust and suitable for hostile applications



ML 1.5



ML 3

Size	AC3 Rating (A)	AC1 Rating (A)	Type	Aux. Contacts	Cat. No.	M.R.P. (`) Per Unit	Std. Pkg. (Nos.)
Fr 1	25	25	ML 1.5	2 NO + 2 NC	SS91851	10190	1
Fr 2	32	40	ML 2	2 NO + 2 NC	SS90701	18930	1
	40	45	ML 3	2 NO + 2 NC	SS90721	27910	1
Fr 3	70	100	ML 4	2 NO + 2 NC	SS90910	45600	1
	110	125	ML 6	2 NO + 2 NC	SS90921	72160	1
Fr 4	300	400	ML 12	2 NO + 2 NC	SS91010	163350	1

Notes:
1) For ordering MX add-on aux contact blocks, please refer page No.8
2) For ordering ML add-on aux contact blocks, please refer page No.9
3) For ordering MX surge suppressor and MIL kit, please refer page No.9
4) For Ordering Suffix, please refer page No.10
5) Standard Coil Voltage : ML 1.5/2/3 - 110V, 240V and 440V, 50 Hz ML 4/6/12 - 110V, 240V and 415V, 50 Hz

4 Pole Power Contactors - Type MCX

Features

- Conforms to IS / IEC 60947-4-1 & IEC 60947-4-1
- Range from 18A - 900A
- Wide operating band up to 130A AC-1
- Power contacts configuration - 4 NO



MCX 22



MCX 34



MCX 47

Size	AC-1 Rating (A)	Type	Aux Contacts	Cat. No.	M.R.P. (`) Per Unit	Std. Pkg. (Nos.)
Fr 1	18	MCX 01	#	CS97009	2220	10
	25	MCX 02	#	CS97010	2290	10
	32	MCX 03	#	CS97011	2540	10
	40	MCX 04	#	CS97012	4230	10
Fr 2	55	MCX 11	#	CS97013	6030	1
	63	MCX 12	####	CS97014	9960	1
	80	MCX 13	2 NO + 2 NC	CS97015	13410	1
Fr 3	105	MCX 22	2 NO + 2 NC	CS97017	20420	1
	130	MCX 23	2 NO + 2 NC	CS97018	21560	1
Fr 4	160	MCX 32	2 NO + 2 NC	CS97020	40530	1
	200	MCX 33	2 NO + 2 NC	CS97021	43520	1
	255	MCX 34	2 NO + 2 NC	CS97022	54260	1
Fr 5	325	MCX 41	2 NO + 2 NC	CS97023	85680	1
	360	MCX 42	2 NO + 2 NC	CS97024	93280	1
	400	MCX 43	2 NO + 2 NC	CS97025	112980	1
	560	MCX 44	2 NO + 2 NC	CS97026	153480	1
	600	MCX 45		CS97027	162240	1
	700	MCX 46		CS97028	182060	11
	900	MCX 47		CS94291	294300	

New 2 NO + 2 NC Power Contactor - Type MCX

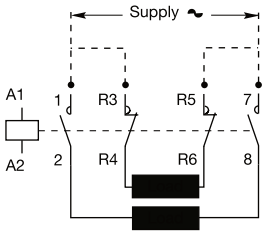
Features

- Conforms to IS / IEC 60947-4-1 & IEC 60947-4-1
- Range from 18A - 40A
- Power contacts configuration - 2 NO + 2 NC

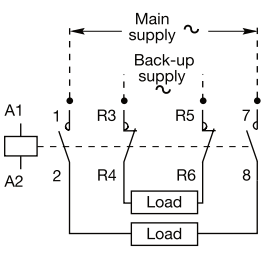
Size	AC-1 Rating (A)	Type	Power Contacts	Cat. No.	M.R.P. (`) Per Unit	Std. Pkg. (Nos.)
Fr 1	18	MCX 01-22	2 NO + 2 NC	CS91107	2220	10
	25	MCX 02-22	2 NO + 2 NC	CS91108	2290	10
	32	MCX 03-22	2 NO + 2 NC	CS91109	2540	10
	40	MCX 04-22	2 NO + 2 NC	CS91110	4230	10

Block diagrams

Single supply and 2 separate loads



2 separate supplies and 2 separate loads



⚠ MCX 2NO+ 2NCcontactors are not suitable for a reversing starter or for controlling a single load from 2 separate supplies.

Notes for MCX:

1) # Add-on blocks can be ordered separately.
2) For ordering MCX add-on aux contact blocks, please refer page No.8
3) For ordering MCX surge suppressor and MIL kit, please refer page No.9
4) For Ordering Suffix, please refer page No.10
5) Standard Coil Voltage: MCX - 220V, 240V and 415V 50Hz
6) Mounting of side add-on aux. contact block is not recommended for mechanically interlocked MCX 11/12/13 contactors
7) MCX 01-04 and MCX 11-13 available in 48V DC coil. Contact nearest branch for more details.

To avoid coil failure due to neutral floating, it is recommended to use 415V coil

AST System Components [9032]

Automatic Transfer Controllers (ATC)



AuXC-2000 Controller

For AuXC 2000/2100 programming videos and more details please scan the QRcode or click here

Type	Cat. No.	M.R.P. (`) Per Unit	Std. Pkg. (Nos.)
AuXC-2000 Controller	ATC2000OOOO	52600	1
AuXC-2100 Controller** with Optional RS485	ATC2100OOOO	104800	1
RS485 Module for AuXC-2100 Controller**	ETACONRS485	20900	1

Can be used along with ACB, Motorised MCCBs, MCX contactors & Motorised Changeover switches

** Note: RS485 expansion module needs to be ordered with AuXC-2100 for communication

Control Relays (Auxiliary Contactors) [8536]

Type MX0 AC



MX0 22E

Features

- Conforms to IS / IEC 60947-4-1 & IEC 60947-4-1
- Available with AC or DC control in same dimension
- Inbuilt Surge Suppressor in MX DC

Rated Current	Description	Cat. No.	M.R.P. (`) Per Unit	Std. Pkg. (Nos.)
For AC control std. Coil Voltage - 24, 110, 240, 415V, 50Hz				
AC-15 4A at 415V	MX0 40E (4 NO)	CS94018	2260	10
	MX0 31E (3 NO + 1 NC)	CS94019	2260	10
	MX0 22E (2 NO + 2 NC)	CS94020	2260	10
	MX0 13E (1 NO + 3 NC)	CS94041	2260	10
	MX0 04E (4 NC)	CS94042	2260	10

Type MX0 DC

Rated Current	Description	Cat. No.	M.R.P. (`) Per Unit	Std. Pkg. (Nos.)
For DC control std. Coil Voltage - 24, 110, 220V				
AC-15 4A at 415V	MX0 40E (4 NO)	CS94027	2790	10
	MX0 31E (3 NO + 1 NC)	CS94028	2790	10
	MX0 22E (2 NO + 2 NC)	CS94029	2790	10
	MX0 13E (1 NO + 3 NC)	CS94043	2790	10
	MX0 04E (4 NC)	CS94044	2790	10

Notes: 1) For Ordering Suffix,please refer page No.10
2) 5 NC & above combinations are not recommended for MX0 DC Control Contactors
3) 1 NO+ 3 NC,4 NC add-on block combinations are not recommended for MX0 DC Control Contactors.

Type MO0 AC


MO0 AC

Features
- Same add-on aux. contact block in MO0 as of MO power contactors
- Common coil for 50 & 60Hz application

Rated Current	Description	Cat. No.	M.R.P. (`) Per Unit	Std. Pkg. (Nos.)
For AC control std. Coil Voltage - 24, 110, 240, 415V, 50Hz				
AC-15 4A at 415V	MO0 40E (4NO)	CS91623	1500	10
	MO0 31E (3NO + 1NC)	CS91624	1500	10
	MO0 22E (2NO + 2NC)	CS91625	1500	10

Note: 6NC & above combination is not recommended for MO0 AC
For ordering add-on contact blocks of MX0, MO0, please refer page no.8

Type MO0 DC


MO0 DC

Features
- Same add-on aux. contact block in MO0 as of MO power contactors
- Inbuilt Surge Suppressor in MO0 DC

Rated Current	Description	Cat. No.	M.R.P. (`) Per Unit	Std. Pkg. (Nos.)
For DC control std. Coil Voltage - 24, 48, 110, 220				
AC-15 4A at 415 V	MO0 40E (4NO)	CS90045	2950	10
	MO0 31E (3NO + 1NC)	CS90046	2950	10
	MO0 22E (2NO + 2NC)	CS90047	2950	10

Note: 5NC & above combination is not recommended for MO0 DC
For ordering add-on contact blocks of MX0, MO0, please refer page no.8

Capacitor Duty Contactors [8536]

Capacitor Duty Contactors - Type MO C


MO C50


MO C100

Size	kVAr Rating @ 440V, 3Ph, 50Hz	Type	Built-in Auxiliary Contacts	Cat. No.	M.R.P. (`) Per Unit	Std. Pkg. (Nos.)
Fr 1	3	MO C3	1NO	CS96146	3480	1
	5	MO C5	1NO	CS96127	3700	1
	8.5	MO C8.5	1NO	CS96320	4800	1
	10	MO C10	1NO	CS96156	4910	1
	12.5	MO C12.5	1NO	CS96321	5180	1
	15	MO C15	1NO	CS90019	6980	1
	20	MO C20	1NO	CS90021	7770	1
	25	MO C25▲	1NO	CS96322	8370	1
	30	MO C30$	1NO	CS96148	13330	1
Fr 2	40	MO C40	1NO	CS96147	22120	1
	50	MO C50	1NO	CS96324	24830	1
	60	MO C60$	1NO	CS96149	25820	1
Fr 3	75	MO C75	1NO	CS96150	30870	1
	85	MO C85	1NO	CS96157	33220	1
	100	MO C100$	1NO	CS96158	33870	1

Features
- Conforms to IS / IEC 60947-4-1 & IEC 60947-4-1
- MO C Range available from 3 -100 kVAr, AC-6b
- Delatching type early make contacts
- Separate termination for damping resistors
- Encapsulated damping resistor assembly
- Common coil for 50 & 60Hz application
- Low pick-up VA consumption
- Standard accessories throughout the range in line with MO contactor
- Suitable for Lug as well as Lugless termination
- RoHS compliant

For Power Quality Solutions, please refer page No. 87-95

Note:
1) For ordering add-on aux. contact block, please refer page No.8
2) For ordering suffix, please refer page No.10
3) For ordering spare coils, please refer page No.11
4) Standard coil voltage : 240V, 50/60 Hz
5) For ordering MO C surge suppressor, please refer page No.9

▲ If using 16 sq mm cable use of spreader link kit is mandatory
▲ For ordering spreader link kit, Please refer page No.9
$ Spreader link along with phase barrier included in packing

Definite Purpose Contactors [8536]

Two Pole Contactors - Type MU-2P

Features
- Wide band potted coil
- Neutral isolation


MU 16-2P

AC3 Rating (A)	Type	Cat. No.	M.R.P. (`) Per Unit	Std. Pkg. (Nos.)
16A	MU16-2P	CS90117	1600	10
25A	MU25-2P	CS90118	1950	10
40A	MU40-2P	CS90119	2500	10

Note:
1) Coil voltages available for MU-2P are 220V, 240V, wide band coil 160-220V
2) Ordering suffix for wide band coil of MU-2P is NOOO
3) For ordering add-on aux. contact block, please refer page No.8

	MNX 9-80	MNX 95-650	MO 9-110	MO 140-300	ML	MX	MDX 9-115	MCX 01-23	MCX 32-47	MX0	MO0	MO C	MU-2P
Front add-on possible	Yes	No	Yes	No	No	Yes	Yes	Yes	No	Yes	Yes	No	Yes
Side add-on possible	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	No	No	Yes	No

Note: 1) Mounting of side add-on aux. contact block is not recommended for mechanically interlocked MCX 11/12/13 contactors
2) Accessories are common for MNX 2P & MNX 3P contactors

Front Mounting
Add-on aux. Contact Block



MNX / MCX
Front Add-on
aux. contact Block



MO / MO0
Front Add-on
aux. contact Block



MDX Front
Add-on
aux. contact Block



MX Front
Add-on
aux. contact Block



MU-2P
Front Add-on
aux. contact Block

Front Mounting	Suitable for									
	MNX 9-80 / MCX 01-23	M.R.P. (`) Per Unit	MO 9-110 / MO0	M.R.P. (`) Per Unit	MDX# 9-115	M.R.P. (`) Per Unit	MX (6,9,12) /MX0	M.R.P. (`) Per Unit	MU-2P	M.R.P. (`) Per Unit
4 NO	CS94112^	1195	CS94594^	1590	-	-	CS94033^	1120	-	-
3 NO + 1 NC	CS94113^	1195	CS94595^	1590	-	-	CS94034^	1120	- - - -	-
2 NO + 2 NC	CS94114^	1195	CS94596^	1590	CS96569~	2600	CS94035^	1120	CS90692^	-
1 NO + 3 NC	CS94115^	1195	CS94597^	1590	CS90906~	2600	CS94036^	1120	CS90693^	- -
4 NC	CS94116^	1195	CS94598^	1590	-	-	CS94037^	1120	CS90694^	940
2 NO	CS94117^	785	CS94591^^	915	-	-	CS94030^	725	CS90695^	940
1 NO + 1 NC	CS94118^	785	CS94592^^	915	CS96568~	1520	CS94031^	725	CS90696^	940
2 NC	CS94119^	785	CS94593^^	915	-	-	CS94032^	725		480
1 NO	CS94120^	400	CS94585^^	535	CS96586~	850	-	-		480
1 NC	CS94121^	400	CS94586^^	535			-	-		

#For MDX Side add-on and top add-on can not be mounted together
*MDX add-on available till stock last

Side Mounting
Add-on aux. Contact Block



MNX/MCX
Side Add-on aux. contact Block



MO/MO C
Left Add-on aux. contact Block

Side Mounting	Suitable for								
	Aux Contact	MNX 9-40/ MCX 01-04	M.R.P. (`) Per Unit	MCX 11-13	M.R.P. (`) Per Unit	MNX 50-80/ MCX 22-23	M.R.P. (`) Per Unit	MO 9-110/ MO C 3-100	M.R.P. (`) Per Unit
First left	1NO+1NC	CS94220^	1265	CS94201^	1370	CS94201^	1370	CS94580^	1475
First Right	1NO+1NC	CS94221^	1265	CS94202^	1370	CS94202^	1370	CS94581^	1475
Second Left	1NO+1NC	-	-	-	-	CS94203^	1370	CS94582^	1475
Second right	1NO+1NC	-	-	-	-	CS94204^	1370	CS94583^	1475

Note: Mounting of side add-on aux. contact block is not recommended for mechanically interlocked MCX 11/12/13 contactors
For MO 9-18, only First left and Second left side add-on is allowed.

Side Mounting
Add-on aux. Contact Block

Side Mounting	Suitable for						
	Aux Contact	MNX 95-650/ MCX 32-47	M.R.P. (`) Per Unit	MO 140-300	M.R.P. (`) Per Unit	MDX# 9-115	M.R.P. (`) Per Unit
First left	1NO+1NC	CS94205^	1555	CS95033^	1815	ST94985^	3110
First Right	1NO+1NC	CS94206^	1555	CS95034^	1815		
Second Left	1NO+1NC	CS94207^	1555	CS95035^	1815	-	-
Second right	1NO+1NC	CS94208^	1555	CS95036^	1815	-	-



MDX
Side Add-on aux.
contact Block

For MDX Side add-on and top add-on can not be mounted together
- Standard Packing is 1 ^Standard Packing is 10 ^^Standard Packing is 20
* MDX add-on available till stock last

Accessories - Add-on Auxiliary Contact Blocks [8538]

Side Mounting Add-on aux. Contact Block -ML



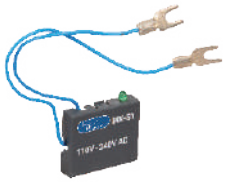
ML Add-on aux. contact Block

Side Mounting	Suitable for				
	Aux Contact	ML 4/6	M.R.P. (`) Per Unit	ML 12	M.R.P. (`) Per Unit
Left	1 NO + 1 NC	SS91494^	1920	-	-
Right	1 NO + 1 NC	-	-	SS91474^	1920

Note: Ordering Suffix for Add-on aux. contact blocks : OOOO

Accessories - Surge Suppressors [8538]

For MX, MNX, MCX, MO & MO C



MX - S1

Ordering Suffix * 110-240V : BOOO, 415V : DOOO
110V : AOOO, 220-240V : BOOO, 360-525V : DOOO
^ 110V : AOOO, 220-320V : BOOO, 360-415V : DOOO

MDX 9-115, MNX 550-650, MCX 45-47, MX DC, MX0 DC & MO0 DC have built in surge suppressor

For Contactor	Cat. No.	M.R.P.(`) Per Unit	Std. Pkg. (Nos.)
MX 06 to MX 12 / MX 0 AC (S1)	CS94039*	1050	10
MNX 9 - 40 / MCX 01 - 04 (S1)	CS94166*	1070	10
MNX 50 - 80 / MCX 11 - 23 (S3)	CS94163*	1195	10
MNX 95 - 250 / MCX 32 - 34 (S4)	CS94164#	3910	10
MNX 300 - 400 / MCX 41 - 44 (S6)	CS94165#	5280	10
MO Frame 0/1, MO C Frame 1, MO0 Control	CS91706^	1070	10
MO/MO C - Frame 2	CS91707^	1195	10
MO/MO C - Frame 3	CS91708^	3910	10
MO Frame - 4/5	CS91854^	5280	10

Accessories - Mechanical Interlock Kits & Spreader Link Kit [8538]

Mechanical Interlock Kit for MX, MO, MDX, MNX & MCX



MCX M3 (MC

For Contactor	Cat. No.	M.R.P.(`) Per Unit	Std. Pkg. (Nos.)
MX 06 to MX 12 / MX 0	CS94038	1010	10
MO 9 - 110*	CS94584	1795	10
MDX 9 - 38	CS96572	1990	1
MDX 50 - 115	CS96573	6040	1
MNX 9 - 40	CS94126	820	10
MNX 50 - 80	CS94197	5770	1
MNX 95 - 140	CS94198	8990	1
MNX 185 - 250	CS94199	10220	1
MNX 300 - 650	CS94200	11580	1
MCX 01 - 04	CS94126	820	10
MCX 11 - 13	ST50540	1625	10
MCX 22 - 23	CS93095	7620	1
MCX 32 - 34	SS94992	7870	1
MCX 41 - 47	CS94301	12980	1

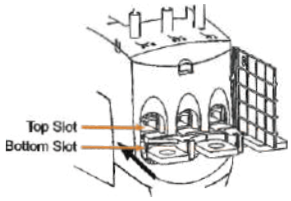
Note:
*MDX Mechanical interlock kit Available till stock last
1) Ordering Suffix for Mechanical Interlock Kits :OOOO
2) *MOMIL Kit contains inbuilt 2 NCContacts
3) Mounting of sideadd-on aux. contact block is not recommended for mechanicallyinterlocked MCX11/12/13 contactors
4) MIL kit for MNX50-80 comes with 2 left &2 right sideadd-on aux. contact blocks i.e. 4 NO+ 4 NC
5) MIL kit for MCX22/23 comes with 2 left &2 right sideadd-on aux. contact blocks i.e. 4 NO+ 4 NC

MO/MO C Spreader Link Kit



For Contactor	Cat. No.	M.R.P. (`) Per Unit	Std. Pkg. (Nos.)
MO 9 - 45 / MOC 3 - 30	CS94274	950	10
MO 50 - 70 / MOC 40 - 60	CS94093	1505	10
MO 80 - 110 / MOC 75 - 100	CS94094	2170	1
MO 140 - 225	CS91057	6110	1
MO 250 - 300	CS90940	9500	1

Note:
1) If using 16 sq mm cablefor MO45/ MOC25 useof spreader link is mandatory
2) Spreader Link Kit consists of six terminals along with phasebarrier (Phase barrier not applicable for MO250-300)
3) In MOC30,MOC60 &MOC100 spreader link is included in packing
4) Ordering Suffix: OOOO
⚠ 5) Insert spreader link in top slot only



Accessories - Connecting Links [8538]

DOL Starter - Link



Contactor
MMS Link

Suitable For	Cat. No.	M.R.P. (`) Per Unit	Std. Pkg. (Nos.)
MOG H1/S1 with MO 9-18	CS90396 #	785	10
MOG H1/S1 with MO 25-45	CS90391 #	785	10

Reversing DOL Starter - Link



Reversing
Starter



Paralleling
Link



Contactor
MMS Link

Suitable For	Cat. No.	M.R.P. (`) Per Unit	Std. Pkg. (Nos.)
MOG H1/S1 with MO 9-18	CS90548 #	1970	10
MOG H1/S1 with MO 25-45	CS90546 #	1970	10

Star Delta Starter - Link



Reversing /
star delta Link



Paralleling
Link



Contactor
MMS Link

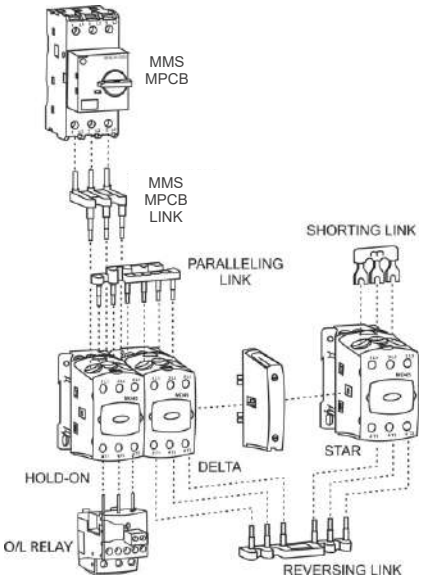


Shorting
Link

Suitable For	Cat. No.	M.R.P. (`) Per Unit	Std. Pkg. (Nos.)
MOG H1/S1 with MO 9-18	CS90549 #	2390	10
MOG H1/S1 with MO 25-45	CS90547 #	2390	10

#Ordering Suffix OOOO

Example of Star Delta Starter
Connection with Link



Ordering Suffix for Standard Coil Voltages

Ordering Suffix for Standard Coil Voltages			
AC Control		DC Control*	
Voltage (V)	Suffix	Voltage (V)	Suffix
24	G O O	24	4OOO
110	O	48	5OOO
220	AOOO	110	1OOO
240	KOOO	220	2OOO
415	BOOO		
440	DOOO		
	POOO		

Ordering suffix for Electronic coil Contactor		
AC / DC control Voltage (V)		
	Suffix	Contactor
20-48	JOOO	MDX 50-115
60-110	AOOO	MDX 50-115
110-240	BOOO	MDX 50-115 & MO 140-300
240-415	DOOO	MO 140-300

Note:
1) * For MX DC, MDX 9-38, MX0 DC, MO0 DC
2) For other coil voltages please contact nearest branch office

Spare Contact Kit and Spare Coil



ML Spare Kits



ML Spare Coils

Type	Spare Contact kit		Spare Coil	
	Cat. No.	M.R.P. (`) Per Unit	Cat. No.	M.R.P. (`) Per Unit
ML 1.5	SS95305^	5575	SS90873 ^	1840
ML 2	SS95307^	10200	SS90545 ^	3410
ML 3	SS95309^	18020		
ML 4	SS95311^	26710	SS91258 ~	6665
ML 6	SS95313^	49415		
ML 10	SS95315~	96245	SS91011 ~	14220
ML 12	SS95317~	103715		
MR	-	-	CS94102 ^	1400
MU16-2P	CS90217^	540	CS90793 ^	620
MU25-2P	CS90218^	715		
MU40-2P	CS90219^	1020		
MO 0 AC	-	-	CS94841 ^	1030

* MRCoils available till stock last

Note:

1) Coil voltages available for MU-2P are 220V, 240V, wide band coil 160-220V
2) Ordering suffix for wide band coil of MU-2P is NOOO

MO C Spare Coils		
Type	Cat. No.	M.R.P. (`) Per Unit
MO C3 - 30	CS96317^	1265
MO C40 - 60	CS96318^	3900
MO C75 - 100	CS96319^	6740

Front housing & Moving bridge kit and Combination coil with timer for ML contactor



Front housing and moving bridge kit		
Type	Cat. No.	M.R.P. (`) Per Unit
ML 1.5	ST28734~	1765
ML 2/ ML 3	ST23866~	2410
ML 4/ ML 6	ST28735~	4370
Combination coil with timer		
Type	Cat. No.	M.R.P. (`) Per Unit
ML 2	SS90650~	7530

Note:

1) Ordering Suffix for Spare Contact kit - OOOO
2) For Spare Coil Ordering Suffix refer page No. 10

~ Standard Packing is 4 ~
^ Standard Packing is 10
~~ Standard Packing is 50

Spare Contact Kit and Spare Coil



MNX Spare Coils



MCX Spare Kits

	Type	Spare Contact kit		Spare Coil	
		Cat. No.	M.R.P. (`) Per Unit	Cat. No.	M.R.P. (`) Per Unit
MO Contactors	MO 9 (1 NO)	CS94843^	1220	CS94841^	1030
	MO 12 (1 NO)	CS94844^	1580		
	MO 18 (1 NO)	CS94845^	1740		
	MO 9	CS96380^~	1220	CS96317^	1265
	MO 12 MO 18 MO 25	CS96381^~	1580		
	MO 32 MO 40 MO 45	CS96382^~	1740		
	MO 50 MO 60 MO 70	CS96383^~	2020		
	MO 80 MO 95 MO	CS96384^~	4565		
	110 MO 140 MO 185	CS96385^~	7705		
	MO 225 MO 250 MO	CS96386^~	7800		
	300	CS96387^~	8175	CS96318^	3900
	MO 140 (electronic coil)	CS96388^~	10590		
	MO 185 (electronic coil)	CS96389^~	11755		
	MO 225 (electronic coil)	CS96390^~	16175	CS96319^	6740
	MO 250 (electronic coil)	CS96391^~	20400		
	MO 300 (electronic coil)	CS96392^~	29805		
MNX Contactors	MNX 9	CS90357~	35490	CS90356~	15970
	MNX 12	CS90358~	42580		
	MNX 18	CS90359~	48755		
	MNX 22	CS94444~	58615	CS94442~	23295
	MNX 25	CS94443~	66155		
	MNX 32	CS90357~	35490	CS90855~	28930
	MNX 40	CS90358~	42580		
	MNX 50	CS90359~	48755		
	MNX 70	CS94444~	58615	CS90738~	29060
	MNX 80	CS94443~	66155		
	MNX 95	CS94123^	975	CS94105	925
	MNX 110	CS94124^	1265		
	MNX 140	CS94125^	1440		
	MNX 185	CS94269^	1600		
	MNX 225	CS94127^	2080		
	MNX 250	CS94128^	4030		
	MNX 300	CS94147^	6560		
	MNX 400	CS94150^	7230	CS94192^	3700
	MNX 550	CS94151^	10890		
	MNX 650	CS94152^	14840		
	MCX 01-04	CS94153~	20855	CS94196~	6340
	MCX 11	CS94154~	30195		
	MCX 12	CS94155~	36615		
	MCX 13	CS94156~	40805	CS94194~	14480
	MCX 22	CS94157~	47185		
	MCX 23	CS90310~	56170		
	MCX 32	CS90283~	62795	CS94195~	21460
	MCX 33	CS94161~	94780		
	MCX 34	CS94162~	127350	CS94193~	45355
	MCX 41	CS96336~	198840		
MCX Contactors	MCX 42	-	-	CS94105^	925
	MCX 43	CS94077^	3270	CS94009^	1110
	MCX 44	CS94078^	7170		
	MCX 45	CS90307^	11115		
	MCX 46	CS94331~	13745	ST91291 *	3110
	MCX 47	CS90078~	15465		
		CS94082^	26425	CS94196~	6340
		CS94083^	31060		
		CS94084^	36965		
		CS94295~	53585	CS94195~	21460
		CS94296~	61300		
		CS94297~	73555		
		CS94298~	103955		
		CS94299~	102040	CS94193~	45355
		CS94300~	112960		
		CS90308~	179215		

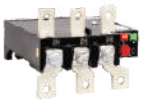
* Ordering Suffix for 240V AC - FOOO, 415V AC - ROOO

Type MN - Suitable for MNX Contactor

Features

- Available in 3 frame sizes from 0.2-570 A
- Ambient temperature compensated up to 55°C
- Built-in Single Phasing protection
- Manual and auto reset mode
- Conforms IS/IEC 60947-4-1 & IEC 60947-4-1


MN 2


MN 5


MN 12


MN 12L

Type of Mounting (Operation)	Relay Range (A)	Cat. No.	M.R.P. (`) Per Unit	Std. Pkg. (Nos.)
MN 2 (Directly Operated)	Direct Mounting on MNX 9 - 40			
	0.2 - 0.33	SS94141OOEO	2680	10
	0.3 - 0.5	SS94141OOGO	2680	10
	0.45 - 0.75	SS94141OOJO	2680	10
	0.6 - 1	SS94141OOKO	2680	10
	0.9 - 1.5	SS94141OOMO	2780	10
	1.4 - 2.3	SS94141OOPO	2780	10
	2 - 3.3	SS94141OOQO	2780	10
	3 - 5	SS94141OOSO	2780	10
	4.5 - 7.5	SS94141OOUO	2780	10
	6 - 10	SS94142OOVO	2780	10
	9 - 15	SS94142OOBO	2900	10
	14 - 23	SS94144OODO	3070	10
	20 - 33	SS94145OOEO	4630	10
	24 - 40	SS94145OOFO	4840	10
MN 5 (Directly Operated)	Direct Mounting on MNX 50 - 80			
	9 - 15	SS94135OOBO	5730	10
	14 - 23	SS94135OODO	5730	10
	20 - 33	SS94136OOEO	5730	10
	30 - 50	SS94136OOGO	7610	10
	36 - 60	SS94136OOTO	7700	10
	45 - 75	SS94137OOJO	8870	10
	66 - 110	SS94137OOKO	9520	10
MN 12 (CT Operated)	Separate Mounting			
	28 - 46.5	SB94211OOGO	14010	1
	42 - 69	SS94138OOHO	14010	1
	60 - 100	SS94138OOKO	14010	1
	90 - 150	SS94138OOMO	14010	1
	135 - 225	SS94138OOPO	15700	1
	180 - 300	SS94139OOQO	17610	1
	270 - 450	SS94139OORO	22110	1
MN 12L # (CT Operated)	Separate Mounting			
	42 - 69	SS94127OOHO	41570	1
	60 - 100	SS94127OOKO	41570	1
	90 - 150	SS94127OOMO	41570	1
	135 - 225	SS94127OOPO	41570	1
	180 - 300	SS94127OOQO	41570	1
	340 - 570	SS94127OOSO	41570	1

For motors with longer starting time (Trip class 30)

Type RTO - Suitable for MO Contactor

Features

- Ambient temperature compensated upto 55°C
- Built-in Single Phasing protection
- Manual and auto reset mode
- Front access to START and STOP/RESET buttons
- Sealable in OFF condition
- Conforms IS/IEC 60947-4-1 & IEC 60947-4-1


RTO 1


RTO 2


RTO 3

Type of Mounting (Operation)	Relay Range (A)	Cat. No.	M.R.P. (`) Per Unit	Std. Pkg. (Nos.)
RTO - 1 (Directly Operated)	Direct Mounting on MO 9 - 45			
	0.23 - 0.41	CS96355OOFO	4090	10
	0.31 - 0.55	CS96355OOGO	4090	10
	0.55 - 0.85	CS96355OOJO	4090	10
	0.78 - 1.2	CS96355OOLO	4090	10
	1.2 - 2.0	CS96355OONO	4090	10
	1.9 - 2.8	CS96355OOPO	4280	10
	2.4 - 3.6	CS96355OOQO	4280	10
	3.5 - 5.2	CS96355OOSO	4280	10
	4.6 - 6.7	CS96355OOTO	4280	10
	6.7 - 9.7	CS96355OOVO	4280	10
	8.5 - 12.5	CS96355OOAO	4330	10
	12.5 - 18.5	CS96356OOCO	4800	10
	17 - 25.5	CS96356OODO	4800	10
	25 - 37	CS96356OOEO	7300	10
	35 - 45	CS96356OOGO	7530	10
RTO - 2 (Directly Operated)	Direct Mounting on MO 50 - 70			
	5 - 7.5	CS96366OOUO	8610	1
	7 - 11 10.5	CS96366OOVO	8610	1
	- 16 15 -	CS96366OOBO	8610	1
	21	CS96366OOCO	8610	1
	20 - 31	CS96366OOEO	8960	1
	30 - 43	CS96366OOFO	9970	1
	40 - 57	CS96366OOSO	11920	1
	50 - 75	CS96367OOJO	12320	1
RTO - 3 (Directly Operated)	Direct Mounting on MO80 - 110			
	23 - 30	CS90873OOEO	13140	1
	29 - 38	CS96303OOQO	13660	1
	37 - 49	CS96304OOGO	14090	1
	47 - 62	CS96312OOTO	14350	1
	60 - 78	CS96313OOJO	16910	1
	75 - 110	CS96314OOKO	18470	1
RTO - 4 (CT Operated)	Separate Mounting			
	23.4 - 36	CS97096OOGO	22180	1
	36 - 60	CS97096OOJO	22180	1
	57 - 84	CS97096OOKO	22180	1
	72 - 108	CS97096OOLO	22180	1
	105 - 156	CS97096OOMO	22180	1
	138 - 201	CS97096OONO	26320	1
	201 - 291	CS97096OOQO	27490	1
	255 - 375	CS97096OORO	33710	1

Thermal Overload Relays [8536]

Type RX

Features

- Direct mounting on MX contactor
- Built-in single phasing protection
- Front access to START and STOP/RESET buttons

Type of Mounting (Operation)	Relay Range (A)	Cat. No.	M.R.P. (`) Per Unit	Std. Pkg. (Nos.)
RX (Directly Operated) Direct Mounting on MX Contactors	0.23-0.41	CS96357OOFO	2420	10
	0.45-0.78	CS96357OOJO	2420	10
	0.78-1.2	CS96357OOLO	2420	10
	1.2-1.9	CS96357OONO	2420	10
	1.8-2.8	CS96357OOPO	2420	10
	2.6-3.6	CS96357OOQO	2420	10
	3.6-5.2	CS96357OOSO	2420	10
	4.8-7 6.4-	CS96357OOTO	2420	10
	9.7 8.2-	CS96357OOVO	2420	10
	12.1	CS96357OOAO	2420	10

Type ML



ML

Type of Mounting (Operation)	Relay Range (A)	Cat. No.	M.R.P. (`) Per Unit	Std. Pkg. (Nos.)
ML 1 (Directly Operated)	Direct Mounting on ML 1.5 Contactors			
	0.15 - 0.25	SS91858OODO	6710	10
	0.25 - 0.4	SS91858OOFO	6710	10
	0.4 - 0.65	SS91858OOHO	6710	10
	0.6 - 1	SS91858OOKO	6710	10
	1 - 1.6	SS91858OOMO	6710	10
	1.5 - 2.5	SS91858OOPO	6710	10
	2.5 - 4	SS91858OORO	6710	10
	4 - 6.5	SS91858OOTO	6710	10
	6 - 10	SS91858OOVO	6710	10
	10 - 16	SS91858OOBO	6710	10
	11 - 18	SS91858OOCO	6710	10
ML 2 / ML 3 (Directly Operated)	Direct Mounting on ML 2/3 Contactors			
	9 - 14	SS91859OOAO	9930	10
	13 - 21	SS91859OOCO	9930	10
	20 - 32	SS91859OOEO	9930	10
	28 - 42	SS91859OOFO	9930	10

Type MU-2P (2 Pole)



MU-2P

Type of Mounting (Operation)	Relay Range (A)	Cat. No.	M.R.P. (`) Per Unit	Std. Pkg. (Nos.)
Direct Mounting on MU-2P Contactor	MU 2P (2 Pole)			
	1 - 1.6A	CS90207OOMO	1130	1
	1.5 - 2.5A	CS90207OOPO	1130	1
	2.5 - 4A 4	CS90207OORO	1130	1
	- 6.5A 6 -	CS90207OOTO	1130	1
	10A	CS90207OOVO	1130	1
	9 - 14A	CS90207OOAO	1130	1

Type of Mounting (Operation)	Relay Range (A)	Cat. No.	M.R.P. (`) Per Unit	Std. Pkg. (Nos.)
Direct Mounting on MU-2P Contactor	MU 2P (2 Pole)			
	11 - 18A	CS90207OOCO	1260	1
	13 - 22A	CS90207OODO	1260	1
	16 - 26A	CS90207OOBO	1260	1
	20 - 32A	CS90207OOEO	1580	1
	26 - 40A	CS90207OOFO	1580	1

Accessories for Thermal Overload Relays [8538]

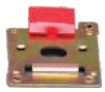
Accessories for Thermal Overload Relays



Relay Mounting Kit



Kit for Mounting MN5 Relay



Din Rail Mounting Kit MN2 Relay

Description	Cat. No.	M.R.P. (`) Per Unit	Std. Pkg. (Nos.)
Push button extn. unit for MN 2 Relays	SS94968OOOO	115	100
Kit for Mounting MN 2 Relay on ML 1.5 contactor	SS94701OOOO	395	50
Kit for Mounting MN 2 Relay separately (Direct Mounting Type)	SS94700OOOO	395	50
Kit for Mounting MN 5 Relay on MNX 95 / 110 / 140 contactor	SS94638OOOO	635	20
Kit for Mounting MN 5 Relay on ML 2 / ML 3 contactor	SS94151OOOO	410	20
Kit for Mounting MN5 Relay on ML 4 / ML 6 contactor	SS94152OOOO	565	20
DIN Rail Mounting Kit Relay on MN 2 Relay	SS91887OOOO	310	50

Separate Mounting Kit for RTO Relay



Relay Reset Cord for MN & RTO relay



400 mm



650 mm



900 mm



1200 mm

Description	Cat. No.	M.R.P. (`) Per Unit	Std. Pkg. (Nos.)
MN Relay reset cord - 400mm	SB94207OOOO	1430	1
MN Relay reset cord - 650mm	SB94208OOOO	1490	1
MN Relay reset cord - 900mm	SB94209OOOO	1525	1
MN Relay reset cord - 1200mm	SB94210OOOO	1715	1
RTO Relay reset cord - 400mm	CS90941OOOO	1430	1
RTO Relay reset cord - 650mm	CS90942OOOO	1490	1
RTO Relay reset cord - 900mm	CS90943OOOO	1525	1
RTO Relay reset cord - 1200mm	CS90944OOOO	1715	1

Description	Cat. No.	M.R.P.(`) Per Unit	Std. Pkg. (Nos.)
RTO-1 Relay Separate Mounting Kit	CS96335OOOO	535	1
RTO-2 Relay Separate Mounting Kit	CS96306OOOO	1260	1
RTO-3 Relay Separate Mounting Kit	CS96307OOOO	1800	1

Type REO - Electronic Overload Relay



To Experience the Benefits of REO Electronic Overload Relay

Click or Scan

Features

- Protections:
  - » Overload
  - » Single Phasing, Phase unbalance » Locked Rotor
  - » Earth Fault in REO 1.1G & REO 4G
- Trip indication
- Selectable Trip class - 10A, 10, 20, 30as per IEC 60947-4-1
- Conforms IS/IEC 60947-4-1 & IEC 60947-4-1

Model	Type of Mounting	Relay Range (A)	Without earth fault protection		Model	With in-built earth fault protection		Std. Pkg. (Nos.)
			Cat. No.	M.R.P. (`) Per Unit		Cat. No.	M.R.P. (`) Per Unit	
REO 1.1	Direct Mounting on MO 9-45	0.15-0.75	CS90418OOJO	10540	REO 1.1G	CS90423OOJO	17570	10
		0.6-3	CS90418OOQO	10540		CS90423OOQO	17570	10
		2.4-12	CS90418OOLO	10540		CS90423OOLO	17570	10
		9-45 18-	CS90418OOGO	11830		CS90423OOGO	18160	10
REO 4	Separate Mounting	90 72-	CS90418OOUO	31220	REO 4G	CS90423OOUO	31520	1
		360	CS90418OORO	42780		CS90423OORO	42940	1

Type REO - Electronic Over Current Relay

Electronic Overcurrent Relay (EOCR) is a type of Electronic relay that has tripping based on Definite mean time characteristics. The tripping of relay is decided by trip time selected by user.



Features

- Protections:
  - » Overload
  - » Single Phasing, Phase unbalance » Locked Rotor
- Settable start time (5s, 10s, 20s, 40s) and trip time (2s, 4s, 8s, 16s)
- Trip indication
- Conforms IS/IEC 60947-4-1 & IEC 60947-4-1

Model	Type of Mounting	Relay Range (A)	Cat. No.	M.R.P. (`) Per Unit	Std. Pkg. (Nos.)
REO 1.1c	Direct Mounting on MO 9-45	0.15-0.75	CS91911OOJO	13540	1
		0.6-3	CS91911OOQO	13540	1
		2.4-12	CS91911OOLO	13540	1
		9-45	CS91911OOGO	13540	1

Accessories for REO - Electronic Overload Relay

Description	Cat. No.	M.R.P. (`) Per Unit	Std. Pkg. (Nos.)
REO Relay Reset Cord - 400mm	CS90425OOOO	1430	1
Separate Mounting Kit for REO 1.1/1.1G/1.1c Relay	CS96335OOOO	535	1

RELIABLE ELECTRICAL

eMPR300D & eMPR300I

Microcontroller based Motor Protection Relay with Inbuilt CTs, Display and Communication.

Protect Your Motors, Enhance Plant Performance.



- Electronic Overload + Overcurrent Protection
- EOLR + EOCR in one product
- Current rating 1 to 88 Amp
- RS-485 Communication

Remote Monitoring of Motor Feeders with SMARTCOMM

eMPR150 - Electronic Motor Protection Relay



- Protections
  - » Overload
  - » Locked Rotor
  - » Single Phasing, Current Unbalance,
  - » Under Current
- Inbuilt CT's (1 A to 88 A)
- Trip indication
- Test facility
- Site Selectable – Fail-safe / Non Fail-safe mode
- Selectable trip class - 10A, 10, 20 and 30 as per IEC 60947-4-1

Model	Aux.Supply	Thermal O/L Range (A)	Device Code	Cat. No.	M.R.P. (`) Per Unit
eMPR150	110V AC	1-5.5	49, 51LR, 37, 46	EMPR150XAAO	4480
		4-22		EMPR150XABO	6830
		16-88		EMPR150XACO	9180
	230V AC	1-5.5		EMPR150XBAO	4480
		4-22		EMPR150XBBO	6830
		16-88		EMPR150XBCO	9180

eMPRselection must be done as per Line Current of Motor

eMPR300 - Electronic Motor Protection Relay with Built-in Earth Fault Protection



- Protections
  - » Overload
  - » Locked Rotor
  - » Single Phasing, Current Unbalance,
  - » Under Current
  - » Earth Fault
  - » Phase Sequence Reversal
- Inbuilt CT's (1 A to 88 A)
- Trip indication
- Test facility
- Site Selectable Phase Sequence - RYB/ RBY
- Site Selectable – Fail-safe / Non Fail-safe mode
- Selectable trip class - 10A, 10, 20 and 30 as per IEC 60947-4-1

Model	Aux.Supply	Thermal O/L Range (A)	Device Code	Cat. No.	M.R.P. (`) Per Unit
eMPR300	110V AC	1-5.5	49, 51LR, 64, 37, 46	EMPR300XAAO	11760
		4-22		EMPR300XABO	14110
		16-88		EMPR300XACO	16460
	230V AC	1-5.5		EMPR300XBAO	11760
		4-22		EMPR300XBBO	14110
		16-88		EMPR300XBCO	16460

eMPRselection must be done as per Line Current of Motor

New

eMPR300D - Electronic Motor Protection Relay with inbuilt display

One solution for both EOLR and EOCR applications



- Protections
  - » Overload
  - » Locked Rotor
  - » Single Phasing, Current Unbalance,
  - » Dry Run Protection with Programmable Under Current
  - » Earth Fault
  - » Phase Sequence Reversal
  - » Overcurrent
- 7 Segment LED Display
- Inbuilt CT's (1 A to 88 A)
- 5 trip records
- Test facility
- Site Selectable – Fail-safe / Non Fail-safe mode
- Selectable trip class - 10A, 10, 20 and 30 as per IEC 60947-4-1

Model	Aux.Supply	Thermal O/L Range (A)	Device Code	Cat. No.	M.R.P. (`) Per Unit
eMPR300D	85-265V AC	1-5.5	37, 46, 49, 51LR, 51, 64	EMPR300DCAO	12390
		4-22		EMPR300DCBO	14600
		16-88		EMPR300DCCO	16800

eMPRselection must be done as per Line Current of Motor

New

eMPR300I - Electronic Motor Protection Relay with inbuilt display & Modbus RTU Communication

One solution for both EOLR and EOCR applications

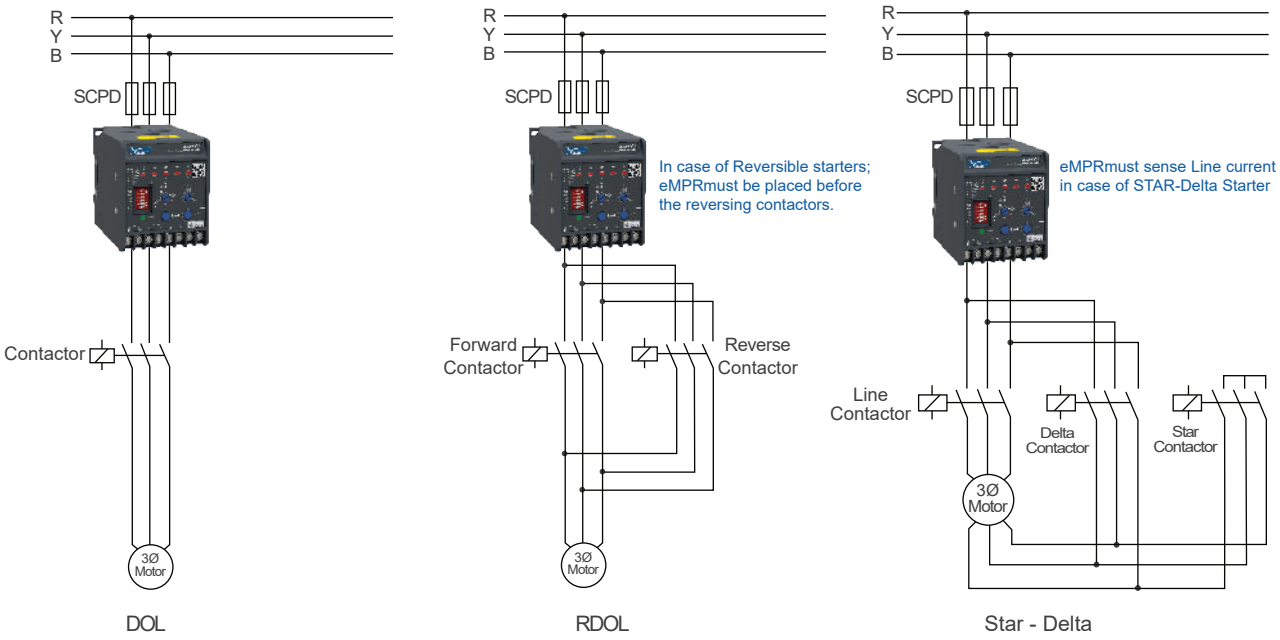


- Protections
  - » Overload
  - » Locked Rotor
  - » Single Phasing, Current Unbalance,
  - » Dry Run Protection with Programmable Under Current
  - » Earth Fault
  - » Phase Sequence Reversal
  - » Overcurrent
- 7 Segment LED Display
- Inbuilt CT's (1 A to 88 A)
- 5 trip records
- Test facility
- Site Selectable – Fail-safe / Non Fail-safe mode
- Selectable trip class - 10A, 10, 20 and 30 as per IEC 60947-4-1
- Inbuilt Communication port Modbus - RS-485

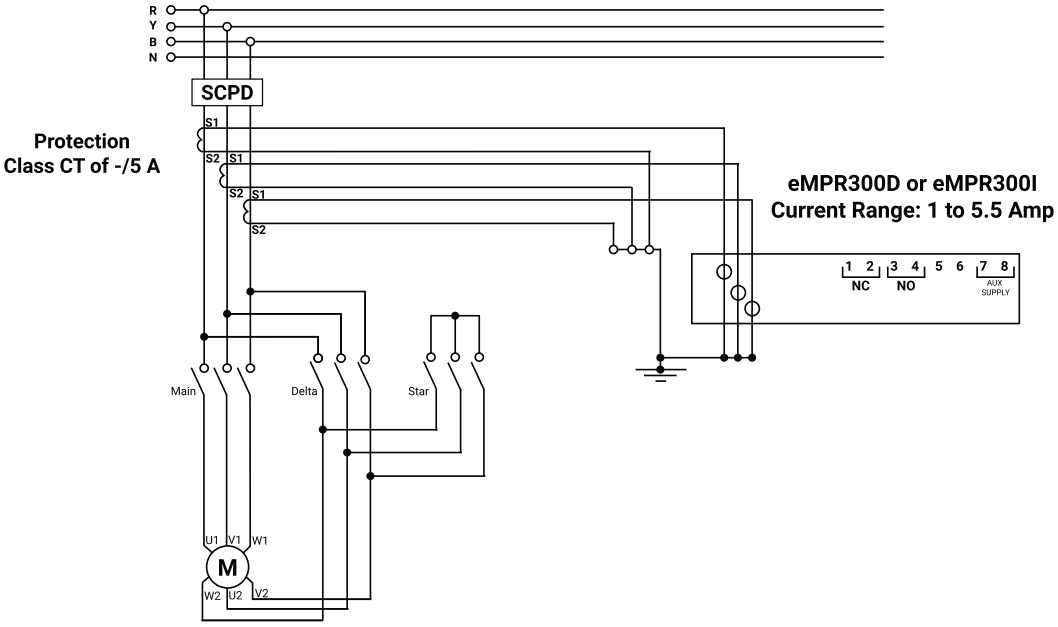
Model	Aux.Supply	Thermal O/L Range (A)	Device Code	Cat. No.	M.R.P. (`) Per Unit
eMPR300I	85-265V AC	1-5.5	37, 46, 49, 51LR, 51, 64	EMPR300ICAO	17850
		4-22		EMPR300ICBO	20060
		16-88		EMPR300ICCO	22260

eMPRselection must be done as per Line Current of Motor

Application Schemes : eMPR150, eMPR300, eMPR300D, eMPR300I



eMPR300D or eMPR300I with External 5P10 Class CTs for Motors with FLC > 88 Amp



Compact Motor Protection Relay - MM10

Features

- Flush Mounting with display
- Last trip data recording
- Protections:
  - » Thermal Overload with pre-alarm » Short Circuit
  - » Earth fault
  - » Phase loss, Unbalance, Phase reversal » Under Current
  - » Prolong starting, Locked Rotor



Model

	Aux. Supply	CT# secondary	Device code	Cat. No.	M.R.P. (`) Per Unit
MM10*	110 - 240 V AC / DC	5 Amp	37, 46, 49, 50 / 51, 51LR, 64	MM10240E005	46640

#- Protection Class CT
*- Available till stock last

Draw-out Motor Protection Relay - MPR21

- MPR21 – 37, 46, 48, 49, 50BF, 50, 51, 50N, 51N, 51LR, 64, 66, 74TCS.
- Microcontroller-based design
- Draw-out enclosure.
- CT rating#- 1A/ 5A (site selectable)
- Display of 250 event and 30 Trip records
- 128*64 graphical display
- Modbus RS-485 Communication
- Front Micro USB port for numrAL Suite



Model	Aux. Supply (V)	Communication	Cat. No.	M.R.P. (`) Per Unit
numrAL MPR21	20 - 60V DC	Modbus RS 485	NRMPR2A28RA	69000
	85 - 265V AC, 87 - 265V DC	Modbus RS 485	NRMPR2B28RA	69000

#- Protection Class CT

Redundant and Reliable network for Intelligent Motor Management Solution with iMMR



Powered By SMARTCOMM

iMMR - Intelligent Motor Management Relay

Besides control, protection and diagnostics, iMMR provides accurate real time data for analytics and insights into the performance of plant and process

Optimum Protection | Accurate real time data | Predictive Maintenance | Cloud Computing | Profinet/Modbus Protocol

Intelligent Motor Management Solutions for enhancement of process and energy efficiency.

Comprehensive Protection and Reliable Motor control with Ethernet based redundant communication network.

Real time monitoring and Predictive analytics with SmartComm

Ring & Star communication networking with Profinet & Ethernet IP

iMMR - Intelligent Motor Management Relay [8536]



iMMR is a comprehensive Motor protection, control and monitoring relay for intelligent MCC's

"Besides control, protection and diagnostics, iMMR provides accurate real time data for analytics and insights into the performance of plant and process"

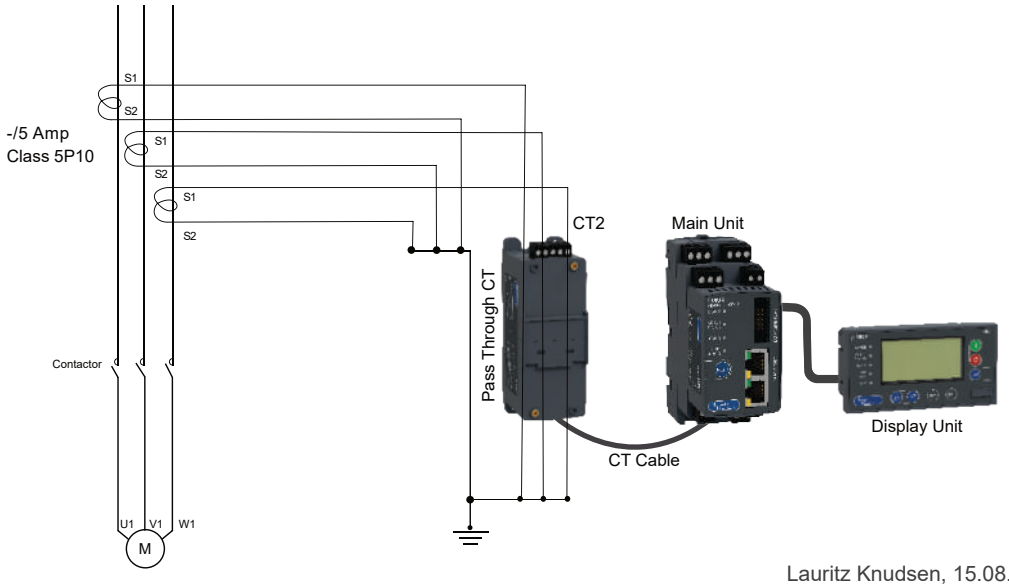
Features

- Comprehensive Current & Voltage based Protections
- 20 nos. of last trip records, 100 event records and 20 IRF Records are available
- Preprogrammed Starter logics reduces manufacturing and commissioning time
- Software iMMR Suite is available for Easy and effective configuration and monitoring
- Ethernet IP, Profinet, Modbus RTU, Modbus TCP/IP and Profibus-DP protocols available for seamless integration with DCS/PLC
- Redundant network for seamless Motor control and monitoring, with Profinet/ Ethernet IP

Product	Description	Cat. No.	M.R.P. (`) Per Unit
Main Unit	iMMR MODBUS RTU 85-265 VAC/DC	CS91244OOOO	30000
	iMMR PROFIBUS-DP 85-265 VAC/DC	*Available On Request	
	iMMR MODBUS TCP/IP 85-265 VAC/DC	*Available On Request	
	iMMREthernet IP 85-265 VAC/DC	*Available On Request	
	iMMRProfinet 85-265 VAC/DC	*Available On Request	
CT Unit	CT1 (0.3-3A) with 15 cm cable	CS91245OOOO	6900
	CT2 (2.5-25A) with 15 cm cable	CS91246OOOO	9200
	CT3 (7-70A) with 15 cm cable	CS91247OOOO	14600
CTVT Unit	CT1 (0.3-3A) + VT with 15 cm cable	CS91249OOOO	15900
	CT2 (2.5-25A) + VT with 15 cm cable	CS91250OOOO	18700
	CT3 (7-70A) + VT with 15 cm cable	CS91251OOOO	24600
Display Unit	iMMRDisplay unit without cable	CS91253OOOO	16000
Display Cable	iMMR Display Cable - 1 meter	XK13128OOOO	1400
	iMMR Display Cable - 2 meter	XK13129OOOO	2100
Expansion Unit	iMMR EXP 4DI + 2DO with 10 cm cable	*Available On Request	
	iMMREXP 6DI 110V/240V with 10cm cable	*Available On Request	
	iMMR EXP Earth Leakage + 2DI + 2DO with 10 cm cable	*Available On Request	
	iMMREXP 2AI + 1AO with 10 cm cable	*Available On Request	

* Please contact our nearest branch for details

iMMR with external CT's for Motors >37kW



iMMR selection guide

Main Unit + CT / CTVT Unit + Display Unit + Display Cable + Expansion Unit = iMMR for one motor

Main Unit	CT / CTVT Unit	Display Unit	Display Cable	Expansion Unit	iMMR for one motor
Select Main Unit based on required communication protocol.	For Current based protection select CT Unit. For Current & Voltage based protection select CTVT Unit.	Select a panel mounted Display Unit & Cable for monitoring and parametrization.		Add up to 5 Expansion Unit based on DI/DO & AI/AO requirement.	Complete package selection of iMMR.

Cat.no. selection guide

Modbus RTU communication and Current based protection and metering

Motor Rating	Total MRP	Main Unit - Modbus RTU	CT Unit	Display Unit	Display Cable - 2 meter
<1.1 KW	55000	CS91244OOOO	CS91245OOOO	CS91253OOOO	XK13129OOOO
1.1 KW to 11 KW	57300	CS91244OOOO	CS91246OOOO	CS91253OOOO	XK13129OOOO
11 KW to 37 KW	62700	CS91244OOOO	CS91247OOOO	CS91253OOOO	XK13129OOOO
>37 KW	57300	CS91244OOOO	CS91246OOOO*	CS91253OOOO	XK13129OOOO

* with External Protection class CT s of -/5Amp

Modbus RTU communication and Current + Voltage based protection and metering

Motor Rating	Total MRP	Main Unit - Modbus RTU	CTVT Unit	Display Unit	Display Cable - 2 meter
<1.1 KW	64000	CS91244OOOO	CS91249OOOO	CS91253OOOO	XK13129OOOO
1.1 KW to 11 KW	66800	CS91244OOOO	CS91250OOOO	CS91253OOOO	XK13129OOOO
11 KW to 37 KW	72700	CS91244OOOO	CS91251OOOO	CS91253OOOO	XK13129OOOO
>37 KW	66800	CS91244OOOO	CS91250OOOO*	CS91253OOOO	XK13129OOOO

* with External Protection class CT s of -/5Amp



Manual Motor Starters [8536]

Rocker Type

- MOG-S1: upto 32A
- Short circuit + Overload protection

Rotary Type

- MOG-H1M: upto32A
- MOG-H2M: 32A-63A
- Short circuit protection

Rotary Type

- MOG-H1: upto 32A
- MOG-H2: 32A-63A
- Short circuit + Overload protection

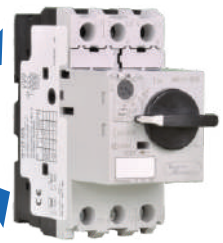
Rocker type and Rotary Type Manual Motor Starters conforms to IEC 60947-4-1

- Short circuit protection
- Over current protection

Circuit Breaker

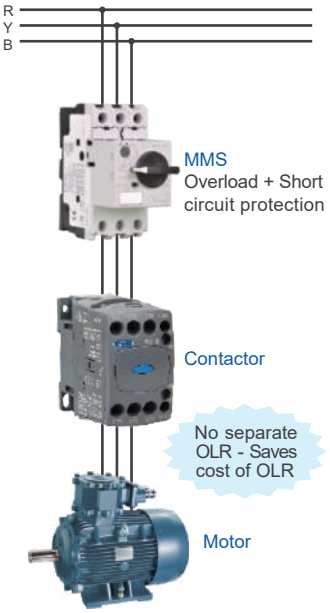
- Overload protection
- Phase loss protection
- Wide range of current adjustment dial
- Ambient temperature compensation

Thermal Overload Relay



MMS

- Compact
- High breaking capacity
- Short circuit protective coordination
- Reduction in wiring work
- High switching durability
- Padlocking feature available even without extended rotary handle
- Stand alone motor protection
- Common accessories



Type MOG-S1 (Rocker Type)

With short circuit & overload protection



Rating (A)	Recommended MotorRating at415V,3-Ph, 50Hz(KW)	Thermal Release range (A)	Instantaneous Trip Current(A)	Cat. No.	M.R.P. (`) Per Unit	Std. Pkg. (Nos.)
0.16	-	0.1 -0.16	2.1	ST41889OOOO	5360	1
0.25	0.06	0.16 -0.25	3.3	ST41890OOOO	5360	1
0.40	0.09	0.25 -0.40	5.2	ST41891OOOO	5360	1
0.63	0.12	0.40 -0.63	8.2	ST41892OOOO	6105	1
1.00	0.25	0.63 -1.00	13	ST41893OOOO	6105	1
1.60	0.55	1.00 -1.60	20.8	ST41894OOOO	6135	1
2.50	0.75	1.60 -2.50	32.5	ST41895OOOO	6135	1
4.00	1.50	2.50 -4.00	52	ST41896OOOO	6370	1
6.30	2.20	4.00 -6.30	81.9	ST41897OOOO	6370	1
10.00	4.00	6.30 -10.00	130	ST41898OOOO	6795	1
13.00	5.40	9.00 -13.00	169	ST41899OOOO	7645	1
16.00	7.50	11.00 -16.00	208	ST41900OOOO	8370	1
20.00	9.00	14.00 -20.00	260	ST41901OOOO	8790	1
25.00	12.50	19.00 -25.00	325	ST41902OOOO	9235	1 1
32.00	15.00	24.00 -32.00	416	ST41903OOOO	16405	

Note: Extended rotary handle cannot be fitted with MOG - S1

Type MOG-H1 (Rotary Type) - Frame1

With short circuit & overload protection



Rating (A)	Recommended Motor Rating at 415V, 3-Ph, 50Hz (KW)	Thermal Release range (A)	Instantaneous Trip Current	Cat. No.	M.R.P. (`) Per Unit	Std. Pkg. (Nos.)
0.16	-	0.1 - 0.16	2.1	ST41904OOOO	6000	1
0.25	0.06	0.16 - 0.25	3.3	ST41905OOOO	6215	1
0.40	0.09	0.25 - 0.40	5.2	ST41906OOOO	6215	1
0.63	0.12	0.40 - 0.63	8.2	ST41907OOOO	6950	1
1.00	0.25	0.63 - 1.00	13	ST41908OOOO	6950	1
1.60	0.55	1.00 - 1.60	20.8	ST41909OOOO	7175	1
2.50	0.75	1.60 - 2.50	32.5	ST41910OOOO	7175	1
4.00	1.50	2.50 - 4.00	52	ST41911OOOO	7310	1
6.30	2.20	4.00 - 6.30	81.9	ST41912OOOO	7375	1
10.00	4.00	6.30 - 10.00	130	ST41913OOOO	7860	1
13.00	5.40	9.00 - 13.00	169	ST41914OOOO	8715	1
16.00	7.50	11.00 - 16.00	208	ST41915OOOO	9375	1
20.00	9.00	14.00 - 20.00	260	ST41916OOOO	10105	1
25.00	12.50	19.00 - 25.00	325	ST41917OOOO	10505	1
32.00	15.00	24.00 - 32.00	416	ST41918OOOO	17030	1

Type MOG-H1M (Rotary Type) - Frame 1



With short circuit protection only

Rating (A)	Recommended Motor Rating at 415V, 3-Ph, 50Hz (KW)	Instantaneous Trip Current	Cat. No.	M.R.P. (`) Per Unit	Std. Pkg. (Nos.)
0.16	-	2.1	ST41923OOOO	5785	1
0.25	0.06	3.3	ST41924OOOO	5785	1
0.40	0.09	5.2	ST41925OOOO	5785	1
0.63	0.12	8.2	ST41926OOOO	6545	1
1.00	0.25	13	ST41927OOOO	6670	1
1.60	0.55	20.8	ST41928OOOO	6670	1
2.50	0.75	32.5	ST41929OOOO	6715	1
4.00	1.50	52	ST41930OOOO	6790	1
6.30	2.20	81.9	ST41931OOOO	6790	1
10.00	4.00	130	ST41932OOOO	7010	1
13.00	5.40	169	ST41933OOOO	7320	1
16.00	7.50	208	ST41934OOOO	7320	1
20.00	9.00	260	ST41935OOOO	7685	1
25.00	12.50	325	ST41936OOOO	7920	1
32.00	15.00	416	ST41937OOOO	12580	1

Type MOG-H2 (Rotary Type) - Frame 2



With short circuit & overload protection

Rating (A)	Recommended Motor Rating at 415V, 3-Ph, 50Hz (KW)	Thermal Release range (A)	Instantaneous Trip Current	Cat. No.	M.R.P. (`) Per Unit	Std. Pkg. (Nos.)
32.00	15.00	24.00 - 32.00	416	ST41919OOOO	20700	1
40.00	20.00	28.00 - 40.00	520	ST41920OOOO	22825	1
50.00	25.00	35.00 - 50.00	650	ST41921OOOO	28495	1
63.00	34.00	45.00 - 63.00	819	ST41922OOOO	28915	1

Type MOG-H2M (Rotary Type) - Frame 2



With short circuit protection only

Rating (A)	Recommended Motor Rating at 415V, 3-Ph, 50Hz (KW)	Instantaneous Trip Current	Cat. No.	M.R.P. (`) Per Unit	Std. Pkg. (Nos.)
32.00	15.00	416	ST41938OOOO	19845	1
40.00	20.00	520	ST41939OOOO	19985	1
50.00	25.00	650	ST41940OOOO	20550	1
63.00	34.00	819	ST41941OOOO	20980	1

Accessories for MOG [8538]



Short Circuit Alarm



Auxiliary + Alarm



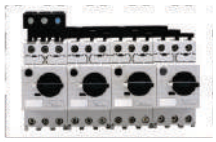
Extended Rotary Handle



Shunt Trip

Mounting Position*	Description	Cat. No.	M.R.P. (`) Per Unit	Std. Pkg. (Nos.)
F1/F2 F1/F2	Auxiliary Contact Front mtg. 1NO	ST41942OOOO	1000	10
L	Auxiliary Contact Front mtg. 1NC	ST41943OOOO	1000	10
	Auxiliary Contact Left side mtg. 2NO	ST41944OOOO	1375	1
L F2 F2	Auxiliary Contact Left side mtg. 1NO + 1NC	ST41945OOOO	1375	1
L	Auxiliary Contact Left side mtg. 2NC	ST41946OOOO	1375	1
L	Trip Alarm Contact Front mtg. 1NO	ST41947OOOO	1780	10
	Trip Alarm Contact Front mtg. 1NC	ST41948OOOO	1780	10
R R R R	Auxiliary + Alarm Left side mtg. 2NO	ST41949OOOO	1890	1
-	Short circuit alarm Left side mtg. 1NO + 1NC	ST41950OOOO	1890	1
-	Shunt trip 24V DC	ST41951OOOO	3635	1
	Shunt trip 110V, 50Hz	ST41952OOOO	3825	1
	Shunt trip 230V, 50Hz	ST42952OOOO	3825	1
	Under Voltage release, 110V, 50Hz	ST41953OOOO	3825	1
	Under Voltage release, 415V, 50Hz	ST41954OOOO	3825	1
	External operating handle, (Black) Frame 1	ST41955OOOO	2205	1
	External operating handle, (Black) Frame 2	ST41956OOOO	2205	1

* F1- Front left slot F2- Front right slot L- Left side R- Right side



MMSs with bus bar connection



Connecting Busbar link



3 Phase Feed in terminal

Description	Cat. No.	M.R.P. (`) Per Unit	Std. Pkg. (Nos.)
Connecting Busbar link			
2 MMS 45 mm width w/o acc	ST41957OOOO	1150	5
3 MMS 45 mm width w/o acc	ST41958OOOO	1265	5
4 MMS 45 mm width w/o acc	ST41959OOOO	1370	5
5 MMS 45 mm width w/o acc	ST41960OOOO	1745	5
2 MMS 45 mm width with one acc 9 mm	ST41961OOOO	1345	5
3 MMS 45 mm width with one acc 9 mm	ST41962OOOO	1450	5
4 MMS 45 mm width with one acc 9 mm	ST41963OOOO	1560	5
5 MMS 45 mm width with one acc 9 mm	ST41964OOOO	1665	5
2 MMS 55 mm width w/o acc	ST41966OOOO	2100	1
3 MMS 55 mm width w/o acc	ST41967OOOO	2395	1
4 MMS 55 mm width w/o acc	ST41968OOOO	2870	1
2 MMS 55 mm width with one acc 9 mm	ST41969OOOO	2285	1
3 MMS 55 mm width with one acc 9 mm	ST41970OOOO	2605	1
4 MMS 55 mm width with one acc 9 mm	ST41971OOOO	3060	1
2 MMS 55 mm width with two acc 18 mm	ST41972OOOO	2675	1
4 MMS 55 mm width with two acc 18 mm	ST41973OOOO	2985	1
Feed in terminal for 45 mm width Busbar	ST41965OOOO	1345	1
Feed in terminal for 55 mm width Busbar	ST41974OOOO	2320	1
Bus bar safety cover 45 mm width Busbar	ST41975OOOO	580	10
Bus bar safety cover 55 mm width Busbar	ST41976OOOO	630	10

acc: Accessories

Direct-on-Line Starters

in Sheet-Steel Enclosure Type MN / ML
(Motor Rating AC-3 Duty, 415V, 50Hz, 3-Ph)



MN 16



ML 1.5

Max. Motor Output at 415V, 3-Ph		Relay Max. Range (A)	Description	Cat. No.	M.R.P. (`) Per Unit	Std. Pkg. (Nos.)
HP	kW					
10.0	7.5	9 - 15	MN 16 DOL	SS94351	9820	1
15.0	11.0	14 - 23	MN 25 DOL	SS94352	14990	1
20.0	15.0	20 - 33	MN 32 DOL	SS94353	24200	1
30.0	22.5	30 - 50	MN 45 DOL	SS94017	41200	1
45.0	33.5	45 - 75	MN 65 DOL	SS94018	56600	1
30.0	22.5	28 - 42	ML 3 DOL	SS90722	53300	1

Fully Automatic Star-Delta Starters [8536]

in Sheet-Steel Enclosure Type MN / ML (Motor Rating AC-3 Duty, 415V, 50Hz, 3-Ph)

Max. Motor Output at 415V, 3-Ph		Relay Max. Range (A)	Description	Cat. No.	M.R.P. (`) Per Unit	Std. Pkg. (Nos.)
HP	kW					
17.5	13.0	9 - 15	MN 16 FASD	SS94362	33100	1
30.0	22.5	14 - 23	MN 25 FASD	SS94364	37000	1
40.0	30.0	20 - 33	MN 32 FASD	SS94366	60800	1
50.0	37.5	30 - 50	MN 45 FASD	SS94021	97500	1
75.0	55.0	45 - 75	MN 65 FASD	SS94022	161800	1
90.0	67.5	45 - 75	MN 80 FASD	SS94705	176700	1
150.0	110.0	66 - 110	MN 110 FASD	SS94706	231400	1
180.0	132.0	90 - 150	MN 140 FASD	SS94707	252800	1
50.0	37.5	28 - 42	ML3 FASD	SS90730	128500	1
75.0	55.0	45 - 75	ML4 FASD	SS90913	220000	1
125.0	90.0	66 - 110	ML6 FASD	SS90923	361000	1

Spares for MN Starters [8538]

Description	Cat. No.	M.R.P. (`) Per Unit	Std. Pkg. (Nos.)
Bracket for Mounting cont. MNX 25 - 32	SS94030OOOO	320	20
MN DOL/FASD Push Button	SS93941OOOO	550	10

Timers

Electronic Timers Type ST100 [9107]



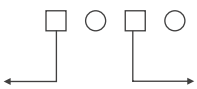
ST 100

Description	Cat. No.	M.R.P. (`) Per Unit	Std Pkg. (Nos.)
240 / 360 / 415V, 50Hz for			
3 - 30 secs.	ST80328OOOO	2470	1
12 - 120 secs.	ST80329OOOO	2470	1

Note:
ST 100 supplied with Mounting Kit, suitable for ET 100 replacement.
For Complete range of Timing Devices, please refer the Panel Accessories Price List.

Ordering Suffix for ML & MN Starters

Coil Voltages
B - 240 V
C - 360 V
D - 415 V
P - 440 V



Relay Range (A)	
ML	MN
A : 9 - 14	B : 9 - 15 D
B : 10 - 16 C	: 14 - 23 E :
: 13 - 21 E :	20 - 33 G :
20 - 32 F : 28	30 - 50 J :
- 42 G : 30 -	45 - 75 K :
50 J : 45 - 75	66 - 110 Q :
K : 66 - 110	2 - 3.3 S : 3 -
M : 90 - 150	5
P : 135 - 225	T : 36 - 60
Q : 180 - 310	U : 4.5 - 7.5
R : 2.5 - 4	V : 6 - 10 M
T : 13 - 21	: 90 - 150

Following combination of Type 2 Charts available

Fuse Based Charts		Fuseless Charts			
IE2/IE3	IE2/IE3	IE2	IE2	IE3	IE3
DOL	SD	DOL	SD	DOL	SD
FN	FN	MMS/MCCB	MMS/MCCB	MMS/MCCB	MMS/MCCB
MNX/MO	MNX/MO	MNX/MO	MNX/MO	MNX/MO	MNX/MO

Charts available at Iq of

- 50kA
- 65kA
- 80kA
- 100kA

MCCB charts are available with Microprocessor Releases too



RELIABLE ELECTRICAL

SETTING THE BENCHMARK IN WATER SUSTAINABILITY

Honoured with

WINNER OF WATER SUSTAINABILITY AWARD 2026

Recognised for our commitment to
Sustain. Conserve. Empower.



Experience the Future Of

IRRIGATION AUTOMATION SOLUTION WITH SMARTCOMM IMS

- Integrated standard solution - Wired & Wireless
- Cloud-based software
- Time-based, Volume-based & Sensor-based operation
- Remote application & control
- Program & scheduling
- Central monitoring with web & mobile application

Complete Your Panel with the widest range of Industrial Signalling Products



Rotary & Load Break Switches



Modular Remote Control Units



Timing Devices & Supply Monitors



Digital Panel Meters



Most Flexible Integrated ATS

Engineered for seamless power switchover and uninterrupted productivity: A comprehensive solution ensures smooth power transfer, making it suitable for a wide range of applications.



- Plug and Play Solution
- RS-485 for Seamless connectivity
- Application friendly
- Large Display unit
- No change in Footprint
- Features of C-line intact

Description	Type	Cat. No.	M.R.P. (`) Per Unit	Std. Pkg. (Nos.)
Integrated ATS, Frame 2-125A	125A	CK90161BATS	80000	1
Integrated ATS, Frame 2-160A	160A	CK90162BATS	85000	1
Integrated ATS, Frame 2-200A	200A	CK90163BATS	96100	1
Integrated ATS, Frame 3-250A	250A	CK90164BATS	114600	1
Integrated ATS, Frame 3-315A	315A	CK90165BATS	116500	1
Integrated ATS, Frame 4-400A	400A	CK90166BATS	138600	1
Integrated ATS, Frame 4-630A	630A	CK90167BATS	168200	1
Integrated ATS, Frame 5-800A	800A	CK90169BATS	233370	1
Integrated ATS, Frame 5-1000A	1000A	CK90170BATS	262500	1

Automatic Solution | Pre-wired | Flexible Settings



Switch to ATS

Now, experience seamless transfer between two power sources…

Convenience

- Ample Space for Cable Termination
- Ease of Generator Control (ON-OFF, Cooling Cycle Self-Test)
- Cyclic Event Logger: Logs 100 Events

Flexibility

- Priority Source Selection
- Adjustable Time Delay (0.1sec to 3 hours)
- Suitable for 3-Phase as well as 1-Phase Sources

Performance

- Wide range: 125A to 630A, 415V ac.
- Double-Break Contact System offering High Short-time Withstand (Icw)
- High Mechanical and Electrical Life: Double than requirement of IS/IEC standard
- Suitable for Aluminum Termination

Safety

- Protections: UV/OV, Phase Sequence, Single Phasing, Frequency
- Authorized Access Control through Password Protection
- Terminal Shrouds, Phase Barriers & Source Separator

Description	Type	Cat. No.	M.R.P. (`) Per Unit	Std. Pkg. (Nos.)
Enclosed ATS, Frame 2, 125A	125A	CK90161BSOO	105800	1
Enclosed ATS, Frame 2, 160A	160A	CK90162BSOO	121220	1
Enclosed ATS, Frame 2, 200A	200A	CK90163BSOO	126510	1
Enclosed ATS, Frame 3, 250A	250A	CK90164BSOO	147350	1
Enclosed ATS, Frame 3, 315A	315A	CK90165BSOO	154600	1
Enclosed ATS, Frame 4, 400A	400A	CK90166BSOO	178910	1
Enclosed ATS, Frame 4, 630A	630A	CK90167BSOO	217340	1

Chapter ID [8537]

For AuXC 2000 programming videos and more details please scan the QR code or click here

Customer Interaction Center (CIC)
Phone no: 022-6932 7800
Web: www.LK-EA.com | e-mail: CIC@LK-EA.com

Changeover Switch-Disconnector (Conforms to IEC 60947-3, IS/IEC 60947-3)

Features offered by Manual Changeover

- Range 63A to 2000A, 415V, AC 23A, 4P
- Enclosure version does not require separate cable gland box
- Terminal Shrouds, Source Separator and Phase Barriers inc
- Staggered Terminals make cable termination easy
- Suitable for horizontal as well as vertical mounting



Open execution



SS enclosure



Motorised Changeover

Features offered by Motorised Changeover

- Range 40 A to 2000A, 415V, AC 23A, 4P (Control Voltage 240 Vac)
- No change in HxWxD dimension of motorised and manual changeover switch
- Padlocking in OFF position
- Option for selection between manual and auto mode

Size	Rated Current (A)	Type	Manual Changeover Open Execution		Manual Changeover In Sheet Steel Enclosure#		Motorised Changeover Open Execution		Std. Pkg. (Nos.)
			Cat. No.	M.R.P. (`) Per Unit	Cat. No.	M.R.P. (`) Per Unit	Cat. No.	M.R.P. (`) Per Unit	
Fr 1	40	CO1-40	-	-	-	-	New CK90944BOOO	34240	1
	63	CO1-63	CO10630OOOO	7870	CO10630OSOO	12650	New CK90945BOOO	35710	1
	63	CO1-63	CO10630OOOD ▲	7640					
	100	CO1-100	CO11000OOOO	9960	CO11000OSOO	14050	New CK90946BOOO	42060	1
	100	CO1-100	CO11000OOOD ▲	9470					
	125	CO1-125	CO11250OOOO	13130	CO11250OSOO	17400	New CK90947BOOO	44720	1
Fr 2	125	CO2-125	CO21250OOOO	16270	CO21250OSOO	24790	CK90161BOOO	60630	1
	160	CO2-160	CO21600OOOO	17840	CO21600OSOO	26060	CK90162BOOO	75470	1
	200	CO2-200	CO22000OOOA	20990	CO22000OSOO	29970	CK90163BOOO	82290	1
Fr 3	250	CO3-250	CO32500OOOO	30350	CO32500OSOO	41430	CK90164BOOO	99530	1
	315	CO3-315	CO33150OOOO	33250	CO33150OSOO	43590	CK90165BOOO	104150	1
Fr 4	400	CO4-400	CO44000OOOO	47070	CO44000OSOO	57810	CK90166BOOO	135860	1
	630	CO4-630	CO46300OOOO	59950	CO46300OSOO	77090	CK90167BOOO	171070	1
Fr 5	630	CO5-630	CO56300OOOO	73070	-	-	CK90168BOOO	177690	1
	800	CO5-800	CO58000OOOO	79100	CO58000OSOO	147250	CK90169BOOO	248450	1
	1000	CO5-1000	CO51000OOOO	175400	CO51000OSOO	224490	CK90170BOOO	325770	1
Fr 6	1250	CO6-1250	CO61250OOOO	212300	-	-	CK90081BOOO	368300	1
	1600	CO6-1600	CO61600OOOO	266530	-	-	CK90082BOOO	452100	1 1
	2000	CO6-2000	CO62000OOOO	372380	-	-	CK90083BOOO	558610	

▲Direct handle version # Sheet Steel Enclosure version is with CO with extended handle
Note: Changeovers will be without inbuilt Aux contact and same to be purchased separately as an accessories if required.

Spares & Accessories for Changeover S-D [8538]



Auxiliary Contact



Operating Handle (63A to 200A)



Flip-able Handle (250A to 2000A)



Castell Type Lock

Description	Type	Cat. No.	M.R.P. (`) Per Unit	Std. Pkg. (Nos.)
Auxiliary Contact Kit (2 sets of C/O contact)	CO1-(63-125A) CO2-(125-	CX10002OOOO	770	1
	200A) CO3-(250-315A)	CX20002OOOO	1310	1
	CO4-(400-630A) CO5-(630-	CX30002OOOO	1860	1
	1000A) CO6-(1250-2000A)	CX40002OOOO	1970	1
	CO1-(63-125A) CO2-(125-	CX50002OOOO	2290	1
	200A) CO3-(250-315A)	CX60002OOOO	2500	1
Operating Handle Kit (handle + shaft + center bush + bush clip)	CO4-(400-630A) CO5-(630-	CX10001OOOO	1170	1
	1000A) CO6-(1250-	CX30001OOOO	2460	1
	2000A)*** CO-(125-1000A)	CK90392OOOO	2530	1
	CO6-(1250-2000A) CO1-	CX40001OOOO	2570	1
	(63-125A) Top Side CO1-	CX50001OOOO	2780	1
	(63-125A) Bottom Side	CX60001OOOO	3160	1
Castell Type Lock$		CX40004OOOO	4370	1
		CX60004OOOO	4180	1
Output shorting link		CX10005OOOT	1220	1
		CX10005OOOB	1440	1
Operating Handle for Motorised Changeover	C/OFrame 1 (40-125A) C/	CK90937OOOO	1650	1
	OFrame 2 & 3 (125-315A) C/	CK90374OOOO	2210	1
	OFrame 4 & 5 (400-1000A)	CK90378OOOO	2780	1
	C/OFrame 6 (1250-2000A	CK90645OOOO	6910	1

$ Chapter ID [8301]

Automatic Transfer Controllers (ATC) for Motorised Changeover [8538]



AST Controller with wire harness



AuXC-2000 Controller with wire harness



Illuminated Push Button assembly

Description	Type		Cat. No.	M.R.P. (`) Per Unit	Std. Pkg. (Nos.)
Automatic Transfer Controllers	AST Controller with wire harness		CK90192OOOO	29620	1
	AuXC-2000 Controller** with wire harness	AuXC-2000 β wire harness	ATC2000OOOO	52600	1
			CK90099OOOO	6040	1
Control Accessories	Illuminated Push Button assembly with Wire harness		CK90195OOOO	6030	1

β Chapter ID [9032]

** Note: For communication version of AuXC controller refer page no-6

*** For CO6,the kit will have only operating handle.



CZ Bypass Switches

125A to 630A

Bypass Switches are meant for special application and help to maintain continuity of power supply to the load by simply ‘bypassing’ UPS or Servo stabilizer. Removal of the UPS or Servo, for maintenance or repair is safe, as it is isolated from both input and output sides in the ‘bypass’ mode.

Time-Saving Convenient solution
No hassle of operating multiple devices for safe and positive isolation on both sides of Servo/UPS

Phase Barriers
Easy to fit and long phase barriers for complete isolation between phases

Suitable for Aluminum Termination
Entire range is suitable for Aluminum cable/link termination as per the size prescribed by the standards

Safety interlock and padlocking
Door interlock is provided in ON position with defeat feature Also, Bypass Switch can be padlocked in OFF position; upto 3 padlocks can be fitted

Mounting flexibility
Suitable for mounting in horizontal as well as vertical orientation. Also, the shaft is ‘cut-able’ and can be adjusted to suit different panel depth requirements.

Finger proof protection (IP30)
Terminal Shrouds provide protection against accidental contact with live terminals.
As it is swivellable, there is no need to remove during termination/inspection

4P, Open Execution with extended handle

Frame	Rating 440Vac, AC 23A	Cat No.	M.R.P. (`) Per Unit	Std. Pkg. (Nos.)
CZ1	125A	CK90813OOOO	30650	1
CZ1	160A	CK90814OOOO	31930	1
CZ1	200A	CK90815OOOO	33760	1
CZ1	250A	CK90816OOOO	44860	1
CZ1	315A	CK90817OOOO	50250	1
CZ2	315A	CK90875OOOO	55530	1
CZ2	400A	CK90876OOOO	67750	1
CZ2	630A	CK90877OOOO	82210	1

Accessories for CZ Bypass switch

Frame	Description	Cat No.	M.R.P. (`) Per Unit	Std. Pkg. (Nos.)
CZ1/ CZ2	Auxiliary Contact Kit* (1 C/O contact)	CK90805OOOO	735	1

Chapter ID [8538]

* Upto 2 C/O contacts can be installed for status/ indication

Customer Interaction Center (CIC)
Phone no: 022-6932 7800
Web: www.LK-EA.com | e-mail: CIC@LK-EA.com

Multiple Applications, One Solution

CZ Switch Disconnectors



- Compact 2P, 3P & 4P configurations
- 1250Vac Insulation Voltage
- AC-23A @ 690Vac without derating
- Suitable for 50°C ambient temperature
- Direct termination without the need of any extended links
- Extra assurance with visible contact system
- High electrical and mechanical life (double than requirement in IS/IEC standards)
- Terminal shrouds and phase barriers are provided as standard offering along with the product
- Higher ground clearance ensure safety at all times

Versions: Upto 690V

4P AC Switch Disconnector					
Frame	Rating Upto 690V, AC 23A	Handle Type	CAT No.	M.R.P.(`) PerUnit	Std. Pkg. (Nos.)
CZ1	125A	Extended	CK90769OOOO	9900	1
CZ1	160A	Extended	CK90770OOOO	13100	1
CZ1	200A	Extended	CK90771OOOO	15200	1
CZ1	250A	Extended	CK90772OOOO	17100	1
CZ1	315A	Extended	CK90773OOOO	19400	1
CZ2	315A	Extended	CK90857OOOO	20200	1
CZ2	400A	Extended	CK90858OOOO	25300	1
CZ2	630A	Extended	CK90859OOOO	33900	1
CZ1	125A	Direct	CK90799OOOO	9590	1
CZ1	160A	Direct	CK90800OOOO	12500	1
CZ1	200A	Direct	CK90801OOOO	14500	1
CZ1	250A	Direct	CK90802OOOO	16300	1
CZ1	315A	Direct	CK90803OOOO	17200	1
CZ2	315A	Direct	CK90872OOOO	19100	1
CZ2	400A	Direct	CK90873OOOO	24500	1
CZ2	630A	Direct	CK90874OOOO	30800	1

Chapter ID [8536]

4P AC Switch Disconnector in SS enclosure (with extended handle)				
Frame	Rating Upto 690V, AC 23A	CAT No.	M.R.P.(`) PerUnit	Std. Pkg. (Nos.)
CZ1	125A	CK90819OOOO	20400	1
CZ1	160A	CK90820OOOO	23600	1
CZ1	200A	CK90821OOOO	26600	1
CZ1	250A	CK90822OOOO	30500	1
CZ1	315A	CK90823OOOO	32200	1
CZ2	315A	CK90878OOOO	38400	1
CZ2	400A	CK90879OOOO	44500	1
CZ2	630A	CK90880OOOO	52100	1

Chapter ID [8536]

Accessories for CZ Switch Disconnector				
Frame	Description	CAT No.	M.R.P.(`) PerUnit	Std. Pkg. (Nos.)
CZ1/CZ2	Auxiliary Contact Kit (1 C/O contact)	CK90805OOOO	735	1
CZ1	Extended Handle	CK90740OOOO	1535	1
CZ2	Extended Handle	CK90842OOOO	1765	1

Chapter ID [8538]

Notes:
- 2P and 3P versions are also available. Please contact our nearest branch office for further details
- Please refer next page for details on offerings for Solar applications

CZ Switch Disconnectors - For Solar/PV Application

- Designed for tough conditions at solar sites
- Separate versions for 800Vac string inverter systems and upto 1500Vdc for central inverter systems
- Suitable for Aluminum termination of double the size recommended by IEC standards
- 1250Vac Rated Insulation Voltage
- Direct termination without the need of any extended links
- Terminal shrouds and phase barriers are provided as standard offering along with CZ AC Isolator

Versions: 800Vac I 1000Vdc I 1500Vdc



AC SD

- Operational Voltage upto 800Vac

800Vac, 3P Switch Disconnectors

Frame	Rating	Handle Type	Cat. No.	M.R.P.(`) Per Unit
CZ1	125A	Direct	CK90757OOOO	*
CZ1	160A	Direct	CK90758OOOO	*
CZ1	200A	Direct	CK90759OOOO	*
CZ1	250A	Direct	CK90760OOOO	*
CZ1	315A	Direct	CK90761OOOO	*
CZ2	315A	Direct	CK90851OOOO	*

800Vac, 3P Switch Disconnectors

Frame	Rating	Handle Type	Cat. No.	M.R.P.(`) Per Unit
CZ2	400A	Direct	CK90852OOOO	*
CZ2	630A	Direct	CK90853OOOO	*
CZ1	125A	Extended	CK90763OOOO	*
CZ1	160A	Extended	CK90764OOOO	*
CZ1	200A	Extended	CK90765OOOO	*
CZ1	250A	Extended	CK90766OOOO	*
CZ1	315A	Extended	CK90767OOOO	*
CZ2	315A	Extended	CK90854OOOO	*
CZ2	400A	Extended	CK90855OOOO	*
CZ2	630A	Extended	CK90856OOOO	*

Chapter ID [8536]



DC SD

- Operational Voltage 1000Vdc & 1500Vdc

DC Switch Disconnectors

Frame	Rating	Voltage	No. of Poles	Description	Cat. No.	M.R.P.(`) PerUnit
CZ1	125A	1000Vdc	2	Direct Handle,Sideoperated	CK90793OOOO	*
CZ1	160A	1000Vdc	2	Direct Handle,Sideoperated	CK90794OOOO	*
CZ1	200A	1000Vdc	2	Direct Handle,Sideoperated	CK90795OOOO	*
CZ1	250A	1000Vdc	2	Direct Handle,Sideoperated	CK90796OOOO	*
CZ1	315A	1000Vdc	2	Direct Handle,Sideoperated	CK90797OOOO	*
CZ2	315A	1000Vdc	2	Direct Handle,Sideoperated	CK90869OOOO	*
CZ2	400A	1000Vdc	2	Direct Handle,Sideoperated	CK90870OOOO	*
CZ2	630A	1000Vdc	2	Direct Handle,Sideoperated	CK90871OOOO	*
CZ0	16A	1500 Vdc	4	Direct Handle,Center operated	CK91314OOOO	*
CZ0	2 5 A	1500 Vdc	4	Direct Handle,Center operated	CK91315OOOO	*
CZ0	3 2 A	1500 Vdc	4	Direct Handle,Center operated	CK91316OOOO	*
CZ0	4 0 A	1500 Vdc	4	Direct Handle,Center operated	CK91317OOOO	*
CZ1	125A	1500Vdc	2	Direct Handle,Sideoperated	CK90787OOOO	*
CZ1	160A	1500Vdc	2	Direct Handle,Sideoperated	CK90788OOOO	*
CZ1	200A	1500Vdc	2	Direct Handle,Sideoperated	CK90789OOOO	*
CZ1	250A	1500Vdc	2	Direct Handle,Sideoperated	CK90790OOOO	*
CZ1	315A	1500Vdc	2	Direct Handle,Side operated	CK90791OOOO	*
CZ2	315A	1500Vdc	3	Direct Handle,Sideoperated	CK90866OOOO	*
CZ2	400A	1500Vdc	3	Direct Handle,Sideoperated	CK90867OOOO	*
CZ2	630A	1500Vdc	3	Direct Handle,Sideoperated	CK90868OOOO	*

Chapter ID [8536]
*Available on Request

DC Switch Disconnectors

Frame	Rating	Voltage	No. of Poles	Description	Cat. No.	M.R.P.(`) PerUnit
CZ2	315A	1500Vdc	2	Direct Handle,Side operated	CK91157OOOO	*
CZ2	400A	1500Vdc	2	Direct Handle,Side operated	CK91158OOOO	*
CZ2	500A	1500Vdc	2	Direct Handle,Side operated	CK91159OOOO	*
CZ2	630A	1500Vdc	2	Direct Handle,Side operated	CK91160OOOO	*
CZ2	315A	1500Vdc	2	Direct Handle,Center operated	CK91161OOOO	*
CZ2	400A	1500Vdc	2	Direct Handle,Center operated	CK91162OOOO	*
CZ2	500A	1500Vdc	2	Direct Handle,Center operated	CK91163OOOO	*
CZ2	630A	1500Vdc	2	Direct Handle,Center operated	CK91164OOOO	*
CZ2	315A	1500Vdc	2	Extended Handle,Side operated	CK91165OOOO	*
CZ2	400A	1500Vdc	2	Extended Handle,Side operated	CK91166OOOO	*
CZ2	500A	1500Vdc	2	Extended Handle,Side operated	CK91167OOOO	*
CZ2	630A	1500Vdc	2	Extended Handle,Side operated	CK91168OOOO	*
CZ2	315A	1500Vdc	2	Extended Handle,Center operated	CK91169OOOO	*
CZ2	400A	1500Vdc	2	Extended Handle,Center operated	CK91170OOOO	*
CZ2	500A	1500Vdc	2	Extended Handle,Center operated	CK91171OOOO	*
CZ2	630A	1500Vdc	2	Extended Handle,Center operated	CK91172OOOO	*
CZ2	315A	1500Vdc	4	Direct Handle,Center operated	CK91177OOOO	*
CZ2	400A	1500Vdc	4	Direct Handle,Center operated	CK91178OOOO	*
CZ2	500A	1500Vdc	4	Direct Handle,Center operated	CK91179OOOO	*
CZ2	630A	1500Vdc	4	Direct Handle,Center operated	CK91180OOOO	*
CZ2	315A	1500Vdc	4	Extended Handle,Center operated	CK91185OOOO	* * * *
CZ2	400A	1500Vdc	4	Extended Handle,Center operated	CK91186OOOO	
CZ2	500A	1500Vdc	4	Extended Handle,Center operated	CK91187OOOO	
CZ2	630A	1500Vdc	4	Extended Handle,Center operated	CK91188OOOO	

Chapter ID [8536]
*Available on Request

Note: CZ1 & CZ2 DC will be without inbuild terminal shroud & same to be purchased separately as an accessory if required

Frame	Description	Cat. No.	M.R.P. (`) Per Unit	Std. Pkg. (Nos.)
CZ2 DC 2P	Terminal Shroud	CK50191OOOO	1000	1
CZ2 DC 4P	Terminal Shroud	CK50072OOOO	1100	1
CZ1 DC 2P	Terminal Shroud	CK50060OOOO	700	1

Chapter ID [8538]

gPV Fuses [8536] New

Features offered by Photovoltaic Fuse, gPV

- Conforms to IEC 60269-6
- Range: 2A to 32A, 1000V, DC
- Range: 2A to 32A, 1500V, DC
- High breaking capacity: 20kA

Cylindrical fuse links Type gPV 1000Vdc New



gPV Fuse

Size	Rated Current (A)	Description	Cat. No.	M.R.P. (`) Per Unit	Std. Pkg. (Nos.)
10 X 38	2	1000Vdc Fuse size 10 x 38 Suitable for Fuse holder PV10DC1038FH	PV10DC103802	145	1 2
	3		PV10DC103803	145	1 2
	4		PV10DC103804	145	1 2
	5		PV10DC103805	145	1 2
	6 8		PV10DC103806	145	1 2
	1 0		PV10DC103808	145	1 2
	1 2		PV10DC103810	145	1 2
	1 5		PV10DC103812	145	1 2
	1 6		PV10DC103815	255	1 2
	2 0		PV10DC103816	255	1 2
	2 5		PV10DC103820	255	1 2
	3 0		PV10DC103825	345	1 2
	32		PV10DC103830	370	1 2
			PV10DC103832	370	12

Cylindrical fuse links Type gPV 1500Vdc New



gPV Fuse

Size	Rated Current (A)	Description	Cat. No.	M.R.P. (`) Per Unit	Std. Pkg. (Nos.)
10 X 85	2	1000Vdc Fuse size 10 x 38 Suitable for Fuse holder PV10DC1038FH	PV15DC108502	430	6
	4		PV15DC108504	430	6
	6 8		PV15DC108506	430	6
	1 0		PV15DC108508	430	6
	1 5		PV15DC108510	430	6
	1 6		PV15DC108515	430	6
	2 0		PV15DC108516	430	6
	2 5		PV15DC108520	570	6
	3 0		PV15DC108525	570	6
	32		PV15DC108530	715	6 6
			PV15DC108532	715	

Cylindrical fuse links + fuse holder Type gPV 1000Vdc New



Fuse + Fuse Holder 1000V DC

Size	Rated Current (A)	Description	Cat. No.	M.R.P. (`) Per Unit	Std. Pkg. (Nos.)
10 X 38	2 0	Fuse + Fuse holder	PV10DC103820A	500	6
	2 5		PV10DC103825A	500	6
	3 0		PV10DC103830A	520	6 6
	32		PV10DC103832A	570	

Cylindrical fuse links + fuse holder Type gPV 1500Vdc New



Fuse + Fuse Holder 1500V DC

Size	Rated Current (A)	Description	Cat. No.	M.R.P. (`) Per Unit	Std. Pkg. (Nos.)
10 X 85	2 0	Fuse + Fuse holder	PV15DC108520A	1140	6
	2 5		PV15DC108525A	1140	6
	3 0		PV15DC108530A	1430	6 6
	32		PV15DC108532A	1430	

Switch-Disconnector Units [8536]

Type FN & C-Line Switch Disconnector (2P/TPN/4P)


FN 2P S-D


FN TPN S-D

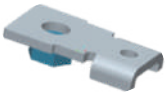
Features offered by S-D
- Range 32A to 2000A, 415V, AC 23A
- Conforms to IEC 60947-3, IS/IEC 60947-3
- Door interlock & padlock facility
- Telescopic shaft for depth adjustment
- Flip-able handle 1000A and above

Size	Rated Current (A)	Open Execution 2P S-D			Std. Pkg. (Nos.)	Open Execution TPN S-D*			Std. Pkg. (Nos.)
		Type	Cat. No.	M.R.P. (`) Per Unit		Type	Cat. No.	M.R.P. (`) Per Unit	
Fr 1	32	FN 32 2P	SK90418OOOO	3100	1	FN 32 TPN / 4P	SK95541OOOO	3700	1
	63	FN 63 2P	SK90419OOOO	3560	1	FN 63 TPN / 4P	SK95540OOOO	4420	1
Fr 2	100	FN 100 2P	SK90420OOOO	6410	1	FN 100 TPN	SK95571OOOO	7970	1
	125	FN 125 2P	SK90421OOOO	8030	1	FN 125 TPN	SK95405OOOO	10000	1
Fr 3	200	FN 200 2P	SK90450OOOO	13200	1	FN 200 TPN	SK95607OOOO	15600	1
	250	FN 250 2P	SK90454OOOO	14700	1	FN 250 TPN	SK95683OOOO	17900	1
Fr 4	315	FN 315 2P	SK90465OOOO	19900	1	FN 315 TPN	SK95609OOOO	21700	1
	400	FN 400 2P	SK90466OOOO	21000	1	FN 400 TPN	SK95610OOOO	25100	1
Fr 5	630	FN 630 2P	SK90467OOOO	33600	1	FN 630 TPN	SK95611OOOO	39500	1
	800	FN 800 2P	SK90468OOOO	36100	1	FN 800 TPN	SK95551OOOO	42400	1
	1000	FN 1000 2P	SK90469OOOO	46500	1	FN 1000 TPN	SK95710OOOO	65300	1
Fr 6	1000	-	- - - -	-	-	C-Line SD 1000 4P$	COS1000OO4O	79500	1
	1250	-		- - -	-	C-Line SD 1250 4P$	COS1250OO4O	99100	1
	1600	-			-	C-Line SD 1600 4P$	COS1600OO4O	126000	1
	2000	-			-	C-Line SD 2000 4P$	COS2000OO4O	165200	1

$ For C-Line SD 3P (1000A to 2000A), please contact nearest branch office
* For Switched Neutral Pole in FN TPN S-D, order Switched Neutral Kit separately. Refer 'Spares & Accessories for type FN' table
* FN SDF and FN SD models are supplied without terminal shrouds

Spares & Accessories for type FN [8538]


Handle Assembly


Earthing Link


Switched Neutral Kit


Auxiliary Contact Kit


Castell Type Lock

Description	Type	Cat. No.	M.R.P. (`) Per Unit	Std. Pkg. (Nos.)
Auxiliary Contact Kit (1NO + 1 NC)	FN 32 / 63	SK91302	840	1
	FN 100 / 125 / 160	SK91328	1020	1
	FN 200 / 250	SK91329	1370	1
	FN 315 / 400 / 630	SK91330	1430	1
	FN 800/630(1)	CK91034#	1430	1
2nd Aux. Contact (1NO + 1NC)	FN 32 / 63	SK90670	910	1
	FN 100 to FN 1000	SK90696	1050	1
Earthing Link	FN 32 to FN 1000@	CK90396	840	1
Handle Assembly - A	FN 32 / 63	SK91257	800	1
	FN 100 to FN 250	SK91258	1700	1
	FN 315 / 400 / 630 / 800	SK91259#	1880	1
Handle Assembly - B	FN 32 / 63	SK91277	800	1
	FN 100 to FN 250	SK91278	1700	1
	FN 315 / 400 / 630 / 800	SK91279#	1880	1
Handle Assembly - CE	FN 32 / 63	SK91337	470	1
Interphase Barrier Kit	FN 200	SK91343	720	
	FN 315 / 400	SK91344	760	1
	FN 630 / 800	SK91345#	780	

Description	Type		Cat. No.	M.R.P. (`) Per Unit	Std. Pkg. (Nos.)
Castell Type Lock$	FN 100 / 125 / 160 / 200 / 250	A	SK00333	4010	1
		B	SK00334	4010	1
		C	SK00335	4010	1
		D	SK00336	4010	1
	FN 315 / 400 / 630 / 800	A	SK00345#	4010	1
		B	SK00346#	4010	1
		C	SK00347#	4010	1
		D	SK00348#	4010	1
Switched Neutral Kit	FN 100 / 125 / 160		SK95233	7710	1
	FN 200 / 250		SK95516	8210	1
	FN 315 / 400		SK95517	8870	1
	FN 630 / 800		SK95546#	12290	1

@For terminating earth busbar upto 25mm width. Order Qty 1 for 10 earthing links
(1)FN 630 units manufactured from Dec-2025: Use Auxiliary Contact CK91034.
FN 630 units manufactured before Dec-2025: Use Auxiliary Contact Sk91330.

Fuse pulling handle [8538]


For Type HN fuse-link


For Type HF fuse-link

Description	Cat. No.	M.R.P. (`) Per Unit	Std. Pkg. (Nos.)
Fuse pulling handle for HF Fuse-link from 2A-63A	SK91185	340	1
Insulated fuse pulling handle for Type HN fuse-link from 63A-800A	SF90126	1170	1

Spares & Accessories for type COS Switch-Disconnector [8538]

Type	Cat. No.	M.R.P. (`) Per Unit	Std. Pkg. (Nos.)
Auxiliary Contact Kit (1 sets of C/O contact)	CXS6002	1410	1
Operating Handle	CXS6001	3020	1
Castell Type Lock$	CX60004	4010	1

$ Chapter ID [8301] # Also suitable for Switch-Disconnector FN 1000

Notes: 1) Add suffix "OOOO" to all cat nos. of Spares and Accessories.

Type TPN S-D-F suitable for DIN fuse-link (TPN & FP) in open execution

Features offered by FN S-D-F

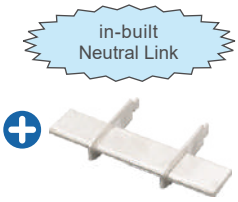
- Range 32A to 800A, 415V, AC 23A
- Conforms to IEC 60947-3, IS/IEC 60947-3
- Phase Barriers included
- Telescopic shaft for depth adjustment
- TPN SDF has isolable neutral
- 4P SDF has Switched Neutral Pole and is 100%rated
- Door interlock & padlock facility



FN - TPN S-D-F
(Open Execution)



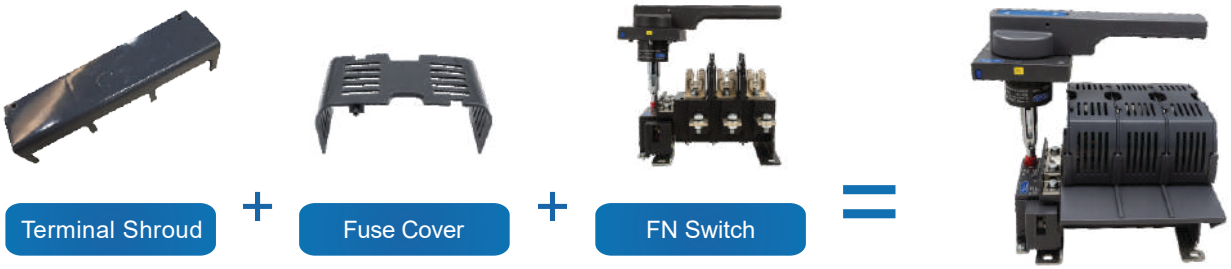
FN - 4P S-D-F
(Open Execution)



Size	Rated Current (A)	Suitable HRC fuse-link		Open Execution Type FN (TPN) S-D-F suitable for DIN fuse-link			Std. Pkg. (Nos.)	Open Execution Type FN S-D-F suitable for DIN fuse-link (4P)			Std. Pkg. (Nos.)
		Type	Range (A)	Type	Cat. No.	M.R.P. (`) Per Unit		Type	Cat. No.	M.R.P. (`) Per Unit	
Fr 1	32	HF Size 14x51	2 to 32	FN 32 TPN / FP FN	SK95518	3740	1	FN 32 TPN/FP	SK95518	3740	1
	32	HF Size 14x51	2 to 32	32 TPN / FP CE* FN	SK95703*	3390	1	FN 32 TPN/FP CE*	SK95703*	3390	1
	63	HF Size 14x51	2 to 63	63 TPN / FP FN 63	SK95421	4930	1	FN 63 TPN/FP	SK95421	4930	1
	63	HF Size 14x51	2 to 63	TPN / FP CE* FN	SK95704*	4600	1	FN 63 TPN/FP CE*	SK95704*	4600	1
Fr 2	New 100	HN Size 000	63 to 100	100C TPN	CK91079	7100	1	-	-	-	-
	100	HN Size 000/00	63 to 100	FN 100 TPN	SK95568	9350	1	FN 100 FP	SK90496	10700	1
	125	HN Size 000/00	63 to 125	FN 125 TPN	SK95001	12400	1	FN 125 FP	SK90497	13300	1
	160	HN Size 000/00	63 to 160	FN 160 TPN	SK95713	13300	1	FN 160 FP	SK90498	15000	1
Fr 3	200	HN Size 0	80 to 200	FN 200 TPN	SK95418	18100	1	FN 200 FP	SK90471	21400	1
	250	HN Size 1	125 to 250	FN 250 TPN	SK95642	20500	1	FN 250 FP	SK90472	24300	1
Fr 4	315	HN Size 1	125 to 315	FN 315 TPN	SK95461	25600	1	FN 315 FP	SK90473	29400	1
	400	HN Size 2	200 to 400	FN 400 TPN	SK95481	30700	1	FN 400 FP	SK90480	33400	1
Fr 5	630	HN Size 3	315 to 630	FN 630 TPN	SK95521	52500	1	FN 630 FP	SK90481	56200	1
	800	HN Size 3	315 to 800	FN 800 TPN	SK95679	92300	1	FN 800 FP	SK90482	109400	1

* 'CE' handle has door interlock facility without defeat feature
* FN SDF and FN SD models are supplied without terminal shrouds

FN S-D-F With Fuse Cover [8537] New



Spares & Accessories for type FN [8538] New

Description	Type	Cat. No.	M.R.P. (`) Per Unit	Std. Pkg. (Nos.)
Fuse Cover Kit for 3P/TPN	FN 32/63	CK91321	250	1
	FN 100/125/160	CK91322	750	1
	FN 200/250	CK91323	1000	1
	FN 315/400	CK91324	1125	1
	FN 630/800	CK91325	1250	1
Terminal Shroud Kit 3P/TPN	FN 32/63	SK91190	290	1
	FN 100/125/160	SK91137	360	1
	FN 200/250	SK91335	1030	1
	FN 315/400	SK91346	1050	1
	FN 630/800	SK91347	1110	1

Description	Type	Cat. No.	M.R.P. (`) Per Unit	Std. Pkg. (Nos.)
Fuse Cover Kit for 4P	FN 100/125/160	CK91326	575	1
	FN 200/250	CK91327	1080	1
	FN 315/400	CK91328	1210	1
	FN 630/800	CK91329	1355	1
Terminal Shroud Kit 4P	FN 100/125/160	CK91334	400	1
	FN 200/250	CK91335	1060	1
	FN 315/400	CK91336	1100	1
	FN 630/800	CK91337	1200	1

Features offered by HRC fuse link

- Conforms to IEC 60269-2, IS 13703 part 2
- Range: 2A to 800A, 415V, AC 50Hz
- Type: Cylindrical (2A to 63A), DIN (63A to 800A) & Bolted (2A to 630A)
- High breaking capacity: 100kA for type HN and 80kA for type HF/HG/HQ

HF



Cylindrical fuse links Type HF

Size	Rated Current (A)	Description	Cat. No.	M.R.P. (`) Per Unit	Std. Pkg. (Nos.)
New 10 X 38	2	Suitable for Type for Fuse Holder 10 x 38 -SF93868	SF93802	110	12
	4 6		SF93804	110	12
	1 0		SF93806	110	12
	1 6		SF93810	110	12
	2 0		SF93816	110	12
	25		SF93820	110	12
			SF93825	110	12
14 X 51	2	Suitable for Type FN 32 / 63 / FNX 32 / 63 S-D-F & for HCO 32 Fuse base	SF90144	245	30
	4		SF90145	245	30
	6		SF90146	245	30
	8		SF90147	245	30
	10		SF90148	245	30
	16		SF90150	245	30
	20		SF90151	245	30
	25		SF90152	245	30
	32		SF90142	245	30
	40	Suitable for Type FN 63 / FNX 63 S-D-F & for HC 63 Fuse base	SF90143	260	30
	50		SF90158	570	30
	63		SF90159	615	30

DIN Type Fuse Links Type HN

000



00



0



1



2



3



Size	Rated Current (A)	Description	Cat. No.	M.R.P. (`) Per Unit	Std. Pkg. (Nos.)
000	63	Suitable for Type FN 100/125/160 / FNX 100/125/160 S-D-F & for HB 160 Fuse base	SF94940	650	3
	80		SF94941	685	3
	100		SF94942	695	3
	125		SF94946	810	3
00	63	Suitable for Type FN 100/125/160 / FNX 125/160 S-D-F & for HB 160 Fuse base	SF94027	855	3
	80		SF94028	855	3
	100		SF94029	855	3
	125		SF94030	865	3
	160		SF94939	885	3
0	80	Suitable for Type FN 200 / FNX 200 S-D-F & for HB 250 Fuse base	SF94128	1120	3
	100		SF94129	1160	3
	125		SF94130	1160	3
	160		SF94131	1170	3
	200		SF94132	1210	3
1	125	Suitable for Type FN 250/315 / FNX 250/315 S-D-F & for HB 250 Fuse base	SF94230	1130	3
	160		SF94231	1210	3
	200		SF94232	1210	3
	250		SF94233	1360	3
	315		SF94234	1730	3
2	200	Suitable for Type FN 400 / FNX 400 S-D-F & for HB 800 Fuse base	SF94332	1720	3
	250		SF94333	1760	3
	315		SF94334	1810	3
	400		SF94335	1840	3
3	315	Suitable for Type FN 630/800 / FNX 630/800 S-D-F & for HB 800 Fuse base	SF94434	2550	1
	400		SF94435	2700	1
	500		SF94436	2780	1
	630		SF94437	2930	1 1
	800		SF94938	3620	

Fuse holders & Fuse bases suitable for Cylindrical / DIN fuse-links



HCM HB HC

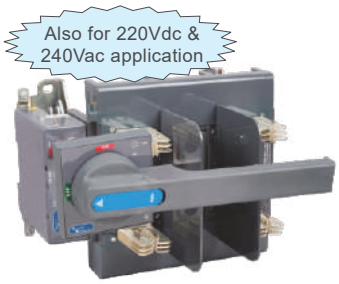
Rated Current (A)	Type	Description	Suitable fuse-link		Cat. No.	M.R.P. (`) Per Unit	Std. Pkg. (Nos.)
			Type	Range (A)			
New 3 2	HCM 32	Fuse holder	H F (1 0 x 3 8)	2-25	SF93868	400	12
3 2	HCO 32	Fuse holder	H F (1 4 x 5 1)	2-32	SK91314	455	10
6 3	HC 63	Fuse holder	HF(14x51) HN-	2-63	SK91043	520	10
160	HB 160	Fuse base	Size 000 & 00	63-160	SK90405	695	12
250	HB 250	Fuse base	HN-Size 0 & 1	80-250	SK90406	1470	3
400	HB 400	Fuse base	HN-Size 2 HN-	200-400	SK90717	2040	3
800	HB 800	Fuse base	Size 3	315-800	SK91051	2970	3

Notes : 1) Add suffix "OOOO" to all cat nos.

Type FN S-D-F suitable for DIN fuse-link (2P) in open execution

Features offered by FN S-D-F

- Range 32A to 630A, 415V, AC 23A
- Conforms to IEC 60947-3, IS/IEC 60947-3
- Phase Barriers included
- Telescopic shaft for depth adjustment
- Door interlock & padlock facility



FN 2P S-D-F

Type FN S-D-F suitable for BS fuse-link (TPN) in open execution

For BOLTED fuse-link

Features offered by FN S-D-F

- Range 32A to 630A, 415V, AC 23A
- Conforms to IEC 60947-3, IS/IEC 60947-3
- Phase Barriers included
- Telescopic shaft for depth adjustment
- Door interlock & padlock facility



FN - TPN S-D-F

Size	Rated Current (A)	Suitable fuse-link type	Type FN (2P) S-D-F suitable for DIN fuse-link			
			Open Execution			
			Type	Cat. No.	M.R.P. (`) Per Unit	Std. Pkg (Nos.)
Fr 1	32	HF Size 14x51	FN 32 2P	SK95594	3210	1
	63	HF Size 14x51	FN 63 2P	SK95595	4280	1
Fr 2	100	HN Size 000/00	FN 100 2P	ST35086	7360	1
	125	HN Size 000/00	FN 125 2P	ST35087	10900	1
	160	HN Size 000/00	FN 160 2P	ST35088	11400	1
Fr 3	200	HN Size 0	FN 200 2P	ST35089	14900	1
	250	HN Size 1	FN 250 2P	ST31674	17200	1
Fr 4	315	HN Size 1	FN 315 2P	ST38930	21300	1
	400	HN Size 2	FN 400 2P	ST31676	24000	1
Fr 5	630	HN Size 3	FN 630 2P	ST35090	41400	1

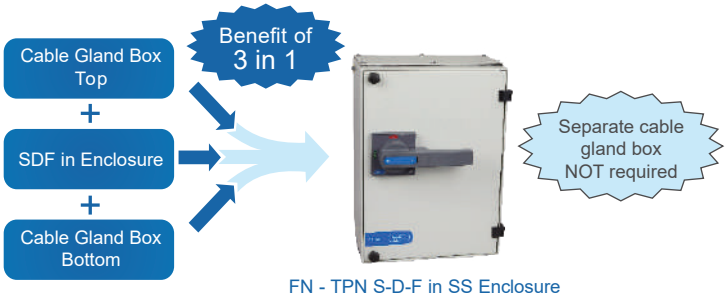
Size	Rated Current (A)	Suitable fuse-link type	Type FN (2P) S-D-F suitable for DIN fuse-link			
			Open Execution			
			Type	Cat. No.	M.R.P. (`) Per Unit	Std. Pkg (Nos.)
Fr 1	32	A1L	FN 32 TPN	SK95653	3610	1
	63	A1L	FN 63 TPN	SK95651	4880	1
Fr 2	100	A4	FN 100 TPN	SK95570	9340	1
	125	A4	FN 125 TPN	SK95009	11900	1
	160	A4	FN 160 TPN	SK95714	12900	1
Fr 3	200	B1 / B2	FN 200 TPN	SK95588	17200	1
	250	B2 / B3	FN 250 TPN	SK95682	20200	1
Fr 4	315	B3	FN 315 TPN	SK95590	25100	1
	400	B4	FN 400 TPN	SK95591	30400	1
Fr 5	630	C2	FN 630 TPN	SK95592	52300	1

* Add suffix "OOOO" to all cat nos.
* FN SDF and FN SD models are supplied without terminal shrouds

FN- TPN S-D-F in SS Enclosure

Features offered by FN S-D-F in SS Enclosure:

- Range 32A to 800A, 415V, AC 23A
- Spacious Sheet Steel Enclosure
- Separate cable gland box not required
- Phase Barriers included
- Conforms to IEC 60947-3, IS/IEC 60947-3
- Suitable for Cylindrical/DIN fuse-link
- Door interlock & padlock facility



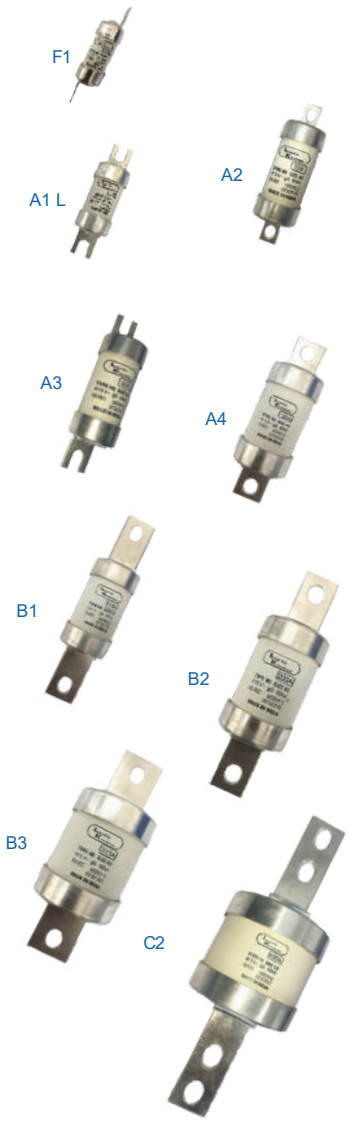
FN - TPN S-D-F in SS Enclosure

Size	Rated Current (A)	Suitable HRC fuse-link		In Sheet Steel Enclosure Type FN (TPN) S-D-F suitable for DIN fuse-link			Std. Pkg. (Nos.)
		Type	Range (A)	Type	Cat. No.	M.R.P. (`) Per Unit	
Fr 1	32	HF Size 14x51	2 to 32	FN 32 TPN / FP CE*	SK90483*	8640	1
	63	HF Size 14x51	2 to 63	FN 63 TPN / FP CE*	SK90484*	10300	1
Fr 2	100	HN Size 000/00	63 to 100	FN 100 TPN	SK90485	16700	1
	125	HN Size 000/00	63 to 125	FN 125 TPN	SK90486	18900	1
	160	HN Size 000/00	63 to 160	FN 160 TPN	SK90487	19800	1
Fr 3	200	HN Size 0	80 to 200	FN 200 TPN	SK90488	28600	1
	250	HN Size 1	125 to 250	FN 250 TPN	SK90489	31500	1
Fr 4	315	HN Size 1	125 to 315	FN 315 TPN	SK90490	36500	1
	400	HN Size 2	200 to 400	FN 400 TPN	SK90491	41100	1
Fr 5	630	HN Size 3	315 to 630	FN 630 TPN	SK90492	64200	1
	800	HN Size 3	315 to 800	FN 800 TPN	SK90493	116800	1

* 'CE' handle has door interlock facility without defeat feature

Notes:
1) Type FN S-D-F range (Bolted fuse-link) suitable for harsh environment is also available. Please contact nearest branch office for further details
2) For 690V AC application, please contact nearest branch office
3) The prices for S-D-F range are without HRC fuses
4) The SDF units in SS enclosure version can be replaced with FN TPN SDF open execution units. Please refer point 5 for replacement of 250A unit
5) For replacement of FN 250 SDF unit in sheet steel enclosure version (Cat. No. SK90489OOOO & SK95681OOOO), order Cat. No. ST97895OOOO
6) Please refer Page 36 for Switch-Disconnectors
7) Add suffix "OOOO" to all cat nos.
8) FN SDF and FN SD models are supplied without terminal shrouds

Bolted fuse links: Type HG and HQ



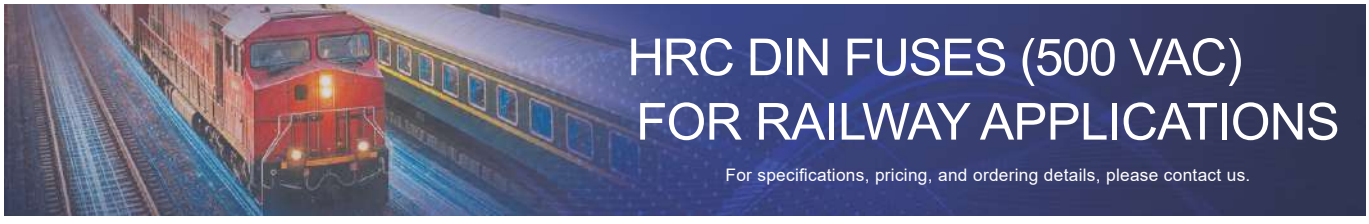
Type	Fixing Method	Size	Rating (A)	Description	Cat. No.	M.R.P. (`) Per Unit	Std. Pkg. (Nos.)
HG	Offset, staggered	F1	2	Suitable for type HD 20H/20P/20B, HD 32H/32P/32B fuse base	ST30725	100	24
			4		ST30726	100	24
			6		ST30727	100	24
			10		ST30728	100	24
			16		ST30729	110	24
			20		ST30730	110	24
			25		ST30731	110	24
			32		ST30732	110	24
HQ	Offset	A1L	20	Suitable for type FN 32/63 S-D-F	ST34527	200	15
			25		ST34528	200	15
			32		ST34529	200	15
			50		ST35827	245	15
			63		ST35828	245	15
		A2	4	Suitable for type HK 32H/32B fuse base	ST30747	170	12
			6		ST30748	170	12
			10		ST30749	170	12
			16		ST30750	170	12
			20		ST30751	170	12
			25		ST30752	170	12
			32		ST30753	170	12
		A3	35	Suitable for type HK 63B/63H Fuse base	ST30759	260	12
			50		ST30760	280	12
			63		ST30761	290	12
		A4	80	Suitable for type FN 100/125/160 S-D-F & for HK 125H/125B Fuse base	ST30767	560	12
			100		ST30768	560	12
			125		ST30769	625	12
			160		ST35829	715	12
	Centre Tag, 2 holes	B1	80	Suitable for type FN 200 S-D-F	ST30774	625	12
			100		ST30775	625	12
			125		ST30776	740	12
		B2	125	Suitable for type FN 200/250 S-D-F FN 250/315 S-D-F	ST30777	760	3
			160		ST30778	785	3
			200		ST30779	850	3
		B3	250	Suitable for type FN 400 S-D-F	ST30781	1240	3
			315		ST30782	1310	3
		B4	355	Suitable for type FN 630 S-D-F	ST30783	1840	3
			400		ST30784	1890	3
	Centre Tag, 4 holes	C2	400		ST30785	3570	1
			500		ST30786	3770	1
			630		ST30787	4310	1

Fuse holders suitable for Bolted fuse-links



Rated Current (A)	Type	Connection Method	Fuse Type	Suitable Fuse Range (A)	Cat. No.	M.R.P. (`) Per Unit	Std. Pkg. (Nos.)
20	HD 20H	Both side cable (Front) Both	F1	2-20	ST30772	365	12
	HD 20P	side busbar (Back) Top	F1	2-20	ST30773	380	12
	HD 20B	busbar & bottom cable	F1	2-20	ST30766	380	12
32	HD 32H	Both side cable (Front) Both	F1	2-32	ST30733	390	12
	HD 32P	side busbar (Back) Top	F1	2-32	ST30734	390	12
	HD 32B	busbar & bottom cable	F1	2-32	ST30735	400	12
	HK 32H	Both side cable (Front) Top	A2	4-32	ST30754	485	12
	HK 32B	busbar & bottom cable	A2	4-32	ST30755	485	12
63	HK 63H	Both side cable (Front) Top	A3	35-63	ST30762	690	6
	HK 63B	busbar & bottom cable	A3	35-63	ST30763	690	6
125	HK 125H	Both side cable (Front) Top	A4	80-125	ST30770	1910	3
	HK 125B	busbar & bottom cable	A4	80-125	ST30771	1910	3

Notes: 1) Add suffix "OOOO" to all cat nos.



FEATURES TO MEET EVERY APPLICATION

Contact System
- Double Break with low let-through energy
- High Breaking Capacity up to 200kA @ 415V AC
- 100kA @690V AC at 100%Ics
- 50kA @ 800V AC offering for Solar PV String inverters
- 1000V/1500V PV DC Offering

Thermal - Magnetic Release
- Extended Overload Setting of 67%
- 16A to 800A Offering
- Ambient Temperature Compensation
- Suitable for wide temperature range

Mechanism
- Class II Front Facia
- Double Insulation
- Positive Isolation
- High Electrical and Mechanical Life



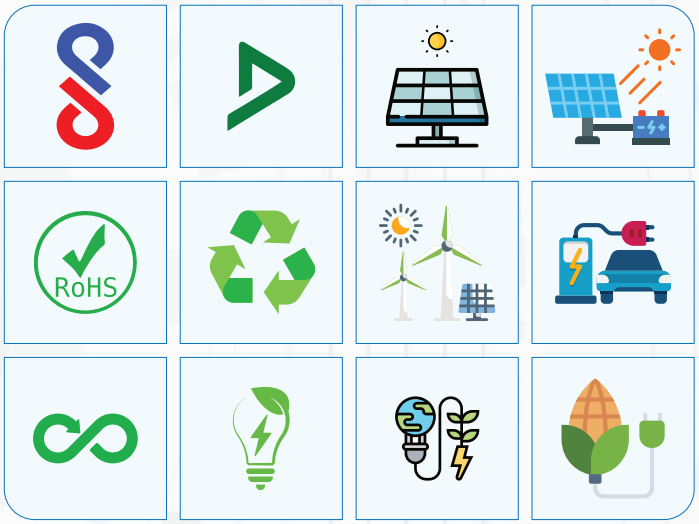
Microprocessor Release
- Extended Overload Setting of 25%
- Individual Fault Indication LEDs
- Battery Operated In-built Display
- Advanced Metering and Protection
- Motor Protection Variant with effective Type 2 Coordination

Modular Architecture
- Compact Size
- Late Personalization
- Interchangeability of Releases
- Reduced Inventory for internal accessories

Modules
- Temperature Monitoring & Protection
- Zone Selective Interlocking for effective Selectivity
- Communication Module for metering & control
- Remote Operation for Motorized MCCB
- Breaker Status, Alarm & Trip with Records

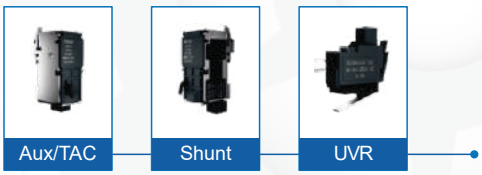
FUTURE READY FOR COMPLIANCE AND NEW APPLICATIONS





RESILIENT FOR BETTER SAFETY AND MAINTENANCE

Inventory & Application friendly Internal Accessories

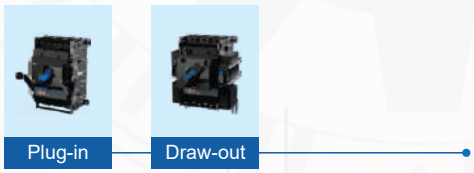


Robust Rotary & Electrically Operated Mechanisms





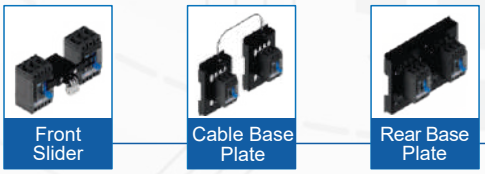
Reduced Downtime with Plug-in & Drawout Modules



Shrouds for increased personnel safety



Multiple options for Mechanical Interlocking



Versatile Range of Terminations

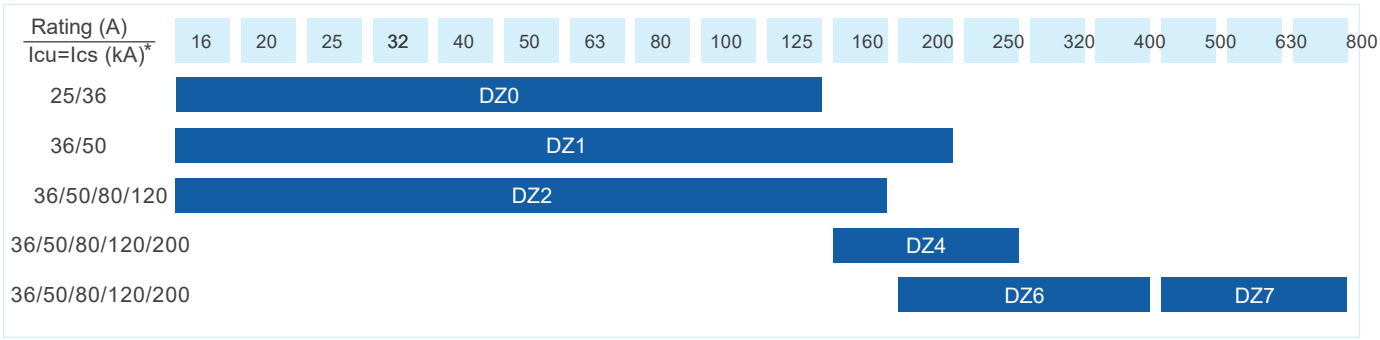


CONNECTED TO DRIVE ENERGY EFFICIENCY



- Data Analytics
- Trend Analysis
- Real Time Monitoring
- Status & Control
- Metering & Protection
- Data Acquisition

d sine DZ With Thermal - Magnetic Release





dsine-DZ0 TM

- Conforms to IS/IEC 60947-2
- 16A to 125A, 3P & 4P
- 25kA & 36kA breaking capacities
- Ics= 100%of Icu*
- Adjustable overload settings: 0.8 - 1.0 x In
- Fixed short-circuit settings: 10 x In
- Compact size
- Manual and Rotary versions available
- Wide range of accessories

Type	Overload Release Range (A)	Breaking Capacity Icu at 415V AC, 50Hz. (kA)	3 Pole		4 Pole		Std. Pkg. (Nos.)
			Cat No	M.R.P. (`) Per Unit	Cat No	M.R.P. (`) Per Unit	
DZ0-125D*	13-16	36kA	DZ0T0016D5C1AOOOO	12400	DZ0F0016D5C1AOOOO	17400	1
	16-20		DZ0T0020D5C1AOOOO	12400	DZ0F0020D5C1AOOOO	17400	1
	20-25		DZ0T0025D5C1AOOOO	12400	DZ0F0025D5C1AOOOO	17400	1
	26-32		DZ0T0032D5C1AOOOO	12400	DZ0F0032D5C1AOOOO	17400	1
	32-40		DZ0T0040D5C1AOOOO	12400	DZ0F0040D5C1AOOOO	17400	1
	40-50		DZ0T0050D5C1AOOOO	12400	DZ0F0050D5C1AOOOO	17400	1
	50-63		DZ0T0063D5C1AOOOO	12100	DZ0F0063D5C1AOOOO	16800	1
	64-80		DZ0T0080D5C1AOOOO	12100	DZ0F0080D5C1AOOOO	16800	1
	80-100		DZ0T0100D5C1AOOOO	12100	DZ0F0100D5C1AOOOO	16800	1
	100-125		DZ0T0125D5C1AOOOO▲	15700	DZ0F0125D5C1AOOOO▲	21000	1
DZ0-125C	13-16	25kA	DZ0T0016CXC1AOOOO	12900	DZ0F0016CXC1AOOOO	18000	1
	16-20		DZ0T0020CXC1AOOOO	12900	DZ0F0020CXC1AOOOO	18000	1
	20-25		DZ0T0025CXC1AOOOO	12900	DZ0F0025CXC1AOOOO	18000	1
	26-32		DZ0T0032CXC1AOOOO	12900	DZ0F0032CXC1AOOOO	18000	1
	32-40		DZ0T0040CXC1AOOOO	12900	DZ0F0040CXC1AOOOO	18000	1
	40-50		DZ0T0050CXC1AOOOO	12900	DZ0F0050CXC1AOOOO	18000	1
	50-63		DZ0T0063CXC1AOOOO	12400	DZ0F0063CXC1AOOOO	17500	1
	64-80		DZ0T0080CXC1AOOOO	12400	DZ0F0080CXC1AOOOO	17500	1
	80-100		DZ0T0100CXC1AOOOO	12400	DZ0F0100CXC1AOOOO	17500	1
	100-125		DZ0T0125CXC1AOOOO▲	17300	DZ0F0125CXC1AOOOO▲	21800	1

▲- Spreader Terminals are included

Note:

Breaking Capacity: C = 25kA, D = 36kA *

DZ0-125D : Ics= 50%Icu

Phase barriers are supplied with all MCCBs

d sine DZ With Thermal - Magnetic Release



dsine-DZ1 TM

- Conforms to IS/IEC 60947-2
- 16A to 800A, 3P & 4P
- 36kA, 50kA, 80kA,120kA & 200kA breaking capacities
- Ics= 100%of Icu
- Adjustable overload settings: 0.67 - 1.0 x In
- Adjustable short-circuit settings: 6 - 12 x In*
- Transparent sealable release cover
- Ambient Temperature Compensation
- Compact size
- Fixed, Plug-in, Drawout, Rotary and Motorised versions available
- Wide range of accessories

Type	Overload Release Range (A)	Breaking Capacity Icu at 415V AC, 50Hz. (kA)	3 Pole		4 Pole		Std. Pkg. (Nos.)
			Cat No	M.R.P. (`) Per Unit	Cat No	M.R.P. (`) Per Unit	
DZ1-160D/ DZ1-200D	11-16	36kA	DZ1T0016DXC1AOOOO	22200	DZ1F0016DXC1AOOOO	27600	1
	14-20		DZ1T0020DXC1AOOOO	22200	DZ1F0020DXC1AOOOO	27600	1
	17-25		DZ1T0025DXC1AOOOO	22200	DZ1F0025DXC1AOOOO	27600	1
	22-32		DZ1T0032DXC1AOOOO	22200	DZ1F0032DXC1AOOOO	27600	1
	27-40		DZ1T0040DXC1AOOOO	22200	DZ1F0040DXC1AOOOO	27600	1
	34-50		DZ1T0050DXC1AOOOO	22200	DZ1F0050DXC1AOOOO	27600	1
	43-63		DZ1T0063DXD1AOOOO	21500	DZ1F0063DXD1AOOOO	26600	1
	54-80		DZ1T0080DXD1AOOOO	21500	DZ1F0080DXD1AOOOO	26600	1
	67-100		DZ1T0100DXD1AOOOO	21500	DZ1F0100DXD1AOOOO	26600	1
	84-125		DZ1T0125DXD1AOOOO	24200	DZ1F0125DXD1AOOOO	29800	1
	108-160		DZ1T0160DXD1AOOOO	31700	DZ1F0160DXD1AOOOO	37700	1
	134-200		DZ1T0200DXD1AOOOO▲	48000	DZ1F0200DXD1AOOOO▲	57600	1
DZ2-160D	11-16		DZ2T0016DXC1AOOOO	22600	DZ2F0016DXC1AOOOO	28200	1
	14-20		DZ2T0020DXC1AOOOO	22600	DZ2F0020DXC1AOOOO	28200	1
	17-25		DZ2T0025DXC1AOOOO	22600	DZ2F0025DXC1AOOOO	28200	1
	22-32		DZ2T0032DXC1AOOOO	22600	DZ2F0032DXC1AOOOO	28200	1
	27-40		DZ2T0040DXC1AOOOO	22600	DZ2F0040DXC1AOOOO	28200	1
	34-50		DZ2T0050DXC1AOOOO	22600	DZ2F0050DXC1AOOOO	28200	1
	43-63		DZ2T0063DXD1AOOOO	21800	DZ2F0063DXD1AOOOO	27300	1
	54-80		DZ2T0080DXD1AOOOO	21800	DZ2F0080DXD1AOOOO	27300	1
	67-100		DZ2T0100DXD1AOOOO	21800	DZ2F0100DXD1AOOOO	27300	1
	84-125		DZ2T0125DXD1AOOOO	24500	DZ2F0125DXD1AOOOO	30400	1
	108-160		DZ2T0160DXD1AOOOO	32100	DZ2F0160DXD1AOOOO	38300	1
DZ4-250D	108-160		DZ4T0160DXD1AOOOO	40600	DZ4F0160DXD1AOOOO	50000	1
	134-200		DZ4T0200DXD1AOOOO	46500	DZ4F0200DXD1AOOOO	55900	1
	168-250		DZ4T0250DXD1AOOOO	49000	DZ4F0250DXD1AOOOO	59000	1
DZ6-400D	134-200		DZ6T0200DXD1AOOOO	60500	DZ6F0200DXD1AOOOO	73900	1
	168-250		DZ6T0250DXD1AOOOO	64900	DZ6F0250DXD1AOOOO	79300	1
	215-320		DZ6T0320DXD1AOOOO	67200	DZ6F0320DXD1AOOOO	81900	1
	268-400		DZ6T0400DXD1AOOOO	67200	DZ6F0400DXD1AOOOO	81900	1
DZ7-800D	335-500		DZ7T0500DXD1AOOOO	76800	DZ7F0500DXD1AOOOO	96800	1
	422-630		DZ7T0630DXD1AOOOO	76800	DZ7F0630DXD1AOOOO	96800	1
	536-800		DZ7T0800DXD1AOOOO	107000	DZ7F0800DXD1AOOOO	136200	1

- Spreader Terminals are included

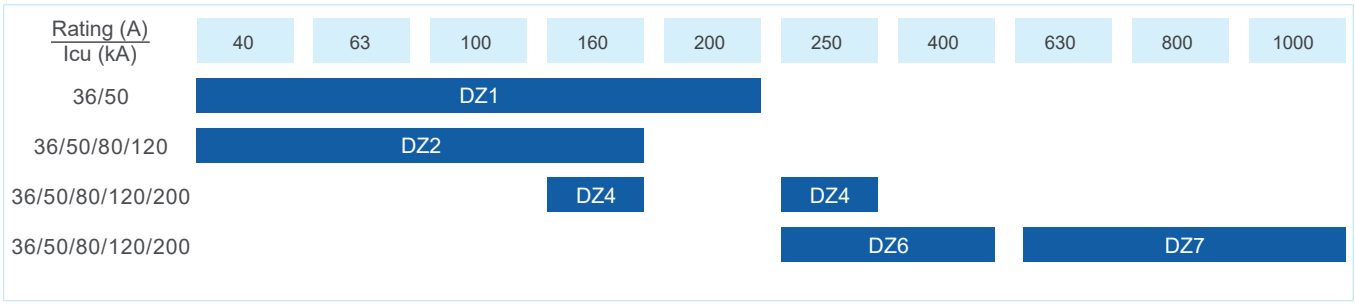
▲

Note:
Breaking Capacity: D = 36kA, N = 50kA, H = 80kA
dsine DZ-120kA & 200kA @415V (Ics=100%Icu) MCCBs are available on request. It is recommended to use spreader terminals for enhancing termination capacity
For Motor back-up protection, use 'M' series of MCCBs such as DZ0-N, DZ1-N, DZ4-N, DZ6-N, DZ7-N
* For DZ1 & DZ2 - 16A to 50A, Fixed Magnetic setting (375A)
For DZ7 630A / 800A, Magnetic setting from 6 In to 10 In / 6 In to 8 In respectively

Type	Overload Release Range (A)	Breaking Capacity Icu at 415V AC, 50Hz. (kA)	3 Pole		4 Pole		Std. Pkg. (Nos.)
			Cat No	M.R.P.(`) Per Unit	Cat No	M.R.P.(`) Per Unit	
DZ1-160N/ DZ1-200N	11-16	50kA	DZ1T0016NXC1AOOOO	26200	DZ1F0016NXC1AOOOO	31500	1
	14-20		DZ1T0020NXC1AOOOO	26200	DZ1F0020NXC1AOOOO	31500	1
	17-25		DZ1T0025NXC1AOOOO	26200	DZ1F0025NXC1AOOOO	31500	1
	22-32		DZ1T0032NXC1AOOOO	26200	DZ1F0032NXC1AOOOO	31500	1
	27-40		DZ1T0040NXC1AOOOO	26200	DZ1F0040NXC1AOOOO	31500	1
	34-50		DZ1T0050NXC1AOOOO	26200	DZ1F0050NXC1AOOOO	31500	1
	43-63		DZ1T0063NXD1AOOOO	25400	DZ1F0063NXD1AOOOO	30600	1
	54-80		DZ1T0080NXD1AOOOO	25400	DZ1F0080NXD1AOOOO	30600	1
	67-100		DZ1T0100NXD1AOOOO	25400	DZ1F0100NXD1AOOOO	30600	1
	84-125		DZ1T0125NXD1AOOOO	33500	DZ1F0125NXD1AOOOO	37000	1
	108-160		DZ1T0160NXD1AOOOO	36400	DZ1F0160NXD1AOOOO	43500	1
	134-200		DZ1T0200NXD1AOOOO▲	53500	DZ1F0200NXD1AOOOO▲	67100	1
DZ2-160N	11-16		DZ2T0016NXC1AOOOO	30300	DZ2F0016NXC1AOOOO	36300	1
	14-20		DZ2T0020NXC1AOOOO	30300	DZ2F0020NXC1AOOOO	36300	1
	17-25		DZ2T0025NXC1AOOOO	30300	DZ2F0025NXC1AOOOO	36300	1
	22-32		DZ2T0032NXC1AOOOO	30300	DZ2F0032NXC1AOOOO	36300	1
	27-40		DZ2T0040NXC1AOOOO	30300	DZ2F0040NXC1AOOOO	36300	1
	34-50		DZ2T0050NXC1AOOOO	30300	DZ2F0050NXC1AOOOO	36300	1
	43-63		DZ2T0063NXD1AOOOO	29300	DZ2F0063NXD1AOOOO	35200	1
	54-80		DZ2T0080NXD1AOOOO	29300	DZ2F0080NXD1AOOOO	35200	1
	67-100		DZ2T0100NXD1AOOOO	29300	DZ2F0100NXD1AOOOO	35200	1
	84-125		DZ2T0125NXD1AOOOO	38500	DZ2F0125NXD1AOOOO	42500	1
	108-160		DZ2T0160NXD1AOOOO	41800	DZ2F0160NXD1AOOOO	49900	1
DZ4-250N	108-160		DZ4T0160NXD1AOOOO	47500	DZ4F0160NXD1AOOOO	60000	1
	134-200		DZ4T0200NXD1AOOOO	51800	DZ4F0200NXD1AOOOO	65000	1 1
	168-250		DZ4T0250NXD1AOOOO	54600	DZ4F0250NXD1AOOOO	68600	1
DZ6-400N	134-200		DZ6T0200NXD1AOOOO	63300	DZ6F0200NXD1AOOOO	78200	1
	168-250		DZ6T0250NXD1AOOOO	66600	DZ6F0250NXD1AOOOO	82400	1
	215-320		DZ6T0320NXD1AOOOO	68800	DZ6F0320NXD1AOOOO	85000 85000	1
	268-400		DZ6T0400NXD1AOOOO	68800	DZ6F0400NXD1AOOOO	110200	1
DZ7-800N	335-500		DZ7T0500NXD1AOOOO	85300	DZ7F0500NXD1AOOOO	110200 146500	1
	422-630		DZ7T0630NXD1AOOOO	85300	DZ7F0630NXD1AOOOO	42900	1
	536-800		DZ7T0800NXD1AOOOO	115100	DZ7F0800NXD1AOOOO	42900	1
DZ2-160H	11-16	80kA	DZ2T0016HXC1AOOOO	38800	DZ2F0016HXC1AOOOO	42900	1
	14-20		DZ2T0020HXC1AOOOO	38800	DZ2F0020HXC1AOOOO	42900	1
	17-25		DZ2T0025HXC1AOOOO	38800	DZ2F0025HXC1AOOOO	42900	1
	22-32		DZ2T0032HXC1AOOOO	38800	DZ2F0032HXC1AOOOO	42900	1
	27-40		DZ2T0040HXC1AOOOO	38800	DZ2F0040HXC1AOOOO	41700	1
	34-50		DZ2T0050HXC1AOOOO	38800	DZ2F0050HXC1AOOOO	41700	1
	43-63		DZ2T0063HXD1AOOOO	37600	DZ2F0063HXD1AOOOO	41700	1
	54-80		DZ2T0080HXD1AOOOO	37600	DZ2F0080HXD1AOOOO	62000	1
	67-100		DZ2T0100HXD1AOOOO	37600	DZ2F0100HXD1AOOOO	66900	1
	84-125		DZ2T0125HXD1AOOOO	56100	DZ2F0125HXD1AOOOO	76000	1
	108-160		DZ2T0160HXD1AOOOO	59800	DZ2F0160HXD1AOOOO	95300 99100	1
DZ4-250H	108-160		DZ4T0160HXD1AOOOO	68100	DZ4F0160HXD1AOOOO	105400	1
	134-200		DZ4T0200HXD1AOOOO	79200	DZ4F0200HXD1AOOOO	108700	1
	168-250		DZ4T0250HXD1AOOOO	82500	DZ4F0250HXD1AOOOO	109800	1
DZ6-400H	134-200		DZ6T0200HXD1AOOOO	89000	DZ6F0200HXD1AOOOO	109800	1
	168-250		DZ6T0250HXD1AOOOO	91700	DZ6F0250HXD1AOOOO	131800	1
	215-320		DZ6T0320HXD1AOOOO	92800	DZ6F0320HXD1AOOOO	131800 169600	1
	268-400		DZ6T0400HXD1AOOOO	92800	DZ6F0400HXD1AOOOO		1
DZ7-800H	335-500		DZ7T0500HXD1AOOOO	110400	DZ7F0500HXD1AOOOO		1
	422-630		DZ7T0630HXD1AOOOO	110400	DZ7F0630HXD1AOOOO		1 1
	536-800		DZ7T0800HXD1AOOOO	129800	DZ7F0800HXD1AOOOO		

Lauritz Knudsen, 15.08.2026

d sine DZ MCCB with Microprocessor Release



d sine DZ MCCB with Microprocessor Release iTRP1



dsine-DZ iTRP1

- Conforms to IS/IEC 60947-2
- 16A to 1000A, 3P & 4P
- 36kA, 50kA, 80kA, 120kA & 200kA breaking capacities
- Ics=100%Icu
- Adjustable overload setting from 0.25 to 1.0 x In
- Adjustable short-circuit setting from 1.5 to 12 x Ir*
- Switchable thermal memory
- Variable trip class
- Transparent sealable release cover
- Compact size
- Fixed, Plug-in, Drawout, Rotary and Motorised versions available
- Wide range of accessories

Type	Overload Release Range (A)	Breaking Capacity Icu at 415V AC, 50Hz. (kA)	3 Pole		4 Pole		Std. Pkg. (Nos.)
			Cat No	M.R.P. (`) Per Unit	Cat No	M.R.P. (`) Per Unit	
DZ1-160D#/ DZ1-200D	10-40 16-	36kA	DZ1T0040DXF1AOOOO	39600	DZ1F0040DXF1AOOOO	48300	1
	63 25-		DZ1T0063DXF1AOOOO	39600	DZ1F0063DXF1AOOOO	48300	1
	100 40-		DZ1T0100DXF1AOOOO	39600	DZ1F0100DXF1AOOOO	48300	1
	160 50-		DZ1T0160DXF1AOOOO	46600	DZ1F0160DXF1AOOOO	65000	1
	200		DZ1T0200DXF1AOOOO▲	60900	DZ1F0200DXF1AOOOO▲	84000	1
DZ2-160D#	10-40 16-		DZ2T0040DXF1AOOOO	41800	DZ2F0040DXF1AOOOO	50900	1
	63 25-		DZ2T0063DXF1AOOOO	41800	DZ2F0063DXF1AOOOO	50900	1
	100 40-		DZ2T0100DXF1AOOOO	41800	DZ2F0100DXF1AOOOO	50900	1
	160 40-		DZ2T0160DXF1AOOOO	49300	DZ2F0160DXF1AOOOO	68400	1
DZ4-250D	160		DZ4T0160DXF1AOOOO	60300	DZ4F0160DXF1AOOOO	84000	1
	63-250		DZ4T0250DXF1AOOOO	62800	DZ4F0250DXF1AOOOO	86900	1
DZ6-400D	63-250		DZ6T0250DXF1AOOOO	75100	DZ6F0250DXF1AOOOO	97300	1
	100-400		DZ6T0400DXF1AOOOO	79100	DZ6F0400DXF1AOOOO	102400	1
DZ7-800D/ DZ7-1000D	158-630		DZ7T0630DXF1AOOOO	96700	DZ7F0630DXF1AOOOO	125300	1
	200-800		DZ7T0800DXF1AOOOO	127000	DZ7F0800DXF1AOOOO	157200	1
	250-1000		DZ7T1000DXF1AOOOO▲	208600	DZ7F1000DXF1AOOOO▲	289200	1
DZ1-160N#/ DZ1-200N	10-40	50kA	DZ1T0040NXF1AOOOO	45900	DZ1F0040NXF1AOOOO	63200	1
	16-63		DZ1T0063NXF1AOOOO	45900	DZ1F0063NXF1AOOOO	63200	1
	25-100		DZ1T0100NXF1AOOOO	45900	DZ1F0100NXF1AOOOO	63200	1
	40-160		DZ1T0160NXF1AOOOO	57600	DZ1F0160NXF1AOOOO	75700	1
	50-200		DZ1T0200NXF1AOOOO▲	71900	DZ1F0200NXF1AOOOO▲	91000	1
DZ2-160N#	10-40		DZ2T0040NXF1AOOOO	48300	DZ2F0040NXF1AOOOO	66800	1
	16-63		DZ2T0063NXF1AOOOO	48300	DZ2F0063NXF1AOOOO	66800	1
	25-100		DZ2T0100NXF1AOOOO	48300	DZ2F0100NXF1AOOOO	66800	1
	40-160		DZ2T0160NXF1AOOOO	60700	DZ2F0160NXF1AOOOO	79600	1

d sine DZ MCCB with Microprocessor Release iTRP1

Type	Overload Release Range (A)	Breaking Capacity Icu at 415V AC, 50Hz. (kA)	3 Pole		4 Pole		Std. Pkg. (Nos.)
			Cat No	M.R.P. (`) Per Unit	Cat No	M.R.P. (`) Per Unit	
DZ4-250N	40-160	50kA	DZ4T0160NXF1AOOOO	69300	DZ4F0160NXF1AOOOO	88900	1
	63-250		DZ4T0250NXF1AOOOO	73900	DZ4F0250NXF1AOOOO	93700	1
DZ6-400N	63-250		DZ6T0250NXF1AOOOO	83800	DZ6F0250NXF1AOOOO	109300	1
	100-400		DZ6T0400NXF1AOOOO	88100	DZ6F0400NXF1AOOOO	115000	1
DZ7-800N/ DZ7-1000N	158-630		DZ7T0630NXF1AOOOO	106900	DZ7F0630NXF1AOOOO	136600	1
	200-800		DZ7T0800NXF1AOOOO	145400	DZ7F0800NXF1AOOOO	185000	1
	250-1000		DZ7T1000NXF1AOOOO▲	259700	DZ7F1000NXF1AOOOO▲	360100	1
DZ2-160H#	10-40	80kA	DZ2T0040HXF1AOOOO	56500	DZ2F0040HXF1AOOOO	70200	1
	16-63		DZ2T0063HXF1AOOOO	56500	DZ2F0063HXF1AOOOO	70200	1
	25-100		DZ2T0100HXF1AOOOO	56500	DZ2F0100HXF1AOOOO	70200	1
	40-160		DZ2T0160HXF1AOOOO	73800	DZ2F0160HXF1AOOOO	92400	1
DZ4-250H	40-160		DZ4T0160HXF1AOOOO	79200	DZ4F0160HXF1AOOOO	99100	1
	63-250		DZ4T0250HXF1AOOOO	88800	DZ4F0250HXF1AOOOO	122000	1
DZ6-400H	63-250		DZ6T0250HXF1AOOOO	111000	DZ6F0250HXF1AOOOO	146800	1
	100-400		DZ6T0400HXF1AOOOO	116900	DZ6F0400HXF1AOOOO	154200	1
DZ7-800H/ DZ7-1000H	158-630		DZ7T0630HXF1AOOOO	121100	DZ7F0630HXF1AOOOO	176400	1
	200-800		DZ7T0800HXF1AOOOO	176300	DZ7F0800HXF1AOOOO	230500	1
	250-1000		DZ7T1000HXF1AOOOO▲	301300	DZ7F1000HXF1AOOOO▲	436000	1

▲= Spreader Terminals are included.*
For DZ7-630A / 800A & 1000A: Magnetic setting from 1.5 In to 10 In / 1.5 In to 8 In respectively
For 25A, please contact nearest branch office

Note:
Breaking Capacity: D = 36kA, N = 50kA, H = 80kA
dsine DZ-120kA & 200kA @415V (Ics=100%Icu) MCCBs are available on request.
It is recommended to use spreader terminals for enhancing termination capacity
dsine DZ Selectivity Version MCCBs are available on request.

d sine DZ MCCB with Microprocessor Release iTRP3


dsine-DZ iTRP3

- Conforms to IS/IEC 60947-2
- 16A to 1000A, 3P & 4P
- 36kA, 50kA, 80kA, 120kA & 200kA breaking capacities
- Ics=100%Icu
- Adjustable overload setting from 0.25 to 1.0 x In
- Adjustable short-circuit setting from 1.5 to 12 x Ir*
- Adjustable Instantaneous setting, 6 In & 12 In
- Inbuilt ground fault protection from 20%to 70%of In
- Adjustable neutral overload protection from 50%to 200%of Ir
- Switchable thermal memory
- Provision for release testing
- Individual fault indication LEDs
- Transparent sealable release cover
- Compact size
- Fixed, Plug-in, Drawout, Rotary and Motorised versions available
- Wide range of accessories

d sine DZ MCCB with Microprocessor Release iTRP3

Type	Overload Release Range (A)	Breaking Capacity Icu at 415V AC, 50Hz. (kA)	3 Pole Cat No	3 Pole M.R.P. (`) Per Unit	4 Pole Cat No	4 Pole M.R.P. (`) Per Unit	Std. Pkg. (Nos.)
DZ1-160D#/ DZ1-200D	10-40	36kA	DZ1T0040DXH1AOOOO	66500	DZ1F0040DXH1AOOOO	77400	1
	16-63		DZ1T0063DXH1AOOOO	66500	DZ1F0063DXH1AOOOO	77400	1
	25-100		DZ1T0100DXH1AOOOO	66500	DZ1F0100DXH1AOOOO	77400	1
	40-160		DZ1T0160DXH1AOOOO	76400	DZ1F0160DXH1AOOOO	94100	1
	50-200		DZ1T0200DXH1AOOOO▲	87300	DZ1F0200DXH1AOOOO▲	107100	1
DZ2-160D#	10-40		DZ2T0040DXH1AOOOO	69400	DZ2F0040DXH1AOOOO	81000	1
	16-63		DZ2T0063DXH1AOOOO	69400	DZ2F0063DXH1AOOOO	81000	1
	25-100		DZ2T0100DXH1AOOOO	69400	DZ2F0100DXH1AOOOO	81000	1
	40-160		DZ2T0160DXH1AOOOO	79800	DZ2F0160DXH1AOOOO	98200	1
DZ4-250D	40-160		DZ4T0160DXH1AOOOO	86300	DZ4F0160DXH1AOOOO	106000	1
	63-250		DZ4T0250DXH1AOOOO	89900	DZ4F0250DXH1AOOOO	110400	1
DZ6-400D	63-250		DZ6T0250DXH1AOOOO	103600	DZ6F0250DXH1AOOOO	120000	1
	100-400		DZ6T0400DXH1AOOOO	108800	DZ6F0400DXH1AOOOO	126200	1
DZ7-800D/ DZ7-1000D	158-630		DZ7T0630DXH1AOOOO	121600	DZ7F0630DXH1AOOOO	151400	1
	200-800		DZ7T0800DXH1AOOOO	163000	DZ7F0800DXH1AOOOO	193700	1
	250-1000		DZ7T1000DXH1AOOOO▲	242800	DZ7F1000DXH1AOOOO▲	320500	1
DZ1-160N#/ DZ1-200N	10-40 16-	50kA	DZ1T0040NXH1AOOOO	73600	DZ1F0040NXH1AOOOO	87700	1
	63 25-		DZ1T0063NXH1AOOOO	73600	DZ1F0063NXH1AOOOO	87700	1
	100 40-		DZ1T0100NXH1AOOOO	73600	DZ1F0100NXH1AOOOO	87700	1
	160 50-		DZ1T0160NXH1AOOOO	87400	DZ1F0160NXH1AOOOO	104600	1
	200		DZ1T0200NXH1AOOOO▲	98200	DZ1F0200NXH1AOOOO▲	119900	1
DZ2-160N#	10-40		DZ2T0040NXH1AOOOO	76800	DZ2F0040NXH1AOOOO	91600	1
	16-63		DZ2T0063NXH1AOOOO	76800	DZ2F0063NXH1AOOOO	91600	1
	25-100		DZ2T0100NXH1AOOOO	76800	DZ2F0100NXH1AOOOO	91600	1
	40-160		DZ2T0160NXH1AOOOO	91300	DZ2F0160NXH1AOOOO	109500	1
DZ4-250N	40-160		DZ4T0160NXH1AOOOO	97400	DZ4F0160NXH1AOOOO	118800	1
	63-250		DZ4T0250NXH1AOOOO	101200	DZ4F0250NXH1AOOOO	123600	1
DZ6-400N	63-250		DZ6T0250NXH1AOOOO	110900	DZ6F0250NXH1AOOOO	132200	1
	100-400		DZ6T0400NXH1AOOOO	116800	DZ6F0400NXH1AOOOO	139100	1
DZ7-800N/ DZ7-1000N	158-630		DZ7T0630NXH1AOOOO	129400	DZ7F0630NXH1AOOOO	171100	1
	200-800		DZ7T0800NXH1AOOOO	199400	DZ7F0800NXH1AOOOO	236800	1
	250-1000		DZ7T1000NXH1AOOOO▲	302400	DZ7F1000NXH1AOOOO▲	399000	1
DZ2-160H#	10-40	80kA	DZ2T0040HXH1AOOOO	91500	DZ2F0040HXH1AOOOO	108800	1
	16-63		DZ2T0063HXH1AOOOO	91500	DZ2F0063HXH1AOOOO	108800	1
	25-100		DZ2T0100HXH1AOOOO	91500	DZ2F0100HXH1AOOOO	108800	1
	40-160		DZ2T0160HXH1AOOOO	108900	DZ2F0160HXH1AOOOO	121400	1
DZ4-250H	40-160		DZ4T0160HXH1AOOOO	116700	DZ4F0160HXH1AOOOO	134700	1
	63-250		DZ4T0250HXH1AOOOO	133600	DZ4F0250HXH1AOOOO	157400	1
DZ6-400H	63-250		DZ6T0250HXH1AOOOO	154100	DZ6F0250HXH1AOOOO	193000	1
	100-400		DZ6T0400HXH1AOOOO	162500	DZ6F0400HXH1AOOOO	203000	1
DZ7-800H/ DZ7-1000H	158-630		DZ7T0630HXH1AOOOO	175800	DZ7F0630HXH1AOOOO	241700	1
	200-800		DZ7T0800HXH1AOOOO	236000	DZ7F0800HXH1AOOOO	294600	1
	250-1000		DZ7T1000HXH1AOOOO▲	379600	DZ7F1000HXH1AOOOO▲	492100	1

▲= Spreader Terminals are included *
For DZ7-630A / 800A & 1000A: Magnetic setting from 1.5 In to 10 In / 1.5 In to 8 In respectively
For 25A, please contact nearest branch office

Note:
Breaking Capacity : D = 36kA, N = 50kA, H = 80kA
dsine DZ 120kA & 200kA @415V (Ics=100%Icu) MCCBs are available on request.
It is recommended to use spreader terminals for enhancing termination capacity
dsine DZ Selectivity Version MCCBs are available on request.

d sine DZ MCCB Range [8536]

Rating (A) / Icu (kA)	40	63	100	160	200	250	400	630	800	1000
	DZ1[$]									
36/50/80/120	DZ2									
36/50/80/120/200				DZ4		DZ4				
36/50/80/120/200						DZ6		DZ7		

[$] iTRP4 Only

d sine DZ MCCB with Microprocessor Releases iTRP4 & iTRP5

- Confirms to IS/IEC 60947-2
- 16A to 1000A, 3P & 4P
- 36kA, 50kA, 80kA, 120kA & 200kA breaking capacities
- Ics=100%Icu
- Adjustable Overload Settings from 0.25 to 1 In (in steps of 0.01)
- Adjustable Short Circuit Settings from 1.5 to 12 Ir (in steps of 0.1)
- Adjustable Instantaneous Settings from 1.5 to 12 Ir (in steps of 0.1)
- In-built Ground Fault Protection from 0.1 to 1 In (in steps of 0.05)
- Adjustable Neutral Overload Protection from 50%to 160%of Ir
- Local LCD Display Menu Navigation using Keypad
- Modbus RTU Communication Capable
- Switchable Thermal Memory
- Provision for Release Testing
- Variable trip class
- Transparent sealable release cover
- Compact size
- Wide range of accessories

Advance Metering Solution



Measurement & Diagnostics

- Advanced Current based protection function via iTRP4 Release
- Advanced Energy based protection function via iTRP5 Release
- I^2T, SI, LI-VI based over load curves
- Advanced Protections like Maximum Demand, Phase Sequence, THD etc
- Common Fault Indication and Diagnostic LED
- Self, Auxiliary and Battery Mode
- Trip & Event Records available
- Communication module for remote monitoring & control
- Temperature module with thermal sensors for online temperature monitoring
- Zone Selective Interlocking (ZSI) module for system level coordination of faults

Accessories for iTRP4 & iTRP5 [8538]

Modules	Details
Communication Module	*
Aux. Power Supply Module	
Temperature Module (with Thermal Sensors)	
Zone Selective Interlocking Module	
Programmable Relay Module	

* On request

d sine DZ MCCBs for Motor back-up Protection

- Range: 16A to 800A, 50kA
- Suitable for isolation
- Wide Range of snap fit Internal and External Accessories

3 Pole					
Type	Current Rating (A)	Breaking Capacity Icu at 415V. AC, 50Hz. (kA)	Cat. No.	M.R.P. (`) Per Unit	Std. Pkg. (Nos.)
DZ0-125N	32	50kA	DZ0T0032N5M1AOOOO	10300	1
	40		DZ0T0040N5M1AOOOO	10300	1
	63		DZ0T0063N5M1AOOOO	10200	1
	80		DZ0T0080N5M1AOOOO	10200	1
	100		DZ0T0100N5M1AOOOO	10200	1
	125		DZ0T0125N5M1AOOOO▲	13400	1
DZ1-160N/ DZ1-200N	32		DZ1T0032NXM1AOOOO	13500	1
	40		DZ1T0040NXM1AOOOO	13500	1
	63		DZ1T0063NXM1AOOOO	13400	1
	80		DZ1T0080NXM1AOOOO	13400	1
	100		DZ1T0100NXM1AOOOO	13400	1
	125		DZ1T0125NXM1AOOOO	14000	1
	160		DZ1T0160NXM1AOOOO	16100	1
	200		DZ1T0200NXM1AOOOO▲	30000	1
DZ4-250N	250		DZ4T0250NXM1AOOOO	38800	1
DZ6-400N	320		DZ6T0320NXM1AOOOO	49000	1
	400		DZ6T0400NXM1AOOOO	51400	1
DZ7-800N	500		DZ7T0500NXM1AOOOO	68600	1
	630		DZ7T0630NXM1AOOOO	72900	1
	800		DZ7T0800NXM1AOOOO	76000	1



Representative Application Image

▲- Spreader Terminals are included

Note:
Please contact nearest branch office for Fuseless Type 2 Co-ordination selection charts.
For Microprocessor based Motor back-up Protection MCCBs, please contact nearest branch office.
For lower HP Motors, Please select MMS. Details are given on page no.21



DZ 800V MCCB Range [8536]

Rating (A) / Icu (kA) @ 800V	200	250	320	400	500	630
25/36/50	DZ6					
36/50					DZ7	



dsine-DZ TM

- Conforms to IS/IEC 60947-2
- 200A to 630A, 3P/4P
- 25kA, 36kA & 50kA @800V breaking capacities
- Ics=100%Icu
- Rated insulation voltage: 1250V AC rms
- Adjustable overload settings: 0.67 - 1.0 x In **
- Adjustable short-circuit settings: 6 - 12 x In
- Transparent sealable release cover
- Ambient Temperature Compensation
- High Electrical & Mechanical life***
- Manual and Rotary versions available
- Standard Back Insulating Plates included for 3P MCCBs
- Wide range of accessories

DZ 800V with Thermal - Magnetic Release

Type	Overload Release Range (A)	Breaking Capacity Icu at 800V AC, 50Hz. (kA)	3 Pole		4 Pole		Std. Pkg. (Nos.)
			Cat No	M.R.P. (`) Per Unit	Cat No	M.R.P. (`) Per Unit	
DZ6-400W	134-200	25kA	DZ6T0200WXD1AOOOO	*	DZ6F0200WXD1AOOOO	*	1
	168-250		DZ6T0250WXD1AOOOO		DZ6F0250WXD1AOOOO		1
DZ6-400Y	134-200	36kA	DZ6T0200YXD1AOOOO	*	DZ6F0200YXD1AOOOO	*	1
	168-250		DZ6T0250YXD1AOOOO		DZ6F0250YXD1AOOOO		1
	214-320		DZ6T0320YXD1AOOOO		DZ6F0320YXD1AOOOO		1
	268-400		DZ6T0400YXD1AOOOO		DZ6F0400YXD1AOOOO		1
DZ7-800Y	335-500		DZ7T0500YXD1AOOOO		DZ7F0500YXD1AOOOO		1
	422-630		DZ7T0630YXD1AOOOO		DZ7F0630YXD1AOOOO		1
DZ6-400Z	134-200	50kA	DZ6T0200ZXD1AOOOO	*	DZ6F0200ZXD1AOOOO	*	1
	168-250		DZ6T0250ZXD1AOOOO		DZ6F0250ZXD1AOOOO		1
	214-320		DZ6T0320ZXD1AOOOO		DZ6F0320ZXD1AOOOO		1
	268-400		DZ6T0400ZXD1AOOOO		DZ6F0400ZXD1AOOOO		1
DZ7-800Z	335-500		DZ7T0500ZXD1AOOOO		DZ7F0500ZXD1AOOOO		1
	422-630		DZ7T0630ZXD1AOOOO		DZ7F0630ZXD1AOOOO		1

* Price on request
** For DZ7 630A - Magnetic setting from 6 In to 10 In
*** Mechanical Life - 20000 Operations; Electrical Life - 4000 Operations (DZ6) & 2500 Operations (DZ7)

General Information
- Ambient temperature compensation in MCCBs helps prevent nuisance tripping by adjusting for temperature variations that affect the thermal elements. High ambient temperatures can cause premature tripping, while low temperatures may delay it. This is most suitable for Solar application.

DZ 800V MCCB Range [8536]

Rating (A) / Icu (kA) @ 800V	125	160	200	250	320	400	500	630	800
25/36/50	DZ6								
36/50							DZ7		



dsine-DZ iTRP1

- Conforms to IS/IEC 60947-2
- 125A to 800A, 3P/4P
- 25kA, 36kA & 50kA @800V breaking capacities
- Ics=100%Icu
- Rated insulation voltage: 1250V AC rms
- Adjustable overload setting from 0.25 to 1.0 x In
- Adjustable short-circuit setting from 1.5 to 12 x Ir**
- Switchable thermal memory
- Variable trip class
- Transparent sealable release cover
- High Electrical & Mechanical life***
- Manual and Rotary versions available
- Standard Back Insulating Plates included for 3P MCCBs
- Wide range of accessories

DZ 800V with Microprocessor Release iTRP1

Type	Overload Release Range (A)	Breaking Capacity Icu at 800V AC, 50Hz. (kA)	3 Pole		4 Pole		Std. Pkg. (Nos.)
			Cat No	M.R.P. (`) Per Unit	Cat No	M.R.P. (`) Per Unit	
DZ6-400W	31-125	25kA	DZ6T0125WXF1AOOOO	*	DZ6F0125WXF1AOOOO	*	1
	40-160		DZ6T0160WXF1AOOOO		DZ6F0160WXF1AOOOO		1
	50-200		DZ6T0200WXF1AOOOO		DZ6F0200WXF1AOOOO		1
	63-250		DZ6T0250WXF1AOOOO		DZ6F0250WXF1AOOOO		1
	80-320		DZ6T0320WXF1AOOOO		DZ6F0320WXF1AOOOO		1
	100-400		DZ6T0400WXF1AOOOO		DZ6F0400WXF1AOOOO		1
DZ6-400Y	31-125	36kA	DZ6T0125YXF1AOOOO	*	DZ6F0125YXF1AOOOO	*	1
	40-160		DZ6T0160YXF1AOOOO		DZ6F0160YXF1AOOOO		1
	50-200		DZ6T0200YXF1AOOOO		DZ6F0200YXF1AOOOO		1
	63-250		DZ6T0250YXF1AOOOO		DZ6F0250YXF1AOOOO		1
	80-320		DZ6T0320YXF1AOOOO		DZ6F0320YXF1AOOOO		1
	100-400		DZ6T0400YXF1AOOOO		DZ6F0400YXF1AOOOO		1
DZ7-800Y	125-500		DZ7T0500YXF1AOOOO		DZ7F0500YXF1AOOOO		1
	156-630		DZ7T0630YXF1AOOOO		DZ7F0630YXF1AOOOO		1
	200-800		DZ7T0800YXF1AOOOO		DZ7F0800YXF1AOOOO		1
DZ6-400Z	31-125	50kA	DZ6T0125ZXF1AOOOO	*	DZ6F0125ZXF1AOOOO	*	1
	40-160		DZ6T0160ZXF1AOOOO		DZ6F0160ZXF1AOOOO		1
	50-200		DZ6T0200ZXF1AOOOO		DZ6F0200ZXF1AOOOO		1
	63-250		DZ6T0250ZXF1AOOOO		DZ6F0250ZXF1AOOOO		1
	80-320		DZ6T0320ZXF1AOOOO		DZ6F0320ZXF1AOOOO		1
	100-400		DZ6T0400ZXF1AOOOO		DZ6F0400ZXF1AOOOO		1
DZ7-800Z	125-500		DZ7T0500ZXF1AOOOO		DZ7F0500ZXF1AOOOO		1
	156-630		DZ7T0630ZXF1AOOOO		DZ7F0630ZXF1AOOOO		1
	200-800		DZ7T0800ZXF1AOOOO		DZ7F0800ZXF1AOOOO		1

* Price on request
** For DZ7 630A / 800A, Magnetic setting from 1.5 In to 10 In / 1.5 In to 8 In respectively
*** Mechanical Life - 20000 Operations; Electrical Life - 4000 Operations (DZ6) & 2500 Operations (DZ7)

DZ 800V MCCB Range [8536]

Rating (A) / Icu (kA) @ 800V	200	250	320	400	500	630	800
25/36/50	DZ6						
36/50					DZ7		



dsine-DZ iTRP3

- Conforms to IS/IEC 60947-2
- 125A to 800A, 3P/4P
- 25kA, 36kA & 50kA @800V breaking capacities
- Ics=100%Icu
- Rated insulation voltage: 1250V AC rms
- Adjustable overload setting from 0.25 to 1.0 x In
- Adjustable short-circuit setting from 1.5 to 12 x Ir**
- Adjustable Instantaneous setting, 6 In & 12 In
- Inbuilt ground fault protection from 20%to 70%of In
- Adjustable neutral overload protection from 50%to 200%of Ir
- Switchable thermal memory
- Variable trip class
- Individual fault indication LEDs
- Transparent sealable release cover
- High Electrical & Mechanical life***
- Manual and Rotary versions available
- Standard Back Insulating Plates included for 3P MCCBs
- Wide range of accessories

DZ 800V with Microprocessor Release iTRP3

Type	Overload Release Range (A)	Breaking Capacity Icu at 800V AC, 50Hz. (kA)	3 Pole		4 Pole		Std. Pkg. (Nos.)
			Cat No	M.R.P. (`) Per Unit	Cat No	M.R.P. (`) Per Unit	
DZ6-400W	50-200	25kA	DZ6T0200WXH1AOOOO	*	DZ6F0200WXH1AOOOO	*	1
	63-250		DZ6T0250WXH1AOOOO		DZ6F0250WXH1AOOOO		1
	80-320		DZ6T0320WXH1AOOOO		DZ6F0320WXH1AOOOO		1
	100-400		DZ6T0400WXH1AOOOO		DZ6F0400WXH1AOOOO		1
DZ6-400Y	50-200	36kA	DZ6T0200YXH1AOOOO	*	DZ6F0200YXH1AOOOO	*	1
	63-250		DZ6T0250YXH1AOOOO		DZ6F0250YXH1AOOOO		1
	80-320		DZ6T0320YXH1AOOOO		DZ6F0320YXH1AOOOO		1
	100-400		DZ6T0400YXH1AOOOO		DZ6F0400YXH1AOOOO		1
DZ7-800Y	125-500		DZ7T0500YXH1AOOOO		DZ7F0500YXH1AOOOO		1
	156-630		DZ7T0630YXH1AOOOO		DZ7F0630YXH1AOOOO		1
	200-800		DZ7T0800YXH1AOOOO		DZ7F0800YXH1AOOOO		1
DZ6-400Z	50-200	50kA	DZ6T0200ZXH1AOOOO	*	DZ6F0200ZXH1AOOOO	*	1
	63-250		DZ6T0250ZXH1AOOOO		DZ6F0250ZXH1AOOOO		1
	80-320		DZ6T0320ZXH1AOOOO		DZ6F0320ZXH1AOOOO		1
	100-400		DZ6T0400ZXH1AOOOO		DZ6F0400ZXH1AOOOO		1
DZ7-800Z	125-500		DZ7T0500ZXH1AOOOO		DZ7F0500ZXH1AOOOO		1
	156-630		DZ7T0630ZXH1AOOOO		DZ7F0630ZXH1AOOOO		1
	200-800		DZ7T0800ZXH1AOOOO		DZ7F0800ZXH1AOOOO		1

* Price on request
** For DZ7 630A / 800A, Magnetic setting from 1.5 In to 10 In / 1.5 In to 8 In respectively
*** Mechanical Life - 20000 Operations; Electrical Life - 4000 Operations (DZ6) & 2500 Operations (DZ7)

Accessories for d sine DZ MCCBs [8538]



Auxiliary Contact
Trip Alarm Contact



Shunt Release



UV Release

Internal Accessories			
Description	Cat No	M.R.P. (`) Per Unit	Std. Pkg. (Nos.)
Auxillary Contact/ Trip Alarm Contact [8538]			
DZ0 Aux/TAC 1 C/o	EM90966OOOO	1150	1
DZ1/2/4 Aux/TAC 1 C/o	EM90110OOOO	1800	1
DZ6/7 Aux/TAC 1 C/o	EM90114OOOO	1960	1
Shunt Release [8538]			
DZ0 Shunt 110/240/415V AC	EM90520OMOO	1560	1
DZ1/2/4 Shunt 415V AC	EM90032OPOO	4780	1
DZ1/2/4 Shunt 240V AC	EM90032OBOO	4780	1
DZ1/2/4 Shunt 110V AC	EM90032OAOO	4780	1
DZ1/2/4 Shunt 48V AC	EM90032OJOO	4780	1
DZ1/2/4 Shunt 24V AC	EM90032OGOO	4780	1
DZ1/2/4 Shunt 220V DC	EM90032O2OO	4780	1
DZ1/2/4 Shunt 110V DC	EM90032O1OO	4780	1
DZ1/2/4 Shunt 48V DC	EM90032O5OO	4780	1
DZ1/2/4 Shunt 24V DC	EM90032O4OO	4780	1
DZ1/2/4 Shunt 12V DC	EM90032O3OO	4780	1
DZ6/7 Shunt 415V AC	EM90034OPOO	5350	1
DZ6/7 Shunt 240V AC	EM90034OBOO	5350	1
DZ6/7 Shunt 110V AC	EM90034OEOO	5350	1
DZ6/7 Shunt 48V AC	EM90034OJOO	5350	1
DZ6/7 Shunt 24V AC	EM90034OGOO	5350	1
DZ6/7 Shunt 220V DC	EM90034O2OO	5350	1
DZ6/7 Shunt 110V DC	EM90034O1OO	5350	1
DZ6/7 Shunt 48V DC	EM90034O5OO	5350	1
DZ6/7 Shunt 24V DC	EM90034O4OO	5350	1
DZ6/7 Shunt 12V DC	EM90034O3OO	5350	1

Internal Accessories			
Description	Cat No	M.R.P. (`) Per Unit	Std. Pkg. (Nos.)
Under Voltage Release [8538]			
DZ0 UVR 240V AC	EM90518BOOO	4690	1
DZ1/2/4 UVR415V AC	EM90031POOO	6180	1
DZ1/2/4 UVR240V AC	EM90031BOOO	6180	1
DZ1/2/4 UVR110V AC	EM90031EOOO	6180	1
DZ1/2/4 UVR48V AC	EM90031JOOO	6180	1
DZ1/2/4 UVR24V AC	EM90031GOOO	6180	1
DZ1/2/4 UVR220V DC	EM900312OOO	6180	1
DZ1/2/4 UVR110V DC	EM900311OOO	6180	1
DZ1/2/4 UVR48V DC	EM900315OOO	6180	1
DZ1/2/4 UVR24V DC	EM900314OOO	6180	1
DZ1/2/4 UVR12V DC	EM900313OOO	6180	1
DZ6/7 UVR 415V AC	EM90033POOO	6860	1
DZ6/7 UVR 240V AC	EM90033BOOO	6860	1
DZ6/7 UVR110V AC	EM90033EOOO	6860	1
DZ6/7 UVR 48V AC	EM90033JOOO	6860	1
DZ6/7 UVR 24V AC	EM90033GOOO	6860	1
DZ6/7 UVR 220V DC	EM900332OOO	6860	1
DZ6/7 UVR 110V DC	EM900331OOO	6860	1
DZ6/7 UVR 48V DC	EM900335OOO	6860	1
DZ6/7 UVR 24V DC	EM900334OOO	6860	1
DZ6/7 UVR 12V DC	EM900333OOO	6860	1

Accessories for d sine DZ MCCBs [8538]


Direct ROM


Extended ROM


Key Lock


EOM


Spreaders Terminals


Rear Terminals


Box Clamp Terminals

External Accessories			
Description	Cat No	M.R.P. (`) Per Unit	Std. Pkg. (Nos.)
Rotary Mechanism (Direct/Extended) [8538]			
DZ0 Direct ROM	EM90969OOOO	2130	1
DZ1 Direct ROM	EM90207OOOO	2370	1
DZ2 Direct ROM	EM90208OOOO	2700	1
DZ4 Direct ROM	EM90386OOOO	3150	1
DZ6 Direct ROM	EM90228OOOO	3900	1
DZ7 Direct ROM	EM90350OOOO	5410	1
DZ0 Extended ROM	EM90970OOOO	3060	1
DZ1 Extended ROM	EM90209OOOO	3200	1
DZ2 Extended ROM	EM90210OOOO	3760	1
DZ4 Extended ROM	EM90293OOOO	4770	1
DZ6 Extended ROM	EM90276OOOO	6290	1
DZ7 Extended ROM	EM90381OOOO	6600	1
Panel Door mounted Key lock for Extended ROM [8301]			
DZ0/1/2/4 Key Lock Type 1	EM99031OOOO	8760	1
DZ0/1/2/4 Key Lock Type 2	EM99031OOOA	8760	1
DZ0/1/2/4 Key Lock Type 3	EM99031OOOB	8760	1
DZ0/1/2/4 Key Lock Type 12	EM99031OOOC	8760	1
DZ0/1/2/4 Key Lock Type 23	EM99031OOOD	8760	1
DZ6/7 Key Lock Type 1	EM99141OOOO	10400	1
DZ6/7 Key Lock Type 2	EM99141OOOA	10400	1
DZ6/7 Key Lock Type 3	EM99141OOOB	10400	1
DZ6/7 Key Lock Type 12	EM99141OOOC	10400	1
DZ6/7 Key Lock Type 23	EM99141OOOD	10400	1
Electrical Operating Mechanism [8538]			
DZ1 240V AC	EM90490BOOO	54900	1
DZ2 240V AC	EM90545BOOO	59900	1
DZ4 240V AC	*		
DZ6 240V AC	EM90355BOOO	85300	1
DZ7 240V AC	EM90480BOOO	115700	1

* Price on request

Note:
For Electrical Operating Mechanism, refer wiring diagram from Product Catalogue or Product Manual.

External Accessories			
Description	Cat No	M.R.P. (`) Per Unit	Std. Pkg. (Nos.)
Spreader Terminals (Up to 690V AC #) [8538]			
DZ0-100 3 Pole	CM97785OOOO@	770	Set of 6
DZ0-100 4 Pole	CM97921OOOO@	1200	Set of 8
DZ1, DZ2-160 3 Pole	EM90609OOOO	2930	Set of 6
DZ1, DZ2-160 4 Pole	EM90610OOOO	3830	Set of 8
DZ4-250 - 3 Pole	EM94096OOOO	4760	Set of 6
DZ4-250 - 4 Pole	EM94097OOOO	6360	Set of 8
DZ6-400 - 3 Pole	EM90611OOOO	7140	Set of 6
DZ6-400 - 4 Pole	EM90612OOOO	9590	Set of 8
DZ7-630 - 3 Pole	EM97050OOOO	21500	Set of 6
DZ7-630 - 4 Pole	EM97052OOOO	28600	Set of 8
DZ7-800 - 3 Pole	EM97051OOOO	26900	Set of 6
DZ7-800 - 4 Pole	EM97053OOOO	35000	Set of 8
Rear Terminals [8538]			
DZ1-160 3 Pole	EM91176OOOO	7460	Set of 6
DZ1-160 4 Pole	EM91177OOOO	10700	Set of 8
DZ2-160 3 Pole	EM92088OOOO	8270	Set of 6
DZ2-160 4 Pole	EM92089OOOO	11700	Set of 8
DZ4-250 - 3 Pole	EM94058OOOO	10000	Set of 6
DZ4-250 - 4 Pole	EM94059OOOO	14400	Set of 8
DZ6-400 - 3 Pole	EM96045OOOO	13600	Set of 6
DZ6-400 - 4 Pole	EM96046OOOO	19700	Set of 8
DZ7-800 - 3 Pole	EM97045OOOO	25400	Set of 6
DZ7-800 - 4 Pole	EM97046OOOO	36900	Set of 8
Box Clamp Termination [8538]			
DZ1, DZ2-160 3 Pole	EM92176OOOO	6270	Set of 6
DZ1, DZ2-160 4 Pole	EM92177OOOO	8960	Set of 8
DZ4-250 - 3 Pole	EM94094OOOO	11600	Set of 6
DZ4-250 - 4 Pole	EM94095OOOO	16700	Set of 8
DZ6-400 - 3 Pole	EM96985OOOO	15800	Set of 6
DZ6-400 - 4 Pole	EM96370OOOO	22800	Set of 8

Note:
Phase Barriers are supplied along with MCCBs
@ Change in CAT No.
# For 800V Application Spreaders, please contact nearest branch office

Accessories for d sine DZ MCCBs [8538]

	DZ1	DZ2	DZ4	DZ6	DZ7
Plug-in	Full Kit				Fixed Kit + Conversion Kit
Draw-out	-		Fixed Kit + Conversion Kit		



Plug-in



Draw-out

External Accessories			
Description	Cat No	M.R.P. (`) Per Unit	Std. Pkg. (Nos.)
Plug-in Module [8538]			
DZ1 3 Pole Full Kit	EM90201OOOO	*	1
DZ1 4 Pole Full Kit	EM90202OOOO	*	1
DZ2 3 Pole Full Kit	EM90262OOOO	*	1
DZ2 4 Pole Full Kit	EM90263OOOO	*	1
DZ4 3 Pole Full Kit	EM90250OOOO	*	1
DZ4 4 Pole Full Kit	EM90251OOOO	*	1
DZ6 3 Pole Full Kit	EM90246OOOO	*	1
DZ6 4 Pole Full Kit	EM90247OOOO	*	1
DZ7-630 3 Pole Fixed Kit	EM99256OOOO	*	1
DZ7-630 3 Pole Conversion Kit	EM99254OOOO	*	1
DZ7-630 4 Pole Fixed Kit	EM99257OOOO	*	1
DZ7-630 4 Pole Conversion Kit	EM99255OOOO	*	1
DZ7-800 3 Pole Fixed Kit	EM99061OOOO	*	1
DZ7-800 3 Pole Conversion Kit	EM99069OOOO	*	1
DZ7-800 4 Pole Fixed Kit	EM99062OOOO	*	1
DZ7-800 4 Pole Conversion Kit	EM99070OOOO	*	1

* Price on request

External Accessories			
Description	Cat No	M.R.P. (`) Per Unit	Std. Pkg. (Nos.)
Draw-out Module [8538]			
DZ4 3 Pole Fixed Kit	EM90260OOOO	*	1
DZ4 3 Pole Conversion Kit	EM90258OOOO	*	1
DZ4 4 Pole Fixed Kit	EM90261OOOO	*	1
DZ4 4 Pole Conversion Kit	EM90259OOOO	*	1
DZ6 3 Pole Fixed Kit	EM90256OOOO	*	1
DZ6 3 Pole Conversion Kit	EM90254OOOO	*	1
DZ6 4 Pole Fixed Kit	EM90257OOOO	*	1
DZ6 4 Pole Conversion Kit	EM90255OOOO	*	1
DZ7-630 3 Pole Fixed Kit	EM99105OOOO	*	1
DZ7-630 3 Pole Conversion Kit	EM99103OOOO	*	1
DZ7-630 4 Pole Fixed Kit	EM99106OOOO	*	1
DZ7-630 4 Pole Conversion Kit	EM99104OOOO	*	1
DZ7-800 3 Pole Fixed Kit	EM90455OOOO	*	1
DZ7-800 3 Pole Conversion Kit	EM90453OOOO	*	1
DZ7-800 4 Pole Fixed Kit	EM90456OOOO	*	1
DZ7-800 4 Pole Conversion Kit	EM90454OOOO	*	1

Direct ROM or EOM is to be ordered mandatorily along with Drawout Module

* Price on request

Description	Cat No	M.R.P. (`) Per Unit	Std. Pkg. (Nos.)
Short Terminal Shroud $ [8538]			
DZ1-160 3 Pole	EM99081OOOO	3570	1
DZ1-160 4 Pole	EM99082OOOO	4300	1
DZ2-160 3 Pole	EM99085OOOO	3570	1
DZ2-160 4 Pole	EM99087OOOO	4300	1
DZ4-250 - 3 Pole	EM99089OOOO	3760	1
DZ4-250 - 4 Pole	EM99091OOOO	5480	1
DZ6-400 - 3 Pole	EM99093OOOO	5000	1
DZ6-400 - 4 Pole	EM99094OOOO	6790	1
DZ7-630/800 - 3 Pole	EM99097OOOO	5440	1
DZ7-630/800 - 4 Pole	EM99099OOOO	7500	1

$ Long Terminal Shrouds available on request

Description	Cat No	M.R.P. (`) Per Unit	Std. Pkg. (Nos.)
External Neutral CT [8504]			
DZ1, DZ2 - 40A, 63A, 80A	EM90507OOOO	4420	1
DZ1, DZ2 - 100A, 160A	EM90508OOOO	4530	1
DZ1 - 200A	EM90509OOOO	4570	1
DZ4 - 160A, 250A	EM90512OOOO	6780	1
DZ6 - 250A, 400A	EM90515OOOO	8330	1
DZ7 - 630A, 800A	EM90516OOOO	12900	1
DZ7 - 1000A	EM97326OOOO	13600	1
Adaptor Kit for External Neutral CT [8538]			
DZ1, DZ2 & DZ4 - Up to 250A	CM99994OOOO	1410	Set of 2
DZ6 - Up to 400A	CM99995OOOO	2600	Set of 2
DZ7 - Up to 1000A	EM97227OOOO	9440	Set of 2

Accessories for d sine DZ MCCBs [8538]

Mechanical Interlocking Kit Range	DZ1	DZ2	DZ4	DZ6
Front Slider	✓	✓	✓	
Rear Base Plate	-	-	✓	✓
Cable Base Plate	✓	✓	✓	✓


Front Slider


Cable Base Plate


Rear Base Plate

External Accessories			
Description	Cat No	M.R.P. (`) Per Unit	Std. Pkg. (Nos.
Mechanical Interlocking Options [8538]			
1. Front Slider MIL#			
DZ1 Front Slider	EM90396OOOO	5350	1
DZ2 Front Slider	EM90397OOOO	5630	1
DZ2/DZ4 Front Slider	EM90398OOOO	7620	1

Front Slider MIL Selection Table	DZ1	DZ2	DZ4
DZ1	✓		
DZ2		✓	✓
DZ4		✓	✓

External Accessories			
Description	Cat No	M.R.P. (`) Per Unit	Std. Pkg. (Nos.)
2. Rear Base Plate MIL#			
DZ4 Mounting Plate ~	EM90400OOOO	5560	1
DZ6 Mounting Plate ~	EM90399OOOO	6930	1
DZ4 Rear Base Plate ~	EM90354OOOO	27400	1
DZ4/DZ6 Rear Base Plate ~	EM90353OOOO	34400	1
DZ7 Rear Base Plate	EM99142OOOO	68000	1

~ - 2 Nos of Mounting Plate and 1 No of Base Plate must be ordered together along with 2 Nos of MCCBs.

Rear Base Plate MIL Selection Table (DZ4 & DZ6)	Base Plate		Mounting Plate	
	EM90353	EM90354	EM90399	EM90400
DZ4-DZ4	X	1No.	X	2 Nos.
DZ4-DZ6	1No.	X	1No.	1No.
DZ6-DZ6	1No.	X	2 Nos.	X

External Accessories			
Description	Cat No	M.R.P. (`) Per Unit	Std. Pkg. (Nos.
3. Cable Base Plate MIL#			
a. Base Plate with Cable (for MCCBs without Rear Terminations)			
DZ1/DZ2 Cable Base Plate $	EM90404OOOO	9600	1
DZ4 Cable Base Plate $	EM90405OOOO	11500	1
DZ6 Cable Base Plate $	EM90406OOOO	15000	1
b. Base Plate with Cable (for MCCBs with Rear Terminations)			
DZ1/DZ2 Cable Base Plate RT $	EM90401OOOO	10600	1
DZ4 Cable Base Plate RT $	EM90402OOOO	12700	1
DZ6 Cable Base Plate RT $	EM90403OOOO	16600	1
c. Cable Types and Lengths - For DZ1/ DZ2/ DZ4/ DZ6 MCCBs (for both MCCBs with and without Rear Terminations)			
L Cable (1 m Length) $	EM00471OOOO	2500	1
L Cable (3 m Length) $	EM00474OOOO	3770	1
L Cable (5 m Length) $	EM00477OOOO	5220	1
M Cable (1 m Length) $	EM00472OOOO	2500	1
M Cable (3 m Length) $	EM00475OOOO	3770	1
M Cable (5 m Length) $	EM00478OOOO	5220	1
H Cable (1 m Length) $	EM00473OOOO	2500	1
H Cable (3 m Length) $	EM00476OOOO	3770	1
H Cable (5 m Length) $	EM00479OOOO	5220	1

$ - 2 Nos of Base Plate & 1 No of suitable length of Cable must be ordered together along with 2 Nos of MCCBs.

Cable Base Plate MIL Selection Table		DZ1		DZ2		DZ4		DZ6	
		EM90404	EM90401	EM90404	EM90401	EM90405	EM90402	EM90406	EM90403
DZ1	EM90404	L	L						
	EM90401		M						
DZ2	EM90404			L	L	L	M	L	M
	EM90401				M	L	M	M	H
DZ4	EM90405					L	M	L	M
	EM90402						H	M	H
DZ6	EM90406							M	H
	EM90403								H

Common for 3P & 4P MCCBs

d sine DN MCCB with Thermal - Magnetic Release

Rating (A) / Icu=Ics (kA)*	16	20	25	32	40	50	63	80	100	125	160	200	250	320	400	500	630
25		DN0-100C								DN1-C							
36		DN0-100D/125D												DN3B			
36/50/70				DN2										DN3			



dsine TM

› Conforms to IS/IEC 60947-2 ›
20A to 630A, 3P & 4P
› 25kA, 36kA, 50kA & 70kA breaking capacities
› Ics= 100%of Icu*
› Adjustable overload settings: 0.8 - 1.0 x In ›
Adjustable short-circuit settings: 6 - 10 x In**
› Manual & Rotary versions available
› Wide range of accessories

Type	Thermal Release Range (A)	Breaking Capacity Icu at 415V AC, 50Hz. (kA)	3 Pole		4 Pole		Std. Pkg. (Nos.)
			Cat. No.	M.R.P. (`) Per Unit	Cat. No.	M.R.P. (`) Per Unit	
DN0-100D*	16-20	36	CM97893OOC2OG	11600	CM97919OOC2OG	16400	1
	20-25		CM97893OOD2OG	11600	CM97919OOD2OG	16400	1
	25-32		CM97893OOE2OG	11600	CM97919OOE2OG	16400	1
	32-40		CM97893OOF2OG	11600	CM97919OOF2OG	16400	1
	40-50		CM97893OOG2OG	11600	CM97919OOG2OG	16400	1
	50-63		CM97893OOH2OG	11300	CM97919OOH2OG	15900	1
	63-80		CM97893OOJ2OG	11300	CM97919OOJ2OG	15900	1
	80-100		CM97893OOK2OG	11300	CM97919OOK2OG	15900	1
DN0-125D*	100-125		CM90680OOLOOG	14100	CM90681OOLOOG	18600	1
DN0-100C	16-20	25	CM91612OOCOOG	12100	CM91712OOCOOG	16900	1
	20-25		CM91612OODOOG	12100	CM91712OODOOG	16900	1
	25-32		CM91612OOEOOG	12100	CM91712OOEOOG	16900	1
	32-40		CM91612OOFOOG	12100	CM91712OOFOOG	16900	1
	40-50		CM91612OOGOOG	12100	CM91712OOGOOG	16900	1
	50-63		CM91612OOHOOG	11700	CM91712OOHOOG	16400	1
	63-80		CM91612OOJOOG	11700	CM91712OOJOOG	16400	1
	80-100		CM91612OOKOOG	11700	CM91712OOKOOG	16400	1
DN1-250C	100-125		CM90638OOLO	16600	CM90642OOLO	20300	1
	125-160		CM90638OOMO	21500	CM90642OOMO	26100	1
	160-200		CM90638OONO	27500	CM90642OONO	32900	1
	200-250		CM90638OOPO	32200	CM90642OOPO	37400	1

Note:
Breaking Capacity : C = 25kA, D = 36kA, N = 50kA, S = 70kA
* DN0-100D/125D : Ics= 50%Icu
** For DN0, DN1, DN3B-Short Circuit Setting: 9In
For DN1-250N (50kA) please contact nearest branch office
*** From 16A to 50A, Fixed Magnetic setting (375A)

d sine DN MCCB with Thermal - Magnetic Release

Type	Thermal Release Range (A)	Breaking Capacity Icu at 415V AC, 50Hz. (kA)	3 Pole		4 Pole		Std. Pkg. (Nos.)
			Cat. No.	M.R.P. (`) Per Unit	Cat. No.	M.R.P. (`) Per Unit	
DN2-250D	100-125	36	CM92008OOL1OG	28700	CM92108OOL1OG	35500	1
	125-160		CM92008OOM1OG	35500	CM92108OOM1OG	43800	1
	160-200		CM92009OON1OG	36800	CM92109OON1OG	47100	1
	200-250		CM92009OOP1OG	41900	CM92109OOP1OG	51700	1
DN3B-400D	250-320		CM98401OOQOOG	57000	CM98403OOQOOG	69500	1
	320-400		CM98401OOROOG	57000	CM98403OOROOG	69500	1
DN3-400D	250-320		CM94005OOQ1OG	*	CM94105OOQ1OG	*	1
	320-400		CM94005OOR1OG	*	CM94105OOR1OG	*	1
DN3-630D	400-500		CM94006OOS1OG	73400	CM94106OOS1OG	92500	1
	500-630		CM94006OOT1OG	73400	CM94106OOT1OG	92500	1
DN2-250N	100-125	50	CM92005OOL1OG	39900	CM92105OOL1OG	48400	1
	125-160		CM92005OOM1OG	40900	CM92105OOM1OG	51500	1
	160-200		CM92006OON1OG	41800	CM92106OON1OG	52400	1
	200-250		CM92006OOP1OG	47000	CM92106OOP1OG	58900	1
DN3-400N	250-320		CM94003OOQ1OG	61900	CM94103OOQ1OG	76700	1
	320-400		CM94003OOR1OG	61900	CM94103OOR1OG	76700	1
DN3-630N	400-500		CM94004OOS1OG	81500	CM94104OOS1OG	105200	1
	500-630		CM94004OOT1OG	81500	CM94104OOT1OG	105200	1
DN2-250S	100-125	70##	CM92002OOL1OG	*	CM92102OOL1OG	*	1
	125-160		CM92002OOM1OG	*	CM92102OOM1OG	*	1
	160-200		CM92003OON1OG	*	CM92103OON1OG	*	1
	200-250		CM92003OOP1OG	*	CM92103OOP1OG	*	1
DN3-400S	250-320		CM94001OOQ1OG	*	CM94101OOQ1OG	*	1
	320-400		CM94001OOR1OG	*	CM94101OOR1OG	*	1
DN3-630S	400-500		CM94002OOS1OG	*	CM94102OOS1OG	*	1
	500-630		CM94002OOT1OG	*	CM94102OOT1OG	*	1

* Price on request

Available till stock lasts.

General Information

› Use of phase barriers is mandatory. These are supplied along with MCCBs

› It is recommended to use spreader terminals for enhancing termination capacity

› Spreader terminals are available as accessories, unless otherwise specified against cat. nos.

Special Applications

› dsine-DN/DU/DY MCCBs with TM release can be used for DC application (2P/3P/4P) ›

dsine-DN/DU MCCBs can be used for Capacitor back-up protection

› For Motor back-up protection, use ‘M’ series of MCCBs

› For isolator applications, use SD version (without protection release)

DN MCCB with Microprocessor Release

Rating (A) / Icu (kA)	40	63	100	160	250	400	630	800	1000	1250
36/50/70/100	DN2					DN3				
50/70/100								DN4		

DN MCCB with Microprocessor Release MTX1.0



dsine DN MTX1.0

- Conforms to IS/IEC 60947-2
- 40A to 1250A, 3P & 4P
- 36kA, 50kA, 70kA and 100kA breaking capacities
- Ics=100%Icu
- Adjustable overload setting from 0.4 to 1.0 x In
- Adjustable short-circuit setting from 1.5 to 8 x Ir
- Inbuilt instantaneous Protection
- Switchable thermal memory
- Variable trip class
- Front LED Indication
- Manual & Rotary versions available
- Wide range of accessories

Type	Release Range (A)	Breaking Capacity Icu at 415V AC, 50Hz. (kA)	3 Pole		4 Pole		Std. Pkg. (Nos.)
			Cat. No.	M.R.P. (`) Per Unit	Cat. No.	M.R.P. (`) Per Unit	
DN2-250D	16-40 25-	36	CM92063OOOOX1	48800	CM92155OOOOX1	61200	1
	63 40-		CM92071OOOOX1	48800	CM92154OOOOX1	61200	1
	100 63-		CM92051OOOOX1	48800	CM92153OOOOX1	61200	1
	160 100-		CM92074OOOOX1	61500	CM92152OOOOX1	85600	1
	250 160-		CM92054OOOOX1	64100	CM92151OOOOX1	88700	1
DN3-400D	400 250-		CM93001OOOOX1	78800	CM93003OOOOX1	102000	1
DN3-630D	630 16-		CM93005OOOOX1	87100	CM93007OOOOX1	115200	1
DN2-250N	40 25-63	50	CM92064OOOOX1	55500	CM92160OOOOX1	73500	1
	40-100		CM92072OOOOX1	55500	CM92159OOOOX1	73500	1
	63-160		CM92052OOOOX1	55500	CM92158OOOOX1	73500	1
	100-250		CM92075OOOOX1	72000	CM92157OOOOX1	93600	1
	160-400		CM92055OOOOX1	76900	CM92156OOOOX1	95700	1
DN3-400N	250-630		CM93002OOOOX1	86100	CM93004OOOOX1	112400	1
DN3-630N	320-800		CM93006OOOOX1	94600	CM93008OOOOX1	123400	1
DN4-1250N	400-1000		CM96021OOOOX1	136000	CM96111OOOOX1	172900	1
	500-1250		CM96022OOOOX1	201100	CM96112OOOOX1	283100	1
	16-40 25-		CM96023OOOOX1	251100	CM96113OOOOX1	339600	1
DN2-250S	63 40-	70##	CM92065OOOOX1	*	CM92165OOOOX1	*	1
	100 63-		CM92073OOOOX1	*	CM92164OOOOX1	*	1
	160 100-		CM92059OOOOX1	*	CM92163OOOOX1	*	1
	250 160-		CM92076OOOOX1	*	CM92162OOOOX1	*	1
	400 250-		CM92056OOOOX1	* * *	CM92161OOOOX1	*	1
DN3-400S	630 320-		CM94053OOOOX1	145800	CM94153OOOOX1	*	1
DN3-630S	800 400-		CM94079OOOOX1	210000	CM94179OOOOX1	*	1
DN4-1250S	1000		CM96025OOOOX1	271900	CM96115OOOOX1	191000	1
	500-1250		CM96026OOOOX1		CM96116OOOOX1	309100	1
			CM96027OOOOX1		CM96117OOOOX1	369900	1 1

Note:
Available till stock lasts.
dsine DN-V Version (Icu=Ics=100kA) MCCBs are available till stock lasts.

d sine DN MCCB with Microprocessor Release MTX2.0



dsine DN MTX2.0

- Conforms to IS/IEC 60947-2
- 40A to 1250A, 3P & 4P
- 36kA, 50kA, 70kA and 100kA breaking capacities
- Ics=100%Icu
- Adjustable overload setting from 0.4 to 1.0 x In
- Adjustable short-circuit setting from 1.5 to 8 x Ir
- Inbuilt instantaneous Protection
- Inbuilt ground fault protection from 20%-50%of In
- Adjustable neutral overload protection from 50%to 150%of Ir
- Switchable thermal memory
- Variable trip class
- Front LED Indication
- Panel mounted display for current metering & trip record
- Manual & Rotary versions available
- Wide range of accessories

Type	Release Range (A)	Breaking Capacity Icu at 415V AC, 50Hz. (kA)	3 Pole		4 Pole		Std. Pkg. (Nos.)
			Cat. No.	M.R.P. (`) Per Unit	Cat. No.	M.R.P. (`) Per Unit	
DN2-250D	16-40 25-	36	CM92063OOOOAG	83400	CM92155OOOOAG	95900	1
	63 40-		CM92071OOOOAG	83400	CM92154OOOOAG	95900	1
	100 63-		CM92051OOOOAG	83400	CM92153OOOOAG	95900	1
	160 100-		CM92074OOOOAG	90600	CM92152OOOOAG	111200	1
	250 160-		CM92054OOOOAG	91800	CM92151OOOOAG	112600	1
DN3-400D	400 250-		CM93001OOOOAG	108600	CM93003OOOOAG	125700	1
DN3-630D	630 16-		CM93005OOOOAG	118800	CM93007OOOOAG	144000	1
DN2-250N	40 25-63	50	CM92064OOOOAG	90600	CM92160OOOOAG	108000	1
	40-100		CM92072OOOOAG	90600	CM92159OOOOAG	108000	1
	63-160		CM92052OOOOAG	90600	CM92158OOOOAG	108000	1
	100-250		CM92075OOOOAG	94400	CM92157OOOOAG	114900	1
	160-400		CM92055OOOOAG	95200	CM92156OOOOAG	115800	1
DN3-400N	250-630		CM93002OOOOAG	114000	CM93004OOOOAG	136000	1
DN3-630N	320-800		CM93006OOOOAG	126300	CM93008OOOOAG	162700	1
DN4-1250N	400-1000		CM96021OOOOAG	181300	CM96111OOOOAG	215100	1
	500-1250		CM96022OOOOAG	233400	CM96112OOOOAG	309300	1
	16-40 25-		CM96023OOOOAG	291900	CM96113OOOOAG	377800	1
DN2-250S	63 40-	70##	CM92065OOOOAG	*	CM92165OOOOAG	*	1
	100 63-		CM92073OOOOAG	*	CM92164OOOOAG	*	1
	160 100-		CM92059OOOOAG	*	CM92163OOOOAG	*	1
	250 160-		CM92076OOOOAG	*	CM92162OOOOAG	*	1
	400 250-		CM92056OOOOAG	*	CM92161OOOOAG	* * *	1
DN3-400S	630 320-		CM94053OOOOAG	*	CM94153OOOOAG	260900	1
DN3-630S	800 400-		CM94079OOOOAG	*	CM94179OOOOAG	379400	1
DN4-1250S	1000		CM96025OOOOAG	208600	CM96115OOOOAG	470600	1
	500-1250		CM96026OOOOAG	291300	CM96116OOOOAG		1
			CM96027OOOOAG	358900	CM96117OOOOAG		1 1

Accessories for MTX2.0 [8538]

Modules for MTX2.0 release	Cat. No.	M.R.P. (`) Per Unit
Current Metering Module (Display & Metering Module)##	CM95698OOOO	72700
Cable (2m length)##	CM01196OOOO	3390
Power Supply Module##	CL90722OOOO	*
UNCO Module for Status Indication & Control through communication##	CL90852OOOO	24300

Current Metering & latest trip record

Note:
* Price on request
# Available till stock lasts.
dsine DN-V Version (Icu=Ics=100kA) MCCBs are available till stock lasts.

d sine DN MCCB with Microprocessor Release MTX3.0



dsine DN MTX3.0

- Conforms to IS/IEC 60947-2 & IEC 60947-2
- Range: 40A to 1250A, 3P & 4P
- Choice of 36kA / 50kA / 70kA / 100kA breaking capacities
- Ics = 100%Icu
- Suitable for Isolation
- Adjustable Over Load from 0.4 - 1.0 x In
- Adjustable Short Circuit from 1.5 - 8 x Ir with selectable time delay
- Instantaneous protection with fine settings
- Inbuilt ground fault protection from 10%- 50%of In
- Adjustable neutral overload protection available : 50%to 150%of Ir
- Advanced Current, Voltage, Frequency & Power based protections
- Other Protections like Maximum Demand, Phase Sequence, THD etc.
- Comprehensive Current, Power, Energy, PF, MD, THD metering
- Provision of Thermal Memory : ON/OFF
- Variable trip class at 1.5 Ir,6 Ir & 7.2 Ir
- Front LED indication of Over Load, short circuit & earth fault
- Panel mounted display available for advanced protections & metering
- Communication capable release
- Manual & Rotary versions available
- For 3 phase 4 wire system, External neutral CTs available for 3P MCCBs
- Wide Range of snap fit Internal and External Accessories

Type	Release Range (A)	Breaking Capacity Icu at 415V AC, 50Hz. (kA)	3 Pole		4 Pole		Std. Pkg. (Nos.)
			Cat. No.	M.R.P. (`) Per Unit	Cat. No.	M.R.P. (`) Per Unit	
DN2-250D	16 - 40	36	CM92063OOOOBG	*	CM92155OOOOBG	*	1
	25 - 63		CM92071OOOOBG		CM92154OOOOBG		1
	40 - 100		CM92051OOOOBG		CM92153OOOOBG		1
	63 - 160		CM92074OOOOBG		CM92152OOOOBG		1
	100 - 250		CM92054OOOOBG		CM92151OOOOBG		1
DN3-400D	160 - 400		CM93001OOOOBG		CM93003OOOOBG		1
DN3-630D	250 - 630		CM93005OOOOBG		CM93007OOOOBG		1
DN2-250N	16 - 40	50	CM92064OOOOBG	*	CM92160OOOOBG	*	1
	25 - 63		CM92072OOOOBG		CM92159OOOOBG		1
	40 - 100		CM92052OOOOBG		CM92158OOOOBG		1
	63 - 160		CM92075OOOOBG		CM92157OOOOBG		1
	100 - 250		CM92055OOOOBG		CM92156OOOOBG		1
DN3-400N	160 - 400		CM93002OOOOBG		CM93004OOOOBG		1
DN3-630N	250 - 630		CM93006OOOOBG		CM93008OOOOBG		1
DN4-1250N	320 - 800		CM96021OOOOBG		CM96111OOOOBG		1
	400 - 1000		CM96022OOOOBG		CM96112OOOOBG		1
	500 - 1250		CM96023OOOOBG		CM96113OOOOBG		1
DN2-250S	16 - 40	70##	CM92065OOOOBG	*	CM92165OOOOBG	*	1
	25 - 63		CM92073OOOOBG		CM92164OOOOBG		1
	40 - 100		CM92059OOOOBG		CM92163OOOOBG		1
	63 - 160		CM92076OOOOBG		CM92162OOOOBG		1
	100 - 250		CM92056OOOOBG		CM92161OOOOBG		1
DN3-400S	160 - 400		CM94053OOOOBG		CM94153OOOOBG		1
DN3-630S	250 - 630		CM94079OOOOBG		CM94179OOOOBG		1
DN4-1250S	320 - 800		CM96025OOOOBG		CM96115OOOOBG		1
	400 - 1000		CM96026OOOOBG		CM96116OOOOBG		1
	500 - 1250		CM96027OOOOBG		CM96117OOOOBG		1

Accessories for MTX3.0 [8538]

Modules for MTX3.0 release	Cat. No.	M.R.P. (`) Per Unit
Communication Module##	CM95680OOOO	*
Voltage Module##	CM95685OOOO	*
Display Module##	CM95676OOOO	*
Power Supply Module##	CL90722OOOO	*
UNCO Module for Status Indication & Control through communication##	CL90852OOOO	24300

Note:
* Price on request
# Available till stock lasts.
dsine DN-V Version (Icu=Ics=100kA) MCCBs are available till stock lasts.

d sine DN MCCBs for Motor back-up Protection##



- Range: 32A to 630A, 50kA
- Suitable for isolation
- Wide Range of snap fit Internal and External Accessories

3 Pole					
Type	Current Rating (A)	Breaking Capacity Icu at 415V. AC, 50Hz. (kA)	Cat. No.	M.R.P. (`) Per Unit	Std. Pkg. (Nos.)
DN0-100M	32	50	CM98944OOEO	*	1
	40		CM98944OOFO	*	1
	50		CM98944OOGO	*	1
	63		CM98944OOHO	*	1
	80		CM98944OOJO	*	1
	100		CM98944OOKO	*	1
DN1-160M	100		CM90345OOKO	*	1
	125		CM90345OOLO	*	1
	160		CM90345OOMO	*	1
DN2-250M	200		CM92171OONOOG	*	1
	250		CM92171OOPOOG	*	1
DN3-400M	320		CM94516OOQOOG	*	1
	400		CM94516OOROOG	*	1
DN3-630M	500		CM94515OOSOOG	*	1
	630		CM94515OOTOOG	*	1

* Price on request



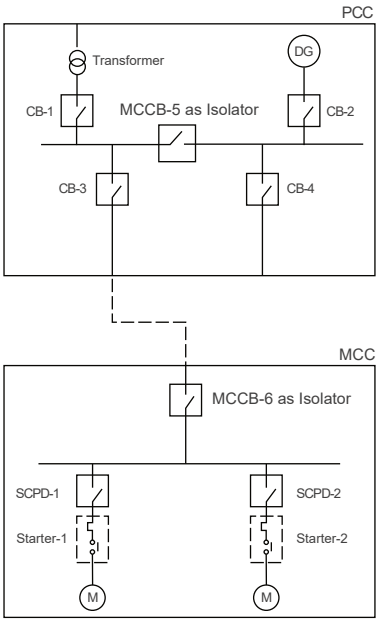
Representative Application Image

Note:
Please contact nearest branch office for fuseless type 2 co-ordination selection chart
For lower HP Motors, Please select MMS. Details are given on page no.21 dsine-DN
M version MCCBs are available till stock lasts.
Available till stock lasts.

d sine DN Switch Disconnector - SD (MCCBs without protection release)



- Used as switching devices for isolation
- Range: 32A to 1250A, 3P & 4P
- Suitable for isolation
- Wide Range of snap fit Internal and External Accessories

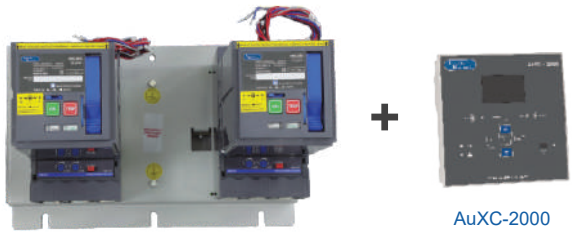


Representative Application Image

Type	Current Rating (A)	3 Pole		4 Pole		Std. Pkg. (Nos.)
		Cat. No.	M.R.P. (`) Per Unit	Cat. No.	M.R.P. (`) Per Unit	
DN0-160SD	32	CM90716OOEO	10500	CM90717OOEO	14100	1
	63	CM90716OOHO	10500	CM90717OOHO	14100	1
	100	CM90716OOKO	12400	CM90717OOKO	16400	1
	125	CM90716OOLO	13800	CM90717OOLO	18300	1
	160	CM90716OOMO	14900	CM90717OOMO	19400	1
DN2-250SD	200	CM96814OONOOG	29800	CM96815OONOOG	39700	1
	250	CM96802OOPOOG	32100	CM96803OOPOOG	42500	1
DN3B-400SD	320	CM98410OOQOOG	47400	CM98412OOQOOG	61500	1
	400	CM98410OOROOG	47400	CM98412OOROOG	61500	1
DN3-630SD	500	CM96806OOSOOG	53700	CM96807OOSOOG	73400	1
	630	CM96806OOTOOG	53700	CM96807OOTOOG	73400	1
DN4-1250SD	800	CM93041OOUO	107300	CM93042OOUO	132100	1
	1000	CM93041OOVO	142500	CM93042OOVO	182400	1
	1250	CM93041OOAO	189000	CM93042OOAO	234300	1

Automatic Source Transfer System (ASTS)**

- 128x80 pixel, backlit LCD screen with 4 grey levels
- Advanced programmable I/O function
- Management of automatic generator start/stop
- Controls of UV, OV, phase loss, asymmetry, minimum frequency, maximum frequency, with independent enabling and time delay



AuXC-2000

Automatic Transfer Controllers (ATC) [9032]

Type	Cat. No.	M.R.P. (`) Per Unit	Std. Pkg. (Nos.)
AuXC-2000 controller**	ATC2000OOOO	52600	1

Can be used along with ACB, Motorised MCCBs, MCX contactors & Motorised Changeover switches

Note:
** For communication version of AuXC controller refer page no-6

2 d sine MCCBs + 2 SE-EOM + 2 ATAC + 1 MIL kit

For AuXC 2000/2100 programming videos and more details please scan the QR code or click here

Frame	Accessories	Total Set M.R.P. (`)	Remarks
DN2	2 Nos : SEOMs with Aux + Trip Alarm Contact + 1 No. : MIL + 1 No. : AuXC2000	*	Add MRPs of Similar 2 MCCBs of DN2 of desired no. of Poles, Breaking Cap. & Release to arrive at ASTS Solution.
DN3-400		*	Add MRPs of Similar 2 MCCBs of DN3 of desired no. of Poles, Breaking Cap. & Release to arrive at ASTS Solution.
DN3-630		*	

* Price on request

Note:
Picture shown is for representation purpose only, MCCB + EOM + ATAC combination, MIL kit & AuXC-2000 to be purchased separately & assembled at site.
dsine-DN COMBO MCCBs are available till stock lasts.
For ASTS Solution in MCCB, please refer DZ range.

Accessories for dsine DN MCCBs [8538]


Auxiliary Contact


TAC


Shunt Release


UV Release


Neutral CT


Direct ROM


Extended ROM


Key Lock

Description	Internal		
	Cat. No.	M.R.P. (`) Per Unit	Std. Pkg. (Nos.)
Auxiliary Contact [8538]			
DN0, DN1 - 1 C/O - Right	CM97886OOOO	1650	1
DN0, DN1 - 2 C/O - Right	CM97887OOOO	2910	1
DN2, DN3B, DN3, DN4 - 1 C/O	CM99801OOOO	1920	1
DN2, DN3B, DN3, DN4 - 2 C/O	CM99802OOOO	3710	1
Trip Alarm Contact [8538]			
DN0, DN1 - 1 C/O - Right DN0,	CM97888OOOO	1650	1
DN1 - 2 C/O - Right	CM97889OOOO	2910	1
DN2, DN3B, DN3, DN4 - 1 C/O - Right	CM99803OOOO	2010	1
Auxiliary 1 C/O + TAC 1 C/O [8538]			
DN0, DN1 - Right	CM97890OOOO	2800	1
DN2, DN3B, DN3, DN4 - Right	CM99804OOOO	3710	1
Shunt Release [8538]			
DN0, DN1 - 24V DC - Left DN0,	CM91402O4OO	3260	1
DN1 - 110V AC - Left	CM97883OAOO	3260	1
DN0, DN1 - 240/415V AC - Left	CM97883OMOO	3260	1
DN2, DN3 - 110V DC - Left	CM99807OOOO	5760	1
DN2,DN3B,DN3,DN4- 110/240/415V AC,220V DC	CM99805OOOO	4800@	1
DN2, DN3B, DN3 - 24V DC	CM98976O4OO	4800@	1
Under Voltage Release [8538]			
DN0, DN1 - 240V AC - Left	CM97892BOOO	5400	1
DN2, DN3B, DN3 - 240V AC - Left	CM99986BOOO	6680**	1
DN4 - 240V AC - Left	CM99906OOOO	7630**	1

@- 'NO' of control contactor to be connected in series for DCcontrol supply
** Use these UV Cat. Nos. with Grey look MCCBs only

Description	External		
	Cat. No.	M.R.P. (`) Per Unit	Std. Pkg. (Nos.)
External Neutral CT [8504]			
DN2 - 40A DN2 - 63A DN2 - 100A	CM99946OOOO	3110	1
DN2 - 160A	CM99947OOOO	3110	1
DN2 - 250A	CM99948OOOO	3110	1
DN3 - 400A	CM99949OOOO	4470	1
DN3 - 630A DN4 - 800A DN4 - 1000A	CM99950OOOO	4470	1
DN4 - 1250A	CM99954OOOO	9130	1
Adaptor kit for External Neutral CT [8538]	CM99955OOOO	9130	1
	CM99889OOOO	14000	1
DN3 - 400 DN3 - 630 DN4 - 800 DN4 - 1000	CM99890OOOO	14600	1 1
DN4 - 1250	CM99891OOOO	16200	
DN2 - 250	CM99994OOOO	1410	Set of 2
	CM99995OOOO	2600	Set of 2
	CM99997OOOO	2850	Set of 2
	CM99996OOOO	6990	Set of 4
	CM90966OOOO	14800	Set of 2
	CM99998OOOO	25400	

Description	External		
	Cat. No.	M.R.P. (`) Per Unit	Std. Pkg. (Nos.)
Rotary Handle [8538]			
DN0 Direct ROM	CM97895OOOO	2100	1
DN1 Direct ROM	CM98040OOOO	2260	1
DN2 Direct ROM DN3B,	CM99829OOOO	2330	1
DN3 Direct ROM	CM99860OOOO	3480	1
DN0 Extended ROM	CM97896OOOO	2720	1
DN1 Extended ROM	CM98041OOOO	2900	1
DN2 Extended ROM DN3B,	CM99830OOOO	3500	1
DN3 Extended ROM	CM99861OOOO	5720	1
DN4 Extended ROM	CM99884OOOO	7260	1
Panel door mounted Key lock for Extended ROM # [8301]			
Type 1	CM99958TOOOO	9670	1
Type 2 Type 3 Type 12	CM99958TOOOA	9670	1
Type 23	CM99958TOOOB	9670	1
	CM99958TOOOC	9670	1
	CM99958TOOOD	9670	1

- Can be used with dsine DN & DU new look extended ROM

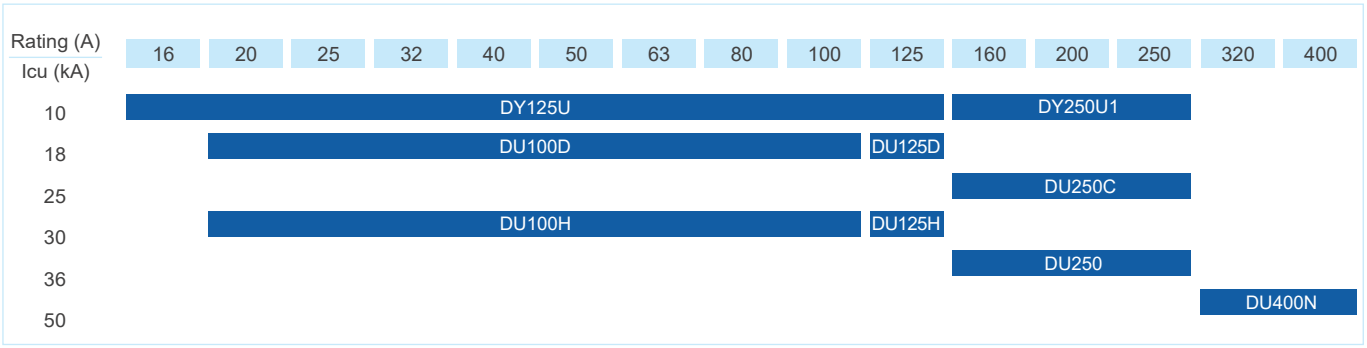

Spreader Terminals


MIL Kit - Base Mounted

Description	External		
	Cat. No.	M.R.P. (`) Per Unit	Std. Pkg. (Nos.)
Spreader Terminals [8538]			
DN0-100 - 3 Pole DN0-	CM97785OOOO	770	Set of 6
125D - 3 Pole	CM90687OOLO	900	Set of 6
DN1, DN2 - 250 - 3 Pole	ST98053OOOO	3000	Set of 6
DN3B/DN3 - 400 - 3 Pole	ST98065OOOO	5520	Set of 6
DN3-630 - 3 Pole DN4-	ST98054OOOO	6500	Set of 6
800 - 3 Pole	CM91161OOUO	16600	Set of 6
DN4-1000 - 3 Pole	CM91161OOVO	24500	Set of 6
DN4-1250 - 3 Pole	CM91161OOAO	68300	Set of 6
DN0-100 - 4 Pole	CM97921OOOO	1200	Set of 8
DN0-125D - 4 Pole	CM90688OOLO	1310	Set of 8
DN1, DN2 - 250 - 4 Pole	CM92007OOOO	3980	Set of 8
DN3B/DN3-400 - 4 Pole	ST98066OOOO	7910	Set of 8
DN3-630 - 4 Pole	CM92004OOOO	8250	Set of 8
DN4-800- 4 Pole	ST90362OOOO	21300	Set of 8
DN4-1000- 4 Pole	CM90064OOVO	32300	Set of 8
DN4-1250 - 4 Pole	ST98058OOOO	87200	Set of 8
Mechanical Interlock Kit - Base Plate [8538]			
D N 2 - 2 5 0	CM99731OOOO	11000	1
D N 3 - 4 0 0	CM99732OOOO	16800	1 1
D N 3 - 6 3 0	CM99854OOOO	18000	
DIN rail kit [8538]			1
DN0	CM90944OOOO	250	

Note:
Phase Barriers are supplied along with MCCBs

DU/DY with Thermal - Magnetic Release :



DY125U MCCBs



- Conforms to IS/IEC 60947-2, IEC 60947-2 & EN 60947-2
- Range: 16A to 125A, 2P/3P/4P
- Ics=100%of Icu
- High Electrical & Mechanical life
- Thermal Magnetic Release
- No Load-Line Bias
- ON-TRIP-OFF indication
- Suitable for Isolation
- Common SS Enclosure for 3P & 4P

Type	Current Rating (A)	Breaking Capacity Icu (kA)	2 Pole		Breaking Capacity Icu (kA)	3 Pole		4 Pole		Std. Pkg. (Nos.)
			Cat. No.	M.R.P. (`) Per Unit		Cat. No.	M.R.P. (`) Per Unit	Cat. No.	M.R.P. (`) Per Unit	
DY125U	16	AC : 25kA @ 240V AC, 50 Hz/60 Hz DC : 10kA @ 250V DC (2P in series)	EM90982OOBO	2900	AC : 10kA @ 415V AC, 50 Hz/60 Hz DC : 10kA @ 250V DC (3P in series)	EM90983OOBO	3410	EM90984OOBO	4590	1
	20		EM90982OOCO	2900		EM90983OOCO	3410	EM90984OOCO	4590	1
	25		EM90982OODO	2900		EM90983OODO	3410	EM90984OODO	4590	1
	32		EM90982OOEO	2900		EM90983OOEO	3410	EM90984OOEO	4590	1
	40		EM90982OOFO	2900		EM90983OOFO	3410	EM90984OOFO	4590	1
	50		EM90982OOGO	2900		EM90983OOGO	3410	EM90984OOGO	4590	1
	63		EM90982OOHO	2820		EM90983OOHO	3310	EM90984OOHO	4460	1
	80		EM90982OOJO▲	3100		EM90983OOJO▲	3730	EM90984OOJO ▲	5150	1
			EM90812OOJO	2820		EM90813OOJO	3310	EM90814OOJO	4460	1
	100		EM90982OOKO▲	3100		EM90983OOKO▲	3730	EM90984OOKO▲	5150	1
			EM90812OOKO	2820		EM90813OOKO	3310	EM90814OOKO	4460	1
	125		EM90982OOLO▲	4330		EM90983OOLO▲	5480	EM90984OOLO ▲	6720	1

▲- Spreader Terminals are included
Note: 2 Pole in 3 Pole frame size
Phase barriers are supplied with all MCCBs

Accessories for DY125U MCCBs [8538]



Auxiliary/Trip Alarm Contact



Shunt Release



Spreader Terminals



Direct ROM



Extended ROM

Description	Internal		
	Cat. No.	M.R.P. (`) Per Unit	Std. Pkg. (Nos.)
Auxiliary/Trip Alarm Contact			
1C/O	EM90966OOOO	1150	1
Shunt Release			
Short Rated 110/240/415V AC	EM90520OMOO	1560	1
Under Voltage Release			
240V AC	EM90518BOOO	4690	1

Description	External		
	Cat. No.	M.R.P. (`) Per Unit	Std. Pkg. (Nos.)
Spreader Terminals			
2 Pole (upto 100A)	CM97785OOO2	460	Set of 4
3 Pole (upto 100A)	CM97785OOOO	770	Set of 6
4 Pole (upto 100A)	CM97921OOOO	1200	Set of 8
Rotary Handle			
Direct ROM	EM90969OOOO	2130	1 1
Extended ROM	EM90970OOOO	3060	
SS Enclosure			1
Size I Enclosure for 3P & 4P	CM90996OOOO	4110	

3 Pole / 4 Pole MCCBs
DU100D/DU125D MCCBs



- Conforms to IS/IEC 60947-2 & IEC 60947-2
- Range: 20A to 125A, 3P & 4P
- Ics=100%of Icu
- Compact size
- Common SS Enclosure for 3P & 4P
- Wide Range of snap fit Internal and External Accessories
- Adjustable Overload Setting: 0.8 - 1.0 x In

Type	Thermal Release Range (A)	Breaking Capacity Icu at 415V AC 50Hz. (kA)	3 Pole		4 Pole		Std. Pkg. (Nos.)
			Cat. No.	M.R.P. (`) Per Unit	Cat. No.	M.R.P. (`) Per Unit	
DU100D	16-20	18	CM90517OOCO	6920	CM90518OOCO	8480	1
	20-25		CM90517OODO	6920	CM90518OODO	8480	1
	25-32		CM90517OOEO	6920	CM90518OOEO	8480	1
	32-40		CM90517OOFO	6920	CM90518OOFO	8480	1
	40-50		CM90517OOGO	6920	CM90518OOGO	8480	1
	50-63		CM90517OOHO	6720	CM90518OOHO	8230	1
	63-80		CM90517OOJO	6720	CM90518OOJO	8230	1
	80-100		CM90517OOKO	6720	CM90518OOKO	8230	1
DU125D	100-125		CM90676OOLO	8140	CM90677OOLO	10200	1

Note:
DIN rail kit available as an accessory. Please refer DU100D/DU125D accessories table.

2 Pole / 3 Pole / 4 Pole MCCBs
DU100H/DU125H MCCBs



- Conforms to IS/IEC 60947-2 & IEC 60947-2
- Range: 20A to 125A, 2P, 3P & 4P
- Compact size
- Common SS Enclosure for 2P, 3P & 4P
- Wide Range of snap fit Internal and External Accessories
- Adjustable Overload Setting: 0.8 - 1.0 x In

Type	Thermal Release Range (A)	Breaking Capacity Icu (kA)	2 Pole		Breaking Capacity Icu at 415V AC 50Hz. (kA)	3 Pole		4 Pole		Std. Pkg. (Nos.)
			Cat. No.	M.R.P. (`) Per Unit		Cat. No.	M.R.P. (`) Per Unit	Cat. No.	M.R.P. (`) Per Unit	
DU100H	16-20	AC : 65kA @ 240V AC, 50Hz DC : 15kA @ 250V DC, (2P in Series) L/R< 15 msec.	CM97898OOC2	5560	30	CM97894OOC2	7770	CM97933OOC2	10300	1
	20-25		CM97898OOD2	5560		CM97894OOD2	7770	CM97933OOD2	10300	1
	25-32		CM97898OOE2	5560		CM97894OOE2	7770	CM97933OOE2	10300	1
	32-40		CM97898OOF2	5560		CM97894OOF2	7770	CM97933OOF2	10300	1
	40-50		CM97898OOG2	5560		CM97894OOG2	7770	CM97933OOG2	10300	1
	50-63		CM97898OOH2	5400		CM97894OOH2	7540	CM97933OOH2	10000	1
	63-80		CM97898OOJ2	5400		CM97894OOJ2	7540	CM97933OOJ2	10000	1
	80-100		CM97898OOK2	5400		CM97894OOK2	7540	CM97933OOK2	10000	1 1
DU125H	100-125		CM91198OOLO	8380		CM90678OOLO	8780	CM90679OOLO	11400	

Note: 2 Pole in 3 pole frame size

DIN rail kit available as an accessory. Please refer DU100H/DU125H accessories table.

Accessories for DU100D/DU125D/DU100H/DU125H MCCBs [8538]



Auxiliary Contact



ATAC



Shunt Release



UV Release



Spreader Terminals



Direct ROM



Extended ROM

Description	Internal		
	Cat. No.	M.R.P. (`) Per Unit	Std. Pkg. (Nos.)
Auxiliary Contact			
1 C/O - Right	CM97886OOOO	1650	1
2 C/O - Right	CM97887OOOO	2910	1
Trip Alarm Contact			
1 C/O - Right	CM97888OOOO	1650	1
2 C/O - Right	CM97889OOOO	2910	1
Auxiliary + Trip Alarm Contact			
1 C/O + 1C/O - Right	CM97890OOOO	2800	1
Shunt Release			
24V DC - Left	CM91402O4OO	3260	1
110V AC - Left 240/415V	CM97883OAOO	3260	1
AC - Left Under Voltage	CM97883OMOO	3260	1
Release 240V AC - Left			
	CM97892BOOO	5400	1

Description		External		
		Cat. No.	M.R.P. (`) Per Unit	Std. Pkg. (Nos.)
Spreader Terminals				
DU100H - 2 Pole DU125H		CM97785OOO2	460	Set of 4
- 2 Pole DU100D/DU100H		CM91199OOLO	580	Set of 4
- 3 Pole DU125D/DU125H		CM97785OOOO	770	Set of 6
- 3 Pole DU100D/DU100H		CM90687OOLO	900	Set of 6
- 4 Pole DU125D/DU125H		CM97921OOOO	1200	Set of 8
- 4 Pole Rotary Handle		CM90688OOLO	1310	Set of 8
DU100D/DU125D/Direct				
DU100H/DU125H	ROM	CM97895OOOO	2100	1 1
DIN rail kit	Extended ROM	CM97896OOOO	2720	
				1
DU100D/DU125D/DU100H/DU125H		CM90944OOOO	250	
SS Enclosure				1
Size I Enclosure		CM90996OOOO	4110	

Note: Phase Barriers are supplied along with all MCCBs

2 Pole / 3 Pole / 4 Pole MCCBs
DY250U1/DU250C/DU250/DU400N MCCBs



- Conforms to IS/IEC 60947-2 & IEC 60947-2
- Range: 160A to 400A, 2P, 3P & 4P
- Common SS Enclosure for 2P, 3P & 4P*
- Compact size
- Wide Range of snap fit Internal and External Accessories
- Adjustable Overload Setting: 0.8 - 1.0 x In

Type	Thermal Release Range (A)	Breaking Capacity Icu (kA)	2 Pole		Breaking Capacity Icu (kA)	3 Pole		4 Pole		Std. Pkg. (Nos.)
			Cat. No.	M.R.P. (`) Per Unit		Cat. No.	M.R.P. (`) Per Unit	Cat. No.	M.R.P. (`) Per Unit	
DY250U1	125-160	–	–	–	10	CM98195OOMO▲	10600	CM98196OOMO▲	13100	1
	160-200					CM98195OONO▲	11300	CM98196OONO▲	14600	1
	200-250					CM98195OOPO▲	14600	CM98196OOPO▲	19700	1
DU250C	125-160	–	–	–	25	CM90631OOMO	11900	CM90634OOMO	15200	1
	160-200					CM90631OONO	14400	CM90634OONO	18300	1
	200-250					CM90631OOPO	15800	CM90634OOPO	20900	1
DU250	125-160	AC : 65kA @240V AC, 50Hz DC : 15kA for DU250 @250V DC & 25kA for DU400N @250V DC, (2P in Series) L/R< 15 msec.	CM90905OOMO	10400	36	CM98062OOOO	13800	CM98065OOMO	17100	1
	160-200		CM90905OONO	12000		CM98061OOOO	16900	CM98065OONO	22900	1
	200-250		CM90905OOPO	13400		CM98060OOOO	19000	CM98065OOPO	25100	1
DU400N	250-320		CM90886OOQO	26400	50	CM98402OOQO	30900	CM98404OOQO	38000	1
	320-400		CM90886OORO	26400		CM98402OORO	30900	CM98404OORO	38000	1

▲- Spreader Terminals are included
Note: 2 Pole in 3 Pole frame size * For DU250/DU250C

Accessories for DY250U1/DU250/DU250C MCCBs [8538]

Description	Internal			Description	External		
	Cat. No.	M.R.P. (`) Per Unit	Std. Pkg. (Nos.)		Cat. No.	M.R.P. (`) Per Unit	Std. Pkg. (Nos.)
Auxiliary Contact				Spreader Terminals			
1 C/O - Right	CM97886OOOO	1650	1	DU250 - 2 Pole	CM90960OOOO	2340	Set of 4
2 C/O - Right	CM97887OOOO	2910	1	DU250C/DU250 - 3 Pole	ST98053OOOO	3000	Set of 6
Trip Alarm Contact				DU250C/DU250 - 4 Pole	CM92007OOOO	3980	Set of 8
1 C/O - Right	CM97888OOOO	1650	1	Rotary Handle			
2 C/O - Right	CM97889OOOO	2910	1	Direct ROM	CM98040OOOO	2260	1 1
Auxiliary + Trip Alarm Contact				Extended ROM	CM98041OOOO	2900	
1 C/O + 1C/O - Right	CM97890OOOO	2800	1	SS Enclosure			1
Shunt Release				Size II Enclosure	CM91003OOOO	9440	
24V DC - Left	CM91402O4OO	3260	1				
110V AC - Left 240/415V	CM97883OAOO	3260	1				
AC - Left Under Voltage	CM97883OMOO	3260	1				
Release 240V AC - Left							
	CM97892BOOO	5400	1				

Note: Phase Barriers are supplied along with all MCCBs

Accessories for DU400N MCCBs [8538]


Auxiliary Contact


TAC


Shunt Release


UV Release


Spreader Terminals

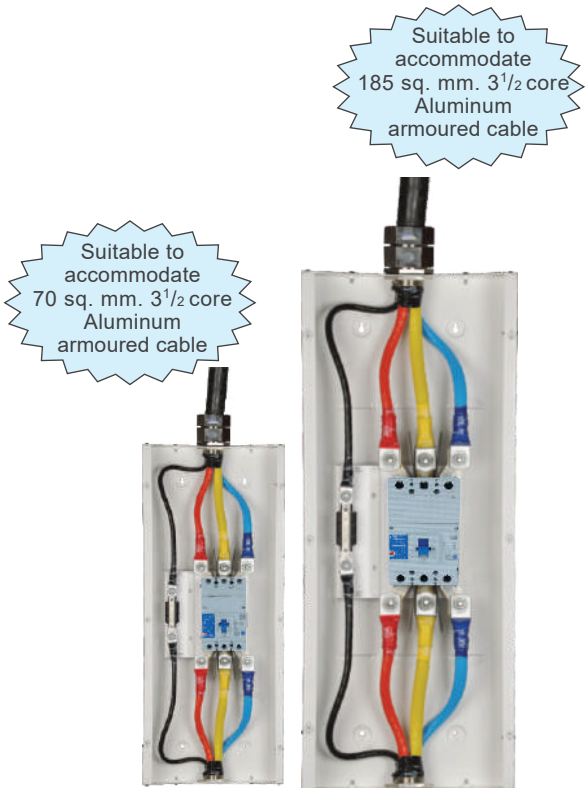

Direct ROM


Extended ROM

Description	Internal			Description	External		
	Cat. No.	M.R.P. (`) Per Unit	Std. Pkg. (Nos.)		Cat. No.	M.R.P. (`) Per Unit	Std. Pkg. (Nos.)
Auxiliary Contact				Spreader Terminals			
1 C/O	CM99801OOOO	1920	1	2 Pole	CM90964OOOO	3610	Set of 4
2 C/O	CM99802OOOO	3710	1	3 Pole	ST98065OOOO	5520	Set of 6
Trip Alarm Contact				4 Pole	ST98066OOOO	7910	Set of 8
1 C/O - Right	CM99803OOOO	2010	1	Rotary Handle			
Auxiliary + Trip Alarm Contact				Direct ROM	CM99860OOOO	3480	1 1
1 C/O + 1C/O - Right	CM99804OOOO	3710	1	Extended ROM	CM99861OOOO	5720	
Shunt Release							
110/240/415V AC, 220V DC	CM99805OOOO	4800@	1				
24V DC	CM98976O4OO	4800@	1				
Under Voltage Release							
240V AC - Left	CM99986BOOO	6680	1				

Note:
Phase Barriers are supplied along with all MCCBs
All internal accessories & ROMs are common for 2P MCCBs
@- 'NO' of control contactor to be connected in series for DC control supply

SS Enclosure for MCCBs [8538]



Size I & Size II Enclosures

Note:
Pictorial is for representation purpose only.
Does not include cabling. MCCB to be purchased separately.

Perfect home for your MCCB

- Superior Aesthetics
- Common Enclosure for 3P and 4P MCCBs
- Generous space for cable termination
- In-built neutral Link for TPN system
- IK08 and IP30 Protection
- Mounting holes for easy wall mounting
- Louvers for better heat dissipation
- Effortless Installation
- Size I suitable up to 125A MCCBs, 36kA
- Size II suitable from 160A to 250A MCCBs, 50kA

Separate cable gland box NOT required



Description	Cat. No.	M.R.P. (`) Per Unit	Std. Pkg. (Nos.)
Size I Enclosure for DU100H/DU125H/ DU100D/DU125D/DN0/DY125U	CM90996OOOO	4110	1
Size II Enclosure for DY250U1/DU250C/DU250/DN1	CM91003OOOO	9440	1



Easy wall Mounting



In-built Neutral Link

Better Heat Dissipation

Ground Fault Module [8538]

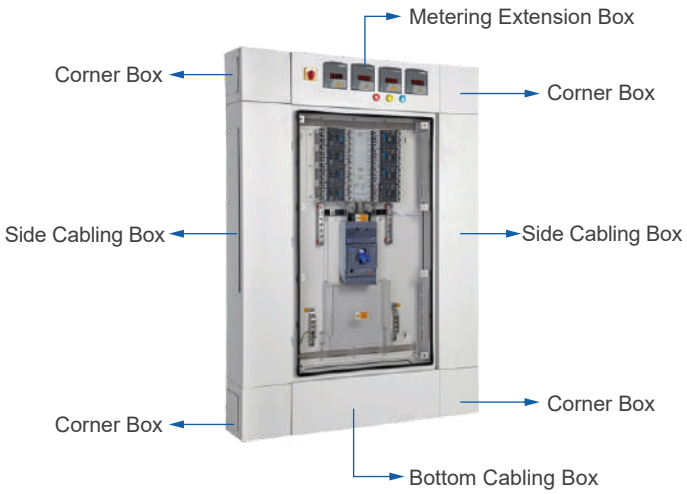


- Provides protection against ground fault
- GF Module for ground fault protection can be used with all Thermal Magnetic MCCBs
- Adjustable ground fault sensitivity selection: 10%- 50%of In
- Adjustable time delay: 100ms / 200ms
- Test facility to check healthiness of ground fault protection system without tripping MCCB
- Suitable for 3 phase 3 wire & 3 phase 4 wire electrical distribution network with cable termination
- LED for earth fault indication

Ground Fault Protection					
Type	Range (A)	Cat. No.	M.R.P. (`) Per Unit	CT	Std. Pkg. (Nos.)
G F 1		ST27745OOOO	16400	Built in CBCT	1
G F 2		ST27746OOOO	24200	Built in CBCT	1
GF11		ST28594OOOO	14600#	External CT required	1

100 - 200A 200 - 400A up to 800A

External CTs of 5P10 class with secondary rating of 1A or 5A



Range Highlights

- Sub Main Distribution Board (SMDB) with MCCB as incomer and MCCBs as outgoing devices
- Conforms to IEC 61439-2
- DEKRA and ASTA certified
- Rating up to 630 A
- Short-time withstand current
  » 250A & 400A SMDB - 36 kA 1s » 630A SMDB - 50 kA 1s
- Ingress protection - IP 43
- Choice in number of outgoing ways - 4, 8, 12 and 16
- Ready to use, off the shelf solution
- Suitable for range of MCCBs
- Metering & cabling extensions are available as accessories

ENERSYS-S SMDB

Description	Cat. No.	No of ways		M.R.P. (`) Per Unit	Height (H) (mm)	Width (W) (mm)	Depth (D) (mm)
		250A	100A				
SMDB - TN250D, O/G 100A 4 ways	DA20D1044CZZ0	-	4	56450	637	670	208.5
SMDB - TN250D, O/G 100A 8 ways	DA20D1084CZZ0	-	8	68655	787	670	208.5
SMDB - TN250D, O/G 100A 12 ways	DA20D1124CZZ0	-	12	86355	937	670	208.5
SMDB - TN250D, O/G 100A 16 ways	DA20D1164CZZ0	-	16	101490	1087	670	208.5
SMDB - TN400D, O/G 100A 4 ways	DA40D1044CZZ0	-	4	63250	937	670	208.5
SMDB - TN400D, O/G 100A 8 ways	DA40D1084CZZ0	-	8	72070	1087	670	208.5
SMDB - TN400D, O/G 100A 12 ways	DA40D1124CZZ0	-	12	92670	1237	670	208.5
SMDB - TN400D, O/G 100A 16 ways	DA40D1164CZZ0	-	16	109225	1387	670	208.5
SMDB - TN630D, O/G 100A 8 ways	DA60D1084CZZ0	-	8	119500	1287	870	208.5
SMDB - TN630D, O/G 100A 12 ways	DA60D1124CZZ0	-	12	161385	1507	870	208.5
SMDB - TN630D, O/G 100A 16 ways	DA60D1164CZZ0	-	16	176900	1507	870	208.5
SMDB - TN630D, O/G 250A 4 ways	DA62D1044CZZ0	4	-	116380	1067	870	208.5
SMDB - TN630D, O/G 250A 8 ways	DA62D1084CZZ0	8	-	130345	1287	870	208.5
SMDB - TN630D, O/G 250A 12 ways	DA62D1124CZZ0	12	-	167590	1507	870	208.5
SMDB - TN630D, O/G 250A 16 ways	DA62D1164CZZ0	16	-	187765	1727	870	208.5
SMDB - TN630D, O/G COMBI 4 ways	DA6AD1044CZZ0	2	2	114055	1067	870	208.5
SMDB - TN630D, O/G COMBI 8 ways	DA6AD1084CZZ0	2	6	124140	1287	870	208.5
SMDB - TN630D, O/G COMBI 12 ways	DA6AD1124CZZ0	2	10	164485	1507	870	208.5
SMDB - TN630D, O/G COMBI 16 ways	DA6AD1164CZZ0	2	14	181550	1507	870	208.5

Incoming Device [8536]

SMDB Type	Description	Cat. No.	M.R.P. (`) Per Unit
TN250D*	DN1-250C 3 Pole MCCB - 160A	CM90638OOMO	21500
	DN1-250C 3 Pole MCCB - 200A	CM90638OONO	27500
	DN1-250C 3 Pole MCCB - 250A	CM90638OOPO	32200
TN400D	DN3-400D 3 Pole MCCB - 320A	CM94005OOQ1OG	*
	DN3-400D 3 Pole MCCB - 400A	CM94005OOR1OG	*
TN630D	DN3-630D 3 Pole MCCB - 500A	CM94006OOS1OG	73400
	DN3-630D 3 Pole MCCB - 630A	CM94006OOT1OG	73400

Note:

- While ordering SMDB, incoming and outgoing MCCBs have to be ordered separately.
- Prices of MCCBs are not included in SMDB prices.

* TN250D - Suitable for DN1-250N, DU250 & DU250C MCCB as incomer.
Price on Request.

Outgoing Device [8536]

SMDB Type	Description	Cat. No.	M.R.P. (`) Per Unit
TN250D, TN400D & TN630D	DN0-100C 3 Pole MCCB - 20A	CM91612OOCOOG	12100
	DN0-100C 3 Pole MCCB - 25A	CM91612OODOOG	12100
	DN0-100C 3 Pole MCCB - 32A	CM91612OOEOOG	12100
	DN0-100C 3 Pole MCCB - 40A	CM91612OOFOOG	12100
	DN0-100C 3 Pole MCCB - 50A	CM91612OOGOOG	12100
	DN0-100C 3 Pole MCCB - 63A	CM91612OOHOOG	11700
	DN0-100C 3 Pole MCCB - 80A	CM91612OOJOOG	11700
	DN0-100C 3 Pole MCCB - 100A	CM91612OOKOOG	11700
TN630D	DN1-250C 3 Pole MCCB - 160A	CM90638OOMO	21500
	DN1-250C 3 Pole MCCB - 200A	CM90638OONO	27500
	DN1-250C 3 Pole MCCB - 250A	CM90638OOPO	32200

DN0, DU100D & DU100H MCCBs are suitable as outgoing devices up to 100A
DN1-250N, DU250 & DU250C MCCBs are suitable as outgoing devices up to 250A

Metering, Bottom Cabling & Corner Box

› Provision of 3 nos of 1-phase ammeter (96*96), 1 nos of 1-phase voltmeter (96*96) with selector switch and indicating lamps.

SMDB Type	Description	Cat. No.	M.R.P. (`) Per Unit
TN250D & TN400D	Metering Extension Box	CM90439OOPO	8715
	Bottom Cabling Box	CM90437OOOO	8170
TN630D	Metering Extension Box	CM91064OOTO	9190
	Bottom Cabling Box	CM91062OOOO	8640
TN250D, TN400D & TN630D	Corner Box	CM91089OOOO	3035
	Mounting base	CM70260OOOO	4095



Note:

› Ammeter, voltmeter, selector switch and indicating lights have to be ordered separately.

› Mounting base to be used without bottom cabling box.

Side Cabling Box

SMDB Type	No. of Ways		Left		Right	
	250A	100A	Cat. No.	M.R.P. (`) Per Unit	Cat. No.	M.R.P. (`) Per Unit
TN250D	-	4	CM91085ODOO	8360	CM91086ODOO	8360
	-	8	CM91085OFOO	10795	CM91086OFOO	10795
	-	12	CM91085OHOO	12935	CM91086OHOO	12935
	-	16	CM91085OKOO	15100	CM91086OKOO	15100
TN400D	-	4	CM91087ODOO	12935	CM91088ODOO	12935
	-	8	CM91087OFOO	15100	CM91088OFOO	15100
	-	12	CM91087OHOO	16540	CM91088OHOO	16540
	-	16	CM91087OKOO	18690	CM91088OKOO	18690
TN630D	-	8	CM91120OOFO	15665	CM91121OOFO	15665
	-	12	CM91120OOHO	18250	CM91121OOHO	18250
	-	16				
	4	-	CM91120OODO	14040	CM91121OODO	14040
	8	-	CM91120OOFO	15665	CM91121OOFO	15665
	12	-	CM91120OOHO	18250	CM91121OOHO	18250
	16	-	CM91120OOKO	19885	CM91121OOKO	19885
	2	2	CM91120OODO	14040	CM91121OODO	14040
	2	6	CM91120OOFO	15665	CM91121OOFO	15665
	2	10	CM91120OOHO	18250	CM91121OOHO	18250
	2	14				



RELIABLE ELECTRICAL

Introducing Lauritz Knudsen's

FIRST SERVE PROGRAM

Peace of Mind with Priority Service for our Air Circuit Breaker

Avail Exclusive Benefits Under "FIRST SERVE" Program for Our Air Circuit Breakers in India





Benefits

- Priority Service: Enjoy expedited service for our ACB.
- Expert Support: Receive guidance and technical assistance from our team.
- Peace of Mind: Rest assured knowing our ACB is in good hands.



Eligibility

- ACB should be within the warranty period.

Customer Connect Hub at +91-22-6932-7800

RELIABLE ELECTRICAL

TRUSTED PARTNER FOR SUSTAINABLE AND EMERGING SOLUTIONS



U-POWER
OMEGA
Air Circuit Breakers

DIGITAL READY SOLUTION TO ENHANCE ENERGY EFFICIENCY

Highest Safety with MTX Protection and Control Unit

Full Uptime with Dual Protection Set Group



Easy Maintenance with Tool Less Arc Chute Removal

Superior Performance With Double Short Circuit Protection

Remote Monitoring & Control with Digicom Module

Advanced Protection with ERMS (Energy Reduction Maintenance Settings)

In-built Industrial Communication Protocol
(MODBUS TCP/IP - ETHERNET/MODBUS RS485/PROFIBUS)





U-POWER OMEGA Air Circuit Breakers Range of Air Circuit Breakers

- Complete range conforms to IS/IEC 60947-2 & IEC 60947-2
- Current Rating from 400A to 6300A in 3 Frame sizes for application voltages upto 690V AC
- Special ACB range available for Voltage Applications upto 800V AC and 1000V AC#
- Available in 3 Pole/4 Pole, Manually & Electrically operated, Fixed/Draw-out version
- Common Height & Depth across the range
- High short time fault withstand capacity, Icu = Ics = Icw for 1 sec for total selectivity
- High mechanical and electrical operating life
- Neutral pole is 100%rated, option of 50%& 200%rated neutral also available
- Available in standard NRYB & RYBN/NBYR/BYRN configurations in 4 Pole ACBs with on-site change facility
- In-built Electrical & Mechanical Anti-Pumping
- Modular & snap-fit accessories
- Ease of on-site conversion from Fixed to Draw-out version
- Pollution Degree 4 suitability
- Best in Class Overlap with Bus bars
- Break Time of 25msec
- RoHS Compliant

Matrix Protection & Control Units:

- Available in versions - MTX1.0/1G/1Gi/1.5G/1.5Gi, MTX3.5/3.5EC/3.5H & MTX 3.5T/MTX 3.5ET/3.5A
- Unique O-LED display for metering
- Unique withdrawable Communication & Power metering modules
- Dual protection curve settings & Password protection
- Soft-rating plug for precise protection at lower load currents
- Provision for on-load self-diagnosis of Releases & modules
- Data communication on Modbus RTU, Modbus TCP/IP (ETHERNET), Profibus & wireless Zigbee protocols
- Power & Harmonics measurement
- Temperature rise monitoring & protection
- Easy to integrate with HMI & PLC
- Add-on modules for advance protections
- Protection Releases conform to EMI/EMC standard



UW-MTX1G/1Gi



UW-MTX1.5G/1.5Gi



UW-MTX3.5/3.5EC/3.5H



New Integrated MODBUS TCP/IP (ETHERNET) Communicable ACB

Breaking Capacities Offered:

at 415V/440V AC (Please refer Catalogue for Breaking Capacities above 440V AC)

Icu = Ics = Icw for 1 sec

	Rated current	800A	1000A	1250A	1600A	2000A	2500A	3200A	4000A	5000A	6300A
Frame-1	N : 50kA										
	S : 65kA										
	H : 80kA										
		UW1-08	UW1-10	UW1-12	UW1-16	UW1-20	UW1-25				
Frame-2	N : 50kA										
	S : 65kA										
	H : 80kA										
		UW2-08	UW2-10	UW2-12	UW2-16	UW2-20	UW2-25	UW2-32	UW2-40		
Frame-3	H : 80kA										
	V : 100kA										
		UW3-08	UW3-10	UW3-12	UW3-16	UW3-20	UW3-25	UW3-32	UW3-40	UW3-50	UW3-63

Note: 400A & 630A ACBs are also available on request. # Please contact the nearest branch office for more details of 1000V AC ACBs

U-POWER OMEGA Air Circuit Breakers ACB ordering information:

UW	1	08	N	X	D	1	2	9	0	0#	UW1 800N 3P ED 1.5G BotV

Frame Size	
Frame - I	1
Frame - II	2
Frame - III	3

Current Ratings	
400A	04
630A	06
800A	08
1000A	10
1250A	12
1600A	16
2000A	20
2500A[4]	25
3200A	32
4000A	40
5000A	50
6300A	63

Selection for Breaking Capacity (Icu=Ics)[1]	
50kA (Fr-I upto 2000A & Fr-II upto 4000A)	N
65kA (Fr-I & Fr-II)	S
80kA (Fr-I, Fr-II & Fr-III)	H
100kA (Fr-III)	V

Type	
Manually Operated	1
Electrically Operated	2

Version	
Draw-out	D
Fixed	F
Cradle/Fixed Part [7]	C
Breaker/Moving Part	B

Selection for control voltage[2]	
For Manually Operated	0
240V AC/DC ECD & CR + 240V AC/DC SR	1
240V AC/DC ECD & CR + 24V DC SR	2
110V AC/DC ECD & CR + 110V AC/DC SR	3
240V AC/DC ECD & CR + 110V AC/DC SR	4

Selection for No. of Poles	
3 Pole	X
4 Pole 100%N	F
4 Pole 50%N (in Fr-III only)	H
4 Pole 200%N (upto 2500A)	D

Selection for Termination (For Drawout ACBs Only)	
Standard Termination	0
For Top Horizontal (Long), Bottom Vertical for Fr2 & Fr3	X
For Top & Bottom Horizontal (Long) for Fr3	Y
Note: X is applicable for 4000A (Fr2 & Fr3) and 5000A (Fr3). Y is applicable for 4000A (Fr3) & 5000A (Fr3). X & Y recommended for Buscoupler only.	
For 800V AC Application	ZM
For 1000V AC Application	ZH

Temperature Rise Monitoring[3]	
Not Required	0
Required	1

Selection for P&C Units	
B/C (w/o protection)	0
UW - MTX1.0	7
UW - MTX1G	8
UW - MTX1Gi	B
UW - MTX1.5G	9
UW - MTX1.5Gi	C
UW-MTX3.5	3
UW-MTX3.5EC[5]	4
UW-MTX4.5	5
UW-MTX3.5H	6
New UW-MTX3.5T[8]	D
New UW-MTX3.5ET[8]	E
New UW-MTX4.5T[8]	F
New UW-MTX3.5A[6]	K

Please Note:

[1] For Icw values please refer technical specification

[2] Other options of control voltage are available as accessory

[3] Temperature monitoring & protection is available only for Drawout type ACBs with MTX3.5 Series & above releases

[4] For Fr-1, 2500A selection, please contact the nearest branch office

[5] For system requiring 690V metering, kindly order separate Power Metering module with MTX3.5.

[6] For MTX3.5A technical specifications please get in touch with the local sales team

[7] For Cradle Cat Number last 5 digits shall be "00000" of any combination

[8] MODBUS TCP/IP (Ethernet) ready ACB as an Integrated Release Offering

U-POWER OMEGA Air Circuit Breakers ACBs are offered with following standard features

Draw-out Version:	OMEGA ACBs with UW-MTX release will have inbuilt- Current Metering (MTX 1.5G/1.5Gi/3.5 Series/4.5 Series), Common Fault Indication microswitch, 4NO+4NC Aux. contacts, Smart-racking shutter, Safety shutter assembly, Racking Handle, Door sealing frame, Pad-locking arrangement for ON/OFF button, Rating Error Preventer, Arc shield. A) For ratings upto 1600A, one side vertical terminal adaptors (Bottom) for Frame 1, 2 & 3. B) For ratings 2000A & above, both side vertical terminal adaptors (Top & Bottom) for Frames 1, 2 & 3. C) For rating 4000A and above operation counter inbuilt for Frames 2 & 3 both.
Fixed Version:	OMEGA ACBs with UW-MTX release will have inbuilt- Current Metering (MTX 1.5G/1.5Gi/3.5 Series/4.5 Series), Common Fault Indicationmicroswitch, 4NO+4NC Aux. contacts, Door sealing frame & Pad-locking arrangement for ON/OFF push button. A) For ratings upto 1600A, one side vertical terminal adaptors (Bottom) for Frames 1, 2 & 3. B) For ratings 2000A & above, both side vertical terminal adaptors (Top & Bottom) for Frames 1, 2 & 3. C) For ratings 4000A & above, operation counter inbuilt for Frames 2 & 3 both.

Please contact the nearest branch office for more details of 800V & 1000V AC ACBs

ACBs upto 690V AC with UW-MTX1G (LSING - BCD Switches) and UW-MTX1.5G (LSING + Current Metering - BCD Switches) [8536]





Current Rating	Version	Breaking Capacity @ 415V AC	3 Pole Manual Draw-out ACB				4 Pole Manual Draw-out ACB			
			UW-MTX1G		UW-MTX1.5G		UW-MTX1G		UW-MTX1.5G	
			Cat. No.	M.R.P. (`) Per Unit	Cat. No.	M.R.P. (`) Per Unit	Cat. No.	M.R.P. (`) Per Unit	Cat. No.	M.R.P. (`) Per Unit
800A	MDO	50kA	UW108NXD01800	322600	UW108NXD01900	343900	UW108NFD01800	402900	UW108NFD01900	424200
1000A			UW110NXD01800	333400	UW110NXD01900	354700	UW110NFD01800	428500	UW110NFD01900	449800
1250A			UW112NXD01800	367200	UW112NXD01900	388500	UW112NFD01800	463300	UW112NFD01900	484600
1600A			UW116NXD01800	416200	UW116NXD01900	437500	UW116NFD01800	519100	UW116NFD01900	540400
2000A			UW120NXD01800	507900	UW120NXD01900	529200	UW120NFD01800	610800	UW120NFD01900	632100
2500A			UW225NXD01800	654900	UW225NXD01900	676200	UW225NFD01800	787500	UW225NFD01900	808800
3200A			UW232NXD01800	782900	UW232NXD01900	804200	UW232NFD01800	961200	UW232NFD01900	982500
4000A			UW240NXD01800	902100	UW240NXD01900	923400	UW240NFD01800	1097300	UW240NFD01900	1118600

Current Rating	Version	Breaking Capacity @ 415V AC	3 Pole Manual Fixed ACB				4 Pole Manual Fixed ACB			
			UW-MTX1G		UW-MTX1.5G		UW-MTX1G		UW-MTX1.5G	
			Cat. No.	M.R.P. (`) Per Unit	Cat. No.	M.R.P. (`) Per Unit	Cat. No.	M.R.P. (`) Per Unit	Cat. No.	M.R.P. (`) Per Unit
800A	MF	50kA	UW108NXF01800	248200	UW108NXF01900	269500	UW108NFF01800	309900	UW108NFF01900	331200
1000A			UW110NXF01800	256500	UW110NXF01900	277800	UW110NFF01800	329600	UW110NFF01900	350900
1250A			UW112NXF01800	282500	UW112NXF01900	303800	UW112NFF01800	356400	UW112NFF01900	377700
1600A			UW116NXF01800	320200	UW116NXF01900	341500	UW116NFF01800	399300	UW116NFF01900	420600
2000A			UW120NXF01800	390700	UW120NXF01900	412000	UW120NFF01800	469800	UW120NFF01900	491100
2500A			UW225NXF01800	503800	UW225NXF01900	525100	UW225NFF01800	605800	UW225NFF01900	627100
3200A			UW232NXF01800	602200	UW232NXF01900	623500	UW232NFF01800	739400	UW232NFF01900	760700
4000A			UW240NXF01800	693900	UW240NXF01900	715200	UW240NFF01800	844100	UW240NFF01900	865400

M.R.P. changes for product customization	M.R.P. (`) Per Unit
MDO to EDO or MF to EF Conversion kit (ECD + CR + SR)	88000
Buscoupler (without protection release)	*
UW-MTX1.0 (LSI - BCD Switches)	
UW-MTX1Gi (LSING + Inbuilt ZSI - BCD Switches)	
UW-MTX1.5Gi (LSING + Current Metering + Inbuilt ZSI - BCD Switches)	
UW-MTX3.5 (LSING + Current Metering) + can be upgraded for Power Metering & Communication	
UW-MTX3.5EC (LSING + Power Metering + Communication)	
UW-MTX3.5H (LSING + Power Metering + Harmonic Metering)	
UW-MTX4.5 (LSING + Power Metering + Harmonic Metering + Communication with Touch Screen navigation + PS Module)	
PS (Auxiliary power supply module for display in No-load or OFF condition)**$	
COM Module (MODBUS) for communication$	
PM Module for power metering$	
New UW-MTX3.5T (LSING + Current Metering + MODBUS TCP/IP (ETHERNET) Communication) + can be upgraded for Power Metering#	
New UW-MTX3.5ET (LSING + Power Metering +MODBUS TCP/IP (ETHERNET) Communication)#	

* Available on request
** Applicable only for MTX 1Gi, MTX 1.5Gi & MTX 3.5 Series
# Integrated Release along with ACB - available as Factory-fitted option only
$ Chapter ID [8538]

3 Pole ACBs upto 690V AC with UW-MTX1G (LSING - BCD Switches) [8536]





Current Rating	Version	3 Pole Manual Draw-out ACB with UW-MTX1G					
		S (65kA @415V AC)		H (80kA @415V AC)		V (100kA @415V AC)	
		Cat. No.	M.R.P. (`) Per Unit	Cat. No.	M.R.P. (`) Per Unit	Cat. No.	M.R.P. (`) Per Unit
800A	MDO	UW108SXD01800	*	UW108HXD01800	*	UW308VXD01800	*
1000A		UW110SXD01800		UW110HXD01800		UW310VXD01800	
1250A		UW112SXD01800		UW112HXD01800		UW312VXD01800	
1600A		UW116SXD01800		UW116HXD01800		UW316VXD01800	
2000A		UW120SXD01800		UW120HXD01800		UW320VXD01800	
2500A		UW225SXD01800		UW225HXD01800		UW325VXD01800	
3200A		UW232SXD01800		UW232HXD01800		UW332VXD01800	
4000A		UW240SXD01800		UW240HXD01800		UW340VXD01800	
4000A		- - -	-	UW340HXD01800		UW340VXD01800	
5000A			-	UW350HXD01800		UW350VXD01800	
6300A			-	UW363HXD01800		UW363VXD01800	

		3 Pole Manual Fixed ACB with UW-MTX1G					
800A	MF	UW108SXF01800	*	UW108HXF01800	*	UW308VXF01800	*
1000A		UW110SXF01800		UW110HXF01800		UW310VXF01800	
1250A		UW112SXF01800		UW112HXF01800		UW312VXF01800	
1600A		UW116SXF01800		UW116HXF01800		UW316VXF01800	
2000A		UW120SXF01800		UW120HXF01800		UW320VXF01800	
2500A		UW225SXF01800		UW225HXF01800		UW325VXF01800	
3200A		UW232SXF01800		UW232HXF01800		UW332VXF01800	
4000A		UW240SXF01800		UW240HXF01800		UW340VXF01800	
4000A		- - -	-	UW340HXF01800		UW340VXF01800	
5000A			-	UW350HXF01800		UW350VXF01800	
6300A			-	*		*	

M.R.P. changes for product customization	M.R.P. (`) Per Unit
MDO to EDO or MF to EF Conversion kit (ECD + CR + SR)	88000
Buscoupler (without protection release)	*
UW-MTX1.0 (LSI - BCD Switches)	
UW-MTX1Gi (LSING + Inbuilt ZSI - BCD Switches)	
UW-MTX1.5G (LSING + Current Metering - BCD Switches)	
UW-MTX1.5Gi (LSING + Current Metering + Inbuilt ZSI - BCD Switches)	
UW-MTX3.5 (LSING + Current Metering) + can be upgraded for Power Metering & Communication	
UW-MTX3.5EC (LSING + Power Metering + Communication)	
UW-MTX3.5H (LSING + Power Metering + Harmonic Metering)	
UW-MTX4.5 (LSING + Power Metering + Harmonic Metering + Communication with Touch Screen navigation + PS Module)	
PS (Auxiliary power supply module for display in No-load or OFF condition)**$	
COM Module (MODBUS) for communication$	
PM Module for power metering$	
New UW-MTX3.5T (LSING + Current Metering + MODBUS TCP/IP (ETHERNET) Communication) + can be upgraded for Power Metering#	
New UW-MTX3.5ET (LSING + Power Metering +MODBUS TCP/IP (ETHERNET) Communication)#	

* Available on request
** Applicable only for MTX 1Gi, MTX 1.5Gi & MTX 3.5 Series
# Integrated Release along with ACB - available as Factory-fitted option only

4 Pole ACBs upto 690V AC with UW-MTX1G (LSING - BCD Switches) [8536]





Current Rating	Version	4 Pole Manual Draw-out ACB with UW-MTX1G					
		S (65kA @415V AC)		H (80kA @415V AC)		V (100kA @415V AC)	
		Cat. No.	M.R.P. (`) Per Unit	Cat. No.	M.R.P. (`) Per Unit	Cat. No.	M.R.P. (`) Per Unit
800A	MDO	UW108SFD01800	*	UW108HFD01800	*	UW308VFD01800	*
1000A		UW110SFD01800		UW110HFD01800		UW310VFD01800	
1250A		UW112SFD01800		UW112HFD01800		UW312VFD01800	
1600A		UW116SFD01800		UW116HFD01800		UW316VFD01800	
2000A		UW120SFD01800		UW120HFD01800		UW320VFD01800	
2500A		UW225SFD01800		UW225HFD01800		UW325VFD01800	
3200A		UW232SFD01800		UW232HFD01800		UW332VFD01800	
4000A		UW240SFD01800		UW240HFD01800		UW340VFD01800	
4000A		- - -	-	UW340HFD01800		UW340VFD01800	
5000A			-	UW350HFD01800		UW350VFD01800	
6300A			-	UW363HFD01800		UW363VFD01800	

4 Pole Manual Fixed ACB with UW-MTX1G							
800A	MF	UW108SFF01800	*	UW108HFF01800	*	UW308VFF01800	*
1000A		UW110SFF01800		UW110HFF01800		UW310VFF01800	
1250A		UW112SFF01800		UW112HFF01800		UW312VFF01800	
1600A		UW116SFF01800		UW116HFF01800		UW316VFF01800	
2000A		UW120SFF01800		UW120HFF01800		UW320VFF01800	
2500A		UW225SFF01800		UW225HFF01800		UW325VFF01800	
3200A		UW232SFF01800		UW232HFF01800		UW332VFF01800	
4000A		UW240SFF01800		UW240HFF01800		UW340VFF01800	
4000A		-	-	UW340HFF01800		UW340VFF01800	
5000A		- -	-	UW350HFF01800		UW350VFF01800	
6300A			-	*		*	

* Available on request

Accessories of U-POWER OMEGA Air Circuit Breakers [8538]

Terminal Adaptor configuration upto 690V AC



Draw-out ACBs Terminal Adaptors



Fixed ACBs Terminal Adaptors

Description	Cat. No.	M.R.P. (`) Per Unit
Terminal Adaptor for Draw-out Omega ACBs		*
Frame-1 400-1000A N/S/H (Vertical / Horizontal)	CL60438OOOO	
Frame-1 1250-2000A N/S/H (Vertical / Horizontal)	CL60963OOOO	
Frame-1 2500A S/H (Vertical)	CL60964OOOO	
Frame-2 400-3200A N/S/H (Vertical / Horizontal)		
Frame-2 4000A N/S/H (Vertical)	CL60420OOOO	
Frame-2 4000A N/S/H (Horizontal)	CL60316OOOO	
Frame-3 400-4000A H/V (Vertical)#	CL60128OOOO	
Frame-3 400-4000A H/V (Horizontal-Long)	CL60073OOOO	
Frame-3 5000A H/V (Horizontal-Long)	CL60966OOOO	
Frame-3 5000A H/V (Vertical)#	CL60067OOOO	
Frame-3 6300A H/V (Vertical)#	CL60965OOOO	

: Please consider 4 terminal adaptors per phase.

Description	Cat. No.	M.R.P. (`) Per Unit
Terminal Adaptor for Fixed Omega ACBs		*
Frame-1 400-2000A N/S (Vertical / Horizontal)	CL60967OOOO	
Frame-1 400-2000A H (Vertical / Horizontal)	CL60968OOOO	
Frame-1 2500A S/H (Vertical)	CL60976OOOO	
Frame-2 400-2500A N/S (Vertical / Horizontal)	CL60122OOOO	
Frame-2 400-3200A H, 3200A N/S (Vertical / Horizontal)	CL60977OOOO	
Frame-2 4000A S/H (Vertical)	CL60417OOOO	
Frame-3 400-4000A H/V (Vertical)#	CL60418OOOO	
Frame-3 5000A H/V (Vertical)#	CL60347OOOO	
Frame-3 400-5000A H/V (Horizontal-Long)	CL60373OOOO	

: Please consider 4 terminal adaptors per phase.

800V AC ACBs with UW-MTX1G (LSING - BCD Switches) [8536]

Breaking Capacity @ 800V AC (Icu=Ics=Icw for 1s)





800V AC Manual Fixed/Draw-out ACB with UW-MTX1G									
Current Rating	Frame	Breaking Capacity @ 800V AC	3P				4P			
			Fixed		Draw-out		Fixed		Draw-out	
			Cat. No.	M.R.P. (`) Per Unit	Cat. No.	M.R.P. (`) Per Unit	Cat. No.	M.R.P. (`) Per Unit	Cat. No.	M.R.P. (`) Per Unit
800A	1	50kA	UW108NXF0180ZM	*	UW108NXD0180ZM	*	UW108NFF0180ZM	*	UW108NFD0180ZM	*
1000A			UW110NXF0180ZM		UW110NXD0180ZM		UW110NFF0180ZM		UW110NFD0180ZM	
1250A			UW112NXF0180ZM		UW112NXD0180ZM		UW112NFF0180ZM		UW112NFD0180ZM	
1600A			UW116NXF0180ZM		UW116NXD0180ZM		UW116NFF0180ZM		UW116NFD0180ZM	
2000A			UW120NXF0180ZM		UW120NXD0180ZM		UW120NFF0180ZM		UW120NFD0180ZM	
2000A	2	50kA	UW220NXF0180ZM	*	UW220NXD0180ZM	*	UW220NFF0180ZM	*	UW220NFD0180ZM	*
2500A			UW225NXF0180ZM		UW225NXD0180ZM		UW225NFF0180ZM		UW225NFD0180ZM	
3200A			UW232NXF0180ZM		UW232NXD0180ZM		UW232NFF0180ZM		UW232NFD0180ZM	
4000A			-		UW240NXD0180ZM		-		UW240NFD0180ZM	
3200A	3	50kA	UW332NXF0180ZM	*	UW332NXD0180ZM	*	UW332NFF0180ZM	*	UW332NFD0180ZM	*
4000A			UW340NXF0180ZM		UW340NXD0180ZM		UW340NFF0180ZM		UW340NFD0180ZM	
5000A			UW350NXF0180ZM		UW350NXD0180ZM		UW350NFF0180ZM		UW350NFD0180ZM	
3200A	3	65kA	UW332SXF0180ZM	*	UW332SXD0180ZM	*	UW332SFF0180ZM	*	UW332SFD0180ZM	*
4000A			UW340SXF0180ZM		UW340SXD0180ZM		UW340SFF0180ZM		UW340SFD0180ZM	
5000A			UW350SXF0180ZM		UW350SXD0180ZM		UW350SFF0180ZM		UW350SFD0180ZM	

Note: 1. Above mentioned Cat. No. of ACBs are without Terminal Adaptors. Please consider Terminal Adaptors from below table.
2. Phase-Barriers are mandatory to be used with 800V AC ACBs:
(a) For Draw-out ACBs, Phase-Barriers are provided as standard supply along with ACBs
(b) For Fixed ACBs, kindly consider Phase-Barriers from below table

M.R.P. changes for product customization	M.R.P. (`) Per Unit
Buscoupler (without protection release) UW-	*
MTX1.0 (LSI - BCD switch for selection) UW-	
MTX1G (LSING - BCD switch for selection)	
UW-MTX1.5G (LSING + display - BCD switch for selection)	
UW-MTX3.5 (LSING + Display + Option for other features)	
UW-TM - Temperature Rise Module (for MTX3.5)	
MDO to EDO or MF to EF Conversion kit (ECD + CR + SR)	
COM Module (MODBUS) for communication	
PS (Auxiliary power supply module for display in No-load or OFF condition)**	

** Applicable only for MTX 1Gi, MTX 1.5Gi & MTX 3.5 Series

Terminal Adaptors for 800V ACBs [8538]

Current Rating	Frame	Fixed			Draw-out		
		Cat. No.	M.R.P. (`) Per Unit	Qty (3P/4P)	Cat. No.	M.R.P. (`) Per Unit	Qty (3P/4P)
630A	1	CL60967OOOO	*	(6/8)	CL60963OOOO	*	(6/8)
800A		CL60967OOOO		(6/8)	CL60963OOOO		(6/8)
1000A		CL60967OOOO		(6/8)	CL60963OOOO		(6/8)
1250A		CL60967OOOO		(6/8)	CL60963OOOO		(6/8)
1600A		CL60967OOOO		(6/8)	CL60963OOOO		(6/8)
2000A		CL60122OOOO		(6/8)	CL60964OOOO		(6/8)
2000A	2	CL60977OOOO		(6/8)	CL60964OOOO		(6/8)
2500A		CL60318OOOO		(6/8)	CL60964OOOO		(6/8)
3200A		CL60417OOOO		(6/8)	CL60419OOOO		(6/8)
4000A		-		-	CL60420OOOO		(6/8)
3200A	3	CL60418OOOO		(12/16)	CL60128OOOO		(12/16)
4000A		CL60418OOOO		(12/16)	CL60067OOOO		(12/16)
5000A		CL60347OOOO		(12/16)	CL60965OOOO		(12/16)

Note: Please contact the nearest branch office for more details of 1000V AC ACBs


Draw-out ACBs Terminal Adaptors


Fixed ACBs Terminal Adaptors

Phase-Barriers for 800V AC Fixed ACBs [8538]

Cat. No.	Type	Pole	M.R.P. (`) Per Unit	Qty. per ACB
CL91258OOOO	Fixed	3P	*	2
CL91259OOOO	Fixed	4P		2

* Available on request


Operation Counter


Door Interlock


Closing Release


Shunt Release


UV Release

Description	Cat. No.	M.R.P. (`) Per Unit
Other Accessories [8538]		
Operation Counter	CL90983OOOO#	*
Door Interlock	CL90978OOOO	
Electrical Position Indication (EPI)	CL95826OOOO	
Microswitches for Indication [8536]		
Microswitch for Common Fault Indication (CFI)	CL90949OOOO	*
Microswitch for Ready To Close Indication (RTC)	CL90953OOOO^	
Microswitch for Shunt Release	CL90951OOOO	
Microswitch for Undervoltage Release	CL90947OOOO	
Microswitch for Spring Charging Indication	ST42672OOOO	

Operation Counter inbuilt for rating 4000A to 6300A

^ Cradle SIC block CL95825OOOO needs to be ordered separately, If EPI not installed in same ACB


R-Lock


C-Lock

Description	Cat. No.	M.R.P. (`) Per Unit
Mechanical Interlock using Key & Lock$		*
R - Lock Type - 1	CL00659OOOO	
R - Lock Type - 2	CL00660OOOO	
R - Lock Type - 3	CL00661OOOO	
R - Lock Type - 12	CL00662OOOO	
R - Lock Type - 23	CL00663OOOO	
Locking arrangement for OFF button with R- Lock (on breaker)	CL90815OOOO	
Locking arrangement for ISO position with R- Lock (on Cradle)	CL90865OOOO	
Locking arrangement for ANY position with R- Lock (on Cradle)	CL90927OOOO	
C - Lock Type - S	CL00664OOOO	
C - Lock Type - T	CL00665OOOO	
C - Lock Type - ST	CL00666OOOO	
C - Lock Type - SS	CL00667OOOO	
C - Lock Type - TT	CL00668OOOO	
Locking arrangement for OFF button with C - Lock (on breaker)	CL90814OOOO	
Locking arrangement for ISO position for C - Lock (on Cradle)	CL90982OOOO	
Locking arrangement for ANY position with C - Lock (on Cradle)	CL90981OOOO	

Note: For Mechanical Interlock using Key & Lock please order combination of Lock and Locking arrangement.

* Available on request $ Only locks [8301] Locking arrangement [8538]

Description	Cat. No.	M.R.P. (`) Per Unit
Electrical Charging Device (ECD) [8501]		*
24-30V DC 48/60V DC	CL90362OOOO	
110V AC / 110-125V DC	CL90363OOOO	
220V AC / 200V DC 240V	CL90360OOOO	
AC / 250V DC 415V AC /	CL90364OOOO	
400V DC	CL90359OOOO	
	CL90361OOOO	
Closing Release (CR) [8538]		*
24-30V DC	CL908173OOO	
48/60V DC	CL908174OOO	
110V AC / 110V DC	CL908175OOO	
125/127V DC	CL90817AOOO	
220 - 240V AC / 220 - 250V DC	CL908171OOO	
415V AC	CL90817BOOO	
	CL90817DOOO	
Shunt Release (SR) [8538]		*
24-30V DC	CL90816O3OO	
48/60V DC	CL90816O4OO	
110V AC / 110V DC	CL90816O5OO	
125/127V DC	CL90816OAOO	
220 - 240V AC / 220 - 250V DC	CL90816O1OO	
415V AC	CL90816OBOO	
	CL90816ODOO	
Undervoltage Release (UVR) with time delay (0-1-3-5 sec) [8538]		*
24-30V DC 48/60V DC	CL908183OOO	
110V AC / 110V DC	CL908184OOO	
240V AC / 220V DC 415V AC	CL908185OOO	
	CL90818AOOO	
	CL90818BOOO	
	CL90818DOOO	


Neutral CT

Description	Cat. No.	M.R.P. (`) Per Unit
External Neutral CT for UW-MTX Releases [8504]		*
Frame-1, 2 & 3 400-800A	CL00717OOOO	
Frame-1, 2 & 3 1000-1600A	CL00718OOOO	
Frame-1 2000-2500A	CL00719OOOO	
Frame-2 & 3 2000-4000A	CL00720OOOO	
Frame-3 5000-6300A	CL00721OOOO	

Automatic Transfer Controllers (ATC) [9032]

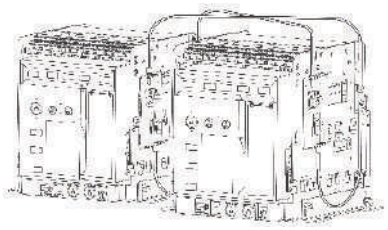

AuXC-2000 Controller

Type	Cat. No.	M.R.P. (`) Per Unit	Std. Pkg. (Nos.)
AuXC-2000 controller**	ATC2000OOOO	52600	1

Can be used along with ACB, Motorised MCCBs, MCX contactors & Motorised Changeover switches

** Note: For communication version of AuXC controller refer page no-6

For AuXC 2000/2100 programming videos and more details please scan the QR code or click here



Mechanical Interlock using Bowden Cable [8538]

Description	Cat. No.	M.R.P. (`) Per Unit
Mechanical Interlock using Bowden Cable (5 meters length)		
Between 2 Incomers	CL90663OOOO	
Between 3 Incomers	CL90664OOOO	*
Between 2 Incomers & 1 Standby	CL90665OOOO	
Between 2 Incomers & 1 Buscoupler	CL90666OOOO	
Mechanical Interlock using Bowden Cable (3 meters length)		
Between 2 Incomers	CL90659OOOO	
Between 3 Incomers	CL90660OOOO	*
Between 2 Incomers & 1 Standby	CL90661OOOO	
Between 2 Incomers & 1 Buscoupler	CL90662OOOO	
Mechanical Interlock using Bowden Cable (2 meters length)		
Between 2 Incomers	CL90810OOOO	
Between 3 Incomers	CL90811OOOO	*
Between 2 Incomers & 1 Standby	CL90812OOOO	
Between 2 Incomers & 1 Buscoupler	CL90813OOOO	

Note: Common from 400A to 6300A and can be interlocked between Fixed / Draw-out / Mixed version

* Available on request



MODBUS Module



Power Metering Module

Description	Cat. No.	M.R.P. (`) Per Unit
MATRIX Releases & Modules [8538]		
UW-MTX1.0 UW-	CL91966OOOO	
MTX1G UW-	CL91971OOOO	
MTX1Gi UW-	CL90562OOOO	
MTX1.5G UW-	CL91965OOOO	
MTX1.5Gi UW-	CL90552OOOO	
MTX3.5 UW-	CL90645OOOO	
MTX3.5EC UW-	CL90644OOOO	
MTX3.5H UW-	CL90646OOOO	
MTX4.5 UW-	*####*	
New MTX3.5T UW-	CL90722OOOO	
New MTX3.5ET UW-	CL91895OOOO	
New MTX4.5T UW-MTX3.5A	CL91896OOOO	
New Power supply module with 2 Ports	CL90716OOOO	
1A Power supply module	CL90709OOOO	*
New DigiCom Module	CL90295OOOO	
New Relay Module	CL90705OOOO	
MODBUS Module	CL90649OOOO	
Profibus Module	CL90685OOOO	
Matrix Smart Card Module	CL90718OOOO	
Power Metering Module (415V)	CL90719OOOO	
Power Metering Module (690V)	CL90720OOOO	
ZSI Module	CL90721OOOO	
TCS Module	CL90724OOOO	
EL Module		
REF Module Simulation Kit		

For Energy Management Communication Software Please contact the nearest branch office

Integrated Release along with ACB - available as Factory-fitted option only



Presenting the pre-engineered CNCS to OMEGA Retrofit kit

CNCS to OMEGA Retrofit kit is a pre-engineered solution which allows you to upgrade from the old CNCS ACB to the advanced OMEGA ACB - with minimal modification. All installations are done by trained Engineers from the nearestAuthorised Service Centre to ensure total reliability and minimum shut-down time.

Specifications

› ETP grade Copper links with Silver Plating
› CNCS to OMEGA Retrofit solution is available from 800A to 3200A

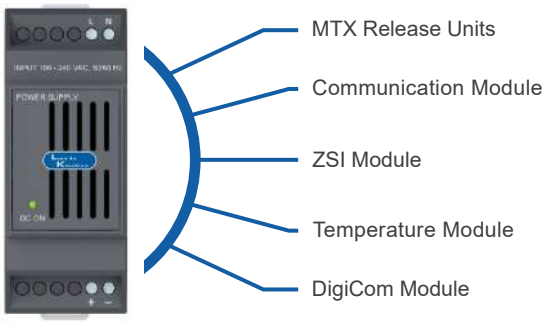
For more details please scan the QR code or click here

For retrofitting of any ACB to Omega ACB please contact the nearest branch office

Customer Interaction Center (CIC)
Phone no: 022-6932 7800
Web: www.LK-EA.com | e-mail: CIC@LK-EA.com

New Power Supply Module (230V AC - 24V DC 1A)

- 100-265V AC Input Voltage
- Regulated 24V DC Output Voltage
- Suitability of up to 1 Amp Loading
- Compact (2M) and Modular Design
- Suitable for DIN Rail & Base mounting



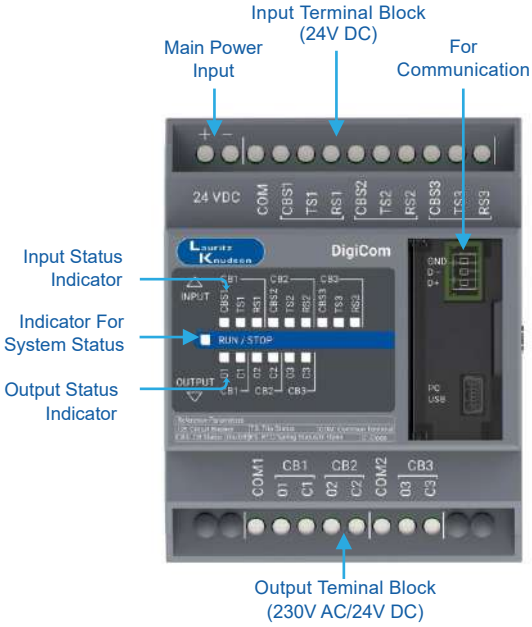
PS Module Details	Function	Module Compatibility	M.R.P. (`) Per Unit
PS Module (CAT Code: CL91895OOOO)	Suitable for providing regulated 24V DC Power Supply	All MTX Release Units for Powering ON, MODBUS Module, ZSI Module, Temperature Module, UN-CO Module & DigiCom Module	11400
UW-PS Module (CAT Code: CL90722OOOO)	Suitable for providing regulated 24V DC Power Supply and Internal Communication Bus	All MTX Release Units and MTX Modules	29700

New DigiCom Module

Status Monitoring & Control of up to 3 Circuit Breakers

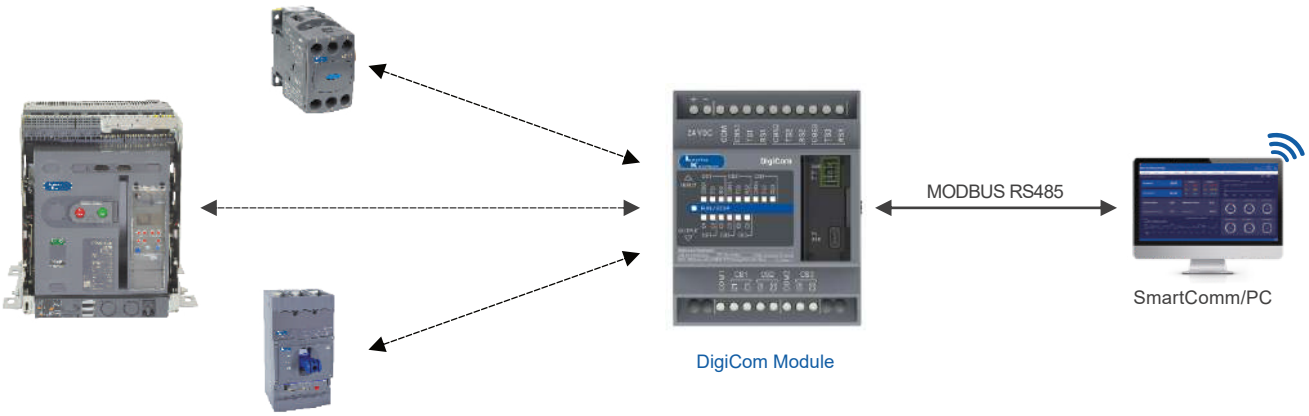
- 3 Digital Inputs for 3 Circuit Breakers - 9 Digital Inputs
- 2 Relay Outputs for 3 Circuit Breakers – 6 Relay Outputs
- 24V DC Input Voltage
- Status Monitoring & Control of up to 3 Circuit Breakers through communication over MODBUS RTU protocol with RS 485 port.
- For optimal performance, CFI and RTC micro switches should be selected along with the ACB.

Input Status Indicator	CB1	CBS1	ON/OFF Indication for Circuit Breaker 1 Trip
		TS1	status Indication for Circuit Breaker 1
		RS1	Ready spring/Ready to Close Status Indication for Circuit Breaker 1
	CB2	CBS2	ON/OFF Indication for Circuit Breaker 2 Trip
		TS2	status Indication for Circuit Breaker 2
		RS2	Ready spring/Ready to Close Status Indication for Circuit Breaker 2
	CB3	CBS3	ON/OFF Indication for Circuit Breaker 3 Trip
		TS3	status Indication for Circuit Breaker 3
		RS3	Ready spring/Ready to Close Status Indication for Circuit Breaker 3
OutputStatus Indicator	CB1	O1	Open Circuit Breaker 1
		C1	Close Circuit Breaker
	CB2	O2	1 Open Circuit Breaker
		C2	2 Close Circuit
	CB3	O3	Breaker 2 Open Circuit
		C3	Breaker 3 Close Circuit Breaker 3



DigiCom Module Details	M.R.P. (`) Per Unit
DigiCom Module (CAT Code: CL91896OOOO)	33800

Connection Architecture of DigiCom



C-POWER S1 Range of Air Circuit Breakers

- Conforms to IS/IEC 60947-2 & IEC 60947-2
- Current rating from 400A to 3200A
- Available in 50kA & 60kA breaking capacity
- Available in 3 Pole/4 Pole, Manually & Electrically operated, Fixed & Draw-out versions
- High short time withstand capacity, Icu = Ics = Icw for 1 sec for total selectivity
- High mechanical and electrical operating life
- 100%rated neutral pole
- Common height and depth across the range
- Protection through Thermal - Magnetic (DN1) & Microprocessor releases (SR18G, SR18G+D & SR18Gi+D)
- Self diagnostic Microprocessor based Releases with on-load testing through TEST button
- Inbuilt thermal memory
- Protection Releases conform to EMI/EMC standards
- Breaker Status and Control through MODBUS protocol



C-POWER S1 ACB

C-POWER C Range of Air Circuit Breakers



C-POWER C ACB

- Conforms to IS/IEC 60947-2 & IEC 60947-2
- Current rating from 800A to 6300A
- Available in 50,55,60 & 95kA breaking capacity
- Available in 3 Pole/4 Pole, Manually & Electrically operated, Fixed & Draw-out versions
- High short time fault withstanding capacity, Icu = Ics = Icw for 1 sec for total selectivity
- High mechanical and electrical operating life
- 100%rated neutral pole
- Protection through Thermal - Magnetic (DN1) & Microprocessor releases (SR18G, SR18G+D, SR18Gi+D)
- Self diagnostic Microprocessor based Releases with on-load testing through TEST button
- Inbuilt thermal memory
- Protection Releases conform to EMI/EMC standards
- Data communication & Power Management
- Breaker Status and Control through MODBUS protocol

C-POWER HE ACBs for Harsh Environment

- Designed to operate at peak efficiency in Sulphur-rich Harsh corrosive environments
- Range 1250A to 5000A, 415/690V ac
- Available in 3 Pole/4 Pole, Manually & Electrically operated, Fixed and Draw-out versions
- Protection through Microprocessor release
- Operates reliably in 3C4 environmental conditions containing SO_2 and H_2S

Please contact the nearest branch office for Details & product Selection



C-POWER HE Range

Breaking Capacities Offered:

Icu = Ics = Icw for 1 sec

	630A	800A	1000A	1250A	1600A	2000A	2500A	3200A	4000A	5000A	6300A
CN-CS : E / G	50kA	50kA	50kA	50kA	50kA	50kA					
	Frame-1										
CN-CS : S1	50kA	50kA	50kA	50kA	50kA	50kA	60kA	60kA			
	Frame-1						Frame-2				
CN-CS : C		50kA	50kA	50kA	50kA	55kA	60kA			95kA	95kA
CN-CS : H CN-		65kA	65kA	65kA	65kA	75kA	75kA				
CS : H2								75kA	75kA		
CN-CS : H / H1								100kA	100kA		
CN-CS : HE				50kA		60kA		75kA		95kA	
		Frame-1				Frame-2		Frame-3		Frame-4	

For technical & dimension details please refer product catalogue. 400A ACB also available on request.





C-POWER S1 3 & 4 Pole Draw-out ACBs

Rating	Breaking Capacity Icu=Ics=Icw (1 sec)	Version	Microprocessor Based SR18G				Thermal-Magnetic DN1			
			3 Pole		4 Pole		3 Pole		4 Pole	
			Cat. No.	M.R.P. (`) Per Unit	Cat. No.	M.R.P. (`) Per Unit	Cat. No.	M.R.P. (`) Per Unit	Cat. No.	M.R.P. (`) Per Unit
630A	50kA	MDO	SL96041	307200	SL96061	385400	SL95331	304000	SL95351	382200
		EDO	SL96051	378500	SL96071	456700	SL95341	375300	SL95361	453500
800A	50kA	MDO	SL96042	307200	SL96062	385400	SL95332	304000	SL95352	382200
		EDO	SL96052	378500	SL96072	456700	SL95342	375300	SL95362	453500
1000A	50kA	MDO	SL96043	319400	SL96063	403600	SL95333	316200	SL95353	400400
		EDO	SL96053	390700	SL96073	474900	SL95343	387500	SL95363	471700
1250A	50kA	MDO	SL96044	352400	SL96064	444500	SL95334	349200	SL95354	441300
		EDO	SL96054	423700	SL96074	515800	SL95344	420500	SL95364	512600
1600A	50kA	MDO	SL96045	401700	SL96065	494100	SL95335	398500	SL95355	490900
		EDO	SL96055	473000	SL96075	565400	SL95345	469800	SL95365	562200
2000A	50kA	MDO	SL96046	471900	SL96066	579600	SL95336	468700	SL95356	576400
		EDO	SL96056	543200	SL96076	650900	SL95346	540000	SL95366	647700
2500A	60kA	MDO	SL96047	583300	SL96067	703100	SL95337	580100	SL95357	699900
		EDO	SL96057	654600	SL96077	774400	SL95347	651400	SL95367	771200

Note : Add a Suffix "OOOO" for all the above mentioned cat. nos.

C-POWER S1 3 & 4 Pole Fixed ACBs

Rating	Breaking Capacity Icu=Ics=Icw (1 sec)	Version	Microprocessor Based SR18G				Thermal-Magnetic DN1			
			3 Pole		4 Pole		3 Pole		4 Pole	
			Cat. No.	M.R.P. (`) Per Unit	Cat. No.	M.R.P. (`) Per Unit	Cat. No.	M.R.P. (`) Per Unit	Cat. No.	M.R.P. (`) Per Unit
630A	50kA	MF	SL95561	167500	SL95581	213600	SL95481	164300	SL95501	210400
		EF	SL95571	238800	SL95591	284900	SL95491	235600	SL95511	281700
800A	50kA	MF	SL95562	167500	SL95582	213600	SL95482	164300	SL95502	210400
		EF	SL95572	238800	SL95592	284900	SL95492	235600	SL95512	281700
1000A	50kA	MF	SL95563	182900	SL95583	230900	SL95483	179700	SL95503	227700
		EF	SL95573	254200	SL95593	302200	SL95493	251000	SL95513	299000
1250A	50kA	MF	SL95564	210800	SL95584	263400	SL95484	207600	SL95504	260200
		EF	SL95574	282100	SL95594	334700	SL95494	278900	SL95514	331500
1600A	50kA	MF	SL95565	233600	SL95585	300500	SL95485	230400	SL95505	297300
		EF	SL95575	304900	SL95595	371800	SL95495	301700	SL95515	368600

Note Add a Suffix "OOOO" for all the above mentioned cat. nos.

M.R.P. changes for product customization w.r.t. SR18G ACB M.R.P.		M.R.P. (`) Per Unit
Bus - Coupler (w/o protection)	Reduce	8400
Microprocessor based SR18G+D (LSING + Current Metering)	Add	22600
Microprocessor based SR18Gi+D (LSING + Current metering + ZSI)	Add	29900

C-POWERS1Draw-OutACBswillhaveinbuilt-2NO+2NCAuxcontactforMDO&6NO+6NCAuxcontactforEDObreakers,Safetyshutterassembly, Rackinghandle,Doorsealingframe,Push-buttoncover&Ratingerrorpreventor. Electricalversionincludes240VACShunttripcoil, ClosingcoilandMotorforelectricalcharging.
C-POWERS1FixedACBswillhaveinbuilt-2NO+2NCAuxcontactforMF&6NO+6NCAuxcontactforEFbreakers,Doorsealingframe&Push-buttoncover. Electricalversionincludes240VACShunttripcoil,ClosingcoilandMotorforelectricalcharging.
Note: 1NOAuxcontactinmanualversion&2NO+2NCinelectricalversionbreakerswillbepre-wiredwithaccessoriesmountedinbreaker. Inelectricallyoperatedbreakerwith DN1release,eitherearthfaultorundervoltageprotectioncanbeused.

CN-CS-E Range 3 Pole Manual Fixed

Rating	Breaking Capacity Icu=Ics=Icw (1 sec)	Version	Thermal-Magnetic Release Type DN1	
			Cat. No.	M.R.P. (`) Per Unit
400A	50kA	3P MF	SL95721OOOO	108900
630A	50kA	3P MF	SL95722OOOO	109900
800A	50kA	3P MF	SL95723OOOO	116400
1000A	50kA	3P MF	SL95724OOOO	119300
1250A	50kA	3P MF	SL95725OOOO	149300
1600A	50kA	3P MF	SL95726OOOO	157200
2000A	50kA	3P MF	SL93297OOOO	180500





C-POWER 3 & 4 Pole Draw-out ACBs

Rating	Breaking Capacity Icu=Ics=Icw (1 sec)	Version	Type	Microprocessor Based SR18G				Thermal-Magnetic DN1			
				3 Pole		4 Pole		3 Pole		4 Pole	
				Cat. No.	M.R.P. (`) Per Unit	Cat. No.	M.R.P. (`) Per Unit	Cat. No.	M.R.P. (`) Per Unit	Cat. No.	M.R.P. (`) Per Unit
800A	65kA	MDO	H	SL95311	543900	#	704700	#	540700	#	701500
		EDO	H	SL95321	615200	#	776000	#	612000	#	772800
1000A	65kA	MDO	H	SL95312	553900	#	749000	#	550700	#	745800
		EDO	H	SL95322	625200	#	820300	#	622000	#	817100
1250A	65kA	MDO	H	SL95313	605600	#	803300	#	602400	#	800100
		EDO	H	SL95323	676900	#	874600	#	673700	#	871400
1600A	65kA	MDO	H	SL95314	681600	#	884100	#	678400	#	880900
		EDO	H	SL95324	752900	#	955400	#	749700	#	952200
2000A	75kA	MDO	H	SL95315	753300	#	903900	#	750100	#	900700
		EDO	H	SL95325	824600	###	975200	#	821400	#	972000
2500A	75kA	MDO	H	SL95316	784100	SL94826	954600	#	780900	#	951400
		EDO	H	SL95326	855400	SL94828	1025900	#	852200	#	1022700
3200A	75kA	MDO	H2	SL94822	826200	SL94827	1014100	#	*	######	*
		EDO	H2	SL94824	897500	SL94829	1085400	#	*		*
4000A	75kA	MDO	H2	SL94823	939000	##	1173500	#	*		*
		EDO	H2	SL94825	1010300		1244800	#	***		*
5000A	95kA	MDO/EDO	C	##	*		**	#			**
6300A	95kA	MDO/EDO	C		*			#			

Note: For higher breaking capacities & 690V AC application please contact the nearest branch office
Add a Suffix "OOOO" for all the above mentioned cat. nos.

C-POWER 3 & 4 Pole Manual Fixed ACBs

Rating	Breaking Capacity Icu=Ics=Icw (1 sec)	Version	Type	Microprocessor Based SR18G				Thermal-Magnetic DN1			
				3 Pole		4 Pole		3 Pole		4 Pole	
				Cat. No.	M.R.P. (`) Per Unit	Cat. No.	M.R.P. (`) Per Unit	Cat. No.	M.R.P. (`) Per Unit	Cat. No.	M.R.P. (`) Per Unit
800A	50kA	MF	C	*				*			
1000A	50kA										
1250A	50kA										
1600A	50kA										
2000A	55kA			SL97635	355500	#	461200	SL93005	352300	#	458000
2500A	60kA			SL97636	391800	#	528000	SL93006	388600	#	524800

Note: For higher breaking capacities & 690V AC application please contact the nearest branch office
Add a Suffix "OOOO" for all the above mentioned cat. nos.

M.R.P. changes for product customization w.r.t. SR18G M.R.P.		M.R.P. (`) Per Unit
Bus-Coupler (w/o protection)	Reduce	8400
Microprocessor based SR18G+D (LSING + Current Metering)	Add	22600
Microprocessor based SR18Gi+D (LSING + Current metering + ZSI)	Add	29900

C-POWER Draw-Out ACBs will have inbuilt - 6NO+6NC Aux contact, Safety shutter assembly, Racking handle, Door sealing frame, Push-button cover & Rating Error preventor. Option of horizontal & vertical termination upto 4000A also available. Operation counter for 4000A & above.
EDO version includes 240V AC Shunt trip coil, Closing coil and Motor for electrical charging.

C-POWER Fixed ACBs will have inbuilt - 6NO+6NC Aux contact, Door sealing frame & Push-button cover. Operation counter for 4000A & above.

Note: 1 NO Aux contact in manual version & 2NO+2NC in electrical version breakers will be pre-wired with accessories mounted in breaker. In electrically operated breaker with DN1 release, either earth fault or undervoltage protection can be used.
Note: Electrical Fixed type breakers are available on request.

Available on "Made to order" basis. * Available on request

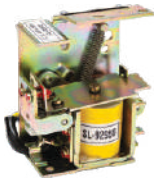
Accessories (Common for C-POWER Family)



LTPB



LIP



Shunt Release



UV Release

Description	Cat. No.	M.R.P. (`) Per Unit
Lockable Trip Push Button (LTPB) [8301]		
Type AA	SL93148OOOA	8260
Type BB	SL93148OOOB	8260
Type CC	SL93148OOOC	8260
Type DD	SL93148OOOD	8260
Lockable Trip Push Button kit (3 I/C & 2 B/C)	SL91936OOOO	41400
Locking of ACB in Isolated position (LIP) [8301]		
Type A	SL93146OOOA	8260
Type B	SL93146OOOB	8260
Type C	SL93146OOOC	8260
Type D	SL93146OOOD	8260
Locking of ACB in Any position (LAP) [8301]		
Type A	SL93147OOOA	8260
Type B	SL93147OOOB	8260
Type C	SL93147OOOC	8260
Type D	SL93147OOOD	8260
Racking Interlock [8301]		
Type AA	SL93149OOOA	11300
Type BB	SL93149OOOB	11300
Type CC	SL93149OOOC	11300
Type DD	SL93149OOOD	11300
Padlock [8301]		
Racking Padlock Assembly	CL90025OOOO	3840
Other Accessories [8538]		
Door Interlock	SL93150OOOO	6050
Mechanical Operation Counter*	XM80837OOOO	6000
Mounting Kit for Front Mounted Counter	SL95882OOOO	2120
Spring Charge Indication Microswitch	SL96000OOOO	4800

* For mounting the Operation counter, mounting kit “SL95882OOOO” needs to be ordered separately. Operation Counter inbuilt for rating 4000A to 6300A.



Vertical Terminal Adaptor

Description & Rating	Cat. No.	M.R.P. (`) Per Unit	Std. Pkg. (Nos.)
Vertical Terminal Adaptors for Draw out C-POWER ACB [8538]			
400-1250 S1/800-1000 C	SL93281OOOO	10300	1
1600-2000 S1/1250-1600 C/800-1600 H	SL93282OOOO	12500	1
2000 C	SL93284OOOO	18500	1
2000 H/2500 C/H	SL93285OOOO	19300	1
2500 S1	SL93289OOOO	19300	1
3200 S1	SL93286OOOO	23800	1
3200H2/H1, 4000H2/H	SL93288OOOO	57500	1

Description	Cat. No.	M.R.P. (`) Per Unit
Shunt Release (SR) [8538]		
Type EA : 24/48V DC	SL92718O4OO	5300
Type EA : 110V DC	SL92718O1OO	5300
Type EA : 220V DC	SL92718O2OO	5300
Type EA1 : 110V AC	SL92718OAOO	5300
Type EA1 : 240V AC	SL92718OBOO	5300
Type EA1 : 415V AC	SL92718ODOO	5300
Under Voltage Release (UVR) [8538]		
Type MV : 24V DC	ST36877OOOO	9310
Type MV : 240V AC	SL92720BOOO	9310
Type MV : 415V AC	SL92720DOOO	9310
Earth Fault Release (for DN1) [8538]		
Type EF1 (10%, 20%In)	SL91340OOOO	8230
Type EF2 (30%, 40%, 50%In)	SL91341OOOO	8230
Remote Fault Indication [8538]		
AN1 Remote Annunciation Module for SR18G/SR18G+D/SR18Gi+D : 240V AC	SL94654OOOO	20000
Microswitches for Indication [8536]		
Microswitch for Voltmetric Releases (2) each	SL92703OOOO	5110
Microswitch for Common Indication of O/L & S/C (3) each	SL92704OOOO	5110
Microswitch for Separate Indication of O/L & S/C (3) each (for DN1 release)	SL92705OOOO	8540
Service Position Microswitch - Right (2)	SL93142OOOO	3450
Service Position Microswitch - Left (2)	SL93143OOOO	3450
Test or Isolated Position Microswitch - Right (2)	SL93144OOOO	3450
Test or Isolated Position Microswitch - Left (2)	SL93145OOOO	3450

Note:
a. The Numerical in brackets, against various accessories indicate the SICs required for wiring purpose in Draw-Out breakers
b. Shunt release requires one set of auxiliary contacts
c. Maximum 24 SICs can be fitted on an ACB. In Electrical ACBs 5 SICs are prewired for control circuit purpose

Features

- Remote Status & Control of ACB
- Communicates on MODBUS Protocol
- Inbuilt RS485 Port

Description	Cat. No.	M.R.P. (`) Per Unit	Std. Pkg. (Nos.)
UN-CO module for Breaker control	CL90852OOOO**	24300	1

**Available till stock last

Protection Releases



SR18G



SR18G+D



SR18Gi+D



CT

Description	Cat. No.	M.R.P. (`) Per Unit
Protection Releases [8538]		
Microprocessor based type SR18Gi+D	SL94813OOOO	98400
Microprocessor based type SR18G+D	SL94812OOOO	91100
Microprocessor based type SR18G	SL96030OOOO	68500
Thermal-Magnetic Release type DN1	SL93152OOOO	65300
Universal Test Kit	CL90462OOOO	140200

Universal Test Kit
Compatible with following Lauritz Knudsen Protection Releases
› SR protection releases of C-Power ACB family
› UNRS protection releases of U-Power ACB family
› MTX and RC releases of D-Sine MCCB family

Retrofit kit solutions are available
For further details please contact the nearest branch office

Description	Cat. No.	M.R.P. (`) Per Unit	Std. Pkg. (Nos.)
CTs for SR18G / SR18G+D / SR18Gi+D [8504]			
400 S1 Fix & Draw-out	SL01523OOOO	11400	1
630 S1 Fix & Draw-out	ST37495OOOO	11400	1
800 C/H/S1 Fix & Draw-out	SL01857OOOO	11400	1
1000 C/H/S1 Fix & Draw-out	SL01858OOOO	11400	1
1250 C/H/S1 Fix & Draw-out	SL90571OOOO	13900	1
1600 C/H/S1 Fix & Draw-out	SL90572OOOO	13900	1
2000 C/H Fix & Draw-out	SL90565OOOO	15200	1
2000 S1 Draw-out	SL93210OOOO	15200	1
2500 C/H Fix & Draw-out	SL90566OOOO	15200	1
2500 S1 Draw-out			
3200 H2/H1 Draw-out	SL01740OOOO	17600	1
4000 H2/H Draw-out	SL01739OOOO	20900	1

For External Neutral C.T.s please use the above Cat. No.



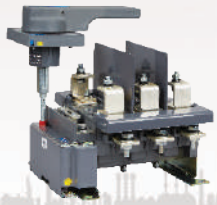
C-POWER HE Air Circuit Breaker

- Range 1250A to 5000A, 415/690V ac
- Available in 3 Pole/4 Pole, Manually & Electrically operated, Fixed & Draw-out versions
- Protection through Microprocessor release



FN BOLTED HE Switch-Disconnector-Fuse

- Range 32A to 630A, 415V ac, AC 23A
- TPN version suitable for Bolted Fuse Link
- Door Interlocking & Padlocking facility



Lauritz Knudsen Electrical & Automations HE range of Air Circuit Breakers (ACBs) and Switch-Disconnector-Fuse (S-D-F) are designed to ensure that they operate at peak efficiency for their entire lifespan in harsh, Sulphur-rich Harsh corrosive environments.

For more details please scan the QR code or click here

ClarityPRD/122015

RELIABLE ELECTRICAL

S-LINE BUSBAR TRUNKING SYSTEM

A smart, safe and reliable solution for power distribution



KEY FEATURES

- Enclosure: GI or Aluminium
- UL Certified Class-F Insulation with ROHS compliance
- Current Rating:
  - 250A to 6300A (Aluminium)
  - 400A to 6300A (Copper)
- Ingress Protection up to IP66
- Plug-in boxes with Safety interlocks

Now equipped with Temperature monitoring system and

Powered By SMARTCOMM

RELIABLE ELECTRICAL

ENGINEERED FOR ENDURANCE

Built to withstand tough conditions



LTXL CAPACITOR

- Designed to operate at Temperature upto 70°C
- 3 x In Over Curent withstand capacity
- Highest 500 x In Inrush current withstand capacity.
- Special Stainless Steel Earthing pad corrosion proof.
- Glazed ceramic bushing provied better protection.
- Enhanced Durability

Power Factor Correction Capacitors [8532]

Parameters	Standard Duty		Heavy Duty		HD Plus Gas Filled	Super Heavy Duty	APP	LTXL Ultra Heavy Duty	
	Cylindrical	Box	Cylindrical	Box	Cylindrical	Cylindrical	Box	Cylindrical	Box
Over current withstand capability	1.5 x In	1.5 x In	1.8 x In	1.8 x In	2.0 x In	2.5 x In	2.5 x In	3 x In	3 x In
Operating losses	0.45 W/kVAr	0.45 W/kVAr	0.5 W/kVAr	0.5 W/kVAr	0.45 W/kVAr	0.45 W/kVAr	0.5 W/kVAr	0.45 W/kVAr	0.5 W/kVAr
Peak Inrush current withstand capability	200 x In	200 x In	250 x In	300 x In	300 x In	350 x In	300 x In	500 x In	500 x In
Number of switching operations per year	5000	5000	7500	8000	10000	15000	10000	18000	20000
Max. Temperature	55°C	55°C	55°C	55°C	55°C	65°C	55°C	65°C	70°C
Operating life	100000 hrs.	100000 hrs.	130000 hrs.	150000 hrs.	180000 hrs.	200000 hrs.	200000 hrs.	300000 hrs.	300000 hrs.

Standard Duty Capacitors

Features

- Finger proof terminal in Cyl capacitor
- 150%continuous current carrying capacity
- Self-Healing property
- Soft resin as coolant
- Inbuilt Over Pressure Disconnector (OPD)



Type	kVAr Rating	Voltage (V)	M.R.P. (`) per kVAr
Cylindrical 1 to 6 kVAr - Series : LTCCF 7.5 to 33.1 kVAr - Series : LTCCD	1 to 25	440	299
	1.2 to 27.7	480	299
	1.3 to 33.1	525	299
Box 1 to 6 kVAr - Series : LTBCF 7.5 to 33.1 kVAr - Series : LTBCD	1 to 50	440	383
	11.1 to 27.7	480	383
	13.2 to 33.1	525	383

HD Plus Gas Filled Capacitor

Features

- High inrush current carrying capacity 300 x In
- Inert gas as coolent (Non-flammable)
- Finger proof terminal in Cyl capacitor
- Self-Healing property
- Inbuilt Over Pressure Disconnector (OPD)
- Long life



Type	kVAr Rating	Voltage (V)	M.R.P. (`) per kVAr
Cylindrical Series: LTCCN	7.5 to 15	440	623
	20 & 25		579
	7.5 to 15	480	623
	20 to 30		579
	7.5 to 15	525	623
	20 to 33.1		579

Heavy Duty Capacitors



Features

- 180%continuous current carrying capacity
- Finger proof terminal in Cyl capacitor
- Self-Healing property
- Soft resin as coolant
- Inbuilt over pressure disconnector (OPD)
- Low losses

Type	kVAr Rating	Voltage (V)	M.R.P. (`) per kVAr
Cylindrical Series: LTCCH	1 to 4	440 V	572
	5 to 15		526
	20 to 30		512
	1.2 to 4.4*	480 V	572
	5.5 to 16.6		526
	17.1 to 27.7 *		512
	4.5 to 5.5	525 V	572
	6.6 to 16.6		526
	20 to 33.1		512
Box Series: LTBCH	1 to 4	440 V	733
	5 to 15		634
	20 to 50		621
	5.5 to 15	480 V	634
	20 to 27.7		621
	6.6 to 15	525 V	634
	20 to 33.1		621

* Now smaller rating also available in Heavy Duty Cylindrical

Super Heavy Duty Capacitors



Features

- High over current withstand capacity 2.5 x In
- High Inrush current withstand capacity 350 x In
- Finger proof Sigut terminal in Cyl capacitor

Type	kVAr Rating	Voltage (V)	M.R.P. (`) per kVAr
Cylindrical Series: LTCCR	3 to 5	440 V	860
	7.5 to 15		703
	20 & 25		665
	1.2 to 5.5	480 V	860
	11.1 & 15		703
	20 to 27.7		665
	1.3 to 5	525 V	860
	6.6 to 15		703
	20 to 33.3		665

APP Capacitors



Features

- High over current withstand capacity 2.5 x In
- High Inrush current withstand capacity 300 x In
- Glazed ceramic bushing
- Tinned Copper studs
- Corrosion proof stainless steel Earthing pad

Type	kVAr Rating	Voltage (V)	M.R.P. (`) per kVAr
Box Series: LTBCP	5 to 15	440 V	1079
	20 to 50 5.5		1044
	to 13.8 16.6	480 V	1079
	to 55.3 6.6		1044
	& 13.2 16.6	525 V	1079
	to 66.2		1044

LTXL - Ultra Heavy Duty Capacitors



Features

- High over current withstand capacity 3 x In
- High Inrush current withstand capacity 500 x In
- Glazed ceramic bushing (In box type capacitor)
- Lower thermal impedance
- Designed to operate at temperature up to 70 °C
- Corrosion proof stainless steel Earthing pad

Type	kVAr Rating	Voltage (V)	M.R.P. (`) per kVAr
Cylindrical Series : LTCCU	5 to 15	440V	1660
	20 & 25		1633
	7.5 to 15	480V	1660
	20		1633
	7.5 to 15	525V	1660
	20		1633
Box Series: LTBCU	5 to 15	440V	1848
	20 to 50		1812
	7.5 to 15	480V	1848
	20 to 30		1812
	7.5 to 15	525V	1848
	20 to 33.1		1812

Ordering Information for Capacitors

C - Cylindrical, B - Box

Duty: D/F – Standard** H - Heavy
N - Gas Filled
R - Super Heavy
P - APP
U - Ultra Heavy

kVAr Rating — Sample ratings
01 - 1 kVAr
07 - 7.5 kVAr
10 - 10 kVAr
12 - 12.5 kVAr

Voltages:B-440V, C-480V,M- 525V

** F - 1 to 6 kVAr. D - 7.5 kVAr & above

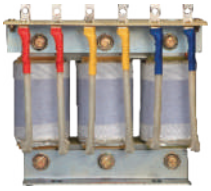
L	T		C		3				2

Catalogue Number

Capacitor Series	kVAr ratings		
	440 V	480 V	525 V
LTCCF	1, 2, 3, 4, 5, 6	1.2, 2.2, 3.3, 4.4, 5.5	1.3, 2.6, 3.9, 5.3, 6.6
LTBCF	1, 2, 3, 4, 5, 6	-	-
LTCCD/LTBCD	7.5, 8.33, 10, 12.5, 15, 20, 25, 30*	11.1, 13.8, 16.6, 22.1, 27.7	13.2, 16.6, 20, 26.5, 30, 33.1
LTCCH	1, 2, 3, 4, 5, 7.5, 10, 12.5, 15, 20, 25, 30	1.2, 2.2, 3.3, 4.4, 5.5, 11.1, 13.8, 16.6, 22.1, 27.7	1.3, 2.6, 3.9, 5.3, 6.6, 13.2, 16.6, 20, 26.5, 30, 33.1
LTBCH	1, 2, 3, 4, 5, 7.5, 8.33, 10, 12.5, 15, 20, 25, 30, 50	5.5, 11.1, 15, 20, 25, 27.7	6.6, 13.2, 15, 20, 25, 30, 33.1
LTCCN	7.5, 8.33, 10, 12.5, 15, 20, 25	7.5, 12.5, 15, 20, 25, 30	7.5, 12.5, 15, 20, 25, 30, 33.1
LTCCR	3, 4, 5, 7.5, 8.33, 10, 12.5, 15, 20, 25	1.2, 2.2, 3.3, 4.4, 5.5, 11.1, 15, 20, 25, 27.7	1.3, 2.6, 3.9, 5, 6.6, 13.2, 15, 20, 25, 30, 33.3
LTBCP	5, 7.5, 10, 12.5, 15, 20, 25, 50	5.5, 11.1, 13.8, 16.6, 22.1, 27.7, 55.3	6.6, 13.2, 16.6, 20, 26.5, 30, 33.1, 66.2
LTCCU	5, 7.5, 8.33, 10, 12.5, 15, 20, 25	7.5, 10, 12.5, 15, 20	7.5, 10, 12.5, 15, 20
LTBCU	5, 7.5, 8.33, 10, 12.5, 15, 20, 25, 30, 50	7.5, 10, 12.5, 15, 20, 25, 30	7.5, 12.5, 15, 20, 25, 30, 33.1

*Only LTBCD is available at 30 kVAr

Detuned Reactors, 440 V, 50 Hz [8504]



Features
- Copper & Aluminium wound reactors
- H-class insulation
- Lower operating losses
- 180%linearity*
- Thermal cut off
- High Quality Factor

kVAr Rating	7%Copper Reactor		7%Aluminium Reactor		14%Copper Reactor		14%Aluminium Reactor	
	Cat. No.	M.R.P. (`) Per Unit	Cat. No.	M.R.P. (`) Per Unit	Cat. No.	M.R.P. (`) Per Unit	Cat. No.	M.R.P. (`) Per Unit
1	LTFR0701B2	15821	LTAL0701B2	9733	LTFR1401B2	30755	LTAL1401B2	16062
2	LTFR0702B2	17277	LTAL0702B2	10616	LTFR1402B2	33528	LTAL1402B2	17493
3	LTFR0703B2	19585	LTAL0703B2	12024	LTFR1403B2	38025	LTAL1403B2	19821
4	LTFR0704B2	20817	LTAL0704B2	12783	LTFR1404B2	40427	LTAL1404B2	21085
5	LTFR0705B2	23373	LTAL0705B2	13822	LTFR1405B2	43710	LTAL1405B2	24124
10	LTFR0710B2	31927	LTAL0710B2	19617	LTFR1410B2	61958	LTAL1410B2	34314
12.5	LTFR0712B2	36028	LTAL0712B2	21936	LTFR1412B2	67971	LTAL1412B2	39308
15	LTFR0715B2	41851	LTAL0715B2	26320	LTFR1415B2	74783	LTAL1415B2	46966
20	LTFR0720B2	46350	LTAL0720B2	29294	LTFR1420B2	86616	LTAL1420B2	53387
25	LTFR0725B2	47256	LTAL0725B2	29857	LTFR1425B2	95122	LTAL1425B2	54818
50	LTFR0750B2	79216	LTAL0750B2	46489	LTFR1450B2	153681	LTAL1450B2	77441
75	LTFR0775B2	117745	LTAL0775B2	68475	LTFR1475B2	222318	LTAL1475B2	115138
100	LTFR0700B2	153209	LTAL0700B2	94093	LTFR1400B2	297019	LTAL1400B2	155251

* Prices of 200%linearity reactors are available on request.

For industries with High Voltage Harmonics, special solutions are available on request. Contact your nearest sales office for the customised solutions.

Selection of capacitors for detuned harmonic filter application

Step Size & 440 V	With 7%detuned reactor			With 14%detuned reactor	
	Reactor rating (kVAr) Capacitor series	480 V Capacitor (kVAr)	525 V Capacitor (kVAr)	Capacitor series	525 V Capacitor (kVAr)
1	LTCCF, LTCCH, LTCCR	1.2	1.3	LTCCF, LTCCH, LTCCR	1.3
2	LTCCF, LTCCH, LTCCR	2.2 3.3	2.6	LTCCF, LTCCH, LTCCR	2.6
3	LTCCF, LTCCH, LTCCR LTCCF, LTCCH	4.4	3.9 5.3	LTCCF, LTCCH, LTCCR LTCCF, LTCCH	3.9 5.3
4	LTCCR		5	LTCCR	5
	LTCCF, LTCCH, LTCCR, LTBCH, LTBCP	5.5	6.6	LTCCF, LTCCH, LTCCR, LTBCH, LTBCP	6.6
5	LTCCN, LTCCU, LTBCU	7.5	7.5	LTCCN, LTCCU, LTBCU	7.5
	LTCCD, LTCCH, LTCCR, LTBCD, LTBCH, LTBCP	11.1	13.2	LTCCD, LTCCH, LTCCR, LTBCD, LTBCH, LTBCP	13.2
10	LTCCN, LTCCU, LTBCU	12.5	12.5	LTCCN, LTCCU, LTBCU	12.5
	LTCCN, LTCCR, LTCCU, LTBCH, LTBCU LTCCD,	15	15	LTCCN, LTCCR, LTCCU, LTBCH, LTBCU LTCCD,	15
12.5	LTCCH, LTBCD, LTBCP	13.8	16.6	LTCCH, LTBCD, LTBCP	16.6
	LTCCN, LTCCR, LTCCU, LTBCH, LTBCU LTCCD,	20	20	LTCCD, LTCCN, LTCCH, LTCCR, LTCCU, LTBCD,	20
15	LTCCH, LTBCD, LTBCP	16.6		LTBCH, LTBCP, LTBCU	
	LTCCN, LTCCR, LTBCH, LTBCU	25	25	LTCCN, LTCCR, LTBCH, LTBCU	25
20	LTCCD, LTCCH, LTBCD, LTBCP	22.1	26.5	LTCCD, LTCCH, LTBCD, LTBCP	26.5
	LTCCU	7.5 + 15	2 x 12.5	LTCCU	2x12.5
	LTCCD, LTCCH, LTCCR, LTBCD, LTBCH, LTBCP	27.7	33.1	LTCCD, LTCCN, LTCCH, LTCCR,	30
25	LTBCU, LTCCN	30		LTBCD, LTBCH, LTBCP, LTBCU	
	LTCCU	12.5 + 15	15 + 20	LTCCU	(10+20)
	LTCCD, LTCCH, LTCCR, LTBCD, LTBCH	2 x 27.7	2 x 33.1	LTCCD, LTCCN, LTCCH, LTCCR,	2 x 30
50	LTBCU, LTCCN	2 x 30		LTBCD, LTBCH, LTBCP, LTBCU	
	LTCCU	2 x (12.5 + 15)	2 x (15 + 20)	LTCCU	3 x 20
	LTBCP	55.3	66.2		
	LTCCD, LTCCH, LTCCR, LTBCD, LTBCH	3 x 27.7	3 x 33.1	LTCCD, LTCCN, LTCCH, LTCCR,	3 x 30
75	LTBCU, LTCCN	3 x 30		LTBCD, LTBCH, LTBCP, LTBCU	
	LTCCU	3 x (12.5 + 15)	3 x (15 + 20)	LTCCU	(4 x 20) + 10
	LTBCP	27.7 + 55.3	33.1 + 66.2		
	LTCCD, LTCCH, LTCCR, LTBCD, LTBCH, LTBCP	4 x 27.7	4 x 33.1	LTCCD, LTCCN, LTCCH, LTCCR,	4 x 30
100	LTBCU, LTCCN	4 x 30		LTBCD, LTBCH, LTBCP, LTBCU	
	LTCCU	4 x (12.5 + 15)	4 x (15 + 20)	LTCCU	6 x 20
	LTBCP	2 x 55.3	2 x 66.2		



Capacitor Duty Contactors - Type MO C [8536]

Features

- Conforms to IS / IEC 60947-4-1 & IEC 60947-4-1
- Delatching type early make contacts
- Separate termination for damping resistors
- Encapsulated damping resistor assembly
- Common coil for 50 & 60Hz application
- Low pick-up VA consumption
- RoHS compliant



Size	kVAr Rating @ 440V, 3Ph, 50Hz	Type	Built-in Auxiliary Contacts	Cat. No.	M.R.P. (`) Per Unit	Std. Pkg. (Nos.)
Fr 1	3	MO C3	1NO	CS96146	3480	1
	5	MO C5	1NO	CS96127	3700	1
	8.5	MO C8.5	1NO	CS96320	4800	1
	10	MO C10	1NO	CS96156	4910	1
	12.5	MO C12.5	1NO	CS96321	5180	1
	15	MO C15	1NO	CS90019	6980	1
	20	MO C20	1NO	CS90021	7770	1
	25	MO C25▲	1NO	CS96322	8370	1
	30	MO C30$	1NO	CS96148	13330	1
Fr 2	40	MO C40	1NO	CS96147	22120	1
	50	MO C50	1NO	CS96324	24830	1
	60	MO C60$	1NO	CS96149	25820	1
Fr 3	75	MO C75	1NO	CS96150	30870	1
	85	MO C85	1NO	CS96157	33220	1
	100	MO C100	1NO	CS96158	33870	1

Thyristor Switching Module, 440V 50Hz [8538] New

Features

- High Peak Inverse Voltage (PIV) - 2.2 kV
- Inbuilt control supply voltage
- Auto thermal cut off
- LEDs for various status/fault indications
- Ambient Temperature -10° C to 55° C
- No moving parts
- On-site self test logic
- Low operating losses
- 2 Nos Aux Contact outputs for fault and status



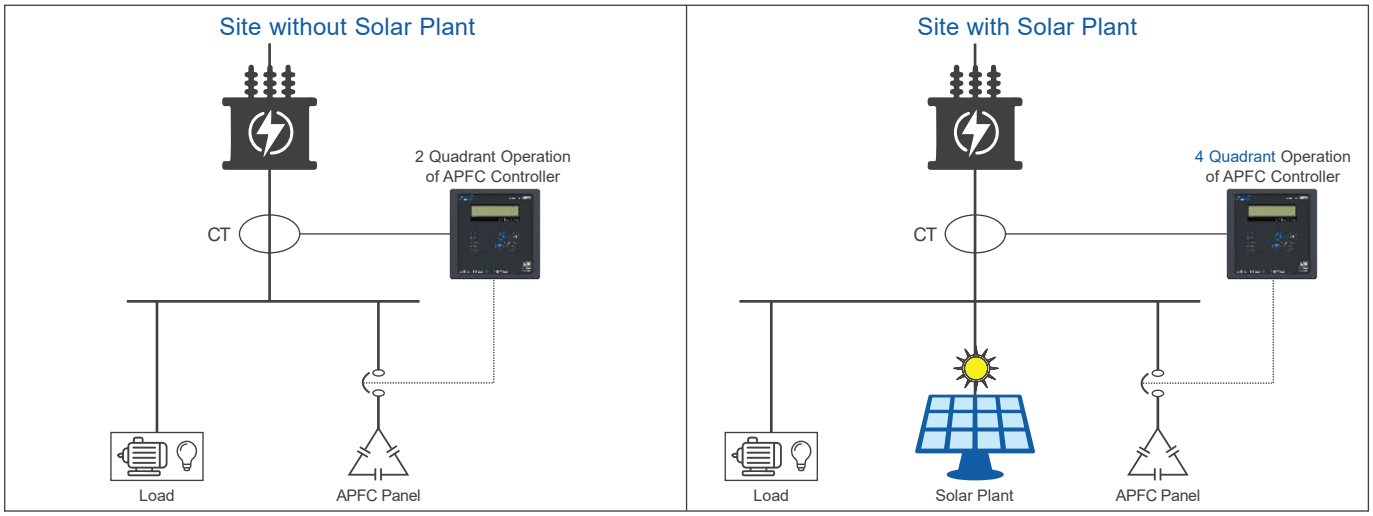
kVAr Rating	Cat. No.	M.R.P. (`) Per Unit
1 0	CS92049OOOO	33245
25 50	CS92050OOOO	47424
	CS92051OOOO	54317

Note (TSM): Above prices include Quick Discharge Resistors (QDR)

Note (MOC):
1) For ordering add-on aux. contact block, please refer page No. 8
2) For ordering suffix, please refer page No.10
3) For ordering spare coils, please refer page No. 11
4) Standard coil voltage : 240V, 50/60 Hz
5) For ordering MO C surge suppressor, please refer page No. 9

▲
▲ If using 16 sq mm cable use of spreader link kit is mandatory
For ordering spreader link kit, Please refer page No.9
$ Spreader link along with phase barrier included in packing

etaSMART and etaULTRA Controllers are compatible for Sites with or without a Solar plant.



Enable 4 Quadrant setting in etaSMART and etaULTRA for site with Solar Plant.

etaULTRA - APFC Controller - 3 CT inputs

Features

- 3 Phase Current and Voltage measurement
- PF display - 3 Digit after decimal
- Individual harmonics measurement up to 31st order
- Dual PF setting for Mains - DG application
- Communication through Inbuilt MODBUS RS-485 Protocol
- Suitable for LT as well as HT side sensing

Cascading (Master - Slave configuration) for APFC panel with more than 16 steps



4 Quadrant Operation suitable for Solar Powered installations

Model Name	No. of steps (For Contactor switching)	No. of steps (For Thyristor switching)	Voltage Input	Cat No.	Size	M.R.P. (`) Per Unit
etaULTRA 8R	8	0	110 / 415 V	CS91050OOOO	144 x 144	31900
etaULTRA 16R	16	0		CS91051OOOO		42790
etaULTRA 14T+2R	2	14		CS91053OOOO		44740
etaULTRA 8T+8R	8	8		CS91054OOOO		44740

Last Two Contacts can be programmed for Capacitor Switching / Alarm Function / Fan Control

etaSMART - APFC Controller - 1 CT input

Features

- Simple and Smart Controller
- Auto programming function available
- CT secondary - 1 / 5 Amp site selectable
- Measurement of Total harmonics distortion of current and voltage up to 13th order harmonics



4 Quadrant Operation suitable for Solar Powered installations

etaSMART T - APFC Controller for Thyristor Switching with 1 CT input

No.of steps (for Thyristor switching)	Size	Cat. No.	Single CT input	Voltage Input	M.R.P. (`) Per Unit
8	144x144	CS91614OOOO	1/ 5 Amp	415 V	26800
12	144x144	CS91615OOOO			33350
15	144x144	CS91616OOOO			38990

One separate relay contact is available for Alarm

etaSMART R - APFC controller for Contactor switching with 1 CT input

No. of steps (For Contactor Switching)	Size	Cat. No.	Single CT input	Voltage Input	M.R.P. (`) Per Unit
4	96 x 96	CS90884OOOO	1/ 5 Amp	415 V	12760
6	96 x 96	CS90885OOOO			14520
8	96 x 96	CS90902OOOO			17110
12	144 x 144	CS90903OOOO			28290
14	144 x 144	CS90904OOOO			34960
16	144 x 144	CS90905OOOO			38070

Last Two Contacts can be Programmed for Capacitor Switching / Alarm Function / Fan Control

Power Factor Perfected, Harmonics Mitigated



ASVG & AHF

Experience the next generation of power quality solutions. Our Advanced Static VAR Generator (ASVG) & Active Harmonic Filter (AHF) Modules dynamically corrects power factor for varying loads and mitigates harmonic in the system, resulting in improved system performance and a longer equipment lifespan. ASVG & AHF Modules compatibility with Hybrid controller enables true hybrid solutions, offering greater control and flexibility.

- Ultra-High Speed compensation using IGBT
- Dynamic Stepless Power Factor Correction
- Harmonic Mitigation

Advanced Static VAR Generator (ASVG) [8504] New

ASVG Features

- Dynamic Stepless PF correction, Load balancing & Harmonic Mitigation
- Suitable for DPF & TPF improvement
- Harmonic Mitigation up to 15th Order
- Fast response time of 50 µsec
- Scalable architecture for future expansion
- Lower thermal losses
- Communicable –Inbuilt MODBUS RS485 Protocol
- Wall mount/ Rack Mount Modules
- True Hybrid Solution Compatibility

Hybrid controller

- Intuitive Touchscreen display
- Easy installation & programming
- 18 Ports to connect Capacitor banks (Thyristor & Cap. duty Contactor Switching)
- Alarm and Event Management
- Bar Chart Visualization



kVAr Rating	3P3W ASVG (415 V,-25%+15%)		3P4W ASVG (415 V,-25%+10%)	
	Cat. No.	M.R.P. (₹) Per Unit	Cat. No.	M.R.P. (₹) Per Unit
30	ASVG0030H3WD2*	On Request	ASVG0030H4WD2*	On Request
50	ASVG0050H3WD2*		ASVG0050H4WD2*	
100	ASVG0100H3WD2*		ASVG0100H4WD2*	
150	ASVG0150H3WD2*		ASVG0150H4WD2*	
30	ASVG0030N3RD2		ASVG0030N4RD2	
50	ASVG0050N3RD2		ASVG0050N4RD2	
100	ASVG0100N3RD2		ASVG0100N4RD2	
150	ASVG0150N3RD2		ASVG0150N4RD2	
Hybrid Controller / HMI				
18 Stage Relay O/P	ASVGHC18R00T		On Request	
18 Stage Thyristor O/P	ASVGHC00R18T			
9 Stage Relay 9 Stage Thyristor O/P	ASVGHC09R09T			
7 Inch HMI	ASVGHMI007			

* ASVGmodule with inbuilt HMI

Active Harmonic Filter (AHF) [8543]





ACTIVE HARMONIC FILTER - MODULE Features

New

- Reduces THD within IEEE - 519 limits
- Harmonic Mitigation, Dynamic Stepless PF correction & Load balancing
- Advanced 3 Level Inverter topology
- Harmonic Mitigation up to 51st Order
- Fast response time of 50 µsec
- Lower thermal losses
- Scalable architecture for future expansion
- Communicable –Inbuilt MODBUS RS485 Protocol
- Wall mount/ Rack Mount Modules
- True Hybrid Solution Compatibility

ACTIVE HARMONIC FILTER Features

- Reduces THD within IEEE - 519 limits
- Harmonic mitigation up to 50th Order
- Harmonic Mitigation, Dynamic Stepless PF correction & Load balancing
- With complete panel enclosure
- Up to 1000 Amp in a single enclosure
- Customizable to withstand in extreme environment
- Communicable – Inbuilt MODBUS RS485 Protocol
- Modular Design allowing for future expansion
- Ease of Monitoring using Touch Screen HMI
- Fully Customized as per site condition**

Ampere Rating	3P3W AHF (415 V,-25%+15%)		3P4W AHF (415 V,-25%+10%)	
	Cat. No.*	M.R.P. (`) Per Unit	Cat. No.*	M.R.P. (`) Per Unit
30	AHF0030H3WD2*	On Request	AHF0030H4WD2*	On Request
50	AHF0050H3WD2*		AHF0050H4WD2*	
100	AHF0100H3WD2*		AHF0100H4WD2*	
150	AHF0150H3WD2*		AHF0150H4WD2*	
30	AHF0030N3RD2		AHF0030N4RD2	
50	AHF0050N3RD2		AHF0050N4RD2	
100	AHF0100N3RD2		AHF0100N4RD2	
150	AHF0150N3RD2		AHF0150N4RD2	
Hybrid Controller / HMI				
18 Stage Relay O/P	AHFHC18R00T	On Request		
18 Stage Thyristor O/P	AHFHC00R18T			
9 Stage Relay 9 Stage Thyristor O/P	AHFHC09R09T			
7 Inch HMI	AHFHMI007			

* AHF module with inbuilt HMI

Contact your nearest sales office for customized solution.

Ampere Rating	3 Phase 3 wire AHF Without Neutral Compensation		3 Phase 4 wire AHF With Neutral Compensation	
	Cat. No.*	M.R.P. (`) Per Unit	Cat. No.*	M.R.P. (`) Per Unit
30	AHF030431D2	On Request	AHF030441D2	On Request
60	AHF060431D2		AHF060441D2	
100	AHF100431D2		AHF100441D2	
125	AHF125433D2		AHF125443D2	
150	AHF150433D2		AHF150443D2	
200	AHF200433D2		AHF200443D2	
250	AHF250433D2		AHF250443D2	
300	AHF300433D2		AHF300443D2	
400	AHF400433D2		AHF400443D2	
500	AHF500433D2		-	
600	AHF600433D2		-	
750	AHF750433D2		-	
1000	AHF000433D2		-	

*Standard CAT No. Configuration Cable Entry – Top/Cable Alley

**Customisable options available IP
Class – IP 40/IP 42/IP 54 Conformal Coating - (3C3)



Designed for 'Low Life-Cycle Cost'

Integrated OEM Ecosystem

Intelligent Thermal Management

Optimised Total Cost of Ownership (TCO)

Unified Hybrid Control Systems

Smart Panels for Real-Time Monitoring and Analytics

* Note: Hybrid Panel Combination - ASVG + APFC & AHF + APFC

Suggested Step Ratings for APFC Panels

Panel Rating (kVAr)	Physical Step Size (kVAr)	No. of Physical Steps	Electrical Steps (All Possible Combination of Physical Steps)	No. of Electrical Steps
10	4 + 3 + 2 + 1	4	1,2,3,4...8,9,10 1,2,3,4..	10
15	5 + 4 + 3 + 2 + 1	5	.13,14,15	15
20	10 + 5 + 2x2 + 1	5	1,2,3,4…18,19,20	20
25	15 + 5 + 2x2 + 1	5	1,2,3,4…23,24,25	20
30	15 + 10 + 2x2 + 1	5	1,2,3,4…28,29,30	22
35	20 + 10 + 2x2 + 1	5	1,2,3,4…33,34,35	23
40	20 + 10 + 5 + 3 + 2	5	2,3,5,7…35,37,38,40	24
45	25 + 10 + 5 + 3 + 2	5	2,3,5,7…40,42,43,45	24
50	25 + 15 + 5 + 3 + 2	5	2,3,5,10…45,47,48,50	24
55	25 + 15 + 10 + 3 + 2	5	2,3,5,10….50,52,53,55	25
60	25 + 15 + 10 + 5 + 3 + 2 25	6	2,3,5,7….55,57,58,60	36
65	+ 2x15 + 5 + 3 + 2	6	2,3,5,7….60,62,63,65	35
70	25 + 20 + 15 + 5 + 3 + 2	6	2,3,5,7….65,67,68,70	36
75	2x25 + 15 + 5 + 3 + 2 2x25	6	2,3,5,7….70,72,73,75	39
80	+ 15 + 10 + 3 + 2 50 + 20 +	6	2,3,5,10….75,77,78,80	36
85	5 + 4 + 2x3	6	2,3,5,6….80,81,82,85	44
90	50 + 25 + 5 + 4 + 2x3	6	3,4,5,6….85,86,87,90	47
95	50 + 25 + 10 + 4 + 2x3 50 +	6	3,4,6,7….89,91,92,95	43
100	25 + 15 + 4 + 2x3 50 + 25 +	6	3,4,6,7….94,96,97,100	44
105	15 + 5 + 4 + 2x3 50 + 25 +	7	3,4,5,6….100,101,102,105	85
110	15 + 10 + 4 + 2x3 50 + 25 +	7	3,4,5,6….104,106,107,110	65
115	2x15 + 4 + 2x3	7	3,4,6,7….109,111,112,115	65

Panel Rating (kVAr)	Physical Step Size (kVAr)	No. of Physical Steps	Electrical Steps (All Possible Combination of Physical Steps)	No. of Electrical Steps
120	50 + 25 + 20 + 15 + 4 + 2x3	7	3,4,6,7….114,116,117,120	85
125	50 + 2x25 + 15 + 4 + 2x3 50	7	3,4,6,7….119,121,122,125	55
130	+ 2x25 + 20 + 4 + 2x3 2x50	7	3,4,6,7….124,126,127,130	60
135	+ 15 + 10 + 4 + 2x3 2x50 +	7	3,4,6,7….129,131,132,135	65
140	20 + 10 + 4 + 2x3 2x50 + 25	7	3,4,6,7….134,136,137,140	62
145	+ 10 + 4 + 2x3 2x50 + 25 +	7	3,4,6,7….139,141,142,145	65
150	15 + 4 + 2x3 2x50 + 25 + 15	7	3,4,6,7….144,146,147,150	66
155	+ 3x5 2x50 + 2x25 + 10 +	7	5,10,15,20….145,150,155	31
175	3x5 2x50 + 3x25 + 15 + 2x5	8	5,10,15,20….165,170,175	35
200	3x50 + 2x25 + 15 + 10 3x50	8	5,10,15,20...190,195,200	40
225	+ 3x25 + 15 + 10 4x50 +	7	10,15,25,35...210,215,225	27
250	2x25 + 15 + 10	8	10,15,25,35...235,240,250	30
275		8	10,15,25,35...260,265,275	33
300	100 +2x50 +3x25 +15 +10	8	10,15,25,35...285,290,300	36
325	100 +3x50 +2x25 +15 +10	8	10,15,25,35...310,315,325	39
350	100 +4x50 +25 +15 +10	8	10,15,25,35...335,340,350	42
375	2x100 +2x50 +2x25 +15 +10	8	10,15,25,35…360,365,375	45
400	2x100 + 3x50 + 3x25	8	25,50,75,100…350,375,400	16
425	2x100 + 3x50 + 4x25	8	25,50,75,100…375,400,425	17
450	2x100 + 4x50 + 3x25	9	25,50,75,100…400,425,450	18
475	2x100 + 5x50 + 2x25	9	25,50,75,100…425,450,475	19
500		9	25,50,75,100…450,475,500	20

Note: Above mentioned steps are typical recommendations, suitable for most of the industries. For accurate compensation, step size selection may have to be decided after studying load profile of that industry.

RELIABLE ELECTRICAL

Empower Your Grid with **PRECISION & INTELLIGENCE**



WC8000
Power Quality Analyzers

WC7000
Power Quality Monitors

WC8000 & WC7000 Power Quality Meter Range Engineered
for excellence, trusted for compliance.

Class 0.2s Accuracy
As per IEC 62053-22

Smart Communication
RS485, Ethernet,
Modbus RTU, MQTT

Reporting
IEC61000-4-30, IEEE519,
ITIC & CBEMA, EN50160

Advanced Harmonics Analysis
Up to 127th order (WC8000)

Web Server Enabled
Remote access
& configuration

Robust Design
IP51 protection, double insulation,
wide voltage range

Real-Time Monitoring
High sampling rates
(1024/cycle for WC8000)

Energy Efficiency Insights
CO tracking, load analysis,
TOU slots

RELIABLE ELECTRICAL

numrAL

Draw-out Numerical Protection Relays with Intelligent Algorithm

- Comprehensive Protection along with Control and Monitoring
- Enhanced interface with Display and Modbus Communication

Current and Voltage-based Protection ▼



▲ Single Element and Multifunction Relays

Powered By SMARTCOMM

APPLICATIONS

DISTRIBUTED ENERGY SYSTEM:

Renewable and Grid Stability

EQUIPMENT PROTECTION:

Generator, Transformer and Motor

POWER GENERATION AND DISTRIBUTION SUBSTATIONS:

LV and MV applications

REAL TIME MONITORING AND PREDICTIVE ANALYTICS

with SmartComm

Correlation between ANSI/IEEEdevice function number and relays																
ANSI Code	Function Name	Protection Relays														
		Single Function						Voltage and Frequency			Feeder		Motor Protection			
		REF11	NDR11	OCR11	RPR11	TCS11	PTF11	VPR11	VPR21	VPR22	FDR21	FDR22	eMPR 300I	iMMR	MM10	MPR21
27	AC under-voltage relay							✓	✓	✓				✓		
32	Power directional relay				✓											
37	Under current or under power relay												✓	✓	✓	✓
46	Reverse phase or phase balance current relay											✓	✓	✓	✓	✓
46BC	Broken conductor Protection											✓				
47	Phase-sequence or single-phasing voltage relay								✓	✓				✓		
48	Excessive Start Time Monitoring													✓	✓	✓
49	Machine or transformer thermal Overload relay											✓	✓	✓	✓	✓
50	Instantaneous overcurrent relay										✓	✓		✓	✓	✓
50N	Instantaneous Earth Fault relay			✓							✓	✓		✓		✓
50BF	Breaker - failure									✓		✓				✓
51	AC time over current relay										✓	✓	✓	✓		✓
51N-(51G)	Ground fault time over current relay / Standby Earth Fault Relay			✓							✓	✓		✓		✓
51LR	Locked rotor												✓	✓	✓	✓
59	AC over-voltage relay							✓	✓	✓				✓		
59N	Neutral Displacement Relay		✓						✓	✓						
59D	Positive Sequence Over-voltage protection								✓	✓						
64REF	Restricted Earth Fault Relay	✓														
64	Machine Ground Fault			✓									✓	✓	✓	✓
66	Max. no. of starts													✓		✓
81	Frequency relay								✓	✓				✓		
87N-(87G)	Ground fault differential protection relay*	✓														
74TCS	Trip Circuit supervision Protection					✓				✓		✓				✓
78	Vector surge protection relay									✓						
df/dt	Rate of change of frequency									✓						
SOTF	Switch On to Fault Protection											✓				
PTFF	PT Fuse failure						✓									

* REF11 is meant for Generator Differential Protection

3 Phase non-directional Over Current + Earth Fault Relay



› FDR21 – 50, 51, 50N, 51N.
› Microcontroller-based design
› Draw-out enclosure.
› CT rating# - 1A/ 5A (site selectable)
› Display of 250 event and 30 Trip records ›
128*64 graphical display

Model	Aux. Supply (V)	Communication	Cat. No.	M.R.P. (`) Per Unit
numrAL FDR21	20 - 60V DC	Non-Communicable	NRFDR2A26NX	29680
	85 - 265V AC, 87 - 265V DC	Non-Communicable	NRFDR2B26NX	29680

#- Protection Class CT

3 Phase non-directional Over Current + Earth Fault Relay



› FDR22 - 46BC, 49, 50, 51, 50N, 51N, 50BF, 74TCS, SOTF
› Microcontroller-based design
› Draw-out enclosure.
› CT rating#- 1A/ 5A (site selectable)
› Display of 250 event and 30 Trip records
› 128*64 graphical display
› Modbus RS-485 Communication
› Front Micro USB port for numrAL Suite

Model	Aux. Supply (V)	Communication	Cat. No.	M.R.P. (`) Per Unit
numrAL FDR22	20 - 60V DC	Modbus RS 485	NRFDR2A27RA	37520
	85 - 265V AC, 87 - 265V DC	Modbus RS 485	NRFDR2B27RA	37520

#- Protection Class CT

Motor Protection Relay



› MPR21 – 37, 46, 48, 49, 50BF, 50, 51, 50N, 51N, 51LR, 64, 66, 74TCS.
› Microcontroller-based design
› Draw-out enclosure.
› CT rating#- 1A/ 5A (site selectable)
› Display of 250 event and 30 Trip records
› 128*64 graphical display
› Modbus RS-485 Communication
› Front Micro USB port for numrAL Suite

Model	Aux. Supply (V)	Communication	Cat. No.	M.R.P. (`) Per Unit
numrAL MPR21	20 - 60V DC	Modbus RS 485	NRMPR2A28RA	69000
	85 - 265V AC, 87 - 265V DC	Modbus RS 485	NRMPR2B28RA	69000

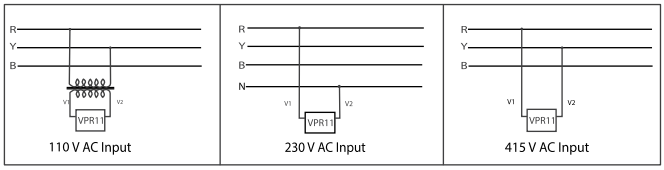
#- Protection Class CT

Single Pole Over Voltage + Under Voltage Relay



VPR11 - Single Pole Under Voltage and Over Voltage Relay (27, 59) ›
Microcontroller-based design
› Draw-out Enclosure
› Single Phase OV + UV Protection
› System Voltage – 110/ 230/ 415 VAC (site programable)
› Inverse and definite time delay
› Display of Actual value and 5 Trip records

Model	Aux. Supply (V)	Communication	Cat. No.	M.R.P. (`) Per Unit
numrAL VPR11	20 - 60V DC	Non-communicable	NRVPR1A11NX	21560
	85 - 265V AC, 87 - 265V DC	Non-communicable	NRVPR1B11NX	21560
	20 - 60V DC	Modbus RS 485	NRVPR1A11RA	26400
	85 - 265V AC, 87 - 265V DC	Modbus RS 485	NRVPR1B11RA	26400

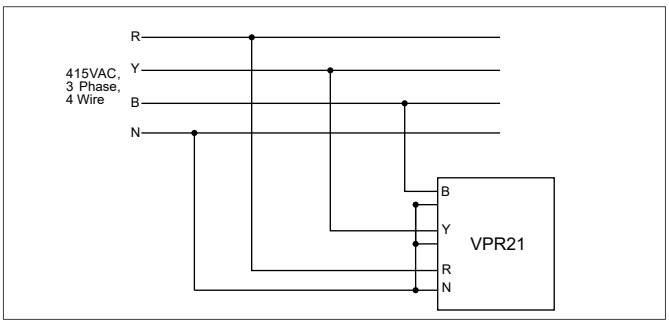


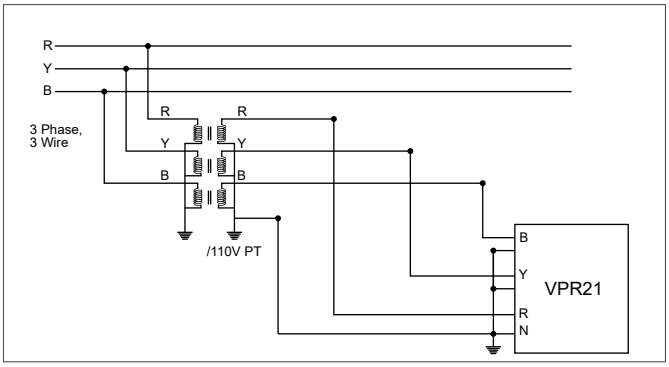
3 Phase Voltage + Frequency Relay



› VPR21 – 27, 47, 59, 59N, 81O/U ›
Microcontroller-based design
› Draw-out enclosure.
› System Voltage – 110/ 230/ 415 VAC (site programable)
› Display of 250 event and 30 Trip records ›
128*64 graphical display

Model	Aux. Supply (V)	Communication	Cat. No.	M.R.P. (`) Per Unit
numrAL VPR21	20 - 60V DC	Non-Communicable	NRVPR2A2ANX	33040
	85 - 265V AC, 87 - 265V DC	Non-Communicable	NRVPR2B2ANX	33040





Restricted Earth Fault Relay

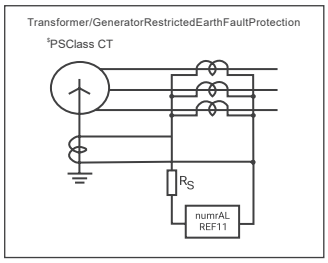
REF11 - Restricted Earth Fault Relay (87N/64REF)

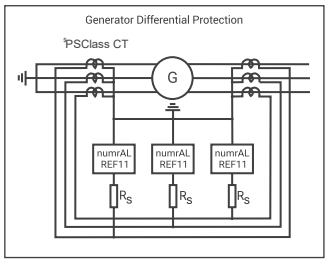
› Microcontroller-based design
› Draw-out Enclosure
› CT rating[$]- 1A/ 5A (site selectable)
› Single Phase high impedance Earth Fault
› Instantaneous and definite time delay [50 msec to 1 sec (programmable)] ›
Built in third harmonic filter
› Display of Actual value and 5 Trip records



Model	Aux. Supply (V)	Communication	Cat. No.	M.R.P. (`) Per Unit
numrAL REF11	20 - 60V DC	Non-communicable	NRREF1A10NX	21560
	85 - 265V AC, 87 - 265V DC	Non-communicable	NRREF1B10NX	21560
	20 - 60V DC	Modbus RS 485	NRREF1A10RA	26400
	85 - 265V AC, 87 - 265V DC	Modbus RS 485	NRREF1B10RA	26400

[$]- PS Class CT





Single Pole Over Current OR Earth Fault Relay

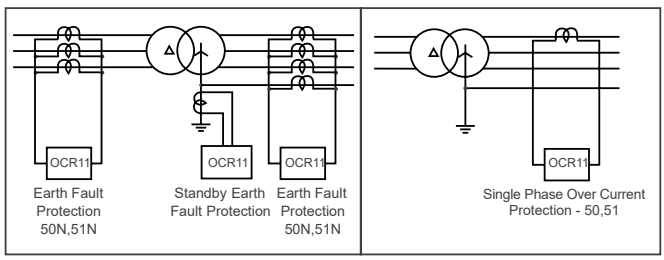
OCR11 – Single pole Over Current or Earth Fault Relay (50, 51 OR 50N, 51N)

› Microcontroller-based design
› Draw-out Enclosure
› Single Phase OC/ EF Protection
› CT rating[#] - 1A/ 5A (site selectable)
› Inverse and definite time delay
› Display of Actual Current value and 5 Trip records



Model	Aux. Supply (V)	Communication	Cat. No.	M.R.P. (`) Per Unit
numrAL OCR11	20 - 60V DC	Non-communicable	NROCR1A10NX	21560
	85 - 265V AC, 87 - 265V DC	Non-communicable	NROCR1B10NX	21560
	20 - 60V DC	Modbus RS 485	NROCR1A10RA	26400
	85 - 265V AC, 87 - 265V DC	Modbus RS 485	NROCR1B10RA	26400

[#]- Protection Class CT



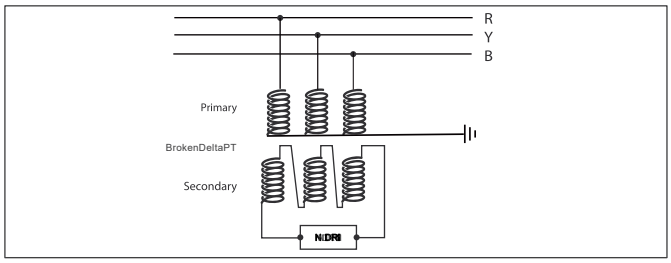
Neutral Displacement Relay

NDR11 - Neutral Displacement Relay (59N)

› Microcontroller-based design
› Draw-out Enclosure
› Single Phase OV Protection
› Definite & Normal inverse time delay
› Display of Actual value and 5 Trip records



Model	Aux. Supply (V)	Communication	Cat. No.	M.R.P. (`) Per Unit
numrAL NDR11	20 - 60V DC	Non-communicable	NRNDR1A11NX	21560
	85 - 265V AC, 87 - 265V DC	Non-communicable	NRNDR1B11NX	21560
	20 - 60V DC	Modbus RS 485	NRNDR1A11RA	26400
	85 - 265V AC, 87 - 265V DC	Modbus RS 485	NRNDR1B11RA	26400



Trip Circuit Supervision Relay

TCS11 – Trip Circuit Supervision Relay (74) ›
Microcontroller-based design
› Draw-out Enclosure
› Monitors Trip Coil in Breaker ON & OFF condition
› Site selectable Trip Coil Voltage



Model	Aux. Supply (V)	Communication	Cat. No.	M.R.P. (`) Per Unit
numrAL TCS11*	20 - 60V DC	Non-Communicable	NRTCS1A13NX	12880
	85 - 265V AC, 87 - 265V DC	Non-Communicable	NRTCS1B13NX	12880

*Available on Request - Please contact our nearest branch for details

PT Fuse Failure Relay

PTF11 – PT Fuse Failure Relay (PTFF/97)

› Microcontroller-based design
› Draw-out Enclosure
› Monitors the healthiness of PT Fuse. › 3 Separate sensing elements.



Model	Aux. Supply (V)	Communication	Cat. No.	M.R.P. (`) Per Unit
numrAL PTF11*	20 - 60V DC	Non-Communicable	NRPTF1A14NX	12880
	85 - 265V AC, 87 - 265V DC	Non-Communicable	NRPTF1B14NX	12880

*Available on Request - Please contact our nearest branch for details

RELIABLE ELECTRICAL

BECAUSE YOUR IT SYSTEMS CAN'T AFFORD DOWNTIME

Discover Insulation Monitoring Relay -Your first alert to insulation failure

Insulation Monitoring Relay



Hospitals & Pharmaceutical Facilities | Data Centres | Mining Operations
Railways & Transport Systems | Transportable & Mobile Cranes

- High visibility status indications
- Early fault detection with clear visual indication
- Test / Reset button
- Precise customizable threshold resistance with easy dial control
- Flexibility to operate in fail safe and non-fail safe mode

Reverse Power Relay

RPR11 – Reverse Power Relay (32) ›
Microcontroller-based design
› Draw-out Enclosure
› Site selectable System Voltage - 110V / 415VAC



Model	Aux. Supply (V)	Communication	Cat. No.	M.R.P. (`) Per Unit
numrAL RPR11*	20 - 60V DC	Modbus RS 485	NRRPR1A12RA	*
	85 - 265V AC, 87 - 265V DC	Modbus RS 485	NRRPR1B12RA	*

*Available on Request - Please contact our nearest branch for details

Insulation Monitoring Relay New

Application:Monitoring of insulation resistancebetween Liveconductors and Earth (Ground) in caseof Unearthed (IT) electrical systems. Detection of insulation faults at earlier stageprevents electrical hazards such as electric shock,fireand equipment damage.

Features:
› Threshold resistance setting from 1K to 100K ohm ›
Suitable for 1Phase and 3 Phase (Both 3W and 4W) ›
Test/Reset function with remote and manual facility ›
Indication of Power ON, Relay output and Fault.
› Both fail safe and non-failsafe relay option available

Application Segments:
1.Railways
2.Hospitals and Pharma
3.Data Centre
4.Mining



Description	Cat Code	M.R.P. (`) Per Unit
System voltage up to 520V. Adjustable from 1-100K Ω with 2C/O	IMR520	13260

Single Element Lockout Relay - LocR

Features
› Lockout Relays [Master Trip Relay] - LocR
› Designed to operate the circuit breaker trip coils at high speed
› Available with Hand reset contact (HRC) and hand reset Flag (HRF)

Description	Output contacts	Reset Contacts	Reset Flag	Coil Voltage	Cat. No.	M.R.P. (`) Per Unit
Single element Lockout relay	3NO+ 2NC	Hand	Hand	24VDC	L1H32DC024X	6000
				110VDC	L1H32DC110X	6000
				220VDC	L1H32DC220X	6000
				110VAC	L1H32AC110X	6000
				230VAC	L1H32AC230X	6000



ANSI Code - 86

Three Element Auxiliary Relay - AuxR

Features
› AuxR relay provides additional contacts for interlocking, control and signal applications
› Available with hand reset or self-reset contacts and hand reset Flag

Description	Output Contacts	Reset Contacts	Reset Flag	Coil Voltage	Cat. No.	M.R.P. (`) Per Unit
Three element Auxiliary relay	4 N/O	Hand	Hand	24VDC	A3H40DC024X	12000
				110VDC	A3H40DC110X	12000
				220VDC	A3H40DC220X	12000
				110VAC	A3H40AC110X	12000
				230VAC	A3H40AC230X	12000
Three element Auxiliary relay	2 N/O+ 2 N/C	Auto	Hand	24VDC	A3A22DC024X	12000
				110VDC	A3A22DC110X	12000
				220VDC	A3A22DC220X	12000
				110VAC	A3A22AC110X	12000
				230VAC	A3A22AC230X	12000



Metering Devices [9028]

Single Phase kWh meter with LCD display



Model EM101+ Class 1 Base mounting

Description	Cat. No.	M.R.P. (`) Per Unit
1P LCD Meter 5-30A	WM101BC5DL0	2596
1P LCD Meter 5-30A with BOX	WM101BC5DL0BOX	3461
1P LCD Meter 5-30A with OPTICAL PORT 1P	WM101BC5DDH	3567
LCD Meter 5-30A with Optical port + BOX 1P	WM101BC5DDHBOX	4432
LCD Meter 10-60A	WM101BC7DL0	3061
1P LCD Meter 10-60A with BOX	WM101BC7DL0BOX	3860
1P LCD Meter 10-60A with Optical Port	WM101BC7DDH	3913
1P LCD Meter 10-60A with Optical Port + BOX	WM101BC7DDHBOX	4499
1P LCD Meter 5-30 with Optical Port + RS232	WM101BC5DLMSC	3993

Trivector Meter Class 1 whole current meter



Model ER300P Class 1 (Base Mounting)

Description	Cat. No.	M.R.P. (`) Per Unit
3Ph, 4W TVM 240 V 10 - 60A BM	WR300BC7300	12219
3Ph, 4W TVM 240 V 10 - 60A BM with Hinge type Box*	WR300BC73BOXH	15134

* - Available on request only and minimum order Quantity is 100 nos

Trivector Meter Class 0.2s



Model ER300P Class 0.2s (Base Mounting)

› Inform CT/PT ratio while ordering
› Meters with DLMS Protocol (IS 15959)

Description	M.R.P. Cat. No(`)	Per Unit
3Ph,4W TVM 110V (L-L) 1 A Class 0.2s BM RS485 Modbus	WR300BB11RS	105376
3Ph,4W TVM 110V (L-L) 5 A Class 0.2s BM RS485 Modbus	WR300BB51RS	105376

Meter Reading Instrument [8471]



Description	Cat. No.	M.R.P. (`) Per Unit
Meter Reading Instrument - (16.5 MB)	990MRIXX000	208581
Meter Optical port to USB cable	990PCXXUSB	2489

3 Phase 4 Wire kWh meter LCD type



Model ER300P Base Mounting

Description	Cat. No.	M.R.P. (`) Per Unit
3Ph 4 W kWh CT op base mtg 240V, /5A, Acc 0.5s	WR301BC3C00	8279
3Ph 4 W kWh Dir base mtg 240V 5-30 A Acc 1 3Ph	WR301BC4D20	6934
4 W kWh Dir base mtg 240V 10-40 A Acc 1 3Ph 4	WR301BC6D20	7135
W kWh Dir base mtg 240V 10-60 A Acc 1 3Ph 4 W	WR301BC7D10	9038
kWh Dir base mtg 240V 20-100 A Acc 1	WR301BC8D10	13097

Trivector Meter Class 0.5s



Model ER300P Class 0.5s (Base Mounting)

› Inform CT/PT ratio while ordering
› Meters with DLMS Protocol (IS 15959)

Description	M.R.P. Cat. No.	(`) Per Unit
3Ph,4W TVM 110V (L-L) 1 A Class 0.5s BM RS485 Modbus#	WR300BB12RS	48848
3Ph,4W TVM 110V (L-L) 5 A Class 0.5s BM RS485 Modbus#	WR300BB52RS	48848
3Ph,4W TVM 240V (L-N) 5 A Cl 0.5s BM RS485 Modbus*	WR300BC52RS	43803

- Available on request
* - Available on request only till stocks are cleared and minimum order Quantity is 100 nos

Smart Meter Solutions$

Smart Meter (IS 16444) solutions please contact our nearest Branch
$ - Available on request

NET/ABT Meters$



Net Meters for solar roof top application & solar generation plant please contact our nearest Branch

ORION (40-200A)$



Combined CT Meter (Available for Generation and Net Metering)
$ For more details please contact nearest branch



RELIABLE ELECTRICAL

SMARTCOMM

BEST BRAND BY THE TIMES GROUP

MAKING **BUSINESSES SMARTER** AT **EVERY STEP**

From designing power distribution systems to maintaining operations, SmartComm provides full visibility, precise control, and predictive insights to maintain energy efficiency

Design
Electrical Installation Simulation
Sizing, Calculations & Protection Schemes

Build
Panel Solutions Configurator
Estimation & Engineering

Commission
Device Management
Configuration & Diagnostics

Maintain
Maintenance Digitization Software

Operate
Power Management Solution
Analytics, Control & Visualization



SMARTCOMM PMS

RELIABLE ELECTRICAL

SmartComm Power Management Solutions



Digitally connect, operate, and optimize with our cutting-edge SCADA-based platform, designed to improve operational efficiency and promote sustainable operations

- Seamless Integration from Plant floor assets to real-time dashboards
- Holistic view of Power Distribution Network using intuitive Single-Line Diagram (SLD)
- Highly scalable platform from 128 to unlimited tags
- Gain valuable insights with Energy Analytics dashboards & Custom Reports for data-driven decisions
- Embrace open communication protocols such as Modbus TCP, MQTT, IEC61850, OPC-UA, and more
- Stay ahead with alerts for power system abnormalities and fault conditions.

CERTIFIED ISO 50001 CERTIFIED



Industry



Commercial complex



Building



Utility



Infra



OEM

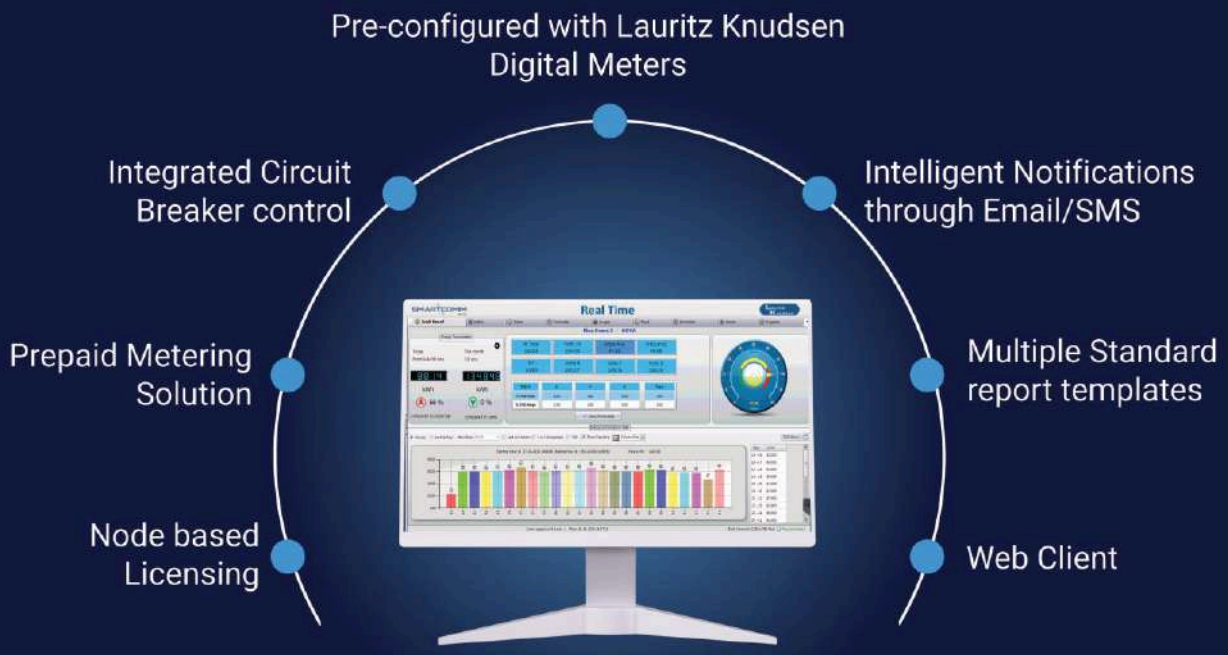
SMARTCOMM
EMS

RELIABLE ELECTRICAL

THE ENERGY MANAGEMENT SYSTEM
THAT FOSTERS ENERGY EFFICIENCY



SmartComm EMS is a simple yet robust solution for organizations seeking to optimize energy consumption and operational efficiency, all within a user-friendly environment. The on-premise implementation gives you direct control and oversight of energy-related data, allowing for real-time monitoring, analysis, and decision-making through an intuitive and easy-to-use interface. With cutting edge features, SmartComm EMS empowers you to proactively manage energy usage, identify savings opportunities, and ensure compliance with sustainability goals and regulations.



Multifunction Meter Selection Chart

Parameters Group	Parameters	Basic MFM	MFM					Advanced MFM	
		4400/ 4405	4410	4420	4425 (New)	4430	4440	5010	5000
Instantaneous Parameters	V1, V2, V3, V12, V23, V31, Avg (VLN, VLL)	✓	✓	✓	✓	✓	✓	✓	✓
	A1, A2, A3, Aavg	✓	✓	✓	✓	✓	✓	✓	✓
	An (Computed)		✓	✓	✓	✓	✓	✓	✓
	Frequency	✓	✓	✓	✓	✓	✓	✓	✓
	%A Unbal, %V Unbal (Avg and Phase wise)		✓	✓	✓	✓	✓	✓	✓
	PF-1, PF-2, PF-3, PF (Avg)	✓	✓	✓	✓	✓	✓	✓	✓
	RPM (Rotations per minute)		✓	✓	✓	✓	✓	✓	✓
	Phase Angle A°1, A°2, A°3, V°1, V°2, V°3		✓	✓	✓	✓	✓	✓	✓
	W1, W2, W3, W(total)	✓	✓	✓	✓	✓	✓	✓	✓
	VA1, VA2, VA3, VA(total)	✓	✓	✓	✓	✓	✓	✓	✓
	VAr1, VAr2, VAr3, VAr (total)		✓	✓	✓	✓	✓	✓	✓
Cumulative Parameters	Import Wh	✓*	✓	✓	✓	✓	✓	✓	✓
	Import VAh	✓*	✓	✓	✓	✓	✓	✓	✓
	Import VArh (Lead & Lag)		✓	✓	✓	✓	✓	✓	✓
	Import load hours	✓	✓	✓	✓	✓	✓	✓	✓
	Export Wh				✓	✓		✓	✓
	Export VAh				✓	✓		✓	✓
	Export VArh (Lead & Lag)				✓	✓		✓	✓
	Export run hours				✓	✓		✓	✓
	No of Interrupts		✓	✓	✓	✓	✓	✓	✓
Reset (old) Cumulative parameters	Import Wh	✓	✓	✓	✓	✓	✓	✓	✓
	Import VAh		✓	✓	✓	✓	✓	✓	✓
	Import VArh (Lead & Lag)		✓	✓	✓	✓	✓	✓	✓
	Import load hours	✓	✓	✓	✓	✓	✓	✓	✓
	Export Wh				✓	✓		✓	✓
	Export VAh				✓	✓		✓	✓
	Export VArh (Lead & Lag)				✓	✓		✓	✓
	Export run hours				✓	✓		✓	✓
Harmonic	V THD%, V1, V2, V3 - harmonic (31st)		✓	✓	✓	✓	✓	✓	✓
	A THD%, A1, A2, A3, - harmonic (31st)		✓	✓	✓	✓	✓	✓	✓
	Individual harmonics upto 31 st (V, A)				✓			✓	✓
Demand / Load parameters	Maximum demand MD W, MD VA, MD VAr - max avg A (without RTC)			✓		✓			
	Maximum demand MD W, MD VA, MD VAr - max avg A (with RTC)				✓		✓	✓	✓
	Max MD & occurence time							✓	✓
Min / Max value	VLL, VLN, A, F, W, VA, VAr, PF		✓	✓	✓	✓	✓	✓	✓
Storage	Datalog (8MB)								✓
Communication	RS485 Modus RTU	Optional	Optional	Optional		Optional	Optional	Optional	Optional
	Ethernet Port (Modbus TCP/IP)				✓				Optional
Input and Output	Digital and Analog (input and output)								Optional
	Pulse Output		Optional						Optional

✓* User will see either kWh or kVAh on the display.

Single Function Meters [9030]

1xxx Series

- Accuracy Class 1.0, 0.5
- Input voltage measurement range 50-520 VAC (P-P)
- Aux supply 80-300 V AC / DC
- CT secondary site selectable 1A / 5A
- Flush mounting 96 x 96 mm
- Inbuilt selector switch for 3 phase meters
- CT/PT site programmable
- Frequency parameter available in 3Ph Voltmeter additionally



Description	Cat. No.	M.R.P. (`) Per Unit
1Ph LED Ammeter Cl 1	WL111010OOOO	1130
1Ph LED Voltmeter Cl 1	WL112010OOOO	1130
3Ph LED Ammeter Cl 1	WL131010OOOO	1725
3Ph LED Voltmeter Cl 1	WL132010OOOO	1725
LED Freq meter Cl 0.2	WL113040OOOO	1130
1Ph LED Ammeter Cl 0.5	WL111020OOOO	1590
1Ph LED Voltmeter Cl 0.5	WL112020OOOO	1590
3Ph LED Ammeter Cl 0.5	WL131020OOOO	2000
3Ph LED Voltmeter Cl 0.5	WL132020OOOO	2000

Energy Meters [9030]

4000 Series

- Accuracy Class 1.0, 0.5
- Input voltage measurement range 50-520 VAC (P-P)
- Aux supply 80-300 VAC/DC
- CT secondary site selectable 1A / 5A
- Flush mounting 96 x 96 mm
- CT/PT site programmable
- Auto scaling of Kilo, Mega and Giga
- Parameters: Site selectable kWh / kVA / PF / W, Old energy

kWh or kVAh is site selectable



Energy display in kWh in its lifetime#

Description	Cat. No.	M.R.P. (`) Per Unit
kWh LED meter Cl 1	WL400010OOOO	3500
kWh LED meter Cl 1 with RS485	WL400011OOOO	3875
kWh LED meter Cl 0.5	WL400020OOOO	4445
kWh LED meter Cl 0.5 with RS485	WL400021OOOO	4825
kWh LCD meter Cl 1	WC400010OOOO	3965
kWh LCD meter Cl 1 with RS485	WC400011OOOO	4380
kWh LCD meter Cl 0.5	WC400020OOOO	4910
kWh LCD meter Cl 0.5 with RS485	WC400021OOOO	5285

For 415V LL and CT Primary value of 400 and below

VAF, VAF + PF Meters [9030]

41XX Series



- Accuracy Class 1.0, 0.5
- Input voltage measurement range 50-520 VAC (P-P)
- Aux supply 80-300 VAC/DC
- CT secondary site selectable 1A / 5A
- Flush mounting 96 x 96 mm
- Parameters:VLL, VLN, A, F, PF, On Hrs, RPM

Description	Cat. No.	M.R.P. (`) Per Unit
VAF meter, Cl 1 New	WL410010OOOO	1935
VAF + PF meter, Cl 1	WL411010OOOO	3210
VAF + PF meter with RS485, Cl 1	WL411011OOOO	4030
VAF + PF meter, Cl 0.5	WL411020OOOO	3690
VAF + PF meter with RS485, Cl 0.5	WL411021OOOO	4465

DIN Type Basic Multifunction Meters [9030]

New 40x0 Series



- DIN mounting whole current operated met
- Accuracy Class 1.0
- Inbuilt RS485 option
- Parameters : Voltage, Current, kW, kWh, kVA, kVAh, RPM, Load hours, Interruptions

Description	Module	Cat. No.	M.R.P. `) Per Unit
Single Phase - 60A	2 5	WD401010OOOO	3940
Three Phase - 80A		WD402010OOOO	8530
Single Phase - 60A (RS485)	2	WD401011OOOO	5825
Three Phase - 80A (RS485)	5	WD402011OOOO	12870



Lauritz Knudsen
Electrical & Automation

Smart DIN Mounted Energy Meters

Empowering Smart Decisions with Micro-Level Insights

Compact, Accurate & Intelligent

Dual Source Basic MFM [9030]

4040 Series

kWh or kVAh is site selectable

Features

› Accuracy Class 1.0, 0.5
› Input voltage measurement range 50-520 VAC (P-P)
› Aux supply 80-300 VAC/DC
› CT secondary site selectable 1A / 5A
› DG sensing input 230 VAC
› Flush mounting 96 X 96 mm
› CT/PT site programmable
› Discrete LED for EB and DG
› True PF or Displacement PF site selectable
› Parameters on Display : kW, kVA, PF, Run hours, kWh (EB and DG), Old energy, Site selectable kWh / kVAh
› Parameters on Communication : V, A, F, kW, kVA, PF, Run hours, kWh (EB and DG), Old energy, Site selectable kWh / kVAh



LCD offers better readability of parameters

Description	Cat. No.	M.R.P. (`) Per Unit
Dualsource LED meter CI1	WL404010OOOO	6040
Dualsource LED meter CI1 with RS485	WL404011OOOO	7100
Dualsource LED meter CI0.5	WL404020OOOO	7170
Dualsource LED meter CI0.5 with RS485	WL404021OOOO	8400
Dualsource LCD meter CI1	WC404010OOOO	6640
Dualsource LCD meter CI1 with RS485	WC404011OOOO	7725
Dualsource LCD meter CI0.5	WC404020OOOO	7785
Dualsource LCD meter CI0.5 with RS485	WC404021OOOO	8915

Basic Multifunction Meters [9030]

4400 Series

Features

› Accuracy Class 1.0, 0.5
› Input voltage measurement range 50-520 VAC
› Aux supply 80-300 VAC/DC
› CT secondary site selectable 1A / 5A
› Flush mounting 96 x 96 mm
› CT/PT site programmable
› True PF or Displacement PF site selectable
› V, A, F, PF, kW, kVA, Old energy, Load hours, site selectable kWh/ kVAh



LCD offers better readability of parameters

Description	Cat. No.	M.R.P. (`) Per Unit
MFM 4400 LED meter CI 1	WL440010OOOO	5790
MFM 4400 LED meter CI 1 with RS485	WL440011OOOO	6685
MFM 4400 LED meter CI 0.5 with RS485	WL440021OOOO	7680
MFM 4400 LED meter CI 0.5S with RS485	WL440031OOOO	7760
MFM 4400 LCD meter CI 1	WC440010OOOO	6090
MFM 4400 LCD meter CI 1 with RS485	WC440011OOOO	7065

Basic Multifunction Meters [9030]

4405 Series

All parameters of 4400 series in 3 line LED display

Features

› Accuracy Class 1.0, 0.5
› Input voltage measurement range 50-520 VAC
› Aux supply 80-300 VAC/DC
› CT secondary site selectable 1A / 5A ›
Flush mounting 96 x 96 mm
› CT/PT site programmable
› V, A, F, PF, kW, kVA, Old energy, On and Run hours site selectable kWh/ kVAh
› True PF or Displacement PF site selectable



Description	Cat. No.	M.R.P. (`) Per Unit
MFM 4405 LED meter CI 1	WL440510OOOO	7485
MFM 4405 LED meter CI 1 with RS485	WL440511OOOO	8455
MFM 4405 LED meter CI 0.5 with RS485	WL440521OOOO	9720
MFM 4405 LED meter CI 0.5S with RS485	WL440531OOOO	9790

Multifunction Meters [9030]

Features

› Accuracy Class 1.0, 0.5, 0.5S, 0.2, 0.2S
› Input voltage measurement range 50-520 VAC (P-P)
› Aux supply 80-300 VAC/DC
› CT secondary site selectable 1A / 5A
› Flush mounting 96 x 96 mm
› CT/PT site programmable
› 128 samples / cycle

True and Displacement PF available

› My favourite page in LCD multifunction meters site selectable for kWh + 2 parameters
› Dedicated buttons available for direct access to Basic, Power and Energy parameters

Constant Wh viewing in LCD MFM even in auto scroll mode. LCD offers better readability of parameters



4410 Series

› Parameters: V, A, F, PF, kW, kVA, kVAR, kWh, kVAh, kVARh, Runhours, On hours, Phase angle, Interrupts, THD, Events (High-Low),Neutral Current,KFactor

Description	Cat. No.	M.R.P. (`) Per Unit
MFM 4410 LED meter CI 1	WL441010OOOO	10840
MFM 4410 LED meter CI 1 with RS485	WL441011OOOO	12185
MFM 4410 LED meter CI 0.5 with RS485	WL441021OOOO	14005
MFM 4410 LED meter CI 0.5S with RS485	WL441031OOOO	15480
MFM 4410 LED meter CI 0.2 with RS485	WL441041OOOO	18430
MFM 4410 LED meter CI 0.2S with RS485	WL441051OOOO	23590
MFM 4410 LCD meter CI 1	WC441010OOOO	12745
MFM 4410 LCD meter CI 1 with RS485	WC441011OOOO	13640
MFM 4410 LCD meter CI 0.5 with RS485	WC441021OOOO	15910
MFM 4410 LCD meter CI 0.5S with RS485	WC441031OOOO	17430
MFM 4410 LCD meter CI 0.2 with RS485	WC441041OOOO	20465
MFM 4410 LCD meter CI 0.2S with RS485	WC441051OOOO	25760

4420 Series Max Demand Indicator (without Real time clock)

Parameters

- All parameters of 4410 series
- Maximum Demand (kW or kVA)

Standard 2 Relay outputs for MD Alarm

Description	Cat. No.	M.R.P. (`) Per Unit
MFM 4420 LED meter Cl 1	WL442010OOOO	15965
MFM 4420 LED meter Cl 1 with RS485	WL442011OOOO	17135
MFM 4420 LED meter Cl 0.5 with RS485	WL442021OOOO	18810
MFM 4420 LED meter Cl 0.5S with RS485	WL442031OOOO	20260
MFM 4420 LED meter Cl 0.2 with RS485	WL442041OOOO	23155
MFM 4420 LED meter Cl 0.2S with RS485	WL442051OOOO	28220
MFM 4420 LCD meter Cl 1	WC442010OOOO	18285
MFM 4420 LCD meter Cl 1 with RS485	WC442011OOOO	19585
MFM 4420 LCD meter Cl 0.5 with RS485	WC442021OOOO	21225
MFM 4420 LCD meter Cl 0.5S with RS485	WC442031OOOO	22735
MFM 4420 LCD meter Cl 0.2 with RS485	WC442041OOOO	25760
MFM 4420 LCD meter Cl 0.2S with Rs485	WC442051OOOO	31080

For Max Demand Controller (with Real time clock) please refer 6000 series

4425 Series MFM for Import-Export New

Parameters

- All parameters of 4420 series with Bi-directional (Import-Export)
- Demand parameters with Individual Harmonics up to 31st order
- Built-in Ethernet port for communication

Description	Cat. No.	M.R.P. (`) Per Unit
MFM 4425 LED meter I/E Cl 1 with Ethernet	WL442512OOOO	22175
MFM 4425 LED meter I/E Cl 0.5s with Ethernet	WL442532OOOO	26215
MFM 4425 LED meter I/E Cl 0.2S with Ethernet	WL442552OOOO	29570

4430 Series MFM for Import-Export

Parameters

- All parameters of Model 4420 series
- Bi-directional (Import-Export)

Standard 2 Relay outputs for MD Alarm

Description	Cat. No.	M.R.P. (`) Per Unit
MFM 4430 LED meter Cl 1	WL443010OOOO	22405
MFM 4430 LED meter Cl 1 with RS485	WL443011OOOO	23370
MFM 4430 LED meter Cl 0.5 with RS485	WL443021OOOO	24795
MFM 4430 LED meter Cl 0.5S with RS485	WL443031OOOO	26170
MFM 4430 LED meter Cl 0.2 with RS485	WL443041OOOO	28935
MFM 4430 LED meter Cl 0.2S with RS485	WL443051OOOO	33760
MFM 4430 LCD meter Cl 1	WC443010OOOO	23820
MFM 4430 LCD meter Cl 1 with RS485	WC443011OOOO	24740
MFM 4430 LCD meter Cl 0.5 with RS485	WC443021OOOO	26170
MFM 4430 LCD meter Cl 0.5S with RS485	WC443031OOOO	27555
MFM 4430 LCD meter Cl 0.2 with RS485	WC443041OOOO	30310
MFM 4430 LCD meter Cl 0.2S with RS485	WC443051OOOO	35140

4440 Series

Parameters

- All parameters of 4410 series
- Maximum Demand with Real Time Clock (RTC)
- Events (high-low) with time stamp

Description	Cat. No.	M.R.P. (`) Per Unit
MFM 4440 LED meter Cl 1 with RS485	WL444011OOOO	19025
MFM 4440 LED meter Cl 0.5 with RS485	WL444021OOOO	21385
MFM 4440 LED meter Cl 0.2 with RS485	WL444041OOOO	26145
MFM 4440 LCD meter Cl 1 with RS485	WC444011OOOO	20610
MFM 4440 LCD meter Cl 0.5 with RS485	WC444021OOOO	22975
MFM 4440 LCD meter Cl 0.2 with RS485	WC444041OOOO	27735

5000 Series

Features

- Datalog (8 MB)
- Bi-directional (Import - Export)
- 128 samples/ cycle
- Analog I/O, digital I/O variants available
- Meter with Built-in Ethernet port available Parameters
- V, A, F, kW, KVA, kVAr, kWh, kVAh, kVArh, PF, Runhr, Onhr, Interupts, Phase angle, THD, Neutral current, Max Demand (with RTC) K Factor
- Bi-directional (Import-Export)
- Events (high-low) with time stamp
- Individual Harmonics upto 31st.
- My favourite page in LCD multifunction meters site selectable for kWh + 2 parameters

True and Displacement PF available

Constant Wh viewing in LCD MFM even in auto scroll mode. LCD offers better readability of parameters



Description	Cat. No.	M.R.P. (`) Per Unit
MFM 5000 LED meter Cl 1 with RS485	WL500011OOOO	48500
MFM 5000 LED meter Cl 1 with Ethernet	WL500012OOOO	55110
MFM 5000 LED meter Cl 0.5 with Ethernet	WL500022OOOO	57470
MFM 5000 LED meter Cl 0.5Swith Ethernet	WL500032OOOO	59055
MFM 5000 LCD meter Cl 1 with RS485	WC500011OOOO	50095
MFM 5000 LCD meter Cl 1 with Ethernet	WC500012OOOO	56690
MFM 5000 LCD meter Cl 0.5 with RS485	WC500021OOOO	52435
MFM 5000 LCD meter Cl 0.5S with RS485	WC500031OOOO	54020
MFM 5000 LCD meter Cl 0.5 with Ethernet	WC500022OOOO	59055
MFM 5000 LCD meter Cl 0.5Swith Ethernet	WC500032OOOO	60615
MFM 5000 LCD meter Cl 0.2 with RS485	WC500041OOOO	57160
MFM 5000 LCD meter Cl 0.2S with RS485	WC500051OOOO	62675
MFM 5000 LED meter Cl 1 RS485 2A/O	WL500011OBOO	Price on request
MFM 5000 LED meter Cl 0.5 RS485 2D/I	WL500021OOBO	
MFM 5000 LED meter Cl 0.5 RS485 4D/O	WL500021OOOD	
MFM 5000 LCD meter Cl 1 RS485 2A/O	WC500011OBOO	
MFM 5000 LCD meter Cl 0.5 RS485 2D/I	WC500021OOBO	
MFM 5000 LCD meter Cl 0.5 RS485 4D/O	WC500021OOOD	
MFM 5000 LCD meter Cl 1 + RS485, 1AO, 1DO	WC500011OAOA	

5000 series with Digital outputs are preconfigured for I

- THD%at 8%and True PF at 0.98.

Meter can be site selected for parameters and values - A THD, VTHD, VA, W, under PF, under/over (VLL, A, F) with programmable trip time (1 to 180 sec) to protect the equipments from electrical abnormalities.

Parameters	Data Log Interval			
	15 Min	30 Min	45 Min	60 Min
	No. of Days			
1	10230	20460	30690	40920
2	6820	13640	20460	27280
4	4092	8184	12276	16368
9	2046	4092	6138	8184
14	1364	2728	4092	5456
29	682	1364	2046	2728

Advanced Multifunction Meters [9030]

5010 Series

Features

- 128 samples / cycle
- Running demand, max demand, prediction demand in single page window

True and Displacement PF available

Parameters

- V, A, F, kW, KVA, kVAr, kWh, kVAh, kVArh, PF, Runhr, Onhr, Interrupts, Phase angle, THD, Neutral current, Max Demand (with RTC)
- Bi-directional (Import-Export)
- Events (high-low) with time stamp
- Individual Harmonics upto 31st.



Description	Cat. No.	M.R.P. (`) Per Unit
MFM 5010 LED meter Cl 1	WL501010OOOO	16975
MFM 5010 LED meter Cl 1 with RS485	WL501011OOOO	17705
MFM 5010 LED meter Cl 0.5S	WL501030OOOO	20880
MFM 5010 LED meter Cl 0.5S with RS485	WL501031OOOO	22035
MFM 5010 LED meter Cl 0.2 with RS485	WL501041OOOO	24355

Maximum Demand Controller [9030]

6000 Series

Features

- Accuracy Class 1.0, 0.5S
- Input voltage measurement range 50-520 VAC (P-P)
- Aux supply 80-300 VAC/DC
- CT secondary site selectable 1A / 5A
- Flush mounting 96 x 96 mm
- CT/PT site programmable
- Datalog (8MB)
- 4 relay outputs for Max. demand controller
- Time of Day (TOD) 6 slots available
- Block/sliding window site selectable
- Running demand, max demand, prediction demand in single page window
- Individual harmonics upto 31st.

8MB Datalog - Configurable for 29 parameters including kWh, Demand and Harmonics for Minimum 1 mins interval

Parameters

- V, A, F, kW, KVA, kVAr, kWh, kVAh, kVArh, PF, Runhr, Onhr, Intr, Phase angle, THD, Events, Neutral current, Max Demand (with RTC)



True and Displacement PF available

Description	Cat. No.	M.R.P. (`) Per Unit
MDC 6000 LED meter Cl 1 with RS485	WL600011OOOO	43030
MDC 6000 LED meter Cl 0.5S with RS485	WL600031OOOO	47175
MDC 6000 LCD meter Cl 1 with RS485	WC600011OOOO	44680
MDC 6000 LCD meter Cl 0.5S with RS485	WC600031OOOO	48825

Power Quality Meter Range [9030]

WC7000 – Power Quality Monitor New

Parameters

- 512 samples/cycle with Class 0.2s accuracy as per IEC 62053-22
- LCD display with 4-digit instantaneous & 8-digit integrated readings
- Dual Communication Port (RS485 + Ethernet) with Web Server
- PQ Parameters Recording & monitoring like THD, TDD, Harmonics (up to 63rd order), Sag, Swell & Interruption.
- USB Port for Downloading Data Log
- TOU with up to 8 slots
- Standard 2DI & 2 DO



Description	Cat. No.	M.R.P. (`) Per Unit
PQM 7000 LCD Cl0.2s RS485+Eth DL, sag+swell	WC700053OOBB	Price on request

WC8000 – Power Quality Analyzer New

Parameters

- 1024 samples/cycle with Class 0.2s accuracy as per IEC 62053-22
- Class A metering as per IEC 61000-4-30
- 5.0" Color TFT with capacitive touch
- PQ Parameters Recording & monitoring like THD, TDD, Odd, Even & Inter Harmonics (up to 127st order), Sag, Swell, Transient, Flicker, RVC & Interruption.
- USB port for data log download as well as Event Data in CommTrade Format
- Dual Communication Port (RS485 + Ethernet) with Web Server
- MQTT, SMTP, SNTP protocols for secured cloud publishing
- Report Generation - IEC 61000 - 4 - 30, IEEE 519, EN 50160, ITIC/CBEMA Curve



Description	Cat. No.	M.R.P. (`) Per Unit
PQA 8000 Class A TFT Cl0.2s RS485+Eth DL	WC800053OOOO	Price on request

New SmartComm Edge [8517] SMARTCOMM Edge

Gateways and converters form the backbone of interconnected networks, and are a crucial link between our devices and cloud-based or on-premises software. They facilitate seamless communication, protocol translation, and data aggregation from various type of devices, enabling efficient data transmission and integration.

TG1000

- Modbus RS485 to MODBUS TCP/IP Gateway
- Easy integration with SmartComm EMS/PMS On-prem or 3rd party Software/HMI



MQ1000 *

- MQTT Gateway with Ethernet port
- Only Compatible with SmartComm EMS Cloud
- Compact & Secure
- Data storage in case of network failure
- Web browser-based configuration



Description	Cat. No.	M.R.P. (`) Per Unit
MODBUS RTU to TCP/IP Gateway	TG1000OOOO	26620

MQ2000 *

- 4G IoT Gateway with Sim Card (Modbus RS485 and MQTT support)
- Only Compatible with SmartComm EMS Cloud, SmartComm Operate and SmartComm IMS
- Compact & Secure
- Data storage in SD Card in case of network failure
- 4G with 2G fall back cellular connectivity



XR SERIES *

- 4G IoT Gateway with Dual Sim (Modbus RS485, Modbus TCP/IP and MQTT support)
- Only Compatible with SmartComm Operate
- Advanced VPN Routing
- Wide range of Industrial protocols support: IEC60870-5-101 Master / Slave , IEC 60870-5-104 Master / Slave , IEEE 62056-21 DLMS , DNP3 Slave



Thermal Monitoring Module

TMZ *

- Monitor temperature remotely
- Wireless monitoring of 8 critical joints in a switchboard with a single module
- Quick Installation and seamless Monitoring



ZG1000 *

Only Compatible with TMZ

- IEEE 802.15.4 to Modbus TCP/IP Gateway
- Built-in webpages for ease of monitoring and multi-client support
- Integrates with SmartComm PMS/HMI/any 3rd party software on the Modbus TCP/IP side



*For more details, please contact the nearest branch office

LTXX* Series

Industrial Managed Ethernet Switch

Cyber-hardened (IEC 62443-4-1 & IEC 62443-4-2)
IEC 61850-3 & IEEE 1613 Compliant

- Managed Ethernet Switches with 8, 16, 24 Ports
- Redundant Ring with recovery time less than 30ms
- Supports RSTP/ MSTP, MRP protocol
- IEC 61850-3/IEEE 1613 certified Ethernet switch with up to 10Gb/s connection

*For further details please contact nearest branch.



RELIABLE ELECTRICAL

Simplifying
AUTOMATION

Tailoring for
YOU

Explore automation solutions tailored for your business. Our industry expertise and solution-centric approach deliver measurable value across diverse industries and geographies.



Our Automation Portfolio : AC Drives, Soft Starters, PLCs, HMIs, & SCADA

Customer Interaction Center (CIC)
Phone no.: 022-6932 7800
Web: www.LK-EA.com | E-mail: CIC@LK-EA.com

Scan to enquire

xD1000
Range : 0.37kW HD to 30kW ND

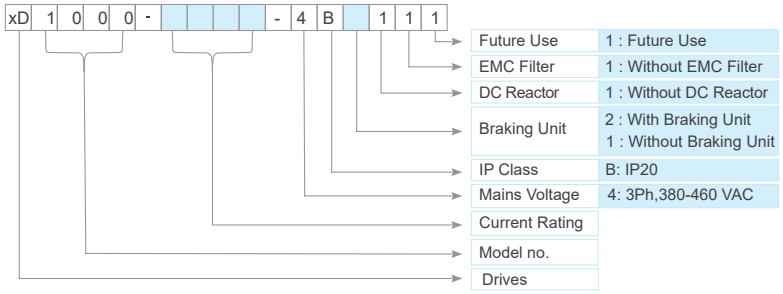


- Rated @ 55℃ (HD), @ 50°C (ND)
- Transient overtorque 170%~200%
- 4 DIs, 2 DOs,1AI, 1AO
- Inbuilt PID with 4 Preset PID references, Sleep & Wakeup, Predictive speed
- Auxiliary Pump control
- Catch on the Fly
- Skip Frequency
- Automatic Restart
- Stall Prevention
- Current limiting function

Input Voltage	Description	Cat. No.	Frame Size	M.R.P. (`) Per Unit
Three Phase 415 VAC	xD1000 415V Drive 0.37kW(HD)	XD1000-01P5-4B1111	S 1	*
	xD1000 415V Drive 0.75kW(HD)	XD1000-02P3-4B1111	S 1	*
	xD1000 415V Drive 1.50kW(HD)	XD1000-04P1-4B2111	S 2	*
	xD1000 415V Drive 2.20kW(HD)	XD1000-05P5-4B2111	S 2	*
	xD1000 415V Drive 3.00kW(HD)/4.00kW(ND)	XD1000-08P9-4B2111	S 3	*
	xD1000 415V Drive 4.00kW(HD)/5.50kW(ND)	XD1000-12P1-4B2111	S 3	*
	xD1000 415V Drive 5.50kW(HD)/7.50kW(ND)	XD1000-16P0-4B2111	S 3	*
	xD1000 415V Drive 7.50kW(HD)/11.0kW(ND)	XD1000-22P8-4B2111	S 4	*
	xD1000 415V Drive 11.0kW(HD)/15.0kW(ND)	XD1000-30P0-4B2111	S 4	*
	xD1000 415V Drive 15.0kW(HD)/18.5kW(ND)	XD1000-36P0-4B2111	S 5	* * *
	xD1000 415V Drive 18.5kW(HD)/22.0kW(ND)	XD1000-43P0-4B2111	S 5	
	xD1000 415V Drive 22.0kW(HD)/30.0kW(ND)	XD1000-60P0-4B2111	S6	

Note: * For prices please contact nearest branch office

Ordering Information for xD1000 AC Drive



xD2000
Range : 0.37kW HD to 160kW ND

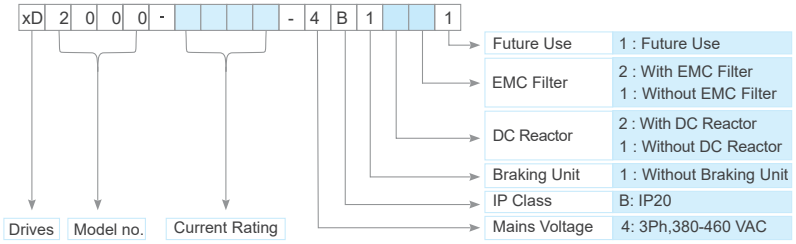


- Suitable for non-regenerative applications
- Rated for -15 to 45°C HD as well as ND ratings
- Inbuilt EMC filter with Category C3 EMC levels
- Inbuilt DC reactor from 4 kW to 160kW
- Inbuilt detachable LCD keypad
- 6 DIs, 3 ROs, 3 AIs, 2 AOs
- External 24 VDC connection to keep control circuit alive during power outage
- Pump and Compressor specific functions
- 2 functions to one DI
- Torque Boost (IR Compensation)
- Slip Compensation
- Auto Tuning
- Decel. Ramp Adaptation
- 16 Preset speeds
- Skip (Jump) Frequency
- Current Limitation
- DC Braking / Stop
- Freewheel Stop & Fast Stop

Input Voltage	Description	Cat. No.	Frame Size	M.R.P. (`) Per Unit
Three Phase 415 VAC	XD2000 415V Drive 0.37kW(HD)/0.75kW(ND)	XD2000-02P2-4B1121	S 1	*
	XD2000 415V Drive 0.75kW(HD)/1.50kW(ND)	XD2000-04P0-4B1121	S 1	*
	XD2000 415V Drive 1.50kW(HD)/2.20kW(ND)	XD2000-05P6-4B1121	S 1	*
	XD2000 415V Drive 2.20kW(HD)/3.00kW(ND)	XD2000-07P2-4B1121	S 1	*
	XD2000 415V Drive 3.00kW(HD)/4.00kW(ND)	XD2000-09P3-4B1221	S 1	*
	XD2000 415V Drive 4.00kW(HD)/5.50kW(ND)	XD2000-12P7-4B1221	S 1	*
	XD2000 415V Drive 5.50kW(HD)/7.50kW(ND)	XD2000-15P8-4B1221	S 1	*
	XD2000 415V Drive 7.50kW(HD)/11.0kW(ND)	XD2000-23P5-4B1221	S 2	*
	XD2000 415V Drive 11.0kW(HD)/15.0kW(ND)	XD2000-31P7-4B1221	S 2	*
	XD2000 415V Drive 15.0kW(HD)/18.5kW(ND)	XD2000-39P2-4B1221	S 3	*
	XD2000 415V Drive 18.5kW(HD)/22.0kW(ND)	XD2000-46P3-4B1221	S 3	*
	XD2000 415V Drive 22.0kW(HD)/30.0kW(ND)	XD2000-61P5-4B1221	S 4	*
	XD2000 415V Drive 30.0kW(HD)/37.0kW(ND)	XD2000-74P5-4B1221	S 4	*
	XD2000 415V Drive 37.0kW(HD)/45.0kW(ND)	XD2000-88P0-4B1221	S 4	*
	XD2000 415V Drive 45.0kW(HD)/55.0kW(ND)	XD2000-120P-4B1221	S 5	*
	XD2000 415V Drive 55.0kW(HD)/75.0kW(ND)	XD2000-145P-4B1221	S 5	*
	XD2000 415V Drive 75.0kW(HD)/90.0kW(ND)	XD2000-173P-4B1221	S 5	*
	XD2000 415V Drive 90.0kW(HD)/110kW(ND)	XD2000-211P-4B1221	S 6	* * *
	XD2000 415V Drive 110kW(HD)/132kW(ND)	XD2000-250P-4B1221	S 6	
	XD2000 415V Drive 132kW(HD)/160kW(ND)	XD2000-302P-4B1221	S6	

Note:
* For prices please contact nearest branch office
Drives are covered under HS code 8504 40 90 and are charged at 18%GST.

Ordering Information for xD2000 AC Drive



xD3000
Range: 0.18kW HD to 15kW HD

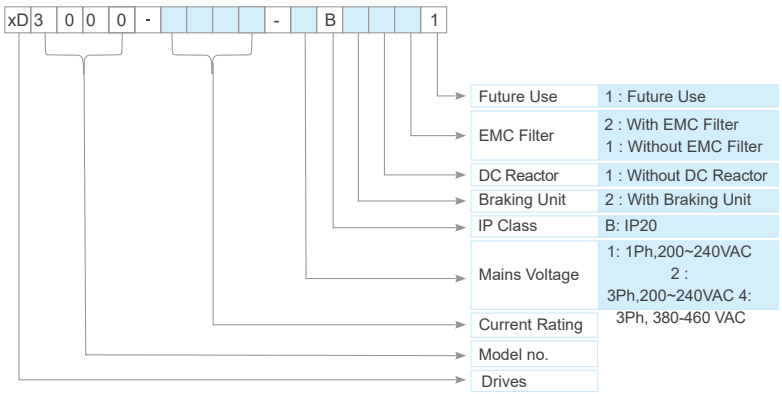


- Suitable for machine applications
- Rated for -10 to 50°C ambient temperature
- Inbuilt EMC filter for EMC category C2
- Inbuilt braking transistor
- 6 DIs, 3 DOs, 3 AIs, 1 AOs, 1 STO input
- External 24 VDC to keep control circuit on during power outages
- Delinearization for Analog Inputs
- Reference Addition, Subtraction & Multiplication
- Hoisting - External Brake Control, Load (External Weight) Measurement, High-speed Hoisting, Rope Slack
- Motor / Generator Torque Limit
- Line Contactor Control & Output Contactor Control
- Positioning by Limit Switches or Sensors
- Traverse control for textile machines
- 8 nos. trip history

Input Voltage	Description	Cat. No.	Frame Size	M.R.P. (`) Per Unit
Single Phase 230 VAC	XD3000 230V 1Ph Drive 0.18kW(HD)	XD3000-01P5-1B2121	S 1	*
	XD3000 230V 1Ph Drive 0.37kW(HD)	XD3000-03P3-1B2121	S 1	*
	XD3000 230V 1Ph Drive 0.55kW(HD)	XD3000-03P7-1B2121	S 1	*
	XD3000 230V 1Ph Drive 0.75kW(HD)	XD3000-04P8-1B2121	S 1	*
	XD3000 230V 1Ph Drive 1.10kW(HD)	XD3000-06P9-1B2121	S 2	*
	XD3000 230V 1Ph Drive 1.50kW(HD)	XD3000-08P0-1B2121	S 2	*
	XD3000 230V 1Ph Drive 2.20kW(HD)	XD3000-11P0-1B2121	S 2	*
Three Phase 230 VAC	XD3000 230V 3Ph Drive 0.18kW(HD)	XD3000-01P5-2B2111	S 1	*
	XD3000 230V 3Ph Drive 0.37kW(HD)	XD3000-03P3-2B2111	S 1	*
	XD3000 230V 3Ph Drive 0.55kW(HD)	XD3000-03P7-2B2111	S 1	*
	XD3000 230V 3Ph Drive 0.75kW(HD)	XD3000-04P8-2B2111	S 1	*
	XD3000 230V 3Ph Drive 1.10kW(HD)	XD3000-06P9-2B2111	S 2	*
	XD3000 230V 3Ph Drive 1.50kW(HD)	XD3000-08P0-2B2111	S 2	*
	XD3000 230V 3Ph Drive 2.20kW(HD)	XD3000-11P0-2B2111	S 2	*
	XD3000 230V 3Ph Drive 3.00kW(HD)	XD3000-13P7-2B2111	S 3	*
	XD3000 230V 3Ph Drive 4.00kW(HD)	XD3000-17P5-2B2111	S 3	*
	XD3000 230V 3Ph Drive 5.50kW(HD)	XD3000-27P5-2B2111	S 4	*
	XD3000 230V 3Ph Drive 7.50kW(HD)	XD3000-33P0-2B2111	S 4	*
	XD3000 230V 3Ph Drive 11.0kW(HD)	XD3000-54P0-2B2111	S 5	*
	XD3000 230V 3Ph Drive 15.0kW(HD)	XD3000-66P0-2B2111	S 5	*
Three Phase 415 VAC	XD3000 415V 3Ph Drive 0.37kW(HD)	XD3000-01P5-4B2121	S 2	*
	XD3000 415V 3Ph Drive 0.55kW(HD)	XD3000-01P9-4B2121	S 2	*
	XD3000 415V 3Ph Drive 0.75kW(HD)	XD3000-02P3-4B2121	S 2	*
	XD3000 415V 3Ph Drive 1.10kW(HD)	XD3000-03P0-4B2121	S 2	*
	XD3000 415V 3Ph Drive 1.50kW(HD)	XD3000-04P1-4B2121	S 2	*
	XD3000 415V 3Ph Drive 2.20kW(HD)	XD3000-05P5-4B2121	S 3	*
	XD3000 415V 3Ph Drive 3.00kW(HD)	XD3000-07P1-4B2121	S 3	*
	XD3000 415V 3Ph Drive 4.00kW(HD)	XD3000-09P5-4B2121	S 3	*
	XD3000 415V 3Ph Drive 5.50kW(HD)	XD3000-14P3-4B2121	S 4	*
	XD3000 415V 3Ph Drive 7.50kW(HD)	XD3000-17P0-4B2121	S 4	* * *
	XD3000 415V 3Ph Drive 11.0kW(HD)	XD3000-27P7-4B2121	S 5	
	XD3000 415V 3Ph Drive 15.0kW(HD)	XD3000-33P0-4B2121	S5	

Note:
* For prices please contact nearest branch office

Ordering Information for xD3000 AC Drive



RELIABLE ELECTRICAL

xD4000 IP55 DRIVE

COMPLYING TO IEC 60529
RANGE: 0.75kW ND TO 11kW ND



Robust Protection
Designed for dusty, humid, and indoor industrial environments

Eliminates External Enclosure
Integrated DC choke, EMC filter & DBU. Reduced wiring, installation time & footprint

Cost & Time Saving
Eliminating the external VFD panel reducing both installation time and system cost

Digital-Architecture Ready
Modbus RTU, Modbus TCP/Ethernet IP, Profibus DP & Profinet S2 redundancy

xD4000
Range : 0.37kW HD to 315kW ND



- Detachable 8 line Graphical LCD keypad with battery for RTC & Help Menu
- Rated for -10 to 50°C ambient temperature
- Inbuilt DC Reactor over entire range
- Inbuilt EMC filter entire range for EMC levels C2 / C3
- Inbuilt Dual port Ethernet IP / Modbus TCP & Modbus RS485 ports
- Inbuilt Braking transistor upto 160kW HD.
- 8 DIs, 4 DOs, 3 AIs, 2 AOs, 2 STO inputs
- Crane specific functions
- Pump specific functions
- Line & Output Contactor control
- Load Sharing, Speed – Torque master slave
- Multi-motor configuration Mode
- Automatic Restart
- Catch on the fly (Flying Start)
- Fault Inhibition / Error detect disabling (Fire Mode)
- 15 nos. trip histories with date and time Stamp

Input Voltage	Description	Cat. No.	Frame Size	M.R.P. (`) Per Unit
Three Phase 415 VAC	XD4000 415V Drive 0.37kW(HD)/0.75kW(ND)	XD4000-02P2-4C2221	S 1	*
	XD4000 415V Drive 0.75kW(HD)/1.50kW(ND)	XD4000-04P0-4C2221	S 1	*
	XD4000 415V Drive 1.50kW(HD)/2.20kW(ND)	XD4000-05P6-4C2221	S 1	*
	XD4000 415V Drive 2.20kW(HD)/3.00kW(ND)	XD4000-07P2-4C2221	S 1	*
	XD4000 415V Drive 3.00kW(HD)/4.00kW(ND)	XD4000-09P3-4C2221	S 1	*
	XD4000 415V Drive 4.00kW(HD)/5.50kW(ND)	XD4000-12P7-4C2221	S 1	*
	XD4000 415V Drive 5.50kW(HD)/7.50kW(ND)	XD4000-16P5-4C2221	S 2	*
	XD4000 415V Drive 7.50kW(HD)/11.0kW(ND)	XD4000-23P5-4C2221	S 2	*
	XD4000 415V Drive 11.0kW(HD)/15.0kW(ND)	XD4000-31P7-4C2221	S 3	*
	XD4000 415V Drive 15.0kW(HD)/18.5kW(ND)	XD4000-39P2-4C2221	S 3	*
	XD4000 415V Drive 18.5kW(HD)/22.0kW(ND)	XD4000-46P3-4C2221	S 3	*
	XD4000 415V Drive 22.0kW(HD)/30.0kW(ND)	XD4000-61P5-4C2221	S 4	*
	XD4000 415V Drive 30.0kW(HD)/37.0kW(ND)	XD4000-74P5-4C2221	S 4	*
	XD4000 415V Drive 37.0kW(HD)/45.0kW(ND)	XD4000-88P0-4C2221	S 4	*
	XD4000 415V Drive 45.0kW(HD)/55.0kW(ND)	XD4000-106P-4C2221	S 5	*
	XD4000 415V Drive 55.0kW(HD)/75.0kW(ND)	XD4000-145P-4C2221	S 5	*
	XD4000 415V Drive 75.0kW(HD)/90.0kW(ND)	XD4000-173P-4C2221	S 5	*
	XD4000 415V Drive 90.0kW(HD)/110kW(ND)	XD4000-211P-4B2221	S 6	*
	XD4000 415V Drive 110kW(HD)/132kW(ND)	XD4000-250P-4B2221	S 6	*
	XD4000 415V Drive 132kW(HD)/160kW(ND)	XD4000-302P-4B2221	S6	*
	XD4000 415V Drive 160kW(HD)/220kW(ND)	XD4000-427P-4A2221	S7A	* * *
	XD4000 415V Drive 200kW(HD)/250kW(ND)	XD4000-481P-4A1221	S7B	
	XD4000 415V Drive 250kW(HD)/315kW(ND)	XD4000-616P-4A1221	S7B	
	XD4000 IP55 415V Drive 0.75kW(ND)	XD4000-02P2-4S2221	S	*
	XD4000 IP55 415V Drive 1.50kW(ND)	XD4000-04P0-4S2221	1	*
	XD4000 IP55 415V Drive 2.20kW(ND)	XD4000-05P6-4S2221	S	*
	XD4000 IP55 415V Drive 3.00kW(ND)	XD4000-07P2-4S2221	1	*
	XD4000 IP55 415V Drive 4.00kW(ND)	XD4000-09P3-4S2221	S	*
	XD4000 IP55 415V Drive 5.50kW(ND)	XD4000-12P7-4S2221	1	*
	XD4000 IP55 415V Drive 7.50kW(ND)	XD4000-16P5-4S2221	S	*
	XD4000 IP55 415V Drive 11.0kW(ND)	XD4000-23P5-4S2221	1	*
			S	
			1	
			S	
			1	
			S	

Note: * For prices please contact nearest branch office

xD4000 - IP55 with Inbuilt Power Disconnector
Range : 0.75kW ND to 11kW ND

- IP55 Complying to IEC 60529
- Built-In IP65 Graphical LCD Display with RTC
- Supports Asynchronous, PM synchronous & reluctance motors
- Built-in DC reactor & C2/C3 EMC filter for Harmonics & Noise reduction.
- Built-in dynamic braking unit.
- Starting Torque of 150%at 3Hz for V/f
- Built-in Brake Control & Macros
- Inbuilt PID with sleep & wake up feature
- Conformal coating complying to IEC 60721-3-3 class 3C3, 3S2 & 3M3
- Built-in RS 485 Modbus RTU & Modbus TCP/Ethernet IP communication and optional – Profinet S2 redundancy & Profibus



Ordering Information for xD4000 AC Drive

xD	4	0	0	0	-					-	4	B				1

Future Use	1 : Future Use
EMC Filter	2 : With EMC Filter 1 : Without EMC Filter
DC Reactor	2 : With DC Reactor
Braking Unit	2 : With Braking Unit 1 : Without Braking Unit
IP Class	A = IP00 B = IP20 C = IP21 S = IP55
Mains Voltage	4 = 3Ph, 380-480 VAC
Current Rating	
Model no.	
Drives	

Accessories for AC Drives [8504]

Drive Model	Description	Cat. No.	M.R.P. (`) Per Unit
xD1000	IP54 LED Remote Keypad	XDOP-DOP-100	*
xD2000	IP21 LCD Std. Graphical Keypad	XDOP-DOP-300	*
	Remote Mounting Kit for IP21 LCD Keypad	XDKT-DOP-300	*
	IP65 LCD Graphical Keypad	XDOP-DOP-500	*
	Mounting kit for IP65 LCD Keypad	XDKT-DOP-500	*
	IO Expansion Card-1 - 6DI,2DO,2AI	XDIO-EX1-V01	*
	IO Expansion Card-2 - 3RO	XDIO-EX2-V01	*
	Profibus-DP Comm. Card	XDCI-PDP-V01	*
xD3000	IP54 LED Remote Keypad	XDOP-DOP-100	*
	IP65 LCD Graphical Keypad	XDOP-DOP-500	*
	Mounting kit for IP65 LCD Keypad	XDKT-DOP-500	*
	Communication Option Module Adapter	XDKT-ADP-V01	*
	Speed Monitoring Card	XDEN-SPD-V01	*
	Modbus TCP/EtherNet IP Comm. Card	XDCI-ETH-V01	*
	EtherCAT Comm. Card	XDCI-ECT-V01	*
	Profibus-DP Comm. Card	XDCI-PDP-V01	*
	DeviceNet Comm. Card	XDCI-DEN-V01	*
	POWERLINK Comm. Card	XDCI-PLN-V01	*
	ProfiNet Comm. Card	XDCI-PFN-V01	*
	CANopen DaisyChain Comm. Card	XDCI-CND-V01	*
	CANopen SUB-D Comm. Card	XDCI-CNS-V01	*
	CANopen Terminals Comm. Card	XDCI-CNT-V01	*
	Additional Safety Integrity Module	XDSI-SIM-V01	*
xD4000	IP65 LCD Graphical Keypad	XDOP-DOP-500	*
	Mounting kit for IP65 LCD Keypad	XDKT-DOP-500	*
	IO Expansion Card-1 - 6DI,2DO,2AI	XDIO-EX1-V01	*
	IO Expansion Card-2 - 3RO	XDIO-EX2-V01	*
	Digital Encoder Interface Card	XDEN-DEI-V01	*
	Analog Encoder Interface Module	XDEN-AEI-V01	*
	Resolver Interface Module	XDEN-REI-V01	*
	HTL Encoder Interface Module Profibus-	XDEN-HEI-V01	*
	DP Comm. Card	XDCI-PDP-V01	*
	DeviceNet Comm. Card	XDCI-DEN-V01	*
	POWERLINK Comm. Card	XDCI-PLN-V01	*
	ProfiNet Comm. Card - Redundant	XDCI-PFN-V02	*
	CANopen DaisyChain Comm. Card	XDCI-CND-V01	*
	CANopen SUB-D Comm. Card	XDCI-CNS-V01	*
	CANopen Terminals Comm. Card	XDCI-CNT-V01	*

Note:
* For prices please contact nearest branch office
Drives are covered under HS code 8504 40 90 and are charged at 18%GST.

xS1000 Soft Starters

Range: 18A to 200A



xS1000 Soft Starters:For Standard Applications

- Inbuilt Bypass Contactor
- Soft Start / Soft Stop
- Compact in size
- Truly plug & play
- Communication options available

Description	Cat. No.	M.R.P. (`) Per Unit	Bypass Contactor
xS1000,18A,M:200-440VAC,C:110/230-440VAC	XS1000-0018-B44111	*	Built - In
xS1000,34A,M:200-440VAC,C:110/230-440VAC	XS1000-0034-B44111	*	
xS1000,42A,M:200-440VAC,C:110/230-440VAC	XS1000-0042-B44111	*	
xS1000,48A,M:200-440VAC,C:110/230-440VAC	XS1000-0048-B44111	*	
xS1000,60A,M:200-440VAC,C:110/230-440VAC	XS1000-0060-B44111	*	
xS1000,75A,M:200-440VAC,C:110/230-440VAC	XS1000-0075-B44111	*	
xS1000,85A,M:200-440VAC,C:110/230-440VAC	XS1000-0085-B44111	*	
xS1000,100A,M:200-440VAC,C110/230-440VAC	XS1000-0100-B44111	*	
xS1000,140A,M:200-440VAC,C110/230-440VAC	XS1000-0140-B44111	*	
xS1000,170A,M:200-440VAC,C110/230-440VAC	XS1000-0170-B44111	*	
xS1000,200A,M:200-440VAC,C110/230-440VAC	XS1000-0200-B44111	*	

xS2000 Soft Starters

Range: 18A to 200A



xS2000 Soft Starters:For standard applications

- Inbuilt Bypass Contactor
- Soft start / Soft stop / Adjustable current limit
- Essential motor protections against
  - » Overload
  - » Single phasing
  - » Instantaneous overcurrent »
  - Phase sequence reversal
  - » Abnormality in supply
  - » Unbalanced current
- Thermistor protection through PTC
- Excess start time setting
- Communication options available
- PC Interface as optional

Description	Cat. No.	M.R.P. (`) Per Unit	Bypass Contactor
xS2000,18A,M:200-440VAC,C:110/230-440VAC	XS2000-0018-B44111	*	Built - In
xS2000,34A,M:200-440VAC,C:110/230-440VAC	XS2000-0034-B44111	*	
xS2000,42A,M:200-440VAC,C:110/230-440VAC	XS2000-0042-B44111	*	
xS2000,48A,M:200-440VAC,C:110/230-440VAC	XS2000-0048-B44111	*	
xS2000,60A,M:200-440VAC,C:110/230-440VAC	XS2000-0060-B44111	*	
xS2000,75A,M:200-440VAC,C:110/230-440VAC	XS2000-0075-B44111	*	
xS2000,85A,M:200-440VAC,C:110/230-440VAC	XS2000-0085-B44111	*	
xS2000,100A,M:200-440VAC,C110/230-440VAC	XS2000-0100-B44111	*	
xS2000,140A,M:200-440VAC,C110/230-440VAC	XS2000-0140-B44111	*	
xS2000,170A,M:200-440VAC,C110/230-440VAC	XS2000-0170-B44111	*	
xS2000,200A,M:200-440VAC,C110/230-440VAC	XS2000-0200-B44111	*	

Note:

* For prices please contact nearest branch office

The above xS1000 & xS2000 ratings are based on 400%starting current, 10 starts per hour up to 60A & 6 starts per hour for 75A & above, 6 seconds starting time and ambient temperature of 40°C.

For proper sizing of soft starter based on the application parameters please use Winstart Software.

Ordering Information for xS1000 & xS2000 Series Soft Starter

xS	nnnn	-	1234	-	B	V	C	D	F	F

xS	Soft starters
nnnn	Soft starter Name
	1000 xS1000
	2000 xS2000 Current Rating
1234	1234 Nominal Current Rating
	Bypass Type
B	B Internal Bypass
	Mains Voltage
V	4 3Ph, 200-440VAC
	5 3Ph, 200-575VAC
	Control Voltage
C	1 24V AC/DC
	4 110/230-440V AC
	Graphical Display
D	1 No Graphical Display
	Future Use
F	1 Future Use Future Use
	1 Future Use
F	

Werecommend theuseof :

1. LineContactor :This will isolateand protect thesoft starter SCR's from anyvoltagetransient whileit's not inoperation.
2. Bypass Contactor (For models without built-in bypass) : This will bypass and protect the soft starter SCR's while in running state from Current and Voltagetransient's.
3. Semiconductor fuses : This will protect the starter SCR's during startingand stoppingstates from current transient's and excess I^2T.

Note:

* For prices please contact nearest branch office
Soft Starters are covered under HSN code 8504 40 90 and are charged at 18%GST.

xS3000 Soft Starters

Range: 24A to 580A



- Built in bypass contactor
- Compact & Flexible Design
- Screw-less design for easy and fast servicing
- USB port for easy and fast commissioning and data extraction
- Full graphical display with multi-languages support
- Built-in Simulation Mode
- 384 event logs
- Communication options available
- Fire Mode Function
- Starts per hour count

Description	Cat. No.	M.R.P. (`) Per Unit	Bypass Contactor
xS3000,24A,M:200-525VAC,C:110/220VAC	XS3000-0024-B52211	*	Built - In
xS3000,42A,M:200-525VAC,C:110/220VAC	XS3000-0042-B52211	*	
xS3000,52A,M:200-525VAC,C:110/220VAC	XS3000-0052-B52211	*	
xS3000,64A,M:200-525VAC,C:110/220VAC	XS3000-0064-B52211	*	
xS3000,69A,M:200-525VAC,C:110/220VAC	XS3000-0069-B52211	*	
xS3000,105A,M:200-525VAC,C:110/220VAC	XS3000-0105-B52211	*	
xS3000,115A,M:200-525VAC,C:110/220VAC	XS3000-0115-B52211	*	
xS3000,135A,M:200-525VAC,C:110/220VAC	XS3000-0135-B52211	*	
xS3000,184A,M:200-525VAC,C:110/220VAC	XS3000-0184-B52211	*	
xS3000,200A,M:200-525VAC,C:110/220VAC	XS3000-0200-B52211	*	
xS3000,229A,M:200-525VAC,C:110/220VAC	XS3000-0229-B52211	*	
xS3000,250A,M:200-525VAC,C:110/220VAC	XS3000-0250-B52211	*	
xS3000,352A,M:200-525VAC,C:110/220VAC	XS3000-0352-B52211	*	
xS3000,397A,M:200-525VAC,C:110/220VAC	XS3000-0397-B52211	*	
xS3000,410A,M:200-525VAC,C:110/220VAC	XS3000-0410-B52211	* * *	
xS3000,550A,M:200-525VAC,C:110/220VAC	XS3000-0550-B52211		
xS3000,580A,M:200-525VAC,C:110/220VAC	XS3000-0580-B52211		

xS4000 Soft Starters

Range: 24A to 1250A



- Built in bypass contactor
- Compact & Flexible Design
- Screw-less design for easy and fast servicing
- USB port for easy and fast commissioning and data extraction
- Full graphical display with multi-languages support
- Real time graphs of motor operating performance
- 384 event logs with time stamping
- Advanced protection system
- Communication options available
- Smart card for level controlled pump activation and pump protection
- Under Voltage / Over Voltage protection available
- Fire Mode Function
- Starts per hour count
- Power through function available
- Scheduling based on RTC

Description	Cat. No.	M.R.P. (`) Per Unit	Bypass Contactor
xS4000,24A,M:200-525VAC,C:110/220VAC	XS4000-0024-B52211	*	Built - In
xS4000,42A,M:200-525VAC,C:110/220VAC	XS4000-0042-B52211	*	
xS4000,52A,M:200-525VAC,C:110/220VAC	XS4000-0052-B52211	*	
xS4000,64A,M:200-525VAC,C:110/220VAC	XS4000-0064-B52211	*	
xS4000,69A,M:200-525VAC,C:110/220VAC	XS4000-0069-B52211	*	
xS4000,105A,M:200-525VAC,C:110/220VAC	XS4000-0105-B52211	*	
xS4000,115A,M:200-525VAC,C:110/220VAC	XS4000-0115-B52211	*	
xS4000,135A,M:200-525VAC,C:110/220VAC	XS4000-0135-B52211	*	
xS4000,184A,M:200-525VAC,C:110/220VAC	XS4000-0184-B52211	*	
xS4000,200A,M:200-525VAC,C:110/220VAC	XS4000-0200-B52211	*	
xS4000,229A,M:200-525VAC,C:110/220VAC	XS4000-0229-B52211	*	
xS4000,250A,M:200-525VAC,C:110/220VAC	XS4000-0250-B52211	*	
xS4000,352A,M:200-525VAC,C:110/220VAC	XS4000-0352-B52211	*	
xS4000,397A,M:200-525VAC,C:110/220VAC	XS4000-0397-B52211	*	
xS4000,410A,M:200-525VAC,C:110/220VAC	XS4000-0410-B52211	*	
xS4000,550A,M:200-525VAC,C:110/220VAC	XS4000-0550-B52211	*	
xS4000,580A,M:200-525VAC,C:110/220VAC	XS4000-0580-B52211	*	
xS4000,835A,M:200-525VAC,C:110/220VAC	XS4000-0835-B52211	*	
xS4000,940A,M:200-525VAC,C:110/220VAC	XS4000-0940-B52211	*	
xS4000,1070A,M:200-525VAC,C:110/220VAC	XS4000-1070-B52211	*	
xS4000,1230A,M:200-525VAC,C:110/220VAC	XS4000-1230-B52211	*	
xS4000,1250A,M:200-525VAC,C:110/220VAC	XS4000-1250-B52211	*	
xS4000,735A,M:200-525VAC,C:110/220VAC	XS4000-0735-C52211	*	External bypass contactor (AC1 rating) All protections remain active during bypass operation
xS4000,830A,M:200-525VAC,C:110/220VAC	XS4000-0830-C52211	*	
xS4000,1025A,M:200-525VAC,C:110/220VAC	XS4000-1025-C52211	*	
xS4000,1170A,M:200-525VAC,C:110/220VAC	XS4000-1170-C52211	*	
xS4000,1220A,M:200-525VAC,C:110/220VAC	XS4000-1220-C52211	*	

xS	nnnn	-	1234	-	B	V	C	D	F	F

xS	Soft starters	
nnnn	Soft starter Name	
	3000	xS3000
	4000	xS4000 Current Rating
1234	1234	Nominal Current Rating
B	Bypass Type	
	B	Internal Bypass
	C	Continuous / External Bypass
V	Mains Voltage	
	5	3Ph,200-525VAC
	6	3Ph,380-600VAC
	7	3Ph,380-690VAC

C	Control Voltage	
	1	24V AC/DC
	2	110-120/220-240V AC
D	Graphical Display	
	2	Fixed Graphical Display
F	Future Use	
	1	Future Use Future Use
F	1	Future Use

Note:

* For prices please contact nearest branch office
Prices for 1000V and External Bypass soft starter below 735A available on request Soft Starters are covered under HSN code 8504 40 90 and are charged at 18% GST.

Werecommend theuseof :

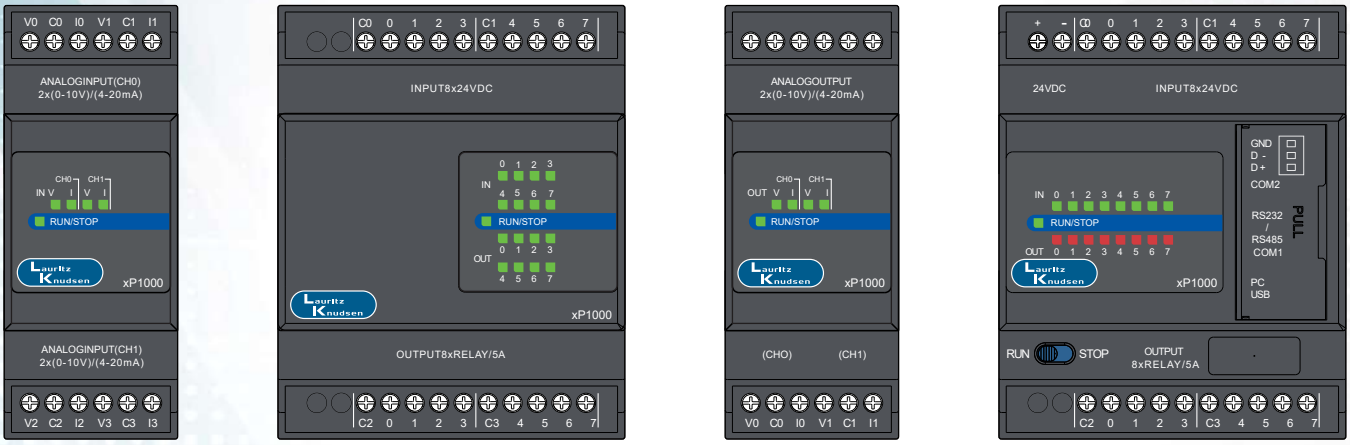
1. Line Contactor : This will isolate and protect the soft starter SCR's from any voltagetransient whileit's not inoperation.
2. Semiconductor fuses : This will protect the starter SCR's during starting and stopping states from current transient's and excess I^2T.
3. Bypass Contactor (For models without built-in bypass) : This will bypass and protect the soft starter SCR's while in running state from Current and Voltage transient's.

Optional Modules/Cards for xS Series



Description	Cat. No.	M.R.P. (`) Per Unit
xS1000 & xS2000 Modbus RTU Card	XSCI-RTU-121	*
xS1000 & xS2000 Modbus TCP Card	XSCI-TCP-123	*
xS1000 & xS2000 Profibus Card	XSCI-PDP-121	*
xS1000 & xS2000 Profinet Card	XSCI-PFN-122	*
xS1000 & xS2000 Ethernet Card	XSCI-ETH-122	*
xS1000 & xS2000 DeviceNet Card	XSCI-DEN-121	*
xS1000 & xS2000 USB Interface Card	XSCI-USB-121	*
xS1000 & xS2000 Operator interface Card	XSOP-DOC-100	*
xS1000 & xS2000 Digital Operator Kit	XSOP-DOK-100	*
xS3000 and xS4000 Modbus RTU Card	XSCI-RTU-341	*
xS3000 and xS4000 Modbus RTU + GF Card	XSCI-RTU-342	*
xS3000 and xS4000 Modbus TCP + GF Card	XSCI-TCP-343	*
xS3000 and xS4000 Profibus Card	XSCI-PDP-341	*
xS3000 and xS4000 Profinet + GF Card	XSCI-PFN-343	*
xS3000 and xS4000 Ethernet + GF Card	XSCI-ETH-343	*
xS3000 and xS4000 DeviceNet Card xS3000	XSCI-DEN-341	*
and xS4000 Operator & Cable xS3000 and	XSOP-DOP-200	*
xS4000 Operator Interface Card xS3000 and	XSOP-DOC-200	* * *
xS4000 Digital Operator Kit xS3000 and	XSOP-DOK-200	
xS4000 Pumping Smart Card	XSSC-PSC-341	

Note:
* For prices please contact nearest branch office
Soft Starters are covered under HSN code 8504 40 90 and are charged at 18%GST.



xP1000 PLC Features

Main CPU

- 8 Digital Inputs
- 24 V DC Power Supply
- 8 Digital Outputs (Relay Output) 5 A (Res.) @ 230 VAC / 30 VDC
- 2 Serial Communication Ports
  (COM1 - RS232/RS485, COM2 - RS485)
- 256KB User Program Memory, 8KB User Data Memory.
- Operating Temperature : 0°C to 55°C,
  Storage Temperature: - 40°C to 70°C

Expansion Modules:

Digital I/Os

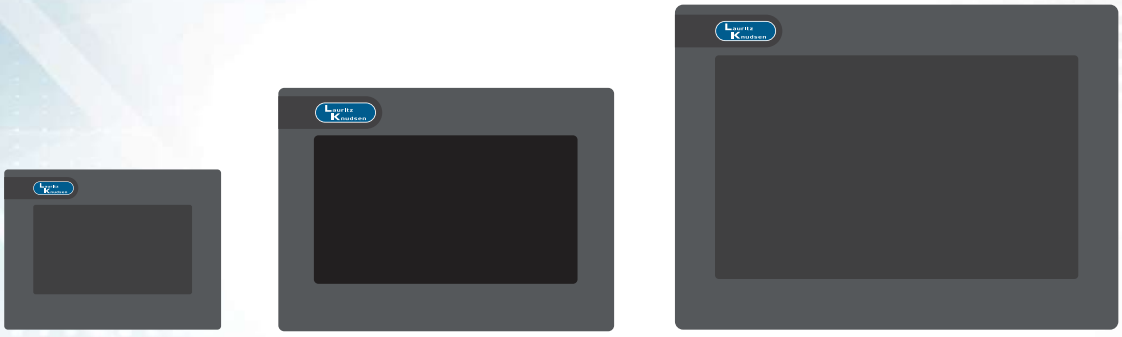
- Extension with 8 Digital Inputs and 8 Relay Outputs,
  Relay Load 5 A (Res.) @ 230 VAC / 30 VDC
- 24 V DC Power Supply

Analog Inputs

- Extension with 4 Analog Inputs (0-10V / 4-20mA)
- 24 V DC Power Supply

Analog Outputs

- Extension with 2 Analog Outputs (0-10V / 4-20mA)
- 24 V DC Power Supply

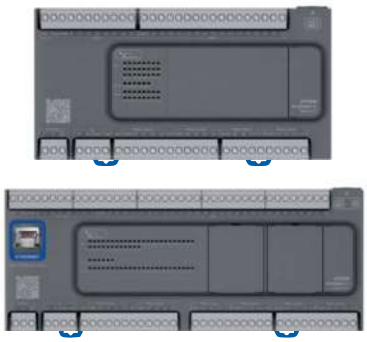


4.3 inch | 7 inch | 10.1 inch

xT1000 HMI Features:

- HMI Size
  4.3”, 7” & 10.1” with colour TFT display options with & without Ethernet model
- Touch Screen
  Higher brightness level up to 440 cd/m2 & long backlight life up to 50000 hours for display
- Protection
  Shock & Vibration protection as per IEC Standard
- CPU
  Equipped with powerful CPU Cortex-M7 (600MHz)
- Data Logging
  Equipped with powerful CPU Cortex-M7 (600MHz)
- Operating Temperature
  Operation temperature range: 0 to 50 °C
- Memory
  RAM - 32 MB for all Models
- Password Management
  User access levels & application password management
- Safety Standards
  CE, RoHS Compliant, IP 65 protection for front panel with Class 2 Pollution Degree.
- Memory
  ROM - 32 MB for Serialmodels & 64 MB for with Ethernet model, ROM Expandable up to 4 GB via USB Stick/SD card
- Picture Library
  Inbuilt picture library with high resolution images

xP5000 Series



- AC / DC power supply
- Supports Upto 196 IOs, Relay and transistor outputs
- Flexible I/Os, 2 cartridges, and up to 4 expansions
- Ethernet and Serial line ports
- Micro-SD card slot and USB port
- 2 High speed counters, 2@100KHz
- 2 Pulse Outputs at 100kHz*2



xP5000 Expansion Modules

- Digital Input Modules: 16 / 32 channel options
- Digital Output Modules: 8/16 / 32 channel options
- Analog Input Modules: 8 channels
  - Voltage: 0–10 V
  - Current: 4–20 mA
- Analog Output Modules: 4/8 channels
  Voltage: 0–10 V
  - Current: 4–20 mA
- Mixed I/O Modules: Combined analog input and output channels (e.g., 4 AI + 2 AO).

Note: * For prices please contact nearest branch office

	Category	Description	Cat. No.	M.R.P. (`) Per Unit
CPU	xP1000	xP1000 CPU, 8 DI,8 RO, 2 Serial Port.	xP1000-MM1DR16AA11	*
	xP1000 Expansions	Expansion 8 DI/ 8 RO	xPEXPN-ME4DR16AA11	*
		Expansion 4 AI	xPEXPN-ME2AX04AA11	*
		Extension with 2 Analog Outputs	xPEXPN-ME3AY02AA11	*
	xP3000	xP3000, CPU, AC220, 09DI, 07DO RY	xP3000-M1DR16AA111	*
		xP3000, CPU, AC220, 14DI, 10DO RY	xP3000-M1DR24AA111	*
		xP3000 CPU AC220 20DI 12DO RY	xP3000-M1DR32AA111	*
		xP3000, CPU, AC220, 24DI, 16DO RY	xP3000-M1DR40AA111	*
	xP5000	xP5000 CPU DC24 09DI 07DO TP	xP5000-M1DT16AA111	*
		xP5000 CPU DC24 09DI 07DO TN xP5000	xP5000-M1DU16AA111	*
		CPU AC220 09DI 07DO RY xP5000 CPU	xP5000-M1DR16AA111	*
		DC24 14DI 10DO TN xP5000 CPU DC24	xP5000-M1DU24AA111	*
		14DI 10DO TP xP5000 CPU AC220 14DI	xP5000-M1DT24AA111	*
		10DO RY xP5000 CPU DC24 14DI 10DO	xP5000-M1DR24AA111	*
		TP Eth.	xP5000-M1DT24EA111	*
		xP5000, CPU, DC24, 14DI, 10DO TN Eth.	xP5000-M1DU24EA111	*
		xP5000 CPU AC220 14DI 10DO RY Eth	xP5000-M1DR24EA111	*
		xP5000, CPU, DC24, 20DI, 12DO TN	xP5000-M1DU32AA111	*
		xP5000 CPU DC24 20DI12DO TP	xP5000-M1DT32AA111	*
		xP5000 CPU AC220 18DI 14DO RY	xP5000-M1DR32AA111	*
		xP5000 CPU AC220 18DI 14DO RY Eth.	xP5000-M1DR32EA111	*
		xP5000,CPU, DC24, 24DI, 16DO TN	xP5000-M1DU40AA111	*
		xP5000 CPU DC24 24DI 16DO TP xP5000,	xP5000-M1DT40AA111	*
		CPU, AC220, 24DI, 16DO RY, xP5000 CPU	xP5000-M1DR40AA111	*
		DC24 24DI 16DO TP Eth. xP5000, CPU,	xP5000-M1DT40EA111	*
		DC24, 24DI, 16DO TN, Eth.	xP5000-M1DU40EA111	*
		xP5000 CPU AC220 24DI 16DO RY Eth	xP5000-M1DR40EA111	*
		xP5000 CPU AC220 36DI 24DO RY	xP5000-M1DR60AA111	*
		xP5000, CPU, AC220, 36DI, 24DO RY, 1 Eth	xP5000-M1DR60EA111	*
	xP5000 Expansion Modules	xPEXPN, 8 OUT RY	xPEXPN-XLE3DR08AA1	*
		xPEXPN, 8DC inputs ,8 relay outputs	xPEXPN-XLE4DR16AA1	*
		xPEXPN, 16 INPUTS	xPEXPN-XLE2DX16AA1	*
		xPEXPN, 16 OUT TR.NPN	xPEXPN-XLE3DU16AA1	*
		xPEXPN, 16 OUT RY	xPEXPN-XLE3DR16AA1	*
		xPEXPN, 16 OUT TR.PNP	xPEXPN-XLE3DT16AA1	*
		xPEXPN, 16DC inputs ,16 relay outputs	xPEXPN-XLE4DR32AA1	*
		xPEXPN, 32 INPUTS	xPEXPN-XLE2DX32AA1	*
		xPEXPN, 32 OUT TR.PNP	xPEXPN-XLE3DT32AA1	*
		xPEXPN, 32 OUT TR.NPN	xPEXPN-XLE3DU32AA1	*
		xPEXPN, 8 ANALOG INPUTS	xPEXPN-XLE2AI08AA1	*
		xPEXPN, 4 ANALOG OUTPUTS	xPEXPN-XLE3XQ04AA1	*
		xPEXPN, 4 AI 2 AO	xPEXPN-XLE4AQ06AA1	*
		xPCTRG, 1 isolated serial line RS485	xPCTRG-XLO5CS01AB1	*
		xPCTRG, 2 analog input ,1 analog output	xPCTRG-XLO4AH03AA1	*

xP6000 Series



xP6000 PLC with display



xP6000 without display



xP6100 PLC



Expansion Module

- HVAC & Refrigeration Dedicated PLC
- Ethernet & Serial Communication
- BACnet, Modbus & CANopen Support
- Scalable I/O Architecture
- Advanced PID Control
- BMS & SCADA Connectivity
- Remote Monitoring & Diagnostics
- High Reliability & Energy Efficiency
- Compact, Modular & OEM-Friendly Design

	Category	Description	Cat. No.	M.R.P. (`) Per Unit
CPU	xP6000	xP6000 Perf. Blind 18 I/Os, Eth, 2 RS485	xP6000M1DR18BA2E1	*
		xP6000 Perf. Display 18 I/Os, Eth, 2 RS485	xP6000M1DR18DA2E1	*
		xP6000 Perf. Blind 28 I/Os, Eth, 2 MB	xP6000M1DR28BA0E1	*
		xP6000 Perf Blind 28 I/O Eth 2 RS485 Isol	xP6000M1DR28BA2E1	*
	xP6100	xP6000 Perf Display 28 I/O Eth 2RS485 Isol	xP6000M1DR28DA2E1	*
		xP6000 Perf Display 42 I/O Eth 2RS485 Isol	xP6000M1DR42DA2E1	*
		xP6000 Perf Blind 42 I/O Eth, 2 RS485 Isol	xP6000M1DR42BA2E1	*
		xP6100 Opt. Blind 22 I/Os, 2 RS485 xP6100	xP6100M1DR22BA2E0	*
		Opt. Display 22 I/Os, 2 RS485 xP6000	xP6100M1DR22DA2E0	*
	Expansion	Expansion Module 14I/O	xPEXPNXLE7DR42AA1	*
		xP6000 Expansion Module 28I/O	xPEXPNXLE7DR102A1	*
	Gateway	xP6000 Gateway Secure Interface	xGWS00GW	*
		xP6000 PlugIn Secure Interface	xGWS00PI	*

xT Series

- Wide Range upto 15” in size
- Application Memory: FLASH EPROM / Screen area: 64MB/User font area 8 MB / Logic program area: 132KB
- Backup Memory: Screen Area: SRAM 320KB,Variable Area: SRAM 64KB
- Various Communication Interface: Ethernet /RS-232C / RS-422/485
- USB host and device
- SD memory card interface
- Certificates: CE, RoHS

Category		Description	Cat. No.	M.R.P. (`) Per Unit
HMI	xT1000	xT1000 series, 4" TFT, Serial,2 Port	xT1000-E104SDAAA1	*
		xT1000 series, 4" TFT, Serial,2 Port, 1 Eth Port	xT1000-E104EDAAA1	*
		xT1000 series, 7" TFT, Serial,2 Port	xT1000-E107SDAAA1	*
		xT1000 series, 7" TFT, Serial,2 Port, 1 Eth Port	xT1000-E107EDAAA1	*
		xT1000 series, 10" TFT, Serial,2 Port	xT1000-E110SDAAA1	*
		xT1000 series, 10" TFT, Serial,2 Port, 1 Eth Port	xT1000-E110EDAAA1	*
	xTE6000	xTE6000 Series 7 " HMI, DC 24V, Eth. xTE6000	xTE6000-07EDAA1	*
		Series 10 " HMI, DC 24V, Eth. xTE6000 Series	xTE6000-10EDAA1	*
		12 " HMI, DC 24V, Eth. xTE6000 Series 15 " HMI,	xTE6000-12EDAA1	*
		DC 24V, Eth. xTS6000 Series 04” Advance HMI,	xTE6000-15EDAA1	*
	xTS6000	DC 24V, Eth. xTS6000 Series 07” Advance HMI,	xTS6000-04EDAA1	*
		DC 24V, Eth. xTS6000 Series 10” Advance HMI,	xTS6000-07EDAA1	*
		DC 24V, Eth. xTS6000 Series 12” Advance HMI,	xTS6000-10EDAA1	* * *
		DC 24V, Eth. xTS6000 Series 15” Advance HMI,	xTS6000-12EDAA1	
		DC 24V, Eth.	xTS6000-15EDAA1	

Note: * For prices please contact nearest branch office



xTE6000_10inch



xTE6000_15inch



xTS6000_15inch

xTE6000

- Wide TFT Color Display (16 Million Colors)
- Resistive Touch Panel
- 24V DC Power Supply
- Compatible with GP-Pro EX Software
- Panel Mount Design
- Industrial Grade Construction

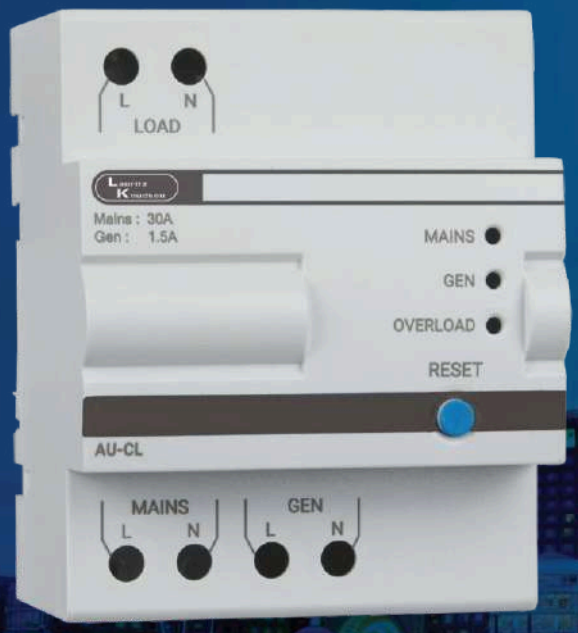
xTS6000

- Wide TFT Color LCD Display (16 Million Colors)
- Projected Capacitive Multi-Touch Panel
- High-Performance CPU for Faster Screen Processing
- Dual Ethernet Ports (on selected models)
- 24V DC Power Supply
- Compatible with GP-Pro EX Software
- Panel Mount Design
- Industrial Grade Construction (IP65 Front Protection)

Experience the robust performance of our ACCL

RELIABLE ELECTRICAL

Single Phase ACCL



Mains rating : 30A

Genset rating : 1A to 30A

Three Phase ACCL
With MCX contactors inside

Range : 32A to 125A

CE



Settable overload current limit at DG side



Separate power consumption monitoring for Mains & Genset



Settable TPN / SPN mode for three phase and single phase DG supply



To Experience Scan or Click

Miniature Circuit Breaker (MCB) [8536]

Range Highlights

- True contact indication for individual pole
- Label holder facility for all configurations
- Conforms to IS/IEC 60898 - 10kA
- Conforms to IS/IEC 60947 - 2
  - » 15kA C-curve till 40 A
  - » 10kA C-curve for 50A, 63A
- Available in B, C & D curves
- Low watt loss - almost 50%of the values prescribed by IS/IEC 60898
- Trip free mechanism
- Design based on advanced current limiting hammer trip mechanism
- No Line-Load bias
- Bi connect feature on both sides
- Suitable for accessory fitment







Rating	Modules 1 Mod = 17.5 mm	B-Curve Cat. No.	M.R.P. (`) Per Unit	C-Curve Cat. No.	M.R.P. (`) Per Unit	D-Curve Cat. No.	M.R.P. (`) Per Unit
Single Pole (SP)							
0.5A	1	-----	-	BB10E50C	640	BB10E50D	665
1A	1	BB10060B	-	BB10010C	640	BB10010D	665
2A	1	BB10100B	-	BB10020C	640	BB10020D	665
3A	1	BB10160B	--	BB10030C	640	BB10030D	665
4A	1	BB10200B	377	BB10040C	640	BB10040D	665
6A	1	BB10250B	377	BB10060C	377	BB10060D	545
10A	1	BB10320B	377	BB10100C	377	BB10100D	545
16A	1	BB10400B	377	BB10160C	377	BB10160D	545
20A	1	BB10500B	377	BB10200C	377	BB10200D	545
25A	1	BB10630B	377	BB10250C	377	BB10250D	545
32A	1		940	BB10320C	377	BB10320D	545
40A	1		940	BB10400C	940	BB10400D	960
50A	1		940	BB10500C	940	BB10500D*	960
63A	1			BB10630C	940	BB10630D*	960
Double Pole (DP)							
0.5A	2	-----	-	BB20E50C	1870	BB20E50D	1905
1A	2	BB20060B	-	BB20010C	1870	BB20010D	1905
2A	2	BB20100B	-	BB20020C	1870	BB20020D	1905
3A	2	BB20160B	-	BB20030C	1870	BB20030D	1905
4A	2	BB20200B	-	BB20040C	1870	BB20040D	1905
6A	2	BB20250B	1305	BB20060C	1305	BB20060D	1385
10A	2	BB20320B	1305	BB20100C	1305	BB20100D	1385
16A	2	BB20400B	1305	BB20160C	1305	BB20160D	1385
20A	2	BB20500B	1305	BB20200C	1305	BB20200D	1385
25A	2	BB20630B	1305	BB20250C	1305	BB20250D	1385
32A	2		1305	BB20320C	1305	BB20320D	1385
40A	2		2125	BB20400C	2125	BB20400D	2260
50A	2		2125	BB20500C	2125	BB20500D*	2260
63A	2		2125	BB20630C	2125	BB20630D*	2260
Three Pole (TP)							
0.5A	3	-----	-	BB30E50C	2725	BB30E50D	2765
1A	3	BB30060B	-	BB30010C	2725	BB30010D	2765
2A	3	BB30100B	-	BB30020C	2725	BB30020D	2765
3A	3	BB30160B	-	BB30030C	2725	BB30030D	2765
4A	3	BB30200B	-	BB30040C	2725	BB30040D	2765
6A	3	BB30250B	2055	BB30060C	2055	BB30060D	2205
10A	3	BB30320B	2055	BB30100C	2055	BB30100D	2205
16A	3	BB30400B	2055	BB30160C	2055	BB30160D	2205
20A	3	BB30500B	2055	BB30200C	2055	BB30200D	2205
25A	3	BB30630B	2055	BB30250C	2055	BB30250D	2205
32A	3		2055	BB30320C	2055	BB30320D	2205
40A	3		3200	BB30400C	3200	BB30400D	3415
50A	3		3200	BB30500C	3200	BB30500D*	3415
63A	3		3200	BB30630C	3200	BB30630D*	3415

Note: Standard Pack Quantity for MCB : SP - 12 Nos., DP - 6 Nos.,TP - 4 Nos., FP - 3 Nos.

*For details, please contact nearest branch office

Miniature Circuit Breaker (MCB) [8536]



Rating	Modules 1 Mod = 17.5 mm	B-Curve Cat. No.	M.R.P. (`) Per Unit	C-Curve Cat. No.	M.R.P. (`) Per Unit	D-Curve Cat. No.	M.R.P. (`) Per Unit
Four Pole (FP)							
0.5A	4	-----	-	BB40E50C	3460	BB40E50D	3465
1A	4	BB40060B	-	BB40010C	3460	BB40010D	3465
2A	4	BB40100B	-	BB40020C	3460	BB40020D	3465
3A	4	BB40160B	-	BB40030C	3460	BB40030D	3465
4A	4	BB40200B	-	BB40040C	3460	BB40040D	3465
6A	4	BB40250B	2875	BB40060C	2875	BB40060D	3000
10A	4	BB40320B	2875	BB40100C	2875	BB40100D	3000
16A	4	BB40400B	2875	BB40160C	2875	BB40160D	3000
20A	4	BB40500B	2875	BB40200C	2875	BB40200D	3000
25A	4	BB40630B	2875	BB40250C	2875	BB40250D	3000
32A	4		2875	BB40320C	2875	BB40320D	3000
40A	4		4030	BB40400C	4030	BB40400D	4435
50A	4		4030	BB40500C	4030	BB40500D*	4435
63A	4		4030	BB40630C	4030	BB40630D*	4435

Note: Standard Pack Quantity for MCB : SP - 12 Nos., DP - 6 Nos.,TP - 4 Nos., FP - 3 Nos.
*For details, please contact nearest branch office

MCBs (Miniature Circuit Breakers) : 80A-125A [8536]

Range Highlights

- Short circuit Breaking Capacity - 15kA (IS/IEC 60947-2, EN 60947-2)
- C & D Characteristics
- Available in SP, DP, TP and FP
- Suitable for Isolation
- Protection Degree - IP 20
- Availability of wide Range of Site Mountable Accessories









Rating	Modules 1 Mod = 17.5 mm	C Curve Cat. No.	M.R.P. (`) Per Unit	D Curve Cat. No.	M.R.P. (`) Per Unit
Single Pole (SP)					
80A	1.5	AU15S10803C	3980	AU15S10803D	4530
100A	1.5	AU15S11003C	4460	AU15S11003D	5065
125A	1.5	AU15S11253C	4800	AU15S11253D	5475
Double Pole (DP)					
80A	3	AU15S20803C	8815	AU15S20803D	10035
100A	3	AU15S21003C	9400	AU15S21003D	10690
125A	3	AU15S21253C	10345	AU15S21253D	11760
Three Pole (TP)					
80A	4.5	AU15S30803C	13905	AU15S30803D	15835
100A	4.5	AU15S31003C	14835	AU15S31003D	16860
125A	4.5	AU15S31253C	16460	AU15S31253D	18705
Four Pole (FP)					
80A	6	AU15S40803C	18165	AU15S40803D	20630
100A	6	AU15S41003C	18895	AU15S41003D	21495
125A	6	AU15S41253C	21400	AU15S41253D	24320



(AC MCB + DC MCB)



AC MCB^ with C-Curve

Description	Modules 1 Mod = 17.5mm	Cat. No.	M.R.P. (`) Per Unit
1 AC 16A DP MCB^ + 1 DC 16A DP 500V MCB	2+2	SC221616	2015
New 1 AC 20A DP MCB^ + 1 DC 20A DP 500V MCB	2+2	SC222020	2015
New 1 AC 20A DP MCB^ + 1 DC 25A DP 500V MCB	2+2	SC222025	2015
New 1 AC 20A DP MCB^ + 1 DC 32A DP 500V MCB	2+2	SC222032	2015
1 AC 25A DP MCB^ + 1 DC 16A DP 500V MCB	2+2	SC222516	2015
New 1 AC 25A DP MCB^ + 1 DC 25A DP 500V MCB	2+2	SC222525	2015
1 AC 32A DP MCB^ + 1 DC 16A DP 500V MCB	2+2	SC223216	2015
New 1 AC 32A DP MCB^ + 1 DC 25A DP 500V MCB	2+2	SC223225	2015
1 AC 32A DP MCB^ + 1 DC 32A DP 500V MCB	2+2	SC223232	2015



DC MCBs as per IEC 60947-2 [8536]

Rated Voltage:
Breaking capacity of 6 kA - BB Series DC MCBs

Rated Voltage:
Breaking capacity of BJ Series DC MCBs

» 10kA till 40 A
» 6kA for 50A, 63A



130V DC SP MCB

Rating	Modules 1 Mod = 17.5mm	Cat. No.	M.R.P. (`) Per Unit
Single Pole (SP)			
0.5A	1	BB10E5DC	910
1A	1	BB1001DC	910
2A	1	BB1002DC	910
3A	1	BB1003DC	910
4A	1	BB1004DC	910
6A	1	BB1006DC	790
10A	1	BB1010DC	790
16A	1	BB1016DC	790
20A	1	BB1020DC	790
25A	1	BB1025DC	790
32A	1	BB1032DC	790
40A	1 1 1	BB1040DC	1040
50A		BB1050DC	1040
63A		BB1063DC	1040

250V DC SP MCB

Rating	Modules 1 Mod = 17.5mm	Cat. No.	M.R.P. (`) Per Unit
Single Pole (SP)			
0.5A	1	BJ10E5DC	1070
1A	1	BJ1001DC	1070
2A	1	BJ1002DC	1070
3A	1	BJ1003DC	1070
4A	1	BJ1004DC	1070
6A	1	BJ1006DC	875
10A	1	BJ1010DC	875
16A	1	BJ1016DC	875
20A	1	BJ1020DC	875
25A	1	BJ1025DC	875
32A	1	BJ1032DC	875
40A	1	BJ1040DC	1210
New 50A	1	BJ1050DC	1210
63A	1	BJ1063DC	1210



250V DC DP MCB

0.5A	2	BB20E5DC	1950
1A	2	BB2001DC	1950
2A	2	BB2002DC	1950
3A	2	BB2003DC	1950
4A	2	BB2004DC	1950
6A	2	BB2006DC	1715
10A	2	BB2010DC	1715
16A	2	BB2016DC	1715
20A	2	BB2020DC	1715
25A	2	BB2025DC	1715
32A	2	BB2032DC	1715
40A	2	BB2040DC	2320
50A	2	BB2050DC	2320
63A	2	BB2063DC	2320

500V DC DP MCB

0.5A	2	**BJ20E5DC**	2230
1A	2	**BJ2001DC**	2230
2A	2	**BJ2002DC**	2230
3A	2	**BJ2003DC**	2230
4A	2	**BJ2004DC**	2230
6A	2	**BJ2006DC**	1885
10A	2	**BJ2010DC**	1885
16A	2	**BJ2016DC**	1885
20A	2	**BJ2020DC**	1885
25A	2	**BJ2025DC**	1885
32A	2	**BJ2032DC**	1885
40A	2	**BJ2040DC**	2400
New 50A	2	**BJ2050DC**	2400
63A	2	**BJ2063DC**	2400

Note: Standard Pack Quantity for MCB : SP - 12 Nos., DP - 6 Nos.

1000V DC MCBs [8536]

Rated Voltage:1000V DC
with breaking capacity of 6 kA - BK Series DC MCBs



Description	Modules 1 Mod = 17.5mm	Cat. No.	M.R.P. (`) Per Unit
DP 6A 1000V DC 6kA MCB	4	BK2006DC	2875
DP 10A 1000V DC 6kA MCB	4	BK2010DC	2875
DP 16A 1000V DC 6kA MCB	4	BK2016DC	2875
DP 20A 1000V DC 6kA MCB	4	BK2020DC	2875
DP 25A 1000V DC 6kA MCB	4	BK2025DC	2875
DP 32A 1000V DC 6kA MCB	4	BK2032DC	2875
DP 40A 1000V DC 6kA MCB	4	BK2040DC	3495
DP 50A 1000V DC 6kA MCB	4	BK2050DC	3495
DP 63A 1000V DC 6kA MCB	4	BK2063DC	3495

Isolators [8536]





Range Highlights
- Conforms to IEC 60947-3
- Utilization category AC-22A
- Available in DP, TP and FP versions in 40A, 63A, 80A & 100A ratings

Rating	Modules 1 Mod = 17.5 mm	Cat. No.	M.R.P. (`) Per Unit	Modules 1 Mod = 17.5 mm	Cat. No.	M.R.P. (`) Per Unit	Modules 1 Mod = 17.5 mm	Cat. No.	M.R.P. (`) Per Unit
	Double Pole (DP)				Three Pole (TP)			Four Pole (FP)	
40A	2	BF204000	915	3	BF304000	1585	4	BF404000	2030
63A	2	BF206300	1160	3	BF306300	1825	4	BF406300	2125
80A	2	BF208000	1480	3	BF308000	2000	4	BF408000	2375
100A	2	BF210000	1550	3	BF310000	2135	4	BF410000	2570

Note: Standard Pack Quantity for Isolator : DP - 6 Nos., TP - 4 Nos., FP - 3 Nos.

RCCB (Residual Current Circuit Breaker) [8536]



Range Highlights
- Conforms to IS 12640 (Part 1) / IEC 61008-1
- RCCBs are available in DP and FP versions from 25 to 100A ratings with 30 mA, 100 mA and 300mA sensitivity



- Truly current operated - operation even at nominal Voltage
- Operates on Core Balance Current Transformer (CBCT) principle
- Advanced neutral mechanism

Rating	Sensitivity	Modules 1 Mod =17.5 mm	Cat. No.	M.R.P. (`) Per Unit
	Double Pole (DP)			
25A	30 mA	2	BG202503	4180
	100 mA	2	BG202510	4685
	300 mA	2	BG202530	4685
New 32A	30 mA	2	BG203203	4780
	100 mA	2	BG203210	5355
	300 mA	2	BG203230	5355
40A	30 mA	2	BG204003	4780
	100 mA	2	BG204010	5355
	300 mA	2	BG204030	5355
63A	30 mA	2	BG206303	5960
	100 mA	2	BG206310	6455
	300 mA	2	BG206330	6455
100A	30 mA	2	BG210003	10705
	100 mA	2	BG210010	11245
	300 mA	2	BG210030	11245

Rating	Sensitivity	Modules 1 Mod =17.5 mm	Cat. No.	M.R.P. (`) Per Unit
	Four Pole (FP)			
25A	30 mA	4	BG402503	5860
	100 mA	4	BG402510	6135
	300 mA	4	BG402530	6135
New 32A	30 mA	4	BG403203	5920
	100 mA	4	BG403210	6240
	300 mA	4	BG403230	6240
40A	30 mA	4	BG404003	5920
	100 mA	4	BG404010	6240
	300 mA	4	BG404030	6240
63A	30 mA	4	BG406303	6690
	100 mA	4	BG406310	7155
	300 mA	4	BG406330	7155
100A	30 mA	4	BG410003	11665
	100 mA	4	BG410010	12095
	300 mA	4	BG410030	12095

RCCBs (Residual Current Circuit Breakers) : Type-Adi (with Added immunity) [8536]




Range Highlights
- Wide Range of Current Ratings - 25A to 100A
- Precise Sensitivities for variety of applications - from 30mA to 300mA
- 2P & 4P versions
- Suitable for Isolation
- Protection Degree - IP 20
- Availability of wide Range of Site Mountable Accessories
- Type Adi: Suitable for AC + Pulsating DC (Type A) + Harmonics

Rating	Sensitivity	Modules 1 Mod = 17.5 mm	CAT Nos.	M.R.P. (`) Per Unit
	2P Adi			
25A	30mA	2	AURAD202503	7945
	100mA	2	AURAD202510	8310
	300mA	2	AURAD202530	8310
40A	30mA	2	AURAD204003	8430
	100mA	2	AURAD204010	8565
	300mA	2	AURAD204030	8565
63A	30mA	2	AURAD206303	9860
	100mA	2	AURAD206310	10050
	300mA	2	AURAD206330	10050
100A	30mA	2	AURAD210003	14570

Rating	Sensitivity	Modules 1 Mod = 17.5 mm	CAT Nos.	M.R.P.(`) Per Unit
	4P Adi			
25A	30mA	4	AURAD402503	9605
	100mA	4	AURAD402510	9785
	300mA	4	AURAD402530	9785
40A	30mA	4	AURAD404003	9975
	100mA	4	AURAD404010	10130
	300mA	4	AURAD404030	10130
63A	30mA	4	AURAD406303	10860
	100mA	4	AURAD406310	11085
	300mA	4	AURAD406330	11085
100A	30mA	4	AURAD410003	17300
	300mA	4	AURAD410030	17300

RELIABLE ELECTRICAL

All-Rounder RCDs (RCCB & RCBO)

Specially designed Adi RCDs ensure Safe and Reliable protection for All Applications in AC networks with Pulsating DC along with Harmonics



Added Immunity

RCBOs (Residual Current Breaker with Overcurrent Protection) [8536]

Range Highlights*

- Conforms to IEC 61009-1, IS 12640-2, EN 61009-1
- Short circuit Breaking Capacity - 10kA
- Precise Sensitivities for a variety of applications
  - » from 10mA to 300mA
- Suitable for Isolation



- Availability of wide Range of Site Mountable Accessories
- Available in
  - »Type AC: For standard AC installations
  - » Type Adi: Suitable for AC + Pulsating DC (Type A) + Harmonics

Type-AC

Rating	Sensitivity	Modules 1 Mod = 17.5 mm	CAT Nos.	M.R.P. (`) Per Unit
2P AC#				
6A	10mA	2	AUF3C200601	7115
	30mA	2	AUF3C200603	7115
	100mA	2	AUF3C200610	7260
	300mA	2	AUF3C200630	7345
10A	10mA	2	AUF3C201001	7115
	30mA	2	AUF3C201003	7115
	100mA	2	AUF3C201010	7260
	300mA	2	AUF3C201030	7345
16A	10mA	2	AUF3C201601	7115
	30mA	2	AUF3C201603	7115
	100mA	2	AUF3C201610	7260
	300mA	2	AUF3C201630	7345
20A	30mA	2	AUF3C202003	7115
	100mA	2	AUF3C202010	7260
	300mA	2	AUF3C202030	7345
25A	30mA	2	AUF3C202503	7115
	100mA	2	AUF3C202510	7260
	300mA	2	AUF3C202530	7345
32A	30mA	2	AUF3C203203	7115
	100mA	2	AUF3C203210	7260
	300mA	2	AUF3C203230	7345
40A	30mA	2	AUF3C204003	7115
	100mA	2	AUF3C204010	7260
	300mA	2	AUF3C204030	7345
63A	30mA	4	AUF3C206303	8610
	100mA	4	AUF3C206310	9130
	300mA	4	AUF3C206330	9200
4P AC				
16A	30mA	7.5	AUF3C401603	7780
	100mA	7.5	AUF3C401610	8660
	300mA	7.5	AUF3C401630	8835
20A	30mA	7.5	AUF3C402003	7780
	100mA	7.5	AUF3C402010	8660
	300mA	7.5	AUF3C402030	8835
25A	30mA	7.5	AUF3C402503	7780
	100mA	7.5	AUF3C402510	8660
	300mA	7.5	AUF3C402530	8835
32A	30mA	7.5	AUF3C403203	8035
	100mA	7.5	AUF3C403210	8665
	300mA	7.5	AUF3C403230	8860
40A	30mA	7.5	AUF3C404003	8160
	100mA	7.5	AUF3C404010	8665
	300mA	7.5	AUF3C404030	8890
63A	30mA	7.5	AUF3C406303	9780
	100mA	7.5	AUF3C406310	9965
	300mA	7.5	AUF3C406330	9965
80A	30mA	12	AUF3C408003	37895
	100mA	1 2	AUF3C408010	38745
	300mA	1 2	AUF3C408030	38745
100A	30mA	1 2	AUF3C410003	40515
	100mA	1 2	AUF3C410010	41485
	300mA	12	AUF3C410030	41485

#For 2P AC/Adi D Curve RCBO, please contact nearest branch office

Type-Adi

Rating	Sensitivity	Modules 1 Mod = 17.5 mm	CAT Nos.	M.R.P. (`) Per Unit
2P Adi				
6A	30mA	2	AUF3D200603	9600
	100mA	2	AUF3D200610	10575
	300mA	2	AUF3D200630	10970
10A	30mA	2	AUF3D201003	9600
	100mA	2	AUF3D201010	10575
	300mA	2	AUF3D201030	10970
16A	30mA	2	AUF3D201603	9600
	100mA	2	AUF3D201610	10575
	300mA	2	AUF3D201630	10970
20A	30mA	2	AUF3D202003	9600
	100mA	2	AUF3D202010	10575
	300mA	2	AUF3D202030	10970
25A	30mA	2	AUF3D202503	9600
	100mA	2	AUF3D202510	10575
	300mA	2	AUF3D202530	10970
32A	30mA	2	AUF3D203203	9600
	100mA	2	AUF3D203210	10575
	300mA	2	AUF3D203230	10970
40A	30mA	2	AUF3D204003	9600
	100mA	2	AUF3D204010	10575
	300mA	2	AUF3D204030	10970
63A	30mA	4	AUF3D206303	11315
	100mA	4	AUF3D206310	11965
	300mA	4	AUF3D206330	12075
4P Adi				
16A	30mA	7.5	AUF3D401603	10220
	100mA	7.5	AUF3D401610	11365
	300mA	7.5	AUF3D401630	11600
20A	30mA	7.5	AUF3D402003	10220
	100mA	7.5	AUF3D402010	11365
	300mA	7.5	AUF3D402030	11600
25A	30mA	7.5	AUF3D402503	10220
	100mA	7.5	AUF3D402510	11365
	300mA	7.5	AUF3D402530	11600
32A	30mA	7.5	AUF3D403203	10545
	100mA	7.5	AUF3D403210	11380
	300mA	7.5	AUF3D403230	11615
40A	30mA	7.5	AUF3D404003	10710
	100mA	7.5	AUF3D404010	11380
	300mA	7.5	AUF3D404030	11665
63A	30mA	7.5	AUF3D406303	12830
	100mA	7.5	AUF3D406310	13090
	300mA	7.5	AUF3D406330	13090
80A	30mA	12	AUF3D408003	37895
	100mA	12	AUF3D408010	38745
	300mA	12	AUF3D408030	38745
100A	30mA	12	AUF3D410003	40515
	100mA	12	AUF3D410010	41485
	300mA	12	AUF3D410030	41485

*For technical details, please contact nearest branch office

SPDs (Surge Protection Devices) [8536]



Range Highlights

- Conforms to IEC 61643-11
- Available in Type 2 and Type 1+2
- Type 2 : Protection against indirect lightning and switching surges
  - » Maximum Discharge Current - Imax up to 70kA
- Type 1+2 : Protection against direct and indirect lightning surges
  - » Maximum Discharge Current - Imax up to 100kA

New

800V Solar Application

Description	Configuration	Modules 1 Mod = 17.5 mm	Voltage (Uc)	Cat. No.	M.R.P. (`) Per Unit
Type 2, I_{max} 40kA	3P	4	1500	AUSP023P40-1500	17250
Type 1+2, I_{imp} 12.5kA	3P	5	1360	AUSP123P50-1360	51750
Type 1+2, I_{imp} 12.5kA	3P	4	880	AUSP123P50-880	35500

440V Application (Common + Differential Mode)

Description	I_{max}	Configuration	Modules 1 Mod = 17.5 mm	Cat. No.	M.R.P. (`) Per Unit
Type 1+2, I_{imp} 12.5kA	50kA	1P+N	2	AUSP121PN50D	13750
		3P+N	4	AUSP123PN50D	26335
Type 2	40kA	1P+N	1	AUSP021PN40D	8595
		3P+N	2	AUSP023PN40D	17175
Type 2	15kA	1P+N	1	AUSP021PN15D	6875
		3P+N	2	AUSP023PN15D	13525
Type 1+2, I_{imp} 8kA	100kA	1P+N	2	AUSP121PN100D	12360
		3P+N	4	AUSP123PN100D	24290
Type 2	70kA	1P+N	2	AUSP021PN70D	13500
		3P+N	4	AUSP023PN70D	22485

SPD Cartridges

Description	Cat. No.	M.R.P. (`) Per Unit
Cartridge for AUSP021PN15D	AUSC021PN15D	3550
Cartridge for AUSP021PN40D	AUSC021PN40D	4420
Cartridge for AUSP021PN70D / AUSP023PN70D	AUSC021PN70D	4725
Cartridge for AUSP023PN15D#	AUSC023PN15D	4640
Cartridge for AUSP023PN40D#	AUSC023PN40D	5900
Cartridge for AUSP121PN100D / AUSP123PN100D	AUSC121PN100D	7080
Cartridge for AUSP121PN50D / AUSP123PN50D	AUSC121PN50D	7645
Cartridge for AUSP023PN15D#	AUSC023PN15DG	5390
Cartridge for AUSP023PN40D#	AUSC023PN40DG	5625

#For technical details, please contact nearest branch office

ACCL (Automatic Changeover with Current Limiter) [8536]

Single Phase ACCL



Range Highlights

- Conforms to IEC 60947-6, IEC 60947-3
- Wide Range of Current Ratings » (Generator side) - 1A to 30A » (Electricity Board side) - 30A
- RoHS compliant

Description EB/DG	Modules 1 Mod = 17.5 mm	CAT Nos.	M.R.P. (`) Per Unit
30A/1A	4	AUCL01030001	3200
30A/1.5A	4	AUCL010301E5	3200
30A/2A	4	AUCL01030002	3200
30A/2.5A	4	AUCL010302E5	3200
30A/3A	4	AUCL01030003	3200
30A/4A	4	AUCL01030004	3200
30A/5A	4	AUCL01030005	3200
30A/6A	4	AUCL01030006	3200
30A/8A	4	AUCL01030008	3200
30A/10A	4	AUCL01030010	3200
30A/12A	4	AUCL01030012	3200
30A/15A	4	AUCL01030015	3200
30A/20A	4	AUCL01030020	3200
30A/30A	4	AUCL01030030*	3200

*Non-current limiting variant

Three Phase ACCL



Range Highlights

- Settable overload current limit at DG side
- Separate power consumption monitoring for Mains & Genset
- Settable overvoltage & undervoltage protection
- Settable TPN or SPN mode at DG side
- Protection against single phasing

Description (AC-1) EB/DG	Cat. No.	M.R.P. (`) Per Unit
32A / 32A	AUCL03032032	22095
40A / 32A	AUCL03040032	22771
40A / 40A	AUCL03040040	24645
50A / 50A	AUCL03050050	35128
63A / 50A	AUCL03063050	38761
63A / 63A	AUCL03063063	43907
80A / 80A	AUCL03080080	66916
125A / 125A	AUCL03125125	112643

For 3 Phase ACCL programming video please scan the QR code or click here

Changeover Switches [8536]



Range Highlights
- Conforms to IEC 60947-3 and IS/IEC 60947-3
- Available in 3 positions (I-O-II) with centre off position
- Utilization category AC-22A

Rating	Modules 1 Mod = 17.5 mm	Cat. No.	M.R.P. (`) Per Unit
Double Pole			
25A	2	AUC00202500	2610
40A	2	AUC00204000	3995
63A	3	AUC00206300	4645
Four Pole			
40A	4	AUC00404000	6885
63A	6	AUC00406300	7805

Accessories

Accessories [8538]



All Half Module and One Module Accessories are common for AU MCBs, RCCBs and RCBOs

Description	Configuration	Modules 1 Mod = 17.5 mm	Voltage	CAT Nos.	M.R.P. (₹) Per Unit
Auxiliary Contact	1NO+1NC	0.5	240V AC, 24V DC	AUAXAC240	1380
AUX/TAC*	1NO+1NC	0.5	240V AC, 24V DC	AUATAC240	1615
HR AUX/TAC*	1NO+1NC	0.5	240V AC, 24V DC	AUATAC240HR	1615
Undervoltage Release	-	1	240V AC	AUUVAC240	3260
	-	1	24V DC	AUUVDC024	3260
Overvoltage Release		1	240V AC	AUOVAC240	4030
Shunt Release		1	240V AC	AUSRAC240	3740
		1	24V DC	AUSRDC024	3740
Padlock-Suitable for Lock Hasp 3.5 - 5 mm dia. max	Suitable for 1Pole=1Mod devices:RCCBs, RCBOs, Changeover Switches up to 40A			AUPD01	735
	Suitable for 1Pole-1.5Mod devices: MCBs 80A-125A, Changeover Switch 63A			AUPD02	830

Note: Standard Pack Quantity for Padlock - 2 Nos.
*For 80A-125A MCBs please contact nearest branch office

Control & Monitoring Devices

Modular Contactors [8536]



Range Highlights
- Wide Range of Current Ratings:
  - » 25A, 40A and 63A
- Conforms to :
  - » IEC 61095, EN 61095
  - » IEC 60947-4-1, EN 60947-4-1
  - » IEC 60947-5-1
- Protection Degree IP 20

Description (AC-1)	Modules 1 Mod = 17.5 mm	Cat. No.	M.R.P. (`) Per Unit
25A-1NO 25A-	1	AUMC1002501	2800
2NO 40A-2NO	1	AUMC2002501	3515
40A-3NO 40A-	3	AUMC2004003	6010
4NO 63A-2NO+2NC	3	AUMC3004003	8615
63A-3NO 63A-4NO	3	AUMC4004003	10105
	3	AUMC2206303	10680
Accessory [8538]	3	AUMC3006303	10945
Auxiliary Contact, 2NO	3	AUMC4006303	12050

	0.5	AUMCAUX240	2620

Energy Meters [9030]



Range Highlights
- DIN mounting whole current operated meter
- Accuracy Class 1.0
- Inbuilt RS485 option
- Parameters : Voltage, Current, kW, kWh, kVA, kVAh, RPM, Load hours, Interruptions

Description	Modules 1 Mod = 17.5 mm	Cat. No.	M.R.P. (`) Per Unit
Single Phase - 60A	2	WD401010OOOO	3940
Three Phase - 80A	5	WD402010OOOO	8530
Single Phase - 60A (RS485)	2	WD401011OOOO	5825
Three Phase - 80A (RS485)	5	WD402011OOOO	12870

Indicating Lights [8531]



Description	Modules 1 Mod = 17.5 mm	Cat. No.	M.R.P. (`) Per Unit
RED	1	AUIL01RED00	1610
YELLOW	1 1 1 1	AUIL01YEL00	1610
BLUE GREEN		AUIL01BLU00	1610
RED-YELLOW-BLUE		AUIL01GRE00	1610
		AUIL01RYB00	1960

Auxiliary & Accessories for Exora MCBs [8538]



Description	Cat. No.	M.R.P. (`) Per Unit
Auxiliary Contact - 6A , 240V AC, (1NO+1NC), 0.5 Mod	BZA11006	1325
Shunt Release - 240V AC, 1 Mod	BZS00240	3625
Trip Alarm Contact - 6A, 240V AC, (1NO+1NC), 0.5 Mod	BZT11006	1545

Plugs



Highlights
- Conforms to IEC 60309 -1&2
- Mechanical Impact - IK08
- Ingress Protection - IP44 & IP67
- Fire Resistance - 850°C as per IEC 60695-2-11
- Easy Screw connection with same orientation of clamp screws

Description	Cat NO	M.R.P. (`) Per Unit
Plug - IP44		
16A, 2P+E	PSKPM30164	700
32A, 2P+E	PSKPM30324	1105
16A, 3P+E	PSKPM40164	895
32A, 3P+E	PSKPM40324	1305
16A, 3P+N+E	PSKPM50164	945
32A, 3P+N+E	PSKPM50324	1260
Plug - IP67		
16A, 2P + E	PSKPM30167	1560
32A, 2P + E	PSKPM30327	2200
63A, 2P + E	PSKPM30637	6250
16A, 3P + E	PSKPM40167	1760
32A, 3P + E	PSKPM40327	2785
63A, 3P + E	PSKPM40637	5950
16A, 3P + N + F	PSKPM50167	1885
32A, 3P + N + E	PSKPM50327	2400
63A, 3P + N + E	PSKPM50637	5965
125A, 3P + N + E	PSKPM51257	18215

Socket



Highlights
- Conforms to IEC 60309 -1&2
- Mechanical Impact - IK08
- Ingress Protection - IP44 & IP67
- Fire Resistance - 850°C as per IEC 60695-211
- Easy Screw connection with same orientation of clamp screws

Description	Cat NO	M.R.P. (`) Per Unit
Socket - IP44		
16A, 2P+E	PSKSM30164	970
32A, 2P+E	PSKSM30324	1355
16A, 3P+E	PSKSM40164	1140
16A, 3P + N + E	PSKSM50164	1240
32A, 3P + N + E	PSKSM50324	1660
Socket - IP67		
16A, 2P+E	PSKSM30167	1830
32A, 2P+E	PSKSM30327	2515
63A, 2P+E	PSKSM30637	6800
16A, 3P+E	PSKSM40167	2295
63A, 3P+E	PSKSM40637	6865
16A, 3P + N + E	PSKSM50167	2400
32A, 3P + N + E	PSKSM50327	2805
63A, 3P + N + E	PSKSM50637	6975
125A, 3P + N + E	PSKSM51257	21895

Socket Angled



Highlights
- Conforms to IEC 60309 -1&2
- Mechanical Impact - IK08
- Ingress Protection - IP44 & IP67
- Fire Resistance - 850°C as per IEC 60695-2-11
- Easy Screw connection with same orientation of clamp screws

Description	Cat NO	M.R.P. (`) Per Unit
Socket Angled - IP44		
16A, 2P+E	PSKSA30164	755
32A, 2P+E	PSKSA30324	1335
16A, 3P+E	PSKSA40164	1140
32A, 3P+E	PSKSA40324	1575
16A, 3P+N+E	PSKSA50164	1215
32A, 3P+N+E	PSKSA50324	1540
Socket Angled - IP67		
16A, 2P+E	PSKSA30167	1440
32A, 2P+E	PSKSA30327	1875
63A, 2P+E	PSKSA30637	6140
32A, 3P+E	PSKSA40327	2785
63A, 3P+E	PSKSA40637	6150
32A, 3P+N+E	PSKSA50327	2220
63A, 3P+N+E	PSKSA50637	6275
125A, 3P+N+E	PSKSA51257	20820

Socket Straight



Highlights
- Conforms to IEC 60309 -1&2
- Mechanical Impact - IK08
- Ingress Protection - IP44 & IP67
- Fire Resistance - 850°C as per IEC 60695-2-11
- Easy Screw connection with same orientation Of clamp screws

Description	Cat NO	M.R.P. (`) Per Unit
Socket Straight- IP44		
16A, 2P+E	PSKSS30164	860
32A, 2P+E	PSKSS30324	1370
32A, 3P+N+E	PSKSS50324	1715
Socket Straight- IP67		
16A, 2P+E	PSKSS30167	1450
63A, 2P+E	PSKSS30637	7435
63A, 3P+E	PSKSS40637	6210
63A, 3P+N+E	PSKSS50637	6210
125A, 3P+N+E	PSKSS51257	20820

Distribution Board suitable for Aluminum shuttering (Mivan) Construction



DBs suitable for Aluminum Shuttering Construction [8537]

SPN DBs

Highlights

- Available in CRCA sheet steel, RAL9003, powder coated
- Ready to use DBs - Provided with 100A insulated phase bus-bar | neutral bar/s with shroud/s | earth bar/s | sticking saddles | cement spill protector | color-coded interconnecting wire set | cable ties | blanking plates and circuit identification label
- With provision for DP MCB/Isolator/RCCB/RCBO as incomer and SP MCBs as outgoings

Description	No. of Modules		Cat. Nos.	M.R.P. (`) Per Unit
	Incomer + Outgoing			
IP 43 - Metal Door				
4 way	2	2	LTSD04M	*
6 way	2	4	LTSD06M	*
8 way	2	6	LTSD08M	*
12 way	2	10	LTSD12M	*
16 way	2	14	LTSD16M	*

TPN DBs

Highlights

- Available in CRCA sheet steel, RAL 9003, powder coated
- Ready to use DBs - Provided with 100A insulated phase bus-bars |neutral bar/s with shroud/s | earth bar/s | sticking saddles | cementspill protector | color-coded interconnecting wire set | cable ties |blanking plates and circuit identification labels
- With provision for FP MCB/Isolator/RCCB/RCBO as incomer and SP MCBs as outgoings

Description	No. of Modules		Cat. Nos.	M.R.P. (`) Per Unit
	Incomer + Outgoing			
IP 43 - Metal Door				
4 way	8	4+4+4	LTTD04M	*
6 way	8	6+6+6	LTTD06M	*
8 way	8	8+8+8	LTTD08M	*

* For details, please contact nearest branch office

EXORA.N
Distribution Boards

DESIGN OR SAFETY?

OBVIOUSLY BOTH. OBVIOUSLY EXORA.N DB.

#ExoraHaiTohSafeHai



©2026. ALL RIGHTS RESERVED

SPN DB [8537] New

Highlights

- Conforms to IEC 61439-1 & 3
- IK 08-for single door DBs, IK 09-for double door Dbs
- Available in CRCA sheet steel, RAL9003, powder coated
- Ready to use DBs - Provided with 100A insulated phase bus-bar | neutral bar/s with shroud/s | earth bar/s | sticking saddles | cement spill protector | color-coded interconnecting wire set | cable ties | blanking plates and circuit identification label
- With provision for DP MCB/Isolator/RCCB/RCBO as incomer and SP MCBs as outgoings



Description	No. of Modules		Cat. Nos.	M.R.P. (`) Per Unit
	Incomer + Outgoing			
IP 30 - Single Door				
4 way	2	2	DESPN004SDS	2175
6 way	2	4	DESPN006SDS	2275
8 way	2	6	DESPN008SDS	2620
12 way	2	10	DESPN012SDS	3110
16 way	2	14	DESPN016SDS	3810
18 way	2	16	DESPN018SDS	4430
IP 43 - Metal Door				
4 way	2	2	DESPN004DDS	2815
6 way	2	4	DESPN006DDS	3245
8 way	2	6	DESPN008DDS	3435
12 way	2	10	DESPN012DDS	4125
16 way	2	14	DESPN016DDS	5265
18 way	2	16	DESPN018DDS	5515
IP 43 - Glazed Door				
4 way	2	2	DESPN004GDS	3770
6 way	2	4	DESPN006GDS	4010
8 way	2	6	DESPN008GDS	4360
12 way	2	10	DESPN012GDS	5310
16 way	2	14	DESPN016GDS	6595
18 way	2	16	DESPN018GDS	6975
IP 54 - Metal Door				
4 way	2	2	DESPN00454S	9915
6 way	2	4	DESPN00654S	11055
8 way	2	6	DESPN00854S	11755
12 way	2	10	DESPN01254S	13500
16 way	2	14	DESPN01654S	15030
18 way	2	16	DESPN01854S	15365

TPN DB [8537] New

Highlights

- Conforms to IEC 61439-1 & 3
- IK 08-for single door DBs, IK 09-for double door Dbs
- Available in CRCA sheet steel, RAL 9003, powder coated
- Ready to use DBs - Provided with 100A insulated phase bus-bars |neutral bar/s with shroud/s | earth bar/s | sticking saddles | cement spill protector | color-coded interconnecting wire set | cable ties | blanking plates and circuit identification labels
- With provision for FP MCB/Isolator/RCCB/RCBO as incomer and SPMCBs as outgoings



Description	No. of Modules		Cat. Nos.	M.R.P. (`) Per Unit
	Incomer	Outgoing		
IP 30 - Single Door				
4 way	4	4+4+4	DETPE004SDS	5630
6 way	4	6+6+6	DETPE006SDS	6910
4 way	8	4+4+4	DETPN004SDS	5925
6 way	8	6+6+6	DETPN006SDS	7340
8 way	8	8+8+8	DETPN008SDS	8655
12 way	8	12+12+12	DETPN012SDS	12475
16 way	8	16+16+16	DETPN016SDS	15210
IP 43 - Metal Door				
4 way	4	4+4+4	DETPE004DDS	6615
6 way	4	6+6+6	DETPE006DDS	8220
4 way	8	4+4+4	DETPN004DDS	6855
6 way	8	6+6+6	DETPN006DDS	8540
8 way	8	8+8+8	DETPN008DDS	10300
12 way	8	12+12+12	DETPN012DDS	15430
16 way	8	16+16+16	DETPN016DDS	19150
IP 43 - Glazed Door				
4 way	4	4+4+4	DETPE004GDS	8985
6 way	4	6+6+6	DETPE006GDS	10800
4 way	8	4+4+4	DETPN004GDS	9350
6 way	8	6+6+6	DETPN006GDS	11380
8 way	8	8+8+8	DETPN008GDS	13495
12 way	8	12+12+12	DETPN012GDS	20700
16 way	8	16+16+16	DETPN016GDS	24880
IP 54 - Metal Door				
4 way	4	4+4+4	DETPE00454S	22445
6 way	4	6+6+6	DETPE00654S	26230
4 way	8	4+4+4	DETPN00454S	23720
6 way	8	6+6+6	DETPN00654S	28565
8 way	8	8+8+8	DETPN00854S	31225
12 way	8	12+12+12	DETPN01254S	44015
16 way	8	16+16+16	DETPN01654S	52820

For ordering old DBs,replace Cat no with “DB” instead of “DE”.
Eg. - New DB Cat no for SPN 12W DD - DESPN012DDS, Old DB Cat no for same will be DBSPN012DDS. Old DBs are available till stock last.

PPI DB [8537] New

Highlights
- Conforms to IEC 61439-1 & 3
- IK 09-for double door DBs
- Available in CRCA sheet steel, RAL 9003, powder coated
- Ready to use DBs - Provided with 100A insulated phase bus-bars | neutral bar/s with shroud/s | earth bar/s | sticking saddles | cement spill protector | color-coded interconnecting wire set | cable ties | blanking plates and circuit identification labels
- With provision for FP MCB / Isolator / RCCB / RCBO as incomer, DP RCCB/RCBO as sub-incomer and SP MCBs as outgoings



IP 43 - Metal Door

Horizontal PPI DBs

Description	No. of Modules			Cat. Nos.	M.R.P. (`) Per Unit
	Incomer	Sub-Incomer	Outgoing		
IP 43 - Metal Door					
4 way	8	2+2+2	4+4+4	DEHPI004DD	12305
6 way	8	2+2+2	6+6+6	DEHPI006DD	14570
8 way	8	2+2+2	8+8+8	DEHPI008DD	17470
12 way	8	2+2+2	12+12+12	DEHPI012DD	24075
16 way	8	2+2+2	16+16+16	DEHPI016DD	28885



Tier PPI DBs

Description	No. of Modules			Cat. Nos.	M.R.P. (`) Per Unit
	Incomer	Sub-Incomer	Outgoing		
IP 43 - Metal Door					
6 way	8	2+2+2	6+6+6	DETPI006DD	15080
8 way	8	2+2+2	8+8+8	DETPI008DD	18905
10 way	8	2+2+2	10+10+10	DETPI010DD	19815
12 way	8	2+2+2	12+12+12	DETPI012DD	20995
16 way	8	2+2+2	16+16+16	DETPI016DD	23935
12 way	MCCB*	2+2+2	12+12+12	DETPL012DD	22455

*Suitable for 3 Pole & 4 Pole DU100H, DU100D, DN0-100D & DN0-100C MCCB as incomer

TPN Phase Segregated DB [8537] New

Highlights
- Conforms to IEC 61439-1 & 3
- IK 09-for double door DBs
- Available in CRCA sheet steel, RAL 9003, powder coated
- Ready to use DBs - Provided with 100A insulated phase bus-bars | neutral bar/s with shroud/s | earth bar/s | sticking saddles | cement spill protector | color-coded interconnecting wire set | cable ties | blanking plates and circuit identification labels
- With provision for
  - » Modular Incomer - FP MCB/Isolator/RCCB/RCBO as incomer, DP RCCB/RCBO as sub-incomer and SP MCBs as outgoings
  - » MCCB Incomer - MCCB* as incomer, DP RCCB/RCBO as sub-incomer and SP MCBs as outgoings



With Modular Incomer

Description	No. of Modules			Cat. Nos.	M.R.P. (`) Per Unit
	Incomer	Sub-Incomer	Outgoing		
IP 43 - Metal Door					
4 way	8	4+4+4	4+4+4	DEPSG004DD	18070
6 way	8	4+4+4	6+6+6	DEPSG006DD	20375
8 way	8	4+4+4	8+8+8	DEPSG008DD	22735
12 way	8	4+4+4	12+12+12	DEPSG012DD	28205



With MCCB Incomer

Description	No. of Modules			Cat. Nos.	M.R.P. (`) Per Unit
	Incomer*	Sub-Incomer	Outgoing		
IP 43 - Metal Door					
4 way	MCCB	4+4+4	4+4+4	DEPGL004DD	24860
6 way	MCCB	4+4+4	6+6+6	DEPGL006DD	28425
8 way	MCCB	4+4+4	8+8+8	DEPGL008DD	32875
12 way	MCCB	4+4+4	12+12+12	DEPGL012DD	37075

*Suitable for 3 Pole & 4 Pole DU100H, DU100D, DN0-100D & DN0-100C MCCB as incomer

For ordering old DBs,replace Cat no with “DB” instead of “DE”.
Eg. - New DB Cat no for SPN 12W DD - DESPN012DDS, Old DB Cat no for same will be DBSPN012DDS. Old DBs are available till stock last.

Vertical TPN DB with MCCB Incomer [8537]

New

Highlights

- Conforms to IEC 61439-1 & 3
- IK 09-for double door Dbs
- Available in CRCA sheet steel, RAL 9003, powder coated
- Ready to use DBs - Provided with insulated vertical phase bus-bars | neutral bar/s with shroud/s | earth bar/s | sticking saddles | cement spill protector | color-coded interconnecting wire set | cable ties | blanking plates and circuit identification labels
- With provision for 3 pole and 4 Pole MCCB* as incomer and SP/TP MCBs as outgoings



Up to 125A MCCB Incomer

Description	No. of Modules		Cat. Nos.	M.R.P. (`) Per Unit
	Incomer*	Outgoing		
IP 43 - Metal Door				
4 way	MCCB	4+4+4	DEVTL004DD	20550
6 way	MCCB	6+6+6	DEVTL006DD	23355
8 way	MCCB	8+8+8	DEVTL008DD	25710
12 way	MCCB	12+12+12	DEVTL012DD	34980
16 way	MCCB	16+16+16	DEVTL016DD	42115
IP 54 - Metal Door				
4 way	MCCB	4+4+4	DEVTL00454	42960
6 way	MCCB	6+6+6	DEVTL00654	48990
8 way	MCCB	8+8+8	DEVTL00854	53035

*Suitable for 3 Pole & 4 Pole DZ0 MCCB as incomer.
In case of any other MCCB frame requirement please contact nearest branch.

Vertical TPN DB with Modular Incomer [8537]

New

Highlights

- Conforms to IEC 61439-1 & 3
- IK 09-for double door Dbs
- Available in CRCA sheet steel, RAL 9003, powder coated
- Ready to use DBs - Provided with insulated vertical phase bus-bars | neutral bar/s with shroud/s | earth bar/s | sticking saddles | cement spill protector | color-coded interconnecting wire set | cable ties | blanking plates and circuit identification labels
- With provision for FP MCB/Isolator/RCCB/RCBO as incomer and SP/ TP MCBs as outgoings



Description	No. of Modules		Cat. Nos.	M.R.P. (`) Per Unit
	Incomer	Outgoing		
IP 43 - Metal Door				
4 way	8	4+4+4	DEVTM004DD	17375
6 way	8	6+6+6	DEVTM006DD	19355
8 way	8	8+8+8	DEVTM008DD	22470
12 way	8	12+12+12	DEVTM012DD	30590
16 way	8	16+16+16	DEVTM016DD	36500
IP 54 - Metal Door				
4 way	8	4+4+4	DEVTM00454	37075
6 way	8	6+6+6	DEVTM00654	40445
8 way	8	8+8+8	DEVTM00854	44665

Vertical TPN DB with MCCB Incomer [8537]

New



Up to 250A MCCB Incomer

Description	No. of Modules		Cat. Nos.	M.R.P. (`) Per Unit
	Incomer*	Outgoing		
IP 43 - Metal Door				
4 way	MCCB	4+4+4	DEVTH004DD	26825
6 way	MCCB	6+6+6	DEVTH006DD	30040
8 way	MCCB	8+8+8	DEVTH008DD	33040
12 way	MCCB	12+12+12	DEVTH012DD	39985
16 way	MCCB	16+16+16	DEVTH016DD	53735
IP 54 - Metal Door				
4 way	MCCB	4+4+4	DEVTH00454	49080
6 way	MCCB	6+6+6	DEVTH00654	53585
8 way	MCCB	8+8+8	DEVTH00854	55420

*Suitable for 3 pole and 4 pole DU250, DU250C & DN1 MCCB as incomer

Flexi/Row DB [8537]

New

Highlights

- Conforms to IEC 61439-1 & 3
- IK 09-for double door Dbs
- Available in CRCA sheet steel, RAL 9003, powder coated
- Ready to use DBs - neutral bar/s with shroud/s | earth bar/s | sticking saddles | cement spill protector | cable ties | circuit identification labels
- With provision to mount modular devices as per requirement



Description	No. of Modules Per Row	Cat. Nos.	M.R.P. (`) Per Unit
IP 43 - Metal Door			
2 Row 28 Module	14	DEROW228DD	8810
3 Row 42 Module	14	DEROW342DD	10560
4 Row 56 Module	14	DEROW456DD	11480
4 Row 64 Module	16	DEROW464DD	13355

For ordering old DBs,replace Cat no with “DB” instead of “DE”.
Eg. - New DB Cat no for SPN 12W DD - DESPN012DDS, Old DB Cat no for same will be DBSPN012DDS. Old DBs are available till stock last.

TPN Phase Selector DB [8537] New

Highlights
- Conforms to IEC 61439-1 & 3
- IK 09-for double door Dbs
- Available in CRCA sheet steel, RAL 9003, powder coated
- Ready to use DBs - Provided with 3 nos. of 63A E&A rotary switches | 3 nos. of rocker switches for phase identification | 100A insulated phase bus-bars | neutral bar/swith shroud/s | set | earth bar/s | sticking saddles | color-coded interconnecting wire cable ties | blanking plates and circuit identification labels
- With provision for - FP MCB/Isolator/RCCB/RCBO as incomer and SP MCBs as outgoings



Description	No. of Modules		Cat. Nos.	M.R.P. (`) Per Unit
	Incomer	Outgoing		
IP 43 - Metal Door				
4 way	8	4+4+4	DEPSR004DD	21560
6 way	8	6+6+6	DEPSR006DD	21905
8 way	8	8+8+8	DEPSR008DD	23465
10 way	8	10+10+10	DEPSR010DD	25315
12 way	8	12+12+12	DEPSR012DD	26690

EV charging DB 8537] New



Highlights
- Engineered specifically Charging application - 3.3 kW
- Robust earth leakage, short circuit and overload protection with RCBO-
- Factory fitted RCBO, switch and socket

Description	No. of Modules	Cat. Nos.	M.R.P. (`) Per Unit
2 way EVDB	2	DEEVC002LD	*
4 way EVDB	4	DEEVC004LD	*

* For details, please contact nearest branch office

Enclosure [8537] New



Highlights
- Conforms to IEC 61439-1 & 3
- Suitable for Surface and Flush mounting
- Available in CRCA sheet steel, RAL9003, powder coated
- With provision to mount MCB/Isolator/RCCB/RCBO and other modular devices

IP 30 - Metal Door

Description	No. of Modules	Cat. Nos.	M.R.P. (`) Per Unit
IP 30 - Metal Door			
2 way	2	DEENC002SD	1095
3 way	3	DEENC003SD	1095
4 way	4	DEENC004SD	1095
6 way	6	DEENC006SD	1700

For ordering old DBs,replace Cat no with “DB” instead of “DE”.
Eg. - New DB Cat no for SPN 12W DD - DESPN012DDS, Old DB Cat no for same will be DBSPN012DDS. Old DBs are available till stock last.

Plug & Socket DB [8537] New

Highlights
- Conforms to IEC 61439-1 & 3
- Suitable for Surface and Flush mounting
- Available in CRCA sheet steel, RAL9003, powder coated
- Loose Metal Plugs & Sockets conforms to IS 8804; available in Single Phase & Three Phase



Metal Plug & Socket



Plastic Plug & Socket

Description	No. of Pins	No. of Modules	Cat. Nos.	M.R.P. (`) Per Unit
Metal Plug & Sockets				
10 A, 2 Pin + SC^	P + N	1	DEMPS110SD	2725
20 A, 2 Pin + SC^	P + N	1	DEMPS120SD	2930
20 A, 2 Pin + SC^	P + N	2	DEMPS220SD	3175
20 A, 3 Pin + SC^	3P	3	DEMPS320SD	5380
32 A, 3 Pin + SC^	3P	3	DEMPS332SD	6370
32 A, 3 Pin + SC^	3P	4	DEMPS432SD	6775
63 A, 5 Pin + SC^	3P+N+E	4	DEMPS463SD	22955
Plastic Plug & Sockets				
16 A, 3 Pin	P+N+E	2	DEPPS316SD	4455
32 A, 3 Pin	P+N+E	4	DEPPS332SD	4805
32 A, 5 Pin	3P+N+E	8	DEPPS532SD	8025
63 A, 5 Pin	3P+N+E	8	DEPPS563SD	20120

Metal Plug [8536]



Description	No. of Pins	Cat. Nos.	M.R.P. (`) Per Unit
10 A, 2 Pin + SC^	P + N	MPS210P	335
20 A, 2 Pin + SC^	P + N	MPS220P	355
20 A, 3 Pin + SC^	3P	MPS320P	475
32 A, 3 Pin + SC^	3P	MPS332P	900

Note: Standard pack quantity - 20 nos.

Metal Socket [8536]



Description	No. of Pins	Cat. Nos.	M.R.P. (`) Per Unit
10 A, 2 Pin + SC^	P + N	MPS210S	350
20 A, 2 Pin + SC^	P + N	MPS220S	390
20 A, 3 Pin + SC^	3P	MPS320S	530
32 A, 3 Pin + SC^	3P	MPS332S	900

^ SC-Scraping Earth
Note: Standard pack quantity - 20 nos.

DBs with provision for TV/ Telephone splitters [8537] New

Highlights
- Distribution Boards equipped with provisions to mount TV / Telephone splitters
- Available in SPN & TPN Dbs
- Communication DB equipped with provisions to mount 2 ONT, Spike guard, Data switch, TV / Telephone splitters



TV / Telephone



Communication DB

DB Type	Description	No. of Modules Incomer	No. of Modules Outgoing	Cat. Nos.	M.R.P. (`) Per Unit
IP 43 - Metal Door					
SPN	6 way	2	4	DESPN006DDTV	6125
	8 way	2	6	DESPN008DDTV	6590
	12 way	2	10	DESPN012DDTV	8105
	16 way	2	14	DESPN016DDTV	9410
	18 way	2	16	DESPN018DDTV	11125
TPN	4 way	8	4+4+4	DETPN004DDTV	12045
	6 way	8	6+6+6	DETPN006DDTV	13920
	8 way	8	8+8+8	DETPN008DDTV	16590
Communication DB				DECOM01DD	*

* For details, please contact nearest branch office

Cable End Boxes [8537]

Highlights
- Available in CRCA sheet steel, RAL9003, powder coated
- Can be either at the top or bottom of the distribution board

Description	Cat. Nos.	M.R.P. (`) Per Unit
CEB for SPN DBs		
CEB-SPN Double Door, 4 way	DESPN004CBS	1200
CEB-SPN Double Door, 6 way	DESPN006CBS	1295
CEB-SPN Double Door, 8 way	DESPN008CBS	1450
CEB-SPN Double Door, 12 way	DESPN012CBS	1610
CEB-SPN Double Door, 16 way	DESPN016CBS	2270
CEB-SPN Double Door, 18 way	DESPN018CBS	2340
CEB for TPN DBs		
CEB-TPE Double Door, 4 way	DETPE004CBS	1555
CEB-TPE Double Door, 6 way	DETPE006CBS	2215
CEB-TPN Double Door, 4 way	DETPN004CBS	1630
CEB-TPN Double Door, 6 way	DETPN006CBS	2285
CEB-TPN Double Door, 8 way	DETPN008CBS	2870
CEB-TPN Double Door, 12 way	DETPN012CBS	4780
CEB-TPN Double Door, 16 way	DETPN016CBS	4825
CEB for Horizontal PPI DBs		
CEB-Horz. PPI Double Door, 4 way	DEHPI004CB	2410
CEB-Horz. PPI Double Door, 6 way	DEHPI006CB	3010
CEB-Horz. PPI Double Door, 8 way	DEHPI008CB	3775
CEB-Horz. PPI Double Door, 12 way	DEHPI012CB	4735
CEB-Horz. PPI Double Door, 16 way	DEHPI016CB	5150
CEB for VTPN DBs		
CEB-VTPN Double Door, Modular Incomer	DEVTMXXXCB	1610
CEB-VTPN Double Door, MCCB Incomer	DEVTXXXXCB	5690
CEB for Phase Segregated DBs		
CEB-PSG Double Door, 4 way	DEPSG004CB	4225
CEB-PSG Double Door, 6 way	DEPSG006CB	5035
CEB-PSG Double Door, 8 way	DEPSG008CB	5560
CEB-PSG Double Door, 12 way	DEPSG012CB	6190

DB Accessories

Busbar - Fork Type [8538]



Highlights
- Available in Single Pole, Double Pole, Three Pole and Four Pole versions
- Material : Copper

Description	Cat. Nos..	M.R.P.(`) Per Unit	Std. Pack Qty.
SP 13 Mod	BSP13	535	5
SP 56 Mod	BSP56	2200	5
DP 12 Mod	BDP12	955	5
TP 12 Mod	BTP12	1035	5
FP 12 Mod	BFP12	2040	5
End Caps for SP	ECP01	35	10
End Caps for DP/TP	ECP03	75	10
End Caps for FP	ECP04	120	10



Blanking Plates [8538]

Highlights
- Available in One module and Half module

Description	Cat. Nos.	M.R.P. (`) Per Unit	Std.Pack Qty.
One Module	BKP10	35	10
Half Module	BKP05	35	10



PDK02

Padlock [8301]

Highlights
- Version with standard lock and a common key

Description	Cat. Nos.	M.R.P. (`) Per Unit	Std. Pack Qty.
Lock and Key Kit	PDK02	935	5

For ordering old DBs,replace Cat no with “DB” instead of “DE”.
Eg. - New DB Cat no for SPN 12W DD - DESPN012DDS,Old DB Cat no for same will be DBSPN012DDS. Old DBs are available till stock last.

Discontinued Products/Suggested Alternate Products

Product Group	Discontinued Products	Suggested Alternate Products
ACB	C-Power ACB with SR71 Release	1. OMEGA ACB with MTX 3.5 Release 2. C-Power Bus-Coupler ACB + numrAL FDR22 + Protection class CT + Shunt Release
MCCB	DZ6-400Z 3P & 4P MCCBs 50/40kA (Icu/Ics)	DZ6-400Z 3P & 4P MCCBs 50/50kA (Icu/Ics)
MCCB	DZ0 100A 3P Spreaders - EM99282OOOO DZ0 100A 4P Spreaders - EM99283OOOO	DN0 100A 3P Spreaders - CM97785OOOO DN0 100A 4P Spreaders - CM97921OOOO
Contactors	MN0 control contactor, its spares and accessories	MO0 control contactor, its spares and accessories
Contactors	MRContactors	MNX 2P/ MU-2P
FDP	Common Mode SPD	Common+ Differential Mode SPD
FDP	AU-CON convertor module	TG1000 Gateway
Soft Starters	CSX	xS1000
Soft Starters	CSXi	xS2000
Soft Starters	EMX4e	xS3000
Soft Starters	EMX4i	xS4000
AC Drives	x2000 Series	xD Series
Protection Relay	MRP11	RPR11
Fusegear	Fuse Mounting Kit	
Fusegear	FNX Series	FN Series

General Terms

All prices are on Maximum retail price basis inclusive of all duties, GST & any other tax as applicable.

Warranty Policy

All products listed in the price list are covered by a warranty against manufacturing defects for a period of 18* months from the date of purchase. For Lauritz Knudsen MCBs & Isolators mounted inside Lauritz Knudsen Distribution Boards, an extended warranty of 5 years is provided.

In the event of a defect due to faulty workmanship or other associated reasons, we will, at our discretion, remedy the defect or replace the faulty parts or the entire product as soon as possible, free of cost.

However, the warranty is subject to proper usage, efficient maintenance, and does not cover defects arising from fire, accidents, inefficient maintenance, faulty operation, or deliberate or accidental damage. It also does not cover damage to power electronic components such as thyristors & IGBTs, which primarily fail due to overtemperature & over-voltage. Users need to take adequate precautions to eliminate these conditions. Manufacturer shall not be responsible & liable for any special, incidental, social or consequential (including lost profits) loss, consequential damages, injury or damages (punitive) of any kind solely attributable to defect or failure of its products. Manufacturer shall not be liable in any manner for the issue of or failure in the performance of other equipment the product is attached to.

Comprehensive Service Support

Lauritz Knudsen Electrical & Automation has over seven decades of experience in providing after sales service for low voltage distribution system in every type of industry & commercial complex in India

Lauritz Knudsen Electrical & Automation offers the following services, partnering you in your maintenance of low voltage distribution products:

- Regular Maintenance
- Preventive Maintenance Programme
- On Call
- Annual Maintenance Contract
- Product Support for Managing Obsolescence-

Please visit www.LK-EA.com for latest update on our products & prices.

Lauritz Knudsen
Electrical & Automation

ENERSYS

ENERGIZING THE FUTURE

Powered By SMARTCOMM



ELEVATING SPACE WITH

PEAK PERFORMANCE
Reliable, IEC-compliant

ABSOLUTE SAFETY
Zero compromise protection

INTELLIGENT & SUSTAINABLE
Smart, eco-conscious design

TROPICAL-READY
Engineered for Indian conditions

©2025. All Rights Reserved.

ProServe
By Your Side

RELIABLE ELECTRICAL



Your Trusted Service Partner

#ByYourSide

Maximise Uptime with Predictive Maintenance

Optimised Business Performance through Power Quality Solutions

Providing Customised Support for AMC & RMC of all Products

Optimised Performance with Tailored Services

CAPEX to OPEX shift with Retrofit and Modernization

Lauritz Knudsen

Electrical & Automation

POWERING A NON-STOP INDIA



Maximum Retail Prices
For Industrial Signaling Products
Effective from 15-08-26

INDUSTRIAL SIGNALING PRODUCTS

Lauritz Knudsen
Electrical & Automation

AT LAURITZ KNUDSEN, WE POWER A NON-STOP INDIA.

That's why we listen, we partner, and we innovate - to make technology and energy solutions accessible to every corner of India.

Born of this soil - we understand India's rhythm and resilience.

Therefore, **we create technology that speaks every language of progress.** From farms to factories, we empower every business, regardless of size, sector, or location, to thrive.

Because when technology reaches everyone, India moves forward as one.

Content

Rotary Switches 01

Load Break Switches 13

Cable Ducts 16

Timing Devices, Supply Monitors & ELR 21

Modular Remote Control Units 29

Note :

Colour of HSN code signifies below [Green colour : HSN code]
Current GST 18%, subject to changes as per Govt. notification

RELIABLE ELECTRICAL

Complete Your Panel with the widest range of Industrial Signaling Products



Rotary & Load Break Switches



Modular Remote Control Units



Timing Devices & Supply Monitors



Digital Panel Meters

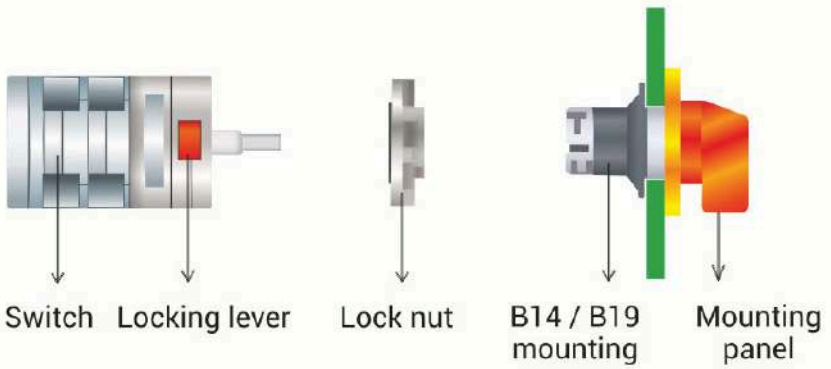


RELIABLE ELECTRICAL



Increase installation efficiency with our Single Hole Mounting Rotary Switch

Single hole mounting (SHM) range of rotary switches uses a unique mounting concept that requires just a single Ø22.5 cut out to mount the switches on the panel



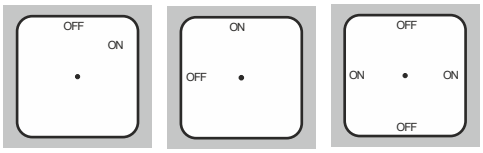


- Available from 6A-32A with B14 / B19 mounting
- Easy mounting - Reduces assembly time
- Wiring accessibility : Switch can be wired separately and then snap fitted to the mounting assembly using locking lever
- Single hole cutout - It requires a single cutout to mount on the panel

Rotary Switches

Note: All mentioned prices are for Standard Mounting & Knob. Kindly reach our branch offices for details of other mountings & knobs.

Cam Operated Rotary Switches [8536]

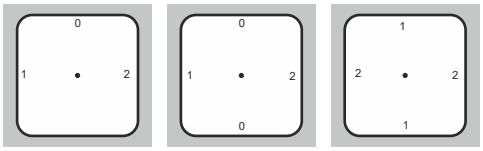


Isolators Switches (ON-OFF Switches)



60⁰ Operation	90⁰ Operation	90⁰ Operation Complete Rotation	Description	M.R.P. (`) Per Unit								
Cat. No.: Program Code (First 5 digits), Next 5 digits in () #▶ ↓				6A (SAB13)	10A (SBB13)	16A (SCB03)	25A (SEB03)	32A (SFB03)	40A (SGB03)	63A (SIB03)	100A (SKB03)	200A (SNB03)
61001	61191	61195	1 Pole ON - OFF	210	335	475	530	665	905	1055	4985	6445
61002	61192	61198	2 Pole ON - OFF	270	380	545	650	770	1085	1350	6240	8405
61003$	-	-	3 Pole ON - OFF	285	460	985	1235	1375	1825	2615	8455	11010
-	61199	61197		285	460	635	860	960	1265	1815	7690	10490
61004	61194	61196	4 Pole ON - OFF	360	510	690	1035	1115	1435	2165	8895	12475

Note : Offered upto 12 Pole
$ Motor Duty Switch (AC-3 Duty)

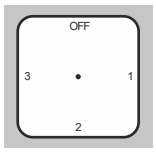


Changeover Switches (Local - Remote, Auto - Manual Switches)



With Center OFF (60⁰)	With OFF (90⁰)	Without OFF (90⁰) with Complete Rotation	Description	M.R.P. (`) Per Unit								
Cat. No.: Program Code (First 5 digits), Next 5 digits in () #▶ ↓				6A (SAB13)	10A (SBB13)	16A (SCB03)	25A (SEB03)	32A (SFB03)	40A (SGB03)	63A (SIB03)	100A (SKB03)	200A (SNB03)
61025	61151	61037	1 P 2W	270	425	605	665	745	1055	1430	6445	9325
61026	61152	61038	2 P 2W	360	505	690	895	1035	1440	2165	9430	14210
61027	61153	61039	3 P 2W	435	625	915	1350	1465	1815	2905	12220	18180
61028	61154	61040	4 P 2W	540	730	1060	1780	1870	2195	3650	15435	22700

Phase Changeover (PS Series Switches)



Cat. No.: Program Code (First 5 digits), Next 5 digits in () #▶ ↓	Description	M.R.P. (`) Per Unit			
		25A (PEB03)	32A (PFB03)	40A (PGB03)	63A (PIB03)
61060	1 P 3W with OFF	555	685	1005	1130

Phase Changeover in SS enclosure

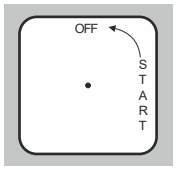


Cat. No.	Description	M.R.P. (`) Per Unit			
		25A (E)	32A (F)	40A (G)	63A (I)
72347P□M17TDYR.	PS Series Switches in SS enclosure	4690	4945	7295	7480

Note : Prices are available on request for higher than 4 Pole ON-OFF version.
Please contact nearest E&A branch office for prices.
For complete ordering code, Kindly refer Page No.10

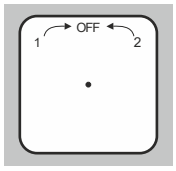


ON - OFF Spring Return Switches



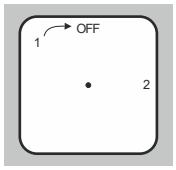
Description	Cat. No.: Program Code (First 5 digits), Next 5 digits in (#)	M.R.P. (`) Per Unit
		16A (SCB03)
1 P ON - OFF	61351	1030
2 P ON - OFF	61352	1080
3 P ON - OFF	61353	1230
4 P ON - OFF	61354	1440

Double Throw with Spring Return Switches



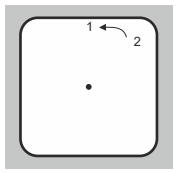
Description	Cat. No.: Program Code (First 5 digits), Next 5 digits in (#)	M.R.P. (`) Per Unit
		16A (SCB03)
1 P 2W W/OFF Spring Return	61361	1080
2 P 2W W/OFF Spring Return	61362	1600
3 P 2W W/OFF Spring Return	61363	1740

One Side Spring Return Switches



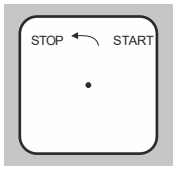
Description	Cat. No.: Program Code (First 5 digits), Next 5 digits in (#)	M.R.P. (`) Per Unit
		16A (SCB03)
1 P 3W Spring Return - OFF from 1	61364	985
2 P 3W Spring Return - OFF from 1	61365	1440
3 P 3W Spring Return - OFF from 1	61369	1585

Spring Return Switches without OFF



Description	Cat. No.: Program Code (First 5 digits), Next 5 digits in (#)	M.R.P. (`) Per Unit
		16A (SCB03)
1 P 2W Spring Return - from 2 to 1	61371	985
2 P 2W Spring Return - from 2 to 1	61372	1440
3 P 2W Spring Return - from 2 to 1	61373	1585

Start Stop Spring Return Switches

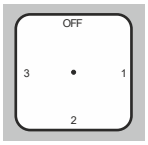
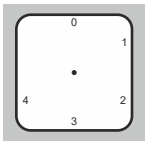
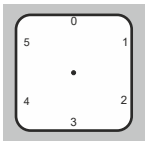
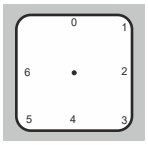
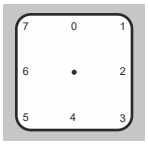
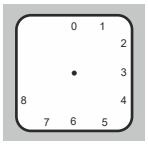
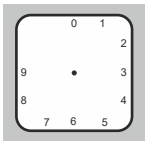
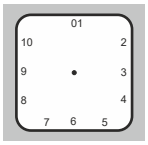
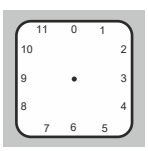


Description	Cat. No.: Program Code (First 5 digits), Next 5 digits in (#)	M.R.P. (`) Per Unit
		16A (SCB03)
1 P Start Stop Spring Return	61300	1230
2 P Start Stop Spring Return	61388	1440

Note: Prices for 25A rating are available on request.
For complete ordering code, kindly refer Page No. 10



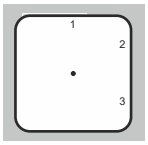
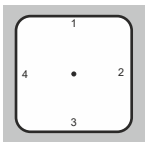
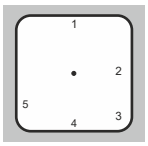
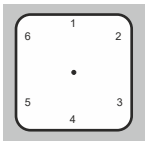
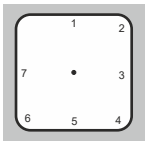
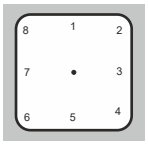
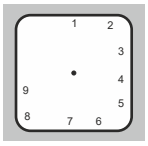
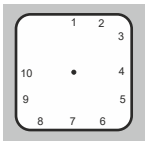
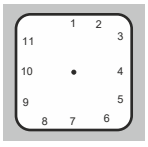
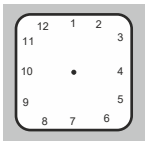
Multi Step Switches with OFF

	Description	Cat. No. #	M.R.P. (`) Per Unit								
			6A (SAB13)	10A (SBB13)	16A (SCB03)	25A (SEB03)	32A (SFB03)	40A (SGB03)	63A (SIB03)	100A (SKB03)	200A (SNB03)
	1 P 3W	61060	315	480	630	PS Series Switches (Refer page no. 2)				6550	9950
3 Way	2 P 3W	61080	435	555	765	1070	1145	1755	1975	9630	15215
	3 P 3W	61100	630	745	1305	1585	1730	2345	3050	12575	19980
	4 P 3W	61131	805	970	1585	1980	2170	3135	3670	15885	25055
	1 P 4W	61061	370	435	915	1125	1240	1495	2035	9215	***
4 Way	2 P 4W	61081	630	800	1080	1175	1375	2145	2380	15435	***
	3 P 4W	61101	870	1020	1710	1980	2275	2735	3670	23260	30045
	4 P 4W	61132	1055	1495	2185	2375	2535	3550	4225	32645	48970
	1 P 5W	61062	405	560	970	1400	1415	1540	2190	***	18700
5 Way	2 P 5W	61082	730	1055	1405	1910	2245	2440	3055	***	***
	3 P 5W	61102	970	1925	2440	2705	2985	3525	4140	30970	***
	1 P 6W	61063	530	700	1020	1410	1440	1590	2430	***	***
6 Way	2 P 6W	61083	870	***	1495	2220	2575	***	5120	***	***
	3 P 6W	61103	1215	***	2805	3185	3435	***	***	***	***
	1 P 7W	61064	540	790	1100	1415	1495	1650	2550	***	***
7 Way	2 P 7W	61084	910	***	1460	2230	2375	3495	4040	***	***
	3 P 7W	61104	1265	***	2365	2935	***	4760	5610	***	***
	1 P 8W	61065	615	860	1090	1945	2180	2600	4210	***	***
8 Way	2 P 8W	61085	995	***	1995	***	***	***	***	***	***
	1 P 9W	61066	630	***	***	***	***	***	***	***	***
9 Way	2 P 9W	61086	1130	***	2930	***	***	***	***	***	***
	1 P 10W	61067	730	1045	1535	3330	***	***	***	***	***
10 Way	2 P 10W	61087	1170	***	***	***	***	***	***	***	***
	1 P 11W	61068	870	***	1395	3640	***	***	***	***	***
11 Way	2 P 11W	61088	1325	***	***	***	***	***	***	***	***

***Prices are available on request.

Program Code first 5 digits, Next 5 digits in (), For complete ordering code, kindly refer Page No.10

Multi Step Switches without OFF

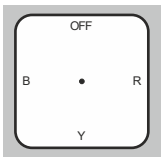
	Description	Cat. No. #	M.R.P. (`) Per Unit								
			6A (SAB13)	10A (SBB13)	16A (SCB03)	25A (SEB03)	32A (SFB03)	40A (SGB03)	63A (SIB03)	100A (SKB03)	200A (SNB03)
	1 P 3W W/O OFF	61049	295	460	645	820	860	1400	1585	***	10100
3 Way	2 P 3W W/O OFF	61069	435	695	900	1085	1630	1755	2065	9630	18180
	3 P 3W W/O OFF	61089	630	860	1345	1585	1730	2345	3050	12575	20170
	4 P 3W W/O OFF	61120	805	970	1565	2020	2145	4990	5515	***	26145
	1 P 4W W/O OFF	61050	330	500	770	990	1035	1530	2120	6550	10320
4 Way	2 P 4W W/O OFF	61070	490	755	915	1165	1290	1830	2380	10120	16345
	3 P 4W W/O OFF	61090	675	800	1460	1870	2070	2390	3205	13330	22035
	4 P 4W W/O OFF	61121	935	1050	1700	2260	2405	3205	4270	16380	27890
	1 P 5W W/O OFF	61051	405	515	845	1115	1375	***	2190	8410	***
5 Way	2 P 5W W/O OFF	61071	730	940	1170	1785	2245	***	***	***	20710
	3 P 5W W/O OFF	61091	970	1925	2230	2450	2685	3015	4260	***	26335
	1 P 6W W/O OFF	61052	425	845	930	1240	1415	1765	2235	9630	18860
6 Way	2 P 6W W/O OFF	61072	855	990	1410	2215	2280	2440	3120	19190	24675
	3 P 6W W/O OFF	61092	1035	1805	2395	2645	2745	3190	4260	32645	51605
	1 P 7W W/O OFF	61053	530	790	1025	1470	***	***	***	16970	***
7 Way	2 P 7W W/O OFF	61073	910	***	1585	2260	***	***	4755	***	***
	3 P 7W W/O OFF	61093	1265	***	2620	3430	***	***	5730	***	***
	1 P 8W W/O OFF	61054	540	930	1185	1495	1570	1835	2695	16125	***
8 Way	2 P 8W W/O OFF	61074	965	1480	1995	2360	2555	***	5215	***	***
	3 P 8W W/O OFF	61094	1350	***	2850	3075	3145	3810	6020	***	***
	1 P 9W W/O OFF	61055	630	***	1395	***	***	***	***	***	***
9 Way	2 P 9W W/O OFF	61075	1065	***	1980	***	***	***	***	***	***
	1 P 10W W/O OFF	61056	680	995	1485	***	***	***	***	***	***
10 Way	2 P 10W W/O OFF	61076	1185	***	***	***	***	***	***	***	***
	1 P 11W W/O OFF	61057	1255	***	***	***	***	***	***	***	***
11 Way	2 P 11W W/O OFF	61077	1425	***	***	***	***	***	***	***	***
	1 P 12W W/O OFF	61058	1320	***	1565	3765	4005	***	5340	***	***
12 Way	2 P 12W W/O OFF	61078	1550	***	4670	***	***	***	***	***	***

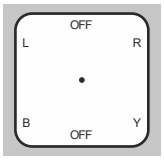
***Prices are available on request.

Program Code first 5 digits, Next 5 digits in (), For complete ordering code, kindly refer Page No.10



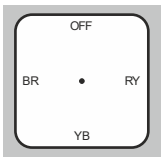
Ammeter Selector Switches (ASS)



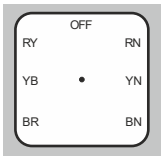


Description	Cat. No.	Amps	M.R.P. (`) Per Unit
Line Currents with OFF with CT	61325 SAB13TDYR	6A	435
Line Currents with OFF with CT	61325 SBB13TDYR	10A	450
Line Currents with OFF with CT	61325 SCB03TDYR	16A	685
Line Currents with OFF without CT	71000 SCB03TDYR	16A	2115
Direct Currents with OFF without CT	71000 SEB03TDYR	25A	2515
Direct Currents with OFF without CT	71000 SFB03TDYR	32A	3015
Direct Currents with OFF without CT	71000 SGB03TDYR	40A	5320
Direct Currents with OFF without CT	71000 SIB03TDYR	63A	5610

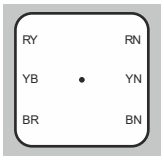
Voltmeter Selector Switches (VSS)



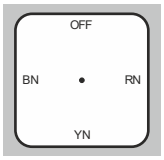
Description	Cat. No.	Amps	M.R.P. (`) Per Unit
Voltage between Phases with OFF	61312 SAB13TDYR	6A	320
Voltage between Phases with OFF	61312 SBB13TDYR	10A	415
Voltage between Phases with OFF	61312 SCB03TDYR	16A	610



Description	Cat. No.	Amps	M.R.P. (`) Per Unit
Voltage between Phases & Individual Phases to Neutral with OFF	61313 SAB13TDYR	6A	570
Voltage between Phases & Individual Phases to Neutral with OFF	61313 SBB13TDYR	10A	800
Voltage between Phases & Individual Phases to Neutral with OFF	61313 SCB03TDYR	16A	1150

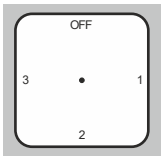


Description	Cat. No.	Amps	M.R.P. (`) Per Unit
Voltage between Phase & Phase to Neutral without OFF	61314 SBB13TDYR	10A	800



Description	Cat. No.	Amps	M.R.P. (`) Per Unit
Voltage between Phase & Phase to Neutral without OFF	61311 SAB13TDYR	6A	535

Ammeter & Voltmeter Combined Switch



Description	Cat. No.	Amps	M.R.P. (`) Per Unit
Voltage between Phases to Neutral & Current of that Phase	61338 SBB13TDYR	10A	845



Control your breaker remotely through TNC Switch



Breaker Control Switches (Trip-Netural-Close)

- 1NO+1NO, 2NO+2NC model available in 25A
- Barrel lock option available
- Spring return from both side to center
- Lost motion contact (LMD)& Sequence Locking available

Customer Interaction Center (CIC)
Telephone No. : 02

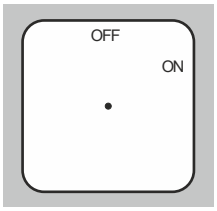
Breaker Control Switches (Trip - Neutral - Close)



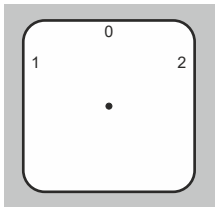
Rating	Contact Arrangement	Mounting Type	Cat. No.	M.R.P. (`) Per Unit
25A	1Trip + 1Close	Standard	73257SEB03PGBB	1595
25A	1Trip + 1Close	Standard	73257SEB03PGYR	1595
25A	1Trip + 1Close	Standard	73257SEB03PGGB	1595
25A	1Trip + 1Close	Barrel Lock	73257SEB90PGBB	2315
25A	2Trip + 2Close	Standard	72009SEB03PGBB	1870
25A	2Trip + 2Close	Standard	72009SEB03PGYR	1870
25A	2Trip + 2Close	Standard	72009SEB03PGGB	1870
25A	2Trip + 2Close	Barrel Lock	72009SEB90PGBB	2880

Other option such as sequence inter lock (SIL) & lost motion device (LMD) available on request.

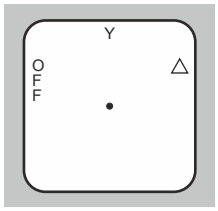
Motor Duty Switches



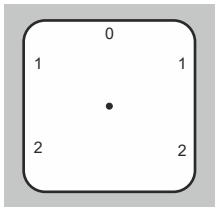
61003



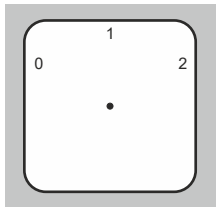
61211



61200



61217

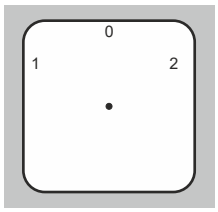


61212

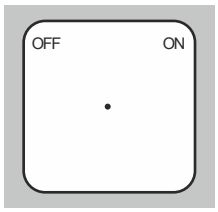
Description	Cat. No. #	M.R.P. (`) Per Unit						
		16A (SCB03)	25A (SEB03)	32A (SFB03)	40A (SGB03)	63A (SIB03)	100A (SKB03)	200A (SNB03)
ON - OFF Switch	61003	985	1235	1375	1825	2615	8455	11010
FOR - OFF - REV Switch	61211	740	915	1085	3005	3670	8420	13580
Star - Delta Switch	61200	985	1300	1625	2645	3380	***	***
2 Speed for FOR - OFF - REV Switch	61217	***	2355^	***	4175	***	***	***
2 Speed forward Switch	61212	1080	2140	2680	3565	4375	10535	12165

^ Supplied only with ball grip handle
# Program Code first 5 digits, Next 5 digits in ( ), For complete ordering code, kindly refer Page No.10

Switches in Enclosure



73393, 71913

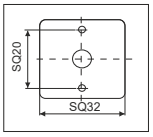


72244



Description	Cat. No.	Amps	M.R.P. (`) Per Unit
FOR - OFF - Rev in SS with ball grip handle	73393SCM17BGXB	16A	1065
FOR - OFF - Rev in SS with ball grip handle	71913SEM17BGYR	25A	1620
FOR - OFF - Rev in SS with ball grip handle	71913SFM17BGYR	32A	2230
3 Pole ON - OFF in SS	72244SEM17TDYR	25A	1405
3 Pole ON - OFF in SS	72244SFM17TDYR	32A	1925
3 Pole 2Way Without OFF in SS	61153SCM17TDYR	16A	1515

For any other rating requirement please contact nearest E&A branch office



Front Plate Assembly

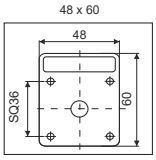
Description	Cat. No.	Size	M.R.P. (`) Per Unit
Front Plate for 6 to 16A	FP16SQ48	48 x 48	60
Front Plate for 25 & 32A	FP32SQ64	64 x 64	130
Front Plate for 40 to 200A	FP200SQ88	88 x 88	185



Tear Drop Flag Knob Ball Grip Lever Handle

Handles & Knobs

Description	Cat. No.	Size	M.R.P. (`) Per Unit
Flag Handle for 16A	KNFHS2	48 x 48, 48 x 60	35
Flag Handle for 25 - 32A	KNFHS3	64 x 64, 64 x 80	60
Ball Handle for 16 - 32A	HNBHS1	64 x 64, 64 x 80	170
Ball Handle for 40 - 63A	HNBHS2	88 x 88, 104 x 104	185
PG Handle for 16 - 32A	HNPGS1	64 x 64, 64 x 80	205
Lever Handle for 40 - 200A	HNLVS1	88 x 88, 104 x 104	270
Tear Drop for 6 - 16A	KNTDS1	48 x 48, 48 x 60	35
Tear Drop for 16 - 32A	KNTDS2	64 x 64, 64 x 80	60
Tear Drop for 40 - 400A	KNTDS3	88 x 88, 104 x 104	135



Special Front Plate Assembly

Description	Cat. No.	Size	M.R.P. (`) Per Unit
SPL IND Plates upto 16A	FPRT4860	48 x 60	130
SPL IND Plates for 16 - 32A	FPRT6480	64 x 80	205

Script Plate (marking plate)

Description	Cat. No.	Size	M.R.P. (`) Per Unit
Script Plate for 6 - 16A	SPSQ48	48 x 48	35
Script Plate for 16 - 32A	SPSQ64	64 x 64	45
Script Plate for 40 - 200A	SPSQ88	88 x 88	50
Script Plate for 6 - 16A	SPRT4816	48 x 16	10
Script Plate for 6 - 32A	SPRT6416	64 x 16	25

Mounting Plates (used for Back Fixing Plate)

Description	Cat. No.	Size	M.R.P. (`) Per Unit
Rear MTG Plate for 6 - 16A	MPSQ48	48 x 48	25
Rear MTG Plate for 25 - 32A	MPSQ64	64 x 64	45
Rear MTG Plate for 40 - 63A	MPSQ88	88 x 88	115
Rear MTG Plate for 80 - 400A	MPSQ104	104 x 104	205
DIN Rail Attachment upto 32A	B21DIN35		185

Wall Type Mounting Boxes (upto 32A - maximum 4 Contacts)

Description	Cat. No.	M.R.P. (`) Per Unit
Plastic / ABS Enclosure B17 16A upto 3 Stage / 25A upto 2 Stage	WMBABS	1295
Aluminium Enclosure B17 16A upto 3 Stage / 25A upto 2 Stage	WMBAL	2135
SS Enclosure M17 upto 32A - 4 Stage	WMBSS	800

Note : Switches to be order separately.



B31 PVC Enclosure

Shrouding Cover (maximum 6 Contacts Round Type)

Description	Cat. No.	M.R.P. (`) Per Unit
Shrouding Cover for 6 - 10A	SHCS1	135
Shrouding Cover for 16A	SHCS2	135
Shrouding Cover for 25 - 32A	SHCS3	190
Shrouding Cover for 40 - 63A	SHCS4	205
Special Cover for Extended Termination 80 - 400A (maximum 2 Contact Stage)	SHCS5	1550

Ordering Code for Rotary Switches

Example for :	1. Programme Code					2. Type	3. Ampere	4. Mounting			5. Knob		6. Colour	
25A 3 Pole														
ON - OFF Switch	6	1	1	9	7	S	E	B	0	3	T	D	Y	R

1. Programme Code

Programme	Programme Code
Isolators	Pg. No. 1
Changeovers Switches	Pg. No. 1
Phase Changeovers Switches	Pg. No. 2
Spring Return Switches	Pg. No. 3
Multistep Switches with OFF	Pg. No. 4
Multistep Switches without OFF	Pg. No. 5
Instrumentation Switches	Pg. No. 6
Motor Control Switches	Pg. No. 8
Switches in SS Enclosure	Pg. No. 8
Breaker Control Switches	Pg. No. 8

2. Type Selection

Type	Code
S-Series (6 to 400A)	S
Touch Proof (6 to 16A)	T
Rear Access Termination (16 to 63A)	R
Phase Selector Only for 1 Pole 3 Way with OFF (25 to 63A)	P
DC Switches (16 to 500A)	D

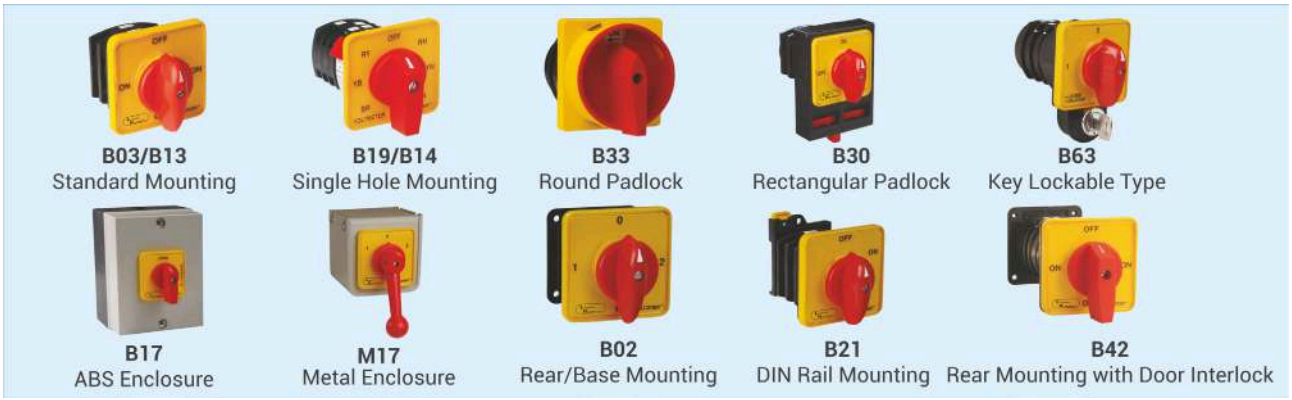


S Series Open Version | TP Series Touch Proof | RT Series Touch Proof & Rear Termination

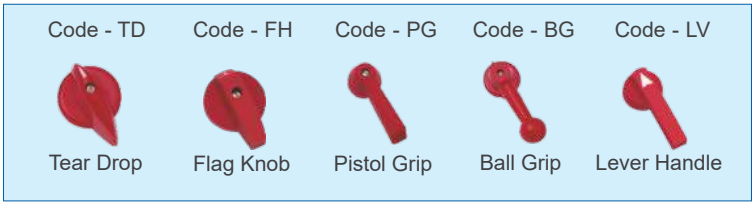
3. Ampere Selection

Ampere	Code	Ampere	Code
6	A	100	K
10	B	125	L
16	C	160	M
20	D	200	N
25	E	250	O
32	F	300	P
40	G	400	Q
50	H	500	R
63	I	600	S
80	J	800	T

4. Mounting Style



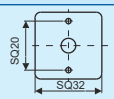
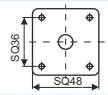
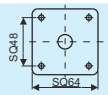
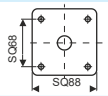
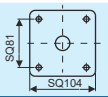
5. Knob / Handle Selection



6. Color Combination Selection Table



Front Plate

Standard Style	Frame Size	Bigger Style
Current Ratings 6/10 Amps		Current Ratings —
16/20 Amps		6/10 Amps
25/32 Amps		16/20 Amps
S40 Amps & above		25/32 Amps
-		S40 Amps & above

Note : 1. For ratings of 6/10A, standard mounting style is B13
2. Single hole mounting equivalent of B03 is B19 and B13 is B14.

Mounting Feasibility

Mounting Code	Description	Feasibility					
		6/10A	16/20A	25/32A	40/63A	80/100/125A	200/400A
B03	Front Mounting, Standard Mounting plate		✓	✓	✓	✓	✓
B13	Front Mounting with next size plate	✓	✓	✓	✓	✓	✓
B00	Front Mounting 48 x 48 plate for 25/32A and 64 x 64 plate for 40/63A			✓	✓		
B19	Single Hole Mounting 32 x 32 plate for 6/10A only 48 x 48 Plate for 16-32A	✓	✓	✓			
B14	Single Hole Mounting 48 x 48 plate for 6/10A	✓					
B33	Front Mounting with Round Padlock for 2 Position (for Isolators)		✓	✓	✓	✓	✓
B30	Front Mounting with Rectangular Padlock 2 Position (for Isolators)		✓	✓	✓	✓	✓
B63	Key Lockable type (Handle/Knob)		✓	✓	✓		
B90	Center Key Lock (Pistol grip Handle in black color only)		✓	✓			
B02	Rear / (Back/Base) Mounting	✓	✓	✓	✓	✓	✓
B21	DIN Rail Mounting on 35 mm Rail 6-32 Amps	✓	✓	✓			
B32	Rear / Base Mounting, Door Interlock + Rectangular Padlock (B30+B42)Base		✓	✓	✓	✓	✓
B34	Rear / Base Mounting Door Interlock + Round Padlock (B33+B42)		✓	✓	✓	✓	✓
B41	Rear Mounting with Clutch Mechanism on Door		✓	✓	✓	✓	✓
	(Door Open in all position without Interlock)						✓
B42	Rear Mounting with Interlock Mechanism on Door		✓	✓	✓	✓	✓
F47	Door Clutch, Mounting Plate at front		✓	✓	✓	✓	✓
B17	ABS Enclosure Max stages	upto 4	upto 3	upto 5	upto 5		
B31	ABS Enclosure with Round Padlock (B33+B17) Max stages		upto 2	upto 2	upto 2		
M17	Metal Enclosure Max stages	upto 4	upto 4	upto 3			
A17	Aluminium Enclosure Max stages	upto 4	upto 3	upto 2			
B40	Single Hole Mounting with Padlock 48 x 48 Plate For 16-32A		✓	✓			
B43	Single Hole Mounting with Center key 48 x 48 Plate for 16-32A		✓	✓			
B45	Single Hole Mounting with Round Ring with Knob 16A-32A		✓	✓			

DC Switches

› Available from 16A to 500A
› Used for railway coaches lighting & fan circuits switching, all DC power circuits - Railways, Telecommunications & Power plants, Battery charging equipment
› Please contact nearest branch office for prices





3 Pole EB - GEN Changeover Switches



B13 Mounting

Description	Cat. No.	M.R.P. (`) Per Unit						
		25A (E)	32A (F)	40A (G)	63A (I)	80A (J)	100A (K)	125A (L)
3 Pole C/O Front Panel Mounting	EBX31153B13BGYR	3259	3395	3960	4120	*	*	*
3 Pole C/O Rear Mounting	EBX31153MB42BGYR	3782	3919	4561	4704	8407	10519	13140
3 Pole C/O in SS Enclosure	EBX31153SB31BGYR	4521	4645	5376	5536	*	*	*
3 Pole C/O Rear Mounting	EBX31153B21BGYR	3782	3919	4561	4704	8407	10519	13140
3 Pole C/O Rear Mounting	EBX31153MB34LHGB	3782	3919	4561	4704	8407	10519	13140
3 Pole C/Oin Polycarbonate Enclosure	EBX31153B31LBGYR	4521	4645	5376	5536	*	*	*
3 Pole C/O in SS Enclosure	EBX31153SB31XLLHYR	*	*	*	*	11881	13978	16598

4 Pole EB - GEN Changeover Switches



MB42 Mounting

Description	Cat. No.	M.R.P. (`) Per Unit						
		25A (E)	32A (F)	40A (G)	63A (I)	80A (J)	100A (K)	125A (L)
4 Pole C/O Front Panel Mounting	EBX31154B13BGYR	3782	3919	4645	4780	*	*	*
4 Pole C/O Rear Mounting	EBX31154MB42BGYR	4260	4424	5224	5438	10603	13268	16574
4 Pole C/O in SS Enclosure	EBX31154SB31BGYR	5041	5237	6074	6290	*	*	*
4 Pole C/O Rear Mounting	EBX31154B21BGYR	4260	4424	5224	5438	10603	13268	16574
4 Pole C/O Rear Mounting	EBX31154MB34LHYR	4260	4424	5224	5438	10603	13268	16574
4 Pole C/O in Polycarbonate Enclosure	EBX31154B31LBGYR	5041	5237	6074	6290	*	*	*
4 Pole C/O in SS Enclosure	EBX31154SB31XLLHYR	*	*	*	*	14075	16721	20048

Rating Selection Table



SB31 Enclosure

Ampere (A)	Code (□)
25	E
32	F
40	G
63	I

Note : SB 31 Enclosure for 25A to 63A ratings. B21 Mounting model is similar to B13 model with links provided on the common side.
*** - Please contact nearest E&A branch office.

Load Break Switches [8536]

AC ON LOAD ISOLATORS

- AC 23 Utilization category
- Range from 16-125 Amps upto 8 pole
- Multiple mounting options, ABS / Aluminium sheet steel enclosures / IP65 / NEMA Rated
- Add on pole Power / Neutral & Auxiliary pole
- Changover switches from 25-125 Amps upto 4 poles Confirms to IEC 60947-1 & 3, EN 60947-3, UL60947-4-1



B03 MB34 SB31M

LB 3 Pole ON - OFF Switches

Description	Cat. No.	Can also be given on request	M.R.P. (`) Per Unit								
			16A (C)	20A (D)	25A (E)	32A (F)	40A (G)	63A (I)	80A (J)	100A (K)	125A (L)
Single Hole MTG Switch with Flag Knob	LBX32300B19FPYR		1118	1141	*	*	*	*	*	*	*
Front Plate MTG with Flag Knob	LBX32300B40FPYR		1088	1118	*	*	*	*	*	*	*
Front Panel MTG with B03 (48x48) Plate	LBX32300B03FLYR	32309	994	1019	1103	1141	1313	1407	*	*	*
Front Panel MTG with B13 (64x64) Plate with Flag Knob	LBX32300B13FLYR	32306/32309	994	1019	1103	1141	1313	1407	3557	4464	5606
Front Panel MTG with B13 (64x64) Plate with BG Handle	LBX32300B13BGYR	32309	*	*	1214	1255	1420	1500	*	*	*
DIN Rail MTG Switch with Flag Knob	LBX32300B23FLGB		*	*	1103	1141	1313	1407	*	*	*
Rectangular Pad Lock Switch with TDYR	LBX32300B30TDYR		*	*	1336	1407	1544	1624	*	*	*
Round Pad Lock Switch with RDYR	LBX32309B33RDYR		1088	1117	1214	1255	1420	1500	3858	4814	6017
Switch with B63 Lock & Key Version	LBX32309B63TDYR		*	*	1845	1929	2090	2145	*	*	*
Base MTG Switch with DIL and Pad Lock	LBX32309MB34RDYR		1738	1791	1929	2035	2119	2281	5139	6417	8021
Base MTG Switch with BG Handle	LBX32309MB42BGYR		1738	1791	1929	2035	2119	2281	5139	6417	8021
Switch in Polycarbonate Enclosure - in B31SM	LBX32300B31SMRDYR		2204	2270	2453	2516	*	*	*	*	*
Switch in Polycarbonate Enclosure - in B31M	LBX32309B31MRDYR		*	*	*	*	2751	2820	*	*	*
Switch in Polycarbonate Enclosure - in B31L with Leech Handle	LBX32309B31LLHYR		*	*	*	*	*	*	7239	8530	10123
Switch in SS Enclosure - in SB31L with Leech Handle	LBX32309SB31LLHYR		*	*	*	*	*	*	7239	8530	10123

Note : To make the complete cat number, replace “X” in the above cat.no with the appropriate current rating code.
(Example: For LBX32300B19FPYR with a 16A rating (16A code = C), the complete code becomes LBC32300B19FPYR.)

LB 4 Pole ON - OFF Switches

Description	Cat. No.	Can also be given on request	M.R.P. (`) Per Unit								
			16A (C)	20A (D)	25A (E)	32A (F)	40A (G)	63A (I)	80A (J)	100A (K)	125A (L)
Single Hole MTG Switch with Flag Knob	LBX32400B19FPYR		1390	1420	*	*	*	*	*	*	*
Front Plate MTG with Flag Knob	LBX32400B40FPYR		1366	1390	*	*	*	*	*	*	*
Front Panel MTG with B03 (48x48) Plate	LBX32400B03FLYR	32409	1268	1296	1408	1448	1694	1791	*	*	*
Front Panel MTG with B13 (64x64) Plate with Flag Knob	LBX32400B13FLYR	32406/32409	1268	1296	1408	1448	1694	1791	4368	5480	6867
Front Panel MTG with B13 (64x64) Plate with BG Handle	LBX32400B13BGYR	32409	1517	1557	1805	1888	*	*	*	*	*
DIN Rail MTG Switch with Flag Knob	LBX32400B23FLGB		*	*	1408	1448	1694	1791	*	*	*
Rectangular Pad Lock Switch with TDYR	LBX32400B30TDYR		*	*	1637	1706	1925	2010	*	*	*
Round Pad Lock Switch with RDYR	LBX32409B33RDYR		1366	1390	1517	1557	1805	1888	4464	5573	6968
Switch with B63 Lock & Key Version	LBX32409B63TDYR		*	*	2145	2230	2472	2531	*	*	*
Base MTG Switch with DIL andPad Lock	LBX32409MB34RDYR		2010	2064	2230	2335	2506	2669	5951	7430	9285
Base MTG Switch with BG Handle	LBX32409MB42BGYR		2010	2064	2230	2335	2506	2669	5951	7430	9285
Switch in Polycarbonate Enclosure - in B31SM	LBX32400B31SMRDYR		2472	2546	2751	2818	*	*	*	*	*
Switch in Polycarbonate Enclosure - in B31M	LBX32409B31MRDYR		*	*	*	*	3133	3204	*	*	*
Switch in Polycarbonate Enclosure - in B31L with Leech Handle	LBX32409B31LLHYR		*	*	*	*	*	*	8052	9545	11389
Switch in SS Enclosure - in SB31L with Leech Handle	LBX32409SB31LLHYR		*	*	*	*	*	*	8052	9545	11389
Auxiliary Contact	FM / RM		279	279	345	345	345	345	1019	1019	1019
Add-on Contact Additional Pole	FM / RM		289	299	322	361	420	454	1190	1469	1634

Note : Standard packing upto 63A switches is 5 Nos.

Note : To make the complete cat number, replace “X” in the above cat.no with the appropriate current rating code.(Example: For LBX32300B19FPYR with a 16A rating (16A code = C), the complete code becomes LBC32300B19FPYR.)



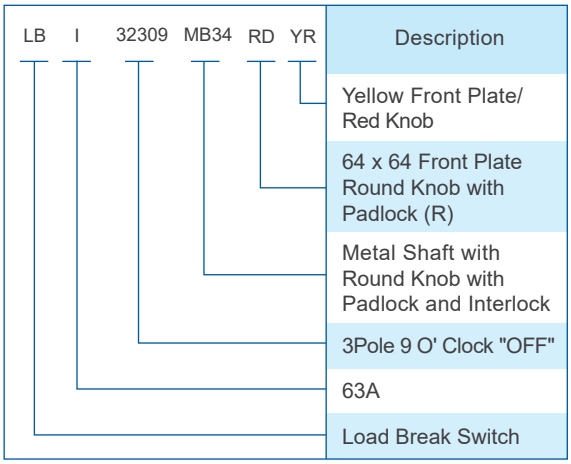
Ordering Code for Load Break and Changeover Switches

LB	□	XXXXX	XXXXX	XX	XX
Load Break Switch	Switch Rating	Programme Code	Mounting Options	Knob Options	Colour

Example

LB Switches, 63A, 3P, 9 O'clock, 4 hole front mounting, with metal shaft, yellow front plate, red round knob

LB I 32309 MB34 RD YR



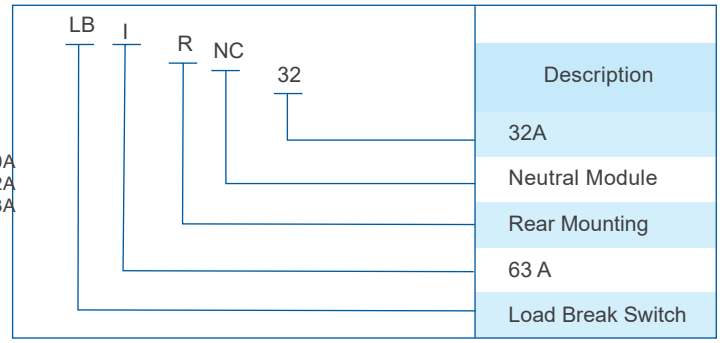
Accessories

LB X — Switch Rating

X — F-Front Mounting; R-Rear Mounting

XX — MC-Main Module; NC-Neutral Module; AC-Auxiliary Module

XXX — 20 - 16A to 20A; 32 - 25A to 32A; 63 - 40A to 63A; 80 - 80A; 125 - 100A, 125A & 80A



Rating Selection Table

Ampere (A)	Code (□)
16	C
20	D
25	E
32	F
40	G
63	I
80	J
100	K
125	L

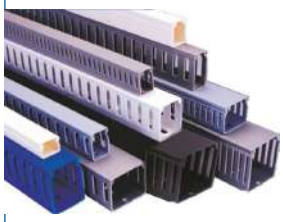
*** Note : Please contact nearest E&A branch office.

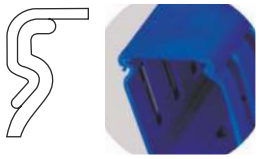
Cable Ducts [8538]

PVC Cable Ducts

› All ducts are ROHS compliant and FRLS › Also available in Zero Halogen

Type A





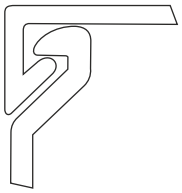
Specially designed Profiles of duct and cover for fast and efficient locking.

A Type
* Snap fit cover
* Easy to remove

Description	1 meter				2 meter			
H x W	Cat. No.(Standard slot Grey)	M.R.P. (`) Per Unit	Std. Pkg.	Min Order Qty	Cat No.(Standard slot Grey)	M.R.P. (`) Per Unit	Std. Pkg.	Min Order Qty
A 15 x 15	WWA1515SG	82	100	100	WWA1515SG2	164	64	64
A 15 x 25	WWA1525SG	112	100	100	WWA1525SG2	224	64	64
A 25 x 25	WWA2525SG	134	70	70	WWA2525SG2	268	48	48
A 30 x 25	WWA3025SG	149	70	70	WWA3025SG2	298	48	48
A 40 x 30	WWA4030SG	185	75	75	WWA4030SG2	370	32	32
A 45 x 25	WWA4525SG	190	75	75	WWA4525SG2	380	40	40
A 45 x 30	WWA4530SG	191	50	50	WWA4530SG2	382	32	32
A 45 x 45	WWA4545SG	242	50	50	WWA4545SG2	484	18	18
A 45 x 60	WWA4560SG	291	50	50	WWA4560SG2	582	12	12
A 60 x 25	WWA6025SG	242	50	50	WWA6025SG2	484	18	18
A 60 x 45	WWA6045SG	284	50	50	WWA6045SG2	568	18	18
A 60 x 60	WWA6060SG	336	32	32	WWA6060SG2	672	12	12
A 60 x 120	WWA60120SG	1142	18	90	WWA60120SG2	2284	8	80
A 75 x 45	WWA7545SG	352	40	40	WWA7545SG2	704	12	12
A 75 x 75	WWA7575SG	497	32	32	WWA7575SG2	994	12	12
A 80 x 80	WWA8080SG	554	25	25	WWA8080SG2	1108	12	12
A 100 x 100	WWA100100SG	897	18	18	WWA100100SG2	1794	8	40



Type B



Non slip cover design of minimum encumbrance and maximum grip



B Type

- Non - slip cover
- Positive locking

Description	1 meter				2 meter			
W x H	Cat. No. (Standard slot)	M.R.P. (`) Per Unit	Std. Pkg.	Min Order Qty	Cat. No. (Standard slot)	M.R.P. (`) Per Unit	Std. Pkg.	Min Order Qty
B 25 x 25	WWB2525SG	145	70	70	WWB2525SG2	290	36	36
B 25 x 30	WWB2530SG	155	100	100	WWB2530SG2	310	36	36
B 25 x 40	WWB2540SG	190	75	75	WWB2540SG2	380	36	36
B 25 x 45	WWB2545SG	196	75	225	WWB2545SG2	392	36	108
B 25 x 60	WWB2560SG	249	50	50	WWB2560SG2	498	18	18
B 25 x 80	WWB2580SG	337	50	50	WWB2580SG2	674	18	18
B 25 x 100	WWB25100SG	427	25	25	WWB25100SG2	854	18	18
B 30 x 20	WWB3020UG	190	100	200	WWB3020UG2	380	36	180
B 30 x 80	WWB3080SG	467	50	200	WWB3080SG2	934	18	90
B 40 x 40	WWB4040SG	249	50	50	WWB4040SG2	498	18	18
B 45 x 45	WWB4545SG	257	50	50	WWB4545SG2	514	18	18
B 40 x 60	WWB4060SG	301	50	50	WWB4060SG2	602	18	18
B 40 x 80	WWB4080SG	356	50	50	WWB4080SG2	712	18	18
B 40 x 100	WWB40100SG	447	25	25	WWB40100SG2	894	12	12
B 45 x 20	WWB4520UG	197	75	225	WWB4520UG2	394	36	180
B 50 x 100	WWB50100SG	513	30	90	WWB50100SG2	1026	12	60
B 60 x 20	WWB6020UG	269	50	200	WWB6020UG2	538	18	90
B 60 x 40	WWB6040SG	301	50	50	WWB6040SG2	602	18	90
B 60 x 60	WWB6060SG	356	50	50	WWB6060SG2	712	12	12
B 60 x 80	WWB6080SG	463	40	40	WWB6080SG2	926	12	12
B 60 x 100	WWB60100SG	610	30	30	WWB60100SG2	1220	8	8
B 72 x 64	WWB7264SG	427	32	96	WWB7264SG2	854	18	90
B 75 x 75	WWB7575SG	602	32	96	WWB7575SG2	1204	8	40
B 75 x 100	WWB75100SG	630	25	75	WWB75100SG2	1260	8	40
B 80 x 40	WWB8040SG	364	50	100	WWB8040SG2	728	12	60
B 80 x 60	WWB8060SG	482	40	80	WWB8060SG2	964	12	60
B 80 x 80	WWB8080SG	599	32	32	WWB8080SG2	1198	12	12
B 80 x 100	WWB80100SG	674	24	24	WWB80100SG2	1348	8	8
B 100 x 60	WWB10060SG	573	30	30	WWB10060SG2	1146	8	8
B 100 x 80	WWB10080SG	674	25	25	WWB10080SG2	1348	8	8
B 100 x 100	WWB100100SG	982	18	18	WWB100100SG2	1964	8	8
B 120 x 80	WWB12080SG	953	18	90	WWB12080SG2	1906	8	40
B 150 x 100	WWB150100SG	1225	12	48	WWB150100SG2	2450	4	40
B 150 x 150	WWB150150SG	2663	8	80	WWB150150SG2	5326	2	40

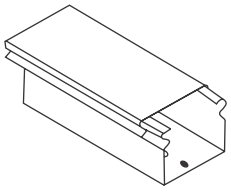
Note : 1) For any special colour request additional 10%will be charged on price. For cut length additional 10%will be charged.
2) Thin / Unslot will be supplied on request. For thin slot replace the cat. number ending with SG by TG,
For un slotted channel replace the cat. number ending with SG by UG.MRP will be same as standard slot.

Covers for FRLS Cable Duct
(Cable duct comes with default covers, following are spare offerings)

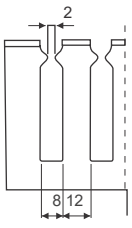


Description	Cat. No.	M.R.P. (`) Per Unit
Cover for 15 mm A type	CCA15SG	38
Cover for 25 mm A type	CCA25SG	59
Cover for 30 mm A type	CCA30SG	71
Cover for 45 mm A type	CCA45SG	111
Cover for 60 mm A type	CCA60SG	133
Cover for 75 mm A type	CCA75SG	169
Cover for 80 mm A type	CCA80SG	201
Cover for 100 mm A type	CCA100SG	245
Cover for 25 mm B type	CCB25SG	61
Cover for 30 mm B type	CCB30SG	74
Cover for 40 mm B type	CCB40SG	92
Cover for 45 mm B type	CCB45SG	113
Cover for 50 mm B type	CCB50SG	137
Cover for 60 mm B type	CCB60SG	137
Cover for 72 mm B type	CCB72SG	173
Cover for 75 mm B type	CCB75SG	173
Cover for 80 mm B type	CCB80SG	207
Cover for 100 mm B type	CCB100SG	252
Cover for 120 mm B type	CCB120SG	269
Cover for 150 mm B type	CCB150SG	315

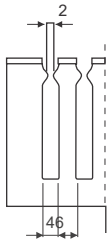
Slotting Styles (A & B Types)



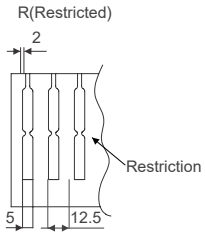
Unslotted
(US)



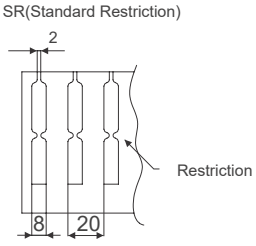
Standard Slot



Thin Slot



Thin Slot with Restriction(R)



Standard Slot with Restriction(SR)

These products are manufactured by salzer

Disclaimer

Every effort as to the correctness or sufficiency of the information and data contained in the catalogue is made. We however cannot accept any liability for the accuracy or completeness of the information and data provided. No claims in this regard shall consequently be accepted. We reserve the right to make changes, without prior notice, in the catalogue.

Products with CAT no. having, with or without, dot as suffix are same.

RELIABLE ELECTRICAL

Control & Protect Your Panels with **Precision & Reliability**



Earth Leakage Relay

Built on Trust. **Designed for high performance.**

LED Indications for power on, alarm and trip for easy identification

Ease of programming using dial and dip switches

MODBUS RS485 communication port available

Wide trip time setting from 0-10 sec

RELIABLE ELECTRICAL

ULTIMATE DIGITAL VOLTAGE MONITORING RELAY

WITH ADVANCED NEUTRAL LOSS FEATURE



SWITCH TO DIGITAL VOLTAGE MONITORING RELAY-SM800

Timing Devices, Supply Monitors & ELR

Timers [9107]

	Type	Time	Voltage	Contact Arrangement	Cat. No.	M.R.P. (`) Per Unit
Micon 175 	ON Delay	0.3 sec - 30 hrs	240 VAC/24 VAC/DC	1 C/O	12ODT4	870
			110 VAC/24 VAC/DC		11ODT4	1645
			12 VDC		15ODT4	1350
	ON Delay & Interval	0.1 sec - 100 hrs	240 VAC/24 VAC/DC	1 C/O	12WDTC	1355
	Star Delta Timer	3 sec - 120 sec	240 VAC	1 NO (Star)+1 NO (Delta)	12SDT0	980
		3 sec - 30 sec	240 - 415 VAC	1 C/O (Star)+1 C/O (Delta)	14SDT1S	1735
	Signal OFF Delay	0.3 sec - 30 hrs	240 VAC/24 VAC/DC	1 C/O	12RDT4	1275
		0.3 sec - 30 hrs	12 VDC		15DDT4	1385
	Multifunction Timer	0.1 sec - 100 hrs	12 - 240 VAC/DC	1 C/O	1CMDT0	2170
				2 C/O	1CMDTF	2315
	Asymmetrical ON/OFF & OFF/ON	0.1 sec - 100 hrs	12 - 240 VAC/DC	1 C/O	1CJDT0	2170
	One Shot	0.3 sec - 30 hrs	110 VAC/24 VAC/DC	1 C/O	11BDT4	1620
			240 VAC/24 VAC/DC		12BDT4	1620
			12 VDC		15BDT4	1695
	Forward Pause Reverse Timer	ON time : 6 sec -60 min Pause time : 0.1 sec-200 sec	12 - 240 VAC / DC	2 C/O	1CZDTF	2315

Pause time for Micon 175 star delta timer is 60 msec 1CMDT0 contains ON Delay, Impulse, Signal ON delay, Cyclic ON/ OFF, Cyclic OFF/ON, Signal OFF Delay, Signal OFF/ON, Accumulative Delay ON signal, Impulse ON/OFF, Leading edge impulse, Trailing edge impulse, Leading edge Bistable



Micon 225







Type	Timing Range	Voltage	Contact Arrangement	Cat. No.	M.R.P. (`) Per Unit
ON Delay	0.1 sec - 10 hrs	24 - 240 VAC/DC	2 C/O	2AODT5	2035
Star Delta Timer	3 sec - 120 sec	24 - 240 VAC/DC	1 NO (Star)+1 NO (Delta)	2ASDT0	2125
		240 - 415 VAC		2BSDT0	2515
Multifunction Timer	0.1s to 120 days	24 - 240 VAC/DC	2 C/O (1 Inst+1 Delayed)	2A8DT6	2280
Multifunction Multirange	0.1 sec - 10 hrs	24 - 240 VAC/DC	2 C/O	2A5DT5	2255
		240 - 415 VAC		2B5DT5	2715
Signal Base Multi function Multirange	0.1 sec - 10 hrs	24 - 240 VAC/DC	1 C/O	2ANDT0	2400
Multifunction Timer 6 Functions	0.1 sec - 10 hrs	24 - 240 VAC/DC	2 C/O (1 Inst+1 Delayed for 6th Mode)	2A6DT6	2415
		240 - 415 VAC		2B6DT6	2460
True OFF Delay	0.6 sec - 600 sec	24 - 240 VAC/DC	2 C/O	23GDT0	3315
Asymmetrical ON/OFF	0.1 sec - 10 hrs	24 - 240 VAC/DC	2 C/O	2AADT5	2555

Pause time for Micon 225 star delta timer is 60 msec, 90 msec, 120 msec, 150 msec Major timing functions

2A5DT5, 2B5DT5, 2A6DT6* and 2B6DT6* contains ON Delay, Interval, Cyclic ON/OFF, Cyclic OFF/ON, One Shot, ON Delay, On Delay (1 Inst + 1 Delayed)*
2ANDT0 contains ON Delay, Interval, Signal ON Delay, Accumulative ON Delay, Signal OFF Delay, Signal OFF/ON Delay, Leading edge impulse
2A8DT6 contains ON Delay, Impulse, Signal ON delay, Signal OFF delay, Step mode, One shot, Interval, Cyclic ON/OFF, Cyclic OFF/ON, Signal OFF Delay, Accumulative Delay ON signal, Impulse ON/OFF.

Digital Timer DIGICON



Functions	Timer	Voltage	Contact Arrangement	Cat. No.	M.R.P. (`) Per Unit
8 Functions	0.1 sec - 999 hrs	24 - 240 VAC/DC	1 C/O	V0DDTS	2560
		24 - 240 VAC/DC	2 NO	V0DDTD	2560
18 Functions	0.1 sec - 999 hrs	24 - 240 VAC/DC	1 C/O	V0DDTS1	2895
		24 - 240 VAC/DC	2 NO	V0DDTD1	2895

V0DDTS and V0DDTD contains On Delay, Signal OFF Delay, Cyclic ON/OFF, Signal OFF/ON, Cyclic OFF/ON, Interval, Signal ON/OFF, One Shot output
V0DDTS1 and V0DDTD1 contains ON Delay, Cyclic OFF/ON, Cyclic ON/OFF, Impulse on energizing, Accumulative Delay ON Signal, Accumulative Delay on Inverted signal, Accumulative Impulse ON signal, Signal ON Delay, Inverted Signal On delay, Signal OFF Delay, Impulse ON/OFF, Signal OFF/ON, Leading edge impulse, Trailing edge impulse, Delayed impulse, Negative edge impulse.

Motor Restart Timer



Functions	Timer	Voltage	Contact Arrangement	Cat. No.	M.R.P. (`) Per Unit
Motor Restart Timer	Memory time Tm: 0.2 to 6 sec	110 VAC	1 C/O	23LDT0	2670
	Delay time Td: 0.2 to 60 sec	240 VAC		22LDT0	2670

FM1 / Quartz



150 Hrs Battery Backup

Product Description		Cat. No.	M.R.P. (`) Per Unit
FM1 / Quartz Daily	110 VAC - 240 VAC Base/DIN Mounting	J648B1	3470

Digital Time Switch



Crono Pro Crono / Pulse

Product Description		Cat. No.	M.R.P. (`) Per Unit
Time Switch (Crono)	110 - 240 VAC 1 C/O Base/DIN 25 ON/OFF Each	67DDT0	3380
	24 VDC 1 C/O Base/DIN 25 ON/OFF Each	6GHDT0	3995
	12 VDC 1 C/O Base/DIN 25 ON/OFF Each	69HDT0	4205
Time Switch (Crono Pro)	110 - 240 VAC 2 C/O Base/DIN 50 ON/OFF Each	WT2DCDS	4810
Time Switch (Pulse) *	110 - 240 VAC 1 C/O Base/DIN 16 Pulse	67DDT9	3980
	24V DC 1 C/O Base /Din 16 Pulse	6GHDT9	4490
	12V DC 1 C/O Base /Din 16 Pulse	69HDT9	4720

* For bell and siren application

Astro



Astro Pro Astro Mini

Product Description		Cat. No.	M.R.P. (`) Per Unit
Astro Mini	110 - 240 VAC 1 Phase - 2W 1 C/O , Base/Din	T2DDT7	6570
Astro Pro	110 - 240 VAC 1 Phase - 2W 2 C/O , Base/Din 50 ON/OFF Each	AS2DCDS	8150

Note : Astro Mini / Astro Pro is used for lighting control based on sunrise / sunset timings by latitude / longitude settings primarily used in streetlight application



Supply Monitoring Devices [9032]

› SPP includes single phasing, phase sequence and phase unbalance monitoring with auto reset

Voltage Monitoring Relay Series	Type	Supply Monitoring Type	Time delay	Asymmetry	Voltage & Contact Arrangement	Cat. No.	M.R.P. (`) Per Unit
 SM 301	SM301 (3Ph, 3W)	Single Phasing Preventor (SPP*) Fail Safe	ON Delay 2 sec and OFF Delay 7 sec	65 VAC Asymmetry	415 VAC, 1 C/O	MA51BC	1485
					415 VAC, 2 C/O	MC21B5	2175
				40 VAC Asymmetry	415 VAC, 1 C/O	MA51BK	1485
	SM301 (3Ph, 3W)	Phase loss monitoring Non Fail Safe Type	OFF Delay 500 msec and Recover Delay 2 Sec	30%Fixed	415 VAC, 1 C/O	MA59B5	1710
 SM 500	SM500 (3 Ph / 1 Ph, 4W)	Selectable Under Voltage + Selectable Over Voltage	Selectable ON Delay (0 to 15 min)	-	240 VAC, 1 C/O	MD71B9	2310
			Selectable ON Delay (0 to 15 sec)	-		MD71BH	2310
			Selectable OFF Delay (0 to 15 sec)	-		MD71BF	2705
 SM 500 with Neutral Loss Protection		Single Phasing Preventor + Selectable Under Voltage + Selectable Over Voltage	Selectable ON Delay (0 to 15 min) & OFF Delay 5 sec	Phase Asymmetry 10%fixed	240 VAC, 2 C/O	MG73B9	2820
			Selectable ON Delay (0 to 15 sec) & OFF Delay 5 sec	Phase Asymmetry 10%fixed		MG73BH	2820
			Selectable OFF Delay (0 to 15 sec) & ON Delay 5 sec	Phase Asymmetry 10%fixed		MG73BF	2820
		SPP + UV/OV, with fixed UV (173 V) & OV (288 V)	Selectable ON (10 Sec) and OFF Delay (5 Sec)	Phase Asymmetry 20%fixed		MG73BR	2820
		SPP + Selectable UV + Selectable OV with Neutral Loss Protection	ON Delay 5 sec and OFF Delay 5 sec, 500ms-1s for Neutral fail	94 VAC Asymmetry	415 VAC, 3 Ph 4W, 2 C/O	MAC04 D0100	2885
 SM 501	SM501 (3 Ph, 3W)	SPP + Under Voltage (80%of ⏀)	Selectable ON Delay and OFF Delay 15 sec	Selectable Asymmetry (5%to 17%)	415 VAC, 2 C/O	MB53BM	2870
		Single Phasing Preventor + Selectable Under Voltage + Selectable Over Voltage	Selectable ON Delay 15 sec & OFF Delay 5 sec	Phase Asymmetry 10%		MG53BH	2870
			Selectable OFF Delay 15 sec & ON Delay 5 sec	Phase Asymmetry 10%		MG53BF	2870
			ON Delay 5 sec and OFF Delay 5 sec	65 VAC Asymmetry		MG53BI	2710
			ON Delay 3 min and OFF Delay 5 sec UV 85%of ⏀ OV 110%of ⏀	Phase Asymmetry 10%		MG53BO	2710
Digital VMR Series							
 SM 800	SM 800 (3PH/ 3W, 4W)	Single Phasing Preventor + Selectable Under Voltage + Selectable Over Voltage + Neutral Loss (Applicable for 3P4W).	Power ON Delay (0 to 999 sec) , OFF Delay (0.1 to 999 sec) & ON delay (0.5 to 999 sec)	Voltage: 5 to 99 VAC (Default 60V), Percentage : 2 to 50% (Default 10%)	145-500 VAC (Line Voltage), 1C/O	DMS110	2745
					145-500 VAC (Line Voltage), 2C/O	DMS120	2975
					85-300 VAC/DC (Auxiliary Supply) (P-N), 2 C/O	DMA220	3210
 SM 600 (MMR)	SM 600 (3P, 3W)	Phase loss + Phase Sequence + Phase Asysmetery + UV + OV + 3 phase interruption	Power ON delay (5s Fixed),ON delay (1-30 sec or Fixed), OFF delay (0.1 - 30 sec or Fixed)	Voltage ±1%of set value	500V -1000V AC 2 C/O	SMB110	13190

Note : 3 Ph 3W - 3 Phase 3 Wire system; 3 Ph 4W - 3 Phase 4 Wire system.

Voltage Monitoring Relay Series



SM175
3 Ph, 3W

Type	Supply Monitoring Type	Time delay	Asymmetry	Voltage & Contact Arrangement	Cat. No.	M.R.P. (`) Per Unit
SM175 (3 Ph, 3W)	Phase loss + Phase Sequence Monitoring	ON Delay 500 msec & OFF Delay 100 msec	–	208 - 480 VAC, 1 C/O (Steps of 208 - 220 - 380 - 400 - 415 - 440 - 480 VAC)	MK21D5	1775
		ON Delay 500 msec & OFF Delay 100 msec	Phase Asymmetry (30%fixed)		MC21D5	1775
		ON Delay 5 sec & OFF Delay 100 msec (0 to 15s Selectable)	Phase Asymmetry (5%to 15%variable)		MA21DN	2320
	Phase Loss + Phase Sequence + Under Voltage + Over Voltage monitoring (UV: -2%to -20%of 中, OV: 2% to 20%of 中)	ON Delay 5 sec and Selectable OFF Delay (0 to 15 sec)	–		MD21DF	2380
	Phase Loss + Phase Sequence + Under Voltage + Over Voltage (UV: -5%to -25%of 中, OV: 5% to 25% of 中)	Selectable ON Delay (0.5 to 15 sec) and OFF Delay 5 sec	Phase Asymmetry (10%fixed)		MG21DH	2605
		ON Delay 5s and Selectable OFF			MG21DF	2605



Current Monitoring relay (CMR)

› Microprocessor based relay protects against Overload, Phase reverse, Phase loss, Phase unbalance faults
› Auto/ Manual reset selection
› Fail- safe protection with inbuilt CT upto 45A
› Inverse time model with underload, locked rotor protection and selectable trip class (10A, 10, 20, 30) ›
Definite time model with underload and selectable start and trip time

Current Monitoring relay





Phase	Type	Current & Contact Arrangement	Cat. No.	M.R.P. (`) Per Unit
3 Phase	Inverse Time Current Monitoring Relay	2 - 5A 1 C/O	17A422CB0	3225
		3 - 9A, 1 C/O	17A122CB0	
		8 - 24A, 1 C/O	17A222CB0	
		15 - 45A, 1 C/O	17A322CB0	
	Definite Time Current Monitoring Relay	2 - 5A 1 C/O	17B422AA0	
		3 - 9A, 1 C/O	17B122AA0	
		8 - 24A, 1 C/O	17B222AA0	
		15 - 45A, 1 C/O	17B322AA0	
	Definite Type / Instant Trip	2 - 5A 1 C/O	17B422PA0	
1 Phase	Inverse Time Current Monitoring Relay	2 - 5A 1 C/O	17C412EB0	3160
		3 - 9A, 1 C/O	17C112EB0	
		8 - 24A, 1 C/O	17C212EB0	
		15 - 45A, 1 C/O	17C312EB0	
	Definite Time Current Monitoring Relay	2 - 5A 1 C/O	17D412DA0	
		3 - 9A, 1 C/O	17D112DA0	
		8 - 24A, 1 C/O	17D212DA0	
		15 - 45A, 1 C/O	17D312DA0	

PTC Thermistor Relay Series



Relay Type	Description	Cat. No.	M.R.P. (`) Per Unit
Thermistor Relay	110 - 240 VAC, 2 C/O	MJ83BK	3260
	220 - 440 VAC, 2 C/O	MJ93BK	3285
	24 VAC/DC, 2 C/O	MJA3BK	3815
	110 - 240 VAC, 1 C/O	MJ81BK	3015
	220 - 440 VAC, 1 C/O	MJ91BK	3060

Hour Meter & Counter [9029]

Hour Meters





Product Description	Cat. No.	M.R.P. (`) Per Unit
HM36, 85 - 265 VAC Flush Mounting	LA25F1	1245
HM 36, 10 - 80 VDC Flush Mounting	LD17F1	1885
HM36, 92 - 264 / 270 - 460 VAC Base - DIN Mounting	30A6B1	1355
HM36, 10 - 80 VDC Base/DIN Mounting	30D1B1	1885
Digital Hour Meter/Digital Counter (Resettable)	Z□□FB□	2260

Hour Meter / Counter Z □ □ FB □

- Voltage: H 10 - 80 VDC; 7 85 - 265 VAC; J 12 - 48 VAC/DC
- 1 Hour Meter; 2 Counter
- Bezel: A Round; B 24 x 48; C Screw Mount

Earth Leakage Relays



96 x 96 mm Earth Leakage Relay



DIN Mounted Earth Leakage Relay



CBCT



Rectangular CBCT

Current Range	Type	Voltage & Contact Arrangement	Cat. No.	M.R.P. (`) Per Unit
30mA - 30A	Panel mounted (96 x 96 mm) Earth Leakage Relay	110 - 240 VAC/DC, 1 C/O (Pre-alarm) + 1 C/O (Fault)	17K716QF4N	5745
		110 - 240 VAC/DC, 1 C/O (Pre-alarm) + 1 C/O (Fault) with RS 485	17K716QF4M	8260
		240 - 415 VAC/DC, 1 C/O (Pre-alarm) + 1 C/O (Fault)	17K726QF4N	5745
		240 - 415 VAC/DC, 1 C/O (Pre-alarm) + 1 C/O (Fault) with RS 485	17K726QF4M	8260
	DIN mounted Earth Leakage Relay	110 - 240 VAC, 110 VDC, Manual reset	17G715GF2	5155
		220 - 415 VAC, 220 VDC, Manual reset	17G745GF2	
		110 - 240 VAC, 110 VDC, Auto reset	17G715KF2	
		220 - 415 VAC, 220 VDC, Auto reset	17G745KF2	
	CBCT (moulded case) for Type A & AC Current	38 mm ID	17H7NNHN3	1770
		57 mm ID	17H7NNIN3	2385
		70 mm ID	17H7NNQN3	2720
		92 mm ID	17H7NNJN3	2970
		120 mm ID	17H7NNLN3	3100
		210 mm ID	17H7NNKN3	5845
	CBCT (moulded case) for Type AC Current	38 mm ID	17H7NNRN3	1325
		57 mm ID	17H7NNVN3	1480
		70 mm ID	17H7NNSN3	1570
		92 mm ID	17H7NNTN3	2105
		120 mm ID	17H7NNUN3	2435
	Rectangular CBCT (moulded case) for Type AC Current	300 x 50 mm ID	17H9NNWN0	11680
		350 x 150 mm ID	17H9NNXN0	14200

› CBCT for Type AC : For applications with sinusoidal alternating current from 30mA to 30A.
› CBCT for Type A and AC : For applications with sinusoidal alternating current (from 30mA to 30A) & pulsating DC current (from 30mA to 3A).
› Please contact nearest branch office for requirements of higher dimension CBCTs.

These products are manufactured by GIC
www.gicindia.com

Disclaimer for Timing Devices and Supply Monitors
Every effort as to the correctness or sufficiency of the information and data contained in the catalogue is made. We however cannot accept any liability for the accuracy or completeness of the information and data provided. No claims in this regard shall consequently be accepted.
We reserve the right to make changes, without prior notice, in the catalogue.
Products with CAT no. having, with or without, dot as suffix are same.

RELIABLE ELECTRICAL

Elevate Your Panels with **superior illumination & aesthetic**



LED Indicators

Built on Trust. **Designed for high performance.**

LEDs with Inbuilt low voltage glow protection at 25% of rated voltage to avoid false indication due to stray voltages.

LEDs with >180 degree viewing angle for enhanced experience with uniform illumination.

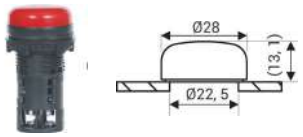
Modular Remote Control Units

Note : All Cat.No. to be ordered in multiple of Standard Packing : 10, Except for Push Button Stations.

Gen Next Series

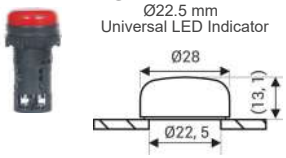
Gen Next Pro LED Indicator [8531]

› Surface Mounted Device LED technology › Low Power consumption < 1W › Surge & Low Voltage Glow Protection (LVGP)

	Description	Cat. No.	Colour (4^{th} Digit)	Voltage (5^{th}, 6^{th}, 7^{th} & 8^{th} Digit)	M.R.P. (`) Per Unit
	Gen Next Pro LED Indicator 22.5 mm	EPL□□□□□□	R-Red G-Green Y-Yellow A-Amber B-Blue W-White	012C - 12 VAC/DC 024C - 24 VAC/DC 030C - 30 VAC/DC 048C - 48 VAC/DC 064C - 64 VAC/DC 110A - 110 VAC 110D - 110 VDC 240A - 240 VAC 220D - 220 VDC	185 318 Blue & White
				415A - 415 VAC	232 392 Blue & White
	Gen Next Pro LED Indicator 16 mm	SPL□□□□□□	R-Red G-Green Y-Yellow A-Amber B-Blue W-White	012C - 12 VAC/DC 024C - 24 VAC/DC 110C - 110 VAC/DC 240A - 240 VAC	216 359 Blue & White

Note * : LED Indicator for Flame Proof Panel application available on request.

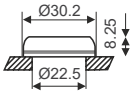
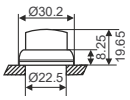
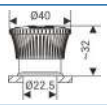
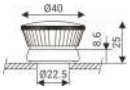
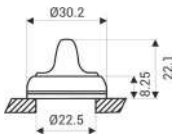
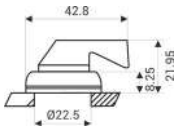
Universal LED Indicator [8531]

	Description	Cat. No.	Colour (8^{th} Digit)	Voltage (9^{th}, 10^{th}, 11^{th} & 12^{th} Digit)	M.R.P. (`) Per Unit
	Gen Next Pro Universal LED indicator	EPL□□□□□□	R-Red G-Green Y-Yellow A-Amber B-Blue W-White	224C-24 to 240V AC/DC	551 661 Blue & White

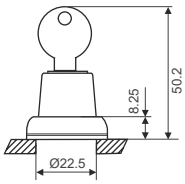
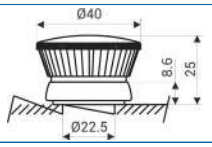
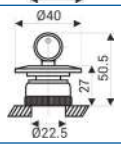
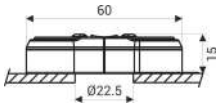


Gen Next Push Button & Selector Actuators Ø 22.5 mm [8538]

› Snap Mounting with compact contact blocks (EC1C & EC2C) › Max 3 row x 3 column stackable contact blocks

	Description	Cat. No.	Colour (4th Digit)	M.R.P. (`) Per Unit
 	Flush Head	EMN☐FD1	R-Red G-Green C-Black Y-Yellow W-White B-Blue A-Amber F-Gray	118
 	Projecting Head Push Function	EMN☐PD1	R-Red G-Green C-Black Y-Yellow W-White B-Blue A-Amber F-Gray	119
 	Mushroom Head 'Push - Turn Function'	EMN☐MH1	R-Red G-Green C-Black Y-Yellow	231
 	Mushroom Head 'Push - Function'	EMN☐MD1	R-Red G-Green C-Black Y-Yellow	168
 	Symmetric Head	2 Position	R-Red G-Green C-Black W-White	327
		Non Spring Return EP09SK00☐0000		
		Spring Return EP09SI00☐0000		
		3 Position		346
		Non Spring Return EP09SL00☐0000		
		Spring Return EP09SJ00☐0000		
		Spring Return L. H. EP09SM00☐0000		
		Spring Return R. H. EP09SN00☐0000		
 	Lever Head	2 Position	R-Red W-White C-Black	327
		Non Spring Return EMN☐LK1		
		Spring Return EMN☐LI1		
		3 Position		346
		Non Spring Return EMN☐LL1		
		Spring Return EMN☐LJ1		
		Spring Return L. H. EMN☐LM1		
		Spring Return R. H. EMN☐LN1		

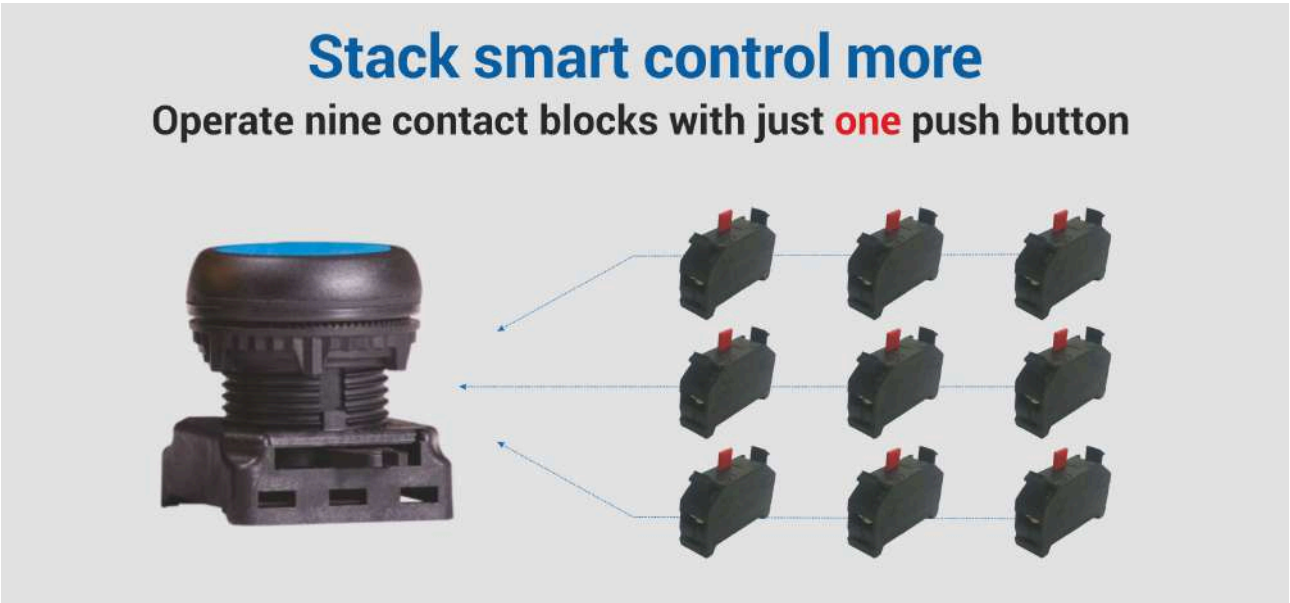
Gen Next Push Button & Selector Actuators Ø 22.5 mm [8538]

	Description	Cat. No.	Colour (4th Digit)	M.R.P. (`) Per Unit
 	Lock & Key Rotary Type	2 Position	C-Black	471
		Non Spring Return EP09KK00☐0000		
		Spring Return EP09KI00☐0000		
		3 Position		
		Non Spring Return EP09KL00☐0000		
		Spring Return EP09KJ00☐0000		
		Spring Return L. H. EP09KM00☐0000		491
		Spring Return R. H. EP09KN00☐0000		
 	Push Pull	EG02MG0☐	R-Red	452
 	Mushroom Head Lock And Key Actuator	EG02MQ0R00	R-Red	512
 	Twin Touch with Black centre strip	EG02TD0I	-	234


Brass Metal Coller Push Button

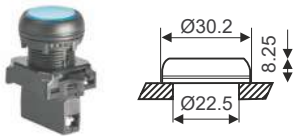
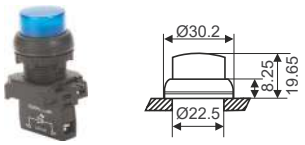
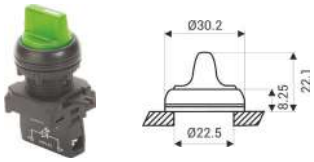
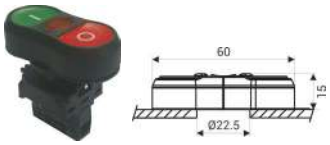
Note : 1. Actuators & Selector Actuators with black ABS collar are offered as Standard
2. Actuators (except Mushroom Head Push - Pull Actuators) are also available with chrome plated ABS & Brass collar Non-Illuminated Actuator
- For PU Coated ABS Collar replace 7th digit 1 by 2 eg. : EMNPD☐2
- For Brass Metal Collar replace 7th digit 1 by 3 eg. : EMNPD☐3 (Please contact nearest branch office for MRP) Iluminated Actuator
- For PU Coated ABS Collar replace 4th digit 3 by 5 eg. : EG☐0 5 ***
- For Brass Metal Collar replace 4th digit 3 by 7 eg. : EG☐0 7 *** (Please contact nearest branch office for MRP)

Note * : In 2 position selector actuator, for operating style 0 1 replace 6th digit from K to R and for operating style 0 1 replace 6th digit from K to T



Gen Next Illuminated Push Button Actuators [8531]

› Snap Mounting with compact contact blocks (EC1C & EC2C)

	Description	Cat. No.	Colour (8th Digit)	Voltage (9th , 10th, 11th &12th Digit)	M.R.P. (`) Per Unit
	Flush Head	EG03FDL□□□□□	R-Red G-Green Y-Yellow A-Amber	012C - 12 VAC/DC 024C - 24 VAC/DC 030C - 30 VAC/DC 048C - 48 VAC/DC 064C - 64 VAC/DC 110A - 110 VAC 110D - 110 VDC 240A - 240 VAC 220D - 220 VDC	333
			B-Blue W-White		615 Blue and White
	Projecting Head (Push Function)	EG03PDL□□□□□	R-Red G-Green Y-Yellow A-Amber	012C - 12 VAC/DC 024C - 24 VAC/DC 030C - 30 VAC/DC 048C - 48 VAC/DC 064C - 64 VAC/DC 110A - 110 VAC 110D - 110 VDC 240A - 240 VAC 220D - 220 VDC	333
			B-Blue W-White		615 Blue and White
	Selector Actuator with LED holder	2 Position	R-Red G-Green Y-Yellow A-Amber B-Blue W-White	012C - 12 VAC/DC 024C - 24 VAC/DC 030C - 30 VAC/DC 048C - 48 VAC/DC 064C - 64 VAC/DC 110A - 110 VAC 110D - 110 VDC 240A - 240 VAC 220D - 220 VDC	486
		Non Spring Return EG03SKL□□□□□			
		Spring Return EG03SIL□□□□□			
		3 Position			724 Blue and White
		Non Spring Return EG03SLL□□□□□			
		Spring Return EG03SJL□□□□□			
	Twin Touch with Led Holder	EG03TDL□□□□□	Y- Yellow A-Amber	012C - 12 VAC/DC 024C - 24 VAC/DC 030C - 30 VAC/DC 048C - 48 VAC/DC 064C - 64 VAC/DC 110A - 110 VAC 110D - 110 VDC 240A - 240 VAC 220D - 220 VDC	417

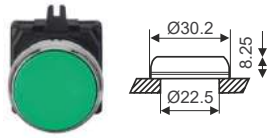
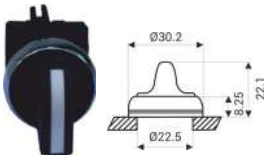
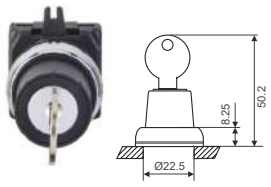
Note* : 1) In 2 position selector actuator, for operating style  replace 6th digit from K to R and for operating style  replace 6th digit from K to T.

2) Assembly comes with LED holder. Please order contact block EC1C and EC2C separately.



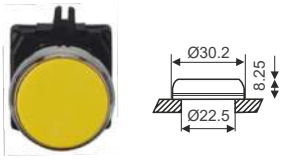
GEN NEXT Metal Push Button & Selector Actuator [8538]

› Snap Mounting with compact contact blocks (EC1C & EC2C)

	Description	Cat. No.	Colour	M.R.P. (`) Per Unit
	Flush head	EM27FD00☐00	R-Red G-Green C-Black Y-Yellow W-White B-Blue A-Amber	124
		EM27FD00☐00		
		EM27FD00☐00		
		EM27FD00☐00		
		EM27FD00☐00		
		EM27FD00☐00		
		EM27FD00☐00		
	Symmetric Head	2 Position	C-Black	
		Non Spring Return EM27SK00☐00		368
		Spring Return EM27SI00☐00		
		3 Position		
		Non Spring Return EM27SL00☐00		416
		Spring Return EM27SJ00☐00		
		Spring Return L.H. EM27SM00☐00		
		Spring Return R.H. EM27SN00☐00		
	Lock & Key	2 Position	C-Black	
		Non Spring Return EM27KK00☐00		505
		Spring Return EM27KI00☐00		
		3 Position		
		Non Spring Return EM27KL00☐00		560
		Spring Return EM27KJ00☐00		
		Spring Return L.H. EM27KM00☐00		
		Spring Return R.H. EM27KN00☐00		
	Mushroom Head-Push Turn	EM27MH00☐00	R-Red	281
		EM27MH00☐00	G-Green	
	Mushroom Head-Push Function	EM27MD00☐00	R-Red	185



GEN NEXT Metal Illuminated Push Button Actuator [8531]

	Description	Cat. No.	Colour (8 Digit)	Voltage (9 , 10 , 11 & 12 Digit)	M.R.P. (`) Per Unit
	Illumnated Flush head	EM28FD0□□□□□□	R-Red	012C - 12 V AC/DC	422
			G-Green	024C - 24 V AC/DC	
			Y-Yellow	030C - 30 V AC/DC	
			A-Amber	048C - 48 V AC/DC	
			W-White B-Blue	064C - 64 V AC/DC	871
				110A - 110 V AC	
				110D - 110 V DC	
				240A - 240 V AC	
				220D - 220 V DC	

Gen Next Modular Contact Blocks [8538]

	Description	Cat. No.	Colour	Voltage	M.R.P. (`) Per Unit
	'NO' Block	EC1C	–	–	93
	'NC' Block	EC2C	–	–	93

Spare for Gen Next Series [8531]

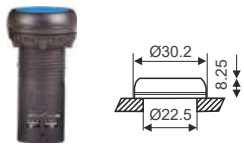
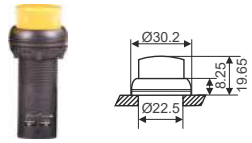
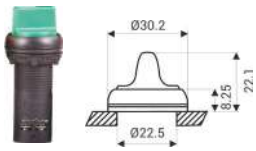
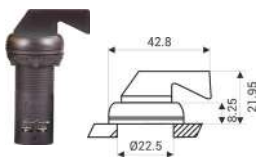
	Description	Cat. No.	Colour	Voltage	M.R.P. (`) Per Unit
	LED Holder for Gen Next illuminated actuator series	EG08HOL□□□□□	R-Red	012C - 12 VAC/DC	250
			G-Green	024C - 24 VAC/DC	
			Y-Yellow	030C - 30 VAC/DC	
			A-Amber	048C - 48 VAC/DC	
			B-Blue W-White	064C - 64 VAC/DC	498 Blue and White
				110A - 110 VAC	
				110D - 110 VDC	
				240A - 240 VAC	
				220D - 220 VDC	

Note : Contact blocks and LED holder are same for Gen next and Gen next META series

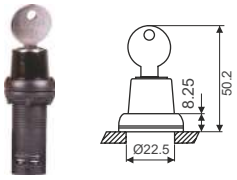


Gen Next entegral Actuator [8536]

› With inbuilt contact arrangement › Contact rating 6A @ 240AC

	Description	Cat. No.	Contact Configuration (3rd Digit)	Colour (4th Digit)	M.R.P. (`) Per Unit
	Flush Head	EE□□FD1	1 - 1 NO 2 - 1 NC	R-Red G-Green Y-Yellow W-White B-Blue A-Amber C-Black	183
			3 - 1 NO + 1 NC 4 - 2 NO 5 - 2 NC		265
	Projecting Head Push Function	EE□□PD1	1 - 1 NO 2 - 1 NC	R-Red G-Green Y-Yellow W-White B-Blue A-Amber C-Black	183
			3 - 1 NO + 1 NC 4 - 2 NO 5 - 2 NC		265
	Mushroom Head Push - Turn	EE□□MH1	1 - 1 NO 2 - 1 NC	R-Red G-Green Y-Yellow C-Black	266
			3 - 1 NO + 1 NC 4 - 2 NO 5 - 2 NC		362
	Mushroom Head Push - Function	EE□□MD1	1 - 1 NO 2 - 1 NC	R-Red G-Green Y-Yellow C-Black	226
			3 - 1 NO + 1 NC 4 - 2 NO 5 - 2 NC		307
	Symmetric Head Actuator	2 Position	1 - 1 NO 2 - 1 NC	R-Red G-Green W-White C-Black	366
		Non Spring Return EE□□SK1	3 - 1 NO + 1 NC (Left NO) 4 - 2 NO 5 - 2 NC 6 - 1 NO + 1 NC (Right NO)		449
		Spring Return EE□□SI1			
		3 Position	3 - 1 NO + 1 NC (Left NO) 4 - 2 NO 5 - 2 NC 6 - 1 NO + 1 NC (Right NO)	R-Red G-Green W-White C-Black	462
		Non Spring Return EE□□SL1			
		Spring Return EE□□SJ1			
		Spring Return L. H. EE□□SM1			
		Spring Return R. H. EE□□SN1			
	Lever Head	2 Position	1 - 1 NO 2 - 1 NC	R-Red G-Green W-White C-Black	366
		Non Spring Return EE□□LK1	3 - 1 NO + 1 NC (Left NO) 4 - 2 NO 5 - 2 NC 6 - 1 NO + 1 NC (Right NO)		449
		Spring Return EE□□LI1			
		3 Position	3 - 1 NO + 1 NC (Left NO) 4 - 2 NO 5 - 2 NC 6 - 1 NO + 1 NC (Right NO)	R-Red G-Green W-White C-Black	462
		Non Spring Return EE□□LL1			
		Spring Return EE□□LJ1			
		Spring Return L. H. EE□□LM1			
		Spring Return R. H. EE□□LN1			

Gen Next entegral Actuator [8536]

	Description	Cat. No.	Contact Configuration (3rd Digit)	Colour (4th Digit)	M.R.P. (`) Per Unit
	Lock & Key Rotary Type	2 Position Non Spring Return EE□□KK1	1 - 1 NO 2 - 1 NC	C-Black	469
			3 - 1 NO + 1 NC (Left NO) 4 - 2 NO 5 - 2 NC 6 - 1 NO + 1 NC (Right NO)		560
		Spring Return EE□□KI1			
		3 Position Non Spring Return EE□□KL1	3 - 1 NO + 1 NC (Left NO) 4 - 2 NO 5 - 2 NC 6 - 1 NO + 1 NC (Right NO)	C-Black	573
		Spring Return EE□□KJ1			
		Spring Return L. H. EE□□KM1			
		Spring Return R. H. EE□□KN1			

Note * : In 2 position selector actuator, for operating style 0 1 replace 6th digit from K to R and for operating style 0 1 replace 6th digit from K to T

Panel Mounted Buzzer Ø 22.5 mm [8531]

› IP20 protection › 80dB at 1 m distance › Low Power consumption < 0.6W

	Description	Electrical Rating	Cat. No. Round Type	M.R.P. (`) Per Unit
	22.5 mm Panel Mounted Buzzer Black colour	240 VAC	EG15R00C240A	439
		110 VAC	EG15R00C110A	
		64 VAC/DC	EG15R00C064C	
		48 VAC/DC	EG15R00C048C	
		30 VAC/DC	EG15R00C030C	
		24 VAC/DC	EG15R00C024C	
		12 VAC/DC	EG15R00C012C	

Gen Next Push Button Stations [8536]

Dimension › Single Station : 65 x 55 x 33 mm › Two Station : 100 x 55 x 53 mm
› Three Station : 134 x 55 x 53 mm › Eight Station : 305 x 55 x 53 mm

	Description	Cat. No.	M.R.P. (`) Per Unit
	Flush Head Actuator - Red with Legend - STOP Contact - 1 'NC'	EP1FAC01	711
	Flush Head Actuator - Green with Legend - START Contact - 1 'NO'	EP1FAB02	
	Two Position Symmetric Head Selector Switch - Black with Legend - OFF / ON Contact - 1 'NO'	EP1FAF08	934
	Two Position Lock & Key Rotary Switch with Legend - OFF / ON Contact - 1 'NO'	EP1FAF12	1030
	Mushroom Head Actuator 'Push Function' with Legend - STOP Contact - 1 'NC' for Stop	EP1FAC03	754

Gen Next Push Button Stations [8536]

	Description	Cat. No.	M.R.P. (`) Per Unit
	Mushroom Head Actuator 'Push Turn Type' with Legend - STOP Contact - 1 'NC' for Stop	EP1FAC05	919
	Flush Head Actuator - Green with Legend - START Contact - 1 'NO' (Station One)	EP2FAH0201	1030
	Flush Head Actuator - Red with Legend - STOP Contact - 1 'NC'		
	Flush Head Actuator - Green with Legend - START Contact - 1 'NO' (Station One)	EP2FAH0205	1140
	Mushroom Head Actuator 'Push Turn Type' with Legend - STOP Contact - 1 'NC' (Station Two)		
	LED Indicator 240 VAC - Red (Station One)	EP3FAUI1X0201	1388
	Flush Head Actuator - Green with Legend - START Contact - 1 'NO' (Station Two)		
	Flush Head Actuator - Red with Legend - STOP Contact - 1 'NC' (Station Three)		
	Flush Head Actuator - Green with Legend - FORWARD Contact - 1 'NO' (Station Two)	EP3FAR020102	1299
	Flush Head Actuator - Red with Legend - STOP Contact - 1 'NC' (Station Two)		
	Flush Head Actuator - Green with Legend - REVERSE Contact - 1 'NO' (Station Three)		
	Flush Head Actuator - Green with Legend - UP Contact - 1 'NO' (Station Two)	EP3FAS020102	1299
	Flush Head Actuator - Red with Legend - STOP Contact - 1 'NC' (Station Two)		
	Flush Head Actuator - Green with Legend - DOWN Contact - 1 'NO' (Station Three)		
 	All 7 Flush Head Actuators with NO Contact & Mushroom Head Push Turn	EP8F02	3685
	8 Way push button pendant with hanging provision	EP8F04	3940
	Single Station Enclosure Box without Actuator	EP1FAA*	393
	Two Station Enclosure Box without Actuator	EP2FAA*	418
	Three Station Enclosure Box without Actuator	EP3FAA*	430
	Eight Station Enclosure Box without Actuator	EP8FAA*	718

Note : 1. All Gen next push button stations contains entegral Actuators.
2. Only entegral actuators can be used for converting Gen next enclosure boxes into Gen Next push button station.
3. For any other combination of actuators/indicators in push button stations please contact nearest branch office.
4. EP8F04 is available in single speed for crane application.
* Chapter ID : 8538.

Universal Push Button Stations (in ABS Engineering plastic body) [8536]

Dimension › Single Station : 75 x 75 x 56 mm › Three Station : 160 x 75 x 56 mm
› Two Station : 127 x 75 x 56 mm

	Description	Cat. No.	M.R.P. (`) Per Unit
	Flush Head Actuator - Red with Laser Marking - STOP Contact - 1 'NC'	EWS1C01AC062	858
	Flush Head Actuator - Green with Laser Marking - START Contact - 1 'NO'	EWS1C01AC063	858
	Two Position Symmetric Head Selector Switch - Black with Laser Marking - OFF / ON Contact - 1 'NO'	EWS1C01AF064	1133
	Illuminated Actuator - Green with Laser Marking - ON Contact - 1 'NO' - 240 VAC	EWS1C01AA070	1012
	Two Position Lock & Key Rotary Switch with Laser Marking - OFF / ON Contact - 1 'NO'	EWS1C01AF065	1280
	Mushroom Head Actuator 'Push Function' with Laser Marking - STOP Contact - 1 'NC' for Stop	EWS1C13AC054	912
	Mushroom Head Actuator 'Push Turn type' with Laser Marking - STOP Contact - 1 'NC' for Stop	EWS1C13AC051	1029
	"Mushroom Head Actuator with Lock and Key on Yellow Cover, with Laser Marking - STOP, Contact - 1 'NC' for Emergency Stop"	EWS1C13AC066	1251
	Push Button Station with Push Pull Emergency Switch, Red with 1 NC	EWS1C13AC069	1112
	Flush Head Actuator - Green with Laser Marking - START Contact - 1 'NO' (Station One) Flush Head Actuator - Red with Laser Marking - STOP Contact - 1 'NC' (Station Two)"	EWS2C01AH045	1238
	Flush Head Actuator - Green with Laser Marking - START Contact - 1 'NO' (Station One) Mushroom Head Actuator 'Push Turn Type' with Laser Marking - TOP Contact - 1 'NC'"	EWS2C01AH067	1372
	Flush Head Actuator - Green with Laser Marking - START Contact - 1 'NO' (Station One) Mushroom Head Actuator 'Lock & Key Type' with Laser Marking - STOP Contact - 1 'NC'"	EWS2C01AH068	1620
	Pilot Light 240 VAC White (Station One) Flush Head Actuator - Green with Laser Marking- START Contact - 1 'NO' (Station Two) Flush Head Actuator - Red with Laser Marking - STOP Contact - 1 'NC' (Station Three)"	EWS3C01AH048	1676
	Flush Head Actuator - Green with Laser Marking - FORWARD Contact - 1 'NO' (Station One) Flush Head Actuator - Red with Laser Marking - STOP Contact - 1 'NC' (Station Two) Flush Head Actuator - Green with Laser Marking - REVERSE Contact - 1 'NO' (Station Three)"	EWS3C01BJ055	1572
	Flush Head Actuator - Green with Laser Marking - UP Contact - 1 'NO' (Station One) Flush Head Actuator - Red with Laser Marking - STOP Contact - 1 'NC' (Station Two) Flush Head Actuator - Green with Laser Marking - DOWN Contact - 1 'NO' (Station Three)"	EWS3C01AS055	1572

Universal Push Button Stations (in ABS Engineering plastic body) [8538]

Push Buttons Station Enclosure

Dimension › Single Station : 75 x 75 x 56 mm › Two Station : 127 x 75 x 56 mm
› Three Station : 160 x 75 x 56 mm › Four Station : 215 x 75 x 70 mm
› Five Station : 270 x 75 x 71 mm

	Description	Cat. No.	M.R.P. (`) Per Unit
	Enclosure Grey-Black single hole	EWS1C01AA	501
	Enclosure Grey-Black & 2 hole of Ø 22.5	EWS2C01AA	648
	Enclosure Grey-Black & 3 holes of Ø 22.5	EWS3C01AA	794
	Enclosure Grey-Black & 4 holes of Ø 22.5	EWS4C01AA	1113
	Enclosure Grey-Black & 5 holes of Ø 22.5	EWS5C01AA	1285
	Enclosure Yellow-Black single hole	EWS1C13AA	501
	Enclosure Yellow-Black & 2 hole of Ø 22.5	EWS2C13AA	648
	Enclosure Yellow-Black & 3 holes of Ø 22.5	EWS3C13AA	794
	Enclosure Yellow-Black & 4 holes of Ø 22.5	EWS4C13AA	1113
	Enclosure Yellow-Black & 5 holes of Ø 22.5	EWS5C13AA	1285

All Purpose Enclosures [8538]

Dimension: 110 x 80 x 65 mm

	Description	Cat. No.	M.R.P. (`) Per Unit
 Note : with plastic screws	All Grey without hole	HF999000	496
	All Grey & 1 hole of Ø 22.5	HF999001	
	All Grey & 2 holes of Ø 22.5	Hf999002	

Note : Gen Next Series actuator and contact blocks can be used to convert all purpose enclosure box into push button stations.

Accessories and Spares [8538]

Metal Plates - Spare



Small Large Square

Description	Cat. No.	M.R.P. (`) Per Unit
Small	HH2420122	36
Large	HH2420124	
Square	HH2420123	

Note : Printing as per customer requirement

Fixing Device



Cat. No.	M.R.P. (`) Per Unit
HH192000	115

Plastic Plate

		Cat. No.	M.R.P. (`) Per Unit
	Yellow legend plate	HB135000	97
	Padlock Yellow (for Mushroom head Actuator)	HF192024	239
	Padlock Transparent (for Flush head Actuator)	HF192025	216
	Protecting Shroud for Emergency Push Button	HF195020A	111
	Protecting Shroud	HF195004	97

Shroud (Boot) for Actuator



(For IP67 protection of actuators)

Colour	Gen Next Actuator	
	Cat. No.	M.R.P. (`) Per Unit
White	HB17101	45
Red	HB17301	
Green	HB17401	
Black	NA	
Yellow	HB17501	
Blue	HB17701	
Amber	HB17801	
Colourless	HB190003	55

Spare Lens Cap



Colour	Cat. No.		M.R.P. (`) Per Unit
	Non Illuminated	Illuminated	
White	HB103002	HB103103	35
Red	HB104000	HB104101	
Green	HB102006	NA	
Black	HB105008	HB105109	
Yellow	HB101004	HB101105	
Blue	HB107010	HB107111	
Amber	HB108012	HB108113	
Colourless	NA	HB100107	

Note : It can be used for Gen Next.

	Cat. No.	Colour	M.R.P. (`) Per Unit
Collar (For Flush/ Projecting Head) 	HB196000	Chrome Plated 'ABS'	29
	HB192000	Black	29
	HB326000	Brass	95
Adaptor Ring * (For 30 to 22 mm in Panel Cutout conversion) 	HH180000	Gray	41
	HH182004	Black	
	HH196006	Chrome Plated 'ABS'	
Blanking Plugs 	HH180002	Gray	80
	HH182009	Black	
	HH196010	Chrome Plated 'ABS'	
Center Indication Strip (For Twin Touch Actuator) 	HB102058	Black	80
	HB105163	Yellow	
	HB108169	Orange	
	HB100161	Colourless	

* It can be used to convert Gen Next actuator series to TK3 Ø30 mm mounting.

Every effort as to the correctness or sufficiency of the information and data contained in the catalogue is made. We however cannot accept any liability for the accuracy or completeness of the information and data provided. No claims in this regard shall consequently be accepted.
We reserve the right to make changes, without prior notice, in the catalogue.
Products with CAT no. having, with or without, dot as suffix are same.

These products are manufactured by ESBEE switch to perfection

General Terms

All prices are on Maximum retail price basis inclusive of all duties, GST & any other tax as applicable.

Warranty Policy

All products listed in the price list are covered by a warranty against manufacturing defects for a period of 18* months from the date of purchase. For Lauritz Knudsen MCBs & Isolators mounted inside Lauritz Knudsen Distribution Boards, an extended warranty of 5 years is provided.

In the event of a defect due to faulty workmanship or other associated reasons, we will, at our discretion, remedy the defect or replace the faulty parts or the entire product as soon as possible, free of cost.

However, the warranty is subject to proper usage, efficient maintenance, and does not cover defects arising from fire, accidents, inefficient maintenance, faulty operation, or deliberate or accidental damage. It also does not cover damage to power electronic components such as thyristors & IGBTs, which primarily fail due to overtemperature & over-voltage. Users need to take adequate precautions to eliminate these conditions. Manufacturer shall not be responsible & liable for any special, incidental, social or consequential (including lost profits) loss, consequential damages, injury or damages (punitive) of any kind solely attributable to defect or failure of its products. Manufacturer shall not be liable in any manner for the issue of or failure in the performance of other equipment the product is attached to.

Comprehensive Service Support

Lauritz Knudsen Electrical & Automation has over seven decades of experience in providing after sales service for low voltage distribution system in every type of industry & commercial complex in India

Lauritz Knudsen Electrical & Automation offers the following services, partnering you in your maintenance of low voltage distribution products:

- Regular Maintenance
- Preventive Maintenance Programme
- On Call
- Annual Maintenance Contract
- Product Support for Managing Obsolescence-

Please visit www.LK-EA.com for latest update on our products & rices.