



Electrical & Automation

# POWERING A NON-STOP INDIA

LOW VOLTAGE | INDUSTRIAL AUTOMATION | SOFTWARE SOLUTIONS



**Maximum Retail Prices  
For Electrical Standard Products**  
Effective from 01-03-26

## FROM THE COO'S DESK.



Electrical & Automation

**Dear Partner,**

Your continued trust and partnership have been the cornerstone of our journey. Building on a legacy of over 70 years, and following our refreshed identity last year, we remain focused on delivering **innovative, reliable, and high-quality products** that power progress.

As part of this journey, we are pleased to **share an updated price list**. This revision reflects our ongoing commitment to **transparency, quality, and excellence**, ensuring you continue to receive the best value and service.

At Lauritz Knudsen, our philosophy remains simple yet powerful: **We listen. We partner. We innovate.**

These words guide our actions and shape the way we grow - together.

We look forward to continuing our collaboration and powering up homes, industries, farms, infrastructure, businesses, and lives - with you by our side.

Wishing you a joyful festive season and continued success.

A handwritten signature in blue ink that reads "Naresh Kumar".

Warm regards,  
Naresh Kumar  
COO & Sr. VP, Electrical Standard Products  
Lauritz Knudsen Electrical & Automation

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

## Power Distribution



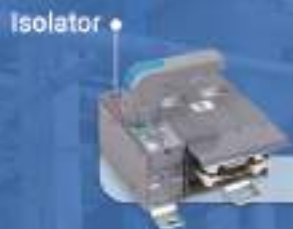
• ACB



• 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

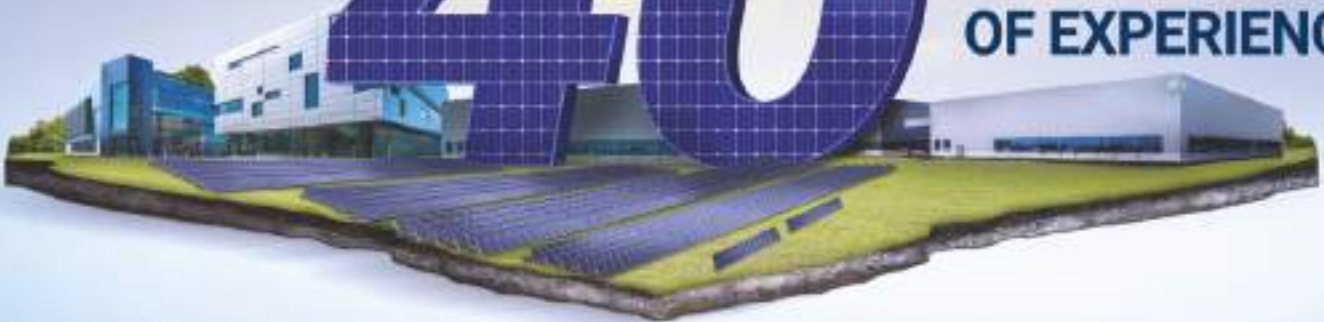
## Software

### 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

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India



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**For Battery Energy Storage Solution (BESS)  
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# 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<sup>#</sup>, 1000V, 750V, 500V & 250V
- › Service Breaking Capacity Ics upto 100kA

\* 6300A in two pole series connection for voltage up to 500V DC

<sup>#</sup> Upcoming version



## SWITCH DISCONNECTOR

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



## MCB

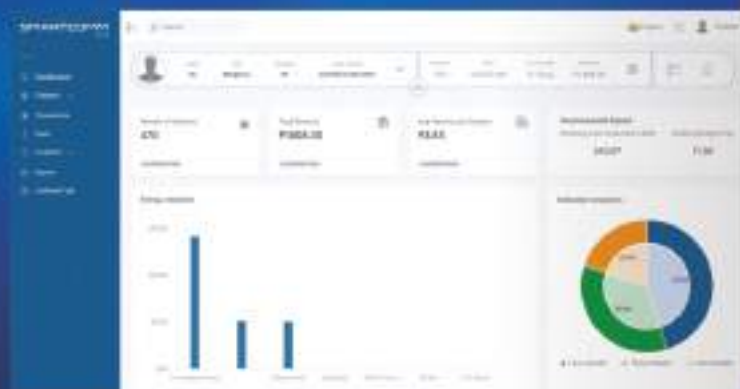
- › Conforms to IEC 60947-2
- › Current rating upto 63A
- › Available in SP/DP and FP versions
- › Voltage rating available from 130V DC to 1000V DC





# TECharge

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



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## 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

COMING SOON.

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Note:

[Black colour : HSN code]

Current GST 18%, subject to changes as per Govt. notification

**Please contact the nearest branch office for  
Prices of the following products :**

- › **Final Distribution Products - 6kA MCBs**
- › **Wires, Cables and Flat Cables**
- › **Busbar Trunking Systems**
- › **Rotary Switches**
- › **Modular Remote Control Units & Indicating Units**
- › **Timing Devices & Supply Monitors**
- › **Cable Ducts & Load Break Switches**
- › **Modular Switches and Sockets**
- › **Medium Voltage AIS upto 36kV**
- › **Agricultural Electrical Products**

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## Contactors

### Power Contactors

#### 2 Pole

- › MNX
- › 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

Optimum solution  
for your applications



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)	CS90401	Price on Request*
MI 9 (With 1 NO aux contact)	CS90402	
MI 12 (With 1 NO aux contact)	CS90403	
MI 18 (With 1 NO aux contact)	CS90404	
MI 22 (With 1 NO aux contact)	CS90405	
MI 25 (With 1 NO aux contact)	CS90406	
MI 32	CS90407	
MI 40	CS90408	
MI 45	CS90704	
MI 50	CS90705	
MI 70	CS90706	
MI 80	CS90707	
MI 95	CS90724	
MI 120	CS90725	
MI 150	CS90726	

#### Notes:

- 1) Standard coil voltage: 110V, 220V, 240V and 415V, 50Hz
- 2) For ordering Suffix, please refer page No. 10

#### Customer Interaction Center (CIC)

Phone no: 022-6932 7800

Web: www.LK-EA.com | e-mail: CIC@LK-EA.com

## 3 Pole Power Contactors [8536]

### 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

### 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	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	1220	20
				1 NC	CS94107	1220	20
	12	30	MNX 12	1 NO	CS94108	1410	20
				1 NC	CS94109	1410	20
	18	30	MNX 18	1 NO	CS94100	1680	20
				1 NC	CS94101	1680	20
22	32	MNX 22	1 NO	CS94980	1860	20	
			1 NC	CS94981	1860	20	
Fr 2	25	45	MNX 25	#	CS94110	1930	20
	32	55	MNX 32	#	CS94111	4130	20
	40	55	MNX 40	#	CS94190	6170	20
Fr 3	50	85	MNX 50	#	CS97075	8980	1
	70	100	MNX 70	#	CS97076	12660	1
	80	100	MNX 80	#	CS97077	15660	1
	95	160	MNX 95	2 NO + 2 NC	CS94136	25420	1
Fr 4	110	160	MNX 110	2 NO + 2 NC	CS94137	31010	1
	140	160	MNX 140	2 NO + 2 NC	CS94138	39550	1
	185	250	MNX 185	2 NO + 2 NC	CS94139	47040	1
Fr 5	225	300	MNX 225	2 NO + 2 NC	CS94140	51980	1
	250	300	MNX 250	2 NO + 2 NC	CS94141	58110	1
	300	400	MNX 300	2 NO + 2 NC	CS90280	70190	1
Fr 6	400	425	MNX 400	2 NO + 2 NC	CS94144	101270	1
	550	650	MNX 550	2 NO + 2 NC	CS94145	148730	1
	650	800	MNX 650	2 NO + 2 NC	CS96327	222500	1

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 NO+1 NC	CS94833	2280	10
	12	12	32	MO 12	1 NO+1 NC	CS94834	2570	10
	18	18	32	MO 18	1 NO+1 NC	CS94835	2920	10
Fr 1	25	25	45	MO 25	#	CS94567	3240	10
	32	32	50	MO 32	#	CS94568	6750	10
	40	40	50	MO 40	#	CS94569	10240	10
	45	45	50	MO 45 ▲	#	CS94570	13140	10
	50	50	100	MO 50	#	CS94572	14130	1
Fr 2	60	60	100	MO 60	#	CS94573	15630	1
	70	70	100	MO 70	#	CS94574	19160	1
	80	80	125	MO 80	#	CS94576	24270	1
Fr 3	95	95	125	MO 95	#	CS94577	29010	1
	110	110	140	MO 110	#	CS94578	35150	1
	140	140	250	MO 140	2 NO+2 NC	CS95000	47620	1
Fr 4	185	185	275	MO 185	2 NO+2 NC	CS95001	55600	1
	225	225	275	MO 225	2 NO+2 NC	CS95002	61970	1
	140	140	250	MO 140	2 NO+2 NC	CS95042	62320	1
Fr 4*	185	185	275	MO 185	2 NO+2 NC	CS95047	77370	1
	225	225	275	MO 225	2 NO+2 NC	CS95052	82330	1
	250	250	400	MO 250	2 NO+2 NC	CS94441	70420	1
Fr 5	300	300	500	MO 300	2 NO+2 NC	CS94440	84860	1
	250	250	400	MO 250	2 NO+2 NC	CS94456	90980	1
Fr 5*	300	300	500	MO 300	2 NO+2 NC	CS94464	105210	1

#### Notes:

- # Add-on blocks can be ordered separately
  - For ordering MNX/MO add-on aux contact blocks, please refer page No.8
  - For ordering MNX/MO surge suppressor and MNX/MO MIL kit, please refer page No.9
  - For ordering Suffix, please refer page No.10
  - 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

#### Switching solution for all Utilization Categories from MO platform



## 2 Pole Power Contactors [8536]

### 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	1035	10
	12	30	MNX 12-2P	1 NO	CS90234	1200	10
	18	30	MNX 18-2P	1 NO	CS90236	1430	10
	22	32	MNX 22-2P	1 NO	CS90238	1580	10
Fr 2	25	45	MNX 25-2P	#	CS90240	1640	10
	32	55	MNX 32-2P	#	CS90241	3510	10
	40	55	MNX 40-2P	#	CS90242	5240	10
Fr 3	50	85	MNX 50-2P	#	CS94061	7630	1
	70	100	MNX 70-2P	#	CS94062	10760	1
	80	100	MNX 80-2P	#	CS94063	13300	1
Fr 4	95	160	MNX 95-2P	#	CS94064	21600	1
	110	160	MNX 110-2P	#	CS94065	26400	1
	140	160	MNX 140-2P	#	CS94066	33600	1
Fr 5	185	250	MNX 185-2P	2 NO + 2 NC	CS94978	40000	1
	225	300	MNX 225-2P	2 NO + 2 NC	CS94979	44200	1
	250	300	MNX 250-2P	2 NO + 2 NC	CS90301	49400	1
Fr 6	300	400	MNX 300-2P	2 NO + 2 NC	CS90346	59700	1
	400	425	MNX 400-2P	2 NO + 2 NC	CS94069	86100	1
	550	650	MNX 550-2P	2 NO + 2 NC	CS90243	126400	1
	650	800	MNX 650-2P	2 NO + 2 NC	CS90578	189100	1

## 3 Pole Power Contactors [8536]

### 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.)
<b>For AC control (Std. Coil Voltage - 24, 110, 240, 415V, 50Hz)</b>						
6A	20A	MX 06	1 NO	CS94012	1530	10
6A	20A	MX 06	1 NC	CS94013	1530	10
9A	20A	MX 09	1 NO	CS94014	1570	10
9A	20A	MX 09	1 NC	CS94015	1570	10
12A	20A	MX 12	1 NO	CS94016	1730	10
12A	20A	MX 12	1 NC	CS94017	1730	10
<b>For DC control (Std. Coil Voltage - 24, 110, 220V)</b>						
6A	20A	MX 06	1 NO	CS94021	2370	10
6A	20A	MX 06	1 NC	CS94022	2370	10
9A	20A	MX 09	1 NO	CS94023	2510	10
9A	20A	MX 09	1 NC	CS94024	2510	10
12A	20A	MX 12	1 NO	CS94025	2820	10
12A	20A	MX 12	1 NC	CS94026	2820	10

## 3 Pole Power Contactors [8536]

### 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	2500	1
	12	28	MDX 12	1 NO	CS96565	2930	1
	18	32	MDX 18	1 NO	CS96566	3530	1
	25	32	MDX 25	1 NO	CS96567	4650	1
Fr 2 (DC Control Coil)	32	56	MDX 32	#	CS96552	8970	1
	38	56	MDX 38	#	CS96553	12620	1
Fr 3 (Electronic Coil-AC/DC)	50	90	MDX 50	#	CS91584	18320	1
	65	110	MDX 65	#	CS91585	20750	1
	80	125	MDX 80	#	CS91586	25730	1
	95	125	MDX 95	#	CS91857	30820	1
	115	125	MDX 115	#	CS91858	34340	1

\* (Frame 1&2) - Available till stock last

#### Notes:

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

### 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	6520	1
Fr 2	32	40	ML 2	2 NO + 2 NC	SS90701	12110	1
	40	45	ML 3	2 NO + 2 NC	SS90721	17860	1
Fr 3	70	100	ML 4	2 NO + 2 NC	SS90910	29180	1
	110	125	ML 6	2 NO + 2 NC	SS90921	46180	1
Fr 4	300	400	ML 12	2 NO + 2 NC	SS91010	104540	1

#### Notes:

- For ordering MX add-on aux contact blocks, please refer page No.8
- For ordering ML add-on aux contact blocks, please refer page No.9
- For ordering MX surge suppressor and MIL kit, please refer page No.9
- For Ordering Suffix, please refer page No.10
- 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 [8536]

### 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	1600	10
	25	MCX 02	#	CS97010	1660	10
	32	MCX 03	#	CS97011	1840	10
	40	MCX 04	#	CS97012	2660	10
Fr 2	55	MCX 11	#	CS97013	3530	1
	63	MCX 12	#	CS97014	7050	1
	80	MCX 13	#	CS97015	9880	1
Fr 3	105	MCX 22	#	CS97017	14560	1
	130	MCX 23	#	CS97018	15500	1
Fr 4	160	MCX 32	2 NO + 2 NC	CS97020	28190	1
	200	MCX 33	2 NO + 2 NC	CS97021	30270	1
	255	MCX 34	2 NO + 2 NC	CS97022	35580	1
Fr 5	325	MCX 41	2 NO + 2 NC	CS97023	60570	1
	360	MCX 42	2 NO + 2 NC	CS97024	64890	1
	400	MCX 43	2 NO + 2 NC	CS97025	75320	1
	560	MCX 44	2 NO + 2 NC	CS97026	106770	1
	600	MCX 45	2 NO + 2 NC	CS97027	112860	1
	700	MCX 46	2 NO + 2 NC	CS97028	126650	1
	900	MCX 47	2 NO + 2 NC	CS94291	204730	1

#### 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 QR code or click here



Type	Cat. No.	M.R.P. (₹) Per Unit	Std. Pkg. (Nos.)
AuXC-2000 Controller	ATC20000000	39800	1
AuXC-2100 Controller** with Optional RS485	ATC21000000	79400	1
RS485 Module for AuXC-2100 Controller**	ETACONRS485	15800	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.)
<b>For AC control std. Coil Voltage - 24, 110, 240, 415V, 50Hz</b>				
AC-15 4A at 415V	MX0 40E (4 NO)	CS94018	1780	10
	MX0 31E (3 NO + 1 NC)	CS94019	1780	10
	MX0 22E (2 NO + 2 NC)	CS94020	1780	10
	MX0 13E (1 NO + 3 NC)	CS94041	1780	10
	MX0 04E (4 NC)	CS94042	1780	10

### Type MX0 DC

Rated Current	Description	Cat. No.	M.R.P. (₹) Per Unit	Std. Pkg. (Nos.)
<b>For DC control std. Coil Voltage - 24, 110, 220V</b>				
AC-15 4A at 415V	MX0 40E (4 NO)	CS94027	2210	10
	MX0 31E (3 NO + 1 NC)	CS94028	2210	10
	MX0 22E (2 NO + 2 NC)	CS94029	2210	10
	MX0 13E (1 NO + 3 NC)	CS94043	2210	10
	MX0 04E (4 NC)	CS94044	2210	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.

## New 2 NO + 2 NC Power Contactor - Type MCX

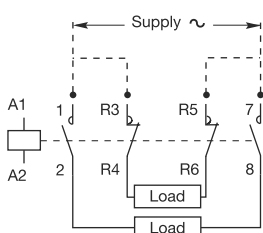
#### Features

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

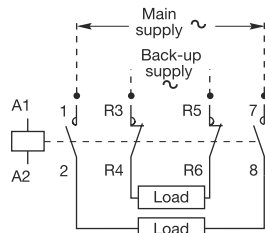
Size	AC-1 Rating (A)	Type	Power Contacts	Cat. No.	M.R.P. (₹) Per Unit	Std. Pkg. (Nos.)
Fr 1	18	MCX 01-22	2 NO + 2 NC	CS91107	1600	10
	25	MCX 02-22	2 NO + 2 NC	CS91108	1660	10
	32	MCX 03-22	2 NO + 2 NC	CS91109	1840	10
	40	MCX 04-22	2 NO + 2 NC	CS91110	2660	10

#### Block diagrams

Single supply and 2 separate loads



2 separate supplies and 2 separate loads



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

## Type MO0 AC



### Features

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

MO0 AC

Rated Current	Description	Cat. No.	M.R.P. (₹) Per Unit	Std. Pkg. (Nos.)
<b>For AC control std. Coil Voltage - 24, 110, 240, 415V, 50Hz</b>				
AC-15 4A at 415V	MO0 40E (4NO)	CS91623	1070	10
	MO0 31E (3NO + 1NC)	CS91624	1070	10
	MO0 22E (2NO + 2NC)	CS91625	1070	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



### Features

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

MO0 DC

Rated Current	Description	Cat. No.	M.R.P. (₹) Per Unit	Std. Pkg. (Nos.)
<b>For DC control std. Coil Voltage - 24, 48, 110, 220</b>				
AC-15 4A at 415 V	MO0 40E (4NO)	CS90045	2390	10
	MO0 31E (3NO + 1NC)	CS90046	2390	10
	MO0 22E (2NO + 2NC)	CS90047	2390	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	kVA 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	2660	1
	5	MO C5	1NO	CS96127	2820	1
	8.5	MO C8.5	1NO	CS96320	3360	1
	10	MO C10	1NO	CS96156	3590	1
	12.5	MO C12.5	1NO	CS96321	3750	1
	15	MO C15	1NO	CS90019	4890	1
	20	MO C20	1NO	CS90021	5630	1
	25	MO C25▲	1NO	CS96322	6170	1
Fr 2	30	MO C30\$	1NO	CS96148	9190	1
	40	MO C40	1NO	CS96147	15500	1
	50	MO C50	1NO	CS96324	17390	1
Fr 3	60	MO C60\$	1NO	CS96149	18710	1
	75	MO C75	1NO	CS96150	22760	1
	85	MO C85	1NO	CS96157	23270	1
	100	MO C100\$	1NO	CS96158	23730	1

### Features

- › Conforms to IS / IEC 60947-4-1 & IEC 60947-4-1
- › MO C Range available from 3 - 100 kVA, 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	1300	10
25A	MU25-2P	CS90118	1580	10
40A	MU40-2P	CS90119	2010	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 N000
- 3) For ordering add-on aux. contact block, please refer page No.8

## Accessories - Add-on Auxiliary Contact Blocks [8538]

	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 0/6/9/12	M.R.P. (₹) Per Unit	MU-2P	M.R.P. (₹) Per Unit
4 NO	CS94112 <sup>^</sup>	830	CS94594 <sup>^</sup>	830	-	-	CS94033 <sup>^</sup>	780	-	-
3 NO + 1 NC	CS94113 <sup>^</sup>	830	CS94595 <sup>^</sup>	830	-	-	CS94034 <sup>^</sup>	780	-	-
2 NO + 2 NC	CS94114 <sup>^</sup>	830	CS94596 <sup>^</sup>	830	CS96569 <sup>~</sup>	1085	CS94035 <sup>^</sup>	780	-	-
1 NO + 3 NC	CS94115 <sup>^</sup>	830	CS94597 <sup>^</sup>	830	CS90906 <sup>~</sup>	1085	CS94036 <sup>^</sup>	780	-	-
4 NC	CS94116 <sup>^</sup>	830	CS94598 <sup>^</sup>	830	-	-	CS94037 <sup>^</sup>	780	-	-
2 NO	CS94117 <sup>^</sup>	545	CS94591 <sup>^^</sup>	545	-	-	CS94030 <sup>^</sup>	505	CS90692 <sup>^</sup>	545
1 NO + 1 NC	CS94118 <sup>^</sup>	545	CS94592 <sup>^^</sup>	545	CS96568 <sup>~</sup>	635	CS94031 <sup>^</sup>	505	CS90693 <sup>^</sup>	545
2 NC	CS94119 <sup>^</sup>	545	CS94593 <sup>^^</sup>	545	-	-	CS94032 <sup>^</sup>	505	CS90694 <sup>^</sup>	545
1 NO	CS94120 <sup>^</sup>	280	CS94585 <sup>^^</sup>	280	CS96586 <sup>~</sup>	355	-	-	CS90695 <sup>^</sup>	280
1 NC	CS94121 <sup>^</sup>	280	CS94586 <sup>^^</sup>	280	-	-	-	-	CS90696 <sup>^</sup>	280

<sup>^</sup>For MDX Side add-on and top add-on can not be mounted together

<sup>~</sup>MDX add-on available till stock last



**MNX/MCX  
Side Add-on aux. contact Block**



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

### Side Mounting Add-on aux. Contact Block

Side Mounting	Aux Contact	Suitable for							
		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	1 NO+1 NC	CS94220 <sup>^</sup>	880	CS94201 <sup>^</sup>	950	CS94201 <sup>^</sup>	950	CS94580 <sup>^</sup>	880
First Right	1 NO+1 NC	CS94221 <sup>^</sup>	880	CS94202 <sup>^</sup>	950	CS94202 <sup>^</sup>	950	CS94581 <sup>^</sup>	880
Second Left	1 NO+1 NC	-	-	-	-	CS94203 <sup>^</sup>	950	CS94582 <sup>^</sup>	880
Second right	1 NO+1 NC	-	-	-	-	CS94204 <sup>^</sup>	950	CS94583 <sup>^</sup>	880

**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	Aux Contact	Suitable for					
		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	1 NO+1 NC	CS94205 <sup>^</sup>	1080	CS95033 <sup>^</sup>	1080	ST94985 <sup>^</sup>	1295
First Right	1 NO+1 NC	CS94206 <sup>^</sup>	1080	CS95034 <sup>^</sup>	1080		
Second Left	1 NO+1 NC	CS94207 <sup>^</sup>	1080	CS95035 <sup>^</sup>	1080	-	-
Second right	1 NO+1 NC	CS94208 <sup>^</sup>	1080	CS95036 <sup>^</sup>	1080	-	-



**MDX  
Side Add-on aux.  
contact Block**

<sup>#</sup> For MDX Side add-on and top add-on can not be mounted together

- Standard Packing is 1 <sup>^</sup>Standard Packing is 10 <sup>^^</sup>Standard Packing is 20

<sup>\*</sup> 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 <sup>^</sup>	1330	-	-
Right	1 NO + 1 NC	-	-	SS91474 <sup>^</sup>	1330

Note: Ordering Suffix for Add-on aux. contact blocks : 0000

## Accessories - Surge Suppressors [8538]

### For MX, MNX, MCX, MO & MO C



MX - S1

Ordering Suffix \* 110-240V : B000, 415V : D000  
 # 110V : A000, 220-240V : B000, 360-525V : D000  
 ^ 110V : A000, 220-320V : B000, 360-415V : D000  
 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*	730	10
MNX 9 - 40 / MCX 01 - 04 (S1)	CS94166*	740	10
MNX 50 - 80 / MCX 11 - 23 (S3)	CS94163*	830	10
MNX 95 - 250 / MCX 32 - 34 (S4)	CS94164 <sup>#</sup>	2720	10
MNX 300 - 400 / MCX 41 - 44 (S6)	CS94165 <sup>#</sup>	3670	10
MO Frame 0/1, MO C Frame 1, MO0 Control	CS91706 <sup>^</sup>	740	10
MO/MO C - Frame 2	CS91707 <sup>^</sup>	830	10
MO/MO C - Frame 3	CS91708 <sup>^</sup>	2720	10
MO Frame - 4/5	CS91854 <sup>^</sup>	3670	10

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

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



MCX M3 (MCX 22)

For Contactor	Cat. No.	M.R.P. (₹) Per Unit	Std. Pkg. (Nos.)
MX 06 to MX 12 / MX 0	CS94038	700	10
MO 9 - 110*	CS94584	995	10
MDX 9 - 38	CS96572	830	1
MDX 50 - 115	CS96573	2520	1
MNX 9 - 40	CS94126	570	10
MNX 50 - 80	CS94197	4010	1
MNX 95 - 140	CS94198	6240	1
MNX 185 - 250	CS94199	7100	1
MNX 300 - 650	CS94200	8040	1
MCX 01 - 04	CS94126	570	10
MCX 11 - 13	ST50540	1130	10
MCX 22 - 23	CS93095	5290	1
MCX 32 - 34	SS94992	5470	1
MCX 41 - 47	CS94301	9020	1

\*MDX Mechanical interlock kit Available till stock last

Note:

- Ordering Suffix for Mechanical Interlock Kits : 0000
- \*MO MIL Kit contains inbuilt 2 NC Contacts
- Mounting of side add-on aux. contact block is not recommended for mechanically interlocked MCX 11/12/13 contactors
- MIL kit for MNX 50-80 comes with 2 left & 2 right side add-on aux. contact blocks i.e. 4 NO + 4 NC
- MIL kit for MCX 22/23 comes with 2 left & 2 right side add-on aux. contact blocks i.e. 4 NO + 4 NC

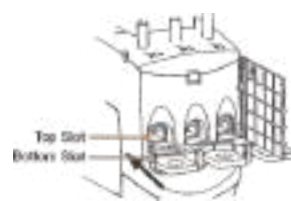
### MO / MO C Spreader Link Kit



For Contactor	Cat. No.	M.R.P. (₹) Per Unit	Std. Pkg. (Nos.)
MO 9 - 45 / MOC 3 - 30	CS94274	660	10
MO 50 - 70 / MOC 40 - 60	CS94093	1045	10
MO 80 - 110 / MOC 75 - 100	CS94094	1510	1
MO 140 - 225	CS91057	4240	1
MO 250 - 300	CS90940	6600	1

Note:

- If using 16 sq mm cable for MO 45/ MO C25 use of spreader link is mandatory
- Spreader Link Kit consists of six terminals along with phase barrier (Phase barrier not applicable for MO 250-300)
- In MO C 30, MO C 60 & MO C 100 spreader link is included in packing
- Ordering Suffix: 0000
- 5) Insert spreader link in top slot only**



## 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 #	545	10
MOG H1/S1 with MO 25-45	CS90391 #	545	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 #	1370	10
MOG H1/S1 with MO 25-45	CS90546 #	1370	10

## Star Delta Starter - Link



Reversing /  
star delta Link



Paralleling  
Link



Contactor  
MMS Link

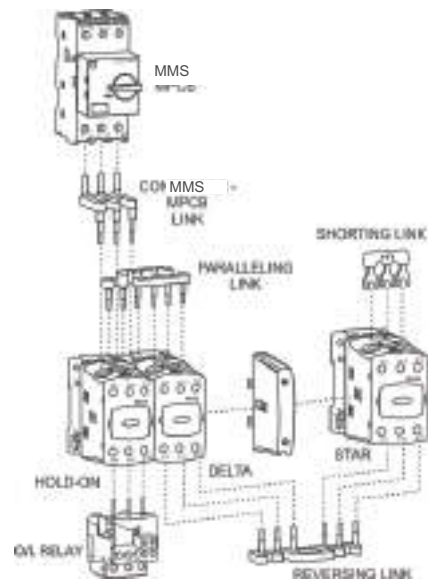


Shorting  
Link

Suitable For	Cat. No.	M.R.P. (₹) Per Unit	Std. Pkg. (Nos.)
MOG H1/S1 with MO 9-18	CS90549 #	1660	10
MOG H1/S1 with MO 25-45	CS90547 #	1660	10

\*Ordering Suffix 0000

## 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	G000	24	4000
110	A000	48	5000
220	K000	110	1000
240	B000	220	2000
415	D000		
440	P000		

Ordering suffix for Electronic coil Contactor		
AC / DC control		
Voltage (V)	Suffix	Contactor
20-48	J000	MDX 50-115
60-110	A000	MDX 50-115
110-240	B000	MDX 50-115 & MO 140-300
240-415	D000	MO 140-300

### Note:

- \* For MX DC, MDX 9-38, MX0 DC, MO0 DC
- 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 <sup>^</sup>	3300	SS90873 <sup>^</sup>	1280
ML 2	SS95307 <sup>^</sup>	6035	SS90545 <sup>^</sup>	2365
ML 3	SS95309 <sup>^</sup>	10660		
ML 4	SS95311 <sup>^</sup>	15805	SS91258 <sup>~</sup>	4630
ML 6	SS95313 <sup>^</sup>	29240		
ML 10	SS95315 <sup>~</sup>	56950	SS91011 <sup>~</sup>	9875
ML 12	SS95317 <sup>~</sup>	61370		
MR	-	-	CS94102 <sup>^</sup>	970
MU16-2P	CS90217 <sup>^</sup>	430	CS90793 <sup>^</sup>	510
MU25-2P	CS90218 <sup>^</sup>	570		
MU40-2P	CS90219 <sup>^</sup>	815		
MO 0 AC	-	-	CS94841 <sup>^</sup>	715

\* MR Coils 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 O000

MO C Spare Coils		
Type	Cat. No.	M.R.P. (₹) Per Unit
MO C3 - 30	CS96317 <sup>^</sup>	850
MO C40 - 60	CS96318 <sup>^</sup>	2620
MO C75 - 100	CS96319 <sup>^</sup>	4530

### 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 <sup>~</sup>	1225
ML 2/ ML 3	ST23866 <sup>~</sup>	1675
ML 4/ ML 6	ST28735 <sup>~</sup>	3035
Combination coil with timer		
Type	Cat. No.	M.R.P. (₹) Per Unit
ML 2	SS90650 <sup>~</sup>	5230

**Note:**

- 1) Ordering Suffix for Spare Contact kit - O000
- 2) For Spare Coil Ordering Suffix refer page No. 10

- ~ Standard Packing is 1
- ^ Standard Packing is 5
- ^ Standard Packing is 10
- ~ Standard Packing is 50

### Spare Contact Kit and Spare Coil



MNX Spare Coils



MCX Spare Kits

	Spare Contact kit		Spare Coil				
	Type	Cat. No.	M.R.P. (₹) Per Unit	Cat. No.	M.R.P. (₹) Per Unit		
MO Contactors	MO 9 (1 NO + 1 NC)	CS94843 <sup>^</sup>	780	CS94841 <sup>^</sup>	700		
	MO 12 (1 NO + 1 NC)	CS94844 <sup>^</sup>	1010				
	MO 18 (1 NO + 1 NC)	CS94845 <sup>^</sup>	1110				
	MO 9	CS96380 <sup>^^</sup>	780	CS96317 <sup>^</sup>	850		
	MO 12	CS96381 <sup>^^</sup>	1010				
	MO 18	CS96382 <sup>^^</sup>	1110				
	MO 25	CS96383 <sup>^^</sup>	1290				
	MO 32	CS96384 <sup>^^</sup>	2920				
	MO 40	CS96385 <sup>^^</sup>	4930				
	MO 45	CS96386 <sup>^^</sup>	4990				
	MO 50	CS96387 <sup>^^</sup>	5230				
	MO 60	CS96388 <sup>^^</sup>	6775			CS96318 <sup>^</sup>	2620
	MO 70	CS96389 <sup>^^</sup>	7525			CS96319 <sup>^</sup>	4530
	MO 80	CS96390 <sup>^^</sup>	10350				
	MO 95	CS96391 <sup>^^</sup>	13055				
	MO 110	CS96392 <sup>^^</sup>	19075	CS90356 <sup>~</sup>	10730		
	MO 140	CS90357 <sup>~</sup>	22710				
	MO 185	CS90358 <sup>~</sup>	27250				
	MO 225	CS90359 <sup>~</sup>	31205	CS94442 <sup>~</sup>	15650		
	MO 250	CS94444 <sup>~</sup>	37510				
MO 300	CS94443 <sup>~</sup>	42340	CS90855 <sup>~</sup>	19440			
MO 140 (electronic coil)	CS90357 <sup>~</sup>	22710					
MO 185 (electronic coil)	CS90358 <sup>~</sup>	27250	CS90738 <sup>~</sup>	19525			
MO 225 (electronic coil)	CS90359 <sup>~</sup>	31205					
MO 250 (electronic coil)	CS94444 <sup>~</sup>	37510	CS94105	640			
MO 300 (electronic coil)	CS94443 <sup>~</sup>	42340					
MNX Contactors	MNX 9	CS94123 <sup>^</sup>	715	CS94192 <sup>^</sup>	2570		
	MNX 12	CS94124 <sup>^</sup>	925				
	MNX 18	CS94125 <sup>^</sup>	1015				
	MNX 22	CS94269 <sup>^</sup>	1130				
	MNX 25	CS94127 <sup>^</sup>	1145				
	MNX 32	CS94128 <sup>^</sup>	2710				
	MNX 40	CS94147 <sup>^</sup>	4405				
	MNX 50	CS94150 <sup>^</sup>	4855				
	MNX 70	CS94151 <sup>^</sup>	7315				
	MNX 80	CS94152 <sup>^</sup>	9970				
	MNX 95	CS94153 <sup>~</sup>	12930	CS94196 <sup>~</sup>	4405		
	MNX 110	CS94154 <sup>~</sup>	18720				
	MNX 140	CS94155 <sup>~</sup>	22700	CS94194 <sup>~</sup>	10055		
	MNX 185	CS94156 <sup>~</sup>	25300				
	MNX 225	CS94157 <sup>~</sup>	29255	CS94195 <sup>~</sup>	14905		
	MNX 250	CS90310 <sup>~</sup>	34825				
	MNX 300	CS90283 <sup>~</sup>	38935	CS94193 <sup>~</sup>	31495		
	MNX 400	CS94161 <sup>~</sup>	58765				
	MNX 550	CS94162 <sup>~</sup>	78955	CS94105 <sup>^</sup>	640		
	MNX 650	CS96336 <sup>~</sup>	123280				
MCX Contactors	MCX 01-04	-	-	CS94009 <sup>^</sup>	830		
	MCX 11	CS94077 <sup>^</sup>	2270				
	MCX 12	CS94078 <sup>^</sup>	4445	ST91291 <sup>*~</sup>	2160		
	MCX 13	CS90307 <sup>^</sup>	6890				
	MCX 22	CS94331 <sup>~</sup>	8390				
	MCX 23	CS90078 <sup>~</sup>	10390	CS94196 <sup>~</sup>	4405		
	MCX 32	CS94082 <sup>^</sup>	15880				
	MCX 33	CS94083 <sup>^</sup>	20530	CS94195 <sup>~</sup>	14905		
	MCX 34	CS94084 <sup>^</sup>	24040				
	MCX 41	CS94295 <sup>~</sup>	35420	CS94195 <sup>~</sup>	14905		
	MCX 42	CS94296 <sup>~</sup>	41185				
	MCX 43	CS94297 <sup>~</sup>	49420	CS94193 <sup>~</sup>	31495		
	MCX 44	CS94298 <sup>~</sup>	62470				
	MCX 45	CS94299 <sup>~</sup>	65305	CS94193 <sup>~</sup>	31495		
	MCX 46	CS94300 <sup>~</sup>	75895				
MCX 47	CS90308 <sup>~</sup>	107695					

\* Ordering Suffix for 240V AC - F000, 415V AC - R000

## 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	SS9414100EO	2010	10
	0.3 - 0.5	SS9414100GO	2010	10
	0.45 - 0.75	SS9414100JO	2010	10
	0.6 - 1	SS9414100KO	2010	10
	0.9 - 1.5	SS9414100MO	2090	10
	1.4 - 2.3	SS9414100PO	2090	10
	2 - 3.3	SS9414100QO	2090	10
	3 - 5	SS9414100SO	2090	10
	4.5 - 7.5	SS9414100UO	2090	10
	6 - 10	SS9414200VO	2090	10
	9 - 15	SS9414200BO	2170	10
	14 - 23	SS9414400DO	2300	10
	20 - 33	SS9414500EO	3470	10
24 - 40	SS9414500FO	3630	10	
MN 5 (Directly Operated)	Direct Mounting on MNX 50 - 80			
	9 - 15	SS9413500BO	4290	10
	14 - 23	SS9413500DO	4290	10
	20 - 33	SS9413600EO	4290	10
	30 - 50	SS9413600GO	5380	10
	36 - 60	SS9413600TO	5780	10
	45 - 75	SS9413700JO	6270	10
66 - 110	SS9413700KO	7140	10	
MN 12 (CT Operated)	Separate Mounting			
	28 - 46.5	SB9421100GO	10500	1
	42 - 69	SS9413800HO	10500	1
	60 - 100	SS9413800KO	10500	1
	90 - 150	SS9413800MO	10500	1
	135 - 225	SS9413800PO	11770	1
	180 - 300	SS9413900QO	13200	1
270 - 450	SS9413900RO	16580	1	
MN 12L # (CT Operated)	Separate Mounting			
	42 - 69	SS9412700HO	32280	1
	60 - 100	SS9412700KO	32280	1
	90 - 150	SS9412700MO	32280	1
	135 - 225	SS9412700PO	32280	1
	180 - 300	SS9412700QO	32280	1
340 - 570	SS9412700SO	32280	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	CS9635500FO	3160	10
	0.31 - 0.55	CS9635500GO	3160	10
	0.55 - 0.85	CS9635500JO	3160	10
	0.78 - 1.2	CS9635500LO	3160	10
	1.2 - 2.0	CS9635500NO	3160	10
	1.9 - 2.8	CS9635500PO	3240	10
	2.4 - 3.6	CS9635500QO	3240	10
	3.5 - 5.2	CS9635500SO	3240	10
	4.6 - 6.7	CS9635500TO	3240	10
	6.7 - 9.7	CS9635500VO	3240	10
	8.5 - 12.5	CS9635500AO	3280	10
	12.5 - 18.5	CS9635600CO	3510	10
	17 - 25.5	CS9635600DO	3510	10
	25 - 37	CS9635600EO	5240	10
	35 - 45	CS9635600GO	5410	10
	RTO - 2 (Directly Operated)	Direct Mounting on MO 50 - 70		
5 - 7.5		CS9636600UO	6290	1
7 - 11		CS9636600VO	6290	1
10.5 - 16		CS9636600BO	6290	1
15 - 21		CS9636600CO	6290	1
20 - 31		CS9636600EO	6550	1
30 - 43		CS9636600FO	7840	1
40 - 57		CS9636600SO	8720	1
50 - 75	CS9636700JO	9010	1	
RTO - 3 (Directly Operated)	Direct Mounting on MO 80 - 110			
	23 - 30	CS9087300EO	9610	1
	29 - 38	CS9630300QO	9980	1
	37 - 49	CS9630400GO	10300	1
	47 - 62	CS9631200TO	10490	1
	60 - 78	CS9631300JO	12360	1
75 - 110	CS9631400KO	13500	1	
RTO - 4 (CT Operated)	Separate Mounting			
	23.4 - 36	CS9709600GO	15670	1
	36 - 60	CS9709600JO	15670	1
	57 - 84	CS9709600KO	15670	1
	72 - 108	CS9709600LO	15670	1
	105 - 156	CS9709600MO	15670	1
	138 - 201	CS9709600NO	19240	1
	201 - 291	CS9709600QO	19750	1
	255 - 375	CS9709600RO	24640	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)	0.23-0.41	CS9635700FO	1740	10
	0.45-0.78	CS9635700JO	1740	10
	0.78-1.2	CS9635700LO	1740	10
	1.2-1.9	CS9635700NO	1740	10
	1.8-2.8	CS9635700PO	1740	10
Direct Mounting on MX Contactors	2.6-3.6	CS9635700QO	1740	10
	3.6-5.2	CS9635700SO	1740	10
	4.8-7	CS9635700TO	1740	10
	6.4-9.7	CS9635700VO	1740	10
	8.2-12.1	CS9635700AO	1740	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.)
<b>MU 2P (2 Pole)</b>				
Direct Mounting on MU-2P Contactor	1 - 1.6A	CS9020700MO	980	1
	1.5 - 2.5A	CS9020700PO	980	1
	2.5 - 4A	CS9020700RO	980	1
	4 - 6.5A	CS9020700TO	980	1
	6 - 10A	CS9020700VO	980	1
	9 - 14A	CS9020700AO	980	1

### Type ML



ML

Type of Mounting (Operation)	Relay Range (A)	Cat. No.	M.R.P. (₹) Per Unit	Std. Pkg. (Nos.)
<b>Direct Mounting on ML 1.5 Contactors</b>				
ML 1 (Directly Operated)	0.15 - 0.25	SS9185800DO	4510	10
	0.25 - 0.4	SS9185800FO	4510	10
	0.4 - 0.65	SS9185800HO	4510	10
	0.6 - 1	SS9185800KO	4510	10
	1 - 1.6	SS9185800MO	4510	10
	1.5 - 2.5	SS9185800PO	4510	10
	2.5 - 4	SS9185800RO	4510	10
	4 - 6.5	SS9185800TO	4510	10
	6 - 10	SS9185800VO	4510	10
	10 - 16	SS9185800BO	4510	10
	11 - 18	SS9185800CO	4510	10
<b>Direct Mounting on ML 2/3 Contactors</b>				
ML 2 / ML 3 (Directly Operated)	9 - 14	SS9185900AO	6670	10
	13 - 21	SS9185900CO	6670	10
	20 - 32	SS9185900EO	6670	10
	28 - 42	SS9185900FO	6670	10

Type of Mounting (Operation)	Relay Range (A)	Cat. No.	M.R.P. (₹) Per Unit	Std. Pkg. (Nos.)
<b>MU 2P (2 Pole)</b>				
Direct Mounting on MU-2P Contactor	11 - 18A	CS9020700CO	1090	1
	13 - 22A	CS9020700DO	1090	1
	16 - 26A	CS9020700BO	1090	1
	20 - 32A	CS9020700EO	1370	1
	26 - 40A	CS9020700FO	1370	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	SS949680000	80	100
Kit for Mounting MN 2 Relay on ML 1.5 contactor	SS947010000	275	50
Kit for Mounting MN 2 Relay separately (Direct Mounting Type)	SS947000000	275	50
Kit for Mounting MN 5 Relay on MNX 95 / 110 / 140 contactor	SS946380000	440	20
Kit for Mounting MN 5 Relay on ML 2 / ML 3 contactor	SS941510000	285	20
Kit for Mounting MN5 Relay on ML 4 / ML 6 contactor	SS941520000	390	20
DIN Rail Mounting Kit Relay on MN 2 Relay	SS918870000	215	50

### Separate Mounting Kit for RTO Relay



### Relay Reset Cord for MN & RTO relay



Description	Cat. No.	M.R.P. (₹) Per Unit	Std. Pkg. (Nos.)
MN Relay reset cord - 400mm	SB942070000	990	1
MN Relay reset cord - 650mm	SB942080000	1035	1
MN Relay reset cord - 900mm	SB942090000	1060	1
MN Relay reset cord - 1200mm	SB942100000	1190	1
RTO Relay reset cord - 400mm	CS909410000	990	1
RTO Relay reset cord - 650mm	CS909420000	1035	1
RTO Relay reset cord - 900mm	CS909430000	1060	1
RTO Relay reset cord - 1200mm	CS909440000	1190	1

Description	Cat. No.	M.R.P. (₹) Per Unit	Std. Pkg. (Nos.)
RTO-1 Relay Separate Mounting Kit	CS963350000	370	1
RTO-2 Relay Separate Mounting Kit	CS963060000	875	1
RTO-3 Relay Separate Mounting Kit	CS963070000	1250	1

## Electronic Motor Protection Relay [8536]

### Type REO - Electronic Overload Relay

#### 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, 30 as per IEC 60947-4-1
- › Conforms IS/IEC 60947-4-1 & IEC 60947-4-1



To Experience the Benefits of REO Electronic Overload Relay



Click or Scan

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	CS9041800JO	7320	REO 1.1G	CS9042300JO	12200	10
		0.6 - 3	CS9041800QO	7320		CS9042300QO	12200	10
		2.4 - 12	CS9041800LO	7320		CS9042300LO	12200	10
		9 - 45	CS9041800GO	8220		CS9042300GO	12610	10
REO 4	Separate Mounting	18-90	CS9041800UO	21680	REO 4G	CS9042300UO	21890	1
		72-360	CS9041800RO	29710		CS9042300RO	29820	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	CS9191100JO	9400	1
		0.6 - 3	CS9191100QO	9400	1
		2.4 - 12	CS9191100LO	9400	1
		9 - 45	CS9191100GO	9400	1

#### Accessories for REO - Electronic Overload Relay

Description	Cat. No.	M.R.P. (₹) Per Unit	Std. Pkg. (Nos.)
REO Relay Reset Cord - 400mm	CS904250000	990	1
Separate Mounting Kit for REO 1.1/1.1G/1.1c Relay	CS963350000	370	1



Electrical & Automation

# eMPR300D & eMPR300I

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

Protect Your Motors, Enhance Plant Performance.



Electronic Overload +  
Overcurrent Protection



EOLR + EOGR  
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	3600
		4-22		EMPR150XABO	5200
		16-88		EMPR150XACO	6800
	230V AC	1-5.5		EMPR150XBBO	3600
		4-22		EMPR150XBCO	5200
		16-88		EMPR150XBCO	6800

eMPR selection 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	9900
		4-22		EMPR300XABO	11900
		16-88		EMPR300XACO	13900
	230V AC	1-5.5		EMPR300XBBO	9900
		4-22		EMPR300XBCO	11900
		16-88		EMPR300XBCO	13900

eMPR selection 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,
  - » 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	11200
		4-22		EMPR300DCBO	13200
		16-88		EMPR300DCCO	15200

eMPR selection 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

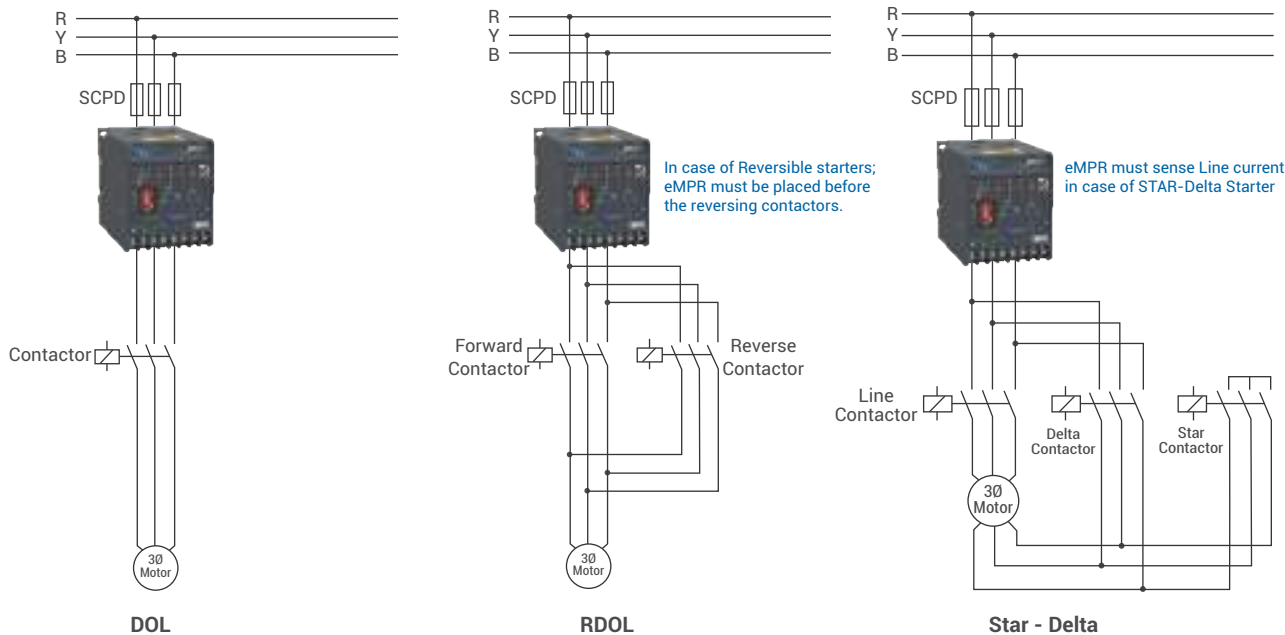


- › **Protections**
  - » Overload
  - » Locked Rotor
  - » Single Phasing, Current Unbalance,
  - » Under Current
  - » Earth Fault
  - » Phase Sequence Reversal
  - » Overcurrent
- › **7 Segment LED Display**
- › **Inbuilt CT's (1 A to 88 A)**
- › **5 trip records**
- › **Test facility**
- › **Site 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**

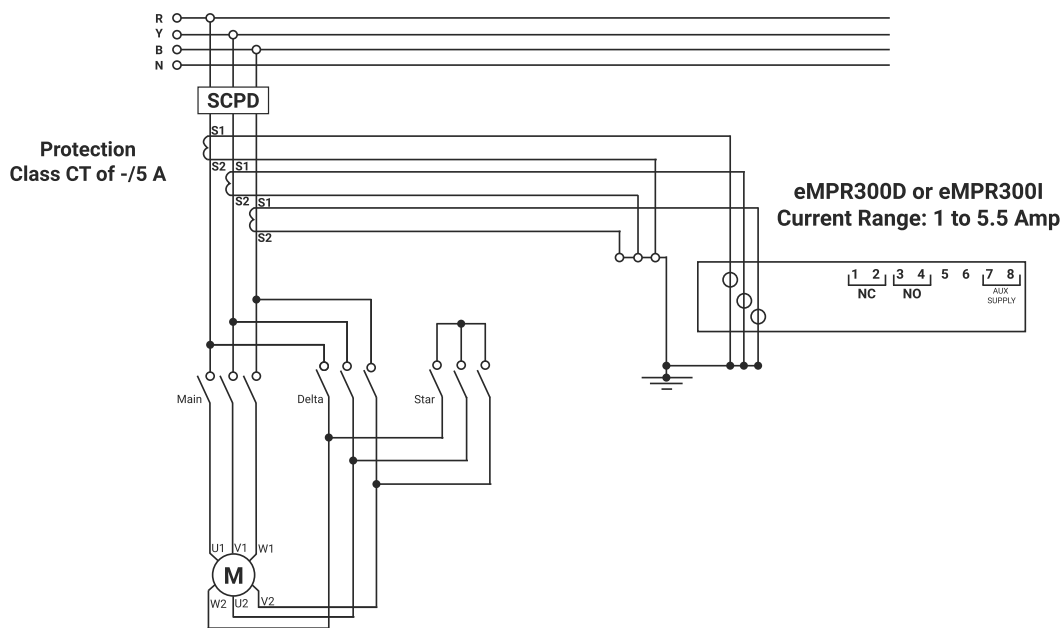
Model	Aux. Supply	Thermal O/L Range (A)	Device Code	Cat. No.	M.R.P. (₹) Per Unit
eMPR300I	85-265V AC	1-5.5	37, 46, 49, 51LR, 51, 64	EMPR300ICAO	14500
		4-22		EMPR300ICBO	16500
		16-88		EMPR300ICCO	18500

eMPR selection 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



## Draw-out Motor Protection Relay - MPR21 \* New

- › 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	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	36900

# - Protection Class CT

Model	Aux. Supply (V)	Communication	Cat. No.	M.R.P. (₹) Per Unit
numrAL MPR21	20 - 60V DC	Modbus RS 485	NRMPR2A28RA	49000
	85 - 265V AC, 87 - 265V DC	Modbus RS 485	NRMPR2B28RA	49000

# - Protection Class CT  
\*- Available On Request



Electrical & Automation

# Redundant and Reliable network for Intelligent Motor Management Solution with iMMR



DISPLAY UNIT



iMMR MAIN UNIT



CT UNIT

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"

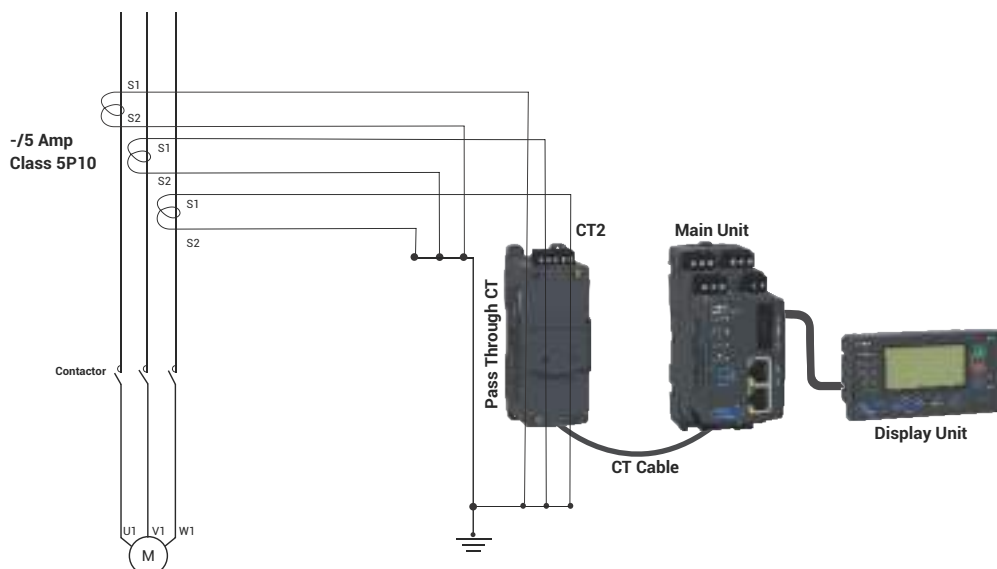
### Features

- › 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

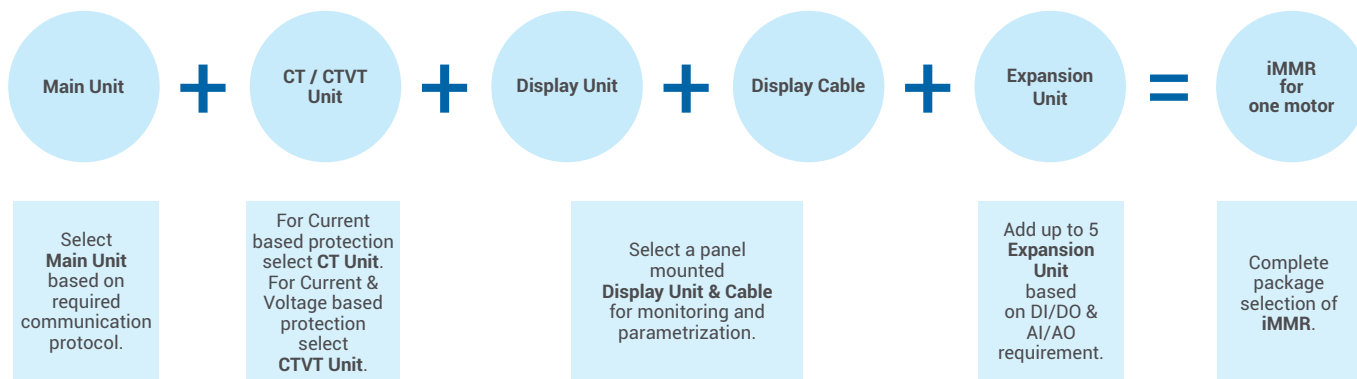
Product	Description	Cat. No.	M.R.P. (₹) Per Unit
Main Unit	iMMR MODBUS RTU 85-265 VAC/DC	CS912440000	22900
	iMMR PROFIBUS-DP 85-265 VAC/DC	*Available On Request	
	iMMR MODBUS TCP/IP 85-265 VAC/DC	*Available On Request	
	iMMR Ethernet IP 85-265 VAC/DC	*Available On Request	
	iMMR Profinet 85-265 VAC/DC	*Available On Request	
CT Unit	CT1 (0.3-3A) with 15 cm cable	CS912450000	5500
	CT2 (2.5-25A) with 15 cm cable	CS912460000	7200
	CT3 (7-70A) with 15 cm cable	CS912470000	11500
CTVT Unit	CT1 (0.3-3A) + VT with 15 cm cable	CS912490000	12600
	CT2 (2.5-25A) + VT with 15 cm cable	CS912500000	14900
	CT3 (7-70A) + VT with 15 cm cable	CS912510000	19500
Display Unit	iMMR Display unit without cable	CS912530000	13000
Display Cable	iMMR Display Cable - 1 meter	XK131280000	1100
	iMMR Display Cable - 2 meter	XK131290000	1600
Expansion Unit	iMMR EXP 4DI + 2DO with 10 cm cable	*Available On Request	
	iMMR EXP 6DI 110V/240V with 10cm cable	*Available On Request	
	iMMR EXP Earth Leakage + 2DI + 2DO with 10 cm cable	*Available On Request	
	iMMR EXP 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



## 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	43000	CS912440000	CS912450000	CS912530000	XK131290000
1.1 KW to 11 KW	44700	CS912440000	CS912460000	CS912530000	XK131290000
11 KW to 37 KW	49000	CS912440000	CS912470000	CS912530000	XK131290000
>37 KW	44700	CS912440000	CS912460000*	CS912530000	XK131290000

\* 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	50100	CS912440000	CS912490000	CS912530000	XK131290000
1.1 KW to 11 KW	52400	CS912440000	CS912500000	CS912530000	XK131290000
11 KW to 37 KW	57000	CS912440000	CS912510000	CS912530000	XK131290000
>37 KW	52400	CS912440000	CS912500000*	CS912530000	XK131290000

\* 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: upto 32A
- › MOG-H2M: 32A-63A
- › Short circuit protection

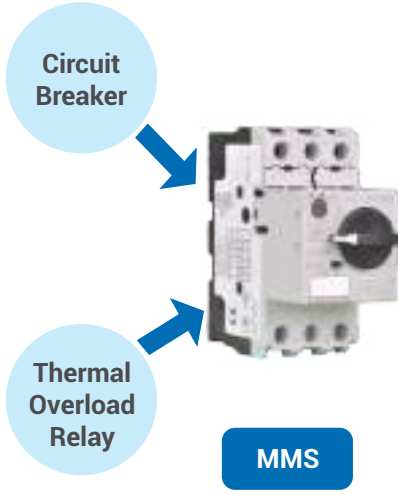
## Rotary Type

- › 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

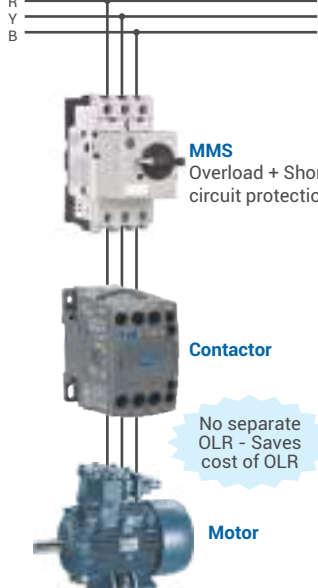
- › Short circuit protection
- › Over current protection

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



**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



**MMS**  
Overload + Short circuit protection

**Contactor**

No separate OLR - Saves cost of OLR

**Motor**

## Type MOG-S1 (Rocker Type)

With short circuit & overload protection



Rating (A)	Recommended Motor Rating at 415V, 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	ST418890000	3,695	1
0.25	0.06	0.16 - 0.25	3.3	ST418900000	3,695	1
0.40	0.09	0.25 - 0.40	5.2	ST418910000	3,695	1
0.63	0.12	0.40 - 0.63	8.2	ST418920000	4,205	1
1.00	0.25	0.63 - 1.00	13	ST418930000	4,205	1
1.60	0.55	1.00 - 1.60	20.8	ST418940000	4,225	1
2.50	0.75	1.60 - 2.50	32.5	ST418950000	4,225	1
4.00	1.50	2.50 - 4.00	52	ST418960000	4,385	1
6.30	2.20	4.00 - 6.30	81.9	ST418970000	4,385	1
10.00	4.00	6.30 - 10.00	130	ST418980000	4,680	1
13.00	5.40	9.00 - 13.00	169	ST418990000	5,265	1
16.00	7.50	11.00 - 16.00	208	ST419000000	5,765	1
20.00	9.00	14.00 - 20.00	260	ST419010000	6,055	1
25.00	12.50	19.00 - 25.00	325	ST419020000	6,360	1
32.00	15.00	24.00 - 32.00	416	ST419030000	11,300	1

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

## Type MOG-H1 (Rotary Type) - Frame 1

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	ST419040000	4,700	1
0.25	0.06	0.16 - 0.25	3.3	ST419050000	4,700	1
0.40	0.09	0.25 - 0.40	5.2	ST419060000	4,700	1
0.63	0.12	0.40 - 0.63	8.2	ST419070000	5,255	1
1.00	0.25	0.63 - 1.00	13	ST419080000	5,255	1
1.60	0.55	1.00 - 1.60	20.8	ST419090000	5,425	1
2.50	0.75	1.60 - 2.50	32.5	ST419100000	5,425	1
4.00	1.50	2.50 - 4.00	52	ST419110000	5,525	1
6.30	2.20	4.00 - 6.30	81.9	ST419120000	5,580	1
10.00	4.00	6.30 - 10.00	130	ST419130000	5,945	1
13.00	5.40	9.00 - 13.00	169	ST419140000	6,590	1
16.00	7.50	11.00 - 16.00	208	ST419150000	7,085	1
20.00	9.00	14.00 - 20.00	260	ST419160000	7,640	1
25.00	12.50	19.00 - 25.00	325	ST419170000	7,945	1
32.00	15.00	24.00 - 32.00	416	ST419180000	12,880	1

## Manual Motor Starters [8536]

### 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	ST419230000	4,225	1
0.25	0.06	3.3	ST419240000	4,225	1
0.40	0.09	5.2	ST419250000	4,225	1
0.63	0.12	8.2	ST419260000	4,780	1
1.00	0.25	13	ST419270000	4,870	1
1.60	0.55	20.8	ST419280000	4,870	1
2.50	0.75	32.5	ST419290000	4,905	1
4.00	1.50	52	ST419300000	4,960	1
6.30	2.20	81.9	ST419310000	4,960	1
10.00	4.00	130	ST419320000	5,120	1
13.00	5.40	169	ST419330000	5,345	1
16.00	7.50	208	ST419340000	5,345	1
20.00	9.00	260	ST419350000	5,615	1
25.00	12.50	325	ST419360000	5,785	1
32.00	15.00	416	ST419370000	9,515	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	ST419190000	16,500	1
40.00	20.00	28.00 - 40.00	520	ST419200000	18,195	1
50.00	25.00	35.00 - 50.00	650	ST419210000	22,715	1
63.00	34.00	45.00 - 63.00	819	ST419220000	23,050	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	ST419380000	15,820	1
40.00	20.00	520	ST419390000	15,935	1
50.00	25.00	650	ST419400000	16,385	1
63.00	34.00	819	ST419410000	16,725	1

## Accessories for MOG [8538]



Short Circuit Alarm



Auxiliary + Alarm



Extended Rotary Handle



Shunt Trip



MMSs with bus bar connection



Connecting Busbar link



3 Phase Feed in terminal

Mounting Position *	Description	Cat. No.	M.R.P. (₹) Per Unit	Std. Pkg. (Nos.)
F1/F2	Auxiliary Contact Front mtg. 1NO	ST419420000	730	10
F1/F2	Auxiliary Contact Front mtg. 1NC	ST419430000	730	10
L	Auxiliary Contact Left side mtg. 2NO	ST419440000	1,005	1
L	Auxiliary Contact Left side mtg. 1NO + 1NC	ST419450000	1,005	1
L	Auxiliary Contact Left side mtg. 2NC	ST419460000	1,005	1
F2	Trip Alarm Contact Front mtg. 1NO	ST419470000	1,300	10
F2	Trip Alarm Contact Front mtg. 1NC	ST419480000	1,300	10
L	Auxiliary + Alarm Left side mtg. 2NO	ST419490000	1,380	1
L	Short circuit alarm Left side mtg. 1NO + 1NC	ST419500000	1,380	1
R	Shunt trip 24V DC	ST419510000	2,655	1
R	Shunt trip 110V, 50Hz	ST419520000	2,795	1
R	Shunt trip 230V, 50Hz	ST429520000	2,795	1
R	Under Voltage release, 110V, 50Hz	ST419530000	2,795	1
R	Under Voltage release, 415V, 50Hz	ST419540000	2,795	1
-	External operating handle, (Black) Frame 1	ST419550000	1,610	1
-	External operating handle, (Black) Frame 2	ST419560000	1,610	1

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

Description	Cat. No.	M.R.P. (₹) Per Unit	Std. Pkg. (Nos.)
<b>Connecting Busbar link</b>			
2 MMS 45 mm width w/o acc	ST419570000	840	5
3 MMS 45 mm width w/o acc	ST419580000	925	5
4 MMS 45 mm width w/o acc	ST419590000	1,000	5
5 MMS 45 mm width w/o acc	ST419600000	1,275	5
2 MMS 45 mm width with one acc 9 mm	ST419610000	985	5
3 MMS 45 mm width with one acc 9 mm	ST419620000	1,060	5
4 MMS 45 mm width with one acc 9 mm	ST419630000	1,140	5
5 MMS 45 mm width with one acc 9 mm	ST419640000	1,220	5
2 MMS 55 mm width w/o acc	ST419660000	1,535	1
3 MMS 55 mm width w/o acc	ST419670000	1,750	1
4 MMS 55 mm width w/o acc	ST419680000	2,100	1
2 MMS 55 mm width with one acc 9 mm	ST419690000	1,670	1
3 MMS 55 mm width with one acc 9 mm	ST419700000	1,900	1
4 MMS 55 mm width with one acc 9 mm	ST419710000	2,235	1
2 MMS 55 mm width with two acc 18 mm	ST419720000	1,955	1
4 MMS 55 mm width with two acc 18 mm	ST419730000	2,180	1
Feed in terminal for 45 mm width Busbar	ST419650000	985	1
Feed in terminal for 55 mm width Busbar	ST419740000	1,695	1
Bus bar safety cover 45 mm width Busbar	ST419750000	425	10
Bus bar safety cover 55 mm width Busbar	ST419760000	460	10

acc: Accessories

## Motor Starters [8536]

### 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	6600	1
15.0	11.0	14 - 23	MN 25 DOL	SS94352	10070	1
20.0	15.0	20 - 33	MN 32 DOL	SS94353	16200	1
30.0	22.5	30 - 50	MN 45 DOL	SS94017	27700	1
45.0	33.5	45 - 75	MN 65 DOL	SS94018	38000	1
30.0	22.5	28 - 42	ML 3 DOL	SS90722	35800	1

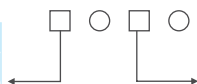
### Fully Automatic Star-Delta Starters [8536]

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	22200	1
30.0	22.5	14 - 23	MN 25 FASD	SS94364	24800	1
40.0	30.0	20 - 33	MN 32 FASD	SS94366	40800	1
50.0	37.5	30 - 50	MN 45 FASD	SS94021	65500	1
75.0	55.0	45 - 75	MN 65 FASD	SS94022	108700	1
90.0	67.5	45 - 75	MN 80 FASD	SS94705	118700	1
150.0	110.0	66 - 110	MN 110 FASD	SS94706	155500	1
180.0	132.0	90 - 150	MN 140 FASD	SS94707	169800	1
50.0	37.5	28 - 42	ML3 FASD	SS90730	86300	1
75.0	55.0	45 - 75	ML4 FASD	SS90913	147800	1
125.0	90.0	66 - 110	ML6 FASD	SS90923	242500	1

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

## Spares for MN Starters [8538]

Description	Cat. No.	M.R.P. (₹) Per Unit	Std. Pkg. (Nos.)
Bracket for Mounting cont. MNX 25 - 32	SS940300000	215	20
MN DOL/FASD Push Button	SS939410000	370	10

## Timers

### Electronic Timers Type ST100 [9107]



ST 100

Description	Cat. No.	M.R.P. (₹) Per Unit	Std. Pkg. (Nos.)
<b>240 / 360 / 415V, 50Hz for</b>			
3 - 30 secs.	ST803280000	2200	1
12 - 120 secs.	ST803290000	2200	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.

All our Type 2 charts are available on **Knowledge Portal**



Access E&A's Knowledge Portal from  
[www.LK-EA.com/kp](http://www.LK-EA.com/kp)

**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



## 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



# SIMPLIFYING WATER CONTROL CHALLENGES



## SzLC WLC Series



Settable OFF-timer  
ranging from  
15-150 minutes



Power ON  
Delay Timer-  
3-30 seconds



Application:  
Single & Double Tank



LED  
Indication



Auto/Manual/Bypass  
operating mode available\*



Use for Single Phase Monoset  
and Submersible Pump upto 3 HP  
and for Three Phase Submersible Pump

\*AUTO/ON/OFF - SzLC  
\*AUTO/MANUAL/BYPASS - SzLC1 & SzLC1

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**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



## 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



### Performance

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



### Flexibility

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



### 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	CK90161BS00	95960	1
Enclosed ATS, Frame 2, 160A	160A	CK90162BS00	105890	1
Enclosed ATS, Frame 2, 200A	200A	CK90163BS00	114750	1
Enclosed ATS, Frame 3, 250A	250A	CK90164BS00	131140	1
Enclosed ATS, Frame 3, 315A	315A	CK90165BS00	140230	1
Enclosed ATS, Frame 4, 400A	400A	CK90166BS00	167050	1
Enclosed ATS, Frame 4, 630A	630A	CK90167BS00	202930	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-Disconnecter (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 included
- › 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	-	-	-	-	<b>New</b> CK90944B000	27310	1
	63	CO1-63	CO106300000	6070	CO106300S00	10090	<b>New</b> CK90945B000	28990	1
	63	CO1-63	CO10630000D ▲	5900					
	100	CO1-100	CO110000000	8160	CO110000S00	12740	<b>New</b> CK90946B000	35400	1
	100	CO1-100	CO11000000D ▲	7970					
	125	CO1-125	CO112500000	10850	CO112500S00	16250	<b>New</b> CK90947B000	37640	1
Fr 2	125	CO2-125	CO212500000	13100	CO212500S00	18750	CK90161B000	50570	1
	160	CO2-160	CO216000000	14360	CO216000S00	20600	CK90162B000	61820	1
	200	CO2-200	CO22000000A	17670	CO220000S00	23690	CK90163B000	67400	1
Fr 3	250	CO3-250	CO325000000	23420	CO325000S00	32750	CK90164B000	81530	1
	315	CO3-315	CO331500000	24630	CO331500S00	34450	CK90165B000	85310	1
Fr 4	400	CO4-400	CO440000000	39620	CO440000S00	53980	CK90166B000	108380	1
	630	CO4-630	CO463000000	46260	CO463000S00	62570	CK90167B000	129360	1
Fr 5	630	CO5-630 <sup>α</sup>	CO563000000 <sup>α</sup>	56730	-	-	CK90168B000	140470	1
	800	CO5-800	CO580000000	65500	CO580000S00	102260	CK90169B000	187860	1
	1000	CO5-1000	CO510000000	121810	CO510000S00	163990	CK90170B000	246330	1
Fr 6	1250	CO6-1250	CO612500000	153840	-	-	CK90081B000	304380	1
	1600	CO6-1600	CO616000000	193140	-	-	CK90082B000	373640	1
	2000	CO6-2000	CO620000000	281570	-	-	CK90083B000	445640	1

▲ 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)	CX100020000	580	1
	CO2-(125-200A)	CX200020000	1080	1
	CO3-(250-315A)	CX300020000	1540	1
	CO4-(400-630A)	CX400020000	1630	1
	CO5-(630-1000A)	CX500020000	1890	1
	CO6-(1250-2000A)	CX600020000	2060	1
Operating Handle Kit (handle + shaft + center bush + bush clip)	CO1-(63-125A)	CX100010000	960	1
	CO2-(125-200A)	CX300010000	2040	1
	CO3-(250-315A)	CK903920000	2090	1
	CO4-(400-630A)	CX400010000	2130	1
	CO5-(630-1000A)	CX500010000	2300	1
	CO6-(1250-2000A)	CX600010000	2610	1
Castell Type Lock <sup>§</sup>	CO-(125-1000A)	CX400040000	3450	1
	CO6-(1250-2000A)	CX600040000	3450	1
Output shorting link	CO1-(63-125A) Top Side	CX10005000T	1010	1
	CO1-(63-125A) Bottom Side	CX10005000B	1010	1
Operating Handle for Motorised Changeover	C/O Frame 2 & 3 (125-315A)	CK903740000	1830	1
	C/O Frame 4 & 5 (400-1000A)	CK903780000	2300	1
	C/O Frame 6 (1250-2000A)	CK906450000	5710	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	CK901920000	24480	1	
	AuXC-2000 Controller** with wire harness	AuXC-2000 <sup>β</sup> wire harness	ATC200000000	39800	1
			CK900990000	4990	1
Control Accessories	Illuminated Push Button assembly with Wire harness	CK901950000	4980	1	

β Chapter ID [9032]

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



# 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



### Suitable for Aluminum Termination

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



### 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.



### Phase Barriers

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



### 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



### 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	CK908130000	21440	1
CZ1	160A	CK908140000	24190	1
CZ1	200A	CK908150000	25570	1
CZ1	250A	CK908160000	36410	1
CZ1	315A	CK908170000	41530	1
CZ2	315A	CK908750000	45890	1
CZ2	400A	CK908760000	55990	1
CZ2	630A	CK908770000	66730	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)	CK908050000	640	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. (₹) Per Unit	Std. Pkg. (Nos.)
CZ1	125A	Extended	CK907690000	8570	1
CZ1	160A	Extended	CK907700000	11330	1
CZ1	200A	Extended	CK907710000	13200	1
CZ1	250A	Extended	CK907720000	14860	1
CZ1	315A	Extended	CK907730000	16490	1
CZ2	315A	Extended	CK908570000	17460	1
CZ2	400A	Extended	CK908580000	21920	1
CZ2	630A	Extended	CK908590000	29340	1
CZ1	125A	Direct	CK907990000	8610	1
CZ1	160A	Direct	CK908000000	10840	1
CZ1	200A	Direct	CK908010000	12540	1
CZ1	250A	Direct	CK908020000	14780	1
CZ1	315A	Direct	CK908030000	15650	1
CZ2	315A	Direct	CK908720000	17380	1
CZ2	400A	Direct	CK908730000	22230	1
CZ2	630A	Direct	CK908740000	27870	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. (₹) Per Unit	Std. Pkg. (Nos.)
CZ1	125A	CK908190000	17620	1
CZ1	160A	CK908200000	20410	1
CZ1	200A	CK908210000	23040	1
CZ1	250A	CK908220000	26320	1
CZ1	315A	CK908230000	27890	1
CZ2	315A	CK908780000	33250	1
CZ2	400A	CK908790000	38570	1
CZ2	630A	CK908800000	45130	1

Chapter ID [8536]

### Accessories for CZ Switch Disconnector

Frame	Description	CAT No.	M.R.P. (₹) Per Unit	Std. Pkg. (Nos.)
CZ1/CZ2	Auxiliary Contact Kit (1 C/O contact)	CK908050000	640	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

#### Customer Interaction Center (CIC)

Phone no: 022-6932 7800

Web: www.LK-EA.com | e-mail: CIC@LK-EA.com

## 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 the product

Versions: 800Vac | 1000Vdc | 1500Vdc



### AC SD

- › Operational Voltage upto 800Vac



### DC SD

- › Operational Voltage 1000Vdc & 1500Vdc

#### DC Switch Disconnectors

Frame	Rating	Voltage	No. of Poles	Description	Cat. No.	M.R.P. (₹) Per Unit
CZ1	125A	1000Vdc	2	Direct Handle, Side operated	CK907930000	*
CZ1	160A	1000Vdc	2	Direct Handle, Side operated	CK907940000	*
CZ1	200A	1000Vdc	2	Direct Handle, Side operated	CK907950000	*
CZ1	250A	1000Vdc	2	Direct Handle, Side operated	CK907960000	*
CZ1	315A	1000Vdc	2	Direct Handle, Side operated	CK907970000	*
CZ2	315A	1000Vdc	2	Direct Handle, Side operated	CK908690000	*
CZ2	400A	1000Vdc	2	Direct Handle, Side operated	CK908700000	*
CZ2	630A	1000Vdc	2	Direct Handle, Side operated	CK908710000	*
CZ0	16A	1500 Vdc	4	Direct Handle, Center operated	CK913140000	*
CZ0	25A	1500 Vdc	4	Direct Handle, Center operated	CK913150000	*
CZ0	32A	1500 Vdc	4	Direct Handle, Center operated	CK913160000	*
CZ0	40A	1500 Vdc	4	Direct Handle, Center operated	CK913170000	*
CZ1	125A	1500Vdc	2	Direct Handle, Side operated	CK907870000	*
CZ1	160A	1500Vdc	2	Direct Handle, Side operated	CK907880000	*
CZ1	200A	1500Vdc	2	Direct Handle, Side operated	CK907890000	*
CZ1	250A	1500Vdc	2	Direct Handle, Side operated	CK907900000	*
CZ1	315A	1500Vdc	2	Direct Handle, Side operated	CK907910000	*
CZ2	315A	1500Vdc	3	Direct Handle, Side operated	CK908660000	*
CZ2	400A	1500Vdc	3	Direct Handle, Side operated	CK908670000	*
CZ2	630A	1500Vdc	3	Direct Handle, Side operated	CK908680000	*

Chapter ID [8536]

\*Available on Request

#### 800Vac, 3P Switch Disconnectors

Frame	Rating	Handle Type	Cat. No.	M.R.P. (₹) Per Unit
CZ1	125A	Direct	CK907570000	*
CZ1	160A	Direct	CK907580000	*
CZ1	200A	Direct	CK907590000	*
CZ1	250A	Direct	CK907600000	*
CZ1	315A	Direct	CK907610000	*
CZ2	315A	Direct	CK908510000	*
CZ2	400A	Direct	CK908520000	*
CZ2	630A	Direct	CK908530000	*
CZ1	125A	Extended	CK907630000	*
CZ1	160A	Extended	CK907640000	*
CZ1	200A	Extended	CK907650000	*
CZ1	250A	Extended	CK907660000	*
CZ1	315A	Extended	CK907670000	*
CZ2	315A	Extended	CK908540000	*
CZ2	400A	Extended	CK908550000	*
CZ2	630A	Extended	CK908560000	*

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#### DC Switch Disconnectors

Frame	Rating	Voltage	No. of Poles	Description	Cat. No.	M.R.P. (₹) Per Unit
CZ2	315A	1500Vdc	2	Direct Handle, Side operated	CK911570000	*
CZ2	400A	1500Vdc	2	Direct Handle, Side operated	CK911580000	*
CZ2	500A	1500Vdc	2	Direct Handle, Side operated	CK911590000	*
CZ2	630A	1500Vdc	2	Direct Handle, Side operated	CK911600000	*
CZ2	315A	1500Vdc	2	Direct Handle, Center operated	CK911610000	*
CZ2	400A	1500Vdc	2	Direct Handle, Center operated	CK911620000	*
CZ2	500A	1500Vdc	2	Direct Handle, Center operated	CK911630000	*
CZ2	630A	1500Vdc	2	Direct Handle, Center operated	CK911640000	*
CZ2	315A	1500Vdc	2	Extended Handle, Side operated	CK911650000	*
CZ2	400A	1500Vdc	2	Extended Handle, Side operated	CK911660000	*
CZ2	500A	1500Vdc	2	Extended Handle, Side operated	CK911670000	*
CZ2	630A	1500Vdc	2	Extended Handle, Side operated	CK911680000	*
CZ2	315A	1500Vdc	2	Extended Handle, Center operated	CK911690000	*
CZ2	400A	1500Vdc	2	Extended Handle, Center operated	CK911700000	*
CZ2	500A	1500Vdc	2	Extended Handle, Center operated	CK911710000	*
CZ2	630A	1500Vdc	2	Extended Handle, Center operated	CK911720000	*
CZ2	315A	1500Vdc	4	Direct Handle, Center operated	CK911770000	*
CZ2	400A	1500Vdc	4	Direct Handle, Center operated	CK911780000	*
CZ2	500A	1500Vdc	4	Direct Handle, Center operated	CK911790000	*
CZ2	630A	1500Vdc	4	Direct Handle, Center operated	CK911800000	*
CZ2	315A	1500Vdc	4	Extended Handle, Center operated	CK911850000	*
CZ2	400A	1500Vdc	4	Extended Handle, Center operated	CK911860000	*
CZ2	500A	1500Vdc	4	Extended Handle, Center operated	CK911870000	*
CZ2	630A	1500Vdc	4	Extended Handle, Center operated	CK911880000	*

Chapter ID [8536]

\*Available on Request

#### Customer Interaction Center (CIC)

Phone no: 022-6932 7800

Web: www.LK-EA.com | e-mail: CIC@LK-EA.com

## Switch-Disconnecter Units [8536]

### Type FN & C-Line Switch Disconnecter (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	SK904180000	2590	1	FN 32 TPN / 4P	SK955410000	3200	1
	63	FN 63 2P	SK904190000	2970	1	FN 63 TPN / 4P	SK955400000	3750	1
Fr 2	100	FN 100 2P	SK904200000	5350	1	FN 100 TPN	SK955710000	6770	1
	125	FN 125 2P	SK904210000	6700	1	FN 125 TPN	SK954050000	8540	1
Fr 3	200	FN 200 2P	SK904500000	10980	1	FN 200 TPN	SK956070000	13300	1
	250	FN 250 2P	SK904540000	12250	1	FN 250 TPN	SK956830000	15170	1
Fr 4	315	FN 315 2P	SK904650000	16620	1	FN 315 TPN	SK956090000	18440	1
	400	FN 400 2P	SK904660000	17500	1	FN 400 TPN	SK956100000	21380	1
Fr 5	630	FN 630 2P	SK904670000	28080	1	FN 630 TPN	SK956110000	33560	1
	800	FN 800 2P	SK904680000	30130	1	FN 800 TPN	SK955510000	35990	1
	1000	FN 1000 2P	SK904690000	38840	1	FN 1000 TPN	SK957100000	55440	1
Fr 6	1000	-	-	-	-	C-Line SD 1000 4P <sup>§</sup>	COS10000040	66350	1
	1250	-	-	-	-	C-Line SD 1250 4P <sup>§</sup>	COS12500040	82710	1
	1600	-	-	-	-	C-Line SD 1600 4P <sup>§</sup>	COS16000040	105180	1
	2000	-	-	-	-	C-Line SD 2000 4P <sup>§</sup>	COS20000040	137860	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 FNX [8538]



Castell Type Lock



DIN Rail Assembly



Auxiliary Contact Kit



Handle Assembly

Description	Type	Cat. No.	M.R.P. (₹) Per Unit	Std. Pkg. (Nos.)
Auxiliary Contact Kit (1NO + 1 NC)	FNX 32 / 63	SK91537	*	1
	FNX 100	SK91538	*	1
	FNX 125 / 160	SK91539	*	1
	FNX 200 / 250	SK91540	*	1
Handle Assembly	FNX 315 / 400 / 630 / 800	SK91541	*	1
	FNX 32 / 63 / 100	SK91524	*	1
	FNX 125 / 160 / 200 / 250	SK91525	*	1
	FNX 315 / 400 / 630 / 800	SK91526	*	1
Castell Type Lock <sup>§</sup>	FNX 32 / 63 / 100	SK91530	*	1
	FNX 125 / 160 / 200 / 250	SK91531	*	1
	FNX 315 / 400 / 630 / 800	SK91531	*	1
DIN Rail Assembly	FNX 32 / 63 / 100	SK91617	*	1

\*Available on request

\*\*Available till stock last

### 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	290	1
Insulated fuse pulling handle for Type HN fuse-link from 63A-800A	SF90126	1010	1

### Spares & Accessories for type COS Switch-Disconnecter [8538]

Type	Cat. No.	M.R.P. (₹) Per Unit	Std. Pkg. (Nos.)
Auxiliary Contact Kit (1 sets of C/O contact)	CXS6002	1220	1
Operating Handle	CXS6001	2620	1
Castell Type Lock <sup>§</sup>	CX60004	3470	1

§ Chapter ID [8301]

# Also suitable for Switch-Disconnecter FN 1000

Notes: 1) Add suffix "0000" to all cat nos. of Spares and Accessories.

### 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	730	1	
	FN 100 / 125 / 160	SK91328	880	1	
	FN 200 / 250	SK91329	1180	1	
	FN 315 / 400 / 630	SK91330	1240	1	
2 <sup>nd</sup> Aux. Contact (1NO + 1NC)	FN 800/630 <sup>(1)</sup>	CK91034 <sup>#</sup>	1240	1	
	FN 32 / 63	SK90670	790	1	
Earthing Link	FN 100 to FN 1000	SK90696	910	1	
	FN 32 to FN 1000 <sup>(2)</sup>	CK90396	730	1	
Terminal Shroud Kit	FN 32 / 63	SK91190	250	1	
	FN 100 / 125 / 160	SK91137	310	1	
	FN 200 / 250	SK91335	890	1	
	FN 315 / 400	SK91346	910	1	
	FN 630 / 800	SK91347 <sup>#</sup>	960	1	
Handle Assembly - A	FN 32 / 63	SK91257	690	1	
	FN 100 to FN 250	SK91258	1470	1	
	FN 315 / 400 / 630 / 800	SK91259 <sup>#</sup>	1630	1	
Handle Assembly - B	FN 32 / 63	SK91277	690	1	
	FN 100 to FN 250	SK91278	1470	1	
	FN 315 / 400 / 630 / 800	SK91279 <sup>#</sup>	1630	1	
Handle Assembly - CE	FN 32 / 63	SK91337	410	1	
Interphase Barrier Kit	FN 200	SK91343	630	1	
	FN 315 / 400	SK91344	650	1	
	FN 630 / 800	SK91345 <sup>#</sup>	670	1	
Castell Type Lock <sup>§</sup>	FN 100 / 125 / 160 / 200 / 250	A	SK00333	3470	1
		B	SK00334	3470	1
		C	SK00335	3470	1
		D	SK00336	3470	1
	FN 315 / 400 / 630 / 800	A	SK00345 <sup>#</sup>	3470	1
		B	SK00346 <sup>#</sup>	3470	1
		C	SK00347 <sup>#</sup>	3470	1
		D	SK00348 <sup>#</sup>	3470	1
Switched Neutral Kit	FN 100 / 125 / 160	SK95233	6670	1	
	FN 200 / 250	SK95516	7110	1	
	FN 315 / 400	SK95517	7680	1	
	FN 630 / 800	SK95546 <sup>#</sup>	10670	1	

<sup>(1)</sup>For terminating earth busbar upto 25mm width. Order Qty 1 for 10 earthing links

<sup>(2)</sup>FN 630 units manufactured from Dec-2025: Use Auxiliary Contact CK91034.

FN 630 units manufactured before Dec-2025: Use Auxiliary Contact SK91330.

Lauritz Knudsen, 01.03.2026

## 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)

in-built  
Neutral Link



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	SK95518	3240	1	FN 32 TPN/FP	SK95518	3240	1
	32	HF Size 14x51	2 to 32	FN 32 TPN / FP CE*	SK95703*	2810	1	FN 32 TPN/FP CE*	SK95703*	2810	1
	63	HF Size 14x51	2 to 63	FN 63 TPN / FP	SK95421	4270	1	FN 63 TPN/FP	SK95421	4270	1
	63	HF Size 14x51	2 to 63	FN 63 TPN / FP CE*	SK95704*	3810	1	FN 63 TPN/FP CE*	SK95704*	3810	1
Fr 2	100	HN Size 000	63 to 100	FN 100C TPN	Ck91079	6760	1	-	-	-	-
	100	HN Size 000/00	63 to 100	FN 100 TPN	SK95568	7950	1	FN 100 FP	SK90496	9470	1
	125	HN Size 000/00	63 to 125	FN 125 TPN	SK95001	10300	1	FN 125 FP	SK90497	11790	1
	160	HN Size 000/00	63 to 160	FN 160 TPN	SK95713	11090	1	FN 160 FP	SK90498	13200	1
Fr 3	200	HN Size 0	80 to 200	FN 200 TPN	SK95418	14960	1	FN 200 FP	SK90471	18860	1
	250	HN Size 1	125 to 250	FN 250 TPN	SK95642	17420	1	FN 250 FP	SK90472	21370	1
Fr 4	315	HN Size 1	125 to 315	FN 315 TPN	SK95461	20850	1	FN 315 FP	SK90473	25940	1
	400	HN Size 2	200 to 400	FN 400 TPN	SK95481	25450	1	FN 400 FP	SK90480	29410	1
Fr 5	630	HN Size 3	315 to 630	FN 630 TPN	SK95521	42560	1	FN 630 FP	SK90481	49580	1
	800	HN Size 3	315 to 800	FN 800 TPN	SK95679	45810	1	FN 800 FP	SK90482	56340	1

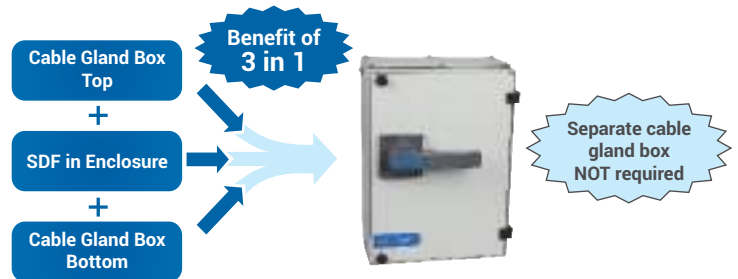
\* 'CE' handle has door interlock facility without defeat feature

\* 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*	7620	1
	63	HF Size 14x51	2 to 63	FN 63 TPN / FP CE*	SK90484*	9110	1
Fr 2	100	HN Size 000/00	63 to 100	FN 100 TPN	SK90485	14680	1
	125	HN Size 000/00	63 to 125	FN 125 TPN	SK90486	16650	1
	160	HN Size 000/00	63 to 160	FN 160 TPN	SK90487	17460	1
Fr 3	200	HN Size 0	80 to 200	FN 200 TPN	SK90488	25210	1
	250	HN Size 1	125 to 250	FN 250 TPN	SK90489	27780	1
Fr 4	315	HN Size 1	125 to 315	FN 315 TPN	SK90490	32260	1
	400	HN Size 2	200 to 400	FN 400 TPN	SK90491	36240	1
Fr 5	630	HN Size 3	315 to 630	FN 630 TPN	SK90492	56550	1
	800	HN Size 3	315 to 800	FN 800 TPN	SK90493	60080	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. SK904890000 & SK956810000), order Cat. No. ST978950000
- 6) Please refer Page 36 for Switch-Disconnectors
- 7) Add suffix "0000" to all cat nos.
- 8) FN SDF and FN SD models are supplied without terminal shrouds

## HRC Fuses [8536]

### 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

### Cylindrical fuse links Type HF

HF



Size	Rated Current (A)	Description	Cat. No.	M.R.P. (₹) Per Unit	Std. Pkg. (Nos.)
14 X 51	2	Suitable for Type FN 32 / 63 / FNX 32 / 63 S-D-F & for HCO 32 Fuse base	SF90144	200	30
	4		SF90145	200	30
	6		SF90146	200	30
	8		SF90147	200	30
	10		SF90148	200	30
	16		SF90150	200	30
	20		SF90151	200	30
	25		SF90152	200	30
	32	SF90142	200	30	
	40	Suitable for Type FN 63 / FNX 63 S-D-F & for HC 63 Fuse base	SF90143	210	30
	50		SF90158	460	30
	63		SF90159	500	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	580	3
	80		SF94941	610	3
	100		SF94942	620	3
	125		SF94946	700	3
00	63	Suitable for Type FN 100/125/160 / FNX 125/160 S-D-F & for HB 160 Fuse base	SF94027	760	3
	80		SF94028	760	3
	100		SF94029	760	3
	125		SF94030	760	3
	160		SF94939	780	3
0	80	Suitable for Type FN 200 / FNX 200 S-D-F & for HB 250 Fuse base	SF94128	970	3
	100		SF94129	970	3
	125		SF94130	970	3
	160		SF94131	980	3
	200		SF94132	1020	3
1	125	Suitable for Type FN 250/315 / FNX 250/315 S-D-F & for HB 250 Fuse base	SF94230	1000	3
	160		SF94231	1070	3
	200		SF94232	1070	3
	250		SF94233	1200	3
	315		SF94234	1450	3
2	200	Suitable for Type FN 400 / FNX 400 S-D-F & for HB 800 Fuse base	SF94332	1510	3
	250		SF94333	1550	3
	315		SF94334	1600	3
	400		SF94335	1620	3
3	315	Suitable for Type FN 630/800 / FNX 630/800 S-D-F & for HB 800 Fuse base	SF94434	2250	1
	400		SF94435	2380	1
	500		SF94436	2450	1
	630		SF94437	2580	1
	800		SF94938	3190	1

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



HB



HC

Rated Current (A)	Type	Description	Suitable fuse-link		Cat. No.	M.R.P. (₹) Per Unit	Std. Pkg. (Nos.)
			Type	Range (A)			
32	HCO 32	Fuse holder	HF	2-32	SK91314	380	10
63	HC 63	Fuse holder	HF	2-63	SK91043	440	10
160	HB 160	Fuse base	HN-Size 000 & 00	63-160	SK90405	580	12
250	HB 250	Fuse base	HN-Size 0 & 1	80-250	SK90406	1270	3
800	HB 800	Fuse base	HN-Size 2 & 3	200-800	SK91051	2480	3

Notes : 1) Add suffix "0000" 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

Also for 220Vdc & 240Vac application



FN 2P S-D-F

Size	Rated Current (A)	Suitable fuse-link type	Type FN (2P) S-D-F suitable for DIN fuse-link			Std. Pkg (Nos.)
			Open Execution			
			Type	Cat. No.	M.R.P. (₹) Per Unit	
Fr 1	32	HF Size 14x51	FN 32 2P	SK95594	2650	1
	63	HF Size 14x51	FN 63 2P	SK95595	3540	1
Fr 2	100	HN Size 000/00	FN 100 2P	ST35086	6690	1
	125	HN Size 000/00	FN 125 2P	ST35087	9020	1
	160	HN Size 000/00	FN 160 2P	ST35088	9410	1
Fr 3	200	HN Size 0	FN 200 2P	ST35089	12240	1
	250	HN Size 1	FN 250 2P	ST31674	14220	1
Fr 4	315	HN Size 1	FN 315 2P	ST38930	17610	1
	400	HN Size 2	FN 400 2P	ST31676	19830	1
Fr 5	630	HN Size 3	FN 630 2P	ST35090	34210	1

\* Add suffix "0000" to all cat nos.

\* FN SDF and FN SD models are supplied without terminal shrouds

## 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 (TPN) S-D-F suitable for BOLTED fuse-link			Std. Pkg (Nos.)
			Open Execution			
			Type	Cat. No.	M.R.P. (₹) Per Unit	
Fr 1	32	A1L	FN 32 TPN	SK95653	2930	1
	63	A1L	FN 63 TPN	SK95651	3890	1
Fr 2	100	A4	FN 100 TPN	SK95570	7650	1
	125	A4	FN 125 TPN	SK95009	9650	1
	160	A4	FN 160 TPN	SK95714	10410	1
Fr 3	200	B1 / B2	FN 200 TPN	SK95588	14170	1
	250	B2 / B3	FN 250 TPN	SK95682	16720	1
Fr 4	315	B3	FN 315 TPN	SK95590	19990	1
	400	B4	FN 400 TPN	SK95591	24040	1
Fr 5	630	C2	FN 630 TPN	SK95592	41340	1

## \*\*Type FNX S-D-F suitable for DIN fuse-link in open execution

Features offered by FNX S-D-F

- Range 32A to 800A, 415V, AC 23A
- TPN and 4P version
- Suitable for Cylindrical / DIN fuse-link
- Telescopic shaft for depth adjustment
- DIN rail mounting up to 100A
- Conforms to IEC 60947-3, IS/IEC 60947-3
- Door interlock & padlock facility
- FNX 4-Pole with in-built Neutral Link



FNX TPN S-D-F

Size	Rated Current (A)	Suitable fuse-link type	Range (A)	Open Execution Type FNX (TPN) S-D-F suitable for DIN fuse-link				Open Execution Type FNX (4P) S-D-F suitable for DIN fuse-link				Std. Pkg. (Nos.)
				Type	Cat. No.	M.R.P. (₹) Per Unit	Std. Pkg. (Nos.)	Type	Cat. No.	M.R.P. (₹) Per Unit		
Fr 1	32	HF Size 14x51	2 to 32	FNX 32 TPN / FP	SK96903	*	1	FNX 32 TPN / FP	SK96903	*	1	
	63	HF Size 14x51	2 to 63	FNX 63 TPN / FP	SK96904	*	1	FNX 63 TPN / FP	SK96904	*	1	
Fr 2	100	HN Size 000	63 to 100	FNX 100 TPN / FP	SK96906	*	1	FNX 100 TPN / FP	SK96906	*	1	
Fr 3	125	HN Size 000/00	63 to 125	FNX 125 TPN	SK95806	*	1	FNX 125 FP	SK95814	*	1	
	160	HN Size 000/00	63 to 160	FNX 160 TPN	SK95807	*	1	FNX 160 FP	SK95815	*	1	
Fr 4	200	HN Size 0	80 to 200	FNX 200 TPN	SK95808	*	1	FNX 200 FP	SK95816	*	1	
	250	HN Size 1	125 to 250	FNX 250 TPN	SK95809	*	1	FNX 250 FP	SK95817	*	1	
Fr 5	315	HN Size 1	125 to 315	FNX 315 TPN	SK95810	*	1	FNX 315 FP	SK95818	*	1	
	400	HN Size 2	200 to 400	FNX 400 TPN	SK95811	*	1	FNX 400 FP	SK95819	*	1	
Fr 6	630	HN Size 3	315 to 630	FNX 630 TPN	SK95812	*	1	FNX 630 FP	SK95820	*	1	
	800	HN Size 3	315 to 800	FNX 800 TPN	SK95813	*	1	FNX 800 FP	SK95821	*	1	

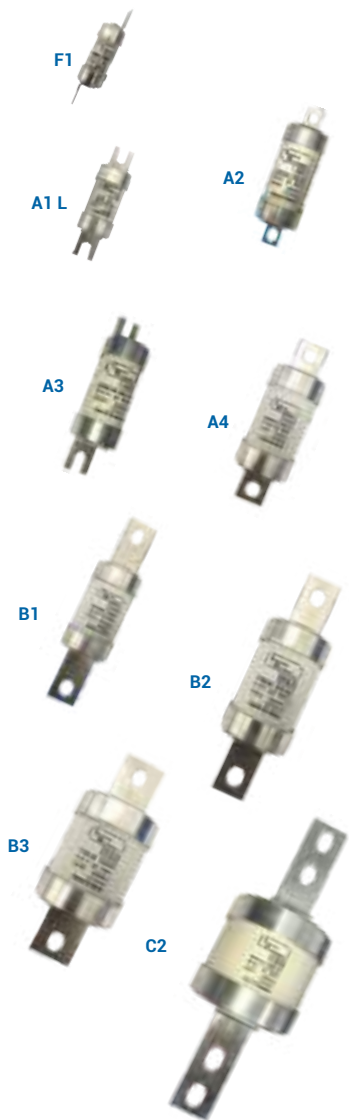
\*Available on request

\*\*Available till stock last

Notes:

- For 690V AC application, please contact nearest branch office.
- The prices for S-D-F range are without HRC fuses
- Add suffix "0000" to all cat nos.

**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	80	24
			4		ST30726	80	24
			6		ST30727	80	24
			10		ST30728	80	24
			16		ST30729	90	24
			20		ST30730	90	24
			25		ST30731	90	24
			32		ST30732	90	24
HQ	Offset	A1L	20	Suitable for type FN 32/63 S-D-F	ST34527	160	15
			25		ST34528	160	15
			32		ST34529	160	15
			50		ST35827	200	15
			63		ST35828	200	15
		A2	4	Suitable for type HK 32H/32B fuse base	ST30747	140	12
			6		ST30748	140	12
			10		ST30749	140	12
			16		ST30750	140	12
			20		ST30751	140	12
			25		ST30752	140	12
			32		ST30753	140	12
	A3	35	Suitable for type HK 63B/63H Fuse base	ST30759	210	12	
		50		ST30760	230	12	
		63		ST30761	240	12	
	A4	80	Suitable for type FN 100/125/160 S-D-F & for HK 125H/125B Fuse base	ST30767	450	12	
		100		ST30768	450	12	
		125		ST30769	510	12	
		160		ST35829	580	12	
	Centre Tag, 2 holes	B1	80	Suitable for type FN 200 S-D-F	ST30774	510	12
			100		ST30775	510	12
			125		ST30776	600	12
		B2	125	Suitable for type FN 200/250 S-D-F	ST30777	620	3
			160		ST30778	640	3
200			ST30779		690	3	
B3		250	Suitable for type FN 250/315 S-D-F	ST30781	1010	3	
		315		ST30782	1060	3	
B4		355	Suitable for type FN 400 S-D-F	ST30783	1490	3	
		400		ST30784	1540	3	
Centre Tag, 4 holes		C2	400	Suitable for type FN 630 S-D-F	ST30785	2900	1
			500		ST30786	3060	1
	630		ST30787		3500	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)	F1	2-20	ST30772	310	12
	HD 20P	Both side busbar (Back)	F1	2-20	ST30773	310	12
	HD 20B	Top busbar & bottom cable	F1	2-20	ST30766	310	12
32	HD 32H	Both side cable (Front)	F1	2-32	ST30733	320	12
	HD 32P	Both side busbar (Back)	F1	2-32	ST30734	320	12
	HD 32B	Top busbar & bottom cable	F1	2-32	ST30735	320	12
	HK 32H	Both side cable (Front)	A2	4-32	ST30754	410	12
	HK 32B	Top busbar & bottom cable	A2	4-32	ST30755	410	12
	63	HK 63H	Both side cable (Front)	A3	35-63	ST30762	580
	HK 63B	Top busbar & bottom cable	A3	35-63	ST30763	580	6
125	HK 125H	Both side cable (Front)	A4	80-125	ST30770	1610	3
	HK 125B	Top busbar & bottom cable	A4	80-125	ST30771	1610	3

Notes: 1) Add suffix "0000" 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

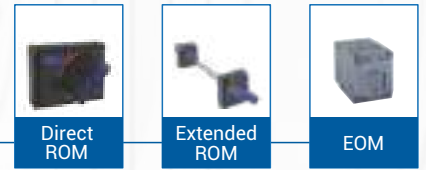


## RESILIENT FOR BETTER SAFETY AND MAINTENANCE

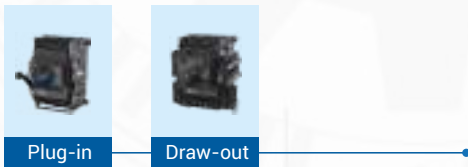
### Inventory & Application friendly Internal Accessories



### 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

Rating (A) Icu=Ics (kA)*	16	20	25	32	40	50	63	80	100	125	160	200	250	320	400	500	630	800			
25	DZ0-125C																				
36	DZ0-125D																				
36/50	DZ1																				
36/50/80/120	DZ2																				
36/50/80/120/200												DZ4									
36/50/80/120/200													DZ6		DZ7						



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	DZ0T0016D5C1A0000	10500	DZ0F0016D5C1A0000	14600	1
	16-20		DZ0T0020D5C1A0000	10500	DZ0F0020D5C1A0000	14600	1
	20-25		DZ0T0025D5C1A0000	10500	DZ0F0025D5C1A0000	14600	1
	26-32		DZ0T0032D5C1A0000	10500	DZ0F0032D5C1A0000	14600	1
	32-40		DZ0T0040D5C1A0000	10500	DZ0F0040D5C1A0000	14600	1
	40-50		DZ0T0050D5C1A0000	10500	DZ0F0050D5C1A0000	14600	1
	50-63		DZ0T0063D5C1A0000	10200	DZ0F0063D5C1A0000	14200	1
	64-80		DZ0T0080D5C1A0000	10200	DZ0F0080D5C1A0000	14200	1
	80-100		DZ0T0100D5C1A0000	10200	DZ0F0100D5C1A0000	14200	1
	100-125		DZ0T0125D5C1A0000 ▲	13200	DZ0F0125D5C1A0000 ▲	17700	1
DZ0-125C	13-16	25kA	DZ0T0016CXC1A0000	10800	DZ0F0016CXC1A0000	15200	1
	16-20		DZ0T0020CXC1A0000	10800	DZ0F0020CXC1A0000	15200	1
	20-25		DZ0T0025CXC1A0000	10800	DZ0F0025CXC1A0000	15200	1
	26-32		DZ0T0032CXC1A0000	10800	DZ0F0032CXC1A0000	15200	1
	32-40		DZ0T0040CXC1A0000	10800	DZ0F0040CXC1A0000	15200	1
	40-50		DZ0T0050CXC1A0000	10800	DZ0F0050CXC1A0000	15200	1
	50-63		DZ0T0063CXC1A0000	10500	DZ0F0063CXC1A0000	14700	1
	64-80		DZ0T0080CXC1A0000	10500	DZ0F0080CXC1A0000	14700	1
	80-100		DZ0T0100CXC1A0000	10500	DZ0F0100CXC1A0000	14700	1
	100-125		DZ0T0125CXC1A0000 ▲	14500	DZ0F0125CXC1A0000 ▲	18300	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
- › 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	DZ1T0016DXC1A0000	14900	DZ1F0016DXC1A0000	18500	1
	14-20		DZ1T0020DXC1A0000	14900	DZ1F0020DXC1A0000	18500	1
	17-25		DZ1T0025DXC1A0000	14900	DZ1F0025DXC1A0000	18500	1
	22-32		DZ1T0032DXC1A0000	14900	DZ1F0032DXC1A0000	18500	1
	27-40		DZ1T0040DXC1A0000	14900	DZ1F0040DXC1A0000	18500	1
	34-50		DZ1T0050DXC1A0000	14900	DZ1F0050DXC1A0000	18500	1
	43-63		DZ1T0063DXD1A0000	14400	DZ1F0063DXD1A0000	17900	1
	54-80		DZ1T0080DXD1A0000	14400	DZ1F0080DXD1A0000	17900	1
	67-100		DZ1T0100DXD1A0000	14400	DZ1F0100DXD1A0000	17900	1
	84-125		DZ1T0125DXD1A0000	16200	DZ1F0125DXD1A0000	20000	1
108-160	DZ1T0160DXD1A0000	21300	DZ1F0160DXD1A0000	25300	1		
134-200	DZ1T0200DXD1A0000 ▲	35700	DZ1F0200DXD1A0000 ▲	44900	1		
DZ2-160D	11-16	36kA	DZ2T0016DXC1A0000	17100	DZ2F0016DXC1A0000	21300	1
	14-20		DZ2T0020DXC1A0000	17100	DZ2F0020DXC1A0000	21300	1
	17-25		DZ2T0025DXC1A0000	17100	DZ2F0025DXC1A0000	21300	1
	22-32		DZ2T0032DXC1A0000	17100	DZ2F0032DXC1A0000	21300	1
	27-40		DZ2T0040DXC1A0000	17100	DZ2F0040DXC1A0000	21300	1
	34-50		DZ2T0050DXC1A0000	17100	DZ2F0050DXC1A0000	21300	1
	43-63		DZ2T0063DXD1A0000	16500	DZ2F0063DXD1A0000	20700	1
	54-80		DZ2T0080DXD1A0000	16500	DZ2F0080DXD1A0000	20700	1
	67-100		DZ2T0100DXD1A0000	16500	DZ2F0100DXD1A0000	20700	1
	84-125		DZ2T0125DXD1A0000	18600	DZ2F0125DXD1A0000	23000	1
108-160	DZ2T0160DXD1A0000	24300	DZ2F0160DXD1A0000	29000	1		
DZ4-250D	108-160	36kA	DZ4T0160DXD1A0000	31300	DZ4F0160DXD1A0000	38600	1
	134-200		DZ4T0200DXD1A0000	35900	DZ4F0200DXD1A0000	43200	1
	168-250		DZ4T0250DXD1A0000	37800	DZ4F0250DXD1A0000	45500	1
DZ6-400D	134-200	36kA	DZ6T0200DXD1A0000	46700	DZ6F0200DXD1A0000	57000	1
	168-250		DZ6T0250DXD1A0000	50100	DZ6F0250DXD1A0000	61200	1
	215-320		DZ6T0320DXD1A0000	51800	DZ6F0320DXD1A0000	63200	1
	268-400		DZ6T0400DXD1A0000	51800	DZ6F0400DXD1A0000	63200	1
DZ7-800D	335-500	36kA	DZ7T0500DXD1A0000	58200	DZ7F0500DXD1A0000	73300	1
	422-630		DZ7T0630DXD1A0000	58200	DZ7F0630DXD1A0000	73300	1
	536-800		DZ7T0800DXD1A0000	81100	DZ7F0800DXD1A0000	103200	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	DZ1T0016NXC1A0000	19900	DZ1F0016NXC1A0000	23900	1
	14-20		DZ1T0020NXC1A0000	19900	DZ1F0020NXC1A0000	23900	1
	17-25		DZ1T0025NXC1A0000	19900	DZ1F0025NXC1A0000	23900	1
	22-32		DZ1T0032NXC1A0000	19900	DZ1F0032NXC1A0000	23900	1
	27-40		DZ1T0040NXC1A0000	19900	DZ1F0040NXC1A0000	23900	1
	34-50		DZ1T0050NXC1A0000	19900	DZ1F0050NXC1A0000	23900	1
	43-63		DZ1T0063NXD1A0000	19300	DZ1F0063NXD1A0000	23200	1
	54-80		DZ1T0080NXD1A0000	19300	DZ1F0080NXD1A0000	23200	1
	67-100		DZ1T0100NXD1A0000	19300	DZ1F0100NXD1A0000	23200	1
	84-125		DZ1T0125NXD1A0000	25400	DZ1F0125NXD1A0000	28100	1
108-160	DZ1T0160NXD1A0000	27600	DZ1F0160NXD1A0000	33000	1		
134-200	DZ1T0200NXD1A0000 ▲	40800	DZ1F0200NXD1A0000 ▲	51200	1		
DZ2-160N	11-16	50kA	DZ2T0016NXC1A0000	22900	DZ2F0016NXC1A0000	27500	1
	14-20		DZ2T0020NXC1A0000	22900	DZ2F0020NXC1A0000	27500	1
	17-25		DZ2T0025NXC1A0000	22900	DZ2F0025NXC1A0000	27500	1
	22-32		DZ2T0032NXC1A0000	22900	DZ2F0032NXC1A0000	27500	1
	27-40		DZ2T0040NXC1A0000	22900	DZ2F0040NXC1A0000	27500	1
	34-50		DZ2T0050NXC1A0000	22900	DZ2F0050NXC1A0000	27500	1
	43-63		DZ2T0063NXD1A0000	22200	DZ2F0063NXD1A0000	26700	1
	54-80		DZ2T0080NXD1A0000	22200	DZ2F0080NXD1A0000	26700	1
	67-100		DZ2T0100NXD1A0000	22200	DZ2F0100NXD1A0000	26700	1
	84-125		DZ2T0125NXD1A0000	29200	DZ2F0125NXD1A0000	32200	1
108-160	DZ2T0160NXD1A0000	31700	DZ2F0160NXD1A0000	37800	1		
DZ4-250N	108-160	50kA	DZ4T0160NXD1A0000	36700	DZ4F0160NXD1A0000	46300	1
	134-200		DZ4T0200NXD1A0000	40000	DZ4F0200NXD1A0000	50200	1
	168-250		DZ4T0250NXD1A0000	42200	DZ4F0250NXD1A0000	52900	1
DZ6-400N	134-200	50kA	DZ6T0200NXD1A0000	48800	DZ6F0200NXD1A0000	60300	1
	168-250		DZ6T0250NXD1A0000	51400	DZ6F0250NXD1A0000	63600	1
	215-320		DZ6T0320NXD1A0000	53100	DZ6F0320NXD1A0000	65600	1
	268-400		DZ6T0400NXD1A0000	53100	DZ6F0400NXD1A0000	65600	1
DZ7-800N	335-500	50kA	DZ7T0500NXD1A0000	64600	DZ7F0500NXD1A0000	83500	1
	422-630		DZ7T0630NXD1A0000	64600	DZ7F0630NXD1A0000	83500	1
	536-800		DZ7T0800NXD1A0000	87200	DZ7F0800NXD1A0000	111000	1
DZ2-160H	11-16	80kA	DZ2T0016HXC1A0000	29400	DZ2F0016HXC1A0000	32500	1
	14-20		DZ2T0020HXC1A0000	29400	DZ2F0020HXC1A0000	32500	1
	17-25		DZ2T0025HXC1A0000	29400	DZ2F0025HXC1A0000	32500	1
	22-32		DZ2T0032HXC1A0000	29400	DZ2F0032HXC1A0000	32500	1
	27-40		DZ2T0040HXC1A0000	29400	DZ2F0040HXC1A0000	32500	1
	34-50		DZ2T0050HXC1A0000	29400	DZ2F0050HXC1A0000	32500	1
	43-63		DZ2T0063HXD1A0000	28500	DZ2F0063HXD1A0000	31600	1
	54-80		DZ2T0080HXD1A0000	28500	DZ2F0080HXD1A0000	31600	1
	67-100		DZ2T0100HXD1A0000	28500	DZ2F0100HXD1A0000	31600	1
	84-125		DZ2T0125HXD1A0000	42500	DZ2F0125HXD1A0000	47000	1
108-160	DZ2T0160HXD1A0000	45300	DZ2F0160HXD1A0000	50700	1		
DZ4-250H	108-160	80kA	DZ4T0160HXD1A0000	51600	DZ4F0160HXD1A0000	57600	1
	134-200		DZ4T0200HXD1A0000	60000	DZ4F0200HXD1A0000	72200	1
	168-250		DZ4T0250HXD1A0000	62500	DZ4F0250HXD1A0000	75100	1
DZ6-400H	134-200	80kA	DZ6T0200HXD1A0000	67400	DZ6F0200HXD1A0000	79800	1
	168-250		DZ6T0250HXD1A0000	69500	DZ6F0250HXD1A0000	82300	1
	215-320		DZ6T0320HXD1A0000	70300	DZ6F0320HXD1A0000	83200	1
	268-400		DZ6T0400HXD1A0000	70300	DZ6F0400HXD1A0000	83200	1
DZ7-800H	335-500	80kA	DZ7T0500HXD1A0000	83700	DZ7F0500HXD1A0000	99800	1
	422-630		DZ7T0630HXD1A0000	83700	DZ7F0630HXD1A0000	99800	1
	536-800		DZ7T0800HXD1A0000	98300	DZ7F0800HXD1A0000	128500	1



d sine DZ MCCB with Microprocessor Release

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

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	36kA	DZ1T0040DXF1A0000	27500	DZ1F0040DXF1A0000	33600	1
	16-63		DZ1T0063DXF1A0000	27500	DZ1F0063DXF1A0000	33600	1
	25-100		DZ1T0100DXF1A0000	27500	DZ1F0100DXF1A0000	33600	1
	40-160		DZ1T0160DXF1A0000	32400	DZ1F0160DXF1A0000	45200	1
	50-200		DZ1T0200DXF1A0000 ▲	45200	DZ1F0200DXF1A0000 ▲	62600	1
DZ2-160D*	10-40		DZ2T0040DXF1A0000	31700	DZ2F0040DXF1A0000	38600	1
	16-63		DZ2T0063DXF1A0000	31700	DZ2F0063DXF1A0000	38600	1
	25-100		DZ2T0100DXF1A0000	31700	DZ2F0100DXF1A0000	38600	1
	40-160		DZ2T0160DXF1A0000	37300	DZ2F0160DXF1A0000	51800	1
DZ4-250D	40-160		DZ4T0160DXF1A0000	43700	DZ4F0160DXF1A0000	60800	1
	63-250		DZ4T0250DXF1A0000	45500	DZ4F0250DXF1A0000	63000	1
DZ6-400D	63-250		DZ6T0250DXF1A0000	52200	DZ6F0250DXF1A0000	67600	1
	100-400		DZ6T0400DXF1A0000	54900	DZ6F0400DXF1A0000	71100	1
DZ7-800D/DZ7-1000D	158-630		DZ7T0630DXF1A0000	62000	DZ7F0630DXF1A0000	80300	1
	200-800		DZ7T0800DXF1A0000	88200	DZ7F0800DXF1A0000	109200	1
	250-1000	DZ7T1000DXF1A0000 ▲	139000	DZ7F1000DXF1A0000 ▲	192800	1	
DZ1-160N*/DZ1-200N	10-40	50kA	DZ1T0040NXF1A0000	31900	DZ1F0040NXF1A0000	44000	1
	16-63		DZ1T0063NXF1A0000	31900	DZ1F0063NXF1A0000	44000	1
	25-100		DZ1T0100NXF1A0000	31900	DZ1F0100NXF1A0000	44000	1
	40-160		DZ1T0160NXF1A0000	40100	DZ1F0160NXF1A0000	52600	1
	50-200		DZ1T0200NXF1A0000 ▲	53200	DZ1F0200NXF1A0000 ▲	67500	1
DZ2-160N*	10-40		DZ2T0040NXF1A0000	36600	DZ2F0040NXF1A0000	50600	1
	16-63		DZ2T0063NXF1A0000	36600	DZ2F0063NXF1A0000	50600	1
	25-100		DZ2T0100NXF1A0000	36600	DZ2F0100NXF1A0000	50600	1
	40-160		DZ2T0160NXF1A0000	46000	DZ2F0160NXF1A0000	60300	1

**New** 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	DZ4T0160NXF1A0000	52000	DZ4F0160NXF1A0000	66600	1
	63-250		DZ4T0250NXF1A0000	53600	DZ4F0250NXF1A0000	67900	1
DZ6-400N	63-250		DZ6T0250NXF1A0000	58200	DZ6F0250NXF1A0000	75900	1
	100-400		DZ6T0400NXF1A0000	61200	DZ6F0400NXF1A0000	79800	1
DZ7-800N/ DZ7-1000N	158-630		DZ7T0630NXF1A0000	68500	DZ7F0630NXF1A0000	87600	1
	200-800		DZ7T0800NXF1A0000	101000	DZ7F0800NXF1A0000	128500	1
	250-1000		DZ7T1000NXF1A0000 ▲	173100	DZ7F1000NXF1A0000 ▲	240100	1
DZ2-160H <sup>#</sup>	10-40		DZ2T0040HXF1A0000	42800	DZ2F0040HXF1A0000	53200	1
	16-63		DZ2T0063HXF1A0000	42800	DZ2F0063HXF1A0000	53200	1
	25-100		DZ2T0100HXF1A0000	42800	DZ2F0100HXF1A0000	53200	1
	40-160		DZ2T0160HXF1A0000	55900	DZ2F0160HXF1A0000	70000	1
DZ4-250H	40-160		80kA	DZ4T0160HXF1A0000	57400	DZ4F0160HXF1A0000	71800
	63-250	DZ4T0250HXF1A0000		64300	DZ4F0250HXF1A0000	88400	1
DZ6-400H	63-250	DZ6T0250HXF1A0000		77100	DZ6F0250HXF1A0000	101900	1
	100-400	DZ6T0400HXF1A0000		81200	DZ6F0400HXF1A0000	107100	1
DZ7-800H/ DZ7-1000H	158-630	DZ7T0630HXF1A0000		84100	DZ7F0630HXF1A0000	122500	1
	200-800	DZ7T0800HXF1A0000		122400	DZ7F0800HXF1A0000	160100	1
	250-1000	DZ7T1000HXF1A0000 ▲		200900	DZ7F1000HXF1A0000 ▲	290600	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.

**New** 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

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	36kA	DZ1T0040DXH1A0000	46200	DZ1F0040DXH1A0000	53800	1
	16-63		DZ1T0063DXH1A0000	46200	DZ1F0063DXH1A0000	53800	1
	25-100		DZ1T0100DXH1A0000	46200	DZ1F0100DXH1A0000	53800	1
	40-160		DZ1T0160DXH1A0000	53100	DZ1F0160DXH1A0000	65400	1
	50-200		DZ1T0200DXH1A0000 ▲	64700	DZ1F0200DXH1A0000 ▲	79400	1
DZ2-160D*	10-40		DZ2T0040DXH1A0000	52600	DZ2F0040DXH1A0000	61300	1
	16-63		DZ2T0063DXH1A0000	52600	DZ2F0063DXH1A0000	61300	1
	25-100		DZ2T0100DXH1A0000	52600	DZ2F0100DXH1A0000	61300	1
	40-160		DZ2T0160DXH1A0000	60400	DZ2F0160DXH1A0000	74400	1
DZ4-250D	40-160		DZ4T0160DXH1A0000	62500	DZ4F0160DXH1A0000	76800	1
	63-250		DZ4T0250DXH1A0000	65200	DZ4F0250DXH1A0000	80000	1
DZ6-400D	63-250		DZ6T0250DXH1A0000	71900	DZ6F0250DXH1A0000	83300	1
	100-400		DZ6T0400DXH1A0000	75600	DZ6F0400DXH1A0000	87700	1
DZ7-800D / DZ7-1000D	158-630		DZ7T0630DXH1A0000	84400	DZ7F0630DXH1A0000	105200	1
	200-800		DZ7T0800DXH1A0000	113200	DZ7F0800DXH1A0000	134500	1
	250-1000	DZ7T1000DXH1A0000 ▲	161800	DZ7F1000DXH1A0000 ▲	213700	1	
DZ1-160N* / DZ1-200N	10-40	50kA	DZ1T0040NXH1A0000	51200	DZ1F0040NXH1A0000	61000	1
	16-63		DZ1T0063NXH1A0000	51200	DZ1F0063NXH1A0000	61000	1
	25-100		DZ1T0100NXH1A0000	51200	DZ1F0100NXH1A0000	61000	1
	40-160		DZ1T0160NXH1A0000	60800	DZ1F0160NXH1A0000	72800	1
	50-200		DZ1T0200NXH1A0000 ▲	72800	DZ1F0200NXH1A0000 ▲	88500	1
DZ2-160N*	10-40		DZ2T0040NXH1A0000	58200	DZ2F0040NXH1A0000	69400	1
	16-63		DZ2T0063NXH1A0000	58200	DZ2F0063NXH1A0000	69400	1
	25-100		DZ2T0100NXH1A0000	58200	DZ2F0100NXH1A0000	69400	1
	40-160		DZ2T0160NXH1A0000	69200	DZ2F0160NXH1A0000	82900	1
DZ4-250N	40-160		DZ4T0160NXH1A0000	70600	DZ4F0160NXH1A0000	86100	1
	63-250		DZ4T0250NXH1A0000	73300	DZ4F0250NXH1A0000	89600	1
DZ6-400N	63-250		DZ6T0250NXH1A0000	77000	DZ6F0250NXH1A0000	91800	1
	100-400		DZ6T0400NXH1A0000	81100	DZ6F0400NXH1A0000	96600	1
DZ7-800N / DZ7-1000N	158-630		DZ7T0630NXH1A0000	89800	DZ7F0630NXH1A0000	118800	1
	200-800		DZ7T0800NXH1A0000	138500	DZ7F0800NXH1A0000	164400	1
	250-1000	DZ7T1000NXH1A0000 ▲	201600	DZ7F1000NXH1A0000 ▲	266000	1	
DZ2-160H*	10-40	80kA	DZ2T0040HXXH1A0000	69300	DZ2F0040HXXH1A0000	82400	1
	16-63		DZ2T0063HXXH1A0000	69300	DZ2F0063HXXH1A0000	82400	1
	25-100		DZ2T0100HXXH1A0000	69300	DZ2F0100HXXH1A0000	82400	1
	40-160		DZ2T0160HXXH1A0000	82500	DZ2F0160HXXH1A0000	92000	1
DZ4-250H	40-160		DZ4T0160HXXH1A0000	84600	DZ4F0160HXXH1A0000	97600	1
	63-250		DZ4T0250HXXH1A0000	96800	DZ4F0250HXXH1A0000	114100	1
DZ6-400H	63-250		DZ6T0250HXXH1A0000	107000	DZ6F0250HXXH1A0000	134000	1
	100-400		DZ6T0400HXXH1A0000	112800	DZ6F0400HXXH1A0000	141000	1
DZ7-800H / DZ7-1000H	158-630		DZ7T0630HXXH1A0000	122100	DZ7F0630HXXH1A0000	167800	1
	200-800		DZ7T0800HXXH1A0000	163900	DZ7F0800HXXH1A0000	204600	1
	250-1000		DZ7T1000HXXH1A0000 ▲	253000	DZ7F1000HXXH1A0000 ▲	328100	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.

New

Rating (A) Icu (kA)	40	63	100	160	200	250	400	630	800	1000
	DZ1 <sup>§</sup>									
36/50/80/120	DZ2									
36/50/80/120/200				DZ4		DZ4				
36/50/80/120/200						DZ6		DZ7		

<sup>§</sup> 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<sup>2</sup>T, 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	DZ0T0032N5M1A0000	8000	1
	40		DZ0T0040N5M1A0000	8000	1
	63		DZ0T0063N5M1A0000	7900	1
	80		DZ0T0080N5M1A0000	7900	1
	100		DZ0T0100N5M1A0000	7900	1
	125		DZ0T0125N5M1A0000 ▲	10300	1
DZ1-160N/ DZ1-200N	32		DZ1T0032NXM1A0000	10400	1
	40		DZ1T0040NXM1A0000	10400	1
	63		DZ1T0063NXM1A0000	10300	1
	80		DZ1T0080NXM1A0000	10300	1
	100		DZ1T0100NXM1A0000	10300	1
	125		DZ1T0125NXM1A0000	10800	1
	160		DZ1T0160NXM1A0000	12400	1
	200		DZ1T0200NXM1A0000 ▲	23100	1
DZ4-250N	250		DZ4T0250NXM1A0000	27400	1
DZ6-400N	320		DZ6T0320NXM1A0000	34600	1
	400		DZ6T0400NXM1A0000	36300	1
DZ7-800N	500		DZ7T0500NXM1A0000	40100	1
	630	DZ7T0630NXM1A0000	42600	1	
	800	DZ7T0800NXM1A0000	44400	1	

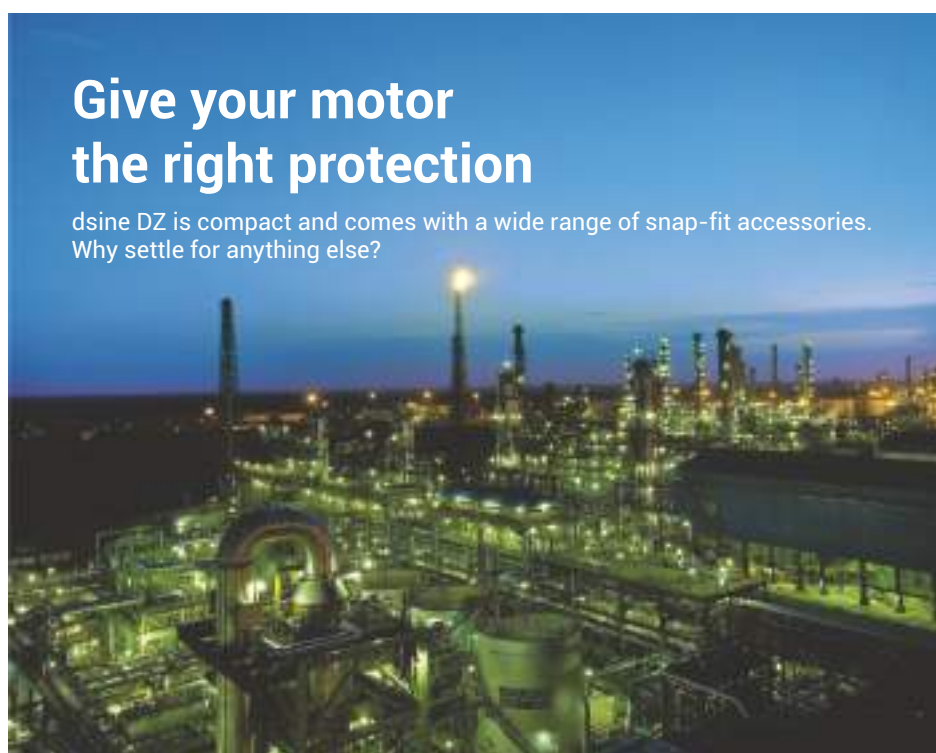
▲- Spreader Terminals are included

**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



Representative Application Image



# Give your motor the right protection

dsine DZ is compact and comes with a wide range of snap-fit accessories. Why settle for anything else?



**d sine** -DZ

# d sine DZ 800V MCCB Range [8536]

New

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
- › 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

## d sine 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	DZ6T0200WXd1A0000	*	DZ6F0200WXd1A0000	*	1
	168-250		DZ6T0250WXd1A0000		DZ6F0250WXd1A0000		1
DZ6-400Y	134-200	36kA	DZ6T0200YXd1A0000	*	DZ6F0200YXd1A0000	*	1
	168-250		DZ6T0250YXd1A0000		DZ6F0250YXd1A0000		1
	214-320		DZ6T0320YXd1A0000		DZ6F0320YXd1A0000		1
	268-400		DZ6T0400YXd1A0000		DZ6F0400YXd1A0000		1
DZ7-800Y	335-500		DZ7T0500YXd1A0000		DZ7F0500YXd1A0000		1
	422-630		DZ7T0630YXd1A0000		DZ7F0630YXd1A0000		1
DZ6-400Z	134-200	50kA	DZ6T0200ZXd1A0000 <sup>†</sup>	*	DZ6F0200ZXd1A0000 <sup>†</sup>	*	1
	168-250		DZ6T0250ZXd1A0000 <sup>†</sup>		DZ6F0250ZXd1A0000 <sup>†</sup>		1
	214-320		DZ6T0320ZXd1A0000 <sup>†</sup>		DZ6F0320ZXd1A0000 <sup>†</sup>		1
	268-400		DZ6T0400ZXd1A0000 <sup>†</sup>		DZ6F0400ZXd1A0000 <sup>†</sup>		1
DZ7-800Z	335-500		DZ7T0500ZXd1A0000		DZ7F0500ZXd1A0000		1
	422-630		DZ7T0630ZXd1A0000		DZ7F0630ZXd1A0000		1

\* Price on request

# Please contact nearest branch office for 50kA (Ics=100% Icu)

\*\* 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.

**New**

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
- > 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

**d sine** 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	DZ6T0125WXF1A0000	*	DZ6F0125WXF1A0000	*	1
	40-160		DZ6T0160WXF1A0000		DZ6F0160WXF1A0000		1
	50-200		DZ6T0200WXF1A0000		DZ6F0200WXF1A0000		1
	63-250		DZ6T0250WXF1A0000		DZ6F0250WXF1A0000		1
	80-320		DZ6T0320WXF1A0000		DZ6F0320WXF1A0000		1
	100-400		DZ6T0400WXF1A0000		DZ6F0400WXF1A0000		1
DZ6-400Y	31-125	36kA	DZ6T0125YXF1A0000	*	DZ6F0125YXF1A0000	*	1
	40-160		DZ6T0160YXF1A0000		DZ6F0160YXF1A0000		1
	50-200		DZ6T0200YXF1A0000		DZ6F0200YXF1A0000		1
	63-250		DZ6T0250YXF1A0000		DZ6F0250YXF1A0000		1
	80-320		DZ6T0320YXF1A0000		DZ6F0320YXF1A0000		1
	100-400		DZ6T0400YXF1A0000		DZ6F0400YXF1A0000		1
DZ7-800Y	125-500		DZ7T0500YXF1A0000		DZ7F0500YXF1A0000		1
	156-630		DZ7T0630YXF1A0000		DZ7F0630YXF1A0000		1
	200-800		DZ7T0800YXF1A0000		DZ7F0800YXF1A0000		1
DZ6-400Z	31-125	50kA	DZ6T0125ZXF1A0000 <sup>†</sup>	*	DZ6F0125ZXF1A0000 <sup>†</sup>	*	1
	40-160		DZ6T0160ZXF1A0000 <sup>†</sup>		DZ6F0160ZXF1A0000 <sup>†</sup>		1
	50-200		DZ6T0200ZXF1A0000 <sup>†</sup>		DZ6F0200ZXF1A0000 <sup>†</sup>		1
	63-250		DZ6T0250ZXF1A0000 <sup>†</sup>		DZ6F0250ZXF1A0000 <sup>†</sup>		1
	80-320		DZ6T0320ZXF1A0000 <sup>†</sup>		DZ6F0320ZXF1A0000 <sup>†</sup>		1
	100-400		DZ6T0400ZXF1A0000 <sup>†</sup>		DZ6F0400ZXF1A0000 <sup>†</sup>		1
DZ7-800Z	125-500		DZ7T0500ZXF1A0000		DZ7F0500ZXF1A0000		1
	156-630		DZ7T0630ZXF1A0000		DZ7F0630ZXF1A0000		1
	200-800		DZ7T0800ZXF1A0000		DZ7F0800ZXF1A0000		1

\* Price on request

# Please contact nearest branch office for 50kA (Ics=100% Icu)

\*\* 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)

# d sine DZ 800V MCCB Range [8536]

New

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
- › 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

## d sine 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	DZ6T0200WXH1A0000	*	DZ6F0200WXH1A0000	*	1
	63-250		DZ6T0250WXH1A0000		DZ6F0250WXH1A0000		1
	80-320		DZ6T0320WXH1A0000		DZ6F0320WXH1A0000		1
	100-400		DZ6T0400WXH1A0000		DZ6F0400WXH1A0000		1
DZ6-400Y	50-200	36kA	DZ6T0200YXH1A0000	*	DZ6F0200YXH1A0000	*	1
	63-250		DZ6T0250YXH1A0000		DZ6F0250YXH1A0000		1
	80-320		DZ6T0320YXH1A0000		DZ6F0320YXH1A0000		1
	100-400		DZ6T0400YXH1A0000		DZ6F0400YXH1A0000		1
DZ7-800Y	125-500		DZ7T0500YXH1A0000		DZ7F0500YXH1A0000		1
	156-630		DZ7T0630YXH1A0000		DZ7F0630YXH1A0000		1
	200-800		DZ7T0800YXH1A0000		DZ7F0800YXH1A0000		1
DZ6-400Z	50-200	50kA	DZ6T0200ZXH1A0000 <sup>†</sup>	*	DZ6F0200ZXH1A0000 <sup>†</sup>	*	1
	63-250		DZ6T0250ZXH1A0000 <sup>†</sup>		DZ6F0250ZXH1A0000 <sup>†</sup>		1
	80-320		DZ6T0320ZXH1A0000 <sup>†</sup>		DZ6F0320ZXH1A0000 <sup>†</sup>		1
	100-400		DZ6T0400ZXH1A0000 <sup>†</sup>		DZ6F0400ZXH1A0000 <sup>†</sup>		1
DZ7-800Z	125-500		DZ7T0500ZXH1A0000		DZ7F0500ZXH1A0000		1
	156-630		DZ7T0630ZXH1A0000		DZ7F0630ZXH1A0000		1
	200-800		DZ7T0800ZXH1A0000		DZ7F0800ZXH1A0000		1

\* Price on request

# Please contact nearest branch office for 50kA (Ics=100% Icu)

\*\* 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 DZ MCCBs [8538]

New



**Auxiliary Contact  
Trip Alarm Contact**



**Shunt Release**



**UV Release**

Internal Accessories			
Description	Cat No	M.R.P. (₹) Per Unit	Std. Pkg. (Nos.)
<b>Auxiliary Contact/ Trip Alarm Contact [8538]</b>			
DZ0 Aux/TAC 1 C/o	EM909660000	800	1
DZ1/2/4 Aux/TAC 1 C/o	EM901100000	1250	1
DZ6/7 Aux/TAC 1 C/o	EM901140000	1360	1
<b>Shunt Release [8538]</b>			
DZ0 Shunt 110/240/415V AC	EM905200M00	1080	1
DZ1/2/4 Shunt 415V AC	EM900320P00	3320	1
DZ1/2/4 Shunt 240V AC	EM900320B00	3320	1
DZ1/2/4 Shunt 110V AC	EM900320A00	3320	1
DZ1/2/4 Shunt 48V AC	EM900320J00	3320	1
DZ1/2/4 Shunt 24V AC	EM900320G00	3320	1
DZ1/2/4 Shunt 220V DC	EM900320200	3320	1
DZ1/2/4 Shunt 110V DC	EM900320100	3320	1
DZ1/2/4 Shunt 48V DC	EM900320500	3320	1
DZ1/2/4 Shunt 24V DC	EM900320400	3320	1
DZ1/2/4 Shunt 12V DC	EM900320300	3320	1
DZ6/7 Shunt 415V AC	EM900340P00	3720	1
DZ6/7 Shunt 240V AC	EM900340B00	3720	1
DZ6/7 Shunt 110V AC	EM900340E00	3720	1
DZ6/7 Shunt 48V AC	EM900340J00	3720	1
DZ6/7 Shunt 24V AC	EM900340G00	3720	1
DZ6/7 Shunt 220V DC	EM900340200	3720	1
DZ6/7 Shunt 110V DC	EM900340100	3720	1
DZ6/7 Shunt 48V DC	EM900340500	3720	1
DZ6/7 Shunt 24V DC	EM900340400	3720	1
DZ6/7 Shunt 12V DC	EM900340300	3720	1

Internal Accessories			
Description	Cat No	M.R.P. (₹) Per Unit	Std. Pkg. (Nos.)
<b>Under Voltage Release [8538]</b>			
DZ0 UVR 240V AC	EM90518B000	3260	1
DZ1/2/4 UVR 415V AC	EM90031P000	4290	1
DZ1/2/4 UVR 240V AC	EM90031B000	4290	1
DZ1/2/4 UVR 110V AC	EM90031E000	4290	1
DZ1/2/4 UVR 48V AC	EM90031J000	4290	1
DZ1/2/4 UVR 24V AC	EM90031G000	4290	1
DZ1/2/4 UVR 220V DC	EM900312000	4290	1
DZ1/2/4 UVR 110V DC	EM900311000	4290	1
DZ1/2/4 UVR 48V DC	EM900315000	4290	1
DZ1/2/4 UVR 24V DC	EM900314000	4290	1
DZ1/2/4 UVR 12V DC	EM900313000	4290	1
DZ6/7 UVR 415V AC	EM90033P000	4770	1
DZ6/7 UVR 240V AC	EM90033B000	4770	1
DZ6/7 UVR 110V AC	EM90033E000	4770	1
DZ6/7 UVR 48V AC	EM90033J000	4770	1
DZ6/7 UVR 24V AC	EM90033G000	4770	1
DZ6/7 UVR 220V DC	EM900332000	4770	1
DZ6/7 UVR 110V DC	EM900331000	4770	1
DZ6/7 UVR 48V DC	EM900335000	4770	1
DZ6/7 UVR 24V DC	EM900334000	4770	1
DZ6/7 UVR 12V DC	EM900333000	4770	1

# Accessories for DZ MCCBs [8538]

New



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.)
<b>Rotary Mechanism (Direct/Extended) [8538]</b>			
DZ0 Direct ROM	EM909690000	1610	1
DZ1 Direct ROM	EM902070000	1790	1
DZ2 Direct ROM	EM902080000	2040	1
DZ4 Direct ROM	EM903860000	2380	1
DZ6 Direct ROM	EM902280000	2950	1
DZ7 Direct ROM	EM903500000	4090	1
DZ0 Extended ROM	EM909700000	2310	1
DZ1 Extended ROM	EM902090000	2420	1
DZ2 Extended ROM	EM902100000	2840	1
DZ4 Extended ROM	EM902930000	3610	1
DZ6 Extended ROM	EM902760000	4760	1
DZ7 Extended ROM	EM903810000	4990	1
<b>Panel Door mounted Key lock for Extended ROM [8301]</b>			
DZ0/1/2/4 Key Lock Type 1	EM990310000	6630	1
DZ0/1/2/4 Key Lock Type 2	EM99031000A	6630	1
DZ0/1/2/4 Key Lock Type 3	EM99031000B	6630	1
DZ0/1/2/4 Key Lock Type 12	EM99031000C	6630	1
DZ0/1/2/4 Key Lock Type 23	EM99031000D	6630	1
DZ6/7 Key Lock Type 1	EM991410000	7860	1
DZ6/7 Key Lock Type 2	EM99141000A	7860	1
DZ6/7 Key Lock Type 3	EM99141000B	7860	1
DZ6/7 Key Lock Type 12	EM99141000C	7860	1
DZ6/7 Key Lock Type 23	EM99141000D	7860	1
<b>Electrical Operating Mechanism [8538]</b>			
DZ1 240V AC	EM90490B000	41500	1
DZ2 240V AC	EM90545B000	45300	1
DZ4 240V AC		*	
DZ6 240V AC	EM90355B000	56800	1
DZ7 240V AC	EM90480B000	87500	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.)
<b>Spreader Terminals (Up to 690V AC #) [8538]</b>			
DZ0-100 3 Pole	EM992820000	590	Set of 6
DZ0-100 4 Pole	EM992830000	920	Set of 8
DZ1, DZ2-160 3 Pole	EM906090000	2030	Set of 6
DZ1, DZ2-160 4 Pole	EM906100000	2660	Set of 8
DZ4-250 - 3 Pole	EM940960000	3050	Set of 6
DZ4-250 - 4 Pole	EM940970000	4070	Set of 8
DZ6-400 - 3 Pole	EM906110000	4390	Set of 6
DZ6-400 - 4 Pole	EM906120000	5900	Set of 8
DZ7-630 - 3 Pole	EM970500000	10400	Set of 6
DZ7-630 - 4 Pole	EM970520000	13300	Set of 8
DZ7-800 - 3 Pole	EM970510000	13400	Set of 6
DZ7-800 - 4 Pole	EM970530000	16500	Set of 8
<b>Rear Terminals [8538]</b>			
DZ1-160 3 Pole	EM911760000	5550	Set of 6
DZ1-160 4 Pole	EM911770000	7930	Set of 8
DZ2-160 3 Pole	EM920880000	6150	Set of 6
DZ2-160 4 Pole	EM920890000	8730	Set of 8
DZ4-250 - 3 Pole	EM940580000	7450	Set of 6
DZ4-250 - 4 Pole	EM940590000	10700	Set of 8
DZ6-400 - 3 Pole	EM960450000	10100	Set of 6
DZ6-400 - 4 Pole	EM960460000	14600	Set of 8
DZ7-800 - 3 Pole	EM970450000	12600	Set of 6
DZ7-800 - 4 Pole	EM970460000	18300	Set of 8
<b>Box Clamp Termination [8538]</b>			
DZ1, DZ2-160 3 Pole	EM921760000	5000	Set of 6
DZ1, DZ2-160 4 Pole	EM921770000	7140	Set of 8
DZ4-250 - 3 Pole	EM940940000	6700	Set of 6
DZ4-250 - 4 Pole	EM940950000	9610	Set of 8
DZ6-400 - 3 Pole	EM969850000	9110	Set of 6
DZ6-400 - 4 Pole	EM963700000	13100	Set of 8

Note:

Phase Barriers are supplied along with MCCBs

# For 800V Application Spreaders, please contact nearest branch office

# Accessories for DZ MCCBs [8538]

New

	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.)
<b>Plug-in Module [8538]</b>			
DZ1 3 Pole Full Kit	EM902010000	*	1
DZ1 4 Pole Full Kit	EM902020000	*	1
DZ2 3 Pole Full Kit	EM902620000	*	1
DZ2 4 Pole Full Kit	EM902630000	*	1
DZ4 3 Pole Full Kit	EM902500000	*	1
DZ4 4 Pole Full Kit	EM902510000	*	1
DZ6 3 Pole Full Kit	EM902460000	*	1
DZ6 4 Pole Full Kit	EM902470000	*	1
DZ7-630 3 Pole Fixed Kit	EM992560000	*	1
DZ7-630 3 Pole Conversion Kit	EM992540000	*	1
DZ7-630 4 Pole Fixed Kit	EM992570000	*	1
DZ7-630 4 Pole Conversion Kit	EM992550000	*	1
DZ7-800 3 Pole Fixed Kit	EM990610000	*	1
DZ7-800 3 Pole Conversion Kit	EM990690000	*	1
DZ7-800 4 Pole Fixed Kit	EM990620000	*	1
DZ7-800 4 Pole Conversion Kit	EM990700000	*	1

\* Price on request

Description	Cat No	M.R.P. (₹) Per Unit	Std. Pkg. (Nos.)
<b>Short Terminal Shroud \$ [8538]</b>			
DZ1-160 3 Pole	EM990810000	2850	1
DZ1-160 4 Pole	EM990820000	3430	1
DZ2-160 3 Pole	EM990850000	2850	1
DZ2-160 4 Pole	EM990870000	3430	1
DZ4-250 - 3 Pole	EM990890000	3000	1
DZ4-250 - 4 Pole	EM990910000	4370	1
DZ6-400 - 3 Pole	EM990930000	3980	1
DZ6-400 - 4 Pole	EM990940000	5410	1
DZ7-630/800 - 3 Pole	EM990970000	4340	1
DZ7-630/800 - 4 Pole	EM990990000	5980	1

\$ Long Terminal Shrouds available on request

External Accessories			
Description	Cat No	M.R.P. (₹) Per Unit	Std. Pkg. (Nos.)
<b>Draw-out Module [8538]</b>			
DZ4 3 Pole Fixed Kit	EM902600000	*	1
DZ4 3 Pole Conversion Kit	EM902580000	*	1
DZ4 4 Pole Fixed Kit	EM902610000	*	1
DZ4 4 Pole Conversion Kit	EM902590000	*	1
DZ6 3 Pole Fixed Kit	EM902560000	*	1
DZ6 3 Pole Conversion Kit	EM902540000	*	1
DZ6 4 Pole Fixed Kit	EM902570000	*	1
DZ6 4 Pole Conversion Kit	EM902550000	*	1
DZ7-630 3 Pole Fixed Kit	EM991050000	*	1
DZ7-630 3 Pole Conversion Kit	EM991030000	*	1
DZ7-630 4 Pole Fixed Kit	EM991060000	*	1
DZ7-630 4 Pole Conversion Kit	EM991040000	*	1
DZ7-800 3 Pole Fixed Kit	EM904550000	*	1
DZ7-800 3 Pole Conversion Kit	EM904530000	*	1
DZ7-800 4 Pole Fixed Kit	EM904560000	*	1
DZ7-800 4 Pole Conversion Kit	EM904540000	*	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.)
<b>External Neutral CT [8504]</b>			
DZ1, DZ2 - 40A, 63A, 80A	EM905070000	2460	1
DZ1, DZ2 - 100A, 160A	EM905080000	2460	1
DZ1 - 200A	EM905090000	3640	1
DZ4 - 160A, 250A	EM905120000	4320	1
DZ6 - 250A, 400A	EM905150000	6640	1
DZ7 - 630A, 800A	EM905160000	10300	1
DZ7 - 1000A	EM973260000	10800	1
<b>Adaptor Kit for External Neutral CT [8538]</b>			
DZ1, DZ2 & DZ4 - Up to 250A	CM999940000	1070	Set of 2
DZ6 - Up to 400A	CM999950000	2070	Set of 2
DZ7 - Up to 1000A	EM972270000	7530	Set of 2

# Accessories for DZ MCCBs [8538]

**New**

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.)
<b>Mechanical Interlocking Options [8538]</b>			
<b>1. Front Slider MIL #</b>			
DZ1 Front Slider	EM903960000	4270	1
DZ2 Front Slider	EM903970000	4490	1
DZ2/DZ4 Front Slider	EM903980000	6070	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.)
<b>2. Rear Base Plate MIL #</b>			
DZ4 Mounting Plate ~	EM904000000	4430	1
DZ6 Mounting Plate ~	EM903990000	5530	1
DZ4 Rear Base Plate ~	EM903540000	21900	1
DZ4/DZ6 Rear Base Plate ~	EM903530000	27400	1
DZ7 Rear Base Plate	EM991420000	54200	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

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

External Accessories			
Description	Cat No	M.R.P. (₹) Per Unit	Std. Pkg. (Nos.)
<b>3. Cable Base Plate MIL #</b>			
<b>a. Base Plate with Cable (for MCCBs without Rear Terminations)</b>			
DZ1/DZ2 Cable Base Plate \$	EM904040000	7650	1
DZ4 Cable Base Plate \$	EM904050000	9200	1
DZ6 Cable Base Plate \$	EM904060000	12000	1
<b>b. Base Plate with Cable (for MCCBs with Rear Terminations)</b>			
DZ1/DZ2 Cable Base Plate RT \$	EM904010000	8430	1
DZ4 Cable Base Plate RT \$	EM904020000	10100	1
DZ6 Cable Base Plate RT \$	EM904030000	13200	1
<b>c. Cable Types and Lengths - For DZ1/ DZ2/ DZ4/ DZ6 MCCBs (for both MCCBs with and without Rear Terminations)</b>			
L Cable (1 m Length) \$	EM004710000	1990	1
L Cable (3 m Length) \$	EM004740000	3010	1
L Cable (5 m Length) \$	EM004770000	4160	1
M Cable (1 m Length) \$	EM004720000	1990	1
M Cable (3 m Length) \$	EM004750000	3010	1
M Cable (5 m Length) \$	EM004780000	4160	1
H Cable (1 m Length) \$	EM004730000	1990	1
H Cable (3 m Length) \$	EM004760000	3010	1
H Cable (5 m Length) \$	EM004790000	4160	1

\$ - 2 Nos of Base Plate & 1 No of suitable length of Cable must be ordered together along with 2 Nos of 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	CM9789300C20G	10500	CM9791900C20G	14600	1
	20-25		CM9789300D20G	10500	CM9791900D20G	14600	1
	25-32		CM9789300E20G	10500	CM9791900E20G	14600	1
	32-40		CM9789300F20G	10500	CM9791900F20G	14600	1
	40-50		CM9789300G20G	10500	CM9791900G20G	14600	1
	50-63		CM9789300H20G	10200	CM9791900H20G	14200	1
	63-80		CM9789300J20G	10200	CM9791900J20G	14200	1
	80-100		CM9789300K20G	10200	CM9791900K20G	14200	1
DN0-125D*	100-125		CM906800OLOG	12600	CM906810OLOG	16700	1
DN0-100C	16-20	25	CM9161200COOG	10800	CM9171200COOG	15100	1
	20-25		CM9161200DOOG	10800	CM9171200DOOG	15100	1
	25-32		CM9161200EOOG	10800	CM9171200EOOG	15100	1
	32-40		CM9161200FOOG	10800	CM9171200FOOG	15100	1
	40-50		CM9161200GOOG	10800	CM9171200GOOG	15100	1
	50-63		CM9161200HOOG	10500	CM9171200HOOG	14700	1
	63-80		CM9161200JOOG	10500	CM9171200JOOG	14700	1
	80-100		CM9161200KOOG	10500	CM9171200KOOG	14700	1
DN1-250C	100-125		CM906380OLO	14500	CM906420OLO	17700	1
	125-160		CM906380OMO	18800	CM906420OMO	22800	1
	160-200		CM906380ONO	24000	CM906420ONO	28700	1
	200-250		CM906380OPO	28200	CM906420OPO	32700	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)

**dsine 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	CM9200800L10G	24600	CM9210800L10G	30500	1	
	125-160		CM9200800M10G	30500	CM9210800M10G	37600	1	
	160-200		CM9200900N10G	31600	CM9210900N10G	40400	1	
	200-250		CM9200900P10G	33100	CM9210900P10G	40900	1	
DN3B-400D	250-320		CM9840100Q00G	42400	CM9840300Q00G	51700	1	
	320-400		CM9840100R00G	42400	CM9840300R00G	51700	1	
DN3-400D	250-320		CM9400500Q10G	*	CM9410500Q10G	*	1	
	320-400		CM9400500R10G	*	CM9410500R10G	*	1	
DN3-630D	400-500		CM9400600S10G	56000	CM9410600S10G	70500	1	
	500-630		CM9400600T10G	56000	CM9410600T10G	70500	1	
DN2-250N	100-125		50	CM9200500L10G	34200	CM9210500L10G	41500	1
	125-160			CM9200500M10G	35100	CM9210500M10G	44200	1
	160-200			CM9200600N10G	35800	CM9210600N10G	44900	1
	200-250			CM9200600P10G	36200	CM9210600P10G	45400	1
DN3-400N	250-320			CM9400300Q10G	51200	CM9410300Q10G	63400	1
	320-400			CM9400300R10G	51200	CM9410300R10G	63400	1
DN3-630N	400-500	CM9400400S10G		62200	CM9410400S10G	80300	1	
	500-630	CM9400400T10G		62200	CM9410400T10G	80300	1	
DN2-250S	100-125	70##		CM9200200L10G	46700	CM9210200L10G	51500	1
	125-160			CM9200200M10G	49700	CM9210200M10G	55700	1
	160-200			CM9200300N10G	53000	CM9210300N10G	62800	1
	200-250			CM9200300P10G	54100	CM9210300P10G	65200	1
DN3-400S	250-320			CM9400100Q10G	63400	CM9410100Q10G	75000	1
	320-400			CM9400100R10G	63400	CM9410100R10G	75000	1
DN3-630S	400-500			CM9400200S10G	79200	CM9410200S10G	94200	1
	500-630			CM9400200T10G	79200	CM9410200T10G	94200	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)

**d sine** DN MCCB with Microprocessor Release

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

**d sine** 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	36	CM920630000X1	38500	CM921550000X1	48400	1
	25-63		CM920710000X1	38500	CM921540000X1	48400	1
	40-100		CM920510000X1	38500	CM921530000X1	48400	1
	63-160		CM920740000X1	48600	CM921520000X1	67600	1
	100-250		CM920540000X1	50600	CM921510000X1	70100	1
DN3-400D	160-400		CM930010000X1	62300	CM930030000X1	80600	1
DN3-630D	250-630		CM930050000X1	68800	CM930070000X1	91100	1
DN2-250N	16-40	50	CM920640000X1	43900	CM921600000X1	58100	1
	25-63		CM920720000X1	43900	CM921590000X1	58100	1
	40-100		CM920520000X1	43900	CM921580000X1	58100	1
	63-160		CM920750000X1	56900	CM921570000X1	74000	1
	100-250		CM920550000X1	60800	CM921560000X1	75600	1
DN3-400N	160-400		CM930020000X1	68100	CM930040000X1	88800	1
DN3-630N	250-630		CM930060000X1	74800	CM930080000X1	97500	1
DN4-1250N	320-800		CM960210000X1	98900	CM961110000X1	125700	1
	400-1000		CM960220000X1	146300	CM961120000X1	205900	1
	500-1250		CM960230000X1	182600	CM961130000X1	247000	1
DN2-250S	16-40	70##	CM920650000X1	46300	CM921650000X1	60300	1
	25-63		CM920730000X1	46300	CM921640000X1	60300	1
	40-100		CM920590000X1	46300	CM921630000X1	60300	1
	63-160		CM920760000X1	60500	CM921620000X1	75800	1
	100-250		CM920560000X1	65600	CM921610000X1	94000	1
DN3-400S	160-400		CM940530000X1	87900	CM941530000X1	116000	1
DN3-630S	250-630		CM940790000X1	93600	CM941790000X1	136300	1
DN4-1250S	320-800		CM960250000X1	106000	CM961150000X1	138900	1
	400-1000		CM960260000X1	152700	CM961160000X1	224800	1
	500-1250		CM960270000X1	197700	CM961170000X1	269000	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



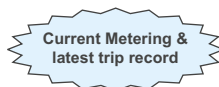
dsine DN MTX2.0

- › 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	36	CM920630000AG	65900	CM921550000AG	75800	1
	25-63		CM920710000AG	65900	CM921540000AG	75800	1
	40-100		CM920510000AG	65900	CM921530000AG	75800	1
	63-160		CM920740000AG	71600	CM921520000AG	87900	1
	100-250		CM920540000AG	72500	CM921510000AG	89000	1
DN3-400D	160-400		CM930010000AG	85800	CM930030000AG	99400	1
DN3-630D	250-630		CM930050000AG	93900	CM930070000AG	113800	1
DN2-250N	16-40	50	CM920640000AG	71600	CM921600000AG	85400	1
	25-63		CM920720000AG	71600	CM921590000AG	85400	1
	40-100		CM920520000AG	71600	CM921580000AG	85400	1
	63-160		CM920750000AG	74600	CM921570000AG	90800	1
	100-250		CM920550000AG	75300	CM921560000AG	91500	1
DN3-400N	160-400		CM930020000AG	90100	CM930040000AG	107500	1
DN3-630N	250-630		CM930060000AG	99800	CM930080000AG	128600	1
DN4-1250N	320-800		CM960210000AG	135500	CM961110000AG	160800	1
	400-1000		CM960220000AG	174500	CM961120000AG	231200	1
	500-1250		CM960230000AG	218200	CM961130000AG	282400	1
DN2-250S	16-40	70##	CM920650000AG	75000	CM921650000AG	89300	1
	25-63		CM920730000AG	75000	CM921640000AG	89300	1
	40-100		CM920590000AG	75000	CM921630000AG	89300	1
	63-160		CM920760000AG	89100	CM921620000AG	99800	1
	100-250		CM920560000AG	98900	CM921610000AG	116400	1
DN3-400S	160-400		CM940530000AG	122000	CM941530000AG	152800	1
DN3-630S	250-630		CM940790000AG	132000	CM941790000AG	181500	1
DN4-1250S	320-800		CM960250000AG	156000	CM961150000AG	195000	1
	400-1000		CM960260000AG	217800	CM961160000AG	283600	1
	500-1250		CM960270000AG	268300	CM961170000AG	351900	1

**Accessories for MTX2.0 [8538]**

Modules for MTX2.0 release	Cat. No.	M.R.P. (₹) Per Unit
Current Metering Module (Display & Metering Module)##	CM956980000	47200
Cable (2m length)##	CM011960000	2050
Power Supply Module	CL907220000	*
UNCO Module for Status Indication & Control through communication	CL908520000	20100



**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	CM920630000BG	*	CM921550000BG	*	1
	25 - 63		CM920710000BG		CM921540000BG		1
	40 - 100		CM920510000BG		CM921530000BG		1
	63 - 160		CM920740000BG		CM921520000BG		1
	100 - 250		CM920540000BG		CM921510000BG		1
DN3-400D	160 - 400		CM930010000BG		CM930030000BG		1
DN3-630D	250 - 630		CM930050000BG		CM930070000BG		1
DN2-250N	16 - 40	50	CM920640000BG	*	CM921600000BG	*	1
	25 - 63		CM920720000BG		CM921590000BG		1
	40 - 100		CM920520000BG		CM921580000BG		1
	63 - 160		CM920750000BG		CM921570000BG		1
	100 - 250		CM920550000BG		CM921560000BG		1
DN3-400N	160 - 400		CM930020000BG		CM930040000BG		1
DN3-630N	250 - 630		CM930060000BG		CM930080000BG		1
DN4-1250N	320 - 800		CM960210000BG		CM961110000BG		1
	400 - 1000		CM960220000BG		CM961120000BG		1
	500 - 1250		CM960230000BG		CM961130000BG		1
DN2-250S	16 - 40	70##	CM920650000BG	*	CM921650000BG	*	1
	25 - 63		CM920730000BG		CM921640000BG		1
	40 - 100		CM920590000BG		CM921630000BG		1
	63 - 160		CM920760000BG		CM921620000BG		1
	100 - 250		CM920560000BG		CM921610000BG		1
DN3-400S	160 - 400		CM940530000BG		CM941530000BG		1
DN3-630S	250 - 630		CM940790000BG		CM941790000BG		1
DN4-1250S	320 - 800		CM960250000BG		CM961150000BG		1
	400 - 1000		CM960260000BG		CM961160000BG		1
	500 - 1250		CM960270000BG		CM961170000BG		1

**Accessories for MTX3.0 [8538]**

Modules for MTX3.0 release	Cat. No.	M.R.P. (₹) Per Unit
Communication Module##	CM956800000	*
Voltage Module##	CM956850000	*
Display Module##	CM956760000	*
Power Supply Module	CL907220000	*
UNCO Module for Status Indication & Control through communication	CL908520000	20100

**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##**

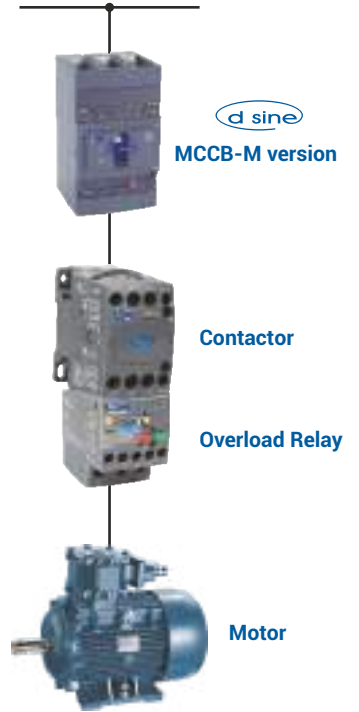


- › Range: 32A to 630A, 50kA
- › Suitable for isolation
- › Wide Range of snap fit Internal and External Accessories

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	CM9894400EO	*	1
	40		CM9894400FO	*	1
	50		CM9894400GO	*	1
	63		CM9894400HO	*	1
	80		CM9894400JO	*	1
	100		CM9894400KO	*	1
DN1-160M	100		CM9034500KO	*	1
	125		CM9034500LO	*	1
	160		CM9034500MO	*	1
DN2-250M	200		CM9217100NOG	*	1
	250		CM9217100POG	*	1
DN3-400M	320		CM9451600QOOG	*	1
	400		CM9451600ROOG	*	1
DN3-630M	500		CM9451500SOOG	*	1
	630		CM9451500TOOG	*	1

\* Price on request

**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.



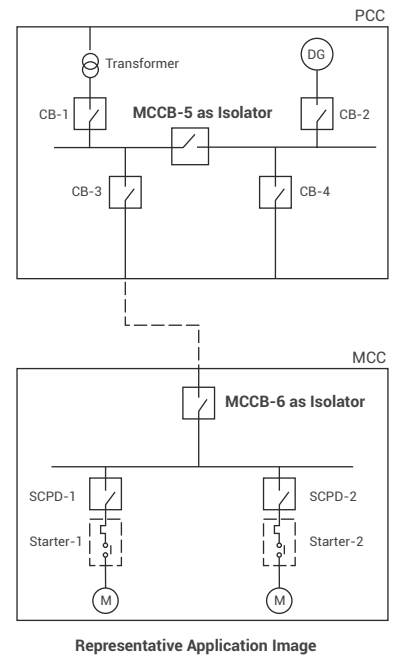
Representative Application Image

**d sine DN Switch Disconnecter - 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

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	CM9071600EO	8670	CM9071700EO	11600	1
	63	CM9071600HO	8670	CM9071700HO	11600	1
	100	CM9071600KO	10300	CM9071700KO	13500	1
	125	CM9071600LO	11400	CM9071700LO	15100	1
	160	CM9071600MO	12300	CM9071700MO	16000	1
DN2-250SD	200	CM9681400NOOG	24600	CM9681500NOOG	32800	1
	250	CM9680200POOG	26500	CM9680300POOG	35100	1
DN3B-400SD	320	CM9841000QOOG	39200	CM9841200QOOG	50800	1
	400	CM9841000ROOG	39200	CM9841200ROOG	50800	1
DN3-630SD	500	CM9680600SOOG	44400	CM9680700SOOG	60600	1
	630	CM9680600TOOG	44400	CM9680700TOOG	60600	1
DN4-1250SD	800	CM9304100UO	88600	CM9304200UO	109200	1
	1000	CM9304100VO	117700	CM9304200VO	150700	1
	1250	CM9304100AO	156200	CM9304200AO	193600	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



**Automatic Transfer Controllers (ATC) [9032]**

Type	Cat. No.	M.R.P. (₹) Per Unit	Std. Pkg. (Nos.)
AuXC-2000 controller**	ATC20000000	39800	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	*	Add MRPs of Similar 2 MCCBs of DN2 of desired no. of Poles, Breaking Cap. & Release to arrive at ASTS Solution.
DN3-400	+ 1 No. : MIL	*	Add MRPs of Similar 2 MCCBs of DN3 of desired no. of Poles, Breaking Cap. & Release to arrive at ASTS Solution.
DN3-630	+ 1 No. : AuXC2000	*	

\* 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 DN MCCBs [8538]



Description	Internal		
	Cat. No.	M.R.P. (₹) Per Unit	Std. Pkg. (Nos.)
<b>Auxiliary Contact [8538]</b>			
DN0, DN1 - 1 C/O - Right	CM978860000	1320	1
DN0, DN1 - 2 C/O - Right	CM978870000	2320	1
DN2, DN3B, DN3, DN4 - 1 C/O	CM998010000	1530	1
DN2, DN3B, DN3, DN4 - 2 C/O	CM998020000	2950	1
<b>Trip Alarm Contact [8538]</b>			
DN0, DN1 - 1 C/O - Right	CM978880000	1320	1
DN0, DN1 - 2 C/O - Right	CM978890000	2320	1
DN2, DN3B, DN3, DN4 - 1 C/O - Right	CM998030000	1600	1
<b>Auxiliary 1 C/O + TAC 1 C/O [8538]</b>			
DN0, DN1 - Right	CM978900000	2240	1
DN2, DN3B, DN3, DN4 - Right	CM998040000	2950	1
<b>Shunt Release [8538]</b>			
DN0, DN1 - 24V DC - Left	CM914020400	2600	1
DN0, DN1 - 110V AC - Left	CM978830A00	2600	1
DN0, DN1 - 240/415V AC - Left	CM978830M00	2600	1
DN2, DN3 - 110V DC - Left	CM998070000	4590	1
DN2, DN3B, DN3, DN4 - 110/240/415V AC, 220V DC	CM998050000	3830 <sup>®</sup>	1
DN2, DN3B, DN3 - 24V DC	CM989760400	3830 <sup>®</sup>	1
<b>Under Voltage Release [8538]</b>			
DN0, DN1 - 240V AC - Left	CM97892B000	4310	1
DN2, DN3B, DN3 - 240V AC - Left	CM99986B000	5330 <sup>**</sup>	1
DN4 - 240V AC - Left	CM999060000	6080 <sup>**</sup>	1

<sup>®</sup> - 'NO' of control contactor to be connected in series for DC control supply  
<sup>\*\*</sup> Use these UV Cat. Nos. with Grey look MCCBs only

Description	External		
	Cat. No.	M.R.P. (₹) Per Unit	Std. Pkg. (Nos.)
<b>External Neutral CT [8504]</b>			
DN2 - 40A	CM999460000	2480	1
DN2 - 63A	CM999470000	2480	1
DN2 - 100A	CM999480000	2480	1
DN2 - 160A	CM999490000	3560	1
DN2 - 250A	CM999500000	3560	1
DN3 - 400A	CM999540000	7280	1
DN3 - 630A	CM999550000	7280	1
DN4 - 800A	CM998890000	11200	1
DN4 - 1000A	CM998900000	11600	1
DN4 - 1250A	CM998910000	12900	1
<b>Adaptor kit for External Neutral CT [8538]</b>			
DN2 - 250	CM999940000	1070	Set of 2
DN3 - 400	CM999950000	2070	Set of 2
DN3 - 630	CM999970000	2160	Set of 2
DN4 - 800	CM999960000	3730	Set of 2
DN4 - 1000	CM909660000	7890	Set of 4
DN4 - 1250	CM999980000	13500	Set of 2



Description	External		
	Cat. No.	M.R.P. (₹) Per Unit	Std. Pkg. (Nos.)
<b>Rotary Handle [8538]</b>			
DN0 Direct ROM	CM978950000	1670	1
DN1 Direct ROM	CM980400000	1800	1
DN2 Direct ROM	CM998290000	1850	1
DN3B, DN3 Direct ROM	CM998600000	2770	1
DN0 Extended ROM	CM978960000	2170	1
DN1 Extended ROM	CM980410000	2310	1
DN2 Extended ROM	CM998300000	2790	1
DN3B, DN3 Extended ROM	CM998610000	4560	1
DN4 Extended ROM	CM998840000	5790	1
<b>Panel door mounted Key lock for Extended ROM # [8301]</b>			
Type 1	CM99958T0000	7710	1
Type 2	CM99958T000A	7710	1
Type 3	CM99958T000B	7710	1
Type 12	CM99958T000C	7710	1
Type 23	CM99958T000D	7710	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.)
<b>Spreader Terminals [8538]</b>			
DN0-100 - 3 Pole	CM977850000	530	Set of 6
DN0-125D - 3 Pole	CM9068700LO	680	Set of 6
DN1, DN2 - 250 - 3 Pole	ST980530000	2270	Set of 6
DN3B/DN3 - 400 - 3 Pole	ST980650000	4400	Set of 6
DN3-630 - 3 Pole	ST980540000	5090	Set of 6
DN4-800 - 3 Pole	CM9116100UO	10700	Set of 6
DN4-1000 - 3 Pole	CM9116100VO	12500	Set of 6
DN4-1250 - 3 Pole	CM9116100AO	42400	Set of 6
DN0-100 - 4 Pole	CM979210000	830	Set of 8
DN0-125D - 4 Pole	CM9068800LO	990	Set of 8
DN1, DN2 - 250 - 4 Pole	CM920070000	3010	Set of 8
DN3B/DN3-400 - 4 Pole	ST980660000	6310	Set of 8
DN3-630 - 4 Pole	CM920040000	6460	Set of 8
DN4-800 - 4 Pole	ST903620000	13700	Set of 8
DN4-1000 - 4 Pole	CM9006400VO	16500	Set of 8
DN4-1250 - 4 Pole	ST980580000	54200	Set of 8
<b>Mechanical Interlock Kit - Base Plate [8538]</b>			
DN2-250	CM997310000	8740	1
DN3-400	CM997320000	13400	1
DN3-630	CM998540000	14400	1
<b>DIN rail kit [8538]</b>			
DN0	CM909440000	200	1

**Note:**  
Phase Barriers are supplied along with MCCBs

## DU/DY MCCB Range [8536]

### DU/DY with Thermal - Magnetic Release :

Rating (A)	16	20	25	32	40	50	63	80	100	125	160	200	250	320	400
Icu (kA)															
10	DY125U										DY250U1				
18	DU100D								DU125D						
25											DU250C				
30	DU100H								DU125H						
36											DU250				
50											DU400N				

### 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)	EM9098200B0	2300	AC : 10kA @ 415V AC, 50 Hz/60 Hz DC : 10kA @ 250V DC (3P in series)	EM9098300B0	2700	EM9098400B0	3630	1
	20		EM9098200C0	2300		EM9098300C0	2700	EM9098400C0	3630	1
	25		EM9098200D0	2300		EM9098300D0	2700	EM9098400D0	3630	1
	32		EM9098200E0	2300		EM9098300E0	2700	EM9098400E0	3630	1
	40		EM9098200F0	2300		EM9098300F0	2700	EM9098400F0	3630	1
	50		EM9098200G0	2300		EM9098300G0	2700	EM9098400G0	3630	1
	63		EM9098200H0	2230		EM9098300H0	2620	EM9098400H0	3520	1
	80		EM9098200J0 ▲	2450		EM9098300J0 ▲	2950	EM9098400J0 ▲	4070	1
	100		EM9081200J0	2230		EM9081300J0	2620	EM9081400J0	3520	1
			EM9098200K0 ▲	2450		EM9098300K0 ▲	2950	EM9098400K0 ▲	4070	1
			EM9081200K0	2230		EM9081300K0	2620	EM9081400K0	3520	1
	125		EM9098200L0 ▲	3430		EM9098300L0 ▲	4330	EM9098400L0 ▲	5310	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.)
<b>Auxiliary/Trip Alarm Contact</b>			
1C/O	EM909660000	800	1
<b>Shunt Release</b>			
Short Rated 110/240/415V AC	EM905200M00	1080	1
<b>Under Voltage Release</b>			
240V AC	EM90518B000	3260	1

Description	External		
	Cat. No.	M.R.P. (₹) Per Unit	Std. Pkg. (Nos.)
<b>Spreader Terminals</b>			
2 Pole (upto 100A)	CM977850002	350	Set of 4
3 Pole (upto 100A)	CM977850000	530	Set of 6
4 Pole (upto 100A)	CM979210000	830	Set of 8
<b>Rotary Handle</b>			
Direct ROM	EM909690000	1610	1
Extended ROM	EM909700000	2310	1
<b>SS Enclosure</b>			
Size I Enclosure for 3P & 4P	CM909960000	2750	1

## DU MCCB Range [8536]

### 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	CM9051700CO	5720	CM9051800CO	7410	1
	20-25		CM9051700DO	5720	CM9051800DO	7410	1
	25-32		CM9051700EO	5720	CM9051800EO	7410	1
	32-40		CM9051700FO	5720	CM9051800FO	7410	1
	40-50		CM9051700GO	5720	CM9051800GO	7410	1
	50-63		CM9051700HO	5550	CM9051800HO	7190	1
	63-80		CM9051700JO	5550	CM9051800JO	7190	1
	80-100		CM9051700KO	5550	CM9051800KO	7190	1
DU125D	100-125		CM9067600LO	6730	CM9067700LO	8900	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.	CM978980OC2	4590	30	CM978940OC2	6420	CM979330OC2	8550	1
	20-25		CM978980OD2	4590		CM978940OD2	6420	CM979330OD2	8550	1
	25-32		CM978980OE2	4590		CM978940OE2	6420	CM979330OE2	8550	1
	32-40		CM978980OF2	4590		CM978940OF2	6420	CM979330OF2	8550	1
	40-50		CM978980OG2	4590		CM978940OG2	6420	CM979330OG2	8550	1
	50-63		CM978980OH2	4460		CM978940OH2	6230	CM979330OH2	8300	1
	63-80		CM978980OJ2	4460		CM978940OJ2	6230	CM979330OJ2	8300	1
	80-100		CM978980OK2	4460		CM978940OK2	6230	CM979330OK2	8300	1
DU125H	100-125		CM911980OLO	6930		CM906780OLO	7250	CM906790OLO	9480	1

**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.)
<b>Auxiliary Contact</b>			
1 C/O - Right	CM978860000	1320	1
2 C/O - Right	CM978870000	2320	1
<b>Trip Alarm Contact</b>			
1 C/O - Right	CM978880000	1320	1
2 C/O - Right	CM978890000	2320	1
<b>Auxiliary + Trip Alarm Contact</b>			
1 C/O + 1C/O - Right	CM978900000	2240	1
<b>Shunt Release</b>			
24V DC - Left	CM914020400	2600	1
110V AC - Left	CM978830A00	2600	1
240/415V AC - Left	CM978830M00	2600	1
<b>Under Voltage Release</b>			
240V AC - Left	CM97892B000	4310	1

Description	External		
	Cat. No.	M.R.P. (₹) Per Unit	Std. Pkg. (Nos.)
<b>Spreader Terminals</b>			
DU100H - 2 Pole	CM977850002	350	Set of 4
DU125H - 2 Pole	CM911990OLO	440	Set of 4
DU100D/DU100H - 3 Pole	CM977850000	530	Set of 6
DU125D/DU125H - 3 Pole	CM906870OLO	680	Set of 6
DU100D/DU100H - 4 Pole	CM979210000	830	Set of 8
DU125D/DU125H - 4 Pole	CM906880OLO	990	Set of 8
<b>Rotary Handle</b>			
DU100D/DU125D/ Direct ROM	CM978950000	1670	1
DU100H/DU125H Extended ROM	CM978960000	2170	1
<b>DIN rail kit</b>			
DU100D/DU125D/DU100H/DU125H	CM909440000	200	1
<b>SS Enclosure</b>			
Size I Enclosure	CM909960000	2750	1

**Note:** Phase Barriers are supplied along with all MCCBs

## DU/DY MCCB Range [8536]

### 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	CM9819500MO▲	8000	CM9819600MO▲	10800	1			
	160-200					CM9819500NO▲	9320	CM9819600NO▲	12100	1			
	200-250					CM9819500PO▲	12100	CM9819600PO▲	16300	1			
DU250C	125-160	-	-	-	25	CM9063100MO	9840	CM9063400MO	12500	1			
	160-200					CM9063100NO	11900	CM9063400NO	15100	1			
	200-250					CM9063100PO	13100	CM9063400PO	17300	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.	-	-	36	CM9090500MO	8550	CM980620000	11400	CM9806500MO	14100	1	
	160-200					CM9090500NO	9890	CM980610000	14000	CM9806500NO	18900	1	
	200-250					CM9090500PO	11100	CM980600000	15700	CM9806500PO	20700	1	
DU400N	250-320		-	-	-	50	CM9088600QO	20000	CM9840200QO	23400	CM9840400QO	28700	1
	320-400						CM9088600RO	20000	CM9840200RO	23400	CM9840400RO	28700	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		
	Cat. No.	M.R.P. (₹) Per Unit	Std. Pkg. (Nos.)
<b>Auxiliary Contact</b>			
1 C/O - Right	CM978860000	1320	1
2 C/O - Right	CM978870000	2320	1
<b>Trip Alarm Contact</b>			
1 C/O - Right	CM978880000	1320	1
2 C/O - Right	CM978890000	2320	1
<b>Auxiliary + Trip Alarm Contact</b>			
1 C/O + 1C/O - Right	CM978900000	2240	1
<b>Shunt Release</b>			
24V DC - Left	CM914020400	2600	1
110V AC - Left	CM978830A00	2600	1
240/415V AC - Left	CM978830M00	2600	1
<b>Under Voltage Release</b>			
240V AC - Left	CM97892B000	4310	1

Description	External		
	Cat. No.	M.R.P. (₹) Per Unit	Std. Pkg. (Nos.)
<b>Spreader Terminals</b>			
DU250 - 2 Pole	CM909600000	1780	Set of 4
DU250C/DU250 - 3 Pole	ST980530000	2270	Set of 6
DU250C/DU250 - 4 Pole	CM920070000	3010	Set of 8
<b>Rotary Handle</b>			
Direct ROM	CM980400000	1800	1
Extended ROM	CM980410000	2310	1
<b>SS Enclosure</b>			
Size II Enclosure	CM910030000	6310	1

Note: Phase Barriers are supplied along with all MCCBs

### Accessories for DU400N MCCBs [8538]



Description	Internal		
	Cat. No.	M.R.P. (₹) Per Unit	Std. Pkg. (Nos.)
<b>Auxiliary Contact</b>			
1 C/O	CM998010000	1530	1
2 C/O	CM998020000	2950	1
<b>Trip Alarm Contact</b>			
1 C/O - Right	CM998030000	1600	1
<b>Auxiliary + Trip Alarm Contact</b>			
1 C/O + 1C/O - Right	CM998040000	2950	1
<b>Shunt Release</b>			
110/240/415V AC, 220V DC	CM998050000	3830@	1
24V DC	CM989760400	3830@	1
<b>Under Voltage Release</b>			
240V AC - Left	CM99986B000	5330	1

Description	External		
	Cat. No.	M.R.P. (₹) Per Unit	Std. Pkg. (Nos.)
<b>Spreader Terminals</b>			
2 Pole	CM909640000	2760	Set of 4
3 Pole	ST980650000	4400	Set of 6
4 Pole	ST980660000	6310	Set of 8
<b>Rotary Handle</b>			
Direct ROM	CM998600000	2770	1
Extended ROM	CM998610000	4560	1

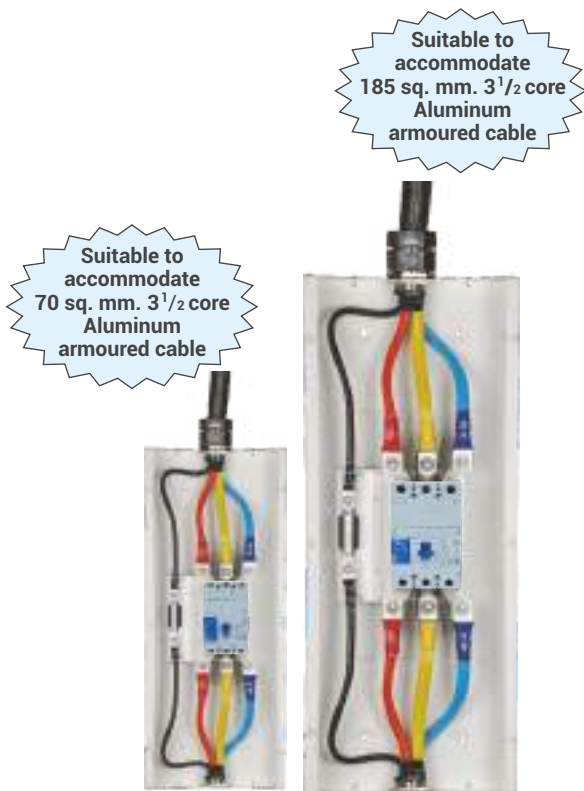
Note:

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/DZ0	CM909960000	2750	1
Size II Enclosure for DY250U1/DU250C/DU250/DN1	CM910030000	6310	1



Easy wall Mounting



In-built Neutral Link



Better Heat Dissipation

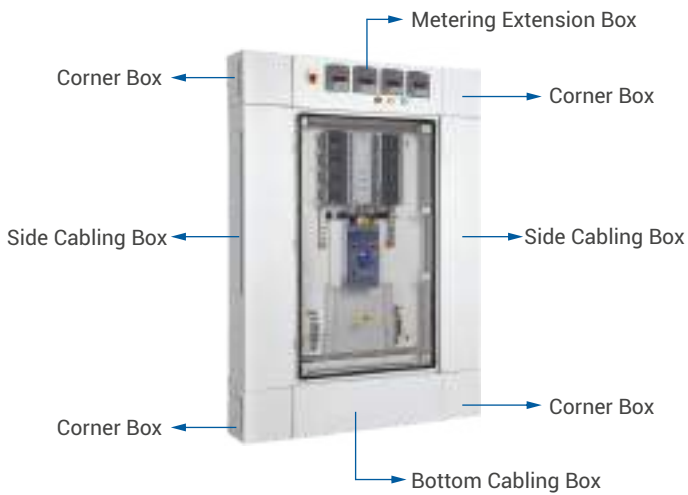
## Ground Fault Module [8538]




- › 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.)
GF1	100 - 200A	ST277450000	13100	Built in CBCT	1
GF2	200 - 400A	ST277460000	20000	Built in CBCT	1
GF11	up to 800A	ST285940000	12100 #	External CT required	1

# 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	DA20D1044CZZO	-	4	53760	637	670	208.5
SMDB - TN250D, O/G 100A 8 ways	DA20D1084CZZO	-	8	65385	787	670	208.5
SMDB - TN250D, O/G 100A 12 ways	DA20D1124CZZO	-	12	82245	937	670	208.5
SMDB - TN250D, O/G 100A 16 ways	DA20D1164CZZO	-	16	96655	1087	670	208.5
SMDB - TN400D, O/G 100A 4 ways	DA40D1044CZZO	-	4	60240	937	670	208.5
SMDB - TN400D, O/G 100A 8 ways	DA40D1084CZZO	-	8	68640	1087	670	208.5
SMDB - TN400D, O/G 100A 12 ways	DA40D1124CZZO	-	12	88255	1237	670	208.5
SMDB - TN400D, O/G 100A 16 ways	DA40D1164CZZO	-	16	104025	1387	670	208.5
SMDB - TN630D, O/G 100A 8 ways	DA60D1084CZZO	-	8	113810	1287	870	208.5
SMDB - TN630D, O/G 100A 12 ways	DA60D1124CZZO	-	12	153700	1507	870	208.5
SMDB - TN630D, O/G 100A 16 ways	DA60D1164CZZO	-	16	168475	1507	870	208.5
SMDB - TN630D, O/G 250A 4 ways	DA62D1044CZZO	4	-	110840	1067	870	208.5
SMDB - TN630D, O/G 250A 8 ways	DA62D1084CZZO	8	-	124140	1287	870	208.5
SMDB - TN630D, O/G 250A 12 ways	DA62D1124CZZO	12	-	159610	1507	870	208.5
SMDB - TN630D, O/G 250A 16 ways	DA62D1164CZZO	16	-	178825	1727	870	208.5
SMDB - TN630D, O/G COMBI 4 ways	DA6AD1044CZZO	2	2	108625	1067	870	208.5
SMDB - TN630D, O/G COMBI 8 ways	DA6AD1084CZZO	2	6	118230	1287	870	208.5
SMDB - TN630D, O/G COMBI 12 ways	DA6AD1124CZZO	2	10	156650	1507	870	208.5
SMDB - TN630D, O/G COMBI 16 ways	DA6AD1164CZZO	2	14	172905	1507	870	208.5

Incoming Device [8536]			
SMDB Type	Description	Cat. No.	M.R.P. (₹) Per Unit
TN250D*	DN1-250C 3 Pole MCCB - 160A	CM9063800MO	18800
	DN1-250C 3 Pole MCCB - 200A	CM9063800NO	24000
	DN1-250C 3 Pole MCCB - 250A	CM9063800PO	28200
TN400D	DN3-400D 3 Pole MCCB - 320A	CM9400500Q10G	#
	DN3-400D 3 Pole MCCB - 400A	CM9400500R10G	#
TN630D	DN3-630D 3 Pole MCCB - 500A	CM9400600S10G	56000
	DN3-630D 3 Pole MCCB - 630A	CM9400600T10G	56000

#### 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	CM9161200COOG	10800	
	DN0-100C 3 Pole MCCB - 25A	CM9161200DOOG	10800	
	DN0-100C 3 Pole MCCB - 32A	CM9161200EOOG	10800	
	DN0-100C 3 Pole MCCB - 40A	CM9161200FOOG	10800	
	DN0-100C 3 Pole MCCB - 50A	CM9161200GOOG	10800	
	DN0-100C 3 Pole MCCB - 63A	CM9161200HOOG	10500	
	DN0-100C 3 Pole MCCB - 80A	CM9161200JOOG	10500	
	DN0-100C 3 Pole MCCB - 100A	CM9161200KOOG	10500	
	TN630D	DN1-250C 3 Pole MCCB - 160A	CM9063800MO	18800
		DN1-250C 3 Pole MCCB - 200A	CM9063800NO	24000
DN1-250C 3 Pole MCCB - 250A		CM9063800PO	28200	

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	CM9043900PO	8300
	Bottom Cabling Box	CM904370000	7780
TN630D	Metering Extension Box	CM9106400TO	8750
	Bottom Cabling Box	CM910620000	8230
TN250D, TN400D & TN630D	Corner Box	CM910890000	2890
	Mounting base	CM702600000	3900



### 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	CM910850D00	7960	CM910860D00	7960
	-	8	CM910850F00	10280	CM910860F00	10280
	-	12	CM910850H00	12320	CM910860H00	12320
	-	16	CM910850K00	14380	CM910860K00	14380
TN400D	-	4	CM910870D00	12320	CM910880D00	12320
	-	8	CM910870F00	14380	CM910880F00	14380
	-	12	CM910870H00	15750	CM910880H00	15750
	-	16	CM910870K00	17800	CM910880K00	17800
TN630D	-	8	CM911200OFO	14920	CM911210OFO	14920
	-	12	CM911200OHO	17380	CM911210OHO	17380
	-	16				
	4	-	CM911200ODO	13370	CM911210ODO	13370
	8	-	CM911200OFO	14920	CM911210OFO	14920
	12	-	CM911200OHO	17380	CM911210OHO	17380
	16	-	CM911200OKO	18940	CM911210OKO	18940
	2	2	CM911200ODO	13370	CM911210ODO	13370
	2	6	CM911200OFO	14920	CM911210OFO	14920
	2	10	CM911200OHO	17380	CM911210OHO	17380
	2	14				



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

U-POWER  
**OMEGA**  
Air Circuit Breakers

## 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.

C-POWER

## Eligibility

- › ACB should be within the warranty period.

To learn more about the First Serve Program or to schedule our ACB's first service visit, please contact

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

# 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)





- › 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<sup>#</sup>**
- › 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,  $I_{cu} = I_{cs} = I_{cw}$  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
- › 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



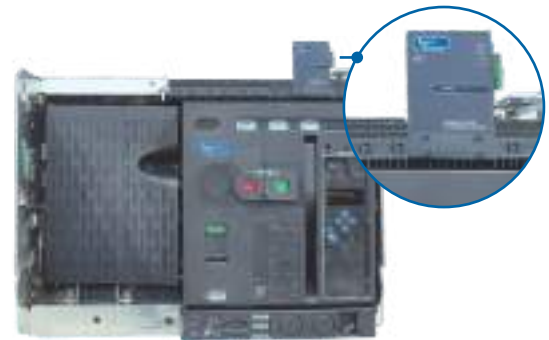
UW-MTX1G/1Gi



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)

		I <sub>cu</sub> = I <sub>cs</sub> = I <sub>cw</sub> 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

**OMEGA** ACB ordering information:

<b>UW</b>	<b>1</b>	<b>08</b>	<b>N</b>	<b>X</b>	<b>D</b>	<b>1</b>	<b>2</b>	<b>9</b>	<b>0</b>	<b>0#</b>	<b>UW1 800N 3P ED 1.5G BotV</b>
-----------	----------	-----------	----------	----------	----------	----------	----------	----------	----------	-----------	---------------------------------

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

Current Ratings	
400A	04
630A	06
<b>800A</b>	<b>08</b>
1000A	10
1250A	12
1600A	16
2000A	20
2500A <sup>(4)</sup>	25
3200A	32
4000A	40
5000A	50
6300A	63

Selection for Breaking Capacity (Icu=Ics) <sup>(1)</sup>	
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
<b>Electrically Operated</b>	<b>2</b>

Version	
<b>Draw-out</b>	<b>D</b>
Fixed	F
Cradle/Fixed Part <sup>(7)</sup>	C
Breaker/Moving Part	B

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 <sup>(3)</sup>	
<b>Not Required</b>	<b>0</b>
Required	1

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

Selection for control voltage <sup>(2)</sup>	
For Manually Operated	0
<b>240V AC/DC ECD &amp; CR + 240V AC/DC SR</b>	<b>1</b>
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	
<b>3 Pole</b>	<b>X</b>
4 Pole 100% N	F
4 Pole 50% N (in Fr-III only)	H
4 Pole 200% N (upto 2500A)	D

**Please Note:**

(1) For Icu 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

**OMEGA** ACBs are offered with following standard features

<b>Draw-out Version:</b>	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.
<b>Fixed Version:</b>	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, 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	236100	UW108NXD01900	253000	UW108NFD01800	294800	UW108NFD01900	311700
1000A			UW110NXD01800	244000	UW110NXD01900	260900	UW110NFD01800	313600	UW110NFD01900	330500
1250A			UW112NXD01800	262300	UW112NXD01900	279200	UW112NFD01800	339100	UW112NFD01900	356000
1600A			UW116NXD01800	304600	UW116NXD01900	321500	UW116NFD01800	379900	UW116NFD01900	396800
2000A			UW120NXD01800	362800	UW120NXD01900	379700	UW120NFD01800	454500	UW120NFD01900	471400
2500A			UW225NXD01800	463700	UW225NXD01900	480600	UW225NFD01800	557500	UW225NFD01900	574400
3200A			UW232NXD01800	554200	UW232NXD01900	571100	UW232NFD01800	680500	UW232NFD01900	697400
4000A			UW240NXD01800	638600	UW240NXD01900	655500	UW240NFD01800	776900	UW240NFD01900	793800

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	181600	UW108NXF01900	198500	UW108NFF01800	226800	UW108NFF01900	243700
1000A			UW110NXF01800	187700	UW110NXF01900	204600	UW110NFF01800	241200	UW110NFF01900	258100
1250A			UW112NXF01800	201800	UW112NXF01900	218700	UW112NFF01800	260800	UW112NFF01900	277700
1600A			UW116NXF01800	234300	UW116NXF01900	251200	UW116NFF01800	292200	UW116NFF01900	309100
2000A			UW120NXF01800	279100	UW120NXF01900	296000	UW120NFF01800	349600	UW120NFF01900	366500
2500A			UW225NXF01800	356700	UW225NXF01900	373600	UW225NFF01800	428800	UW225NFF01900	445700
3200A			UW232NXF01800	426300	UW232NXF01900	443200	UW232NFF01800	523500	UW232NFF01900	540400
4000A			UW240NXF01800	491200	UW240NXF01900	508100	UW240NFF01800	597600	UW240NFF01900	614500

M.R.P. changes for product customization	M.R.P. (₹) Per Unit
MDO to EDO or MF to EF Conversion kit (ECD + CR + SR)	69600
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)	
<b>PS (Auxiliary power supply module for display in No-load or OFF condition)**\$</b>	
COM Module (MODBUS) for communication\$	
PM Module for power metering\$	
<b>New</b> UW-MTX3.5T (LSING + Current Metering + MODBUS TCP/IP (ETHERNET) Communication) + can be upgraded for Power Metering#	
<b>New</b> 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								
Current Rating	Version	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	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	-	-	UW363HXF01800	UW363VXF01800				

M.R.P. changes for product customization	M.R.P. (₹) Per Unit
MDO to EDO or MF to EF Conversion kit (ECD + CR + SR)	69600
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\$	
UW-MTX3.5T (LSING + Current Metering + MODBUS TCP/IP (ETHERNET) Communication) + can be upgraded for Power Metering#	
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]

**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		-		-		UW340VFD01800	
5000A		-		-		UW350VFD01800	
6300A	-	-	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		-		-		UW340VFF01800	
5000A		-		-		UW350VFF01800	
6300A	-	-	UW363VFF01800				

\* Available on request

**Accessories of 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
<b>Terminal Adaptor for Draw-out Omega ACBs</b>		
Frame-1 400-1000A N/S/H (Vertical / Horizontal)	CL604380000	*
Frame-1 1250-2000A N/S/H (Vertical / Horizontal)	CL609630000	
Frame-1 2500A S/H (Vertical)	CL609640000	
Frame-2 400-3200A N/S/H (Vertical / Horizontal)	CL604200000	
Frame-2 4000A N/S/H (Vertical)	CL603160000	
Frame-2 4000A N/S/H (Horizontal)	CL601280000	
Frame-3 400-4000A H/V (Vertical)#	CL600730000	
Frame-3 400-4000A H/V (Horizontal-Long)	CL609660000	
Frame-3 5000A H/V (Horizontal-Long)	CL600670000	
Frame-3 5000A H/V (Vertical)#	CL609650000	
Frame-3 6300A H/V (Vertical)#		

# : Please consider 4 terminal adaptors per phase.

Description	Cat. No.	M.R.P. (₹) Per Unit
<b>Terminal Adaptor for Fixed Omega ACBs</b>		
Frame-1 400-2000A N/S (Vertical / Horizontal)	CL609670000	*
Frame-1 400-2000A H (Vertical / Horizontal)	CL609680000	
Frame-1 2500A S/H (Vertical)	CL609760000	
Frame-2 400-2500A N/S (Vertical / Horizontal)	CL601220000	
Frame-2 400-3200A H, 3200A N/S (Vertical / Horizontal)	CL609770000	
Frame-2 4000A S/H (Vertical)	CL604170000	
Frame-3 400-4000A H/V (Vertical)#	CL604180000	
Frame-3 5000A H/V (Vertical)#	CL603470000	
Frame-3 400-5000A H/V (Horizontal-Long)	CL603730000	

# : 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-Barrier are mandatory to be used with 800V AC ACBs:

(a) For Draw-out ACBs, Phase-Barrier are provided as standard supply along with ACBs

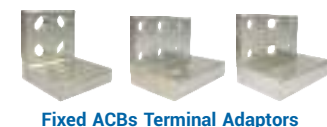
(b) For Fixed ACBs, kindly consider Phase-Barrier from below table

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	CL609670000	*	(6/8)	CL609630000	*	(6/8)
800A		CL609670000		(6/8)	CL609630000		(6/8)
1000A		CL609670000		(6/8)	CL609630000		(6/8)
1250A		CL609670000		(6/8)	CL609630000		(6/8)
1600A		CL609670000		(6/8)	CL609630000		(6/8)
2000A		CL601220000		(6/8)	CL609640000		(6/8)
2000A	2	CL609770000	*	(6/8)	CL609640000	*	(6/8)
2500A		CL603180000		(6/8)	CL609640000		(6/8)
3200A		CL604170000		(6/8)	CL604190000		(6/8)
4000A	-	-	CL604200000	(6/8)			
3200A	3	CL604180000	*	(12/16)	CL601280000	*	(12/16)
4000A		CL604180000		(12/16)	CL600670000		(12/16)
5000A		CL603470000		(12/16)	CL609650000		(12/16)



**Phase-Barrier for 800V AC Fixed ACBs [8538]**

Cat. No.	Type	Pole	M.R.P. (₹) Per Unit	Qty. per ACB
CL912580000	Fixed	3P		2
CL912590000	Fixed	4P	*	2

\* Available on request

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

# Accessories of OMEGA Air Circuit Breakers

Air Circuit Breakers



Operation Counter



Door Interlock



Closing Release



Shunt Release



UV Release

Description	Cat. No.	M.R.P. (₹) Per Unit
<b>Other Accessories [8538]</b>		
Operation Counter	CL909830000#	
Door Interlock	CL909780000	*
Electrical Position Indication (EPI)	CL958260000	
<b>Microswitches for Indication [8536]</b>		
Microswitch for Common Fault Indication (CFI)	CL909490000	
Microswitch for Ready To Close Indication (RTC)	CL909530000^	
Microswitch for Shunt Release	CL909510000	*
Microswitch for Undervoltage Release	CL909470000	
Microswitch for Spring Charging Indication	ST426720000	

# Operation Counter inbuilt for rating 4000A to 6300A

^ Cradle SIC block CL958250000 needs to be ordered separately, If EPI not installed in same ACB



R-Lock



C-Lock

Description	Cat. No.	M.R.P. (₹) Per Unit
<b>Mechanical Interlock using Key &amp; Lock<sup>§</sup></b>		
R - Lock Type - 1	CL006590000	
R - Lock Type - 2	CL006600000	
R - Lock Type - 3	CL006610000	
R - Lock Type - 12	CL006620000	
R - Lock Type - 23	CL006630000	
Locking arrangement for OFF button with R - Lock (on breaker)	CL908150000	
Locking arrangement for ISO position with R - Lock (on Cradle)	CL908650000	
Locking arrangement for ANY position with R - Lock (on Cradle)	CL909270000	*
C - Lock Type - S	CL006640000	
C - Lock Type - T	CL006650000	
C - Lock Type - ST	CL006660000	
C - Lock Type - SS	CL006670000	
C - Lock Type - TT	CL006680000	
Locking arrangement for OFF button with C - Lock (on breaker)	CL908140000	
Locking arrangement for ISO position for C - Lock (on Cradle)	CL909820000	
Locking arrangement for ANY position with C - Lock (on Cradle)	CL909810000	

**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
<b>Electrical Charging Device (ECD) [8501]</b>		
24-30V DC	CL903620000	
48/60V DC	CL903630000	
110V AC / 110-125V DC	CL903600000	*
220V AC / 200V DC	CL903640000	
240V AC / 250V DC	CL903590000	
415V AC / 400V DC	CL903610000	
<b>Closing Release (CR) [8538]</b>		
24-30V DC	CL908174000	
48/60V DC	CL908175000	
110V AC / 110V DC	CL90817A000	*
125/127V DC	CL908171000	
220 - 240V AC / 220 - 250V DC	CL90817B000	
415V AC	CL90817D000	
<b>Shunt Release (SR) [8538]</b>		
24-30V DC	CL908160400	
48/60V DC	CL908160500	
110V AC / 110V DC	CL908160A00	*
125/127V DC	CL908160100	
220 - 240V AC / 220 - 250V DC	CL908160B00	
415V AC	CL908160D00	
<b>Under Voltage Release (UVR) with time delay (0-1-3-5 sec) [8538]</b>		
24-30V DC	CL908184000	
48V DC	CL908185000	
110V AC / 110V DC	CL90818A000	*
240V AC / 220V DC	CL90818B000	
415V AC	CL90818D000	



Neutral CT

Description	Cat. No.	M.R.P. (₹) Per Unit
<b>External Neutral CT for UW-MTX Releases [8504]</b>		
Frame-1, 2 & 3 400-800A	CL007170000	
Frame-1, 2 & 3 1000-1600A	CL007180000	
Frame-1 2000-2500A	CL007190000	*
Frame-2 & 3 2000-4000A	CL007200000	
Frame-3 5000-6300A	CL007210000	

## Automatic Transfer Controllers (ATC) [9032]



AuXC-2000 Controller

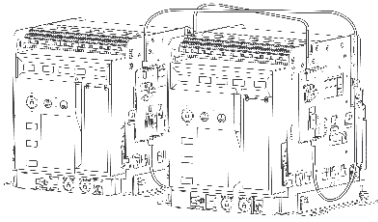
Type	Cat. No.	M.R.P. (₹) Per Unit	Std. Pkg. (Nos.)
AuXC-2000 controller**	ATC20000000	39800	1

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
<b>Mechanical Interlock using Bowden Cable (5 meters length)</b>		
Between 2 Incomers	CL906630000	*
Between 3 Incomers	CL906640000	
Between 2 Incomers & 1 Standby	CL906650000	
Between 2 Incomers & 1 Buscoupler	CL906660000	
<b>Mechanical Interlock using Bowden Cable (3 meters length)</b>		
Between 2 Incomers	CL906590000	*
Between 3 Incomers	CL906600000	
Between 2 Incomers & 1 Standby	CL906610000	
Between 2 Incomers & 1 Buscoupler	CL906620000	
<b>Mechanical Interlock using Bowden Cable (2 meters length)</b>		
Between 2 Incomers	CL908100000	*
Between 3 Incomers	CL908110000	
Between 2 Incomers & 1 Standby	CL908120000	
Between 2 Incomers & 1 Buscoupler	CL908130000	

**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
<b>MATRIX Releases &amp; Modules [8538]</b>		
UW-MTX1.0	CL919660000	*
UW-MTX1G	CL919710000	
UW-MTX1Gi	CL905620000	
UW-MTX1.5G	CL919650000	
UW-MTX1.5Gi	CL905520000	
UW-MTX3.5	CL906450000	
UW-MTX3.5EC	CL906440000	
UW-MTX3.5H	CL906460000	
UW-MTX4.5	*	
<b>New</b> UW-MTX3.5T	#	
<b>New</b> UW-MTX3.5ET	#	
<b>New</b> UW-MTX4.5T	#	
<b>New</b> UW-MTX3.5A	*	
Power supply module with 2 Ports	CL907220000	
<b>New</b> 1A Power supply module	CL918950000	
<b>New</b> DigiCom Module	CL918960000	
Relay Module	CL907160000	
MODBUS Module	CL907090000	
Profibus Module	CL902950000	
Matrix Smart Card Module	CL907050000	
Power Metering Module (415V)	CL906490000	
Power Metering Module (690V)	CL906850000	
ZSI Module	CL907180000	
TCS Module	CL907190000	
EL Module	CL907200000	
REF Module	CL907210000	
Simulation Kit	CL907240000	

For Energy Management Communication Software Please contact the nearest branch office  
# Integrated Release along with ACB - available as Factory-fitted option only

**Upgrade to the new-age OMEGA ACB**  
*with Minimal Modifications*



*Pre-Engineered Retrofit Solution*  
Upgrade CNCS ACB to OMEGA ACB

**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 nearest Authorized 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

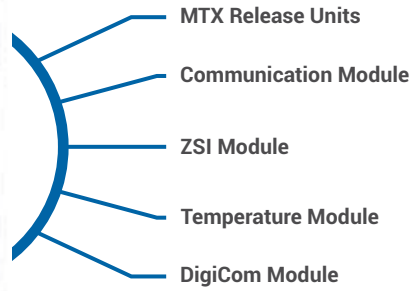
Customer Interaction Center (CIC)

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



New

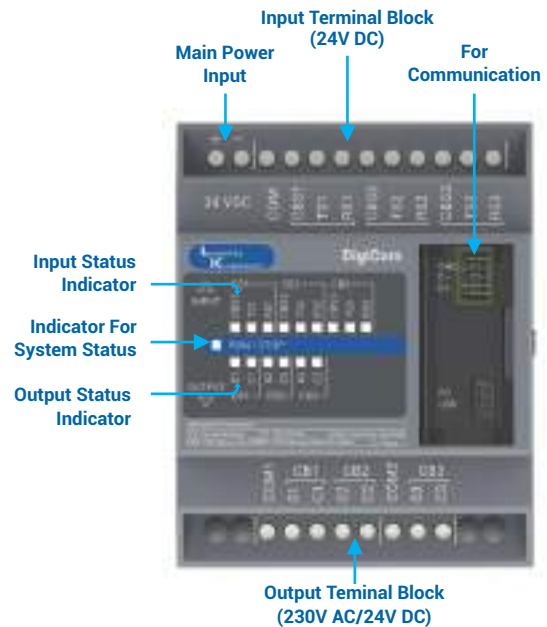
PS Module Details	Function	Module Compatibility	M.R.P. (₹) Per Unit
PS Module (CAT Code: CL918950000)	Suitable for providing regulated 24V DC Power Supply	All MTX Release Units for Powering ON, MODBUS Module, ZSI Module, Temperature Module, UN-CO Module & DigiCom Module	8630
UW-PS Module (CAT Code: CL907220000)	Suitable for providing regulated 24V DC Power Supply and Internal Communication Bus	All MTX Release Units and MTX Modules	23500

## 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.

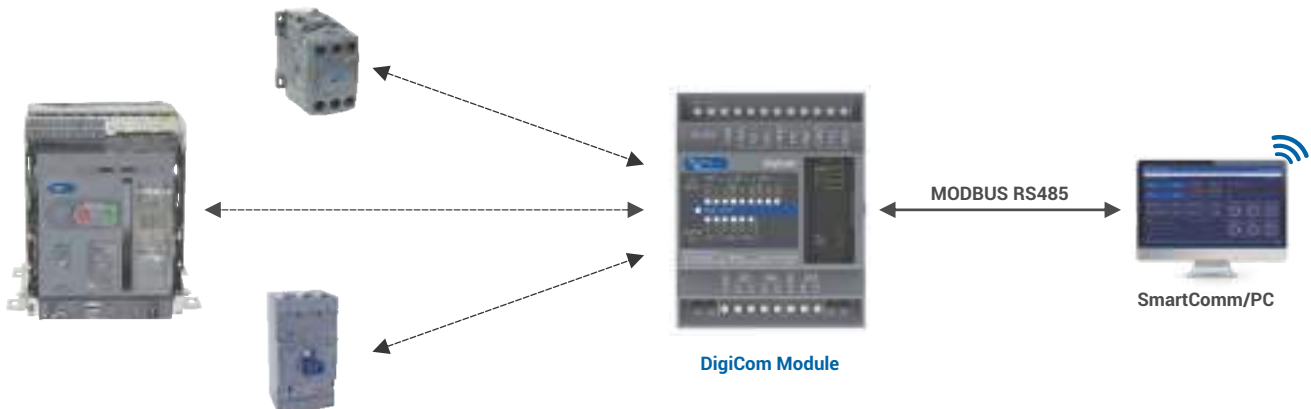
Input Status Indicator	CB1	CBS1	ON/OFF Indication for Circuit Breaker 1
		TS1	Trip status Indication for Circuit Breaker 1
Input Status Indicator	CB2	RS1	Ready spring/Ready to Close Status Indication for Circuit Breaker 1
		CBS2	ON/OFF Indication for Circuit Breaker 2
		TS2	Trip status Indication for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



New

DigiCom Module Details	M.R.P. (₹) Per Unit
DigiCom Module (CAT Code: CL918960000)	25600

## 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,  $I_{cu} = I_{cs} = I_{cw}$  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

- › 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,  $I_{cu} = I_{cs} = I_{cw}$  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 C ACB

## 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<sub>2</sub> and H<sub>2</sub>S

Please contact the nearest branch office for Details & product Selection



C-POWER HE Range

## Breaking Capacities Offered:

		I <sub>cu</sub> = I <sub>cs</sub> = I <sub>cw</sub> 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			65kA	65kA	65kA	65kA	75kA	75kA				
CN-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 Air Circuit Breakers [8536]



### 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	252200	SL96061	316400	SL95331	248600	SL95351	312800
		EDO	SL96051	313900	SL96071	378100	SL95341	310300	SL95361	374500
800A	50kA	MDO	SL96042	252200	SL96062	316400	SL95332	248600	SL95352	312800
		EDO	SL96052	313900	SL96072	378100	SL95342	310300	SL95362	374500
1000A	50kA	MDO	SL96043	262200	SL96063	331400	SL95333	258600	SL95353	327800
		EDO	SL96053	323900	SL96073	393100	SL95343	320300	SL95363	389500
1250A	50kA	MDO	SL96044	289300	SL96064	364900	SL95334	285700	SL95354	361300
		EDO	SL96054	351000	SL96074	426600	SL95344	347400	SL95364	423000
1600A	50kA	MDO	SL96045	329800	SL96065	405700	SL95335	326200	SL95355	402100
		EDO	SL96055	391500	SL96075	467400	SL95345	387900	SL95365	463800
2000A	50kA	MDO	SL96046	387400	SL96066	475900	SL95336	383800	SL95356	472300
		EDO	SL96056	449100	SL96076	537600	SL95346	445500	SL95366	534000
2500A	60kA	MDO	SL96047	478900	SL96067	577200	SL95337	475300	SL95357	573600
		EDO	SL96057	540600	SL96077	638900	SL95347	537000	SL95367	635300

Note : Add a Suffix "0000" 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	145000	SL95581	184900	SL95481	141400	SL95501	181300
		EF	SL95571	206700	SL95591	246600	SL95491	203100	SL95511	243000
800A	50kA	MF	SL95562	145000	SL95582	184900	SL95482	141400	SL95502	181300
		EF	SL95572	206700	SL95592	246600	SL95492	203100	SL95512	243000
1000A	50kA	MF	SL95563	158400	SL95583	199900	SL95483	154800	SL95503	196300
		EF	SL95573	220100	SL95593	261600	SL95493	216500	SL95513	258000
1250A	50kA	MF	SL95564	182500	SL95584	228100	SL95484	178900	SL95504	224500
		EF	SL95574	244200	SL95594	289800	SL95494	240600	SL95514	286200
1600A	50kA	MF	SL95565	202300	SL95585	260200	SL95485	198700	SL95505	256600
		EF	SL95575	264000	SL95595	321900	SL95495	260400	SL95515	318300

Note Add a Suffix "0000" 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	9500
Microprocessor based SR18G+D (LSING + Current Metering)	Add	18500
Microprocessor based SR18Gi+D (LSING + Current metering + ZSI)	Add	24600

**C-POWER S1 Draw-Out ACBs** will have inbuilt - 2NO+2NC Aux contact for MDO & 6NO+6NC Aux contact for EDO breakers, Safety shutter assembly, Racking handle, Door sealing frame, Push-button cover & Rating error preventor.

Electrical version includes 240V AC Shunt trip coil, Closing coil and Motor for electrical charging.

**C-POWER S1 Fixed ACBs** will have inbuilt - 2NO+2NC Aux contact for MF & 6NO+6NC Aux contact for EF breakers, Door sealing frame & Push-button cover.

Electrical version includes 240V AC Shunt trip coil, Closing coil and Motor for electrical charging.

**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.

### 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	SL957210000	94300
630A	50kA	3P MF	SL957220000	95200
800A	50kA	3P MF	SL957230000	100800
1000A	50kA	3P MF	SL957240000	103300
1250A	50kA	3P MF	SL957250000	135400
1600A	50kA	3P MF	SL957260000	142600
2000A	50kA	3P MF	SL932970000	163700

## C-POWER Air Circuit Breakers [8536]



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

Rating	Breaking Capacity I <sub>cu</sub> =I <sub>cs</sub> =I <sub>cw</sub> (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	439000	#	568700	#	435400	#	565100
		EDO	H	SL95321	500700	#	630400	#	497100	#	626800
1000A	65kA	MDO	H	SL95312	447000	#	604500	#	443400	#	600900
		EDO	H	SL95322	508700	#	666200	#	505100	#	662600
1250A	65kA	MDO	H	SL95313	488800	#	648300	#	485200	#	644700
		EDO	H	SL95323	550500	#	710000	#	546900	#	706400
1600A	65kA	MDO	H	SL95314	550100	#	713600	#	546500	#	710000
		EDO	H	SL95324	611800	#	775300	#	608200	#	771700
2000A	75kA	MDO	H	SL95315	608000	#	729600	#	604400	#	726000
		EDO	H	SL95325	669700	#	791300	#	666100	#	787700
2500A	75kA	MDO	H	SL95316	632900	#	770400	#	629300	#	766800
		EDO	H	SL95326	694600	#	832100	#	691000	#	828500
3200A	75kA	MDO	H2	SL94822	666900	SL94826	818500	#	663300	#	814900
		EDO	H2	SL94824	728600	SL94828	880200	#	725000	#	876600
4000A	75kA	MDO	H2	SL94823	757900	SL94827	947100	#	754300	#	943500
		EDO	H2	SL94825	819600	SL94829	1008800	#	816000	#	1005200
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 "0000" for all the above mentioned cat. nos.

### C-POWER 3 & 4 Pole Manual Fixed ACBs

Rating	Breaking Capacity I <sub>cu</sub> =I <sub>cs</sub> =I <sub>cw</sub> (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			SL97635	302300	#	392100	SL93005	298700	#	388500
2000A	55kA			SL97636	333100	#	449000	SL93006	329500	#	445400
2500A	60kA										

**Note:** For higher breaking capacities & 690V AC application please contact the nearest branch office  
Add a Suffix "0000" 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	9500
Microprocessor based SR18G+D (LSING + Current Metering)	Add	18500
Microprocessor based SR18Gi+D (LSING + Current metering + ZSI)	Add	24600

**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
<b>Lockable Trip Push Button (LTPB) [8301]</b>		
Type AA	SL93148000A	7150
Type BB	SL93148000B	7150
Type CC	SL93148000C	7150
Type DD	SL93148000D	7150
Lockable Trip Push Button kit (3 I/C & 2 B/C)	SL919360000	35800
<b>Locking of ACB in Isolated position (LIP) [8301]</b>		
Type A	SL93146000A	7150
Type B	SL93146000B	7150
Type C	SL93146000C	7150
Type D	SL93146000D	7150
<b>Locking of ACB in Any position (LAP) [8301]</b>		
Type A	SL93147000A	7150
Type B	SL93147000B	7150
Type C	SL93147000C	7150
Type D	SL93147000D	7150
<b>Racking Interlock [8301]</b>		
Type AA	SL93149000A	9860
Type BB	SL93149000B	9860
Type CC	SL93149000C	9860
Type DD	SL93149000D	9860
<b>Padlock [8301]</b>		
Racking Padlock Assembly	CL900250000	3330
<b>Other Accessories [8538]</b>		
Door Interlock	SL931500000	5240
Mechanical Operation Counter*	XM808370000	5190
Mounting Kit for Front Mounted Counter	SL958820000	1840
Spring Charge Indication Microswitch	SL960000000	4150

\* For mounting the Operation counter, mounting kit "SL958820000" 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.)
<b>Vertical Terminal Adaptors for Draw out C-POWER ACB [8538]</b>			
400-1250 S1/800-1000 C	SL932810000	8910	1
1600-2000 S1/1250-1600 C/800-1600 H	SL932820000	10800	1
2000 C	SL932840000	16000	1
2000 H/2500 C/H	SL932850000	16700	1
2500 S1	SL932890000	16700	1
3200 S1	SL932860000	20600	1
3200H2/H1, 4000H2/H	SL932880000	49800	1

Description	Cat. No.	M.R.P. (₹) Per Unit
<b>Shunt Release (SR) [8538]</b>		
Type EA : 24/48V DC	SL927180400	4600
Type EA : 110V DC	SL927180100	4600
Type EA : 220V DC	SL927180200	4600
Type EA1 : 110V AC	SL927180A00	4600
Type EA1 : 240V AC	SL927180B00	4600
Type EA1 : 415V AC	SL927180D00	4600
<b>Under Voltage Release (UVR) [8538]</b>		
Type MV : 24V DC	ST368770000	8060
Type MV : 240V AC	SL92720B000	8060
Type MV : 415V AC	SL92720D000	8060
<b>Earth Fault Release ( for DN1) [8538]</b>		
Type EF1 (10%, 20% In )	SL913400000	7130
Type EF2 (30%, 40%, 50% In)	SL913410000	7130
<b>Remote Fault Indication [8538]</b>		
AN1 Remote Annunciation Module for SR18G/SR18G+D/SR18Gi+D : 240V AC	SL946540000	17300
<b>Microswitches for Indication [8536]</b>		
Microswitch for Voltmetric Releases (2) each	SL927030000	4430
Microswitch for Common Indication of O/L & S/C (3) each	SL927040000	4430
Microswitch for Separate Indication of O/L & S/C (3) each (for DN1 release)	SL927050000	7390
Service Position Microswitch - Right (2)	SL931420000	2990
Service Position Microswitch - Left (2)	SL931430000	2990
Test or Isolated Position Microswitch - Right (2)	SL931440000	2990
Test or Isolated Position Microswitch - Left (2)	SL931450000	2990

#### Note:

- The Numerical in brackets, against various accessories indicate the SICs required for wiring purpose in Draw-Out breakers
- Shunt release requires one set of auxiliary contacts
- 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	CL908520000**	20100	1

\*\*Available till stock last

## Protection Releases



SR18G



SR18G+D



SR18Gi+D



CT

Description	Cat. No.	M.R.P. (₹) Per Unit
<b>Protection Releases [8538]</b>		
Microprocessor based type SR71**	<b>On Request</b>	
Microprocessor based type SR18Gi+D	SL948130000	81300
Microprocessor based type SR18G+D	SL948120000	75200
Microprocessor based type SR18G	SL960300000	56700
Thermal-Magnetic Release type DN1	SL931520000	53100
Universal Test Kit	CL904620000	130200

**\*\*Available till stock last**

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.)
<b>CTs for SR18G / SR18G+D / SR18Gi+D [8504]</b>			
400 S1 Fix & Draw-out	SL015230000	9900	1
630 S1 Fix & Draw-out	ST374950000	9900	1
800 C/H/S1 Fix & Draw-out	SL018570000	9900	1
1000 C/H/S1 Fix & Draw-out	SL018580000	9900	1
1250 C/H/S1 Fix & Draw-out	SL905710000	12000	1
1600 C/H/S1 Fix & Draw-out	SL905720000	12000	1
2000 C/H Fix & Draw-out	SL905650000	13200	1
2000 S1 Draw-out	SL932100000	13200	1
2500 C/H Fix & Draw-out	SL905660000	13200	1
2500 S1 Draw-out			
3200 H2/H1 Draw-out	SL017400000	15300	1
4000 H2/H Draw-out	SL017390000	18100	1

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



**Protect your equipment in Sulphur-rich environments**

### 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-Disconnecter-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-Disconnecter-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



### Customer Interaction Center (CIC)

Phone no: 022-6932 7800

Web: www.LK-EA.com | e-mail: CIC@LK-EA.com

CIC/19/01/2015

# S-LINE BUSBAR TRUNKING SYSTEM

A smart, safe, and reliable digital product for commercial spaces.



## 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**

# ENGINEERED FOR ENDURANCE

Built to withstand tough conditions



## LTXL CAPACITOR



Designed to operate at  
Temperature upto 70°C



3 x In Over Current  
withstand capacity



Highest 500 x In  
Inrush current  
withstand capacity.



Special Stainless  
Steel Earthing pad  
corrosion proof.



Glazed ceramic  
bushing provided  
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 Disconnecter (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	274
	1.2 to 27.7	480	274
	1.3 to 33.1	525	274
Box 1 to 6 kVAr - Series : LTBCF 7.5 to 33.1 kVAr - Series : LTBCD	1 to 50	440	326
	11.1 to 27.7	480	326
	13.2 to 33.1	525	326

### 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 disconnecter (OPD)
- > Low losses



Type	kVAr Rating	Voltage (V)	M.R.P. (₹) per kVAr
Cylindrical Series: LTCCH	1 to 4	440 V	523
	5 to 15		481
	20 to 30		469
	1.2 to 4.4*	480 V	523
	5.5 to 16.6		481
	22.1 to 27.7		469
	1.3 to 5.3*	525 V	523
	6.6 to 16.6		481
	20 to 33.1		469
	20 to 33.1		469
Box Series: LT BCH	1 to 4	440 V	623
	5 to 15		538
	20 to 50		528
	5.5 to 15	480 V	538
	20 to 27.7		528
	20 to 27.7		528
	6.6 to 15	525 V	538
	20 to 33.1		528

### HD Plus Gas Filled Capacitor

#### Features

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



Type	kVAr Rating	Voltage (V)	M.R.P. (₹) per kVAr
Cylindrical Series: LTCCN	7.5 to 15	440	515
	20 & 25		478
	7.5 to 15	480	515
	20 to 30		478
	7.5 to 15	525	515
	20 to 33.1		478

\* 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	717
	7.5 to 15		586
	20 & 25		555
	1.2 to 5.5	480 V	717
	11.1 & 15		586
	20 to 27.7		555
	1.3 to 5	525 V	717
	6.6 to 15		586
20 to 33.3	555		

## 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	934
	20 to 50		903
	5.5 to 13.8	480 V	934
	16.6 to 55.3		903
	6.6 & 13.2	525 V	934
	16.6 to 66.2		903

## 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	1336
	20 & 25		1314
	7.5 to 15	480V	1336
	20		1314
	7.5 to 15		525V
20	1314		
Box Series: LTBCU	5 to 15	440V	1487
	20 to 50		1458
	7.5 to 15	480V	1487
	20 to 30		1458
	7.5 to 15	525V	1487
	20 to 33.1		1458

## 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

### Sample ratings

kVAr Rating

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	12170	LTAL0701B2	7487	LTFR1401B2	23658	LTAL1401B2	12355
2	LTFR0702B2	13290	LTAL0702B2	8166	LTFR1402B2	25791	LTAL1402B2	13456
3	LTFR0703B2	15065	LTAL0703B2	9249	LTFR1403B2	29250	LTAL1403B2	15247
4	LTFR0704B2	16013	LTAL0704B2	9833	LTFR1404B2	31098	LTAL1404B2	16219
5	LTFR0705B2	17979	LTAL0705B2	10632	LTFR1405B2	33623	LTAL1405B2	18557
10	LTFR0710B2	24559	LTAL0710B2	15090	LTFR1410B2	47660	LTAL1410B2	26395
12.5	LTFR0712B2	27714	LTAL0712B2	16874	LTFR1412B2	52285	LTAL1412B2	30237
15	LTFR0715B2	32193	LTAL0715B2	20246	LTFR1415B2	57525	LTAL1415B2	36128
20	LTFR0720B2	35654	LTAL0720B2	22534	LTFR1420B2	66628	LTAL1420B2	41067
25	LTFR0725B2	36351	LTAL0725B2	22967	LTFR1425B2	73171	LTAL1425B2	42168
50	LTFR0750B2	60935	LTAL0750B2	35761	LTFR1450B2	118216	LTAL1450B2	59570
75	LTFR0775B2	90573	LTAL0775B2	52673	LTFR1475B2	171014	LTAL1475B2	88568
100	LTFR0700B2	117853	LTAL0700B2	72379	LTFR1400B2	228476	LTAL1400B2	119424

\* 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 Reactor rating (kVAR)	With 7% detuned reactor			With 14% detuned reactor	
	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	2.6	LTCCF, LTCCH, LTCCR	2.6
3	LTCCF, LTCCH, LTCCR	3.3	3.9	LTCCF, LTCCH, LTCCR	3.9
4	LTCCF, LTCCH	4.4	5.3	LTCCF, LTCCH	5.3
	LTCCR		5	LTCCR	5
5	LTCCF, LTCCH, LTCCR, LTBCB, LTBCP	5.5	6.6	LTCCF, LTCCH, LTCCR, LTBCB, LTBCP	6.6
	LTCCN, LTCCU, LTBCU	7.5	7.5	LTCCN, LTCCU, LTBCU	7.5
10	LTCCD, LTCCH, LTCCR, LTBCD, LTBCB, LTBCP	11.1	13.2	LTCCD, LTCCH, LTCCR, LTBCD, LTBCB, LTBCP	13.2
	LTCCN, LTCCU, LTBCU	12.5	12.5	LTCCN, LTCCU, LTBCU	12.5
12.5	LTCCN, LTCCR, LTCCU, LTBCB, LTBCU	15	15	LTCCN, LTCCR, LTCCU, LTBCB, LTBCU	15
	LTCCD, LTCCH, LTBCD, LTBCP	13.8	16.6	LTCCD, LTCCH, LTBCD, LTBCP	16.6
15	LTCCN, LTCCR, LTCCU, LTBCB, LTBCU	20	20	LTCCD, LTCCN, LTCCH, LTCCR, LTCCU, LTBCD, LTBCB, LTBCP, LTBCU	20
	LTCCD, LTCCH, LTBCD, LTBCP	16.6			
20	LTCCN, LTCCR, LTBCB, LTBCU	25	25	LTCCN, LTCCR, LTBCB, LTBCU	25
	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
25	LTCCD, LTCCH, LTCCR, LTBCD, LTBCB, LTBCP	27.7	33.1	LTCCD, LTCCN, LTCCH, LTCCR, LTBCD, LTBCB, LTBCP, LTBCU	30
	LTBCU, LTCCN	30			
	LTCCU	12.5 + 15		15 + 20	
50	LTCCD, LTCCH, LTCCR, LTBCD, LTBCB	2 x 27.7	2 x 33.1	LTCCD, LTCCN, LTCCH, LTCCR, LTBCD, LTBCB, LTBCP, LTBCU	2 x 30
	LTBCU, LTCCN	2 x 30			
	LTCCU	2 x (12.5 + 15)	2 x (15 + 20)	LTCCU	3 x 20
	LTBCP	55.3	66.2		
75	LTCCD, LTCCH, LTCCR, LTBCD, LTBCB	3 x 27.7	3 x 33.1	LTCCD, LTCCN, LTCCH, LTCCR, LTBCD, LTBCB, LTBCP, LTBCU	3 x 30
	LTBCU, LTCCN	3 x 30			
	LTCCU	3 x (12.5 + 15)	3 x (15 + 20)	LTCCU	(4 x 20) + 10
	LTBCP	27.7 + 55.3	33.1 + 66.2		
100	LTCCD, LTCCH, LTCCR, LTBCD, LTBCB	4 x 27.7	4 x 33.1	LTCCD, LTCCN, LTCCH, LTCCR, LTBCD, LTBCB, LTBCP, LTBCU	4 x 30
	LTBCU, LTCCN	4 x 30			
	LTCCU	4 x (12.5 + 15)	4 x (15 + 20)	LTCCU	6 x 20
	LTBCP	2 x 55.3	2 x 66.2		

# FAST. SILENT. LIMITLESS SWITCHING.

Dynamic Power Factor Correction  
engineered for rapidly fluctuating  
industrial loads.

 5 ms response

 Zero transients

 Extended capacitor life



**TSM**

## Power Quality Solutions

### 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	2660	1
	5	MO C5	1NO	CS96127	2820	1
	8.5	MO C8.5	1NO	CS96320	3360	1
	10	MO C10	1NO	CS96156	3590	1
	12.5	MO C12.5	1NO	CS96321	3750	1
	15	MO C15	1NO	CS90019	4890	1
	20	MO C20	1NO	CS90021	5630	1
	25	MO C25▲	1NO	CS96322	6170	1
Fr 2	30	MO C30 <sup>§</sup>	1NO	CS96148	9190	1
	40	MO C40	1NO	CS96147	15500	1
	50	MO C50	1NO	CS96324	17390	1
Fr 3	60	MO C60 <sup>§</sup>	1NO	CS96149	18710	1
	75	MO C75	1NO	CS96150	22760	1
	85	MO C85	1NO	CS96157	23270	1
	100	MO C100 <sup>§</sup>	1NO	CS96158	23730	1

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

#### 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
10	CS920490000	27475
25	CS920500000	39193
50	CS920510000	44890

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

#### Note (MOC):

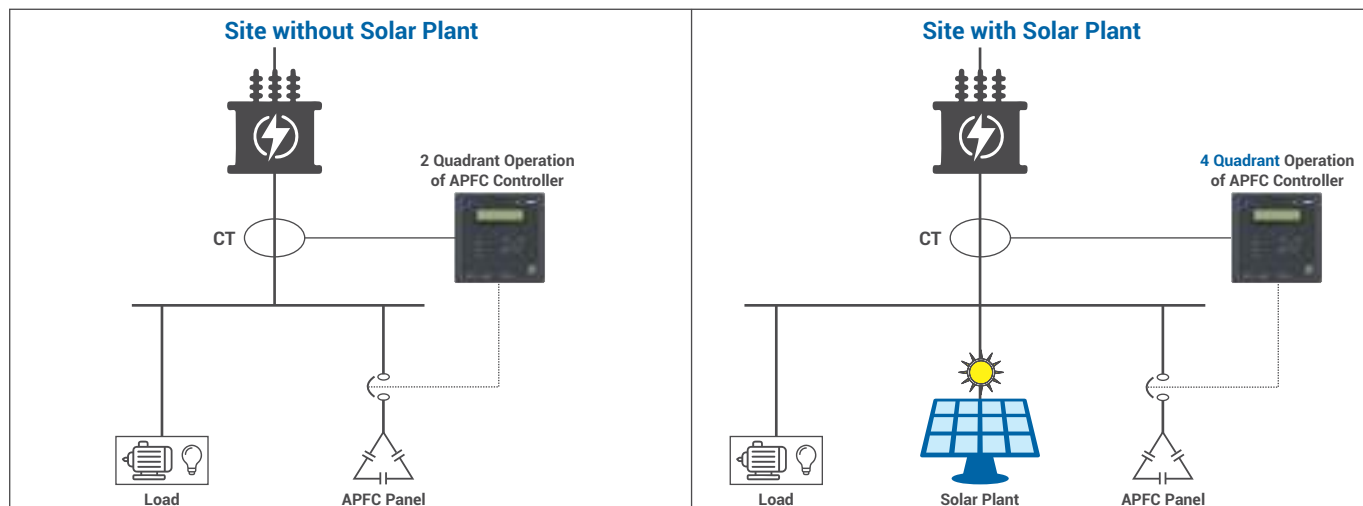
- 1) For ordering add-on aux. contact block, please refer page No. 8
- 2) For ordering suffix, please refer page No.10
- 3) For ordering spare coils, please refer page No. 11
- 4) Standard coil voltage : 240V, 50/60 Hz
- 5) For ordering MO C surge suppressor, please refer page No. 9

▲ 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	CS910500000	144 x 144	25050
etaULTRA 16R	16	0		CS910510000		35150
etaULTRA 14T+2R	2	14		CS910530000		35150
etaULTRA 8T+8R	8	8		CS910540000		35150

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	CS916140000	1/ 5 Amp	415 V	21150
12	144x144	CS916150000			26450
15	144x144	CS916160000			30850

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	CS908840000	1/ 5 Amp	415 V	9650
6	96 x 96	CS908850000			12700
8	96 x 96	CS909020000			15050
12	144 x 144	CS909030000			23800
14	144 x 144	CS909040000			27600
16	144 x 144	CS909050000			30100

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]

### 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		
<b>Hybrid Controller / HMI</b>				
18 Stage Relay O/P		ASVGH18R00T	On Request	
18 Stage Thyristor O/P		ASVGH00R18T		
9 Stage Relay 9 Stage Thyristor O/P		ASVGH09R09T		
7 Inch HMI		ASVGHMI007		

\* ASVG module with inbuilt HMI

## Active Harmonic Filter (AHF) [8543]



### ACTIVE HARMONIC FILTER - MODULE New

#### Features

- › 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

Ampere Rating	3P3W AHF (415 V <sub>L</sub> -25%+15%)		3P4W AHF (415 V <sub>L</sub> -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			
<b>Hybrid Controller / HMI</b>						
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

### 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\*\*

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)

# INTRODUCING etaSYS HYBRID APFC PANEL



BUILT FOR TOTAL ACCOUNTABILITY.

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- 

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	10
15	5+4+3+2+1	5	1,2,3,4...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	6	2,3,5,7...55,57,58,60	36
65	25+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	6	2,3,5,7...70,72,73,75	39
80	2x25+15+10+3+2	6	2,3,5,10...75,77,78,80	36
85	50+20+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	6	3,4,6,7...89,91,92,95	43
100	50+25+15+4+2x3	6	3,4,6,7...94,96,97,100	44
105	50+25+15+5+4+2x3	7	3,4,5,6...100,101,102,105	85
110	50+25+15+10+4+2x3	7	3,4,5,6...104,106,107,110	65
115	50+25+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	7	3,4,6,7...119,121,122,125	55
130	50+2x25+20+4+2x3	7	3,4,6,7...124,126,127,130	60
135	2x50+15+10+4+2x3	7	3,4,6,7...129,131,132,135	65
140	2x50+20+10+4+2x3	7	3,4,6,7...134,136,137,140	62
145	2x50+25+10+4+2x3	7	3,4,6,7...139,141,142,145	65
150	2x50+25+15+4+2x3	7	3,4,6,7...144,146,147,150	66
155	2x50+25+15+3x5	7	5,10,15,20...145,150,155	31
175	2x50+2x25+10+3x5	8	5,10,15,20...165,170,175	35
200	2x50+3x25+15+2x5	8	5,10,15,20...190,195,200	40
225	3x50+2x25+15+10	7	10,15,25,35...210,215,225	27
250	3x50+3x25+15+10	8	10,15,25,35...235,240,250	30
275	4x50+2x25+15+10	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+2x50+4x25	8	25,50,75,100...350,375,400	16
425	2x100+3x50+3x25	8	25,50,75,100...375,400,425	17
450	2x100+3x50+4x25	9	25,50,75,100...400,425,450	18
475	2x100+4x50+3x25	9	25,50,75,100...425,450,475	19
500	2x100+5x50+2x25	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.

# 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, IEEE619,  
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<sub>2</sub> tracking, load analysis,  
TOU slots

Customer Interaction Center (CIC)

Phone no: 022-6932 7800

Web: [www.LK-EA.com](http://www.LK-EA.com) | e-mail: [CIC@LK-EA.com](mailto:CIC@LK-EA.com)

# numrAL

## Draw-out Numerical Protection Relays with Intelligent Algorithm

Current and Voltage-based Protection ▼



▲ Single Element and Multifunction Relays

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

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

## Protection Relays [8536]

Correlation between ANSI/IEEE device 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	eMPR3001	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<sup>#</sup>- 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	<b>NRFD2A26NX</b>	<b>25300</b>
	85 - 265V AC, 87 - 265V DC	Non-Communicable	<b>NRFD2B26NX</b>	<b>25300</b>

<sup>#</sup>- 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<sup>#</sup>- 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	<b>NRFD2A27RA</b>	<b>32000</b>
	85 - 265V AC, 87 - 265V DC	Modbus RS 485	<b>NRFD2B27RA</b>	<b>32000</b>

<sup>#</sup>- 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<sup>#</sup>- 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	<b>NRMP2A28RA</b>	<b>49000</b>
	85 - 265V AC, 87 - 265V DC	Modbus RS 485	<b>NRMP2B28RA</b>	<b>49000</b>

<sup>#</sup> - Protection Class CT  
\* - Available on Request

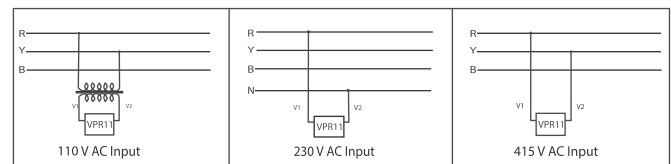
### Single Pole Over Voltage + Under Voltage Relay

#### 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 programmable)
- › 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	<b>NRVPR1A11NX</b>	<b>18000</b>
	85 - 265V AC, 87 - 265V DC	Non-communicable	<b>NRVPR1B11NX</b>	<b>18000</b>
	20 - 60V DC	Modbus RS 485	<b>NRVPR1A11RA</b>	<b>20000</b>
	85 - 265V AC, 87 - 265V DC	Modbus RS 485	<b>NRVPR1B11RA</b>	<b>20000</b>

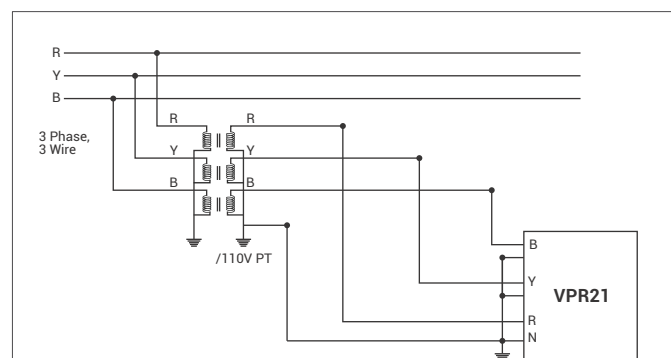
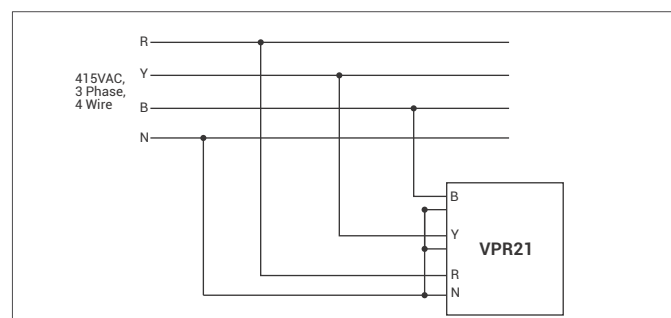


### 3 Phase Voltage + Frequency Relay

- › VPR21 – 27, 47, 59, 59N, 810/U
- › Microcontroller-based design
- › Draw-out enclosure.
- › System Voltage – 110/ 230/ 415 VAC (site programmable)
- › 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	<b>NRVPR2A2ANX</b>	<b>25300</b>
	85 - 265V AC, 87 - 265V DC	Non-Communicable	<b>NRVPR2B2ANX</b>	<b>25300</b>



## Restricted Earth Fault Relay

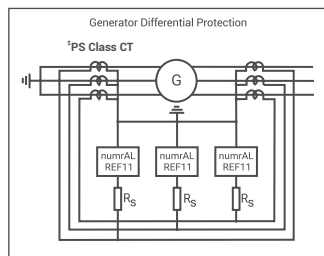
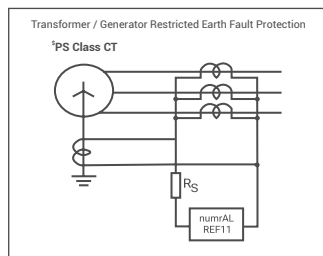
### REF11 - Restricted Earth Fault Relay (87N/64REF)

- › Microcontroller-based design
- › Draw-out Enclosure
- › CT rating<sup>§</sup>- 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	18000
	85 - 265V AC, 87 - 265V DC	Non-communicable	NRREF1B10NX	18000
	20 - 60V DC	Modbus RS 485	NRREF1A10RA	20000
	85 - 265V AC, 87 - 265V DC	Modbus RS 485	NRREF1B10RA	20000

§ - PS Class CT



## Single Pole Over Current OR Earth Fault Relay

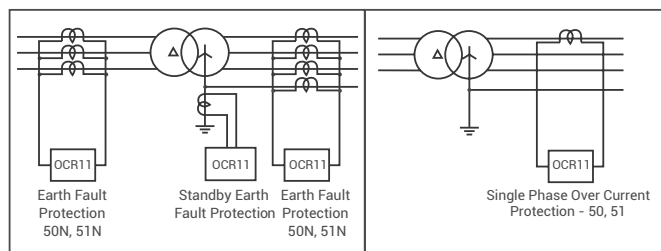
### OCR11 – Single pole Over Current or Earth Fault Relay (50, 51 OR 50N, 51N)

- › Microcontroller-based design
- › Draw-out Enclosure
- › Single Phase OC/ EF Protection
- › CT rating<sup>§</sup> - 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	18000
	85 - 265V AC, 87 - 265V DC	Non-communicable	NROCR1B10NX	18000
	20 - 60V DC	Modbus RS 485	NROCR1A10RA	20000
	85 - 265V AC, 87 - 265V DC	Modbus RS 485	NROCR1B10RA	20000

§ - Protection Class CT



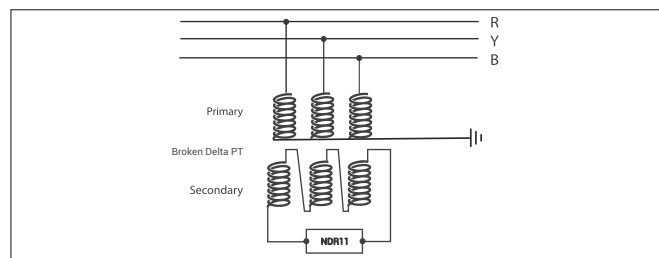
## Neutral Displacement Relay

### 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	18000
	85 - 265V AC, 87 - 265V DC	Non-communicable	NRNDR1B11NX	18000
	20 - 60V DC	Modbus RS 485	NRNDR1A11RA	20000
	85 - 265V AC, 87 - 265V DC	Modbus RS 485	NRNDR1B11RA	20000



## 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	*Available On Request	
	85 - 265V AC, 87 - 265V DC	Non-Communicable		

\* 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	*Available On Request	
	85 - 265V AC, 87 - 265V DC	Non-Communicable		

\* Please contact our nearest branch for details

# 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

## Legacy Range:

Model	Aux. Supply (V)	Details	Cat. No.	M.R.P. (₹) Per Unit
MRP11* Reverse Power Relay	20 - 110V AC/DC	1A CT secondary	MRP11A10X00	24500
	20 - 110V AC/DC	5A CT secondary	MRP11A50X00	24500
	88 - 264V AC/DC	1A CT secondary	MRP11B10X00	24500
	88 - 264V AC/DC	5A CT secondary	MRP11B50X00	24500

\* Available till stock lasts

## Insulation Monitoring Relay New

Application: Monitoring of insulation resistance between Live conductors and Earth (Ground) in case of Unearthed (IT) electrical systems. Detection of insulation faults at earlier stage prevents electrical hazards such as electric shock, fire and 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	12000

## 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
				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
				230VAC	A3H40AC230X	12000
Three element Auxiliary relay	2 N/O + 2 N/C	Auto	Hand	24VDC	A3A22DC024X	12000
				110VDC	A3A22DC110X	12000
				220VDC	A3A22DC220X	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	2145
1P LCD Meter 5-30A with BOX	WM101BC5DL0BOX	2860
1P LCD Meter 5-30A with OPTICAL PORT	WM101BC5DDH	2948
1P LCD Meter 5-30A with Optical port + BOX	WM101BC5DDHBOX	3663
1P LCD Meter 10-60A	WM101BC7DL0	2530
1P LCD Meter 10-60A with BOX	WM101BC7DL0BOX	3190
1P LCD Meter 10-60A with Optical Port	WM101BC7DDH	3234
1P LCD Meter 10-60A with Optical Port + BOX	WM101BC7DDHBOX	3718
1P LCD Meter 5-30 with Optical Port + RS232	WM101BC5DLMSC	3300

### 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	10098
3Ph, 4W TVM 240 V 10 - 60A BM RS 485Modbus*	WR300BC73RS485	14410
3Ph, 4W TVM 240 V 10 - 60A BM with Hinge type Box	WR300BC73BOXH	12507

\*- Available on request only & 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	Cat. No.	M.R.P. (₹) Per Unit
3Ph, 4W TVM 110V (L-L) 1 A Class 0.2s BM RS485 Modbus	WR300BB11RS	87087
3Ph, 4W TVM 110V (L-L) 5 A Class 0.2s BM RS485 Modbus	WR300BB51RS	87087

### Meter Reading Instrument [8471]



Description	Cat. No.	M.R.P. (₹) Per Unit
Meter Reading Instrument - (16.5 MB)	990MR1XX000	172381
Meter Optical port to USB cable	990PCXXUSB	2057

### 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	6842
3Ph 4 W kWh Dir base mtg 240V 5- 30 A Acc 1	WR301BC4D20	5731
3Ph 4 W kWh Dir base mtg 240V 10- 40 A Acc 1	WR301BC6D20	5896
3Ph 4 W kWh Dir base mtg 240V 10- 60 A Acc 1	WR301BC7D10	7469
3Ph 4 W kWh Dir base mtg 240V 20- 100 A Acc 1	WR301BC8D10	10824

### 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	Cat. No.	M.R.P. (₹) Per Unit
3Ph, 4W TVM 110V (L-L) 1 A Class 0.5s BM RS 485 Modbus	WR300BB12RS	40370
3Ph, 4W TVM 110V (L-L) 5 A Class 0.5s BM RS 485 Modbus#	WR300BB52RS	40370
3Ph, 4W TVM 240V (L-N) 5 A CI 0.5s BM RS 485 Modbus	WR300BC52RS	36201

# - available on request

### Pre-Payment<sup>®</sup> & Smart Meter Solutions<sup>§</sup>

Pre-Payment Meter (IS 15884)<sup>®</sup>, Smart Meter (IS 16444) solutions please contact our nearest Branch

<sup>®</sup> - Long lead item. Available on request

### NET/ABT Meters<sup>§</sup>



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

### ORION (40-200A)<sup>§</sup>



Combined CT Meter (Available for Generation and Net Metering)

<sup>§</sup> For more details please contact nearest branch



## SMART METERING SOLUTION

Powered by SMARTCOMM Edge



Subscription based Software



Prepaid & Postpaid Metering



MeitY Certified Cloud



Data Security, Compliance & Reliability

# 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 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.



Industry



Commercial complex



Building



Utility



Infra



OEM

## 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.

### Pre-configured with Lauritz Knudsen Digital Meters



# Empowering You with Energy Insights, Anytime, Anywhere!

## EMS on Cloud simplifies energy monitoring with real time data

Smartcomm EMS on Cloud empowers business owners and plant heads to seamlessly monitor energy usage & efficiency across operations and facilities. With our subscription-based software license, harness the power of cloud with minimal investment, faster deployment, seamless updates and easy scalability. Businesses owners can now track and take decisions on energy optimization based on real-time as well as historical insights, thereby reducing energy costs and increasing business efficiency.

- **Accessibility:** Accessible from anywhere, enabling remote monitoring and management
- **Cost-Effectiveness:** Lower upfront costs reducing IT maintenance expenses
- **Integration:** Integrate with IoT devices for a comprehensive energy management solution
- **Updates and Maintenance:** Automatic software updates and maintenance
- **Data Analytics:** Data Analytics at its best through widget-based dashboards and reports
- **Key Performance Indicators:** Intelligent Notifications through SMS and Email based alerts and alarms

Customer Interaction Center (CIC)

Phone no: 022-6932 7800

Web: [www.LK-EA.com](http://www.LK-EA.com) | e-mail: [CIC@LK-EA.com](mailto:CIC@LK-EA.com)

## Multifunction Meter Selection Chart

Parameters Group	Parameters	Basic MFM	MFM				Advanced MFM	
		4400/4405	4410	4420	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 (31 <sup>st</sup> )		✓	✓	✓	✓	✓	✓
	A THD%, A1, A2, A3, - harmonic (31 <sup>st</sup> )		✓	✓	✓	✓	✓	✓
	Individual harmonics upto 31 <sup>st</sup> (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 & occurrence time						✓	✓
Min / Max value	VLL, VLN, A, F, W, VA, VAR, PF		✓	✓	✓	✓	✓	✓
Storage	Datalog (8MB)							✓
Communication	RS485 Modbus 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

## 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 CI 1	WL1110100000	1075
1Ph LED Voltmeter CI 1	WL1120100000	1075
3Ph LED Ammeter CI 1	WL1310100000	1645
3Ph LED Voltmeter CI 1	WL1320100000	1645
LED Freq meter CI 0.2	WL1130400000	1075
1Ph LED Ammeter CI 0.5	WL1110200000	1515
1Ph LED Voltmeter CI 0.5	WL1120200000	1515
3Ph LED Ammeter CI 0.5	WL1310200000	1905
3Ph LED Voltmeter CI 0.5	WL1320200000	1905

## 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 CI 1	WL4000100000	3250
kWh LED meter CI 1 with RS485	WL4000110000	3595
kWh LED meter CI 0.5	WL4000200000	4130
kWh LED meter CI 0.5 with RS485	WL4000210000	4480
kWh LCD meter CI 1	WC4000100000	3680
kWh LCD meter CI 1 with RS485	WC4000110000	4065
kWh LCD meter CI 0.5	WC4000200000	4555
kWh LCD meter CI 0.5 with RS485	WC4000210000	4905

# 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, Apeak

Description	Cat. No.	M.R.P. (₹) Per Unit
VAF meter, CI 1 <span style="color: blue; font-weight: bold;">New</span>	WL4100100000	1935
VAF + PF meter, CI 1	WL4110100000	2655
VAF + PF meter with RS485, CI 1	WL4110110000	3330
VAF + PF meter, CI 0.5	WL4110200000	3050
VAF + PF meter with RS485, CI 0.5	WL4110210000	3690

## DIN Type Basic Multifunction Meters [9030]

### New 40x0 Series

- › 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	Module	Cat. No.	M.R.P. (₹) Per Unit
Single Phase - 60A	2	WD4010100000	3410
Three Phase - 80A	5	WD4020100000	7385
Single Phase - 60A (RS485)	2	WD4010110000	5045
Three Phase - 80A (RS485)	5	WD4020110000	11145



# Smart DIN Mounted Energy Meters

Empowering Smart Decisions with Micro-Level Insights

Compact, Accurate & Intelligent

## Dual Source Basic MFM [9030]

### 4040 Series

#### 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

kWh or kVAh  
is site selectable



LCD offers better readability  
of parameters

Description	Cat. No.	M.R.P. (₹) Per Unit
Dualsource LED meter CI1	WL4040100000	5475
Dualsource LED meter CI1 with RS485	WL4040110000	6440
Dualsource LED meter CI0.5	WL4040200000	6505
Dualsource LED meter CI0.5 with RS485	WL4040210000	7620
Dualsource LCD meter CI1	WC4040100000	6025
Dualsource LCD meter CI1 with RS485	WC4040110000	7005
Dualsource LCD meter CI0.5	WC4040200000	7060
Dualsource LCD meter CI0.5 with RS485	WC4040210000	8085

## 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	WL4400100000	5250
MFM 4400 LED meter CI 1 with RS485	WL4400110000	6060
MFM 4400 LED meter CI 0.5 with RS485	WL4400210000	6965
MFM 4400 LED meter CI 0.5S with RS485	WL4400310000	7040
MFM 4400 LCD meter CI 1	WC4400100000	5525
MFM 4400 LCD meter CI 1 with RS485	WC4400110000	6410

## Basic Multifunction Meters [9030]

### 4405 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
- > V, A, F, PF, kW, kVA, Old energy, On and Run hours, site selectable kWh/ kVAh
- > True PF or Displacement PF site selectable

All parameters  
of 4400 series  
in 3 line  
LED display



Description	Cat. No.	M.R.P. (₹) Per Unit
MFM 4405 LED meter CI 1	WL4405100000	6790
MFM 4405 LED meter CI 1 with RS485	WL4405110000	7665
MFM 4405 LED meter CI 0.5 with RS485	WL4405210000	8815
MFM 4405 LED meter CI 0.5S with RS485	WL4405310000	8880

## 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
- > 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

True and  
Displacement  
PF available

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, K Factor

Description	Cat. No.	M.R.P. (₹) Per Unit
MFM 4410 LED meter CI 1	WL4410100000	9835
MFM 4410 LED meter CI 1 with RS485	WL4410110000	11050
MFM 4410 LED meter CI 0.5 with RS485	WL4410210000	12705
MFM 4410 LED meter CI 0.5S with RS485	WL4410310000	14045
MFM 4410 LED meter CI 0.2 with RS485	WL4410410000	16715
MFM 4410 LED meter CI 0.2S with RS485	WL4410510000	21395
MFM 4410 LCD meter CI 1	WC4410100000	11560
MFM 4410 LCD meter CI 1 with RS485	WC4410110000	12370
MFM 4410 LCD meter CI 0.5 with RS485	WC4410210000	14430
MFM 4410 LCD meter CI 0.5S with RS485	WC4410310000	15810
MFM 4410 LCD meter CI 0.2 with RS485	WC4410410000	18560
MFM 4410 LCD meter CI 0.2S with RS485	WC4410510000	23365

## Multifunction Meters [9030]

### 4420 Series Max Demand Indicator (without Real time clock)

#### Parameters

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

Standard  
2 Relay outputs  
for MD Alarm

Description	Cat. No.	M.R.P. (₹) Per Unit
MFM 4420 LED meter CI 1	WL4420100000	14480
MFM 4420 LED meter CI 1 with RS485	WL4420110000	15545
MFM 4420 LED meter CI 0.5 with RS485	WL4420210000	17060
MFM 4420 LED meter CI 0.5S with RS485	WL4420310000	18375
MFM 4420 LED meter CI 0.2 with RS485	WL4420410000	21000
MFM 4420 LED meter CI 0.2S with RS485	WL4420510000	25595
MFM 4420 LCD meter CI 1	WC4420100000	16585
MFM 4420 LCD meter CI 1 with RS485	WC4420110000	17760
MFM 4420 LCD meter CI 0.5 with RS485	WC4420210000	19250
MFM 4420 LCD meter CI 0.5S with RS485	WC4420310000	20620
MFM 4420 LCD meter CI 0.2 with RS485	WC4420410000	23365
MFM 4420 LCD meter CI 0.2S with Rs485	WC4420510000	28190

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
- › Ethernet port for communication

Description	Cat. No.	M.R.P. (₹) Per Unit
MFM 4425 LED meter I/E CI 1 with Ethernet	WL4425120000	20115
MFM 4425 LED meter I/E CI 0.5s with Ethernet	WL4425320000	23775
MFM 4425 LED meter I/E CI 0.2S with Ethernet	WL4425520000	26820

### 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 CI 1	WL4430100000	20325
MFM 4430 LED meter CI 1 with RS485	WL4430110000	21195
MFM 4430 LED meter CI 0.5 with RS485	WL4430210000	22490
MFM 4430 LED meter CI 0.5S with RS485	WL4430310000	23740
MFM 4430 LED meter CI 0.2 with RS485	WL4430410000	26245
MFM 4430 LED meter CI 0.2S with RS485	WL4430510000	30620
MFM 4430 LCD meter CI 1	WC4430100000	21605
MFM 4430 LCD meter CI 1 with RS485	WC4430110000	22440
MFM 4430 LCD meter CI 0.5 with RS485	WC4430210000	23740
MFM 4430 LCD meter CI 0.5S with RS485	WC4430310000	24995
MFM 4430 LCD meter CI 0.2 with RS485	WC4430410000	27490
MFM 4430 LCD meter CI 0.2S with RS485	WC4430510000	31870

### 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 CI 1 with RS485	WL4440110000	17255
MFM 4440 LED meter CI 0.5 with RS485	WL4440210000	19395
MFM 4440 LED meter CI 0.2 with RS485	WL4440410000	23715
MFM 4440 LCD meter CI 1 with RS485	WC4440110000	18695
MFM 4440 LCD meter CI 0.2 with RS485	WC4440210000	20840
MFM 4440 LCD meter CI 0.2 with RS485	WC4440410000	25155

## Advanced Multifunction Meters [9030]

### 5000 Series

#### Features

- › Datalog (8 MB)
- › Bi-directional (Import - Export)
- › 128 samples/ cycle
- › Analog I/O, digital I/O variants available
- › Meter with Ethernet port available

True and  
Displacement  
PF available

#### Parameters

- › V, A, F, kW, KVA, kVA, kWh, kVAh, kVAh, PF, Runhr, Onhr, Interrupts, 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

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 CI 1 with RS485	WL5000110000	40080
MFM 5000 LED meter CI 1 with Ethernet	WL5000120000	45545
MFM 5000 LED meter CI 0.5 with Ethernet	WL5000220000	47495
MFM 5000 LED meter CI 0.5S with Ethernet	WL5000320000	48805
MFM 5000 LCD meter CI 1 with RS485	WC5000110000	41400
MFM 5000 LCD meter CI 1 with Ethernet	WC5000120000	46850
MFM 5000 LCD meter CI 0.5 with RS485	WC5000210000	43335
MFM 5000 LCD meter CI 0.5S with RS485	WC5000310000	44645
MFM 5000 LCD meter CI 0.5 with Ethernet	WC5000220000	48805
MFM 5000 LCD meter CI 0.5S with Ethernet	WC5000320000	50095
MFM 5000 LCD meter CI 0.2 with RS485	WC5000410000	47240
MFM 5000 LCD meter CI 0.2S with RS485	WC5000510000	51795
MFM 5000 LED meter CI 1 RS485 2A/O	WL5000110B00	Price on request
MFM 5000 LED meter CI 0.5 RS485 2D/I	WL50002100B0	
MFM 5000 LED meter CI 0.5 RS485 4D/O	WL50002100OD	
MFM 5000 LCD meter CI 1 RS485 2A/O	WC5000110B00	
MFM 5000 LCD meter CI 0.5 RS485 2D/I	WC50002100B0	
MFM 5000 LCD meter CI 0.5 RS485 4D/O	WC50002100OD	
MFM 5000 LCD meter CI 1 + RS485, 1AO, 1DO	WC5000110AOA	

#### 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, V THD, 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

#### Parameters

- › V, A, F, kW, KVA, kVAh, kWh, kVAh, kVAh, 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.

True and Displacement PF available



Description	Cat. No.	M.R.P. (₹) Per Unit
MFM 5010 LED meter CI 1	WL5010100000	15430
MFM 5010 LED meter CI 1 with RS485	WL5010110000	16095
MFM 5010 LED meter CI 0.5S	WL5010300000	18980
MFM 5010 LED meter CI 0.5S with RS485	WL5010310000	20030
MFM 5010 LED meter CI 0.2 with RS485	WL5010410000	22140

### 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, kVAh, kWh, kVAh, kVAh, 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 CI 1 with RS485	WL6000110000	35565
MDC 6000 LED meter CI 0.5S with RS485	WL6000310000	38985
MDC 6000 LCD meter CI 1 with RS485	WC6000110000	36925
MDC 6000 LCD meter CI 0.5S with RS485	WC6000310000	40350

### Power Quality Meter Range [9030]

### WC7000 – Power Quality Monitor <sup>New</sup>

#### 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 61st order), Sag, Swell & Interruption.
- › USB Port for Downloading Data Log
- › TOU with up to 8 slots
- › Standard 2DI & 2DO



Description	Cat. No.	M.R.P. (₹) Per Unit
PQM 7000 LCD CI 0.2s RS485+Eth DL, sag+swell	WC70005300BB	Price on request

### WC8000 – Power Quality Analyzer <sup>New</sup>

#### 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, SNMP protocols for secured cloud publishing
- › Report Generation - IEC 61000 - 4 - 30, IEEE 519, EN 50610, ITIC/CBEMA Curve



Description	Cat. No.	M.R.P. (₹) Per Unit
PQA 8000 Class A TFT CI 0.2s RS485+Eth DL	WC8000530000	Price on request



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 3<sup>rd</sup> 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	TG10000000	22000

**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

**Wireless Thermal Monitoring**

Insight into Every Critical Joint in a Switchboard

**Anytime Anywhere**



Simplifying  
**AUTOMATION**



Tailoring for  
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Scan to enquire



## xD1000

Range : 0.37kW HD to 30kW ND

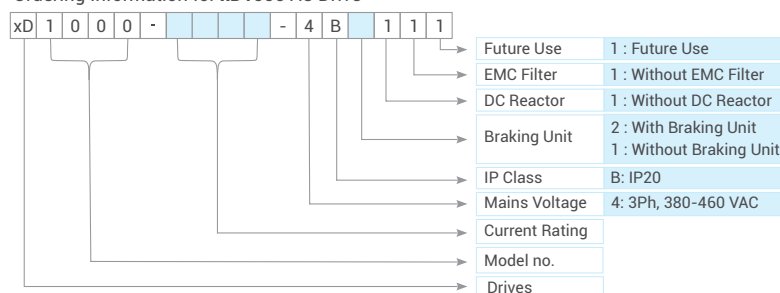


- › Rated @ 55°C (HD), @ 50°C (ND)
- › Transient overtorque 170%~200%
- › 4 DIs, 2 DOs, 1AI, 1AO
- › Inbuilt PID with 4 Preset PID references, Sleep & Wakeup, Predictive speed
- › Auxiliary Pump control
- › Catch on the Fly
- › Skip Frequency
- › Automatic Restart
- › Stall Prevention
- › Current limiting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

Input Voltage	Description	Cat. No.	Frame Size	M.R.P. (₹) Per Unit
Three Phase 415 VAC	xD1000 415V Drive 0.37kW(HD)	<b>XD1000-01P5-4B1111</b>	S1	*
	xD1000 415V Drive 0.75kW(HD)	<b>XD1000-02P3-4B1111</b>	S1	*
	xD1000 415V Drive 1.50kW(HD)	<b>XD1000-04P1-4B2111</b>	S2	*
	xD1000 415V Drive 2.20kW(HD)	<b>XD1000-05P5-4B2111</b>	S2	*
	xD1000 415V Drive 3.00kW(HD)/4.00kW(ND)	<b>XD1000-08P9-4B2111</b>	S3	*
	xD1000 415V Drive 4.00kW(HD)/5.50kW(ND)	<b>XD1000-12P1-4B2111</b>	S3	*
	xD1000 415V Drive 5.50kW(HD)/7.50kW(ND)	<b>XD1000-16P0-4B2111</b>	S3	*
	xD1000 415V Drive 7.50kW(HD)/11.0kW(ND)	<b>XD1000-22P8-4B2111</b>	S4	*
	xD1000 415V Drive 11.0kW(HD)/15.0kW(ND)	<b>XD1000-30P0-4B2111</b>	S4	*
	xD1000 415V Drive 15.0kW(HD)/18.5kW(ND)	<b>XD1000-36P0-4B2111</b>	S5	*
xD1000 415V Drive 18.5kW(HD)/22.0kW(ND)	<b>XD1000-43P0-4B2111</b>	S5	*	
xD1000 415V Drive 22.0kW(HD)/30.0kW(ND)	<b>XD1000-60P0-4B2111</b>	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

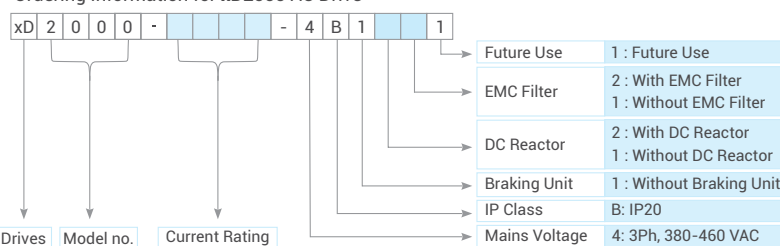
Input Voltage	Description	Cat. No.	Frame Size	M.R.P. (₹) Per Unit
Three Phase 415 VAC	XD2000 415V Drive 0.37kW(HD)/0.75kW(ND)	<b>XD2000-02P2-4B1121</b>	S1	*
	XD2000 415V Drive 0.75kW(HD)/1.50kW(ND)	<b>XD2000-04P0-4B1121</b>	S1	*
	XD2000 415V Drive 1.50kW(HD)/2.20kW(ND)	<b>XD2000-05P6-4B1121</b>	S1	*
	XD2000 415V Drive 2.20kW(HD)/3.00kW(ND)	<b>XD2000-07P2-4B1121</b>	S1	*
	XD2000 415V Drive 3.00kW(HD)/4.00kW(ND)	<b>XD2000-09P3-4B1221</b>	S1	*
	XD2000 415V Drive 4.00kW(HD)/5.50kW(ND)	<b>XD2000-12P7-4B1221</b>	S1	*
	XD2000 415V Drive 5.50kW(HD)/7.50kW(ND)	<b>XD2000-15P8-4B1221</b>	S1	*
	XD2000 415V Drive 7.50kW(HD)/11.0kW(ND)	<b>XD2000-23P5-4B1221</b>	S2	*
	XD2000 415V Drive 11.0kW(HD)/15.0kW(ND)	<b>XD2000-31P7-4B1221</b>	S2	*
	XD2000 415V Drive 15.0kW(HD)/18.5kW(ND)	<b>XD2000-39P2-4B1221</b>	S3	*
	XD2000 415V Drive 18.5kW(HD)/22.0kW(ND)	<b>XD2000-46P3-4B1221</b>	S3	*
	XD2000 415V Drive 22.0kW(HD)/30.0kW(ND)	<b>XD2000-61P5-4B1221</b>	S4	*
	XD2000 415V Drive 30.0kW(HD)/37.0kW(ND)	<b>XD2000-74P5-4B1221</b>	S4	*
	XD2000 415V Drive 37.0kW(HD)/45.0kW(ND)	<b>XD2000-88P0-4B1221</b>	S4	*
	XD2000 415V Drive 45.0kW(HD)/55.0kW(ND)	<b>XD2000-120P-4B1221</b>	S5	*
	XD2000 415V Drive 55.0kW(HD)/75.0kW(ND)	<b>XD2000-145P-4B1221</b>	S5	*
	XD2000 415V Drive 75.0kW(HD)/90.0kW(ND)	<b>XD2000-173P-4B1221</b>	S5	*
	XD2000 415V Drive 90.0kW(HD)/110kW(ND)	<b>XD2000-211P-4B1221</b>	S6	*
	XD2000 415V Drive 110kW(HD)/132kW(ND)	<b>XD2000-250P-4B1221</b>	S6	*
XD2000 415V Drive 132kW(HD)/160kW(ND)	<b>XD2000-302P-4B1221</b>	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





# xD4000 IP55 DRIVE

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



BUILDING



FOOD & BEVERAGES



TEXTILE



MINING, METAL,  
& MINERALS



PHARMA



WASTE WATER  
TREATMENT



### 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	S1	*
	XD4000 415V Drive 0.75kW(HD)/1.50kW(ND)	XD4000-04P0-4C2221	S1	*
	XD4000 415V Drive 1.50kW(HD)/2.20kW(ND)	XD4000-05P6-4C2221	S1	*
	XD4000 415V Drive 2.20kW(HD)/3.00kW(ND)	XD4000-07P2-4C2221	S1	*
	XD4000 415V Drive 3.00kW(HD)/4.00kW(ND)	XD4000-09P3-4C2221	S1	*
	XD4000 415V Drive 4.00kW(HD)/5.50kW(ND)	XD4000-12P7-4C2221	S1	*
	XD4000 415V Drive 5.50kW(HD)/7.50kW(ND)	XD4000-16P5-4C2221	S2	*
	XD4000 415V Drive 7.50kW(HD)/11.0kW(ND)	XD4000-23P5-4C2221	S2	*
	XD4000 415V Drive 11.0kW(HD)/15.0kW(ND)	XD4000-31P7-4C2221	S3	*
	XD4000 415V Drive 15.0kW(HD)/18.5kW(ND)	XD4000-39P2-4C2221	S3	*
	XD4000 415V Drive 18.5kW(HD)/22.0kW(ND)	XD4000-46P3-4C2221	S3	*
	XD4000 415V Drive 22.0kW(HD)/30.0kW(ND)	XD4000-61P5-4C2221	S4	*
	XD4000 415V Drive 30.0kW(HD)/37.0kW(ND)	XD4000-74P5-4C2221	S4	*
	XD4000 415V Drive 37.0kW(HD)/45.0kW(ND)	XD4000-88P0-4C2221	S4	*
	XD4000 415V Drive 45.0kW(HD)/55.0kW(ND)	XD4000-106P-4C2221	S5	*
	XD4000 415V Drive 55.0kW(HD)/75.0kW(ND)	XD4000-145P-4C2221	S5	*
	XD4000 415V Drive 75.0kW(HD)/90.0kW(ND)	XD4000-173P-4C2221	S5	*
	XD4000 415V Drive 90.0kW(HD)/110kW(ND)	XD4000-211P-4B2221	S6	*
	XD4000 415V Drive 110kW(HD)/132kW(ND)	XD4000-250P-4B2221	S6	*
	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	S1	*
	XD4000 IP55 415V Drive 1.50kW(ND)	XD4000-04P0-4S2221	S1	*
	XD4000 IP55 415V Drive 2.20kW(ND)	XD4000-05P6-4S2221	S1	*
	XD4000 IP55 415V Drive 3.00kW(ND)	XD4000-07P2-4S2221	S1	*
	XD4000 IP55 415V Drive 4.00kW(ND)	XD4000-09P3-4S2221	S1	*
	XD4000 IP55 415V Drive 5.50kW(ND)	XD4000-12P7-4S2221	S1	*
	XD4000 IP55 415V Drive 7.50kW(ND)	XD4000-16P5-4S2221	S2	*
	XD4000 IP55 415V Drive 11.0kW(ND)	XD4000-23P5-4S2221	S2	*

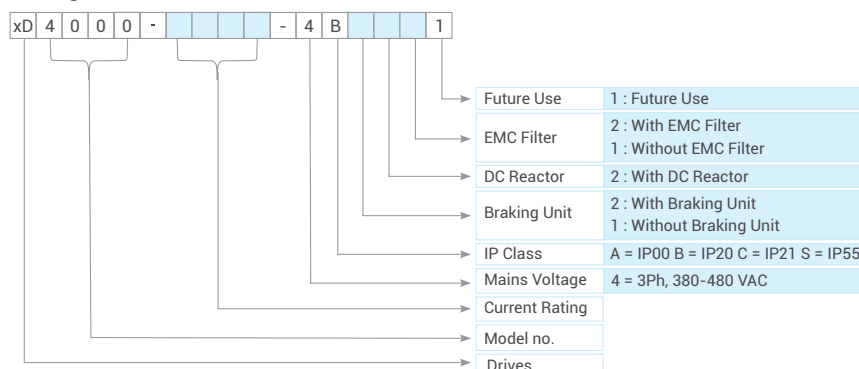
Note: \* For prices please contact nearest branch office

## 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



## 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	XDEN-HEI-V01	*
	Profibus-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,C:110/230-440VAC	XS1000-0100-B44111	*	
xS1000,140A,M:200-440VAC,C:110/230-440VAC	XS1000-0140-B44111	*	
xS1000,170A,M:200-440VAC,C:110/230-440VAC	XS1000-0170-B44111	*	
xS1000,200A,M:200-440VAC,C:110/230-440VAC	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,C:110/230-440VAC	XS2000-0100-B44111	*	
xS2000,140A,M:200-440VAC,C:110/230-440VAC	XS2000-0140-B44111	*	
xS2000,170A,M:200-440VAC,C:110/230-440VAC	XS2000-0170-B44111	*	
xS2000,200A,M:200-440VAC,C:110/230-440VAC	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	<b>Soft starter Name</b>
	1000 xS1000 2000 xS2000
1234	<b>Current Rating</b>
	1234 Nominal Current Rating
B	<b>Bypass Type</b>
	B Internal Bypass
V	<b>Mains Voltage</b>
	4 3Ph, 200-440VAC 5 3Ph, 200-575VAC
C	<b>Control Voltage</b>
	1 24V AC/DC 4 110/230-440V AC
D	<b>Graphical Display</b>
	1 No Graphical Display
F	<b>Future Use</b>
	1 Future Use
F	<b>Future Use</b>
	1 Future Use

We recommend the use of:

1. Line Contactor : This will isolate and protect the soft starter SCR's from any voltage transient while it's not in operation.
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 Voltage transient's.
3. Semiconductor fuses : This will protect the starter SCR's during starting and stopping states from current transient's and excess I<sup>2</sup>T.

### 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
1234	Current Rating
	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
C	1 24V AC/DC
	2 110-120/220-240V AC
D	Graphical Display
D	2 Fixed Graphical Display
F	Future Use
F	1 Future Use
F	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.

We recommend the use of:

1. Line Contactor : This will isolate and protect the soft starter SCR's from any voltage transient while it's not in operation.
2. Semiconductor fuses : This will protect the starter SCR's during starting and stopping states from current transient's and excess I<sup>2</sup>T.
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.

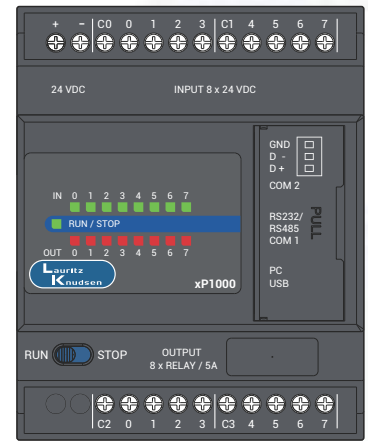
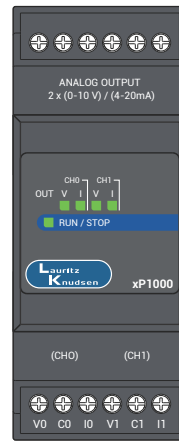
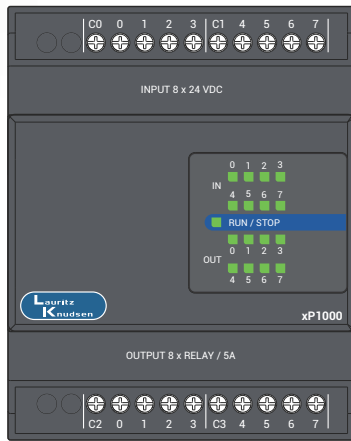
## Optional Modules/Cards for xS Series



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	XSCI-DEN-341	*
xS3000 and xS4000 Operator & Cable	XSOP-DOP-200	*
xS3000 and xS4000 Operator Interface Card	XSOP-DOC-200	*
xS3000 and xS4000 Digital Operator Kit	XSOP-DOK-200	*
xS3000 and 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

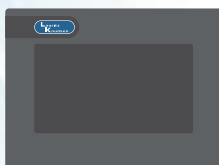
- › Extension with 8 Digital Inputs and 8 Relay Outputs, Relay Load 5 A (Res.) @ 230 VAC / 30 VDC
- › 24 V DC Power Supply

#### Analog Inputs

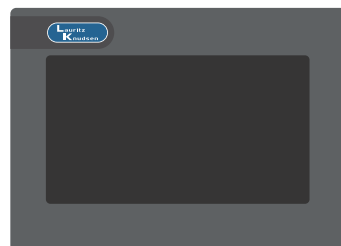
- › Extension with 4 Analog Inputs (0-10V / 4-20mA)
- › 24 V DC Power Supply

#### Analog Outputs

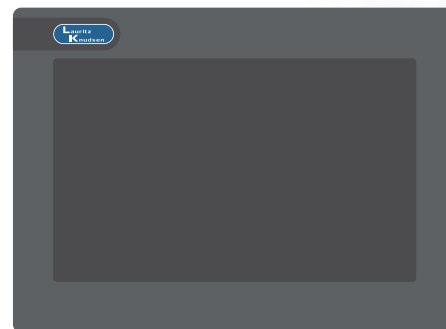
- › Extension with 2 Analog Outputs (0-10V / 4-20mA)
- › 24 V DC Power Supply



4.3 inch



7 inch

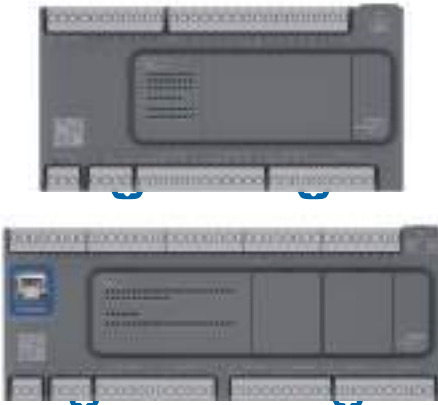


10.1 inch

## 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/m<sup>2</sup> & 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 Serial models & 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

## xP 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



## xP Expansion Modules Features:

- › 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).

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 18DI 14DO RY	xP3000-M1DR32AA111	*
		xP3000, CPU, AC220, 24DI, 16DO RY	xP3000-M1DR40AA111	*
	xP5000	xP5000 CPU DC24 10DI 09DO TP	xP5000-M1DT16AA111	*
		xP5000 CPU DC24 10DI 09DO TN	xP5000-M1DU16AA111	*
		xP5000 CPU AC220 14DI 09DO RY	xP5000-M1DR16AA111	*
		xP5000 CPU DC24 14DI 10DO TN	xP5000-M1DU24AA111	*
		xP5000 CPU DC24 14DI 10DO TP	xP5000-M1DT24AA111	*
		xP5000 CPU AC220 14DI 10DO RY	xP5000-M1DR24AA111	*
		xP5000 CPU DC24 14DI 10DO 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-M1DT40AA111	*	
xP5000, CPU, AC220, 24DI, 16DO RY,		xP5000-M1DR40AA111	*	
xP5000 CPU DC24 24DI 16DO TP Eth.	xP5000-M1DT40EA111	*		
xP5000, CPU, 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-XL05CS01AB1	*	
	xPCTRG, 2 analog input ,1 analog output	xPCTRG-XL04AH03AA1	*	

Note: \* For prices please contact nearest branch office

## 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.	xTE6000-07EDAA1	*
		xTE6000 Series 10 " HMI, DC 24V, Eth.	xTE6000-10EDAA1	*
		xTE6000 Series 12 " HMI, DC 24V, Eth.	xTE6000-12EDAA1	*
		xTE6000 Series 15 " HMI, DC 24V, Eth.	xTE6000-15EDAA1	*
	xTS6000	xTS6000 Series 04" Advance HMI, DC 24V, Eth.	xTS6000-04EDAA1	*
		xTS6000 Series 07" Advance HMI, DC 24V, Eth.	xTS6000-07EDAA1	*
		xTS6000 Series 10" Advance HMI, DC 24V, Eth.	xTS6000-10EDAA1	*
		xTS6000 Series 12" Advance HMI, DC 24V, Eth.	xTS6000-12EDAA1	*
		xTS6000 Series 15" Advance HMI, DC 24V, Eth.	xTS6000-15EDAA1	*

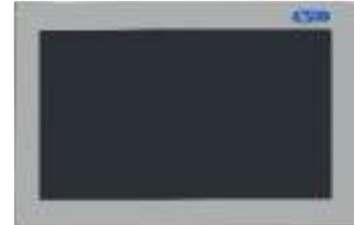
Note: \* For prices please contact nearest branch office



xTE6000\_10inch



xTE6000\_15inch



xTS6000\_15inch

## xTE6000

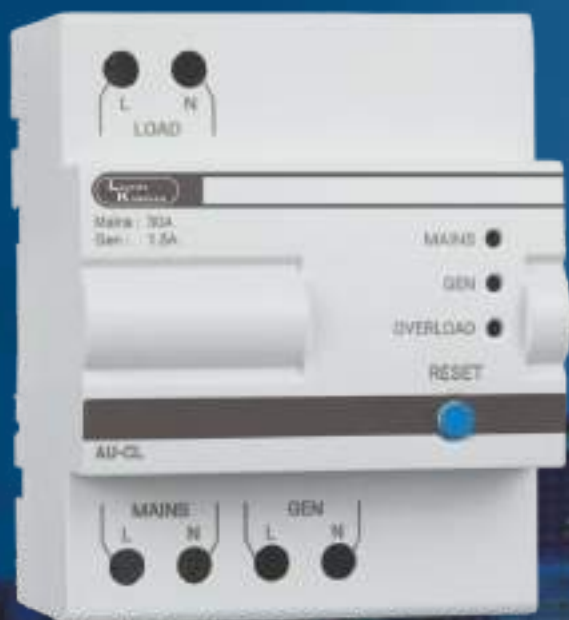
- › Wide TFT Color Display (16 Million Colors)
- › Resistive Touch Panel
- › 24V DC Power Supply
- › Compatible with GP-Pro EX Software
- › Panel Mount Design
- › Industrial Grade Construction

## 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

## Single Phase ACCL



Mains rating : 30A

Genset rating : 1A to 30A

## Three Phase ACCL With MCX contactors inside

Range : 32A to 125A



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
<b>Single Pole (SP)</b>							
0.5A	1	-	-	BB10E50C	540	BB10E50D	560
1A	1	-	-	BB10010C	540	BB10010D	560
2A	1	-	-	BB10020C	540	BB10020D	560
3A	1	-	-	BB10030C	540	BB10030D	560
4A	1	-	-	BB10040C	540	BB10040D	560
6A	1	BB10060B	318	BB10060C	318	BB10060D	470
10A	1	BB10100B	318	BB10100C	318	BB10100D	470
16A	1	BB10160B	318	BB10160C	318	BB10160D	470
20A	1	BB10200B	318	BB10200C	318	BB10200D	470
25A	1	BB10250B	318	BB10250C	318	BB10250D	470
32A	1	BB10320B	318	BB10320C	318	BB10320D	470
40A	1	BB10400B	756	BB10400C	756	BB10400D	840
50A	1	BB10500B	756	BB10500C	756	BB10500D*	840
63A	1	BB10630B	756	BB10630C	756	BB10630D*	840
<b>Double Pole (DP)</b>							
0.5A	2	-	-	BB20E50C	1550	BB20E50D	1575
1A	2	-	-	BB20010C	1550	BB20010D	1575
2A	2	-	-	BB20020C	1550	BB20020D	1575
3A	2	-	-	BB20030C	1550	BB20030D	1575
4A	2	-	-	BB20040C	1550	BB20040D	1575
6A	2	BB20060B	1080	BB20060C	1080	BB20060D	1145
10A	2	BB20100B	1080	BB20100C	1080	BB20100D	1145
16A	2	BB20160B	1080	BB20160C	1080	BB20160D	1145
20A	2	BB20200B	1080	BB20200C	1080	BB20200D	1145
25A	2	BB20250B	1080	BB20250C	1080	BB20250D	1145
32A	2	BB20320B	1080	BB20320C	1080	BB20320D	1145
40A	2	BB20400B	1760	BB20400C	1760	BB20400D	1870
50A	2	BB20500B	1760	BB20500C	1760	BB20500D*	1870
63A	2	BB20630B	1760	BB20630C	1760	BB20630D*	1870
<b>Three Pole (TP)</b>							
0.5A	3	-	-	BB30E50C	2255	BB30E50D	2290
1A	3	-	-	BB30010C	2255	BB30010D	2290
2A	3	-	-	BB30020C	2255	BB30020D	2290
3A	3	-	-	BB30030C	2255	BB30030D	2290
4A	3	-	-	BB30040C	2255	BB30040D	2290
6A	3	BB30060B	1700	BB30060C	1700	BB30060D	1825
10A	3	BB30100B	1700	BB30100C	1700	BB30100D	1825
16A	3	BB30160B	1700	BB30160C	1700	BB30160D	1825
20A	3	BB30200B	1700	BB30200C	1700	BB30200D	1825
25A	3	BB30250B	1700	BB30250C	1700	BB30250D	1825
32A	3	BB30320B	1700	BB30320C	1700	BB30320D	1825
40A	3	BB30400B	2650	BB30400C	2650	BB30400D	2825
50A	3	BB30500B	2650	BB30500C	2650	BB30500D*	2825
63A	3	BB30630B	2650	BB30630C	2650	BB30630D*	2825

**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
<b>Four Pole (FP)</b>							
0.5A	4	-	-	BB40E50C	2840	BB40E50D	2845
1A	4	-	-	BB40010C	2840	BB40010D	2845
2A	4	-	-	BB40020C	2840	BB40020D	2845
3A	4	-	-	BB40030C	2840	BB40030D	2845
4A	4	-	-	BB40040C	2840	BB40040D	2845
6A	4	BB40060B	2355	BB40060C	2355	BB40060D	2460
10A	4	BB40100B	2355	BB40100C	2355	BB40100D	2460
16A	4	BB40160B	2355	BB40160C	2355	BB40160D	2460
20A	4	BB40200B	2355	BB40200C	2355	BB40200D	2460
25A	4	BB40250B	2355	BB40250C	2355	BB40250D	2460
32A	4	BB40320B	2355	BB40320C	2355	BB40320D	2460
40A	4	BB40400B	3305	BB40400C	3305	BB40400D	3640
50A	4	BB40500B	3305	BB40500C	3305	BB40500D*	3640
63A	4	BB40630B	3305	BB40630C	3305	BB40630D*	3640

**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
<b>Single Pole (SP)</b>					
80A	1.5	AU15S10803C	3175	AU15S10803D	3615
100A	1.5	AU15S11003C	3560	AU15S11003D	4045
125A	1.5	AU15S11253C	3830	AU15S11253D	4370
<b>Double Pole (DP)</b>					
80A	3	AU15S20803C	7035	AU15S20803D	8010
100A	3	AU15S21003C	7505	AU15S21003D	8535
125A	3	AU15S21253C	8260	AU15S21253D	9390
<b>Three Pole (TP)</b>					
80A	4.5	AU15S30803C	11100	AU15S30803D	12640
100A	4.5	AU15S31003C	11840	AU15S31003D	13455
125A	4.5	AU15S31253C	13140	AU15S31253D	14930
<b>Four Pole (FP)</b>					
80A	6	AU15S40803C	14500	AU15S40803D	16465
100A	6	AU15S41003C	15080	AU15S41003D	17160
125A	6	AU15S41253C	17080	AU15S41253D	19415

**CERTIFIED TO LEAD,  
TRUSTED FOR SAFETY.**

BIS-Certified HR MCBs Range - 80A, 100A & 125A



(AC MCB + DC MCB)



AC MCB<sup>^</sup> with C-Curve

Description	Modules 1 Mod = 17.5mm	Cat. No.	M.R.P. (₹) Per Unit
1 AC 16A DP MCB <sup>^</sup> + 1 DC 16A DP 500V MCB	2+2	SC221616	1900
<b>New</b> 1 AC 20A DP MCB <sup>^</sup> + 1 DC 20A DP 500V MCB	2+2	SC222020	1900
<b>New</b> 1 AC 20A DP MCB <sup>^</sup> + 1 DC 25A DP 500V MCB	2+2	SC222025	1900
<b>New</b> 1 AC 20A DP MCB <sup>^</sup> + 1 DC 32A DP 500V MCB	2+2	SC222032	1900
1 AC 25A DP MCB <sup>^</sup> + 1 DC 16A DP 500V MCB	2+2	SC222516	1900
<b>New</b> 1 AC 25A DP MCB <sup>^</sup> + 1 DC 25A DP 500V MCB	2+2	SC222525	1900
1 AC 32A DP MCB <sup>^</sup> + 1 DC 16A DP 500V MCB	2+2	SC223216	1900
<b>New</b> 1 AC 32A DP MCB <sup>^</sup> + 1 DC 25A DP 500V MCB	2+2	SC223225	1900
1 AC 32A DP MCB <sup>^</sup> + 1 DC 32A DP 500V MCB	2+2	SC223232	1900

# Double the Protection, Twice the Power!

## Complete Protection for Solar Rooftop Installations

**DC MCB:**  
10kA as per IEC 60947-2  
**AC MCB:**  
10kA as per IS/IEC 60898-1



## Miniature Circuit Breaker (MCB) [8536]

### DC MCBs as per IEC 60947-2 [8536]

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

#### 130V DC SP MCB

Rating	Modules 1 Mod = 17.5mm	Cat. No.	M.R.P. (₹) Per Unit
<b>Single Pole (SP)</b>			
0.5A	1	BB10E5DC	755
1A	1	BB1001DC	755
2A	1	BB1002DC	755
3A	1	BB1003DC	755
4A	1	BB1004DC	755
6A	1	BB1006DC	655
10A	1	BB1010DC	655
16A	1	BB1016DC	655
20A	1	BB1020DC	655
25A	1	BB1025DC	655
32A	1	BB1032DC	655
40A	1	BB1040DC	860
50A	1	BB1050DC	860
63A	1	BB1063DC	860



Rated Voltage:  
Breaking capacity of BJ Series DC MCBs  
» 10kA till 40 A  
» 6kA for 50A, 63A

#### 250V DC SP MCB

Rating	Modules 1 Mod = 17.5mm	Cat. No.	M.R.P. (₹) Per Unit
<b>Single Pole (SP)</b>			
0.5A	1	BJ10E5DC	895
1A	1	BJ1001DC	895
2A	1	BJ1002DC	895
3A	1	BJ1003DC	895
4A	1	BJ1004DC	895
6A	1	BJ1006DC	730
10A	1	BJ1010DC	730
16A	1	BJ1016DC	730
20A	1	BJ1020DC	730
25A	1	BJ1025DC	730
32A	1	BJ1032DC	730
40A	1	BJ1040DC	1010
50A	1	BJ1050DC	1010
63A	1	BJ1063DC	1010

**New**

#### 250V DC DP MCB

0.5A	2	BB20E5DC	1615
1A	2	BB2001DC	1615
2A	2	BB2002DC	1615
3A	2	BB2003DC	1615
4A	2	BB2004DC	1615
6A	2	BB2006DC	1420
10A	2	BB2010DC	1420
16A	2	BB2016DC	1420
20A	2	BB2020DC	1420
25A	2	BB2025DC	1420
32A	2	BB2032DC	1420
40A	2	BB2040DC	1920
50A	2	BB2050DC	1920
63A	2	BB2063DC	1920



#### 500V DC DP MCB

0.5A	2	BJ20E5DC	1865
1A	2	BJ2001DC	1865
2A	2	BJ2002DC	1865
3A	2	BJ2003DC	1865
4A	2	BJ2004DC	1865
6A	2	BJ2006DC	1575
10A	2	BJ2010DC	1575
16A	2	BJ2016DC	1575
20A	2	BJ2020DC	1575
25A	2	BJ2025DC	1575
32A	2	BJ2032DC	1575
40A	2	BJ2040DC	2005
50A	2	BJ2050DC	2005
63A	2	BJ2063DC	2005

**New**

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	2400
DP 10A 1000V DC 6kA MCB	4	BK2010DC	2400
DP 16A 1000V DC 6kA MCB	4	BK2016DC	2400
DP 20A 1000V DC 6kA MCB	4	BK2020DC	2400
DP 25A 1000V DC 6kA MCB	4	BK2025DC	2400
DP 32A 1000V DC 6kA MCB	4	BK2032DC	2400
DP 40A 1000V DC 6kA MCB	4	BK2040DC	2915
DP 50A 1000V DC 6kA MCB	4	BK2050DC	2915
DP 63A 1000V DC 6kA MCB	4	BK2063DC	2915

**New**



## 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
<b>Double Pole (DP)</b>			<b>Three Pole (TP)</b>			<b>Four Pole (FP)</b>			
40A	2	BF204000	685	3	BF304000	1190	4	BF404000	1525
63A	2	BF206300	870	3	BF306300	1370	4	BF406300	1595
80A	2	BF208000	1110	3	BF308000	1505	4	BF408000	1785
100A	2	BF210000	1165	3	BF310000	1605	4	BF410000	1930

**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
<b>Double Pole (DP)</b>				
25A	30 mA	2	BG202503	3685
	100 mA	2	BG202510	3910
	300 mA	2	BG202530	3910
32A	30 mA	2	BG203203	4135
	100 mA	2	BG203210	4470
	300 mA	2	BG203230	4470
40A	30 mA	2	BG204003	4135
	100 mA	2	BG204010	4470
	300 mA	2	BG204030	4470
63A	30 mA	2	BG206303	5160
	100 mA	2	BG206310	5390
	300 mA	2	BG206330	5390
100A	30 mA	2	BG210003	9270
	100 mA	2	BG210010	9385
	300 mA	2	BG210030	9385

Rating	Sensitivity	Modules 1 Mod = 17.5 mm	Cat. No.	M.R.P. (₹) Per Unit
<b>Four Pole (FP)</b>				
25A	30 mA	4	BG402503	4825
	100 mA	4	BG402510	5050
	300 mA	4	BG402530	5050
32A	30 mA	4	BG403203	4870
	100 mA	4	BG403210	5135
	300 mA	4	BG403230	5135
40A	30 mA	4	BG404003	4870
	100 mA	4	BG404010	5135
	300 mA	4	BG404030	5135
63A	30 mA	4	BG406303	5510
	100 mA	4	BG406310	5890
	300 mA	4	BG406330	5890
100A	30 mA	4	BG410003	9600
	100 mA	4	BG410010	9955
	300 mA	4	BG410030	9955

## 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
<b>2P Adi</b>				
25A	30mA	2	AURAD202503	6395
	100mA	2	AURAD202510	6690
	300mA	2	AURAD202530	6690
40A	30mA	2	AURAD204003	6785
	100mA	2	AURAD204010	6895
	300mA	2	AURAD204030	6895
63A	30mA	2	AURAD206303	7940
	100mA	2	AURAD206310	8090
	300mA	2	AURAD206330	8090
100A	30mA	2	AURAD210003	11730

Rating	Sensitivity	Modules 1 Mod = 17.5 mm	CAT Nos.	M.R.P. (₹) Per Unit
<b>4P Adi</b>				
25A	30mA	4	AURAD402503	7735
	100mA	4	AURAD402510	7880
	300mA	4	AURAD402530	7880
40A	30mA	4	AURAD404003	8030
	100mA	4	AURAD404010	8155
	300mA	4	AURAD404030	8155
63A	30mA	4	AURAD406303	8745
	100mA	4	AURAD406310	8925
	300mA	4	AURAD406330	8925
100A	30mA	4	AURAD410003	13930
	300mA	4	AURAD410030	13930

# 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

## Type-AC

Rating	Sensitivity	Modules 1 Mod = 17.5 mm	CAT Nos.	M.R.P. (₹) Per Unit
<b>2P AC*</b>				
6A	10mA	2	AUF3C200601	5835
	30mA	2	AUF3C200603	5835
	100mA	2	AUF3C200610	5955
	300mA	2	AUF3C200630	6025
10A	10mA	2	AUF3C201001	5835
	30mA	2	AUF3C201003	5835
	100mA	2	AUF3C201010	5955
	300mA	2	AUF3C201030	6025
16A	10mA	2	AUF3C201601	5835
	30mA	2	AUF3C201603	5835
	100mA	2	AUF3C201610	5955
	300mA	2	AUF3C201630	6025
20A	30mA	2	AUF3C202003	5835
	100mA	2	AUF3C202010	5955
	300mA	2	AUF3C202030	6025
25A	30mA	2	AUF3C202503	5835
	100mA	2	AUF3C202510	5955
	300mA	2	AUF3C202530	6025
32A	30mA	2	AUF3C203203	5835
	100mA	2	AUF3C203210	5955
	300mA	2	AUF3C203230	6025
40A	30mA	2	AUF3C204003	5835
	100mA	2	AUF3C204010	5955
	300mA	2	AUF3C204030	6025
63A	30mA	4	AUF3C206303	6930
	100mA	4	AUF3C206310	7350
	300mA	4	AUF3C206330	7410
<b>4P AC</b>				
16A	30mA	7.5	AUF3C401603	6265
	100mA	7.5	AUF3C401610	6975
	300mA	7.5	AUF3C401630	7115
20A	30mA	7.5	AUF3C402003	6265
	100mA	7.5	AUF3C402010	6975
	300mA	7.5	AUF3C402030	7115
25A	30mA	7.5	AUF3C402503	6265
	100mA	7.5	AUF3C402510	6975
	300mA	7.5	AUF3C402530	7115
32A	30mA	7.5	AUF3C403203	6470
	100mA	7.5	AUF3C403210	6980
	300mA	7.5	AUF3C403230	7135
40A	30mA	7.5	AUF3C404003	6570
	100mA	7.5	AUF3C404010	6980
	300mA	7.5	AUF3C404030	7155
63A	30mA	7.5	AUF3C406303	7875
	100mA	7.5	AUF3C406310	8020
	300mA	7.5	AUF3C406330	8020
80A	30mA	12	AUF3C408003	30515
	100mA	12	AUF3C408010	31195
	300mA	12	AUF3C408030	31195
100A	30mA	12	AUF3C410003	32620
	100mA	12	AUF3C410010	33400
	300mA	12	AUF3C410030	33400

\*For 2P AC/Adi D Curve RCBO, please contact nearest branch office



- › 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-Adi

Rating	Sensitivity	Modules 1 Mod = 17.5 mm	CAT Nos.	M.R.P. (₹) Per Unit
<b>2P Adi</b>				
6A	30mA	2	AUF3D200603	7875
	100mA	2	AUF3D200610	8675
	300mA	2	AUF3D200630	9000
	30mA	2	AUF3D201003	7875
10A	100mA	2	AUF3D201010	8675
	300mA	2	AUF3D201030	9000
	30mA	2	AUF3D201603	7875
16A	100mA	2	AUF3D201610	8675
	300mA	2	AUF3D201630	9000
	30mA	2	AUF3D202003	7875
20A	100mA	2	AUF3D202010	8675
	300mA	2	AUF3D202030	9000
	30mA	2	AUF3D202503	7875
25A	100mA	2	AUF3D202510	8675
	300mA	2	AUF3D202530	9000
	30mA	2	AUF3D203203	7875
32A	100mA	2	AUF3D203210	8675
	300mA	2	AUF3D203230	9000
	30mA	2	AUF3D204003	7875
40A	100mA	2	AUF3D204010	8675
	300mA	2	AUF3D204030	9000
	30mA	4	AUF3D206303	9110
63A	100mA	4	AUF3D206310	9635
	300mA	4	AUF3D206330	9720
	<b>4P Adi</b>			
16A	30mA	7.5	AUF3D401603	8230
	100mA	7.5	AUF3D401610	9150
	300mA	7.5	AUF3D401630	9340
20A	30mA	7.5	AUF3D402003	8230
	100mA	7.5	AUF3D402010	9150
	300mA	7.5	AUF3D402030	9340
25A	30mA	7.5	AUF3D402503	8230
	100mA	7.5	AUF3D402510	9150
	300mA	7.5	AUF3D402530	9340
32A	30mA	7.5	AUF3D403203	8490
	100mA	7.5	AUF3D403210	9160
	300mA	7.5	AUF3D403230	9350
40A	30mA	7.5	AUF3D404003	8620
	100mA	7.5	AUF3D404010	9160
	300mA	7.5	AUF3D404030	9390
63A	30mA	7.5	AUF3D406303	10330
	100mA	7.5	AUF3D406310	10540
	300mA	7.5	AUF3D406330	10540
80A	30mA	12	AUF3D408003	30515
	100mA	12	AUF3D408010	31195
	300mA	12	AUF3D408030	31195
100A	30mA	12	AUF3D410003	32620
	100mA	12	AUF3D410010	33400
	300mA	12	AUF3D410030	33400

\*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 - I<sub>max</sub> up to 70kA
- › Type 1+2 : Protection against direct and indirect lightning surges
  - » Maximum Discharge Current - I<sub>max</sub> up to 100kA



### 440V Application (Common + Differential Mode)

Description	I <sub>max</sub>	Configuration	Modules 1 Mod = 17.5 mm	Cat. No.	M.R.P. (₹) Per Unit
Type 1+2, I <sub>imp</sub> 12.5kA	50kA	1P+N	2	AUSP121PN50D	11955
		3P+N	4	AUSP123PN50D	22900
Type 2	40kA	1P+N	1	AUSP021PN40D	7475
		3P+N	2	AUSP023PN40D	14935
Type 2	15kA	1P+N	1	AUSP021PN15D	5980
		3P+N	2	AUSP023PN15D	11760
Type 1+2, I <sub>imp</sub> 8kA	100kA	1P+N	2	AUSP121PN100D	10750
		3P+N	4	AUSP123PN100D	21120
Type 2	70kA	1P+N	2	AUSP021PN70D	11740
		3P+N	4	AUSP023PN70D	19550

### 800V Solar Application

Description	Configuration	Modules 1 Mod = 17.5 mm	Voltage (Uc)	Cat. No.	M.R.P. (₹) Per Unit
Type 2, I <sub>max</sub> 40kA	3P	4	1500	AUSP023P40-1500	15000
Type 1+2, I <sub>imp</sub> 12.5kA	3P	5	1360	AUSP123P50-1360	45000
Type 1+2, I <sub>imp</sub> 12.5kA	3P	4	880	AUSP123P50-880	30000

### SPD Cartridges

Description	Cat. No.	M.R.P. (₹) Per Unit
Cartridge for AUSP021PN15D	AUSC021PN15D	2940
Cartridge for AUSP021PN40D	AUSC021PN40D	3660
Cartridge for AUSP021PN70D / AUSP023PN70D	AUSC021PN70D	3915
Cartridge for AUSP023PN15D <sup>#</sup>	AUSC023PN15D	3845
Cartridge for AUSP023PN40D <sup>#</sup>	AUSC023PN40D	4885
Cartridge for AUSP121PN100D / AUSP123PN100D	AUSC121PN100D	5865
Cartridge for AUSP121PN50D / AUSP123PN50D	AUSC121PN50D	6330
Cartridge for AUSP023PN15D <sup>#</sup>	AUSC023PN15DG	4455
Cartridge for AUSP023PN40D <sup>#</sup>	AUSC023PN40DG	4650

<sup>#</sup>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	2930
30A/1.5A	4	AUCL010301E5	2930
30A/2A	4	AUCL01030002	2930
30A/2.5A	4	AUCL010302E5	2930
30A/3A	4	AUCL01030003	2930
30A/4A	4	AUCL01030004	2930
30A/5A	4	AUCL01030005	2930
30A/6A	4	AUCL01030006	2930
30A/8A	4	AUCL01030008	2930
30A/10A	4	AUCL01030010	2930
30A/12A	4	AUCL01030012	2930
30A/15A	4	AUCL01030015	2930
30A/20A	4	AUCL01030020	2930
30A/30A	4	AUCL01030030*	2930

\*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	14385
40A / 32A	AUCL03040032	14825
40A / 40A	AUCL03040040	16045
50A / 50A	AUCL03050050	22870
63A / 50A	AUCL03063050	25235
63A / 63A	AUCL03063063	28585
80A / 80A	AUCL03080080	43565
125A / 125A	AUCL03125125	73335

For 3 Phase ACCL programming video please scan the QR code or click here



## Changeover Switches [8536]



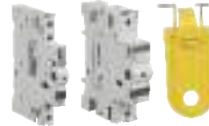
### Range Highlights

- › 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
<b>Double Pole</b>			
25A	2	AUC00202500	1975
40A	2	AUC00204000	3020
63A	3	AUC00206300	3515
<b>Four Pole</b>			
40A	4	AUC00404000	5205
63A	6	AUC00406300	5900

## 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	1110
AUX/TAC*	1NO+1NC	0.5	240V AC, 24V DC	AUATAC240	1300
HR AUX/TAC*	1NO+1NC	0.5	240V AC, 24V DC	AUATAC240HR	1300
Undervoltage Release	-	1	240V AC	AUUVAC240	2625
Release	-	1	24V DC	AUUVDC024	2625
Overvoltage Release	-	1	240V AC	AUOVAC240	3245
Shunt Release	-	1	240V AC	AUSRAC240	3010
	-	1	24V DC	AUSRDC024	3010
Padlock-Suitable for Lock Hasp 3.5 - 5 mm dia. max	Suitable for 1Pole=1Mod devices: RCCBs, RCBOs, Changeover Switches up to 40A			AUPD01	595
	Suitable for 1Pole-1.5Mod devices: MCBs 80A-125A, Changeover Switch 63A			AUPD02	670

**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	1	AUMC1002501	2215
25A-2NO	1	AUMC2002501	2780
40A-2NO	3	AUMC2004003	4750
40A-3NO	3	AUMC3004003	6810
40A-4NO	3	AUMC4004003	7985
63A-2NO+2NC	3	AUMC2206303	8445
63A-3NO	3	AUMC3006303	8650
63A-4NO	3	AUMC4006303	9525
<b>Accessory [8538]</b>			
Auxiliary Contact, 2NO	0.5	AUMCAUX240	2070

### 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	WD4010100000	3410
Three Phase - 80A	5	WD4020100000	7385
Single Phase - 60A (RS485)	2	WD4010110000	5045
Three Phase - 80A (RS485)	5	WD4020110000	11145

### Indicating Lights [8531]



Description	Modules 1 Mod = 17.5 mm	Cat. No.	M.R.P. (₹) Per Unit
RED	1	AUIL01RED00	1275
YELLOW	1	AUIL01YEL00	1275
BLUE	1	AUIL01BLU00	1275
GREEN	1	AUIL01GRE00	1275
RED-YELLOW-BLUE	1	AUIL01RYB00	1550

### 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	1065
Shunt Release - 240V AC, 1 Mod	BZS00240	2915
Trip Alarm Contact - 6A, 240V AC, (1NO+1NC), 0.5 Mod	BZT11006	1245

## 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
<b>Plug - IP44</b>		
16A, 2P+E	PSKPM30164	610
32A, 2P+E	PSKPM30324	960
16A, 3P+E	PSKPM40164	780
32A, 3P+E	PSKPM40324	1135
16A, 3P+N+E	PSKPM50164	820
32A, 3P+N+E	PSKPM50324	1095
<b>Plug - IP67</b>		
16A, 2P + E	PSKPM30167	1355
32A, 2P + E	PSKPM30327	1915
63A, 2P + E	PSKPM30637	5435
16A, 3P + E	PSKPM40167	1530
32A, 3P + E	PSKPM40327	2420
63A, 3P + E	PSKPM40637	5175
16A, 3P + N + F	PSKPM50167	1640
32A, 3P + N + E	PSKPM50327	2085
63A, 3P + N + E	PSKPM50637	5185
125A, 3P + N + E	PSKPM51257	15840

## Socket



### 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
<b>Socket - IP44</b>		
16A, 2P+E	PSKSM30164	845
32A, 2P+E	PSKSM30324	1180
16A, 3P+E	PSKSM40164	990
16A, 3P + N + E	PSKSM50164	1080
32A, 3P + N + E	PSKSM50324	1445
<b>Socket - IP67</b>		
16A, 2P+E	PSKSM30167	1590
32A, 2P+E	PSKSM30327	2185
63A, 2P+E	PSKSM30637	5915
16A, 3P+E	PSKSM40167	1995
63A, 3P+E	PSKSM40637	5970
16A, 3P + N + E	PSKSM50167	2085
32A, 3P + N + E	PSKSM50327	2440
63A, 3P + N + E	PSKSM50637	6065
125A, 3P + N + E	PSKSM51257	19040

## 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
<b>Socket Angled - IP44</b>		
16A, 2P+E	PSKSA30164	655
32A, 2P+E	PSKSA30324	1160
16A, 3P+E	PSKSA40164	990
32A, 3P+E	PSKSA40324	1370
16A, 3P+N+E	PSKSA50164	1055
32A, 3P+N+E	PSKSA50324	1340
<b>Socket Angled - IP67</b>		
16A, 2P+E	PSKSA30167	1250
32A, 2P+E	PSKSA30327	1630
63A, 2P+E	PSKSA30637	5340
32A, 3P+E	PSKSA40327	2420
63A, 3P+E	PSKSA40637	5350
32A, 3P+N+E	PSKSA50327	1930
63A, 3P+N+E	PSKSA50637	5455
125A, 3P+N+E	PSKSA51257	18105

## 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
<b>Socket Straight- IP44</b>		
16A, 2P+E	PSKSS30164	750
32A, 2P+E	PSKSS30324	1190
32A, 3P+N+E	PSKSS50324	1490
<b>Socket Straight- IP67</b>		
16A, 2P+E	PSKSS30167	1260
63A, 2P+E	PSKSS30637	6465
63A, 3P+E	PSKSS40637	5400
63A, 3P+N+E	PSKSS50637	5400
125A, 3P+N+E	PSKSS51257	18105

# 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 outgoing

Description	No. of Modules		Cat. Nos.	M.R.P. (₹) Per Unit
	Incomer + Outgoing			
<b>IP 43 - Metal Door</b>				
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 | 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 MCBs as outgoing

Description	No. of Modules		Cat. Nos.	M.R.P. (₹) Per Unit
	Incomer + Outgoing			
<b>IP 43 - Metal Door</b>				
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

**Lauritz  
Knudsen**  
Electrical & Automation

**DESIGN OR SAFETY?**  
OBVIOUSLY BOTH. OBVIOUSLY EXORA.N DB.

#ExoraHaiTohSafeHai



**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 outgoing



Description	No. of Modules		Cat. Nos.	M.R.P. (₹) Per Unit
	Incomer + Outgoing			
<b>IP 30 - Single Door</b>				
4 way	2	2	DESPN004SDS	1790
6 way	2	4	DESPN006SDS	1875
8 way	2	6	DESPN008SDS	2160
12 way	2	10	DESPN012SDS	2565
16 way	2	14	DESPN016SDS	3140
18 way	2	16	DESPN018SDS	3650
<b>IP 43 - Metal Door</b>				
4 way	2	2	DESPN004DDS	2330
6 way	2	4	DESPN006DDS	2685
8 way	2	6	DESPN008DDS	2875
12 way	2	10	DESPN012DDS	3450
16 way	2	14	DESPN016DDS	4360
18 way	2	16	DESPN018DDS	4565
<b>IP 43 - Glazed Door</b>				
4 way	2	2	DESPN004GDS	3120
6 way	2	4	DESPN006GDS	3320
8 way	2	6	DESPN008GDS	3610
12 way	2	10	DESPN012GDS	4395
16 way	2	14	DESPN016GDS	5460
18 way	2	16	DESPN018GDS	5780
<b>IP 54 - Metal Door</b>				
4 way	2	2	DESPN00454S	8135
6 way	2	4	DESPN00654S	9070
8 way	2	6	DESPN00854S	9645
12 way	2	10	DESPN01254S	11075
16 way	2	14	DESPN01654S	12330
18 way	2	16	DESPN01854S	12605

**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 outgoing



Description	No. of Modules		Cat. Nos.	M.R.P. (₹) Per Unit
	Incomer	Outgoing		
<b>IP 30 - Single Door</b>				
4 way	4	4+4+4	DETPN004SDS	4660
6 way	4	6+6+6	DETPN006SDS	5720
4 way	8	4+4+4	DETPN004SDS	4910
6 way	8	6+6+6	DETPN006SDS	6080
8 way	8	8+8+8	DETPN008SDS	7170
12 way	8	12+12+12	DETPN012SDS	10330
16 way	8	16+16+16	DETPN016SDS	12595
<b>IP 43 - Metal Door</b>				
4 way	4	4+4+4	DETPN004DDS	5480
6 way	4	6+6+6	DETPN006DDS	6810
4 way	8	4+4+4	DETPN004DDS	5730
6 way	8	6+6+6	DETPN006DDS	7140
8 way	8	8+8+8	DETPN008DDS	8570
12 way	8	12+12+12	DETPN012DDS	12780
16 way	8	16+16+16	DETPN016DDS	15860
<b>IP 43 - Glazed Door</b>				
4 way	4	4+4+4	DETPN004GDS	7440
6 way	4	6+6+6	DETPN006GDS	8945
4 way	8	4+4+4	DETPN004GDS	7745
6 way	8	6+6+6	DETPN006GDS	9425
8 way	8	8+8+8	DETPN008GDS	11175
12 way	8	12+12+12	DETPN012GDS	17145
16 way	8	16+16+16	DETPN016GDS	20605
<b>IP 54 - Metal Door</b>				
4 way	4	4+4+4	DETPN00454S	18585
6 way	4	6+6+6	DETPN00654S	21720
4 way	8	4+4+4	DETPN00454S	19645
6 way	8	6+6+6	DETPN00654S	23655
8 way	8	8+8+8	DETPN00854S	25860
12 way	8	12+12+12	DETPN01254S	36450
16 way	8	16+16+16	DETPN01654S	43745

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.

**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 outgoing



**Horizontal PPI DBs**

**IP 43 - Metal Door**

Description	No. of Modules			Cat. Nos.	M.R.P. (₹) Per Unit
	Incomer	Sub-Incomer	Outgoing		
<b>IP 43 - Metal Door</b>					
4 way	8	2+2+2	4+4+4	DEHPI004DD	10190
6 way	8	2+2+2	6+6+6	DEHPI006DD	12065
8 way	8	2+2+2	8+8+8	DEHPI008DD	14470
12 way	8	2+2+2	12+12+12	DEHPI012DD	19940
16 way	8	2+2+2	16+16+16	DEHPI016DD	23920



**Tier PPI DBs**

Description	No. of Modules			Cat. Nos.	M.R.P. (₹) Per Unit
	Incomer	Sub-Incomer	Outgoing		
<b>IP 43 - Metal Door</b>					
6 way	8	2+2+2	6+6+6	DETP1006DD	12485
8 way	8	2+2+2	8+8+8	DETP1008DD	15655
10 way	8	2+2+2	10+10+10	DETP1010DD	16410
12 way	8	2+2+2	12+12+12	DETP1012DD	17385
16 way	8	2+2+2	16+16+16	DETP1016DD	19820
12 way	MCCB*	2+2+2	12+12+12	DETP1012DD	18595

\*Suitable for 3 Pole & 4 Pole DU100H, DU100D, DN0-100D & DN0-100C MCCB as incomer

**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 outgoing
  - » MCCB Incomer - MCCB\* as incomer, DP RCCB/RCBO as sub-incomer and SP MCBs as outgoing



**With Modular Incomer**

Description	No. of Modules			Cat. Nos.	M.R.P. (₹) Per Unit
	Incomer	Sub-Incomer	Outgoing		
<b>IP 43 - Metal Door</b>					
4 way	8	4+4+4	4+4+4	DEPSG004DD	14965
6 way	8	4+4+4	6+6+6	DEPSG006DD	16875
8 way	8	4+4+4	8+8+8	DEPSG008DD	18825
12 way	8	4+4+4	12+12+12	DEPSG012DD	23355



**With MCCB Incomer**

Description	No. of Modules			Cat. Nos.	M.R.P. (₹) Per Unit
	Incomer*	Sub-Incomer	Outgoing		
<b>IP 43 - Metal Door</b>					
4 way	MCCB	4+4+4	4+4+4	DEPGL004DD	20585
6 way	MCCB	4+4+4	6+6+6	DEPGL006DD	23540
8 way	MCCB	4+4+4	8+8+8	DEPGL008DD	27225
12 way	MCCB	4+4+4	12+12+12	DEPGL012DD	30705

\*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]



### 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 MCCBs as outgoing



### Up to 125A MCCB Incomer

Description	No. of Modules		Cat. Nos.	M.R.P. (₹) Per Unit
	Incomer*	Outgoing		
<b>IP 43 - Metal Door</b>				
4 way	MCCB	4+4+4	DEVTL004DD	16700
6 way	MCCB	6+6+6	DEVTL006DD	18980
8 way	MCCB	8+8+8	DEVTL008DD	20895
12 way	MCCB	12+12+12	DEVTL012DD	28425
16 way	MCCB	16+16+16	DEVTL016DD	33910
<b>IP 54 - Metal Door</b>				
4 way	MCCB	4+4+4	DEVTL00454	34590
6 way	MCCB	6+6+6	DEVTL00654	39445
8 way	MCCB	8+8+8	DEVTL00854	42700

\*Suitable for 3 Pole & 4 Pole DZO MCCB as incomer. In case of any other MCCB frame requirement please contact nearest branch.

## Vertical TPN DB with Modular Incomer [8537]



### 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 MCCBs as outgoing



Description	No. of Modules		Cat. Nos.	M.R.P. (₹) Per Unit
	Incomer	Outgoing		
<b>IP 43 - Metal Door</b>				
4 way	8	4+4+4	DEVTM004DD	14120
6 way	8	6+6+6	DEVTM006DD	15730
8 way	8	8+8+8	DEVTM008DD	18260
12 way	8	12+12+12	DEVTM012DD	24630
16 way	8	16+16+16	DEVTM016DD	29385
<b>IP 54 - Metal Door</b>				
4 way	8	4+4+4	DEVTM00454	29850
6 way	8	6+6+6	DEVTM00654	32565
8 way	8	8+8+8	DEVTM00854	35960

## Vertical TPN DB with MCCB Incomer [8537]



### Up to 250A MCCB Incomer

Description	No. of Modules		Cat. Nos.	M.R.P. (₹) Per Unit
	Incomer*	Outgoing		
<b>IP 43 - Metal Door</b>				
4 way	MCCB	4+4+4	DEVTH004DD	21700
6 way	MCCB	6+6+6	DEVTH006DD	24300
8 way	MCCB	8+8+8	DEVTH008DD	26725
12 way	MCCB	12+12+12	DEVTH012DD	32345
16 way	MCCB	16+16+16	DEVTH016DD	43465
<b>IP 54 - Metal Door</b>				
4 way	MCCB	4+4+4	DEVTH00454	39700
6 way	MCCB	6+6+6	DEVTH00654	43345
8 way	MCCB	8+8+8	DEVTH00854	44830

\*Suitable for 3 pole and 4 pole DU250, DU250C & DN1 MCCB as incomer

## Flexi/Row DB [8537]



### 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
<b>IP 43 - Metal Door</b>			
2 Row 28 Module	14	DEROW228DD	7295
3 Row 42 Module	14	DEROW342DD	8745
4 Row 56 Module	14	DEROW456DD	9510
4 Row 64 Module	16	DEROW464DD	11060

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]



### 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/s with shroud/s | earth bar/s | sticking saddles | 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 outgoing



Description	No. of Modules		Cat. Nos.	M.R.P. (₹) Per Unit
	Incomer	Outgoing		
<b>IP 43 - Metal Door</b>				
4 way	8	4+4+4	DEPSR004DD	18380
6 way	8	6+6+6	DEPSR006DD	18675
8 way	8	8+8+8	DEPSR008DD	20005
10 way	8	10+10+10	DEPSR010DD	21375
12 way	8	12+12+12	DEPSR012DD	22535

## EV charging DB 8537]



### 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]



### 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
<b>IP 30 - Metal Door</b>			
2 way	2	DEENC002SD	910
3 way	3	DEENC003SD	910
4 way	4	DEENC004SD	910
6 way	6	DEENC006SD	1410

For ordering old DBs, replace Cat no with "DB" instead of "DE".

Eq. - 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]



### 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
<b>Metal Plug &amp; Sockets</b>				
10 A, 2 Pin + SC <sup>A</sup>	P + N	1	DEMPS110SD	2255
20 A, 2 Pin + SC <sup>A</sup>	P + N	1	DEMPS120SD	2425
20 A, 2 Pin + SC <sup>A</sup>	P + N	2	DEMPS220SD	2630
20 A, 3 Pin + SC <sup>A</sup>	3P	3	DEMPS320SD	4455
32 A, 3 Pin + SC <sup>A</sup>	3P	3	DEMPS332SD	5275
32 A, 3 Pin + SC <sup>A</sup>	3P	4	DEMPS432SD	5610
63 A, 5 Pin + SC <sup>A</sup>	3P+N+E	4	DEMPS463SD	19010
<b>Plastic Plug &amp; Sockets</b>				
16 A, 3 Pin	P+N+E	2	DEPPS316SD	3690
32 A, 3 Pin	P+N+E	4	DEPPS332SD	3980
32 A, 5 Pin	3P+N+E	8	DEPPS532SD	6650
63 A, 5 Pin	3P+N+E	8	DEPPS563SD	16660

## Metal Plug [8536]



Description	No. of Pins	Cat. Nos.	M.R.P. (₹) Per Unit
10 A, 2 Pin + SC <sup>A</sup>	P + N	MPS210P	280
20 A, 2 Pin + SC <sup>A</sup>	P + N	MPS220P	295
20 A, 3 Pin + SC <sup>A</sup>	3P	MPS320P	390
32 A, 3 Pin + SC <sup>A</sup>	3P	MPS332P	745

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 <sup>A</sup>	P + N	MPS210S	290
20 A, 2 Pin + SC <sup>A</sup>	P + N	MPS220S	320
20 A, 3 Pin + SC <sup>A</sup>	3P	MPS320S	440
32 A, 3 Pin + SC <sup>A</sup>	3P	MPS332S	745

<sup>A</sup> SC-Scraping Earth

Note: Standard pack quantity - 20 nos.



## 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

## 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
<b>CEB for SPN DBs</b>		
CEB-SPN Double Door, 4 way	DESPN004CBS	995
CEB-SPN Double Door, 6 way	DESPN006CBS	1075
CEB-SPN Double Door, 8 way	DESPN008CBS	1200
CEB-SPN Double Door, 12 way	DESPN012CBS	1335
CEB-SPN Double Door, 16 way	DESPN016CBS	1880
CEB-SPN Double Door, 18 way	DESPN018CBS	1940
<b>CEB for TPN DBs</b>		
CEB-TPE Double Door, 4 way	DETPE004CBS	1285
CEB-TPE Double Door, 6 way	DETPE006CBS	1835
CEB-TPN Double Door, 4 way	DETPN004CBS	1350
CEB-TPN Double Door, 6 way	DETPN006CBS	1890
CEB-TPN Double Door, 8 way	DETPN008CBS	2380
CEB-TPN Double Door, 12 way	DETPN012CBS	3955
CEB-TPN Double Door, 16 way	DETPN016CBS	3995
<b>CEB for Horizontal PPI DBs</b>		
CEB-Horz. PPI Double Door, 4 way	DEHPI004CB	1995
CEB-Horz. PPI Double Door, 6 way	DEHPI006CB	2490
CEB-Horz. PPI Double Door, 8 way	DEHPI008CB	3125
CEB-Horz. PPI Double Door, 12 way	DEHPI012CB	3920
CEB-Horz. PPI Double Door, 16 way	DEHPI016CB	4265
<b>CEB for VTPN DBs</b>		
CEB-VTPN Double Door, Modular Incomer	DEVTMXXXCB	1335
CEB-VTPN Double Door, MCCB Incomer	DEVTXXXCB	4715
<b>CEB for Phase Segregated DBs</b>		
CEB-PSG Double Door, 4 way	DEPSG004CB	3500
CEB-PSG Double Door, 6 way	DEPSG006CB	4170
CEB-PSG Double Door, 8 way	DEPSG008CB	4605
CEB-PSG Double Door, 12 way	DEPSG012CB	5125

DB Type	Description	No. of Modules		Cat. Nos.	M.R.P. (₹) Per Unit
		Incomer + Outgoing			
<b>IP 43 - Metal Door</b>					
SPN	6 way	2	4	DESPN006DDTV	5075
	8 way	2	6	DESPN008DDTV	5455
	12 way	2	10	DESPN012DDTV	6715
	16 way	2	14	DESPN016DDTV	7790
	18 way	2	16	DESPN018DDTV	9215
TPN	4 way	8	4+4+4	DETPN004DDTV	9975
	6 way	8	6+6+6	DETPN006DDTV	11525
	8 way	8	8+8+8	DETPN008DDTV	13740
Communication DB				DECOM01DD	*

\*For details, please contact nearest branch office

## 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	445	5
SP 56 Mod	BSP56	1820	5
DP 12 Mod	BDP12	790	5
TP 12 Mod	BTP12	855	5
FP 12 Mod	BFP12	1690	5
End Caps for SP	ECP01	30	10
End Caps for DP/TP	ECP03	60	10
End Caps for FP	ECP04	100	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	30	10
Half Module	BKP05	30	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	775	5

For ordering old DBs, replace Cat no with "DB" instead of "DE".

Eg. - New DB Cat no for SPN 12W DD - DESPN012DDSD, Old DB Cat no for same will be DBSPN012DDSD. Old DBs are available till stock last.

## Discontinued Products/Suggested Alternate Products

Product Group	Discontinued Products	Suggested Alternate Products
MCCB	DTH800 3P & Acc	 DN4-1250N 800A 3P & Acc
Controlgear	MN0 control contactor, its spares and accessories	MO0 control contactor, its spares and accessories
Controlgear	MVO contactors	MNX contactor (up to 650 A)
Controlgear	MR contactors	MNX 2P/ MU-2P
Soft Starters	CSX	xS1000
Soft Starters	CSXi	xS2000
Soft Starters	EMX4e	xS3000
Soft Starters	EMX4i	xS4000
AC Drives	x2000 Series	xD Series
Protection Relay	MC31/MC61	FDR21/FDR22
Protection Relay	TCS01NX	TCS11
FDP	Common Mode SPD	Common+ Differential Mode SPD
Fusegear	Fuse Mounting Kit	

## 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

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- › Product Support for Managing Obsolescence-

# Switchgear Training Centres



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Switchgear Training Centre  
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E-mail: STC-PUNE@LK-EA.com



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Near Sarita Vihar / Mohan Estate Metro Station  
Main Mathura Road, New Delhi - 110044  
Tel: 9899020306 / 9720186726 / 9560845094  
E-mail: STC-DELHI@LK-EA.com



## Kolkata

Lauritz Knudsen Electrical & Automation  
Switchgear Training Centre,  
2nd Floor, Block BN3, Sector V,  
Salt Lake City,  
Kolkata - 700091, West Bengal  
Tel: 7738717893 / 7797795567  
E-mail: STC-KOLKATA@LK-EA.com



## Vadodara

Lauritz Knudsen Electrical & Automation  
Switchgear Training Centre  
Behind L&T Knowledge City,  
Near Village Ankhol,  
Vadodara - 390019  
Tel: 0265 6147805 / 6147808  
E-mail: STC-VADODARA@LK-EA.com



## Coonor

Lauritz Knudsen Electrical & Automation  
Switchgear Training Centre  
Ooty-Coonor Main Road  
Yellanahalli P.O.,  
The Nilgiris - 643 243  
Tel: 0423 251 7107  
E-mail: STC-COONOOR@LK-EA.com

Customer Interaction Center (CIC)  
Phone no: 022 6932 7800  
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Tel: 022-6722 6300 | Fax: 022-6705 1112 | e-mail: CIC@LK-EA.com

## BRANCH OFFICES

Lauritz Knudsen Electrical & Automation  
C-201, The First Commercial Complex,  
B/S Keshavbaug Party Plot, Vastrapur,  
**Ahmedabad - 380 015**  
Phone No: 022-6932 7800  
e-mail: CIC@LK-EA.com

Lauritz Knudsen Electrical & Automation  
Shri Daneshwari, 1st Floor,  
Plot No. 17, 2nd Cross, Near Old Income  
Tax Office Road, Vidyanagar,  
**Hubballi - 580 021**  
Phone No: 022-6932 7800  
e-mail: CIC@LK-EA.com

Lauritz Knudsen Electrical & Automation  
No.10, Fortuna Towers, 2nd Floor,  
Rana Pratap Marg, Near NBRL,  
**Lucknow - 226 001**  
Phone No: 022-6932 7800  
e-mail: CIC@LK-EA.com

Lauritz Knudsen Electrical & Automation  
A06/A07, Second Floor,  
Grand Chandra Complex, Frazer Road  
**Patna - 800 001**  
Phone No: 022-6932 7800  
e-mail: CIC@LK-EA.com

Lauritz Knudsen Electrical & Automation  
Wework Central, #36 Infantry Road,  
**Bengaluru - 560 001**  
Phone No: 022-6932 7800  
e-mail: CIC@LK-EA.com

Lauritz Knudsen Electrical & Automation  
AWFIS Space Solutions, Prestige Phoenix,  
4th floor, 1405, Umanagar, Begumpet,  
**Hyderabad - 500 016**  
Phone No: 022-6932 7800  
e-mail: CIC@LK-EA.com

Lauritz Knudsen Electrical & Automation  
El Dorado Building, 3rd Floor, 6,  
Venkatraman Street, Chinna Chokkikulam,  
**Madurai - 625 002**  
Phone No: 022-6932 7800  
e-mail: CIC@LK-EA.com

Lauritz Knudsen Electrical & Automation  
UrbanWrk, 5th Floor, Sai Radhe,  
Raja Bahadur Mill Road, Behind Hotel  
Grand Sheraton, Sangamwadi  
**Pune - 411 001**  
Phone No: 022-6932 7800  
e-mail: CIC@LK-EA.com

Lauritz Knudsen Electrical & Automation  
Work loop Unit-612, 6th Floor,  
Esplanade One, Rasulgarh,  
**Bhubaneswar - 751 010**  
Phone No: 022-6932 7800  
e-mail: CIC@LK-EA.com

Lauritz Knudsen Electrical & Automation  
Workie, 214 - 2nd Floor,  
Apollo Premier, PU-4,  
Scheme No. 54, Vijay Nagar Square,  
**Indore - 452 010**  
Phone No: 022-6932 7800  
e-mail: CIC@LK-EA.com

Lauritz Knudsen Electrical & Automation  
Bestech Business Park,  
Tower - A, 2nd floor, Sector - 66  
**Mohali - 160059**  
Phone No: 022-6932 7800  
e-mail: CIC@LK-EA.com

Lauritz Knudsen Electrical & Automation  
Office No. 211 & 212, Pithalia Plaza,  
KK Road, Near Fafadih Chowk,  
**Raipur - 492 001**  
Phone No: 022-6932 7800  
e-mail: CIC@LK-EA.com

Lauritz Knudsen Electrical & Automation  
801 Word Level-8, No. 28,  
SIDCO Industrial Estate, Guindy,  
**Chennai - 600 032**  
Phone No: 022-6932 7800  
e-mail: CIC@LK-EA.com

Lauritz Knudsen Electrical & Automation  
Office No. 430, 4th Floor,  
Jaipur Electronic Market, Riddhi Siddhi,  
Gopalpura Bypass,  
**Jaipur - 302 018**  
Phone No: 022-6932 7800  
e-mail: CIC@LK-EA.com

Lauritz Knudsen Electrical & Automation  
TC II, Tower B, PRIMA BAY Gate No. 5,  
Saki Vihar Road Powai,  
**Mumbai - 400 072**  
Phone No: 022-6932 7800  
e-mail: CIC@LK-EA.com

Lauritz Knudsen Electrical & Automation  
DevX 4th Floor, A Wing, Om 9 Square,  
150 Ft Ring Road, Near Nana Mava Circle,  
Opp Silver Heights,  
**Rajkot - 360 001**  
Phone No: 022-6932 7800  
e-mail: CIC@LK-EA.com

Lauritz Knudsen Electrical & Automation  
Playworkz Coworking Space  
43 & 44, 3rd Cross,  
Bharathy Colony, Peelamedu,  
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Phone No: 022-6932 7800  
e-mail: CIC@LK-EA.com

Lauritz Knudsen Electrical & Automation  
GDR Siddha, Ground Floor, N Road  
Bistupur, Opposite St. Mary's Church,  
**Jamshedpur - 831 001**  
Phone No: 022-6932 7800  
e-mail: CIC@LK-EA.com

Lauritz Knudsen Electrical & Automation  
Unnati Building, 2nd Floor,  
Automation Campus, A-600, TTC Industrial  
Area Shil-Mahape Road, Mahape,  
**Navi Mumbai - 400 710**  
Phone No: 022-6932 7800  
e-mail: CIC@LK-EA.com

Lauritz Knudsen Electrical & Automation  
10th Floor, Titaanium Business,  
Bhimrad Road, Althan  
**Surat - 395 017**  
Phone No: 022-6932 7800  
e-mail: CIC@LK-EA.com

Lauritz Knudsen Electrical & Automation  
3rd Floor, 1&2 Vijay Park,  
Main Chakrata Road, Opp. Anandam,  
Near Ballupur chowk,  
**Dehradun - 248 001**  
Phone No: 022-6932 7800  
e-mail: CIC@LK-EA.com

Lauritz Knudsen Electrical & Automation  
Business Communication Centre  
2nd Floor, Chiramel Chambers,  
Kurusipally Road, Ravipuram,  
**Kochi - 682 015**  
Phone No: 022-6932 7800  
e-mail: CIC@LK-EA.com

Lauritz Knudsen Electrical & Automation  
M1 & M2, Mezzanine Floor,  
Himalaya Excellency,  
Plot No. C-47, Pratap Nagar Square,  
**Nagpur - 440 022**  
Phone No: 022-6932 7800  
e-mail: CIC@LK-EA.com

Lauritz Knudsen Electrical & Automation  
11th Floor, Block-D, Notus IT Park,  
Sarabhai Campus, Bhailal Amin Marg,  
**Vadodara - 390 023**  
Phone No: 022-6932 7800  
e-mail: CIC@LK-EA.com

Lauritz Knudsen Electrical & Automation  
Ground Floor, B-27,  
Biplab Rashbihari Sarani,  
Sector 2A, Bidhan Nagar,  
**Durgapur - 713 212**  
Phone No: 022-6932 7800  
e-mail: CIC@LK-EA.com

Lauritz Knudsen Electrical & Automation  
207, 2nd floor, Revolution Complex,  
Station Road, E Ward,  
Next to Pedestrian Bridge,  
**Kolhapur - 416 001**  
Phone No: 022-6932 7800  
e-mail: CIC@LK-EA.com

Lauritz Knudsen Electrical & Automation  
2nd Floor, Samarth House,  
Opposite Titan World,  
Samarth Nagar, Mahatma Nagar,  
**Nasik - 422 005**  
Phone No: 022-6932 7800  
e-mail: CIC@LK-EA.com

Lauritz Knudsen Electrical & Automation  
Qubexpro Business Centre,  
4th Floor, V Mall, Above Lifestyles,  
Factor Layout, Waltair Uplands,  
**Visakhapatnam - 530 003**  
Phone No: 022-6932 7800  
e-mail: CIC@LK-EA.com

Lauritz Knudsen Electrical & Automation  
6th Floor, Exotica Greens, A Block, 191,  
R G Baruah Road, Guwahati Central,  
**Guwahati - 781 005**  
Phone No: 022-6932 7800  
e-mail: CIC@LK-EA.com

Lauritz Knudsen Electrical & Automation  
2nd Floor, BN3, Salt Lake, Sector-V,  
**Kolkata - 700 091**  
Phone No: 022-6932 7800  
e-mail: CIC@LK-EA.com

Lauritz Knudsen Electrical & Automation  
A-25, 1st Floor, Imperia Complex,  
Mohan Corporative Industrial Estate,  
Near Sarita Vihar Metro Station,  
Mathura Road,  
**New Delhi - 110 044**  
Phone no: 022-6932 7800  
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### Lauritz Knudsen Electrical & Automation, Electrical Standard Product

A/600, Shil-Mahape Road, TTC Industrial Area, MIDC Thane, Navi Mumbai, 400 710, Maharashtra, Phone No: 022-6722 6300 | Web: www.LK-EA.com

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