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Good quality products and customer service, continuous improvement in processes, systems and capabilities are the hallmark of leaders in business.

The Electrical Standard Products (ESP) business and New Product Development (NPD) function of L&T Electrical & Automation (E&A) have been awarded the Deming Prize 2019, by JUSE (Union of Japanese Scientists and Engineers), Japan.

The Deming Prize is one of the highest awards on Total Quality Management (TQM) in the globe. It is presented to an organization that has implemented TQM suitable for its management philosophy, scope/type/scale of business and management environment.

The TQM activities of ESP were evaluated for establishment of customer oriented objectives and strategies & top management leadership, suitable utilisation and implementation of TQM, effects obtained regarding business objectives and demonstration of organizational capabilities.

E&A's ESP is the first low voltage switchgear manufacturer in India that has received this recognition.



Contents

Switching & Control	
» Contactors	03
» Accessories	08
» Spares	11
Motor Protection Solutions	
» Thermal Overload Relays	12
» Electronic Motor Protection Relays	14
» iMMR – Intelligent Motor Management Relay	16
» Motor Protection Circuit Breakers	18
Starters	
» Motor Starters	21
Powergear	
» Enclosed Automatic Transfer Switch	24
» On Load Changeover Switch-Disconnectors	25
» Switch-Disconnecter-Fuse Units, HRC Fuses & SDs	26
» Moulded Case Circuit Breakers	33
» Sub - Main Distribution Boards	46
» Air Circuit Breakers	50
Energy Management	
» Power Quality Solutions	61
» Protection Relays	69
» Metering Devices	71
» Energy Management Solution	72
Automation Solution	
» AC Drives	78
» Digital Soft Starters	82
» Programmable Logic Controllers (PLC) & Human Machine Interface	83
Final Distribution Products	87
Discontinued Products/Suggested Alternate Products	107

Note:

[Green 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**
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- **Rotary Switches**
- **Modular Remote Control Units & Indicating Units**
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- **Cable Ducts & Load Break Switches**
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- **Medium Voltage AIS upto 36kV**
- **Agricultural Electrical Products**

Note: Product photographs shown, are for representative purposes only.



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Contactors

Power Contactors

- | 1 Pole | 2 Pole | 3 Pole | 4 Pole |
|--------|------------------|---|--------|
| • MR | • MNX
• MU-2P | • MO
• MNX
• MI
• MX Power
• ML
• MDX (DC Control)
• MVO (Vacuum) | • MCX |

Control Relays (Auxiliary Contactors)

- MX0 (Mini) AC/DC
- MO0 AC
- MN0 DC

Capacitor Duty Contactors

- MO C

MI Contactors 6-150A, AC-3 Rating

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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

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

For more details please contact nearest branch.

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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

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	805	10
				1 NC	CS94107	805	10
	12	30	MNX 12	1 NO	CS94108	935	10
				1 NC	CS94109	935	10
	18	30	MNX 18	1 NO	CS94100	1085	10
				1 NC	CS94101	1085	10
	22	32	MNX 22	1 NO	CS94980	1310	10
				1 NC	CS94981	1310	10
Fr 2	25	45	MNX 25	#	CS94110	1330	10
	32	55	MNX 32	#	CS94111	2900	10
	40	55	MNX 40	#	CS94190	4615	10
Fr 3	50	85	MNX 50	#	CS97075	5750	1
	70	100	MNX 70	#	CS97076	7950	1
	80	100	MNX 80	#	CS97077	10110	1
Fr 4	95	160	MNX 95	2 NO + 2 NC	CS94136	13725	1
	110	160	MNX 110	2 NO + 2 NC	CS94137	16540	1
	140	160	MNX 140	2 NO + 2 NC	CS94138	21825	1
Fr 5	185	250	MNX 185	2 NO + 2 NC	CS94139	26260	1
	225	300	MNX 225	2 NO + 2 NC	CS94140	28910	1
	250	300	MNX 250	2 NO + 2 NC	CS94141	32610	1
Fr 6	300	400	MNX 300	2 NO + 2 NC	CS90280	39315	1
	400	425	MNX 400	2 NO + 2 NC	CS94144	52860	1
	550	650	MNX 550	2 NO + 2 NC	CS94145	78730	1
	650	800	MNX 650	2 NO + 2 NC	CS96327	117810	1

Notes:

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

▲ If using 16 sq mm cable for MO 45 use of spreader link kit is mandatory

▲ For ordering spreader link kit for MO 45, Please refer page No. 9

* Universal AC/DC electronic coil version

3 Pole Power Contactors - Type MO

Features

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



MO 18



MO 45



MO 70



MO 110



MO 140



MO 300

Size	AC3 Rating (A)	AC1 Rating (A)	Type	Aux. Contacts	Cat. No.	M.R.P. (₹) Per Unit	Std. Pkg. (Nos.)
Fr 0	9	30	MO 9	1 NO + 1 NC	CS94833	1210	10
	12	32	MO 12	1 NO + 1 NC	CS94834	1365	10
	18	32	MO 18	1 NO + 1 NC	CS94835	1535	10
Fr 1	25	45	MO 25	#	CS94567	1735	10
	32	50	MO 32	#	CS94568	3675	10
	40	50	MO 40	#	CS94569	5690	10
	45	50	MO 45▲	#	CS94570	6830	10
Fr 2	50	100	MO 50	#	CS94572	7135	1
	60	100	MO 60	#	CS94573	7770	1
	70	100	MO 70	#	CS94574	9595	1
Fr 3	80	125	MO 80	#	CS94576	12205	1
	95	125	MO 95	#	CS94577	14970	1
	110	140	MO 110	#	CS94578	18145	1
Fr 4	140	250	MO 140	2 NO + 2 NC	CS95000	24700	1
	185	275	MO 185	2 NO + 2 NC	CS95001	29715	1
	225	275	MO 225	2 NO + 2 NC	CS95002	32705	1
Fr 4* (Electronic coil) AC/DC	140	250	MO 140	2 NO + 2 NC	CS95042	30925	1
	185	275	MO 185	2 NO + 2 NC	CS95047	38300	1
	225	275	MO 225	2 NO + 2 NC	CS95052	40950	1
Fr 5	250	400	MO 250	2 NO + 2 NC	CS94441	36890	1
	300	500	MO 300	2 NO + 2 NC	CS94440	44490	1
Fr 5* (Electronic coil) AC/DC	250	400	MO 250	2 NO + 2 NC	CS94456	44900	1
	300	500	MO 300	2 NO + 2 NC	CS94464	52100	1

Vacuum Contactors\$ [8536]

3 Pole Vacuum Contactors - Type MVO

Features

- Conforms to IS / IEC 60947-4-1 & IEC 60947-4-1
- Range from 400 – 820A AC-3
- With contact erosion indicator
- Wide band potted coil with built-in surge suppressor
- Coil on top design
- RoHS compliant



MVO 820

AC3 Rating (A)	AC1 Rating (A)	Type	Aux. Contacts	Cat. No.	M.R.P. (₹) Per Unit	Std. Pkg. (Nos.)
400	630	MVO 400	2 NO + 2 NC	CS90097	159050	1
500	630	MVO 500	2 NO + 2 NC	CS90098	206400	1
630	820	MVO 630	2 NO + 2 NC	CS90099	262300	1
820	1000	MVO 820	2 NO + 2 NC	CS90077	397000	1

\$ Available till stocks last

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	690	10
	12	30	MNX 12-2P	1 NO	CS90234	750	10
	18	30	MNX 18-2P	1 NO	CS90236	870	10
	22	32	MNX 22-2P	1 NO	CS90238	1050	10
Fr 2	25	45	MNX 25-2P	#	CS90240	1100	10
	32	55	MNX 32-2P	#	CS90241	2425	10
	40	55	MNX 40-2P	#	CS90242	3690	10
Fr 3	50	85	MNX 50-2P	#	CS94061	4850	1
	70	100	MNX 70-2P	#	CS94062	6580	1
	80	100	MNX 80-2P	#	CS94063	8105	1
Fr 4	95	160	MNX 95-2P	#	CS94064	11845	1
	110	160	MNX 110-2P	#	CS94065	13000	1
	140	160	MNX 140-2P	#	CS94066	17270	1
Fr 5	185	250	MNX 185-2P	2 NO + 2 NC	CS94978	22265	1
	225	300	MNX 225-2P	2 NO + 2 NC	CS94979	23600	1
	250	300	MNX 250-2P	2 NO + 2 NC	CS90301	26115	1
Fr 6	300	400	MNX 300-2P	2 NO + 2 NC	CS90346	31750	1
	400	425	MNX 400-2P	2 NO + 2 NC	CS94069	42500	1
	550	650	MNX 550-2P	2 NO + 2 NC	CS90243	64735	1
	650	800	MNX 650-2P	2 NO + 2 NC	CS90578	93500	1

3 Pole Power Contactors [8536]

3 Pole Power Contactors - Type MDX (DC Control)

Features

- Conforms to IS/IEC 60947-4-1 & IEC 60947-4-1
- Range from 9 - 110A AC-3
- Built in surge suppressor for MDX 9 - 80
- MDX 50-80 with universal AC/DC electronic coil



MDX 25



MDX 38



MDX 110

Size	AC3 Rating (A)	AC1 Rating (A)	Type	Aux. Contacts	Cat. No.	M.R.P. (₹) Per Unit	Std. Pkg. (Nos.)
Fr 1	9	25	MDX 9	1 NO	CS96564	1520	1
	12	28	MDX 12	1 NO	CS96565	1750	1
	18	32	MDX 18	1 NO	CS96566	2035	1
	25	32	MDX 25	1 NO	CS96567	3415	1
Fr 2	32	56	MDX 32	#	CS96552	6105	1
	38	56	MDX 38	#	CS96553	7015	1
Fr 3	50	90	MDX 50*	#	CS91584	10525	1
	65	110	MDX 65*	#	CS91585	11910	1
	80	125	MDX 80*	#	CS91586	14345	1
	95	125	MDX 95	#	CS96557	17980	1
	110	125	MDX 110	#	CS96558	18790	1

Notes: 1) # Add-on blocks can be ordered separately.

2) * Universal AC/DC electronic coil

3) For ordering MDX/MNX add-on aux contact blocks, please refer page No. 8

4) For ordering MDX/MNX surge suppressor and MIL kit, please refer page No. 9

5) For ordering Suffix, please refer page No. 10

6) Standard coil voltage: MDX - 24V, 48V, 110V and 220V DC.

7) Standard coil voltage: MNX 2P - 240V, 50Hz

8) For DC power ratings refer catalogue

9) For MDX side add-on and top add-on can not be mounted together

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.)
For AC control (Std. Coil Voltage - 24, 110, 240, 415V, 50Hz)						
6A	20A	MX 06	1 NO	CS94012	1000	10
6A	20A	MX 06	1 NC	CS94013	1000	10
9A	20A	MX 09	1 NO	CS94014	1030	10
9A	20A	MX 09	1 NC	CS94015	1030	10
12A	20A	MX 12	1 NO	CS94016	1105	10
12A	20A	MX 12	1 NC	CS94017	1105	10
For DC control (Std. Coil Voltage - 24, 110, 220V)						
6A	20A	MX 06	1 NO	CS94021	1535	10
6A	20A	MX 06	1 NC	CS94022	1535	10
9A	20A	MX 09	1 NO	CS94023	1575	10
9A	20A	MX 09	1 NC	CS94024	1575	10
12A	20A	MX 12	1 NO	CS94025	1640	10
12A	20A	MX 12	1 NC	CS94026	1640	10

3 Pole Power Contactors - Type ML

Features

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



ML 1.5



ML 3



ML 6



ML 12

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	3320	1
Fr 2	32	40	ML 2	2 NO + 2 NC	SS90701	6170	1
	40	45	ML 3	2 NO + 2 NC	SS90721	9105	1
Fr 3	70	100	ML 4	2 NO + 2 NC	SS90910	14890	1
	110	125	ML 6	2 NO + 2 NC	SS90921	23500	1
Fr 4	300	400	ML 12	2 NO + 2 NC	SS91010	53230	1

Notes:

1) For ordering MX add-on aux contact blocks, please refer page No. 8

2) For ordering ML add-on aux contact blocks, please refer page No. 9

3) For ordering MX surge suppressor and MIL kit, please refer page No. 9

4) For Ordering Suffix, please refer page No. 10

5) Standard Coil Voltage : ML 1.5/2/3 - 110V, 240V and 440V, 50 Hz

ML 4/6/12 - 110V, 240V and 415V, 50 Hz

4 Pole Power Contactors - Type MCX

Features

- Conforms to IS / IEC 60947-4-1 & IEC 60947-4-1
- Range from 16A – 800AAC-1
- Wide operating band up to 130AAC-1



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	16	MCX 01	#	CS97009	1015	10
	25	MCX 02	#	CS97010	1070	10
	32	MCX 03	#	CS97011	1105	10
	40	MCX 04	#	CS97012	1720	10
Fr 2	50	MCX 11	#	CS97013	2275	1
	63	MCX 12	#	CS97014	4340	1
	80	MCX 13	#	CS97015	6555	1
Fr 3	100	MCX 22	#	CS97017	8415	1
	130	MCX 23	#	CS97018	9640	1
Fr 4	160	MCX 32	2 NO + 2 NC	CS97020	16320	1
	200	MCX 33	2 NO + 2 NC	CS97021	22260	1
	255	MCX 34	2 NO + 2 NC	CS97022	23845	1
Fr 5	325	MCX 41	2 NO + 2 NC	CS97023	43485	1
	360	MCX 42	2 NO + 2 NC	CS97024	47280	1
	400	MCX 43	2 NO + 2 NC	CS97025	54835	1
	500	MCX 44	2 NO + 2 NC	CS97026	67540	1
	600	MCX 45	2 NO + 2 NC	CS97027	75070	1
	700	MCX 46	2 NO + 2 NC	CS97028	97155	1
	800	MCX 47	2 NO + 2 NC	CS94291	115470	1

Automatic Transfer Controllers (ATC)



AuXC-2000 Controller

Type	Cat. No.	M.R.P. (₹) Per Unit	Std. Pkg. (Nos.)
AuXC-2000 Controller	ATC20000000	23445	1

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

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



Notes:

- 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.
- 8) MCX 01-04 available with 2NO+2NC power contacts. Contact nearest branch for more details.

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

Control Relays (Auxiliary Contactors) [8536]

Type MX0



MX0 40E

Features

- Conforms to IS / IEC 60947-4-1 & IEC 60947-4-1
- Available with AC or DC control in 45mm width
- Inbuilt Surge Suppressor in MX DC

Rated Current	Description	Cat. No.	M.R.P. (₹) Per Unit	Std. Pkg. (Nos.)
For AC control std. Coil Voltage - 24, 110, 240, 415V, 50Hz				
AC-15 4A at 415V	MX0 40E (4 NO)	CS94018	1145	10
	MX0 31E (3 NO + 1 NC)	CS94019	1145	10
	MX0 22E (2 NO + 2 NC)	CS94020	1145	10
	MX0 13E (1 NO + 3 NC)	CS94041	1145	10
	MX0 04E (4 NC)	CS94042	1145	10
For DC control std. Coil Voltage - 24, 110, 220V				
AC-15 4A at 415V	MX0 40E (4 NO)	CS94027	1560	10
	MX0 31E (3 NO + 1 NC)	CS94028	1560	10
	MX0 22E (2 NO + 2 NC)	CS94029	1560	10
	MX0 13E (1 NO + 3 NC)	CS94043	1560	10
	MX0 04E (4 NC)	CS94044	1560	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. For Example, In MX0 DC control Contactors, 4NO + 4NC combination can be achieved with 2NO + 2NC aux contactor and 2NO + 2NC add on block and not with 4NO standalone contactor and 4NC add on block
- 4) For ordering add-on aux contact blocks, please refer page No. 8

AC Control Contactor - MO0



MO0 AC

Features

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

Rated Current	Description	Cat. No.	M.R.P. (₹) Per Unit	Std. Pkg. (Nos.)
For AC control std. Coil Voltage - 24, 110, 240, 415V, 50Hz				
AC-15 4A at 415V	MO0 40E (4NO)	CS91623	800	10
	MO0 31E (3NO + 1NC)	CS91624	800	10
	MO0 22E (2NO + 2NC)	CS91625	800	10

- Note:** 1) 6NC & above combination is not recommended for MO0
2) For ordering add-on aux contact blocks, please refer page No. 8
3) Other combinations available on request



MN0 DC 22E

DC Control Contactor - MN0

Rated Current	Description	Cat. No.	M.R.P. (₹) Per Unit	Std. Pkg. (Nos.)
For DC control std. Coil Voltage - 24, 110, 220V				
AC-15 4A at 415V	MN0 40E (4 NO)	SS94665	1650	10
	MN0 31E (3 NO + 1 NC)	SS94666	1650	10
	MN0 22E (2 NO + 2 NC)	SS94667	1650	10
	MN0 13E (1 NO + 3 NC)	SS94668	1650	10
	MN0 04E (4 NC)	SS94669	1650	10

For ordering add-on aux contact blocks, please refer page No. 8

Capacitor Duty Contactors [8536]

Capacitor Duty Contactors - Type MO C



MO C25



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	1655	1
	5	MO C5	1NO	CS96127	1780	1
	8.5	MO C8.5	1NO	CS96320	1960	1
	10	MO C10	1NO	CS96156	2125	1
	12.5	MO C12.5	1NO	CS96321	2185	1
	15	MO C15	1NO	CS90019	2985	1
	20	MO C20	1NO	CS90021	3415	1
	25	MO C25▲	1NO	CS96322	3795	1
Fr 2	30	MO C30\$	1NO	CS96148	6070	1
	40	MO C40	1NO	CS96147	10310	1
	50	MO C50	1NO	CS96324	10755	1
Fr 3	60	MO C60\$	1NO	CS96149	12725	1
	75	MO C75	1NO	CS96150	14680	1
	85	MO C85	1NO	CS96157	15845	1
	100	MO C100\$	1NO	CS96158	16950	1

Features

- 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. 61-68**

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

- ▲ 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]

Single Pole Contactors - Type MR

Features

- Wide and chatter free operating band
- High AC-1 rating for single phase applications



MR 11W
(Wide band coil)



MR 13



MR 11NW
SPN (Wide band coil)

AC3 Rating (A)	Type	Cat. No.	M.R.P. (₹) Per Unit	Std. Pkg. (Nos.)
25A	MR 11W	CS94176	910	10
25A	MR 11NW	CS94178	970	10
40A	MR 13	CS94992	990	40

Note:

- 1) Ordering Suffix BOOO - 240V, 50Hz
- 2) For ordering add-on aux. contact block, please refer page No. 9

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	645	10
25A	MU25-2P	CS90118	835	10
40A	MU40-2P	CS90119	1095	10

Note:

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

Accessories - Add-on Auxiliary Contact Blocks [8538]

	MNX 9-80	MNX 95-650	MO 9-110	MO 140-300	ML	MX	MDX 9-110	MCX 01-23	MCX 32-47	MX0	MN0	MO0	MO C	MR	MU-2P
Front add-on possible	Yes	No	Yes	No	No	Yes	Yes	Yes	No	Yes	Yes	Yes	No	Yes	Yes
Side add-on possible	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	No	No	No	Yes	No	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



MN0 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# 9-110	M.R.P. (₹) Per Unit	MX 0/6/9/12	M.R.P. (₹) Per Unit	MU-2P	M.R.P. (₹) Per Unit	MN0 DC	M.R.P. (₹) Per Unit
4 NO	CS94112 [^]	520	CS94594 [^]	520	-	-	CS94033 [^]	440	-	-	SS94083 [^]	550
3 NO + 1 NC	CS94113 [^]	520	CS94595 [^]	520	-	-	CS94034 [^]	440	-	-	SS94084 [^]	550
2 NO + 2 NC	CS94114 [^]	520	CS94596 [^]	520	CS96569 [~]	650	CS94035 [^]	440	-	-	SS94085 [^]	550
1 NO + 3 NC	CS94115 [^]	520	CS94597 [^]	520	CS90906 [~]	650	CS94036 [^]	440	-	-	SS94086 [^]	550
4 NC	CS94116 [^]	520	CS94598 [^]	520	-	-	CS94037 [^]	440	-	-	SS94087 [^]	550
2 NO	CS94117 [^]	345	CS94591 ^{^^}	345	-	-	CS94030 [^]	285	CS90692 [^]	345	SS94080 [^]	350
1 NO + 1 NC	CS94118 [^]	345	CS94592 ^{^^}	345	CS96568 [~]	380	CS94031 [^]	285	CS90693 [^]	345	SS94081 [^]	350
2 NC	CS94119 [^]	345	CS94593 ^{^^}	345	-	-	CS94032 [^]	285	CS90694 [^]	345	SS94082 [^]	350
1 NO	CS94120 [^]	175	CS94585 ^{^^}	175	CS96586 [~]	210	-	-	CS90695 [^]	175	SS94715 [^]	200
1 NC	CS94121 [^]	175	CS94586 ^{^^}	175			-	-	CS90696 [^]	175	SS94716 [^]	200

For MDX Side add-on and top add-on can not be mounted together



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	Suitable for							
	Aux Contact	MNX 9-40/ MCX 01-04	M.R.P. (₹) Per Unit	MCX 11-13	M.R.P. (₹) Per Unit	MNX 50-80/ MCX 22-23	M.R.P. (₹) Per Unit	MO 9-110/ MO C 3-100
First left	1 NO + 1 NC	CS94220 [^]	520	CS94201 [^]	555	CS94201 [^]	555	CS94580 [^]
First Right	1 NO + 1 NC	CS94221 [^]	520	CS94202 [^]	555	CS94202 [^]	555	CS94581 [^]
Second Left	1 NO + 1 NC	-	-	-	-	CS94203 [^]	555	CS94582 [^]
Second right	1 NO + 1 NC	-	-	-	-	CS94204 [^]	555	CS94583 [^]

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.



MO
Left Add-on aux. contact Block



MDX
Side Add-on aux. contact Block

Side Mounting

Add-on aux. Contact Block

Side Mounting	Suitable for							
	Aux Contact	MNX 95-650/ MCX 32-47	M.R.P. (₹) Per Unit	MO 140-300	M.R.P. (₹) Per Unit	MVO 400-820	M.R.P. (₹) Per Unit	MDX# 9-110
First left	1 NO + 1 NC	CS94205 [^]	635	CS95033 [^]	635	CS91208 [^]	635	ST94985 [^]
First Right	1 NO + 1 NC	CS94206 [^]	635	CS95034 [^]	635	CS91209 [^]	635	
Second Left	1 NO + 1 NC	CS94207 [^]	635	CS95035 [^]	635	CS95035 [^]	635	-
Second right	1 NO + 1 NC	CS94208 [^]	635	CS95036 [^]	635	CS95036 [^]	635	-

For MDX Side add-on and top add-on can not be mounted together

~ Standard Packing is 1 ^Standard Packing is 10 ^^Standard Packing is 20

Accessories - Add-on Auxiliary Contact Blocks [8538]

Side Mounting Add-on aux. Contact Block - ML



ML Add-on aux. contact Block

Side Mounting	Aux Contact	Suitable for			
		ML 4/6	M.R.P. (₹) Per Unit	ML 12	M.R.P. (₹) Per Unit
Left	1 NO + 1 NC	SS91494 [^]	750	-	-
Right	1 NO + 1 NC	-	-	SS91474 [^]	750

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

Add-on aux. Contact Block - MR



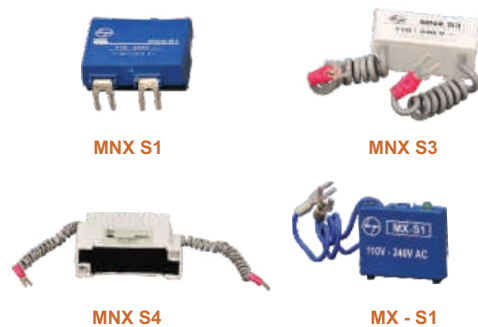
MR 1NO

Description	For Contactor	Contacts Type	Cat. No.	M.R.P. (₹) Per Unit
Top add-on single pole	MR	1 NO	CS94179 [^]	250

~ Standard Packing is 1 [^]Standard Packing is 10 ^{^^}Standard Packing is 20

Accessories - Surge Suppressors [8538]

For MX, MNX, MDX & MCX



For Contactor	Cat. No.	M.R.P. (₹) Per Unit	Std. Pkg. (Nos.)
MX 06 to MX 12 / MX 0 AC (S1)	CS94039 [*]	400	10
MNX 9 - 40 / MCX 01 - 04 (S1)	CS94166 [*]	405	10
MNX 50 - 80 / MCX 11 - 23 (S3)	CS94163 [*]	445	10
MNX 95 - 250 / MCX 32 - 34 (S4)	CS94164 [#]	1475	10
MNX 300 - 400 / MCX 41 - 44 (S6)	CS94165 [#]	1990	10
MDX 95 - 110	CS96571 ^{**}	415	10

Ordering Suffix * 110-240V: BOOO, 415V: DOOO ** : OOOO

110V: AOOO, 220-240V: BOOO, 360-525V: DOOO

MVO, MDX 9-80, MNX 550-650, MCX 45-47, MX DC & MX0 DC have built in surge suppressor

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

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



For Contactor	Cat. No.	M.R.P. (₹) Per Unit	Std. Pkg. (Nos.)
MX 06 to MX 12 / MX 0	CS94038	400	10
MO 9 - 110 [*]	CS94584	565	10
MDX 9 - 38	CS96572	470	1
MDX 50 - 110	CS96573	1445	1
MNX 9 - 40	CS94126	380	10
MNX 50 - 80	CS94197	2280	1
MNX 95 - 140	CS94198	3545	1
MNX 185 - 250	CS94199	4040	1
MNX 300 - 650	CS94200	4580	1
MCX 01 - 04	CS94126	380	10
MCX 11 - 13	ST50540	720	10
MCX 22 - 23	CS93095	3390	1
MCX 32 - 34	SS94992	3500	1
MCX 41 - 47	CS94301	5780	1

Note: 1) Ordering Suffix for Mechanical Interlock Kits : OOOO

2) * MO MIL Kit contains inbuilt 2 NC Contacts

3) Mounting of side add-on aux. contact block is not recommended for mechanically interlocked MCX 11/12/13 contactors

4) MIL kit for MNX 50-80 comes with 2 left & 2 right side add-on aux. contact blocks i.e. 4 NO + 4 NC

5) 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	390	10
MO 50 - 70 / MOC 40 - 60	CS94093	615	10
MO 80 - 110 / MOC 75 - 100	CS94094	895	1
MO 140 - 225	CS91057	2500	1
MO 250 - 300	CS90940	3900	1

Note:

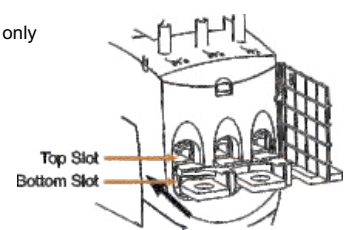
1) If using 16 sq mm cable for MO 45/MO C25 use of spreader link is mandatory

2) Spreader Link Kit consists of six terminals along with phase barrier (Not applicable for MO 250-300)

3) In MO C 30, MO C 60 & MO C 100 spreader link is included in packing

4) Ordering Suffix: OOOO

5) Insert spreader link in top slot only



Accessories - Connecting Links [8538]

DOL Starter - Link



DOL Starter



Contactor MPCB Link

Suitable For	Cat. No.	M.R.P. (₹) Per Unit	Std. Pkg. (Nos.)
MOG H1/S1 with MO 9-18	CS90396 #	315	10
MOG H1/S1 with MO 25-45	CS90391 #	315	10

Reversing DOL Starter - Link



RDOL Starter



Reversing Starter



Paralleling Link



Contactor MPCB Link

Suitable For	Cat. No.	M.R.P. (₹) Per Unit	Std. Pkg. (Nos.)
MOG H1/S1 with MO 9-18	CS90548 #	785	10
MOG H1/S1 with MO 25-45	CS90546 #	785	10

Star Delta Starter - Link



Star Delta Starter



Reversing / star delta Link



Paralleling Link



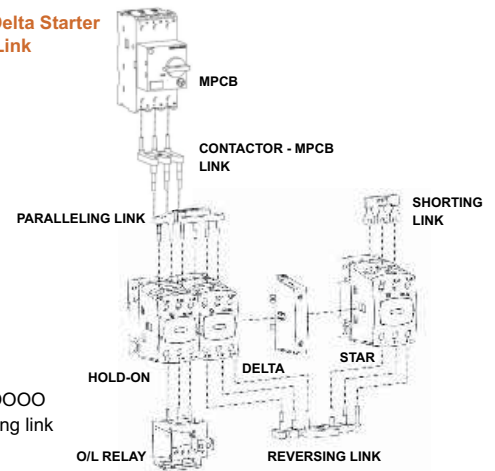
Contactor MPCB Link



Shorting Link

Suitable For	Cat. No.	M.R.P. (₹) Per Unit	Std. Pkg. (Nos.)
MOG H1/S1 with MO 9-18	CS90549 #	945	10
MOG H1/S1 with MO 25-45	CS90547 #	945	10

Example of Star Delta Starter Connection with Link



Ordering Suffix OOOO
For MPCB paralleling link refer page no.19

Accessories - Mechanical Latch [8538]

Mechanical Latch



Suitable For	Description	Cat. No.	M.R.P. (₹) Per Unit	Std. Pkg. (Nos.)
MO 9-70A, MO 0 control	Mechanical Latch	CS90136	2095	10

Features

- Keeps contactor in closed condition even after removal of coil supply
- Ideal for logical operations
- Suitable for sites where voltage fluctuation is frequent
- Saves energy as coil supply can be removed once contactor is picked up

For Ordering Suffix refer below table

Standard Coil Voltage of Mechanical Latch is 24V AC, 110V AC & 240V AC

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 50-80
60-110	A000	MDX 50-80
110-240	B000	MDX 50-80 & MO 140-300
240-415	D000	MO 140-300

Note:

1) * For MX DC, MDX, MX0 DC & MN0 DC

2) For other coil voltages please contact nearest branch office

Spare Contact Kit and Spare Coil



ML Spare Kits



ML Spare Coils

Spare Contact kit			Spare Coil	
Type	Cat. No.	M.R.P. (₹) Per Unit	Cat. No.	M.R.P. (₹) Per Unit
ML 1.5	SS95305 [^]	1845	SS90873 [^]	730
ML 2	SS95307 [^]	3005	SS90545 [^]	1225
ML 3	SS95309 [^]	5060		
ML 4	SS95311 [^]	7885	SS91258 [~]	2340
ML 6	SS95313 [^]	13885		
ML 10	SS95315 [~]	28280	SS91011 [~]	5270
ML 12	SS95317 [~]	32460		
MR	-	-	CS94102 [^]	505
MU16-2P	CS90217 [^]	220	CS90793 [^]	280
MU25-2P	CS90218 [^]	285		
MU40-2P	CS90219 [^]	420		
MO 0 AC	-	-	CS94841 [^]	475
MN 0 AC	-	-	SS94191 [^]	580
MN 0 DC	-	-	SS94651 [~]	1075

Note:

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

MO C Spare Coils		
Type	Cat. No.	M.R.P. (₹) Per Unit
MO C3 - 30	CS96317 [^]	525
MO C40 - 60	CS96318 [^]	1650
MO C75 - 100	CS96319 [^]	2805

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 [~]	580
ML 2/ ML 3	ST23866 [~]	790
ML 4/ ML 6	ST28735 [~]	1440
Combination coil with timer		
Type	Cat. No.	M.R.P. (₹) Per Unit
ML 2	SS90650 [~]	2730

Note :

- 1) Ordering Suffix for Spare Contact kit - OOOO
- 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 [^]	530	CS94841 [^]	475
	MO 12 (1 NO + 1 NC)	CS94844 [^]	685		
	MO 18 (1 NO + 1 NC)	CS94845 [^]	750		
	MO 9	CS96380 [~]	530	CS96317 [^]	525
	MO 12	CS96381 [^]	685		
	MO 18	CS96382 [~]	750		
	MO 25	CS96383 [~]	860		
	MO 32	CS96384 [~]	1765		
	MO 40	CS96385 [~]	2810		
	MO 45	CS96386 [~]	3300		
	MO 50	CS96387 [~]	3335		
	MO 60	CS96388 [~]	4190		
	MO 70	CS96389 [~]	4795		
	MO 80	CS96390 [~]	6470	CS96318 [^]	1650
	MO 95	CS96391 [~]	7645		
	MO 110	CS96392 [~]	9810	CS96319 [^]	2805
	MO 140	CS90357 [~]	13320		
	MO 185	CS90358 [~]	14940	CS90356 [~]	5880
	MO 225	CS90359 [~]	16970		
	MO 250	CS94444 [~]	19800	CS94442 [~]	8765
	MO 300	CS94443 [~]	23185		
	MO 140 (electronic coil)	CS90357 [~]	13320	CS90855 [~]	9980
	MO 185 (electronic coil)	CS90358 [~]	14940		
	MO 225 (electronic coil)	CS90359 [~]	16970	CS90738 [~]	10080
	MO 250 (electronic coil)	CS94444 [~]	19800		
	MO 300 (electronic coil)	CS94443 [~]	23185	CS90174 [~]	20000
	MVO	-	-		
MNX Contactors	MNX 9	CS94123 [^]	530	CS94105 [^]	475
	MNX 12	CS94124 [^]	685		
	MNX 18	CS94125 [^]	750		
	MNX 22	CS94269 [^]	770		
	MNX 25	CS94127 [^]	860		
	MNX 32	CS94128 [^]	1765		
	MNX 40	CS94147 [^]	2810		
	MNX 50	CS94150 [^]	3335		
	MNX 70	CS94151 [^]	4795	CS94192 [^]	1650
	MNX 80	CS94152 [^]	6470		
	MNX 95	CS94153 [~]	7645	CS94196 [~]	2805
	MNX 110	CS94154 [~]	9810		
	MNX 140	CS94155 [~]	13320	CS94194 [~]	5880
	MNX 185	CS94156 [~]	14940		
	MNX 225	CS94157 [~]	16970	CS94195 [~]	8765
	MNX 250	CS90310 [~]	19800		
	MNX 300	CS90283 [~]	23185	CS94193 [~]	17430
	MNX 400	CS94161 [~]	31895		
	MNX 550	CS94162 [~]	42055	CS94195 [~]	8765
	MNX 650	CS96336 [~]	65095		
MCX Contactors	MCX 01-04	-	-	CS94105 [^]	475
	MCX 11	CS94077 [^]	1715	CS94009 [^]	515
	MCX 12	CS94078 [^]	3110		
	MCX 13	CS90307 [^]	4340		
	MCX 22	CS94331 [~]	5380	ST91291 [~]	1500
	MCX 23	CS90078 [~]	6595		
	MCX 32	CS94082 [^]	9930	CS94196 [~]	2805
	MCX 33	CS94083 [^]	12725		
	MCX 34	CS94084 [^]	13800	CS94195 [~]	8765
	MCX 41	CS94295 [~]	24320		
	MCX 42	CS94296 [~]	30255	CS94193 [~]	17430
	MCX 43	CS94297 [~]	33935		
	MCX 44	CS94298 [~]	41570	CS94193 [~]	17430
	MCX 45	CS94299 [~]	44815		
	MCX 46	CS94300 [~]	51565	CS94193 [~]	17430
	MCX 47	CS90308 [~]	66475		

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

Type MN - Suitable for MNX Contactor

Features

- Available in 3 frame sizes from 0.2-570 A
- Ambient temperature compensated up to 55°C
- Built-in Single Phasing protection
- Manual and auto reset mode



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	SS941410OEO	1380	10
	0.3 - 0.5	SS941410OGO	1380	10
	0.45 - 0.75	SS941410OJO	1380	10
	0.6 - 1	SS941410OKO	1380	10
	0.9 - 1.5	SS941410OMO	1390	10
	1.4 - 2.3	SS941410OPO	1390	10
	2 - 3.3	SS941410OQO	1390	10
	3 - 5	SS941410OSO	1390	10
	4.5 - 7.5	SS941410OUO	1390	10
	6 - 10	SS941420OVO	1390	10
	9 - 15	SS941420OBO	1410	10
	14 - 23	SS941440ODO	1540	10
	20 - 33	SS941450OEO	2290	10
	24 - 40	SS941450OFO	2375	10
MN 5 (Directly Operated)	Direct Mounting on MNX 50 - 80			
	9 - 15	SS941350OBO	2765	10
	14 - 23	SS941350ODO	2765	10
	20 - 33	SS941360OEO	2790	10
	30 - 50	SS941360OGO	3275	10
	36 - 60	SS941360OTO	3730	10
	45 - 75	SS941370OJO	4080	10
	66 - 110	SS941370OKO	4655	10
MN 12 (CT Operated)	Separate Mounting			
	28 - 46.5	SB942110OGO	7035	1
	42 - 69	SS941380OHO	7035	1
	60 - 100	SS941380OKO	7035	1
	90 - 150	SS941380OMO	7035	1
	135 - 225	SS941380OPO	8720	1
	180 - 300	SS941390OQO	9175	1
	270 - 450	SS941390ORO	10995	1
MN 12L # (CT Operated)	Separate Mounting			
	42 - 69	SS941270OHO	18250	1
	60 - 100	SS941270OKO	18250	1
	90 - 150	SS941270OMO	18250	1
	135 - 225	SS941270OPO	18250	1
	180 - 300	SS941270OQO	18250	1
	340 - 570	SS941270OSO	18250	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



RTO 1



RTO 2



RTO 3



RTO 4

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	CS963550OFO	1670	10
	0.31 - 0.55	CS963550OGO	1670	10
	0.55 - 0.85	CS963550OJO	1670	10
	0.78 - 1.2	CS963550OLO	1670	10
	1.2 - 2.0	CS963550ONO	1670	10
	1.9 - 2.8	CS963550OPO	1680	10
	2.4 - 3.6	CS963550OQO	1680	10
	3.5 - 5.2	CS963550OSO	1680	10
	4.6 - 6.7	CS963550OTO	1680	10
	6.7 - 9.7	CS963550OVO	1680	10
	8.5 - 12.5	CS963550OAO	1740	10
	12.5 - 18.5	CS963560OCO	1740	10
	17 - 25.5	CS963560ODO	1920	10
	25 - 37	CS963560OEO	2905	10
	35 - 45	CS963560OGO	2965	10
RTO - 2 (Directly Operated)	Direct Mounting on MO 50 - 70			
	5 - 7.5	CS963660OUO	3380	1
	7 - 11	CS963660OVO	3380	1
	10.5 - 16	CS963660OBO	3380	1
	15 - 21	CS963660OCO	3380	1
	20 - 31	CS963660OEO	3560	1
	30 - 43	CS963660OFO	3940	1
	40 - 57	CS963660OSO	4765	1
	50 - 75	CS963670OJO	5210	1
RTO - 3 (Directly Operated)	Direct Mounting on MO 80 - 110			
	23 - 30	CS908730OEO	5455	1
	29 - 38	CS963030OQO	5665	1
	37 - 49	CS963040OGO	5845	1
	47 - 62	CS963120OTO	5955	1
	60 - 78	CS963130OJO	7015	1
	75 - 110	CS963140OKO	7965	1
RTO - 4 (CT Operated)	Separate Mounting			
	23.4 - 36	CS970960OGO	9050	1
	36 - 60	CS970960OJO	9050	1
	57 - 84	CS970960OKO	9050	1
	72 - 108	CS970960OLO	9050	1
	105 - 156	CS970960OMO	9050	1
	138 - 201	CS970960ONO	11215	1
	201 - 291	CS970960OQO	11460	1
	255 - 375	CS970960ORO	14150	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	CS96357OOF0	940	10
	0.45-0.78	CS96357OOJO	940	10
	0.78-1.2	CS96357OOL0	940	10
	1.2-1.9	CS96357OONO	940	10
	1.8-2.8	CS96357OOP0	940	10
Direct Mounting on MX Contactors	2.6-3.6	CS96357OOQ0	940	10
	3.6-5.2	CS96357OOSO	940	10
	4.8-7	CS96357OOT0	940	10
	6.4-9.7	CS96357OOVO	940	10
	8.2-12.1	CS96357OOAO	940	10

Type ML



Type of Mounting (Operation)	Relay Range (A)	Cat. No.	M.R.P. (₹) Per Unit	Std. Pkg. (Nos.)
ML 1 (Directly Operated)	Direct Mounting on ML 1.5 Contactors			
	0.15 - 0.25	SS91858OOD0	2300	10
	0.25 - 0.4	SS91858OOF0	2300	10
	0.4 - 0.65	SS91858OOHO	2300	10
	0.6 - 1	SS91858OOK0	2300	10
	1 - 1.6	SS91858OOM0	2300	10
	1.5 - 2.5	SS91858OOP0	2300	10
	2.5 - 4	SS91858OORO	2300	10
	4 - 6.5	SS91858OOT0	2300	10
	6 - 10	SS91858OOVO	2300	10
	10 - 16	SS91858OOBO	2300	10
ML 2 / ML 3 (Directly Operated)	Direct Mounting on ML 2/3 Contactors			
	9 - 14	SS91859OOAO	3395	10
	13 - 21	SS91859OOCO	3395	10
	20 - 32	SS91859OOEO	3395	10
	28 - 42	SS91859OOF0	3395	10

Type MU-2P (2 Pole)



Type of Mounting (Operation)	Relay Range (A)	Cat. No.	M.R.P. (₹) Per Unit	Std. Pkg. (Nos.)	Type of Mounting (Operation)	Relay Range (A)	Cat. No.	M.R.P. (₹) Per Unit	Std. Pkg. (Nos.)
Direct Mounting on MU-2P Contactor	MU 2P (2 Pole)				Direct Mounting on MU-2P Contactor	MU 2P (2 Pole)			
	1 - 1.6A	CS90207OOM0	510	1		11 - 18A	CS90207OOCO	580	1
	1.5 - 2.5A	CS90207OOP0	510	1		13 - 22A	CS90207OOD0	580	1
	2.5 - 4A	CS90207OORO	510	1		16 - 26A	CS90207OOBO	580	1
	4 - 6.5A	CS90207OOT0	510	1		20 - 32A	CS90207OOEO	735	1
	6 - 10A	CS90207OOVO	510	1		26 - 40A	CS90207OOF0	735	1
	9 - 14A	CS90207OOAO	510	1					

Accessories for Thermal Overload Relays [8538]

Accessories for Thermal Overload Relays



Relay Mounting Kit Kit for Mounting MN5 Relay Din Rail Mounting Kit MN2 Relay

Description	Cat. No.	M.R.P. (₹) Per Unit	Std. Pkg. (Nos.)
Push button extn. unit for MN 2 Relays	SS94968OOOO	50	100
Kit for Mounting MN 2 Relay on ML 1.5 contactor	SS94701OOOO	185	50
Kit for Mounting MN 2 Relay separately (Direct Mounting Type)	SS94700OOOO	185	50
Kit for Mounting MN 5 Relay on MNX 95 / 110 / 140 contactor	SS94638OOOO	295	20
Kit for Mounting MN 5 Relay on ML 2 / ML 3 contactor	SS94151OOOO	195	20
Kit for Mounting MN5 Relay on ML 4 / ML 6 contactor	SS94152OOOO	260	20
DIN Rail Mounting Kit Relay on MN 2 Relay	SS91887OOOO	140	50

Relay Reset Cord for MN & RTO relay



400 mm 650 mm 900 mm 1200 mm

Description	Cat. No.	M.R.P. (₹) Per Unit	Std. Pkg. (Nos.)
MN Relay reset cord - 400mm	SB94207OOOO	670	1
MN Relay reset cord - 650mm	SB94208OOOO	695	1
MN Relay reset cord - 900mm	SB94209OOOO	715	1
MN Relay reset cord - 1200mm	SB94210OOOO	800	1
RTO Relay reset cord - 400mm	CS90941OOOO	670	1
RTO Relay reset cord - 650mm	CS90942OOOO	695	1
RTO Relay reset cord - 900mm	CS90943OOOO	715	1
RTO Relay reset cord - 1200mm	CS90944OOOO	800	1

Separate Mounting Kit for RTO Relay



Description	Cat. No.	M.R.P. (₹) Per Unit	Std. Pkg. (Nos.)
RTO-1 Relay Separate Mounting Kit	CS96335OOOO	250	1
RTO-2 Relay Separate Mounting Kit	CS96306OOOO	590	1
RTO-3 Relay Separate Mounting Kit	CS96307OOOO	840	1

Electronic Motor Protection Relay [8536]

Type REO - Direct Mounting on MO Contactor

Features

- Protections:
 - Overload
 - Single Phasing, Phase unbalance
 - Locked Rotor
 - Earth Fault in REO 1.1G
- Trip indication
- Selectable Trip class - 10A, 10, 20, 30 as per IEC 947-4-1



To Experience the Benefits of REO Electronic Overload Relay



Click or Scan

Model	Type of Mounting	Relay Range (A)	REO 1.1/4		REO 1.1G/4G (With in built earth fault protection)		Std. Pkg. (Nos.)
			Cat. No.	M.R.P. (₹) Per Unit	Cat. No.	M.R.P. (₹) Per Unit	
REO 1.1/1.1G	Direct Mounting on MO 9-45	0.15-0.75	CS9041800JO	3960	CS9042300JO	7300	10
		0.6-3	CS9041800QO	3960	CS9042300QO	7300	10
		2.4-12	CS9041800LO	3960	CS9042300LO	7300	10
		9-45	CS9041800GO	4455	CS9042300GO	7550	10
REO 4/4G	Separate Mounting	18-90	CS9041800UO	14000	CS9042300UO	15500	1
		72-360	CS9041800RO	22000	CS9042300RO	22300	1

Accessories for REO - Electronic Overload Relay

Description	Cat. No.	M.R.P. (₹) Per Unit	Std. Pkg. (Nos.)
REO Relay Reset Cord - 400mm	CS904250000	670	1
REO Relay Separate Mounting Kit	CS963350000	250	1

MPR200nX Electronic Motor Protection Relay



- Protections:
 - Overload
 - Locked Rotor
 - Single Phasing, Current Unbalance, Phase Sequence Reversal
 - Under Current
- Inbuilt CT's (1 A to 88 A)
- Trip indication
- Test facility
- Selectable trip class - 10A, 10, 20 and 30 as per IEC 947-4-1

MPR300 Electronic Motor Protection Relay With in-built Earth Fault Protection



- Protections:
 - Overload
 - Earth Fault
 - Locked Rotor
 - Single Phasing, Current Unbalance, Phase Sequence Reversal
 - Under Current
- Inbuilt CT's (1 A to 88 A)
- Trip indication
- Test facility
- Selectable trip class - 10A, 10, 20 and 30 as per IEC 947-4-1

Model	Aux. supply	Thermal O/L Range (A)	Device Code	Cat. No.	M.R.P. (₹) Per Unit
MPR200nX	240V AC	1 - 2.75	49, 51LR, 37, 46,	MPR200BE010	3200
		2 - 5.5		MPR201BE020	3200
		4 - 11		MPR202BE040	3900
		8 - 22		MPR203BE080	3900
		16 - 44		MPR204BE160	4600
		32 - 88		MPR205BE320	4600
	110V AC	1 - 2.75		MPR200BB010	3200
		2 - 5.5		MPR201BB020	3200
		4 - 11		MPR202BB040	3900
		8 - 22		MPR203BB080	3900
		16 - 44		MPR204BB160	4600
		32 - 88		MPR205BB320	4600

Model	Aux. supply	Thermal O/L Range (A)	Device Code	Cat. No.	M.R.P. (₹) Per Unit
MPR300	240V AC	1 - 2.75	49, 51LR, 64, 37, 46,	MPR300BE010	6800
		2 - 5.5		MPR301BE020	6800
		4 - 11		MPR302BE040	7500
		8 - 22		MPR303BE080	7500
		16 - 44		MPR304BE160	8200
		32 - 88		MPR305BE320	8200
	110V AC	1 - 2.75		MPR300BB010	6800
		2 - 5.5		MPR301BB020	6800
		4 - 11		MPR302BB040	7500
		8 - 22		MPR303BB080	7500
		16 - 44		MPR304BB160	8200
		32 - 88		MPR305BB320	8200

Note : MPR200nX/ MPR300 must sense Line current in case of Star-Delta Starter.

Electronic Motor Protection Relay [8536]

New

MPR300 with Fail safe logic

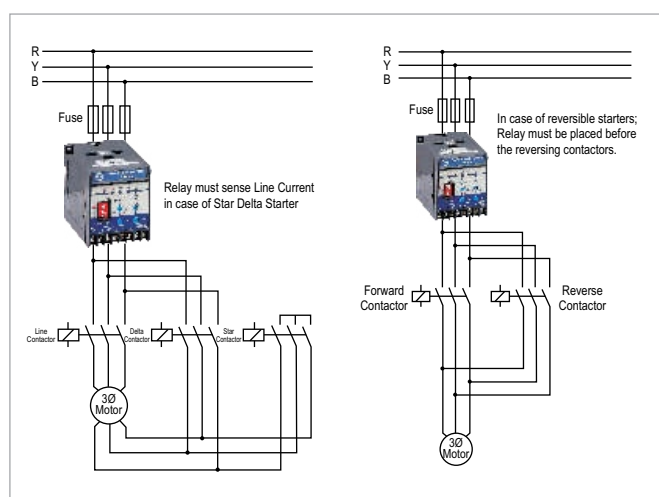
MPR300 with Fail safe logic will trip the Motor in case of Aux. supply failure



Model	Aux. Supply	Thermal Over load range	Device Code	Cat. No.	M.R.P. (₹) Per Unit
MPR300	240 VAC	1 - 2.75	49, 51LR, 64, 37, 46	MPR300BF010	6800
		2 - 5.5		MPR301BF020	6800
		4 - 11		MPR302BF040	7500
		8 - 22		MPR303BF080	7500
		16 - 44		MPR304BF160	8200
		32 - 88		MPR305BF320	8200

Note : MPR300 must sense line current in case of Star-Delta Starter.

MPR200nX / MPR300 Application Diagram



MPR200nX / MPR300 Trip Time Characteristics

Trip class	Trip time delay		
	I = 120% of Im	I = 150% of Im	I = 720% of Im
10A	< 2 hours	< 2 min	2 - 10 secs
10	< 2 hours	< 4 min	4 - 10 secs
20	< 2 hours	< 6 min	6 - 20 secs
30	< 2 hours	< 12 min	9 - 30 secs

Im - Motor Full Load Current

I - Actual current drawn by the Motor

Compact Motor Protection Relay - MM10

Features:

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



Model	Aux. Supply	CT secondary	Device code	Cat. No.	M.R.P. (₹) Per Unit
MM10	110 - 240 V AC / DC	5 Amp	37, 46, 49, 50 / 51, 51LR, 64	MM10240E005	22000

New

MC2 - 30M / MC2 - 30MW

Comprehensive Motor Protection Relay for Medium and Large Sized Induction Motors

- Modbus RTU / IEC870-5-103 Communication Protocol
- MC2-30M offers Current based protections whereas, MC2-30MW offers Current + Voltage based protections



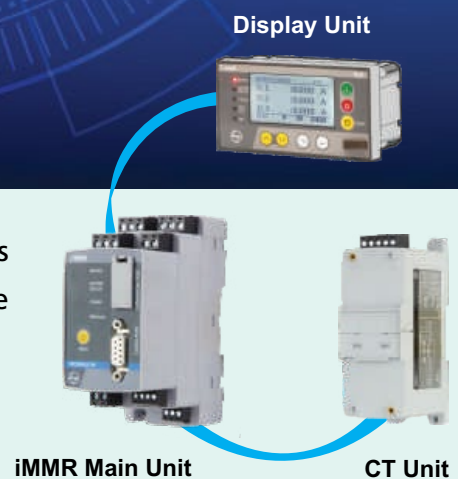
Product	Aux. Supply	CT Secondary	Cat. No.	M.R.P. (₹) Per Unit
MC2-30M	24 to 110VAC/DC	1 / 5 Ampere Site selectable	MC230MAOOO	90000
	80 to 220VAC/DC		MC230MBOOO	90000
MC2-30MW	24 to 110VAC/DC		MC230MWAOO	100000
	80 to 220VAC/DC		MC230MWBOO	100000

Your partner in digital transformation



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"



Intelligent MCC's for enhanced plant efficiency and safety

TI - Motor Control Center

- Modular MCC's designed as per IEC 61439-1 & 2
- Internal arc resistance design of 70kA- 500msec.

Customer Interaction Center (CIC)

BSNL / MTNL (toll free): 1800 233 5858 Reliance (toll free): 1800 200 5858
Tel: 022 6774 5858 Email: cic@Lntebg.com Web: www.Lntebg.com



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

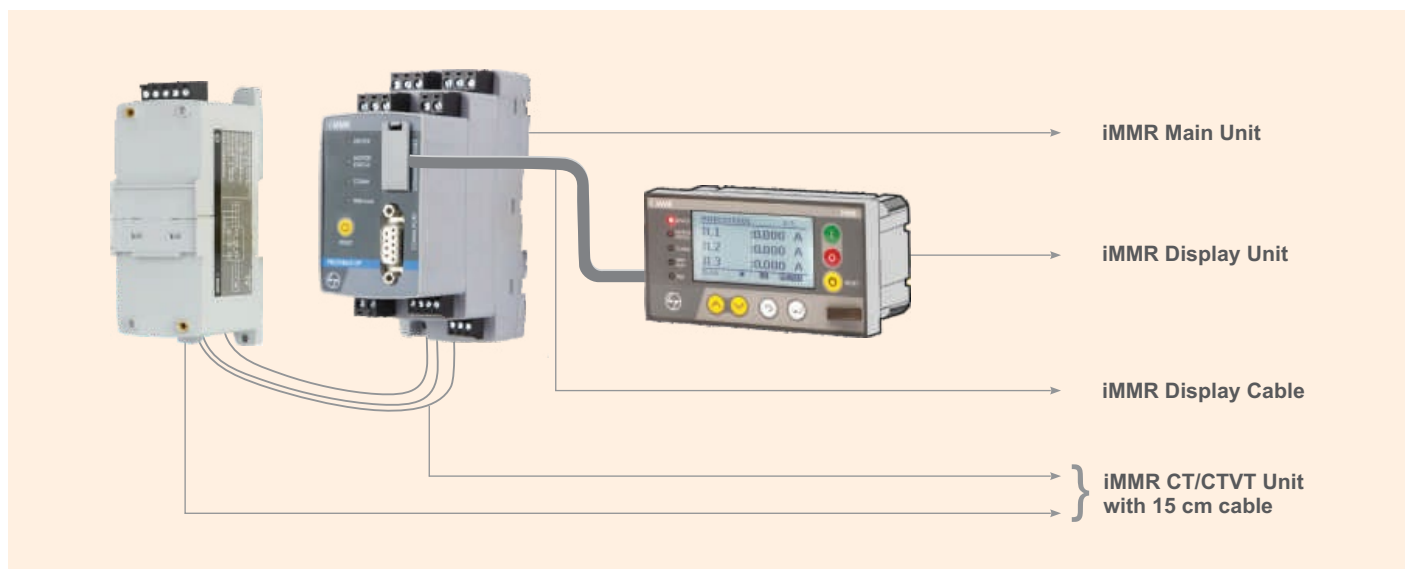
"Besides control, protection and diagnostics, iMMR provides accurate real time data for analytics and insights into the performance of plant and process"

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
- Modbus RTU, Profibus-DP protocol for Seamless integration with SCADA

Product	Description	Cat. No.	M.R.P. (₹) Per Unit
iMMR Main Unit	iMMR MODBUS RTU 85-265 VAC/DC	CS912440000	15000
	iMMR PROFIBUS 85-265 VAC/DC	Available On Request	
CT Unit / CT+VT Unit	CT1 (0.3-3A) with 15 cm cable	CS912450000	4500
	CT2 (2.5-25A) with 15 cm cable	CS912460000	4500
	CT1 (0.3-3A) + VT with 15 cm cable	CS912490000	7000
	CT2 (2.5-25A) + VT with 15 cm cable	CS912500000	7000
Display Unit	iMMR Display unit without cable	CS912530000	10000
	iMMR Display Cable - 1 meter	XK131280000	800
	iMMR Display Cable - 2 meter	XK131290000	1200
Optional CT Cable	iMMR CT / CTVT Cable - 0.5 meter	Available On Request	

Selection Guide



Motor Protection Circuit Breakers [8536]

Rocker Type

- MOG-S1: upto 32A
- Short circuit + Overload protection
- Icu=100kA upto 10A, Icu=50kA for 13A & Icu=25kA for 16-32A

Rotary Type

- MOG-H1M: upto 32A
- MOG-H2M: 32A-63A
- Short circuit protection
- Icu=100kA upto 13A & Icu=50kA from 16A-63A

Rotary Type

- MOG-H1: upto 32A
- MOG-H2: 32A-63A
- Short circuit + Overload protection
- Icu=100kA upto 13A & Icu=50kA from 16A-63A

✓ Short circuit protection

✓ Over current protection

✓ Overload protection

✓ Phase loss protection

✓ Wide range of current adjustment dial

✓ Ambient temperature compensation

Circuit Breaker

Thermal Overload Relay

MPCB

✓ 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

MPCB
Overload + Short circuit protection

Contactor

Motor

No separate OLR - Saves cost of OLR

Type MOG-S1 (Rocker Type)

With short circuit & overload protection



Type MOG-H1 (Rotary Type) - Frame1

With short circuit & overload protection



Rating (A)	Recommended Motor Rating at 415V, 3-Ph, 50Hz (KW)	Thermal Release range (A)	Instantaneous Trip Current (A)	Cat. No.	M.R.P. (₹) Per Unit	Std. Pkg. (Nos.)
0.16	-	0.1 - 0.16	2.1	ST418890000	2320	1
0.25	0.06	0.16 - 0.25	3.3	ST418900000	2320	1
0.40	0.09	0.25 - 0.40	5.2	ST418910000	2320	1
0.63	0.12	0.40 - 0.63	8.2	ST418920000	2630	1
1.00	0.25	0.63 - 1.00	13	ST418930000	2630	1
1.60	0.55	1.00 - 1.60	20.8	ST418940000	2650	1
2.50	0.75	1.60 - 2.50	32.5	ST418950000	2650	1
4.00	1.50	2.50 - 4.00	52	ST418960000	2745	1
6.30	2.20	4.00 - 6.30	81.9	ST418970000	2745	1
10.00	4.00	6.30 - 10.00	130	ST418980000	2935	1
13.00	5.40	9.00 - 13.00	169	ST418990000	3305	1
16.00	7.50	11.00 - 16.00	208	ST419000000	3575	1
20.00	9.00	14.00 - 20.00	260	ST419010000	3765	1
25.00	12.50	19.00 - 25.00	325	ST419020000	3960	1
32.00	15.00	24.00 - 32.00	416	ST419030000	6910	1

Breaking capacity: Icu = 100kA upto 10A, Icu = 50kA for 13A & Icu = 25kA for 16-32A

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	3035	1
0.25	0.06	0.16 - 0.25	3.3	ST419050000	3035	1
0.40	0.09	0.25 - 0.40	5.2	ST419060000	3035	1
0.63	0.12	0.40 - 0.63	8.2	ST419070000	3390	1
1.00	0.25	0.63 - 1.00	13	ST419080000	3390	1
1.60	0.55	1.00 - 1.60	20.8	ST419090000	3495	1
2.50	0.75	1.60 - 2.50	32.5	ST419100000	3495	1
4.00	1.50	2.50 - 4.00	52	ST419110000	3565	1
6.30	2.20	4.00 - 6.30	81.9	ST419120000	3595	1
10.00	4.00	6.30 - 10.00	130	ST419130000	3830	1
13.00	5.40	9.00 - 13.00	169	ST419140000	4245	1
16.00	7.50	11.00 - 16.00	208	ST419150000	4525	1
20.00	9.00	14.00 - 20.00	260	ST419160000	5025	1
25.00	12.50	19.00 - 25.00	325	ST419170000	5125	1
32.00	15.00	24.00 - 32.00	416	ST419180000	8320	1

Breaking capacity: Icu = 100kA upto 13A & Icu = 50kA from 16A - 32A

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

Motor Protection Circuit Breakers [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	ST4192300000	2725	1
0.25	0.06	3.3	ST4192400000	2725	1
0.40	0.09	5.2	ST4192500000	2725	1
0.63	0.12	8.2	ST4192600000	3140	1
1.00	0.25	13	ST4192700000	3140	1
1.60	0.55	20.8	ST4192800000	3140	1
2.50	0.75	32.5	ST4192900000	3140	1
4.00	1.50	52	ST4193000000	3170	1
6.30	2.20	81.9	ST4193100000	3170	1
10.00	4.00	130	ST4193200000	3295	1
13.00	5.40	169	ST4193300000	3295	1
16.00	7.50	208	ST4193400000	3295	1
20.00	9.00	260	ST4193500000	3340	1
25.00	12.50	325	ST4193600000	3735	1
32.00	15.00	416	ST4193700000	6140	1

Breaking capacity: Icu = 100kA upto 13A & Icu = 50kA from 16A - 32A

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	ST4191900000	9615	1
40.00	20.00	28.00 - 40.00	520	ST4192000000	10705	1
50.00	25.00	35.00 - 50.00	650	ST4192100000	13230	1
63.00	34.00	45.00 - 63.00	819	ST4192200000	13590	1

Breaking capacity: Icu = 50kA from 32A - 63A

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	ST4193800000	9240	1
40.00	20.00	520	ST4193900000	9415	1
50.00	25.00	650	ST4194000000	9635	1
63.00	34.00	819	ST4194100000	9810	1

Breaking capacity: Icu = 50kA from 32A - 63A

Accessories for MOG [8538]



Short Circuit Alarm



Auxiliary + Alarm



Extended Rotary Handle



Shunt Trip

Mounting Position *	Description	Cat. No.	M.R.P. (₹) Per Unit	Std. Pkg. (Nos.)
F1/F2	Auxiliary Contact Front mtg. 1NO	ST4194200000	450	10
F1/F2	Auxiliary Contact Front mtg. 1NC	ST4194300000	450	10
L	Auxiliary Contact Left side mtg. 2NO	ST4194400000	625	1
L	Auxiliary Contact Left side mtg. 1NO + 1NC	ST4194500000	625	1
L	Auxiliary Contact Left side mtg. 2NC	ST4194600000	625	1
F2	Trip Alarm Contact Front mtg. 1NO	ST4194700000	805	10
F2	Trip Alarm Contact Front mtg. 1NC	ST4194800000	805	10
L	Auxiliary + Alarm Left side mtg. 2NO	ST4194900000	860	1
L	Short circuit alarm Left side mtg. 1NO + 1NC	ST4195000000	860	1
R	Shunt trip 24V DC	ST4195100000	1650	1
R	Shunt trip 110V, 50Hz	ST4195200000	1740	1
R	Shunt trip 230V, 50Hz	ST4295200000	1740	1
R	Under Voltage release, 110V, 50Hz	ST4195300000	1740	1
R	Under Voltage release, 415V, 50Hz	ST4195400000	1740	1
-	External operating handle, (Black) Frame 1	ST4195500000	1000	1
-	External operating handle, (Black) Frame 2	ST4195600000	1000	1

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



MPCBs with bus bar connection



Connecting Busbar link



3 Phase Feed in terminal

Description	Cat. No.	M.R.P. (₹) Per Unit	Std. Pkg. (Nos.)
Connecting Busbar link			
2 MPCB 45 mm width w/o acc	ST4195700000	505	5
3 MPCB 45 mm width w/o acc	ST4195800000	555	5
4 MPCB 45 mm width w/o acc	ST4195900000	600	5
5 MPCB 45 mm width w/o acc	ST4196000000	650	5
2 MPCB 45 mm width with one acc 9 mm	ST4196100000	590	5
3 MPCB 45 mm width with one acc 9 mm	ST4196200000	640	5
4 MPCB 45 mm width with one acc 9 mm	ST4196300000	685	5
5 MPCB 45 mm width with one acc 9 mm	ST4196400000	735	5
2 MPCB 55 mm width w/o acc	ST4196600000	920	1
3 MPCB 55 mm width w/o acc	ST4196700000	1050	1
4 MPCB 55 mm width w/o acc	ST4196800000	1260	1
2 MPCB 55 mm width with one acc 9 mm	ST4196900000	1005	1
3 MPCB 55 mm width with one acc 9 mm	ST4197000000	1135	1
4 MPCB 55 mm width with one acc 9 mm	ST4197100000	1345	1
2 MPCB 55 mm width with two acc 18 mm	ST4197200000	1175	1
4 MPCB 55 mm width with two acc 18 mm	ST4197300000	1305	1
Feed in terminal for 45 mm width Busbar	ST4196500000	590	1
Feed in terminal for 55 mm width Busbar	ST4197400000	1020	1
Bus bar safety cover 45 mm width Busbar	ST4197500000	255	10
Bus bar safety cover 55 mm width Busbar	ST4197600000	275	10

acc: Accessories



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**Modular Remote
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**Digital Panel
Meters**

For Cam operated Rotary switches, Cable ducts, Load break switches, Timers, Time switches, Supply monitors, Ø22.5 mm range of Modular remote control & Indicating units please refer Panel Accessories Price List.

For Digital Panel Meter details please refer Pg.72

Customer Interaction Center (CIC)

BSNL / MTNL (toll free): 1800 233 5858 Reliance (toll free): 1800 200 5858
Tel: 022 6774 5858 Email: cic@Lntebg.com Web: www.Lntebg.com

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



MN 45



ML 3

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	3640	1
15.0	11.0	14 - 23	MN 25 DOL	SS94352	5565	1
20.0	15.0	20 - 33	MN 32 DOL	SS94353	8980	1
30.0	22.5	30 - 50	MN 45 DOL	SS94017	15360	1
45.0	33.5	45 - 75	MN 65 DOL	SS94018	21030	1
30.0	22.5	28 - 42	ML 3 DOL	SS90722	18875	1

Fully Automatic Star-Delta Starters [8536]



MN 16F

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	12260	1
30.0	22.5	14 - 23	MN 25 FASD	SS94364	13710	1
40.0	30.0	20 - 33	MN 32 FASD	SS94366	22555	1
50.0	37.5	30 - 50	MN 45 FASD	SS94021	36225	1
75.0	55.0	45 - 75	MN 65 FASD	SS94022	60025	1
90.0	67.5	45 - 75	MN 80 FASD	SS94705	65615	1
150.0	110.0	66 - 110	MN 110 FASD	SS94706	85885	1
180.0	132.0	90 - 150	MN 140 FASD	SS94707	89900	1
50.0	37.5	28 - 42	ML3 FASD	SS90730	45505	1
75.0	55.0	45 - 75	ML4 FASD	SS90913	77985	1
125.0	90.0	66 - 110	ML6 FASD	SS90923	127865	1

Spares for MN Starters [8538]

Description	Cat. No.	M.R.P. (₹) Per Unit	Std. Pkg. (Nos.)
Bracket for Mounting cont. MNX 25 - 32	SS940300000	115	20
MN DOL/FASD Push Button	SS939410000	195	10

Timers

Electronic Timers Type ST 100 [9107]



ST 100

Description	Cat. No.	M.R.P. (₹) Per Unit	Std. Pkg. (Nos.)
240 / 360 / 415V, 50Hz for			
3 - 30 secs.	ST803280000	1575	1
12 - 120 secs.	ST803290000	1575	1

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

Ordering Suffix for ML & MN Starters

Coil Voltages	Relay Range (A)	
	ML	MN
B - 240 V	A : 9 - 14	B : 9 - 15
C - 360 V	B : 10 - 16	D : 14 - 23
D - 415 V	C : 13 - 21	E : 20 - 33
P - 440 V	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	

DIGITAL SINGLE PHASE CONTROLLER

The power of flexibility and versatility



Basic version

FEATURES

Auto version

Microcontroller Based Solution

Dry Run Protection

UV/OV Protection

Current, Voltage Metering

& Periodic Display

Start & Run Capacitor

Bypass Mode (For bore cleaning)

Off Timer

Digital Display

Capacitor cut-off

Water Tank Status Indication

Automatic Current Setting

All features of Basic Version

Inbuilt Water Level Controller

Water tank status indication

WLC bypass feature

Auto start capacitor switching

Power on delay

Dry run auto reset timer

Auto & Manual mode

RTC based daily ON/OFF timer

Timer count down display

Cyclic timer

Timer Compensation

• Refer Agricultural Electrical Product Pricelist for Agricultural Electrical Product Range



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Digital Enabled Smart Agriculture



- * **Digital Products for effective monitoring & remote operation**
- * **Agri products for all seasons and all crops**
- * **Complete protection from all faults**
- * **Maintenance free product life**

Enclosed Automatic Transfer Switch

Automatic Solution | Pre-wired | Flexible Settings



Switch to **ATS**

Now, experience seamless transfer between two power sources...



Convenience

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



Performance

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



Flexibility

- Priority Source Selection
- Adjustable Time Delay(0.1sec 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	CK90161BSOO	65540	1
Enclosed ATS, Frame 2, 160A	160A	CK90162BSOO	69090	1
Enclosed ATS, Frame 2, 200A	200A	CK90163BSOO	74200	1
Enclosed ATS, Frame 3, 250A	250A	CK90164BSOO	87870	1
Enclosed ATS, Frame 3, 315A	315A	CK90165BSOO	93990	1
Enclosed ATS, Frame 4, 400A	400A	CK90166BSOO	105140	1
Enclosed ATS, Frame 4, 630A	630A	CK90167BSOO	122130	1

Chapter ID [8537]

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



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On Load Changeover Switch - Disconnectors [8536]

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



Manual CO with fuse mounting kit*

Features offered by Motorised Changeover

- Range 125 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	63	CO1-63	CO106300000	4770	CO106300S00	6860	-	-	1
	63	CO1-63	CO10630000D ▲	4600			-	-	-
	100	CO1-100	CO110000000	6350			-	-	1
	100	CO1-100	CO11000000D ▲	6030			-	-	-
	125	CO1-125	CO112500000	7840			-	-	1
Fr 2	125	CO2-125	CO212500000	9920	CO212500S00	13350	CK90161B000	32310	1
	160	CO2-160	CO216000000	10340	CO216000S00	14230	CK90162B000	36990	1
	200	CO2-200	CO22000000A	12550	CO220000S00	16450	CK90163B000	38490	1
Fr 3	250	CO3-250	CO325000000	18160	CO325000S00	22870	CK90164B000	48550	1
	315	CO3-315	CO331500000	19480	CO331500S00	24660	CK90165B000	50770	1
Fr 4	400	CO4-400	CO440000000	27920	CO440000S00	35270	CK90166B000	62240	1
	630	CO4-630	CO463000000	32420	CO463000S00	40880	CK90167B000	68190	1
Fr 5	630	CO5-630 ^α	CO563000000 ^α	37730	-	-	CK90168B000	74110	1
	800	CO5-800	CO580000000	46800	CO580000S00	65000	CK90169B000	101790	1
	1000	CO5-1000	CO510000000	83590	CO510000S00	108150	CK90170B000	132310	1
Fr 6	1250	CO6-1250	CO612500000	111020	-	-	CK90081B000	163460	1
	1600	CO6-1600	CO616000000	131290	-	-	CK90082B000	197160	1
	2000	CO6-2000	CO620000000	178670	-	-	CK90083B000	231220	1

▲ Direct handle version # Sheet Steel Enclosure version is with CO with extended handle
^α Fuse mounting kit CX563000000 is suitable for mounting on CO5-630 Changeover Switch

* Fuse mounting kit to be purchased separately. Refer below table

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	360	1
	CO2-(125-200A)	CX200020000	670	1
	CO3-(250-315A)	CX300020000	960	1
	CO4-(400-630A)	CX400020000	1020	1
	CO5-(630-1000A)	CX500020000	1160	1
	CO6-(1250-2000A)	CX600020000	1280	1
Operating Handle Kit (handle + shaft + center bush + bush clip)	CO1-(63-125A)	CX100010000	580	1
	CO2-(125-200A)	CX300010000	1140	1
	CO3-(250-315A)	CK903920000	1270	1
	CO4-(400-630A)	CX400010000	1300	1
	CO5-(630-1000A)	CX500010000	1400	1
Operating Handle	CO6-(1250-2000A)	CX600010000	1590	1
Castell Type Lock [§]	CO-(125-1000A)	CX400040000	2100	1
	CO6-(1250-2000A)	CX600040000	2100	1
Output shorting link	CO1-(63-125A) Top Side	CX10005000T	620	1
	CO1-(63-125A) Bottom Side	CX10005000B	620	1
Operating Handle for Motorised Changeover	C/O Frame 2 & 3 (125-315A)	CK903740000	1110	1
	C/O Frame 4 & 5 (400-1000A)	CK903780000	1400	1
	C/O Frame 6 (1250-2000A)	CK906450000	3480	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	15740	1
	AuXC - 2000 Controller with wire harness	AuXC - 2000 ^β	ATC200000000	23445
		CK900990000	3240	1
Control Accessories	Illuminated Push Button assembly with Wire harness	CK901950000	3170	1

^β Chapter ID [9032]

Fuse Mounting Kit [8538]



Description	Suitable fuse-link	Type	Cat. No.	M.R.P. (₹) Per Unit	Std. Pkg. (Nos.)
Fuse Mounting Kit	HF 14x51	CO1-63	CX106300OCO	1800	1
	HN Size 000	CO2-125	CX212500ODO	3510	1
	HN Size 00	CO2-160	CX216000ODO	4990	1
	HN Size 1	CO3-250	CX325000ODO	6830	1
	HN Size 1	CO3-315	CX331500ODO	7150	1
	HN Size 2	CO4-400	CX440000ODO	10260	1
	HN Size 3	CO5-630	CX563000ODO	20660	1
	HN Size 3	CO5-800	CX580000ODO	23500	1

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

Features offered by FN S-D-F

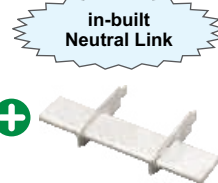
- Range 32A to 800A, 415V, AC 23A
- Conforms to IEC 60947-3, IS/IEC 60947-3
- **Terminal Shrouds on both sides and Phase Barriers included**
- **Telescopic shaft for depth adjustment**
- **TPN SDF has isolable neutral**
- **4P SDF has Switched Neutral Pole and is 100% rated**
- Door interlock & padlock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



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



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



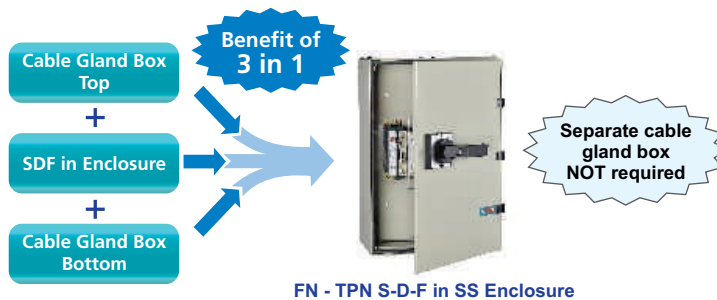
Size	Rated Current (A)	Suitable HRC fuse-link		Open Execution Type FN (TPN) S-D-F suitable for DIN fuse-link			Std. Pkg. (Nos.)	Open Execution Type FN S-D-F suitable for DIN fuse-link (4P)			Std. Pkg. (Nos.)
		Type	Range (A)	Type	Cat. No.	M.R.P. (₹) Per Unit		Type	Cat. No.	M.R.P. (₹) Per Unit	
Fr 1	32	HF Size 14x51	2 to 32	FN 32 TPN / FP	SK95518	2130	1	FN 32 TPN/FP	SK95518	2130	1
	32	HF Size 14x51	2 to 32	FN 32 TPN / FP CE*	SK95703*	1870	1	FN 32 TPN/FP CE*	SK95703	1870	1
	63	HF Size 14x51	2 to 63	FN 63 TPN / FP	SK95421	2880	1	FN 63 TPN/FP	SK95421	2880	1
	63	HF Size 14x51	2 to 63	FN 63 TPN / FP CE*	SK95704*	2570	1	FN 63 TPN/FP CE*	SK95704	2570	1
Fr 2	100	HN Size 000/00	63 to 100	FN 100 TPN	SK95568	5610	1	FN 100 FP	SK90496	6710	1
	125	HN Size 000/00	63 to 125	FN 125 TPN	SK95001	7490	1	FN 125 FP	SK90497	8680	1
	160	HN Size 000/00	63 to 160	FN 160 TPN	SK95713	8130	1	FN 160 FP	SK90498	9690	1
Fr 3	200	HN Size 0	80 to 200	FN 200 TPN	SK95418	10670	1	FN 200 FP	SK90471	11840	1
	250	HN Size 1	125 to 250	FN 250 TPN	SK95642	12600	1	FN 250 FP	SK90472	13710	1
Fr 4	315	HN Size 1	125 to 315	FN 315 TPN	SK95461	15440	1	FN 315 FP	SK90473	16920	1
	400	HN Size 2	200 to 400	FN 400 TPN	SK95481	18860	1	FN 400 FP	SK90480	20060	1
Fr 5	630	HN Size 3	315 to 630	FN 630 TPN	SK95521	30360	1	FN 630 FP	SK90481	32740	1
	800	HN Size 3	315 to 800	FN 800 TPN	SK95679	32930	1	FN 800 FP	SK90482	35940	1

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

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**
- **Terminal Shrouds on both sides and 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*	4560	1
	63	HF Size 14x51	2 to 63	FN 63 TPN / FP CE*	SK90484*	5440	1
Fr 2	100	HN Size 000/00	63 to 100	FN 100 TPN	SK90485	9010	1
	125	HN Size 000/00	63 to 125	FN 125 TPN	SK90486	10460	1
	160	HN Size 000/00	63 to 160	FN 160 TPN	SK90487	11200	1
Fr 3	200	HN Size 0	80 to 200	FN 200 TPN	SK90488	15480	1
	250	HN Size 1	125 to 250	FN 250 TPN	SK90489	17330	1
Fr 4	315	HN Size 1	125 to 315	FN 315 TPN	SK90490	20740	1
	400	HN Size 2	200 to 400	FN 400 TPN	SK90491	24210	1
Fr 5	630	HN Size 3	315 to 630	FN 630 TPN	SK90492	38800	1
	800	HN Size 3	315 to 800	FN 800 TPN	SK90493	41640	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 Pg. 32 for Switch-Disconnectors

FN TPN SDF and C-line Manual Changeover in Sheet Steel Enclosure

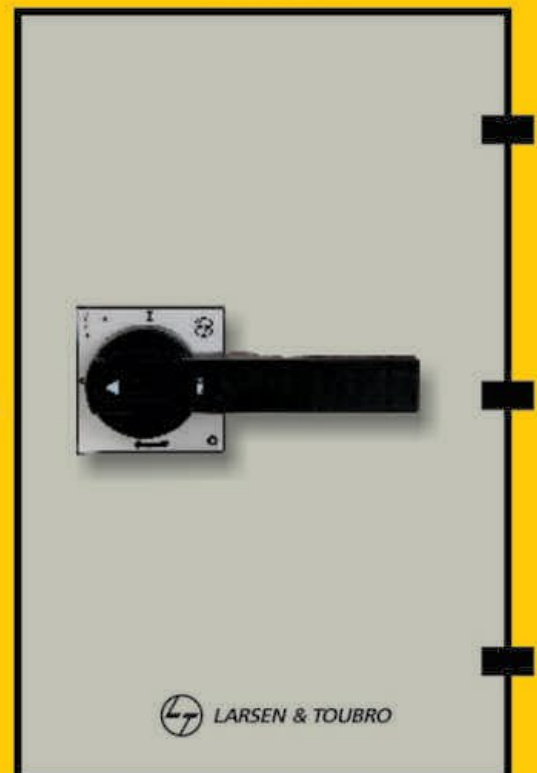
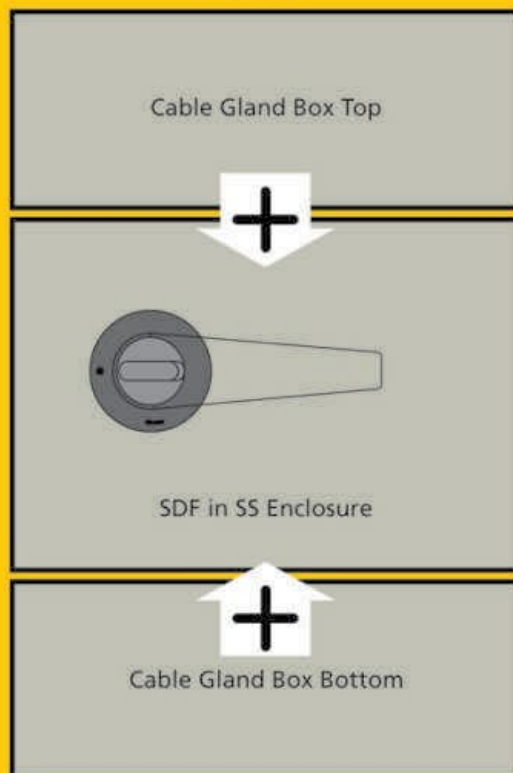
Separate cable gland boxes are not required for SDF and Changeover in spacious enclosures...

Get the benefits of
3

in

1

by choosing
FN & C-line



See. Assure. Act Inbuilt Aux. Contacts for CO Switch Status

Safeguard the continuity of power supply in your premises by knowing the actual position of the Changeover Switch

Open Execution Manual Changeover Switches have inbuilt 2 sets of auxiliary changeover contacts (One for each position) throughout the range, 63A to 2000A.





FN gets a Facelift!

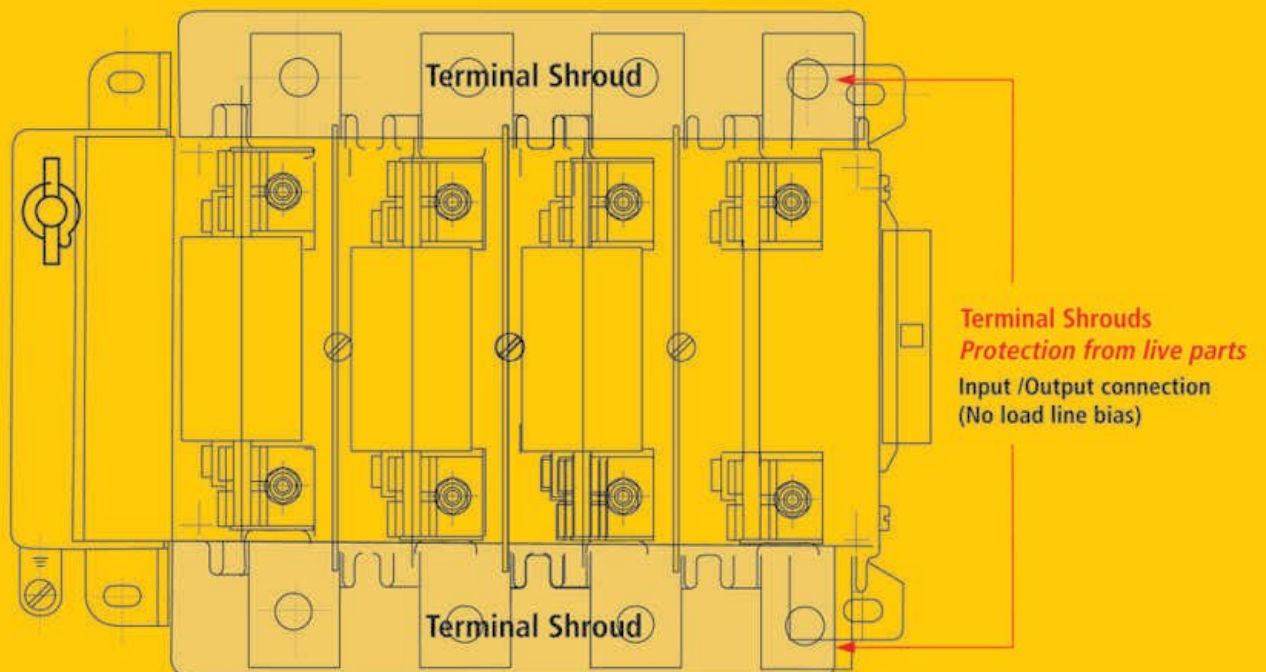
Telescopic Shafts :
Flexibility for fine
adjustment in depth

Slide

Adjustable telescopic shaft

Terminal Shroud

Why compromise with your safety, when it comes at no extra cost...



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

Also for 220Vdc & 240Vac application

Features offered by FN S-D-F

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



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	1680	1
	63	HF Size 14x51	FN 63 2P	SK95595	2320	1
Fr 2	100	HN Size 000/00	FN 100 2P	ST35086	4630	1
	125	HN Size 000/00	FN 125 2P	ST35087	6010	1
	160	HN Size 000/00	FN 160 2P	ST35088	6440	1
Fr 3	200	HN Size 0	FN 200 2P	ST35089	8290	1
	250	HN Size 1	FN 250 2P	ST31674	10260	1
Fr 4	315	HN Size 1	FN 315 2P	ST38930	13280	1
	400	HN Size 2	FN 400 2P	ST31676	15400	1
Fr 5	630	HN Size 3	FN 630 2P	ST35090	25330	1

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
- **Terminal Shrouds on both sides and 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	1910	1
	63	A1L	FN 63 TPN	SK95651	2680	1
Fr 2	100	A4	FN 100 TPN	SK95570	5380	1
	125	A4	FN 125 TPN	SK95009	7090	1
	160	A4	FN 160 TPN	SK95714	7720	1
Fr 3	200	B1 / B2	FN 200 TPN	SK95588	10080	1
	250	B2 / B3	FN 250 TPN	SK95682	12190	1
Fr 4	315	B3	FN 315 TPN	SK95590	15650	1
	400	B4	FN 400 TPN	SK95591	18230	1
Fr 5	630	C2	FN 630 TPN	SK95592	29380	1

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

Features offered by FNX S-D-F

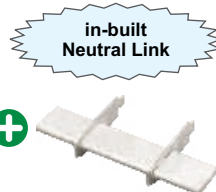
- Range 32A to 800A, 415V, **AC 23A**
- TPN and 4P version
- Suitable for Cylindrical / DIN fuse-link
- Telescopic shaft for depth adjustment
- DIN rail mounting up to 100A
- Conforms to IEC 60947-3, IS/IEC 60947-3
- Door interlock & padlock facility
- FNX 4-Pole with in-built Neutral Link



FNX TPN S-D-F



FNX 4P 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	Std. Pkg. (Nos.)	
Fr 1	32	HF Size 14x51	2 to 32	FNX 32 TPN / FP	SK96903	*	1	FNX 32 TPN / FP	SK96903	*	1	1
	63	HF Size 14x51	2 to 63	FNX 63 TPN / FP	SK96904	*	1	FNX 63 TPN / FP	SK96904	*	1	1
Fr 2	100	HN Size 000	63 to 100	FNX 100 TPN / FP	SK96906	*	1	FNX 100 TPN / FP	SK96906	*	1	1
Fr 3	125	HN Size 000/00	63 to 125	FNX 125 TPN	SK95806	*	1	FNX 125 FP	SK95814	*	1	1
	160	HN Size 000/00	63 to 160	FNX 160 TPN	SK95807	*	1	FNX 160 FP	SK95815	*	1	1
Fr 4	200	HN Size 0	80 to 200	FNX 200 TPN	SK95808	*	1	FNX 200 FP	SK95816	*	1	1
	250	HN Size 1	125 to 250	FNX 250 TPN	SK95809	*	1	FNX 250 FP	SK95817	*	1	1
Fr 5	315	HN Size 1	125 to 315	FNX 315 TPN	SK95810	*	1	FNX 315 FP	SK95818	*	1	1
	400	HN Size 2	200 to 400	FNX 400 TPN	SK95811	*	1	FNX 400 FP	SK95819	*	1	1
Fr 6	630	HN Size 3	315 to 630	FNX 630 TPN	SK95812	*	1	FNX 630 FP	SK95820	*	1	1
	800	HN Size 3	315 to 800	FNX 800 TPN	SK95813	*	1	FNX 800 FP	SK95821	*	1	1

* Available on request

Notes : 1) For 690V AC application, please contact nearest branch office.
2) The prices for S-D-F range are without HRC fuses

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



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	111	30
	4		SF90145	111	30
	6		SF90146	111	30
	8		SF90147	111	30
	10		SF90148	111	30
	16		SF90150	111	30
	20		SF90151	111	30
	25		SF90152	111	30
	32	Suitable for Type FN 63 / FNX 63 S-D-F & for HC 63 Fuse base	SF90142	111	30
	40		SF90143	123	30
	50		SF90158	262	30
	63		SF90159	320	30

DIN Type Fuse Links Type HN



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	355	3
	80		SF94941	375	3
	100		SF94942	375	3
	125		SF94946	430	3
00	63	Suitable for Type FN 100/125/160 / FNX 125/160 S-D-F & for HB 160 Fuse base	SF94027	460	3
	80		SF94028	460	3
	100		SF94029	460	3
	125		SF94030	475	3
	160		SF94939	475	3
	200		SF94128	635	3
0	80	Suitable for Type FN 200 / FNX 200 S-D-F & for HB 250 Fuse base	SF94129	635	3
	100		SF94130	635	3
	125		SF94131	645	3
	160		SF94132	645	3
	200		SF94230	650	3
1	125	Suitable for Type FN 250/315 / FNX 250/315 S-D-F & for HB 250 Fuse base	SF94231	655	3
	160		SF94232	660	3
	200		SF94233	750	3
	250		SF94234	925	3
	315		SF94332	960	3
2	200	Suitable for Type FN 400 / FNX 400 S-D-F & for HB 800 Fuse base	SF94333	965	3
	250		SF94334	1000	3
	315		SF94335	1010	3
	400		SF94434	1435	1
3	315	Suitable for Type FN 630/800 / FNX 630/800 S-D-F & for HB 800 Fuse base	SF94435	1435	1
	400		SF94436	1570	1
	500		SF94437	1625	1
	630		SF94938	1955	1
	800				

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



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	200	10
63	HC 63	Fuse holder	HF	2-63	SK91043	225	10
160	HB 160	Fuse base	HN-Size 000 & 00	63-160	SK90405	350	12
250	HB 250	Fuse base	HN-Size 0 & 1	80-250	SK90406	800	3
800	HB 800	Fuse base	HN-Size 2 & 3	200-800	SK91051	1490	3

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	48	24
			4		ST30726	48	24
			6		ST30727	48	24
			10		ST30728	48	24
			16		ST30729	48	24
			20		ST30730	57	24
			25		ST30731	57	24
			32		ST30732	57	24
HQ	Offset	A1L	20	Suitable for type FN 32/63 S-D-F	ST34527	93	15
			25		ST34528	93	15
			32		ST34529	95	15
			50		ST35827	98	15
			63		ST35828	98	15
			4	Suitable for type HK 32H/32B fuse base	ST30747	80	12
		A2	6		ST30748	80	12
			10		ST30749	83	12
			16		ST30750	83	12
			20		ST30751	83	12
			25		ST30752	83	12
			32		ST30753	83	12
		A3	35	Suitable for type HK 63B/63H Fuse base	ST30759	125	12
			50		ST30760	125	12
			63		ST30761	125	12
		A4	80	Suitable for type FN 100/125/160 S-D-F & for HK 125H/125B Fuse base	ST30767	230	12
			100		ST30768	235	12
			125		ST30769	280	12
			160		ST35829	300	12
	Centre Tag, 2 holes	B1	80	Suitable for type FN 200 S-D-F	ST30774	270	12
			100		ST30775	270	12
			125		ST30776	340	12
			125		ST30777	375	3
		B2	160		ST30778	390	3
			200		ST30779	395	3
			250	Suitable for type FN 250/315 S-D-F	ST30781	540	3
		B3	315		ST30782	560	3
			355	Suitable for type FN 400 S-D-F	ST30783	865	3
		B4	400		ST30784	875	3
	Centre Tag, 4 holes	C2	400	Suitable for type FN 630 S-D-F	ST30785	1635	1
			500		ST30786	1725	1
			630		ST30787	1860	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	125	12
	HD 20P	Both side busbar (Back)	F1	2-20	ST30773	190	12
	HD 20B	Top busbar & bottom cable	F1	2-20	ST30766	160	12
32	HD 32H	Both side cable (Front)	F1	2-32	ST30733	140	12
	HD 32P	Both side busbar (Back)	F1	2-32	ST30734	205	12
	HD 32B	Top busbar & bottom cable	F1	2-32	ST30735	185	12
	HK 32H	Both side cable (Front)	A2	4-32	ST30754	240	12
	HK 32B	Top busbar & bottom cable	A2	4-32	ST30755	295	12
	HK 63H	Both side cable (Front)	A3	35-63	ST30762	310	6
63	HK 63B	Top busbar & bottom cable	A3	35-63	ST30763	395	6
	HK 125H	Both side cable (Front)	A4	80-125	ST30770	930	3
125	HK 125B	Top busbar & bottom cable	A4	80-125	ST30771	1170	3

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
- Terminal shrouds on both sides

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	1530	1	FN 32 TPN / 4P	SK955410000	2180	1
	63	FN 63 2P	SK904190000	2080	1	FN 63 TPN / 4P	SK955400000	2910	1
Fr 2	100	FN 100 2P	SK904200000	4320	1	FN 100 TPN	SK955710000	5250	1
	125	FN 125 2P	SK904210000	5400	1	FN 125 TPN	SK954050000	6530	1
Fr 3	200	FN 200 2P	SK904500000	7250	1	FN 200 TPN	SK956070000	9080	1
	250	FN 250 2P	SK904540000	8710	1	FN 250 TPN	SK956830000	11330	1
Fr 4	315	FN 315 2P	SK904650000	11070	1	FN 315 TPN	SK956090000	12590	1
	400	FN 400 2P	SK904660000	13210	1	FN 400 TPN	SK956100000	16710	1
Fr 5	630	FN 630 2P	SK904670000	21310	1	FN 630 TPN	SK956110000	24860	1
	800	FN 800 2P	SK904680000	22340	1	FN 800 TPN	SK955510000	27290	1
	1000	FN 1000 2P	SK904690000	28990	1	FN 1000 TPN	SK957100000	36670	1
Fr 6	1000	-	-	-	-	C-Line SD 1000 4P	COS10000040	48210	1
	1250	-	-	-	-	C-Line SD 1250 4P	COS12500040	50920	1
	1600	-	-	-	-	C-Line SD 1600 4P	COS16000040	70700	1
	2000	-	-	-	-	C-Line SD 2000 4P	COS20000040	87810	1

*For Switched Neutral Pole in FN TPN S-D, order Switched Neutral Kit separately. Refer 'Spares & Accessories for type FN' table

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
	FNX 315 / 400 / 630 / 800	SK91541	*	1
Handle Assembly	FNX 32 / 63 / 100	SK91524	*	1
	FNX 125 / 160 / 200 / 250	SK91525	*	1
	FNX 315 / 400 / 630 / 800	SK91526	*	1
Castell Type Lock\$	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

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	150	1
Insulated fuse pulling handle for Type HN fuse-link from 63A-800A	SF90126	540	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	710	1
Operating Handle	CXS6001	1590	1
Castell Type Lock\$	CX60004	2100	1

\$ Chapter ID [8301]

Also suitable for Switch-Disconnecter FN 1000

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	450	1	
	FN 100 / 125 / 160	SK91328	520	1	
	FN 200 / 250	SK91329	700	1	
	FN 315 / 400 / 630 / 800	SK91330 [#]	740	1	
2 nd Aux. Contact (1NO + 1NC)	FN 32 / 63	SK90670	480	1	
	FN 100 to FN 1000	SK90696	550	1	
Earthing Link	FN 32 to FN 1000 [@]	CK90396	390	1	
Terminal Shroud Kit	FN 32 / 63	SK91190	130	1	
	FN 100 / 125 / 160	SK91137	170	1	
	FN 200 / 250	SK91335	470	1	
	FN 315 / 400	SK91346	490	1	
	FN 630 / 800	SK91347 [#]	520	1	
Handle Assembly - A	FN 32 / 63	SK91257	370	1	
	FN 100 to FN 250	SK91258	790	1	
	FN 315 / 400 / 630 / 800	SK91259 [#]	880	1	
Handle Assembly - B	FN 32 / 63	SK91277	370	1	
	FN 100 to FN 250	SK91278	790	1	
	FN 315 / 400 / 630 / 800	SK91279 [#]	880	1	
Handle Assembly - CE	FN 32 / 63	SK91337	220	1	
Interphase Barrier Kit	FN 200	SK91343	330	1	
	FN 315 / 400	SK91344	350	1	
	FN 630 / 800	SK91345 [#]	360	1	
Castell Type Lock ^{\$}	FN 100 / 125 / 160 / 200 / 250	A	SK00333	2000	1
		B	SK00334	2060	1
		C	SK00335	2060	1
		D	SK00336	2060	1
	FN 315 / 400 / 630 / 800	A	SK00345 [#]	2000	1
		B	SK00346 [#]	2060	1
		C	SK00347 [#]	2060	1
		D	SK00348 [#]	2060	1
Switched Neutral Kit [#]	FN 100 / 125 / 160	SK95233	3840	1	
	FN 200 / 250	SK95516	4100	1	
	FN 315 / 400	SK95517	4430	1	
	FN 630 / 800	SK95546 [*]	6220	1	

@For terminating earth busbar upto 25mm width. Order Qty 1 for 10 earthing links

Communication
Total Selectivity
Advanced Protections
Energy Metering

Choose the superhero. Choose **d sine** MCCB

d sine MCCBs



Features

Range: 20A to 1250A
Breaking capacity: 25/36/50/70/**100kA**
Variants: 3P/4P

Our new advanced MTX3.0 release fosters Energy Management along with most advanced protections. It also enables communication of various parameters for this automation era.

d sine range can now make Total Selectivity possible for uninterrupted healthy power network.

d sine -DZ MCCBs



Features

Range: 16A to 160A
Breaking capacity: 36/50kA
Variants: 3P/4P

Our new **d sine** -DZ range offers wide range of adjustable overload and short circuit settings with wide range of internal and external accessories.

Why wait? Contact us today.

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BSNL / MTNL (toll free): 1800 233 5858 Reliance (toll free): 1800 200 5858
Tel: 022 6774 5858 Email: cic@Lntebg.com Web: www.Lntebg.com

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														
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)	EM90982O0BO	1380	AC : 10kA @ 415V AC, 50 Hz/60 Hz DC : 10kA @ 250V DC (3P in series)	EM90983O0BO	1860	EM90984O0BO	2450	1
	20		EM90982O0CO	1380		EM90983O0CO	1860	EM90984O0CO	2450	1
	25		EM90982O0DO	1380		EM90983O0DO	1860	EM90984O0DO	2450	1
	32		EM90982O0EO	1380		EM90983O0EO	1860	EM90984O0EO	2450	1
	40		EM90982O0FO	1380		EM90983O0FO	1860	EM90984O0FO	2450	1
	50		EM90982O0GO	1380		EM90983O0GO	1860	EM90984O0GO	2450	1
	63		EM90982O0HO	1370		EM90983O0HO	1840	EM90984O0HO	2430	1
	80		EM90982O0JO ▲	1500		EM90983O0JO ▲	2020	EM90984O0JO ▲	2780	1
			EM90812O0JO	1370		EM90813O0JO	1840	EM90814O0JO	2430	1
	100		EM90982O0KO ▲	1500		EM90983O0KO ▲	2020	EM90984O0KO ▲	2780	1
			EM90812O0KO	1370		EM90813O0KO	1840	EM90814O0KO	2430	1
	125		EM90982O0LO ▲	2130		EM90983O0LO ▲	2930	EM90984O0LO ▲	3680	1

▲ - Spreader Terminals are included

Note: 2 Pole in 3 Pole frame size

Phase barriers are supplied with all MCCBs

Accessories for DY125U MCCBs [8538]



Auxiliary/Trip Alarm Contact



Shunt Release



Spreader Terminals



Direct ROM



Extended ROM

Description	Internal		
	Cat. No.	M.R.P. (₹) Per Unit	Std. Pkg. (Nos.)
Auxiliary/Trip Alarm Contact			
1C/O	EM90966O000	555	1
Shunt Release			
Short Rated 110/240/415V AC	EM90520O000	640	1

Description	External		
	Cat. No.	M.R.P. (₹) Per Unit	Std. Pkg. (Nos.)
Spreader Terminals			
2 Pole (upto 100A)	CM97785O002	195	Set of 4
3 Pole (upto 100A)	CM97785O000	265	Set of 6
4 Pole (upto 100A)	CM97921O000	450	Set of 8
Rotary Handle			
Direct ROM	EM90969O000	875	1
Extended ROM	EM90970O000	1650	1
SS Enclosure			
Size I Enclosure for 3P & 4P	CM90996O000	1655	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

Kindly refer page no. 43 for cost effective MCCB for motor starter application

Type	Thermal Release Range (A)	Breaking Capacity Icu at 415V AC 50Hz. (kA)	3 Pole		4 Pole		Std. Pkg. (Nos.)
			Cat. No.	M.R.P. (₹) Per Unit	Cat. No.	M.R.P. (₹) Per Unit	
DU100D	16-20	18	CM90517OOCO	4050	CM90518OOCO	5230	1
	20-25		CM90517OODO	4050	CM90518OODO	5230	1
	25-32		CM90517OOEO	4050	CM90518OOEO	5230	1
	32-40		CM90517OOF0	4050	CM90518OOF0	5230	1
	40-50		CM90517OOGO	4050	CM90518OOGO	5230	1
	50-63		CM90517OOHO	4000	CM90518OOHO	5150	1
	63-80		CM90517OOJO	4000	CM90518OOJO	5150	1
	80-100		CM90517OOKO	4000	CM90518OOKO	5150	1
DU125D	100-125		CM90676OOLO	4520	CM90677OOLO	5880	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

For DC application please refer catalogue

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	CM97898OOC2	3300	30	CM97894OOC2	4550	CM97933OOC2	6060	1
	20-25		CM97898OOD2	3300		CM97894OOD2	4550	CM97933OOD2	6060	1
	25-32		CM97898OOE2	3300		CM97894OOE2	4550	CM97933OOE2	6060	1
	32-40		CM97898OOF2	3300		CM97894OOF2	4550	CM97933OOF2	6060	1
	40-50	DC : 15kA @ 250V DC, (2P in Series) L/R < 15 msec.	CM97898OOG2	3300		CM97894OOG2	4550	CM97933OOG2	6060	1
	50-63		CM97898OOH2	3270		CM97894OOH2	4530	CM97933OOH2	6000	1
	63-80		CM97898OOJ2	3270		CM97894OOJ2	4530	CM97933OOJ2	6000	1
	80-100		CM97898OOK2	3270		CM97894OOK2	4530	CM97933OOK2	6000	1
DU125H	100-125		CM91198OOLO	4550		CM90678OOLO	5170	CM90679OOLO	6630	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

Description	Internal		
	Cat. No.	M.R.P. (₹) Per Unit	Std. Pkg. (Nos.)
Auxiliary Contact			
1 C/O - Right	CM97886OOOO	800	1
2 C/O - Right	CM97887OOOO	1570	1
Trip Alarm Contact			
1 C/O - Right	CM97888OOOO	800	1
2 C/O - Right	CM97889OOOO	1570	1
Auxiliary + Trip Alarm Contact			
1 C/O + 1C/O - Right	CM97890OOOO	1475	1
Shunt Release			
24V DC - Left	CM91402O4OO	1380	1
110V AC - Left	CM97883OAOO	1380	1
240/415V AC - Left	CM97883OMOO	1495	1
Under Voltage Release			
240V AC - Left	CM97892BOOO	2195	1



Spreader Terminals



Direct ROM



Extended ROM

Description	External		
	Cat. No.	M.R.P. (₹) Per Unit	Std. Pkg. (Nos.)
Spreader Terminals			
DU100H - 2 Pole	CM97785OOO2	195	Set of 4
DU125H - 2 Pole	CM91199OOLO	250	Set of 4
DU100D/DU100H - 3 Pole	CM97785OOOO	265	Set of 6
DU125D/DU125H - 3 Pole	CM90687OOLO	375	Set of 6
DU100D/DU100H - 4 Pole	CM97921OOOO	450	Set of 8
DU125D/DU125H - 4 Pole	CM90688OOLO	540	Set of 8
Rotary Handle			
DU100D/DU125D/ Direct ROM	CM97895OOOO	995	1
DU100H/DU125H Extended ROM	CM97896OOOO	1435	1
DIN rail kit			
DU100D/DU125D/DU100H/DU125H	CM90944OOOO	85	1
SS Enclosure			
Size I Enclosure	CM90996OOOO	1655	1

Note: Phase Barriers are supplied along with all MCCBs

DU MCCB Range [8536]

2 Pole / 3 Pole / 4 Pole MCCBs

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

Kindly refer page no. 43 for cost effective MCCB for motor starter application

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	
DU250C	125-160	-	-	-	25	CM90631OOMO	7120	CM90634OOMO	9530	1
	160-200					CM90631OONO	8530	CM90634OONO	10740	1
	200-250					CM90631OPO	9250	CM90634OPO	12640	1
DU250	125-160	AC : 65kA @ 240V AC, 50Hz DC : 15kA for DU250 @ 250V DC & 25kA for DU400N @ 250V DC, (2P in Series) L/R < 15 msec.	CM90905OOMO	5400	36	CM98062OONO	8230	CM98065OONO	10010	1
	160-200		CM90905OONO	6240		CM98061OONO	10660	CM98065OONO	13750	1
	200-250		CM90905OPO	6990		CM98060OONO	12250	CM98065OPO	15760	1
DU400N	250-320		CM90886OONO	12210	50	CM98402OONO	16260	CM98404OONO	20330	1
	320-400		CM90886OORO	12210		CM98402OORO	16260	CM98404OORO	20330	1

Note: 2 Pole in 3 Pole frame size * For DU250/DU250C

Accessories for DU250/DU250C MCCBs [8538]



Auxiliary Contact ATAC Shunt Release UV Release

Description	Internal		
	Cat. No.	M.R.P. (₹) Per Unit	Std. Pkg. (Nos.)
Auxiliary Contact			
1 C/O - Right	CM97886OONO	800	1
2 C/O - Right	CM97887OONO	1570	1
Trip Alarm Contact			
1 C/O - Right	CM97888OONO	800	1
2 C/O - Right	CM97889OONO	1570	1
Auxiliary + Trip Alarm Contact			
1 C/O + 1C/O - Right	CM97890OONO	1475	1
Shunt Release			
24V DC - Left	CM91402O4OO	1380	1
110V AC - Left	CM97883OAOO	1380	1
240/415V AC - Left	CM97883OMOO	1495	1
Under Voltage Release			
240V AC - Left	CM97892BOOO	2195	1



Spreader Terminals Direct ROM Extended ROM

Description		External		
		Cat. No.	M.R.P. (₹) Per Unit	Std. Pkg. (Nos.)
Spreader Terminals				
DU250 - 2 Pole		CM90960O000	1005	Set of 4
DU250C/DU250 - 3 Pole		ST98053O000	1270	Set of 6
DU250C/DU250 - 4 Pole		CM92007O000	1670	Set of 8
Rotary Handle				
DU250C/DU250	Direct ROM	CM98040O000	1035	1
	Extended ROM	CM98041O000	1640	1
SS Enclosure				
Size II Enclosure		CM91003O000	3805	1

Note: Phase Barriers are supplied along with all MCCBs

Accessories for DU400N MCCBs [8538]



Auxiliary Contact TAC Shunt Release UV Release

Description	Internal		
	Cat. No.	M.R.P. (₹) Per Unit	Std. Pkg. (Nos.)
Auxiliary Contact			
1 C/O	CM99801OONO	880	1
2 C/O	CM99802OONO	1655	1
Trip Alarm Contact			
1 C/O - Right	CM99803OONO	930	1
Auxiliary + Trip Alarm Contact			
1 C/O + 1C/O - Right	CM99804OONO	1660	1
Shunt Release			
110/240/415V AC, 110/220V DC	CM99805OONO	2155@	1
24V DC	CM98976O4OO	2240@	1
Under Voltage Release			
240V AC - Left	CM99986BOOO	2945	1

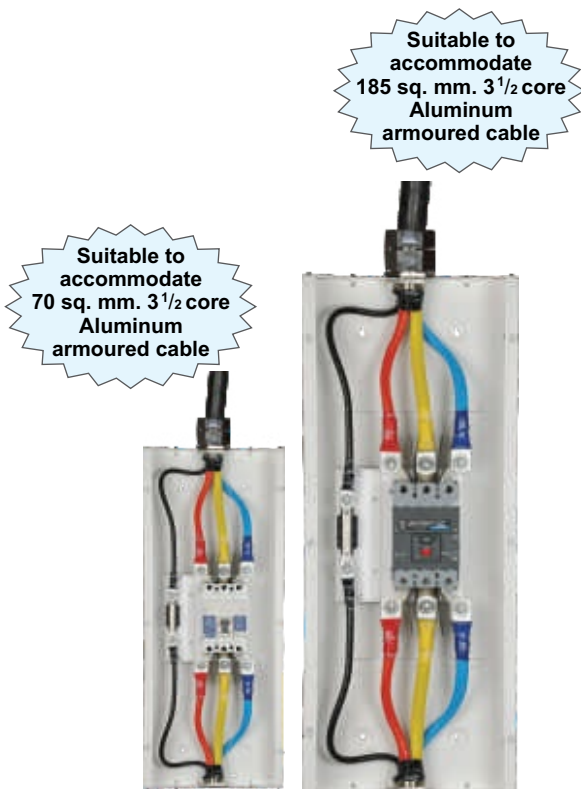


Spreader Terminals Direct ROM Extended ROM

Description	External		
	Cat. No.	M.R.P. (₹) Per Unit	Std. Pkg. (Nos.)
Spreader Terminals			
2 Pole	CM90964OONO	1580	Set of 4
3 Pole	ST98065OONO	2400	Set of 6
4 Pole	ST98066OONO	3440	Set of 8
Rotary Handle			
Direct ROM	CM99860OONO	1605	1
Extended ROM	CM99861OONO	2755	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



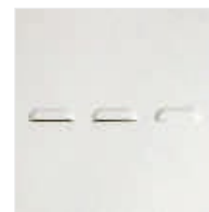
Description	Cat. No.	M.R.P. (₹) Per Unit	Std. Pkg. (Nos.)
Size I Enclosure for DU100H/DU125H/DU100D/DU125D/DN0/DY125U	CM909960000	1655	1
Size II Enclosure for DU250C/DU250/DN1	CM910030000	3805	1



Easy wall Mounting

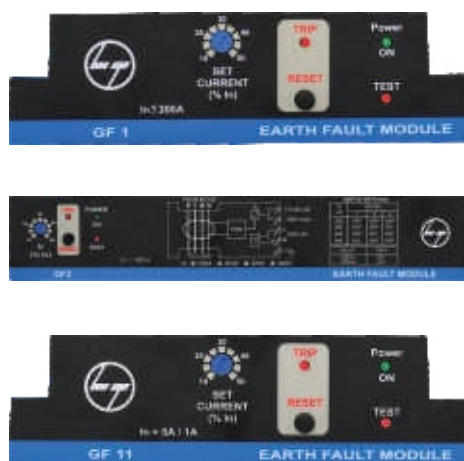


In-built Neutral Link



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	7450	Built in CBCT	1
GF2	200 - 400A	ST277460000	10850	Built in CBCT	1
GF11	up to 800A	ST285940000	6850 #	External CT required	1

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

d sine With Thermal - Magnetic Release :

Rating (A)	16	20	25	32	40	50	63	80	100	125	160	200	250	320	400	500	630
Icu=Ics (kA)*																	
25																	
36																	
36/50																	
36/50/70																	



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 and Motorised versions available@
- Wide range of accessories



dsine-DZ1 TM

- Conforms to IS/IEC 60947-2
- 16A to 160A, 3P & 4P
- 36kA & 50kA 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
- 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	CM978930OC2OG	6940	CM979190OC2OG	9630	1
	20-25		CM978930OD2OG	6940	CM979190OD2OG	9630	1
	25-32		CM978930OE2OG	6940	CM979190OE2OG	9630	1
	32-40		CM978930OF2OG	6940	CM979190OF2OG	9630	1
	40-50		CM978930OG2OG	6940	CM979190OG2OG	9630	1
	50-63		CM978930OH2OG	6880	CM979190OH2OG	9550	1
	63-80		CM978930OJ2OG	6880	CM979190OJ2OG	9550	1
	80-100		CM978930OK2OG	6880	CM979190OK2OG	9550	1
DN0-125D*	100-125		CM90680OOL0OG	7800	CM90681OOL0OG	10380	1
DN0-100C	16-20	25	CM916120OCCOOG	7100	CM917120OCCOOG	9820	1
	20-25		CM916120ODCOOG	7100	CM917120ODCOOG	9820	1
	25-32		CM916120OECOOG	7100	CM917120OECOOG	9820	1
	32-40		CM916120OFCOOG	7100	CM917120OFCOOG	9820	1
	40-50		CM916120OGCOOG	7100	CM917120OGCOOG	9820	1
	50-63		CM916120OHOOG	7030	CM917120OHOOG	9740	1
	63-80		CM916120OJOOG	7030	CM917120OJOOG	9740	1
	80-100		CM916120OKOOG	7030	CM917120OKOOG	9740	1
DN1-250C	100-125		CM90638OOLO	9590	CM90642OOLO	11610	1
	125-160		CM90638OOMO	12680	CM90642OOMO	15250	1
	160-200		CM90638OONO	16430	CM90642OONO	21130	1
	200-250		CM90638OOP0	18750	CM90642OOP0	24060	1

Kindly refer page no. 43 for cost effective MCCB for motor starter application

Note:

Breaking Capacity : C = 25kA, D = 36kA, N = 50kA, S = 70kA

@ Motorised version available for DN2 and DN3 frames (please refer page No. 45)

* 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 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	
DZ1-160D	11-16	36	DZ1T0016DXC1A	8680	DZ1F0016DXC1A	10900	1
	14-20		DZ1T0020DXC1A	8680	DZ1F0020DXC1A	10900	1
	17-25		DZ1T0025DXC1A	8680	DZ1F0025DXC1A	10900	1
	22-32		DZ1T0032DXC1A	8680	DZ1F0032DXC1A	10900	1
	27-40		DZ1T0040DXC1A	8680	DZ1F0040DXC1A	10900	1
	34-50		DZ1T0050DXC1A	8680	DZ1F0050DXC1A	10900	1
	43-63		DZ1T0063DXD1A	8600	DZ1F0063DXD1A	10800	1
	54-80		DZ1T0080DXD1A	8600	DZ1F0080DXD1A	10800	1
	67-100		DZ1T0100DXD1A	8600	DZ1F0100DXD1A	10800	1
	84-125		DZ1T0125DXD1A	9910	DZ1F0125DXD1A	12250	1
	108-160		DZ1T0160DXD1A	13180	DZ1F0160DXD1A	15660	1
DN2-250D	100-125	36	CM92008OOL1OG	11400	CM92108OOL1OG	14210	1
	125-160		CM92008OOM1OG	15160	CM92108OOM1OG	18170	1
	160-200		CM92009OON1OG	18280	CM92109OON1OG	22920	1
	200-250		CM92009OOP1OG	20520	CM92109OOP1OG	25420	1
DN3B-400D	250-320		CM98401OOQOOG	25090	CM98403OOQOOG	31060	1
	320-400		CM98401OOROOG	25090	CM98403OOROOG	31060	1
DN3-400D	250-320		CM94005OOQ1OG	*	CM94105OOQ1OG	*	1
	320-400		CM94005OOR1OG	*	CM94105OOR1OG	*	1
DN3-630D	400-500		CM94006OOS1OG	32590	CM94106OOS1OG	40250	1
	500-630		CM94006OOT1OG	32590	CM94106OOT1OG	40250	1
DZ1-160N	11-16	50	DZ1T0016NXC1A	11250	DZ1F0016NXC1A	13950	1
	14-20		DZ1T0020NXC1A	11250	DZ1F0020NXC1A	13950	1
	17-25		DZ1T0025NXC1A	11250	DZ1F0025NXC1A	13950	1
	22-32		DZ1T0032NXC1A	11250	DZ1F0032NXC1A	13950	1
	27-40		DZ1T0040NXC1A	11250	DZ1F0040NXC1A	13950	1
	34-50		DZ1T0050NXC1A	11250	DZ1F0050NXC1A	13950	1
	43-63		DZ1T0063NXD1A	11150	DZ1F0063NXD1A	13820	1
	54-80		DZ1T0080NXD1A	11150	DZ1F0080NXD1A	13820	1
	67-100		DZ1T0100NXD1A	11150	DZ1F0100NXD1A	13820	1
	84-125		DZ1T0125NXD1A	14460	DZ1F0125NXD1A	16820	1
	108-160		DZ1T0160NXD1A	15830	DZ1F0160NXD1A	19100	1
DN2-250N	100-125	50	CM92005OOL1OG	16630	CM92105OOL1OG	19850	1
	125-160		CM92005OOM1OG	18200	CM92105OOM1OG	22160	1
	160-200		CM92006OON1OG	20750	CM92106OON1OG	26540	1
	200-250		CM92006OOP1OG	22240	CM92106OOP1OG	28190	1
DN3-400N	250-320		CM94003OOQ1OG	27220	CM94103OOQ1OG	33070	1
	320-400		CM94003OOR1OG	27220	CM94103OOR1OG	33070	1
DN3-630N	400-500		CM94004OOS1OG	35010	CM94104OOS1OG	44120	1
	500-630		CM94004OOT1OG	35010	CM94104OOT1OG	44120	1
DN2-250S	100-125	70	CM92002OOL1OG	23080	CM92102OOL1OG	26240	1
	125-160		CM92002OOM1OG	25250	CM92102OOM1OG	29830	1
	160-200		CM92003OON1OG	28380	CM92103OON1OG	34610	1
	200-250		CM92003OOP1OG	30330	CM92103OOP1OG	36510	1
DN3-400S	250-320		CM94001OOQ1OG	34310	CM94101OOQ1OG	39910	1
	320-400		CM94001OOR1OG	34310	CM94101OOR1OG	39910	1
DN3-630S	400-500		CM94002OOS1OG	43900	CM94102OOS1OG	54790	1
	500-630		CM94002OOT1OG	43900	CM94102OOT1OG	54790	1

For DC application please refer catalogue

Kindly refer page no. 43 for cost effective MCCB for motor starter application

* Price on request Note: Add suffix as "OOOO" to all DZ1 cat. nos.

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/DU/DY MCCBs with TM release can be used for DC application (2P/3P/4P)
- dsine/DU MCCBs can be used for Capacitor back-up protection
- For Motor back-up protection, use 'M' series of MCCBs such as DN0-M, DZ1-M, DN1-M, DN2-M, DN3-M
- For isolator applications, use SD version (without protection release)

d sine With Microprocessor Release :

Rating (A)	40	63	100	160	250	400	630	800	1000	1250
Icu (kA)										
36/50	DZ1									
36/50/70/100	DN2					DN3				
50/70/100								DN4		

d sine With Microprocessor Release MTX1.0 & iTRP1 :



dsine 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 and Motorised versions available@
- Wide range of accessories



dsine-DZ iTRP1

- Conforms to IS/IEC 60947-2
- 16A to 160A, 3P & 4P
- 36kA & 50kA 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
- OR Instantaneous setting from 1.5 to 12 x In
- Switchable thermal memory
- Variable trip class
- Transparent sealable release cover
- Compact size
- 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	
DZ1-160D#	10-40	36	DZ1T0040DXF1A	14720	DZ1F0040DXF1A	18860	1
	16-63		DZ1T0063DXF1A	14720	DZ1F0063DXF1A	18860	1
	25-100		DZ1T0100DXF1A	14720	DZ1F0100DXF1A	18860	1
	40-160		DZ1T0160DXF1A	18800	DZ1F0160DXF1A	26130	1
DN2-250D	16-40		CM92063O000X1	16780	CM92155O000X1	21500	1
	25-63		CM92071O000X1	16780	CM92154O000X1	21500	1
	40-100		CM92051O000X1	16780	CM92153O000X1	21500	1
	63-160		CM92074O000X1	21430	CM92152O000X1	29790	1
	100-250		CM92054O000X1	25470	CM92151O000X1	33070	1
DN3-400D	160-400		CM93001O000X1	30330	CM93003O000X1	37440	1
DN3-630D	250-630	CM93005O000X1	34870	CM93007O000X1	46590	1	
DZ1-160N#	10-40	50	DZ1T0040NXF1A	17710	DZ1F0040NXF1A	24090	1
	16-63		DZ1T0063NXF1A	17710	DZ1F0063NXF1A	24090	1
	25-100		DZ1T0100NXF1A	17710	DZ1F0100NXF1A	24090	1
	40-160		DZ1T0160NXF1A	22520	DZ1F0160NXF1A	29210	1
DN2-250N	16-40		CM92064O000X1	20190	CM92160O000X1	27460	1
	25-63		CM92072O000X1	20190	CM92159O000X1	27460	1
	40-100		CM92052O000X1	20190	CM92158O000X1	27460	1
	63-160		CM92075O000X1	25670	CM92157O000X1	33300	1
	100-250		CM92055O000X1	29410	CM92156O000X1	36960	1
DN3-400N	160-400		CM93002O000X1	33330	CM93004O000X1	42980	1
DN3-630N	250-630	CM93006O000X1	36890	CM93008O000X1	49420	1	
DN4-1250N	320-800	CM96021O000X1	53520	CM96111O000X1	64590	1	
	400-1000	CM96022O000X1	74900	CM96112O000X1	108390	1	
	500-1250	CM96023O000X1	93460	CM96113O000X1	135830	1	
DN2-250S	16-40	70	CM92065O000X1	21980	CM92165O000X1	28740	1
	25-63		CM92073O000X1	21980	CM92164O000X1	28740	1
	40-100		CM92059O000X1	21980	CM92163O000X1	28740	1
	63-160		CM92076O000X1	29630	CM92162O000X1	38840	1
	100-250		CM92056O000X1	33640	CM92161O000X1	40160	1
DN3-400S	160-400		CM94053O000X1	42130	CM94153O000X1	53210	1
DN3-630S	250-630		CM94079O000X1	44520	CM94179O000X1	59240	1
DN4-1250S	320-800		CM96025O000X1	69640	CM96115O000X1	88210	1
	400-1000		CM96026O000X1	94290	CM96116O000X1	138750	1
	500-1250		CM96027O000X1	115390	CM96117O000X1	156980	1

Note: dsine-V Version (Icu=Ics=100kA) MCCBs are available on request.

@ Motorised version available for DN2, DN3 and DN4 frames (please refer page No. 45)

Add suffix as "OOOO" to all DZ1 cat. nos. # For 25A, please contact nearest branch office

d sine With Microprocessor Release MTX2.0 & iTRP3 :



dsine 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 and Motorised versions available@
- Wide range of accessories



dsine-DZ iTRP3

- Conforms to IS/IEC 60947-2
- 16A to 160A, 3P & 4P
- 36kA & 50kA breaking capacities
- Ics=100% Icu
- Adjustable overload setting from 0.25 to 1.0 x In
- Adjustable short-circuit setting from 1.5 to 10 x Ir
- Adjustable Instantaneous setting, 6 In & 12 In
- Inbuilt ground fault protection from 20%-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
- 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	
DZ1-160D#	10-40	36	DZ1T0040DXH1A	25120	DZ1F0040DXH1A	29170	1
	16-63		DZ1T0063DXH1A	25120	DZ1F0063DXH1A	29170	1
	25-100		DZ1T0100DXH1A	25120	DZ1F0100DXH1A	29170	1
	40-160		DZ1T0160DXH1A	28780	DZ1F0160DXH1A	35690	1
DN2-250D	16-40	36	CM920630000AG	29140	CM921550000AG	34130	1
	25-63		CM920710000AG	29140	CM921540000AG	34130	1
	40-100		CM920510000AG	29140	CM921530000AG	34130	1
	63-160		CM920740000AG	33380	CM921520000AG	40690	1
	100-250		CM920540000AG	35340	CM921510000AG	42690	1
DN3-400D	160-400	36	CM930010000AG	41540	CM930030000AG	48560	1
DN3-630D	250-630		CM930050000AG	44830	CM930070000AG	56560	1
DZ1-160N#	10-40	50	DZ1T0040NXH1A	27560	DZ1F0040NXH1A	32880	1
	16-63		DZ1T0063NXH1A	27560	DZ1F0063NXH1A	32880	1
	25-100		DZ1T0100NXH1A	27560	DZ1F0100NXH1A	32880	1
	40-160		DZ1T0160NXH1A	33210	DZ1F0160NXH1A	39580	1
DN2-250N	16-40	50	CM920640000AG	31690	CM921600000AG	37480	1
	25-63		CM920720000AG	31690	CM921590000AG	37480	1
	40-100		CM920520000AG	31690	CM921580000AG	37480	1
	63-160		CM920750000AG	37360	CM921570000AG	44330	1
	100-250		CM920550000AG	38070	CM921560000AG	45890	1
DN3-400N	160-400	50	CM930020000AG	44460	CM930040000AG	53020	1
DN3-630N	250-630		CM930060000AG	48290	CM930080000AG	60600	1
DN4-1250N	320-800	70	CM960210000AG	81690	CM961110000AG	92780	1
	400-1000		CM960220000AG	96240	CM961120000AG	128780	1
	500-1250		CM960230000AG	112760	CM961130000AG	159760	1
DN2-250S	16-40	70	CM920650000AG	34050	CM921650000AG	39420	1
	25-63		CM920730000AG	34050	CM921640000AG	39420	1
	40-100		CM920590000AG	34050	CM921630000AG	39420	1
	63-160		CM920760000AG	42750	CM921620000AG	51900	1
	100-250		CM920560000AG	43290	CM921610000AG	55640	1
DN3-400S	160-400	70	CM940530000AG	54460	CM941530000AG	68140	1
DN3-630S	250-630		CM940790000AG	60020	CM941790000AG	82460	1
DN4-1250S	320-800	70	CM960250000AG	91630	CM961150000AG	108620	1
	400-1000		CM960260000AG	116690	CM961160000AG	160760	1
	500-1250		CM960270000AG	138500	CM961170000AG	181730	1

Note: dsine-V Version (Icu=Ics=100kA) MCCBs are available on request.
 @ Motorised version available for DN2, DN3 and DN4 frames (please refer page No. 45)
 Add suffix "OOOO" to all DZ1 cat nos.
 # For 25A, please contact nearest branch office
 *Price on request

Accessories for MTX2.0 [8538]

Modules for MTX2.0 release	Cat. No.	M.R.P. (₹) Per Unit
Current Metering Module (Display & Metering Module)	CM956980000	16400
Cable (2m length)	CM011960000	1165
Power Supply Module	CL907220000	*
UNCO Module for Status Indication & Control through communication	CL908520000	10200

Current Metering & latest trip record



Display Module

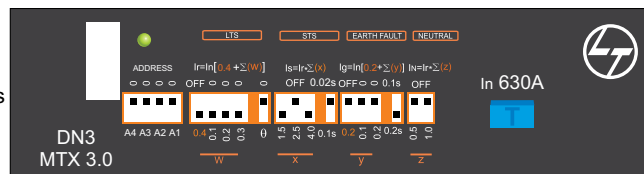
Metering Module

MTX2.0 with current metering module

d sine With Microprocessor Release 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 or Motorised 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	36	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	50	CM930020000BG	*	CM930040000BG	*	1
DN3-630N	250 - 630		CM930060000BG		CM930080000BG		1
DN4-1250N	320 - 800	70	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	70	CM940530000BG	*	CM941530000BG	*	1
DN3-630S	250 - 630		CM940790000BG		CM941790000BG		1
DN4-1250S	320 - 800	70	CM960250000BG	*	CM961150000BG	*	1
	400 - 1000		CM960260000BG		CM961160000BG		1
	500 - 1250		CM960270000BG		CM961170000BG		1

Note: dsine-V Version (Icu=Ics=100kA) MCCBs are available on request.

@ Motorised version available for DN2, DN3 and DN4 frames (please refer page No. 45)

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	10200

* Price on request

MCCB with MTX3.0 release



MTX3.0 with all modules

d sine MCCBs for Motor back-up Protection:



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

**Cost effective solution
for motor starter protection**

3 Pole					
Type	Current Rating (A)	Breaking Capacity Icu at 415V. AC, 50Hz. (kA)	Cat. No.	M.R.P. (₹) Per Unit	Std. Pkg. (Nos.)
DN0-100M	32	50	CM98944OOEO	4840	1
	40		CM98944OOF0	4840	1
	50		CM98944OOGO	4840	1
	63		CM98944OOHO	4840	1
	80		CM98944OOJO	4840	1
	100		CM98944OOKO	4840	1
New DZ1-160M	100		DZ1T0100NXM1A	7230	1
	125		DZ1T0125NXM1A	7350	1
	160		DZ1T0160NXM1A	8730	1
DN1-160M	100		CM90345OOKO	7610	1
	125		CM90345OOL0	7740	1
	160		CM90345OOMO	9190	1
DN2-250M	200		CM9217100NOOG	12510	1
	250		CM9217100POOG	16730	1
DN3-400M	320		CM945160OQOOG	21150	1
	400		CM945160OROOG	22190	1
DN3-630M	500		CM945150SOOOG	24430	1
	630		CM945150OTOOG	24840	1

Note: Please contact nearest branch office for fuseless type 2 co-ordination selection chart
For lower HP motors, Please select MPCB. Details are given on page no. 18
Add suffix as "OOOO" to all DZ1 cat. nos.



Give your motor the right protection

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



Cost Effective

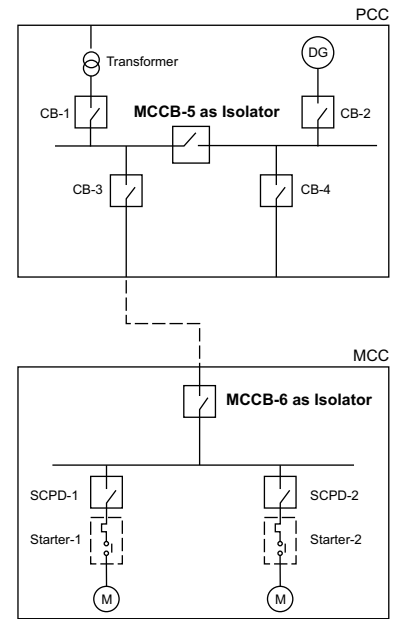
d sine
dsine-M range

d sine 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	CM90716OOEO	5100	CM90717OOEO	6500	1
	63	CM90716OOHO	5100	CM90717OOHO	6500	1
	100	CM90716OOKO	6090	CM90717OOKO	7560	1
	125	CM90716OOL0	6730	CM90717OOL0	8570	1
	160	CM90716OOMO	7280	CM90717OOMO	9130	1
DN2-250SD	200	CM96814OON0OG	14400	CM96815OON0OG	18180	1
	250	CM96802OOP0OG	15220	CM96803OOP0OG	19840	1
DN3B-400SD	320	CM98410OOQ0OG	18440	CM98412OOQ0OG	24430	1
	400	CM98410OOR0OG	21780	CM98412OOR0OG	27730	1
DN3-630SD	500	CM96806OOS0OG	24660	CM96807OOS0OG	31880	1
	630	CM96806OOT0OG	24920	CM96807OOT0OG	33080	1
DN4-1250SD	800	CM93041OOU0	51210	CM93042OOU0	67110	1
	1000	CM93041OOV0	69180	CM93042OOV0	93280	1
	1250	CM93041OOA0	90700	CM93042OOA0	124620	1



Representative Application Image

Automatic Source Transfer System (ASTS)

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



AuXC-2000

Automatic Transfer Controllers (ATC) [9032]

Type	Cat. No.	M.R.P. (₹) Per Unit	Std. Pkg. (Nos.)
AuXC-2000 controller	ATC20000000	23445	1

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

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

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



Frame	Accessories	Total Set M.R.P. (₹)	Remarks
DN2	2 Nos : SEOMs with Aux + Trip Alarm Contact + 1 No. : MIL + 1 No. : AuXC2000	76370	Add MRPs of Similar 2 MCCBs of DN2 of desired no. of Poles, Breaking Cap. & Release to arrive at ASTS Solution.
DN3-400		92715	Add MRPs of Similar 2 MCCBs of DN3 of desired no. of Poles, Breaking Cap. & Release to arrive at ASTS Solution.
DN3-630		92980	

Note: Picture shown is for representation purpose only, MCCB + EOM + ATAC combination, MIL kit & AuXC-2000 to be purchased separately & assembled at site.

Accessories for MCCBs [8538]



Description	Internal		
	Cat. No.	M.R.P. (₹) Per Unit	Std. Pkg. (Nos.)
Auxiliary Contact [8538]			
DN0, DN1 - 1 C/O - Right	CM97886O000	800	1
DN0, DN1 - 2 C/O - Right	CM97887O000	1570	1
DZ1 - 1 C/O	EM90110O000	800	1
DN2, DN3B, DN3, DN4 - 1 C/O	CM99801O000	880	1
DN2, DN3B, DN3, DN4 - 2 C/O	CM99802O000	1655	1
Trip Alarm Contact [8538]			
DN0, DN1 - 1 C/O - Right	CM97888O000	800	1
DN0, DN1 - 2 C/O - Right	CM97889O000	1570	1
DZ1 - 1 C/O	EM90110O000	800	1
DN2, DN3B, DN3, DN4 - 1 C/O - Right	CM99803O000	930	1
Auxiliary 1 C/O + TAC 1 C/O [8538]			
DN0, DN1 - Right	CM97890O000	1475	1
DN2, DN3B, DN3, DN4 - Right	CM99804O000	1660	1
Shunt Release [8538]			
DN0, DN1 - 24V DC - Left	CM91402O400	1380	1
DN0, DN1 - 110V AC - Left	CM97883OAOO	1380	1
DN0, DN1 - 240/415V AC - Left	CM97883OMOO	1495	1
DZ1 - 240V AC\$	EM90032OBOO	2100	
DN2, DN3B, DN3, DN4 - 110/240/415V AC, 110/220V DC	CM99805O000	2155@	1
DN2, DN3B, DN3 - 24V DC	CM98976O400	2240@	1
Under Voltage Release [8538]			
DN0, DN1 - 240V AC - Left	CM97892BOOO	2195	1
DZ1 - 240V AC\$	EM90031BOOO	2645	1
DN2, DN3B, DN3 - 240V AC - Left	CM99986BOOO	2945**	1
DN4 - 240V AC - Left	CM99906O000	3510**	1

@ - 'NO' of control contactor to be connected in series for DC control supply

** Use these UV Cat. Nos. with Grey lock MCCBs only

\$ For other voltages, please contact nearest branch office

*For additional accessories of DZ1 MCCBs, please contact nearest branch office

Description	External		
	Cat. No.	M.R.P. (₹) Per Unit	Std. Pkg. (Nos.)
External Neutral CT [8504]			
DZ1 - 40A, 63A	EM90507O000	1470	1
DZ1 - 100A, 160A	EM90508O000	1470	1
DN2 - 40A	CM99946O000	1460	1
DN2 - 63A	CM99947O000	1460	1
DN2 - 100A	CM99948O000	1460	1
DN2 - 160A	CM99949O000	2090	1
DN2 - 250A	CM99950O000	2090	1
DN3 - 400A	CM99954O000	3905	1
DN3 - 630A	CM99955O000	3905	1
DN4 - 800A	CM99889O000	5990	1
DN4 - 1000A	CM99890O000	5990	1
DN4 - 1250A	CM99891O000	6645	1
Adaptor kit for External Neutral CT [8538]			
DZ1-160 & DN2-250	CM99994O000	550	Set of 2
DN3 - 400	CM99995O000	1105	Set of 2
DN3 - 630	CM99997O000	1115	Set of 2
DN4 - 800	CM99996O000	1920	Set of 2
DN4 - 1000	CM90966O000	4060	Set of 4
DN4 - 1250	CM99998O000	6920	Set of 2
Stored Energy Electrical Operating Mechanism			
DN2-240V AC*		22530	
DN3-240V AC*		29490	
DN4-240V AC*		45450	

* Available as customised factory-fitted solution, please contact nearest branch office



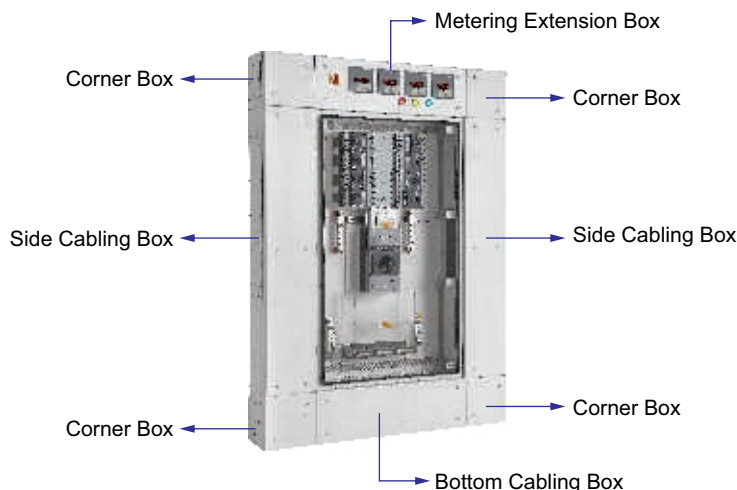
Description	External		
	Cat. No.	M.R.P. (₹) Per Unit	Std. Pkg. (Nos.)
Rotary Handle [8538]			
DN0 Direct ROM	CM97895O000	995	1
DN1 Direct ROM	CM98040O000	1035	1
DZ1 Direct ROM	EM90207O000	1070	1
DN2 Direct ROM	CM99829O000	1070	1
DN3B, DN3 Direct ROM	CM99860O000	1605	1
DN0 Extended ROM	CM97896O000	1435	1
DN1 Extended ROM	CM98041O000	1640	1
DZ1 Extended ROM	EM90209O000	1685	1
DN2 Extended ROM	CM99830O000	1685	1
DN3B, DN3 Extended ROM	CM99861O000	2755	1
DN4 Extended ROM	CM99884O000	3495	1
Panel door mounted Key lock for Extended ROM # [8301]			
Type 1	CM99958TOOOO	3310	1
Type 2	CM99958TOOOA	3310	1
Type 3	CM99958TOOOB	3310	1
Type 12	CM99958TOOOC	3310	1
Type 23	CM99958TOOOD	3310	1

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



Description	External		
	Cat. No.	M.R.P. (₹) Per Unit	Std. Pkg. (Nos.)
Spreader Terminals [8538]			
DN0-100 - 3 Pole	CM97785O000	265	Set of 6
DN0-125D - 3 Pole	CM90687O0LO	375	Set of 6
DZ1 - 160 - 3 Pole	EM90609O000	1270	Set of 6
DN1, DN2 - 250 - 3 Pole	ST98053O000	1270	Set of 6
DN3B/DN3-400 - 3 Pole	ST98065O000	2400	Set of 6
DN3-630 - 3 Pole	ST98054O000	2775	Set of 6
DN4-800 - 3 Pole	CM91161OOUO	5845	Set of 6
DN4-1000 - 3 Pole	CM91161OOVO	11690	Set of 12
DN4-1250 - 3 Pole	CM91161OOAO	21245	Set of 6
DN0-100 - 4 Pole	CM97921O000	450	Set of 8
DN0-125D - 4 Pole	CM90688O0LO	540	Set of 8
DZ1 - 160 - 4 Pole	EM90610O000	1670	Set of 8
DN1, DN2 - 250 - 4 Pole	CM92007O000	1670	Set of 8
DN3B/DN3-400 - 4 Pole	ST98066O000	3440	Set of 8
DN3-630 - 4 Pole	CM92004O000	3740	Set of 8
DN4-800 - 4 Pole	ST90362O000	7455	Set of 8
DN4-1000 - 4 Pole	CM90064OOVO	14900	Set of 16
DN4-1250 - 4 Pole	ST98058O000	27185	Set of 8
Mechanical Interlock Kit - Base Plate [8538]			
DN2-250	CM99731O000	4545	1
DN3-400	CM99732O000	6970	1
DN3-630	CM99854O000	7235	1
DIN rail kit [8538]			
DN0	CM90944O000	85	1

Note: Phase Barriers are supplied along with MCCBs



Range Highlights

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

ENERSYS-S SMDB

Description	Cat. No.	No of ways		M.R.P. (₹) Per Unit	Height (H) (mm)	Width (W) (mm)	Depth (D) (mm)
		250A	100A				
SMDB - TN250D, O/G 100A 4 ways	DA20D1044CZZ0	-	4	42790	637	670	208.5
SMDB - TN250D, O/G 100A 8 ways	DA20D1084CZZ0	-	8	52040	787	670	208.5
SMDB - TN250D, O/G 100A 12 ways	DA20D1124CZZ0	-	12	65460	937	670	208.5
SMDB - TN250D, O/G 100A 16 ways	DA20D1164CZZ0	-	16	76930	1087	670	208.5
SMDB - TN400D, O/G 100A 4 ways	DA40D1044CZZ0	-	4	47940	937	670	208.5
SMDB - TN400D, O/G 100A 8 ways	DA40D1084CZZ0	-	8	54630	1087	670	208.5
SMDB - TN400D, O/G 100A 12 ways	DA40D1124CZZ0	-	12	70240	1237	670	208.5
SMDB - TN400D, O/G 100A 16 ways	DA40D1164CZZ0	-	16	82800	1387	670	208.5
SMDB - TN630D, O/G 100A 8 ways	DA60D1084CZZ0	-	8	88760	1287	870	208.5
SMDB - TN630D, O/G 100A 12 ways	DA60D1124CZZ0	-	12	119880	1507	870	208.5
SMDB - TN630D, O/G 100A 16 ways	DA60D1164CZZ0	-	16	131400	1507	870	208.5
SMDB - TN630D, O/G 250A 4 ways	DA62D1044CZZ0	4	-	86450	1067	870	208.5
SMDB - TN630D, O/G 250A 8 ways	DA62D1084CZZ0	8	-	96820	1287	870	208.5
SMDB - TN630D, O/G 250A 12 ways	DA62D1124CZZ0	12	-	124490	1507	870	208.5
SMDB - TN630D, O/G 250A 16 ways	DA62D1164CZZ0	16	-	139470	1727	870	208.5
SMDB - TN630D, O/G COMBI 4 ways	DA6AD1044CZZ0	2	2	84720	1067	870	208.5
SMDB - TN630D, O/G COMBI 8 ways	DA6AD1084CZZ0	2	6	92210	1287	870	208.5
SMDB - TN630D, O/G COMBI 12 ways	DA6AD1124CZZ0	2	10	122180	1507	870	208.5
SMDB - TN630D, O/G COMBI 16 ways	DA6AD1164CZZ0	2	14	134860	1507	870	208.5

Incoming Device [8536]			
SMDB Type	Description	Cat. No.	M.R.P. (₹) Per Unit
TN250D*	DN1-250C 3 Pole MCCB - 160A	CM90638OOMO	12680
	DN1-250C 3 Pole MCCB - 200A	CM90638OONO	16430
	DN1-250C 3 Pole MCCB - 250A	CM90638OPO	18750
TN400D	DN3-400D 3 Pole MCCB - 320A	CM94005OOQ1OG	25720
	DN3-400D 3 Pole MCCB - 400A	CM94005OOR1OG	25720
TN630D	DN3-630D 3 Pole MCCB - 500A	CM94006OOS1OG	32590
	DN3-630D 3 Pole MCCB - 630A	CM94006OOT1OG	32590

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.

Outgoing Device [8536]			
SMDB Type	Description	Cat. No.	M.R.P. (₹) Per Unit
TN250D, TN400D & TN630D	DN0-100C 3 Pole MCCB - 20A	CM91612OOCOOG	7100
	DN0-100C 3 Pole MCCB - 25A	CM91612OODOOG	7100
	DN0-100C 3 Pole MCCB - 32A	CM91612OOEOOG	7100
	DN0-100C 3 Pole MCCB - 40A	CM91612OOF0OG	7100
	DN0-100C 3 Pole MCCB - 50A	CM91612OOGOOG	7100
	DN0-100C 3 Pole MCCB - 63A	CM91612OOHOOG	7030
	DN0-100C 3 Pole MCCB - 80A	CM91612OOJOOG	7030
	DN0-100C 3 Pole MCCB - 100A	CM91612OOKOOG	7030
TN630D	DN1-250C 3 Pole MCCB - 160A	CM90638OOMO	12680
	DN1-250C 3 Pole MCCB - 200A	CM90638OONO	16430
	DN1-250C 3 Pole MCCB - 250A	CM90638OPO	18750

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

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	6980
	Bottom Cabling Box	CM904370000	6540
TN630D	Metering Extension Box	CM9106400TO	7420
	Bottom Cabling Box	CM910620000	6980
TN250D, TN400D & TN630D	Corner Box	CM910890000	2260
	Mounting base	CM702600000	3270



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	CM910850DOO	6560	CM910860DOO	6560
	-	8	CM910850FOO	8480	CM910860FOO	8480
	-	12	CM910850HOO	10170	CM910860HOO	10170
	-	16	CM910850KOO	11870	CM910860KOO	11870
TN400D	-	4	CM910870DOO	10170	CM910880DOO	10170
	-	8	CM910870FOO	11870	CM910880FOO	11870
	-	12	CM910870HOO	13000	CM910880HOO	13000
	-	16	CM910870KOO	14690	CM910880KOO	14690
TN630D	-	8	CM911200OFO	12540	CM911210OFO	12540
	-	12	CM911200OHO	14610	CM911210OHO	14610
	-	16				
	4	-	CM911200ODO	11230	CM911210ODO	11230
	8	-	CM911200OFO	12540	CM911210OFO	12540
	12	-	CM911200OHO	14610	CM911210OHO	14610
	16	-	CM911200OKO	15920	CM911210OKO	15920
	2	2	CM911200ODO	11230	CM911210ODO	11230
	2	6	CM911200OFO	12540	CM911210OFO	12540
	2	10	CM911200OHO	14610	CM911210OHO	14610
	2	14				



Get the Aluminium Edge



Presenting Ti – the new, design-verified aluminium busbar-based power distribution solution from L&T Electrical & Automation (E&A).

The new Ti range of panels is a power distribution solution from E&A, available with an Aluminum busbar option. Ti is a design verified solution complying with latest IEC-61439 standard and available up to 4000A rating. It offers unique blend of quality, safety and standardization. Ti offering through E&As authorized franchisee network further gives edge as cost competitiveness and localized support for all future needs.

The unique busbar arrangement reduces impedance and heat loss, thereby saving almost 40% energy over conventional systems.

Moreover, these systems feature a fully-compartmentalized design, with an option of aluminium or copper busbars – ensuring quicker delivery and easier installation.

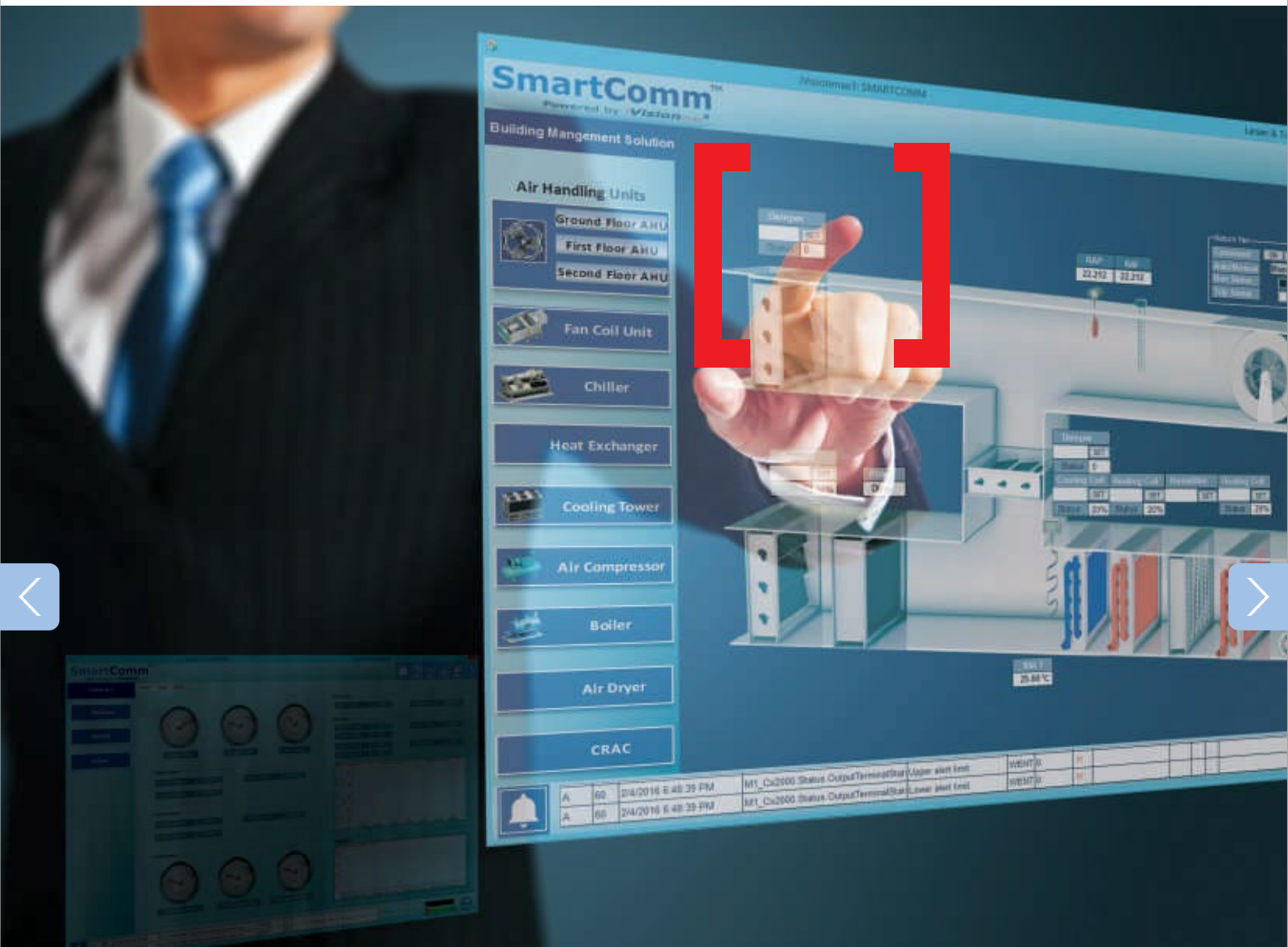
So, the next time you require electrical distribution solutions for your project, get the aluminium edge with the design-verified Ti Range.

Customer Interaction Center (CIC)

BSNL / MTNL (toll free): 1800 233 5858 Reliance (toll free): 1800 200 5858
Tel: 022 6774 5858 Email: cic@Lntebg.com Web: www.Lntebg.com



Smart is in the Communication



Presenting SmartComm – Integration | Monitoring | Protection | Control | Reporting

SmartComm is an unified software platform for device communication, integration, data acquisition, data management, monitoring & control.

This single platform integrates complete E&A's communicable product offerings ranging from Digital Panel Meters through Circuit Breakers, Protection Relays, AC Drives, Soft Starters, Final Distribution Products and Building Automation devices.

SmartComm built-in features of Energy Monitoring, Controlling and Monitoring Switchgears as well as Building Automation and Management functionality.

Key Features:

Customised SLD

Multi-device and Protocol Compatibility

Real-time Reporting

Easy View Interface

Customer Interaction Center (CIC)

BSNL / MTNL (toll free): 1800 233 5858 Reliance (toll free): 1800 200 5858
Tel: 022 6774 5858 Email: cic@Lntebg.com Web: www.Lntebg.com

SmartComm



U-POWER

OMEGA Range of Air Circuit Breakers

Air Circuit Breakers

- Complete range conforms to IS/IEC 60947-2 & IEC 60947-2
- Current rating from 400A to 6300A in 3 frame sizes
- 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 & MTX4.5
- Unique O-LED display for metering
- Touch screen technology in UW-MTX4.5
- 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, 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-MTX1.0



UW-MTX1G



UW-MTX1Gi



UW-MTX1.5G



UW-MTX1.5Gi



UW-MTX3.5/3.5EC/3.5H



UW-MTX4.5

Breaking Capacities Offered:

I _{cu} = I _{cs} = I _{cw} 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.

UW 1 08 N X D 1 2 9 0 0 OMEGA Fr-1 800A 50kA 3P EDO UW-MTX1.5G

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

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

Selection for Breaking Capacity (Icu=Ics) ⁽¹⁾	
50kA (Fr-I upto 2000A & Fr-2 upto 3200A)	N
65kA (Fr-I & Fr-II)	S
80kA (Fr-I, Fr-II & Fr-III)	H
100kA (Fr-III)	V

Please Note :

⁽¹⁾ For Icu values please refer product catalogue

⁽²⁾ Other options of control voltage are available as accessory

⁽³⁾ Temperature protection is available in UW-MTX3.5/3.5EC/3.5H/4.5

⁽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 MTX 3.5 (refer page 55)

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.	

Temperature Rise Monitoring⁽³⁾

Not Required	0
Required	1

Selection for P&C Units

B/C (w/o protection)	0
UW - MTX1.0	7
UW - MTX1G	8
UW - MTX1Gi	B
UW - MTX1.5G	9
UW - MTX1.5Gi	C
UW-MTX3.5	3
UW-MTX3.5EC ⁽⁵⁾	4
UW-MTX4.5	5
UW-MTX3.5H	6

Type

Manually Operated	1
Electrically Operated	2

Selection for control voltage⁽²⁾

For Manually Operated	0
240V AC ECD & CR & 240V AC SR	1
240V AC ECD & CR & 24V DC SR	2

Version

Draw-out	D
Fixed	F

Selection for No. of Poles

3 Pole	X
4 Pole 100% N	F
4 Pole 50% N (in Fr-III only)	H
4 Pole 200% N (upto 2500A)	D

Draw-out Version :

Omega ACBs with UW-MTX release will have inbuilt- Current Metering (MTX 1.5G/1.5Gi/3.5/3.5EC/3.5H/4.5), Common Fault Indication microswitch, 4NO+4NC Aux. contacts, Smart-racking shutter, Safety shutter assembly, Racking Handle, Door sealing frame, Pad-locking arrangement for ON/OFF button, Rating Error Preventer, Arc shield.

A) For ratings upto 1600A, one side vertical terminal adaptors (Bottom) for Frame 1, 2 & 3.

B) For ratings 2000A & above, both side vertical terminal adaptors (Top & Bottom) for Frames 1, 2 & 3.

C) For rating 4000A and above operation counter inbuilt for Frames 2 & 3 both.

Fixed Version :

Omega ACBs with UW-MTX release will have inbuilt- Current Metering (1.5G/1.5Gi/3.5/3.5EC/3.5H/4.5), 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.

Electrically operated ACB includes ECD (240V AC), CR (240V AC) & SR (240V AC OR 24V DC).

3 Pole ACBs with UW-MTX1G (LSING - BCD Switches)



Current Rating	Version	3 Pole Manual Draw-out ACB with UW-MTX1G							
		N (50kA)		S (65kA)		H (80kA)		V (100kA)	
		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	UW108NXD01800	*	UW108SXD01800	*	UW108HXD01800	*	UW308VXD01800	*
1000A		UW110NXD01800		UW110SXD01800		UW110HXD01800		UW310VXD01800	
1250A		UW112NXD01800		UW112SXD01800		UW112HXD01800		UW312VXD01800	
1600A		UW116NXD01800		UW116SXD01800		UW116HXD01800		UW316VXD01800	
2000A		UW120NXD01800		UW120SXD01800		UW120HXD01800		UW320VXD01800	
2500A		UW225NXD01800		UW225SXD01800		UW225HXD01800		UW325VXD01800	
3200A		UW232NXD01800		UW232SXD01800		UW232HXD01800		UW332VXD01800	
4000A		-		UW240SXD01800		UW240HXD01800		UW340VXD01800	
4000A		-		-		UW340HXD01800		UW340VXD01800	
5000A		-		-		UW350HXD01800		UW350VXD01800	
6300A		-		-		UW363HXD01800		UW363VXD01800	

Current Rating	Version	3 Pole Manual Fixed ACB with UW-MTX1G							
		N (50kA)		S (65kA)		H (80kA)		V (100kA)	
		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	UW108NXF01800	*	UW108SXF01800	*	UW108HXF01800	*	UW308VXF01800	*
1000A		UW110NXF01800		UW110SXF01800		UW110HXF01800		UW310VXF01800	
1250A		UW112NXF01800		UW112SXF01800		UW112HXF01800		UW312VXF01800	
1600A		UW116NXF01800		UW116SXF01800		UW116HXF01800		UW316VXF01800	
2000A		UW120NXF01800		UW120SXF01800		UW120HXF01800		UW320VXF01800	
2500A		UW225NXF01800		UW225SXF01800		UW225HXF01800		UW325VXF01800	
3200A		UW232NXF01800		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 (Includes ECD 240V AC, CR 240V AC & SR 240V AC or 24V DC)	*
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 + UW-PS Module)	
UW-PS (Auxiliary power supply module for display in No-load or OFF condition) [§]	
COM Module (MODBUS) for communication [§]	
PM Module for power metering [§]	

* Available on request

§ Chapter ID [8538]

4 Pole ACBs with UW-MTX1G (LSING - BCD Switches)



Current Rating	Version	4 Pole Manual Draw-out ACB with UW-MTX1G							
		N (50kA)		S (65kA)		H (80kA)		V (100kA)	
		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	UW108NFD01800	*	UW108SFD01800	*	UW108HFD01800	*	UW308VFD01800	*
1000A		UW110NFD01800		UW110SFD01800		UW110HFD01800		UW310VFD01800	
1250A		UW112NFD01800		UW112SFD01800		UW112HFD01800		UW312VFD01800	
1600A		UW116NFD01800		UW116SFD01800		UW116HFD01800		UW316VFD01800	
2000A		UW120NFD01800		UW120SFD01800		UW120HFD01800		UW320VFD01800	
2500A		UW225NFD01800		UW225SFD01800		UW225HFD01800		UW325VFD01800	
3200A		UW232NFD01800		UW232SFD01800		UW232HFD01800		UW332VFD01800	
4000A		-		UW240SFD01800		UW240HFD01800		UW340VFD01800	
4000A		-		-		UW340HFD01800		UW340VFD01800	
5000A		-		-		UW350HFD01800		UW350VFD01800	
6300A		-		-		UW363HFD01800		UW363VFD01800	

4 Pole Manual Fixed ACB with UW-MTX1G									
800A	MF	UW108NFF01800	*	UW108SFF01800	*	UW108HFF01800	*	UW308VFF01800	*
1000A		UW110NFF01800		UW110SFF01800		UW110HFF01800		UW310VFF01800	
1250A		UW112NFF01800		UW112SFF01800		UW112HFF01800		UW312VFF01800	
1600A		UW116NFF01800		UW116SFF01800		UW116HFF01800		UW316VFF01800	
2000A		UW120NFF01800		UW120SFF01800		UW120HFF01800		UW320VFF01800	
2500A		UW225NFF01800		UW225SFF01800		UW225HFF01800		UW325VFF01800	
3200A		UW232NFF01800		UW232SFF01800		UW232HFF01800		UW332VFF01800	
4000A		-		UW240SFF01800		UW240HFF01800		UW340VFF01800	
4000A		-		-		UW340HFF01800		UW340VFF01800	
5000A		-		-		UW350HFF01800		UW350VFF01800	
6300A		-		-		UW363HFF01800		UW363VFF01800	

* Available on request

Accessories of OMEGA Air Circuit Breakers [8538]

Air Circuit Breakers



Draw-out ACBs Terminal Adaptors



Fix ACBs Terminal Adaptors

Description	Cat. No.	M.R.P. (₹) Per Unit
Terminal Adaptor for Draw-out Omega ACBs		
Frame-1 400-2000A N/S/H (Vertical / Horizontal)	CL609630000	*
Frame-1 2500A S/H (Vertical)	CL609640000	
Frame-2 400-3200A N/S/H (Vertical / Horizontal)		
Frame-2 4000A S/H (Vertical)	CL604200000	
Frame-2 4000A S/H (Horizontal)	CL603160000	
Frame-3 400-4000A H/V (Vertical) #	CL601280000	
Frame-3 400-4000A H/V (Horizontal-Long)	CL600730000	
Frame-3 5000A H/V (Horizontal-Long)	CL609660000	
Frame-3 5000A H/V (Vertical)#	CL600670000	
Frame-3 6300A H/V (Vertical) #	CL609650000	

: Please consider 4 terminal adaptors per phase.

Description	Cat. No.	M.R.P. (₹) Per Unit
Terminal Adaptor for Fixed Omega ACBs		
Frame-1 400-2000A N/S (Vertical / Horizontal)	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.

Accessories of **OMEGA** Air Circuit Breakers

U-POWER



Operation Counter



Door Interlock

Description	Cat. No.	M.R.P. (₹) Per Unit
Other Accessories [8538]		
Operation Counter	CL909830000#	*
Door Interlock	CL909780000	
Electrical Position Indication (EPI)	CL958260000	
Microswitches for Indication [8536]		
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	

^ Cradle SIC block CL9582500000 needs to be ordered separately, If EPI not installed in same ACB

Operation Counter inbuilt for rating 4000A to 6300A



R-Lock



C-Lock

Description	Cat. No.	M.R.P. (₹) Per Unit
Mechanical Interlock using Key & Lock\$		
R - Lock Type - 1	CL0065900000	*
R - Lock Type - 2	CL0066000000	
R - Lock Type - 3	CL0066100000	
R - Lock Type - 12	CL0066200000	
R - Lock Type - 23	CL0066300000	
Locking arrangement for OFF button with R - Lock (on breaker)	CL9081500000	
Locking arrangement for ISO position with R - Lock (on Cradle)	CL9086500000	
Locking arrangement for ANY position with R - Lock (on Cradle)	CL9092700000	
C - Lock Type - S	CL0066400000	
C - Lock Type - T	CL0066500000	
C - Lock Type - ST	CL0066600000	
C - Lock Type - SS	CL0066700000	
C - Lock Type - TT	CL0066800000	
Locking arrangement for OFF button with C - Lock (on breaker)	CL9081400000	
Locking arrangement for ISO position for C - Lock (on Cradle)	CL9098200000	
Locking arrangement for ANY position with C - Lock (on Cradle)	CL9098100000	

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

* Available on request

\$ Only locks [8301]
Locking arrangement [8538]



Closing Release



Shunt Release



UV Release

Description	Cat. No.	M.R.P. (₹) Per Unit
Electrical Charging Device (ECD) [8501]		
24-30V DC	CL9036200000	*
48/60V DC	CL9036300000	
110V AC / 110-125V DC	CL9036000000	
220V AC / 200V DC	CL9036400000	
240V AC / 250V DC	CL9035900000	
415V AC / 400V DC	CL9036100000	
Closing Release (CR) [8538]		
24-30V DC	CL9081740000	*
48/60V DC	CL9081750000	
110V AC / 110V DC	CL90817A0000	
125/127V DC	CL9081710000	
220 - 240V AC / 220 - 250V DC	CL90817B0000	
415V AC	CL90817D0000	
Shunt Release (SR) [8538]		
24-30V DC	CL9081604000	*
48/60V DC	CL9081605000	
110V AC / 110V DC	CL908160A000	
125/127V DC	CL9081601000	
220 - 240V AC / 220 - 250V DC	CL908160B000	
415V AC	CL908160D000	
Under Voltage Release (UVR) with time delay (0-1-3-5 sec) [8538]		
24-30V DC	CL9081840000	*
48V DC	CL9081850000	
110V AC / 110V DC	CL90818A0000	
240V AC / 220V DC	CL90818B0000	
415V AC	CL90818D0000	



NCT

Description	Cat. No.	M.R.P. (₹) Per Unit
External Neutral CT for UW-MTX Releases [8504]		
Frame-1, 2 & 3 400-800A	CL0071700000	*
Frame-1, 2 & 3 1000-1600A	CL0071800000	
Frame-1 2000-2500A	CL0071900000	
Frame-2 & 3 2000-4000A	CL0072000000	
Frame-3 5000-6300A	CL0072100000	

Automatic Transfer Controllers (ATC) [9032]



AuXC-2000 Controller

Type	Cat. No.	M.R.P. (₹) Per Unit	Std. Pkg. (Nos.)
AuXC-2000 controller	ATC20000000	23445	1

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



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

Accessories of **OMEGA** Air Circuit Breakers

U-POWER



Mechanical Interlock using Bowden Cable [8538]

Description	Cat. No.	M.R.P. (₹) Per Unit
Mechanical Interlock using Bowden Cable (5 meters length)		
Between 2 Incomers	CL906630000	*
Between 3 Incomers	CL906640000	
Between 2 Incomers & 1 Standby	CL906650000	
Between 2 Incomers & 1 Buscoupler	CL906660000	
Mechanical Interlock using Bowden Cable (3 meters length)		
Between 2 Incomers	CL906590000	*
Between 3 Incomers	CL906600000	
Between 2 Incomers & 1 Standby	CL906610000	
Between 2 Incomers & 1 Buscoupler	CL906620000	
Mechanical Interlock using Bowden Cable (2 meters length)		
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
MATRIX Releases & Modules [8538]		
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	CL906470000	
Power supply module	CL907220000	
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

Upgrade to the new-age OMEGA ACB with Minimal Modifications



Pre-Engineered Retrofit Solution
Upgrade E&A CNCS ACB to OMEGA ACB



Presenting the pre-engineered L&T Electrical & Automation (E&A) CNCS to OMEGA Retrofit kit

The E&A CNCS to OMEGA Retrofit kit is a pre-engineered solution which allows you to upgrade from the old CNCS ACB to the advanced E&A OMEGA ACB - with minimal modification. All installations are done by trained Engineers from the nearest E&A Authorised 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

Customer Interaction Center (CIC)

BSNL / MTNL (toll free): 1800 233 5858 Reliance (toll free): 1800 200 5858
Tel: 022 6774 5858 Email: cic@Lntebg.com Web: www.Lntebg.com

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

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 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 (UN-CO module)



C-POWER S1 ACB



C-POWER ACB

C-POWER Range of Air Circuit Breakers

- Conforms to IS/IEC 60947-2 & IEC 60947-2
- Current rating from 800A to 6300A
- 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 & SR71)
- 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 (UN-CO module)

C-POWER HE ACBs for Harsh Environment

- Designed to operate at peak efficiency in Sulphur-rich 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 of SO₂ and H₂S

Please contact the nearest branch office for Details & product Selection



C-POWER HE Range

Breaking Capacities Offered:

Icu = Ics = Icw for 1 sec											
	630A	800A	1000A	1250A	1600A	2000A	2500A	3200A	4000A	5000A	6300A
CN-CS : E / G	50kA	50kA	50kA	50kA	50kA	50kA					
	Frame-1										
CN-CS : S1	50kA	50kA	50kA	50kA	50kA	50kA	60kA	60kA			
	Frame-1						Frame-2				
CN-CS : C		50kA	50kA	50kA	50kA	55kA	60kA			95kA	95kA
CN-CS : H		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
630A	50kA	MDO
		EDO
800A	50kA	MDO
		EDO
1000A	50kA	MDO
		EDO
1250A	50kA	MDO
		EDO
1600A	50kA	MDO
		EDO
2000A	50kA	MDO
		EDO
2500A	60kA	MDO
		EDO

Microprocessor Based SR18G			
3 Pole		4 Pole	
Cat. No.	M.R.P. (₹) Per Unit	Cat. No.	M.R.P. (₹) Per Unit
SL96041	151770	SL96061	190500
SL96051	186770	SL96071	225500
SL96042	151770	SL96062	190500
SL96052	186770	SL96072	225500
SL96043	159290	SL96063	197710
SL96053	194290	SL96073	232710
SL96044	177430	SL96064	218930
SL96054	212430	SL96074	253930
SL96045	199930	SL96065	243860
SL96055	234930	SL96075	278860
SL96046	248050	SL96066	301820
SL96056	283050	SL96076	336820
SL96047	303980	SL96067	369520
SL96057	338980	SL96077	404520

Thermal-Magnetic DN1			
3 Pole		4 Pole	
Cat. No.	M.R.P. (₹) Per Unit	Cat. No.	M.R.P. (₹) Per Unit
SL95331	143770	SL95351	182500
SL95341	178770	SL95361	217500
SL95332	143770	SL95352	182500
SL95342	178770	SL95362	217500
SL95333	151290	SL95353	189710
SL95343	186290	SL95363	224710
SL95334	169430	SL95354	210930
SL95344	204430	SL95364	245930
SL95335	191930	SL95355	235860
SL95345	226930	SL95365	270860
SL95336	240050	SL95356	293820
SL95346	275050	SL95366	328820
SL95337	295980	SL95357	361520
SL95347	330980	SL95367	396520

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

C-POWER S1 3 & 4 Pole Fixed ACBs

Rating	Breaking Capacity Icu=Ics=Icw (1 sec)	Version
630A	50kA	MF
		EF
800A	50kA	MF
		EF
1000A	50kA	MF
		EF
1250A	50kA	MF
		EF
1600A	50kA	MF
		EF

Microprocessor Based SR18G			
3 Pole		4 Pole	
Cat. No.	M.R.P. (₹) Per Unit	Cat. No.	M.R.P. (₹) Per Unit
SL95561	99150	SL95581	123950
SL95571	134150	SL95591	158950
SL95562	99150	SL95582	123950
SL95572	134150	SL95592	158950
SL95563	103360	SL95583	129190
SL95573	138360	SL95593	164190
SL95564	124680	SL95584	155860
SL95574	159680	SL95594	190860
SL95565	137000	SL95585	171270
SL95575	172000	SL95595	206270

Thermal-Magnetic DN1			
3 Pole		4 Pole	
Cat. No.	M.R.P. (₹) Per Unit	Cat. No.	M.R.P. (₹) Per Unit
SL95481	91150	SL95501	115950
SL95491	126150	SL95511	150950
SL95482	91150	SL95502	115950
SL95492	126150	SL95512	150950
SL95483	95360	SL95503	121190
SL95493	130360	SL95513	156190
SL95484	116680	SL95504	147860
SL95494	151680	SL95514	182860
SL95485	129000	SL95505	163270
SL95495	164000	SL95515	198270

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

M.R.P. changes for product customization w.r.t. SR18G ACB M.R.P.		M.R.P. (₹) Per Unit
Bus - Coupler (w/o protection)	Reduce	17500
Microprocessor based SR18G+D (LSING + Current Metering)	Add	8500
Microprocessor based SR18Gi+D (LSING + Current metering + ZSI)	Add	10000

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.

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
400A	50kA	3P MF
630A	50kA	3P MF
800A	50kA	3P MF
1000A	50kA	3P MF
1250A	50kA	3P MF
1600A	50kA	3P MF
2000A	50kA	3P MF

Thermal-Magnetic Release Type DN1	
Cat. No.	M.R.P. (₹) Per Unit
SL95721OOOO	63900
SL95722OOOO	64460
SL95723OOOO	66350
SL95724OOOO	68690
SL95725OOOO	89150
SL95726OOOO	99290
SL93297OOOO	112850

C-POWER Air Circuit Breakers [8536]



C-POWER 3 & 4 Pole Draw-out ACBs

Rating	Breaking Capacity Icu=Ics=Icw (1 sec)	Version	Type	Microprocessor Based SR18G				Thermal-Magnetic DN1			
				3 Pole		4 Pole		3 Pole		4 Pole	
				Cat. No.	M.R.P. (₹) Per Unit	Cat. No.	M.R.P. (₹) Per Unit	Cat. No.	M.R.P. (₹) Per Unit	Cat. No.	M.R.P. (₹) Per Unit
800A	65kA	MDO	H	SL95311	225810	#	282770	#	217810	#	274770
		EDO	H	SL95321	260810	#	317770	#	252810	#	309770
1000A	65kA	MDO	H	SL95312	244030	#	300230	#	236030	#	292230
		EDO	H	SL95322	279030	#	335230	#	271030	#	327230
1250A	65kA	MDO	H	SL95313	269330	#	327300	#	261330	#	319300
		EDO	H	SL95323	304330	#	362300	#	296330	#	354300
1600A	65kA	MDO	H	SL95314	292900	#	366600	#	284900	#	358600
		EDO	H	SL95324	327900	#	401600	#	319900	#	393600
2000A	75kA	MDO	H	SL95315	344740	#	429170	#	336740	#	421170
		EDO	H	SL95325	379740	#	464170	#	371740	#	456170
2500A	75kA	MDO	H	SL95316	364910	#	447950	#	356910	#	439950
		EDO	H	SL95326	399910	#	482950	#	391910	#	474950
3200A	75kA	MDO	H2	SL94822	367200	SL94826	450680	SL94814	359200	SL94818	442680
		EDO	H2	SL94824	402200	SL94828	485680	SL94816	394200	SL94820	477680
4000A	75kA	MDO	H2	SL94823	440200	SL94827	570990	SL94815	432200	SL94819	562990
		EDO	H2	SL94825	475200	SL94829	605990	SL94817	467200	SL94821	597990
5000A	95kA	MDO/EDO	C	#	*	#	*	#	*	#	*
6300A	95kA	MDO/EDO	C	#	*	#	*	#	*	#	*

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

C-POWER 3 & 4 Pole Manual Fixed ACBs

Rating	Breaking Capacity Icu=Ics=Icw (1 sec)	Version	Type	Microprocessor Based SR18G				Thermal-Magnetic DN1			
				3 Pole		4 Pole		3 Pole		4 Pole	
				Cat. No.	M.R.P. (₹) Per Unit	Cat. No.	M.R.P. (₹) Per Unit	Cat. No.	M.R.P. (₹) Per Unit	Cat. No.	M.R.P. (₹) Per Unit
800A	50kA	MF	C	*				*			
1000A	50kA										
1250A	50kA										
1600A	50kA										
2000A	55kA			SL97635	174060	#	225790	SL93005	166060	#	217790
2500A	60kA			SL97636	191800	#	258570	SL93006	183800	#	250570

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

M.R.P. changes for product customization w.r.t. SR18G M.R.P.		M.R.P. (₹) Per Unit
Bus-Coupler (w/o protection)	Reduce	17500
Microprocessor based SR18G+D (LSING + Current Metering)	Add	8500
Microprocessor based SR18Gi+D (LSING + Current metering + ZSI)	Add	10000
Microprocessor based SR71 (LSING + Current metering + Advance protection + PS Module)	Add	*
Communication Module (MODBUS) for SR71 release (SR71 - COM)\$	SL94698OOOO	
Power Metering Module for SR71 release (SR71 - PM)\$	SL94699OOOO	

\$ Chapter ID [8538]

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 of C-POWER Air Circuit Breakers

Accessories (Common for C-POWER Family)



AN1 Module



LTPB



LIP



Shunt Release



UV Release

Description	Cat. No.	M.R.P. (₹) Per Unit
Lockable Trip Push Button (LTPB) [8301]		
Type AA	SL93148000A	3440
Type BB	SL93148000B	3440
Type CC	SL93148000C	3440
Type DD	SL93148000D	3440
Lockable Trip Push Button kit (3 I/C & 2 B/C)	SL919360000	17220
Locking of ACB in Isolated position (LIP) [8301]		
Type A	SL93146000A	3440
Type B	SL93146000B	3440
Type C	SL93146000C	3440
Type D	SL93146000D	3440
Locking of ACB in Any position (LAP) [8301]		
Type A	SL93147000A	3690
Type B	SL93147000B	3690
Type C	SL93147000C	3690
Type D	SL93147000D	3690
Racking Interlock [8301]		
Type AA	SL93149000A	4750
Type BB	SL93149000B	4750
Type CC	SL93149000C	4750
Type DD	SL93149000D	4750
Padlock [8301]		
Racking Padlock Assembly	CL900250000	1610
Other Accessories [8538]		
Door Interlock	SL931500000	2530
Mechanical Operation Counter*	XM808370000	2610
Mounting Kit for Front Mounted Counter	SL958820000	930
Spring Charge Indication Microswitch	SL960000000	1920

* 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.)
Vertical Terminal Adaptors for Draw out C-POWER ACB [8538]			
400-1250 S1/800-1000 C	SL932810000	3940	1
1600-2000 S1/1250-1600 C/800-1600 H	SL932820000	4780	1
2000 C	SL932840000	7060	1
2000 H/2500 C/H	SL932850000	7370	1
2500 S1	SL932890000	7370	1
3200 S1	SL932860000	9080	1
3200H2/H1, 4000H2/H	SL932880000	22020	1

Description	Cat. No.	M.R.P. (₹) Per Unit
Shunt Release (SR) [8538]		
Type EA : 24/48V DC	SL927180400	2700
Type EA : 110V DC	SL927180100	2700
Type EA : 220V DC	SL927180200	2700
Type EA1 : 110V AC	SL927180A00	2700
Type EA1 : 240V AC	SL927180B00	2700
Type EA1 : 415V AC	SL927180D00	2700
Under Voltage Release (UVR) [8538]		
Type MV : 24V DC	ST368770000	3890
Type MV : 240V AC	SL92720B000	3890
Type MV : 415V AC	SL92720D000	3890
Earth Fault Release (for DN1) [8538]		
Type EF1 (10%, 20% In)	SL913400000	3530
Type EF2 (30%, 40%, 50% In)	SL913410000	3530
Remote Fault Indication [8538]		
AN1 Remote Annunciation Module for SR18G/SR18G+D/SR18Gi+D : 240V AC	SL946540000	7870
Microswitches for Indication [8536]		
Microswitch for Voltmetric Releases (2) each	SL927030000	2040
Microswitch for Common Indication of O/L & S/C (3) each	SL927040000	2040
Microswitch for Separate Indication of O/L & S/C (3) each (for DN1 release)	SL927050000	3410
Service Position Microswitch - Right (2)	SL931420000	1380
Service Position Microswitch - Left (2)	SL931430000	1380
Test or Isolated Position Microswitch - Right (2)	SL931440000	1380
Test or Isolated Position Microswitch - Left (2)	SL931450000	1380

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



UN-CO module [8538]

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	10200	1

Spares of C-POWER Air Circuit Breakers

Protection Releases



SR71



SR18G+D/SR18Gi+D



SR18G



DN1



Universal Test Kit



CT

Description	Cat. No.	M.R.P. (₹) Per Unit
Protection Releases [8538]		
Microprocessor based type SR71	On Request	
Microprocessor based type SR18Gi+D	SL948130000	41500
Microprocessor based type SR18G+D	SL948120000	40000
Microprocessor based type SR18G	SL960300000	31500
Thermal-Magnetic Release type DN1	SL931520000	23500
Universal Test Kit	CL904620000	76020

Universal Test Kit

Compatible with following L&T 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

Upgrade to high end communicable Release SR71

Retrofit kit solutions are available

For further details please contact the nearest branch office

Description	Cat. No.	M.R.P. (₹) Per Unit	Std. Pkg. (Nos.)
CTs for SR18G / SR18G+D / SR18Gi+D [8504]			
400 S1 Fix & Draw-out	SL015230000	4700	1
630 S1 Fix & Draw-out	ST374950000	4700	1
800 C/H/S1 Fix & Draw-out	SL018570000	4700	1
1000 C/H/S1 Fix & Draw-out	SL018580000	4700	1
1250 C/H/S1 Fix & Draw-out	SL905710000	5680	1
1600 C/H/S1 Fix & Draw-out	SL905720000	5680	1
2000 C/H Fix & Draw-out	SL905650000	6310	1
2000 S1 Draw-out	SL932100000	6310	1
2500 C/H Fix & Draw-out	SL905660000	6310	1
2500 S1 Draw-out			
3200 H2/H1 Draw-out	SL017400000	7250	1
4000 H2/H Draw-out	SL017390000	8700	1

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

Protect your equipment in Sulphur-rich environments



L&T 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 environments.

For more details please scan the QR code or click here



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



Customer Interaction Center (CIC)

BSNL / MTNL (toll free): 1800 233 5858 Reliance (toll free): 1800 200 5858
Tel: 022 6774 5858 Email: cic@Lntebg.com Web: www.Lntebg.com

Toughest Construction, Highest Dependability

Best in class LTXL Capacitors.
Available in Cylindrical & Box Configurations



Salient features :

- Industry's only Ultra Heavy Duty Capacitors in Cylindrical Configuration
- Proven Performance even under harsh Power Quality Conditions
- Highest Inrush Current Withstand Ability
- Highest Life with Optimised Space
- Maximum Ambient Temperature upto 70 °C
- Space Economy in APFC panels with cylindrical design

Customer Interaction Center (CIC)

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Tel: 022 6774 5858 Email: cic@Lntebg.com Web: www.Lntebg.com

Power Factor Correction Capacitors [8532]

Parameters	Standard Duty		Heavy Duty		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	1.8 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	0.35 W/kVAr	0.35 W/kVAr	0.45 W/kVAr	0.5 W/kVAr	0.45 W/kVAr	0.35 W/kVAr
Peak Inrush current withstand capability	200 x In	200 x In	250 x In	300 x In	250 x In	350 x In	300 x In	500 x In	500 x In
Number of switching operations per year	5000	5000	7500	8000	8000	15000	10000	18000	20000
Max. Ambient temp.	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.	150000 hrs.	200000 hrs.	200000 hrs.	300000 hrs.	300000 hrs.

Standard Duty Capacitors



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	187
	1.2 to 27.7	480	197
	1.3 to 33.1	525	201
Box 1 to 6 kVAr - Series : LTBCF 7.5 to 33.1 kVAr - Series : LTBCD	1 to 30	440	261
	11.1 to 27.7	480	273
	13.2 to 33.1	525	279

Heavy Duty Capacitors



Type	kVAr Rating	Voltage (V)	M.R.P. (₹) per kVAr
New Cylindrical Series: LTCCCH	1 to 4	440 V	363
	5 to 15		333
	20 to 30		325
	5.5 to 16.6	480 V	350
	22.1 & 27.7		341
	6.6 to 16.6	525 V	356
	20 to 33.1		348
Box Series: LTBCCH	1 to 4	440 V	481
	5 to 15		408
	20 to 50		399
	5.5 to 15	480 V	428
	20 to 27.7		419
	6.6 to 15	525 V	437
	20 to 33.1		426

Gas Filled Capacitors



Type	kVAr Rating	Voltage (V)	M.R.P. (₹) per kVAr
Cylindrical Series: LTCCN	3 & 4	440	374
	5 to 15		343
	20 & 25		333
	7.5 to 15	480	361
	20 to 30		350
	7.5 to 15	525	367
	20 to 30		356

Standard Duty Prime Capacitors

Type	kVAr Rating	Voltage (V)	M.R.P. (₹) per kVAr
Cylindrical Series: LTCCV	5 to 25	440 V	240

The 3-in-1 solution!



The brand new Standard duty Box capacitor with inbuilt MCB and LED indication

- **Correction** of power factor by Standard duty capacitor
- **Indication** of capacitor health status by LED
- **Protection** and isolation by inbuilt MCB

Convenient & Suitable for

- Transformer compensation
- Direct motor compensation

kVAr Rating	Voltage	Cat. No.	M.R.P. (₹) Per Unit
5	440 V	LTBCM305B2	3360
7.5		LTBCM307B2	3740
8.33		LTBCM308B2	3960
10		LTBCM310B2	4400
12.5		LTBCM312B2	5060
15		LTBCM315B2	5725
20		LTBCM320B2	7690
25		LTBCM325B2	9015

Super Heavy Duty Capacitors



Type	kVAr Rating	Voltage (V)	M.R.P. (₹) per kVAr
Cylindrical Series: LTCCR	3 to 5	440 V	376
	7.5 to 15		345
	20 & 25		337
	1.2 to 5.5	480 V	395
	11.1 & 15		363
	20 to 27.7		354
	1.3 to 5	525 V	402
	6.6 to 15		369
	20 to 33.3		361

APP Capacitors



Type	kVAr Rating	Voltage (V)	M.R.P. (₹) per kVAr
Box Series: LTBCP	5 to 15	440 V	625
	20 to 50		604
	5.5 to 13.8	480 V	657
	16.6 to 27.7		635
	6.6 & 13.2	525 V	669
	16.6 to 33.1		647

LTXL - Ultra Heavy Duty Capacitors



Type	kVAr Rating	Voltage (V)	M.R.P. (₹) per kVAr
Cylindrical Series : LTCCU	5 to 15	440V	660
	20 & 25		649
	7.5 to 15	480V	693
	20		682
	7.5 to 15	525V	706
	20		694
Box Series: LTBCU	5 to 15	440V	829
	20 to 50		813
	7.5 to 15	480V	871
	20 to 30		854
	7.5 to 15	525V	887
	20 to 33.1		870

Ordering Information for Capacitors

C - Cylindrical, B - Box

Duty: D/F – Standard*
M - Standard duty Box with MCB & LED Indication
H - Heavy
N - Gas Filled
R - Super Heavy
P - APP
U - Ultra Heavy

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

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

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

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
LTBCM	5, 7.5, 8.33, 10, 12.5, 15, 20, 25	—	—
LTCCCH	1, 2, 3, 4, 5, 7.5, 10, 12.5, 15, 20, 25, 30	5.5, 11.1, 13.8, 16.6, 22.1, 27.7	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	3, 4, 5, 7.5, 8.33, 10, 12.5, 15, 20, 25	7.5, 12.5, 15, 20, 25, 30	7.5, 8.33, 12.5, 15, 20, 25, 30
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	6.6, 13.2, 16.6, 20, 26.5, 30, 33.1
LTCCU	5, 7.5, 8.33, 10, 12.5, 15, 20, 25	7.5, 8.33, 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]

- Copper & Aluminium wound reactors
- Lower operating losses
- 180% linearity*
- Thermal cut off
- Better Harmonic Blocking Capability [Quality Factor > 35]



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	6635	LTAL0701B2	4620	LTFR1401B2	10390	LTAL1401B2	7235
2	LTFR0702B2	6955	LTAL0702B2	5040	LTFR1402B2	12170	LTAL1402B2	9505
3	LTFR0703B2	7275	LTAL0703B2	5710	LTFR1403B2	13045	LTAL1403B2	10240
4	LTFR0704B2	7725	LTAL0704B2	6070	LTFR1404B2	13695	LTAL1404B2	10765
5	LTFR0705B2	7940	LTAL0705B2	6670	LTFR1405B2	15420	LTAL1405B2	11155
10	LTFR0710B2	12480	LTAL0710B2	9465	LTFR1410B2	24230	LTAL1410B2	15620
12.5	LTFR0712B2	13835	LTAL0712B2	10385	LTFR1412B2	26840	LTAL1412B2	17135
15	LTFR0715B2	15320	LTAL0715B2	11110	LTFR1415B2	29740	LTAL1415B2	18330
20	LTFR0720B2	18145	LTAL0720B2	13235	LTFR1420B2	35245	LTAL1420B2	21835
25	LTFR0725B2	19290	LTAL0725B2	14005	LTFR1425B2	37450	LTAL1425B2	23110
50	LTFR0750B2	30630	LTAL0750B2	22220	LTFR1450B2	59475	LTAL1450B2	36660
75	LTFR0775B2	45380	LTAL0775B2	33040	LTFR1475B2	88115	LTAL1475B2	54510
100	LTFR0700B2	62390	LTAL0700B2	45400	LTFR1400B2	121150	LTAL1400B2	74910

* 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 and reactor rating (440 V)	With 7% detuned reactor			With 14% detuned reactor	
	Capacitor series	Capacitor (480 V)	Capacitor (525 V)	Capacitor series	Capacitor (525 V)
1 kVar	LTCCF, LTCCR	1.2 kVar	1.3 kVar	LTCCF, LTCCR	1.3 kVar
2 kVar	LTCCF, LTCCR	2.2 kVar	2.6 kVar	LTCCF, LTCCR	2.6 kVar
3 kVar	LTCCF, LTCCR	3.3 kVar	3.9 kVar	LTCCF, LTCCR	3.9 kVar
4 kVar	LTCCF	4.4 kVar	5.3 kVar	LTCCF	5.3 kVar
	LTCCR		5 kVar	LTCCR	5 kVar
5 kVar	LTCCF, LTCCH, LTCCR, LTBCB, LTBCP	5.5 kVar	6.6 kVar	LTCCF, LTCCH, LTCCR, LTBCB, LTBCP	6.6 kVar
	LTCCN, LTCCU, LTBCU	7.5 kVar	7.5 kVar	LTCCN, LTCCU, LTBCU	7.5 kVar
10 kVar	LTCCD, LTCCH, LTCCR, LTBCD, LTBCB, LTBCP	11.1 kVar	13.2 kVar	LTCCD, LTCCH, LTCCR, LTBCD, LTBCB, LTBCP	13.2 kVar
	LTCCN, LTCCU, LTBCU	12.5 kVar	12.5 kVar	LTCCN, LTCCU, LTBCU	12.5 kVar
12.5 kVar	LTCCN, LTCCR, LTCCU, LTBCB, LTBCU	15 kVar	15 kVar	LTCCN, LTCCR, LTCCU, LTBCB, LTBCU	15 kVar
	LTCCD, LTCCH, LTBCD, LTBCP	13.8 kVar	16.6 kVar	LTCCD, LTCCH, LTBCD, LTBCP	16.6 kVar
15 kVar	LTCCN, LTCCR, LTCCU, LTBCB, LTBCU	20 kVar	20 kVar	LTCCD, LTCCN, LTCCH, LTCCR, LTCCU, LTBCD, LTBCB, LTBCP, LTBCU	20 kVar
	LTCCD, LTCCH, LTBCD, LTBCP	16.6 kVar			
20 kVar	LTCCN, LTCCR, LTBCB, LTBCU	25 kVar	25 kVar	LTCCN, LTCCR, LTBCB, LTBCU	25 kVar
	LTCCD, LTCCH, LTBCD, LTBCP	22.1 kVar	26.5 kVar	LTCCD, LTCCH, LTBCD, LTBCP	26.5 kVar
	LTCCU	7.5 + 15 kVar	2 x 12.5 kVar	LTCCU	2x12.5 kVar
25 kVar	LTCCD, LTCCH, LTCCR, LTBCD, LTBCB, LTBCP	27.7 kVar	33.1 kVar	LTCCD, LTCCN, LTCCH, LTCCR, LTBCD, LTBCB, LTBCP, LTBCU	30 kVar
	LTBCU	30 kVar	33.1 kVar		
	LTCCN		25 + 8.33 kVar		
	LTCCU	12.5 + 15 kVar	15 + 20 kVar	LTCCU	(10+20) kVar
50 kVar	LTCCD, LTCCH, LTCCR, LTBCD, LTBCB, LTBCP	2 x 27.7 kVar	2 x 33.1 kVar	LTCCD, LTCCN, LTCCH, LTCCR, LTBCD, LTBCB, LTBCP, LTBCU	2 x 30 kVar
	LTBCU	2 x 30 kVar	2 x 33.1 kVar		
	LTCCN		2 x (25 + 8.33) kVar		
	LTCCU	2 x (12.5 + 15) kVar	2 x (15 + 20) kVar	LTCCU	2 x (10+20) kVar
100 kVar	LTCCD, LTCCH, LTCCR, LTBCD, LTBCB, LTBCP	4 x 27.7 kVar	4 x 33.1 kVar	LTCCD, LTCCN, LTCCH, LTCCR, LTBCD, LTBCB, LTBCP, LTBCU	4 x 30 kVar
	LTBCU	4 x 30 kVar	4 x 33.1 kVar		
	LTCCN		4 x (25 + 8.33) kVar		
	LTCCU	4 x (12.5 + 15) kVar	4 x (15 + 20) kVar	LTCCU	4 x (10+20) kVar

* kVar selection is based on minimum size required and higher standard rating available

Capacitor Duty Contactors - Type MO C [8536]



MO C25

MO C50

MO C100

Size	kVAr Rating @ 440V, 3Ph, 50Hz	Type	Built-in Auxiliary Contacts	Cat. No.	M.R.P. (₹) Per Unit	Std. Pkg. (Nos.)
Fr 1	3	MO C3	1NO	CS96146	1655	1
	5	MO C5	1NO	CS96127	1780	1
	8.5	MO C8.5	1NO	CS96320	1960	1
	10	MO C10	1NO	CS96156	2125	1
	12.5	MO C12.5	1NO	CS96321	2185	1
	15	MO C15	1NO	CS90019	2985	1
	20	MO C20	1NO	CS90021	3415	1
	25	MO C25▲	1NO	CS96322	3795	1
Fr 2	30	MO C30\$	1NO	CS96148	6070	1
	40	MO C40	1NO	CS96147	10310	1
	50	MO C50	1NO	CS96324	10755	1
Fr 3	60	MO C60\$	1NO	CS96149	12725	1
	75	MO C75	1NO	CS96150	14680	1
	85	MO C85	1NO	CS96157	15845	1
	100	MO C100\$	1NO	CS96158	16950	1

Thyristor Switching Module, 440V 50Hz [8538]

- High Peak Inverse Voltage (PIV) - 2.2 kV
- Lower operating losses
- Auto thermal cut off
- Compact Design
- No moving parts
- LEDs for various status/fault indications



kVAr Rating	Cat. No.	M.R.P. (₹) Per Unit
10	LTSM10B2	18220
25	LTSM25B2	25995
50	LTSM50B2	30335

Note: Above prices include Quick Discharge Resistors (QDR)

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

▲ 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

Please refer page No. 7 for further details.

APFC Controller [8538]

etaSMART - APFC Controller - 1 CT input

Features:

- Simple and Smart Controller
- Auto programming function available
- CT secondary - 1 / 5 Amp site selectable



2 & 4 Quadrant Operation for sites with / without Solar Plants

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

No. of O/P steps (for Thyristor switching)	Size	Cat. No.	Single CT input	Voltage Input	M.R.P. (₹) Per Unit
6	96 x 96	CS916130000	1/ 5 Amp	415 V	11500
8	144 x 144	CS916140000			13500
12	144 x 144	CS916150000			15500
15	144 x 144	CS916160000			18200

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	9000
6	96 x 96	CS908850000			10500
8	96 x 96	CS909020000			12200
12	144 x 144	CS909030000			14600
14	144 x 144	CS909040000			16000
16	144 x 144	CS909050000			17600

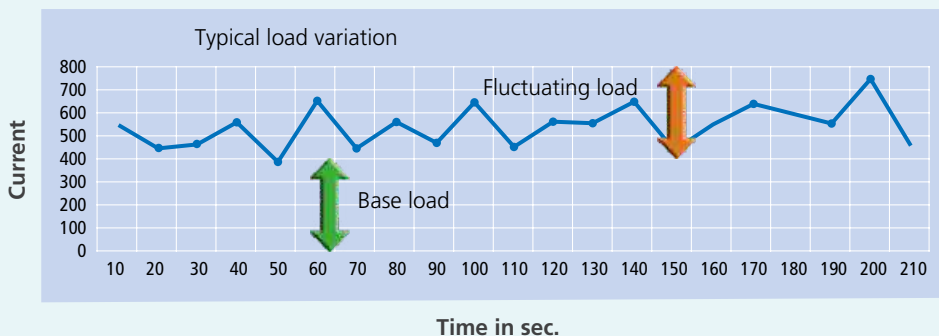
Last Two Contacts can be Programmed for Capacitor Switching / Alarm Function / Fan Control

*Performance
meets economy*



Automatic power factor control solutions

etaULTRA 8T + 8R APFC Controller for Thyristor + Contactor Switching



‘Thyristor + Contactor’ based APFC Panels for **performance** and **economy**



etaULTRA 8T + 8R controller offers:

- 8 Transistor outputs for Thyristor switching and 8 Relay outputs for Contactor switching
- 3-Phase Current and Voltage measurement to compensate PF in unbalanced load
- 4 Quadrant measurement to take care of Sites with Solar plants
- Individual harmonics measurement up to 31st order
- 3-digit Power Factor setting to obtain higher Accuracy
- Communication through inbuilt MODBUS RS-485 Protocol

Customer Interaction Center (CIC)

BSNL / MTNL (toll free): 1800 233 5858 Reliance (toll free): 1800 200 5858
Tel: 022 6774 5858 Email: cic@Lntebg.com Web: www.Lntebg.com

etaULTRA - APFC Controller - 3 CT inputs

Features:

- 3 Phase Current and Voltage measurement
- PF display - 3 Digit after decimal
- Cascading - Master - Slave Configuration possible to increase contact outputs
- Individual harmonics measurement up to 31st order
- Dual PF setting for Mains - DG application
- Communication through Inbuilt MODBUS RS-485 Protocol



2 & 4 Quadrant Operation for sites with / without Solar Plants

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	CS910500000	144 x 144	19000
etaULTRA 16R	16	0		CS910510000		25000
etaULTRA 8T+2R	2	8		CS910520000		19000
etaULTRA 14T+2R	2	14		CS910530000		25000
etaULTRA 8T+8R	8	8		CS910540000		19000

New

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

etaCON M - APFC Controller

APFC controller for Contactor switching with 1 CT input

Features:

- Modular and expandable steps
- CT secondary - 1 A / 5 A Site selectable
- Measurement of individual Current and Voltage harmonic (THD) up to 15th Order
- Capacitor failure indication
- Suitable for LT as well as HT side sensing
- Communicable on Modbus through RS485 Plug-in Module



2 & 4 Quadrant Operation for sites with / without Solar Plants

etaCON M Optional Plug-in Modules

Description	Model	Cat. No.	M.R.P. (₹) Per Unit
2 Steps Plug-in Module	2 Relays NO	ETACONEXP2R	1900
3 Steps Plug-in Module	3 Relays NO	ETACONEXP3R	2800
RS485 Plug-in Module	RS485 Plug-in Module	ETACONRS485	10000

Any 1 Plug-in module can to be added to ETACONM003R

Any 1 Plug-in module can to be added to ETACONM005R

Any 2 Plug-in modules can to be added to ETACONM008R

etaCON M APFC Controller

Model	Single CT input	Voltage input	Cat. No.	M.R.P. (₹) Per Unit
3 Step APFC Controller (96 x96)	1 A / 5 A	415V / 110 V	ETACONM003R	11500
5 Step APFC Controller (96 x96)			ETACONM005R	13400
8 Step APFC Controller (144 x144)			ETACONM008R	16900

Active Harmonic Filter (AHF) [8543]

- Reduces THD within IEEE - 519 limits
- Dynamic correction of THD
- Improves both distortion & displacement Power Factor
- 3 Phase 3 Wire AHF to be used where 3rd Harmonic Mitigation is not required
- 3 Phase 4 Wire AHF to be used where 3rd Harmonic Mitigation is required
- Modular Design allowing for future expansion
- Ease of Monitoring using Touch Screen HMI
- Flexibility of Configuration in both open loop (load side sensing) & closed loop (source side sensing)



Filter Rating (A)	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	AHF030331D2	On Request	AHF030341D2	On Request
60	AHF060331D2		AHF060341D2	
75	AHF075331D2		AHF075341D2	
100	AHF100331D2		AHF100341D2	
150	AHF150331D2		AHF150341D2	
200	AHF200331D2		AHF200341D2	
300	AHF300331D2		AHF300341D2	
400	AHF400331D2			
600	AHF600331D2			
800	AHF800331D2			

* Standard CAT. No. Configuration

Contact your nearest sales office for customised solutions:

Customisable Options Available:

IP Class : IP20/IP40/IP42

Cable Entry : Bottom / Top / Additional Cable Alley

Communication : MODBUS RS485 Protocol Available

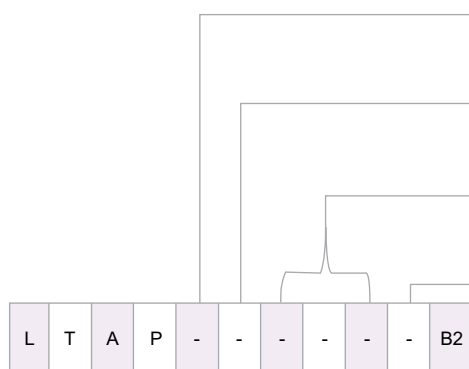
etaSYS Standard APFC Panels [8537]

Features

- Wide range of ratings (35 to 500 kVAr) covers the typical requirement of APFC panel ratings
- All the panels are with optimal number of steps and step sizes
 - Offers sufficient step resolution which would be suitable for all types of industries
 - Panel operation without hunting of capacitors
- Pre-selected switchgear with accurate ratings offers reliable operation, protection and isolation
- Accurate combination of capacitor and reactor offers better protection against harmonics
- IP 42 panels
- Auto and manual switching options



Ordering Information for APFC Panels



Branch Protection:

M - MCCB

F - HRC Fuse/ Semiconductor Fuse

Capacitors:

H - Super Heavy Duty Cylindrical

U - LTXL Ultra Heavy Duty

kVAr ratings:

035, 050, 075, 100, 125, 150, 200,
225, 250, 300, 350, 400, 450 & 500

1 - Contactor switched, without reactors

2 - Contactor switched, with reactors

3 - Thyristor switched, with reactors, with HSF

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.

3 Phase Over Current + Earth Fault Relay

C.T. Rating 1A or 5A, Field Selectable



- IDMT & Definite time characteristics
- Last 30 trip data recording with date and time
- Password Protection

Model	Aux. Supply (V)	Output Contacts	Device Code	Cat. No.	M.R.P. (₹) Per Unit
MC31AnX	24 - 240V AC/ DC	2 NO + 2 NC	51, 51N	MC31ANX2200	16500
		4 NO		MC31ANX4000	

3 Phase Over Current + Earth Fault Relay with High Set

C.T. Rating 1A or 5A, Field Selectable



- IDMT & Definite time characteristics
- Last 30 trip data recording with date and time
- Password Protection

Model	Aux. Supply (V)	Output Contacts	Device Code	Cat. No.	M.R.P. (₹) Per Unit
MC61AnX	24 - 240V AC/ DC	2 NO + 2 NC	51, 51N,	MC61ANX2200	19000
		4 NO	50, 50N	MC61ANX4000	

3 Phase Over Current + Earth Fault Relay with High Set & RS - 485 Port

C.T. Rating 1A or 5A, Field Selectable



- IDMT & Definite time characteristics
- Last 30 trip data recording with date and time
- Password Protection

Model	Aux. Supply (V)	Output Contacts	Device Code	Cat. No.	M.R.P. (₹) Per Unit
MC61CnX	24 - 240V AC/ DC	4 NO	51, 51N, 50, 50N	MC61CNX4000	23500

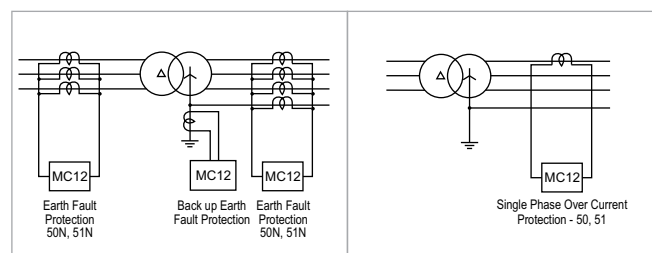
Single Pole Over Current or Earth Fault Relay

C.T. Rating 1A or 5A, Not Field Selectable



- IDMT and Definite time characteristics

Model	Aux. Supply (V)	C.T. Secondary (A)	Device Code	Cat. No.	M.R.P. (₹) Per Unit
MC12	20 - 110V AC/DC	1A	50, 51 or 50N, 51N	MC12AA10X00	12500
		5A		MC12AA50X00	
	88 - 264V AC/DC	1A		MC12AB10X00	
		5A		MC12AB50X00	



Reverse Power Relay

C.T. Rating 1A or 5A, Not Field Selectable



- System Voltage is site selectable - 110V / 415V AC

Model	Aux Supply (V)	C.T. Secondary (A)	Device Code	Cat. No.	M.R.P. (₹) Per Unit
MRP11	20 - 110V AC/DC	1A	32	MRP11A10X00	22500
		5A		MRP11A50X00	
	88 - 264V AC/DC	1A		MRP11B10X00	
		5A		MRP11B50X00	

Trip Circuit Supervision Relay



- Static Relay.
- Monitors Trip Coil in Breaker ON & OFF condition
- Site selectable Trip Coil Voltage

Model	Aux. Supply (V)	Cat. No.	M.R.P. (₹) Per Unit
TCS01nX	20 - 110 V AC/ DC	TCS01NXA000	7500
	88 - 264 V AC/ DC	TCS01NXB000	

MV12

Single Phase Under Voltage or Over Voltage Relay

- System Voltage is site selectable - 110 / 240 / 415V AC



Model	Aux. Supply (V)	Device code	Cat. No.	M.R.P. (₹) Per Unit
MV12	20 - 110V AC/DC	27 or 59	MV12AA00X00	12500
	88 - 264V AC/DC		MV12AB00X00	

MC2-30T

Comprehensive Over Current & Earth Fault Protection Relay with Auto reclosing

- Modbus RTU / IEC870-5-103 Communication Protocol
- Protections offered: 46, 49, 50, 51, 50N, 51N, 51BF, 74TCS, 79



Product	Description	Cat. No.	M.R.P. (₹) Per Unit
MC2-30T	MC2 30T, Aux. supply 24 to 110VAC/DC	MC230TA000	90000
	MC2 30T, Aux. supply 80 to 220VAC/DC	MC230TB000	

* Available on request only

MC2-30V

Three Phase Voltage & Frequency Relay with df/dt protection

- Modbus RTU / IEC870-5-103 Communication Protocol
- Protections offered: 27, 59, 59Vo, 81, df/dt, 74



Product	Description	Cat. No.	M.R.P. (₹) Per Unit
MC2-30V	MC2 30V, Aux. supply 24 to 110VAC/DC	MC230VA000	100000
	MC2 30V, Aux. supply 80 to 220VAC/DC	MC230VB000	

* Available on request only

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	
				220VDC	L1H32DC220X	
				230VAC	L1H32AC230X	

* Available on request only

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
Single element Auxiliary relay	4 N/O	Hand	Hand	24VDC	A1H40DC024X	5000
				110VDC	A1H40DC110X	
				220VDC	A1H40DC220X	
				230VAC	A1H40AC230X	
Single element Auxiliary relay	2 N/O + 2 N/C	Auto	Hand	24VDC	A1A22DC024X	
				110VDC	A1A22DC110X	
				220VDC	A1A22DC220X	
				230VAC	A1A22AC230X	

* Available on request only

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	1407
1P LCD Meter 5-30A with BOX	WM101BC5DL0BOX	1883
1P LCD Meter 5-30A with OPTICAL PORT	WM101BC5DDH	1932
1P LCD Meter 5-30A with Optical port + BOX	WM101BC5DDHBOX	2408
1P LCD Meter 10-60A	WM101BC7DL0	1665
1P LCD Meter 10-60A with BOX	WM101BC7DL0BOX	2099
1P LCD Meter 10-60A with Optical Port	WM101BC7DDH	2129
1P LCD Meter 10-60A with Optical Port + BOX	WM101BC7DDHBOX	2448

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	4253
3Ph 4 W kWh Dir base mtg 240V 5-30 A Acc 1	WR301BC4D20	3563
3Ph 4 W kWh Dir base mtg 240V 10-40 A Acc 1	WR301BC6D20	3668
3Ph 4 W kWh Dir base mtg 240V 10-60 A Acc 1	WR301BC7D10	4645
3Ph 4 W kWh Dir base mtg 240V 20-100 A Acc 1	WR301BC8D10	6736

Trivector Meter Class 0.5s

Model ER300P Class 0.5s (Base Mounting)

- Inform CT/PT ratio while ordering
- DLMS (IS 15959) Protocol meters is available on request



Description	Cat. No.	M.R.P. (₹) Per Unit
3Ph, 4W TVM 110V (L-L) 1 A Class 0.5s BM	WR300BB1200	20359
3Ph, 4W TVM 110V (L-L) 5 A Class 0.5s BM	WR300BB5200	20359
3Ph, 4W TVM 240V (L-N) 5 A Class 0.5s BM	WR300BC5200	18763
3Ph, 4W TVM 110V (L-L) 1 A Class 0.5s BM RS 485 Modbus	WR300BB12RS	24431
3Ph, 4W TVM 110V (L-L) 5 A Class 0.5s BM RS 485 Modbus#	WR300BB52RS	24431
3Ph, 4W TVM 240V (L-N) 5 A CI 0.5s BM RS 485 Modbus	WR300BC52RS	22515

- available on request only

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	6337
3Ph, 4W TVM 240 V 10 - 60A BM RS 485Modbus*	WR300BC73RS485	9040
3Ph, 4W TVM 240 V 10 - 60A BM with Hinge type Box	WR300BC73BOXH	7850

*- 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
- DLMS (IS 15959) Protocol meters is available on request



Description	Cat. No.	M.R.P. (₹) Per Unit
3Ph, 4W TVM 110V (L-L) 1 A Class 0.2s BM	WR300BB1100	49395
3Ph, 4W TVM 110V (L-L) 5 A Class 0.2s BM	WR300BB5100	49395
3Ph, 4W TVM 110V (L-L) 1 A Class 0.2s BM RS485 Modbus	WR300BB11RS	52694
3Ph, 4W TVM 110V (L-L) 5 A Class 0.2s BM RS485 Modbus	WR300BB51RS	52694

Meter Reading Instrument

[8471]



Description	Cat. No.	M.R.P. (₹) Per Unit
Meter Reading Instrument - (16.5 MB)	990MRXX000	105254
Meter Optical port to USB cable	990PCXXUSB	1260

Pre-Payment & Smart Meter Solutions[§]



For Pre-payment (IS 15884) and Smart Meter (IS 16444) solutions please contact our nearest Branch

Net Meters[§]



Net Meters for solar roof top application & solar generation plant

ORION (40-200A)[§]



Combine CT Meter - Thread Through Meter (Meter + CT + Modem)

§ For more details please contact nearest branch

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Digital Panel Meters

- Meters with Class 1, Class 0.5, 0.5S, Class 0.2, 0.2S accuracy
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- Direct access to Basic, Power and Energy parameters through front keys
- RS485 or Ethernet communication available
- Analog, Digital inputs and outputs, Data logging options

For our DPM programming videos and more details on Energy Management Solutions please scan the QR code or click here



Our metering solutions include:

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VAF + PF meters
Energy meters
Dual Source meters
Basic Multifunction meters
Advanced Multifunction meters
MD Controller

Customer Interaction Center (CIC)

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Tel: 022 6774 5858 Email: cic@lntebg.com Web: www.lntebg.com

Single Function Meters [9030]

1xxx Series

Features

- Accuracy Class 1.0, 0.5
- Input voltage measurement range 50-520 VAC (P-P)
- Aux supply 80-300 VAC
- 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	880
1Ph LED Voltmeter CI 1	WL1120100000	880
3Ph LED Ammeter CI 1	WL1310100000	1275
3Ph LED Voltmeter CI 1	WL1320100000	1275
LED Freq meter CI 0.2	WL1130400000	880
1Ph LED Ammeter CI 0.5	WL1110200000	1185
1Ph LED Voltmeter CI 0.5	WL1120200000	1185
3Ph LED Ammeter CI 0.5	WL1310200000	1540
3Ph LED Voltmeter CI 0.5	WL1320200000	1540

Energy Meters [9030]

4000 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
- 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	2500
kWh LED meter CI 1 with RS485	WL4000110000	2950
kWh LED meter CI 0.5	WL4000200000	3170
kWh LED meter CI 0.5 with RS485	WL4000210000	3615
kWh LCD meter CI 1	WC4000100000	2770
kWh LCD meter CI 1 with RS485	WC4000110000	3215
kWh LCD meter CI 0.5	WC4000200000	3435
kWh LCD meter CI 0.5 with RS485	WC4000210000	3885

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

VAF + PF Meters [9030]

4110 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
- Flush mounting 96 x 96 mm
- CT/PT site programmable
- Parameters: VLL, VLN, A, F, PF, On Hrs, RPM, Apeak



Description	Cat. No.	M.R.P. (₹) Per Unit
VAF + PF meter, CI 1	WL4110100000	2225
VAF + PF meter with RS485, CI 1	WL4110110000	2780
VAF + PF meter, CI 0.5	WL4110200000	2555
VAF + PF meter with RS485, CI 0.5	WL4110210000	3090

DIN Basic Multifunction Meters [9030]

4000 Series

Features

- DIN mounting whole current operated meter
- Accuracy Class 1.0
- Inbuilt analytics with energy consumption without any additional software



- Push to push mode for variable kWh consumption monitoring
- Parameters: 1 Phase - Voltage, Current, kW, kWh
3 Phase - Voltage, Current, kW, kWh + PF, kVA, kVAh, MD



Description	Cat. No.	M.R.P. (₹) Per Unit
Energy meter 1P 5-40A CI 1 DIN	WD4000101000	2135
Energy meter 3P 10-60A CI 1 DIN	WD4000103000	4850
Energy meter RS485 module	WD400010RS00	2135
Energy meter Wi-Fi module	WD400010WFO0	9500

Counter type Energy Meter [9030]

4030 Series

Features

- Accuracy Class 1.0
- Flush mounting 96 x 96 mm
- Available with sealing arrangement
- Parameter : kWh



Description	Cat. No.	M.R.P. (₹) Per Unit
kWh Counter type meter CI 1 (3Ph 4W 240V 5A)	WL4030100000	3120

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: V, A, F, PF, kW, kVA, Run hours, kWh (EB and DG), Old energy, Site selectable kWh / kVAh

kWh or kVAh
is site selectable



Description	Cat. No.	M.R.P. (₹) Per Unit
Dualsource LED meter CI1	WL4040100000	3790
Dualsource LED meter CI1 with RS485	WL4040110000	4685
Dualsource LED meter CI0.5	WL4040200000	4505
Dualsource LED meter CI0.5 with RS485	WL4040210000	5540
Dualsource LCD meter CI1	WC4040100000	4060
Dualsource LCD meter CI1 with RS485	WC4040110000	4960
Dualsource LCD meter CI0.5	WC4040200000	4765
Dualsource LCD meter CI0.5 with RS485	WC4040210000	5720

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	4820
MFM 4405 LED meter CI 1 with RS485	WL4405110000	5715
MFM 4405 LED meter CI 0.5 with RS485	WL4405210000	6570
MFM 4405 LED meter CI 0.5S with RS485	WL4405310000	6625

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



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	6935
MFM 4410 LED meter CI 1 with RS485	WL4410110000	7930
MFM 4410 LED meter CI 0.5 with RS485	WL4410210000	9415
MFM 4410 LED meter CI 0.5S with RS485	WL4410310000	10405
MFM 4410 LED meter CI 0.2 with RS485	WL4410410000	12390
MFM 4410 LED meter CI 0.2S with RS485	WL4410510000	15855
MFM 4410 LCD meter CI 1	WC4410100000	7930
MFM 4410 LCD meter CI 1 with RS485	WC4410110000	8920
MFM 4410 LCD meter CI 0.5 with RS485	WC4410210000	10405
MFM 4410 LCD meter CI 0.5S with RS485	WC4410310000	11395
MFM 4410 LCD meter CI 0.2 with RS485	WC4410410000	13375
MFM 4410 LCD meter CI 0.2S with RS485	WC4410510000	16840

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



Description	Cat. No.	M.R.P. (₹) Per Unit
MFM 4400 LED meter CI 1	WL4400100000	3790
MFM 4400 LED meter CI 1 with RS485	WL4400110000	4685
MFM 4400 LED meter CI 0.5 with RS485	WL4400210000	5540
MFM 4400 LED meter CI 0.5S with RS485	WL4400310000	5595
MFM 4400 LCD meter CI 1	WC4400100000	4060
MFM 4400 LCD meter CI 1 with RS485	WC4400110000	4960

Multifunction Meters [9030]

4420 Series Max Demand Indicator (without Real time clock)

Parameters:

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

2 Relay outputs
for MD Alarm

Description	Cat. No.	M.R.P. (₹) Per Unit
MFM 4420 LED meter CI 1	WL4420100000	10405
MFM 4420 LED meter CI 1 with RS485	WL4420110000	11395
MFM 4420 LED meter CI 0.5 with RS485	WL4420210000	12885
MFM 4420 LED meter CI 0.5S with RS485	WL4420310000	13875
MFM 4420 LED meter CI 0.2 with RS485	WL4420410000	15855
MFM 4420 LED meter CI 0.2S with RS485	WL4420510000	19325
MFM 4420 LCD meter CI 1	WC4420100000	11395
MFM 4420 LCD meter CI 1 with RS485	WC4420110000	12390
MFM 4420 LCD meter CI 0.5 with RS485	WC4420210000	13875
MFM 4420 LCD meter CI 0.5S with RS485	WC4420310000	14860
MFM 4420 LCD meter CI 0.2 with RS485	WC4420410000	16840
MFM 4420 LCD meter CI 0.2S with RS485	WC4420510000	20315

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

4430 Series MFM for IE

Parameters:

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

2 Relay outputs
for MD Alarm

Description	Cat. No.	M.R.P. (₹) Per Unit
MFM 4430 LED meter CI 1	WL4430100000	15360
MFM 4430 LED meter CI 1 with RS485	WL4430110000	16350
MFM 4430 LED meter CI 0.5 with RS485	WL4430210000	17835
MFM 4430 LED meter CI 0.5S with RS485	WL4430310000	18825
MFM 4430 LED meter CI 0.2 with RS485	WL4430410000	20810
MFM 4430 LED meter CI 0.2S with RS485	WL4430510000	24280
MFM 4430 LCD meter CI 1	WC4430100000	16350
MFM 4430 LCD meter CI 1 with RS485	WC4430110000	17340
MFM 4430 LCD meter CI 0.5 with RS485	WC4430210000	18825
MFM 4430 LCD meter CI 0.5S with RS485	WC4430310000	19815
MFM 4430 LCD meter CI 0.2 with RS485	WC4430410000	21795
MFM 4430 LCD meter CI 0.2S with RS485	WC4430510000	25270

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	11895
MFM 4440 LED meter CI 0.5 with RS485	WL4440210000	13375
MFM 4440 LED meter CI 0.2 with RS485	WL4440410000	16350
MFM 4440 LCD meter CI 1 with RS485	WC4440110000	12885
MFM 4440 LCD meter CI 0.5 with RS485	WC4440210000	14370
MFM 4440 LCD meter CI 0.2 with RS485	WC4440410000	17345

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, kVAh, 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



Description	Cat. No.	M.R.P. (₹) Per Unit
MFM 5000 LED meter CI 1 with RS485	WL5000110000	29755
MFM 5000 LED meter CI 1 with Ethernet	WL5000120000	33810
MFM 5000 LED meter CI 0.5 with Ethernet	WL5000220000	35260
MFM 5000 LED meter CI 0.5S with Ethernet	WL5000320000	36225
MFM 5000 LCD meter CI 1 with RS485	WC5000110000	30725
MFM 5000 LCD meter CI 1 with Ethernet	WC5000120000	34775
MFM 5000 LCD meter CI 0.5 with RS485	WC5000210000	32170
MFM 5000 LCD meter CI 0.5S with RS485	WC5000310000	33140
MFM 5000 LCD meter CI 0.5 with Ethernet	WC5000220000	36225
MFM 5000 LCD meter CI 0.5S with Ethernet	WC5000320000	37190
MFM 5000 LCD meter CI 0.2 with RS485	WC5000410000	35070
MFM 5000 LCD meter CI 0.2S with RS485	WC5000510000	38450
MFM 5000 LED meter CI 1 RS485 2A/O	WL5000110BOO	32165
MFM 5000 LED meter CI 0.5 RS485 2D/I	WL5000210OBO	33615
MFM 5000 LED meter CI 0.5 RS485 4D/O	WL5000210OOD	34580
MFM 5000 LCD meter CI 1 RS485 2A/O	WC5000110BOO	33135
MFM 5000 LCD meter CI 0.5 RS485 2D/I	WC5000210OBO	34580
MFM 5000 LCD meter CI 0.5 RS485 4D/O	WC5000210OOD	35550
MFM 5000 LCD meter CI 1 + RS485, 1AO, 1DO	WC5000110AOA	33350

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	10625
MFM 5010 LED meter CI 1 with RS485	WL5010110000	11590
MFM 5010 LED meter CI 0.5S	WL5010300000	13040
MFM 5010 LED meter CI 0.5S with RS485	WL5010310000	14005
MFM 5010 LED meter CI 0.2 with RS485	WL5010410000	15940

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 preconfigured for 9 parameters including kWh, Running demand and Max Demand for 15 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

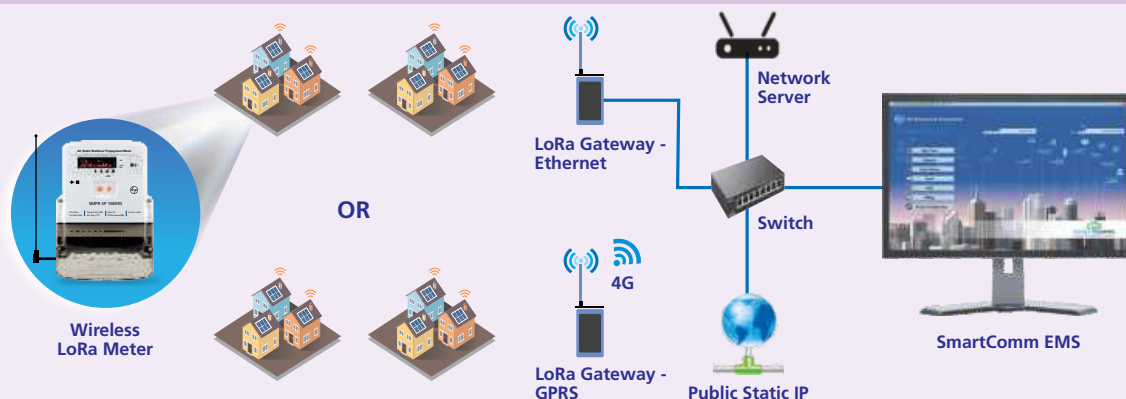
Description	Cat. No.	M.R.P. (₹) Per Unit
MDC 6000 LED meter CI 1 with RS485	WL6000110000	26405
MDC 6000 LED meter CI 0.5S with RS485	WL6000310000	28945
MDC 6000 LCD meter CI 1 with RS485	WC6000110000	27420
MDC 6000 LCD meter CI 0.5S with RS485	WC6000310000	29960

Prepaid Metering Solutions with SmartComm EMS [9030]



- Dual source meters by default
- Class 1 accuracy as per IS 15884
- Ratings : 1P (10-60A) : 3P (10-60A, 20-80A, CT operated)
- Parameters: V, A, PF, W, VA, Wh - EB, DG
- Communication: Wired (Modbus RS485) or Wireless (LoRaWAN)
- Facility for connection or disconnection of electric supply based on the credit balance in the meter through relay
- Server maintained at site itself
- Optional
 - In RS485 model upto 4DI for water and gas meter
 - In LoRaWAN model upto 2DI for water and gas meters
- Wireless postpaid or prepaid metering solutions for large townships on SmartComm EMS Platform available.
- With LoRaWAN technology, meters upto 1 km approx from LoRa Gateway can be monitored without Line of sight.
- Prices available on request.

Connect large townships with wireless energy meters on IoT based SmartComm EMS





SmartComm EMS

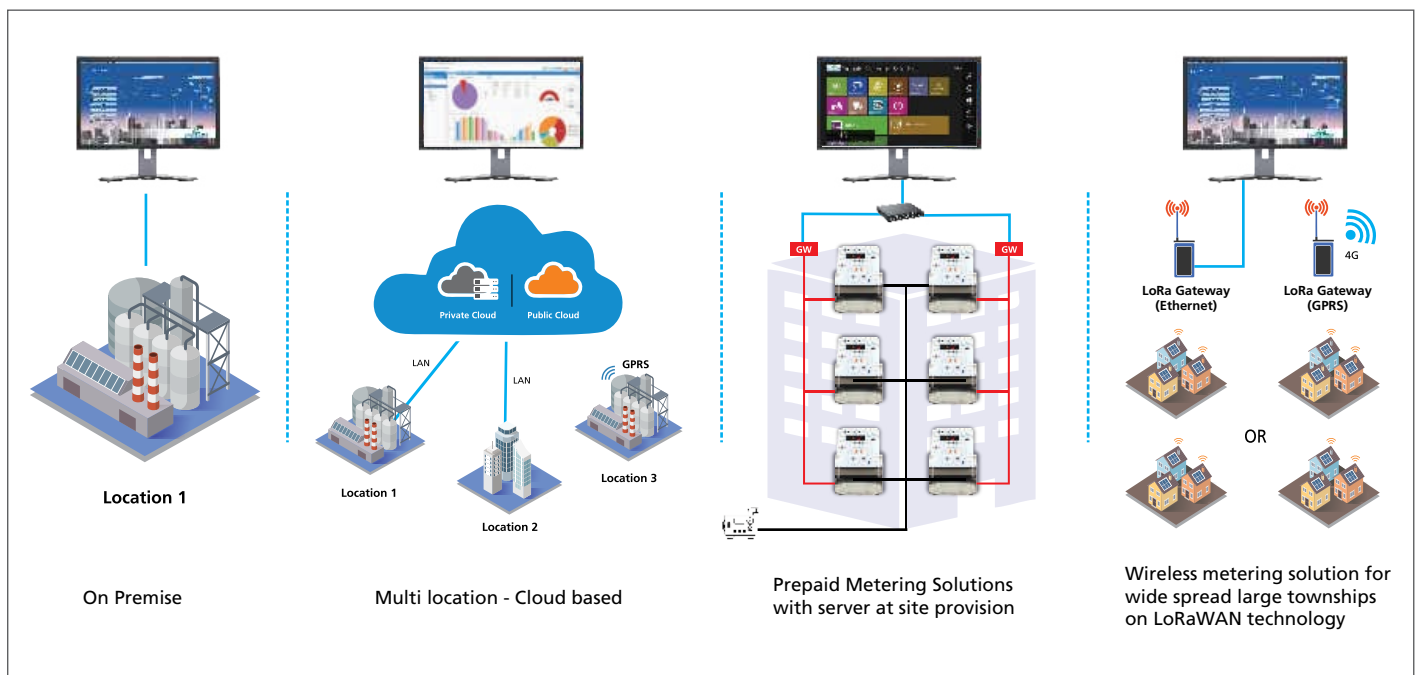
Simple and powerful energy monitoring software with multiple benefits that empowers the user to save money.

Features:

- Glimpse of entire energy consumption in the plant through dashboard
- Quick understanding of energy consumption of today compared to yesterday, this month consumption compared to last month as well as yoy energy comparison through dashboard.
- Easy navigation through the modules
- Excel reports with charts
- All parameters in the device can be monitored from the software
- Multiple combination of devices and parameters for analysis
- Provision to generate multiple report types
- Specific Energy Consumption (SEC) report
- Access to features defined by user levels
- E&A meters preconfigured in the software
- Monitor ON, OFF, Trip, Ready to close status of circuit breaker through E&A's UNCO module with on premise solution
- Control Circuit breaker ON & OFF, provision for breaker On & Trip counter, last 20 trips date & time stamp with on premise solution
- Email & SMS notification

- SmartComm EMS license ordering is based on number of nodes i.e meters / UNCO module to be connected in the system.

Please scan the QR code and fill in the details on the webpage to schedule a demo of SmartComm EMS to get started on your Energy Management journey.



Please contact nearest branch office for optimal Energy Monitoring Solution and network architecture with SmartComm EMS software.

► Automation Solutions



Metal



Oil & Gas



Pharma



Water



Sugar



Textile



HVAC



AC Drives	Soft Starter	PLC	HMI	Servo
Nx2000	EMX4e	XLB - E	B - XT	M5
Nx2000 ⁺	EMX4i	XLB - S	S - XT	
Sx2000	CSX	XLB - U	I - XT	
Fx2000	CSXi	XLB - HPL	iXP2	
Hx2000				

AC Drives [8504]



New Series Nx2000 & Nx2000+



- Range: 0.2 kW to 11 kW
- Simplified sensorless vector control
- Built-in EMC filter to meet IEC 61800-3
- Built-in Potentiometer
- DIN Rail mounting for Side-by-Side installation
- Built-in PID
- Built-in Brake Control
- Conformal Coating complying to IEC 60721-3-3 class 3C3 Avg.
- Built-in RS485 Modbus RTU
- Interface:
Nx2000: 5DI, 2DO (R), 2AI (V & V/I), 1AO (V)
Nx2000+: 5DI, 2DO (R), 2AI (V & I), 1AO (V)

Input Voltage	Description	Cat. No.	M.R.P. (₹) Per Unit
Single Phase 230VAC	Nx2000 230V 1Ph Drive 0.20 kW (HD)	LTVF-N101P4BAA	*
	Nx2000 230V 1Ph Drive 0.40 kW (HD)	LTVF-N102P4BAA	*
	Nx2000 230V 1Ph Drive 0.75 kW (HD)	LTVF-N104P2BAA	*
	Nx2000 230V 1Ph Drive 1.50 kW (HD)	LTVF-N107P5BAA	*
	Nx2000 230V 1Ph Drive 2.20 kW (HD)	LTVF-N110P0BAA	*
Three Phase 230VAC	Nx2000+ 230V Drive 0.40kW(HD)/0.75kW(ND)	LTVF-N203P1BAA	*
	Nx2000+ 230V Drive 0.75kW(HD)/1.50kW(ND)	LTVF-N206P0BAA	*
	Nx2000+ 230V Drive 1.50kW(HD)/2.20kW(ND)	LTVF-N209P6BAA	*
	Nx2000+ 230V Drive 2.20kW(HD)/3.70kW(ND)	LTVF-N212P0BAA	*
	Nx2000+ 230V Drive 4.00kW(HD)/5.50kW(ND)	LTVF-N218P0BAA	*
	Nx2000+ 230V Drive 5.50kW(HD)/7.50kW(ND)	LTVF-N230P0BAA	*
	Nx2000+ 230V Drive 7.50kW(HD)/11.0kW(ND)	LTVF-N240P0BAA	*
Three Phase 415VAC	Nx2000+ 415V Drive 0.40kW(HD)/0.75kW(ND)	LTVF-N402P0BAA	*
	Nx2000+ 415V Drive 0.75kW(HD)/1.50kW(ND)	LTVF-N403P1BAA	*
	Nx2000+ 415V Drive 1.50kW(HD)/2.20kW(ND)	LTVF-N405P1BAA	*
	Nx2000+ 415V Drive 2.20kW(HD)/3.70kW(ND)	LTVF-N406P9BAA	*
	Nx2000+ 415V Drive 4.00kW(HD)/5.50kW(ND)	LTVF-N410P0BAA	*
	Nx2000+ 415V Drive 5.50kW(HD)/7.50kW(ND)	LTVF-N416P0BAA	*
	Nx2000+ 415V Drive 7.50kW(HD)/11.0kW(ND)	LTVF-N423P0BAA	*

Note: * For prices please contact nearest branch office

Smart Series Sx2000



- Range: 0.75kW to 90kW
- Starting Torque: 150% at 3 Hz for V/F, 200% at 0.5Hz for Sensorless Vector Control
- Built-in Brake Control
- Built-in PLC functionality
- Peer to Peer Communication to share I/O's
- Conformal Coating complying to IEC 60721-3-3 class 3C2 (3C3 Avg.)
- Built-in RS485 Modbus RTU
- Component Life Monitor
- Built-in Braking Chopper till 30kW
- Interface :
Upto 30kW ND: 7DI, 2DO (R+T), 2AI (V & V/I), 1AO (V/I)
From 37kW ND: 7DI, 3DO (2R+T), 2AI (V & V/I), 2AO (V & V/I)

Input Voltage	Description	Cat. No.	M.R.P. (₹) Per Unit
Single Phase 230Vac	Sx2000 VVVF 230V 1Ph Drive 0.40 kW (HD) / 0.75 kW (ND)	LTVF-S10003BAA	*
	Sx2000 VVVF 230V 1Ph Drive 0.75 kW (HD) / 1.5 kW (ND)	LTVF-S10006BAA	*
	Sx2000 VVVF 230V 1Ph Drive 1.5 kW (HD) / 2.20 kW (ND)	LTVF-S10010BAA	*
	Sx2000 VVVF 230V 1Ph Drive 2.2 kW (HD) / 3.70 kW (ND)	LTVF-S10012BAA	*
Three Phase 230Vac	Sx2000 VVVF 230V 3Ph Drive 0.40 kW (HD) / 0.75 kW (ND)	LTVF-S20003BAA	*
	Sx2000 VVVF 230V 3Ph Drive 0.75 kW (HD) / 1.5 kW (ND)	LTVF-S20006BAA	*
	Sx2000 VVVF 230V 3Ph Drive 1.5 kW (HD) / 2.20 kW (ND)	LTVF-S20010BAA	*
	Sx2000 VVVF 230V 3Ph Drive 2.2 kW (HD) / 3.70 kW (ND)	LTVF-S20012BAA	*
	Sx2000 VVVF 230V 3Ph Drive 4.0 kW (HD) / 5.5 kW (ND)	LTVF-S20018BAA	*
	Sx2000 VVVF 230V 3Ph Drive 5.5 kW (HD) / 7.5 kW (ND)	LTVF-S20030BAA	*
	Sx2000 VVVF 230V 3Ph Drive 7.5 kW (HD) / 11 kW (ND)	LTVF-S20040BAA	*
	Sx2000 VVVF 230V 3Ph Drive 11 kW (HD) / 15 kW (ND)	LTVF-S20056BAA	*
	Sx2000 VVVF 230V 3Ph Drive 15 kW (HD) / 18.5 kW (ND)	LTVF-S20069BAA	*
	Sx2000 VVVF 415V Drive 0.40 kW (HD) / 0.75 kW (ND)	LTVF-S40002BAA	*
Three Phase 415Vac	Sx2000 VVVF 415V Drive 0.75 kW (HD) / 1.50 kW (ND)	LTVF-S40003BAA	*
	Sx2000 VVVF 415V Drive 1.50 kW (HD) / 2.20 kW (ND)	LTVF-S40005BAA	*
	Sx2000 VVVF 415V Drive 2.20 kW (HD) / 3.7 kW (ND)	LTVF-S40007BAA	*
	Sx2000 VVVF 415V Drive 4.00 kW (HD) / 5.50 kW (ND)	LTVF-S40010BAA	*
	Sx2000 VVVF 415V Drive 5.50 kW (HD) / 7.50 kW (ND)	LTVF-S40016BAA	*
	Sx2000 VVVF 415V Drive 7.50 kW (HD) / 11.0 kW (ND)	LTVF-S40023BAA	*
	Sx2000 VVVF 415V Drive 11.0 kW (HD) / 15.0 kW (ND)	LTVF-S40030BAA	*
	Sx2000 VVVF 415V Drive 15.0 kW (HD) / 18.5 kW (ND)	LTVF-S40038BAA	*
	Sx2000 VVVF 415V Drive 18.5 kW (HD) / 22.0 kW (ND)	LTVF-S40044BAA	*
	Sx2000 VVVF 415V Drive 22.0 kW (HD) / 30.0 kW (ND)	LTVF-S40058BAA	*
	Sx2000 VVVF 415V Drive 30.0 kW (HD) / 37.0 kW (ND)	LTVF-S40075BAA	*
	Sx2000 VVVF 415V Drive 37.0 kW (HD) / 45.0 kW (ND)	LTVF-S40091BAA	*
	Sx2000 VVVF 415V Drive 45.0 kW (HD) / 55.0 kW (ND)	LTVF-S40107BAA	*
	Sx2000 VVVF 415V Drive 55.0 kW (HD) / 75.0 kW (ND)	LTVF-S40142BAA	*
	Sx2000 VVVF 415V Drive 75.0 kW (HD) / 90.0 kW (ND)	LTVF-S40169BAA	*

Note:

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

Smart Series Sx2000 IP66



- Range: 0.75 to 22kW (HD)
- V/F, Slip Compensation, Sensorless Vector Control
- Starting Torque: 150% at 3Hz for V/F, 200% at 0.5Hz for Sensorless Vector Control
- Conformal Coating complying to IEC 60721-3-3, Class 3C2 (3C3 Avg.)
- Built-in RS485 Modbus
- Peer to Peer communication to share I/Os
- Built-in Brake Control
- Built-in PLC functionality
- Component Life Monitor
- Built-in PID
- Built-in Braking Chopper
- Interface: 5DI, 2DO (1R+1T), 2AI, 1AO

Input Voltage	Description	Cat. No.	M.R.P. (₹) Per Unit
Three Phase 415Vac	Sx2000 VVVF 415V IP66 Drive 0.40 kW (HD)	LTVF-S40001XAA	*
	Sx2000 VVVF 415V IP66 Drive 0.75 kW (HD)	LTVF-S40003XAA	*
	Sx2000 VVVF 415V IP66 Drive 1.50 kW (HD)	LTVF-S40004XAA	*
	Sx2000 VVVF 415V IP66 Drive 2.20 kW (HD)	LTVF-S40006XAA	*
	Sx2000 VVVF 415V IP66 Drive 4.00 kW (HD)	LTVF-S40009XAA	*
	Sx2000 VVVF 415V IP66 Drive 5.50 kW (HD)	LTVF-S40012XAA	*
	Sx2000 VVVF 415V IP66 Drive 7.50 kW (HD)	LTVF-S40016XAA	*
	Sx2000 VVVF 415V IP66 Drive 11.0 kW (HD)	LTVF-S40024XAA	*
	Sx2000 VVVF 415V IP66 Drive 15.0 kW (HD)	LTVF-S40030XAA	*
	Sx2000 VVVF 415V IP66 Drive 18.5 kW (HD)	LTVF-S40039XAA	*
	Sx2000 VVVF 415V IP66 Drive 22.0 kW (HD)	LTVF-S40045XAA	*

Note: * For prices please contact nearest branch office

Flexi Series Fx2000



- Range: 0.75kW to 375kW (HD)
- Ideal for Heavy Duty Application Crane, Winder, Textile Application, Plastic extruders
- Starting Torque: 250% at 0Hz for Closed Loop Vector Control
- Built-in Crane function
- Conformal Coating complying to IEC 60721-3-3 class 3C2 (3C3 Avg.)
- Built-in RS485 Modbus RTU
- Built-in DC Reactor from 22kW to 220kW HD
- Built-in Braking Chopper till 22kW HD
- Interface : 8DI, 3DO (2R+1T), 2AI (V & I), 2AO (V & I)

Input Voltage	Description	Cat. No.	M.R.P. (₹) Per Unit
Three Phase 415Vac	Fx2000 VVVF 415V Drive 0.75 kW (HD) / 1.50 kW (ND)	LTVF-F40004CAA	*
	Fx2000 VVVF 415V Drive 1.50 kW (HD) / 2.20 kW (ND)	LTVF-F40006CAA	*
	Fx2000 VVVF 415V Drive 2.20 kW (HD) / 3.70 kW (ND)	LTVF-F40008CAA	*
	Fx2000 VVVF 415V Drive 3.70 kW (HD) / 4.00 kW (ND)	LTVF-F40012CAA	*
	Fx2000 VVVF 415V Drive 5.50 kW (HD) / 7.50 kW (ND)	LTVF-F40016CAA	*
	Fx2000 VVVF 415V Drive 7.50 kW (HD) / 11.0 kW (ND)	LTVF-F40024CAA	*
	Fx2000 VVVF 415V Drive 11.0 kW (HD) / 15.0 kW (ND)	LTVF-F40030CAA	*
	Fx2000 VVVF 415V Drive 15.0 kW (HD) / 18.5 kW (ND)	LTVF-F40039CAA	*
	Fx2000 VVVF 415V Drive 18.5 kW (HD) / 22.0 kW (ND)	LTVF-F40045CAA	*
	Fx2000 VVVF 415V Drive 22.0 kW (HD) / 30.0 kW (ND)	LTVF-F40061CAA	*
	Fx2000 VVVF 415V Drive 30.0 kW (HD) / 37.0 kW (ND)	LTVF-F40075CAA	*
	Fx2000 VVVF 415V Drive 37.0 kW (HD) / 45.0 kW (ND)	LTVF-F40091CAA	*
	Fx2000 VVVF 415V Drive 45.0 kW (HD) / 55.0 kW (ND)	LTVF-F40110CAA	*
	Fx2000 VVVF 415V Drive 55.0 kW (HD) / 75.0 kW (ND)	LTVF-F40152CAA	*
	Fx2000 VVVF 415V Drive 75.0 kW (HD) / 90.0 kW (ND)	LTVF-F40183CAA	*
	Fx2000 VVVF 415V Drive 90.0 kW (HD) / 110 kW (ND)	LTVF-F40223AAA	*
	Fx2000 VVVF 415V Drive 110 kW (HD) / 132 kW (ND)	LTVF-F40264AAA	*
	Fx2000 VVVF 415V Drive 132 kW (HD) / 160 kW (ND)	LTVF-F40325AAA	*
	Fx2000 VVVF 415V Drive 160 kW (HD) / 185 kW (ND)	LTVF-F40370AAA	*
	Fx2000 VVVF 415V Drive 185 kW (HD) / 220 kW (ND)	LTVF-F40432AAA	*
	Fx2000 VVVF 415V Drive 220 kW (HD) / 285 kW (ND)	LTVF-F40547AAA	*
	Fx2000 VVVF 415V Drive 285 kW (HD) / 315 kW (ND)	LTVF-F40613AAA	*
	Fx2000 VVVF 415V Drive 315 kW (HD) / 375 kW (ND)	LTVF-F40731AAA	*
	Fx2000 VVVF 415V Drive 375 kW (HD) / 450 kW (ND)	LTVF-F40877AAA	*

Note:

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

AC Drives [8504]

HVAC Series Hx2000



- Range: 0.75 to 90kW
- V/F, Slip Compensation
- Built-in RTC for Scheduling
- Built-in EMC filter class C3
- Password Protection
- Multi-motor Control
- Built-in Payback Counter
- Dry Pump Detection
- Built-in 4 PID (1 Main & 3 EPID)
- Built-in RS485 Communication, BACnet, Modbus-RTU, Metasys N2
- Global Specification Compliant - CE, UL (Plenum Rated)
- Conformal Coating complying to IEC 60721-3-3, Class 3C2 (3C3 Avg.)
- Interface: 7DI, 6DO (5R+1T), 2AI, 2AO

Input Voltage	Description	Cat. No.	M.R.P. (₹) Per Unit
Three Phase 415Vac	Hx2000 VVVF 415V Drive 0.75 kW (ND)	LTVF-H40002BAA	*
	Hx2000 VVVF 415V Drive 1.50 kW (ND)	LTVF-H40004BAA	*
	Hx2000 VVVF 415V Drive 2.20 kW (ND)	LTVF-H40006BAA	*
	Hx2000 VVVF 415V Drive 3.7 kW (ND)	LTVF-H40008BAA	*
	Hx2000 VVVF 415V Drive 5.50 kW (ND)	LTVF-H40012BAA	*
	Hx2000 VVVF 415V Drive 7.50 kW (ND)	LTVF-H40016BAA	*
	Hx2000 VVVF 415V Drive 11.0 kW (ND)	LTVF-H40024BAA	*
	Hx2000 VVVF 415V Drive 15.0 kW (ND)	LTVF-H40030BAA	*
	Hx2000 VVVF 415V Drive 18.5 kW (ND)	LTVF-H40038BAA	*
	Hx2000 VVVF 415V Drive 22.0 kW (ND)	LTVF-H40045BAA	*
	Hx2000 VVVF 415V Drive 30.0 kW (ND)	LTVF-H40061BAA	*
	Hx2000 VVVF 415V Drive 37.0 kW (ND)	LTVF-H40075BAA	*
	Hx2000 VVVF 415V Drive 45.0 kW (ND)	LTVF-H40091BAA	*
	Hx2000 VVVF 415V Drive 55.0 kW (ND)	LTVF-H40107BAA	*
	Hx2000 VVVF 415V Drive 75.0 kW (ND)	LTVF-H40142BAA	*
	Hx2000 VVVF 415V Drive 90.0 kW (ND)	LTVF-H40169BAA	*

Note: * For prices please contact nearest branch office

Accessories for AC Drives [8504]

Drive Model	Description	Cat. No.	M.R.P. (₹) Per Unit
Nx2000	Nx2000 Remote Keypad with 3m cable	LTOP-DOP-51	*
Nx2000+	Nx2000+ Remote Keypad with 3m cable	LTOP-DOP-52	*
	CANOpen Comm Card for Nx2000+	LTCI-CAN-NP	*
	Eth.IP/Mod.TCP/RAPIDnet Opt for Nx2000+	LTCI-ETH-NP	*
	Profibus-DP Comm Card for Nx2000+	LTCI-PDP-NP	*
Sx2000	LCD Digital Operator	LTOP-DOP-200	*
	I/O Expansion Card for Sx2000	LTIO-EXP-S	*
	CANOpen Communication card	LTCI-CAN-S	*
	Profibus-DP Communication card	LTCI-PDP-S	*
	Profinet option card for Sx2000	LTCI-PFN-S	*
	Ethernet IP - Modbus TCP Communication card	LTCI-ETH-S	*
Fx2000	LCD Digital Operator	LTOP-DOP-200	*
	I/O Expansion Card 1 for Fx2000	LTIO-EX1-F	*
	I/O Expansion Card 2 for Fx2000	LTIO-EX2-F	*
	Synchronization Option Card	LTCN-SYN-F	*
	Position control option card for Fx2000	LTCN-PCN-F	*
	Incremental card for Open collector and Line Driver Encoder	LTEN-INC-F	*
	Profibus-DP Communication Interface card	LTCI-PDP-F	*
	Profinet option card for Fx2000	LTCI-PFN-F	*
	Application Development PLC Option card	LTAD-PLC-F	*
	CANOpen Communication Interface card	LTCI-CAN-F	*
	DeviceNet Communication Interface card	LTCI-DEN-F	*
	Ethernet IP/Modbus TCP Communication Interface card	LTCI-ETH-F	*
Hx2000	I/O Expansion Card for Hx2000	LTIO-EXP-H	*
	I/O Expansion Card 2 for Hx2000	LTIO-EXP2-H	*
DBU for Sx2000, Fx2000	Dynamic Braking Unit for 11 - 15kW	LTDBU-0150-4	*
	Dynamic Braking Unit for 18.5 - 22kW	LTDBU-0220-4	*
	Dynamic Braking Unit for 30 - 37kW	LTDBU-0370-4	*
	Dynamic Braking Unit for 45 - 55kW	LTDBU-0550-4	*
	Dynamic Braking Unit for 75kW	LTDBU-0750-4	*
	Dynamic Braking Unit for 220 - 375kW	LTDBU-2200-4	*

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

EMX4e 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
EMX4e,24A,Main 200-525Vac,CTR 110-240Vac	EMX4e-0024B-511	*	Built - In
EMX4e,42A,Main 200-525Vac,CTR 110-240Vac	EMX4e-0042B-511	*	
EMX4e,52A,Main 200-525Vac,CTR 110-240Vac	EMX4e-0052B-511	*	
EMX4e,64A,Main 200-525Vac,CTR 110-240Vac	EMX4e-0064B-511	*	
EMX4e,69A,Main 200-525Vac,CTR 110-240Vac	EMX4e-0069B-511	*	
EMX4e,105A,Main 200-525Vac,CTR 110-240Vac	EMX4e-0105B-511	*	
EMX4e,115A,Main 200-525Vac,CTR 110-240Vac	EMX4e-0115B-511	*	
EMX4e,135A,Main 200-525Vac,CTR 110-240Vac	EMX4e-0135B-511	*	
EMX4e,184A,Main 200-525Vac,CTR 110-240Vac	EMX4e-0184B-511	*	
EMX4e,200A,Main 200-525Vac,CTR 110-240Vac	EMX4e-0200B-511	*	
EMX4e,229A,Main 200-525Vac,CTR 110-240Vac	EMX4e-0229B-511	*	
EMX4e,250A,Main 200-525Vac,CTR 110-240Vac	EMX4e-0250B-511	*	
EMX4e,352A,Main 200-525Vac,CTR 110-240Vac	EMX4e-0352B-511	*	
EMX4e,397A,Main 200-525Vac,CTR 110-240Vac	EMX4e-0397B-511	*	
EMX4e,410A,Main 200-525Vac,CTR 110-240Vac	EMX4e-0410B-511	*	
EMX4e,550A,Main 200-525Vac,CTR 110-240Vac	EMX4e-0550B-511	*	
EMX4e,580A,Main 200-525Vac,CTR 110-240Vac	EMX4e-0580B-511	*	

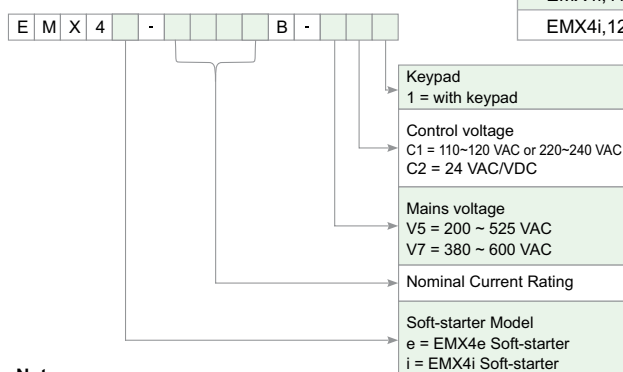
EMX4i Soft Starters



- 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
- 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
EMX4i,24A,Main 200-525Vac,CTR 110-240Vac	EMX4i-0024B-511	*	Built - In
EMX4i,42A,Main 200-525Vac,CTR 110-240Vac	EMX4i-0042B-511	*	
EMX4i,52A,Main 200-525Vac,CTR 110-240Vac	EMX4i-0052B-511	*	
EMX4i,64A,Main 200-525Vac,CTR 110-240Vac	EMX4i-0064B-511	*	
EMX4i,69A,Main 200-525Vac,CTR 110-240Vac	EMX4i-0069B-511	*	
EMX4i,105A,Main 200-525Vac,CTR 110-240Vac	EMX4i-0105B-511	*	
EMX4i,115A,Main 200-525Vac,CTR 110-240Vac	EMX4i-0115B-511	*	
EMX4i,135A,Main 200-525Vac,CTR 110-240Vac	EMX4i-0135B-511	*	
EMX4i,184A,Main 200-525Vac,CTR 110-240Vac	EMX4i-0184B-511	*	
EMX4i,200A,Main 200-525Vac,CTR 110-240Vac	EMX4i-0200B-511	*	
EMX4i,229A,Main 200-525Vac,CTR 110-240Vac	EMX4i-0229B-511	*	
EMX4i,250A,Main 200-525Vac,CTR 110-240Vac	EMX4i-0250B-511	*	
EMX4i,352A,Main 200-525Vac,CTR 110-240Vac	EMX4i-0352B-511	*	
EMX4i,397A,Main 200-525Vac,CTR 110-240Vac	EMX4i-0397B-511	*	
EMX4i,410A,Main 200-525Vac,CTR 110-240Vac	EMX4i-0410B-511	*	
EMX4i,550A,Main 200-525Vac,CTR 110-240Vac	EMX4i-0550B-511	*	
EMX4i,580A,Main 200-525Vac,CTR 110-240Vac	EMX4i-0580B-511	*	
EMX4i,835A,Main 200-525Vac,CTR 110-240Vac	EMX4i-0835B-511	*	
EMX4i,940A,Main 200-525Vac,CTR 110-240Vac	EMX4i-0940B-511	*	
EMX4i,1070A,Main 200-525Vac,CTR 110-240Vac	EMX4i-1070B-511	*	
EMX4i,1230A,Main 200-525Vac,CTR 110-240Vac	EMX4i-1230B-511	*	
EMX4i,1250A,Main 200-525Vac,CTR 110-240Vac	EMX4i-1250B-511	*	Terminals for connecting External contactor (AC1 duty)
EMX4i,735A,Main 200-525Vac,CTR 110-240Vac	EMX4i-0735C-511	*	
EMX4i,830A,Main 200-525Vac,CTR 110-240Vac	EMX4i-0830C-511	*	
EMX4i,1025A,Main 200-525Vac,CTR 110-240Vac	EMX4i-1025C-511	*	
EMX4i,1170A,Main 200-525Vac,CTR 110-240Vac	EMX4i-1170C-511	*	* All protections remain active during bypass operation
EMX4i,1220A,Main 200-525Vac,CTR 110-240Vac	EMX4i-1220C-511	*	

Ordering Information for **EMX4** Soft Starter



Note:

* For prices please contact nearest branch office
Soft Starters are covered under HS 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 I²T.

CSX Soft Starters



Motor kW	Cat. No.	M.R.P. (₹) Per Unit
7.5	CSX-007-41	*
15	CSX-015-41	*
18	CSX-018-41	*
22	CSX-022-41	*
30	CSX-030-41	*
37	CSX-037-41	*
45	CSX-045-41	*
55	CSX-055-41	*
75	CSX-075-41	*
90	CSX-090-41	*
110	CSX-110-41	*

CSXi Soft Starters



Motor kW	Cat. No.	M.R.P. (₹) Per Unit
7.5	CSXi-007-41	*
15	CSXi-015-41	*
18	CSXi-018-41	*
22	CSXi-022-41	*
30	CSXi-030-41	*
37	CSXi-037-41	*
45	CSXi-045-41	*
55	CSXi-055-41	*
75	CSXi-075-41	*
90	CSXi-090-41	*
110	CSXi-110-41	*

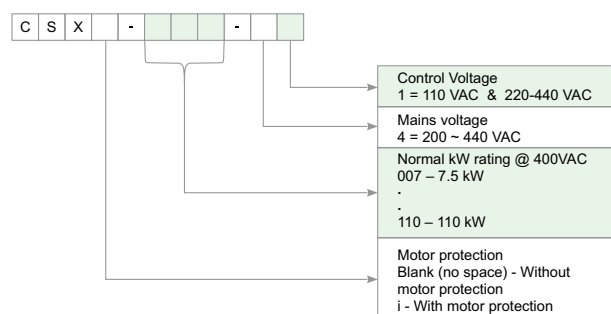
Note:

* For prices please contact nearest branch office

The above CSX & CSXi ratings are based on 400% starting current, 10 starts per hour up to 30kW & 6 starts per hour for 37kW & above, 6 seconds starting time and ambient temperature of 45°C.

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

Ordering Information for **CSX** Series Soft Starter



Optional Modules/Cards for CSX / CSXi / EMX4



Description	Cat. No.	M.R.P. (₹) Per Unit
Modbus Interface	PIM-MB-01	*
Profibus Interface	PIM-PB-01	*
DeviceNet Interface	PIM-DN-01	*
USB Interface	PIM-USB-01	*
Modbus TCP Module	PIM-MT-01	*
Ethernet IP Module	PIM-EI-01	*
Profinet Module	PIM-PN-01	*
DeviceNet Card, EMX4	PIC-DN-01	*
Ethernet IP Card, EMX4	PIC-EI-01	*
Modbus RTU Card, EMX4	PIC-MB-01	*
Modbus TCP Card, EMX4	PIC-MT-01	*
Profibus Card, EMX4	PIC-PB-01	*
Profinet Card, EMX4	PIC-PN-01	*
Remote Keypad Card, EMX4	PIC-RC-01	*
Remote Keypad Card & Keypad EMX4	PIC-RC-02	*
Remote Keypad, EMX4 with cable & mountin	PIC-RK-01	*
Smart Control Card Pump Application. EMX4	SCC-PC-01	*

Note:

* For prices please contact nearest branch office

Soft Starters are covered under HS code 8504 40 90 and are charged at 18% GST.

CSX Soft Starters : For Standard Applications

- Inbuilt Bypass Contactor
- Soft Start / Soft Stop
- Compact
- Complements existing motor protection
- Truly plug & play
- Communication options available

CSXi 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

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 I²T.

PLC

Features:

- Processing speed: $0.06\mu\text{s}/\text{step}$
- Expandable upto 10 modules
- Built-in Function: RTC, HSC, PTO, PID, Interrupt, Analog I/O
- Various communication Interface: Built-in USB / RS-232C / RS-485 / Ethernet, optional other communication modules
- Built-in Web-server, E-mail
- EtherCAT based motion control modules with Virtual Axis
- Built-in SD Card interface
- Smart Remote IO



Range:

- Up to 352 local I/O points
- Up to 5728 remote I/O points

HMI



Range:

- Text Display
- 4" ~ 15" TFT color LCD

Features:

- Large Memory: Upto 128MB display data and 1MB back-up memory
- Various Communication Interface: Ethernet / RS-232C / RS-422/485
- USB host and device
- SD memory card interface
- Web server / Data monitoring
- Remote controlling and monitoring
- Presence sensor (within 1m)
- Sound Output

Servo

Features:

- Absolute encoder (standard)
- 1.6 kHz Frequency response
- Serial communication (RS-422/485, Modbus)
- Supports various operation modes (CSP, CSV, CST, PP, PV, PT, HM, IP, etc.)
- Safe-torque off function
- 4-step notch filter
- 2-step vibration suppression filter at the load position
- FFT function for real-time frequency analysis
- Scalable analog output



Range:

- Capacity: 0.1kW to 15kW
- Voltage: 200Vac / 400Vac
- Speed: 1500rpm / 3000rpm
- Control: Pulse/Analog or Network

Customer Interaction Center (CIC)

BSNL / MTNL (toll free): 1800 233 5858 Reliance (toll free): 1800 200 5858
Tel: 022 6774 5858 Email: cic@Lntebg.com Web: www.Lntebg.com

The Most Flexible Solution For Changeover Applications



20.A7P8

Settable overload current limit
at DG side

UAPLE88

Separate power consumption
monitoring for Mains & Genset

5PAP888

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

Three Phase Automatic Changeover with Current Limiter

- Settable Overvoltage & Undervoltage protection
- Secured with password to avoid unauthorized access
- Protection against single phasing
- Simple & convenient programming
- Separate LED indication for Mains, Genset & Overload condition



To Experience Scan or Click



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2 Sec Termination

'Quick Connect' MCBs for faster installation



Time Saver



To Experience Scan or Click



All-Rounder RCDs

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



AC



Type A



Harmonics



Added Immunity

To Experience Scan or Click



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Tel: 022 6774 5858 Email: cic@Lntebg.com Web: www.Lntebg.com

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 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
- Suitable for accessory fitment



Rating	Modules 1 Mod = 17.5 mm	B-Curve Cat. No.	M.R.P. (₹) Per Unit	C-Curve Cat. No.	M.R.P. (₹) Per Unit	D-Curve Cat. No.	M.R.P. (₹) Per Unit
Single Pole (SP)							
0.5A	1	-	-	BB10E50C	385	BB10E50D	390
1A	1	-	-	BB10010C	385	BB10010D	390
2A	1	-	-	BB10020C	385	BB10020D	390
3A	1	-	-	BB10030C	385	BB10030D	390
4A	1	-	-	BB10040C	385	BB10040D	390
6A	1	BB10060B	237	BB10060C	237	BB10060D	320
10A	1	BB10100B	237	BB10100C	237	BB10100D	320
16A	1	BB10160B	237	BB10160C	237	BB10160D	320
20A	1	BB10200B	237	BB10200C	237	BB10200D	320
25A	1	BB10250B	237	BB10250C	237	BB10250D	320
32A	1	BB10320B	237	BB10320C	237	BB10320D	320
40A	1	BB10400B	560	BB10400C	560	BB10400D	595
50A	1	BB10500B	560	BB10500C	560	BB10500D*	595
63A	1	BB10630B	560	BB10630C	560	BB10630D*	595



Double Pole (DP)							
0.5A	2	-	-	BB20E50C	1055	BB20E50D	1065
1A	2	-	-	BB20010C	1055	BB20010D	1065
2A	2	-	-	BB20020C	1055	BB20020D	1065
3A	2	-	-	BB20030C	1055	BB20030D	1065
4A	2	-	-	BB20040C	1055	BB20040D	1065
6A	2	BB20060B	750	BB20060C	750	BB20060D	780
10A	2	BB20100B	750	BB20100C	750	BB20100D	780
16A	2	BB20160B	750	BB20160C	750	BB20160D	780
20A	2	BB20200B	750	BB20200C	750	BB20200D	780
25A	2	BB20250B	750	BB20250C	750	BB20250D	780
32A	2	BB20320B	750	BB20320C	750	BB20320D	780
40A	2	BB20400B	1205	BB20400C	1205	BB20400D	1275
50A	2	BB20500B	1205	BB20500C	1205	BB20500D*	1275
63A	2	BB20630B	1205	BB20630C	1205	BB20630D*	1275



Three Pole (TP)							
0.5A	3	-	-	BB30E50C	1540	BB30E50D	1570
1A	3	-	-	BB30010C	1540	BB30010D	1570
2A	3	-	-	BB30020C	1540	BB30020D	1570
3A	3	-	-	BB30030C	1540	BB30030D	1570
4A	3	-	-	BB30040C	1540	BB30040D	1570
6A	3	BB30060B	1205	BB30060C	1205	BB30060D	1285
10A	3	BB30100B	1205	BB30100C	1205	BB30100D	1285
16A	3	BB30160B	1205	BB30160C	1205	BB30160D	1285
20A	3	BB30200B	1205	BB30200C	1205	BB30200D	1285
25A	3	BB30250B	1205	BB30250C	1205	BB30250D	1285
32A	3	BB30320B	1205	BB30320C	1205	BB30320D	1285
40A	3	BB30400B	1870	BB30400C	1870	BB30400D	1985
50A	3	BB30500B	1870	BB30500C	1870	BB30500D*	1985
63A	3	BB30630B	1870	BB30630C	1870	BB30630D*	1985

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

* For details, please contact nearest branch office

Miniature Circuit Breaker (MCB) [8536]



Rating	Modules 1 Mod = 17.5 mm	B-Curve Cat. No.	M.R.P. (₹) Per Unit	C-Curve Cat. No.	M.R.P. (₹) Per Unit	D-Curve Cat. No.	M.R.P. (₹) Per Unit
Four Pole (FP)							
0.5A	4	-	-	BB40E50C	1945	BB40E50D	1950
1A	4	-	-	BB40010C	1945	BB40010D	1950
2A	4	-	-	BB40020C	1945	BB40020D	1950
3A	4	-	-	BB40030C	1945	BB40030D	1950
4A	4	-	-	BB40040C	1945	BB40040D	1950
6A	4	BB40060B	1630	BB40060C	1630	BB40060D	1700
10A	4	BB40100B	1630	BB40100C	1630	BB40100D	1700
16A	4	BB40160B	1630	BB40160C	1630	BB40160D	1700
20A	4	BB40200B	1630	BB40200C	1630	BB40200D	1700
25A	4	BB40250B	1630	BB40250C	1630	BB40250D	1700
32A	4	BB40320B	1630	BB40320C	1630	BB40320D	1700
40A	4	BB40400B	2345	BB40400C	2345	BB40400D	2505
50A	4	BB40500B	2345	BB40500C	2345	BB40500D*	2505
63A	4	BB40630B	2345	BB40630C	2345	BB40630D*	2505

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

DC MCBs as per IEC 60947-2 [8536]

Rated Voltage: 130V DC (for SP), 250V DC (for DP)
with breaking capacity of 6 kA - BB Series DC MCBs

Rating	Modules 1 Mod = 17.5mm	Cat. No.	M.R.P. (₹) Per Unit
Single Pole (SP)			
0.5A	1	BB10E5DC	540
1A	1	BB1001DC	540
2A	1	BB1002DC	540
3A	1	BB1003DC	540
4A	1	BB1004DC	540
6A	1	BB1006DC	465
10A	1	BB1010DC	465
16A	1	BB1016DC	465
20A	1	BB1020DC	465
25A	1	BB1025DC	465
32A	1	BB1032DC	465
40A	1	BB1040DC	610
50A	1	BB1050DC	610
63A	1	BB1063DC	610

Double Pole (DP)

0.5A	2	BB20E5DC	1140
1A	2	BB2001DC	1140
2A	2	BB2002DC	1140
3A	2	BB2003DC	1140
4A	2	BB2004DC	1140
6A	2	BB2006DC	1005
10A	2	BB2010DC	1005
16A	2	BB2016DC	1005
20A	2	BB2020DC	1005
25A	2	BB2025DC	1005
32A	2	BB2032DC	1005
40A	2	BB2040DC	1360
50A	2	BB2050DC	1360
63A	2	BB2063DC	1360

Rated Voltage: 250V DC (for SP), 500V DC (for DP)
with breaking capacity of 10 kA - BJ Series DC MCBs

Rating	Modules 1 Mod = 17.5mm	Cat. No.	M.R.P. (₹) Per Unit
Single Pole (SP)			
0.5A	1	BJ10E5DC	665
1A	1	BJ1001DC	665
2A	1	BJ1002DC	665
3A	1	BJ1003DC	665
4A	1	BJ1004DC	665
6A	1	BJ1006DC	545
10A	1	BJ1010DC	545
16A	1	BJ1016DC	545
20A	1	BJ1020DC	545
25A	1	BJ1025DC	545
32A	1	BJ1032DC	545
40A	1	BJ1040DC	750

Double Pole (DP)

0.5A	2	BJ20E5DC	1385
1A	2	BJ2001DC	1385
2A	2	BJ2002DC	1385
3A	2	BJ2003DC	1385
4A	2	BJ2004DC	1385
6A	2	BJ2006DC	1170
10A	2	BJ2010DC	1170
16A	2	BJ2016DC	1170
20A	2	BJ2020DC	1170
25A	2	BJ2025DC	1170
32A	2	BJ2032DC	1170
40A	2	BJ2040DC	1660

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

New

Solar Combo MCBs [8536]

Description	Modules 1 Mod = 17.5mm	Cat. No.	M.R.P. (₹) Per Unit
1 AC 16A DP MCB [^] + 1 DC 16A DP 500V MCB	2+2	SC221616	1485
1 AC 25A DP MCB [^] + 1 DC 16A DP 500V MCB	2+2	SC222516	1485
1 AC 32A DP MCB [^] + 1 DC 16A DP 500V MCB	2+2	SC223216	1485
1 AC 32A DP MCB [^] + 1 DC 32A DP 500V MCB	2+2	SC223232	1485

[^]AC MCB with C-Curve



Solar Combo MCBs

Complete Protection for Solar Rooftop Installations

Combo Pack
Tested for Reliable
Performance



DC MCB



AC MCB

- [1 DP DC (500V) MCB] + [1 DP AC MCB] in a combo pack
- Provides complete protection for DC and AC sides of solar rooftop installations
- DC MCB : 10kA as per IEC 60947-2
- AC MCB : 10kA as per IS/IEC 60898-1



Customer Interaction Center (CIC)

BSNL / MTNL (toll-free): 1800 233 5858 Reliance (toll-free): 1800 200 5858

Tel: 022 6774 5858 Email: cic@Lntebg.com Web: www.Lntebg.com

Miniature Circuit Breaker (MCB) [8536]

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	730
Shunt Release - 240V AC, 1 Mod	BZS00240	1970
Trip Alarm Contact - 6A, 240V AC, (1NO+1NC), 0.5 Mod	BZT11006	845

MCBs (Miniature Circuit Breakers): Quick Connect [8536]

- Conforms to IS/IEC 60898 - 10kA
- Available in SP, DP, TP, FP, SPN & TPN version



Rating	Module	B Curve Cat. Nos.	M.R.P. (₹) Per Unit	C Curve Cat. Nos.	M.R.P. (₹) Per Unit
Single Pole (SP)					
6A	1	AU10Q10063B	280	AU10Q10063C	280
10A	1	AU10Q10103B	280	AU10Q10103C	280
16A	1	AU10Q10163B	280	AU10Q10163C	280
20A	1	AU10Q10203B	280	AU10Q10203C	280

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

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

Range Highlights

- Short circuit Breaking Capacity - 15kA (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	Module	C Curve Cat. No.	M.R.P. (₹) Per Unit
Single Pole (SP)			
80A	1.5	AU15S10803C	2085
100A	1.5	AU15S11003C	2330
125A	1.5	AU15S11253C	2510
Double Pole (DP)			
80A	3	AU15S20803C	4610
100A	3	AU15S21003C	4920
125A	3	AU15S21253C	5415
Three Pole (TP)			
80A	4.5	AU15S30803C	7280
100A	4.5	AU15S31003C	7760
125A	4.5	AU15S31253C	8610
Four Pole (FP)			
80A	6	AU15S40803C	9505
100A	6	AU15S41003C	9890
125A	6	AU15S41253C	11190



D Curve Cat. No.	M.R.P. (₹) Per Unit
AU15S10803D	2280
AU15S11003D	2555
AU15S11253D	2765
AU15S20803D	5065
AU15S21003D	5400
AU15S21253D	5935
AU15S30803D	7985
AU15S31003D	8505
AU15S31253D	9435
AU15S40803D	10405
AU15S41003D	10845
AU15S41253D	12270

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 300 mA sensitivity



- Truly current operated - operation even at nominal voltage
- Operates on Core Balance Current Transformer (CBCT) principle
- Operation even in case of neutral failure
- Advanced neutral mechanism



Rating	Sensitivity	Modules 1 Mod = 17.5 mm	Cat. No.	M.R.P. (₹) Per Unit
Double Pole (DP)				
25A	30 mA	2	BG202503	2665
	100 mA	2	BG202510	2790
	300 mA	2	BG202530	2790
40A	30 mA	2	BG204003	3015
	100 mA	2	BG204010	3190
	300 mA	2	BG204030	3190
63A	30 mA	2	BG206303	3755
	100 mA	2	BG206310	3850
	300 mA	2	BG206330	3850
100A	30 mA	2	BG210003	6560
	100 mA	2	BG210010	6645
	300 mA	2	BG210030	6645

Rating	Sensitivity	Modules 1 Mod = 17.5 mm	Cat. No.	M.R.P. (₹) Per Unit
Four Pole (FP)				
25A	30 mA	4	BG402503	3560
	100 mA	4	BG402510	3660
	300 mA	4	BG402530	3660
40A	30 mA	4	BG404003	3590
	100 mA	4	BG404010	3720
	300 mA	4	BG404030	3720
63A	30 mA	4	BG406303	4065
	100 mA	4	BG406310	4265
	300 mA	4	BG406330	4265
100A	30 mA	4	BG410003	7025
	100 mA	4	BG410010	7150
	300 mA	4	BG410030	7150

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	Module	CAT Nos.	M.R.P. (₹) Per Unit
2P Adi				
25A	30mA	2	AURAD202503	4290
	100mA	2	AURAD202510	4485
	300mA	2	AURAD202530	4485
40A	30mA	2	AURAD204003	4555
	100mA	2	AURAD204010	4625
	300mA	2	AURAD204030	4625
63A	30mA	2	AURAD206303	5320
	100mA	2	AURAD206310	5425
	300mA	2	AURAD206330	5425
100A	30mA	2	AURAD210003	7865



Rating	Sensitivity	Module	CAT Nos.	M.R.P. (₹) Per Unit
4P Adi				
25A	30mA	4	AURAD402503	5185
	100mA	4	AURAD402510	5285
	300mA	4	AURAD402530	5285
40A	30mA	4	AURAD404003	5380
	100mA	4	AURAD404010	5470
	300mA	4	AURAD404030	5470
63A	30mA	4	AURAD406303	5860
	100mA	4	AURAD406310	5980
	300mA	4	AURAD406330	5980
100A	30mA	4	AURAD410003	9335
	300mA	4	AURAD410030	9335

Isolators [8536]

Range Highlights

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



Rating	Modules 1 Mod = 17.5 mm	Cat. No.	M.R.P. (₹) Per Unit	Modules 1 Mod = 17.5 mm	Cat. No.	M.R.P. (₹) Per Unit	Modules 1 Mod = 17.5 mm	Cat. No.	M.R.P. (₹) Per Unit
Double Pole (DP)				Three Pole (TP)			Four Pole (FP)		
40A	2	BF204000	450	3	BF304000	790	4	BF404000	1035
63A	2	BF206300	580	3	BF306300	915	4	BF406300	1050
80A	2	BF208000	740	3	BF308000	1010	4	BF408000	1195
100A	2	BF210000	775	3	BF310000	1090	4	BF410000	1275

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

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_{max} up to 70kA
- Type 1+2 : Protection against direct and indirect lightning surges
 - Maximum Discharge Current - I_{max} up to 100kA



800V Solar Application

Description	Configuration	Module	Cat. No.	M.R.P. (₹) Per Unit
New Type 2, I _{max} 40kA	3P	4	AUSP023P40-1500	12500



Extend SPD life with Spare Cartridges

Description	I _{max}	Configuration	Module	Cat. No.	M.R.P. (₹) Per Unit
Type 1+2, I _{imp} 12.5kA	50kA	1P+N	2	AUSP121PN50	8355
		3P+N	4	AUSP123PN50	16000
Type 2	40kA	1P+N	1	AUSP021PN40	5220
		3P+N	2	AUSP023PN40	10440
Type 2	15kA	1P+N	1	AUSP021PN15	4175
		3P+N	2	AUSP023PN15	8215
Type 1+2, I _{imp} 8kA	100kA	1P+N	2	AUSP121PN100	7515
		3P+N	4	AUSP123PN100	14755
Type 2	70kA	1P+N	2	AUSP021PN70	8350
		3P+N	4	AUSP023PN70	13920

Description	Cat. No.	M.R.P. (₹) Per Unit
Cartridge for AUSP021PN15	AUSC021PN15	2090
Cartridge for AUSP021PN40	AUSC021PN40	2610
Cartridge for AUSP021PN70 / AUSP023PN70	AUSC021PN70	2785
Cartridge for AUSP023PN15	AUSC023PN15	2740
Cartridge for AUSP023PN40	AUSC023PN40	3480
Cartridge for AUSP121PN100 / AUSP123PN100	AUSC121PN100	4175
Cartridge for AUSP121PN50 / AUSP123PN50	AUSC121PN50	4510

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	Module	CAT Nos.	M.R.P. (₹) Per Unit
2P AC				
6A	10mA	2	AUF3C200601	4005
	30mA	2	AUF3C200603	4005
	100mA	2	AUF3C200610	4090
	300mA	2	AUF3C200630	4135
10A	10mA	2	AUF3C201001	4005
	30mA	2	AUF3C201003	4005
	100mA	2	AUF3C201010	4090
	300mA	2	AUF3C201030	4135
16A	10mA	2	AUF3C201601	4005
	30mA	2	AUF3C201603	4005
	100mA	2	AUF3C201610	4090
	300mA	2	AUF3C201630	4135
20A	30mA	2	AUF3C202003	4005
	100mA	2	AUF3C202010	4090
	300mA	2	AUF3C202030	4135
25A	30mA	2	AUF3C202503	4005
	100mA	2	AUF3C202510	4090
	300mA	2	AUF3C202530	4135
32A	30mA	2	AUF3C203203	4005
	100mA	2	AUF3C203210	4090
	300mA	2	AUF3C203230	4135
40A	30mA	2	AUF3C204003	4005
	100mA	2	AUF3C204010	4090
	300mA	2	AUF3C204030	4135
63A	30mA	4	AUF3C206303	5135
	100mA	4	AUF3C206310	5445
	300mA	4	AUF3C206330	5485
4P AC				
16A	30mA	7.5	AUF3C401603	4645
	100mA	7.5	AUF3C401610	5165
	300mA	7.5	AUF3C401630	5270
20A	30mA	7.5	AUF3C402003	4645
	100mA	7.5	AUF3C402010	5165
	300mA	7.5	AUF3C402030	5270
25A	30mA	7.5	AUF3C402503	4645
	100mA	7.5	AUF3C402510	5165
	300mA	7.5	AUF3C402530	5270
32A	30mA	7.5	AUF3C403203	4795
	100mA	7.5	AUF3C403210	5170
	300mA	7.5	AUF3C403230	5280
40A	30mA	7.5	AUF3C404003	4865
	100mA	7.5	AUF3C404010	5170
	300mA	7.5	AUF3C404030	5300
63A	30mA	7.5	AUF3C406303	5835
	100mA	7.5	AUF3C406310	5945
	300mA	7.5	AUF3C406330	5945
80A	30mA	12	AUF3C408003	20990
	100mA	12	AUF3C408010	21460
	300mA	12	AUF3C408030	21460
100A	30mA	12	AUF3C410003	22440
	100mA	12	AUF3C410010	22975
	300mA	12	AUF3C410030	22975

- 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	Module	CAT Nos.	M.R.P. (₹) Per Unit
2P Adi				
6A	30mA	2	AUF3D200603	5280
	100mA	2	AUF3D200610	5815
	300mA	2	AUF3D200630	6035
10A	30mA	2	AUF3D201003	5280
	100mA	2	AUF3D201010	5815
	300mA	2	AUF3D201030	6035
16A	30mA	2	AUF3D201603	5280
	100mA	2	AUF3D201610	5815
	300mA	2	AUF3D201630	6035
20A	30mA	2	AUF3D202003	5280
	100mA	2	AUF3D202010	5815
	300mA	2	AUF3D202030	6035
25A	30mA	2	AUF3D202503	5280
	100mA	2	AUF3D202510	5815
	300mA	2	AUF3D202530	6035
32A	30mA	2	AUF3D203203	5280
	100mA	2	AUF3D203210	5815
	300mA	2	AUF3D203230	6035
40A	30mA	2	AUF3D204003	5280
	100mA	2	AUF3D204010	5815
	300mA	2	AUF3D204030	6035
63A	30mA	4	AUF3D206303	6560
	100mA	4	AUF3D206310	6945
	300mA	4	AUF3D206330	7000
4P Adi				
16A	30mA	7.5	AUF3D401603	5930
	100mA	7.5	AUF3D401610	6595
	300mA	7.5	AUF3D401630	6730
20A	30mA	7.5	AUF3D402003	5930
	100mA	7.5	AUF3D402010	6595
	300mA	7.5	AUF3D402030	6730
25A	30mA	7.5	AUF3D402503	5930
	100mA	7.5	AUF3D402510	6595
	300mA	7.5	AUF3D402530	6730
32A	30mA	7.5	AUF3D403203	6120
	100mA	7.5	AUF3D403210	6600
	300mA	7.5	AUF3D403230	6740
40A	30mA	7.5	AUF3D404003	6215
	100mA	7.5	AUF3D404010	6600
	300mA	7.5	AUF3D404030	6765
63A	30mA	7.5	AUF3D406303	7445
	100mA	7.5	AUF3D406310	7590
	300mA	7.5	AUF3D406330	7590
80A	30mA	12	AUF3D408003	20990
	100mA	12	AUF3D408010	21460
	300mA	12	AUF3D408030	21460
100A	30mA	12	AUF3D410003	22440
	100mA	12	AUF3D410010	22975
	300mA	12	AUF3D410030	22975

* For technical details, please contact nearest branch office

Single Phase - ACCL [8536]

Automatic Changeover with Current Limiter

Range Highlights

- Conforms to IEC 60947-6, IEC 60947-3
- Wide Range of Current Ratings
 - (Generator side) - 1.5A to 30A
 - (Electricity Board side) - 30A
- RoHS compliant



Description EB/DG	Module	CAT Nos.	M.R.P. (₹) Per Unit
30A/1.5A	4	AUCL010301E5	2120
30A/2.5A	4	AUCL010302E5	2120
30A/3A	4	AUCL01030003	2120
30A/4A	4	AUCL01030004	2120
30A/5A	4	AUCL01030005	2120
30A/6A	4	AUCL01030006	2120
30A/8A	4	AUCL01030008	2120
30A/10A	4	AUCL01030010	2120
30A/12A	4	AUCL01030012	2120
30A/15A	4	AUCL01030015	2120
30A/20A	4	AUCL01030020	2120
30A/30A	4	AUCL01030030*	2120

* Non-current limiting variant

Three Phase - ACCL [8536]

Automatic Changeover with Current Limiter

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	8000
40A / 32A	AUCL03040032	8400
40A / 40A	AUCL03040040	9100
50A / 50A	AUCL03050050	12600
63A / 50A	AUCL03063050	14300
63A / 63A	AUCL03063063	16200
80A / 80A	AUCL03080080	22550
125A / 125A	AUCL03125125	37950

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	Module	Cat. No.	M.R.P. (₹) Per Unit
Double Pole			
25A	2	AUC00202500	1365
40A	2	AUC00204000	2090
63A	3	AUC00206300	2430
Four Pole			
40A	4	AUC00404000	3600
63A	6	AUC00406300	4085

Indicating Lights [8531]



Description	Module	Cat. No.	M.R.P. (₹) Per Unit
RED	1	AUIL01RED00	895
YELLOW	1	AUIL01YEL00	895
BLUE	1	AUIL01BLU00	895
GREEN	1	AUIL01GRE00	895
RED-YELLOW-BLUE	1	AUIL01RYB00	1085

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)	Module	Cat. No.	M.R.P. (₹) Per Unit
25A-1NO	1	AUMC1002501	1505
25A-2NO	1	AUMC2002501	1880
40A-2NO	3	AUMC2004003	3230
40A-3NO	3	AUMC3004003	4625
40A-4NO	3	AUMC4004003	5430
63A-2NO+2NC	3	AUMC2206303	5740
63A-3NO	3	AUMC3006303	5880
63A-4NO	3	AUMC4006303	6470
Accessory [8538]			
Auxiliary Contact, 2NO	0.5	AUMCAUX240	1625

Accessories [8538]



All Half Module and One Module Accessories are common for 80A-125A MCBs, RCBOs and Adi RCCBs

Description	Configuration	Module	Voltage	CAT Nos.	M.R.P. (₹) Per Unit
Auxiliary Contact	1NO+1NC	0.5	240V AC, 24V DC	AUAXAC240	790
AUX/TAC*	1NO+1NC	0.5	240V AC, 24V DC	AUATAC240	925
Undervoltage Release	-	1	240V AC	AUUVAC240	1870
	-	1	24V DC	AUUVDC024	1870
Overvoltage Release	-	1	240V AC	AUOVAC240	2310
Shunt Release	-	1	240V AC	AUSRAC240	2145
	-	1	24V DC	AUSRDC024	2145
Padlock-Suitable for Lock Hasp 3.5 - 5 mm dia. max	Suitable for 1Pole=1Mod devices: RCCBs, RCBOs, Changeover Switches up to 40A			AUPD01	425
	Suitable for 1Pole-1.5Mod devices: MCBs 80A-125A, Changeover Switch 63A			AUPD02	480

Note: Standard Pack Quantity for Padlock - 2 Nos.

* For 80A-125A MCBs please contact nearest branch office



Reliable Protection for DC Installations

250/500V DC MCBs

- ◆ 250V(SP) & 500V(DP)
10kA breaking capacity
- ◆ Conforms to IEC 60947-2
- ◆ Range : 0.5A to 40A
- ◆   compliant

Customer Interaction Center (CIC)

BSNL / MTNL (toll free): 1800 233 5858 Reliance (toll free): 1800 200 5858
Tel: 022 6774 5858 Email: cic@Lntebg.com Web: www.Lntebg.com

Time Switches [9107]



Description	Module	Cat. No.	M.R.P. (₹) Per Unit
Analog time switch	1	AUTS01ANA00	3940
Analog time switch	3	AUTS03ANA00	4790
Digital time switch	2	AUTS02DIG00	3105
Astro time switch	2	AUTS02AST00	5215

Energy Meters [9030]

Range Highlights

- Communication with additional RS485 & WiFi module
- Class 1 accuracy
- Direct current operated meter
- Reverse current indication for three-phase meter



Description	Module	Cat. No.	M.R.P. (₹) Per Unit
Single Phase (5-40A)	2	WD4000101000	2135
Three Phase (10-60A)	7	WD4000103000	4850

EXORA DBs

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			
IP 43 - Metal Door				
4 way	2	2	LTSD04M	*
6 way	2	4	LTSD06M	*
8 way	2	6	LTSD08M	*
12 way	2	10	LTSD12M	*
16 way	2	14	LTSD16M	*

TPN DBs

Highlights

- Available in CRCA sheet steel, RAL 9003, powder coated
- Ready to use DBs - Provided with 100A insulated phase bus-bars | neutral bar/s with shroud/s | earth bar/s | sticking saddles | 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			
IP 43 - Metal Door				
4 way	8	4+4+4	LTTD04M	*
6 way	8	6+6+6	LTTD06M	*
8 way	8	8+8+8	LTTD08M	*

* For details, please contact nearest branch office

Specially Designed

Distribution Board suitable for Aluminum shuttering (Mivan) Construction



> To experience Scan or click



Highlights

- Conforms to IS 8623-1 & 3, 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



IP 30 - Single Door

IP 43 - Metal Door

IP 43 - Glazed Door

Description	No. of Modules		Cat. Nos.	M.R.P. (₹) Per Unit
	Incomer + Outgoing			
IP 30 - Single Door				
4 way	2	2	DBSPN004SD	1140
6 way	2	4	DBSPN006SD	1245
8 way	2	6	DBSPN008SD	1440
12 way	2	10	DBSPN012SD	1700
16 way	2	14	DBSPN016SD	2105
18 way	2	16	DBSPN018SD	2480
IP 43 - Metal Door				
4 way	2	2	DBSPN004DD	1570
6 way	2	4	DBSPN006DD	1805
8 way	2	6	DBSPN008DD	1940
12 way	2	10	DBSPN012DD	2340
16 way	2	14	DBSPN016DD	2930
18 way	2	16	DBSPN018DD	3300
IP 43 - Glazed Door				
4 way	2	2	DBSPN004GD	2020
6 way	2	4	DBSPN006GD	2155
8 way	2	6	DBSPN008GD	2345
12 way	2	10	DBSPN012GD	2840
16 way	2	14	DBSPN016GD	3530
18 way	2	16	DBSPN018GD	3790
IP 54 - Metal Door				
4 way	2	2	DBSPN00454	5060
6 way	2	4	DBSPN00654	5645
8 way	2	6	DBSPN00854	5950
12 way	2	10	DBSPN01254	6870
16 way	2	14	DBSPN01654	7610
18 way	2	16	DBSPN01854	7985

Highlights

- Conforms to IS 8623-1 & 3, 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 SP MCBs as outgoing



IP 30 - Single Door

IP 43 - Metal Door

IP 43 - Glazed Door

Description	No. of Modules		Cat. Nos.	M.R.P. (₹) Per Unit
	Incomer	Outgoing		
IP 30 - Single Door				
4 way	4	4+4+4	DBTPE004SD	2985
6 way	4	6+6+6	DBTPE006SD	3665
4 way	8	4+4+4	DBTPN004SD	3205
6 way	8	6+6+6	DBTPN006SD	3950
8 way	8	8+8+8	DBTPN008SD	4640
12 way	8	12+12+12	DBTPN012SD	6750
16 way	8	16+16+16	DBTPN016SD	8315
IP 43 - Metal Door				
4 way	4	4+4+4	DBTPE004DD	3605
6 way	4	6+6+6	DBTPE006DD	4440
4 way	8	4+4+4	DBTPN004DD	3840
6 way	8	6+6+6	DBTPN006DD	4735
8 way	8	8+8+8	DBTPN008DD	5665
12 way	8	12+12+12	DBTPN012DD	8485
16 way	8	16+16+16	DBTPN016DD	10465
IP 43 - Glazed Door				
4 way	4	4+4+4	DBTPE004GD	4690
6 way	4	6+6+6	DBTPE006GD	5785
4 way	8	4+4+4	DBTPN004GD	5050
6 way	8	6+6+6	DBTPN006GD	6170
8 way	8	8+8+8	DBTPN008GD	7395
12 way	8	12+12+12	DBTPN012GD	11340
16 way	8	16+16+16	DBTPN016GD	13610
IP 54 - Metal Door				
4 way	4	4+4+4	DBTPE00454	11665
6 way	4	6+6+6	DBTPE00654	14390
4 way	8	4+4+4	DBTPN00454	12280
6 way	8	6+6+6	DBTPN00654	14780
8 way	8	8+8+8	DBTPN00854	16165
12 way	8	12+12+12	DBTPN01254	22780
16 way	8	16+16+16	DBTPN01654	27345

**Highlights**

- Conforms to IS 8623-1 & 3, 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		
IP 43 - Metal Door					
4 way	8	2+2+2	4+4+4	DBHPI004DD	6440
6 way	8	2+2+2	6+6+6	DBHPI006DD	7690
8 way	8	2+2+2	8+8+8	DBHPI008DD	9140
12 way	8	2+2+2	12+12+12	DBHPI012DD	12495
16 way	8	2+2+2	16+16+16	DBHPI016DD	14995
IP 54 - Metal Door					
4 way	8	2+2+2	4+4+4	DBHPI00454	14710
6 way	8	2+2+2	6+6+6	DBHPI00654	17525
8 way	8	2+2+2	8+8+8	DBHPI00854	19350
12 way	8	2+2+2	12+12+12	DBHPI01254	26875

**Tier PPI DBs****IP 43 - Metal Door**

Description	No. of Modules			Cat. Nos.	M.R.P. (₹) Per Unit
	Incomer	Sub-Incomer	Outgoing		
IP 43 - Metal Door					
6 way	8	2+2+2	6+6+6	DBTPI006DD	8080
8 way	8	2+2+2	8+8+8	DBTPI008DD	10135
10 way	8	2+2+2	10+10+10	DBTPI010DD	10625
12 way	8	2+2+2	12+12+12	DBTPI012DD	11560
16 way	8	2+2+2	16+16+16	DBTPI016DD	12170
12 way	MCCB*	2+2+2	12+12+12	DBTPL012DD	12040

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

Highlights

- Conforms to IS 8623-1 & 3, 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 1. Modular Incomer - FP MCB/Isolator/RCCB/RCBO as incomer, DP RCCB/RCBO as sub-incomer and SP MCBs as outgoing
2. MCCB Incomer - MCCB* as incomer, DP RCCB/RCBO as sub-incomer and SP MCBs as outgoing

**With Modular Incomer****IP 30 - Single Door****IP 43 - Metal Door**

Description	No. of Modules			Cat. Nos.	M.R.P. (₹) Per Unit
	Incomer	Sub-Incomer	Outgoing		
IP 30 - Single Door					
4 way	8	4+4+4	4+4+4	DBPSG004SD	8745
6 way	8	4+4+4	6+6+6	DBPSG006SD	9545
8 way	8	4+4+4	8+8+8	DBPSG008SD	10225
12 way	8	4+4+4	12+12+12	DBPSG012SD	11770
IP 43 - Metal Door					
4 way	8	4+4+4	4+4+4	DBPSG004DD	9965
6 way	8	4+4+4	6+6+6	DBPSG006DD	11235
8 way	8	4+4+4	8+8+8	DBPSG008DD	12535
12 way	8	4+4+4	12+12+12	DBPSG012DD	15695

**With MCCB Incomer****IP 30 - Single Door****IP 43 - Metal Door**

Description	No. of Modules			Cat. Nos.	M.R.P. (₹) Per Unit
	Incomer*	Sub-Incomer	Outgoing		
IP 30 - Single Door					
4 way	MCCB	4+4+4	4+4+4	DBPGL004SD	12245
6 way	MCCB	4+4+4	6+6+6	DBPGL006SD	14095
8 way	MCCB	4+4+4	8+8+8	DBPGL008SD	16190
IP 43 - Metal Door					
4 way	MCCB	4+4+4	4+4+4	DBPGL004DD	13710
6 way	MCCB	4+4+4	6+6+6	DBPGL006DD	15680
8 way	MCCB	4+4+4	8+8+8	DBPGL008DD	18135
12 way	MCCB	4+4+4	12+12+12	DBPGL012DD	20450

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

TPN Phase Selector DB [8537]

Highlights

- Conforms to IS 8623-1 & 3, 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 3 nos. of 63A L&T 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



IP 30 - Single Door

IP 43 - Metal Door

Description	No. of Modules		Cat. Nos.	M.R.P. (₹) Per Unit
	Incomer	Outgoing		
IP 30 - Single Door				
4 way	8	4+4+4	DBPSR004SD	11610
6 way	8	6+6+6	DBPSR006SD	12340
8 way	8	8+8+8	DBPSR008SD	13675
10 way	8	10+10+10	DBPSR010SD	14185
12 way	8	12+12+12	DBPSR012SD	15005
IP 43 - Metal Door				
4 way	8	4+4+4	DBPSR004DD	13585
6 way	8	6+6+6	DBPSR006DD	13805
8 way	8	8+8+8	DBPSR008DD	14785
10 way	8	10+10+10	DBPSR010DD	15800
12 way	8	12+12+12	DBPSR012DD	16655

Flexi/Row DB [8537]

Highlights

- Conforms to IS 8623-1 & 3, 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 | blanking plates and circuit identification labels
- With provision to mount modular devices as per requirement



IP 43 - Metal Door

IP 43 - Glazed Door

Description	No. of Modules Per Row	Cat. Nos.	M.R.P. (₹) Per Unit
IP 43 - Metal Door			
2 Row 28 Module	14	DBROW228DD	4810
3 Row 42 Module	14	DBROW342DD	5770
4 Row 56 Module	14	DBROW456DD	6440
4 Row 64 Module	16	DBROW464DD	7290
IP 43 - Glazed Door			
2 Row 28 Module	14	DBROW228GD	5270
3 Row 42 Module	14	DBROW342GD	6460
4 Row 56 Module	14	DBROW456GD	7325
4 Row 64 Module	16	DBROW464GD	8030

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	290	5
SP 56 Mod	BSP56	1095	5
DP 12 Mod	BDP12	480	5
TP 12 Mod	BTP12	515	5
FP 12 Mod	BFP12	1025	5
End Caps for SP	ECP01	15	10
End Caps for DP/TP	ECP03	35	10
End Caps for FP	ECP04	55	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	15	10
Half Module	BKP05	15	10

Padlock [8301]

Highlights

- Version with standard lock and a common key



PDK02

Description	Cat. Nos.	M.R.P. (₹) Per Unit	Std. Pack Qty.
Lock and Key Kit	PDK02	510	5

Vertical TPN DB with Modular Incomer [8537]

Highlights

- Conforms to IS 8623-1 & 3, 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 insulated vertical phase bus-bars | neutral bar/s with shroud/s | earth bar/s | sticking saddles | cement spill protector | color-coded interconnecting wire set | cable ties | blanking plates and circuit identification labels
- With provision for FP MCB/Isolator/RCCB/RCBO as incomer and SP/TP MCBs as outgoings



IP 30 - Single Door

IP 43 - Metal Door

IP 43 - Glazed Door

Description	No. of Modules		Cat. Nos.	M.R.P. (₹) Per Unit
	Incomer	Outgoing		
IP 30 - Single Door				
4 way	8	4+4+4	DBVTM004SD	8640
6 way	8	6+6+6	DBVTM006SD	9265
8 way	8	8+8+8	DBVTM008SD	10540
12 way	8	12+12+12	DBVTM012SD	14920
16 way	8	16+16+16	DBVTM016SD	17605
IP 43 - Metal Door				
4 way	8	4+4+4	DBVTM004DD	9275
6 way	8	6+6+6	DBVTM006DD	11010
8 way	8	8+8+8	DBVTM008DD	12315
12 way	8	12+12+12	DBVTM012DD	16695
16 way	8	16+16+16	DBVTM016DD	20100
IP 43 - Glazed Door				
4 way	8	4+4+4	DBVTM004GD	12685
6 way	8	6+6+6	DBVTM006GD	13675
8 way	8	8+8+8	DBVTM008GD	16125
12 way	8	12+12+12	DBVTM012GD	21090
16 way	8	16+16+16	DBVTM016GD	22835
IP 54 - Metal Door				
4 way	8	4+4+4	DBVTM00454	19510
6 way	8	6+6+6	DBVTM00654	20915
8 way	8	8+8+8	DBVTM00854	22785
12 way	8	12+12+12	DBVTM01254	30655
16 way	8	16+16+16	DBVTM01654	33110

Vertical TPN DB with MCCB Incomer [8537]

Highlights

- Conforms to IS 8623-1 & 3, 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 insulated vertical phase bus-bars | neutral bar/s with shroud/s | earth bar/s | sticking saddles | cement spill protector | color-coded interconnecting wire set | cable ties | blanking plates and circuit identification labels
- With provision for 3 pole and 4 Pole MCCB* as incomer and SP/TP MCBs as outgoings



IP 30 - Single Door

IP 43 - Metal Door

IP 43 - Glazed Door

Description	No. of Modules		Cat. Nos.	M.R.P. (₹) Per Unit
	Incomer*	Outgoing		
IP 30 - Single Door				
4 way	MCCB	4+4+4	DBVTL004SD	9795
6 way	MCCB	6+6+6	DBVTL006SD	10640
8 way	MCCB	8+8+8	DBVTL008SD	11590
12 way	MCCB	12+12+12	DBVTL012SD	17345
16 way	MCCB	16+16+16	DBVTL016SD	20320
IP 43 - Metal Door				
4 way	MCCB	4+4+4	DBVTL004DD	11315
6 way	MCCB	6+6+6	DBVTL006DD	12990
8 way	MCCB	8+8+8	DBVTL008DD	14225
12 way	MCCB	12+12+12	DBVTL012DD	18930
16 way	MCCB	16+16+16	DBVTL016DD	22270
IP 43 - Glazed Door				
4 way	MCCB	4+4+4	DBVTL004GD	13285
6 way	MCCB	6+6+6	DBVTL006GD	15050
8 way	MCCB	8+8+8	DBVTL008GD	16980
12 way	MCCB	12+12+12	DBVTL012GD	22630
16 way	MCCB	16+16+16	DBVTL016GD	25055
IP 54 - Metal Door				
4 way	MCCB	4+4+4	DBVTL00454	22820
6 way	MCCB	6+6+6	DBVTL00654	24470
8 way	MCCB	8+8+8	DBVTL00854	27430
12 way	MCCB	12+12+12	DBVTL01254	34620
16 way	MCCB	16+16+16	DBVTL01654	41420

* Suitable for 3 Pole & 4 Pole DU100H, DU100D, DU125D, DU125H & DNO MCCB as incomer

Vertical TPN DB with MCCB Incomer [8537]

Up to 250A MCCB Incomer



IP 30 - Single Door



IP 43 - Metal Door

Description	No. of Modules		Cat. Nos.	M.R.P. (₹) Per Unit
	Incomer*	Outgoing		
IP 30 - Single Door				
4 way	MCCB	4+4+4	DBVTH004SD	12980
6 way	MCCB	6+6+6	DBVTH006SD	13620
8 way	MCCB	8+8+8	DBVTH008SD	14975
12 way	MCCB	12+12+12	DBVTH012SD	21155
16 way	MCCB	16+16+16	DBVTH016SD	25490
IP 43 - Metal Door				
4 way	MCCB	4+4+4	DBVTH004DD	14705
6 way	MCCB	6+6+6	DBVTH006DD	16705
8 way	MCCB	8+8+8	DBVTH008DD	18370
12 way	MCCB	12+12+12	DBVTH012DD	24585
16 way	MCCB	16+16+16	DBVTH016DD	29190
IP 54 - Metal Door				
4 way	MCCB	4+4+4	DBVTH00454	31650
6 way	MCCB	6+6+6	DBVTH00654	34560
8 way	MCCB	8+8+8	DBVTH00854	35745
12 way	MCCB	12+12+12	DBVTH01254	41850
16 way	MCCB	16+16+16	DBVTH01654	44055

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

Enclosure [8537]

Highlights

- Conforms to IS 8623-1 & 3, IEC 61439-1 & 3
- Suitable for Surface and Flush mounting
- Available in CRCA sheet steel, RAL9003, powder coated
- With provision to mount MCB/Isolator/RCCB/RCBO and other modular devices



IP 30 - Metal Door

Description	No. of Modules	Cat. Nos.	M.R.P. (₹) Per Unit
IP 30 - Metal Door			
2 way	2	DBENC002SD	600
3 way	3	DBENC003SD	600
4 way	4	DBENC004SD	600
6 way	6	DBENC006SD	900

Plug & Socket DB [8537]

Highlights

- Conforms to IS 8623-1 & 3, IEC 61439-1 & 3
- Suitable for Surface and Flush mounting
- Available in CRCA sheet steel, RAL9003, powder coated
- Loose Metal Plugs & Sockets conforms to IS 8804; available in Single Phase & Three Phase



Metal Plug & Socket



Plastic Plug & Socket

Description	No. of Pins	No. of Modules	Cat. Nos.	M.R.P. (₹) Per Unit
Metal Plug & Sockets				
10 A, 2 Pin + SC [^]	P + N	1	DBMPS110SD	1510
20 A, 2 Pin + SC [^]	P + N	1	DBMPS120SD	1625
20 A, 2 Pin + SC [^]	P + N	2	DBMPS220SD	1770
20 A, 3 Pin + SC [^]	3P	3	DBMPS320SD	2995
32 A, 3 Pin + SC [^]	3P	3	DBMPS332SD	3540
32 A, 3 Pin + SC [^]	3P	4	DBMPS432SD	3765
63 A, 5 Pin + SC [^]	3P+N+E	4	DBMPS463SD	12765
Plastic Plug & Sockets				
16 A, 3 Pin	P+N+E	2	DBPPS316SD	2475
32 A, 3 Pin	P+N+E	4	DBPPS332SD	2675
32 A, 5 Pin	3P+N+E	8	DBPPS532SD	4505
63 A, 5 Pin	3P+N+E	8	DBPPS563SD	11450

Metal Plug [8536]



Description	No. of Pins	Cat. Nos.	M.R.P. (₹) Per Unit
10 A, 2 Pin + SC [^]	P + N	MPS210P	155
20 A, 2 Pin + SC [^]	P + N	MPS220P	165
20 A, 3 Pin + SC [^]	3P	MPS320P	210
32 A, 3 Pin + SC [^]	3P	MPS332P	395

Note: Standard pack quantity - 20 nos.

Metal Socket [8536]



Description	No. of Pins	Cat. Nos.	M.R.P. (₹) Per Unit
10 A, 2 Pin + SC [^]	P + N	MPS210S	155
20 A, 2 Pin + SC [^]	P + N	MPS220S	180
20 A, 3 Pin + SC [^]	3P	MPS320S	240
32 A, 3 Pin + SC [^]	3P	MPS332S	395

[^] SC-Scraping Earth

Note: Standard pack quantity - 20 nos.

Cable End Boxes [8537]

Highlights

- Available in CRCA sheet steel, RAL9003, powder coated
- Can be either at the top or bottom of the distribution board

Description	Cat. Nos.	M.R.P. (₹) Per Unit
CEB for SPN DBs		
CEB-SPN Double Door, 4 way	DBSPN004CB	660
CEB-SPN Double Door, 6 way	DBSPN006CB	705
CEB-SPN Double Door, 8 way	DBSPN008CB	780
CEB-SPN Double Door, 12 way	DBSPN012CB	870
CEB-SPN Double Door, 16 way	DBSPN016CB	1215
CEB-SPN Double Door, 18 way	DBSPN018CB	1290
CEB for TPN DBs		
CEB-TPN Double Door, 4 way	DBTPN004CB	1000
CEB-TPN Double Door, 6 way	DBTPN006CB	1245
CEB-TPN Double Door, 8 way	DBTPN008CB	1900
CEB-TPN Double Door, 12 way	DBTPN012CB	2445
CEB-TPN Double Door, 16 way	DBTPN016CB	2470
CEB-TPE Double Door, 4 way	DBTPE004CB	960
CEB-TPE Double Door, 6 way	DBTPE006CB	1200
CEB for Horizontal PPI DBs		
CEB-Horz. PPI Double Door, 4 way	DBHPI004CB	1290
CEB-Horz. PPI Double Door, 6 way	DBHPI006CB	1465
CEB-Horz. PPI Double Door, 8 way	DBHPI008CB	1990
CEB-Horz. PPI Double Door, 12 way	DBHPI012CB	2345
CEB-Horz. PPI Double Door, 16 way	DBHPI016CB	2555
CEB for Tier PPI DBs		
CEB-Tier PPI Double Door, 6 way	DBTPI006CB	1220
CEB-Tier PPI Double Door, 8 way	DBTPI008CB	1275
CEB-Tier PPI Double Door, 10 way	DBTPI010CB	1545
CEB-Tier PPI Double Door, 12 way	DBTPI012CB	1890
CEB-Tier PPI Double Door, 16 way	DBTPI016CB	2010
CEB-Tier PPI Double Door, 12 way MCCB incomer	DBTPL012CB	1910



Description	Cat. Nos.	M.R.P. (₹) Per Unit
CEB for VTPN DBs		
CEB-VTPN Double Door, Modular Incomer	DBVTMXXCB	875
CEB-VTPN Double Door, MCCB Incomer	DBVTXXXCB	3135
CEB for FLEXI DBs		
CEB for Flexi DBs with 14 Modules per Row	DBROWX14CB	895
CEB for Flexi DBs with 16 Modules per Row	DBROWX16CB	1025
CEB for Phase Segregated DBs		
CEB-PSG Double Door, 4 way	DBPSG004CB	2185
CEB-PSG Double Door, 6 way	DBPSG006CB	2600
CEB-PSG Double Door, 8 way	DBPSG008CB	2885
CEB-PSG Double Door, 12 way	DBPSG012CB	3205
CEB for Phase Selector DBs		
CEB-Phase Selector Double Door, 4 way	DBPSR004CB	910
CEB-Phase Selector Double Door, 6 way	DBPSR006CB	1030
CEB-Phase Selector Double Door, 8 way	DBPSR008CB	1670
CEB-Phase Selector Double Door, 10 way	DBPSR010CB	1925
CEB-Phase Selector Double Door, 12 way	DBPSR012CB	2085

DBs with provision for TV/Telephone splitters [8537]

Highlights

- Distribution Boards equipped with provisions to mount TV / Telephone splitters
- Available in SPN & TPN DBs



DB Type	Description	No. of Modules		Cat. Nos.	M.R.P. (₹) Per Unit
		Incomer + Outgoing			
IP 43 - Metal Door					
SPN	6 way	2	4	DBSPN006DDTV	3375
	8 way	2	6	DBSPN008DDTV	3630
	12 way	2	10	DBSPN012DDTV	4490
	16 way	2	14	DBSPN016DDTV	5180
	18 way	2	16	DBSPN018DDTV	6360
TPN	4 way	8	4+4+4	DBTPN004DDTV	6520
	6 way	8	6+6+6	DBTPN006DDTV	7530
	8 way	8	8+8+8	DBTPN008DDTV	8740

Selection as per Type 2 Co-ordination

All our type 2 charts are available on **Knowledge Portal & ProductWhiz.**



Access E&A's Knowledge Portal from
www.intebg.com/KP



L&T Electrical & Automation,
ESP BizWhiz and ProductWhiz from
Google Play Store/Apple App Store

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	MPCB/MCCB	MPCB/MCCB	MPCB/MCCB	MPCB/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
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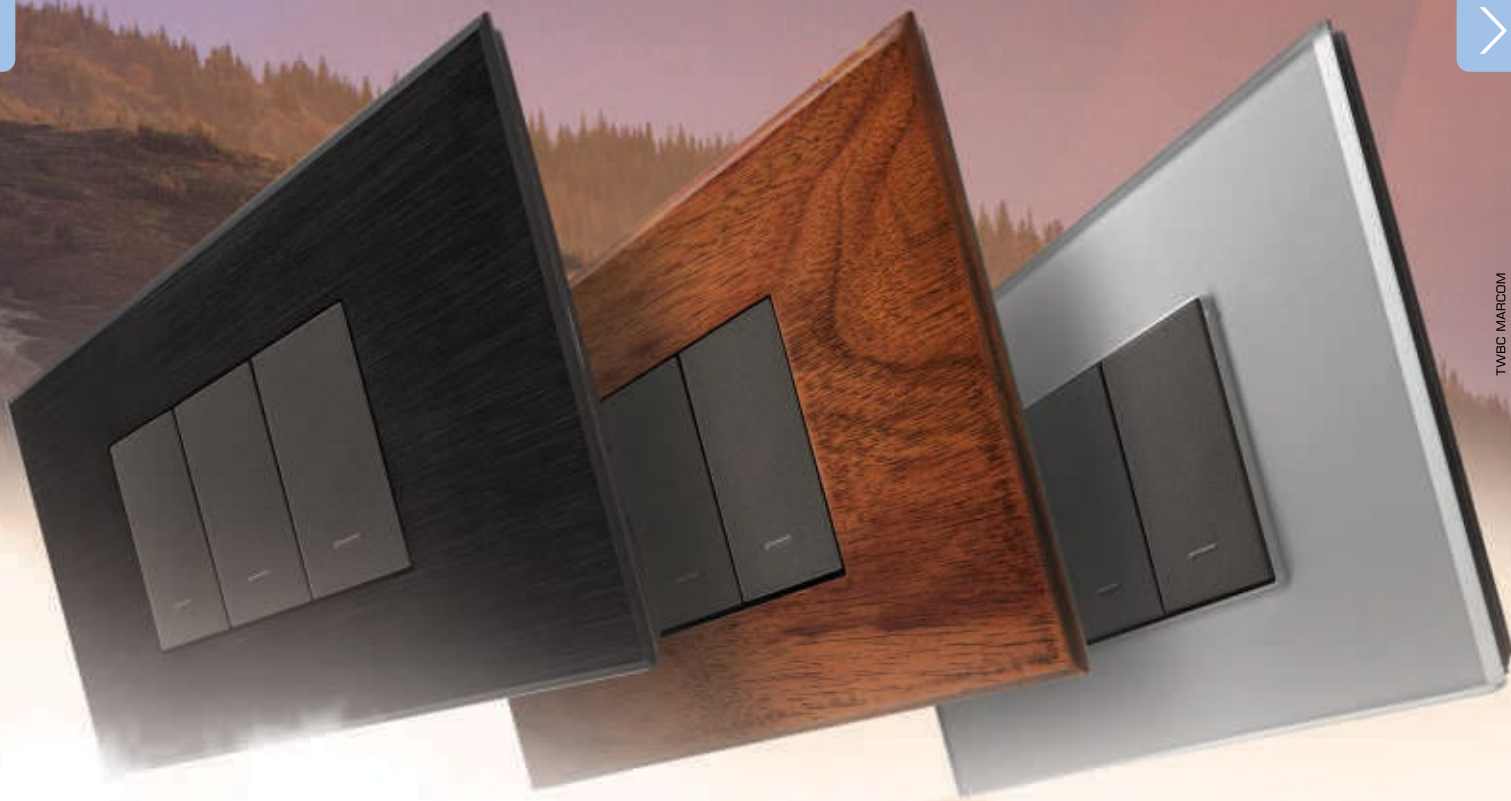
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- Conformal Coating complying to IEC 60721-3-3 class 3C2
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- Peer to Peer Communication to share I/O's
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Customer Interaction Center (CIC)

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Discontinued Products/Suggested Alternate Products

Product Group	Discontinued Products	Suggested Alternate Products
MCCB	DTH800 3P & Acc	 DN4-1250N 800A 3P & Acc



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Notes:

General Terms

All prices are on maximum retail price basis inclusive of all Duties, GST and any other Tax as applicable.

Prices are subject to revision without notice.

Warranty Policy

All the products listed in the price list carry a warranty, against manufacturing defects for a period of 18* months from the date of purchase.

Should the product prove to be defective due to faulty workmanship or otherwise, we will remedy the defect or replace the faulty parts or the whole product at our discretion, as soon as possible, free of cost.

The warranty is however subject to the provision of proper usage, efficient maintenance and does not cover defects arising out of fire, accident, inefficient maintenance, faulty operation and willful or accidental damage. It also does not cover damage to power electronic components like thyristors & IGBTs, which fail predominantly due to over-temperature & over-voltage. The user needs to take adequate precautions to eliminate these conditions. The manufacturer shall not be liable for any consequential loss, injury or damages attributable to defect or failure of its products.

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Product improvement is a continuous process. For the latest information and special application, please contact any of our offices listed here. Product photographs shown for representative purpose only.



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