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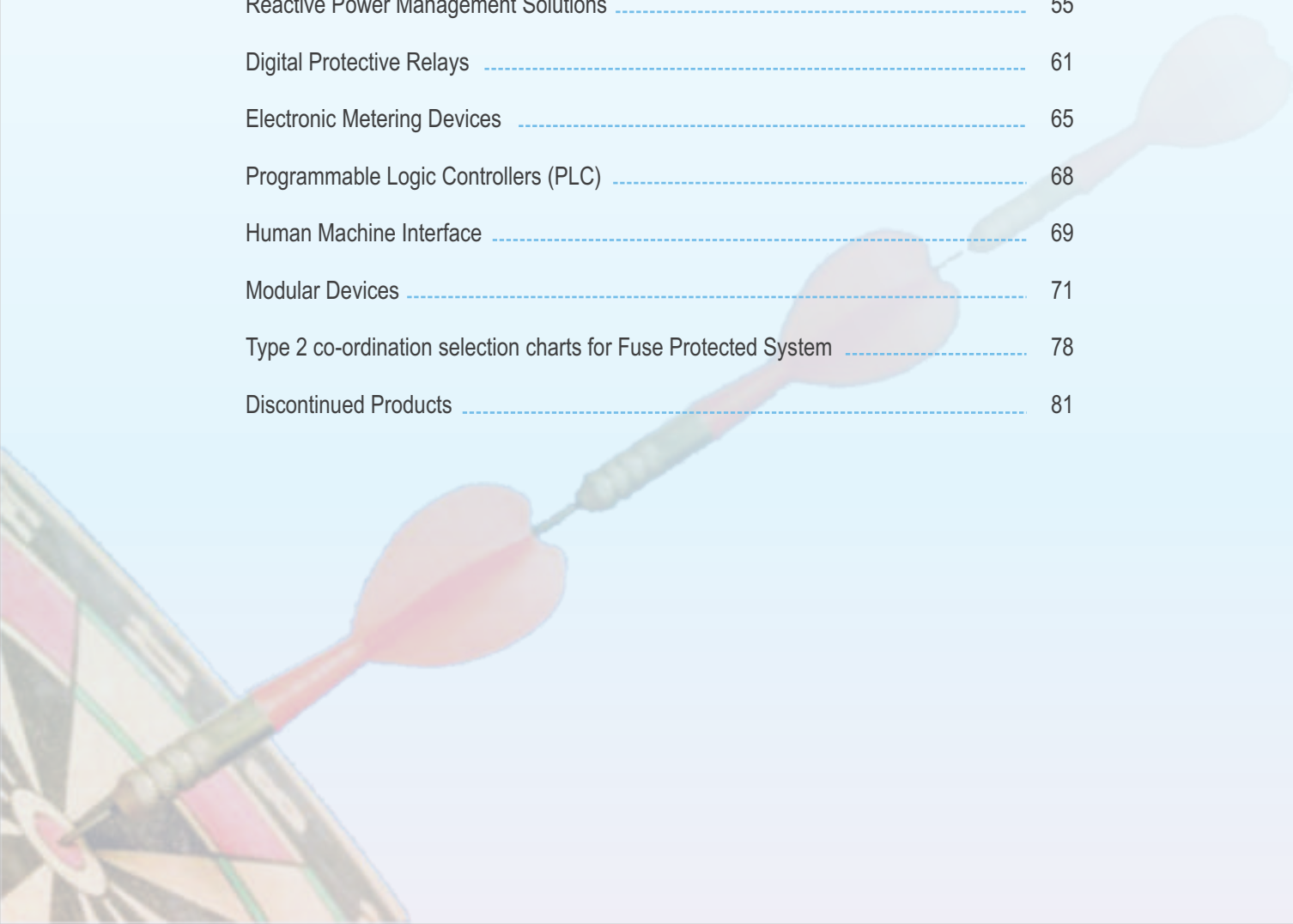


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Contactors

Power Contactors

- | | | |
|---------------|--------------------|---------------|
| 2 Pole | 3 Pole | 4 Pole |
| • MNX | • MX Power | • MCX |
| | • MNX | |
| | • MO | |
| | • MDX (DC Control) | |
| | • ML | |

Control Relays (Auxiliary Contactors)

- MX0 (Mini)
- MN0

Capacitor Duty Contactors

- MO C

Definite Purpose Contactors

- Single Pole - MR
- MK1
- MU

3 Pole Power Contactors

3 Pole Power Contactors - Type MNX

Features

- Conforms to IS / IEC 60947-4-1 & IEC 60947-4-1
- Range from 9A – 650AAC-3
- Entire range is UL listed
- 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 225



MNX 650

AC3 Rating (A)	AC1 Rating (A)	Type	Aux. Contacts	Cat. No.	M.R.P. (₹) Per Unit	Std. Pkg. (Nos.)
9	25	MNX 9	1 NO	CS94106	720	10
			1 NC	CS94107	720	10
12	30	MNX 12	1 NO	CS94108	810	10
			1 NC	CS94109	810	10
18	30	MNX 18	1 NO	CS94100	945	10
			1 NC	CS94101	945	10
22	32	MNX 22	1 NO	CS94980	1095	10
			1 NC	CS94981	1095	10
			#	CS94110	1130	10
25	45	MNX 25	#	CS94111	2510	10
32	55	MNX 32	#	CS94190	4010	10
40	55	MNX 40	#	CS94190	4010	10
45	85	MNX 45	2 NO + 2 NC	ST19000	5495	1
50	85	MNX 50	2 NO + 2 NC	ST19001	5535	1
70	100	MNX 70	2 NO + 2 NC	ST19002	7585	1
80	100	MNX 80	2 NO + 2 NC	ST19003	9325	1
95	160	MNX 95	2 NO + 2 NC	CS94136	11235	1
110	160	MNX 110	2 NO + 2 NC	CS94137	13345	1
140	160	MNX 140	2 NO + 2 NC	CS94138	17530	1
185	250	MNX 185	2 NO + 2 NC	CS94139	23065	1
225	300	MNX 225	2 NO + 2 NC	CS94140	25145	1
265	350	MNX 265	2 NO + 2 NC	CS94142	29775	1
325	400	MNX 325	2 NO + 2 NC	CS94143	34180	1
400	425	MNX 400	2 NO + 2 NC	CS94144	44150	1
550	650	MNX 550	2 NO + 2 NC	CS94145	69145	1
650	800	MNX 650	2 NO + 2 NC	CS96327	88540	1

3 Pole Power Contactors - Type MO

Features

- Conforms to IS / IEC 60947-4-1 & IEC 60947-4-1
- Range from 9A - 110AAC-3
- Compact dimensions saving panel space
- Lug less termination for contactors above 50A
- Standardized accessories throughout the range
- Low pick-up VA consumption
- RoHS compliant



MO 9



MO 45



MO 70



MO 110

AC3 Rating (A)	AC1 Rating (A)	Type	Aux. Contacts	Cat. No.	M.R.P. (₹) Per Unit	Std. Pkg. (Nos.)
9	30	MO 9	#	CS94564	695	10
12	35	MO 12	#	CS94565	800	10
18	40	MO 18	#	CS94566	945	10
25	45	MO 25	#	CS94567	1325	10
32	50	MO 32	#	CS94568	2880	10
40	50	MO 40	#	CS94569	4345	10
45	50	MO 45	#	CS94570	4865	10
50	65	MO 50	#	CS94572	4910	1
60	80	MO 60	#	CS94573	5940	1
70	100	MO 70	#	CS94574	6865	1
80	125	MO 80	#	CS94576	8520	1
95	125	MO 95	#	CS94577	10340	1
110	140	MO 110	#	CS94578	12475	1

Notes:

- 1) # Add-on blocks can be ordered separately
- 2) For ordering MNX/MO add-on aux contact blocks, please refer page No. 6
- 3) For ordering MNX surge suppressor and MNX/MO MIL kit, please refer page No. 7
- 4) For Ordering Suffix, please refer page No. 7, Table A
- 5) Standard coil voltage: MNX/MO - 110V, 220V, 240V and 415V, 50Hz.

3 Pole Power Contactors

New

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 - 38
- IP20 connection security for MDX 9 - 38



MDX 25



MDX 38



MDX 110

AC3 Rating (A)	AC1 Rating (A)	Type	Aux. Contacts	Cat. No.	M.R.P. (₹) Per Unit	Std. Pkg. (Nos.)
9	25	MDX 9	1 NO	CS96564	1420	1
12	28	MDX 12	1 NO	CS96565	1500	1
18	32	MDX 18	1 NO	CS96566	1730	1
25	32	MDX 25	1 NO	CS96567	2430	1
32	56	MDX 32	#	CS96552	4850	1
38	56	MDX 38	#	CS96553	5670	1
50	90	MDX 50	#	CS96554	7980	1
65	110	MDX 65	#	CS96555	9040	1
80	125	MDX 80	#	CS96556	11055	1
95	125	MDX 95	#	CS96557	13795	1
110	125	MDX 110	#	CS96558	14450	1

Notes:

- 1) # Add-on blocks can be ordered separately.
- 2) For ordering MDX/MNX add-on aux contact blocks, please refer page No. 6
- 3) For ordering MDX/MNX surge suppressor and MIL kit, please refer page No. 7
- 4) For ordering Suffix, please refer page No. 7, Table A
- 5) Standard coil voltage: MDX - 24V, 48V, 110V and 220V DC.
- 6) Standard coil voltage: MNX - 110V, 220V, 240V and 415V, 50Hz.

2 Pole Power Contactors

New

2 Pole Power Contactors - Type MNX

Features

- Conforms to IS / IEC 60947-4-1 & IEC 60947-4-1
- Range from 9A – 550A 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

AC3 Rating (A)	AC1 Rating (A)	Type	Aux. Contacts	Cat. No.	M.R.P. (₹) Per Unit	Std. Pkg. (Nos.)
9	25	MNX 9-2P	1 NO	CS90232	540	10
12	30	MNX 12-2P	1 NO	CS90234	610	10
18	30	MNX 18-2P	1 NO	CS90236	710	10
22	32	MNX 22-2P	1 NO	CS90238	820	10
25	45	MNX 25-2P	#	CS90240	850	10
32	55	MNX 32-2P	#	CS90241	1885	10
40	55	MNX 40-2P	#	CS90242	3010	10
45	85	MNX 45-2P	#	CS94060	3845	1
50	85	MNX 50-2P	#	CS94061	4325	1
70	100	MNX 70-2P	#	CS94062	5290	1
80	100	MNX 80-2P	#	CS94063	6520	1
95	160	MNX 95-2P	2 NO + 2 NC	CS94064	7895	1
110	160	MNX 110-2P	2 NO + 2 NC	CS94065	9395	1
140	160	MNX 140-2P	2 NO + 2 NC	CS94066	12265	1
185	250	MNX 185-2P	2 NO + 2 NC	CS94978	16190	1
225	300	MNX 225-2P	2 NO + 2 NC	CS94979	17685	1
265	350	MNX 265-2P	2 NO + 2 NC	CS94067	21050	1
325	400	MNX 325-2P	2 NO + 2 NC	CS94068	24075	1
400	425	MNX 400-2P	2 NO + 2 NC	CS94069	30850	1
550	650	MNX 550-2P	2 NO + 2 NC	CS90243	48500	1

3 Pole Power Contactors

3 Pole Power Contactors - Type ML

Features

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



ML 1.5



ML 3



ML 6



ML 12

AC3 Rating (A)	AC1 Rating (A)	Type	Aux. Contacts	Cat. No.	M.R.P. (₹) Per Unit	Std. Pkg. (Nos.)
25	25	ML 1.5	2 NO + 2 NC	SS91851	2230	1
32	40	ML 2	2 NO + 2 NC	SS90701	4140	1
40	45	ML 3	2 NO + 2 NC	SS90721	6110	1
70	100	ML 4	2 NO + 2 NC	SS90910	9990	1
110	125	ML 6	2 NO + 2 NC	SS90921	15770	1
200	250	ML 10	2 NO + 2 NC	SS90935	34840	1
300	400	ML 12	2 NO + 2 NC	SS91010	37510	1

Notes:

- 1) For ordering ML/MX add-on aux contact blocks, please refer page No. 6
- 2) For ordering MX surge suppressor and MIL kit, please refer page No. 7
- 3) For Ordering Suffix, please refer page No. 7, Table A
- 4) Std. Coil Voltage: ML - 110V, 220V, 240V and 415V, 50Hz

3 Pole Power Contactors - Type MX Mini

Features

- Conforms to IS / IEC 60947-4-1 & IEC 60947-4-1
- Enclosed construction providing compactness and convenience
- Base as well as DIN Rail mounting facility
- Inbuilt 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	655	10
6A	20A	MX 06	1 NC	CS94013	655	10
9A	20A	MX 09	1 NO	CS94014	690	10
9A	20A	MX 09	1 NC	CS94015	690	10
12A	20A	MX 12	1 NO	CS94016	760	10
12A	20A	MX 12	1 NC	CS94017	760	10
For DC control (Std. Coil Voltage - 24, 110, 220V)						
6A	20A	MX 06	1 NO	CS94021	980	10
6A	20A	MX 06	1 NC	CS94022	980	10
9A	20A	MX 09	1 NO	CS94023	1030	10
9A	20A	MX 09	1 NC	CS94024	1030	10
12A	20A	MX 12	1 NO	CS94025	1125	10
12A	20A	MX 12	1 NC	CS94026	1125	10

4 Pole Power Contactors & AST System Components

4 Pole Power Contactors - Type MCX

Features

- Conforms to IS / IEC 60947-4-1 & IEC 60947-4-1
- Range from 16A – 800A AC-1
- Wide operating band up to 100A AC-1



MCX 22

MCX 34

MCX 47

AC-1 Rating (A)	Type	Aux Contacts	Cat. No.	M.R.P. (₹) Per Unit	Std. Pkg. (Nos.)
16	MCX 01	#	CS97009	975	10
25	MCX 02	#	CS97010	1095	10
32	MCX 03	#	CS97011	1175	10
40	MCX 04	#	CS97012	1830	10
50	MCX 11	#	CS97013	2150	1
63	MCX 12	#	CS97014	4265	1
80	MCX 13	#	CS97015	5675	1
80	MCX 21*	#	CS97016	6515	1
100	MCX 22*	#	CS97017	6870	1
130	MCX 23*	#	CS97018	9100	1
130	MCX 31	1 NO + 1 NC	CS97019	10435	1
160	MCX 32	1 NO + 1 NC	CS97020	14395	1
200	MCX 33	1 NO + 1 NC	CS97021	17710	1
255	MCX 34	1 NO + 1 NC	CS97022	18975	1
325	MCX 41	2 NO + 2 NC	CS97023	34215	1
360	MCX 42	2 NO + 2 NC	CS97024	37110	1
400	MCX 43	2 NO + 2 NC	CS97025	43855	1
500	MCX 44	2 NO + 2 NC	CS97026	54505	1
600	MCX 45	2 NO + 2 NC	CS97027	64940	1
700	MCX 46	2 NO + 2 NC	CS97028	77695	1
800	MCX 47	2 NO + 2 NC	CS94291	100150	1

Auto Source Transfer Controller



AuXC-1000L

AuXC-1000

Type	Cat. No.	M.R.P. (₹) Per Unit	Std. Pkg. (Nos.)
AuXC-1000L	ST800240000	39790	1
AuXC-1000	ST802300000	47950	1

Can be used along with U-POWER Omega ACBs, MCCBs, & MCX contactors

4 Pole Mechanically Interlocked Contactors



Two MCX 12

Type	Aux Contacts	Cat. No.	M.R.P. (₹) Per Unit	Std. Pkg. (Nos.)
Two MCX 11	#	CS94362	5560	1
Two MCX 12	#	CS94365	9790	1
Two MCX 13	#	CS94367	12610	1

Notes:

- 1) # Add on blocks can be ordered separately.
- 2) For ordering MCX add-on aux contact blocks, please refer page No. 6
- 3) For ordering MCX surge suppressor and MIL kit, please refer page No. 7
- 4) For Ordering Suffix, please refer page No. 7, Table A
- 5) Std. Coil Voltage: MCX - 220V, 240V and 415V 50Hz
- 6) *Ordering Suffix for MCX 21 / 22 / 23; F000 - 240V AC, R000 - 415V AC

Control Relays (Auxiliary Contactors)

Type MX0



MX0 40E

Features

- Conforms to IS / IEC 60947-4-1 & IEC 60947-4-1
- Alphanumeric terminal markings
- Available with AC or DC control
- 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	MX0 40E (4 NO)	CS94018	810	10
	MX0 31E (3 NO + 1 NC)	CS94019	810	10
	MX0 22E (2 NO + 2 NC)	CS94020	810	10
	MX0 13E (1 NO + 3 NC)	CS94041	810	10
	MX0 04E (4 NC)	CS94042	810	10
For DC control std. Coil Voltage - 24, 110, 220V				
AC-15 4A	MX0 40E (4 NO)	CS94027	1090	10
	MX0 31E (3 NO + 1 NC)	CS94028	1090	10
	MX0 22E (2 NO + 2 NC)	CS94029	1090	10
	MX0 13E (1 NO + 3 NC)	CS94043	1090	10
	MX0 04E (4 NC)	CS94044	1090	10

Type MN0



MN0 22E



MN0dc 22E

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	MN0 40E (4 NO)	SS94660	955	10
	MN0 31E (3 NO + 1 NC)	SS94661	955	10
	MN0 22E (2 NO + 2 NC)	SS94662	955	10
	MN0 13E (1 NO + 3 NC)	SS94663	955	10
	MN0 04E (4 NC)	SS94664	955	10
For DC control std. Coil Voltage - 24, 110, 220V				
AC-15 4A	MN0 40E (4 NO)	SS94665	1580	10
	MN0 31E (3 NO + 1 NC)	SS94666	1580	10
	MN0 22E (2 NO + 2 NC)	SS94667	1580	10
	MN0 13E (1 NO + 3 NC)	SS94668	1580	10
	MN0 04E (4 NC)	SS94669	1580	10

Notes:

- 1) For Ordering Suffix, please refer page No. 7, Table A
- 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 plus 4NC add on block

Capacitor Duty Contactors

Capacitor Duty Contactors - Type MO C



MO C25



MO C50



MO C80

kVAR Rating @ 415V, 3Ph, 50Hz	Type	Built-in Auxiliary Contacts	Cat. No.	M.R.P. (₹) Per Unit	Std. Pkg. (Nos.)
8.5	MO C8.5	1NO	CS96320	1740	1
		1NC	CS96337	1740	1
12.5	MO C12.5	1NO	CS96321	1955	1
		1NC	CS96338	1955	1
15	MO C15	1NO	CS90019	2760	1
		1NC	CS90020	2760	1
20	MO C20	1NO	CS90021	3185	1
		1NC	CS90022	3185	1
25	MO C25	1NO	CS96322	3610	1
		1NC	CS96339	3610	1
33.5	MO C33.5	1NO	CS96323	6490	1
		1NC	CS96340	6490	1
50	MO C50	1NO	CS96324	9750	1
		1NC	CS96341	9750	1
70	MO C70	1NO	CS96325	11715	1
		1NC	CS96342	11715	1
80	MO C80	1NO	CS96326	12690	1
		1NC	CS96343	12690	1

Features

- MO C Range available from 8.5 - 80 Kvar
- Delatching auxiliary contacts
- Encapsulated resistor assembly
- Separate termination for damping resistors
- Lug less termination for MO C33.5 to MO C80
- **RoHS** compliant

For Reactive Power Management Solutions, please refer page No. 55-59

Note :

- 1) # Add on blocks can be ordered separately
For Add on block Cat No. refer page No. 6
- 2) For ordering suffix, please refer page No. 7, Table A
- 3) For ordering spare coils, please refer page No. 8

Definite Purpose Contactors

Type MU



MU 1



MU 2

AC3 Rating (A)	Type	Cat. No.	M.R.P. (₹) Per Unit	Std. Pkg. (Nos.)
16A	MU 1	CS94007	1525	10
25A	MU 2	CS94008	2065	10

For Overload Relays type MU refer page No.11
For Ordering Suffix please refer page No. 7, Table A

Type MK1



MK 1

Type	AC3 Rating (A)	Motor Output 3 Phase 415V, 50Hz		Cat. No.	M.R.P. (₹) Per Unit	Std. Pkg. (Nos.)
		HP	KW			
MK 1	15A	7.5	5.5	SS95200	985	10

For Overload Relays type MK1, please refer page No. 11
For Ordering Suffix, please refer page No. 7, Table A
(For 360V wide band, Ordering Suffix - S000)

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	660	10
25A	MR 11NW	CS94178	710	10
40A	MR 13	CS94992	725	40

Ordering Suffix BOOO - 240V, 50Hz

Accessories - Add-on Auxiliary Contact Blocks

Front Mounting add-on block



MNX / MCX
Front Add-on Block



MO
Front Add-on Block



MDX Front
Add-on Block



MX Front
Add-on Block



MN0 Front
Add-on Block

Front Mounting	Suitable for									
	MNX 9-40 / MCX 01-23	M.R.P. (₹) Per Unit	MO 9-110	M.R.P. (₹) Per Unit	MDX	M.R.P. (₹) Per Unit	MX	M.R.P. (₹) Per Unit	MN0	M.R.P. (₹) Per Unit
4 NO	CS94112	400	CS94594	400	-	-	CS94033	350	SS94083	360
3 NO + 1 NC	CS94113	400	CS94595	400	-	-	CS94034	350	SS94084	360
2 NO + 2 NC	CS94114	400	CS94596	400	CS96569	525	CS94035	350	SS94085	360
1 NO + 3 NC	CS94115	400	CS94597	400	-	-	CS94036	350	SS94086	360
4 NC	CS94116	400	CS94598	400	-	-	CS94037	350	SS94087	360
2 NO	CS94117	270	CS94591	270	-	-	CS94030	225	SS94080	240
1 NO + 1 NC	CS94118	270	CS94592	270	CS96568	305	CS94031	225	SS94081	240
2 NC	CS94119	270	CS94593	270	-	-	CS94032	225	SS94082	240
1 NO	CS94120	130	CS94585	130	CS96586	170	-	-	SS94715	120
1 NC	CS94121	130	CS94586	130			-	-	SS94716	120

Side Mounting add-on block



MNX/MCX
Side Add-on Block

Side Mounting	Suitable for								
	Aux Contact	MNX 9-40 / MCX 01-04	M.R.P. (₹) Per Unit	MNX 45-80 / MCX 11-23	M.R.P. (₹) Per Unit	MCX 31-34	M.R.P. (₹) Per Unit	MNX 95-650 / MCX 41-47	M.R.P. (₹) Per Unit
First left	1 NO + 1 NC	CS94220	400	CS94201	430	CS94205	485	CS94205	485
First Right	1 NO + 1 NC	CS94221	400	CS94202	430	-	-	CS94206	485
Second Left	1 NO + 1 NC	-	-	CS94203	430	CS94207	485	CS94207	485
Second right	1 NO + 1 NC	-	-	CS94204	430	-	-	CS94208	485

Side Mounting add-on block



MO/MO C
Left Add-on Block



MDX
Add-on Block

Side Mounting	Suitable for						
	Aux Contact	MO 9-110	M.R.P. (₹) Per Unit	MO C 8.5-80	M.R.P. (₹) Per Unit	MDX 9-110	M.R.P. (₹) Per Unit
First left	1 NO + 1 NC	CS94580	400	CS94580	400	ST94985	630
First Right	1 NO + 1 NC	CS94581	400	CS94581	400		
Second Left	1 NO + 1 NC	CS94582	400	CS94582	400	-	-
Second right	1 NO + 1 NC	CS94583	400	CS94583	400	-	-

Side Mounting add-on block



ML
Add-on Block

Side Mounting	Suitable for				
	Aux Contact	ML 4/6	M.R.P. (₹) Per Unit	ML 10/12	M.R.P. (₹) Per Unit
Left	1 NO + 1 NC	SS91494	500	-	-
Right	1 NO + 1 NC	-	-	SS91474	525

For MR & MU



MR 1NO

Description	For Contactor	Contacts Type	Cat. No.	M.R.P. (₹) Per Unit	Std. Pkg. (Nos.)
Add-on Single pole	MR	1 NO	CS94179	165	10
Side mounted auxiliary contact block	MU 1/MU 2	1 NO + 1 NC	SS94072	150	10
		1 NC	SS94074	125	10

Note: Ordering Suffix for Add-on blocks : OOOO

Accessories - Surge Suppressors

For MX, MNX, MDX & MCX



For Contactor	Cat. No.	M.R.P. (₹) Per Unit
MX 06 to MX 09 / MX 0 AC	CS94039*	345
MNX 9 - 40 / MCX 01 - 04	CS94166*	360
MNX 45 - 80 / MCX 11 - 22	CS94163*	395
MNX 95 - 225 / MCX 31 - 34	CS94164*	1300
MNX 265 - 400 / MCX 41 - 44	CS94165*	1760
MDX 50 - 110	CS96571**	360

Ordering Suffix * 110-240V: B000, 415V: D000 ** : O000
110V: A000, 220-240V: B000, 360-525V: D000

*MX DC has in-built surge suppressor

For MN0



Type	Cat. No.	M.R.P. (₹) Per Unit	Std. Pkg. (Nos.)
MN0 AC	SS94623	360	1
MN0 DC	SS94781	360	1

Ordering Suffix 110-240V : B000
415V : D000

24-48VDC : 5000
110-220VDC : 2000

Accessories - Mechanical Interlock Kits & Spreader Link Kit

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



For Contactor	Cat. No.	M.R.P. (₹) Per Unit
MX 06 to MX 09 / MX 0	CS94038	345
MO 9 - 110*	CS94584	450
MDX 9 - 38	CS96572	400
MDX 50 - 110	CS96573	1225
MNX 9 - 40	CS94126	390
MNX 45 - 80	CS94197	1570
MNX 95 - 140	CS94198	2480
MNX 185 - 225	CS94199	2830
MNX 265 - 650	CS94200	3210
MCX 01 - 04	CS94126	390
MCX 21 - 22	CS93095	2485
MCX 31 - 34	SS94992	2665
MCX 41 - 47	CS94301	4320

* MO MIL Kit contains inbuilt 2 NC Contacts

Note: Ordering Suffix for Mechanical Interlock Kits : O000

MO Spreader Link Kit



For Contactor	Cat. No.	M.R.P. (₹) Per Unit
MO 9 - 45	CS94274O000	355

Note: Spreader Link Kit consists of six terminals

Ordering Suffix for Standard Coil Voltages

Table A

Ordering Suffix for Standard Coil Voltages			
AC Control		DC Control*	
Voltage (V)	Suffix	Voltage (V)	Suffix
24	G000	24	4000
42	H000	48	5000
48	J000	110	1000
110	A000	220	2000
220	K000		
240	B000		
360	C000		
380	L000		
415	D000		
440	P000		
525	M000		

Note: * for MX DC, MDX, MX0 DC & MN0 DC

Spare Contact Kit and Spare Coil



ML Spare Kits



ML Spare Coils

Type	Spare Contact kit		Spare Coil	
	Cat. No.	M.R.P. (₹) Per Unit	Cat. No.	M.R.P. (₹) Per Unit
MU 1	CS94010	580	CS94009	440
MU 2	CS94011	985		
ML 1.5	SS95305	1415	SS90873	590
ML 2	SS95307	2215	SS90545	960
ML 3	SS95309	3765		
ML 4	SS95311	5875	SS91258	1840
ML 6	SS95313	10240		
ML 10	SS95315	20090	SS91011	4025
ML 12	SS95317	24900		
MN 0 ac	-	-	SS94191	460
MN 0 dc	-	-	SS94651	850
MR	-	-	CS94102	350

MO C Spare Coils		
Type	Cat. No.	M.R.P. (₹) Per Unit
MO C8.5 - 25	CS96317	440
MO C33.5 - 50	CS96318	1390
MO C70 - 80	CS96319	2140

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 0	ST28732	400
ML 1	ST28733	400
ML 1.5	ST28734	400
ML 2/ ML 3	ST23866	550
ML 4/ ML 6	ST28735	1000
Combination coil with timer		
Type	Cat. No.	M.R.P. (₹) Per Unit
ML 2	SS90650	1890

Note :

- 1) Ordering Suffix for Spare Contact kit - OOOO
- 2) For Spare Coil Ordering Suffix refer page No. 7, Table A

Spare Contact Kit and Spare Coil



MNX Spare Coils

MCX Spare Kits



MNX Spare Kits

	Type	Spare Contact kit		Spare Coil	
		Cat. No.	M.R.P. (₹) Per Unit	Cat. No.	M.R.P. (₹) Per Unit
MO Contactors	MO 9	CS96380	490	CS96317	440
	MO 12	CS96381	635		
	MO 18	CS96382	695		
	MO 25	CS96383	795		
	MO 32	CS96384	1585		
	MO 40	CS96385	2365		
	MO 45	CS96386	2745	CS96318	1390
	MO 50	CS96387	2805		
	MO 60	CS96388	3155		
	MO 70	CS96389	3920		
	MO 80	CS96390	4465	CS96319	2140
	MO 95	CS96391	5455		
	MO 110	CS96392	6590		
MNX Contactors	MNX 9	CS94123	490	CS94105	440
	MNX 12	CS94124	635		
	MNX 18	CS94125	695		
	MNX 22	CS94269	715		
	MNX 25	CS94127	795		
	MNX 32	CS94128	1485		
	MNX 40	CS94147	2365	CS94192	1390
	MNX 45	CS94149	2745		
	MNX 50	CS94150	2805		
	MNX 70	CS94151	3920		
	MNX 80	CS94152	5135	CS94196	2140
	MNX 95	CS94153	5775		
	MNX 110	CS94154	7355	CS94194	3930
	MNX 140	CS94155	9900		
	MNX 185	CS94156	12215	CS94195	4515
	MNX 225	CS94157	13870		
	MNX 265	CS94159	16715	CS94193	14675
	MNX 325	CS94160	20495		
MCX Contactors	MNX 400	CS94161	26330	CS94105	440
	MNX 550	CS94162	35410		
	MNX 650	CS96336	47455	CS94009	440
	MCX 01-04	-	-		
	MCX 11	CS94077	1590	ST91291*	1390
	MCX 12	CS94078	2565		
	MCX 21	CS94330	3855	CS94196	2140
	MCX 22	CS94331	4440		
	MCX 31	CS94081	6440		
	MCX 32	CS94082	7885		
	MCX 33	CS94083	9915	CS94195	4515
	MCX 34	CS94084	11170		
	MCX 41	CS94295	20075		
	MCX 42	CS94296	25475		
	MCX 43	CS94297	28575	CS94193	14675
	MCX 44	CS94298	33660		
	MCX 45	CS94299	37735		
	MCX 46	CS94300	42570		
	MCX 47	-	-		

* Ordering Suffix for 240V AC - FOOO

L&T Automatic Changeover Switch - with current limiter



Single Phase ACCL

Optimizes Genset Power Distribution

The new L&T changeover switch is smart. So when it switches to genset supply, you can choose which loads to run.

And of course, it is a Changeover switch with L&T's trust built into it. So you can be assured of performance.

It's time you change over to the smarter Changeover Switch. Ask for it at your nearest L&T Authorised Stockist.

Customer Interaction Centre (CIC)

BSNL / MTNL (Toll free): 1800 233 5858

Reliance (Toll free): 1800 200 5858

Tel: +91 22 6774 5858 Fax: +91 22 6774 5859

E-mail: cic@lntebg.com

Bimetal Overload Relays

Type MN

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.)
(Directly Operated)	MN 2			
	0.2 - 0.33	SS94141OOEO	1125	10
	0.3 - 0.5	SS94141OOGO	1125	10
	0.45 - 0.75	SS94141OOJO	1125	10
	0.6 - 1	SS94141OOKO	1125	10
	0.9 - 1.5	SS94141OOMO	1125	10
	1.4 - 2.3	SS94141OOPo	1125	10
	2 - 3.3	SS94141OOQO	1135	10
	3 - 5	SS94141OOSO	1135	10
	4.5 - 7.5	SS94141OOUO	1135	10
	6 - 10	SS94142OOVO	1135	10
	9 - 15	SS94142OOBO	1155	10
	14 - 23	SS94144OODO	1235	10
	20 - 33	SS94145OOEO	1815	10
	24 - 40	SS94145OOFO	1815	10
(Directly Operated)	MN 5			
	20 - 33	SS94136OOEO	2085	10
	30 - 50	SS94136OOGO	2385	10
	45 - 75	SS94137OOJO	3435	10
Direct mounting on MNX 45 - 80	66 - 110	SS94137OOKO	3560	10
	MN 12			
	42 - 69	SS94138OOHO	6220	1
	60 - 100	SS94138OOKO	6220	1
(CT Operated)	90 - 150	SS94138OOMO	6220	1
	135 - 225	SS94138OOPo	6530	1
	180 - 300	SS94139OOQO	7495	1
	270 - 450	SS94139OORO	8160	1
(CT Operated)	MN 12L#			
	42 - 69	SS94127OOHO	9355	1
	60 - 100	SS94127OOKO	9355	1
	90 - 150	SS94127OOMO	9355	1
	135 - 225	SS94127OOPo	9355	1
	180 - 300	SS94127OOQO	9355	1
	340 - 570	SS94127OOSO	9355	1

For motors with longer starting time (Trip class 30)

Note : 1) MN 5 & MN 12 Relays of lower ratings available on request

Type RTO

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



Type of Mounting (Operation)	Relay Range (A)	Cat. No.	M.R.P. (₹) Per Unit	Std. Pkg. (Nos.)
(Directly Operated)	RTO - 1			
	0.23 - 0.41	CS963550OFO	1275	10
	0.31 - 0.55	CS963550OGO	1275	10
	0.55 - 0.85	CS963550OJO	1275	10
	0.78 - 1.2	CS963550OLO	1275	10
	1.2 - 2.0	CS963550ONO	1275	10
	1.9 - 2.8	CS963550OPo	1275	10
	2.4 - 3.6	CS963550OQO	1290	10
	3.5 - 5.2	CS963550OSO	1290	10
	4.6 - 6.7	CS963550OTO	1290	10
	6.7 - 9.7	CS963550OVO	1290	10
	8.5 - 12.5	CS963550OAO	1310	10
	12.5 - 18.5	CS963560OCO	1400	10
	17 - 25.5	CS963560ODO	1400	10
	25 - 37	CS963560OEO	2060	10
	35 - 45	CS963560OOG	2060	10



Modular Load Feeder

RTO Relays can be directly mounted onto MO contactors. This along with the standardized accessories of MO provides you a complete modular feeder solution.

Mini Motor Protection Relay



Features

- Selectable trip class 10A, 10, 20 and 30.
- In-built CT (1A - 88A)
- Test facility
- Protection
 - Thermal Overload
 - Single phasing
 - Current unbalance
 - Phase sequence reversal
 - Locked Rotor
 - Earth Fault
 - Under current

Model	Thermal O/L Range	Aux. Supply: 240 V AC		Aux. Supply: 110 V AC	
		Cat. No.	M.R.P. (₹) Per Unit	Cat. No.	M.R.P. (₹) Per Unit
MPR300	1-2.75	MPR300BE010	5700	MPR300BB010	5700
MPR301	2-5.5	MPR301BE020	5700	MPR301BB020	5700
MPR302	4-11	MPR302BE040	5700	MPR302BB040	5700
MPR303	8-22	MPR303BE080	5700	MPR303BB080	5700
MPR304	16-44	MPR304BE160	5700	MPR304BB160	5700
MPR305	32-88	MPR305BE320	5700	MPR305BB320	5700

Bimetal Overload Relays

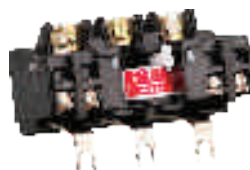
Type MX-R0



MX - R0

Type of Mounting (Operation)	Relay Range (A)	Cat. No.	M.R.P. (₹) Per Unit	Std. Pkg. (Nos.)
(Directly Operated)	0.1 - 0.16	ST94074O0BO	835	10
	0.16 - 0.24	ST94074O0DO	835	10
	0.22 - 0.33	ST94074O0EO	835	10
	0.3 - 0.45	ST94074O0GO	835	10
	0.45 - 0.67	ST94074O0HO	835	10
	0.67 - 1.0	ST94074O0KO	835	10
	1.0 - 1.5	ST94074O0MO	835	10
Direct Mounting on MX Contactors	1.4 - 2.1	ST94074O0NO	835	10
	1.8 - 2.7	ST94074O0PO	835	10
	2.4 - 3.6	ST94074O0QO	835	10
	3.5 - 5	ST94074O0SO	835	10
	4.0 - 6.0	ST94074O0TO	835	10
	5.5 - 8.5	ST94074O0UO	835	10
	8.5 - 12.5	ST94074O0VO	835	10

Type ML



ML

Type of Mounting (Operation)	Relay Range (A)	Cat. No.	M.R.P. (₹) Per Unit	Std. Pkg. (Nos.)
(Directly Operated)	ML 1			
	0.15 - 0.25	SS91858O0DO	1565	10
	0.25 - 0.4	SS91858O0FO	1565	10
	0.4 - 0.65	SS91858O0HO	1565	10
	0.6 - 1	SS91858O0KO	1565	10
	1 - 1.6	SS91858O0MO	1565	10
	1.5 - 2.5	SS91858O0PO	1565	10
	2.5 - 4	SS91858O0RO	1565	10
	4 - 6.5	SS91858O0TO	1565	10
	6 - 10	SS91858O0VO	1565	10
Direct Mounting on ML 1.5 Contactors	10 - 16	SS91858O0BO	1565	10
	ML 2 / ML 3			
	9 - 14	SS91859O0AO	2315	2
	13 - 21	SS91859O0CO	2315	2
	20 - 32	SS91859O0EO	2315	2
	28 - 42	SS91859O0FO	2315	2

Type MK1



MK1

Type of Mounting (Operation)	Relay Range (A)	Cat. No.	M.R.P. (₹) Per Unit	Std. Pkg. (Nos.)
(Directly Operated)	0.6 - 1	SS90035O0KO	740	10
	1 - 1.6	SS90035O0MO	740	10
	1.5 - 2.5	SS90035O0PO	740	10
	2.5 - 4	SS90035O0RO	740	10
Direct Mounting on MK1 Contactors	4 - 6.5	SS90035O0TO	740	10
	6 - 10	SS90035O0VO	740	10
	9 - 14	SS90035O0AO	740	10
	11 - 18	SS90036O0CO	775	10
	13 - 22	SS91888O0DO	815	10

Type MU



MU1



MU2

Type of Mounting (Operation)	Relay Range (A)	Cat. No.	M.R.P. (₹) Per Unit	Std. Pkg. (Nos.)
(Directly Operated)	MU1			
	4 - 6.5	SS96557O0TO	990	1
	6 - 10	SS96557O0VO	990	1
	MU2			
Direct Mounting on MU Contactor	9 - 14	SS95979O0AO	1080	1
	13 - 21	SS95979O0CO	1150	1
	20 - 32	SS95979O0EO	1395	1
	28 - 42	SS95979O0FO	1650	1

Accessories for Bimetal Overload Relays

Accessories for Bimetal 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 unit for MK 1 / ML Relays	SS90004	120	1
Push button extn. unit for MN 2 Relays	SS94968	35	100
Kit for Mounting MN 2 Relay on ML 1.5 contactor	SS94701	130	50
Kit for Mounting MN 2 Relay separately (Direct Mounting Type)	SS94700	130	50
Kit for Mounting MN 5 Relay on MNX 95 / 110 / 140 contactor	SS94638	190	20
Kit for Mounting MN 5 Relay on ML 2 / ML 3 contactor	SS94151	145	20
Kit for Mounting MN5 Relay on ML 4 / ML 6 contactor	SS94152	185	20
DIN Rail Mounting Kit Relay on MN 2 Relay	SS91887	100	50

Relay Reset Cord for MN2 Relay



400 mm 650 mm 900 mm 1200 mm

Description	Cat. No.	M.R.P. (₹) Per Unit	Std. Pkg. (Nos.)
MN2 Relay reset cord - 400mm	SB942070000	515	1
MN2 Relay reset cord - 650mm	SB942080000	540	1
MN2 Relay reset cord - 900mm	SB942090000	590	1
MN2 Relay reset cord - 1200mm	SB942100000	665	1

Separate Mounting Kit for RTO Relay



Description	Cat. No.	M.R.P. (₹) Per Unit	Std. Pkg. (Nos.)
RTO Relay Separate Mounting Kit	CS963350000	190	1

Timers

Electronic Timers Type ET 100



ET 100

Description	Cat. No.	M.R.P. (₹) Per Unit	Std. Pkg. (Nos.)
110 / 240V, 50Hz for			
3 - 10 secs.	SE92001	3275	1
9 - 30 secs.	SE92002	3275	1
36 - 120 secs.	SE92003	3275	1
240 / 360 / 415V*, 50Hz for			
3 - 10 secs.	SE92005	3275	1
9 - 30 secs.	SE92006	3275	1
36 - 120 secs.	SE92007	3275	1

Notes: 1) Available till stocks last
2) # 360V tap can be used for 240V connections
3) Ordering Suffix is OOOO

Thermal Timers Type GT 200



GT 200

Description	Cat. No.	M.R.P. (₹) Per Unit	Std. Pkg. (Nos.)
Operating Voltages: 230 / 250V, 360V, 400 / 440V, 500V, 50 Hz for 5 - 18 secs. range	SS91270	2480	1

Ordering Suffix for GT 200 Timer

Voltage (V)	Suffix
250V	NOOO
320V	ROOO
360V	COOO
380V	LOOO
400 / 440V	POOO

Electronic Timers Type ST 100



ST 100

Description	Cat. No.	M.R.P. (₹) Per Unit	Std. Pkg. (Nos.)
240 / 360 / 415V, 50Hz for			
3 - 30 secs.	ST803280000	1440	1
12 - 120 secs.	ST803290000	1440	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

Control Accessories

Actuator Units Type TK3

6A, 415V, 50 Hz (Suitable for 30.5mm Cutout Dia.)

Description	Cat. No.	M.R.P. (₹) Per Unit	Std Pkg. (Nos.)
Selector actuator - 2 position (black only)	SS91516	440	30
Selector actuator - 3 position (black only)	SS91517	440	30
Mushroom push button actuator (red, green or black)	SS91518	270	30
Shrouded push button actuator (red, black, green, yellow, blue or grey)	SS91519	195	30
Unshrouded push button actuator (red, black, green, yellow, blue or grey)	SS91520	195	30
Key actuator - lockable in 1 position	SS91522 *	600	30
Key actuator - lockable in both positions	SS91521 *	600	30
Element with 2 fixing screws	SS90375 *	220	100

Ordering Suffix for Colour	
Black	OAOO
Red	OBOO
Green	OCOO
Yellow	ODOO
Blue	OEOO
Grey	OFOO
*	O000

Push Button Pendants

6A, 415V, 50 Hz

Description	Cat. No.	M.R.P. (₹) Per Unit	Std Pkg. (Nos.)
With 2 push buttons	SS90502	1025	30
With 4 push buttons	SS90504	1905	30
With 6 push buttons	SS90506	2560	30

Ordering Suffix is O000

New

Single Phase Preventor Relay



Sz5



SDz5

Description	Cat. No.	M.R.P. (₹) Per Unit	Std. Pkg. (Nos.)
SDz5, SPPR + Timer, 360V	XM818080000	1845	1
SDz5, SPPR + Timer, 415V	XM818090000	1845	1
Single Phase Preventor Relay - Sz5 380V AC (6 wires)	CS94824L000	630	1
Single Phase Preventor Relay - Sz5 380V AC (7 wires)	ST921660000	630	1

To order Control Accessories, please specify Type, Cat no. & Ordering Suffix for color



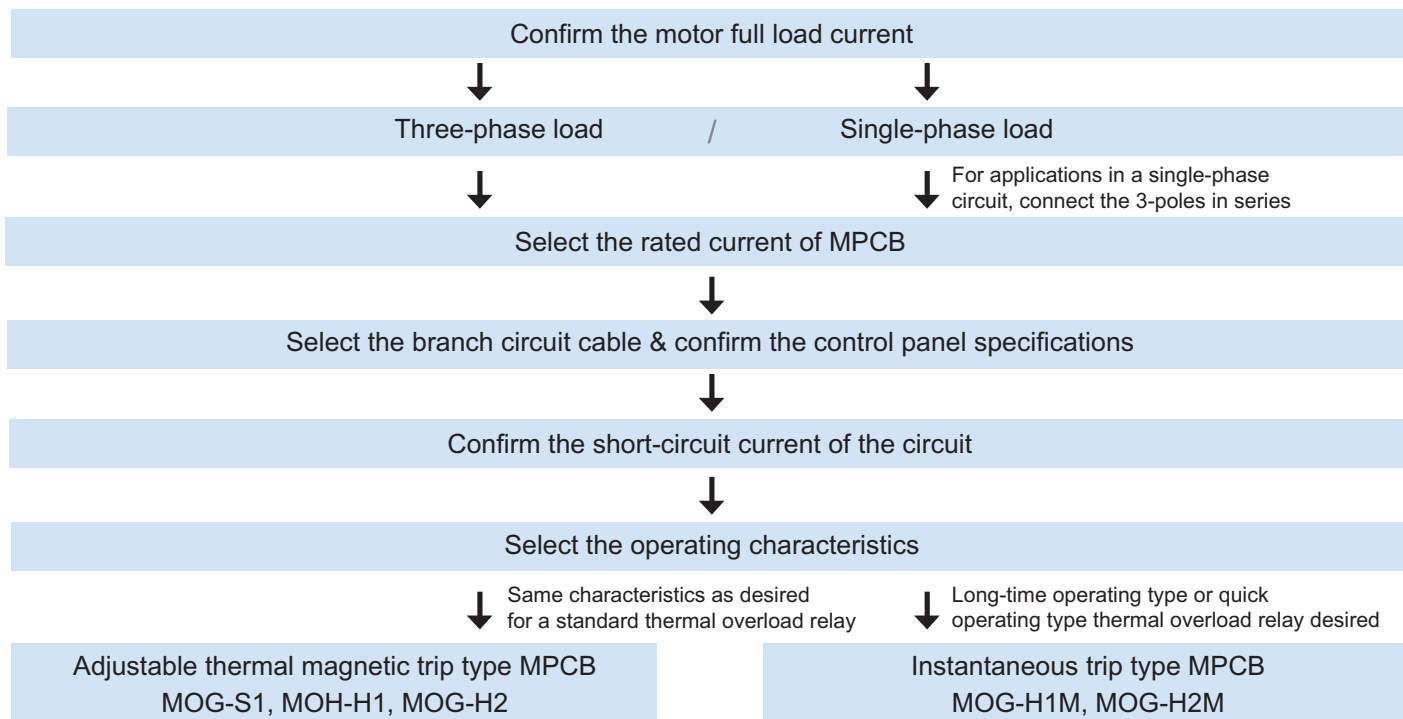
For Timing, Control Devices and Supply Monitors from GIC and 22.5 mm dia Range of Modular Remote Control & Indicating Units from ESBE, please refer Panel Accessories Price List.

Motor Protection Circuit Breakers

Features

- With compactness MPCB provides high-performance short-circuit current breaking
- Wide range of current adjustment dial for optimum protection
- Stand-alone motor protection
- With Single phasing protection
- All accessories are common for both frames and separate short circuit alarm is also available
- Padlocking features available on MPCB rotary knob and rocker type

Procedure for selecting the appropriate model:



Note: Please contact the nearest branch office for fuseless type 2 co-ordination selection chart.

Type MOG-S1 (Rocker Type)

(ROM cannot be fitted with MOG - S1)
With short circuit & overload protection



Rating (A)	Recommended Motor Rating at 415V, 3-Ph, 50Hz (KW)	Thermal Release range (A)	Cat. No.	M.R.P. (₹) Per Unit	Std. Pkg. (Nos.)
0.16	-	0.1 - 0.16	ST418890000	2340	1
0.25	0.06	0.16 - 0.25	ST418900000	2340	1
0.40	0.09	0.25 - 0.40	ST418910000	2340	1
0.63	0.12	0.40 - 0.63	ST418920000	2445	1
1.00	0.25	0.63 - 1.00	ST418930000	2445	1
1.60	0.55	1.00 - 1.60	ST418940000	2505	1
2.50	0.75	1.60 - 2.50	ST418950000	2505	1
4.00	1.50	2.50 - 4.00	ST418960000	2570	1
6.30	2.20	4.00 - 6.30	ST418970000	2585	1
10.00	4.00	6.30 - 10.00	ST418980000	2585	1
13.00	5.40	9.00 - 13.00	ST418990000	2855	1

Breaking capacity: Icu = 100kA upto 10A & Icu = 50kA for 13A

Type MOG-H1M (Rotary Type) - Frame 1

With short circuit protection only



Rating (A)	Recommended Motor Rating at 415V, 3-Ph, 50Hz (KW)	Short Circuit Release (A)	Cat. No.	M.R.P. (₹) Per Unit	Std. Pkg. (Nos.)
0.16	-	2.1	ST419230000	2190	1
0.25	0.06	3.3	ST419240000	2190	1
0.40	0.09	5.2	ST419250000	2190	1
0.63	0.12	8.2	ST419260000	2940	1
1.00	0.25	13	ST419270000	2940	1
1.60	0.55	20.8	ST419280000	2940	1
2.50	0.75	32.5	ST419290000	2940	1
4.00	1.50	52	ST419300000	3100	1
6.30	2.20	81.9	ST419310000	3100	1
10.00	4.00	130	ST419320000	3205	1
13.00	5.40	169	ST419330000	3330	1
16.00	7.50	208	ST419340000	3385	1
20.00	9.00	260	ST419350000	3625	1
25.00	12.50	325	ST419360000	4385	1
32.00	15.00	416	ST419370000	6015	1

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

Motor Protection Circuit Breakers

Type MOG-H1 (Rotary Type) - Frame 1

With short circuit & overload protection



Rating (A)	Recommended Motor Rating at 415V, 3-Ph, 50Hz (KW)	Thermal Release range (A)	Cat. No.	M.R.P. (₹) Per Unit	Std. Pkg. (Nos.)
0.16	-	0.1 - 0.16	ST419040000	2750	1
0.25	0.06	0.16 - 0.25	ST419050000	2885	1
0.40	0.09	0.25 - 0.40	ST419060000	2885	1
0.63	0.12	0.40 - 0.63	ST419070000	3105	1
1.00	0.25	0.63 - 1.00	ST419080000	3105	1
1.60	0.55	1.00 - 1.60	ST419090000	3110	1
2.50	0.75	1.60 - 2.50	ST419100000	3110	1
4.00	1.50	2.50 - 4.00	ST419110000	3170	1
6.30	2.20	4.00 - 6.30	ST419120000	3230	1
10.00	4.00	6.30 - 10.00	ST419130000	3330	1
13.00	5.40	9.00 - 13.00	ST419140000	3620	1
16.00	7.50	11.00 - 16.00	ST419150000	4000	1
20.00	9.00	14.00 - 20.00	ST419160000	4315	1
25.00	12.50	19.00 - 25.00	ST419170000	4695	1
32.00	15.00	24.00 - 32.00	ST419180000	7325	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)	Cat. No.	M.R.P. (₹) Per Unit	Std. Pkg. (Nos.)
32.00	15.00	24.00 - 32.00	ST419190000	9470	1
40.00	20.00	28.00 - 40.00	ST419200000	9590	1
50.00	25.00	35.00 - 50.00	ST419210000	10540	1
63.00	34.00	45.00 - 63.00	ST419220000	11220	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)	Short Circuit Release (A)	Cat. No.	M.R.P. (₹) Per Unit	Std. Pkg. (Nos.)
32.00	15.00	416	ST419380000	7730	1
40.00	20.00	520	ST419390000	7730	1
50.00	25.00	650	ST419400000	9430	1
63.00	34.00	819	ST419410000	9430	1

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

Accessories for MOG



Short Circuit Alarm



Auxiliary + Alarm



External Operating Handle



Shunt Trip



Connecting Busbar link



3 Phase Feed in terminal



Busbar Safety Cover

Description	Cat. No.	M.R.P. (₹) Per Unit	Std. Pkg. (Nos.)
Auxiliary Contact Front mtg. 1NO	ST419420000	480	10
Auxiliary Contact Front mtg. 1NC	ST419430000	480	10
Auxiliary Contact Left side mtg. 2NO	ST419440000	590	1
Auxiliary Contact Left side mtg. 1NO + 1NC	ST419450000	590	1
Auxiliary Contact Left side mtg. 2NC	ST419460000	575	1
Trip Alarm Contact Front mtg. 1NO	ST419470000	765	10
Trip Alarm Contact Front mtg. 1NC	ST419480000	765	10
Auxiliary + Alarm Left side mtg. 2NO	ST419490000	815	1
Short circuit alarm Left side mtg. 1NO + 1NC	ST419500000	815	1
Shunt trip 24V DC	ST419510000	1330	1
Shunt trip 110V, 50Hz	ST419520000	1400	1
Shunt trip 230V, 50Hz	ST429520000	1400	1
Under Voltage release, 110V, 50Hz	ST419530000	1400	1
Under Voltage release, 415V, 50Hz	ST419540000	1400	1
External operating handle, (Black) Frame 1	ST419550000	1050	1
External operating handle, (Black) Frame 2	ST419560000	1050	1

Description	Cat. No.	M.R.P. (₹) Per Unit	Std. Pkg. (Nos.)
Connecting Busbar link			
2 MPCB 45 mm width w/o acc	ST419570000	590	5
3 MPCB 45 mm width w/o acc	ST419580000	650	5
4 MPCB 45 mm width w/o acc	ST419590000	705	5
5 MPCB 45 mm width w/o acc	ST419600000	765	5
2 MPCB 45 mm width with one acc 9 mm	ST419610000	690	5
3 MPCB 45 mm width with one acc 9 mm	ST419620000	750	5
4 MPCB 45 mm width with one acc 9 mm	ST419630000	805	5
5 MPCB 45 mm width with one acc 9 mm	ST419640000	865	5
2 MPCB 55 mm width w/o acc	ST419660000	1080	1
3 MPCB 55 mm width w/o acc	ST419670000	1230	1
4 MPCB 55 mm width w/o acc	ST419680000	1480	1
2 MPCB 55 mm width with one acc 9 mm	ST419690000	1180	1
3 MPCB 55 mm width with one acc 9 mm	ST419700000	1330	1
4 MPCB 55 mm width with one acc 9 mm	ST419710000	1580	1
2 MPCB 55 mm width with two acc 18 mm	ST419720000	1380	1
4 MPCB 55 mm width with two acc 18 mm	ST419730000	1530	1
Feed in terminal for 45 mm width Busbar	ST419650000	690	1
Feed in terminal for 55 mm width Busbar	ST419740000	1195	1
Bus bar safety cover 45 mm width Busbar	ST419750000	300	10
Bus bar safety cover 55 mm width Busbar	ST419760000	325	10



**Operate your pump
from anywhere using your mobile phone.**



Customer Interaction Centre (CIC)
BSNL / MTNL (toll free) : 1800 233 5858
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MPOWER
module for mobile starters

Designed especially for  Controllers

Direct-on-Line Starters

in Sheet-Steel Enclosure Type MF, MK, MU & MB
(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					
7.5	5.5	9 - 15	MF1	SS97210	1100	1
7.5	5.5	9 - 14	MK1 DOL	SS96210	1810	1
7.5	5.5	11 - 18	MK1 DOL	SS96211	1850	1
7.5	5.5	13 - 22	MK1 DOL	SS96228	1895	1
10.0	7.5	13 - 21	MU1 DOL #	SS95647	3070	1
10.0	7.5	14 - 23	MB1 DOL #	SS95649	3090	1
15.0	11.0	20 - 32	MU2 DOL #	SS95648	4130	1
15.0	11.0	20 - 33	MB2 DOL #	SS95650	4150	1

For lower relay ranges, please refer Agricultural Electrical Products' price list.

Single Phase Starters



Max. Motor Output at 230V, 1-Ph		Relay Max. Range (A)	Description	Cat. No.	M.R.P. (₹) Per Unit	Std. Pkg. (Nos.)
HP	kW					
0.5	0.37	4 - 6.5	MH0 (Coil operated)	ST37491BOTO	950	1
1.0	0.75	6 - 10	MH0 (Coil operated)	ST37491BOVO	950	1
2.0	1.5	10.5 - 17.5	MF1	SS97227OOCO	820	1
3.0	2.2	12 - 20	MF1	SS97227OOCO	820	1

Semi-Automatic Star-Delta Starters

in Sheet-Steel Enclosure Type MK, MU & MB
(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					
12.5	9.3	9 - 14	MK1 SASD	SS96255	5940	1
15.0	11.0	11 - 18	MK1 SASD	SS96258	5965	1
15.0	11.0	13 - 22	MK1 SASD	SS96260	5985	1
15.0	11.0	13 - 21	MU1 SASD #	SS95891	7935	1
15.0	11.0	14 - 23	MB1 SASD #	SS95895	8905	1
30.0	22.5	20 - 32	MU2 SASD #	SS95893	10030	1
30.0	22.5	20 - 33	MB2 SASD #	SS95897	10540	1

For lower relay ranges, please refer Agricultural Electrical Products' price list.

Note: 1) # Type MU1 / MU2 consists of type MU Relay + MU1 / MU2 contactors
Type MB1 / MB2 consists of type MN Relay + MU1 / MU2 contactors
2) For Ordering Suffix please refer table C page No. 19

Direct-on-Line Starters

in Sheet-Steel Enclosure Type MN with Single Phase Protection feature (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					
10.0	7.5	9 - 15	MN 16 DOL	SS94351	2900	1
15.0	11.0	14 - 23	MN 25 DOL	SS94352	4435	1
20.0	15.0	20 - 33	MN 32 DOL	SS94353	7150	1
30.0	22.5	30 - 50	MN 45 DOL	SS94017	12235	1
45.0	33.5	45 - 75	MN 65 DOL	SS94018	16755	1

Direct-on-Line Starters

in Sheet-Steel Enclosure Type 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					
15.0	11.0	20 - 32	ML 1.5 DOL	SS91854	4500	1
20.0	15.0	20 - 32	ML 2 DOL	SS90702	7495	1
30.0	22.5	28 - 42	ML 3 DOL	SS90722	12750	1

Semi-Automatic Star-Delta Starters

in Sheet-Steel Enclosure Type 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					
25.0	18.5	13 - 21	ML1.5 SASD	SS91856	10355	1
35.0	26.0	20 - 32	ML2 SASD	SS90707	18100	1

Fully Automatic Star-Delta Starters



MN 16F

in Sheet-Steel Enclosure Type MN
with Single Phase Protection feature
(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					
15.0	11.0	9 - 15	MN 16 FASD	SS94362	9765	1
25.0	18.5	14 - 23	MN 25 FASD	SS94364	10920	1
35.0	26.0	20 - 33	MN 32 FASD	SS94366	17965	1
50.0	37.5	30 - 50	MN 45 FASD	SS94021	28850	1
75.0	55.0	45 - 75	MN 65 FASD	SS94022	47815	1
90.0	67.0	45 - 75	MN 80 FASD	SS94705	52270	1
125.0	90.0	66 - 110	MN 110 FASD	SS94706	68410	1
175.0	130.0	90 - 150	MN 140 FASD	SS94707	71615	1

Fully-Automatic Star-Delta Starters

in Sheet-Steel Enclosure Type MK, ML, MU & MB
(Motor Rating AC-3 Duty, 415V, 50Hz, 3Ph)



MK 1F



MB 1F



MU 2F

Max. Motor Output at 415V, 3-Ph		Relay Max. Range (A)	Description	Cat. No.	M.R.P. (₹) Per Unit	Std. Pkg. (Nos.)
HP	kW					
12.5	9.3	9 - 14	MK1 FASD	SS96254	6745	1
15.0	11.0	11 - 18	MK1 FASD	SS96257	6805	1
15.0	11.0	13 - 22	MK1 FASD	SS96259	6830	1
15.0	11.0	13 - 21	MU1 FASD #	SS95890	9190	1
15.0	11.0	14 - 23	MB1 FASD #	SS95894	9230	1
30.0	22.5	20 - 32	MU2 FASD #	SS95892	11070	1
30.0	22.5	20 - 33	MB2 FASD #	SS95896	11170	1

For lower relay ranges, please refer Agricultural Electrical Products' price list.



ML 2F



ML 1.5F

Max. Motor Output at 415V, 3-Ph		Relay Max. Range (A)	Description	Cat. No.	M.R.P. (₹) Per Unit	Std. Pkg. (Nos.)
HP	kW					
25.0	18.5	13 - 21	ML1.5 FASD	SS91855	11755	1
35.0	26.0	20 - 32	ML2 FASD	SS90705	18660	1
50.0	37.5	28 - 42	ML3 FASD	SS90730	30745	1
75.0	55.0	45 - 75	ML4 FASD	SS90913	52680	1
125.0	90.0	66 - 110	ML6 FASD	SS90923	86370	1
250.0	180.0	135 - 225	ML10 FASD	SS90938	136710	1
400.0	300.0	180 - 300	ML12 FASD	SS91019	154850	1

Note: 1) # Type MU1 / MU2 consists of type MU Relay + MU1 / MU2 contactors
Type MB1 / MB2 consists of type MN Relay + MU1 / MU2 contactors
2) For Ordering Suffix please refer table C page No. 19

Spares for MK1 Starters



Aux contact block



Spare coil



Combination coil



Push button unit

Description	Cat. No.	M.R.P. (₹) Per Unit	Std. Pkg. (Nos.)
Single Moving Contact	SS91009	40	10
Std. Operating coils			
400 / 440V, 50Hz	SS90047	200	10
360V, 50Hz	SS90165	200	10
320V, 50Hz	SS90166	200	10
230V, 50Hz	SS90045	200	10
220V, 50Hz	SS90044	200	10
110V, 50Hz	SS90043	200	10
Auxiliary contact block: 1 NO + 1 NC	SS90120	275	50
Spare kit without coil	SS90983	450	50
Thermal timer without combination coil	SS90224	780	1
Combination coils			
Combination coils for 400 / 440V, 50Hz	SS90443	510	10
Combination coils for 230V, 50Hz	SS90444	510	10
Combination coils for 380V, 50Hz	SS90445	510	10
Combination coils for 360V, 50Hz	SS90446	510	10
Push Button Unit	SS90004	120	1
Arc Shield	SS50004	130	1
Contact bridge without Contacts	SS50005	120	1

Spares for MN Starters

Description	Cat. No.	M.R.P. (₹) Per Unit	Std. Pkg. (Nos.)
Bracket for Mounting cont. MNX 25 - 32	SS940300000	100	20

Salient Features and Benefits of Starters

- Conforms to IS/IEC 60947-4-1 & IEC 60947-4-1
- Sheet steel enclosures with IP 54 protection
- Wide range of relay settings and coil voltages
- Standardized accessories and spares available

Submersible Pump Controller

In Sheet Enclosure Type MU - G

(Motor Rating AC-3 Duty, 415V, 50Hz, 3 phase)



MU - G6



MU - G10

Max. Motor Output at 415V, 3-Ph		Relay Max. Range (A)	Description	Cat. No.	M.R.P. (₹) Per Unit	Std. Pkg. (Nos.)
HP	kW					
6	4.5	9 - 14	MU - G6 DOL Starter *	SS97756	5000	1
10	7.5	13 - 21	MU - G10 DOL Starter *	SS95983	5940	1
10	7.5	28 - 42	MU - G10H DOL Starter *	SS95974	6920	1

* For lower relay ranges, please refer Agricultural Electrical Products' price list.

Submersible Pump Controller

In Sheet Enclosure Type MU-G

(Motor Rating AC-3 Duty, 415V, 50 Hz, 3 phase)



MU-G20



MU-G50



MU-G75

Max. Motor Output at 415V, 3-Ph		Relay Max. Range (A)	Description	Cat. No.	M.R.P. (₹) Per Unit	Std. Pkg. (Nos.)
HP	kW					
New 15	11	9 - 14	MU-G15 Fully Automatic Star - Delta Starter*	CS94091	9700	1
20	15	13 - 21	MU-G20 Fully Automatic Star - Delta Starter*	SS95984	11450	1
20	15	28 - 42	MU-G20 Fully Automatic Star - Delta Starter*	SS95975	14100	1
30	22.5	30 - 50	MU-G30 Fully Automatic Star - Delta Starter*	CS96008	22850	1
50	37.5	45 - 75	MU-G50 Fully Automatic Star - Delta Starter*	CS96009	36160	1
New 75	101	66 - 110	MU-G75 Fully Automatic Star - Delta Starter*	CS96451	49000	1

* For lower relay ranges, please refer Agricultural Electrical Products' price list.

Submersible Pump Controller

In Sheet Steel Enclosure Type MR-G, MF-G



MR-G2



MF-G1

Max. Motor Output at 230V, 3-Ph		Relay Max. Range (A)	Description	Cat. No.	M.R.P. (₹) Per Unit	Std. Pkg. (Nos.)
HP	kW					
0.5	0.37	6 - 10	Type MR-G2 * For Single Phase Motors	SS96988	3360	1
1.0	0.75	9 - 14		SS96560	3670	1
1.5	1.1	11 - 18		SS96989	4055	1
2.0	1.5	13 - 22		SS96990	4245	1
3.0	2.2	13 - 22		SS97725	4540	1
0.5	0.37	6.5 - 11	Type MF-G1 * For Single Phase Motors	SS97734	2255	1
1.0	0.75	12 - 20		SS97736	2350	1
1.5	1.1	12 - 20		SS97737	2435	1
2.0	1.5	12 - 20		SS97738	2480	1

Note: For dual meter (Ammeter + Voltmeter) version - Add (₹) 210

* Also available with lower Relay Ranges

M-POWER - Module for Mobile Starter



Description	Cat. No.	M.R.P. (₹) Per Unit	Std. Pkg. (Nos.)
Module for Mobile Starter & Submersible Controllers	GSM03010000	5950	1

Salient Features and Benefits of Submersible Pump Controller

- Conforms to IS/IEC 60947-4-1 & IEC 60947-4-1
- Protections Offered - Overload, Single Phasing, Phase reversal, Phase imbalance
- Auto Restart Feature
- Vibration proof enclosure with IP54 protection class
- Indications Offered - ON/OFF, Voltage and Ampere
- Compatible with M-POWER

Ordering Suffix for MK1/MU/MB/ML & MN Starters

Table C

Coil Voltages	Relay Range (A)				
	MK1	MU	MB	ML	MN
B - 240 V	A : 9 - 14	A : 9 - 14	B : 9 - 15	A : 9 - 14	B : 9 - 15
C - 360 V	C : 11 - 18	C : 13 - 21	D : 14 - 23	B : 10 - 16	D : 14 - 23
D - 415 V	D : 13 - 22	E : 20 - 32	E : 20 - 33	C : 13 - 21	E : 20 - 33
P - 440 V	M : 1 - 1.6			E : 20 - 32	G : 30 - 50
	P : 1.5 - 2.5			F : 28 - 42	J : 45 - 75
	R : 2.5 - 4			G : 30 - 50	K : 66 - 110
	T : 4 - 6.5			J : 45 - 75	Q : 2 - 3.3
	V : 6 - 10			K : 66 - 110	S : 3 - 5
				M : 90 - 150	U : 4.5 - 7.5
				P : 135 - 225	V : 6 - 10
				Q : 180 - 310	
				R : 2.5 - 4	
				T : 13 - 21	

Digital Soft Starters

CSX Soft Starters



Motor kW	Cat. No.	M.R.P. (₹) Per Unit
7.5	CSX-007-41	28600
15	CSX-015-41	30300
18	CSX-018-41	31400
22	CSX-022-41	37100
30	CSX-030-41	41800
37	CSX-037-41	47900
45	CSX-045-41	54500
55	CSX-055-41	59400
75	CSX-075-41	80900
90	CSX-090-41	88000
110	CSX-110-41	97000

CSXi Soft Starters



Motor kW	Cat. No.	M.R.P. (₹) Per Unit
7.5	CSXi-007-41	41500
15	CSXi-015-41	48100
18	CSXi-018-41	50500
22	CSXi-022-41	53900
30	CSXi-030-41	60000
37	CSXi-037-41	65700
45	CSXi-045-41	79200
55	CSXi-055-41	86700
75	CSXi-075-41	101000
90	CSXi-090-41	127000
110	CSXi-110-41	141000

Note : 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.

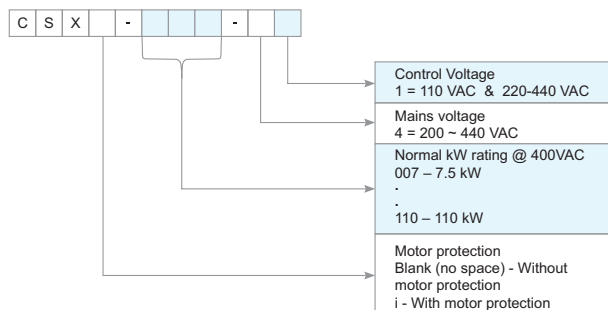
For proper sizing of soft starter based on the application parameters please use Winstart Software.

Optional Modules/Cards for CSX / CSXi / EMX3



Description	Cat. No.	M.R.P. (₹) Per Unit
Modbus Interface	PIM-MB-01	13000
Profibus Interface	PIM-PB-01	21000
DeviceNet Interface	PIM-DN-01	17000
USB Interface	PIM-USB-01	8000
Modbus TCP Module	PIM-MT-01	40000
Ethernet IP Module	PIM-EI-01	44000
Profinet Module	PIM-PN-01	44000
EMX3 RTD/Ground Fault Expansion Card	995-04804-00	17000
EMX3 I/O Expansion Card	995-04803-00	10000

Ordering Information for **CSX** Series Soft Starter



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.

Switch-Disconnecter-Fuse Units

Type FN S-D-F suitable for DIN fuse-link

Features offered by FN S-D-F

- Range 32A to 800A, 415V, AC 23A
- 2P / TP / TPN Versions
- Suitable for cylindrical / DIN / Bolted fuse-link
- Available in interior / Sheet steel enclosure version
- Conforms to IEC 60947-3, IS/IEC 60947-3
- Door interlock & padlock facility



FN TP S-D-F

Type FN S-D-F suitable for BS fuse-link

For Capacitor & Motor back-up



FN TPN S-D-F

Rated Current (A)	Type FN (2P) S-D-F suitable for DIN fuse-link New				Type FN (TP) S-D-F suitable for DIN fuse-link			Type FN (TPN) S-D-F suitable for bolted fuse-link				Std. Pkg (Nos.)
	Open Execution				Open Execution			Open Execution				
	Type	Suitable fuse-link type	Cat. No.	M.R.P. (₹) Per Unit	Type	Cat. No.	M.R.P. (₹) Per Unit	Type	Suitable fuse-link type	Cat. No.	M.R.P. (₹) Per Unit	
32	FN 32 2P	HF	SK95594	1315	FN 32 TP	ST27892	1490	FN 32 TPN	A1L	SK95653	1595	1
63	FN 63 2P	HF	SK95595	1765	FN 63 TP	ST27893	2095	FN 63 TPN	A1L	SK95651	2195	1
100	FN 100 2P	HN Size 000/00	ST35086	3750	FN 100 TP	ST30287	4235	FN 100 TPN	A4	SK95570	4470	1
125	FN 125 2P	HN Size 000/00	ST35087	4515	FN 125 TP	ST27894	5335	FN 125 TPN	A4	SK95009	5575	1
160	FN 160 2P	HN Size 000/00	ST35088	4920	FN 160 TP	SK95998	5990	FN 160 TPN	A4	SK95714	5970	1
200	FN 200 2P	HN Size 0	ST35089	6255	FN 200 TP	ST27895	7875	FN 200 TPN	B2	SK95588	7370	1
250	FN 250 2P	HN Size 1	ST31674	7380	FN 250 TP	ST31731	9625	FN 250 TPN	B2 / B3	SK95682	9560	1
315	FN 315 2P	HN Size 1	ST38930	9335	FN 315 TP	ST27897	11910	FN 315 TPN	B3	SK95590	12415	1
400	FN 400 2P	HN Size 2	ST31676	11245	FN 400 TP	ST27898	14340	FN 400 TPN	B4	SK95591	13855	1
630	FN 630 2P	HN Size 3	ST35090	17895	FN 630 TP	ST27899	23110	FN 630 TPN	C2	SK95592	23305	1
800	FN 800 TP	HN Size 3	-	-	FN 800 TP	ST27900	25070	-	-	-	-	1

Note: Please refer page no. 25 for Switch-Disconnecter & 4 pole Switch-Disconnecter-Fuse

Type FN S-D-F suitable for DIN fuse-link (TPN)



FN - TPN (Open Execution)



FN in SS Enclosure

Rated Current (A)	Suitable HRC fuse-link		Open Execution				In Sheet Steel Enclosure			
	Type	Range (A)	Type	Cat. No.	M.R.P. (₹) Per Unit	Std. Pkg. (Nos.)	Type	Cat. No.	M.R.P. (₹) Per Unit	Std. Pkg. (Nos.)
32	HF	2 to 32	FN 32 TPN / FP	SK95518	1605	1	FN 32 TPN / FP CE*	SK95612*	3590	1
32	HF	2 to 32	FN 32 TPN / FP CE*	SK95703*	1440	1				
63	HF	2 to 63	FN 63 TPN / FP	SK95421	2205	1	FN 63 TPN / FP CE*	SK95613*	4295	1
63	HF	2 to 63	FN 63 TPN / FP CE*	SK95704*	1950	1				
100	HN Size 000/00	63 to 100	FN 100 TPN	SK95568	4545	1	FN 100 TPN	SK95569	7080	1
125	HN Size 000/00	63 to 125	FN 125 TPN	SK95001	5970	1	FN 125 TPN	SK95005	8380	1
160	HN Size 000/00	63 to 160	FN 160 TPN	SK95713	6540	1	FN 160 TPN	SK95715	8985	1
200	HN Size 0	80 to 200	FN 200 TPN	SK95418	8315	1	FN 200 TPN	SK95511	11805	1
250	HN Size 1	125 to 250	FN 250 TPN	SK95642	9960	1	FN 250 TPN	SK95681▲	13625	1
315	HN Size 1	125 to 315	FN 315 TPN	SK95461	12430	1	FN 315 TPN	SK95514	16155	1
400	HN Size 2	200 to 400	FN 400 TPN	SK95481	14835	1	FN 400 TPN	SK95515	18850	1
630	HN Size 3	315 to 630	FN 630 TPN	SK95521	23980	1	FN 630 TPN	SK95547	30210	1
800	HN Size 3	315 to 800	FN 800 TPN	SK95679	26015	1	FN 800 TPN	SK95705	32730	1

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

▲ Spare cat no. ST978950000 is of Interior FN 250 SDF suitable for Sheet steel enclosure

HRC Fuses

Features offered by HRC fuse link

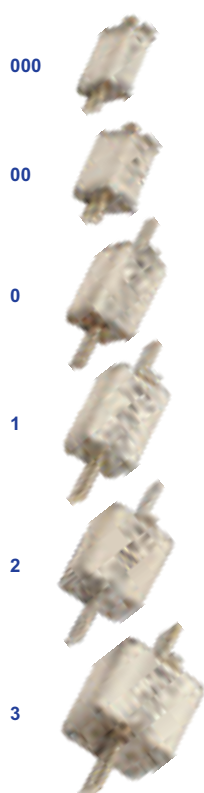
- Conforms to IEC 60269-2, IS 13703 part 2
- Range: 2A to 800A, 415V, AC 50Hz
- Type: Cylindrical (2A to 63A), DIN (63A to 800A) & Bolted (2A to 630A)
- High breaking capacity: 100kA for type HN and 80kA for type HF/HG/HQ

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	87	30
	4		SF90145	87	30
	6		SF90146	87	30
	8		SF90147	87	30
	10		SF90148	87	30
	16		SF90150	87	30
	20		SF90151	87	30
	25		SF90152	87	30
	32	Suitable for Type FN 63 / FNX 63 S-D-F & for HC 63 Fuse base	SF90142	87	30
	40		SF90143	98	30
	50		SF90158	215	30
	63		SF90159	275	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 Suitable for Type FA-C 100 & for HB 160 Fuse base	SF94940	285	3
	80		SF94941	305	3
	100		SF94942	305	3
	125		SF94946	350	3
00	63	Suitable for Type FN 100/125/160 / FNX 125/160 S-D-F Suitable for Type FA-C 100 & for HB 160 Fuse base	SF94027	370	3
	80		SF94028	370	3
	100		SF94029	370	3
	125		SF94030	385	3
	160		SF94939	405	3
	200		SF94128	505	3
0	80	Suitable for Type FN 200 / FNX 200 S-D-F & for HB 250 Fuse base	SF94129	505	3
	100		SF94130	505	3
	125		SF94131	515	3
	160		SF94132	515	3
	200		SF94230	535	3
1	125	Suitable for Type FN 250/315 / FNX 250/315 S-D-F & for HB 250 Fuse base	SF94231	555	3
	160		SF94232	555	3
	200		SF94233	615	3
	250		SF94234	750	3
	315		SF94332	760	3
	400		SF94333	790	3
2	200	Suitable for Type FN 400 / FNX 400 S-D-F & for HB 800 Fuse base	SF94334	805	3
	250		SF94335	815	3
	315		SF94434	1180	1
	400		SF94435	1180	1
	500		SF94436	1250	1
3	630	Suitable for Type FN 630/800 / FNX 630/800 S-D-F & for HB 800 Fuse base	SF94437	1320	1
	800		SF94938	1550	1

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	163	10
63	HC 63	Fuse holder	HF	2-63	SK91043	185	10
160	HB 160	Fuse base	HN-Size 000 & 00	63-160	SK90405	290	12
250	HB 250	Fuse base	HN-Size 0 & 1	80-250	SK90406	600	3
800	HB 800	Fuse base	HN-Size 2 & 3	200-800	SK91051	1190	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	42	24
			4		ST30726	42	24
			6		ST30727	42	24
			10		ST30728	42	24
			16		ST30729	42	24
			20		ST30730	47	24
			25		ST30731	47	24
			32		ST30732	47	24
HQ	Offset	A1	2	-	ST30736	59	24
			4		ST30737	59	24
			6		ST30738	59	24
			10		ST30739	59	24
			16		ST30740	59	24
			20		ST30741	61	24
			25		ST30742	62	24
			32		ST30743	69	24
		A1L	20	Suitable for type FN 32/63 S-D-F	ST34527	72	15
			25		ST34528	72	15
			32		ST34529	78	15
			50		ST35827	78	15
			63		ST35828	78	15
		A2	4	Suitable for type HK 32H/32B fuse base	ST30747	62	12
			6		ST30748	62	12
			10		ST30749	62	12
			16		ST30750	62	12
			20		ST30751	62	12
			25		ST30752	62	12
		A3	32		ST30753	62	12
			35	Suitable for type HK 63B/63H Fuse base	ST30759	89	12
			50		ST30760	89	12
			63		ST30761	89	12
		A4	80	Suitable for type FN 100/125/160 S-D-F & for HK 125H/125B Fuse base	ST30767	169	12
			100		ST30768	174	12
			125		ST30769	210	12
			160		ST35829	215	12
			80		ST30774	190	12
	Centre Tag, 2 holes	B1	100	Suitable for type FN 200 S-D-F	ST30775	190	12
			125		ST30776	245	12
			125		ST30777	265	3
		B2	160	Suitable for type FN 250/315 S-D-F	ST30778	275	3
			200		ST30779	275	3
		B3	250		ST30781	400	3
			315		ST30782	410	3
		B4	355	Suitable for type FN 400 S-D-F	ST30783	615	3
			400		ST30784	650	3
	Centre Tag, 4 holes	C2	400	Suitable for type FN 630 S-D-F	ST30785	1115	1
			500		ST30786	1309	1
			630		ST30787	1375	1
		C3	630	-	ST30788	1520	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	105	12
	HD 20P	Both side busbar (Back)	F1	2-20	ST30773	116	12
	HD 20B	Top busbar & bottom cable	F1	2-20	ST30766	110	12
32	HD 32H	Both side cable (Front)	F1	2-32	ST30733	116	12
	HD 32P	Both side busbar (Back)	F1	2-32	ST30734	147	12
	HD 32B	Top busbar & bottom cable	F1	2-32	ST30735	137	12
	HK 32H	Both side cable (Front)	A2	4-32	ST30754	179	12
	HK 32B	Top busbar & bottom cable	A2	4-32	ST30755	210	12
	HK 63H	Both side cable (Front)	A3	35-63	ST30762	240	6
63	HK 63B	Top busbar & bottom cable	A3	35-63	ST30763	290	6
	HK 125H	Both side cable (Front)	A4	80-125	ST30770	745	3
125	HK 125B	Top busbar & bottom cable	A4	80-125	ST30771	815	3

Switch-Disconnecter-Fuse Units

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



FNX TPN S-D-F



FNX 4P S-D-F

Features offered by FNX S-D-F

- Range 32A to 800A, 415V, AC 23A
- TPN and FP 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

Rated Current (A)	Suitable HRC fuse-link		Three pole + Neutral (TPN)				Four Pole (FP)			
	Type	Range (A)	Type	Cat. No.	M.R.P. (₹) Per Unit	Std. Pkg. (Nos.)	Type	Cat. No.	M.R.P. (₹) Per Unit	Std. Pkg. (Nos.)
32	HF	2 to 32	FNX 32 TPN / FP	SK96903	1685	1	FNX 32 TPN / FP	SK96903	1685	1
63	HF	2 to 63	FNX 63 TPN / FP	SK96904	2310	1	FNX 63 TPN / FP	SK96904	2310	1
100	HN Size 000	63 to 100	FNX 100 TPN / FP	SK96906	4565	1	FNX 100 TPN / FP	SK96906	4565	1
125	HN Size 000/00	63 to 125	FNX 125 TPN	SK95806	6285	1	FNX 125 FP	SK95814	6385	1
160	HN Size 000/00	63 to 160	FNX 160 TPN	SK95807	6845	1	FNX 160 FP	SK95815	7215	1
200	HN Size 0	80 to 200	FNX 200 TPN	SK95808	8705	1	FNX 200 FP	SK95816	9315	1
250	HN Size 1	125 to 250	FNX 250 TPN	SK95809	10440	1	FNX 250 FP	SK95817	10805	1
315	HN Size 1	125 to 315	FNX 315 TPN	SK95810	13085	1	FNX 315 FP	SK95818	13530	1
400	HN Size 2	200 to 400	FNX 400 TPN	SK95811	15560	1	FNX 400 FP	SK95819	16140	1
630	HN Size 3	315 to 630	FNX 630 TPN	SK95812	25150	1	FNX 630 FP	SK95820	25755	1
800	HN Size 3	315 to 800	FNX 800 TPN	SK95813	27260	1	FNX 800 FP	SK95821	28020	1

Type FN & FG Switch-Disconnecter (TPN)



FN TPN S-D

Rated Current (A)	Type	Cat. No.	M.R.P. (₹) Per Unit	Std. Pkg. (Nos.)
32	FN 32 TPN / 4P	SK95541	1645	1
63	FN 63 TPN / 4P	SK95540	2240	1
100	FN 100 TPN	SK95571	4305	1
125	FN 125 TPN	SK95405	5365	1
200	FN 200 TPN	SK95607	7315	1
250	FN 250 TPN	SK95683	9320	1
315	FN 315 TPN	SK95609	10980	1
400	FN 400 TPN	SK95610	13555	1
630	FN 630 TPN	SK95611	20150	1
800	FN 800 TPN	SK95551	23335	1
1000	FN 1000 TPN	SK95710	30590	1
1000	FN 1000H TPN	SK95992	33740	1
1250	FG 1250 TPN	ST30198	49170	1
1600	FG 1600 TPN	ST30199	62350	1
2000	FG 2000 TPN	ST30200	166570	1
2500	FG 2500 TPN	ST30201	197630	1
3150	FG 3150 TPN	ST30202	201305	1

Type FFO/FF/FAC suitable for panel mounting

Rated Current (A)	Description	Cat. No.	M.R.P. (₹) Per Unit	Std. Pkg. (Nos.)
32	FFO TP Interior	SK91100	1175	1
63	FF TP Interior	SK91000	1780	1
63	FAC 63 TPN	SK95156	3300	1
100	FAC 100 TPN	SK95157	5400	1

Spares & Accessories for Type FFO/FF/FAC

Description	Rated Current (A)	Cat. No.	M.R.P. (₹) Per Unit	Std. Pkg. (Nos.)
FAC - Handle Assembly	63 / 100	SK90453	70	1
FFO / FF Handle Assembly	32 / 63	SK90998	80	1
FFO / FF Handle Coupler & Door Interlock	32 / 63	SK91079	400	1

Refer catalogue for short circuit withstand capacity

Switch-Disconnecter-Fuse: Accessories

Accessories for type FNX



Castell 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	160	1
	FNX 100	SK91538	310	1
	FNX 125 / 160	SK91539	310	1
	FNX 200 / 250	SK91540	400	1
	FNX 315 / 400 / 630 / 800	SK91541	445	1
Handle Assembly	FNX 32 / 63 / 100	SK91524	270	1
	FNX 125 / 160 / 200 / 250	SK91525	510	1
	FNX 315 / 400 / 630 / 800	SK91526	640	1
Castell Lock	FNX 32 / 63 / 100	SK91530	500	1
	FNX 125 / 160 / 200 / 250	SK91531	880	1
	FNX 315 / 400 / 630 / 800	SK91531	880	1
DIN Rail Assembly	FNX 32 / 63 / 100	SK91617	65	1

Accessories for type FN



Terminal Shroud Kit



Handle Assembly



Auxiliary Contact Kit



Switched Neutral Kit



Shaft Extension Kit

Description	Type	Cat. No.	M.R.P. (₹) Per Unit	Std. Pkg. (Nos.)
Auxiliary Contact Kit (1NO + 1 NC)	FN 32 / 63	SK91302	370	1
	FN 100 / 125 / 160	SK91328	420	1
	FN 200 / 250	SK91329	495	1
	FN 315 / 400 / 630 / 800	SK91330*	545	1
Terminal Shroud Kit	FN 32 / 63	SK91190	90	1
	FN 100 / 125 / 160	SK91137	120	1
	FN 200 / 250	SK91335	205	1
	FN 315 / 400	SK91346	215	1
	FN 630 / 800	SK91347*	225	1
Handle Assembly - A	FN 32 / 63	SK91257	260	1
	FN 100 / 125 / 160	SK91258	570	1
	FN 200 / 250	SK91258	570	1
Handle Assembly - B	FN 32 / 63	SK91277	260	1
	FN 100 / 125 / 160	SK91278	570	1
	FN 200 / 250	SK91278	570	1
Handle Assembly - CE	FN 32 / 63	SK91279*	635	1
	FN 100 / 125 / 160	SK91259*	635	1
	FN 200 / 250	SK91259*	635	1
Switched Neutral Kit	FN 32 / 63	SK91337	145	1
	FN 100 / 125 / 160	SK95233	2415	1
	FN 200 / 250	SK95516	2450	1
	FN 315 / 400	SK95517	2545	1
Interphase Barrier Kit	FN 200	SK95546*	3430	1
	FN 315 / 400	SK91343	190	1
	FN 630 / 800	SK91344	200	1
Shaft Extension Kit	FN 32 / 63	SK91345*	210	1
	FN 100 / 125 / 160	SK91346*	210	1
	FN 200 / 250	SK95600	150	1
Shaft Extension Kit	FN 315 / 400	SK91331*	180	1
	FN 630 / 800	SK91331*	180	1

* Also suitable for switch-disconnector FN1000 & FN1000H

Spare front housing assemblies for FN S-D-F (suitable for DIN fuse-link)

Rating (A)	Description	Cat. No.	M.R.P. (₹) Per Unit	Std. Pkg. (Nos.)
100	FN 100 Front housing assembly	ST31677	2890	1
125	FN 125 Front housing assembly	ST31678	3380	1
200	FN 200 Front housing assembly	ST31679	3865	1
250	FN 250 Front housing assembly	ST31729	5250	1
315	FN 315 Front housing assembly	ST31681	6325	1
400	FN 400 Front housing assembly	ST31682	7975	1
630	FN 630 Front housing assembly	ST31683	14310	1

Fuse pulling handle



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	110	1
Insulated fuse pulling handle for Type HN fuse-link from 63A-800A	SF90126	410	1

Castell lock for type FN



Castell lock

Suitable for	Description & Cat. No.	M.R.P. (₹) Per Unit	Std. Pkg. (Nos.)
Type FN 100 to FN 250	A = SK00333 C = SK00335 B = SK00334 D = SK00336	1500	2
Type FN 315 to FN 800	A = SK00345* C = SK00347* B = SK00346* D = SK00348*	1500	2

*Also suitable for Switch-Disconnecter FN 1000 & FN 1000H



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On Load Changeover Switch - Disconnectors

Type **C-line** changeover switch-disconnector



C-line Direct handle F1 **C-line** Extended handle F1 **C-line** as open execution **C-line** in SS enclosure

Features offered by **C-line** Changeover

- Range 63A to 1000A, 415V, AC 23A, 4P
- Conforms to IEC 60947-3, IS/IEC 60947-3
- Staggered terminals
- Site convertible fuse version for open execution
- Flip-able handle above 400A
- Interchangeable dual shaft position with site convertibility
- **SS enclosure version does not require separate cable gland box**

Rated Current (A)	Open Execution				In Sheet Steel Enclosure [#]			
	Type	Cat. No.	M.R.P. (₹) Per Unit	Std. Pkg. (Nos.)	Type	Cat. No.	M.R.P. (₹) Per Unit	Std. Pkg. (Nos.)
63	CO1-63	CO106300000	4295	1	CO1-63	CO106300S00	6150	1
63	CO1-63	CO10630000D*	3950	1				
100	CO1-100	CO110000000	5470	1	CO1-100	CO110000S00	7435	1
100	CO1-100	CO11000000D*	5070	1				
125	CO2-125	CO212500000	8160	1	CO2-125	CO212500S00	10945	1
160	CO2-160	CO216000000	9010	1	CO2-160	CO216000S00	12030	1
200	CO2-200	CO220000000	10870	1	CO2-200	CO220000S00	13535	1
250	CO3-250	CO325000000	15365	1	CO3-250	CO325000S00	19245	1
315	CO3-315	CO331500000	16265	1	CO3-315	CO331500S00	20160	1
400	CO4-400	CO440000000	23990	1	CO4-400	CO440000S00	29565	1
630	CO4-630	CO463000000	28670	1	CO4-630	CO463000S00	34125	1
630	CO5-630	CO563000000	30000	1				
800	CO5-800	CO580000000	42515	1	CO5-800	CO580000S00	51490	1
1000	CO5-1000	CO510000000	68620	1	CO5-1000	CO510000S00	87050	1

* Direct handle version

All sheet steel enclosure version are with extended handle switch

Type FG / FGC (TPN) changeover switch-disconnector



FGC Changeover

Rated Current (A)	Type	Description	Cat. No.	M.R.P. (₹) Per Unit	Std. Pkg. (Nos.)
1250	FGC 1250	Back to Back mtg. with 4 O/P terminals	ST27460000C	102235	1
1600	FG 1600	Back to Back mtg. with 8 O/P terminals	ST274700000	141080	1

Type **C-line** in fuse version Fuse mountable kit (suitable for DIN fuse-link)



Fuse Mountable Kit

Rated Current (A)	Suitable fuse-link type DIN	Fuse Mountable Kit	Cat. No.	M.R.P. (₹) Per Unit	Std. Pkg. (Nos.)
63	HF	CO Frame 1 63A	CX10630000C	1100	1
125	Size 000	CO Frame 2 125A	CX21250000D	2820	1
160	Size 00	CO Frame 2 160A	CX21600000D	3735	1
200	Size 00	CO Frame 2 200A	CX22000000D	4765	1
250	Size 1	CO Frame 3 250A	CX32500000D	5115	1
315	Size 1	CO Frame 3 315A	CX33150000D	5360	1
400	Size 2	CO Frame 4 400A	CX44000000D	7820	1
630	Size 3	CO Frame 5 630A	CX56300000D	16890	1
800	Size 3	CO Frame 5 800A	CX58000000D	18870	1

Spares & Accessories for type **C-line** / FG / FGC Auxiliary contact



Auxiliary Contact

Auxiliary contact block suitable for	Auxiliary Contact	Cat. No.	M.R.P. (₹) Per Unit	Std. Pkg. (Nos.)
C/O Frame 1 (63-100A)	2 NO + 2 NC	CX100020000	400	1
C/O Frame 2 (125-200A)	2 NO + 2 NC	CX200020000	605	1
C/O Frame 3 (250-315A)	2 NO + 2 NC	CX300020000	660	1
C/O Frame 4 (400-630A)	2 NO + 2 NC	CX400020000	695	1
C/O Frame 5 (800-1000A)	2 NO + 2 NC	CX500020000	795	1
FG & FGC (250 - 1600A)	1 NO + 1 NC	ST265420000	782	1

Operating Handle



Operating Handle (63A to 315A)



Flip-able Handle (400A to 1000A)

Operating handle suitable for	Cat. No.	M.R.P. (₹) Per Unit	Std. Pkg. (Nos.)
C/O Frame 1 (63-100A)	CX100010000	450	1
C/O Frame 2 & 3 (125-315A)	CX300010000	800	1
C/O Frame 4 (400-630A)	CX400010000	1050	1
C/O Frame 5 (800-1000A)	CX500010000	1145	1
FG Isolator 1000 / 1250 / 1600A	ST265910000	2750	1
FGC C/O 1000 / 1250A	ST26591000C	2750	1

MCCB Range



- Conforms to IS/IEC 60947-2 & IEC 60947-2
- Comprehensive range from 0.63A to 1250A
- 1, 2, 3 & 4 pole versions
- Breaking capacities upto 70kA
- Manual & Electrical operation

- Protection units:
 - Thermal Magnetic
 - Microprocessor based
 - Microprocessor based with communication & metering
- Comprehensive range of internal & external accessories
- Solution for ASTS (Automatic Source Transfer System)

- 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.
- **Spreaders are made of silver plated copper**

Special Applications

- For DC application, 2P MCCBs are available
- For Capacitor back up protection, MCCBs are available
- For Motor backup protection, use 'M' series of MCCBs such as DM, DN0-M, DN2-M, DN3-M
- For isolation, use SD version (without protection release)

DU MCCB Range

Rating (A)	16	20	25	32	40	50	63	80	100	125	160	200	250
Icu (kA)													
10	DU100												
30		DU100H											
36										DU250			

DU100 MCCB



- Conforms to IS/IEC 60947-2 & IEC 60947-2
- Range: 16A to 100A, 2P & 3P
- Compact size
- Also available in SS Enclosure
- Suitable for mounting on D-Pan assembly

Type	Current Rating (A)	Breaking Capacity Icu at 415V AC 50Hz. (kA)	2 Pole ^{New}		3 Pole		Std. Pkg. (Nos.)
			Cat. No.	M.R.P. (₹) Per Unit	Cat. No.	M.R.P. (₹) Per Unit	
DU100	16	10	CM977950000	1115	CM977510000	1600	1
	20		CM977960000	1115	CM977520000	1600	1
	25		CM977970000	1115	CM977530000	1600	1
	32		CM977980000	1115	CM977540000	1600	5*
	40		CM977990000	1115	CM977550000	1600	1
	50		CM978000000	1115	CM977560000	1600	1
	63		CM978010000	1115	CM977570000	1600	5*
	80		CM978020000	1225 ▲	CM989210000	1750 ▲	1
	100		CM978030000	1225 ▲	CM989220000	1750 ▲	5*

▲ - Spreader Terminals are included
* - For 3P MCCBs
Note: 2P in 3P frame size

DU100H MCCB



- Conforms to IS/IEC 60947-2 & IEC 60947-2
- Range: 20A to 100A, 2P, 3P & 4P
- Compact size
- Also available in SS Enclosure
- Suitable for mounting on D-Pan assembly
- Wide Range of snap fit Internal and External Accessories
- Adjustable Overload Setting: 0.8 - 1.0 x In

Type	Thermal Release Range (A)	Breaking Capacity Icu at 415V AC 50Hz. (kA)	2 Pole ^{New}		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	30	CM978980OC2	2800	CM978940OC2	4110	CM979330OC2	5550	1
	20-25		CM978980OD2	2800	CM978940OD2	4110	CM979330OD2	5550	1
	25-32		CM978980OE2	2800	CM978940OE2	4110	CM979330OE2	5550	1
	32-40		CM978980OF2	2800	CM978940OF2	4110	CM979330OF2	5550	1
	40-50		CM978980OG2	2800	CM978940OG2	4110	CM979330OG2	5550	1
	50-63		CM978980OH2	2800	CM978940OH2	4110	CM979330OH2	5550	1
	63-80		CM978980OJ2	2800	CM978940OJ2	4110	CM979330OJ2	5550	1
	80-100		CM978980OK2	2800	CM978940OK2	4110	CM979330OK2	5550	1

Note: 2P in 3P frame size
For higher rating 2P MCCBs, please contact nearest branch

DU250 MCCB



- Conforms to IS/IEC 60947-2 & IEC 60947-2
- Range: 100A to 250A, 3P & 4P
- Compact size
- Wide Range of snap fit Internal and External Accessories
- Adjustable Overload Setting: 0.8 - 1.0 x In

Type	Thermal Release Range (A)	Breaking Capacity Icu 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	
DU250	80-100	36	CM980640000	5210	CM980650OKO	7010	1
	100-125		CM980630000	5810	CM980650OLO	7650	1
	125-160		CM980620000	7650	CM980650OMO	9390	1
	160-200		CM980610000	10100	CM980650ONO	13100	1
	200-250		CM980600000	11780	CM980650OPO	15300	1

Accessories for DU MCCBs

Accessories for DU100



Auxiliary Contact



Shunt Release



Spreader Terminals



Direct Rotary Handle

Description	Internal		
	Cat. No.	M.R.P. (₹) Per Unit	Std. Pkg. (Nos.)
Auxiliary Contact			
1 C/O - Right	CM977810000	405	1
1 C/O - Left	CM977820000	405	1
Shunt Release			
240/415V AC - Left	CM977830000	500	1

Description	External		
	Cat. No.	M.R.P. (₹) Per Unit	Std. Pkg. (Nos.)
Spreader Terminals			
3 Pole	CM977850000	195	Set of 6
Rotary Handle			
Direct	SL970440000	750	1

Note: Phase Barriers are supplied along with MCCBs

Accessories for DU100H/DU250



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	CM978860000	695	1
2 C/O - Right	CM978870000	1180	1
Trip Alarm Contact			
1 C/O - Right	CM978880000	695	1
2 C/O - Right	CM978890000	1180	1
Auxiliary 1 C/O + TAC 1 C/O			
Right	CM978900000	1180	1
Shunt Release			
240/415V AC - Left	CM978830000	990	1
Under Voltage Release			
240V AC - Left	CM978920000	1330	1



Spreader Terminals



Direct Rotary Handle

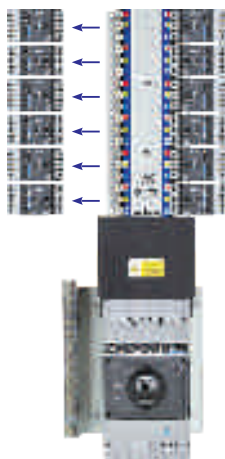


Extended Rotary Handle

Description	External		
	Cat. No.	M.R.P. (₹) Per Unit	Std. Pkg. (Nos.)
Spreader Terminals			
DU100H - 3 Pole	CM977850000	195	Set of 6
DU100H - 4 Pole	CM979210000	265	Set of 8
DU250 - 3 Pole	ST980530000	1035	Set of 6
DU250 - 4 Pole	CM920070000	1260	Set of 8
Rotary Handle			
DU100H - Direct	CM978950000	950	1
DU250 - Direct	CM980400000	1015	1
DU100H - Extended	CM978960000	1410	1
DU250 - Extended	CM980410000	1450	1

Note: Phase Barriers are supplied along with MCCBs

D-Pan Assembly



- Offers a convenient solution for distribution
- Available for 250A, 400A main incomer 3P MCCBs
- Available for 4, 8 & 12 ways 3P outgoing MCCBs
- Type tested (KEMA)

Description I/C -	O/G - DU100		O/G - DN0 / DU100H		Std. Pkg. (Nos.)
	Cat. No.	M.R.P. (₹) Per Unit	Cat. No.	M.R.P. (₹) Per Unit	
D-Pan I/C 250A O/G 4 Way	CM978210000	9105	CM979120000	9105	1
D-Pan I/C 250A O/G 8 Way	CM978220000	12750	CM979130000	12750	1
D-Pan I/C 250A O/G 12 Way	CM978230000	16485	CM979140000	16485	1
D-Pan I/C 400A O/G 4 Way	CM986050000	10660	CM979150000	10660	1
D-Pan I/C 400A O/G 8 Way	CM986060000	14300	CM979160000	14300	1
D-Pan I/C 400A O/G 12 Way	CM986070000	18030	CM979170000	18030	1

Note: MCCBs and shroud are shown for representation purpose only, need to be purchased separately.

DU (DU125/160/200) MCCB Range



- Conforms to IS/IEC 60947-2 & IEC 60947-2
- Range: 125A to 200A, 3P & 4P
- Adjustable thermal setting: 0.8-1.0 x In
- Also available in SS Enclosure
- Wide range of Internal and External 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	
DU125 #	100-125	30	CM977910000	6850 ▲	CM981100000	8750 ▲	1
DU160 #	128-160		CM977920000	8790 ▲	CM981110000	10640 ▲	1
DU200 #	160-200		CM977930000	11500 ▲	-	-	1

▲ - Spreader Terminals are included
- Available till stocks last

DH MCCB Range

Rating (A) Icu (kA)	16	20	25	32	40	50	63	80	100	125	160	200	320	400	500	630
25	DH100															
35	DH125/160/200										DH400/630					
50	DL100															



- Conforms to IS/IEC 60947-2 & IEC 60947-2
- Range: 16A to 630A, 3P & 4P
- Ics = 100% Icu@
- Adjustable thermal setting: 0.8-1.0 x In
- Also available in SS Enclosure for DH100/125/160/200
- Wide Range of Internal and External 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	
DH100	12-16	25	SL972010000	4720	SL985970000	6400	1
	16-20		SL972020000	4720	SL985980000	6400	1
	20-25		SL972030000	4720	SL985990000	6400	1
	25-32		SL972040000	4720	SL986000000	6400	1
	32-40		SL972050000	4720	SL986010000	6400	1
	40-50		SL972060000	4720	SL986020000	6400	1
	50-63		SL972070000	4720	SL986030000	6400	1
	63-80		SL972080000	4720	SL986040000	6400	1
	80-100		SL972090000	4970 ▲	SL986050000	6740 ▲	1
DH125	12-16	35	SL986440000	6200	SL986110000	7060	1
	16-20		SL986450000	6200	SL986120000	7060	1
	20-25		SL986460000	6200	SL986130000	7060	1
	25-32		SL986470000	6200	SL986140000	7060	1
	32-40		SL986480000	6200	SL986150000	7060	1
	40-50		SL986490000	6200	SL986160000	7060	1
	50-63		SL986500000	6200	SL986170000	7060	1
	63-80		SL986510000	6200	SL986180000	7060	1
	80-100		SL986520000	6920 ▲	SL986190000	7890 ▲	1
	100-125		SL986530000	7060 ▲	SL986070000	8120 ▲	1
DH160 #	128-160		SL986540000	9950 ▲	SL986080000	10760 ▲	1
DH200 #	160-200		SL986550000	11920 ▲			
DH400 #	250-320		SL978830000	20900 ▲			
	320-400		SL978840000	20900 ▲			
DH630 #	400-500		SL945310000	24230 ▲			
	500-630		SL945320000	24230 ▲			

Note: For 2P MCCB, please contact nearest branch

▲ - Spreader Terminals are included
@ - Refer Catalogue for DH160, DH200
- Available till stocks last

DL MCCB Range



- Conforms to IS/IEC 60947-2 & IEC 60947-2
- Range: 16A to 100A, 3P & 4P
- Ics = 100% Icu
- Adjustable thermal setting: 0.8-1.0 x In
- Wide Range of Internal and External Accessories
- For Icu=65 kA, please contact branch office

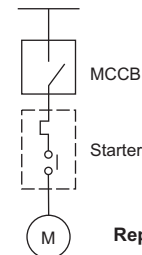
Type	Thermal Release Range (A)	Breaking Capacity Icu at 415V AC, 50Hz. (kA)	3 Pole		4 Pole		Std. Pkg. (Nos.)
			Cat. No.	M.R.P. (₹) Per Unit	Cat. No.	M.R.P. (₹) Per Unit	
DL100	12-16	50	SL978010000	9200	SL986200000	10460	1
	16-20		SL978020000	9200	SL986210000	10460	1
	20-25		SL978030000	9200	SL986220000	10460	1
	25-32		SL978040000	9200	SL986230000	10460	1
	32-40		SL978050000	9200	SL986240000	10460	1
	40-50		SL978060000	9200	SL986250000	10460	1
	50-63		SL978070000	9200	SL986260000	10460	1
	63-80		SL978080000	9200	SL986270000	10460	1
	80-100		SL978090000	10170▲	SL986280000	11530▲	1

▲ - Spreader Terminals are included

DM MCCB Range for Motor Back-up Protection



- Conforms to IS/IEC 60947-2 & IEC 60947-2
- Range: 0.63A to 400A, 65kA
- Short Circuit Protection : 12 In
- Wide Range of Internal and External Accessories



Representative Application Image

3 Pole					
Type	Current Rating (A)	Breaking Capacity Icu at 415V, 50Hz (kA)	Cat. No.	M.R.P. (₹) Per Unit	Std. Pkg. (Nos.)
DM16	0.63	65	SL975810000	3515	1
	1.0		SL975820000	3515	1
	1.6		SL975830000	3515	1
	2.5		SL975840000	3515	1
	4.0		SL975850000	3515	1
	5.0		SL975860000	3515	1
	6.3		SL975870000	3515	1
	7.5		SL975880000	3515	1
	10.0		SL975890000	3515	1
	12.0		SL975900000	3515	1
DM100	16.0		SL975910000	3515	1
	16.0		SL978110000	8790	1
	25.0		SL978120000	8790	1
	30.0		SL978160000	8790	1
	35.0		SL978130000	8790	1
	50.0		SL978140000	8790	1
	60.0		SL978170000	8790	1
	70.0		SL978150000	8790	1
	80.0		SL979870000	8790	1

3 Pole					
Type	Current Rating (A)	Breaking Capacity Icu at 415V, 50Hz (kA)	Cat. No.	M.R.P. (₹) Per Unit	Std. Pkg. (Nos.)
DM160	100.0	65	SL971230000	13875	1
	120.0		SL977030000	13875	1
	160.0		SL971240000	13875	1
DM250	200.0		SL975510000	17895 ▲	1
	230.0		SL975520000	17895 ▲	1
	250.0		SL975530000	17895 ▲	1
DM400	275.0		SL975540000	21100 ▲	1
	325.0		SL975550000	21100 ▲	1
	350.0		SL975560000	21100 ▲	1
	400.0		SL975570000	21100 ▲	1

▲ - Spreader Terminals are included

Note: Please contact nearest branch office for fuseless type 2 co-ordination selection chart

DTH MCCB Range



- Conforms to IS/IEC 60947-2 & IEC 60947-2
- Suitable for distribution & induction furnace application
- Rugged construction
- Adjustable thermal setting : 600 - 800A
- Adjustable magnetic setting : 2600 - 6400A

3 Pole (for Distribution Application)					
Type	Thermal Release Range (A)	Breaking Capacity Icu at 415V, 50Hz (kA)	Cat. No.	M.R.P. (₹) Per Unit	Std. Pkg. (Nos.)
DTH800	600-800	50	SL944720000	39260	1

3 Pole (for Induction Furnace Application)						
Type	Current Rating (A)	Instantaneous Setting (A)	Breaking Capacity Icu at 415V, 50Hz (kA)	Cat. No.	M.R.P. (₹) Per Unit	Std. Pkg. (Nos.)
DTH800 - Instantaneous	250	360	50	SB950520000	39260	1
	400	550	50	SB950530000	39260	1
	630	850	50	SB950540000	39260	1
	800	1050	50	SB950550000	39260	1

Accessories for DH100/125/160/200, DU125/160/200, DL100, DM100 MCCBs



Auxiliary Contact



TAC



Shunt Release



UV Release

Description	Internal		
	Cat. No.	M.R.P. (₹) Per Unit	Std. Pkg. (Nos.)
Auxiliary Contact			
1 C/O - Right	SL972960000	765	1
1 C/O - Left	SL972970000	765	1
Trip Alarm Contact			
1 C/O - Right	SL972980000	765	1
Shunt Release			
240V AC - Left	SL972990M00	955	1
24V DC - Left *	SL972990400	955	1
Under Voltage Release			
240V AC - Left	SL976110000	1280	1



Spreader Terminal



Extended Rotary Handle

Description	External		
	Cat. No.	M.R.P. (₹) Per Unit	Std. Pkg. (Nos.)
Spreader Terminals			
3 Pole	ST980470000	335	Set of 6
4 Pole	ST980600000	440	Set of 8
Rotary Handle			
Extended - New look	CM991030000	1235	1

* Not available for DU MCCBs

Note: Phase Barriers are supplied along with MCCBs

Accessories for DM16 MCCB



Auxiliary Contact



Shunt Release

Description	Internal		
	Cat. No.	M.R.P. (₹) Per Unit	Std. Pkg. (Nos.)
Auxiliary Contact			
1 C/O - Right	SL970230000	550	1
1 C/O - Left	SL970250000	550	1
Trip Alarm Contact			
1 C/O - Right	SL970370000	550	1
Shunt Release			
240 / 415V AC, 110V DC - Left	SL970420000	610	1



Direct Rotary Handle



Extended Rotary Handle

Description	External		
	Cat. No.	M.R.P. (₹) Per Unit	Std. Pkg. (Nos.)
Rotary Handle			
Direct	SL970440000	750	1
Extended - New look	CM999180000	1390	1

Accessories for DM160 MCCB



Auxiliary Contact



Shunt Release



UV Release



Extended Rotary Handle

Description	Internal		
	Cat. No.	M.R.P. (₹) Per Unit	Std. Pkg. (Nos.)
Auxiliary Contact			
2 C/O - Left	SL943290000	1675	1
2 C/O - Right	SL943300000	1675	1
Shunt Release			
415V AC - Right	SL943310DOO	1660	1
240V AC - Right	SL943310BOO	1660	1
Under Voltage Release			
415V AC - Left	SL94332DOOO	1660	1
240V AC - Left	SL94332BOOO	1660	1

Description	External		
	Cat. No.	M.R.P. (₹) Per Unit	Std. Pkg. (Nos.)
Rotary Handle			
Extended - New look	CM991020000	1500	1

Note: For (DM160+TAC), please contact nearest branch office

Accessories for DM250/400 & DH400/630 MCCBs



Auxiliary Contact



Shunt Release



UV Release



Direct Rotary Handle



Extended Rotary Handle

Description	Internal		
	Cat. No.	M.R.P. (₹) Per Unit	Std. Pkg. (Nos.)
Auxiliary Contact			
2 C/O	SL975730000	1150	1
Trip Alarm Contact			
1 C/O - Right	SL975740000	1150	1
Shunt Release			
415V AC, 220V DC	SL975750000	1340	1
240V AC, 110V DC	SL975760000	1340	1
Under Voltage Release			
415V AC - Left	SL975790000	1545	1
240V AC - Left	SL975800000	1545	1

Description	External		
	Cat. No.	M.R.P. (₹) Per Unit	Std. Pkg. (Nos.)
Rotary Handle			
DM250/400 & DH400 Direct	SL975620000	965	1
DH630 Direct	SL979790000	1155	1
DM250/400 & DH400 / 630 Extended - New look	CM991010000	2350	1
Spreader Terminals			
DM250/400 - 3 Pole	ST980450000	2330	Set of 6

Note: Phase Barriers are supplied along with MCCBs

Accessories for DTH 630/800 MCCBs



UV Release



Shunt Release



Auxiliary Contact



Extended Rotary Handle

Description	Internal		
	Cat. No.	M.R.P. (₹) Per Unit	Std. Pkg. (Nos.)
Auxiliary Contact			
2 C/O	SL942170000	1515	1
Shunt Release			
415V AC, 220V DC - Right	SL985260000	1810	1
240V AC, 110V DC - Right	SL985340000	1810	1
Under Voltage Release			
415V AC - Left	SL985480000	1810	1
240V AC - Left	SL985450000	1810	1
110V AC - Left	SL985430000	1810	1

Description	External		
	Cat. No.	M.R.P. (₹) Per Unit	Std. Pkg. (Nos.)
Rotary Handle			
Extended - New look	CM998980000	2410	1

Note: For (DTH800+TAC), please contact nearest branch office

SS Enclosure for DU / DH / DL / DM



DU100 / 100H SS Enclosure



DH / DL / DM / DU SS Enclosure

Description	Cat. No.	M.R.P. (₹) Per Unit	Std. Pkg. (Nos.)
DU100 SS Enclosure	ST980500000	770	1
DU100H SS Enclosure	ST420210000	770	1
DH100/125/160/200, DL100, DM100, DU125/160/200 SS Enclosure	ST299670000	1400	1

Note : Suitable for 3P MCCBs

Ground Fault Module



- 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
- 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	6035	Built in CBCT	1
GF2	250 - 400A	ST277460000	9175	Built in CBCT	1
GF11	up to 800A	ST285940000	5500 #	External CT required	1

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



DN4



DN3



DN2



DN1



DN0



With Thermal - Magnetic Release :

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

- Conforms to IS/IEC 60947-2 & IEC 60947-2
- Range: 20A to 630A, 3P & 4P
- Choice of 25kA / 36kA / 50kA / 70kA breaking capacities
- Ics = 100% Icu*
- Suitable for Isolation
- Adjustable Over Load setting: 0.8 - 1.0 x In
- Adjustable Short Circuit setting: 6 - 10 x In**
- Manual, Rotary or Motorised versions available @
- Wide Range of snap fit Internal and External Accessories



Type	Thermal Release Range (A)	Breaking Capacity Icu at 415V AC, 50Hz. (kA)	3 Pole		4 Pole		Std. Pkg. (Nos.)
			Cat. No.	M.R.P. (₹) Per Unit	Cat. No.	M.R.P. (₹) Per Unit	
DN0-100D*	16-20	36	CM97893OOC2OG	4940	CM97919OOC2OG	6670	1
	20-25		CM97893OOD2OG	4940	CM97919OOD2OG	6670	1
	25-32		CM97893OOE2OG	4940	CM97919OOE2OG	6670	1
	32-40		CM97893OOF2OG	4940	CM97919OOF2OG	6670	1
	40-50		CM97893OOG2OG	4940	CM97919OOG2OG	6670	1
	50-63		CM97893OOH2OG	4940	CM97919OOH2OG	6670	1
	63-80		CM97893OOJ2OG	4940	CM97919OOJ2OG	6670	1
	80-100		CM97893OOK2OG	4940	CM97919OOK2OG	6670	1
DN1-250N*	100 - 125	50	CM98608OOL1OG	8780	CM98613OOL1OG	11390	1
	125 - 160		CM98608OOM1OG	11210	CM98613OOM1OG	14420	1
	160 - 200		CM98608OON1OG	15090	CM98613OON1OG	#	1
	200 - 250		CM98608OOP1OG	17690	CM98613OOP1OG	#	1

New	DN0-100C	16-20	CM91612OOCOOG	5410	CM91712OOCOOG	7340	1
		20-25	CM91612OODOOG	5410	CM91712OODOOG	7340	1
		25-32	CM91612OOEOOG	5410	CM91712OOEOOG	7340	1
		32-40	CM91612OOF0OG	5410	CM91712OOF0OG	7340	1
		40-50	CM91612OOGOOG	5410	CM91712OOGOOG	7340	1
		50-63	CM91612OOHOOG	5410	CM91712OOHOOG	7340	1
		63-80	CM91612OOJOOG	5410	CM91712OOJOOG	7340	1
		80-100	CM91612OOKOOG	5410	CM91712OOKOOG	7340	1
	DN2-250D	100-125	CM92008OOL1OG	9990	CM92108OOL1OG	12230	1
		125-160	CM92008OOM1OG	12650	CM92108OOM1OG	14800	1
		160-200	CM92009OON1OG	17670	CM92109OON1OG	20930	1
		200-250	CM92009OOP1OG	18780	CM92109OOP1OG	22600	1
	DN3-400D	250-320	CM94005OOQ1OG	22790	CM94105OOQ1OG	28550	1
		320-400	CM94005OOR1OG	22980	CM94105OOR1OG	28810	1
	DN3-630D	400-500	CM94006OOS1OG	26400	CM94106OOS1OG	33300	1
		500-630	CM94006OOT1OG	28180	CM94106OOT1OG	35140	1
	DN2-250N	100-125	CM92005OOL1OG	12540	CM92105OOL1OG	16240	1
		125-160	CM92005OOM1OG	15540	CM92105OOM1OG	18230	1
		160-200	CM92006OON1OG	19960	CM92106OON1OG	25200	1
		200-250	CM92006OOP1OG	21150	CM92106OOP1OG	26250	1
	DN3-400N	250-320	CM94003OOQ1OG	24440	CM94103OOQ1OG	30200	1
		320-400	CM94003OOR1OG	24520	CM94103OOR1OG	30610	1
	DN3-630N	400-500	CM94004OOS1OG	28700	CM94104OOS1OG	36760	1
		500-630	CM94004OOT1OG	30760	CM94104OOT1OG	39000	1
	DN2-250S	100-125	CM92002OOL1OG	16830	CM92102OOL1OG	19330	1
		125-160	CM92002OOM1OG	19850	CM92102OOM1OG	24040	1
		160-200	CM92003OON1OG	23110	CM92103OON1OG	30010	1
		200-250	CM92003OOP1OG	24210	CM92103OOP1OG	30730	1
	DN3-400S	250-320	CM94001OOQ1OG	28000	CM94101OOQ1OG	32010	1
		320-400	CM94001OOR1OG	28140	CM94101OOR1OG	32450	1
	DN3-630S	400-500	CM94002OOS1OG	35890	CM94102OOS1OG	43990	1
		500-630	CM94002OOT1OG	37790	CM94102OOT1OG	46690	1

Note: For 800A TM release please refer DTH MCCBs, page No. 34

For higher ratings, please refer microprocessor release MCCBs, page No. 38, 39

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

@ Motorised version available for DN2 and DN3 frames (please refer page No. 41)

* For DN0-100D, DN1-250N : Ics = 50% Icu

**For DN0, DN1-Short Circuit Setting : 9In

Available on request

d sine With Microprocessor Release :

Rating (A)	40	50	63	80	100	125	160	200	250	320	400	500	630	800	1000	1250
Icu (kA)																
36/50/70	DN2										DN3					
50/70															DN4	

d sine With Microprocessor Release MTX1.0 :



- Conforms to IS/IEC 60947-2 & IEC 60947-2
- Range: 40A to 1250A, 3P & 4P
- Choice of 36kA / 50kA / 70kA 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
- Inbuilt Instantaneous Protection
- Provision of Thermal Memory : ON/OFF
- Variable trip class at 7.2 Ir & 6 Ir
- Front LED indication of Over Load (Ready, Over load pre-alarm & Overload)
- Manual, Rotary or Motorised versions available @
- Wide Range of snap fit Internal and External Accessories



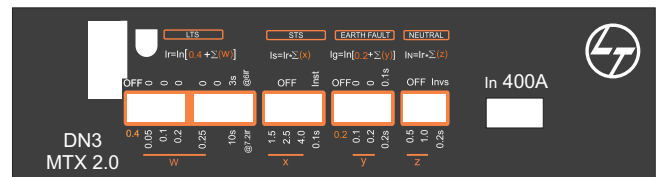
Type	Release Range (A)	Breaking Capacity Icu at 415V AC, 50Hz. (kA)	3 Pole		4 Pole		Std. Pkg. (Nos.)
			Cat. No.	M.R.P. (₹) Per Unit	Cat. No.	M.R.P. (₹) Per Unit	
DN2-250D	16 - 40	36	CM920630000X1	13230	CM921550000X1	17130	1
	25 - 63		CM920710000X1	13230	CM921540000X1	17130	1
	40 - 100		CM920510000X1	13230	CM921530000X1	17130	1
	63 - 160		CM920740000X1	15730	CM921520000X1	21350	1
	100 - 250		CM920540000X1	22020	CM921510000X1	28720	1
DN3-400D	160 - 400	50	CM930010000X1	27260	CM930030000X1	32720	1
DN3-630D	250 - 630		CM930050000X1	30230	CM930070000X1	39680	1
DN2-250N	16 - 40		CM920640000X1	15140	CM921600000X1	19150	1
	25 - 63		CM920720000X1	15140	CM921590000X1	19150	1
	40 - 100		CM920520000X1	15140	CM921580000X1	19150	1
	63 - 160		CM920750000X1	19430	CM921570000X1	24340	1
	100 - 250		CM920550000X1	24030	CM921560000X1	31640	1
DN3-400N	160 - 400	70	CM930020000X1	29380	CM930040000X1	37180	1
DN3-630N	250 - 630		CM930060000X1	32570	CM930080000X1	43360	1
DN4-1250N	320 - 800		CM960210000X1	50030	CM961110000X1	62180	1
	400 - 1000		CM960220000X1	66880	CM961120000X1	95770	1
	500 - 1250		CM960230000X1	83350	CM961130000X1	122130	1
DN2-250S	16 - 40	70	CM920650000X1	18180	CM921650000X1	22270	1
	25 - 63		CM920730000X1	18180	CM921640000X1	22270	1
	40 - 100		CM920590000X1	18180	CM921630000X1	22270	1
	63 - 160		CM920760000X1	24510	CM921620000X1	31290	1
	100 - 250		CM920560000X1	30600	CM921610000X1	35840	1
DN3-400S	160 - 400	70	CM940530000X1	35040	CM941530000X1	45360	1
DN3-630S	250 - 630		CM940790000X1	39600	CM941790000X1	50660	1
DN4-1250S	320 - 800		CM960250000X1	58630	CM961150000X1	71500	1
	400 - 1000		CM960260000X1	82670	CM961160000X1	118130	1
	500 - 1250		CM960270000X1	104060	CM961170000X1	141700	1

@ Motorised version available for DN2 and DN3 frames (please refer page No. 41)

d sine With Microprocessor Release MTX2.0 :



- Conforms to IS/IEC 60947-2 & IEC 60947-2
- Range: 40A to 1250A, 3P & 4P
- Choice of 36kA / 50kA / 70kA breaking capacities
- $I_{cs} = 100\% I_{cu}$
- Suitable for Isolation
- Adjustable Over Load from 0.4 - 1.0 x I_n
- Adjustable Short Circuit from 1.5 - 8 x I_r
- Inbuilt Instantaneous Protection
- Inbuilt ground fault protection from 20% - 50% of I_n
- Adjustable neutral overload protection available : 50% to 150% of I_r
- Provision of Thermal Memory : ON/OFF
- Variable trip class at 7.2 I_r & 6 I_r
- Front LED indication of Over Load (Ready, Over load pre-alarm & Overload)
- Panel mounted display available for Current metering
- 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 I_{cu} at 415V AC, 50Hz. (kA)	3 Pole		4 Pole		Std. Pkg. (Nos.)
			Cat. No.	M.R.P. (₹) Per Unit	Cat. No.	M.R.P. (₹) Per Unit	
DN2-250D	16 - 40	36	CM920630000AG	23700	CM921550000AG	27520	1
	25 - 63		CM920710000AG	23700	CM921540000AG	27520	1
	40 - 100		CM920510000AG	23700	CM921530000AG	27520	1
	63 - 160		CM920740000AG	27140	CM921520000AG	33650	1
	100 - 250		CM920540000AG	32400	CM921510000AG	39870	1
DN3-400D	160 - 400	50	CM930010000AG	37800	CM930030000AG	44200	1
DN3-630D	250 - 630		CM930050000AG	40730	CM930070000AG	51410	1
DN2-250N	16 - 40		CM920640000AG	25990	CM921600000AG	29990	1
	25 - 63		CM920720000AG	25990	CM921590000AG	29990	1
	40 - 100		CM920520000AG	25990	CM921580000AG	29990	1
	63 - 160		CM920750000AG	30740	CM921570000AG	36630	1
	100 - 250		CM920550000AG	34270	CM921560000AG	43400	1
DN3-400N	160 - 400	70	CM930020000AG	39270	CM930040000AG	47800	1
DN3-630N	250 - 630		CM930060000AG	44320	CM930080000AG	57290	1
DN4-1250N	320 - 800		CM960210000AG	65190	CM961110000AG	78120	1
	400 - 1000		CM960220000AG	83400	CM961120000AG	111600	1
	500 - 1250		CM960230000AG	104450	CM961130000AG	145150	1
DN2-250S	16 - 40	70	CM920650000AG	28790	CM921650000AG	33330	1
	25 - 63		CM920730000AG	28790	CM921640000AG	33330	1
	40 - 100		CM920590000AG	28790	CM921630000AG	33330	1
	63 - 160		CM920760000AG	36160	CM921620000AG	43890	1
	100 - 250		CM920560000AG	41380	CM921610000AG	49670	1
DN3-400S	160 - 400	70	CM940530000AG	45940	CM941530000AG	56930	1
DN3-630S	250 - 630		CM940790000AG	52590	CM941790000AG	71560	1
DN4-1250S	320 - 800		CM960250000AG	72930	CM961150000AG	88980	1
	400 - 1000		CM960260000AG	100280	CM961160000AG	134170	1
	500 - 1250		CM960270000AG	121200	CM961170000AG	166920	1

@ Motorised version available for DN2 and DN3 frames (please refer page No. 41)

Modules for MTX2.0 release	Cat. No.	M.R.P. (₹) Per Unit
Current Metering Module	CM956980000	#
Cable (2m length)	CM011960000	1000
Power Supply Module	CL907220000	10500

UNCO Module for Status Indication & Control with RS485 Port (for MTX1.0/2.0)	CL908520000	9000
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Available on request



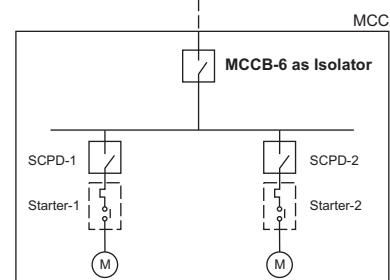
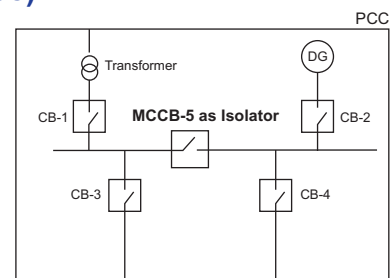
MTX2.0 with current metering module

d sine Switch Disconnecter - SD (MCCBs without protection release):



- Used as switching devices for isolation
- Range: 100A 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	
DN2-250SD	100	CM96808OOKOOG	8200	CM96809OOKOOG	9830	1
	125	CM96810OOLOOOG	8400	CM96811OOLOOOG	10300	1
	160	CM96817OOMOOG	9640	CM96818OOMOOG	11710	1
	200	CM96814OONOOOG	12870	CM96815OONOOOG	15480	1
	250	CM96802OOPOOOG	13210	CM96803OOPOOOG	16390	1
DN3-400SD	320	CM96804OOQOOG	16960	CM96805OOQOOG	23200	1
	400	CM96804OOROOOG	18530	CM96805OOROOOG	24230	1
DN3-630SD	500	CM96806OOSOOG	19980	CM96807OOSOOG	27110	1
	630	CM96806OOTOOOG	21180	CM96807OOTOOOG	28680	1
New DN4-1250SD	800	CM93041OOUO	48980	CM93042OOUO	61730	1
	1000	CM93041OOVO	61280	CM93042OOVO	79460	1
	1250	CM93041OOAO	75790	CM93042OOAO	106130	1

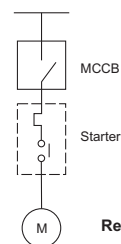


Representative Application Image

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



Representative Application Image

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	4600	1
	40		CM98944OOFO	4600	1
	50		CM98944OOGO	4600	1
	63		CM98944OOHO	4600	1
	80		CM98944OOJO	4600	1
	100		CM98944OOKO	4600	1

3 Pole					
Type	Current Rating (A)	Breaking Capacity Icu at 415V. AC, 50Hz. (kA)	Cat. No.	M.R.P. (₹) Per Unit	Std. Pkg. (Nos.)
DN2-250M	100	50	CM92172OOKOOG	8250	1
	125		CM92172OOLOOOG	8475	1
	160		CM92172OOMOOG	9920	1
	200		CM92171OONOOOG	12940	1
	250		CM92171OOPOOOG	16640	1
DN3-400M	320		CM94516OOQOOG	19720	1
	400		CM94516OOROOOG	20885	1
DN3-630M	500		CM94515OOSOOG	24615	1
	630		CM94515OOTOOOG	25030	1

Note: Please contact nearest branch office for fuseless type 2 co-ordination selection chart



Automatic Source Transfer System

- Stored Energy operated
- Automatic / Manual control of power supply source
- Set-up data programming
- Virtual front panel viewing with key activation feature
- Programmable I/Os
- Test function
- LED display
- Voltage and Frequency display
- Inbuilt UV protection
- Inbuilt phase unbalance protection



+



New

AuXC-1000L

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

ASTS with Thermal - Magnetic Releases

Frame	Current Rating (A)	Breaking Capacity Icu at 415V AC, 50Hz. (kA)	3 Pole	4 Pole
			M.R.P. (₹) Per Unit	M.R.P. (₹) Per Unit
DN2	100	36	108395	112995
	160		114975	119275
	250		127235	134875
DN2	100	50	111995	117655
	160		120755	126135
	250		131975	142175
DN3	400	70	148745	160925
	630		161225	177705
DN2	160	70	129375	137755
	250		138095	151135
DN3	400	70	155985	164605
	630		175285	193085

Auto Source Transfer Controller

Type	Cat. No.	M.R.P. (₹) Per Unit	Std. Pkg. (Nos.)
New AuXC-1000L	ST800240000	39790	1
AuXC-1000	ST802300000	47950	1
Can be used along with U-POWER Omega ACBs, d sine MCCBs, & MCX contactors			

ASTS with Microprocessor Release MTX1.0

Frame	Current Rating (A)	Breaking Capacity Icu at 415V AC, 50Hz. (kA)	3 Pole	4 Pole
			M.R.P. (₹) Per Unit	M.R.P. (₹) Per Unit
DN2	100	36	116135	123935
	160		121135	132375
	250		133715	147115
DN2	100	50	119955	127975
	160		128535	138355
	250		137735	152955
DN3	400	70	158465	174065
	630		164845	186425
DN2	160	70	138695	152255
	250		150875	161355
DN3	400	70	169785	190425
	630		178905	201025

ASTS with Microprocessor Release MTX2.0

Frame	Current Rating (A)	Breaking Capacity Icu at 415V AC, 50Hz. (kA)	3 Pole	4 Pole
			M.R.P. (₹) Per Unit	M.R.P. (₹) Per Unit
DN2	100	36	137075	144715
	160		143955	156975
	250		154475	169415
DN2	100	50	141655	149655
	160		151155	162935
	250		158215	176475
DN3	400	70	178245	195305
	630		188345	214285
DN2	160	70	161995	177455
	250		172435	189015
DN3	400	70	191585	213565
	630		204885	242825

ASTS MRP consists of the following products: 2 d sine MCCBs, 2 SE-EOMs, 2 UV release, 2 Aux + Trip Alarm contact, 1 MIL Kit & 1 AuXC-1000L Controller
For AuXC-1000 please add ₹ 8160 to the above MRP

Note: Picture shown is for representation purpose only, MCCB + EOM + UV combination, MIL kit & AuXC-1000L to be purchased separately & assembled at site.

Accessories for MCCBs



Auxiliary Contact



TAC



Shunt Release



UV Release

Description	Internal		
	Cat. No.	M.R.P. (₹) Per Unit	Std. Pkg. (Nos.)
Auxiliary Contact			
DN0, DN1 - 1 C/O - Right	CM978860000	695	1
DN0, DN1 - 2 C/O - Right	CM978870000	1180	1
DN2, DN3, DN4 - 1 C/O	CM998010000	790	1
DN2, DN3, DN4 - 2 C/O	CM998020000	1285	1
Trip Alarm Contact			
DN0, DN1 - 1 C/O - Right	CM978880000	695	1
DN0, DN1 - 2 C/O - Right	CM978890000	1180	1
DN2, DN3, DN4 - 1 C/O - Right	CM998030000	790	1
Auxiliary 1 C/O + TAC 1 C/O			
DN0, DN1 - Right	CM978900000	1180	1
DN2, DN3, DN4 - Right	CM998040000	1445	1
Shunt Release			
DN0, DN1 - 240/415V AC - Left	CM978830MOO	990	1
DN2, DN3, DN4 - 110/240/415V AC, 110/220V DC	CM998050000	1790@	1
Under Voltage Release			
DN0, DN1 - 240V AC - Left	CM97892BOOO	1330	1
DN2, DN3 - 240V AC - Left	CM99986BOOO	2100**	1
DN4 - 240V AC - Left	CM999060000	2305**	1

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

** - Use these UV Cat. Nos. with Grey look MCCBs only



Direct Rotary Handle



Extended Rotary Handle



Key Lock

Description	External		
	Cat. No.	M.R.P. (₹) Per Unit	Std. Pkg. (Nos.)
Rotary Handle			
DN0 Direct	CM978950000	950	1
DN1 Direct	CM980400000	1015	1
DN2 Direct	CM998290000	1025	1
DN3 Direct	CM998600000	1560	1
DN0 Extended	CM978960000	1410	1
DN1 Extended	CM980410000	1450	1
DN2 Extended	CM998300000	1460	1
DN3 Extended	CM998610000	2495	1
DN4 Extended	CM998840000	3415	1
Panel door mounted Key lock for Extended Rotary Handle #			
Type 1	CM99958TOOOO	1290	1
Type 2	CM99958TOOOA	1290	1
Type 3	CM99958TOOOB	1290	1
Type 12	CM99958TOOOC	1290	1
Type 23	CM99958TOOOD	1290	1

- Can be used with dsine, DU, DH/DL/DM, DTH new look extended ROM



Stored Energy EOM



Neutral CT



Adaptor kit for NCT

Description	External		
	Cat. No.	M.R.P. (₹) Per Unit	Std. Pkg. (Nos.)
Stored Energy Electrical Operating Mechanism			
DN2 - 240V AC \$	CM981320000	Price on request	1 ●
DN3 - 240V AC \$	CM981300000		1 ●
External Neutral CT			
DN2 - 40A	CM999460000	1400	1
DN2 - 63A	CM999470000	1400	1
DN2 - 100A	CM999480000	1400	1
DN2 - 160A	CM999490000	2000	1
DN2 - 250A	CM999500000	2000	1
DN3 - 400A	CM999540000	3700	1
DN3 - 630A	CM999550000	3700	1
DN4 - 800A	CM998890000	5500	1
DN4 - 1000A	CM998900000	5500	1
DN4 - 1250A	CM998910000	5500	1
Adaptor kit for External Neutral CT			
DN2-250	CM999940000	450	Set of 2
DN3-400	CM999950000	895	Set of 2
DN3-630	CM999970000	950	Set of 2
DN4-800	CM999960000	1600	Set of 2
DN4-1000/1250	CM999980000	5950	Set of 2

● - Including indicator Assembly (Aux + TAC)

\$ - Please contact nearest branch office for availability



Spreader Terminals



MIL Kit - Base Mounted

Description	External		
	Cat. No.	M.R.P. (₹) Per Unit	Std. Pkg. (Nos.)
Spreader Terminals			
DN0-100 - 3 Pole	CM977850000	195	Set of 6
DN1, DN2 - 250 - 3 Pole	ST980530000	1035	Set of 6
DN3-400 - 3 Pole	ST980650000	1945	Set of 6
DN3-630 - 3 Pole	ST980540000	2175	Set of 6
DN4-800 - 3 Pole	ST903610000	4150	Set of 6
DN4-1000 - 3 Pole	CM900630OVO	11000	Set of 6
DN4-1250 - 3 Pole	ST980550000	15025	Set of 6
DN0-100 - 4 Pole	CM979210000	265	Set of 8
DN1, DN2 - 250 - 4 Pole	CM920070000	1260	Set of 8
DN3-400 - 4 Pole	ST980660000	2790	Set of 8
DN3-630 - 4 Pole	CM920040000	3275	Set of 8
DN4-800 - 4 Pole	ST903620000	5405	Set of 8
DN4-1000 - 4 Pole	CM900640OVO	14300	Set of 8
DN4-1250 - 4 Pole	ST980580000	19845	Set of 8
Mechanical Interlock Kit - Base Mounted			
DN2-250	CM997310000	3685	1
DN3-400	CM997320000	5715	1
DN3-630	CM998540000	5715	1

Note: Phase Barriers are supplied along with MCCBs

AuXC - 1000 - The Auto Source Transfer Solution from L&T



AuXC-1000 & AuXC-1000L

Technology that Spells Reliability

AuXC - 1000 & AuXC - 1000L from L&T. It shows you the difference that Auto Source Transfer controller can make.

L&T's ASTS Controller works on a more advanced level of technology compared to conventional changeover systems. And what makes it different makes it better. You get a greater level of reliability, and the assurance that critical changeovers work each time, every time.

Make AuXC - 1000 the nodal point for changeover using L&T's ACBs, MCCBs, Changeover switches and Contactors...and experience the reliability L&T can give.

Customer Interaction Centre (CIC)

BSNL / MTNL (Toll free): 1800 233 5858

Reliance (Toll free): 1800 200 5858

Tel: +91 22 6774 5858 Fax: +91 22 6774 5859

E-mail: cic@Lntebg.com

C-POWER S1 Range of Air Circuit Breakers

- Conforms to IS/IEC 60947-2 & IEC 60947-2
- Current rating from 630A 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 (SR18, SR18G & SR21i)
- Self diagnostic Microprocessor based Releases with on-load testing through TEST button
- Inbuilt thermal memory
- Protection Releases conform to EMI/EMC standards
- Breaker control through MODBUS protocol



C-POWER S1 ACB

C-POWER Range of Air Circuit Breakers



C-POWER ACB

- 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 (SR18, SR18G, SR21i & 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 control through MODBUS protocol

Breaking Capacities offered:

I _{cu} = I _{cs} = I _{cw} for 1 sec											
	630A	800A	1000A	1250A	1600A	2000A	2500A	3200A	4000A	5000A	6300A
CN-CS : E	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		70kA	95kA	95kA
CN-CS : H		65kA	65kA	65kA	65kA	75kA	75kA				
CN-CS : H0								75kA	75kA		
CN-CS : H/H1								100kA	100kA		
	Frame-1				Frame-2		Frame-3		Frame-4		

For technical & dimension details please refer product catalogue.

C-POWER Air Circuit Breakers



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

Rating	Breaking Capacity I _{cu} =I _{cs} =I _{cw} (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

Microprocessor Based SR18G			
3 Pole		4 Pole	
Cat. No.	M.R.P. (₹) Per Unit	Cat. No.	M.R.P. (₹) Per Unit
SL96041	135440	SL96061	170870
SL96051	168440	SL96071	203870
SL96042	135440	SL96062	170870
SL96052	168440	SL96072	203870
SL96043	141960	SL96063	181090
SL96053	174960	SL96073	214090
SL96044	158750	SL96064	204410
SL96054	191750	SL96074	237410
SL96045	179140	SL96065	224820
SL96055	212140	SL96075	257820
SL96046	215230	SL96066	269950
SL96056	248230	SL96076	302950

Thermal-Magnetic DN1			
3 Pole		4 Pole	
Cat. No.	M.R.P. (₹) Per Unit	Cat. No.	M.R.P. (₹) Per Unit
SL95331	121440	SL95351	156870
SL95341	154440	SL95361	189870
SL95332	121440	SL95352	156870
SL95342	154440	SL95362	189870
SL95333	127960	SL95353	167090
SL95343	160960	SL95363	200090
SL95334	144750	SL95354	190410
SL95344	177750	SL95364	223410
SL95335	165140	SL95355	210820
SL95345	198140	SL95365	243820
SL95336	201230	SL95356	255950
SL95346	234230	SL95366	288950

C-POWER S1 3 & 4 Pole Fixed ACBs

Rating	Breaking Capacity I _{cu} =I _{cs} =I _{cw} (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	96820	SL95581	121030
SL95571	129820	SL95591	154030
SL95562	96820	SL95582	121030
SL95572	129820	SL95592	154030
SL95563	100920	SL95583	126150
SL95573	133920	SL95593	159150
SL95564	121740	SL95584	152180
SL95574	154740	SL95594	185180
SL95565	133780	SL95585	167230
SL95575	166780	SL95595	200230

Thermal-Magnetic DN1			
3 Pole		4 Pole	
Cat. No.	M.R.P. (₹) Per Unit	Cat. No.	M.R.P. (₹) Per Unit
SL95481	82820	SL95501	107030
SL95491	115820	SL95511	140030
SL95482	82820	SL95502	107030
SL95492	115820	SL95512	140030
SL95483	86920	SL95503	112150
SL95493	119920	SL95513	145150
SL95484	107740	SL95504	138180
SL95494	140740	SL95514	171180
SL95485	119780	SL95505	153230
SL95495	152780	SL95515	186230

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	23000
Microprocessor based SR18 (LSI)	Reduce	3000
Microprocessor based SR21i (LSIG + ZSI)	Add	14000

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

Thermal-Magnetic Release Type DN1				
Rating	Breaking Capacity I _{cu} =I _{cs} =I _{cw} (1 sec)	Version	Cat. No.	M.R.P. (₹) Per Unit
400A	50kA	3P MF	SL932910000	58580
630A	50kA	3P MF	SL932920000	59100
800A	50kA	3P MF	SL932930000	60830
1000A	50kA	3P MF	SL932940000	62970
1250A	50kA	3P MF	SL932950000	81720
1600A	50kA	3P MF	SL932960000	91020
2000A	50kA	3P MF	SL932970000	103450

C-POWER Air Circuit Breakers



C-POWER 3 & 4 Pole Draw-out ACBs

Rating	Breaking Capacity I _{cu} =I _{cs} =I _{cw} (1 sec)	Version
800A	65kA	MDO
		EDO
1000A	65kA	MDO
		EDO
1250A	65kA	MDO
		EDO
1600A	65kA	MDO
		EDO
2000A	55kA	MDO
		EDO
2500A	60kA	MDO
		EDO
3200A	75kA	MDO (H0)
		EDO (H0)
4000A	70kA	MDO (C)
		EDO (C)
	75kA	MDO (H0)
		EDO (H0)
5000A	95kA	MDO/EDO
6300A	95kA	MDO/EDO

Microprocessor Based SR18G			
3 Pole		4 Pole	
Cat. No.	M.R.P. (₹) Per Unit	Cat. No.	M.R.P. (₹) Per Unit
SL95311	177470	#	226500
SL95321	210470	#	259500
SL95312	191800	#	240480
SL95322	224800	#	273480
SL95313	216730	#	263390
SL95323	249730	#	296390
SL95314	235700	#	295000
SL95324	268700	#	328000
ST35545	246760	ST35565	307410
ST35555	279760	ST35575	340410
ST35546	273230	ST35566	339510
ST35556	306230	ST35576	372510
ST35547	339280	ST35567	416010
ST35557	372280	ST35577	449010
#	*	#	*
#	*	#	*
ST35548	*	ST35568	*
ST35558	*	ST35578	*
#	*	#	*
#	*	#	*

Thermal-Magnetic DN1			
3 Pole		4 Pole	
Cat. No.	M.R.P. (₹) Per Unit	Cat. No.	M.R.P. (₹) Per Unit
#	163470	#	212500
#	196470	#	245500
#	177800	#	226480
#	210800	#	259480
#	202730	#	249390
#	235730	#	282390
#	221700	#	281000
#	254700	#	314000
SL93065	232760	ST25035	293410
#	265760	#	326410
SL93066	259230	ST25036	325510
#	292230	#	358510
SL93459	325280	SL93479	402010
#	358280	#	435010
#	*	#	*
#	*	#	*
#	*	#	*
SL93460	*	SL93480	*
#	*	#	*
#	*	#	*
#	*	#	*

Note: For higher breaking capacities & 690V AC application please contact the nearest branch office

C-POWER 3 & 4 Pole Manual Fixed ACBs

Rating	Breaking Capacity I _{cu} =I _{cs} =I _{cw} (1 sec)	Version
800A	50kA	MF
1000A	50kA	
1250A	50kA	
1600A	50kA	
2000A	55kA	
2500A	60kA	
3200A	70kA	
4000A	70kA	

Microprocessor Based SR18G			
3 Pole		4 Pole	
Cat. No.	M.R.P. (₹) Per Unit	Cat. No.	M.R.P. (₹) Per Unit
On Request			
SL97635	160420	#	208090
SL97636	176770	#	238300
#	*	#	*
#	*	#	*

Thermal-Magnetic DN1			
3 Pole		4 Pole	
Cat. No.	M.R.P. (₹) Per Unit	Cat. No.	M.R.P. (₹) Per Unit
On Request			
SL93005	146420	#	194090
SL93006	162770	#	224300
#	*	#	*
#	*	#	*

Note: For higher breaking capacities & 690V AC application please contact the nearest branch office

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	23000
Microprocessor based SR18 (LSI)	Reduce	3000
Microprocessor based SR21i (LSIG + ZSI)	Add	14000
Microprocessor based SR71 (LSIGN + Current metering + Advance protection + PS Module)	Add	On Request
Communication Module (MODBUS) for SR71 release (SR71 - COM)	SL94698	
Power Metering Module for SR71 release (SR71 - PM)	SL94699	

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.

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.

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)		
Type AA	SL93148000A	2300
Type BB	SL93148000B	2300
Type CC	SL93148000C	2300
Type DD	SL93148000D	2300
Lockable Trip Push Button kit (3 I/C & 2 B/C)	SL919360000	11530
Lockable Trip Push Button kit (A to Z)	ST288950000	59910
Lockable Trip Push Button kit (A to P)	ST287300000	36870
Locking of ACB in Isolated position (LIP)		
Type A	SL93146000A	2300
Type B	SL93146000B	2300
Type C	SL93146000C	2300
Type D	SL93146000D	2300
Locking of ACB in Any position (LAP)		
Type A	SL93147000A	2300
Type B	SL93147000B	2300
Type C	SL93147000C	2300
Type D	SL93147000D	2300
Racking Interlock		
Type AA	SL93149000A	4330
Type BB	SL93149000B	4330
Type CC	SL93149000C	4330
Type DD	SL93149000D	4330
Door Interlock	SL931500000	2300



Vertical Terminal Adaptor

Description & Rating	Cat. No.	Qty	M.R.P. (₹) Per Unit
Vertical Terminal Adaptors for Draw out C-POWER ACB			
630-1250 S1/800-1000 C	SL932810000	1	3010
1600-2000 S1/1250-1600 C	SL932820000	1	3520
2000 C	SL932840000	1	4820
2500 C	SL932850000	1	5230
3200H0/H1, 4000H0/H	SL932880000	1	14060

Description	Cat. No.	M.R.P. (₹) Per Unit
Shunt Release (SR)		
Type EA : 24/48V DC	SL927180400	2300
Type EA : 110V DC	SL927180100	2300
Type EA : 220V DC	SL927180200	2300
Type EA1 : 110V AC	SL927180A00	2300
Type EA1 : 240V AC	SL927180B00	2300
Type EA1 : 415V AC	SL927180D00	2300
Under Voltage Release (UVR)		
Type MV : 24V DC	ST368770000	3380
Type MV : 240V AC	SL92720B000	3380
Type MV : 415V AC	SL92720D000	3380
Earth Fault Release (for DN1)		
Type EF1 (10%, 20% In)	SL913400000	2300
Type EF2 (30%, 40%, 50% In)	SL913410000	2300

AN1 Remote Annunciation Module for SR18/SR18G/SR21i : 240V AC	SL946540000	7180
Microswitch for Voltmetric Releases (2) each	SL927030000	1860
Microswitch for Common Indication of O/L & S/C (3) each	SL927040000	1860
Microswitch for Separate Indication of O/L & S/C (3) each (for DN1 release)	SL927050000	3110
Service Position Microswitch - Right (2)	SL931420000	1250
Service Position Microswitch - Left (2)	SL931430000	1250
Test or Isolated Position Microswitch - Right (2)	SL931440000	1250
Test or Isolated Position Microswitch - Left (2)	SL931450000	1250

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

Features

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

Description	Cat. No.	Qty	M.R.P. (₹) Per Unit
UN-CO module for Breaker control	CL908520000	1	9000

Protection Releases



SR71



SR21i



SR18G



SR18



DN1



Test Kit

Description	Cat. No.	M.R.P. (₹) Per Unit
Protection Releases		
Microprocessor based Type SR71	Available on Request	
Microprocessor based Type SR21i	SL939600000	44000
Microprocessor based Type SR18G	SL939590000	30000
Microprocessor based Type SR18	SL939580000	27000
Thermal-Magnetic Release Type DN1	SL931520000	16000
Test-Kit SRT-2 (SR21i/SR18G/SR18)	ST231300000	31300

Upgrade to high end communicable Release SR71
Retrofit kit solutions are available
For further details please contact the nearest branch office

For retrofitting of any ACB to U-POWER
OMEGA
Please contact the nearest branch office

Description	Cat. No.	Qty.	M.R.P. (₹) Per Unit
CTs for SR18/SR18G/SR21i			
630 S1 Fix & Draw-out	ST374950000	1	3920
800 C/H/S1 Fix & Draw-out	SL018570000	1	3920
1000 C/H/S1 Fix & Draw-out	SL018580000	1	3920
1250 C/H/S1 Fix & Draw-out	SL905710000	1	4760
1600 C/H/S1 Fix & Draw-out	SL905720000	1	4760
2000 C/H Fix & Draw-out	SL905650000	1	5100
2000 S1 Draw-out	SL932100000	1	5100
2500 C/H Fix & Draw-out	SL905660000	1	5100
2500 S1 Draw-out			
3200 D Fix & Draw-out	SL905670000	1	6170
3200 S1 Draw-out	SL905750000	1	6170
3200 H0/H1	SL017400000	1	6170
4000 C	SL905680000	1	6980
4000 H0/H	SL017390000	1	6980

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



U-POWER Range of Air Circuit Breakers

OMEGA

- Complete range conforms to IS/IEC 60947-2 & IEC 60947-2
- Current rating from 400A to 6300A in 3 frames 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 both NRYB & RYBN configuration in 4 Pole ACBs
- In-built Electrical & Mechanical Anti-Pumping
- Modular & snap-fit accessories
- Ease of on-site conversion from Fixed to Draw-out version

Matrix Protection & Control units:

- Available in 8 versions - MTX1.0/1G/1.5G, MTX2.5/2.5G, MTX3.5/3.5EC & MTX4.5
- Unique O-LED display for metering
- Touch screen technology in UW-MTX4.5
- Unique with-drawable 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
- 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 protection
- Protection Releases conform to EMI/EMC standard



UW-MTX1.0



UW-MTX1G



UW-MTX1.5G



UW-MTX2.5/2.5G



UW-MTX3.5/3.5EC



UW-MTX4.5

Breaking Capacities offered:

		I _{cu} = I _{cs} = I _{cw} for 1 sec									
		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	S : 65kA										
	H : 80kA										
		UW2-08	UW2-10	UW2-12	UW2-16	UW2-20	UW2-25	UW2-32			
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.

U-POWER OMEGA ACB ordering information:

UW 1 08 N X D 1 2 9 0 0											OMEGA 800A Fr-1 50kA 3P EDO UW-MTX1.5G																																																																														
Frame Size <table><tr><td>Frame - I</td><td>1</td></tr><tr><td>Frame - II</td><td>2</td></tr><tr><td>Frame - III</td><td>3</td></tr></table>		Frame - I	1	Frame - II	2	Frame - III	3	Current Ratings <table><tr><td>400A</td><td>04</td></tr><tr><td>630A</td><td>06</td></tr><tr><td>800A</td><td>08</td></tr><tr><td>1000A</td><td>10</td></tr><tr><td>1250A</td><td>12</td></tr><tr><td>1600A</td><td>16</td></tr><tr><td>2000A</td><td>20</td></tr><tr><td>2500A⁽⁴⁾</td><td>25</td></tr><tr><td>3200A</td><td>32</td></tr><tr><td>4000A</td><td>40</td></tr><tr><td>5000A</td><td>50</td></tr><tr><td>6300A</td><td>63</td></tr></table>		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	Temperature Rise Monitoring⁽³⁾ <table><tr><td>Not Required</td><td>0</td></tr><tr><td>Required</td><td>1</td></tr></table>		Not Required	0	Required	1	Selection for P&C Units <table><tr><td>B/C (w/o protection)</td><td>0</td></tr><tr><td>UW - MTX1.0</td><td>7</td></tr><tr><td>UW - MTX1G</td><td>8</td></tr><tr><td>UW - MTX1.5G</td><td>9</td></tr><tr><td>UW - MTX2.5</td><td>1</td></tr><tr><td>UW -MTX2.5G</td><td>2</td></tr><tr><td>UW-MTX3.5</td><td>3</td></tr><tr><td>UW-MTX3.5EC</td><td>4</td></tr><tr><td>UW-MTX4.5</td><td>5</td></tr></table>		B/C (w/o protection)	0	UW - MTX1.0	7	UW - MTX1G	8	UW - MTX1.5G	9	UW - MTX2.5	1	UW -MTX2.5G	2	UW-MTX3.5	3	UW-MTX3.5EC	4	UW-MTX4.5	5	Type <table><tr><td>Manually Operated</td><td>1</td></tr><tr><td>Electrically Operated</td><td>2</td></tr></table>		Manually Operated	1	Electrically Operated	2	Selection for control voltage⁽²⁾ <table><tr><td>For Manually Operated</td><td>0</td></tr><tr><td>240V AC ECD & CR & 240V AC SR</td><td>1</td></tr><tr><td>240V AC ECD & CR & 24V DC SR</td><td>2</td></tr></table>		For Manually Operated	0	240V AC ECD & CR & 240V AC SR	1	240V AC ECD & CR & 24V DC SR	2	Version <table><tr><td>Draw-out</td><td>D</td></tr><tr><td>Fixed</td><td>F</td></tr></table>		Draw-out	D	Fixed	F	Selection for No. of Poles <table><tr><td>3 Pole</td><td>X</td></tr><tr><td>4 Pole 100% N</td><td>F</td></tr><tr><td>4 Pole 50% N (in Fr-III only)</td><td>H</td></tr><tr><td>4 Pole 200% N (upto 2500A)</td><td>D</td></tr></table>		3 Pole	X	4 Pole 100% N	F	4 Pole 50% N (in Fr-III only)	H	4 Pole 200% N (upto 2500A)	D
		Frame - I	1																																																																																						
		Frame - II	2																																																																																						
Frame - III	3																																																																																								
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																																																																																								
Not Required	0																																																																																								
Required	1																																																																																								
B/C (w/o protection)	0																																																																																								
UW - MTX1.0	7																																																																																								
UW - MTX1G	8																																																																																								
UW - MTX1.5G	9																																																																																								
UW - MTX2.5	1																																																																																								
UW -MTX2.5G	2																																																																																								
UW-MTX3.5	3																																																																																								
UW-MTX3.5EC	4																																																																																								
UW-MTX4.5	5																																																																																								
Manually Operated	1																																																																																								
Electrically Operated	2																																																																																								
For Manually Operated	0																																																																																								
240V AC ECD & CR & 240V AC SR	1																																																																																								
240V AC ECD & CR & 24V DC SR	2																																																																																								
Draw-out	D																																																																																								
Fixed	F																																																																																								
3 Pole	X																																																																																								
4 Pole 100% N	F																																																																																								
4 Pole 50% N (in Fr-III only)	H																																																																																								
4 Pole 200% N (upto 2500A)	D																																																																																								
Selection for Breaking Capacity (Icu=Ics)⁽¹⁾ <table><tr><td>50kA (Fr-I upto 1600A)</td><td>N</td></tr><tr><td>65kA (Fr-I & Fr-II)</td><td>S</td></tr><tr><td>80kA (Fr-I, Fr-II & Fr-III)</td><td>H</td></tr><tr><td>100kA (Fr-III)</td><td>V</td></tr></table>		50kA (Fr-I upto 1600A)	N	65kA (Fr-I & Fr-II)	S	80kA (Fr-I, Fr-II & Fr-III)	H	100kA (Fr-III)	V																																																																																
		50kA (Fr-I upto 1600A)	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/4.5
⁽⁴⁾ For Fr-1, 2500A selection, please contact the nearest branch office

U-POWER OMEGA ACBs are offered with following standard features :

Draw-out version :	U-POWER Omega ACBs with UW-MTX release will have inbuilt- Current Metering (MTX 1.5G/2.5/2.5G/3.5/3.5EC/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 (with frame 1N, 2S & 3H version) A) For ratings upto 1600A, one side vertical terminal adaptors (Bottom). B) For ratings 2000A & above, both side vertical terminal adaptors (Top & Bottom).
Fixed Version :	U-POWER Omega ACBs with UW-MTX release will have inbuilt- Current Metering (MTX 1.5G/2.5/2.5G/3.5/3.5EC/4.5), Common Fault Indication microswitch, 4NO+4NC Aux. contacts, Door sealing frame & Pad-locking arrangement for ON/OFF button.
Electrically operated ACB includes ECD (240V AC), CR (240V AC) & SR (240V AC or 24V DC).	

3 Pole ACBs with UW-MTX1.5G (LSING + Current Metering)



Current Rating	Version	3 Pole Manual Draw-out ACB with UW-MTX1.5G							
		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	UW108NXD01900	On Request	UW108SXD01900	On Request	UW108HXD01900	On Request	UW308VXD01900	On Request
1000A		UW110NXD01900		UW110SXD01900		UW110HXD01900		UW310VXD01900	
1250A		UW112NXD01900		UW112SXD01900		UW112HXD01900		UW312VXD01900	
1600A		UW116NXD01900		UW116SXD01900		UW116HXD01900		UW316VXD01900	
2000A		-	-	UW120SXD01900	On Request	UW120HXD01900	On Request	UW320VXD01900	On Request
2500A		-	-	UW225SXD01900		UW225HXD01900		UW325VXD01900	
3200A		-	-	UW232SXD01900		UW232HXD01900		UW332VXD01900	
4000A		-	-	-		UW340HXD01900		UW340VXD01900	
5000A		-	-	-		UW350HXD01900		UW350VXD01900	
6300A		-	-	-		UW363HXD01900		UW363VXD01900	

Current Rating	Version	3 Pole Manual Fixed ACB with UW-MTX1.5G							
		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	UW108NXF01900	On Request	UW108SXF01900	On Request	UW108HXF01900	On Request	UW308VXF01900	On Request
1000A		UW110NXF01900		UW110SXF01900		UW110HXF01900		UW310VXF01900	
1250A		UW112NXF01900		UW112SXF01900		UW112HXF01900		UW312VXF01900	
1600A		UW116NXF01900		UW116SXF01900		UW116HXF01900		UW316VXF01900	
2000A		-	-	UW120SXF01900	On Request	UW120HXF01900	On Request	UW320VXF01900	On Request
2500A		-	-	UW225SXF01900		UW225HXF01900		UW325VXF01900	
3200A		-	-	UW232SXF01900		UW232HXF01900		UW332VXF01900	
4000A		-	-	-		UW340HXF01900		UW340VXF01900	
5000A		-	-	-		UW350HXF01900		UW350VXF01900	
6300A		-	-	-		UW363HXF01900		UW363VXF01900	

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)	On Request
Protection & Control Unit change with respect to UW-MTX1.5G ACB M.R.P.	
Buscoupler (without protection release)	On Request
UW - MTX1.0 (LSI - BCD Switches)	
UW - MTX1G (LSING - BCD Switches)	
UW-MTX3.5 (LSING + Current Metering) - can be upgraded for Power Metering & Communication	
UW-MTX3.5EC (LSING + Power Metering + Communication)	
UW-MTX4.5 (LSING + Power 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	

4 Pole ACBs with UW-MTX1.5G (LSING + Current Metering)



Current Rating	Version	4 Pole Manual Draw-out ACB with UW-MTX1.5G							
		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	UW108NFD01900	On Request	UW108SFD01900	On Request	UW108HFD01900	On Request	UW308VFD01900	On Request
1000A		UW110NFD01900		UW110SFD01900		UW110HFD01900		UW310VFD01900	
1250A		UW112NFD01900		UW112SFD01900		UW112HFD01900		UW312VFD01900	
1600A		UW116NFD01900		UW116SFD01900		UW116HFD01900		UW316VFD01900	
2000A		-	-	UW120SFD01900	On Request	UW120HFD01900	On Request	UW320VFD01900	On Request
2500A		-	-	UW225SFD01900		UW225HFD01900		UW325VFD01900	
3200A		-	-	UW232SFD01900		UW232HFD01900		UW332VFD01900	
4000A		-	-	-		UW340HFD01900		UW340VFD01900	
5000A		-	-	-		UW350HFD01900		UW350VFD01900	
6300A		-	-	-		UW363HFD01900		UW363VFD01900	

Current Rating	Version	4 Pole Manual Fixed ACB with UW-MTX1.5G							
		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	UW108NFF01900	On Request	UW108SFF01900	On Request	UW108HFF01900	On Request	UW308VFF01900	On Request
1000A		UW110NFF01900		UW110SFF01900		UW110HFF01900		UW310VFF01900	
1250A		UW112NFF01900		UW112SFF01900		UW112HFF01900		UW312VFF01900	
1600A		UW116NFF01900		UW116SFF01900		UW116HFF01900		UW316VFF01900	
2000A		-	-	UW120SFF01900	On Request	UW120HFF01900	On Request	UW320VFF01900	On Request
2500A		-	-	UW225SFF01900		UW225HFF01900		UW325VFF01900	
3200A		-	-	UW232SFF01900		UW232HFF01900		UW332VFF01900	
4000A		-	-	-		UW340HFF01900		UW340VFF01900	
5000A		-	-	-		UW350HFF01900		UW350VFF01900	
6300A		-	-	-		UW363HFF01900		UW363VFF01900	

Auto Source Transfer Controller

POWERMAN		
System for :		
- Complete monitoring of Power & Energy Parameters - Breaker Control		
Cat. No.	Description	M.R.P. (₹) Per Unit
BPV304ARH	Add on Powerman for 04 RS485 Meters/ACB/MCCB	28130
BPV308ARH	Add on Powerman for 08 RS485 Meters/ACB/MCCB	56260
BPV312ARH	Add on Powerman for 12 RS485 Meters/ACB/MCCB	84400
BPV316ARH	Add on Powerman for 16 RS485 Meters/ACB/MCCB	112530

The application price is valid only for L&T devices
For others please contact nearest branch office.
The application cost starts with minimum 24 devices, Cat. No. need to be considered accordingly.
Integration cost and local product cost are not considered in above prices.

Type	Cat. No.	M.R.P. (₹) Per Unit	Std. Pkg. (Nos.)
New AuXC-1000L	ST800240000	39790	1
AuXC-1000	ST802300000	47950	1

Can be used along with U-POWER Omega ACBs, MCCBs, & MCX contactors



UN-CO module

Features

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

Description	Cat. No.	Qty	M.R.P. (₹) Per Unit
UN-CO module for Breaker control	CL908520000	1	9000

Accessories of U-POWER Air Circuit Breakers

OMEGA



Operation Counter



Door Interlock

Description	Cat. No.	M.R.P. (₹) Per Unit
Operation Counter	CL909830000	On Request
Door Interlock	CL909780000	
Electrical Position Indication (EPI)	CL958260000	
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	



R-Lock



C-Lock

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

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



Closing Release



Shunt Release



UV Release

Description	Cat. No.	M.R.P. (₹) Per Unit
Electrical Charging Device (ECD)		
24-30V DC	CL903620000	On Request
110V AC / 110-125V DC	CL903600000	
220V AC / 200V DC	CL903640000	
240V AC / 250V DC	CL903590000	
415V AC / 400V DC	CL903610000	
Closing Release (CR)		
24-30V DC	CL908174000	On Request
110V AC & DC	CL90817A000	
240V AC / 220 - 250V DC	CL90817B000	
415V AC	CL90817D000	
Shunt Release (SR)		
24-30V DC	CL908160400	On Request
110V AC / 110V DC	CL908160A00	
240V AC / 220 - 250V DC	CL908160B00	
415V AC	CL908160D00	
Under Voltage Release (UVR) with time delay (0-1-3-5 sec)		
24-30V DC	CL908184000	On Request
110V AC	CL90818A000	
240V AC (DG application)	ST427450000	
240V AC	CL90818B000	
415V AC	CL90818D000	



NCT

Description	Cat. No.	M.R.P. (₹) Per Unit
External Neutral CT for UW-MTX Releases		
Frame-1, 2 & 3 400-800A	CL007170000	On Request
Frame-1, 2 & 3 1000-1600A	CL007180000	
Frame-1 2000-2500A	CL007190000	
Frame-2 & 3 2000-3200A	CL007200000	
Frame-3 4000A		
Frame-3 5000-6300A	CL007210000	

Accessories of U-POWER Air Circuit Breakers

OMEGA



Draw-out ACBs Terminal Adaptors

Description	Cat. No.	M.R.P. (₹) Per Unit
Terminal Adaptors for Draw-out Omega ACBs		
Frame-1 400-2000A (Vertical / Horizontal)	CL609630000	On Request
Frame-1 2500A (Vertical)	CL609640000	
Frame-2 400-3200A (Vertical / Horizontal)		
Frame-3 400-4000A (Vertical / Horizontal) #	CL907470000	
Frame-3 5000A (Vertical) #	CL907480000	
Frame-3 6300A (Vertical) #	CL609650000	

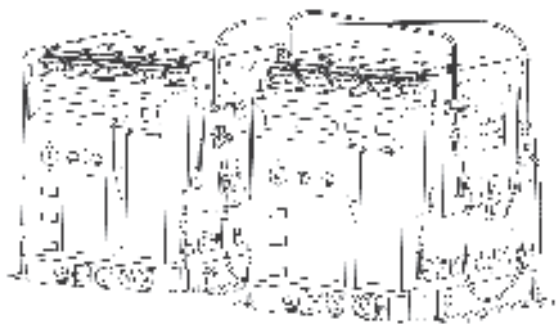
: Please consider 4 terminal adaptors per phase (I/C + O/G)



Fix ACBs Terminal Adaptors

Description	Cat. No.	M.R.P. (₹) Per Unit
Terminal Adaptors for Fixed Omega ACBs		
Frame-1 400-1600A N/S (Vertical / Horizontal)	CL609670000	On Request
Frame-1 400-2000A H & 2000A S (Vertical/Horizontal)	CL609680000	
Frame-1 2500A S/H (Vertical)	CL609760000	
Frame-2 400-3200A S/H (Vertical / Horizontal)	CL609770000	
Frame-3 400-4000A H/V (Vertical / Horizontal) #	CL906680000	
Frame-3 5000A H/V (Vertical) #	CL609820000	
Frame-3 6300A H/V (Vertical) #	CL906690000	

: Please consider 4 terminal adaptors per phase (I/C + O/G)



Mechanical Interlock using Bowden Cable

Description	Cat. No.	M.R.P. (₹) Per Unit
Mechanical Interlock using Bowden Cable (3 meters length)		
Between 2 Incomers	CL906590000	On Request
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	On Request
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



MODBUS Module

Power Metering Module

Description	Cat. No.	M.R.P. (₹) Per Unit
Matrix Releases & Modules		
UW-MTX1.0	CL919660000	On Request
UW-MTX1G	CL919710000	
UW-MTX1.5G	CL919650000	
UW-MTX2.5	CL901120000	
UW-MTX2.5G	CL906100000	
UW-MTX3.5	CL901130000	
UW-MTX3.5EC	CL907000000	
UW-MTX4.5	CL906110000	
Power supply module (UW-PS)	CL907220000	
Relay Module	CL907160000	
MODBUS Module	CL907090000	
Profibus Module	CL907320000	
Power Metering Module	CL907040000	
ZSI Module (UW-ZSI)	CL907180000	
TCS module (UW-TCS)	CL907190000	
Simulation Kit	CL907240000	

Reactive Power Management Solutions



PF Compensation:

- Standard Duty Capacitors
- Heavy Duty Capacitors
- Ultra Heavy Duty Capacitors

Harmonic Mitigation:

- Detuned Reactors
5.67%, 7% and 14%

Capacitor Switching:

- MO C Capacitor Duty Contactors
- Thyristor Switching Module

Control:

- *eta*CON - APFC Controller

Branch Protection:

- MCCB
- MCB
- Fuse

Solutions:

- *eta*SYS - APFC Panels
- Harmonic Mitigation Solutions

Reactive Power Management Solutions

Power Factor Correction Capacitors

Standard Duty Capacitors



- MPP standard duty capacitors
- Operating losses - 0.45 W / kVAR
- Over current withstand capability - 1.5 times rated current
- Inrush current withstand capability - 200 times rated current
- Number of switching - 5000 operations per year

Duty	Type	kVAR Rating	Voltage (V)	M.R.P. (₹) per kVAR
Standard Duty	Cylindrical	1 to 25	440 V	186
	Box	1 to 50	440 V	254

Heavy Duty Capacitors



- MPP heavy duty capacitors
- Operating losses - 0.35 W / kVAR
- Over current withstand capability - 1.8 times rated current
- Inrush current withstand capability - 300 times rated current
- Operating life - 130000 hours
- Number of switching - 8000 operations per year

Duty	Type	kVAR Rating	Voltage (V)	M.R.P. (₹) per kVAR
Heavy Duty	Cylindrical (Gas filled)	3 to 15	440 V	331
			480 V	364
			525 V	397
			690 V	413
		20 & 25	440 V	323
			480 V	355
		20 to 30	525 V	388
			690 V	404
	Box (Resin filled)	5 to 15	440 V	406
			480 V	447
			525 V	487
		20 to 50	440 V	397
			480 V	437
			525 V	476

LTXL - Ultra Heavy Duty Capacitors



- Advance APP technology
- Lower operating losses - 0.35 W / kVAR
- High over current withstand capability - 3 times rated current
- High inrush current withstand capability - 500 times rated current
- Higher operating life - 300000 hours
- More number of switching - 20000 operations per year

Duty	Type	kVAR Rating	Voltage (V)	M.R.P. (₹) per kVAR
LTXL - Ultra Heavy Duty	Box	5 to 15	440 V	652
			480 V	717
			525 V	782
			690 V	815
		20 to 100	440 V	640
			480 V	704
			525 V	768
			690 V	800

Prices of 850 V and 1000 V LTXL capacitors are available on request

7% Detuned Copper Reactors, 440 V 50 Hz



- Copper wound reactors
- Lower operating losses
- High linearity - 1.8 times the rated current
- Thermal cut off

kVAR Rating	Cat. No.	M.R.P. (₹) Per Unit
5	LTFR0705B2	7390
10	LTFR0710B2	11615
12.5	LTFR0712B2	12875
15	LTFR0715B2	14255
20	LTFR0720B2	16890
25	LTFR0725B2	17950
50	LTFR0750B2	28505
75	LTFR0775B2	42230
100	LTFR0700B2	58065

Note: Prices of 5.67% & 14% reactors are available on request

Selection of capacitors for detuned harmonic filter application

Capacitor kVAR selection is done considering the tuning frequency of 189 Hz with 7% reactor and based on standard ratings available.

Effective kVAR output	With 7% detuned reactor		
	Reactor (440 V)	Capacitor (480 V)	Capacitor (525 V)
5 kVAR	5 kVAR	7.5 kVAR 480 V	7.5 kVAR 525 V
10 kVAR	10 kVAR	12.5 kVAR 480 V	12.5 kVAR 525 V
12.5 kVAR	12.5 kVAR	15 kVAR 480 V	15 kVAR 525 V
15 kVAR	15 kVAR	20 kVAR 480 V	20 kVAR 525 V
20 kVAR	20 kVAR	25 kVAR 480 V	25 kVAR 525 V
25 kVAR	25 kVAR	30 kVAR 480 V	25 kVAR 525 V + 8.33kVAR 525 V
50 kVAR	50 kVAR	2 nos of 30 kVAR 480 V	2 nos of 25 kVAR 525 V + 8.33kVAR 525 V
75 kVAR	75 kVAR	3 nos of 30 kVAR 480 V	3 nos of 25 kVAR 525 V + 8.33kVAR 525 V
100 kVAR	100 kVAR	4 nos of 30 kVAR 480 V	4 nos of 25 kVAR 525 V + 8.33kVAR 525 V

Selection for 5.67% and 14% reactors available on request.

Sample Selection: for 25kVAR 7% detuned reactors with heavy duty capacitors, place an order for: 1 No. 25 kVAR 7% detuned reactor: LTFR0725B2 & 1 No. 30 kVAR LTCCN capacitors at 480 V: LTCCN330C2

Ordering Information for Capacitors

Ordering
Information
for Capacitors

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

Standard Rating Available are : 1, 2, 3, 4, 5, 6, 7.5, 8.33, 10, 12.5, 15, 20, 25, 30, 50, 100

Reactive Power Management Solutions

Thyristor Switching Module, 440V 50Hz



- High Peak Inverse Voltage (PIV) - 2.2 kV
- Lower operating losses
- Auto thermal cut off

kVAR Rating	Cat. No.	M.R.P. (₹) Per Unit
10	LTTSM10B2	19760
25	LTTSM25B2	28190
50	LTTSM50B2	32900

Capacitor Duty Contactors - Type MO C



MO C25

MO C50

MO C80

kVAR Rating @ 415V, 3Ph, 50Hz	Type	Built-in Auxiliary Contacts	Cat. No.	M.R.P. (₹) Per Unit	Std. Pkg. (Nos.)
8.5	MO C8.5	1NO	CS96320	1740	1
		1NC	CS96337	1740	1
12.5	MO C12.5	1NO	CS96321	1955	1
		1NC	CS96338	1955	1
15	MO C15	1NO	CS90019	2760	1
		1NC	CS90020	2760	1
20	MO C20	1NO	CS90021	3185	1
		1NC	CS90022	3185	1
25	MO C25	1NO	CS96322	3610	1
		1NC	CS96339	3610	1
33.5	MO C33.5	1NO	CS96323	6490	1
		1NC	CS96340	6490	1
50	MO C50	1NO	CS96324	9750	1
		1NC	CS96341	9750	1
70	MO C70	1NO	CS96325	11715	1
		1NC	CS96342	11715	1
80	MO C80	1NO	CS96326	12690	1
		1NC	CS96343	12690	1

Please refer page No. 5 for further details.

APFC Relays



New

Model	Description	CT secondary	Voltage input	Cat. No.	M.R.P. (₹) Per Unit
etaCON L3	3 stage APFC relay	5 Amp	415V	ERPML03D500	9000
etaCON L5	5 stage APFC relay	5 Amp	415V	ERPML05D500	10000
etaCON L7	7 stage APFC relay	5 Amp	415V	ERPML07D500	11000
etaCON L8	8 stage APFC relay	5 Amp	415V	ERPML08D500	13600
etaCON L12	12 stage APFC relay	5 Amp	415V	ERPML12D500	14800

Model	Description	CT secondary	Voltage input	Cat. No.	M.R.P. (₹) Per Unit
RPM 14	Fourteen Stage APFC Relay	1 A or 5 A - Field selectable	240V	MRPML1400000	16900

etaPRO v2.0 Multi Utility Software Package



etaPRO is an innovative, multi-utility and user friendly software package, related to Reactive Power Management. The users will get the benefit of easy and error free selection of products.

Salient Features :

- kVAR calculation
- Detuned harmonic filter selection
- APFC panel Bill of Materials generation
- Payback calculation
- Technical articles and presentations

Benefits :

- Easy selection of capacitors and reactors
- Error free switchgear ratings selection
- Time saving while preparing APFC quotations
- Optimum step size selection
- Automatic selection of capacitor-reactor combinations
- BoM can be exported to Microsoft Excel format

To download the software for free visit www.LNTEBG.COM/etaPRO

Reactive Power Management Solutions

etaSYS - STANDARD APFC PANELS

Product	kVAr Rating	Capacitors	Incomer	Branch Protection	Switching
etaSYS - MH	35 to 500 kVAr	Heavy Duty Gas filled capacitors	MCCB - up to 350 kVAr; ACB - 400 to 500 kVAr	MCCB	Auto + Manual
etaSYS - FH	35 to 500 kVAr	Heavy Duty Gas filled capacitors	MCCB - up to 350 kVAr; ACB - 400 to 500 kVAr	HRC Fuse	Auto + Manual
etaSYS - MU	100 to 500 kVAr	LTXL - Ultra Heavy Duty capacitors	MCCB - up to 350 kVAr; ACB - 400 to 500 kVAr	MCCB	Auto + Manual
etaSYS - FU	100 to 500 kVAr	LTXL - Ultra Heavy Duty capacitors	MCCB - up to 350 kVAr; ACB - 400 to 500 kVAr	HRC Fuse	Auto + Manual

etaSYS - MH1

Contactor switched standard APFC Panels

Panel Rating (kVAr)	Cat. No.	Step sizes (kVAr)	No. of Steps	M.R.P. (₹) Per Unit
35	LTAPMH0351B2	2x12.5 + 2x5	4	185000
50	LTAPMH0501B2	2 x 12.5 + 2x10 + 1x5	5	213700
75	LTAPMH0751B2	2 x 25 + 2x10 + 1x5	5	250400
100	LTAPMH1001B2	50 + 25 + 15 + 5 + 5	5	286900
125	LTAPMH1251B2	2 x 12.5 + 2 x 25 + 50	5	317000
150	LTAPMH1501B2	2 x 12.5 + 3 x 25 + 50	6	355800
175	LTAPMH1751B2	2 x 12.5 + 2 x 25 + 2 x 50	6	388000
200	LTAPMH2001B2	2 x 12.5 + 25 + 3 x 50	6	430400
225	LTAPMH2251B2	2 x 12.5 + 4 x 50	6	469800
250	LTAPMH2501B2	2 x 25 + 4 x 50	6	505800
275	LTAPMH2751B2	1x100 + 3x50 + 2x12.5	6	550700
300	LTAPMH3001B2	1x100 + 3x50 + 2x25	6	571700
350	LTAPMH3501B2	1x100 + 3x50 + 4x25	8	682500
400	LTAPMH4001B2	2x100 + 2x50 + 4x25	8	812500
450	LTAPMH4501B2	2x100 + 4x50 + 2x25	8	880000
500	LTAPMH5001B2	3x100 + 3x50 + 2x25	8	990900

etaSYS - MH2

Contactor Switched standard APFC panels with 7% detuned harmonics filter

Panel Rating (kVAr)	Cat. No.	Step sizes (kVAr)	No. of Steps	M.R.P. (₹) Per Unit
100	LTAPMH1002B2	50 + 25 + 15 + 5 + 5	5	405600
125	LTAPMH1252B2	2 x 12.5 + 2 x 25 + 50	5	459200
150	LTAPMH1502B2	2 x 12.5 + 3 x 25 + 50	6	519500
175	LTAPMH1752B2	2 x 12.5 + 2 x 25 + 2 x 50	6	564100
200	LTAPMH2002B2	2 x 12.5 + 1 x 25 + 3 x 50	6	631800
225	LTAPMH2252B2	2 x 12.5 + 4 x 50	6	638400
250	LTAPMH2502B2	2 x 25 + 4 x 50	6	726000
275	LTAPMH2752B2	1x100 + 3x50 + 2x12.5	6	801800
300	LTAPMH3002B2	1x100 + 3x50 + 2x25	6	842100
350	LTAPMH3502B2	1x100 + 3x50 + 4x25	8	1003400
400	LTAPMH4002B2	2x100 + 2x50 + 4x25	8	1153400
450	LTAPMH4502B2	2x100 + 4x50 + 2x25	8	1257600
500	LTAPMH5002B2	3x100 + 3x50 + 2x25	8	1403100

Features of etaSYS:

- IP 42 panels
- Standard GA drawing readily available
- Wide range of ratings (35 to 500 kVAr) covers the typical requirement of APFC panel ratings for most of the industries
- 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

Notes:

- Standard lead time of APFC panels is 6 to 8 weeks (Ex-Nagpur)
- Freight charges at actuals
- For other ratings and specifications, contact nearest branch office

etaSYS - FH1

Contactor switched standard APFC Panels

Panel Rating (kVAr)	Cat. No.	Step sizes (kVAr)	No. of Steps	M.R.P. (₹) Per Unit
35	LTAPFH0351B2	2x12.5 + 2x5	4	170100
50	LTAPFH0501B2	2 x 12.5 + 2x10 + 1x5	5	206700
75	LTAPFH0751B2	2 x 25 + 2x10 + 1x5	5	245500
100	LTAPFH1001B2	50 + 25 + 15 + 5 + 5	5	270700
125	LTAPFH1251B2	2 x 12.5 + 2 x 25 + 50	5	298400
150	LTAPFH1501B2	2 x 12.5 + 3 x 25 + 50	6	344300
175	LTAPFH1751B2	2 x 12.5 + 2 x 25 + 2 x 50	6	374500
200	LTAPFH2001B2	2 x 12.5 + 25 + 3 x 50	6	412800
225	LTAPFH2251B2	2 x 12.5 + 4 x 50	6	440900
250	LTAPFH2501B2	2 x 25 + 4 x 50	6	475800
275	LTAPFH2751B2	1x100 + 3x50 + 2x12.5	6	533700
300	LTAPFH3001B2	1x100 + 3x50 + 2x25	6	537000
350	LTAPFH3501B2	1x100 + 3x50 + 4x25	8	655600
400	LTAPFH4001B2	2x100 + 2x50 + 4x25	8	756900
450	LTAPFH4501B2	2x100 + 4x50 + 2x25	8	828800
500	LTAPFH5001B2	3x100 + 3x50 + 2x25	8	912100

etaSYS - FH2

Contactor Switched standard APFC panels with 7% detuned harmonics filter

Panel Rating (kVAr)	Cat. No.	Step sizes (kVAr)	No. of Steps	M.R.P. (₹) Per Unit
100	LTAPFH1002B2	50 + 25 + 15 + 5 + 5	5	396200
125	LTAPFH1252B2	2 x 12.5 + 2 x 25 + 50	5	445200
150	LTAPFH1502B2	2 x 12.5 + 3 x 25 + 50	6	526100
175	LTAPFH1752B2	2 x 12.5 + 2 x 25 + 2 x 50	6	568900
200	LTAPFH2002B2	2 x 12.5 + 1 x 25 + 3 x 50	6	630800
225	LTAPFH2252B2	2 x 12.5 + 4 x 50	6	673100
250	LTAPFH2502B2	2 x 25 + 4 x 50	6	707000
275	LTAPFH2752B2	1 x 100 + 3 x 50 + 2 x 12.5	6	764600
300	LTAPFH3002B2	1 x 100 + 3 x 50 + 2 x 25	6	798000
350	LTAPFH3502B2	1 x 100 + 3 x 50 + 4 x 25	8	948300
400	LTAPFH4002B2	2 x 100 + 2 x 50 + 4 x 25	8	1098600
450	LTAPFH4502B2	2 x 100 + 4 x 50 + 2 x 25	8	1192100
500	LTAPFH5002B2	3 x 100 + 3 x 50 + 2 x 25	8	1315100

etaSYS - FH3

Thyristor Switched standard APFC panels with 7% detuned harmonics filter (Real-time PF Compensation)

Panel Rating (kVAr)	Cat. No.	Step sizes (kVAr)	No. of Steps	M.R.P. (₹) Per Unit
100	LTAPFH1003B2	50 + 25 + 15 + 5 + 5	5	636500
125	LTAPFH1253B2	2 x 12.5 + 2 x 25 + 50	5	709700
150	LTAPFH1503B2	2 x 12.5 + 3 x 25 + 50	6	824300
175	LTAPFH1753B2	2 x 12.5 + 2 x 25 + 2 x 50	6	871400
200	LTAPFH2003B2	2 x 12.5 + 1 x 25 + 3 x 50	6	926000
225	LTAPFH2253B2	2 x 12.5 + 4 x 50	6	977200
250	LTAPFH2503B2	2 x 25 + 4 x 50	6	1011700
275	LTAPFH2753B2	1x100 + 3x50 + 2x12.5	6	1102500
300	LTAPFH3003B2	1x100 + 3x50 + 2x25	6	1134300
350	LTAPFH3503B2	1x100 + 3x50 + 4x25	8	1452500
400	LTAPFH4003B2	2x100 + 2x50 + 4x25	8	1595200
450	LTAPFH4503B2	2x100 + 4x50 + 2x25	8	1680600
500	LTAPFH5003B2	3x100 + 3x50 + 2x25	8	1844300

Reactive Power Management Solutions

etaSYS - MU1

Contactor switched standard APFC Panels

Panel Rating (kVAr)	Cat. No.	Step sizes (kVAr)	No. of Steps	M.R.P. (₹) Per Unit
100	LTAPMU1001B2	50 + 25 + 15 + 5 + 5	5	345100
125	LTAPMU1251B2	2 x 12.5 + 2 x 25 + 50	5	378800
150	LTAPMU1501B2	2 x 12.5 + 3 x 25 + 50	6	437900
175	LTAPMU1751B2	2 x 12.5 + 2 x 25 + 2 x 50	6	481500
200	LTAPMU2001B2	2 x 12.5 + 25 + 3 x 50	6	533200
225	LTAPMU2251B2	2 x 12.5 + 4 x 50	6	569100
250	LTAPMU2501B2	2 x 25 + 4 x 50	6	619100
275	LTAPMU2751B2	1x100 + 3x50 + 2x12.5	6	666600
300	LTAPMU3001B2	1x100 + 3x50 + 2x25	6	702600
350	LTAPMU3501B2	1x100 + 3x50 + 4x25	8	823400
400	LTAPMU4001B2	2x100 + 2x50 + 4x25	8	953500
450	LTAPMU4501B2	2x100 + 4x50 + 2x25	8	1041700
500	LTAPMU5001B2	3x100 + 3x50 + 2x25	8	1151800

etaSYS - FU1

Contactor switched standard APFC Panels

Panel Rating (kVAr)	Cat. No.	Step sizes (kVAr)	No. of Steps	M.R.P. (₹) Per Unit
100	LTAPFU1001B2	50 + 25 + 15 + 5 + 5	5	331100
125	LTAPFU1251B2	2 x 12.5 + 2 x 25 + 50	5	365100
150	LTAPFU1501B2	2 x 12.5 + 3 x 25 + 50	6	416900
175	LTAPFU1751B2	2 x 12.5 + 2 x 25 + 2 x 50	6	457200
200	LTAPFU2001B2	2 x 12.5 + 25 + 3 x 50	6	507800
225	LTAPFU2251B2	2 x 12.5 + 4 x 50	6	558900
250	LTAPFU2501B2	2 x 25 + 4 x 50	6	591800
275	LTAPFU2751B2	1x100 + 3x50 + 2x12.5	6	631500
300	LTAPFU3001B2	1x100 + 3x50 + 2x25	6	665500
350	LTAPFU3501B2	1x100 + 3x50 + 4x25	8	780200
400	LTAPFU4001B2	2x100 + 2x50 + 4x25	8	906700
450	LTAPFU4501B2	2x100 + 4x50 + 2x25	8	990700
500	LTAPFU5001B2	3x100 + 3x50 + 2x25	8	1113300

etaSYS - MU2

Contactor Switched standard APFC panels with 7% detuned harmonics filter

Panel Rating (kVAr)	Cat. No.	Step sizes (kVAr)	No. of Steps	M.R.P. (₹) Per Unit
100	LTAPMU1002B2	50 + 25 + 15 + 5 + 5	5	477100
125	LTAPMU1252B2	2 x 12.5 + 2 x 25 + 50	5	510700
150	LTAPMU1502B2	2 x 12.5 + 3 x 25 + 50	6	587300
175	LTAPMU1752B2	2 x 12.5 + 2 x 25 + 2 x 50	6	634200
200	LTAPMU2002B2	2 x 12.5 + 1 x 25 + 3 x 50	6	679500
225	LTAPMU2252B2	2 x 12.5 + 4 x 50	6	718600
250	LTAPMU2502B2	2 x 25 + 4 x 50	6	766700
275	LTAPMU2752B2	1x100 + 3x50 + 2x12.5	6	812200
300	LTAPMU3002B2	1x100 + 3x50 + 2x25	6	847200
350	LTAPMU3502B2	1x100 + 3x50 + 4x25	8	1016200
400	LTAPMU4002B2	2x100 + 2x50 + 4x25	8	1146200
450	LTAPMU4502B2	2x100 + 4x50 + 2x25	8	1236100
500	LTAPMU5002B2	3x100 + 3x50 + 2x25	8	1344500

etaSYS - FU2

Contactor Switched standard APFC panels with 7% detuned harmonics filter

Panel Rating (kVAr)	Cat. No.	Step sizes (kVAr)	No. of Steps	M.R.P. (₹) Per Unit
100	LTAPFU1002B2	50 + 25 + 15 + 5 + 5	5	456600
125	LTAPFU1252B2	2 x 12.5 + 2 x 25 + 50	5	494300
150	LTAPFU1502B2	2 x 12.5 + 3 x 25 + 50	6	561300
175	LTAPFU1752B2	2 x 12.5 + 2 x 25 + 2 x 50	6	603200
200	LTAPFU2002B2	2 x 12.5 + 1 x 25 + 3 x 50	6	668000
225	LTAPFU2252B2	2 x 12.5 + 4 x 50	6	701600
250	LTAPFU2502B2	2 x 25 + 4 x 50	6	739600
275	LTAPFU2752B2	1x100 + 3x50 + 2x12.5	6	776100
300	LTAPFU3002B2	1x100 + 3x50 + 2x25	6	810100
350	LTAPFU3502B2	1x100 + 3x50 + 4x25	8	972900
400	LTAPFU4002B2	2x100 + 2x50 + 4x25	8	1103000
450	LTAPFU4502B2	2x100 + 4x50 + 2x25	8	1193100
500	LTAPFU5002B2	3x100 + 3x50 + 2x25	8	1309300

etaSYS - FU3

Thyristor Switched standard APFC panels with 7% detuned harmonics filter (Real-time PF Compensation)

Panel Rating (kVAr)	Cat. No.	Step sizes (kVAr)	No. of Steps	M.R.P. (₹) Per Unit
100	LTAPFU1003B2	50 + 25 + 15 + 5 + 5	5	691400
125	LTAPFU1253B2	2 x 12.5 + 2 x 25 + 50	5	771700
150	LTAPFU1503B2	2 x 12.5 + 3 x 25 + 50	6	906800
175	LTAPFU1753B2	2 x 12.5 + 2 x 25 + 2 x 50	6	959500
200	LTAPFU2003B2	2 x 12.5 + 1 x 25 + 3 x 50	6	1031500
225	LTAPFU2253B2	2 x 12.5 + 4 x 50	6	1083000
250	LTAPFU2503B2	2 x 25 + 4 x 50	6	1125900
275	LTAPFU2753B2	1x100 + 3x50 + 2x12.5	6	1221200
300	LTAPFU3003B2	1x100 + 3x50 + 2x25	6	1263600
350	LTAPFU3503B2	1x100 + 3x50 + 4x25	8	1604700
400	LTAPFU4003B2	2x100 + 2x50 + 4x25	8	1758200
450	LTAPFU4503B2	2x100 + 4x50 + 2x25	8	1871600
500	LTAPFU5003B2	3x100 + 3x50 + 2x25	8	2058200





Making MCCs More Intelligent

We go the extra mile.

Conventional MCCs only provide you with basic protection. For smarter MCCs and complete motor protection, control and monitoring, choose L&T MCOMP – the intelligent motor management relay. By combining multiple advantages in one offering, we go the extra mile.



Complete Solution for Motor Protection

Features & advantages

- Integration of voltage and current based protections
- Enhanced circuit breaker control, interlocking and logic building
- Metering, event recording and trip data recording helps in fault analysis, ensures lower down-time and increases plant efficiency
- Connectivity with SCADA / DCS on Modbus RTU / TCP IP and Profibus DP

Customer Interaction Centre (CIC)

BSNL / MTNL (Toll free): 1800 233 5858

Reliance (Toll free): 1800 200 5858

Tel: 022 6774 5858 Fax: 022 6774 5859

Email: cic@Lntebg.com

Website: www.Lntebg.com

Digital Protective Relays

3 Phase Over Current + Earth Fault Relay

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



IDMT and Definite time characteristics

Model	Aux. Supply (V)	Output Contacts	Cat. No.	M.R.P. (₹) Per Unit	Std Pkg. (Nos.)
MC31A	20 - 110V AC/DC	4 NO Programmable	MC31AAXX000	15000	1
MC31A	20 - 110V AC/DC	2 NO + 2 NC Pre programmed*	MC31AAXX001	15000	1
MC31A	88 - 264V AC/DC	4 NO Programmable	MC31ABXX000	15000	1
MC31A	88 - 264V AC/DC	2 NO + 2 NC Pre programmed*	MC31ABXX001	15000	1

* 2NO + 2NC contacts are factory programmed for both Over current and Earth fault

3 Phase Over Current + Earth Fault Relay With High Set

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



IDMT and Definite time characteristics

Model	Aux. Supply (V)	Output Contacts	Cat. No.	M.R.P. (₹) Per Unit	Std Pkg. (Nos.)
MC61A	20 - 110V AC/DC	4 NO Programmable	MC61AAXX000	17000	1
MC61A	20 - 110V AC/DC	2 NO + 2 NC Pre programmed*	MC61AAXX001	17000	1
MC61A	88 - 264V AC/DC	4 NO Programmable	MC61ABXX000	17000	1
MC61A	88 - 264V AC/DC	2 NO + 2 NC Pre programmed*	MC61ABXX001	17000	1

* 2NO + 2NC contacts are factory programmed for both Over current and Earth fault

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

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



IDMT and Definite time characteristics

Model	Aux. Supply (V)	C.T. Secondary (A)		Cat. No.	M.R.P. (₹) Per Unit	Output contacts
		In	On			
MC61C	20 - 110V AC/DC	1	1	MC61CA11000 *	40000	5 NO; Pre-Programmed Contacts
MC61C	20 - 110V AC/DC	5	5	MC61CA55000 *	40000	
MC61C	88 - 264V AC/DC	1	1	MC61CB11000 *	40000	
MC61C	88 - 264V AC/DC	5	5	MC61CB55000 *	40000	

* - available on request only

Configuration of preprogrammed output contacts:

R1 - Time delayed output; R2 - Instantaneous output

R3 - Breaker opening; R4 - Breaker closing; R5 - Internal Relay Failure

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)	Cat. No.	M.R.P. (₹) Per Unit	Std Pkg. (Nos.)
MC12A	20 - 110V AC/DC	1A	MC12AA10X00	9600	1
MC12A	20 - 110V AC/DC	5A	MC12AA50X00	9600	1
MC12A	88 - 264V AC/DC	1A	MC12AB10X00	9600	1
MC12A	88 - 264V AC/DC	5A	MC12AB50X00	9600	1

Reverse Power Relay

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



Model	Aux. Supply (V)	C.T. Secondary (A)	Cat. No.	M.R.P. (₹) Per Unit	Std Pkg. (Nos.)
MRP11	20 - 110V AC/DC	1A	MRP11A10X00	21500	1
MRP11	20 - 110V AC/DC	5A	MRP11A50X00	21500	1
MRP11	88 - 264V AC/DC	1A	MRP11B10X00	21500	1
MRP11	88 - 264V AC/DC	5A	MRP11B50X00	21500	1

Instantaneous Earth Fault Relay

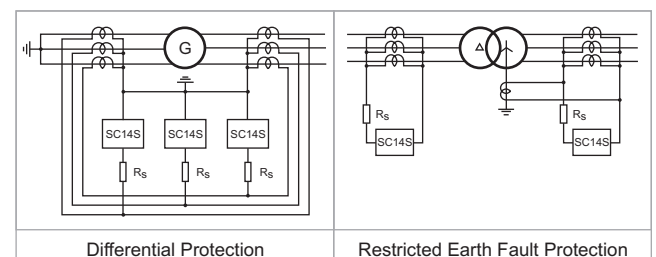
C.T. Rating 1A or 5A, Not Field Selectable



High Impedance relay.

Meant for Restricted Earth fault protection of Transformers/Generators or Differential Protection of Generators.

Model	C.T. Secondary (A)	Range	Cat. No.	M.R.P. (₹) Per Unit	Std Pkg. (Nos.)
SC14S	1	10 - 40 %	MC14SX10100	8400	1
SC14S	1	20 - 80 %	MC14SX10200	8400	1
SC14S	5	10 - 40 %	MC14SX50100	8400	1
SC14S	5	20 - 80 %	MC14SX50200	8400	1



Mini Motor Protection Relay



- Inbuilt CT's (1 Amp to 88 Amp)
- Selectable trip class - 10A, 10, 20 and 30 as per IEC 947-4-1
- Trip Indication
- Test Facility
- Protections:
 - Thermal Overload
 - Single Phasing
 - Current Unbalance
 - Phase sequence reversal
 - Locked Rotor
 - Earth Fault
 - Under current

Model	Thermal O/L Range (A)	Aux. supply	Cat. No.	M.R.P. (₹) Per Unit
MPR300	1 - 2.75	240V AC	MPR300BE010	5700
MPR300	2 - 5.5	240V AC	MPR301BE020	5700
MPR300	4 - 11	240V AC	MPR302BE040	5700
MPR300	8 - 22	240V AC	MPR303BE080	5700
MPR300	16 - 44	240V AC	MPR304BE160	5700
MPR300	32 - 88	240V AC	MPR305BE320	5700
New				
MPR300	1 - 2.75	110V AC	MPR300BB010	5700
MPR300	2 - 5.5	110V AC	MPR301BB020	5700
MPR300	4 - 11	110V AC	MPR302BB040	5700
MPR300	8 - 22	110V AC	MPR303BB080	5700
MPR300	16 - 44	110V AC	MPR304BB160	5700
MPR300	32 - 88	110V AC	MPR305BB320	5700

Comprehensive Motor protection relay MM30-743

with current based protections



Model	Aux. Supply	Device code	Cat. No.	M.R.P. (₹) Per Unit
MM30 - 743	20 - 110V AC/ DC	37,46,47,48, 49,50/51,51LR,	EMM30AXX00E	69800
MM30 - 743	88 - 240V AC/ DC	64, 66,68,74	EMM30BXX00E	69800

Comprehensive Motor protection relay MM30-W74*

with current and voltage based protections



Model	Aux. Supply	Device code	Cat. No.	M.R.P. (₹) Per Unit
MM30 - W74	20 - 110V AC/ DC	12/14,27/59,37, 46,47,48,49,	EMM30WAX002	86500
MM30 - W74	88 - 240V AC/ DC	50/51, 51LR,55, 64,66,68,74,81.	EMM30WBX002	86500

* available on request only

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

Note:

1. MRP300 must sense Line Current of Motor.
2. In case of reversible starter; place MPR300 before Main Contactor.

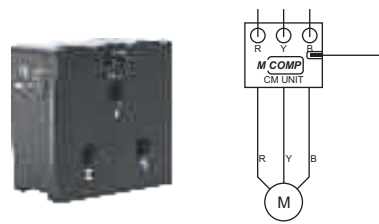
Intelligent Motor Protection & Control Relay - MCOMP*



New

Model	Aux. supply	Cat. No.	M.R.P. (₹) Per Unit
MCOMP Blind unit - Modbus RTU	80 - 240V AC/ DC	MCOMPZX90032	24000
MCOMP Blind unit - Profibus	80 - 240V AC/ DC	MCOMPZX90033	35000

Current Module (CM) Unit



Model	Cable Length	Current rating (A)	Cat. No.	M.R.P. (₹) Per Unit
MCOMP CT1 UNIT	0.5 M	0.675 to 2.025	MCOMPZX90006	4000
MCOMP CT2 UNIT	0.5 M	1.8 to 5.4	MCOMPZX90007	5000
MCOMP CT3 UNIT	0.5 M	4.5 to 13.5	MCOMPZX90008	5000
MCOMP CT4 UNIT	0.5 M	12.6 to 37.8	MCOMPZX90009	5000
MCOMP CT5 UNIT	0.5 M	36 to 81	MCOMPZX90010	6000

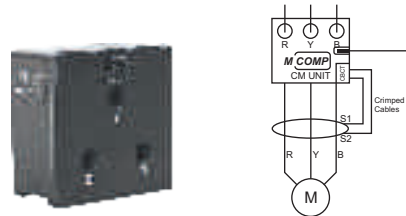
CT unit consists of 3 CT's for R, Y and B phase.
Cable length of 1 meter is available on request.

CM unit with extra crimped cable for CBCT



Model	Cable Length	Aux. supply	Cat.No.	M.R.P. (₹) Per Unit
USB Display Unit	1 meter	80 - 240V AC/ DC	MCOMPZX90042	15000
USB Display Unit	2 meter	80 - 240V AC/ DC	MCOMPZX90043	15000

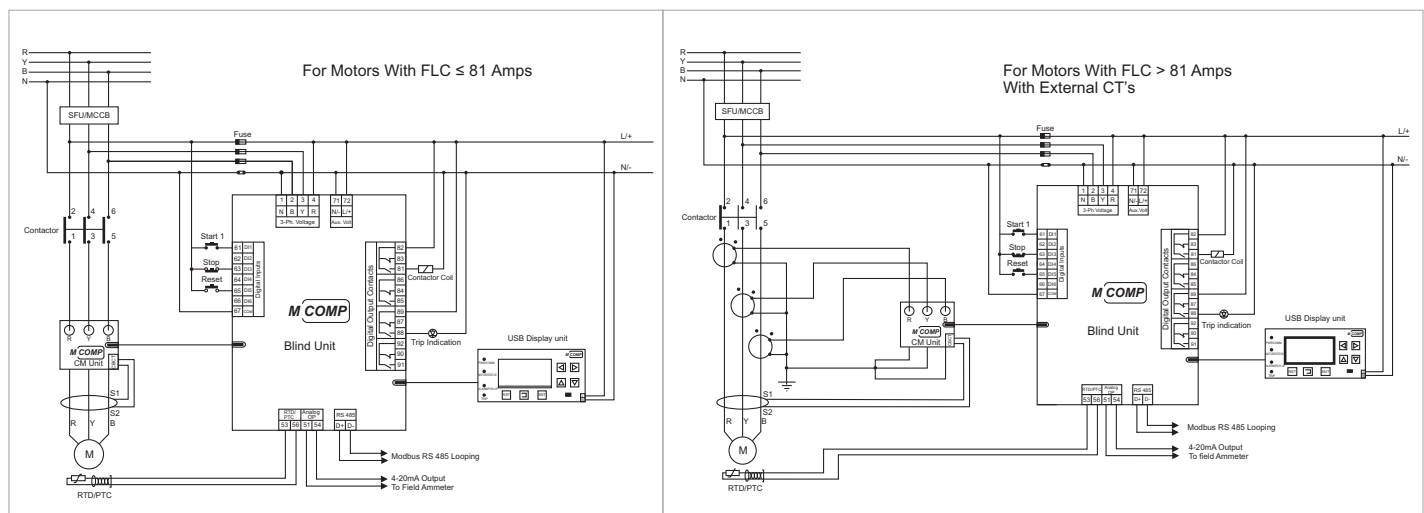
Cable length of 0.5 meter is available on request



Model	Cable Length	Current rating (A)	Cat. No.	M.R.P. (₹) Per Unit
MCOMP CT1 UNIT	1 M	0.675 to 2.025	MCOMPZX90016	4000
MCOMP CT2 UNIT	1 M	1.8 to 5.4	MCOMPZX90017	5000
MCOMP CT3 UNIT	1 M	4.5 to 13.5	MCOMPZX90018	5000
MCOMP CT4 UNIT	1 M	12.6 to 37.8	MCOMPZX90019	5000
MCOMP CT5 UNIT	1 M	36 to 81	MCOMPZX90020	6000

CT unit consists of 3 CT's for R, Y and B phase.
Pair of crimped cable is provided for connecting external CBCT
* available on request only

Typical Wiring Diagram



Digital Protective Relays

APFC Relays



New

Model	Description	CT secondary	Voltage input	Cat. No.	M.R.P. (₹) Per Unit
etaCON L3	3 stage APFC relay	5 Amp	415V	ERPML03D500	9000
etaCON L5	5 stage APFC relay	5 Amp	415V	ERPML05D500	10000
etaCON L7	7 stage APFC relay	5 Amp	415V	ERPML07D500	11000
etaCON L8	8 stage APFC relay	5 Amp	415V	ERPML08D500	13600
etaCON L12	12 stage APFC relay	5 Amp	415V	ERPML12D500	14800

Model	Description	CT secondary	Voltage input	Cat. No.	M.R.P. (₹) Per Unit
RPM 14	Fourteen Stage APFC Relay	1 A or 5 A - Field selectable	240V	MRPM1400000	16900

Single Phase Under Voltage or Over Voltage Relay



Model	Aux. Supply (V)	Cat. No.	M.R.P. (₹) Per Unit	Std Pkg. (Nos.)
MV12A	20 - 110V AC/DC	MV12AA00X00	10000	1
MV12A	88 - 264V AC/DC	MV12AB00X00	10000	1

Three phase Voltage and Frequency relay with df/dt and dv/dt protection



Model	Aux. supply	Device code	Cat. No.	M.R.P. (₹) Per Unit
UFD34	20 - 110V AC/ DC	27, 59, 81, df/dt, dv/dt	EFD34A00000	123000
UFD34	88 - 240V AC/DC	27, 59, 81, df/dt, dv/dt	EFD34B00000	123000

Generator protection relay



Model	Generator Grounding	Aux. supply	Device code	Cat. No.	M.R.P. (₹) Per Unit
MG30I	Solid grounding	20 - 110 VAC/ DC	21,24,27/59,32,37, 40,46,49,50/27, 50V/51V, 51BF, 60FL, 64S,68,81	EM30GIAXX00	210000
MG30I	Solid grounding	88 - 240 VAC/DC		EM30GIBXX00	210000
MG30	Impedance Grounding (NGR/ NGT)	20 - 110 VAC/ DC	21,24,27/59,32,37, 40,46,49,50/27, 50V/51V,51BF, 60FL, 64S,68,81	EMG30AXX000	210000
MG30	Impedance Grounding (NGR/ NGT)	88 - 240 VAC/DC		EMG30BXX000	210000

Voltage Frequency and Zero Sequence Voltage Relay with Vector shift detection



Model	Aux. supply	Device code	Cat. No.	M.R.P. (₹) Per Unit
UM30	20 - 110V AC/ DC	24, 27d/59d, 47, 59, 59Uo, 78, 81	EUM30A00000 *	123000
UM30	88 - 240V AC/DC	24, 27d/59d, 47, 59, 59Uo, 78, 81	EUM30B00000 *	123000

* available on request only

Model	Description	Aux. supply	Device code	Cat. No.	M.R.P. (₹) Per Unit
MD32G	Generator Differential Relay	20 - 110V AC/ DC	50/51, 68, 87, 87N	ED32GAXX000 *	266500
MD32G	Generator Differential Relay	88 - 240V AC/DC	50/51, 68, 87, 87N	ED32GBXX000 *	266500

Electronic Metering Devices

Single Phase kWh meter with LCD display

Model EM101+ Class 1 Base mounting



Description	Cat. No.	M.R.P. (₹) Per Unit
1Ph LCD Meter 5-30A without optical port	WM101BC5DL0	1640
1Ph LCD Meter 10-60A without optical port	WM101BC7DL0	1950
1P LCD Meter 5-30A with optical port	WM101BC5DDH	1950
1Ph LCD Meter 10-60A with optical port	WM101BC7DDH	2050

3 Phase 4 Wire kWh meter Counter type

Model EM301B Class 1 Base mounting



Description	Cat. No.	M.R.P. (₹) Per Unit
3Ph 4 W kWh CT op base mtg 240V 1-2A	WM301BC1C00	4820
3Ph 4 W kWh CT op base mtg 240V 5 -10 A	WM301BC3C00	4310
3Ph 4 W kWh Dir base mtg 240V 5 -20 A Sleek	WM301BC4D20	4310
3Ph 4 W kWh Dir base mtg 240V 10 -40 A Sleek	WM301BC6D20	4310
3Ph 4 W kWh Dir base mtg 240V 10 - 60 A big body	WM301BC7D10	4410
3Ph 4 W kWh Dir base mtg 240V 50 -100 A big body	WM301BC8D10	6250

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	6660
3Ph, 4W TVM 240 V 10 - 60A BM RS 485 *	WR300BC73RS	9500

* - available on request only

Trivector Meter Class 0.5

Model ER300P Class 0.5 (Base Mounting)



Description	Cat. No.	M.R.P. (₹) Per Unit
3Ph, 3W TVM 110V (L-L) 1 A Class 0.5 BM *	WR200BB1200	20500
3Ph, 3W TVM 110V (L-L) 5 A Class 0.5 BM *	WR200BB5200	20500
3Ph, 4W TVM 110V (L-L) 1 A Class 0.5 BM	WR300BB1200	20500
3Ph, 4W TVM 110V (L-L) 5 A Class 0.5 BM	WR300BB5200	20500
3Ph, 4W TVM 240V (L-N) 1 A Class 0.5 BM *	WR300BC1200	20500
3Ph, 4W TVM 240V (L-N) 5 A Class 0.5 BM	WR300BC5200	20500
3Ph, 3W TVM 110V (L-L) 1 A Class 0.5 BM RS485 *	WR200BB12RS	24600
3Ph, 3W TVM 110V (L-L) 5 A Class 0.5 BM RS485 *	WR200BB52RS	24600
3Ph, 4W TVM 110V (L-L) 1 A Class 0.5 BM RS485	WR300BB12RS	24600
3Ph, 4W TVM 110V (L-L) 5 A Class 0.5 BM RS485 *	WR300BB52RS	24600
3Ph, 4W TVM 240V (L-N) 1 A CI 0.5 BM RS485 *	WR300BC12RS	24600
3Ph, 4W TVM 240V (L-N) 5 A CI 0.5 BM RS485	WR300BC52RS	24600

* - available on request only

Trivector Meter Class 0.2

Model ER300P Class 0.2 (Base Mounting)



Description	Cat. No.	M.R.P. (₹) Per Unit
3Ph, 4W TVM 110V (L-L) 1 A Class 0.2 BM	WR300BB1100	46120
3Ph, 4W TVM 110V (L-L) 5 A Class 0.2 BM	WR300BB5100	46120
3Ph, 4W TVM 110V (L-L) 1 A Class 0.2 BM RS485	WR300BB11RS	49200
3Ph, 4W TVM 110V (L-L) 5 A Class 0.2 BM RS485	WR300BB51RS	49200

Meter reading instrument



Description	Cat. No.	M.R.P. (₹) Per Unit
METER READING INSTRUMENT - (6MB)	990MR1XX00S	100000

3 Ph Flush Mounting Multifunction meter

Model NOVA - LCD display



Nova

Description	Cat. No.	M.R.P. (₹) Per Unit
3Ph 4 W 240V 5A with RS485 (MFM - LCD display with RS 485 port) - NOVA	WM30KFC3CRS	4600
3Ph 4W 240V 5A (MFM - LCD display)	WM30KFC3C00	4300

3 Ph Flush Mounting kWh meter

Model ACRUX - counter type



AcruX

Description	Cat. No.	M.R.P. (₹) Per Unit
3Ph 4 W 240V 1A (kWh meter counter type) - AcruX	WM301FC1C10	3200
3Ph 4 W 240V 5A (kWh meter counter type) - AcruX	WM301FC3C10	3200

Intelligent Panel Meter

Model QUASAR Class 1 (Flush Mounting) 96 x 96 mm



Description	Cat. No.	M.R.P. (₹) Per Unit
3Ph, 4W IPM 240 V (L-N) 1 A Class 1 FM *	WI300FC1300	8710
3Ph, 4W IPM 240 V (L-N) 5 A Class 1 FM	WI300FC5300	8710
3Ph, 3W IPM 110 V (L-L) 1 A Class 1 FM *	WI301FC1300	8710
3Ph, 3W IPM 110 V (L-L) 5 A Class 1 FM *	WI301FC5300	8710
3Ph, 4W IPM 110 V (L-L) 1A Class 1 FM *	WI300FB1300	8710
3Ph, 4W IPM 110 V (L-L) 5A Class 1 FM *	WI300FB5300	8710
3Ph, 4W IPM 240 V (L-N) 1 A Class 1 FM with RS485 *	WI300FC13RS	9740
3Ph, 4W IPM 240 V (L-N) 5 A Class 1 FM with RS485	WI300FC53RS	9740
3Ph, 3W IPM 110 V (L-L) 1 A Class 1 FM with RS485 *	WI301FC13RS	9740
3Ph, 3W IPM 110 V (L-L) 5 A Class 1 FM with RS485 *	WI301FC53RS	9740
3Ph, 4W IPM 110 V (L-L) 1A Class 1 FM with RS485 *	WI300FB13RS	9740
3PH, 4W IPM 110 V (L-L) 5A Class 1 FM with RS485 *	WI300FB53RS	9740

* - available on request only

3 Ph Flush Mounting Dual source kWh meter

Model GEMINI - LCD display



Gemini

Description	Cat. No.	M.R.P. (₹) Per Unit
3Ph 4 W 240V 5A with RS485 (Dual source kWh meter) - Gemini	WM30DFC3CRS	4600

Intelligent Panel Meter

Model QUASAR plus Class 0.5 (Flush Mounting) 96 x 96 mm



Description	Cat. No.	M.R.P. (₹) Per Unit
3Ph, 4W IPM 240 V (L-N) 1 A Class 0.5 FM *	WI300FC1200	10760
3Ph, 4W IPM 240 V (L-N) 5 A Class 0.5 FM	WI300FC5200	10760
3Ph, 3W IPM 110 V (L-L) 1 A Class 0.5 FM *	WI301FC1200	10760
3Ph, 3W IPM 110 V (L-L) 5 A Class 0.5 FM *	WI301FC5200	10760
3Ph, 4W IPM 110 V (L-L) 1A Class 0.5 FM *	WI300FB1200	10760
3Ph, 4W IPM 110 V (L-L) 5A Class 0.5 FM *	WI300FB5200	10760
3Ph, 4W IPM 240 V (L-N) 1 A Class 0.5 FM with RS485	WI300FC12RS	11790
3Ph, 4W IPM 240 V (L-N) 5 A Class 0.5 FM with RS485	WI300FC52RS	11790
3Ph, 3W IPM 110 V (L-L) 1 A Class 0.5 FM with RS485	WI301FC12RS	11790
3Ph, 3W IPM 110 V (L-L) 5 A Class 0.5 FM with RS485	WI301FC52RS	11790
3Ph, 4W IPM 110 V (L-L) 1A Class 0.5 FM with RS485 *	WI300FB12RS	11790
3Ph, 4W IPM 110 V (L-L) 5A Class 0.5 FM with RS485 *	WI300FB52RS	11790

* - available on request only

Electronic Metering Devices

VEGA series

Single function meters



AMMETER



VOLTMETER

Description	Cat. No.	M.R.P. (₹) Per Unit
Single Phase Basic Meters		
1Ph Voltmeter Class 1	WDS101FEV00	1000
1Ph Ammeter, Class 1, 5A	WDS101FCA00	1000
1Ph Ammeter, Class 1, 1A	WDS101OCA00	1000
1Ph Freq. meter Class 0.2	WDS121FCF00	1000
Three Phase Basic Meters		
3Ph Voltmeter Class 1	WDS301FEV00	1360
3Ph Ammeter, 5A, Class 1	WDS301FCA00	1360
3 Ph Ammeter, 1 A, Class 1	WDS301OCA00	1360

VEGA series

Multifunction meters Class 1.0



New

Description	Cat. No.	M.R.P. (₹) Per Unit
3Ph Multifunction Meter, Model A, class 1, 5A	WDM303FDWA1	6990
3Ph Multifunction Meter, Model B, class 1, 5A	WDM303FDNB1	10900
3Ph Multifunction Meter, Model C, class 1, 5A	WDM303FDNC1	16020
3Ph Multifunction Meter, Model A, class 1, 1A	WDM303ODWA1	6990
3Ph Multifunction Meter, Model B, class 1, 1A	WDM303ODNB1	10900
3Ph Multifunction Meter, Model C, class 1, 1A	WDM303ODNC1	16020
3Ph Multifunction Meter, Model A, class 1, 5A with Relay	WDM303FDWA0	8200
3Ph Multifunction Meter, Model B, class 1, 5A with Relay	WDM303FDNB0	13320
3Ph Multifunction Meter, Model C, class 1, 5A with Relay	WDM303FDNC0	20500

VEGA Series



New

VAF Meter

Description	Cat. No.	M.R.P. (₹) Per Unit
VAF Meter		
3Ph VAF, Class 1, 5A	WDV303FC000	2600
3Ph VAF, Class 1, 1A	WDV303OC000	2600

VEGA Series

Multifunction meters Class 0.5



New

Description	Cat. No.	M.R.P. (₹) Per Unit
3Ph Multifunction Meter, Model A, class 0.5*	WDM313CDWA1	9000
3Ph Multifunction Meter, Model B, class 0.5*	WDM313CDNB1	14000
3Ph Multifunction Meter, Model C, class 0.5*	WDM313CDNC1	20000

* Site selectable 1A/ 5A

mi ENERGY

Din rail meters



New

Description	Cat. No.	M.R.P. (₹) Per Unit
1Ph 5-30A, 240V, Class 2 Din rail meter	W2DLD050600	2200
3Ph 10-60A, 240V, Class 2 Din rail meter	W4DLD100600	5000

Panel Meter Overview

Meter type	Parametres	Display	RS 485
Accrux	kWh	Counter	No
Vega VAF	V, A, F, RPM	LED	No
Nova	V, A, F, Pf, kW, kWh	LCD	Optional
Gemini	V, A, F, kW, kWh - Dual source	LCD	Yes
Quasar	V, A, F, pf, Power, Energy, THD	LCD	Optional
Vega Model A	V, A, F, pf, Power, Energy, Run & ON hours, RPM	LED	Yes
Vega Model B	V, A, F, pf, Power, Energy, Run & ON hours, RPM + Neutral current, MD (kW & kVA), MD reset	LED	Yes
Vega Model C	V, A, F, pf, Power, Energy, Run & ON hours, RPM + Neutral current, MD (kW & kVA), MD reset + THD, Bi - directional	LED	Yes

RPM = Rotations per minute

Programmable Logic Controller (PLC)

- Compact & Powerful
- LX7S from 10 to 48 I/O
- LX7 from 28 to 104 I/O
- 2 serial ports (with Modbus RTU)
- Built-in backup flash memory
- Built-in High speed counter & Pulse Output
- Built-in real time clock in LX7
- Ideal for small to mid size machine automation / AMF panels / Load management / pump control and many more applications
- Can communicate with ACB, MCCB Releases, Energy Meters



LX7 / LX7S



LX70



LX700

Type	Cat. No.	Description	M.R.P. (₹) Per Unit
LX7S Series (Non Expandable PLC)	LX7S-10ADR	AC Powered, 6 Digital Inputs, 4 Digital Outputs (Relay)	9500
	LX7S-10ADT	AC Powered, 6 Digital Inputs, 4 Digital Outputs (Transistor)	9300
	LX7S-14ADR	AC Powered, 8 Digital Inputs, 6 Digital Outputs (Relay)	11200
	LX7S-14ADT	AC Powered, 8 Digital Inputs, 6 Digital Outputs (Transistor)	10900
	LX7S-20ADR	AC Powered, 12 Digital Inputs, 8 Digital Outputs (Relay)	13700
	LX7S-20ADT	AC Powered, 12 Digital Inputs, 8 Digital Outputs (Transistor)	13300
	LX7S-28ADR	AC Powered, 16 Digital Inputs, 12 Digital Outputs (Relay)	16500
	LX7S-28ADT	AC Powered, 16 Digital Inputs, 12 Digital Outputs (Transistor)	16100
	LX7S-40ADR	AC Powered, 24 Digital Inputs, 16 Digital Outputs (Relay)	20700
	LX7S-40ADT	AC Powered, 24 Digital Inputs, 16 Digital Outputs (Transistor)	20100
	LX7S-48ADR	AC Powered, 28 Digital Inputs, 20 Digital Outputs (Relay)	22900
	LX7S-48ADT	AC Powered, 28 Digital Inputs, 20 Digital Outputs (Transistor)	22200
	LX7S-10DDR	DC Powered, 6 Digital Inputs, 4 Digital Outputs (Relay)	9500
	LX7S-10DDT	DC Powered, 6 Digital Inputs, 4 Digital Outputs (Transistor)	9300
	LX7S-14DDR	DC Powered, 8 Digital Inputs, 6 Digital Outputs (Relay)	11200
	LX7S-14DDT	DC Powered, 8 Digital Inputs, 6 Digital Outputs (Transistor)	10900
LX7 Series (Expandable PLC)	Base Modules		
	LX7-28ADR	AC Powered, 16 Digital Inputs, 12 Digital Outputs (Relay)	21252
	LX7-28ADT	AC Powered, 16 Digital Inputs, 12 Digital Outputs (Transistor)	20066
	LX7-48ADR	AC Powered, 28 Digital Inputs, 20 Digital Outputs (Relay)	31510
	LX7-48ADT	AC Powered, 28 Digital Inputs, 20 Digital Outputs (Transistor)	29298
	LX7-28DDR	DC Powered, 16 Digital Inputs, 12 Digital Outputs (Relay)	21922
	LX7-28DDT	DC Powered, 16 Digital Inputs, 12 Digital Outputs (Transistor)	20608
	LX7-48DDR	DC Powered, 28 Digital Inputs, 20 Digital Outputs (Relay)	33270
	LX7-48DDT	DC Powered, 28 Digital Inputs, 20 Digital Outputs (Transistor)	30722
	LX7-20ADR-4A	AC Powered, 12 Digital Inputs, 8 Digital Outputs (Relay), 4 Analog Inputs	24900
	LX7-20ADR-6A	AC Powered, 12 Digital Inputs, 8 Digital Outputs (Relay), 4 Analog Inputs, 2 Analog Outputs	29500
	LX7-20ADT-4A	AC Powered, 12 Digital Inputs, 8 Digital Outputs (Transistor), 4 Analog Inputs	24400
	LX7-20ADT-6A	AC Powered, 12 Digital Inputs, 8 Digital Outputs (Transistor), 4 Analog Inputs, 2 Analog Outputs	28800
	Expansion Modules		
	LX7-14EDR	Expansion Module, 8 Digital Inputs, 6 Digital Outputs (Relay)	10400
	LX7-14EDT	Expansion Module, 8 Digital Inputs, 6 Digital Outputs (Transistor)	10100
	LX7-28EDR	Expansion Module, 16 Digital Inputs, 12 Digital Outputs (Relay)	14300
	LX7-28EDT	Expansion Module, 16 Digital Inputs, 12 Digital Outputs (Transistor)	13900

LX 70 Series PLC:

- Modular structure with variety of I/O modules
- Fast & powerful processors to control upto 384 I/O points
- Built-in PID for process control

LX 700 Series PLC:

- Modular structure with high density I/O modules
- Fast & powerful processors to control upto 1600 I/O points
- Distributed I/O configuration using Remote I/O master & slave

Human Machine Interface (HMI)

- Available from 3" to 15" in 8 models
- Touch LCD interface
- Modbus Serial, Ethernet, Field bus Communication
- Supports various Fonts and Graphics
- Supports various languages - Japanese, Korean etc
- Multiple PLCs, Controllers connectivity. Communication with ACB, MCCB, Energy Meter
- Advanced features: Multy - Language, Graphic, Extended Alarms, Recipe, Data Logging, Printing, Password protection, Trends
- Supports scripting



Type	Cat. No.	Description	M.R.P. (₹) Per Unit
1	LX-TEXTMATE	DC Powered, 3", 8-Line Alphanumeric Text Display	10400
2	S04TDAA	4.3" Wide 65536 Color TFT, SRAM, 480X272, 6M Memory(Serial only), DC powered	20000
3	E05TDAA	5.7" 65536 Color TFT, SRAM, 320X240, (Serial/USB/CF/Ethernet), DC powered	50000
4	S07TDAA	7" Wide 65536 Color TFT, SRAM, 800X480, 26M Memory (Serial only), DC powered	29000
5	E08TDAA	8.4" 65536 Color TFT, SRAM, 640*480, (Serial/USB/CF/Ethernet), DC powered	65000
6	E10TDWA	10.4" 65536 Color TFT, SRAM, 800x600, (Serial/USB/CF/Ethernet), DC powered	58000
7	F12TAAA	12.1" 65536 Color TFT, SRAM, 800x600, (Serial/USB/CF/Ethernet, Option: Profibus slave), AC powered	150000
8	F15TAAA	15" 65536 Color TFT, SRAM, 1024x768, (Serial/USB/CF/Ethernet, Option: Profibus slave), AC powered	200000

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- Plastics
- Machine Tool
- Crane & Elevator
- Textile
- Pharmaceuticals

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Miniature Circuit Breaker (MCB)

Range Highlights

- True contact indication for individual pole
- Label holder facility for all configurations
- Conforms to IS/IEC 60898
- Breaking capacity of 10kA throughout the range
- 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
- Suitable for DC application, as per IEC 60947-2
 - Rated Voltage: 130V DC (for SP), 250V DC (for DP)
 - with breaking capacity of 6kA



Current Rating (In)	Modules 1 Mod = 17.5mm	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	300	BB10E50D	300
1A	1	-	-	BB10010C	300	BB10010D	300
2A	1	-	-	BB10020C	300	BB10020D	300
3A	1	-	-	BB10030C	300	BB10030D	300
4A	1	-	-	BB10040C	300	BB10040D	300
6A	1	BB10060B	204	BB10060C	204	BB10060D	265
10A	1	BB10100B	204	BB10100C	204	BB10100D	265
16A	1	BB10160B	204	BB10160C	204	BB10160D	265
20A	1	BB10200B	204	BB10200C	204	BB10200D	265
25A	1	BB10250B	204	BB10250C	204	BB10250D	265
32A	1	BB10320B	204	BB10320C	204	BB10320D	265
40A	1	BB10400B	480	BB10400C	480	BB10400D	495
50A	1	BB10500B	480	BB10500C	480	*	495
63A	1	BB10630B	480	BB10630C	480	*	495
Double Pole (DP)							
0.5A	2	-	-	BB20E50C	800	BB20E50D	815
1A	2	-	-	BB20010C	800	BB20010D	815
2A	2	-	-	BB20020C	800	BB20020D	815
3A	2	-	-	BB20030C	800	BB20030D	815
4A	2	-	-	BB20040C	800	BB20040D	815
6A	2	BB20060B	620	BB20060C	620	BB20060D	665
10A	2	BB20100B	620	BB20100C	620	BB20100D	665
16A	2	BB20160B	620	BB20160C	620	BB20160D	665
20A	2	BB20200B	620	BB20200C	620	BB20200D	665
25A	2	BB20250B	620	BB20250C	620	BB20250D	665
32A	2	BB20320B	620	BB20320C	620	BB20320D	665
40A	2	BB20400B	1060	BB20400C	1060	BB20400D	1025
50A	2	BB20500B	1060	BB20500C	1060	*	1025
63A	2	BB20630B	1060	BB20630C	1060	*	1025

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

* Contact nearest L&T branch office for its availability.

Miniature Circuit Breaker (MCB)



Current Rating (In)	Modules 1 Mod = 17.5mm	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
Three Pole (TP)							
0.5A	3	-	-	BB30E50C	1100	BB30E50D	1120
1A	3	-	-	BB30010C	1100	BB30010D	1120
2A	3	-	-	BB30020C	1100	BB30020D	1120
3A	3	-	-	BB30030C	1100	BB30030D	1120
4A	3	-	-	BB30040C	1100	BB30040D	1120
6A	3	BB30060B	1000	BB30060C	1000	BB30060D	1020
10A	3	BB30100B	1000	BB30100C	1000	BB30100D	1020
16A	3	BB30160B	1000	BB30160C	1000	BB30160D	1020
20A	3	BB30200B	1000	BB30200C	1000	BB30200D	1020
25A	3	BB30250B	1000	BB30250C	1000	BB30250D	1020
32A	3	BB30320B	1000	BB30320C	1000	BB30320D	1020
40A	3	BB30400B	1550	BB30400C	1550	BB30400D	1570
50A	3	BB30500B	1550	BB30500C	1550	*	1570
63A	3	BB30630B	1550	BB30630C	1550	*	1570
Four Pole (FP)							
0.5A	4	-	-	BB40E50C	1580	BB40E50D	1590
1A	4	-	-	BB40010C	1580	BB40010D	1590
2A	4	-	-	BB40020C	1580	BB40020D	1590
3A	4	-	-	BB40030C	1580	BB40030D	1590
4A	4	-	-	BB40040C	1580	BB40040D	1590
6A	4	BB40060B	1360	BB40060C	1360	BB40060D	1390
10A	4	BB40100B	1360	BB40100C	1360	BB40100D	1390
16A	4	BB40160B	1360	BB40160C	1360	BB40160D	1390
20A	4	BB40200B	1360	BB40200C	1360	BB40200D	1390
25A	4	BB40250B	1360	BB40250C	1360	BB40250D	1390
32A	4	BB40320B	1360	BB40320C	1360	BB40320D	1390
40A	4	BB40400B	1990	BB40400C	1990	BB40400D	2005
50A	4	BB40500B	1990	BB40500C	1990	*	2005
63A	4	BB40630B	1990	BB40630C	1990	*	2005

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

* Contact nearest L&T branch office for its availability.

Auxiliary & Accessories for 10kA MCB



Description	Cat. No.	M.R.P. (₹) Per Unit
Auxiliary Contact - 6A (1NO+1NC), 0.5 Mod	BZA11006	600
Shunt Release - 240V AC, 1 Mod	BZS00240	1595
Undervoltage Release - 240V AC, 1 Mod	BZU00240*	1390

* Contact nearest L&T branch office for its availability.

Residual Current Circuit Breaker (RCCB)

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



Current Rating (In)	Sensitivity	Modules 1 Mod = 17.5 mm	Cat. Nos.	M.R.P. (₹) Per Unit
Double Pole (DP)				
25A	30 mA	2	BG202503	2300
	100 mA	2	BG202510	2340
	300 mA	2	BG202530	2340
40A	30 mA	2	BG204003	2585
	100 mA	2	BG204010	2600
	300 mA	2	BG204030	2600
63A	30 mA	2	BG206303	3245
	100 mA	2	BG206310	3290
	300 mA	2	BG206330	3290
100A	30 mA	2	BG210003	5700
	100 mA	2	BG210010	5525
	300 mA	2	BG210030	5525

Current Rating (In)	Sensitivity	Modules 1 Mod = 17.5 mm	Cat. Nos.	M.R.P. (₹) Per Unit
Four Pole (FP)				
25A	30 mA	4	BG402503	2910
	100 mA	4	BG402510	2935
	300 mA	4	BG402530	2935
40A	30 mA	4	BG404003	3035
	100 mA	4	BG404010	2950
	300 mA	4	BG404030	2950
63A	30 mA	4	BG406303	3420
	100 mA	4	BG406310	3395
	300 mA	4	BG406330	3395
100A	30 mA	4	BG410003	5985
	100 mA	4	BG410010	5935
	300 mA	4	BG410030	5935

Isolators

Range Highlights

- Conforms to IEC 60947-3
- Utilization category AC22-A
- Available in DP, TP and FP versions in 40A, 63A, 80A & 100A ratings



Current Rating (In)	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)		
40	2	BF204000	405	3	BF304000	725	4	BF404000	920
63	2	BF206300	520	3	BF306300	820	4	BF406300	945
80	2	BF208000	675	3	BF308000	890	4	BF408000	1080
100	2	BF210000	705	3	BF310000	910	4	BF410000	1110

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

Other Protection & Control Devices

Modular Energy Meter



Description	Cat. No.	M.R.P. (₹) Per Unit
1-Phase 2-wire 240V, 5-30A	W2DLD050600	2200
3-Phase 4-Wire 240V 10-60A	W4DLD100600	5000

Astronomical Time Switch



Description	Cat. No.	M.R.P. (₹) Per Unit
Astronomical Time Switch 110-240V 1 C/O - 2 Mod	T2DDT7	3150

Modular Indicator



Description	Cat. No.	M.R.P. (₹) Per Unit
Single Phase Indicator-Red 1 Mod	MM1NDV04	560
Single Phase Indicator-Yellow 1 Mod	MM1NDW04	560
Single Phase Indicator-Blue 1 Mod	MM1NDX04	560
Three Phase Indicator-Red, Yellow & Blue 1Mod	MM3ND04	780

Surge Protection Device



Description	Cat. No.	M.R.P. (₹) Per Unit
Type 2 SPDs - (8/20 micro sec)		
40kA, 1P+N, 2 Mod	LPDA2040P2	6125
40kA, 3P+N, 4 Mod	LPDA2040P4	12000
15kA, 1P+N, 2 Mod	LPDA2015P2	5000
15kA, 3P+N, 4 Mod	LPDA2015P4	10005

Analog Time Switch



Description	Cat. No.	M.R.P. (₹) Per Unit
Time Switch - 1 Mod (1 NO)	J6107B204	2450
Time Switch - 3 Mod (1 C/O)	J6118B304	2400

Description	Cat. No.	M.R.P. (₹) Per Unit
Type 1 SPDs - (10/350 micro sec)*	-	-

* Contact nearest L&T branch office for its availability.

Single Phase ACCL



Automatic Source Changeover With Current Limiter

Description EB/DG (Load)	Cat. No.	M.R.P. (₹) Per Unit
30A/1.5A (300W)	ACCL1130010	1500
30A/2.5A (500W)	ACCL1130020	1500
30A/3A (600W)	ACCL1130030	1500
30A/4A (800W)	ACCL1130040	1500
30A/5A (1000W)	ACCL1130050	1500
30A/6A (1200W)	ACCL1130060	1500
30A/8A (1600W)	ACCL1130080	1500
30A/10A (1800W)	ACCL1130100	1500

Digital Time Switch



Description	Cat. No.	M.R.P. (₹) Per Unit
Crono Time Switch 110-240V AC 1 C/O- 2 Mod	67DDT0	1875
Pulse Time Switch, 110-240V AC 1 C/O- 2 Mod	67DDT9	1825

Distribution Boards

Range Highlights

- As per IS 8623
- Aesthetically superior to suit the interiors
- Suitable for flush and surface mounting
- Ready to use DBs - provided with 100A phase Bus-bar, Neutral bar, Cement Spill Protector, Earth bar and interconnecting wires as standard accessories*

SPN Distribution Boards



Description	No. of Modules	Cat. Nos.	M.R.P. (₹) Per Unit
IP30 - Single Door			
6 way	6	LTSC06N	905
8 way	8	LTSC08N	1030
12 way	12	LTSC12N	1220
16 way	16	LTSC16N	1540
18 way	18	LTSC18N	2035
IP43 - Double Door : Plain			
4 way	4	LTSD04N	1155
6 way	6	LTSD06N	1325
8 way	8	LTSD08N	1450
12 way	12	LTSD12N	1790
16 way	16	LTSD16N	2170
18 way	18	LTSD18N	2920
IP43 - Double Door : Glazed			
4 way	4	LTSD04GN	1405
6 way	6	LTSD06GN	1545
8 way	8	LTSD08GN	1650
12 way	12	LTSD12GN	2015
16 way	16	LTSD16GN	2470
18 way	18	LTSD18GN	3050

TPN Distribution Boards



Description	No. of Modules	Cat. Nos.	M.R.P. (₹) Per Unit
IP30 - Single Door			
4 way +	4 + 12	LTTC04NE	2140
4 way	8 + 12	LTTC04N	2275
6 way	8 + 18	LTTC06N	2765
8 way	8 + 24	LTTC08N	3215
12 way	8 + 36	LTTC12N	4905
IP43 - Double Door : Plain			
4 way +	4 + 12	LTDD04NE	2855
4 way	8 + 12	LTDD04N	2895
6 way	8 + 18	LTDD06N	3555
8 way	8 + 24	LTDD08N	4275
12 way	8 + 36	LTDD12N	6410
16 way	8 + 48	LTDD16N	7845
IP43 - Double Door : Glazed			
4 way +	4 + 12	LTDD04GNE	3295
4 way	8 + 12	LTDD04GN	3470
6 way	8 + 18	LTDD06GN	4265
8 way	8 + 24	LTDD08GN	5020
12 way	8 + 36	LTDD12GN	7660
16 way	8 + 48	LTDD16GN	9305

TPN Horizontal PPI Distribution Boards



Description	No. of Modules	Cat. Nos.	M.R.P. (₹) Per Unit
IP43 - Double Door : Plain			
4 + 2 way	8 + 6 + 12	LTHPD04N	4650
6 + 2 way	8 + 6 + 18	LTHPD06N	5550
8 + 2 way	8 + 6 + 24	LTHPD08N	6490
10 + 2 way	8 + 6 + 30	LTHPD10N	7590
12 + 2 way	8 + 6 + 36	LTHPD12N	8565
14 + 2 way	8 + 6 + 42	LTHPD14N	9665
IP43 - Double Door : Glazed			
4 + 2 way	8 + 6 + 12	LTHPD04GN	5280
6 + 2 way	8 + 6 + 18	LTHPD06GN	6310
8 + 2 way	8 + 6 + 24	LTHPD08GN	7550
12 + 2 way	8 + 6 + 36	LTHPD12GN	10615

TPN Tier PPI Distribution Boards



Description	No. of Modules	Cat. Nos.	M.R.P. (₹) Per Unit
IP43 - Double Door : Plain			
6 + 2 way	8 + 6 + 18	LTPPD06N	6510
8 + 2 way	8 + 6 + 24	LTPPD08N	8170
10 + 2 way	8 + 6 + 30	LTPPD10N	8570
12 + 2 way	8 + 6 + 36	LTPPD12N	9320
16 + 2 way	8 + 6 + 48	LTPPD16N	9810
12 + 2 way +	MCCB + 6 + 36	LTPPD12MN	8860
IP43 - Double Door : Glazed			
6 + 2 way	8 + 6 + 18	LTPPD06GN	7270
8 + 2 way	8 + 6 + 24	LTPPD08GN	8370
10 + 2 way	8 + 6 + 30	LTPPD10GN	8665
12 + 2 way	8 + 6 + 36	LTPPD12GN	9720
16 + 2 way	8 + 6 + 48	LTPPD16GN	10160
12 + 2 way +	MCCB + 6 + 36	LTPPD12MGN	9500

* For flexi DB, Phase bus-bar & connecting wires are not part of standard accessories

Note: Provision to mount MCCB type DH 3P up to 200A and 4P up to 160A as incomer.

Distribution Boards

TPN Vertical Distribution Boards (Modular Incomer)



Description	No. of Modules	Cat. Nos.	M.R.P. (₹) Per Unit
IP30 - Single Door			
4 way	8 + 12	LTVC04N	6030
6 way	8 + 18	LTVC06N	7090
8 way	8 + 24	LTVC08N	7560
12 way	8 + 36	LTVC12N	10550
IP43 - Double Door : Plain			
4 way	8 + 12	LTVD04N	7115
6 way	8 + 18	LTVD06N	8660
8 way	8 + 24	LTVD08N	9135
12 way	8 + 36	LTVD12N	12095
16 way	8 + 48	LTVD16N	16665
IP43 - Double Door : Glazed			
4 way	8 + 12	LTVD04GN	8415
6 way	8 + 18	LTVD06GN	10710
8 way	8 + 24	LTVD08GN	13055
12 way	8 + 36	LTVD12GN	14305
16 way	8 + 48	LTVD16GN	17490

TPN Vertical Distribution Boards (MCCB Incomer)



Description	No. of Modules	Cat. Nos.	M.R.P. (₹) Per Unit
IP43 - Double Door : Plain			
4 way	MCCB + 12	LTV04MN	8065
6 way	MCCB + 18	LTV06MN	9835
8 way	MCCB + 24	LTV08MN	10365
12 way	MCCB + 36	LTV12MN	13585
16 way	MCCB + 48	LTV16MN	17170
IP43 - Double Door : Glazed			
4 way	MCCB + 12	LTV04MGN	9795
6 way	MCCB + 18	LTV06MGN	11155
8 way	MCCB + 24	LTV08MGN	12345
12 way	MCCB + 36	LTV12MGN	15985
16 way	MCCB + 48	LTV16MGN	19185

Note: Provision to mount MCCB type DH 3P up to 200A and 4P up to 160A as incomer.

TPN Phase Segregated Distribution Boards



Description	No. of Modules	Cat. Nos.	M.R.P. (₹) Per Unit
IP30 - Single Door : (Modular incomer)			
4 way	8 + 12 + 12	LTPSC04N	6120
6 way	8 + 12 + 18	LTPSC06N	6525
8 way	8 + 12 + 24	LTPSC08N	7100
12 way	8 + 12 + 36	LTPSC12N	8480
IP43 - Double Door : Plain (Modular incomer)			
4 way	8 + 12 + 12	LTPSD04N	7115
6 way	8 + 12 + 18	LTPSD06N	8040
8 way	8 + 12 + 24	LTPSD08N	8800
12 way	8 + 12 + 36	LTPSD12N	11385
IP43 - Double Door : Plain (MCCB incomer)			
4 way	MCCB + 12 + 12	LTPSD04MN	10050
6 way	MCCB + 12 + 18	LTPSD06MN	11480
8 way	MCCB + 12 + 24	LTPSD08MN	13150
12 way	MCCB + 12 + 36	LTPSD12MN	14900

TPN Phase Selector Distribution Boards



Description	No. of Modules	Cat. Nos.	M.R.P. (₹) Per Unit
IP30 - Single Door			
4 way	8 + 12	LTPCC04NS	9050
6 way	8 + 18	LTPCC06NS	9620
8 way	8 + 24	LTPCC08NS	10600
12 way	8 + 36	LTPCC12NS	11560
IP43 - Double Door : Plain			
4 way with single front plate	6 + 12	LTPCD04NES	10120
4 way	8 + 12	LTPCD04NS	10160
6 way	8 + 18	LTPCD06NS	10335
8 way	8 + 24	LTPCD08NS	10845
12 way	8 + 36	LTPCD12NS	12410

Note: Provision to mount MCCB type DH 3P up to 200A and 4P up to 160A as incomer.

Distribution Boards

Flexi Distribution Boards



Description	No. of Modules	Cat. Nos.	M.R.P. (₹) Per Unit
IP43 - Double Door : Plain			
2 row 28 module	28	LTFD228N	3620
3 row 42 module	42	LTFD342N	4320
4 row 56 module	56	LTFD456N	4740
IP43 - Double Door : Glazed			
2 row 28 module	28	LTFD228GN	3690
3 row 42 module	42	LTFD342GN	4560
4 row 56 module	56	LTFD456GN	4830

Enclosures



Description	No. of Modules	Cat. Nos.	M.R.P. (₹) Per Unit
1 way	1	LTMC01NE	410
2 way	2	LTMC02N	435
4 way	4	LTMC04N	445
6 way	6	LTMC06N	685

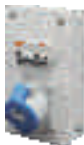
Metal Plug and Socket DBs



Description	No. of Modules	Cat. Nos.	M.R.P. (₹) Per Unit
10A 2Pin + SC	1	LTMP110N	1060
20A 2Pin + SC	1	LTMP120N	1130
20A 2Pin + SC	2	LTMP220N	1165
20A 3Pin + SC	3	LTMP320N	2380
32A 3Pin + SC	3	LTMP332N	2790
32A 3Pin + SC	4	LTMP432N	2950
63A 5Pin + SC	4	LTMP463N	10370

SC - Scraping Earth

Plastic Plug and Socket DBs



Description	No. of Modules	Cat. Nos.	M.R.P. (₹) Per Unit
16A 3Pin + SC	4	LTPP316N	1990
32A 3Pin + SC	4	LTPP332N	2700
32A 5Pin + SC	6	LTPP532N	3300
63A 5Pin + SC	8	LTPP563N	9330

SC - Scraping Earth

Cable End Boxes

Description	Cat. Nos.	M.R.P. (₹) Per Unit
CEB for SPN DBs		
CEB for 4 Way SPN DD DB	LTSD04CBN	455
CEB for 6 Way SPN DD DB	LTSD06CBN	510
CEB for 8 Way SPN DD DB	LTSD08CBN	515
CEB for 12 Way SPN DD DB	LTSD12CBN	580
CEB for 16 Way SPN DD DB	LTSD16CBN	800
CEB for 18 Way SPN DD DB	LTSD18CBN	870
CEB for TPN DBs		
CEB for 4 Way TPN DD ECO DB	LTTD04CBNE	730
CEB for 4 Way TPN DD DB	LTTD04CBN	840
CEB for 6 Way TPN DD DB	LTTD06CBN	910
CEB for 8 Way TPN DD DB	LTTD08CBN	1360
CEB for 12 Way TPN DD DB	LTTD12CBN	1860
CEB for 16 Way TPN DD DB	LTTD16CBN	2095
CEB for TPN Horizontal PPI DBs		
CEB for 2 + 4 Way Horizontal PPI DD DB	LTHPD04CBN	940
CEB for 2 + 6 Way Horizontal PPI DD DB	LTHPD06CBN	1465
CEB for 2 + 8 Way Horizontal PPI DD DB	LTHPD08CBN	1675
CEB for 2 + 12 Way Horizontal PPI DD DB	LTHPD12CBN	1980
CEB for TPN Tier PPI DBs		
CEB for 2 + 6 Way Tier PPI DD DB	LTTPD06CBN	880
CEB for 2 + 8 Way Tier PPI DD DB	LTTPD08CBN	920
CEB for 2 + 10 Way Tier PPI DD DB	LTTPD10CBN	1120
CEB for 2 + 12 Way Tier PPI DD DB	LTTPD12CBN	1675
CEB for 2 + 12 Way Tier PPI DD DB (MCCB)	LTTPD12MCBN	1880
CEB for Vertical TPN DBs		
CEB for Vertical DD (Modular I/C)	LTVDXxCB	725
CEB for Vertical DD (MCCB I/C)	LTVDXXMCBN	2270
CEB for Flexi DBs	LTFDxxCBN	725
CEB for Phase Segregated DB		
CEB for 4 Way TPN Modular (I/C) DB	LTPSD04CBN	1385
CEB for 6 Way TPN Modular (I/C) DB	LTPSD06CBN	1655
CEB for 8 Way TPN Modular (I/C) DB	LTPSD08CBN	2200
CEB for 12 Way TPN Modular (I/C) DB	LTPSD12CBN	3290
CEB for 4 Way MCCB (I/C) DB	LTPSD04MCBN	1690
CEB for 6 Way MCCB (I/C) DB	LTPSD06MCBN	2025
CEB for 8 Way MCCB (I/C) DB	LTPSD08MCBN	2380
CEB for 12 Way MCCB (I/C) DB	LTPSD12MCBN	3555

Customized Distribution Boards

For TV Telephone DBs, pre-wired DBs, 8 Segment DBs and other customized DBs, please contact nearest L&T office.

Selection Chart: Fuse Protected Feeders

TYPE '2' Co-ordination, Iq=50 kA at 415V, 3Ø, 50 Hz as per IS/IEC 60947-4-1 standard

- The Full Load Current (FLC) indicated for 3-phase motors are of 'squirrel-cage Induction motors' at full load.
- Contactors / S-D-Fs indicated are of the minimum ratings. Higher rating of contactors and S-D-Fs can be used.
- Selection chart is for standard 3-phase, squirrel cage motor with average power factor and efficiency.
- Selection is valid only for complete L&T combinations.
- Compliance to Type '2' co-ordination is not assured in case these combinations are changed to accommodate another brand / rating of products like S-D-F / Fuse etc.
- All S-D-F ratings are AC-23A as per IS/IEC 60947-3, IEC 60947-3 & EN 60947-3
- Normal motor starting time (<=5 Sec) is assumed. Selection for motors with longer starting times can be made available on request.
- These charts remain same for IE1 and IE2 motors
- For Type 2 charts for fuseless feeders, kindly contact the nearest branch office.

DOL STARTER FEEDERS

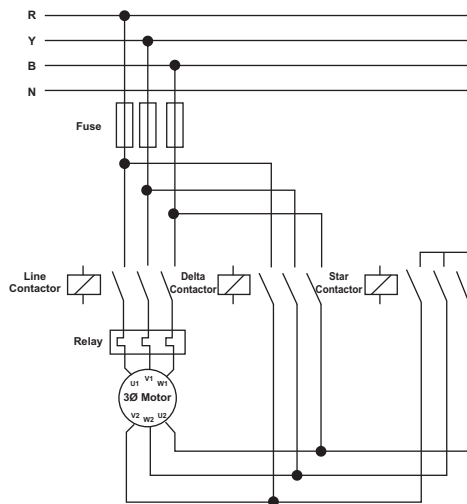
Motor: 3Ø, 415V, 50 Hz			Contactor Type	Overload Relay		Nominal Backup fuse		S - D - F
hp	kW	In (A)		Type	Range (A)	Type	Rating (A)	
0.16	0.12	0.51	MNX 9	MN 2	0.45 - 0.75	HF	2	FN 32 / FNX 32
0.25	0.18	0.6	MNX 9	MN 2	0.45 - 0.75	HF	2	FN 32 / FNX 32
0.33	0.25	0.8	MNX 9	MN 2	0.6 - 1.0	HF	2	FN 32 / FNX 32
0.5	0.37	1.2	MNX 9	MN 2	0.9 - 1.5	HF	4	FN 32 / FNX 32
0.75	0.55	1.5	MNX 9	MN 2	1.4 - 2.3	HF	4	FN 32 / FNX 32
1	0.75	2	MNX 9	MN 2	1.4 - 2.3	HF	6	FN 32 / FNX 32
1.5	1.1	2.7	MNX 9	MN 2	2.0 - 3.3	HF	8	FN 32 / FNX 32
1.75	1.3	3	MNX 9	MN 2	2.0 - 3.3	HF	8	FN 32 / FNX 32
2	1.5	3.5	MNX 9	MN 2	3 - 5	HF	10	FN 32 / FNX 32
3	2.2	4.92	MNX 9	MN 2	4.5 - 7.5	HF	16	FN 32 / FNX 32
4	3	6	MNX 9	MN 2	4.5 - 7.5	HF	16	FN 32 / FNX 32
5	3.7	7.5	MNX 9	MN 2	4.5 - 7.5	HF	20	FN 32 / FNX 32
5.5	4	8.5	MNX 9	MN 2	6 - 10	HF	20	FN 32 / FNX 32
7.5	5.5	11	MNX 12	MN 2	9 - 15	HF	32	FN 32 / FNX 32
10	7.5	14.5	MNX 22	MN 2	9 - 15	HF	40	FN 63 / FNX 63
12.5	9.3	17.3	MNX 25	MN 2	14 - 23	HF	50	FN 63 / FNX 63
15	11	21	MNX 25	MN 2	14 - 23	HF	63	FN 63 / FNX 63
17.5	13	24	MNX 25	MN 2	20 - 33	HF	63	FN 63 / FNX 63
20	15	29	MNX 40	MN 2	20 - 33	HN, 000*	63	FN 100 / FNX 100*
25	18.5	35	MNX 40	MN 2	24 - 40	HN, 000*	80	FN 100 / FNX 100*
30	22	40	MNX 45	MN 5	30 - 50	HN, 000*	80	FN 100 / FNX 100*
40	30	54	MNX 70	MN 5	45 - 75	HN, 000*	100	FN 100 / FNX 100*
50	37	68	MNX 80	MN 5	45 - 75	HN, 000	125	FN 125 / FNX 125
60	45	81	MNX 95	MN 5	66 - 110	HN, 000	125	FN 125 / FNX 125
75	55	94	MNX 95	MN 5	66 - 110	HN, 00#	160	FN 160 / FNX 160#
100	75	130	MNX 140	MN 12	90 - 150	HN, 0	200	FN 200 / FNX 200
110	80	139	MNX 140	MN 12	90 - 150	HN, 0	200	FN 200 / FNX 200
120	90	157	MNX 185	MN 12	135 - 225	HN, 1	250	FN 250 / FNX 250
150	110	189	MNX 225	MN 12	135 - 225	HN, 1	250	FN 250 / FNX 250
170	125	207	MNX 265	MN 12	135 - 225	HN, 1	315	FN 315 / FNX 315
180	132	226	MNX 265	MN 12	180 - 300	HN, 1	315	FN 315 / FNX 315
200	150	248	MNX 265	MN 12	180 - 300	HN, 2	400	FN 400 / FNX 400
215	160	270	MNX 325	MN 12	180 - 300	HN, 2	400	FN 400 / FNX 400
240	180	298	MNX 325	MN 12	180 - 300	HN, 2	400	FN 400 / FNX 400
270	200	336	MNX 400	MN 12	270 - 450	HN, 3	500	FN 630 / FNX 630
300	225	360	MNX 400	MN 12	270 - 450	HN, 3	500	FN 630 / FNX 630
335	250	420	MNX 550	MN 12	270 - 450	HN, 3	500	FN 630 / FNX 630
370	275	440	MNX 550	MN 12	270 - 450	HN, 3	630	FN 630 / FNX 630
425	315	529	MNX 550	MN 12L	340 - 570	HN, 3	630	FN 630 / FNX 630
452	335	550	MNX 650	MN 12L	340 - 570	HN, 3	800	FN 800 / FNX 800

* : Only size '000' fuses to be used with FNX 100 S-D-F.

: Only size '00' fuses to be used with FNX 160 S-D-F.

Selection Chart: Fuse Protected Feeders

STAR DELTA STARTER FEEDERS



Note : It is recommended that Star Delta configuration is used along with Star-Delta Timer with Pause Time and not On-Delay Timer. Recommended timer Cat No is 12SDT0.

Ratings at 3Ø, 415V, 50 Hz				Contactor			Overload Relay		Nominal Back up fuse		S - D - F
hp	kW	Current, In (A)									
		Line	Phase	Star	Line	Delta	Type	Range (A)	Type	Rating (A)	
1	0.75	2	1.2	MNX 9	MNX 9	MNX 9	MN 2	0.9 - 1.5	HF	4	FN 32 / FNX 32
1.5	1.1	2.7	1.6	MNX 9	MNX 9	MNX 9	MN 2	1.4 - 2.3	HF	4	FN 32 / FNX 32
1.75	1.3	3	1.7	MNX 9	MNX 9	MNX 9	MN 2	1.4 - 2.3	HF	4	FN 32 / FNX 32
2	1.5	3.5	2.0	MNX 9	MNX 9	MNX 9	MN 2	1.4 - 2.3	HF	6	FN 32 / FNX 32
3	2.2	4.92	2.8	MNX 9	MNX 9	MNX 9	MN 2	2 - 3.3	HF	8	FN 32 / FNX 32
4	3	6	3.5	MNX 9	MNX 9	MNX 9	MN 2	3 - 5	HF	8	FN 32 / FNX 32
5	3.7	7.5	4.3	MNX 9	MNX 9	MNX 9	MN 2	3 - 5	HF	10	FN 32 / FNX 32
5.5	4	8.5	4.9	MNX 9	MNX 9	MNX 9	MN 2	3 - 5	HF	16	FN 32 / FNX 32
7.5	5.5	11	6.4	MNX 9	MNX 9	MNX 9	MN 2	4.5 - 7.5	HF	16	FN 32 / FNX 32
10	7.5	14.5	8.4	MNX 9	MNX 9	MNX 9	MN 2	6 - 10	HF	20	FN 32 / FNX 32
12.5	9.3	17.3	10.0	MNX 9	MNX 12	MNX 12	MN 2	9 - 15	HF	32	FN 32 / FNX 32
15	11	21	12.0	MNX 9	MNX 12	MNX 12	MN 2	9 - 15	HF	32	FN 32 / FNX 32
17.5	13	24	13.9	MNX 12	MNX 18	MNX 18	MN 2	9 - 15	HF	32	FN 32 / FNX 32
20	15	29	16.7	MNX 12	MNX 22	MNX 22	MN 2	14 - 23	HF	40	FN 63 / FNX 63
25	18.5	35	20.2	MNX 18	MNX 25	MNX 25	MN 2	14 - 23	HF	50	FN 63 / FNX 63
30	22	40	23.1	MNX 18	MNX 25	MNX 25	MN 2	20 - 33	HF	63	FN 63 / FNX 63
40	30	54	31.2	MNX 32	MNX 32	MNX 32	MN 2	20 - 33	HN, 000*	63	FN 100 / FNX 100*
50	37	68	39.3	MNX 32	MNX 45	MNX 45	MN 5	30 - 50	HN, 000*	80	FN 100 / FNX 100*
60	45	81	46.8	MNX 45	MNX 70	MNX 70	MN 5	30 - 50	HN, 000*	100	FN 100 / FNX 100*
75	55	94	54.3	MNX 45	MNX 70	MNX 70	MN 5	45 - 75	HN, 000*	100	FN 100 / FNX 100*
100	75	130	75.1	MNX 80	MNX 95	MNX 95	MN 5	66 - 110	HN, 00#	160	FN 160 / FNX 160#
110	80	139	80.3	MNX 80	MNX 95	MNX 95	MN 5	66 - 110	HN, 00#	160	FN 160 / FNX 160#
120	90	157	90.6	MNX 80	MNX 95	MNX 95	MN 5	66 - 110	HN, 00#	160	FN 160 / FNX 160#
150	110	189	109	MNX 95	MNX 110	MNX 110	MN 5	66 - 110	HN, 0	200	FN 200 / FNX 200
170	125	207	120	MNX 95	MNX 140	MNX 140	MN 12	90 - 150	HN, 1	250	FN 250 / FNX 250
180	132	226	130	MNX 110	MNX 140	MNX 140	MN 12	90 - 150	HN, 1	250	FN 250 / FNX 250
200	150	248	143	MNX 110	MNX 185	MNX 185	MN 12	135 - 225	HN, 1	250	FN 250 / FNX 250
215	160	270	156	MNX 140	MNX 225	MNX 225	MN 12	135 - 225	HN, 1	315	FN 315 / FNX 315
240	180	298	172	MNX 140	MNX 225	MNX 225	MN 12	135 - 225	HN, 1	315	FN 315 / FNX 315
270	200	336	194	MNX 265	MNX 265	MNX 265	MN 12	135 - 225	HN, 2	400	FN 400 / FNX 400
300	225	360	208	MNX 265	MNX 265	MNX 265	MN 12	135 - 225	HN, 2	400	FN 400 / FNX 400
335	250	420	242	MNX 265	MNX 325	MNX 325	MN 12	180 - 300	HN, 3	500	FN 630 / FNX 630
370	275	440	254	MNX 265	MNX 325	MNX 325	MN 12	180 - 300	HN, 3	500	FN 630 / FNX 630
425	315	529	305	MNX 325	MNX 550	MNX 550	MN 12	270 - 450	HN, 3	630	FN 630 / FNX 630
452	335	550	318	MNX 400	MNX 550	MNX 550	MN 12	270 - 450	HN, 3	630	FN 630 / FNX 630
475	355	589	340	MNX 400	MNX 550	MNX 550	MN 12	270 - 450	HN, 3	630	FN 630 / FNX 630
502	375	615	355	MNX 400	MNX 550	MNX 550	MN 12	270 - 450	HN, 3	630	FN 630 / FNX 630

* : Only size '000' fuses to be used with FNX 100 S-D-F.

: Only size '00' fuses to be used with FNX 160 S-D-F.



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A photograph of a runner in a red shirt and blue cap running on a paved road that winds through rolling green hills under a clear blue sky. The headline 'We Go The Extra Mile' is overlaid on the upper left portion of the image.

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*Product improvement is a continuous process. For the latest information and special applications, please contact any of our offices listed here.
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