M-line

3 Pole Power Contactors

		MNX 9	MNX 12	MNX 18	MNX 22	MNX 25
Catalogue No.		CS 94106 / 7*	CS 94108 / 9*	CS 94100 / 1*	CS 94980 / 81*	CS 94110
Conformance to standards						
Power Contacts						
No. of poles		3	3	3	3	3
Rated insulation voltage, Ui		690V	690V	690V	690V	690V
Rated impulse withstand voltage, U_i		8 kV	8 kV	8 kV	8kV	8 kV
Rated making capacity - Amp		450	450	450	450	480
Rated breaking capacity - Amp		200	250	250	250	400
Conventional thermal current, Ith At 55°C Motor duty : 3Ø, 415V, 50Hz	Utilization category AC-1	25A	30A	30A	32A	45A
	Utilization category AC-2	9A	12A	18A	22A	25A
	Utilization category AC-3	4kW / 5.5hp / 9A	5.5kW / 7.5hp / 12A	9.3kW / 12.5hp / 18A	11kW / 15hp / 22A	11kW / 15hp / 25A
	Utilization category AC-4	4kW / 5.5hp / 9A	5.5kW / 7.5hp / 12A	9.3kW / 12.5hp / 18A	11kW / 15hp / 22A	11kW / 15hp /25A
Operational current I_e for AC-4 Utilization category at 415V,3Ø, 5OHz for 2,00,000 operating cycles		5.5A	7.1A	8A	8.5A	13.5A
Capacitor switching delta connected: 415V, 50Hz ***		6 kVAR	7.5 kVAR	9 kVAR	9 kVAR	15 kVAR
Max. Permissible peak in-rush current, I_p for capacitor switching		570A	680A	750A	750A	1400A
DC ratings (with 3 poles in series) and AC coil operation	DC 1 - 110V	9A	12A	18A	22A	25A
	DC 1 - 220V	9A	12A	18A	22A	25A
	DC 3 - 110V	9A	12A	18A	22A	25A
	DC 3 - 220V	9A	12A	18A	22A	25A
	DC 5 - 110V	9A	12A	18A	22A	25A
	DC 5 - 220V	6A	7.5A	9A	9A	12A
Mechanical life, No. of operating cycles		$15x10^6$	$15x10^6$	$15x10^6$	$15x10^6$	$10x10^6$
Max. frequency of operations: Operating cycles/hr	Mechanical	7200	7200	7200	7200	7200
	Utilization Category AC-1	3000	3000	3000	3000	3000
	Utilization Category AC-2	750	750	750	750	750
	Utilization Category AC-3	750	750	750	750	750
	Utilization Category AC-4	300	300	300	300	300
Service Temperature		-20°C to +55°C	-20°C to +55°C	-20°C to +55°C	-20°C to +55°C	-20°C to +55°C
Main terminal capacity	Lug (mm^2)	1 x 6	1 x 6	1 x 6	1 x 6	1x10
	Link (mm^2)	-	-	-	-	-
	Solid Conductors (mm^2)	2 x 4	2 x 4	2 x 4	2 x 4	2 x 6
	Multi strand conductors (mm^2)	2 x 2.5	2 x 2.5	2 x 2.5	2 x 2.5	2 x 4
Auxiliary Contacts						
No. of built-in auxiliary contacts		1NO or 1NC	1NO or 1NC	1NO or 1NC	NO or NC	#
Conventional thermal current, I_{th} at 55°C		10A	10A	10A	10A	10A
AC-15 rating at 415V, 50Hz		4A	4A	4A	4A	4A
Terminal capacity (Solid or multi strand conductors (mm^2)		2 x 2.5	2 x 2.5	2 x 2.5	2 x 2.5	2 x 2.5
Coil						
Voltage available for 50 Hz	Uc V	24, 42, 110, 220 / 240, 415, 525	24, 42, 110, 220 / 240, 415, 525	24, 42, 110, 220 / 240, 415, 525	24,42,110, 220/240,415,525	24, 42, 110, 220 / 240, 415, 525
Pick-up	VA	68	68	68	68	68
	CosØ	0.82	0.82	0.82	0.82	0.82
Hold-on	VA	11	11	11	11	11
	Watts	4	4	4	4	4
Limits of operation	Pick-up (%Uc)	65 - 120	65 - 120	65 - 120	65 - 120	65 - 120
	Drop-off(%Uc)	35 - 65	35 - 65	35 - 65	35 - 65	35 - 65

* With 1NC Auxiliary Contacts
** Data Available on request
*** For Capacitor Switching, please connect inductor in series
# Add - On block can be ordered separately
• 60Hz & 50/60HZ Coils available on request.

Technical Data

MNX 32	MNX40	MNX 45	MNX 50	MNX 70	MNX 80	MNX 95	MNX 110
CS 94111	CS 94190	ST 19000	ST 19001	ST 19002	ST 19003	CS 94136	CS 94137
IEC 60947-4-1, BSEN 60947-4-1 & IS 13947-4-1							
3	3	3	3	3	3	3	3
690V	690V	690V	690V	690V	690V	1000V	1000V
8 kV	8 kV	8 kV	8 kV	8 kV	8 kV	8 kV	8 kV
550	550	900	900	900	900	1680	1680
500	500	750	750	750	750	1400	1400
55A	55A	85A	85A	100A	100A	160A	160A
32A	40A	45A	50A	70A	80A	95A	110A
17kW / 22.5hp / 32A	22.5kW / 30hp / 40A	25kW /34 hp / 45A	26kW /35 hp / 50A	37kW / 50 hp / 70A	40kW / 54 hp / 80A	45kW / 60 hp / 95A	55kW / 75 hp / 110A
17kW / 22.5hp /32A	22.5kW / 30hp / 40A	25kW / 34hp / 45A	26kW / 35hp / 50A	30kW / 40hp / 63A	37kW / 50hp / 70A	45kW / 60hp / 95A	55kW / 75hp / 110A
16A	20A	24A	24A	28.5A	43A	53A	58A
20 kVAR	20 kVAR	30 kVAR	30 kVAR	35 kVAR	40 kVAR	65kVAR	65kVAR
2000A	2000A	2450A	2450A	2650A	3000A	3500A	3500A
32A	40A	45A	50A	63A	80A	95A	110A
32A	40A	45A	50A	63A	80A	95A	110A
32A	40A	45A	50A	63A	80A	95A	110A
32A	40A	45A	50A	63A	80A	95A	110A
32A	40A	45A	50A	63A	80A	95A	110A
20A	25A	45A	50A	50A	63A	95A	110A
$10x10^6$	$10x10^6$	$10x10^6$	$10x10^6$	$10x10^6$	$10x10^6$	$10x10^6$	$10x10^6$
7200	3600	3600	3600	3600	3600	3600	3600
3000	3000	3000	3000	3000	3000	3000	3000
750	750	750	750	750	750	750	750
750	750	750	750	750	750	750	750
300	300	300	300	300	300	300	300
-20^0C to $+55^0C$	-20^0C to $+55^0C$	-20^0C to $+55^0C$	-20^0C to $+55^0C$	-20^0C to $+55^0C$	-20^0C to $+55^0C$	-20^0C to $+55^0C$	-20^0C to $+55^0C$
1x10	1x10	1x35	1x35	1x35	1x35	1x120	1x120
-	-	1 x 12.5mm x 3mm	1 x 12.5mm x 3mm	1 x 12.5mm x 3mm	2 x 12.5mm x 3mm	2 x 25mm x 3mm	2 x 25mm x 3mm
2 x 6	2 x 6	-	-	-	-	-	-
2 x 4	2 x 4	-	-	-	-	-	-
#	#	2NO + 2NC	2NO + 2NC	2NO + 2NC	2NO + 2NC	2NO + 2NC	2NO + 2NC
10A	10A	10A	10A	10A	10A	10A	10A
4A	4A	4A	4A	4A	4A	4A	4A
2 x 2.5	2 x 2.5	2 X 2.5	2 X 2.5	2 X 2.5	2 X 2.5	2 X 2.5	2 X 2.5
24, 42, 110, 220 / 240, 415, 525	24, 42, 110, 220 / 240, 415, 525	24, 42, 110, 220 / 240, 415, 525	24, 42, 110, 220 / 240, 415, 525	24, 42, 110, 220 / 240, 415, 525	24, 42, 110, 220 / 240, 415, 525	24, 42, 110, 220 / 240, 415, 525	24, 42, 110, 220 / 240, 415, 525
68	68	190	190	190	190	550	550
0.82	0.82	0.77	0.77	0.77	0.77	0.64	0.64
11	11	21	21	21	21	36	36
4	4	5.5	5.5	5.5	5.5	10	10
65 - 120	80 - 110	80 - 110	80 - 110	80 - 110	80 - 110	80 - 110	80 - 110
35 - 65	35 - 65	35 - 65	35 - 65	35 - 65	35 - 65	35 - 65	35 - 65

Technical Data

MNX 140	MNX 185	MNX 225	MNX 265	MNX 325	MNX 400	MNX 550	MNX 650
CS 94138	CS 94139	CS 94140	CS 94142	CS 94143	CS 94144	CS 94145	CS 96327
3	3	3	3	3	3	3	3
1000V	1000V	1000V	1000V	1000V	1000V	1000V	1000V
8 kV	8 kV	8 kV	8 kV	8 kV	8 kV	8 kV	8 kV
1800	2220	2400	4000	4500	4500	5500	6500A
1600	1850	2000	3200	4000	4000	4500	5200A
160A	250A	300A	350A	400A	425A	650A	850A
140A	185A	225A	265A	325A	400A	550A	650A
75kW / 100 hp / 140A	90kW / 120 hp / 185A	110kW / 150 hp / 225A	147kW / 196 hp / 265A	180kW / 245 hp / 325A	200kW / 270 hp / 400A	315kW / 425hp / 550A	355kW / 475hp / 650A
75kW / 100hp / 140A	90kW / 120hp / 160A	100kW / 136hp / 200A	130kW / 175hp / 235A	140kW / 190hp / 250A	150kW / 200hp / 275A	168kW / 225hp / 300A	200kW / 267hp / 400A
66A	90A	100A	120A	140A	150A	150A	**
70kVAR	100kVAR	125kVAR	150kVAR	175kVAR	175kVAR	250 kVAR	300 kVAR
4000A	4500A	5400A	6100A	7000A	7000A	**	**
125A	185A	225A	265A	325A	400A	550A	650A
125A	185A	225A	265A	325A	400A	550A	650A
125A	185A	225A	265A	325A	400A	550A	650A
125A	185A	225A	265A	325A	400A	550A	650A
125A	185A	225A	265A	325A	400A	550A	650A
125A	185A	225A	265A	325A	400A	550A	650A
$10x10^6$	$10x10^6$	$10x10^6$	$10x10^6$	$10x10^6$	$10x10^6$	$10x10^6$	$10x10^6$
3600	3600	3600	3600	3600	3600	1200	1200
3000	3000	3000	3000	3000	3000	750	750
750	750	750	750	750	750	750	750
750	750	750	750	750	750	750	750
300	250	150	150	150	150	150	150
-20^0C to $+55^0$C	-20^0C to $+55^0$C	-20^0C to $+55^0$C	-20^0C to $+55^0$C	-20^0C to $+55^0$C	-20^0C to $+55^0$C	-20^0C to + 55^0C	-20^0C to + 55^0C
1x120	1x185	1x185	2x240 / 1x300	2x240 / 1x300	2x240 / 1x300	2 x 50mm x 5mm	-
2 x 25mm x 3mm	2 x 30mm x 5mm	2 x 30mm x 5mm	2 x 50mm x 5mm	2 x 50mm x 5mm	2 x 50mm x 5mm	2 x 50mm x 5mm	2 x 60mm x 5mm
-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-
2NO + 2NC	2NO + 2NC	2NO + 2NC	2NO + 2NC	2NO + 2NC	2NO + 2NC	2NO + 2NC	2NO + 2NC
10A	10A	10A	10A	10A	10A	10A	10A
4A	4A	4A	4A	4A	4A	4A	4A
2 X 2.5	2 X 2.5	2 X 2.5	2 X 2.5	2 X 2.5	2 X 2.5	2 x 2.5	2 x 2.5
24, 42, 110, 220 / 240, 415, 525	110 240, 415, 525	110 240, 415, 525	110 240, 415, 525	110 240, 415, 525	110 240, 415, 525	110 240, 415	110 240, 415
550	960	960	2100	2100	2100	1000	1000
0.64	0.3	0.3	0.21	0.21	0.21	-	-
36	56	56	95	95	95	25	25
10	16	16	35	35	35	10	10
80 - 110	80 - 110	80 - 110	80 - 110	80 - 110	80 - 110	80 - 110	80 - 110
35 - 65	35 - 65	35 - 65	35 - 65	35 - 65	35 - 65	35 - 65	35 - 65