

Contactors

MC-Series



UL508
E108780



Standards and Certifications

- UL508
- IEC 60947-2 & IEC 60947-4-2
- CSA C22.2 No.14

Features

- 8 Frame Sizes
- 1/2HP up to 600HP @ 480V AC
- Screw Terminals (Lug Terminals Available)
- Direct Mounting Overload Relays
- Optional accessories
 - Additional Auxiliary contacts
 - Replacement Coils
 - Reversing Wiring Sets and Interlocks
 - Direct Wiring Adapters fro MMS
 - Coil surge Suppressors

General Specifications

Maximum Voltage	600V AC
Rated Frequency	50/60Hz
Operating Temperature	-5°C (23°F) to +40°C (104°F)
Degree of protection	IP20
Resistance to Vibration (5-300Hz)	> 15g
Flame Resistance	According to UL94

Terminal Size Acceptability and Torque

Wire Type	22AF	40AF	65-100AF	150AF	225AF	400AF	800AF
Solid	18-8 AWG	14-8AWG	12-4AWG	10AWG-1/0	8AWG - 300kcmil	8AWG - 400kcmil	2/0 - 700kcmil
Stranded	18-10AWG	14-8AWG	12-4AWG	10AWG-1/0	8AWG - 300kcmil	8AWG - 400kcmil	2/0 - 700kcmil
Ferrule	18-10AWG	18-10AWG	12-4AWG	10AWG-1/0	8AWG - 300kcmil	8AWG - 400kcmil	2/0 - 700kcmil
Torque	20 lb-in.	35 lb-in.	35 lb-in.	87 lb-in.	130 lb-in.	200 lb-in.	235 lb-in.



86

Contactors

3 Pole / Frame Size 22AF



Altech Corp.®



includes UA-1-11
Auxiliary switch,
(1NO/1NC)

Additional Auxiliaries
and other accessories
see page 11-13

22AF

Type	MC-9B	MC-12B	MC-18B	MC-22B
Number of Poles	3	3	3	3
NEMA Size	00	00	0	1
Standard Auxiliaries	1NO/1NC	1NO/1NC	1NO/1NC	1NO/1NC

	Coil Voltage	Frequency	Part. No.	Part. No.	Part. No.	Part. No.
AC Coil	24V	50/60 Hz	MC-9B-AC24V	MC-12B-AC24V	MC-18B-AC24V	MC-22B-AC24V
	120V	50/60 Hz	MC-9B-AC120V	MC-12B-AC120V	MC-18B-AC120V	MC-22B-AC120V
	208V	60 Hz	MC-9B-AC208V	MC-12B-AC208V	MC-18B-AC208V	MC-22B-AC208V
	230V	50/60 Hz	MC-9B-AC230V	MC-12B-AC230V	MC-18B-AC230V	MC-22B-AC230V
	480V	60 Hz	MC-9B-AC480V	MC-12B-AC480V	MC-18B-AC480V	MC-22B-AC480V

Other AC Coil Voltages Available:

60 Hz: 277V, 600V

50/ 60Hz: 48V, 100V, 110V, 200V, 220V, 240V, 380V, 415V, 440V, 500V, 550V

DC Coil	12V	—	MC-9B-DC12V	MC-12B-DC12V	MC-18B-DC12V	MC-22B-DC12V
	24V	—	MC-9B-DC24V	MC-12B-DC24V	MC-18B-DC24V	MC-22B-DC24V

Other DC Coil Voltages Available:

20V, 48V, 60V, 80V, 100V, 110V, 125V, 200V, 220V, 250V

HP Rating / UL508

		HP	HP	HP	HP
Single phase	Continuous current	25A	25A	40A	40A
	110~120V	0.5	0.75	1	2
	220~240V	1.5	2	3	3
Three phase	200~208V	2	3	5	7.5
	220~240V	3	5	7.5	10
	440~480V	5	7.5	10	15
	550~600V	7.5	10	15	20

Overload Relays

(Class 10A,
Differential Typical)



MT-32

Setting Ranges (A)

Setting Ranges (A)	Frame Size 22AF
0.1-0.16A	MT-32/3K-0.16
0.16-0.25A	MT-32/3K-0.25
0.25-0.4A	MT-32/3K-0.4
0.4-0.63A	MT-32/3K-0.63
0.63-1A	MT-32/3K-1
1-1.6A	MT-32/3K-1.6
1.6-2.5A	MT-32/3K-2.5
2.4-4A	MT-32/3K-4
4-6A	MT-32/3K-6
5-8A	MT-32/3K-8
6-9A	MT-32/3K-9
7-10A	MT-32/3K-10
9-13A	MT-32/3K-13
12-18A	MT-32/3K-18
16-22A	MT-32/3K-22
18-25A	MT-32/3K-25
22-32A	MT-32/3K-32
28-40A	MT-32/3K-40

Drawings and other technical information can be found on page 14-20.

Contactor 3 Pole

Contactors

3 Pole / Frame Size 40AF / 65F



includes 2 x UA-1-11
Auxiliary switch,
(2NO/2NC)

Additional Auxiliaries
and other accessories
see page 11-13



includes 2 x UA-1-11
Auxiliary switch,
(2NO/2NC)

Additional Auxiliaries
and other accessories
see page 11-13

40AF

65AF

Type	MC-32A	MC-40A	MC-50A*	MC-65A*
Number of Poles	3	3	3	3
NEMA Size	1	1	2	2
Standard Auxiliaries	2NO/2NC	2NO/2NC	2NO/2NC	2NO/2NC

	Coil Voltage	Frequency	Part. No.	Part. No.	Part. No.	Part. No.
AC Coil	24V	50/60 Hz	MC-32A-AC24V	MC-40A-AC24V	MC-50A-AC24V	MC-65A-AC24V
	120V	50/60 Hz	MC-32A-AC120V	MC-40A-AC120V	MC-50A-AC120V	MC-65A-AC120V
	208V	60 Hz	MC-32A-AC208V	MC-40A-AC208V	MC-50A-AC208V	MC-65A-AC208V
	230V	50/60 Hz	MC-32A-AC230V	MC-40A-AC2300V	MC-50A-AC230V	MC-65A-AC230V
	480V	60 Hz	MC-32A-AC480V	MC-40A-AC480V	MC-50A-AC480V	MC-65A-AC480V

Other AC Coil Voltages Available:

60 Hz: 277V, 600V

50/ 60Hz: 48V, 100V, 110V, 200V, 220V, 240V, 380V, 415V, 440V, 500V, 550V

DC Coil	12V	—	MC-32A-DC12V	MC-40A-DC12V	MC-50A-DC12V	MC-65A-DC12V
	24V	—	MC-32A-DC24V	MC-40A-DC24V	MC-50A-DC24V	MC-65A-DC24V

Other DC Coil Voltages Available:

20V, 48V, 60V, 80V, 100V, 110V, 125V, 200V, 220V, 250V

HP Rating / UL508	HP	HP	HP	HP
Continuous current	50A	60A	70A	100A
Single phase				
110~120V	2	3	3	5
220~240V	5	7.5	10	15
Three phase				
200~208V	7.5	15	20	25
220~240V	10	15	25	30
440~480V	20	30	40	50
550~600V	25	30	50	60

Overload Relays (Class 10A, Differential Typical)



MT-63

Setting Ranges (A)	Frame Size 40AF	Frame Size 65AF
0.1-0.16A	MT-32/3K-0.16	-
0.16-0.25A	MT-32/3K-0.25	-
0.25-0.4A	MT-32/3K-0.4	-
0.4-0.63A	MT-32/3K-0.63	-
0.63-1A	MT-32/3K-1	-
1-1.6A	MT-32/3K-1.6	-
1.6-2.5A	MT-32/3K-2.5	-
2.4-4A	MT-32/3K-4	-
4-6A	MT-32/3K-6	MT-63/3K-6
5-8A	MT-32/3K-8	MT-63/3K-8
6-9A	MT-32/3K-9	MT-63/3K-9
7-10A	MT-32/3K-10	MT-63/3K-10
9-13A	MT-32/3K-13	MT-63/3K-13
12-18A	MT-32/3K-18	MT-63/3K-18
16-22A	MT-32/3K-22	MT-63/3K-22
18-25A	MT-32/3K-25	MT-63/3K-25
22-32A	MT-32/3K-32	-
28-40A	MT-32/3K-40	MT-63/3K-40
34-50A	-	MT-63/3K-50
45-65A	-	MT-63/3K-60

* Lug terminals available; please add "L" to part number, e.g. MC-75A-AC24V-L.

Drawings and other technical information can be found on page 14-20.

Contactor

3 Pole / Frame Size 100AF



Altech Corp.®

includes 2 x UA-1-11
Auxiliary switch,
(2NO/2NC)

Additional Auxiliaries
and other accessories
see page 11-13

100AF

Type	MC-75A*	MC-85A*	MC-100A*
Number of Poles	3	3	3
NEMA Size	2	3	3
Standard Auxiliaries	2NO/2NC	2NO/2NC	2NO/2NC

	Coil Voltage	Frequency	Part. No.	Part. No.	Part. No.
AC Coil	24V	50/60 Hz	MC-75A-AC24V	MC-85A-AC24V	MC-100A-AC24V
	120V	50/60 Hz	MC-75A-AC120V	MC-85A-AC120V	MC-100A-AC120V
	208V	60 Hz	MC-75A-AC208V	MC-85A-AC208V	MC-100A-AC208V
	230V	50/60 Hz	MC-75A-AC230V	MC-85A-AC230V	MC-100A-AC230V
	480V	60 Hz	MC-75A-AC480V	MC-85A-AC480V	MC-100A-AC480V

Other AC Coil Voltages Available:

60 Hz: 277V, 600V

50/ 60Hz: 48V, 100V, 110V, 200V, 220V, 240V, 380V, 415V, 440V, 500V, 550V

DC Coil	12V	—	MC-75A-DC12V	MC-85A-DC12V	MC-100A-DC12V
	24V	—	MC-75A-DC24V	MC-85A-DC24V	MC-100A-DC24V

Other DC Coil Voltages Available:

20V, 48V, 60V, 80V, 100V, 110V, 125V, 200V, 220V, 250V

HP Rating / UL508

		HP	HP	HP
	Continuous current	110A	135A	160A
Single phase	110~120V	5	7.5	10
	220~240V	15	15	20
Three phase	200~208V	25	30	30
	220~240V	30	40	40
	440~480V	50	60	75
	550~600V	60	75	75

Overload Relays

(Class 10A,
Differential Typical)



MT-95

Setting Ranges (A)

Setting Ranges (A)	Frame Size 100AF
7-10A	MT-95/3K-10
9-13A	MT-95/3K-13
12-18A	MT-95/3K-18
16-22A	MT-95/3K-22
18-25A	MT-95/3K-25
22-32A	MT-95/3K-32
24-36A	MT-95/3K-36
28-40A	MT-95/3K-40
34-50A	MT-95/3K-50
45-65A	MT-95/3K-65
54-75A	MT-95/3K-75
63-85A	MT-95/3K-85
70-95A	MT-95/3K-95
80-100A	MT-95/3K-100

* Lug terminals available; please add "L" to part number, e.g. MC-75A-AC24V-L.

Drawings and other technical information can be found on page 14-20.

Contactor 3 Pole

Contactors

3 Pole /Frame Size 150AF/225AF



includes 2 x UA-1-11
Auxiliary switch,
(2NO/2NC)

Additional Auxiliaries
and other accessories
see page 11-13



includes 2 x AU-100-11
Auxiliary switch,
(2NO/2NC)

Additional Auxiliaries
and other accessories
see page 11-13

150AF with Lug Terminals

225AF

Type	MC-130A*	MC-150A*	MC-185A	MC-225A
Number of Poles	3	3	3	3
NEMA Size	3	4	4	4
Standard Auxiliaries	2NO/2NC	2NO/2NC	2NO/2NC	2NO/2NC

	Coil Voltage	Frequency	Part. No.	Part. No.	Part. No.	Part. No.
AC Coil	24V	50/60 Hz	MC-130A-AC24V-L	MC-150A-AC24V-L	-	-
	110V	50/60 Hz	MC-130A-AC110V-L	MC-150A-AC110V-L	-	-
	220V	50/60 Hz	MC-130A-AC220V-L	MC-150A-AC220V-L	-	-
	300V	50/60 Hz	MC-130A-AC300V-L	MC-150A-AC300V-L	-	-
	400V	50/60 Hz	MC-130A-AC400V-L	MC-150A-AC400V-L	-	-
	500V	50/60 Hz	MC-130A-AC500V-L	MC-150A-AC500V-L	-	-
DC Coil	12V	-	MC-130A-DC12V-L	MC-150A-DC12V-L	-	-
	24V	-	MC-130A-DC24V-L	MC-150A-DC24V-L	-	-
	110V	-	MC-130A-DC110V-L	MC-150A-DC110V-L	-	-
	220V	-	MC-130A-DC220V-L	MC-150A-DC220V-L	-	-

AC/DC

Common Coil	Coil Voltage					
	AC 50/60Hz	DC				
	24-25V	24V	-	-	MC-185A-24V	MC-225A-24V
	48-50V	48V	-	-	MC-185A-48V	MC-225A-48V
	100-240V	100-220V	-	-	MC-185A-100/200V	MC-225A-100/200V
	265-347V	-	-	-	MC-185A-300V	MC-225A-300V
	380-450V	-	-	-	MC-185A-400V	MC-225A-400V
	440-575V	-	-	-	MC-185A-500V	MC-225A-500V

HP Rating / UL508

		HP	HP	HP	HP
	Continuous current	160A	210A	230A	275A
Single phase	110~120V	10	15	15	15
	220~240V	20	25	30	40
Three phase	200~208V	40	40	60	60
	220~240V	40	50	60	75
	440~480V	75	100	125	150
	550~600V	75	75	125	150

Overload Relays

(Class 10A,
Differential Typical)



MT-150

Setting Ranges (A)

Frame Size 150AF

Frame Size 225AF

34-50A	MT-150/3K-50	-
45-65A	MT-150/3K-65	-
54-75A	MT-150/3K-75	-
63-85A	MT-150/3K-85	-
65-100A	-	MT-225/3K-100
80-105A	MT-150/3K-105	-
85-125A	-	MT-225/3K-125
95-130A	MT-150/3K-130	-
110-150A	MT-150/3K-150	-
100-160A	-	MT-225/3K-160
120-185A	-	MT-225/3K-185
160-240A	-	MT-225/3K-240

* Screw terminals available; please remove "-L" from part number, e.g. MC-75A-AC24V.

Drawings and other technical information can be found on page 14-20.