

Contactors & Overload relays

Metasol MC 3P 18 to 100A

MC type Magnetic Contactors



Frame size			18AF				22AF				
Type			MC-6a	MC-9a	MC-12a	MC-18a	MC-9b	MC-12b	MC-18b	MC-22b	
screws clamp terminals			●	●	●	●	●	●	●	●	
Number of poles			3pole				3pole				
Rated operational voltage, Ue			690V				690V				
Rated insulation voltage, Ui			690V				690V				
Rated frequency			50/60Hz				50/60Hz				
Rated impulse withstand voltage, Uimp			6kV				6kV				
Maximum operating rate in operating cycles per hour(AC3)			1800 operations per hour				1800 operations per hour				
Durability			15 mil. operations				15 mil. operations				
Mechanical			2.5 mil. operations				2.5 mil. operations				
Electrical			2.5 mil. operations				2.5 mil. operations				
Current and power	AC-1, Thermal current	A	25	25	25	32	25	25	40	40	
		kW	2.2	2.5	3.5	4.5	2.5	3.5	4.5	5.5	
	AC-3	200/240V	A	9	11	13	18	11	13	18	22
		kW	3	4	5.5	7.5	4	5.5	7.5	11	
	380/440V	A	7	9	12	18	9	12	18	22	
		kW	3	4	7.5	7.5	4	7.5	7.5	15	
	500/550V	A	6	7	12	13	7	12	13	20	
		kW	3	4	7.5	7.5	4	7.5	7.5	15	
	690V	kW	3	4	7.5	7.5	4	7.5	7.5	15	
		A	4	5	9	9	6	9	9	18	
1000V	kW	-	-	-	-	-	-	-	-		
	A	-	-	-	-	-	-	-	-		
Rated Short-time withstand current (IEC 60947)	1s	A	210	250	280	300	250	280	300	400	
	10s	A	105	110	120	130	110	120	154	186	
	30s	A	70	70	80	85	70	80	100	130	
	1min	A	61	61	61	70	61	61	84	90	
	3min	A	40	45	47	50	45	50	60	60	
	10min	A	30	30	30	40	30	30	40	50	
	≥ 15min	A	25	26	28	40	26	28	40	45	
UL rating (50/60Hz)	Continuous current		A	25	25	25	32	25	25	40	40
	Single phase	110~120V	HP	0.5	0.5	0.75	1	0.5	0.75	1	2
		220~240V	HP	1.5	1.5	2	3	1.5	2	3	3
		200~208V	HP	2	2	3	5	2	3	5	7.5
	Three phase	220~240V	HP	3	3	5	7.5	3	5	7.5	10
		440~480V	HP	5	5	7.5	10	5	7.5	10	15
		550~600V	HP	7.5	7.5	10	15	7.5	10	15	20
NEMA size			00	00	0	1	00	00	1		
Size and weight	AC control	Weight	0.33				0.34				
		Size(W × H × D)	45 × 73.5 × 80.4				45 × 73.5 × 87.4				
	DC control	Weight	0.4				0.41				
		Size(W × H × D)	45 × 73.5 × 96.6				45 × 73.5 × 103.6				
Auxiliary(standard)			1NO or 1NC				1NO1NC				
Auxiliary			UA-1				UA-1				
Side mount			UA-2, UA-4				UA-2, UA-4				
Front mount			UA-2, UA-4				UA-2, UA-4				

Note) Minimum conduct current of Auxiliary contactor is DC 17V 5mA.

MT type Thermal Overload Relays



Type			MT-12/□		MT-32/□	
Screws clamp terminals			●		●	
Rated operational voltage, Ue			690V		690V	
Rated insulation voltage, Ui			690V		690V	
Rated impulse withstand voltage, Uimp			6kV		6kV	
Trip class			10A, 20		10A, 20	
Setting range			0.1~18A		0.1~40A	
Size and weight	Weight	kg	0.1		0.17	
		Size(W × H × D) mm	45 × 73.2 × 63.7		45 × 75 × 90	

* The safety cover of magnetic contactor and thermal overload relay is optional.



40AF

MC-32a	MC-40a
●	●
3pole	
690V	
1000V	
50/60Hz	
8kV	
1800 operations per hour	
12 mil. operations	
2 mil. operations	
50	60
7.5	11
32	40
15	18.5
32	40
18.5	22
28	32
18.5	22
20	23
22	22
17	17
600	700
260	300
160	190
100	120
70	80
55	65
50	60
50	60
2	3
5	7.5
7.5	15
10	15
20	30
25	30
1P	2
0.4	
45 × 83 × 90	
0.6	
45 × 83 × 117.1	
2NO2NC	
UA-1	
UA-2, UA-4	



MT-32/□

●
690V
690V
6kV
10A, 20
0.1~40A
0.17
45 × 75 × 90



65AF

MC-50a	MC-65a
●	●
3pole	
690V	
1000V	
50/60Hz	
8kV	
1200 operations per hour	
12 mil. operations	
2 mil. operations	
70	100
15	18.5
55	65
22	30
50	65
30	33
43	60
30	33
28	35
30	33
23	26
1000	1050
550	700
330	380
250	270
150	200
90	120
87	100
70	100
3	5
10	15
20	25
25	30
40	50
50	60
0.9	
55 × 106 × 119	
1.2	
55 × 106 × 146.4	
2NO2NC	
UA-1	
UA-2, UA-4	



MT-63/□

●
690V
690V
6kV
10A, 20
4~65A
0.31/0.33
55 × 81 × 100



100AF

MC-75a	MC-85a	MC-100a
●		●
3pole		
690V		
1000V		
50/60Hz		
8kV		
1200 operations per hour		
12 mil. operations		
2 mil. operations		
110	135	160
22	25	30
75	85	105
37	45	55
75	85	105
37	45	55
64	75	85
37	45	55
42	45	65
37	45	45
28	33	33
1100	1200	1320
750	800	900
400	450	500
300	350	400
220	270	270
140	170	180
114	150	160
110	135	160
5	7.5	10
15	15	20
25	30	30
30	40	40
50	60	75
60	75	75
1.6		
70 × 140 × 135.8		
2.6		
70 × 140 × 172.3		
2NO2NC		
UA-1		
UA-2, UA-4		



MT-95/□

●
690V
690V
6kV
10A, 20
7~100A
0.48/0.5
70 × 97 × 110

Contactors & Overload relays

Metasol MC 3P 150 to 800A

MC type Magnetic Contactors



Frame size			150AF		225AF		
Type	screws clamp terminals		MC-130a	MC-150a	MC-185a	MC-225a	
Number of poles			3pole		3pole		
Rated operational voltage, Ue			690V		690V		
Rated insulation voltage, Ui			1000V		1000V		
Rated frequency			50/60Hz		50/60Hz		
Rated impulse withstand voltage, Uimp			8kV		8kV		
Maximum operating rate in operating cycles per hour(AC3)			1200 operations per hour		1200 operations per hour		
Durability	Mechanical		5 mil. operations		5 mil. operations		
	Electrical		1 mil. operations		1 mil. operations		
Current and power	AC-1, Thermal current	A	160	210	230	275	
	AC-3, 200/240V	kW	37	45	55	75	
		A	130	150	185	225	
		380/440V	kW	60	75	90	132
		A	130	150	185	225	
		500/550V	kW	60	70	110	132
		A	90	100	180	200	
		690V	kW	55	55	110	140
		A	60	60	120	150	
		1000V	kW	75	90	132	140
	A	53	65	90	100		
Rated Short-time withstand current (IEC 60947)	1s	A	1350	1800	2000	2500	
	10s	A	950	1200	1500	1700	
	30s	A	700	800	1000	1200	
	1min	A	550	600	800	1000	
	3min	A	350	450	520	700	
	10min	A	200	300	350	500	
	≥ 15min	A	175	280	320	400	
UL rating (50/60Hz)	Continuous current	A	160	210	230	275	
	Single phase	110~120V	HP	10	15	15	15
		220~240V	HP	20	25	30	40
	Three phase	200~208V	HP	40	40	60	60
		220~240V	HP	40	50	60	75
		440~480V	HP	75	100	125	150
	550~600V	HP	75	75	125	150	
NEMA size			4				
Size and weight	AC control	Weight kg	2.4		5.4		
	DC control	Size(W × H × D) mm	95 × 158 × 130.3		138 × 203 × 185.1		
Auxiliary(standard)	Side mount	Weight kg					
	Front mount	Size(W × H × D) mm					
			2NO2NC		2NO2NC		
			UA-1		AU-100, AU-100E (Max.4NO4NC)		
			UA-2, UA-4		-		

MT type Thermal Overload Relays



Type	Screws clamp terminals		MT-150/□	MT-225/□
Rated operational voltage, Ue			690V	690V
Rated insulation voltage, Ui			690V	690V
Rated impulse withstand voltage, Uimp			6kV	6kV
Trip class			10A, 20	10A, 20
Setting range			34~150A	65~240A
Size and weight	Weight	kg	0.67	2.5
	Size(W × H × D)	mm	95 × 109 × 113	147 × 141 × 184

* The safety cover of magnetic contactor and thermal overload relay is optional.



400AF

MC-265a	MC-330a	MC-400a
●	●	●
3pole		
690V		
1000V		
50/60Hz		
8kV		
1200 operations per hour		
5 mil. operations		2.5 mil. operations
1 mil. operations		0.5 mil. operations
300	350	450
80	90	125
265	330	400
147	160	200
265	330	400
147	160	225
225	250	350
160	200	250
185	220	300
147	160	185
105	115	140
3500	4000	4600
2400	3000	4400
1500	2500	2974
1100	1700	1846
800	1000	1313
600	620	760
500	553	699
300	350	450
-	-	-
-	-	-
75	100	125
100	100	150
200	200	300
200	200	300
5		

9.2
163 × 243 × 204.4

2NO2NC

AU-100, AU-100E (Max.4NO4NC)



MT-400/□

●
690V
690V
6kV
10A, 20
85~400A
2.6
151 × 171 × 198



800AF

MC-500a	MC-630a	MC-800a
●	●	●
3pole		
690V		
1000V		
50/60Hz		
8kV		
1200 operations per hour		
	2.5 mil. operations	
	0.5 mil. operations	
580	660	900
147	190	220
500	630	800
265	330	440
500	630	800
265	330	500
400	500	720
300	400	500
380	420	630
280	355	400
220	262	288
6000	7000	7500
5050	6400	7000
4400	4500	4900
3400	3500	3800
2000	2200	2500
1400	1550	1550
1100	1300	1300
580	660	900
-	-	-
-	-	-
150	200	200
200	250	300
400	500	600
400	500	600
6		7

22.4
285 × 312 × 245.3

2NO2NC

AU-100, AU-100E (Max.4NO4NC)



MT-800/□

●
690V
690V
6kV
10A, 20
200~800A
11.5
360 × 530 × 212