

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	Mechanical		15 mil. operations				15 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	
	AC-3	200/240V	kW	2.2	2.5	3.5	4.5	2.5	3.5	4.5	5.5
			A	9	11	13	18	11	13	18	22
	380/440V	kW	3	4	5.5	7.5	4	5.5	7.5	11	
		A	7	9	12	18	9	12	18	22	
	500/550V	kW	3	4	7.5	7.5	4	7.5	7.5	15	
		A	6	7	12	13	7	12	13	20	
	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
	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	Side mount		UA-1				UA-1				
	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



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



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-32/□

●
690V
690V
6kV
10A, 20
0.1~40A
0.17

45 × 75 × 90



MT-63/□

●
690V
690V
6kV
10A, 20
4~65A
0.31/0.33

55 × 81 × 100



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	
		kW	37	45	55	75	
	AC-3	200/240V	A	130	150	185	225
		kW	60	75	90	132	
	380/440V	A	130	150	185	225	
		kW	60	70	110	132	
	500/550V	A	90	100	180	200	
		kW	55	55	110	140	
	690V	A	60	60	120	150	
		kW	75	90	132	140	
Rated Short-time withstand current (IEC 60947)	1s	A	1350	1800	2000	2500	
		A	950	1200	1500	1700	
	10s	A	700	800	1000	1200	
		A	550	600	800	1000	
	3min	A	350	450	520	700	
		A	200	300	350	500	
	10min	A	175	280	320	400	
		A	160	210	230	275	
	UL rating (50/60Hz)	Continuous current	A	160	210	230	275
			HP	10	15	15	15
Single phase		110~120V	HP	20	25	30	40
		220~240V	HP	40	40	60	60
Three phase		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	2.4		5.4		
		Size(W × H × D) mm	95 × 158 × 130.3		138 × 203 × 185.1		
Auxiliary (standard)	DC control	Weight					
		Size(W × H × D) mm					
Auxiliary	Side mount		2NO2NC		2NO2NC		
	Front mount		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

Contactors & Overload relays

Metasol MC 4P 18 to 85A

MC type Magnetic Contactors



Frame size				
Type	Screw clamp terminal			
Number of poles				
Rated operational voltage (Ue)				
Rated insulation voltage (Ui)				
Rated frequency				
Rated impulse withstand voltage, Uimp				
Maximum operating rate in operating cycles per hour(AC1)				
Durability	Mechanical			
	Electrical			
Current and Power	Thermal current	A		
	AC-1	200/240V	kW	
		380/400V	kW	
	500/550V	kW	A	
		690V	kW	A
	UL rating (50/60Hz)	Continuous current		A
Size and weight	AC	Weight	kg	
			Control	Size(W×H×D)
	DC	Weight		kg
			Control	Size(W×H×D)
	Auxiliary(standard)			
	Auxiliary	Side Mount		
Front Mount				



18AF				
	MC-6a/4	MC-9a/4	MC-12a/4	MC-18a/4
	●			
	4pole			
	690V			
	690V			
	50/60Hz			
	6kV			
	1800 operations per hour			
	15 mil. Operations			
	0.5 mil. Operations		0.8 mil. Operations	
	25	25	25	40
	9	9	9	15
	25	25	25	40
	17	17	17	27
	25	25	25	40
	21	21	21	35
	25	25	25	40
	27	27	27	44
	25	25	25	40
	25	25	25	32
	0.5	0.5	0.75	1
	1.5	1.5	2	3
	2	2	3	5
	3	3	5	7.5
	5	5	7.5	10
	7.5	7.5	10	15
	0.33			
	45×73.5× 79			
	0.5			
	45×73.5×110.7			
	-			
	UA-1			
	AU-2, AU-4			



22AF	
MC-22a/4	
●	
4pole	
690V	
690V	
50/60Hz	
6kV	
1800 operations per hour	
15 mil. Operations	
1 mil. Operations	
40	
15	
40	
27	
40	
35	
40	
44	
40	
32	
2	
3	
7.5	
7.5	
10	
15	
0.4	
47.2×80×86.8	
0.5	
47.2×80×113.2	
-	
AU-1	
AU-2, AU-4	

40AF	
MC-32a/4	MC-40a/4
●	
4pole	
690V	
690V	
50/60Hz	
6kV	
1800 operations per hour	
15 mil. Operations	
1 mil. Operations	
50	60
18	22
50	60
35	42
50	60
43	52
50	60
55	66
50	60
45	50
2	3
5	5
7.5	10
10	10
20	25
20	25
0.59	
59×83.5×94.5	
0.7	
59×83.5×121	
-	
AU-1	
AU-2, AU-4	

85AF			
MC-50a/4	MC-65a/4	MC-75a/4	MC-85a/4
●			
4pole			
690V			
1000V			
50/60Hz			
8kV			
1800 operations per hour			
12 mil. Operations			
1 mil. Operations			
80	100	110	135
30	37	41	51
80	100	110	135
56	70	76	95
80	100	110	135
70	88	97	120
80	100	110	135
88	110	120	150
80	100	110	135
70	80	90	100
3	5	5	7.5
7.5	10	15	15
10	15	20	25
15	20	25	30
30	40	50	50
30	40	50	50
1.2			
91×123.5×117.8			
1.29			
91×123.5×117.8			
-			
AU-1			
AU-2, AU-4			

Contactors & Overload relays

Metasol MC 4P 225 to 800A

MC type Magnetic Contactors



Frame size			
Type	Screw clamp terminal		
Number of poles	4		
Rated operational voltage (Ue)	690V		
Rated insulation voltage (Ui)	1000V		
Rated frequency	50/60Hz		
Rated impulse withstand voltage, Uimp	8kV		
Maximum operating rate in operating cycles per hour(AC1)	1200 operations per hour		
Durability	Mechanical		
	Electrical		
Current and Power	Thermal current	A	
	AC-1	200/240V	kW
		380/400V	kW
	500/550V	kW	A
		690V	kW
	UL rating (50/60Hz)	Continuous current	
Single		110~120V	HP
		Phase	220~240V
			200~208V
Three		220~240V	HP
		Phase	440~480V
	550~600V		HP
Size and weight	AC	Weight	kg
		Control	Size(W×H×D)
	DC	Weight	kg
		Control	Size(W×H×D)
Auxiliary(standard)			
Auxiliary	Side Mount		
	Front Mount		



225AF				
MC-100a/4	MC-130a/4	MC-150a/4	MC-185a/4	MC-225a/4
●				
4pole				
690V				
1000V				
50/60Hz				
8kV				
1200 operations per hour				
5 mil. Operations				
0.8 mil. Operations				
160	165	250	300	330
57	60	76	87	100
150	155	200	230	260
106	110	142	165	185
150	155	200	230	260
132	137	180	205	230
150	155	200	230	260
165	170	225	255	290
150	155	200	230	260
160	160	210	230	275
7.5	10	15	15	15
15	20	25	30	40
30	40	40	60	60
30	40	50	60	75
60	75	100	125	150
60	75	100	125	150
5.6				
175×203×185				
2a2b				
AU-100 / AU-100E				
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* - FLA = 722 A, LRA = 5618 A

** - FLA = 566 A, LRA = 4495 A



400AF

MC-265a/4	MC-330a/4	MC-400a/4
	●	
	4pole	
	690V	
	1000V	
	50/60Hz	
	8kV	
	1200 operations per hour	
	2.5 mil. Operations	
	0.5 mil. Operations	
360	420	500
115	135	160
300	350	420
215	250	300
300	350	420
265	315	375
300	350	420
335	390	470
300	350	420
300	350	450
-	-	-
-	-	-
75	100	125
100	125	150
200	250	300
200	250	300

9.9
206 × 243 × 205

2a2b

AU-100
-

800AF

MC-500a/4	MC-630a/4	MC-800a/4
	●	
	4pole	
	690V	
	1000V	
	50/60Hz	
	8kV	
	1200 operations per hour	
	2.5 mil. Operations	
	0.5 mil. Operations	
630	750	900
245	255	310
630	660	800
450	470	570
630	660	800
560	590	710
630	660	800
710	740	900
630	660	800
580	660	900
-	-	-
-	-	-
150	200	200
200	250	300
400	500	600 *
400	500	600 **

26.3
346 × 310 × 244

2a2b

AU-100
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