

Contactors

Susol

Specifications



			12AF		32AF				
			MC-9a	MC-12a	MC-9	MC-12	MC-18	MC-25	MC-32
Type	Model								
	Connection by screws clamp terminals		•	•	•	•	•	•	•
	Connection by lugs		-	-	-	-	-	-	-
Number of poles			3		3				
Rated operational voltage, Ue			690V		690V				
Rated insulation voltage, Ui									
			1000V		1000V				
			600V		600V				
Rated impulse withstand voltage, Uimp			8kV		8kV				
Degree of pollution (IEC60529)			IP20		IP20				
Rated operational current Ie ($\theta \leq 55^{\circ}\text{C}$)									
	AC-1	Ue max 690V [A]	25	25	25	25	40	40	50
	AC-3	200/240V [A]	11	13	11	13	18	25	32
		380/400V [A]	9	12	9	12	18	25	32
		415V [A]	9	12	9	12	18	25	32
		440V [A]	9	12	9	12	18	25	32
		500V [A]	7	12	7	12	13	22	28
		690V [A]	5	9	5	9	9	18	20
Rated operational power ($\theta \leq 55^{\circ}\text{C}$)									
	AC-3	200/240V [kW]	2.5	3.5	2.5	3.5	4.5	5.5	7.5
		380/400V [kW]	4	5.5	4	5.5	7.5	11	15
		415V [kW]	4	5.5	4	5.5	7.5	11	15
		440V [kW]	4	5.5	4	5.5	7.5	11	15
		500V [kW]	4	7.5	4	7.5	7.5	15	18.5
		690V [kW]	4	7.5	4	7.5	7.5	15	18.5
Rated operational current(440V AC-3) [A]			9	12	9	12	18	25	32
According to IEC 947-4-1	Rated making capacity AC-3 (I/Ie) [440V]		90	120	90	120	180	250	320
	Rated breaking capacity AC-3 (Ic/Ie) [440V]		72	96	72	96	144	200	256
Mechanical durability in millions of operating cycles			15	15	15	15	15	15	15
Maximum operating rate In operating cycles per hour			1800	1800	1800	1800	1800	1800	1800
Mechanical durability in millions of operating cycles			8.07	8.07	8.07	8.07	8.07	8.07	8.07
Maximum operating rate In operating cycles per hour			7200	7200	7200	7200	7200	7200	7200
Electrical life for Ie/AC-3 Max in millions of operating cycles			2.5	2.5	2.5	2.5	2.5	2.5	2.5
Maximum operating rate in operating cycles per hour			1800	1800	1800	1800	1800	1800	1800
AC control coil voltage operated contactors									
			0.26		0.45				
Weight [kg]									
Basic dimensions (W × H × D) [mm]			45 × 74 × 82		45 × 83 × 93				
DC control coil voltage operated contactors									
			0.47		0.63				
Weight [kg]									
Basic dimensions (W × H × D) [mm]			45 × 74 × 114		45 × 83 × 118				

Contactors

Susol



63AF

MC-35	MC-40	MC-50	MC-63
•	•	•	•
•	•	•	•
3			
690V			
1000V			
600V			
8kV			
IP20			
55	60	70	75
35	40	55	63
35	40	50	63
35	40	50	63
35	40	50	63
35	40	50	63
30	32	43	45
21	23	28	30
11	11	15	15
18.5	18.5	22	25
18.5	18.5	22	25
18.5	18.5	22	25
22	22	30	30
22	22	30	30
35	40	50	63
350	400	500	630
280	320	400	504
12	12	12	12
1200	1200	1200	1200
5.97	5.97	5.97	5.97
7200	7200	7200	7200
2	2	2	1.3
1200	1200	1200	1200
0.94			
55 × 106 × 122			
1.2			
55 × 106 × 160.5			

95AF

MC-65	MC-75	MC-85	MC-95
•	•	•	•
•	•	•	•
3			
690V			
1000V			
600V			
8kV			
IP20			
100	110	135	140
65	75	85	95
65	75	85	95
65	75	85	95
65	75	85	95
65	75	85	95
60	64	75	85
35	42	45	50
18.5	22	25	25
30	37	45	45
30	37	45	45
30	37	45	45
33	37	45	50
33	37	45	45
65	75	85	95
650	750	850	950
520	600	680	760
12	12	12	12
1200	1200	1200	1200
5.97	5.97	5.97	5.97
7200	7200	7200	7200
2	2	2	2
1200	1200	1200	1200
1.82			
70 × 140 × 137			
2.7			
70 × 140 × 172.5			

3-pole contactors

for motor control up to 45kW at 440V in category AC-3



MC-32□



MC-63□S



MC-95□S



MC-63□L



MC-95□L

Connection by screw clamp terminals

AC-3 operational power ratings 3-phase motors ($\theta \leq 55^\circ\text{C}$)						Rated operational current at AC-3	Built-in auxiliary contacts		Type	Weight
200 240V	380 400V	415V	440V	500V	690V		440V	NO	NC	Connection by screw clamp terminals
kW	kW	kW	kW	kW	kW	A				
2.5	4	4	4	4	4	9	1NO or 1NC		MC-9a	0.26
3.5	5.5	5.5	5.5	7.5	7.5	12	1NO or 1NC		MC-12a	0.26
2.5	4	4	4	4	4	9	-	-	MC-9	0.45
3.5	5.5	5.5	5.5	7.5	7.5	12	-	-	MC-12	0.45
4.5	7.5	7.5	7.5	7.5	7.5	18	-	-	MC-18	0.45
5.5	11	11	11	15	15	25	-	-	MC-25	0.45
11	18.5	18.5	18.5	22	22	32	-	-	MC-32	0.45
7.5	15	15	15	18.5	18.5	35	-	-	MC-35□S	0.94
11	18.5	18.5	18.5	22	22	40	-	-	MC-40□S	0.94
15	22	22	22	30	30	50	-	-	MC-50□S	0.94
15	25	25	25	30	30	63	-	-	MC-63□S	0.94
18.5	30	30	30	33	33	65	-	-	MC-65□S	1.82
22	37	37	37	37	37	75	-	-	MC-75□S	1.82
25	45	45	45	45	45	85	-	-	MC-85□S	1.82
25	45	45	45	50	45	95	-	-	MC-95□S	1.82


Connection by lugs

AC-3 operational power ratings 3-phase motors ($\theta \leq 55^\circ\text{C}$)						Rated operational current at AC-3	Built-in auxiliary contacts		Type	Weight
200 240V	380 400V	415V	440V	500V	690V		440V	NO	NC	Connection by lugs terminals
kW	kW	kW	kW	kW	kW	A				
7.5	15	15	15	18.5	18.5	35	-	-	MC-35□L	0.94
11	18.5	18.5	18.5	22	22	40	-	-	MC-40□L	0.94
15	22	22	22	30	30	50	-	-	MC-50□L	0.94
15	25	25	25	30	30	63	-	-	MC-63□L	0.94
18.5	30	30	30	33	33	65	-	-	MC-65□L	1.82
22	37	37	37	37	37	75	-	-	MC-75□L	1.82
25	45	45	45	45	45	85	-	-	MC-85□L	1.82
25	45	45	45	50	45	95	-	-	MC-95□L	1.82

Accessories

Auxiliary contact blocks and modules: see pages 27 to 31.

Mounting

Clip-on mounting on 35 mm  rail or screw fixing.
MC-65 to MC-95 types are mountable on 70mm DIN rail.

Standard control circuit voltage, Coil voltage

- AC circuit 50/60Hz
 - 50Hz : 24, 32, 36, 42, 48, 80, 100, 110, 220, 230, 240, 380, 400, 415, 440, 500, 550V
 - 60Hz : 24, 48, 100, 110, 120, 200, 208, 220, 230, 240, 277, 380, 440, 480, 600V
 - 50/60Hz : 24, 48, 100, 110, 120, 200, 220, 230, 240, 380, 415, 440, 500, 550V
- DC circuit
 - 12, 20, 24, 48, 60, 80, 100, 110, 125, 200, 220, 250V

Overloads to suit contactors are on page 20

Contactors

Susol

3-pole contactors

for control in utilization category AC-1, 25 to 140 A



MC-32□



MC-63□S



MC-95□S



MC-63□L



MC-95□L

Connection by screw clamp terminals

AC-1 Non inductive loads maximum current ($\theta \leq 55^\circ\text{C}$)	Number of poles	Built-in auxiliary contacts		Type	Weight
		NC	NO	Connection by screw clamp terminals	AC control kg
AC-1 (A)	NO	NC	NO		
25	3	1NO or 1NC		MC-9a	0.26
25	3	1NO or 1NC		MC-12a	0.26
25	3	-	-	MC-9	0.45
25	3	-	-	MC-12	0.45
40	3	-	-	MC-18	0.45
40	3	-	-	MC-25	0.45
50	3	-	-	MC-32	0.45
55	3	-	-	MC-35□S	0.94
60	3	-	-	MC-40□S	0.94
70	3	-	-	MC-50□S	0.94
75	3	-	-	MC-63□S	0.94
100	3	-	-	MC-65□S	1.82
110	3	-	-	MC-75□S	1.82
135	3	-	-	MC-85□S	1.82
140	3	-	-	MC-95□S	1.82

Connection by lugs

AC-1 Non inductive loads maximum current ($\theta \leq 55^\circ\text{C}$)	Number of poles	Built-in auxiliary contacts		Type	Weight
		NC	NO	Connection by lugs terminals	AC control kg
AC-1 (A)	NO	NC	NO		
55	3	-	-	MC-35□L	0.94
60	3	-	-	MC-40□L	0.94
70	3	-	-	MC-50□L	0.94
75	3	-	-	MC-63□L	0.94
100	3	-	-	MC-65□L	1.82
110	3	-	-	MC-75□L	1.82
135	3	-	-	MC-85□L	1.82
140	3	-	-	MC-95□L	1.82

Accessories

Auxiliary contact blocks and modules: see pages 27 to 31.

Mounting

Clip-on mounting on 35 mm \square rail or screw fixing.
MC-65 to MC-95 types are mountable on 70mm DIN rail.

Standard control circuit voltage, Coil voltage

- AC circuit 50/60Hz
 - 50Hz : 24, 32, 36, 42, 48, 80, 100, 110, 220, 230, 240, 380, 400, 415, 440, 500, 550V
 - 60Hz : 24, 48, 100, 110, 120, 200, 208, 220, 230, 240, 277, 380, 440, 480, 600V
 - 50/60Hz : 24, 48, 100, 110, 120, 200, 220, 230, 240, 380, 415, 440, 500, 550V
- DC circuit
 - 12, 20, 24, 48, 60, 80, 100, 110, 125, 200, 220, 250V

Overloads to suit contactors are on page 20

Reversing contactors

for motor control up to 45kW at 440V in category AC-3



MC-32/RS



MC-63/RS



MC-95/RS

Connection by screw clamp terminals

AC-3 operational power ratings 3-phase motors ($\theta \leq 55^\circ\text{C}$)						Rated operational current at AC-3	Built-in auxiliary per contactor		Type	Weight
200 240V	380 400V	415V	440V	500V	690V		440V	NO		
kW	kW	kW	kW	kW	kW	A				kg
2.5	4	4	4	4	4	9	1NO or 1NC		MC-9a/RS	0.57
3.5	5.5	5.5	5.5	7.5	7.5	12	1NO or 1NC		MC-12a/RS	0.57
2.5	4	4	4	4	4	9	-	-	MC-9/RS	0.95
3.5	5.5	5.5	5.5	7.5	7.5	12	-	-	MC-12/RS	0.95
4.5	7.5	7.5	7.5	7.5	7.5	18	-	-	MC-18/RS	0.95
5.5	11	11	11	15	15	25	-	-	MC-25/RS	0.95
11	18.5	18.5	18.5	22	22	32	-	-	MC-32/RS	0.95
7.5	15	15	15	18.5	18.5	35	-	-	MC-35/RS	1.73
11	18.5	18.5	18.5	22	22	40	-	-	MC-40/RS	1.73
15	22	22	22	30	30	50	-	-	MC-50/RS	1.73
15	25	25	25	30	30	63	-	-	MC-63/RS	1.73
18.5	30	30	30	33	33	65	-	-	MC-65/RS	3.25
22	37	37	37	37	37	75	-	-	MC-75/RS	3.25
25	45	45	45	45	45	85	-	-	MC-85/RS	3.25
25	45	45	45	50	45	95	-	-	MC-95/RS	3.25

Connection by lugs

AC-3 operational power ratings 3-phase motors ($\theta \leq 55^\circ\text{C}$)						Rated operational current at AC-3	Built-in auxiliary per contactor		Type	Weight
200 240V	380 400V	415V	440V	500V	690V		440V	NO		
kW	kW	kW	kW	kW	kW	A				kg
7.5	15	15	15	18.5	18.5	35	-	-	MC-35/RL	1.73
11	18.5	18.5	18.5	22	22	40	-	-	MC-40/RL	1.73
15	22	22	22	30	30	50	-	-	MC-50/RL	1.73
15	25	25	25	30	30	63	-	-	MC-63/RL	1.73
18.5	30	30	30	33	33	65	-	-	MC-65/RL	3.25
22	37	37	37	37	37	75	-	-	MC-75/RL	3.25
25	45	45	45	45	45	85	-	-	MC-85/RL	3.25
25	45	45	45	45	45	95	-	-	MC-95/RL	3.25

Note :

- Pre-wired power connections.
- Mechanical interlock without electrical interlocking.
- Please contact LSIS for reversing contactors with electrical interlocking pre-wired at the factory.

Accessories

Auxiliary contact blocks and modules: see pages 27 to 31.

Mounting

Clip-on mounting on 35 mm \square rail or screw fixing.
MC-65 to MC-95 types are mountable on 70mm DIN rail.

Standard control circuit voltage, Coil voltage

- AC circuit 50/60Hz
50Hz : 24, 32, 36, 42, 48, 80, 100, 110, 220, 230, 240, 380, 400, 415, 440, 500, 550V
60Hz : 24, 48, 100, 110, 120, 200, 208, 220, 230, 240, 277, 380, 440, 480, 600V
50/60Hz : 24, 48, 100, 110, 120, 200, 220, 230, 240, 380, 415, 440, 500, 550V
- DC circuit
12, 20, 24, 48, 60, 80, 100, 110, 125, 200, 220, 250V

Contactors

Susol

General technical data

For utilization categories AC-3

Operational current and power conforming to IEC ($\theta \leq 55^\circ \text{C}$)

Contactor size			MC-9	MC-12	MC-18	MC-25	MC-32	MC-35	MC-40	MC-50	MC-63	MC-65	MC-75	MC-85	MC-95
Max. operational current in AC-3	$\leq 440\text{V}$	A	9	12	18	25	32	35	40	50	63	65	75	85	95
Rated operational power P (standard motor power ratings)	220/240V	W	2.5	3.5	4.5	5.5	7.5	11	11	15	15	18.5	22	25	25
	380/440V	W	4	5.5	7.5	11	15.8	18.5	18.5	22	25	30	37	45	45
	500/550V	W	4	7.5	7.5	15	18.5	22	22	30	30	33	37	45	50
	690V	W	4	7.5	7.5	15	18.5	22	222	30	30	33	37	45	45
	1000V	W	-	-	-	-	-	-	-	-	-	-	-	-	-

Operational current and power conforming to UL,CSA ($\theta \leq 55^\circ \text{C}$)

Contactor size			MC-9	MC-12	MC-18	MC-25	MC-32	MC-35	MC-40	MC-50	MC-63	MC-65	MC-75	MC-85	MC-95
Max. operational current in AC-3	$\leq 440\text{V (A)}$		9	12	18	25	32	35	40	50	63	65	75	85	95
Rated operational power P (standard motor power ratings)	1ph	100~120V	0.5	0.75	1	2	2.2	2	3	3	5	5	5.5	7.5	10
		220~240V	1.5	2	3	3	5	5	7.5	10	10	15	15	15	20
Rated operational power P (standard motor power ratings)	3ph	200~240V	2	3	5	7.5	7.5	10	15	20	20	25	25	30	30
		220~240V	3	5	7.5	10	10	15	20	25	25	30	30	40	40
		440~480V	5	7.5	10	15	20	25	30	40	40	50	50	60	75
50/60Hz		550~600V	7.5	10	15	20	25	30	40	50	50	60	60	75	100

Maximum operating rate in operating cycles/hour

Contactor size			MC-9	MC-12	MC-18	MC-25	MC-32	MC-35	MC-40	MC-50	MC-63	MC-65	MC-75	MC-85	MC-95
Max. operational current in AC-3	$\leq 440\text{V (A)}$		9	12	18	25	32	35	40	50	63	65	75	85	95
operating cycles	1/Hr		1800	1800	1800	1800	1800	1200	1200	1200	1200	1200	1200	1200	1200