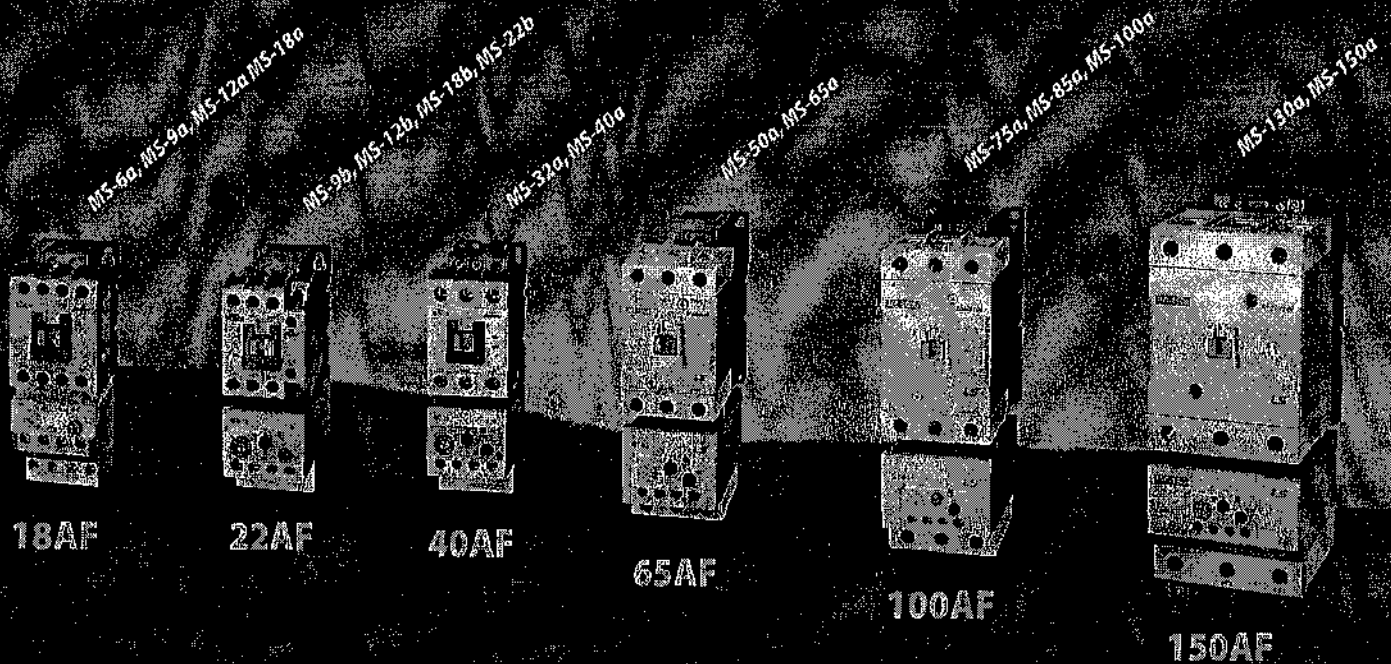


Contactors and overload relays

Motor Starters

- Compact design for space saving
- DIN rail and screw mountable (upto 150AF)
- Overload relays directly mountable to contactors separately
- Finger-proof design
- Easy to combine with manual motor starters
- Broad range of accessories
- World class products conforming to IEC and UL standards



18AF

Contactor

MC-6a, 9a, 12a, 18a

Rated current:

6, 9, 12, 18A

Rated insulation voltage:

690V

Overload relay MT-12

Current range: 0.1~18A

Trip class: Class10A, 20

22AF

Contactor

MC-9b, 12b, 18b, 22b

Rated current:

9, 12, 18, 22A

Rated insulation voltage:

690V

Overload relay MT-32

Current range: 0.1~40A

Trip class: Class10A, 20

40AF

Contactor

MC-32a, 40a

Rated current:

32, 40A

Rated insulation voltage:

1000V

Overload relay MT-32

Current range: 0.1~40A

Trip class: Class10A, 20

65AF

Contactor

MC-50a, 65a

Rated current:

50, 65A

Rated insulation voltage:

1000V

Overload relay MT-63

Current range: 4~65A

Trip class: Class10A, 20

100AF

Contactor

MC-75a, 85a, 100a

Rated current:

75, 85, 100A

Rated insulation voltage:

1000V

Overload relay MT-95

Current range: 7~100A

Trip class: Class10A, 20

150AF

Contactor

MC-130a, 150a

Rated current:

130, 150A

Rated insulation voltage:

1000V

Overload relay MT-150

Current range: 34~150A

Trip class: Class10A, 20

MS-185a, MS-225a

MS-265a, MS-330a, MS-400a

MS-500a, MS-630a, MS-800a

MC-800a

Metasol

LS

225AF

400AF

800AF

225AF

400AF

800AF

1260AF

2100AF

Contactor

MC-185a, 225a

Rated current:

185, 225A

Rated insulation voltage:

1000V

Overload relay MT-225

Current range: 65-240A

Trip class: Class10A, 20

Contactor

MC-265a, 330a, 400a

Rated current:

265, 330, 400A

Rated insulation voltage:

1000V

Overload relay MT-400

Current range: 85-400A

Trip class: Class10A, 20

Contactor

MC-500a, 630a, 800a

Rated current:

600, 630, 800A

Rated insulation voltage:

1000V

Overload relay MT-800

Current range: 200-800A

Trip class: Class10A, 20

Contactor

MC-1260a

Rated current:

1260A

Rated insulation voltage:

1000V

Contactor

MC-1400a, 1700a, 2100a

Rated current:

1400, 1700, 2100A

Rated insulation voltage:

1000V

MC/TOR Accessories

Perfect combination of peripheral
devices and various accessories



Offering economical solution with compact size & easy connection



Perfect system with other devices and accessories

■ One-touch connection

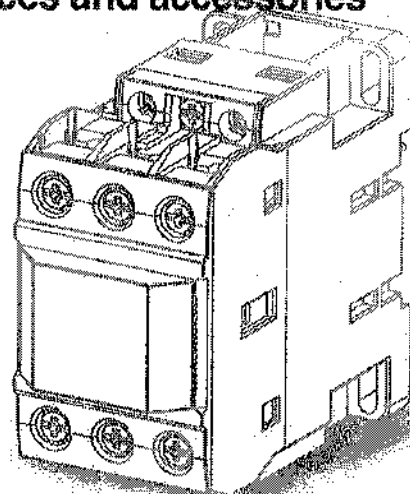
- DIN Rail connection without any special tools
- Direct combine a surge unit

■ Simple wiring

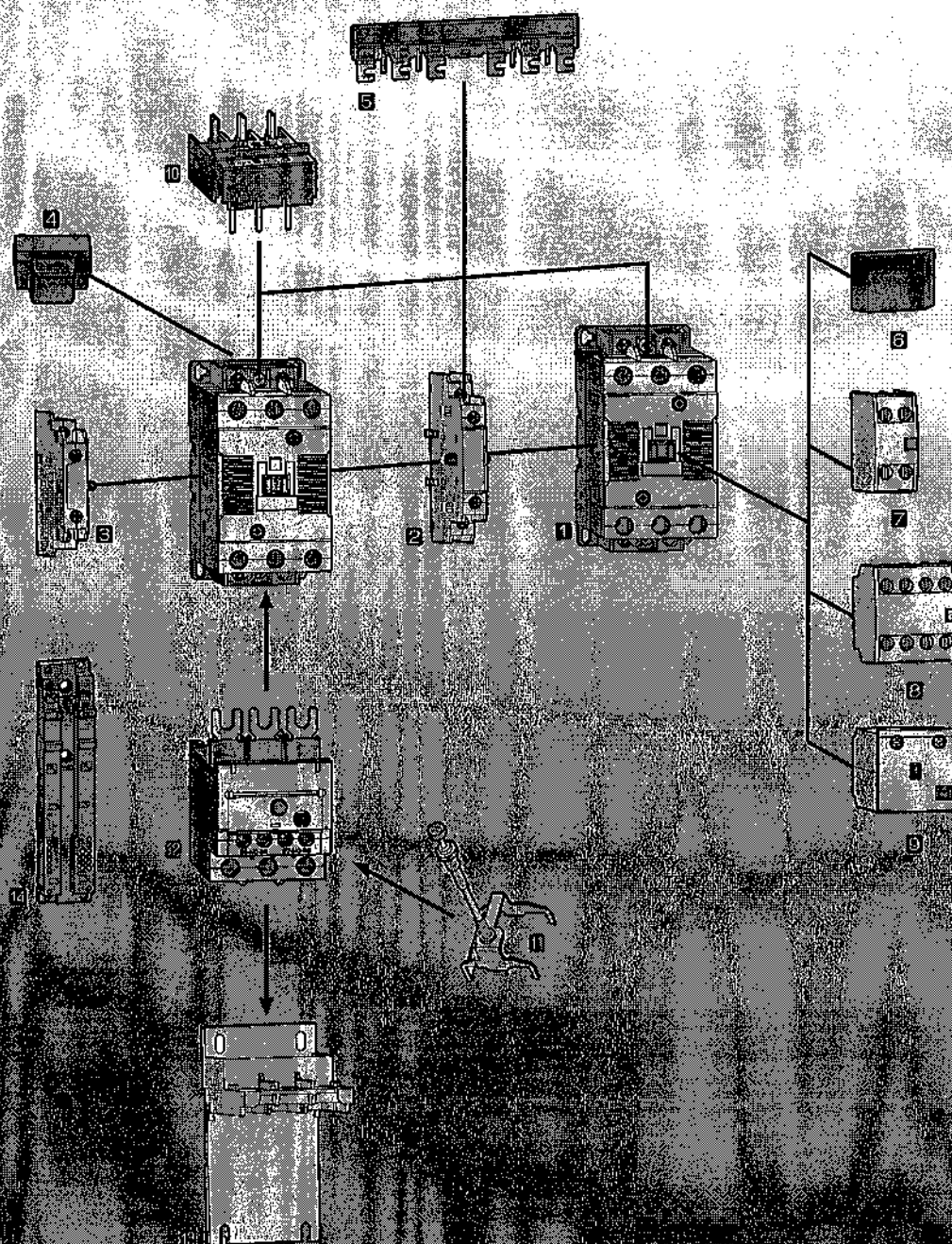
- Mounting unit, Adapter
- Reversing wire set

■ Easy maintenance

- 4-terminal type: Easy wiring of operation coil
- Module type of screw terminal
- Interlock unit with built-in auxiliary contacts (2NO built-in)



Advanced accessories for Metasol contactors



- | | | |
|-------------------------------------|---|-----------------------------------|
| 1 Contactor | 6 Safety cover (Option) | 10 Direct adaptor to MMS |
| 2 Interlock unit | 7 Auxiliary contact unit front mount (2p) | 11 Remote reset unit |
| 3 Auxiliary contact unit side mount | 8 Auxiliary contact unit front mount (4p) | 12 Overload relay |
| 4 Surge unit | 9 Mechanical latch unit | 13 Separate mounting unit |
| 5 Wire kit | | 14 Mounting unit for use with MMS |

Table of specifications

Metasol

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			•	•	•	•	•	•	•	•
	Lug clamp terminals										
Number of poles				3pole				3pole			
Rated operational voltage, U _e				690V				690V			
Rated insulation voltage, U _i				690V				690V			
Rated frequency				50/60Hz				50/60Hz			
Rated impulse withstand voltage, U _{imp}				6kV				6kV			
Maximum operating rate in operating cycles per hour (ACB)				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	27	27	32	45	
	AG-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	16	
		A	4	5	8	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	27	27	32	45	
	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
	Three phase	200-208V	HP	2	2	3	7.5	2	3	7.5	7.5
		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
		650-600V	HP	7.5	7.5	10	15	7.5	10	15	20
	NEMA size		00	00	0	1	00	0	1		
Size and weight	T AC control	Weight	0.33				0.34				
		Size(W×H×D) mm	45×73.5×80.4				45×73.5×87.4				
Auxiliary (standard)	DC control	Weight	0.4				0.41				
		Size(W×H×D) mm	45×73.5×96.6				45×73.5×103.6				
Auxiliary	Side mount				1a or 1b			1a1b			
	Front mount				UA-1			UA-1			
					UA-2, UA-4			UA-2, UA-4			

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

MT type Thermal Overload Relays



Type			MT-12	MT-32
	Screws clamp terminals		•	•
	Lug clamp terminals			
Rated operational voltage, U _e			690V	690V
Rated insulation voltage, U _i			690V	690V
Rated impulse withstand voltage, U _{imp}			6kV	6kV
Trip class			10A, 20	10A, 20
Setting range			0.1-18A	0.1-40A
Size and weight			0.1	0.17
			45×73.2×63.7	45×75×90

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