

2-pole DC Contactors

Description



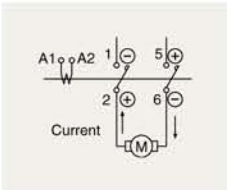
- Two normally open main contacts for DC circuit
- Positive and negative poles indicated on the front plate
- Eternal magnet installed for the effective arc extinguishing
- DIN rail or screw mountable
- 2NO+2NC Auxiliary contacts built-in as standard
- AC/DC control voltage

Selection



Contactor types	DC-2-5 ratings			Continuous current, I _{th}	Auxiliary contacts
	125V	250V	500V		
MD-30a	3.7kW 40A	5.5kW 30A	7.5kW 20A	60A	2NO+2NC
MD-60a	7.5kW 80A	11kW 60A	15kW 40A	100A	2NO+2NC
MD-100a	11kW 120A	18.5kW 100A	22kW 60A	135A	2NO+2NC

Ratings of auxiliary contacts



UA-1	AC15 duty						DC13 duty				
	120V	240V	380V	480V	500V	600V	125V	250V	400V	500V	600V
Rated currents	6A	3A	1.9A	1.5A	1.4A	1.2A	1.1A	0.55A	0.31A	0.27A	0.2A
Continuous current, I _{th}	16A										

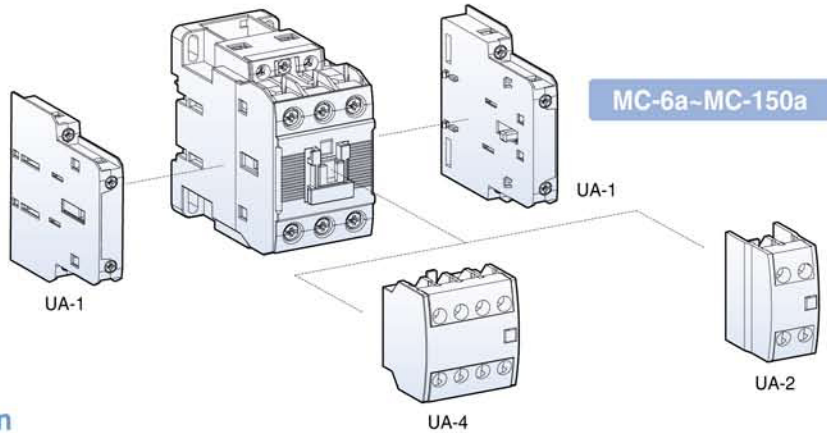


Coil voltage

AC	50/60Hz	24, 48, 100, 110, 120, 200, 220, 230, 240, 380, 400, 415, 440, 500, 550V
DC	DC	12, 20, 24, 48, 60, 80, 100, 110, 125, 200, 220, 250V

Auxiliary contact units

- 2 and 4 pole
- Side and front mountable
- Common use for Metasol contactors from MC-6a to MC-150a
- Auxiliary contact meet the requirements for mirror contacts in IEC 60947-4-1. Annex F (A mirror contact is an auxiliary NC contact that cannot be closed simultaneously with a NO main contact)



Selection

Type	Appearance	Pole	Composition		Contact arrangement	Mount	Weight
			NO	NC			
UA-1		2	1	1		Side	53g
UA-2		2	2 1 -	- 1 2		Front	28g
UA-4		4	4 3 2 1 -	- 1 2 3 4		Front	50g

Maximum combination of contact units

MC-6a-18a, 9b-22b (Max. 4a3b)	MC-32a-150a (Max. 4a4b)
UA-4(on front)+UA-1×1EA (1EA on one side)	UA-4(on front)+UA-1×2EA (1EA on both sides)
UA-2(on front)+UA-1×1EA (1EA on one side)	UA-2(on front)+UA-1×2EA (1EA on both sides)
UA-1×2EA (1EA on both sides)	UA-1×4EA (2EA on both sides) *For AC Coil

*To use UA-1, MC-9b-22b Type is available on only left side

Auxiliary contact units

- 2 pole
- Side mountable
- Common use for Metasol contactors from MC-185a to MC-800a
- Auxiliary contact meet the requirements for mirror contacts in IEC 60947-4-1. Annex F
(A mirror contact is an auxiliary NC contact that cannot be closed simultaneously with a NO main contact)



Selection

Type	Appearance	Pole	Composition		Contact arrangement	Mount	Weight
			NO	NC			
AU-100 AU-100E		2	1	1		Side	53g

Maximum combination of contact units

MC-185a-800a (Max. 4a4b)

AU-100 × 4EA (2EA on both sides)

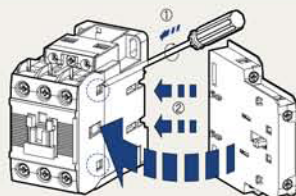
AU-100E × 4EA (2EA on both sides)

Rating

Type		UA-1	UA-2, 4	AU-100	AU-100E	
Rated operation voltage (Ue)		600V	600V	600V	60V	
Rated insulation voltage (Ui)		600V	600V	600V	600V	
Rated impulse withstand voltage (Uimp)		6kV	6kV	6kV	6kV	
Rated frequency		50/60Hz	50/60Hz	50/60Hz	50/60Hz	
Contact sensibility						
Voltage		DC 17V	DC 24V	DC 24V	DC 7V	
Current		DC 5mA	DC 10mA	DC 10mA	DC 5mA	
Rated thermal current (Ith, AC12 duty)		10A	16A	16A	1A	
Rated operation current						
AC15 duty (A600)	120V	6A	6A	6A	AC/DC 24V 0.1A AC/DC 50V 0.01A	
	240V	3A	3A	3A		
	380V	1.9A	1.9A	1.9A		
	480V	1.5A	1.5A	1.5A		
	500V	1.4A	1.4A	1.4A		
	600V	1.2A	1.2A	1.2A		
	DC13 duty (P600)	125V	1.1A	1.1A		1.1A
		250V	0.55A	0.55A		0.55A
		400V	0.31A	0.31A		0.31A
		500V	0.27A	0.27A		0.27A
600V		0.2A	0.2A	0.2A		
Electrical lifetime (mil. operations)						
AC15 duty	220V	0.25	0.25	0.25	1	
	440V	0.25	0.25	0.25		
DC13 duty	220V	0.25	0.25	0.25		
	440V	0.25	0.25	0.25		
Maximum operating cycles per hour		1800	1800	1800	1200	
Conductor size (Solid, stranded)	AWG	18~10	18~10	18~10	18~10	
	(the max. number of conducts: 2) mm ²	1~2.5	1~2.5	1~2.5	1~2.5	

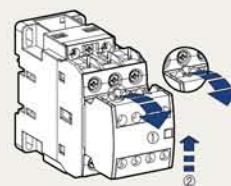
Installation

UA-1



To install side mounting unit remove the indicated part in the circle in the fig. first. And then fit each part as shown. To separate push forward and pull.

UA-2, 4



To install front mounting unit fit it on the upper part of the front of the contactor and push it down. To separate pull the lever of the unit and push the unit upward.