

Capacitor contactors

Description

Capacitor unit(Pre-loading resistor) is connected to the terminals of the contactor to reduce the high inrush current exceeding $20 \times I_n$.

- AC or DC control coil on selection
- 3-pole(NO) main contact
- Finger proof design
- DIN rail or screw mountable
- IEC 60947-4-1 AC 6b

Rating

Type	Rating (kVar, A)			Rating thermal current (Ith)
	220 ~ 240V	400 ~ 440V	500 ~ 550V	
MC-9b with AC-9	5kVar	9.7kVar	14kVar	21.6A
	13A	14A	16A	
MC-12b with AC-9	6.7kVar	12.5kVar	18kVar	28.4A
	18A	18A	21A	
MC-18b with AC-9	8.5kVar	16.7kVar	24kVar	37.8A
	22A	24A	28A	
MC-22b with AC-9	10kVar	18kVar	26kVar	40.5A
	26A	26A	30A	
MC-32a with AC-9	15kVar	25kVar	36kVar	56.1A
	39A	36A	42A	
MC-40a with AC-9	20kVar	33.3kVar	48kVar	74.8A
	52A	48A	55A	
MC-50a with AC-50	20kVar	40kVar	58kVar	90.4A
	52A	58A	67A	
MC-65a with AC-50	25kVar	45.7kVar	66kVar	102.9A
	66A	66A	76A	
MC-75a with AC-50	29.7kVar	54kVar	78kVar	121.6A
	78A	92A	97A	
MC-85a with AC-50	35kVar	60kVar	92kVar	143.4A
	92A	87A	106A	
MC-100a with AC-50	37kVar	62kVar	94kVar	146.5A
	90A	106A	109A	

Note) - When the switch is closed condenser must be discharged before recharged. (Maximum residual voltage at terminals $\leq 50V$)
 - To prevent short current, gG type fuse must be 1.5~2 times than rated current.
 - AC-50 is including screw type and lug type.



Coil voltage

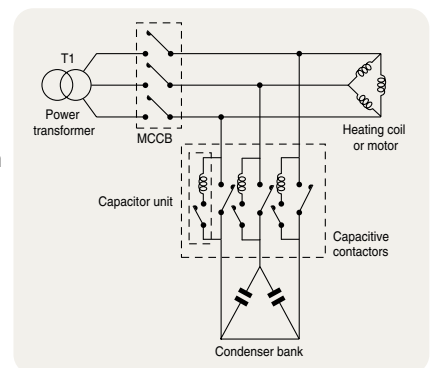
AC	50Hz	24, 32, 42, 48, 80, 100, 110, 220, 230, 240, 380, 400, 500, 550V
	60Hz	24, 48, 100, 110, 120, 200, 208, 220, 230, 240, 277, 380, 480, 600V
DC	DC	12, 20, 24, 48, 60, 80, 100, 110, 125, 200, 220, 250V

These capacitive contactors are suitable for switching single-step or multiple-step condenser bank.

It is standardized by IEC-60947-4941, UL and CSA.

Features of capacitor unit(Pre-loading resistor)

- Damping resistor that can limit the inrush current upto $60 \times I_n$ is connected to the mechanism that closed earlier than the main contact of the contactor
- No heat loss by the serial resistor
- Eliminate the switching surge
- Improving the performance of the capacitor system



Example

Capacitor unit



Capacitor unit is connected to the terminals of the contactor to reduce the high inrush current.
IEC 60947-4-1 AC 6b

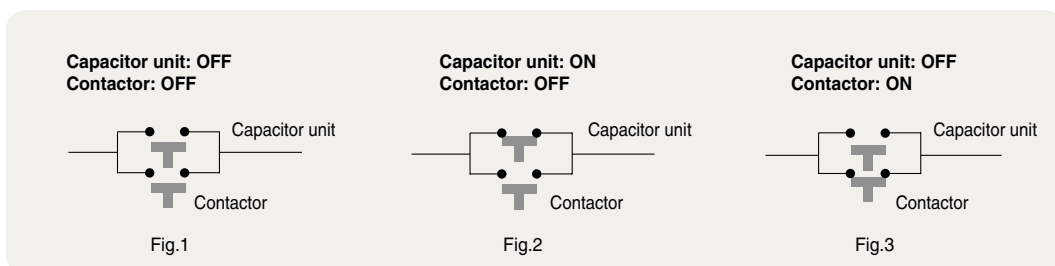
Type		AC-9 (1b)	AC-50 (1b)		
Rating thermal current (Ith)		16A	16A		
Current	AC-15	Rated	120V	6	6
			240V	3	3
		Operational Current (A)	380V	1.9	1.9
			480V	1.5	1.5
			500V	1.4	1.4
	DC-13	Rated	600V	1.2	1.2
			125V	0.55	0.55
		Operational Current (A)	250V	0.27	0.27
			400V	0.15	0.15
			500V	0.13	0.13
		600V	0.1	0.1	

Note) - When the switch is closed condenser must be discharged before recharged. (Maximum residual voltage at terminals $\leq 50V$)
- To prevent short current, gG type fuse must be 1.5-2 times than rated current.

Features of capacitor unit (Pre-loading resistor)

- Damping resistor that can limit the inrush current upto $60 \times I_n$ is connected to the mechanism that closed earlier than the main contact of the contactor
- No heat loss by the serial resistor
- Eliminate the switching surge
- Improving the performance of the capacitor system

Operation sequence



Note) Closing sequence: Fig.1 => Fig.2 => Fig.3
Opening sequence: Fig.3 => Fig.1