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	Contactor	Maximum operating power (kvar)			Max. Peak current (A)
		220 ~ 240V	400 ~ 440V	500 ~ 550V	
AC-9	MC-9a/9b	5	9.7	14	560
	MC-12a/12b	6.7	12.5	18	560
	MC-18a/18b	8.5	16.7	24	850
	MC-22b	10	18	26	1250
	MC-32a	15	25	36	1900
	MC-40a	20	33.3	48	2160
AC-50	MC-50a	20	40	58	2160
	MC-65a	25	45.7	66	3040
	MC-75a	29.7	54	78	3040
	MC-85a	35	60	92	3040
	MC-100a	37	62	94	3040

Note) - When the switch is closed condenser must be discharged before recharged. (Maximum residual voltage at terminals ≤ 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 resister that can limit the inrush current upto 60 × In 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

Capacitor unit: OFF
Contactor: OFF

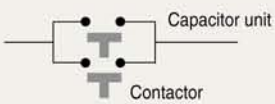

Fig.1

Capacitor unit: ON
Contactor: OFF

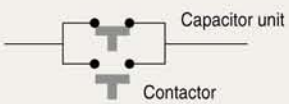

Fig.2

Capacitor unit: OFF
Contactor: ON

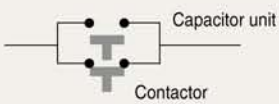

Fig.3

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