

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

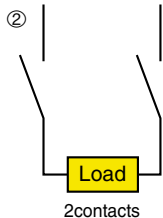
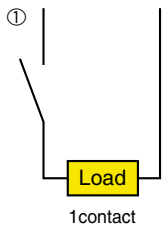
Selection



Type		Number of contacts in series	DC2, 4 ratings			Continuous current, Ith	Auxiliary contacts
AC coil	DC coil		110V	220V	440V		
SMM-30P	SMM-30DP	1 ①	2.2kW 30A	3.7kW 20A	2.2kW 7.5A	50A	2NO+2NC
		2 ②	3.7kW 40A	5.5kW 30A	7.5kW 20A		
SMM-60P	SMM-60DP	1	5.5kW 60A	7.5kW 40A	5.5kW 15A	90A	2NO+2NC
		2	7.5kW 80A	11kW 60A	15kW 40A		
SMM-100P	SMM-100DP	1	7.5kW 100A	11kW 60A	15kW 20A	120A	2NO+2NC
		2	11kW 120A	18.5kW 100A	22kW 60A		

Ratings of auxiliary contacts

		AC duty			DC duty		
		110V	220V	550V	48V	110V	220V
Rated currents	Inductive load	6A	5A	3A	3A	1.2A	0.2A
	Resistive load	10A	10A	5A	2.5A	1A	
Continuous current, Ith		16A					



Performance

Contactor types	Breaking current				Making current	Endurance
	contacts in series	DC110V	DC220V	DC440V		
SMM-30P	1	120A	80A	30A	160A	Mechanical lifetime : 2.5 mil. operations
SMM-30DP	2	160A	120A	80A		
SMM-60P	1	240A	160A	60A	320A	Electrical lifetime : 0.5 mil. operations
SMM-60DP	2	320A	240A	160A		
SMM-100P	1	400A	240A	80A	480A	Operation cycle : 1200 operations/hour
SMM-100DP	2	480A	400A	240A		

Contactor coil voltage, AC 50/60Hz

48, 100/100~110, 110~120/115~120, 200/200~220, 220~240/230~240, 380~415/400~440V

Coil voltage, DC

24, 48, 100, 110, 200, 220V

Ordering information

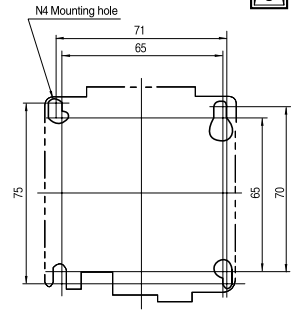
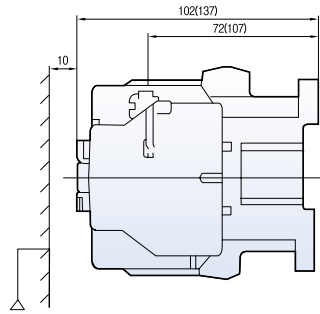
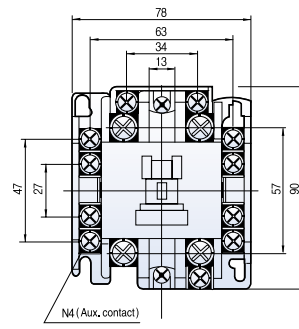
Specify type and coil voltage

Example : SMM-30P, AC100V 50Hz

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SMM-30P

SMM-30DP



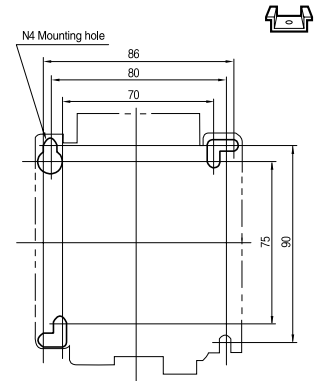
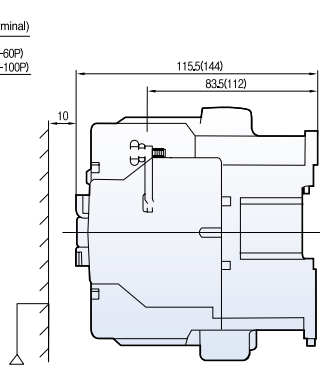
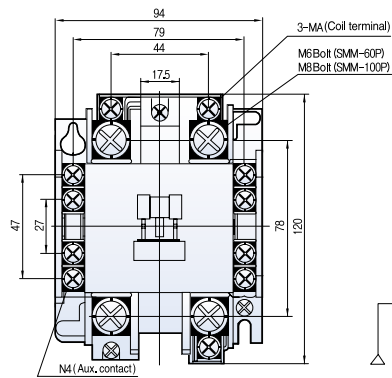
0.61(0.93)kg

SMM-60P

SMM-100P

SMM-60DP

SMM-100DP



1.15(2.17)kg

[mm]



2-pole AC Contactors, Definite purpose

Features and specifications



The single pole contactor is small, light and economical. It is suitable for use in equipment of lower switching frequency such as heaters, lightning equipment and in motor control of air conditioners, refrigerators, drivers, pumps, compressors, industrial cleaner and etc.

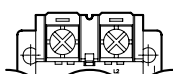
- Space-Saving small and light Design
- Extended Range in same size enables its use in a wide range of application areas
- Sealed structure which Improves Noise
- Equipped with Operation Status display unit
- Rated current: 10, 20, 25, 30, 35, 40A (AC 220V Standard)

Type and rating

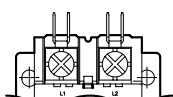


Type			GMC-10P2	GMC-20P2	GMC-25P2	GMC-30P2	GMC-35P2	GMC40P2
			10A	20A	25A	30A	35A	40A
Number of poles			2	2	2	2	2	2
Main contact			2a	2a	2a	2a	2a	2a
Rated insulation voltage, Ui			AC					
			690					
Rating			DC					
			250					
AC3 ratings	Rated current (A)	200~220V	10	20	25	30	35	40
		380~440V	8	17	21	23	26	32
		500~550V	6	14	17	21	23	26
	AC1 lth (A)	20	30	35	40	45	50	

Main contactor

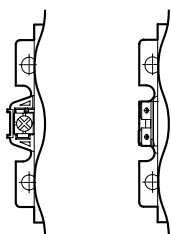


Screw clamp



Quick connect

Coil contactor



Screw clamp

Quick connect

Coil characteristics

Voltage (AC)	Input (VA)		Thermal dissipation (W)	Operation voltage (V)		Coil current (mA)	Operation time (ms)	
	Inrush	Sealed		Pick-up	Drop-out		Closing	Opening
24V 50/60Hz	35	6.0	2	18~20	10~15	263	40	30
48V 50/60Hz	35	6.0	2	36~40	19~27	131	40	30
100V 50/60Hz	35	6.0	2	74~81	39~57	63	40	30
110V 50/60Hz	35	6.0	2	78~90	50~64	57	40	30
120V 50/60Hz	35	6.0	2	90~100	52~66	53	40	30
200V 50/60Hz	35	6.0	2	155~165	80~115	32	40	30
220V 50/60Hz	35	6.0	2	160~175	90~120	29	40	30
230V 50/60Hz	35	6.0	2	165~180	110~130	27	40	30
240V 50/60Hz	35	6.0	2	168~185	110~135	26	40	30

Note) 1. Input VA is average value

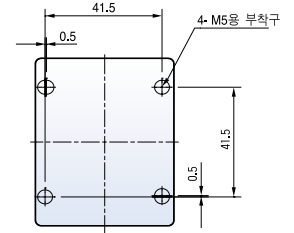
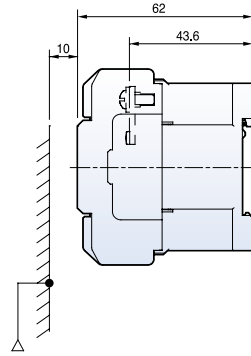
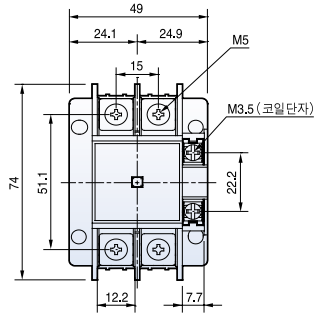
2. The data above consists of test results at 60Hz. (20°C COLD status)

3. The contactor will operate between 85% and 110% of rated voltage. But when continuously Applied, the voltage should remain within the rated voltage.

Dimensions

2-pole AC Contactors

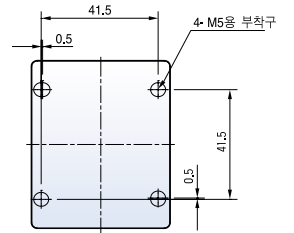
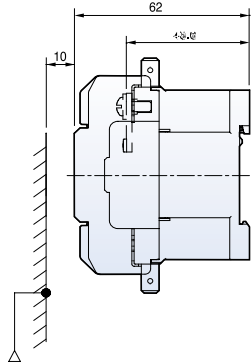
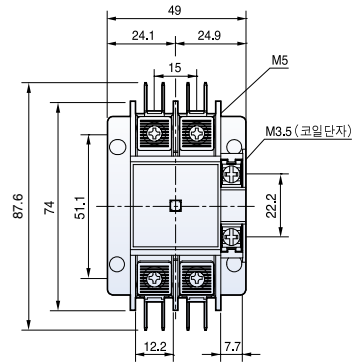
- GMC-10P2
- GMC-20P2
- GMC-25P2
- GMC-30P2
- GMC-35P2
- GMC-40P2
- (TSBS Type)



[mm]

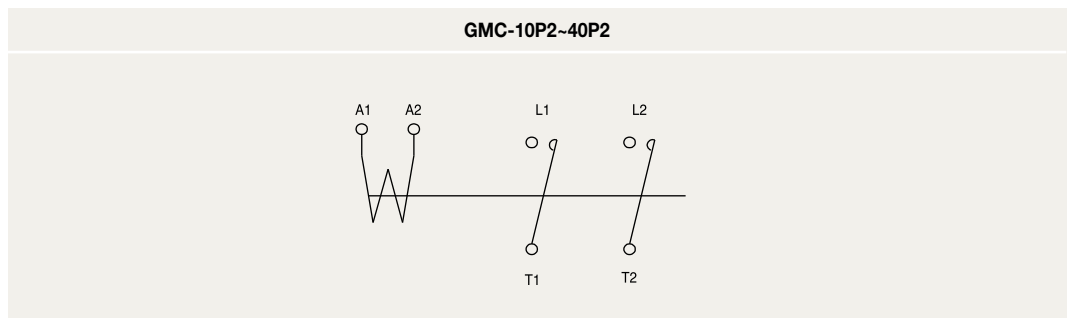
1.29kg

- GMC-10P2
- GMC-20P2
- GMC-25P2
- GMC-30P2
- GMC-35P2
- GMC-40P2
- (TQBS Type)



1.29kg

Circuit diagram



Terminal

Type	Terminal	Screw (mm ²)	Wire (kgf · cm)	Torque (mm)	A × B × C
GMC-10P2-40P2	Main	M5	1-16	26	12.2 × 7 × 8
	Coil	M3.5	1-2.5	12	7.7 × 7.5 × 4.5

