

**FEATURES**

- 120A Latching relay
- Electrical endurance 10000ops
- According to IEC62052-31:UC3
- Contact resistance  $\leq 0.35 \text{ m}\Omega$

**CONTACT DATA**

Contact form	1A,1B
Contact resistance <sup>1)</sup> (Initial)	Typ:0.35 m $\Omega$ max. (at 100A) <sup>2)</sup>
Contact rating	100Amax/220VAC COS $\phi$ =1
Max. switching power	33120W
Max. switching voltage	276VAC
Max. switching current	120A
Contact material	AgSnO <sub>2</sub>
Weight	85g

- 1) The data shown above are initial values
- 2) Typical value: Sampling quantity for contact resistance shall not less than 20pcs, take the average value from 5 continuous measurements for each sample.

**CHARACTERISTICS**

Insulation resistance	1000M $\Omega$ min (at 500VDC)
Dielectric strength	
- between coil to contacts	4000VAC 1min
- between open contacts	2000VAC 1min
Creepage distance	8mm
Operate time	$\leq 20 \text{ ms}$
Release time	$\leq 20 \text{ ms}$
Shock resistance	Functional: 98m/s <sup>2</sup> Destructive: 980m/s <sup>2</sup>
Vibration resistance	10-55Hz, 1.5mm DA
Humidity	5%~85% RH
Ambient temperature	- 40°C to 85°C
Life expectancy	
- Electrical	1 x 10 <sup>4</sup> operations
- Mechanical	1 x 10 <sup>5</sup> operations

**COIL SPECIFICATIONS – 1 COIL**

Nominal voltage (VDC)	Max. Set/Reset voltage <sup>1)</sup> (VDC)	Pulse Duration (Recommended) (ms)	Coil resistance ( $\Omega \pm 10\%$ )	Power consumption (W)
6	$\leq 4.8$	50~100	16	2.4
9	$\leq 7.2$	50~100	34	2.4
12	$\leq 9.6$	50~100	60	2.4
24	$\leq 19.2$	50~100	250	2.4
48	$\leq 38.4$	50~100	1000	2.4

**COIL SPECIFICATIONS – 2 COIL**

Nominal voltage (VDC)	Max. Set/Reset voltage <sup>1)</sup> (VDC)	Pulse Duration (Recommended) (ms)	Coil resistance ( $\Omega \pm 10\%$ )	Power consumption (W)
6	$\leq 4.8$	50~100	8+8	4.8
9	$\leq 7.2$	50~100	17+17	4.8
12	$\leq 9.6$	50~100	30+30	4.8
24	$\leq 19.2$	50~100	125+125	4.8
48	$\leq 38.4$	50~100	500+500	4.8

1) The data shown above are initial values; recommended driving voltage is 1~1.5 times of rated voltage.

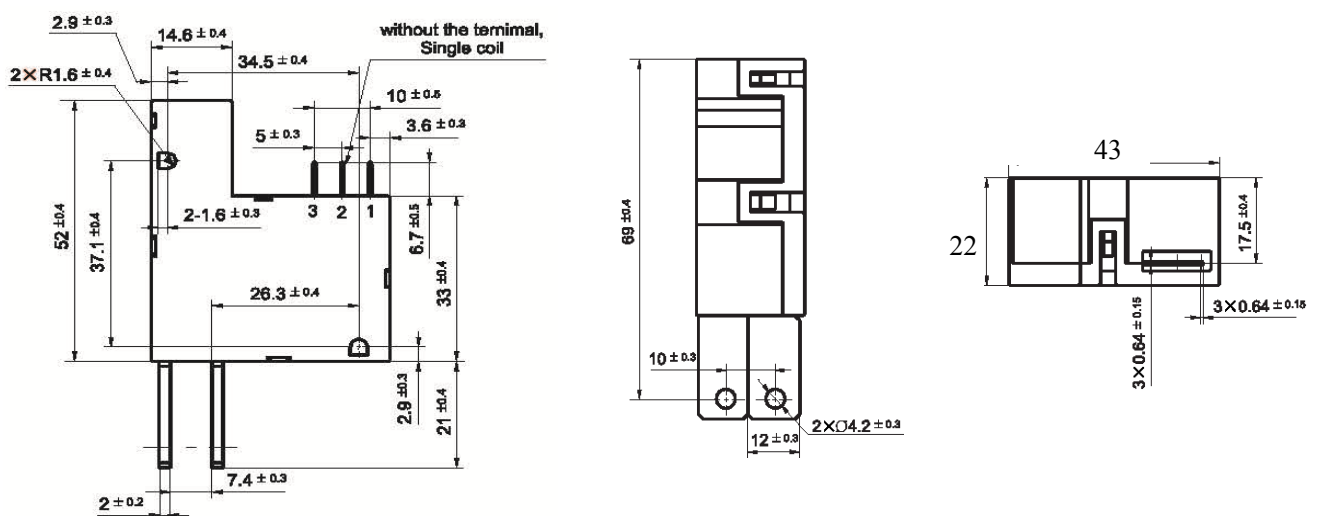
**ORDERING INFORMATION**

**ME-120 - L1 - 12 A C R**

Model No.	Coil type	Coil Voltage	Contact form	Version	Polarity
ME-120	L1: 1 coil latching L2: 2 coil latching	6VDC – 48VDC	A: 1Form A B: 1Form B	A: Type A contact terminal B: Type B contact terminal C: Type C contact terminal D: Type D contact terminal F: Type F contact terminal G: Type G contact terminal	Nil: Positive polarity R: Negative polarity

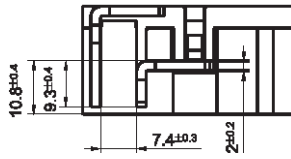
**Dimensions(unit:mm)**

Type C contact terminal

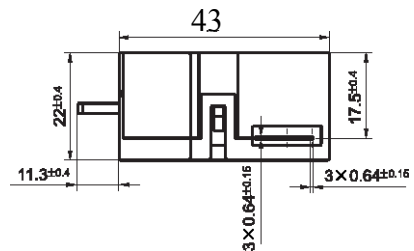
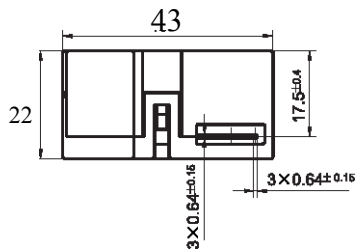
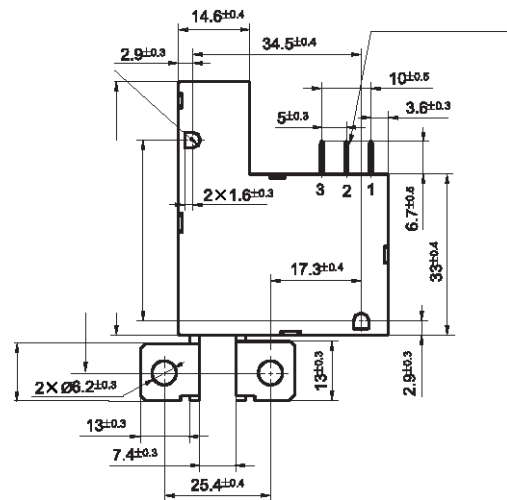
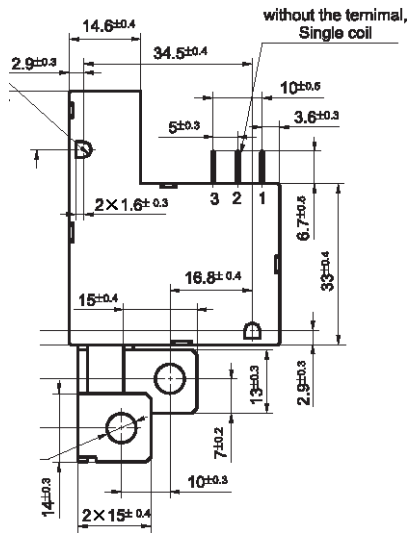
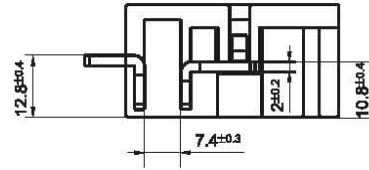


## Dimensions(unit:mm)

### Type A contact terminal

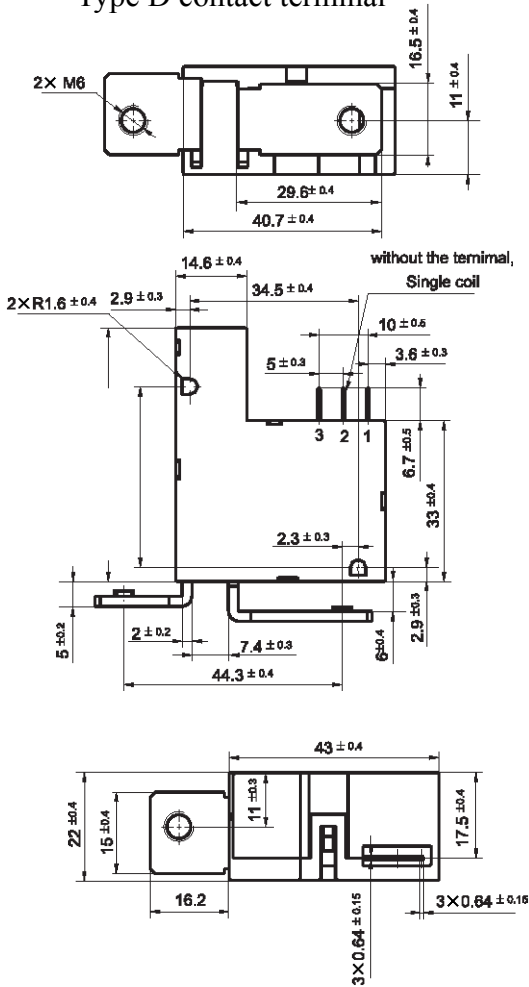


### Type B contact terminal

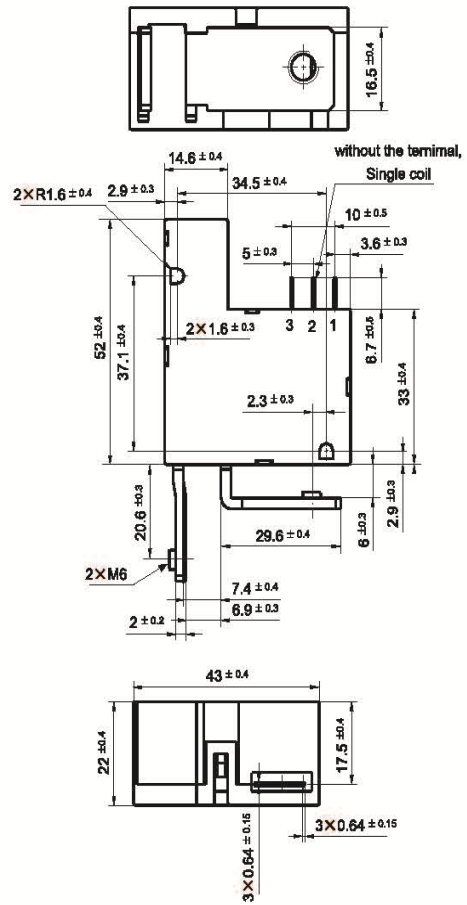


Dimensions(unit:mm)

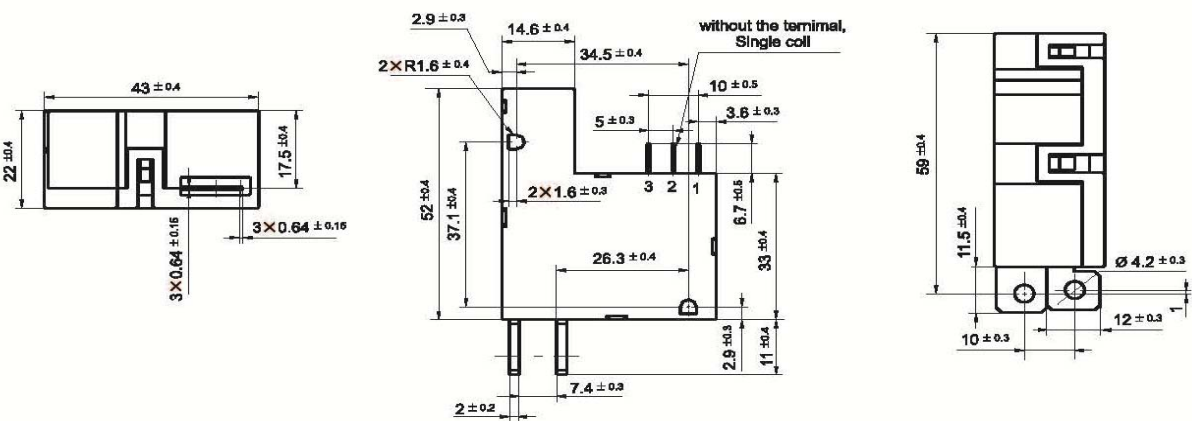
Type D contact terminal



Type F contact terminal

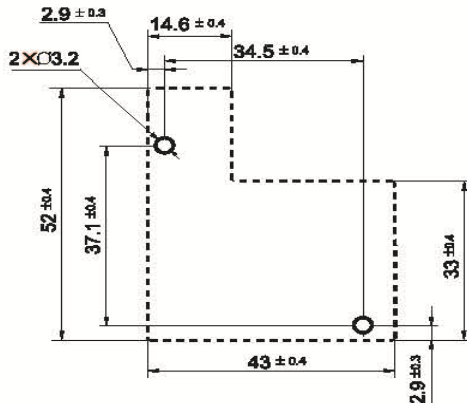


Type G contact terminal



## Dimensions(unit:mm)

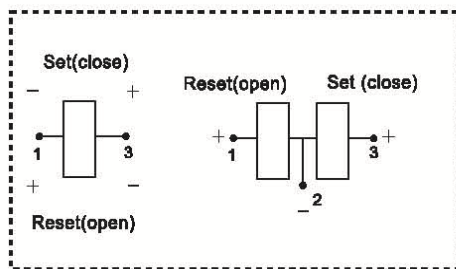
## PCB Layout



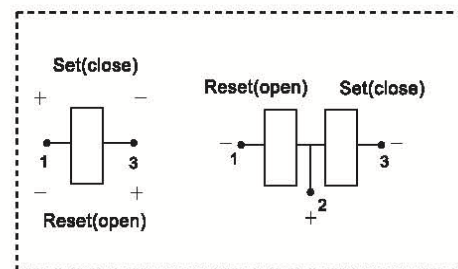
Remark: In case of no tolerance shown in outline dimension: outline dimension  $\leq 1\text{mm}$ , tolerance should be  $\pm 0.1\text{mm}$ ; outline dimension  $> 1\text{mm}$  and  $\leq 5\text{mm}$ , tolerance should be  $\pm 0.2\text{mm}$ ; outline dimension  $> 5\text{mm}$ , tolerance should be  $\pm 0.4\text{mm}$ .

## Coil Wiring Diagram

## Positive polarity



## Negative polarity



## Notice:

1. Relay is on the “reset” or “set” status when being released from stock, with the consideration of shock arisen from transit and relay mounting, relay would be changed to “set” or “reset” status, therefore, when application (connecting the power supply), please reset the relay to “set” or “reset” status on request.
2. Do not energize voltage to “set” coil and “reset” coil simultaneously. And also long energized time (more than 1 min) should be avoided.
3. Normally the load terminals are not suitable for reflow solder, wave solder or tin solder, we suggest use spot welding. Load terminals shall be prevented from assembly stress, or freely move.
4. Relays used for metering measuring applications are usually made with dust proof structure, while most relays could be made specially per customers specific requirements. No longer than 6 months storage time is recommended for this kind of relay, and please pay attention to the storage environment. To ensure contact reliability, we will keep contact status be close when delivery if no special required by customer.

**Disclaimer: All the specifications are subject to change without notice.**