

**FEATURES**

- 4 Main contacts+ 1 Auxiliary contact
- Detection of main contact welding makes it possible to construct a safety circuit (according to IEC 6180-3)
- Meet the requirements for auxiliary contact linked with power contact(mirror contact)(according to IEC 60947-4-1)
- Contact gap : 3.9mm (Main contact),each contact
- Low coil holding voltage contributes to save energy
- Fulfill 3kA short circuit current test according to IEC 62955
- Outline dimensions : (59 x 35 x 47)mm

**CONTACT DATA**

Contact arrangement		4A;4AB
Contact resistance (initial)	Main contact	10 mΩ max. (at 20A 6VDC)
	Auxiliary contact	100 mΩ max. (at 1A 6VDC)
Contact rating(Resistive)	Main contact	40A 440VAC
	Auxiliary contact	1A 277VAC 1A 30VDC
Max. switching voltage	Main contact	440VAC
	Auxiliary contact	277VAC 30VDC
Max. switching current	Main contact	40A
	Auxiliary contact	1A
Max. switching power	Main contact	17600VA
	Auxiliary contact	277VA/30W
Contact material	Main contact	AgSnO <sub>2</sub>
	Auxiliary contact	AgNi

**CHARACTERISTICS**

Insulation resistance	1000MΩ at 500VDC
Dielectric strength	Main contact: 5000VAC, 1min.between coil to contacts 2000VAC, 1 min. between contact sets 2000VAC, 1 min. between open contacts 2000VAC, 1min.between main contact and Auxiliary contact 2000VAC, 1min. between coil and Auxiliary contacts 1000VAC, 1min. between open Auxiliary contacts
Operate time	Max. 40 ms (nominal voltage)
Release time	Max. 20 ms (nominal voltage)
Vibration resistance	10-55Hz, Double Amplitude 1.0mm
Temperature rise	70K max.(contact load current 40A, Applied voltage of coil 100% rated voltage for 100 ms holding voltage of coil 50% rated voltage, at 85°C)
Shock resistance	Functional:98m/s <sup>2</sup> Destructive:980m/s <sup>2</sup>
Humidity	5% to 85% RH
Ambient temperature	-40°C ~ 85°C
Life expectancy - Mechanical	1 x 10 <sup>5</sup> operations

# ME-43

# MASSUSE RELAY

## ELECTRICAL ENDURANCE

Life expectancy Electrical Endurance	NO: Making 10A Loading 40A Breaking 10A 440VAC, Resistive load, 85°C, 5 x 10 <sup>4</sup> ops NC: 1A 277VAC/30VDC, Resistive load, 85°C, 1s on 9s off, 10 x 10 <sup>4</sup> ops
---	--

## COIL SPECIFICATIONS

Nominal voltage (VDC)	Pick-up voltage VDC(Max.)	Drop-out voltage VDC(Min.)	Nominal current (mA±10%)	Coil resistance (Ω±10%)	Power consumption(W)	Max. allowable voltage(VDC)
9	6.75	0.45	532.5	16.9	4.8	130% of nominal voltage
12	9	0.6	400	30	4.8	
24	18	1.2	200	120	4.8	
48	36	2.4	100	480	4.8	

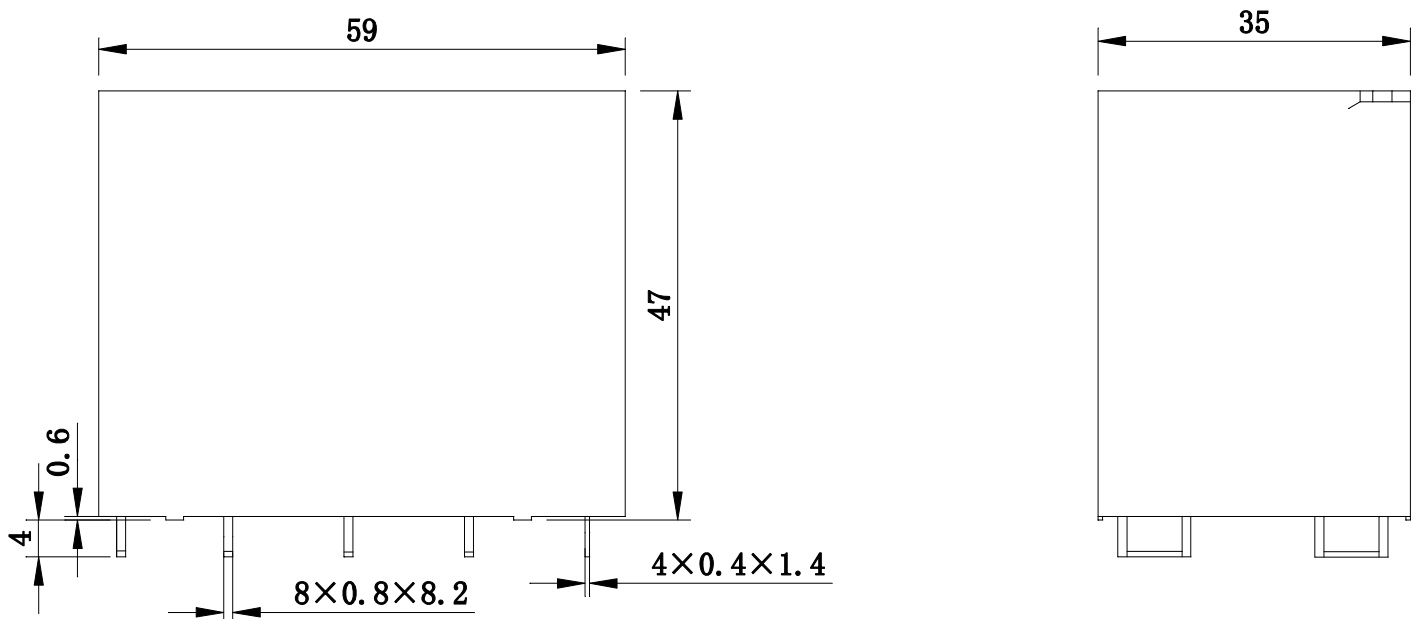
## ORDERING INFORMATION

ME-43 - 012 - 4A B XX XX

Model No.	Coil Voltage	Contact Form	Auxiliary contact arrangement	Contact Material	Insulation System
ME-43	9VDC-48VDC	4A: 4 Form A	B:1 Form B	Nil: AgSnO <sub>2</sub>	Nil : Class F

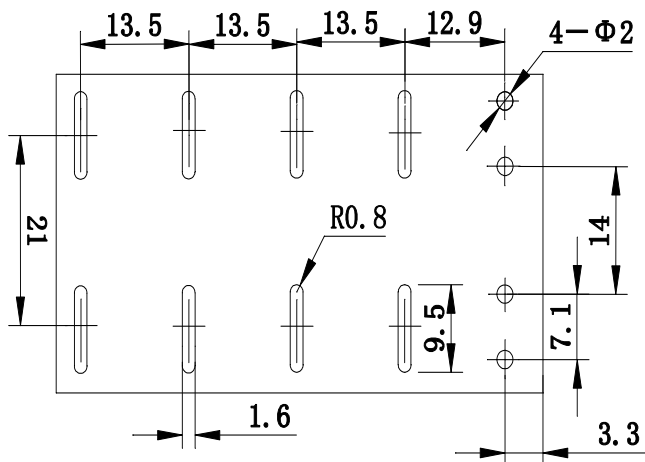
## Dimensions(unit:mm)

Tolerance: ±0.5mm

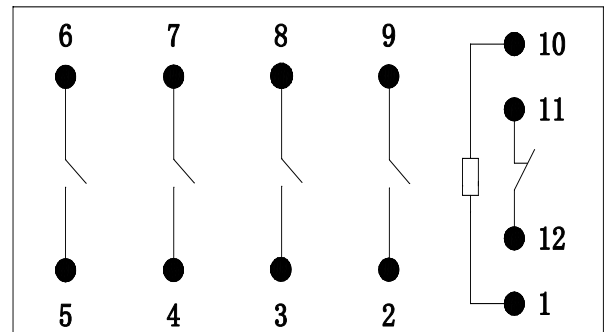


Dimensions(unit:mm)

PCB LAYOUT



SCHEMATIC

**Remark:**

1) In case of no tolerance shown in outline dimension: outline dimension  $\leq 1$ mm, tolerance should be  $\pm 0.2$ mm; outline dimension  $> 1$ mm and  $\leq 5$  mm, tolerance should be  $\pm 0.3$ mm; outline dimension  $> 5$ mm and  $\leq 30$ mm, tolerance should be  $\pm 0.4$ mm; outline dimension  $> 30$ mm, tolerance should be  $\pm 0.6$ mm .

2) The tolerance without indicating for PCB layout is always  $\pm 0.1$ mm.

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