ME-46 MASSUSE RELAY

FEATURES

- 2 Main contact + 1 Auxiliary contact
- Detection of main contact welding makes it possible to construct a safety circuit
- Fully compliant to the 10kA short circuit current test and 500A switching
- Meet the requirements for Auxiliary contact linked with power contact (mirror contact)
- Low coil holding voltage contributes to saving energy of equipment
- Contact gap:3.6mm(Main contact)，each contact
- Insulation system: Class F

CONTACT DATA

Contact arrangement		2A,2A1B
Contact resistance (initial)	Main contact	10 mΩ(6VDC20A)
	Auxiliary contact	100 mΩ(1A 6VDC)
Contact rating(Resistive)	Main contact	50A 440VAC
	Auxiliary contact	1A 277VAC 1A 30VDC
Max. switching voltage	Main contact	440VAC
	Auxiliary contact	277VAC 30VDC
Min. switching load	Auxiliary contact	NC:100mA 12VDC NC(Gold plated): 10mA 12VDC
Max. switching current	Main contact	50A
	Auxiliary contact	1A
Max. switching power	Main contact	22000VA
	Auxiliary contact	277VA/30W
Contact material	Main contact	$AgSnO_2$
	Auxiliary contact	AgNi

CHARACTERISTICS

Insulation resistance	1000MΩ at 500VDC
Dielectric strength	5000VAC, 1 min. between coil to contacts 2000VAC,1min. between contacts sets 2000VAC, 1 min. between open contacts 2000VAC,1min.between main contact to 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, 1.0mm DA
Temperature rise	70K max.(contact load current 50A,Applied voltage of coil 100% rated voltage for 100ms holding voltage of coil 50% rated voltage,at 85℃)
Shock resistance	Functional:$98m/s^2$ Destructive:$980m/s^2$
Humidity	5% to 85% RH
Ambient temperature	-40℃ ~ 85℃
Life expectancy - Mechanical	2×10^5 operations

Electrical Endurance

Life expectancy Electrical Endurance	NO: 5 x 10^4ops,Making 10A Loading 50A Breaking 10A 440VAC, Resistive load, 85℃, NC: 10 x 10^4 ops,1A 277VAC/30VDC, Resistive load, 85℃,1s on 9s off

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	400	22.5	3.6	110% of nominal voltage
12	9	0.6	300	40	3.6	
24	18	1.2	150	160	3.6	
48	36	2.4	75	640	3.6	

ORDERING INFORMATION

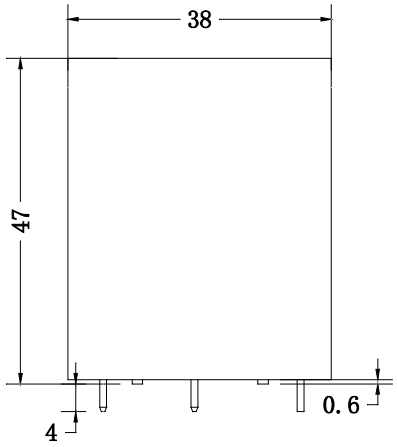
ME-46 - 012 - 2H D T F G

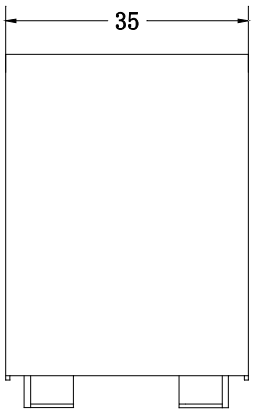
Model No.	Coil Voltage	Contact Form	Auxiliary contacts arrangement	Contact Material	Insulation System	Special code
ME-46	9VDC–48V DC	2H: 2 A	Nil: Without Auxiliary contact D: 1B	T: $AgSnO_2$	F : Class F	Nil: Compliant IEC62955 G: Auxiliary contact gold plated

Dimensions(unit:mm)

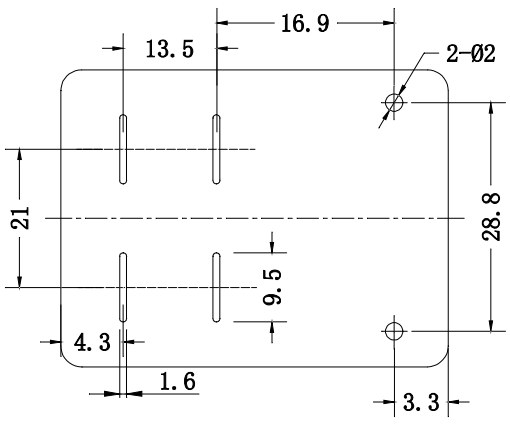
Tolerance:±0.5mm

2H





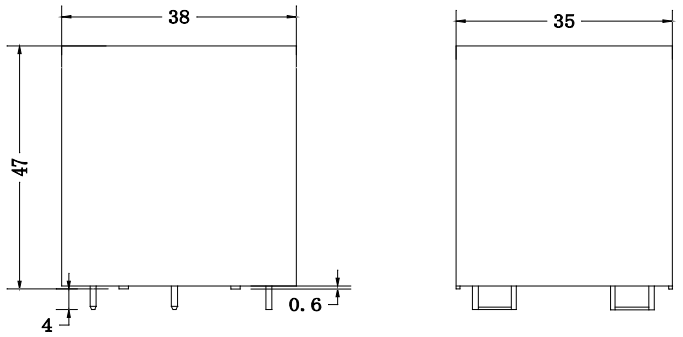
PCB LAYOUT



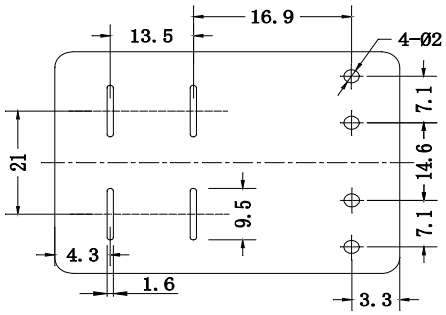
Dimensions(unit:mm)

Tolerance:±0.5mm

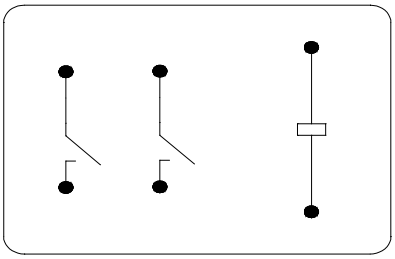
2HD



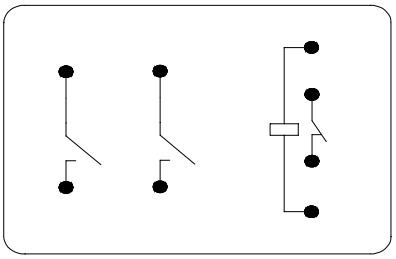
PCB LAYOUT



Wiring Diagram



2H



2HD

Remark:

1) In case of no tolerance shown in outline dimension: outline dimension≤1mm, tolerance should be ±0.2mm; outline dimension >1mm and ≤5 mm, tolerance should be ±0.3mm; outline dimension>5mm, tolerance should be ±0.4mm.

2) The tolerance without indicating for PCB layout is always ±0.1mm.

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