Single phase 100A latching Relay TP41-23

▶Description

● Single Phase 100A Switching Capability;

● Multi-layer blades, Low temperature rise;

● Environment protection (Comply with ROSH);

● Conform to IEC62055-31 UC_3;

Ordering information

| Tp41 | 23 | C | 12 | D |

① D: Doulbe Coil S: Single Coil

② Coil Voltage: 6,9,12,18,24,48 VDC

③ Contact Material: $AgSnO_2$

④ Part No.: Single phase 100A Switching

⑤ Type: Magnetic latching relay

Technical Data

▶ Coil data

Rated coil voltage		6V. 9V. 12V. 24V. 48V.
Rated Power	Single Coil	2W
	Double Coil	4W
pulse Width		50 ms MAX
pulse time		〈30ms (at norminal voltage)

▶ Contact data

Contact Material:		$AgSnO2$
Contact arrangement		1A(B)
Contact Resistance		1.0mΩ Max.
Max. Switching Voltage:		253V
Max. Switching Current:		100A
Max. Switching Power:		25300VA
Life	Mechanical Life	1×10^5 OPS
	Electrical Life	1×10^4 OPS

▶ Standard windings

Nominal voltage (VDC)	Operating voltage range MAX. (VDC)	Coil resistance (± 10%)/ (Ohm)
Single Winding		
6	4.8	18
9	7.2	40.5
12	9.6	72
24	19.2	288
48	38.4	1152
Double Winding		
6	4.8	9+9
9	7.2	20+20
12	9.6	36+36
24	19.2	144+144
48	38.4	576+576

NOTE: Others norminal voltage required, special ordering allowed.

▶ Characteristics

Insulation Resistance:		1000MΩ
Dielectric strength	Between Contact and Coil	4000V 1Min.
	Between Open Contact	2000V 1Min.
Creepage Distance:		8 mm
Shock Ristance:		147m/s2
Vabration Resistance:		10HZ-55HZ amplitude 1.5mm
Ambient Temperature:		-40℃...+85℃
Weight:		APPROX.85g
Contruction:		Dust protection

▶ Electrical Endurance

UC Class	Voltage (UC)	Current (IC)	Power factor	Close Open time(s)	Electrical Endurance(OPS)	
UC$_3$	220VAC	100A	cosφ=1.0 cosφ=0.5	10:20	5000 Cycle 5000 Cycle	10000 Cycle

NOTE: Electrical endurance confirm to IEC62055-31 UC3 testing requirement, do the inductive load testing after the resistance load testing.
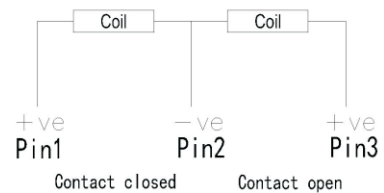
Outline dimensions and circuit diagram

Wiring diagram

+ve Pin1   −ve Pin2
Contact closed

−ve Pin1   +ve Pin2
Contact open

Wiring diagram

+ve Pin1   −ve Pin2   +ve Pin3
Contact closed   Contact open
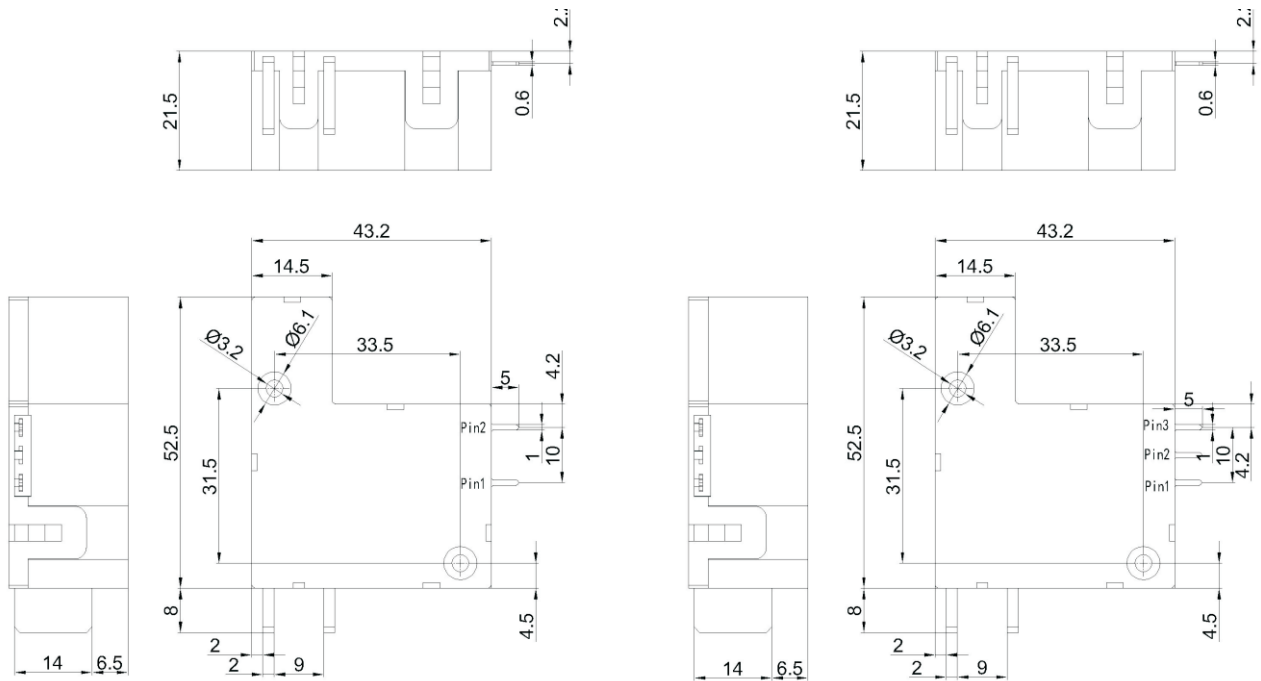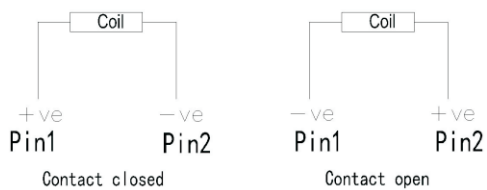
Remark: The tolerance didn't mark on drawings. When dimension is ≤1mm, the tolerance should be less than ±0. 2mm ; when dimension is between 1-5mm, the tolerance should be less than ±0. 3mm; When dimension is ≥5mm, the tolerance should be less than ±0. 5mm.

Note:
1. The default status of the relay contact is closed(Reset), it maybe change to "open" due to transit or relay mounting, please check the contact status when using, and reset the relay contact status on request if necessary.
2. In order to make sure the contact " open" or "closed" status, the excitation voltage should reach to rated voltage, but the excitation time should not over 1 minute. For double coil relay, do not apply the voltage to both coils at the same time.
3. The terminals relay without twisted copper cable can not be tin soldered, can not be wrenched too.
4. Please do not use the relay which has been tested for electrical endurance testing.