

Three phase 120A latching Relay TP41-10A



► Description

- Three phase 120A Switching Capability;
- Multi-layer blades, Low temperature rise;
- Conform to fault making capacity and short-circuit current carrying capacity requirement of IEC62055-31(UC2 and UC3);
- Environment protection (Comply with ROHS);

Ordering information

TP41	10A	C	12	D	①	D: Double Coil S: Single Coil
					②	Coil Voltage: 6,9,12,18,24,48 VDC
					③	Contact Material: AgSnO ₂
					④	Part No.: Three phase 120A Switching
					⑤	Type: Magnetic latching relay

Technical Data

► Coil data

Rated coil voltage	6V. 9V. 12V. 24V. 48V.	
Rated Power	Single Coil	2.5W
	Double Coil	5W
pulse Width	50 ms MAX	
pulse time	<50ms (at nominal voltage)	

► Contact data

Contact Material:	AgSnO ₂	
Contact arrangement	3A(B)	
Contact Resistance:	1.0mΩ Max.	
Max. Switching Voltage:	253VAC	
Max. Switching Current:	120A	
Max. Switching Power:	30000VA	
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 ($\pm 10\%$)/ (Ohm)
Single Winding		
6	4.8	14.4
9	7.2	32.4
12	9.6	57.6
24	19.2	230.4
48	38.4	921.6
Double Winding		
6	4.8	7.2+7.2
9	7.2	16.2+16.2
12	9.6	28.8+28.8
24	19.2	115.2+115.2
48	38.4	460.8+460.8

NOTE: Others nominal voltage required, special ordering allowed.

► Characteristics

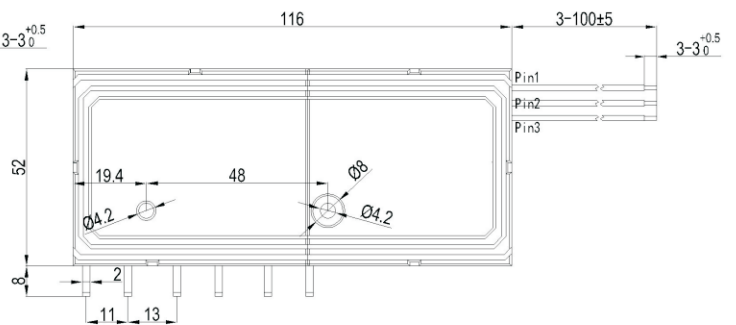
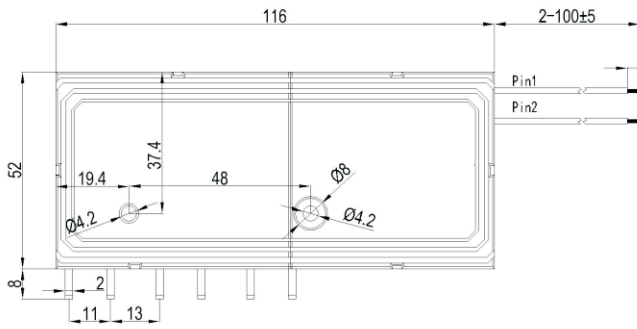
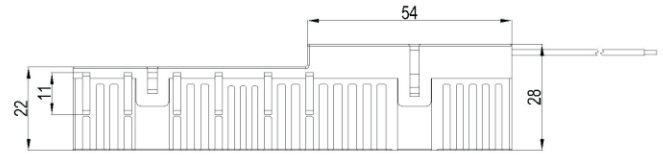
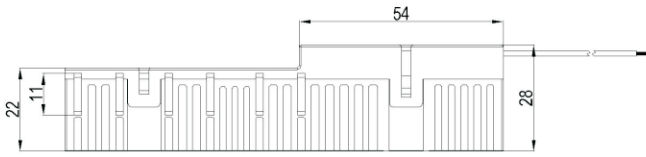
Insulation Resistance:	1000M Ω	
Dielectric strength	Between Contact and Coil	4000V 1Min.
	Between Open Contact	2500V 1Min.
Creepage Distance:	8 mm	
Shock Ristance:	147m/s ²	
Vabration Resistance:	10HZ-55HZ amplitude 1.5mm	
Ambient Temperature:	-40 $^{\circ}$ C...+85 $^{\circ}$ C	
Weight:	APPROX.300g	
Contruction:	Dust protection	

► Electrical Endurance

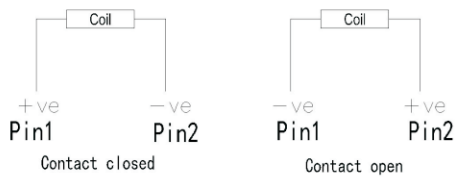
UC Class	Voltage (UC)	Current (IC)	Power factor	Close Open time(s)	Electrical Endurance(OPS)	
UC ₃	220VAC	120A	cos ϕ =1.0 cos ϕ =0.5	10:20	5000 Cycle 5000 Cycle	10000 Cycle

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

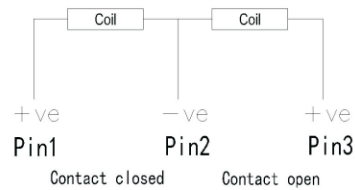
Outline dimensions and circuit diagram



Wiring diagram



Wiring diagram



Remark: The tolerance didn't mark on drawings. When dimension is $\leq 1\text{mm}$, the tolerance should be less than $\pm 0.2\text{mm}$; when dimension is between 1-5mm, the tolerance should be less than $\pm 0.3\text{mm}$; When dimension is $\geq 5\text{mm}$, the tolerance should be less than $\pm 0.5\text{mm}$.

Note:

1. The default status of the relay contact is closed (Reset), it may 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 of the 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.