

Single phase 2 pole 90A latching Relay TP41-20



► Description

- Single Phase 2 pole 90A Switching Capability;
- Multi-layer blades, Low temperature rise;
- Environment protection (Comply with ROHS);
- Connection : L N N L;
- Conform to IEC62055-31 UC₂;

Ordering information

TP41	20	C	12	D	①	D: Double Coil S: Single Coil
					②	Coil Voltage: 6,9,12,18,24,48 VDC
					③	Contact materials : AgSnO ₂
					④	Part No.: Single phase 2 pole 90A 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 (can be customized)
pulse Width	50 ms MAX	
pulse time	<30ms (at nominal voltage)	

► Contact data

Contact Material:	AgSnO ₂	
Contact arrangement	2A(B)	
Contact Resistance:	1.0mΩ Max.	
Max. Switching Voltage:	253 VAC	
Max. Switching Current:	90A	
Max. Switching Power:	22500VA	
Life	Mechanical Life	1×10 ⁵ OPS
	Electrical Life	1×10 ⁴ OPS

► Standard windings

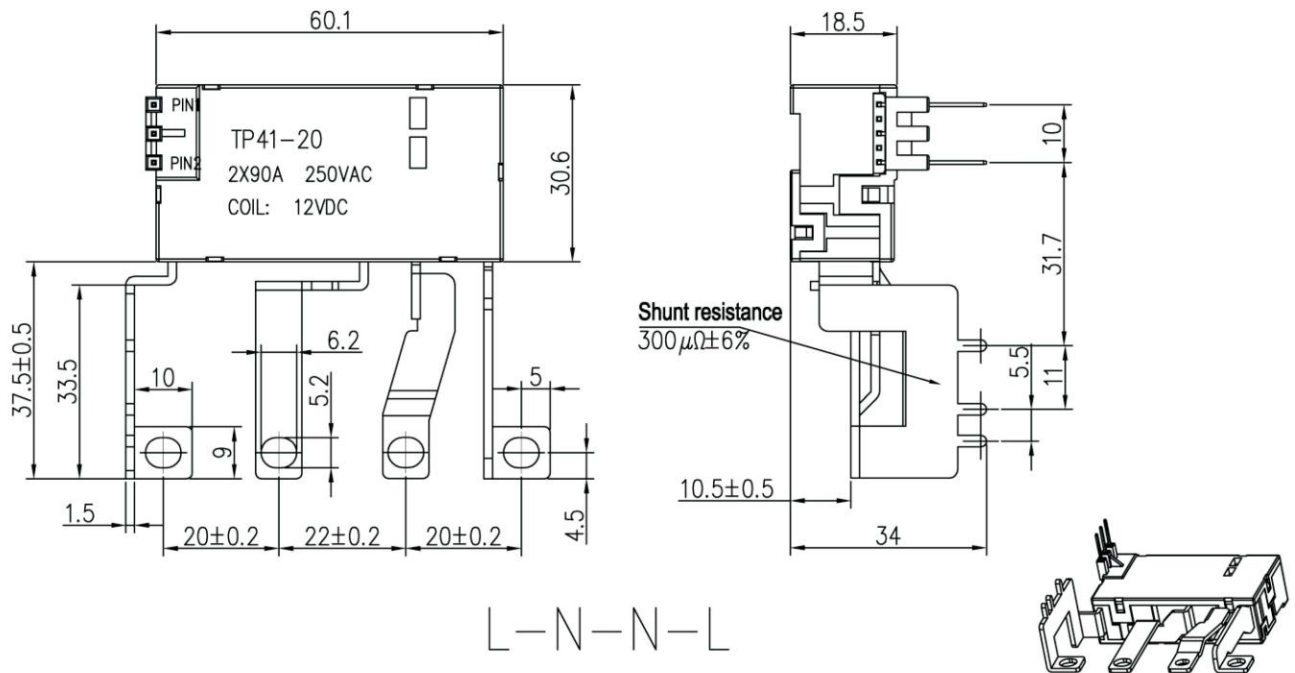
Nominal voltage (VDC)	Operating voltage range MAX. (VDC)	Coil resistance ($\pm 10\%$)/ (Ohm)
Single Winding		
6	4.8	14.4
9	7.2	32.4
12	9.6	57.6
24	19.2	230.4
48	38.4	921.6
Double Winding		
6	4.8	7.2+7.2
9	7.2	16.2+16.2
12	9.6	28.8+28.8
24	19.2	150.2+150.2
48	38.4	460.8+460.8

NOTE: Others nominal voltage required, special ordering allowed.

► Characteristics

Insulation Resistance:	1000M Ω	
Dielectric strength	Between Contact and Coil	4000V 1Min.
	Between Open Contact	1800V 1Min.
Creepage Distance:	8 mm	
Shock Resistance:	147m/s ²	
Vibration Resistance:	10HZ-55HZ amplitude 1.5mm	
Ambient Temperature:	-40 $^{\circ}$ C...+85 $^{\circ}$ C	
Weight:	APPROX.110g	
Construction:	Dust protection	

Outline dimensions and circuit 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 (R set), 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 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.