

### Features

- It applied in electronic energy meter.
- Two pole 80A Switching Capability.
- Dimension: 61.0x36.0x21.0(mm).
- Low Coil Power Comsumption.
- Environment protection(ROSH Compliant).



**TP41-21-80A**

### Ordering information

	TP41	21	80	12	B	D
Latching relay						
Part number						
Rated current: 80A						
Coil voltage: 9VDC,12VDC,18VDC,24VDC,48 VDC						
Contact form B: Normal closed						
S: Single coil D: Double coil						

### Contact parameters

Contact form	2A 2B
Contact resistance <sup>(1)</sup>	$\leq 1.0 \text{ m}\Omega$ (1A、6VDC)
Contact materials	AgSnO <sub>2</sub>
Rated load	80A/250VAC
Max switching voltage	250VAC
Max switching current	80A
Max switching Power	20000VA
Mechanical endurance	$1 \times 10^5$ ops

### Coil parameters

Rated coil power		Single: 4W double: 8W	
<b>Single coil</b>			
Rated voltage (VDC)	Operation voltage range (VDC)	Impulse width (recommended value) ms	Coil resistance (1±10%) Ω
6	$\leq 4.8$	$\geq 50$	9
9	$\leq 7.2$	$\geq 50$	20.25
12	$\leq 9.6$	$\geq 50$	36
24	$\leq 19.2$	$\geq 50$	144

### Double coil

Rated voltage (VDC)		Operation voltage range (VDC)		Impulse width (recommended value) ms	Coil resistance (1±10%)
6	$\leq 4.8$	$\geq 50$			4.5+4.5
9	$\leq 7.2$	$\geq 50$			10+10
12	$\leq 9.6$	$\geq 50$			18+18
24	$\leq 19.2$	$\geq 50$			72+72

### Electrical endurance

Rated current	Rated voltage	PF	ON/OFF	Cycles
60A	250VAC	$\cos\phi=1$	10s:20s	5000
		$\cos\phi=0.5$	10s:20s	5000

Memo: (1) The above value is the initial value.

## Two pole 80A relay TP41-21

## Latching relay technical data

### Performance parameters

Dielectric strength	Coil and Contact (1min) Btw contacts (1min)	4000VAC 50/60Hz 2000VAC 50/60Hz
Creepage distance		6.4mm
Close time (Rated voltage)		≤30ms
Recovery time (Rated voltage)		≤30ms
Insulation	Btw open contacts	1000MΩ (500VDC)
	Contact and coil	1000MΩ (500VDC)
Shock	Stability	98m/s <sup>2</sup>
	Strength	980m/s <sup>2</sup>
Vibration		10Hz~55Hz 1.5mm Double amplitude
Fault current making capacity (2.5KA)		Meet requirement
Short-circuit current carrying capacity (4.5KA)		Meet requirement

Humidity	5%~85%RH
Environment	-40°C~+85°C

Terminals	Coil pins	PCB mounting,quick connection
	Load terminals	quick connection
High temperature		85°C±2°C,16H
Low temperature		-40°C±2°C, 2H
Sealing		Dust sealing

### Dimensions (Unit: mm)

