FH27L

Latching Relay

Features

- 120A switching capability
- Single coil and double coils are all available
- Double contacts structure
- Can be customized the manganese copper shunt, transformer and other external accessories according to customer demand
- Breakdown voltage (between contact and coil):4KV
- Meet the standard of IEC62055-31:2005 UC3
- Environment-friendly product (RoHS compliant)
- Outline Dimensions:(42.0×32.0×20.8)mm
- Main application:Smart meter、Power supply

■ CHARACTERISTICS

Specifications	Item		
Contact Data	Contact arrangement	1A、1B	
	Contact resistance(initial)	≤1mΩ(6VDC 1A)	
	Contact material	AgSnO$_2$	
Rated value	Rated load(Resistance load)	100A 250VAC(Standard)	
		120A 250VAC	
	Max.switching voltage	277VAC	
	Max.switching current	120A	
	Max.switching capacity	30000VA	
	Min.allowing load	/	
Electrical performance	Insulation resistance(initial)	1000MΩ(500VDC)	
	Dielectric strength (initial)	Between open contacts	2000VAC,1min
		Between coil&contacts	4000VAC,1min
	Impact resistance voltage	≤30ms	
	Set time	≤30ms	
	Reset time	98m/s^2(10g)	
Mechanical performance	Shock resistance	Functional	980m/s^2(100g)
		Destructive	10Hz~55Hz 1.5mm DA
	Vibration resistance	2×10^{5}ops	
Endurance	Mechanical	120A 250VAC	6×10^{3}ops (ON/OFF=1s/9s)
		100A 250VAC	1×10^{4}ops (ON/OFF=1s/9s)
	Electrical(Room temperature)	-40℃~85℃	
Operate condition	Ambient temperature	5% to 85%	
	Humidity	Plug-in needle type+Screw type(XB)	
Termination		Approx.70g(Without attachment)	
Unit weight		Flux proofed	

■ COIL DATA(23℃)

■ Single coil latching

| Nominal Voltage	Set Voltage VDC	Reset Voltage VDC	Rated Current (±10%)	Coil Resistance (±10%)	Nominal Power	Max Voltage
DC 6V	≤4.50	≤4.50	500mA	12Ω		DC 9V
DC 9V	≤6.75	≤6.75	333.3mA	27Ω	3W	DC 13.5V
DC 12V	≤9.00	≤9.00	250mA	48Ω		DC 18V
DC 24V	≤18.00	≤18.00	125mA	192Ω		DC 36V

■ Double coils latching

Nominal Voltage	Set Voltage VDC	Reset Voltage VDC	Rated Current (±10%)	Coil Resistance (±10%)	Nominal Power	Max Voltage
DC 6V	≤4.50	≤4.50	1000/1000mA	6/6Ω		DC 9V
DC 9V	≤6.75	≤6.75	666.7/666.7mA	13.5/13.5Ω	6W	DC 13.5V
DC 12V	≤9.00	≤9.00	500/500mA	24/24Ω		DC 18V
DC 24V	≤18.00	≤18.00	250/250mA	96/96Ω		DC 36V

■ ORDERING INFORMATION

FH27L   -1B   T   -L1   R   -XXX   DC6V

① Type

② Contact arrangement:1A=1 open contacts、
                        1B=1 close contacts

③ Contact material:T=AgSnO$_2$

④ Coil type:L1=Single coil latching、L2=Double coils latching

⑤ Operation polarity:Nil=standard polarity   R=reversed polarity

⑥ Customer special code:numbers or letters denote customer's requirements

⑦ Coil specification:DC5/6/9/12/24V

■ OUTLINE DIMENSIONS,WIRING DIAGRAM AND PC BOARD LAYOUT(Unit:mm)

1A/1B Outline Dimensions Wiring Diagram

Single coil latching

1(＋)3(－) 4-5 Reset
3(＋)1(－) 4-5 Set

Double coils latching

1(＋)2(－) 4-5 Reset
3(＋)2(－) 4-5 Set
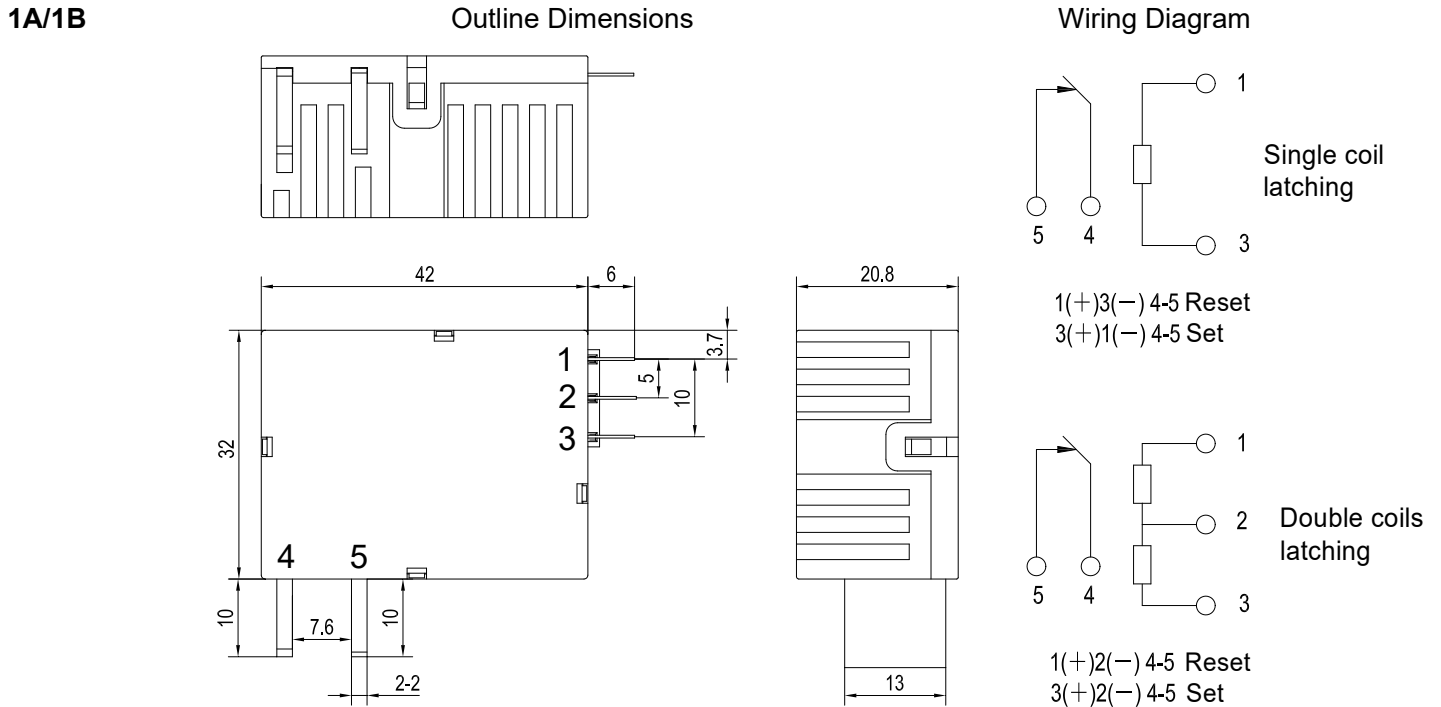
Remark: ⑴ In case of no tolerance shown in outline dimension:outline dimension≤1mm,tolerance should be±0.2mm;outline dimension >1mm and <5mm,tolerance should be ±0.3mm;outline dimension≥5mm,tolerance should be ±0.5mm.

　　　　⑵ The tolerance without indicating for PCB layout is always ±0.1mm.

■ NOTICE

① With the consideration of shock risen from transit and relay mounting,relay's initial state might be changed ,please impose pulse voltage to reset the relay before using(rated coil voltage,impulse width≥5 times operation time.

② In order to maintain the initial performance parameters of the relay, please be careful not to drop the product;

③ In order to maintain the "set" or "reset" status, energized voltage to coil should reach the rated voltage, impulse width should be 5 times more than "set" or "reset" time. Do not energize the voltage to "set" coil and "reset" coil simultaneously.

④ The specification is for reference only.Specifications subject to change without notice.