FH57L

Latching Relay

Features

- 90A switching capability
- Double contact structure, good contact reliability
- It only requires pulse excitation voltage to work, which is energy-saving and environmentally friendly
- Environment-friendly product(RoHS compliant)
- Outline Dimensions:(30×16×25)mm

■ CHARACTERISTICS

Specifications	Item		
Contact Data	Contact arrangement		1A
	Contact resistance		≤1mΩ(6VDC 20A)
	Contact material		$AgSnO_2$
Rated value	Rated load(Resistance load)		Main contact：90A 250VAC/48VDC Auxiliary contact：1A 250VAC/48VDC
	Max.switching voltage		Main contact：250VAC/48VDC
	Max.switching current		Main contact：90A
	Max.switching capacity		Main contact：22500VA/4320W
	Min.allowing load		Main contact：1VDC 100mA Auxiliary contact：3VDC 1mA
Electrical performance	Insulation resistance(initial)		100MΩ(500VDC)
	Dielectric strength (initial))	Between open contacts	1000VAC,1 min
		Between coil&contacts	1000VAC,1 min
	Set time(Rated driving voltage）		≤20ms
	Reset time(Rated driving voltage）		≤20ms
Mechanical performance	Shock resistance		98m/s^2 (10g)
			980m/s^2 (100g)
	Vibration resistance		1×10^5 ops
Endurance	Mechanical		90A 250VAC/48VDC 6×10^3 ops(ON/OFF=1s/9s)
	Electrical(Room temperature)		-40℃～90℃
Operate condition	Ambient temperature		5% to 85%
	Humidity		PCB
Termination			Approx.28g
Unit weight			Plastic sealed, 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 5V	≤3.75	≤3.75	600mA	8.3Ω	3W	DC 6.5V
DC 12V	≤9	≤9	250mA	48Ω		DC 15.6V
DC 24V	≤18	≤18	125mA	192Ω		DC 31.2V
DC 48V	≤36	≤36	62.5mA	768Ω		DC 62.4V
DC 60V	≤45	≤45	50mA	1200Ω		DC 78.0V

■ ORDERING INFORMATION

FH57L -1A S T F A -L1 R -AC DC12V

① Type:

② Contact arrangement:1A=1 open contacts

③ Construction(1):Nil=Flux proofed,S=Plastic sealed

④ Contact material:T=$AgSnO_2$

⑤ Insulation standard:F=Class F

⑥ Arc extinguishing system：A=With magnetic blowing arc extinguishing、B=without magnetic blowing arc extinguishing

⑦ Sort:L1=1 coil latching

⑧ Operation polarity:Nil=standard polarity R=reversed polarity

⑨ Auxiliary contact(2)：None=No auxiliary contact、AC=with auxiliary contact

⑩ Coil specification:DC5/12/24/48/60V

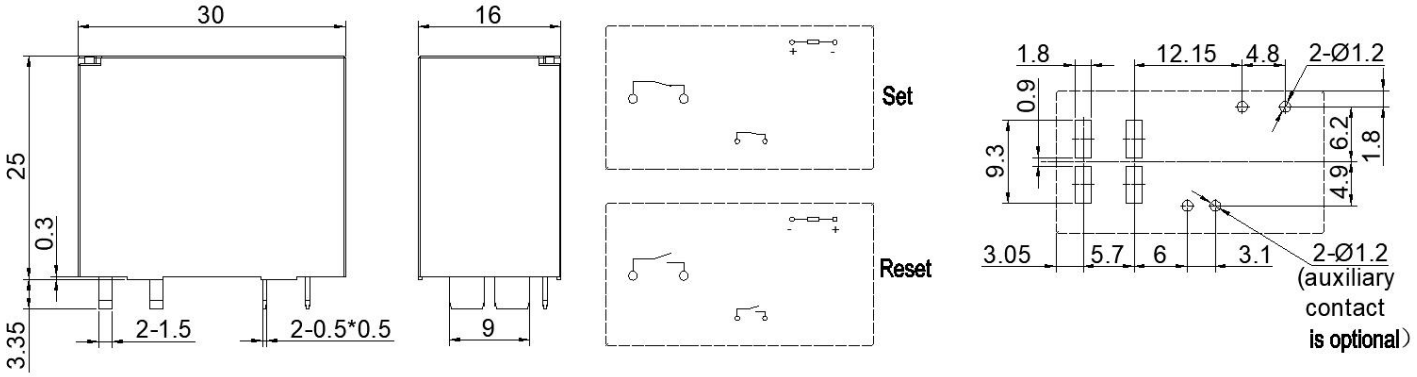
(1) When used in clean environment(excluding H_2S,SO_2,NO_2,dust and other pollutants), it is recommended to choose the Flux proofed type;When used in unclean environment(contain H_2S,SO_2,NO_2,dust and other pollutants), it is recommended to choose the Plastic sealed.

(2) The auxiliary contacts and the main contacts are of the same form.

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

1A Outline Dimensions Wiring Diagram PCB Layout

(Single coil latching) (Bottom view) (Bottom view)



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.