FH62NE

Power Relay

Features

- 4 sets of 40A main contacts+1 set of auxiliary contact
- When the main contact sticks,Auxiliary contacts meet the safety monitoring function (According to IEC61810-3)
- Contact gap :3.9mm(main contact)
  Auxiliary contact:Min0.5mm(When the main contact sticks)
- Coil power is 4.8W
- UL insulation system:Class F
- Meet the 3KA short circuit current test of IEC 62955
- Creep distance:>8mm
- Outline Dimensions:(58x35x47)mm
- Main applications: Inverter for solar photovoltaic power generation, AC charge spots
- The coil voltage applied to complete machine to save power loss

■ CHARACTERISTICS

Specifications	Item			
Contact Data	Contact arrangement		4A	4AB
	Contact resistance(initial)	Main contact	≤10mΩ(6VDC 20A)	
		Auxiliary contact	/	≤100mΩ(6VDC 1A)
	Contact material	Main contact	$AgSnO_2$	
		Auxiliary contact	/	AgNi
Rated value	Rated load (Resistance load)	Main contact	40A 480VAC	
		Auxiliary contact	/	1A 277VAC,1A 30VDC
	Max.switching voltage	Main contact	480VAC	
		Auxiliary contact	/	277VAC,30VDC
	Max.switching current	Main contact	40A	
		Auxiliary contact	/	1A
	Max.switching capacity	Main contact	19200VA	
		Auxiliary contact	/	277VA/30W
Electrical performance	Insulation resistance(initial)		1000MΩ(500VDC)	
	Dielectric strength (Initial)	Disconnect between main contacts	2000VAC 1min(50Hz/60Hz)	
		Between main contact and auxiliary contact		
		Between main contact groups		
		Between coil and auxiliary contact		
		Between the coil and the main contact	5000VAC 1min(50Hz/60Hz)	
		Disconnect between auxiliary contacts	/	1000VAC 1min(50Hz/60Hz)
	Operate time		≤40ms	

	Release time		≤20ms	
Mechanical performance	Shock resistance	Functional	main contact 98m/s^2(10g)	
		Destructive	980m/s^2(100g)	
	Vibration resistance		main contact10Hz~55Hz 1.5mm DA	
Endurance	Mechanical		1×10^{6}ops	
	Electrical (main contact)	ON/OFF=1S/9S	40A 480VAC Resistive	3×10^4 ops
			32A 277VAC Resistive	5×10^4 ops
	Electrical (auxiliary contact)		1A 277VAC/30VDC Resistive	1×10^{5}ops
Surge voltage (Between coil&contacts)			10kV(1.2/50 μs)	
Operate condition	Ambient temperature		-40℃~+85℃	
	Humidity		5%~85%RH	
Unit weight			Approx.200g	
Construction			Flux proofed	

Note:The above datas are the initial values

■ COIL DATA(23℃)

Nominal Voltage	Operate Voltage VDC	Release Voltage VDC	Rated Current (±10%)A	Coil Resistance (±10%)Ω	Nominal Power	Sustaining voltage	Max Voltage VDC
DC 6V	≤4.5	≥0.3	0.8	7.5	4.8	40%-100%Un (Ambient temperature25℃) 50%-60%Un (Ambient temperature85℃)	6.6
DC 9V	≤6.75	≥0.45	0.53	16.9			9.9
DC 12V	≤9	≥0.6	0.4	30			13.2
DC 24V	≤18	≥1.2	0.2	120			26.4
DC 48V	≤36	≥2.4	0.1	480			52.8

Remark:(1)The coil sustaining voltage applied to coil 100ms after the rated voltage.

(2)To avoid overheating and buring,the coil can not be consistently applied to with voltage larger than maximum sustaining voltage.

■ ORDERING INFORMATION

FH62NE 4A T B -XXX -DC12V

① Type

② Contact arrangement:4A=4 open contacts

③ Contact material:T=$AgSnO_2$

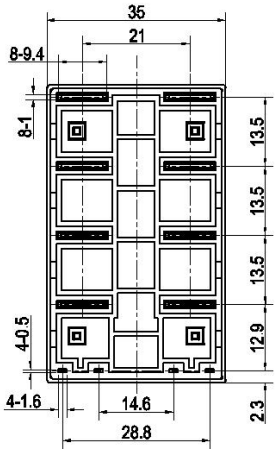
④ Auxiliary switch: None = no auxiliary switch、
B= auxiliary switch normally closed

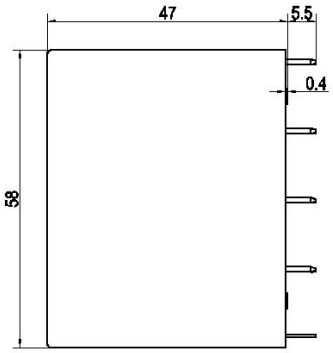
⑤ Customer special code:numbers or letters denote customer's requirements

⑥ Coil specification:DC6/9/12/24/48V

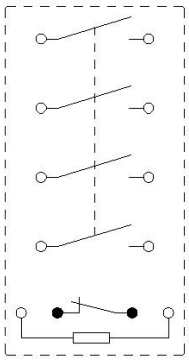
■ WIRING DIAGRAM AND PC BOARD LAYOUT(Unit:mm)

Outline Dimensions

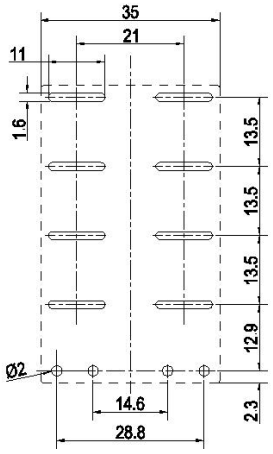




Wiring Diagram
(Bottom view)



PCB Layout
(Bottom view)



Remark:(1)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.

(2) The tolerance without indicating for PCB layout is always ±0.1mm.

■ SAFETY APPROVAL RATINGS

Approval	File No.	Type	Approved ratings			
UL/C-UL (Pending)	/	main contact	50A	277VAC	85°C	No damage
			32A	277VAC	85°C	5×10^4 ops
		Auxiliary contact	1A	30VDC	85°C	10×10^4ops
			1A	277VAC	85°C	10×10^4ops
TUV (Pending)	/	main contact	50A	277VAC	85°C	No damage
			32A	277VAC	85°C	5×10^4 ops
		Auxiliary contact	1A	30VDC	85°C	10×10^4ops
			1A	277VAC	85°C	10×10^4ops
CQC (Pending)	/	main contact	50A	277VAC	85°C	No damage
			32A	277VAC	85°C	5×10^4 ops
		Auxiliary contact	1A	30VDC	85°C	10×10^4ops
			1A	277VAC	85°C	10×10^4ops

■ NOTICE

① In order to maintain the initial performance parameters of the relay, please be careful not to drop the product or be affected by external force;

② The soldering temperature of load extraction terminal with copper is 260℃±5℃,soldering time is 3~5S;

③ The specification is for reference only.Specifications subject to change without notice.