FH67NE

Solar relays

Features

- 200A/270A switching capability
- One set of double-break with normally open type，
  Contact gap≥4.0mm
- UL insulation system:Class F
- The whole machine applies the coil to maintain the voltage,
  saving power loss
- Provide the type with heat-sink,
  the heat dissipation effect is more better
- Environment-friendly product(RoHS compliant)
- Main application: PV inverter,Industrial control device

CHARACTERISTICS

Specifications	Item			
Contact Data	Contact arrangement		1A	
	Contact resistance(initial)		≤1mΩ(6VDC 20A)	
	Contact material		$AgSnO_2$	
Rated value	Rated Current (carrying)		200A	270A
	Rated load(Resistance load)		Making：55A，Loading：Rated Current，Breaking：55A	
	Max.switching voltage		1000VAC	
	Max.switching current		220A	275A
	Max.switching capacity		220000VA	275000VA
Electrical performance	Insulation resistance(initial)		1000MΩ(500VDC)	
	Dielectric strength (initial)	Between open contacts	2500VAC,1 min	
		Between coil&contacts	5000VAC,1 min	
	Operate time(Nominal Voltage)		≤45ms	
	Release time(Nominal Voltage)		≤10ms	
Mechanical performance	Shock resistance	Functional	$98m/s^2$(10g)	
		Destructive	$980m/s^2$(100g)	
	Vibration resistance		10Hz～55Hz 1.0mm DA	
Endurance	Mechanical		1×10^6ops(ON/OFF：0.2s/0.2s)	
	Electrical(Resistance load)		$\geq3\times10^4$ops(at 85℃，ON/OFF=1s/9s)	
Operate condition	Ambient temperature		-40℃～85℃	
	Humidity		5% to 85%	
Termination			PCB	
Unit weight			Standard Type：Approx.225g With heat sink type：Approx.235g	
Construction			Flux proofed	

COIL DATA(23℃)

Nominal Voltage	Operate Voltage VDC	Release Voltage VDC	Rated Current (±10%)	Coil Resistance (±10%)	Nominal Power	Sustaining voltage	Max Voltage
DC 6V	≤4.50	≥0.30	666.7mA	9Ω	4W	55%～100%Un (Ambient temperature23℃) 55%～60%Un (Ambient temperature85℃)	DC 7.2V
DC 9V	≤6.75	≥0.45	444.4mA	20.3Ω			DC 10.8V
DC 12V	≤9.00	≥0.60	333.3mA	36Ω			DC 14.4V
DC 24V	≤18.00	≥1.20	166.7mA	144Ω			DC 28.8V
DC 48V	≤36.00	≥2.40	83.3mA	576Ω			DC 57.6V

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.

(3)The maximum voltage refers to the maximum voltage that the relay can withstand in a short period of time.

ORDERING INFORMATION

FH67NE 200 -1A T F L -XXX DC12V

① Type

② Rated Current： 200=200A
270=270A

③ Contact arrangement:1A=1 open contacts

④ Contact material:T=$AgSnO_2$

⑤ Insulation system:F=Class F

⑥ Special requirements：Nil=Standard Type、L=Heat sink type

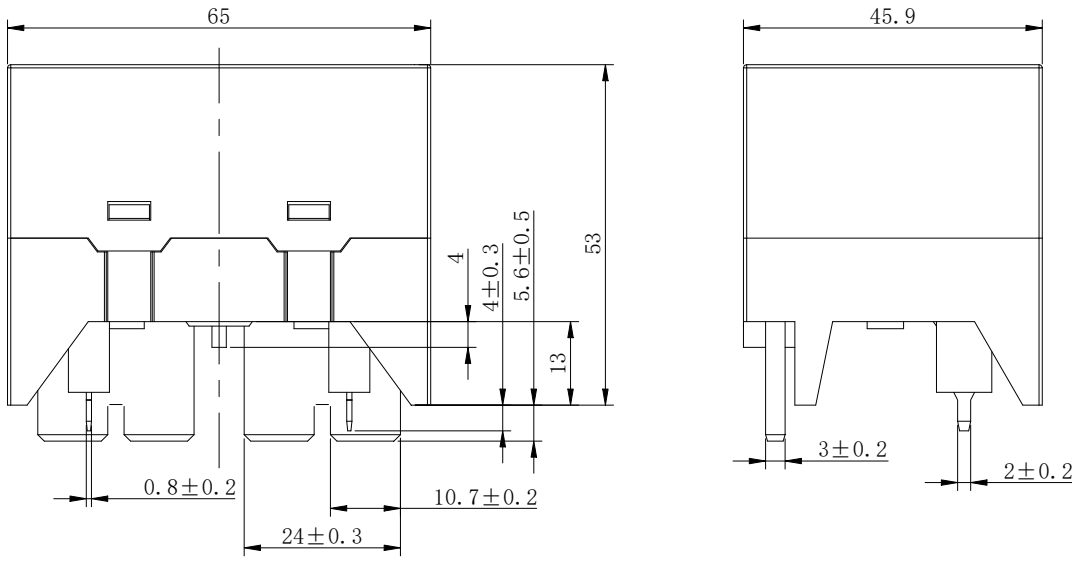
⑦ Customer special code:numbers or letters denote customer’s requirements

⑧ Coil specification：DC6/9/12/24/48V

WIRING DIAGRAM AND PC BOARD LAYOUT(Unit:mm)

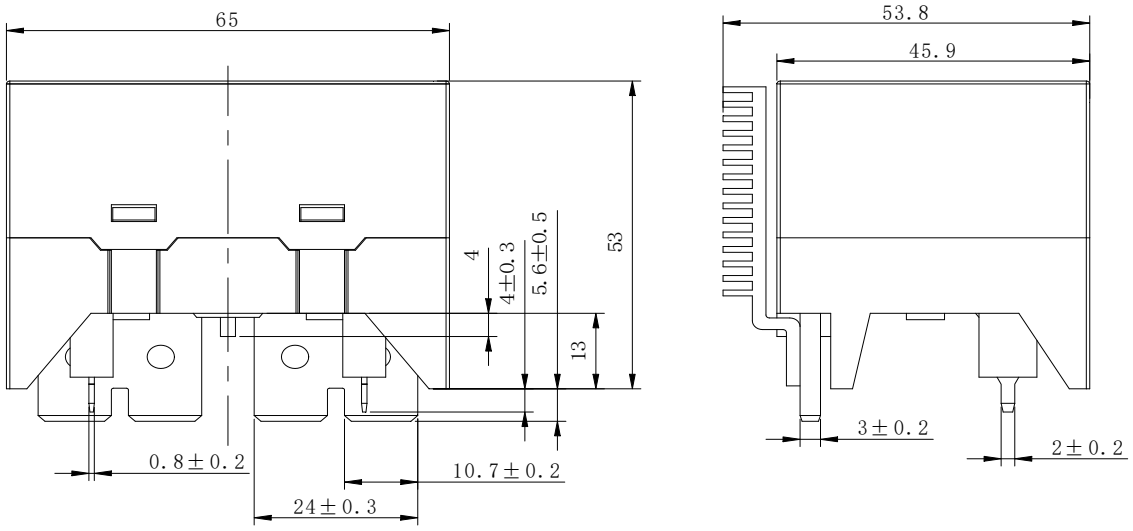
Standard Type

Outline Dimensions



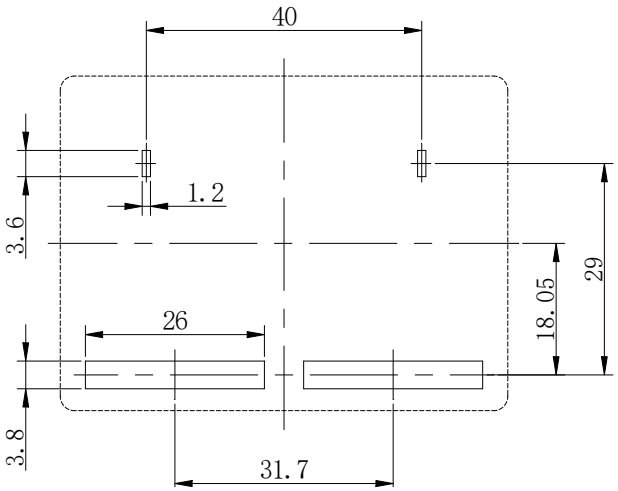
With heat sink type

Outline Dimensions

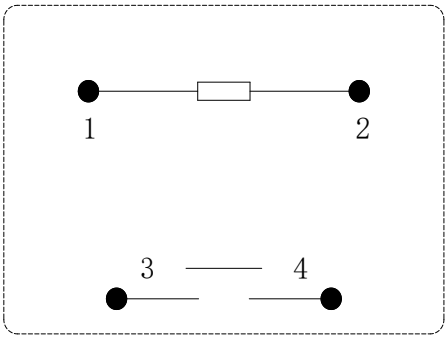


WIRING DIAGRAM AND PC BOARD LAYOUT(Unit:mm)

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.
(3)Since the heat sink is live as a whole, it is forbidden to install any metal parts or components within 10mm ofthe heat dissipation device.
(4) The FH67NE 200 has no slot at the bottom of the main terminal, and the FH67NE 270 has a slot at the bottom of the main terminal.

SAFETY APPROVAL RATINGS

Approval	File No.	Contact material	Approved ratings
UL/C-UL	/	$AgSnO_2$	Connecting 55A,Carrying 200A/270A,Breaking 55A, 1000VAC, 85℃, 30000ops, Resistive loads
TUV	/	$AgSnO_2$	
CQC	/	$AgSnO_2$	

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