

# FH66NE200

Power Relay

## Features

- Contact gap is 4.0mm
- 200A contact switching capability
- Outline Dimensions:(45X40X50)mm
- UL insulation system:Class F
- Main application: PV inverter,Inverter precharge circuit control,  
Industrial control device



## CHARACTERISTICS

Specifications	Item		
Contact Data	Contact arrangement		1A
	Contact resistance(initial)		$\leq 2\text{m}\Omega$ (6VDC 20A)
	Contact material		AgSnO <sub>2</sub>
Rated value	Rated load(Resistance load)		Connecting 50A,carrying 200A, breaking 50A 830VAC
	Max.switching voltage		830VAC
	Max.switching current		200A
	Max.switching capacity		41500VA
Electrical performance	Insulation resistance(initial)		1000M $\Omega$ (at500VDC)
	Dielectric strength (initial)	Disconnect between main contacts	2500VAC 1min (50Hz/60Hz)
		Between coil&contacts	5000VAC 1min (50Hz/60Hz)
	Operate time		$\leq 30\text{ms}$
	Release time		$\leq 10\text{ms}$
Mechanical performance	Shock resistance	Functional	98m/s <sup>2</sup> (10g)
		Destructive	980m/s <sup>2</sup> (100g)
	Vibration resistance		10Hz~55Hz 1.5mm DA
Endurance	Mechanical		1 $\times 10^6$ ops
	Electrical	ON/OFF=1S/9S	Connecting 50A carrying 200A breaking 50A 830VAC Resistive 85 $^{\circ}$ C 3 $\times 10^4$ ops
Surge voltage (Between coil&contacts)			10KV(1.2/50 $\mu$ s)
Operate condition	Ambient temperature		-40 $^{\circ}$ C~+85 $^{\circ}$ C
	Humidity		5%~85%RH
Unit weight			Approx.147g
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	0.533	11.3	3.2W	40%-100%Un (Ambient temperature25℃) 50%-60%Un (Ambient temperature85℃)	6.6
DC 9V	≤6.75	≥0.45	0.356	25.3			9.9
DC 12V	≤9	≥0.6	0.267	45			13.2
DC 24V	≤18	≥1.2	0.133	180			26.4
DC 48V	≤36	≥2.4	0.067	720			52.8

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

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

## ■ ORDERING INFORMATION

**FH66NE 200 -1A 1 T F -XXX -DC12V**

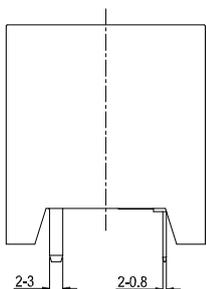
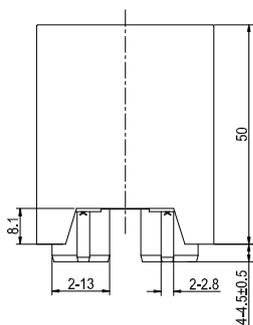
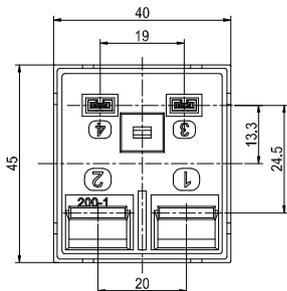
- ① Type
- ② Rated Current:200=200A
- ③ Contact arrangement:1A=1 open contacts
- ④ Terminal:1=2-3×13 2=2-2.5×14
- ⑤ Contact material:T=AgSnO<sub>2</sub>
- ⑥ Insulation standard:Nil=Blank F=Class F
- ⑦ Customer special code:numbers or letters denote customer's requirements
- ⑧ Coil specification:DC6/9/12/24/48V



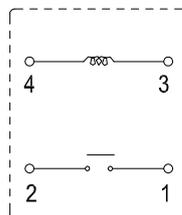
# ■ WIRING DIAGRAM AND PC BOARD LAYOUT(Unit:mm)

1A1

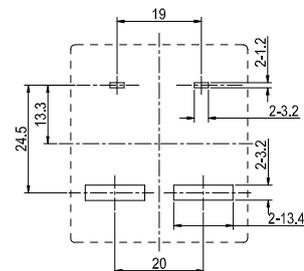
Outline Dimensions



Wiring Diagram  
(Bottom view)

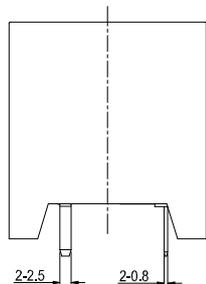
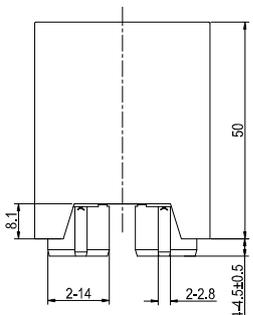
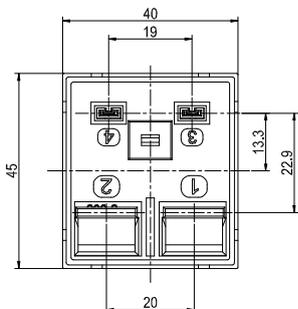


PCB Layout  
(Bottom view)

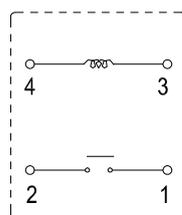


1A2

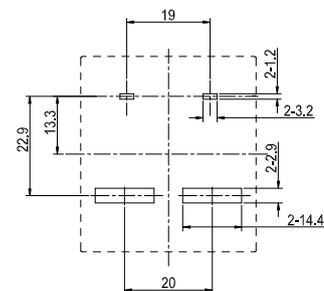
Outline Dimensions



Wiring Diagram  
(Bottom view)



PCB Layout  
(Bottom view)



Remark:(1)In case of no tolerance shown in outline dimension:outline dimension $\leq$ 1mm,tolerance should be $\pm$ 0.2mm;outline dimension  $>$ 1mm and  $<$ 5mm,tolerance should be  $\pm$ 0.3mm;outline dimension $\geq$ 5mm,tolerance should be  $\pm$ 0.5mm.

(2) The tolerance without indicating for PCB layout is always  $\pm$ 0.1mm.



## ■ SAFETY APPROVAL RATINGS

Approval	File No.	Approved ratings
UL/C-UL	E475405	Connecting 50A/40A carrying 200A breaking 50A/40A 830VAC /277VAC 100A Resistive 85°C 3×10 <sup>4</sup> ops 277VAC /250VAC Resistive 85°C 2×10 <sup>4</sup> ops
TUV	R 50601543	Connecting 50A/40A carrying 200A breaking 50A/40A 830VAC /277VAC Resistive 85°C 3×10 <sup>4</sup> ops
CQC	CQC2300240 5299	Connecting 50A/40A carrying 200A breaking 50A/40A 830VAC /277VAC Resistive 85°C 3×10 <sup>4</sup> ops

## ■ 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°C±5°C, soldering time is 3~5S;
- ③ The specification is for reference only. Specifications subject to change without notice.

