# 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) | | ≤2mΩ(6VDC 20A) |
| | Contact material | | $AgSnO_2$ |
| Rated value | Rated load(Resistance load) | | Connecting 50A,carrying 200A, breaking 50A 830VAC |
| | Max.switching voltage | | 830VAC |
| | Max.switching current | | 200A |
| | Max.switching capacity | | 166000VA |
| Electrical performance | Insulation resistance(initial) | | 1000MΩ(at500VDC) |
| | Dielectric strength (initial) | Disconnect between main contacts | 2500VAC 1min（50Hz/60Hz） |
| | | Between coil&contacts | 5000VAC 1min（50Hz/60Hz） |
| | Operate time | | ≤30ms |
| | Release time | | ≤10ms |
| Mechanical performance | Shock resistance | Functional | $98m/s^2$(10g) |
| | | Destructive | $980m/s^2$(100g) |
| | Vibration resistance | | 10Hz~55Hz 1.5mm DA |
| Endurance | Mechanical | | $1\times10^6$ops |
| | Electrical | ON/OFF=1S/9S | Connecting 50A carrying 200A breaking 50A 830VAC<br>Resistive 85℃ $3\times10^4$ ops |
| Surge voltage (Between coil&contacts) | | | 10KV(1.2/50μs) |
| Operate condition | Ambient temperature | | -40℃~+85℃ |
| | 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 buring,the coil can not be consistently applied to with voltage larger than maximum sustaining voltage.

## ■ ORDERING INFORMATION

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

① Type

② Rated Current:200=200A

③ Contact arrangement:1A=1 open contact

④ Terminal:1=2-3×13 2=2-2.5×14

⑤ Contact material:T=$AgSnO_2$

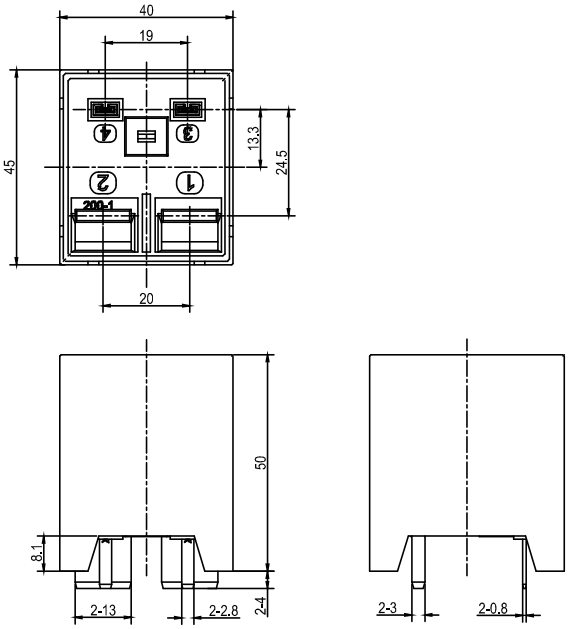
⑥ Customer special code:numbers or letters denote customer's requirements

⑦ Coil specification:DC6/9/12/24/48V

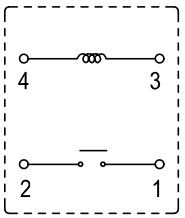
## ■ WIRING DIAGRAM AND PC BOARD LAYOUT(Unit:mm)

**1A1**

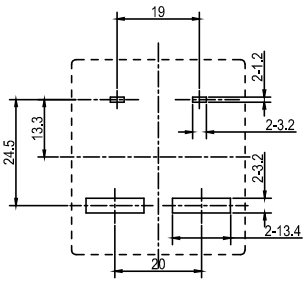
Outline Dimensions




Wiring Diagram
(Bottom view)

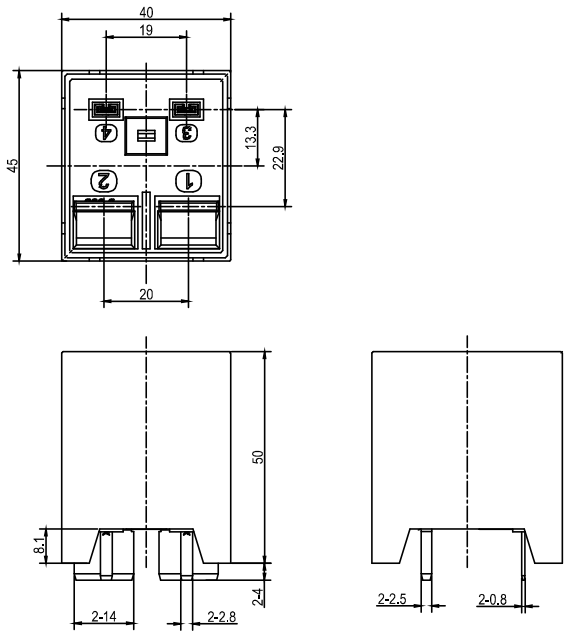



PCB Layout
(Bottom view)

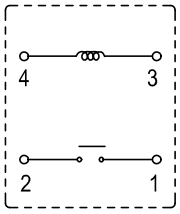



**1A2**

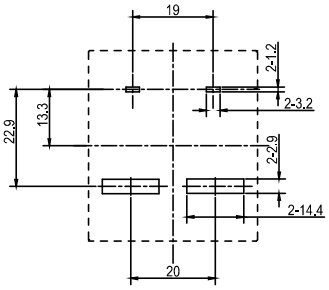
Outline Dimensions




Wiring Diagram
(Bottom view)




PCB Layout
(Bottom view)




Remark:(1)In case of no tolerance shown in outline dimension:outline dimension≤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. | Approved ratings |
|---|---|---|
| UL/C-UL | E475405 | Connecting 50A/40A carrying 200A breaking 50A/40A 830VAC /277VAC Resistive 85℃ $3\times10^4$ops<br>100A 277VAC /250VAC Resistive 85℃ $2\times10^4$ops |
| TUV | R 50601543 | Connecting 50A/40A carrying 200A breaking 50A/40A 830VAC /277VAC Resistive 85℃ $3\times10^4$ops |
| CQC | CQC23002405299 | Connecting 50A/40A carrying 200A breaking 50A/40A 830VAC /277VAC Resistive 85℃ $3\times10^4$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℃±5℃,soldering time is 3~5S;

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