

# HFE6

# HIGH POWER LATCHING RELAY



### Features

- Latching relay
- 200A switching capability
- Strong resistance ability to shock & vibration
- Heavy load up to 55.4kVA
- 4kV dielectric strength (between coil and contacts)
- Typical application: Power, Lamp
- Environmental friendly product (RoHS compliant)
- Outline Dimensions: (100.0 x 80.0 x 29.8) mm

### CONTACT DATA

Contact arrangement	2A, 2B
Contact resistance	Typ.:0.25mΩ max.(at 200A) <sup>(1)</sup>
Contact material	AgSnO <sub>2</sub>
Contact rating (Res. load)	200A 277VAC/28VDC
Max. switching voltage	440VAC
Max. switching current	200A
Max. switching power	55400VA / 5600W
Mechanical endurance	1 x 10 <sup>5</sup> OPS
Electrical endurance	1 x 10 <sup>4</sup> OPS

Notes: (1) Typical value: Sampling quantity for contact resistance shall not less than 20 pcs, take the average value from 5 continuous measurements for each sample.

### CHARACTERISTICS

Insulation resistance	1000MΩ (at 500VDC)	
Dielectric strength	Between coil & contacts	4000VAC 1min
	Between open contacts	2000VAC 1min
Creepage distance	8mm	
Operate time (at nomi. volt.)	30ms max.	
Release time (at nomi. volt.)	30ms max.	
Shock resistance	Functional	98m/s <sup>2</sup>
	Destructive	980m/s <sup>2</sup>
Vibration resistance	10Hz to 55Hz 1.0mm DA	
Humidity	5% to 85% RH	
Ambient temperature	-40°C to 85°C	
Termination	QC	
Unit weight	Approx. 500g	
Construction	Dust protected	

Notes: The data shown above are initial values.

### COIL

Coil power	Single coil latching: Approx. 12W; Double coils latching: Approx. 24W
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### COIL DATA

at 23°C

Nominal Voltage VDC	Set / Reset Voltage VDC max.	Pulse Duration ms min.	Coil Resistance x (1±10%) Ω	
12	9.6	150	Single coil latching	12
24	19.2	150		48
48	38.4	150		190
12	9.6	150	Double coils latching	6+6
24	19.2	150		24+24
48	38.4	150		95+95

Notes: When requiring other nominal voltage, special order allowed.



HONGFA RELAY

ISO9001, ISO/TS16949, ISO14001, OHSAS18001, IECQ QC 080000 CERTIFIED

2013 Rev. 1.00

## ORDERING INFORMATION

<b>HFE6</b>		<b>-A /</b>	<b>12</b>	<b>-2D</b>	<b>T</b>	<b>2</b>	<b>-R</b>	<b>(XXX)</b>
<b>Type</b>								
<b>Version</b>	<b>A:</b> Type A contact terminal <b>B:</b> Type B contact terminal							
<b>Coil voltage</b>	12, 24, 48VDC							
<b>Contact form</b> <sup>1)</sup>	<b>2D:</b> 2 Form B <b>2H:</b> 2 Form A							
<b>Contact material</b>	T: AgSnO <sub>2</sub>							
<b>Sort</b>	<b>1:</b> Single coil latching <b>2:</b> Double coils latching							
<b>Polarity</b>	<b>R:</b> Negative polarity <b>Nil:</b> Positive polarity							
<b>Customer special code</b>								

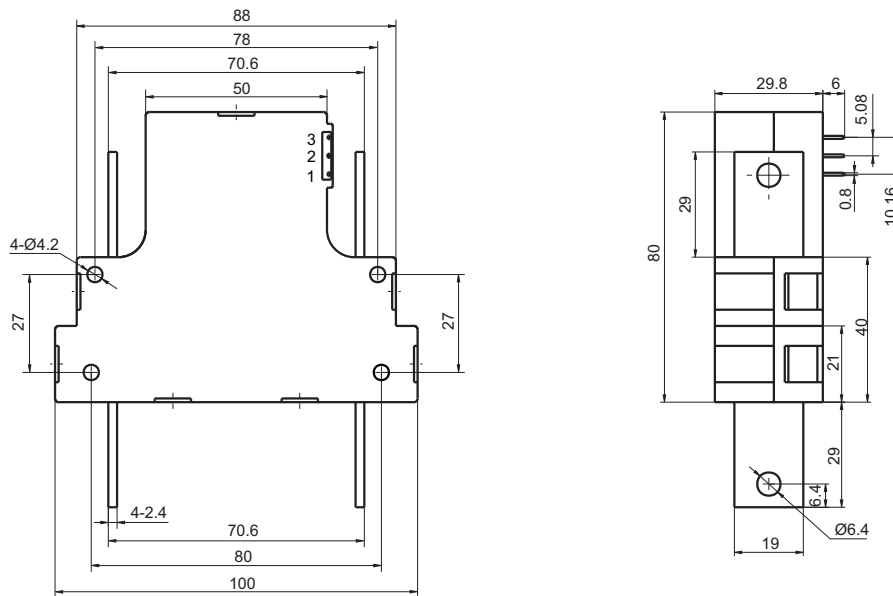
Notes: 1) 2H, 2SH means that relay is on the "reset" status when delivery; 2D, 2SD means that relay is on the "set" status when delivery. If no special required by customer, we will keep the relay on the "set" status when delivery.

## OUTLINE DIMENSIONS AND WIRING DIAGRAM

Unit: mm

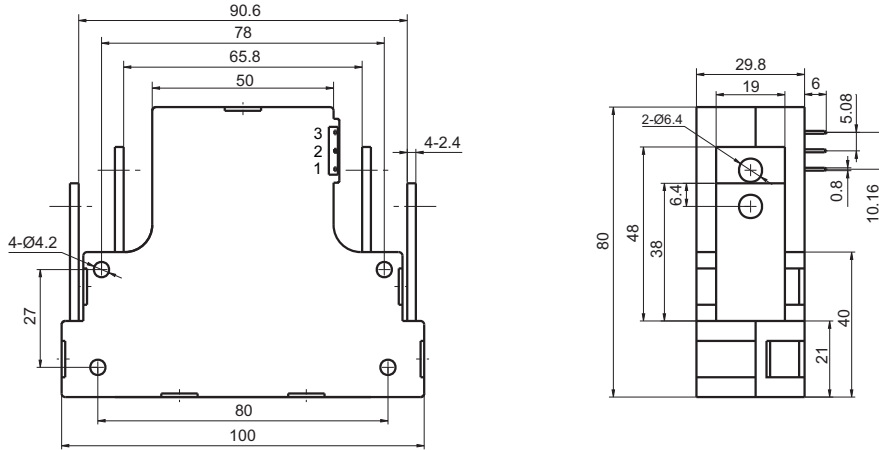
### Outline Dimensions

Type A contact terminal



Outline Dimensions

Type B contact terminal

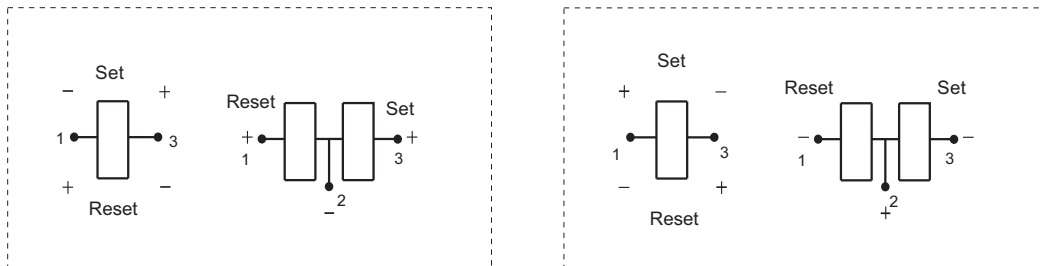


Remark: In case of no tolerance shown in outline dimension: outline dimension  $\leq 1$ mm, tolerance should be  $\pm 0.2$ mm; outline dimension  $> 1$ mm and  $\leq 5$ mm, tolerance should be  $\pm 0.3$ mm; outline dimension  $> 5$ mm, tolerance should be  $\pm 0.4$ mm.

Coil Wiring Diagram

Positive polarity

Negative polarity



Notice

1. Relay is on the "reset" or "set" status when being released from stock, with the consideration of shock risen from transit and relay mounting, relay would be changed to "set" or "reset" status, therefore, when application (connecting the power supply), please reset the relay to "set" or "reset" status on request.
2. In order to maintain "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 voltage to "set" coil and "reset" coil simultaneously. And also long energized time (more than 1 min) should be avoided.
3. The terminals of relay without twisted copper wire can not be tin-soldered, can not be moved willfully.
4. Relays used for metering measuring applications are usually made with dust proof structure, while most relays could be made specially per customer's specific requirements. No longer than 6 months' storage time is recommended for this kind of relay, and please pay attention to the storage environment. To ensure contact reliability, we will keep contact status be closed when delivery if no special required by customer.

Disclaimer

This datasheet is for the customers' reference. All the specifications are subject to change without notice.

We could not evaluate all the performance and all the parameters for every possible application. Thus the user should be in a right position to choose the suitable product for their own application. If there is any query, please contact Hongfa for the technical service. However, it is the user's responsibility to determine which product should be used only.