

# HFE25

# HIGH POWER LATCHING RELAY



### Features

- Latching relay
- 200A switching capability
- According to ANSI C 12.1  
(Carrying: 12kA current / 66.7ms;  
7kA peak current/100ms )
- Switching power up to 55.4kVA
- 4kV dielectric strength (between coil and contacts)
- Environmental friendly product (RoHS compliant)
- Outline Dimensions: (73.3 x 74.8 x 29.5) 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	5 x 10 <sup>4</sup> OPS
Electrical endurance	6 x 10 <sup>3</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	9.6mm	
Operate time (at nomi. volt.)	20ms max.	
Release time (at nomi. volt.)	20ms max.	
Shock resistance	Functional	98m/s <sup>2</sup>
	Destructive	980m/s <sup>2</sup>
Vibration resistance	10Hz to 55Hz 1.5mm DA	
Humidity	5% to 85% RH	
Ambient temperature	-40°C to 85°C	
Termination	QC	
Unit weight	Approx. 400g	
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	100	Single coil latching	12
24	19.2	100		48
48	38.4	100		190
12	9.6	100	Double coils latching	6+6
24	19.2	100		24+24
48	38.4	100		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

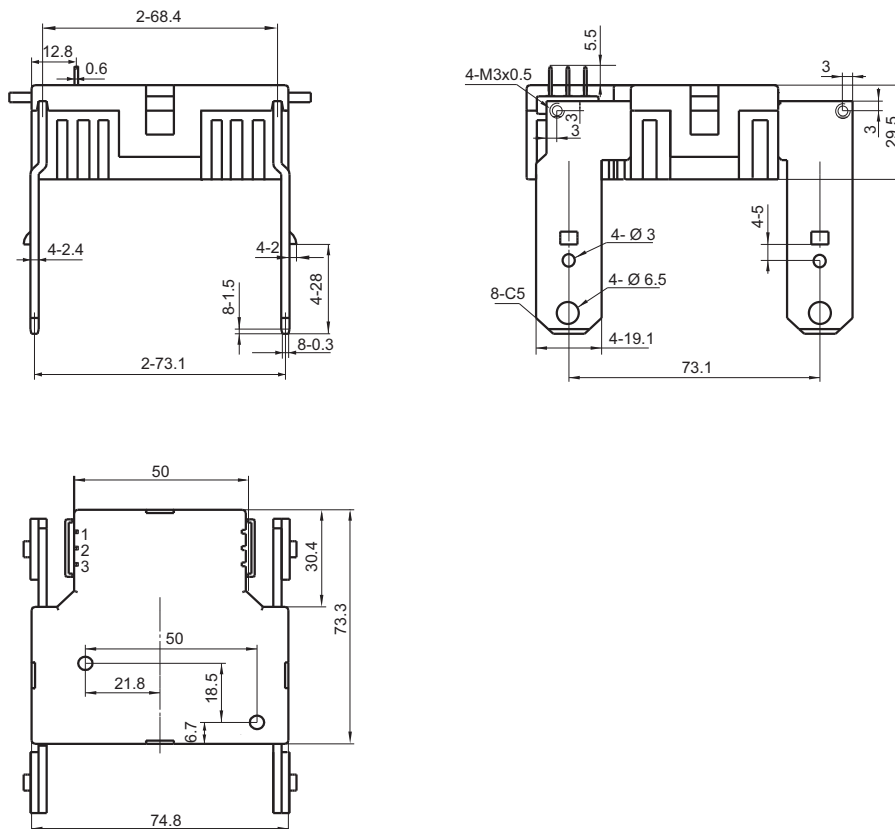
Type	HFE25		-A /	12	-2D	T	2	-R	(XXX)
Version	A: Type A contact terminal								
Coil voltage	12, 24, 48VDC								
Contact form <sup>1)</sup>	2D: 2 Form B			2H: 2 Form A					
Contact material	T: AgSnO <sub>2</sub>								
Coil Sort	1: Single coil latching				2: Double coils latching				
Polarity	R: Negative polarity				Nil: Positive polarity				
Customer special code									

Notes: 1) 2H means that relay is on the "reset" status when delivery; 2D 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, WIRING DIAGRAM AND PC BOARD LAYOUT

Unit: mm

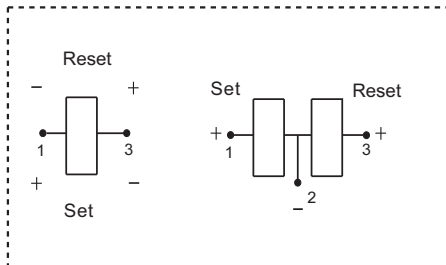
### Outline Dimensions



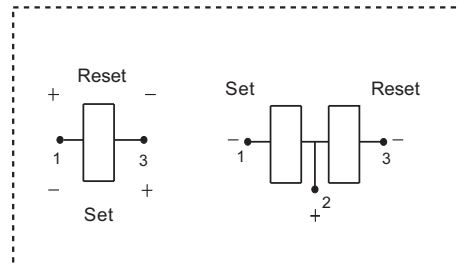
**Remark:** In case of no tolerance shown in outline dimension: outline dimension  $\leq 1$ mm, tolerance should be  $\pm 0.2$ mm; outline dimension  $> 1$ mm and  $\leq 5$ mm, tolerance should be  $\pm 0.3$ mm; outline dimension  $> 5$ mm, tolerance should be  $\pm 0.4$ mm.

Coil Wring 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.