


HFE17

HIGH POWER LATCHING RELAY



The image shows a black rectangular HFE17 high power latching relay. It has two large silver-colored contact terminals on the top and two smaller ones on the side. The front face is labeled with 'HFE17-A', '24-2HT1', 'COIL-24VDC', and '200A 277VAC/28VDC'.

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: (97.6 x 73.2 x 29.5) mm

CONTACT DATA	
Contact arrangement	2A, 2B
Contact resistance	0.25mΩ max.(at 200A)
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	6000OPS

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% ~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	1 coil latching: Approx. 12W
	2 coils latching: Approx. 24W

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	200	Single coil latching	12
24	19.2	200		48
48	38.4	200		190
12	9.6	200	Double coils latching	6+6
24	19.2	200		24+24
48	38.4	200		95+95

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

ORDERING INFORMATION

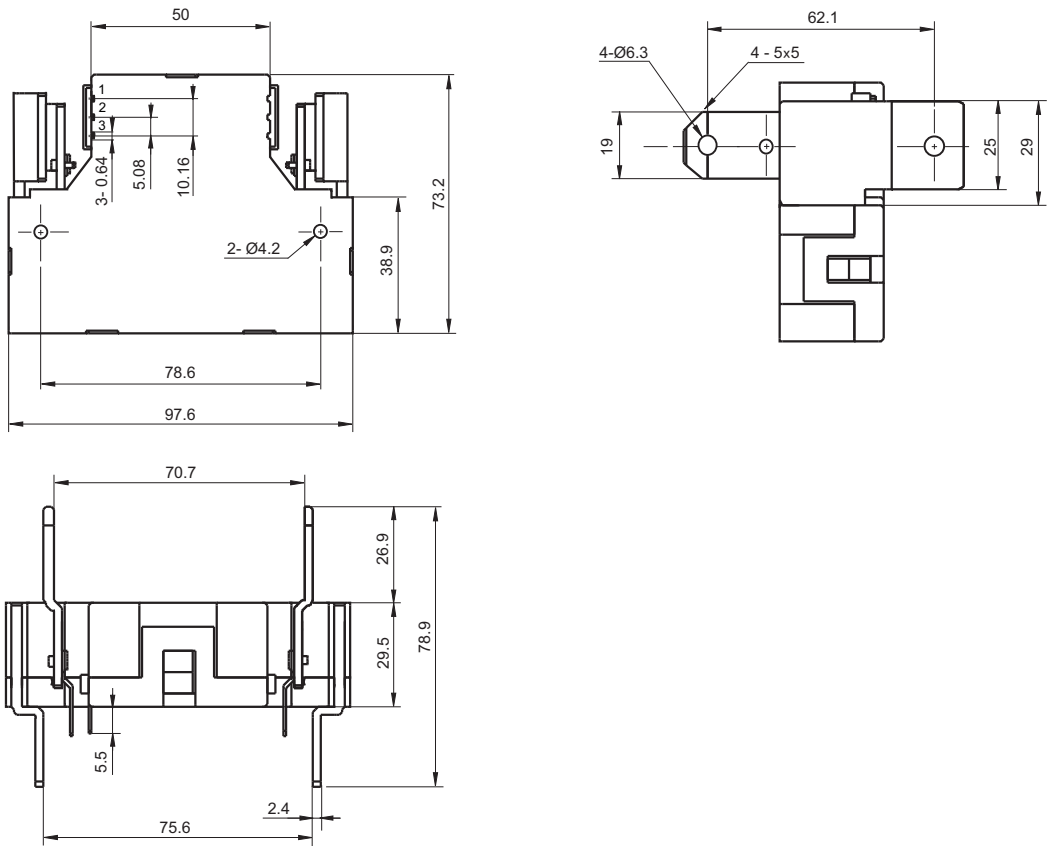
	HFE 17	-A /	12	-2D	T	2	-R	(XXX)
Type								
Version	A: Type A contact terminal							
Coil voltage	12, 24, 48VDC							
Contact form <sup>1)</sup>	2D: 2 Form B		2H: 2 Form A					
Contact material	T: AgSnO <sub>2</sub>							
Coil Sort	1: 1 coil latching			2: 2 coils latching				
Polarity	R: Negative 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 speical 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



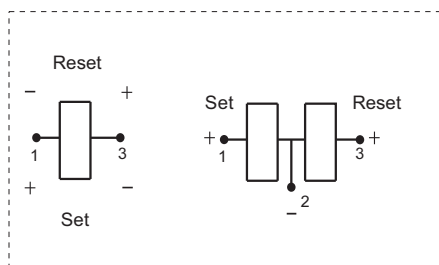
Remark: In case of no tolerance shown in outline dimension: outline dimension ≤1mm, tolerance should be ±0.2mm; outline dimension >1mm and ≤5mm, tolerance should be ±0.3mm; outline dimension >5mm, tolerance should be ±0.4mm.

## OUTLINE DIMENSIONS, WIRING DIAGRAM AND PC BOARD LAYOUT

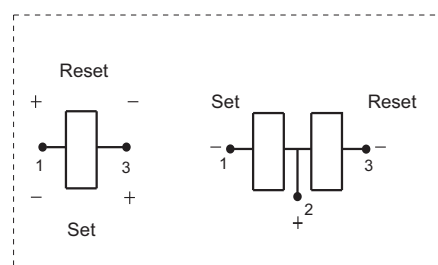
Unit: mm

### 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.

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