

# HFE17

# HIGH POWER LATCHING RELAY



## Features

- Latching relay
- 200A switching capability
- Accord with ANSI C 12.1  
(Carrying:10kA; Switching: 7kA peak, 12kA RMS short circuit current)
- 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
Contact resistance	2mΩ (at 1A 24VDC)
Contact material	AgSnO <sub>2</sub> , AgSnO <sub>2</sub> In <sub>2</sub> O <sub>3</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

## 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	98% RH, 40°C	
Ambient temperature	-40°C to 85°C	
Termination	PCB & QC	
Unit weight	500g	
Construction	Dust protected	

Notes: The data shown above are initial values.

## COIL

Coil power	Single Coil: 12W; Double Coil: 24W
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## COIL DATA

Nominal Voltage VDC	Pick-up Voltage VDC	Pulse Duration ms	Coil Resistance Ω	
			Single Coil	Double Coil
12	9.6	200	12 x (1±10%)	(6+6) x (1±10%)
24	19.2	200	48 x (1±10%)	(24+24) x (1±10%)
48	38.4	200	190 x (1±10%)	(95+95) x (1±10%)

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

## NOTICE

1. Relay is on the "set" status when being released from stock, with the consideration of shock risen from transit and relay mounting, relay would be changed to "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, more over two terminals can not be fixed at the same time.



HONGFA RELAY

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

2009 Rev. 1.00

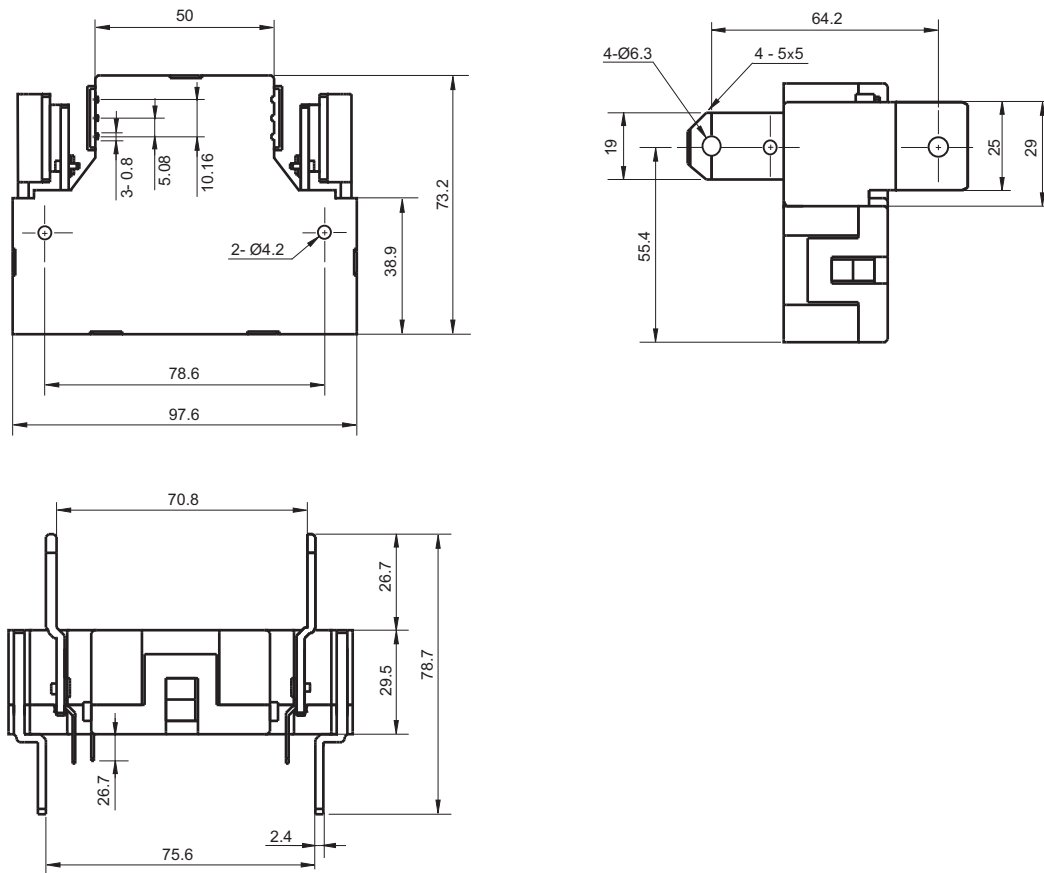
## ORDERING INFORMATION

Type	HFE 17 -A / 12 -2H T 2 R (XXX)					
Version	A: Type A contact terminal					
Coil voltage	12, 24, 48VDC					
Contact form	2A: 2 Form A					
Contact material	T: AgSnO <sub>2</sub>			5: AgSnO <sub>2</sub> In <sub>2</sub> O <sub>3</sub>		
Coil Sort	1: Single coil latching			2: 2 coils latching		
Polarity	R: Negative polarity			Nil: Positive polarity		
Customer special code						

## OUTLINE DIMENSIONS, WIRING DIAGRAM AND PC BOARD LAYOUT

Unit: mm

### Outline Dimensions



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

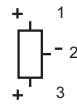
Coil Wring Diagram

1 coil latching



1(+) 3(-) reset  
3(+) 1(-) set

2 coil latching



1(+) 2(-) reset  
3(+) 2(-) set

Remark: The coil polarity of Reverse polarity and Standard polarity is opposite.

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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