# HFE27

## **MINIATURE HIGH POWER LATCHING RELAY**



# c **Al** us

File No.:E134517

### Features

- 16A, 25A switching capability
- Latching relay
- Manual switch function available
- Dielectric strength: more than 4kV (between coil and contacts)
- Environmental friendly product (RoHS compliant)
- Outline Dimensions: (66.7 x 51.0 x 13.6)mm

CONTACT DATA			
Contact arrangement	1A,1B,1C		
Contact resistence	20mΩ max.(at 1A 24VDC)		
Contact material	AgSnO <sub>2</sub>		
Contact rating (Res. load)	16A 250VAC		
Max. switching voltage	250VAC		
Max. switching current	25A		
Max. switching power	4000VA		
Max. continuous current	25A		
Mechanical endurance	1 x 10 <sup>6</sup> ops		
Electrical endurance	$9.5 \times 10^4$ ops (at 16A) $3 \times 10^4$ ops (at 25A)		

CHARACTERISTICS			
Insulation resistance		1000MΩ (at 500VDC)	
Dielectric strength	Between coil & contacts	4000VAC 1min	
	Between open contacts	1500VAC 1min	
Creepage distance (input to output)		8mm min.	
Operate time (at nomi. volt.)		20ms max.	
Release time (at nomi. volt.)		20ms max.	
Shock resistance	Functional	98m/s²	
	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. 38.2g	
Construction		Dust protected	

**Notes:** The data shown above are initial values.

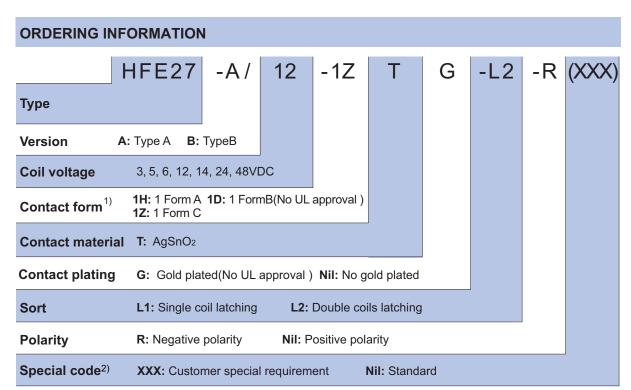
COIL	
Coil power	Single coil latching: Approx. 0.7W
	Double coils latching: Approx. 1.4W

COIL	COIL DATA at 23°C				
Nominal Voltage VDC	Set / Reset Voltage VDC max.	Pulse Duration ms min.		esistance :10%) Ω	
3	2.4	50		12.8	
5	4.0	50		35.7	
6	4.8	50	Cinalo soil	51.4	
12	9.6	50	Single coil latching	205.7	
14	11.2	50		280	
24	19.2	50		822.8	
48	38.4	50		3291.4	
3	2.4	50		6.4+6.4	
5	4.0	50	Double coils	17.85+17.85	
6	4.8	50		25.7+25.7	
12	9.6	50	latching	102.8+102.8	
14	11.2	50		140+140	
24	19.2	50		411.4+411.4	
48	38.4	50		1645.7+1645.7	

SAFETY APPROVAL RATINGS					
UL/CUL (AgSnO2)	1 Form A	Resistive: 16A 250VAC			
		Resistive: 20A 250VAC			
		Standard ballast: 8A 250VAC			
		Motor:1.5HP 250VAC			
	1 Form C	Resistive: 16A 250VAC			
		Resistive: 20A 250VAC			
		Standard ballast: 8A 250VAC			
		motor:1.5HP 250VAC			

**Notes:** Only some typical ratings are listed above. If more details are required, please contact us.





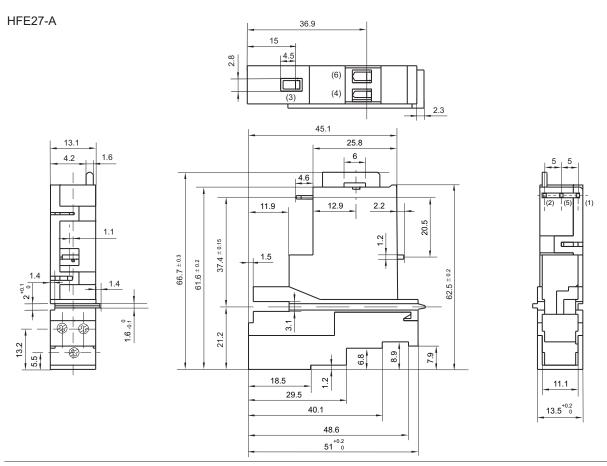
Notes: 1) 1H means that relay is on the "reset" status when delivery; 1D means that relay is on the "set" status when delivery.

2) The customer special requirement express as special code after evaluating by Hongfa.

### **OUTLINE DIMENSIONS AND WIRING DIAGRAM**

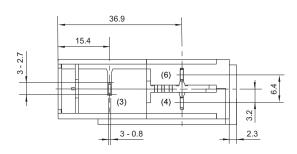
Unit: mm

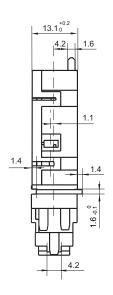
#### Outline Dimensions

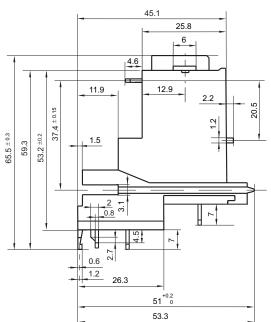


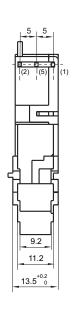
#### **Outline Dimensions**

HFE27-B







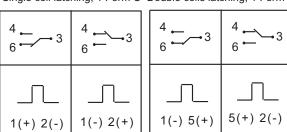


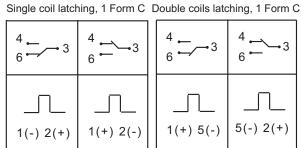
Wiring Diagram

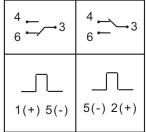
Positive polarity

Negative polarity

Single coil latching, 1 Form C Double coils latching, 1 Form C







#### Disclaimer

The specification is for reference only. See to "Terminology and Guidelines" for more information. Specifications 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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