

HFE27

MINIATURE HIGH POWER LATCHING RELAY



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 resistance	20mΩ max.(at 1A 24VDC)
Contact material	AgSnO ₂
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 ⁶ OPS
Electrical endurance	9.5 x 10 ⁴ OPS (16A 250VAC, Resistive load, at 85°C, 3s on 3s off) 3 x 10 ⁴ OPS (25A 250VAC, Resistive load, at 85°C, 3s on 3s off)

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.	
Set time (at nomi. volt.)	20ms max.	
Reset time (at nomi. volt.)	20ms max.	
Shock resistance	Functional	98m/s ²
	Destructive	980m/s ²
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 DATA

at 23°C

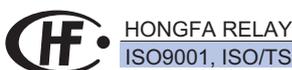
Nominal Voltage VDC	Set / Reset Voltage VDC max.	Pulse Duration ms min.	Coil Resistance x (±10%) Ω	
3	2.4	50	Single coil latching	12.8
5	4.0	50		35.7
6	4.8	50		51.4
12	9.6	50		205.7
14	11.2	50		280
24	19.2	50		822.8
48	38.4	50	3291.4	
3	2.4	50	Double coils latching	6.4+6.4
5	4.0	50		17.85+17.85
6	4.8	50		25.7+25.7
12	9.6	50		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 (AgSnO ₂)	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: 1) All values unspecified are at room temperature.

2) Only some typical ratings are listed above. If more details are required, please contact us.



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

2016 Rev. 1.00

ORDERING INFORMATION

Type	HFE27 -A / 12 -1Z T G -L2 -R (XXX)					
Version	A: Type A B: TypeB					
Coil voltage	3, 5, 6, 12, 14, 24, 48VDC					
Contact form ¹⁾	1H: 1 Form A 1D: 1 FormB(No UL approval) 1Z: 1 Form C					
Contact material	T: AgSnO ₂					
Contact plating	G: Gold plated(No UL approval) Nil: No gold plated					
Sort	L1: Single coil latching L2: Double coils latching					
Polarity	R: Negative polarity Nil: Positive polarity					
Special code ²⁾	XXX: Customer special requirement Nil: Standard					

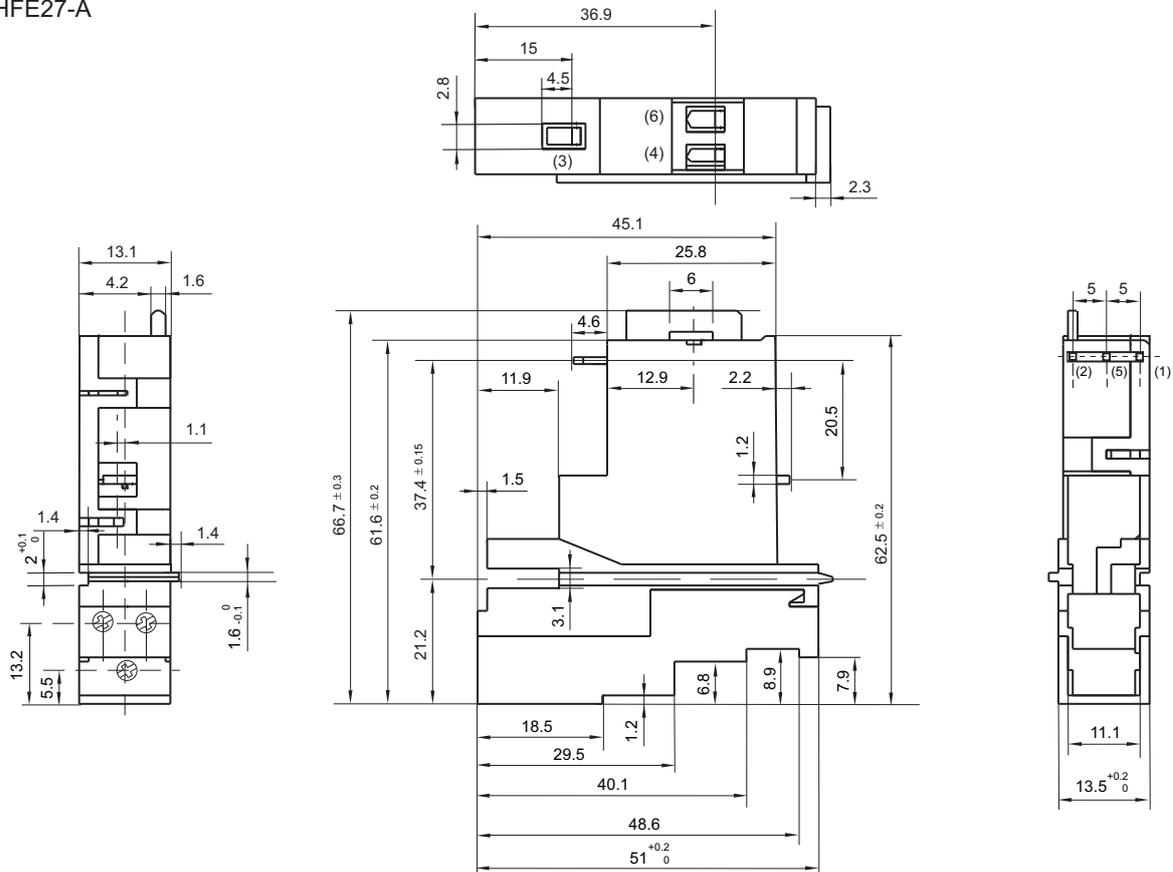
Notes: 1) 1H means that relay is on the "reset" status when delivery; 1D means that relay is on the "set" status when delivery.
2) The customer special requirement express as special code after evaluating by Hongfa.

OUTLINE DIMENSIONS AND WIRING DIAGRAM

Unit: mm

Outline Dimensions

HFE27-A

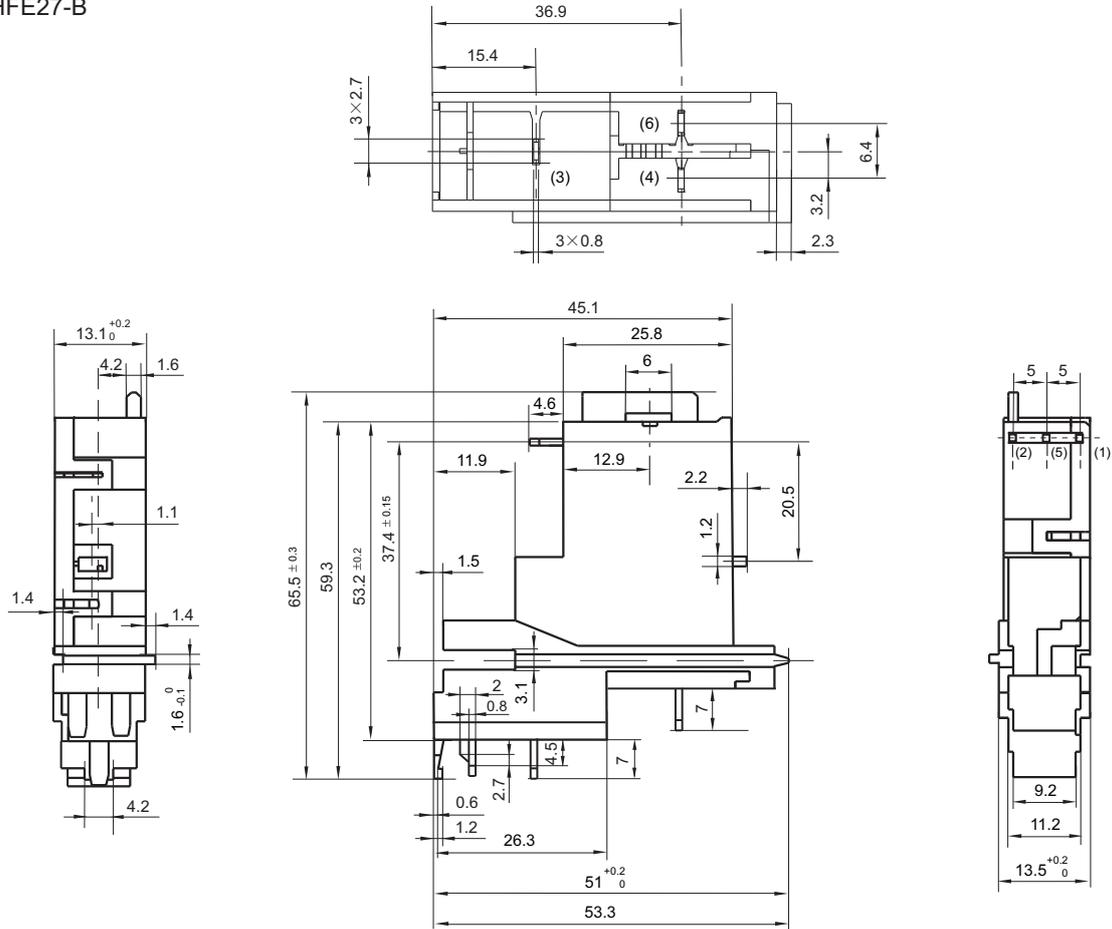


OUTLINE DIMENSIONS AND WIRING DIAGRAM

Unit: mm

Outline Dimensions

HFE27-B

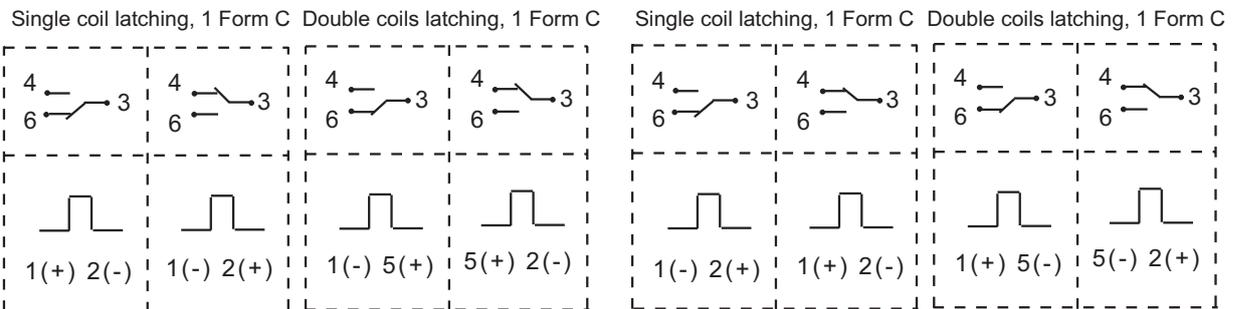


Remark: In case of no tolerance shown in outline dimension: outline dimension $\leq 1\text{mm}$, tolerance should be $\pm 0.2\text{mm}$; outline dimension $> 1\text{mm}$ and $\leq 5\text{mm}$, tolerance should be $\pm 0.3\text{mm}$; outline dimension $> 5\text{mm}$, tolerance should be $\pm 0.4\text{mm}$.

Wiring Diagram

Positive polarity

Negative polarity



Disclaimer

The specification is for reference only. 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.

© Xiamen Hongfa Electroacoustic Co., Ltd. All rights of Hongfa are reserved.