

HFE28

HIGH POWER LATCHING RELAY



Features

- Latching relay
- 100A switching capability
- According to IEC 62055-31:UC4
(Contact:4.5kA;Bearable load:10kA load-current)
- AC-voltage driving is feasible
- 4kV dielectric strength (between coil and contacts)
- Environmental friendly product (RoHS compliant)
- Outline Dimensions: (66.0 x 75.0 x 23.5) mm

CONTACT DATA

Contact arrangement	2A, 2B, 2U, 2V
Contact resistance	2A, 2B: 1mΩ (at 1A 24VDC) 2U, 2V :0.7mΩ (at 1A 24VDC)
Contact material	AgSnO ₂
Contact rating (Res. load)	100A 277VAC/28VDC
Max. switching voltage	440VAC
Max. switching current	120A
Max. switching power	27700VA/2800W
Mechanical endurance	1 x 10 ⁵ OPS
Electrical endurance	5000OPS

CHARACTERISTICS

Insulation resistance	1000MΩ (at 500VDC)	
Dielectric strength	Between coil & contacts	4000VAC 1min
	Between open contacts	2500VAC 1min
Creepage distance	9.6mm	
Operate time (at nomi. volt.)	20ms max.	
Release 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	98% RH, 40°C	
Ambient temperature	-40°C to 85°C	
Termination	QC	
Unit weight	Approx. 250g	
Construction	Dust protected	

Notes: The data shown above are initial values.

COIL

Coil power	1 coil latching: 5W; 2 coils latching: 10W
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COIL DATA

at 23°C

Nominal Voltage VDC	Pick-up Voltage VDC	Pulse Duration ms	Coil Resistance x (1±10%) Ω	
6	4.8	100	1 coil latching	7.2
12	9.6	100		28.8
24	19.2	100		114
48	36.4	100		460
6	4.8	100	2 coils latching	3.6+3.6
12	9.6	100		14.4+14.4
24	19.2	100		57+57
48	36.4	100		230+230

Nominal Voltage VAC	Pick-up Voltage VAC	Pulse Duration ms	Coil Resistance x (1±10%) Ω	
230	161	50: full-wave rectification	1 coil latching	2420
230	161	100: half-wave rectification	2 coils latching	1210+1210

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



HONGFA RELAY

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

2010 Rev. 1.00

ORDERING INFORMATION

HFE28 -A 140 /12 -2H T 2 R (XXX)	
Type	
Version	A: Type A contact terminal
Typical sampling resistance	140μΩ 280μΩ
Coil voltage	6, 12, 24, 48VDC; 230VAC
Contact form ¹⁾	2H: 2 Form A (Single-contact) 2D: 2 Form B (Single-contact) 2SH: 2 Form A (Double-contact) 2SD: 2 Form B (Double-contact)
Contact material	T: AgSnO ₂
Sort	1: 1 coil latching 2: 2 coils latching
Polarity	R: Negative polarity Nil: Positive polarity
Customer special code	

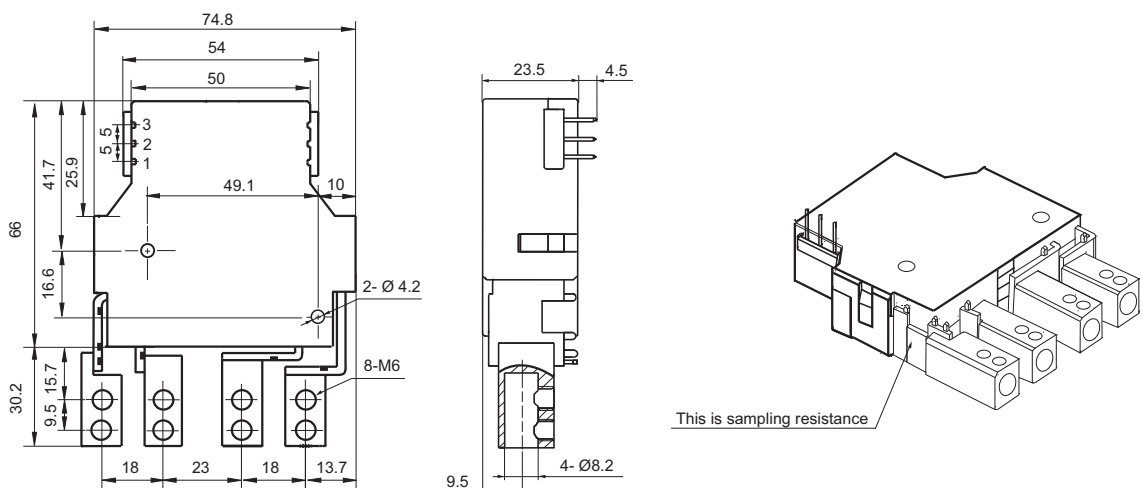
Notes: 1) 2H, 2SH means that relay is on the "reset" status when delivery; 2D, 2SD means that relay is on the "set" status when delivery.

OUTLINE DIMENSIONS AND WIRING DIAGRAM

Unit: mm

Outline Dimensions

Type A contact terminal

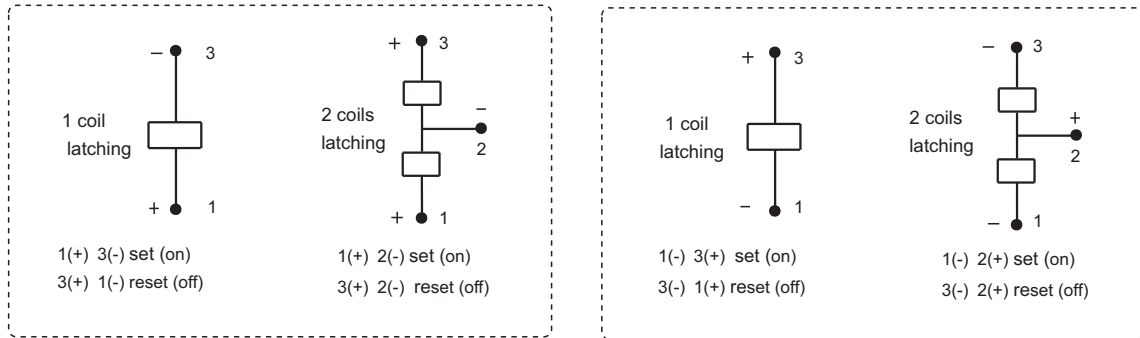


Remark: In case of no tolerance shown in outline dimension: outline dimension $\leq 1\text{mm}$, tolerance should be $\pm 0.2\text{mm}$; outline dimension $> 1\text{mm}$ and $\leq 5\text{mm}$, tolerance should be $\pm 0.3\text{mm}$; outline dimension $> 5\text{mm}$, tolerance should be $\pm 0.4\text{mm}$.

Coil Wiring 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. In order to avoid changing operate voltage, products should not be kept in strong magnetic field during transportation, storage and application.

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.