

HFE23

MINIATURE 3-PHASES RELAY



Features

- 3-phases latching relay
- 120A switching capability
- Strong resistance ability to shock & vibration
- Heavy load up to 27600VA
- 4kV dielectric strength (between coil and contacts)
- Environmental friendly product (RoHS compliant)
- Outline Dimensions: (115.0 x 54.0 x 24.0) mm

CONTACT DATA

Contact arrangement	3A, 3B, 3U, 3V
Contact resistance	3A, 3B: 1mΩ (at 1A 24VDC) 3U, 3V: 0.7mΩ (at 1A 24VDC)
Contact material	AgSnO ₂
Contact rating (Res. load)	120A 230VAC
Max. switching voltage	440VAC
Max. switching current	120A
Max. switching power	27600VA
Mechanical endurance	1 x 10 ⁵ OPS
Electrical endurance	5 x 10 ³ OPS

CHARACTERISTICS

Insulation resistance	1000MΩ (at 500VDC)	
Dielectric strength	Between coil & contacts	4000VAC 1 min
	Between open contacts	2500VAC 1 min
Creepage distance	8mm	
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 1.0mm DA	
Humidity	98% RH, 40°C	
Ambient temperature	-40°C to 85°C	
Termination	QC	
Unit weight	Approx.300g	
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	
9	7.2	100		7
12	9.6	100		16
24	19.2	100		29
48	38.4	100		115
6	4.8	100	2 coils latching	
9	7.2	100		460
12	9.6	100		3.5+3.5
24	19.2	100		8+8
48	38.4	100		14.5+14.5
				57.5+57.5
				230+230

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

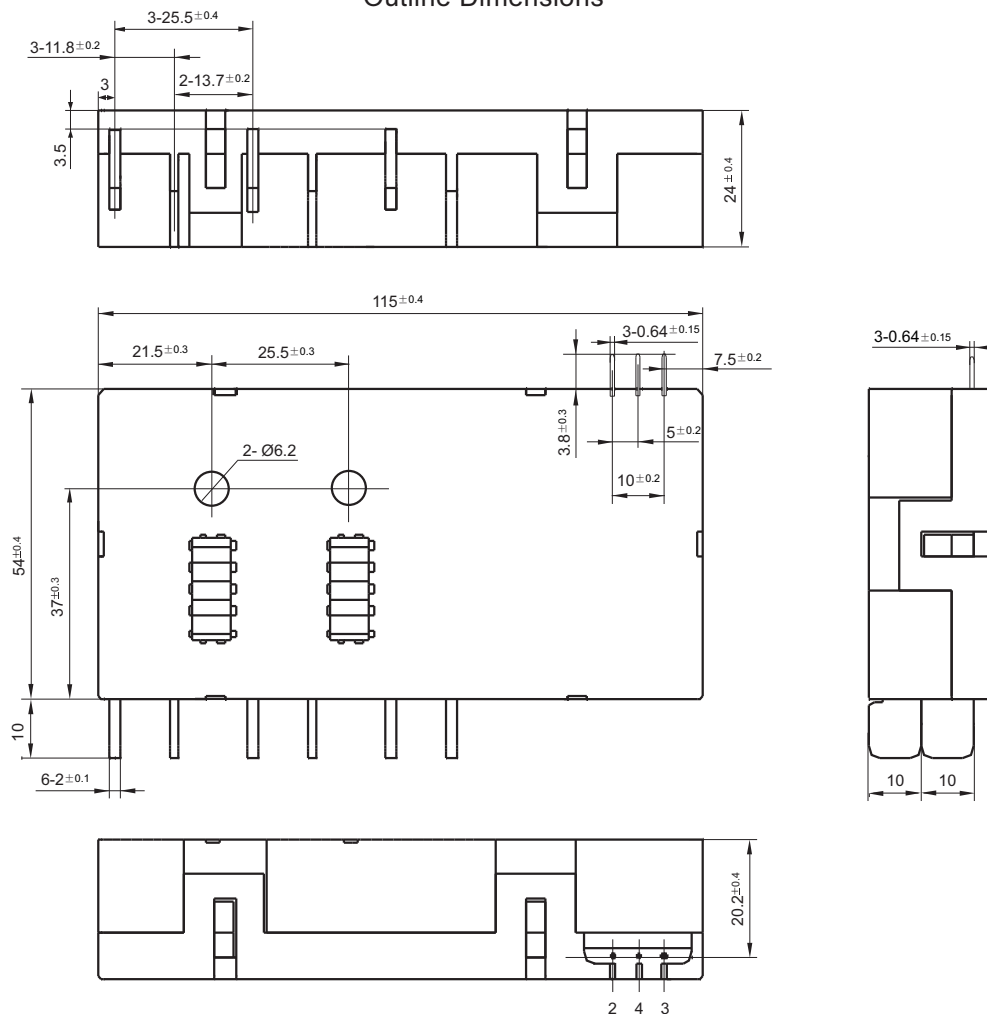
Type	HFE23		-A /	12	-3H	T	2	-R	(XXX)
Version	A: Type A contact terminal								
Coil voltage	6, 9, 12, 24, 48VDC								
Contact form ¹⁾	3H: 3 Form A (Single-contact) 3D: 3 Form B (Single-contact) 3SH: 3 Form A (Double-contact) 3SD: 3 Form B (Double-contact)								
Contact material	T: AgSnO ₂								
Sort	1: 1 coil latching			2: 2 coils latching					
Polarity	R: Negative polarity				Nil: Positive polarity				
Customer special code									

Notes: 1) 3H, 3SH means that relay is on the "reset" status when delivery; 3D, 3SD means that relay is on the "set" status when delivery.

OUTLINE DIMENSIONS, WIRING DIAGRAM

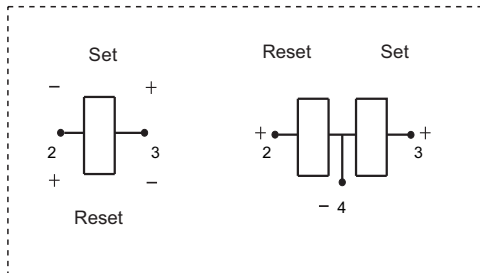
Unit: mm

Outline Dimensions

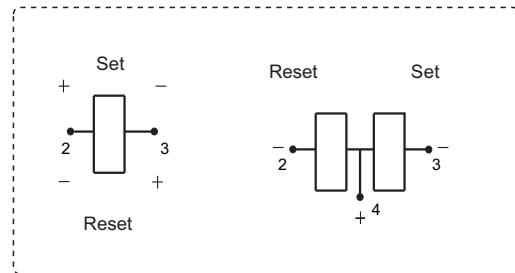


Coil Wiring Diagram

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.

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