

HFE22

MINIATURE HIGH POWER LATCHING RELAY



File No.: E133481



Features

- 100A switching capability
- Strong resistance ability to shock & vibration
- Heavy load up to 27700VA
- 4kV dielectric strength
(between coil and contacts)
- Micro switch on mounting board available
- Environmental friendly product (RoHS compliant)
- Outline Dimensions: (60.0 x 40.0 x 21.0) mm

CONTACT DATA

Contact arrangement	1A, 1B
Contact resistance	30mΩ (at 1A 24VDC)
Contact material	AgSnO ₂ , AgCdO
Contact rating (Res. load)	100A 277VAC/28VDC
Max. switching voltage	440VAC
Max. switching current	100A
Max. switching power	27700VA / 2800W
Mechanical endurance	1 x 10 ⁶ OPS
Electrical endurance	2 x 10 ⁴ OPS Meter: 1 x 10 ⁴ OPS

CHARACTERISTICS

Insulation resistance		1000MΩ (at 500VDC)
Dielectric strength	Between coil & contacts	4000VAC 1 min
	Between open contacts	2000VAC 1 min
Creepage distance		8mm
Operate time (at nomi. volt.)		20ms max.
Release time (at nomi. volt.)		20ms max.
Shock resistance	Functional	294m/s ²
	Destructive	980m/s ²
Vibration resistance		10Hz to 55Hz 1.5mm DA
Humidity		98% RH, 40°C
Ambient temperature		-40°C to 70°C
Termination		QC
Unit weight		Approx. 100g
Construction		Dust protected

Notes: The data shown above are initial values.

COIL

Coil power	1 coil latching: 2.4W; 2 coils latching: 4.8W
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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	16
12	9.6	100		60
24	19.2	100		250
48	38.4	100		1000
6	4.8	100	2 coils latching	8+8
12	9.6	100		30+30
24	19.2	100		125+125
48	38.4	100		500+500

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

	HFE22	-A / 12	-H	1	T	2	1	-R	(XXX)
Type									
Version	A: Type A contact terminal B: Type B contact terminal C: Type C contact terminal								
Coil voltage	6, 12, 24, 48VDC								
Contact form ¹⁾	H: 1 Form A D: 1 Form B								
Coil terminal type	1: Type 1 2: Type 2								
Contact material	T: AgSnO ₂ Nil: AgCdO								
Sort	1: 1 coil latching 2: 2 coils latching								
Mounting board form	1: Without micro switch 2: With micro switch								
Polarity	R: Negative polarity Nil: Positive polarity								
Customer special code									

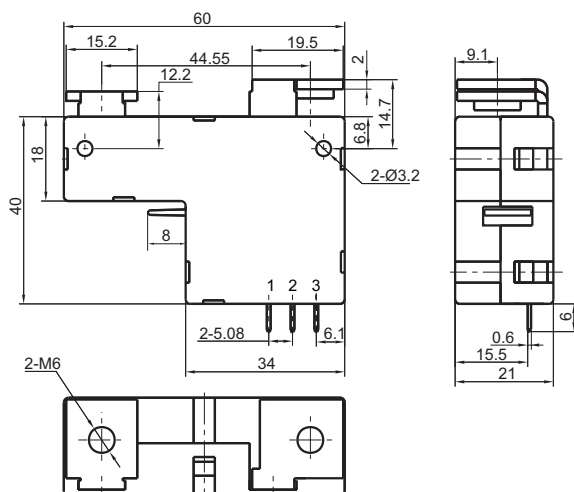
Notes: 1) H means that relay is on the "reset" status when delivery; D means that relay is on the "set" status when delivery.

OUTLINE DIMENSIONS, WIRING DIAGRAM AND PC BOARD LAYOUT

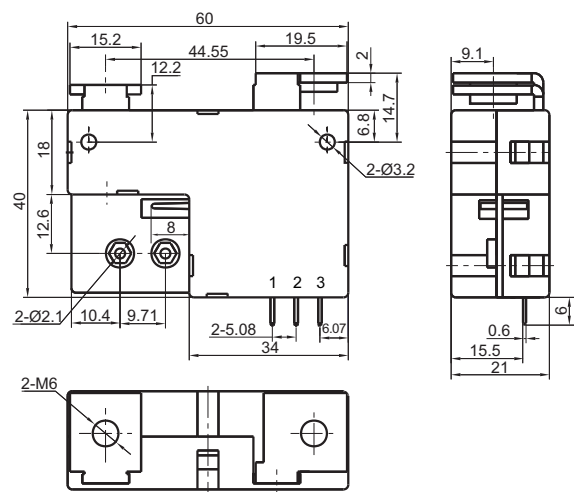
Unit: mm

Outline Dimensions

Type A contact terminal, Without micro switch

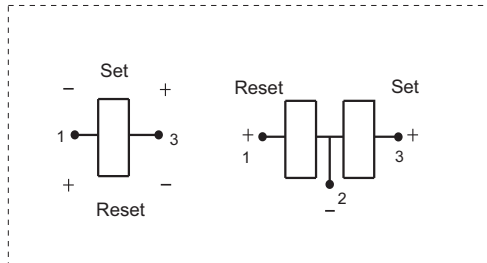


Type A contact terminal, With micro switch

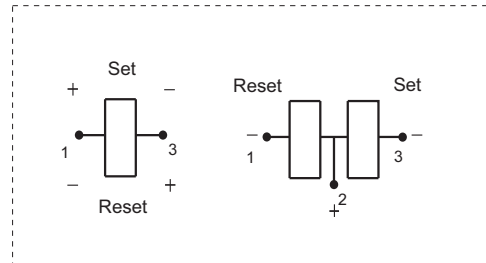


Coil Wiring Diagram

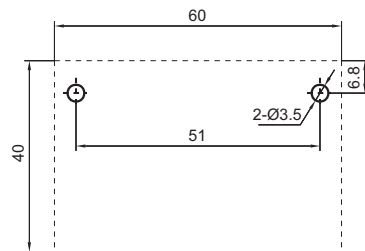
Positive polarity



Negative polarity



PCB Layout



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.