

HFE25

HIGH POWER LATCHING RELAY



Features

- Latching relay
- 200A switching capability
- Accord with ANSI C 12.1
(Carrying:10kA; Switching: 12kA peak, 12kA RMS short circuit current)
- Switching power up to 55.4kVA
- 4kV dielectric strength (between coil and contacts)
- Environmental friendly product (RoHS compliant)
- Outline Dimensions: (73.3 x 74.8 x 29.5) mm

CONTACT DATA

| | |
|----------------------------|-------------------------|
| Contact arrangement | 2A |
| Contact resistance | 2mΩ (at 1A 24VDC) |
| Contact material | AgSnO ₂ |
| Contact rating (Res. load) | 200A 277VAC/28VDC |
| Max. switching voltage | 440VAC |
| Max. switching current | 200A |
| Max. switching power | 55400VA / 5600W |
| Mechanical endurance | 5 x 10 ⁴ OPS |
| Electrical endurance | 6 x 10 ³ OPS |

CHARACTERISTICS

| | | |
|-------------------------------|-------------------------|---------------------|
| Insulation resistance | 1000MΩ (at 500VDC) | |
| Dielectric strength | Between coil & contacts | 4000VAC 1min |
| | Between open contacts | 2000VAC 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 1.0mm DA | |
| Humidity | 5% to 98% RH, 40°C | |
| Ambient temperature | -40°C to 85°C | |
| Termination | PCB & QC | |
| Unit weight | 400g | |
| Construction | Dust protected | |

Notes: The data shown above are initial values.

COIL

| | |
|------------|------------------------------------|
| Coil power | Single Coil: 12W; Double Coil: 24W |
|------------|------------------------------------|

COIL DATA

| Nominal Voltage VDC | Pick-up Voltage VDC | Pulse Duration ms | Coil Resistance Ω | |
|---------------------|---------------------|-------------------|-------------------|-------------------|
| | | | Single Coil | Double Coil |
| 12 | 9.6 | 200 | Single Coil | 12 x (1±10%) |
| 24 | 19.2 | 200 | | 48 x (1±10%) |
| 48 | 38.4 | 200 | | 190 x (1±10%) |
| 12 | 9.6 | 200 | Double Coil | (6+6) x (1±10%) |
| 24 | 19.2 | 200 | | (24+24) x (1±10%) |
| 48 | 38.4 | 200 | | (95+95) x (1±10%) |

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

NOTICE

1. Relay is on the "set" status when being released from stock, with the consideration of shock risen from transit and relay mounting, relay would be changed to "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. The terminals of relay without twisted copper wire can not be tin-soldered, can not be moved willfully, more over two terminals can not be fixed at the same time.



HONGFA RELAY

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

2009 Rev. 1.00

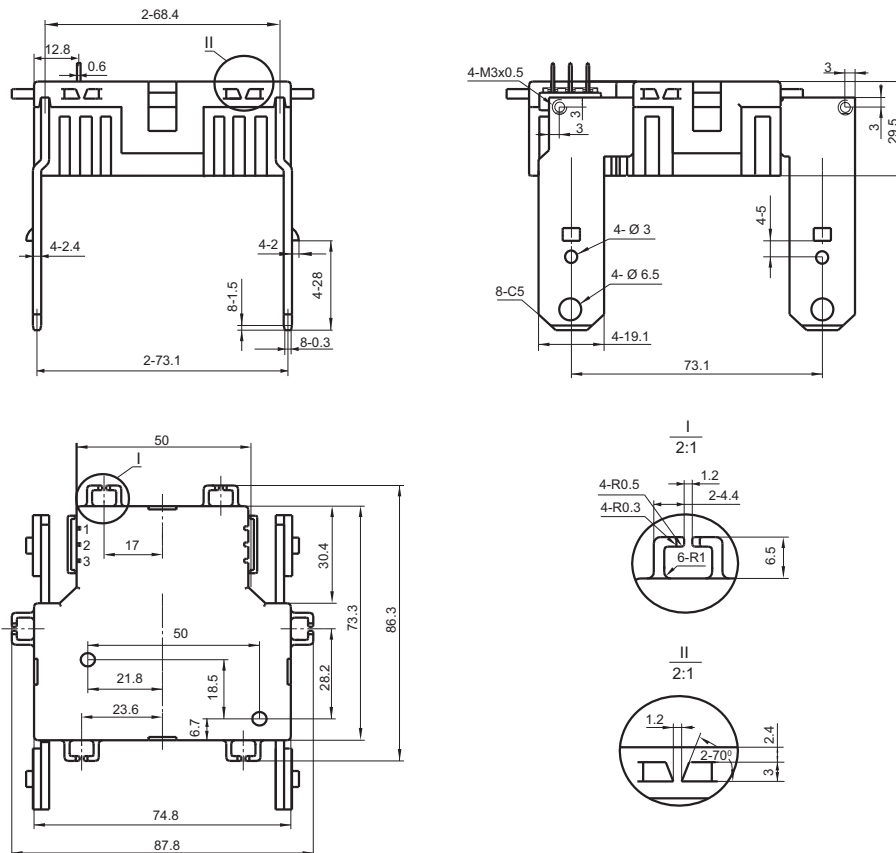
ORDERING INFORMATION

| | | | | | | |
|-----------------------|-------------------------------|--|--|------------------------|--|--|
| Type | HFE25 -A / 12 -2H T 2 R (XXX) | | | | | |
| Version | A: Type A contact terminal | | | | | |
| Coil voltage | 12, 24, 48VDC | | | | | |
| Contact form | 2H: 2 Form A | | | | | |
| Contact material | T: AgSnO ₂ | | | | | |
| Coil Sort | 1: Single coil latching | | | 2: 2 coils latching | | |
| Polarity | R: Negative polarity | | | Nil: Positive polarity | | |
| Customer special code | | | | | | |

OUTLINE DIMENSIONS, WIRING DIAGRAM AND PC BOARD LAYOUT

Unit: mm

Outline Dimensions



Remark: In case of no tolerance shown in outline dimension: outline dimension ≤ 1 mm, tolerance should be ± 0.2 mm; outline dimension > 1 mm and ≤ 5 mm, tolerance should be ± 0.3 mm; outline dimension > 5 mm, tolerance should be ± 0.4 mm.

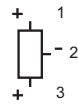
Coil Wring Diagram

1 coil latching



1(+) 3(-) set
3(+) 1(-) reset

2 coil latching



1(+) 2(-) set
3(+) 2(-) reset

Remark: The coil polarity of Reverse polarity and Standard polarity is opposite.

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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