HFE25

HIGH POWER LATCHING RELAY

Features

● Latching relay
● 200A switching capability
● According to ANSI C 12.1
   (Carrying: 12kA current / 66.7ms;
    7kA peak current/100ms)
● 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, 2B
Contact resistence	0.25mΩ max.(at 200A)
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	5×10^4 OPS
Electrical endurance	6×10^3 OPS

COIL

Coil power	1 coil latching: Approx. 12W 2 coils latching: Approx. 24W

COIL DATA   at 23°C

Nominal Voltage VDC	Set / Reset Voltage VDC max.	Pulse Duration ms min.	Coil Resistance x (1±10%)Ω	
12	9.6	100	1 coil latching	12
24	19.2	100		48
48	38.4	100		190
12	9.6	100	2 coils latching	6+6
24	19.2	100		24+24
48	38.4	100		95+95

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

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 1.5mm DA
Humidity		5% to 85% RH
Ambient temperature		-40°C to 85°C
Termination		QC
Unit weight		Approx. 400g
Construction		Dust protected

Notes: The data shown above are initial values.

ORDERING INFORMATION

| HFE 25 | -A / | 12 | -2D | T | 2 | -R | (XXX) |

Type

Version   **A:** Type A contact terminal

Coil voltage   12, 24, 48VDC

Contact form [1)]   **2D:** 2 Form B   **2H:** 2 Form A

Contact material   **T:** $AgSnO_2$

Coil Sort   **1:** 1 coil latching   **2:** 2 coils latching

Polarity   **R:** Negative polarity   **Nil:** Positive polarity

Customer special code

Notes: 1) 2H means that relay is on the "reset" status when delivery; 2D means that relay is on the "set" status when delivery.If no speical required by customer,we will keep the relay on the "set" status when delivery.

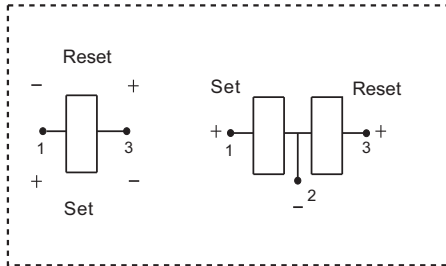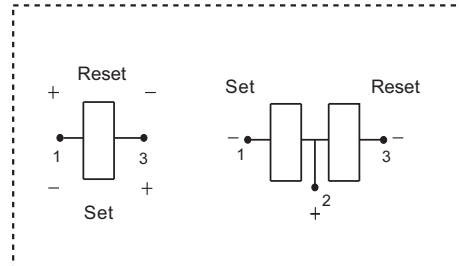## OUTLINE DIMENSIONS, WIRING DIAGRAM AND PC BOARD LAYOUT   Unit: mm

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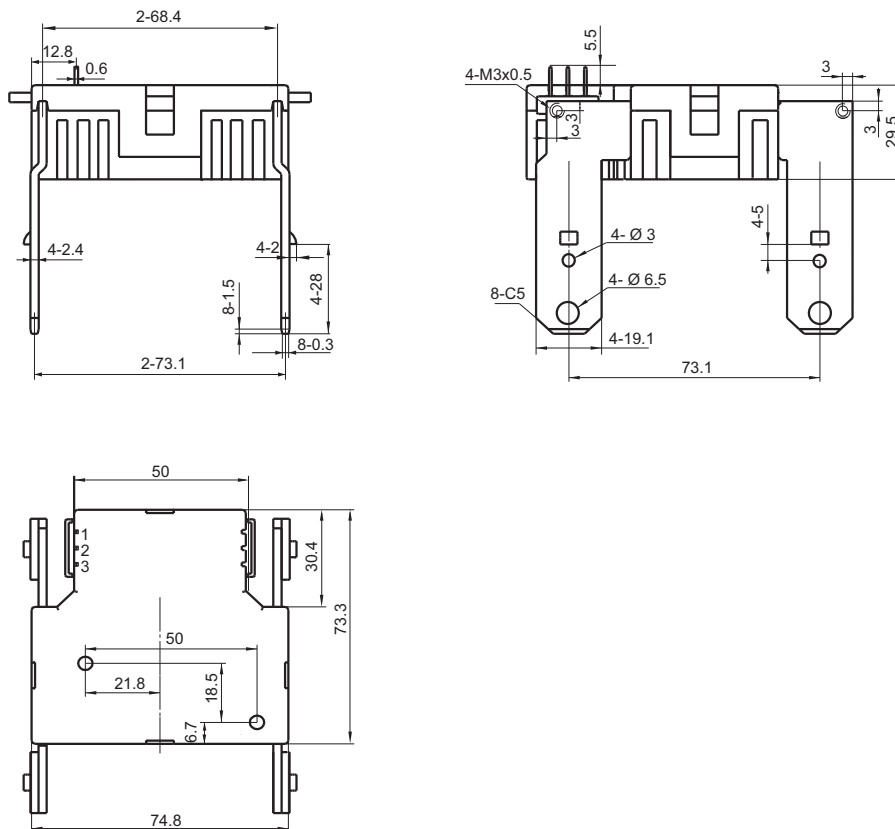
Remark: In case of no tolerance shown in outline dimension: outline dimension ≤1mm, tolerance should be ±0.2mm; outline dimension >1mm and ≤5mm, tolerance should be ±0.3mm; outline dimension >5mm, tolerance should be ±0.4mm.

Coil Wring 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. The terminals of relay without twisted copper wire can not be tin-soldered, can not be moved willfully.
4. Relays used for metering measuring applications are usually made with dust proof structure, while most relays could be made specially per customer's specific requirements.No longer than 6 months' storage time is recommended for this kind of relay, and please pay attention to the storage environment. To ensure contact reliability, we will keep contact status be closed when delivery if no special required by customer.

Disclaimer