HFE25 HIGH POWER LATCHING RELAY

Features

- 200A Latching relay
- Electrical endurance 6000ops
- According to ANSI C 12.1
  (Carrying: 12kA current / 66.7ms;
  7kA peak current/100ms)
- Contact resistence ≤0.25mΩ

CONTACT DATA

Contact arrangement	2A,2B
Contact resistance 1)	Typ.: 0.25mΩ max.(200A) 2)
Contact material	$AgSnO_2$
Contact rating	200A 240VAC/28VDC
Max. switching Voltage	265VAC
Max. switching current	200A
Rated switching power	48000VA/5600W
Mechanical endurance	1 x 10^5ops
Electrical endurance	6 x 10^3ops

Notes:1) The data shown above are initial values.
2) Typical value: Sampling quantity for contact resistance shall not less than 20 pcs, take the average value from 5 continous measurements for each sample.

CHARACTERISTICS

Insulation resistance		1000mΩ (500VDC)
Dielectric strength	Between coil & contacts	4000VAC 1min
	Between open contacts	2000VAC 1min
Creepage distance		9.6mm
Set time (at nomi. volt.)		≤20ms
Reset time (at nomi. volt.)		≤20ms
Shock resistance	Functional	98m/s^2
	Destructive	980m/s^2
Vibration resistance		10Hz ~ 55Hz 1.5mm DA
Humidity		5% ~ 85% RH
Ambient temperature		-40°C ~ 85°C
Termination	Coil termination	PCB&QC
	Load termination	QC
Unit weight		Approx.400g
Construction		Dust protected

Notes: The data shown above are initial values.

COIL

Coil power	Single coil latching: Approx. 12W Double coils latching: Approx. 24W

COIL DATA

23°C

Single coil latching

Nominal Voltage VDC	Set / Reset Voltage VDC 1)	Pulse Duration (Recommended) ms	Coil Resistance x (1±10%) Ω
6	≤4.8	50~100	3
9	≤7.2	50~100	6.75
12	≤9.6	50~100	12
24	≤19.2	50~100	48
48	≤38.4	50~100	190

Double coils latching

Nominal Voltage VDC	Set / Reset Voltage VDC 1)	Pulse Duration (Recommended) ms	Coil Resistance x (1±10%) Ω
6	≤4.8	50~100	1.5+1.5
9	≤7.2	50~100	3.3+3.3
12	≤9.6	50~100	6+6
24	≤19.2	50~100	24+24
48	≤38.4	50~100	95+95

Notes:1) The data shown above are initial values; recommended driving voltage is 1~1.5times of rated voltage.

ORDERING INFORMATION

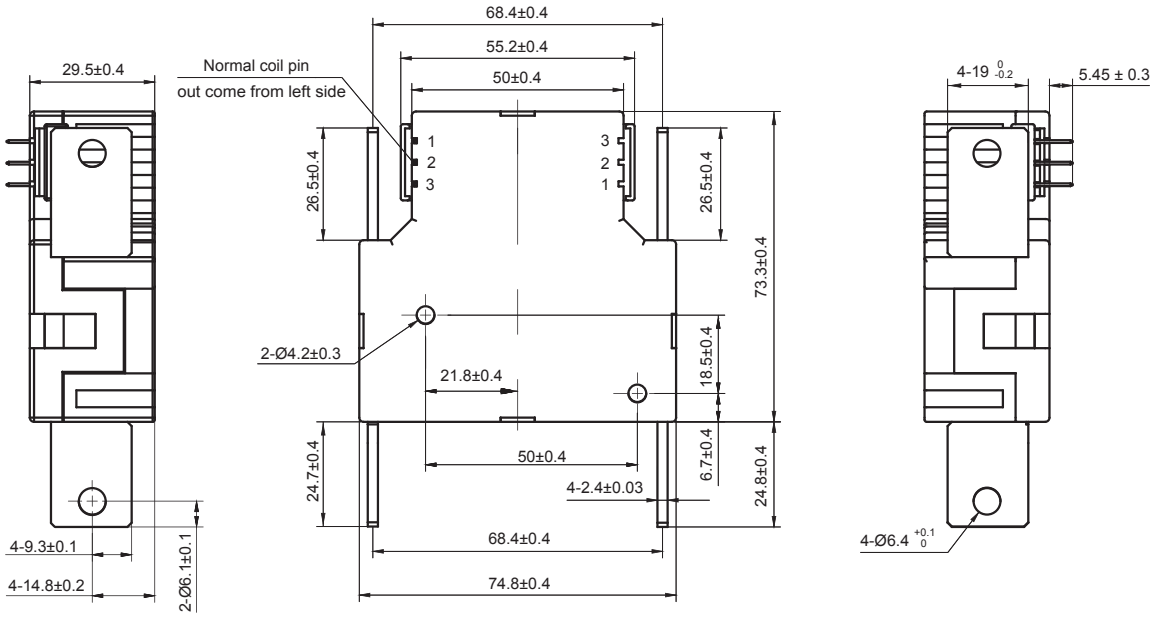
	HFE25	-B	/12	-2D	T	2	-R	(XXX)
Type								
Version	**B:**Type B contact terminal							
Coil voltage	6, 9,12, 24, 48VDC							
Contact form [1]	**2D**: 2Form B **2H**: 2 Form A							
Contact material	**T:** $AgSnO_2$							
Sort	**1:** Single coil latching	**2:** Double coils latching						
Polarity	**R:** Negative polarity	**Nil:** Positive polarity						
Special code [2]	**XXX:** Customer special requirement	**Nil:** Standard(See electrical endurance)						

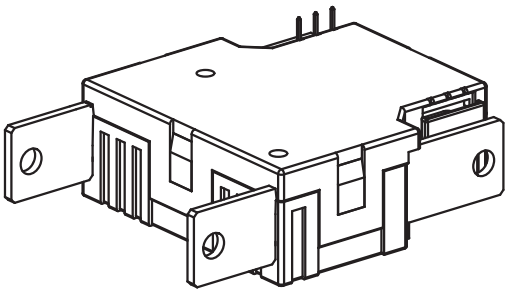
Notes: 1) 2H means that relay is on the "reset" status when delivery; 2D means that relay is on the "set" status when delivery. If no speical required by customer, we will keep the relay on the "set" status when delivery.
2) The customer special requirement express as special code after evaluating by Hongfa.

OUTLINE DIMENSIONS, WIRING DIAGRAM AND PC BOARD LAYOUT

Unit: mm

Outline Dimensions

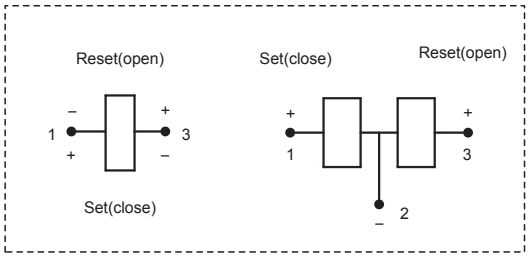




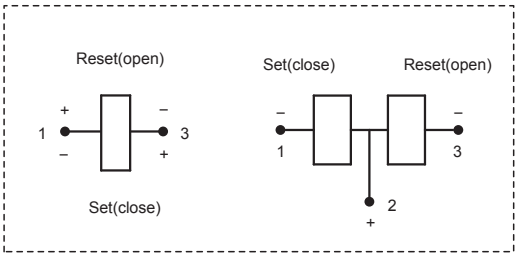
OUTLINE DIMENSIONS, WIRING DIAGRAM AND PC BOARD LAYOUT

Unit: mm

Positive polarity



Negtive 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. Do not energize voltage to "set" coil and "reset" coil simultaneously. And also long energized time (more than 1 min) should be avoided.
3. Normally the load terminals are not suitable for reflow solder, wave solder or tin solder, we suggest use spot welding. Load terminals shall be prevented from assembly stress, or freely move.
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.