CHP5 Series 60A Magnetic Latching Relay

Churod Electronics

FEATURES

- 60A Switching Capability
- Single Coil Latching; Double Coil Latching
- 4,000VAC Dielectric Strength(Between Coil and Contact)
- RoHS Compliance
- REACH SvHC Compliance

APPLICATION

Pre-payment Power Meters

Charging Pile

Coil Power

Coil voltage	9-48VDC	
Coil power	Single Coil	1.5W
	Double Coil	3W+3W

CONTACT DATA

Contact arrangement	1 Form B/1 Form A/1 Form C
Contact material	AgSnO2
Initial contact resistance	2mΩ max.@6VDC,1A
Max. switching voltage	250VAC/30VDC
Max. switching current	60A
Max. switching power	15,000VA
Contact rating(Resistive Load)	60A@ 250VAC/30VDC
Mechanical endurance	100,000 ops Min.(no load)
Electrical endurance	10,000 ops Min(rated load)

COIL DATA @23℃

Single Coil(1.5W)				
Nominal coil voltage (VDC)	Nominal Current (mA)	Coil Resistance (Ω±10%)	Operate Voltage (VDC Max.)	Release Voltage (VDC Max.)
9	167	54	6.8	6.8
12	125	96	9	9
24	63	384	18	18
48	31	1536	36	36

Double Coil(3W+3W)				
Nominal coil voltage (VDC)	Nominal Current (mA)	Coil Resistance (Ω±10%)	Operate Voltage (VDC Max.)	Release Voltage (VDC Max.)
9	333	27+27	6.8	6.8
12	250	48+48	9	9
24	125	192+192	18	18
48	63	768+768	36	36

Note: Special ordering for other coil voltage

CHARACTERISTICS

Operate voltage		75% of nominal voltage or less
Release voltage		75% of nominal voltage or less
Operate time (At nominal voltage)		20ms max.
Release time(At nominal voltage)		20ms max.
Insulation resistance		1,000 MΩ min. (at 500 VDC)
Dielectric strength	Between coil and contacts	4,000 VAC, 50/60Hz for 1 min
	Between open contacts	1,500 VAC, 50/60Hz for 1 min
Vibration resistance		10 to 55 Hz.,1.5mm double amplitude
		10 to 55 Hz.,1.5mm double amplitude
Shock resistance	Destruction	1,000 m/s^2(100G approximately)
	Malfunction	100 m/s^2(10G approximately)
Ambient temperature		Operating: -40~+85℃ (without icing or condensation)
Ambient humidity		Operating: 20% to 85% RH
Pulse Duration		50ms Min
Weight		Approx. 34g

ORDERING INFORMATION

	CHP5	-1A	12	B	N	B	2	-B	60	000

1. Product Family

CHP5 series

2. Number of Poles

1A=1 Form A or 1 Form B 1C=1 Form C

3. Rated Coil Voltage

09=9VDC 12=12VDC 24=24VDC 48=48VDC

4. Coil Type

S=Single Coil B=Double Coil

5. Coil Polarity

P= Positive N:Negative (Refer to "DIAGRAMS Coil Polarity")

6.Contact Arrangement

1A: A=Open Contanct B= Close Contanct

1C: B=Close M(4#)contact and C(3#) A=Open M(4#)contact and C(3#)

7. Contact Material

2=AgSnO2

8.Terminal shape

A=Temianal Type A

B=Temianal Type B

9. Contact Rating

40=40A 50=50A 60=60A

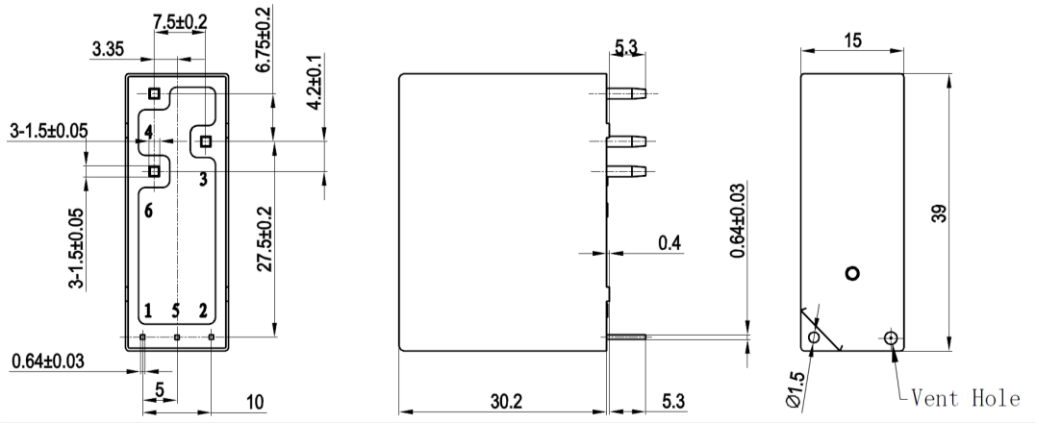
10. Additional numbers and / or letters

A combination of letters and Numbers (or blank),which does not represent electrical changes, only for specific customer requirements

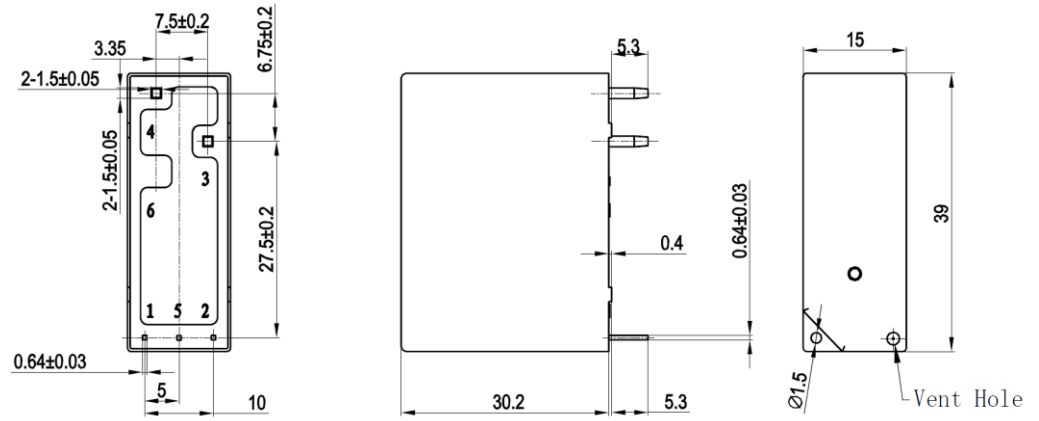
Typicial Outline

Temianal Type A

From C

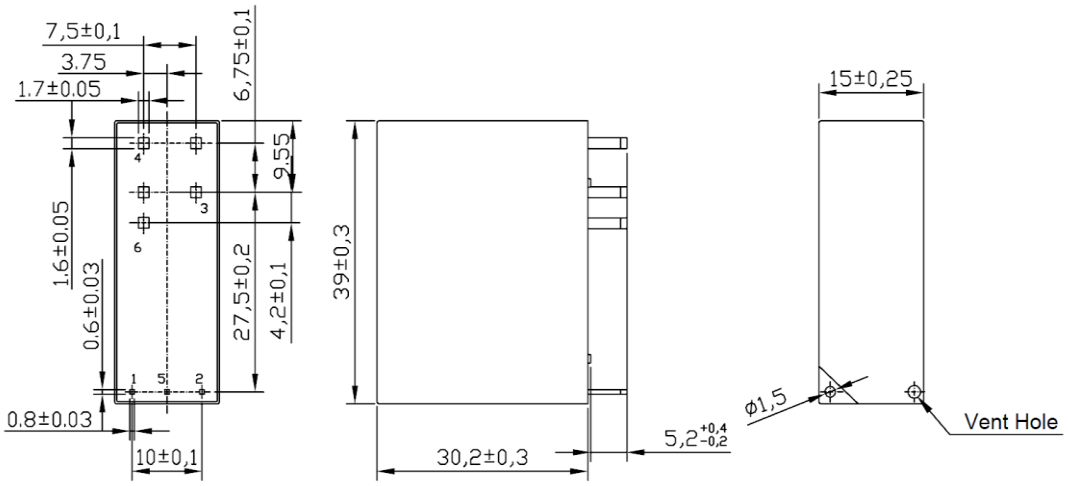


From A/B

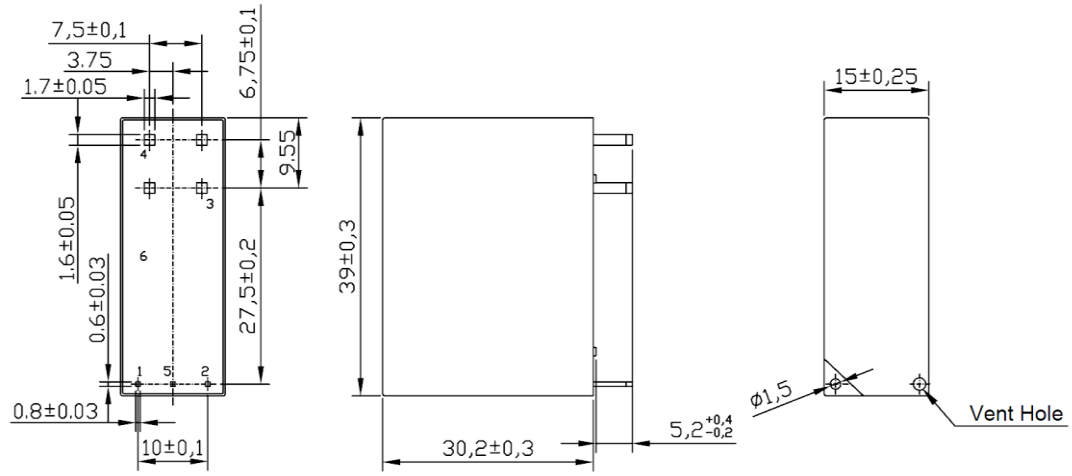


Temianal Type B

From C



From A/B



Remark: 1)The reference tolerance in outline dimension:

outline dimension ≤1mm, reference tolerance is ±0.2mm;

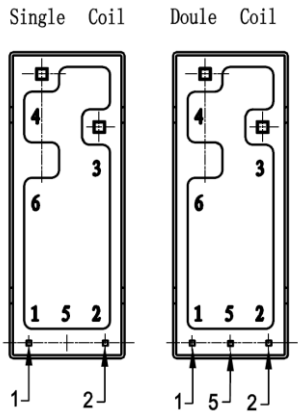
outline dimension > 1mm and ≤5mm, reference tolerance is ±0.3mm;

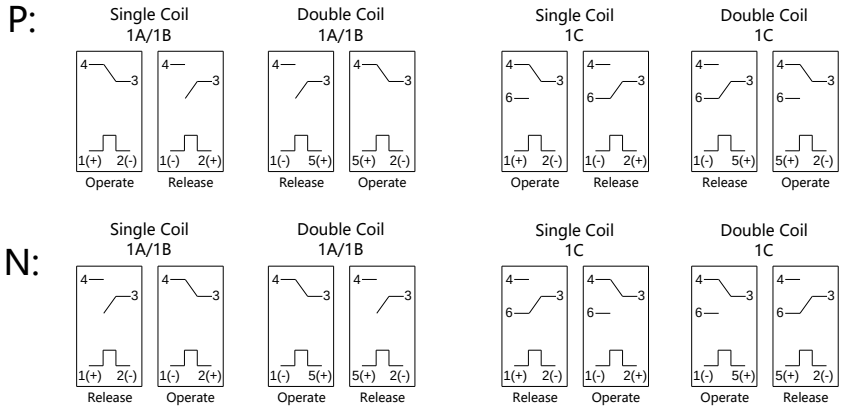
outline dimension > 5mm, reference tolerance is ±0.5mm.

2)The reference tolerance for PC Board layout is ±0.1mm.

3) Relay is on the "reset" or "set" status when being released from stock, wiith the consideration of shock risen from transit and relay mounting,relay would be changed to "set" or "reset" sttus, therefore, when application (connecting the power supply), please rest the relay to "set" or "reset" status on request.

DIAGRAMS Coil Polarity





Operating Instruction

1,Default status of contacts is close(reset). But due to the collision during transportation or assembly, contacts status could be changed. So it,s necessary to reset the contacts status before using.

2,This specifications is just reference,reserve the right to change the parameters without prior notice