

HZID-C31 series

Current Transducer

1. Brief introduction

HZID-C31 current transducer uses Hall effect(open loop principle) to measure any kinds of electric current. The output signal could be small current or low voltage that can be accepted by electronic circuit. The primary input current and the output signal is highly electric isolated. This kind of transducer



has a compact size but with a Φ 42mm aperture hole. It can be used in Power Utility, Telecom, Oil & Gas, welding machine and New energy fields.

- ★ AC/DC/Pulsed and Mixed current
- ★ Good overload capacity
- ★ Optimized response time ★ Good linearity circuit ★ Wide frequency bandwidth ★ Low
- ★ Galvanic isolation between primary and secondary

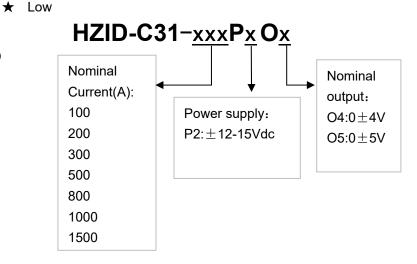
power consumption ★Split core

2. Order information (see right chart) Nominal Current:

100 200 300 500 800 1000 1500Arms

Nominal output: O4:0±4V, O5:0±5V

Power supply: P2: ±12-15Vdc



3. Eletrical data

| lpn | Primary nominal current (Arms) | 100 200 300 500 800 1000 1500A |
|-------|--|--------------------------------|
| lp | Primary Current, measuring range(Arms) | 150% x lpn |
| loc | Over load capacity | 3000Arms |
| Vsn | Secondary output (Vrms) | 4 or 5V |
| X | Accuracy (Ta =+25℃) | ≤1% |
| EL | Linearity error | ≤0.5% |
| Vc | Power supply voltage | Pn(±5%) |
| Vofs | Offset voltage(Ta =+25℃) | ≤50mV |
| Tr | Response time | ≤ 10uS |
| di/dt | di/dt | > 50A/uS |
| f | Frequency bandwidth | DC-10KHz |
| Ic | Current consumption | 20mA |
| R_L | Load resistance (@IpN,@ ±15V) | >5ΚΩ |
| Vd | Isolation test(50HZ,1min) | 5KV |

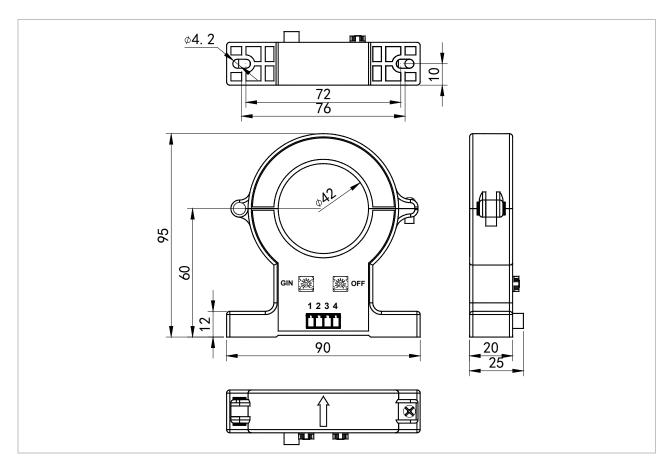
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4. General data:

| Та | Ambient operating temperature | -25 - +70 °C |
|----|-------------------------------|----------------------|
| Ts | Ambient storage temperature | -40 - +85 °C |
| W | Mass | 200g |
| St | Standards | EN50178 |
| На | Ambient operating humidity | 0-95% RH |
| | Case material | According to UL94-V0 |

5. Dimensions

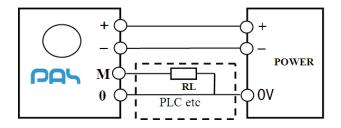


| General tolerance | ± 1 mm |
|-------------------|--------------------|
| Primary hole size | Ф42mm |
| Fastening | Bottom: 2 x Φ4.2mm |

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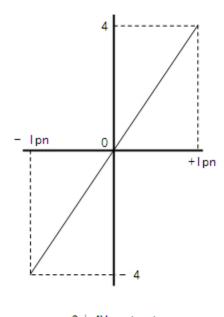
6. Connection



| Pin | Definition |
|-----|--------------------|
| 1 | (+) supply voltage |
| 2 | (-)supply voltage |
| 3 | (M) measure |
| 4 | (0) supply GND |

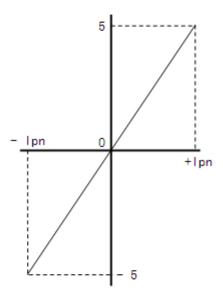
7. Output figure

Output in V



0±4V output

Output in V



 $0\pm5V$ output

8. Safety items



- 1. Only qualified people can operate with such electrical products.
- 2. Wrong connection may destroy the products.
- 3. ESD protection is necessary, please follow the correct process.
- 4. Do not use in the environment with conductive dust and corrosive gas.
- 5. The Potentiometers on the product are used by PAS internal, the user can not calibrate.
- 6. Strong vibration and very high temperature may damage the products.



1. After the installation, the bus bar may be connected to the high voltage equipment, please do not touch the exposed parts of the transducers to avoid electric shock!



2. Any question about the datasheet, please contact our TCS.

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