

HZIB-C12 series

Current Transducer



1. Brief introduction

HZIB-C12 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 $\Phi 21\text{mm}$ 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 ★ Galvanic isolation between primary and secondary circuit
- ★ Wide frequency bandwidth ★ Low power consumption ★ Split core

2. Order information (see right chart)

Nominal Current:

50 100 200 300 400 500 Arms

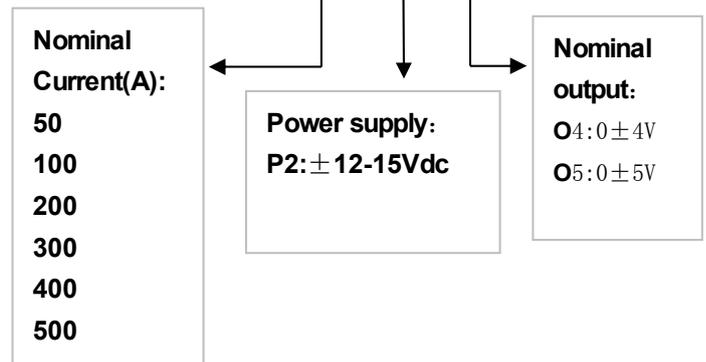
Nominal output:

O4: $0 \pm 4\text{V}$, O5: $0 \pm 5\text{V}$

Power supply:

P2: $\pm 12\text{-}15\text{Vdc}$

HZIB-C12-xxxPxOx



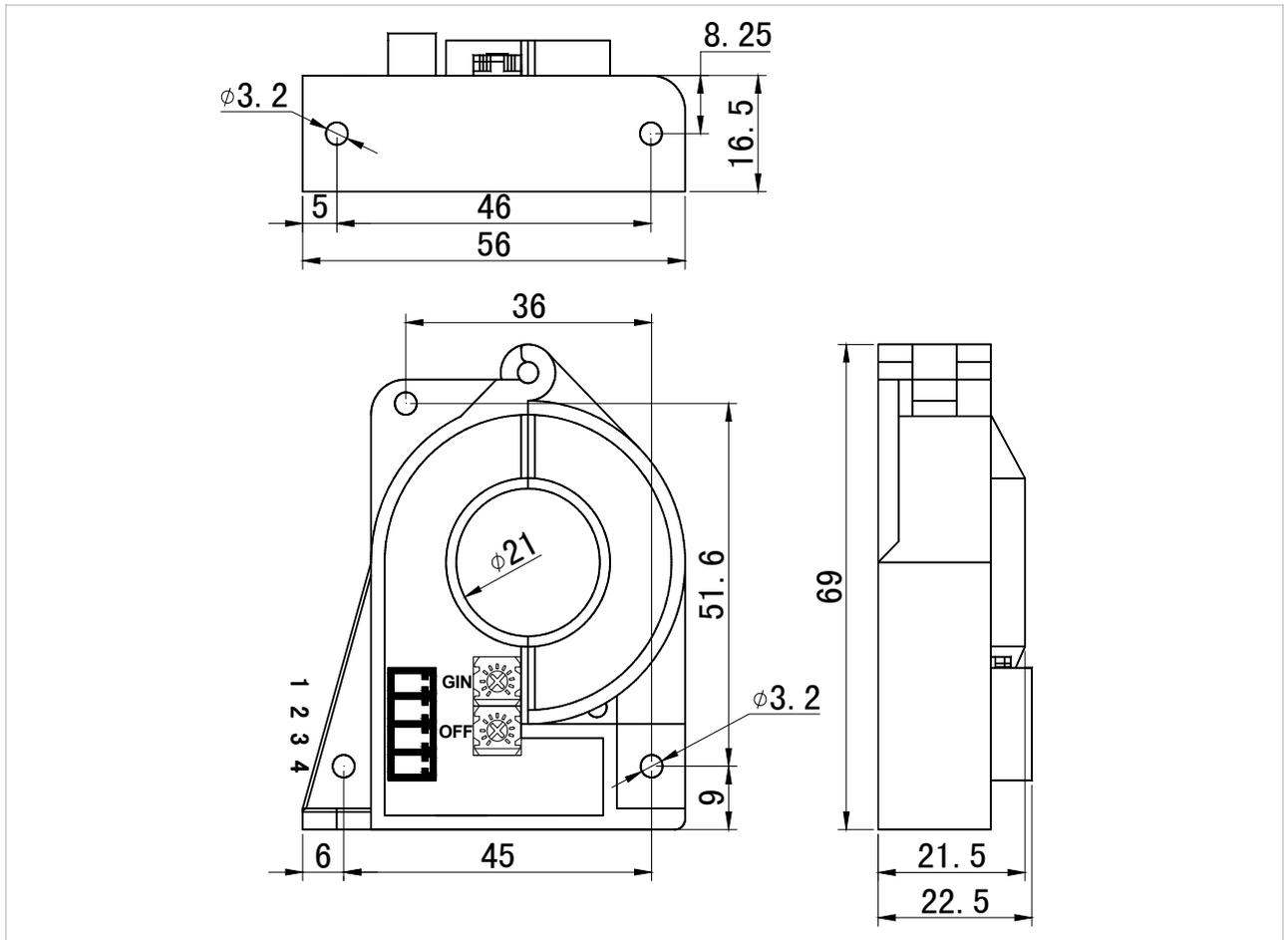
3. Electrical data

| | | |
|-------|--|------------------------|
| IpN | Primary nominal current (Arms) | 50 100 200 300 400 500 |
| Ip | Primary Current, measuring range(Arms) | 150% x IpN |
| Ioc | Over load capacity | 1000Arms |
| Vsn | Secondary output (Vrms) | 4 or 5V |
| X | Accuracy (Ta =+25°C) | ≤1% |
| EL | Linearity error | ≤0.5% |
| Vc | Power supply voltage | Pn(±5%) |
| Vofs | Offset voltage (Ta =+25°C) | ≤50mV |
| Tr | Response time | ≤ 10uS |
| di/dt | di/dt | > 50A/uS |
| f | Frequency bandwidth | DC-10K Hz |
| Ic | Current consumption | 20mA |
| RL | Load resistance (@IpN,@ ±15V) | >5KΩ |
| Vd | Isolation test(50HZ,1min) | 5KV |

4. General data:

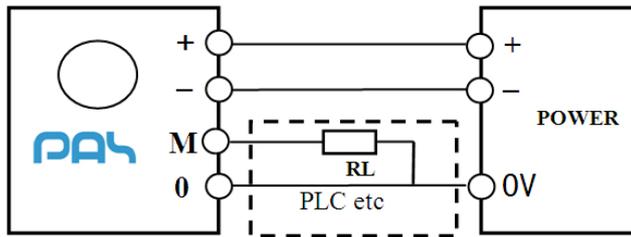
| | | |
|----|-------------------------------|----------------------|
| Ta | Ambient operating temperature | -25 - +70 °C |
| Ts | Ambient storage temperature | -40 - +85 °C |
| W | Mass | 100g |
| St | Standards | EN50178 |
| Ha | Ambient operating humidity | 0-95% RH |
| | Case material | According to UL94-V0 |

5. Dimensions



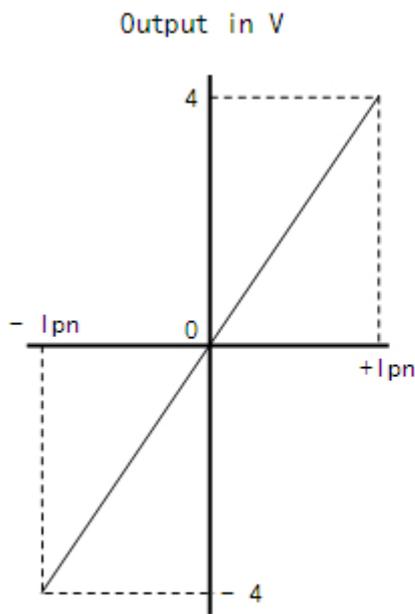
| | | |
|-------------------|--------------------|-----------------|
| General tolerance | ± 1mm | |
| Primary hole size | Φ21mm | |
| Fastening | Bottom: 2 x Φ3.2mm | Side: 3x Φ3.2mm |

6. Connection

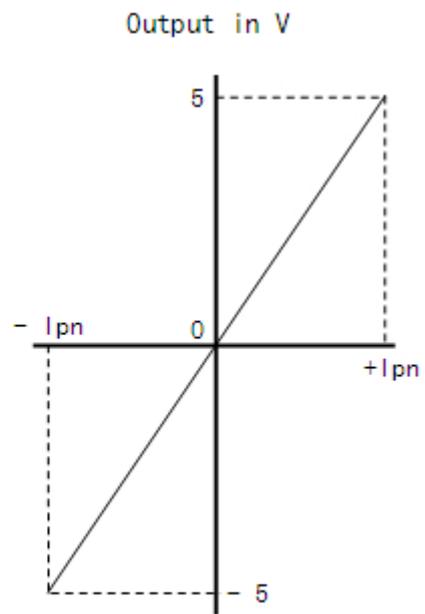


| Pin | Definition |
|-----|--------------------|
| 1 | (+) supply voltage |
| 2 | (-) supply voltage |
| 3 | (M) measure |
| 4 | (0) supply GND |

7. Output figure



0±4V output



0±5V 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!

Note: 1.Passion technology company reserves the right to modify the datasheets at any time without previous notifications.
2.Any question about the datasheet, please contact our TCS.