

## HJIE-C42 series

### Current Transducer



#### 1. Brief introduction

**HJIE-C42** current transducer uses Hall effect(open loop principle) to measure AC 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 104 x 22mm size window. It can be used in Power Utility, Telecom, Oil & Gas, welding machine and New energy fields.

- ★ AC current measurement      ★ Good overload capacity
- ★ Good linearity      ★ Galvanic isolation between primary and secondary circuit      ★ Low power consumption
- ★ Split core

#### 2. Order information (see right chart)

Nominal Current:

500 800 1000 1500 2000Aac

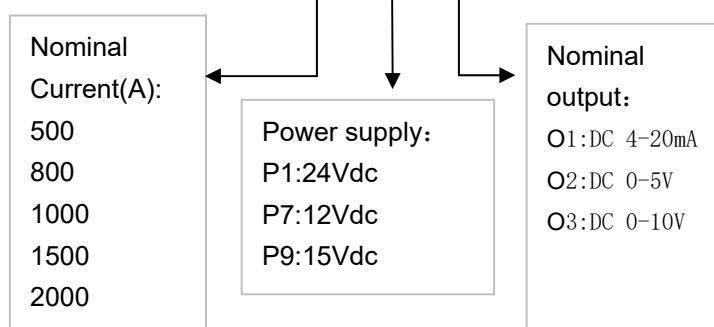
Nominal output:

O1:DC 4-20mA ,O2:DC 0-5V ,O3:DC 0-10V

Power supply:

P1: 24Vdc      P7: 12Vdc      P9:15Vdc

#### HJIE-C42-xxxPx O<sub>x</sub>



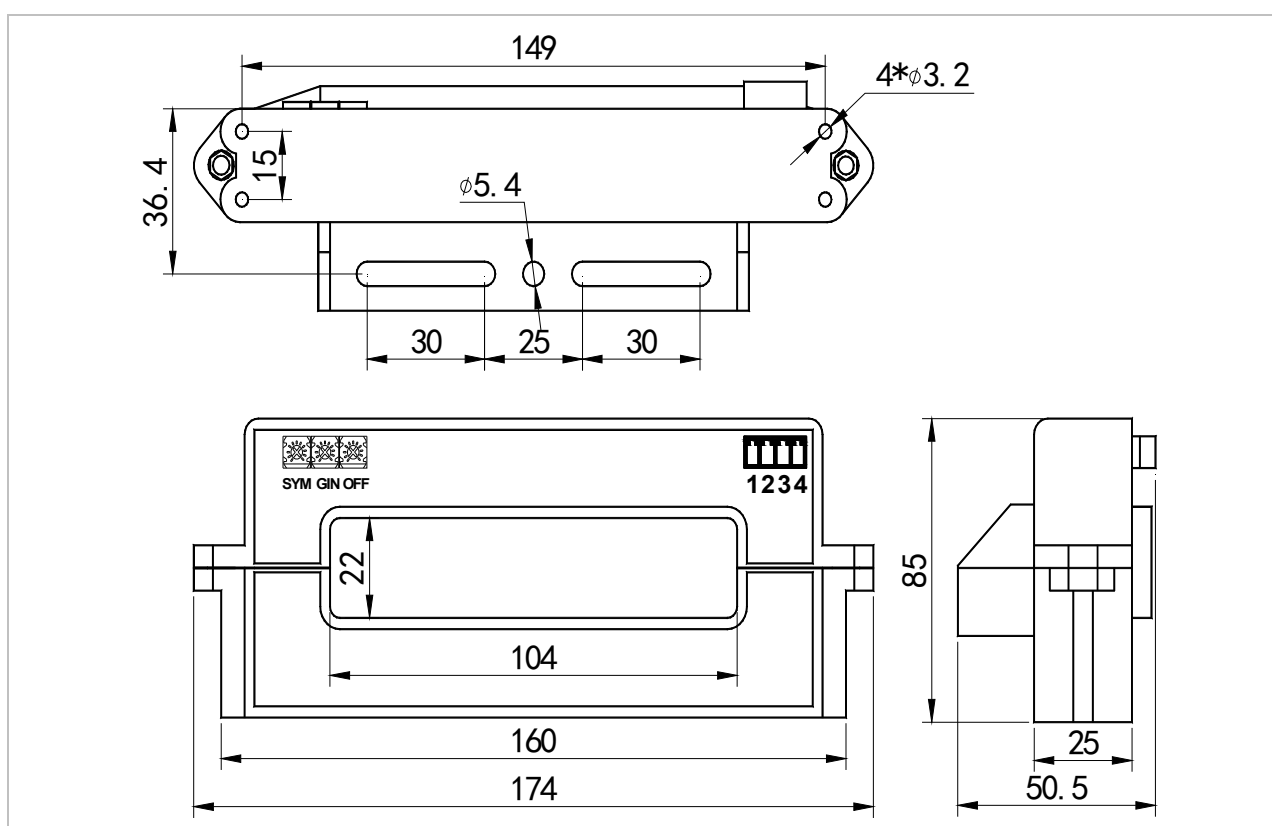
#### 3. Eletrical data

|                                      |                                          |                                                       |
|--------------------------------------|------------------------------------------|-------------------------------------------------------|
| I <sub>pn</sub>                      | Primary nominal current (Arms)           | 500 800 1000 1500 2000                                |
| I <sub>p</sub>                       | Primary Current, measuring range(Arms)   | 120% x I <sub>pn</sub>                                |
| I <sub>oc</sub>                      | Over load capacity                       | 10000Arms                                             |
| V <sub>sn</sub> (for voltage output) | Secondary output (Vrms)                  | DC0-5V, DC0-10V etc                                   |
| I <sub>sn</sub> (for current output) | Secondary output (mArms)                 | DC 4-20mA,DC 0-20mA etc                               |
| X                                    | Accuracy (Ta =+25℃)                      | ≤1%                                                   |
| E <sub>L</sub>                       | Linearity error                          | ≤0.5%                                                 |
| V <sub>c</sub>                       | Power supply voltage                     | Pn(±5%)                                               |
| V <sub>ofs</sub> /I <sub>ofs</sub>   | Offset voltage/Offset current (Ta =+25℃) | ≤50mV(for voltage output)/ ≤80uA (for current output) |
| Tr                                   | Response time                            | ≤ 300mS                                               |
| f                                    | Frequency bandwidth                      | 40-200Hz                                              |
| I <sub>c</sub>                       | Current consumption                      | 30mA (for current output : + I <sub>s</sub> )         |
| R <sub>L</sub>                       | Load resistance                          | >5KΩ(for voltage output)/ ≤450Ω(for current output)   |
| V <sub>d</sub>                       | Isolation test(50HZ,1min)                | 6KV                                                   |

#### 4. General data :

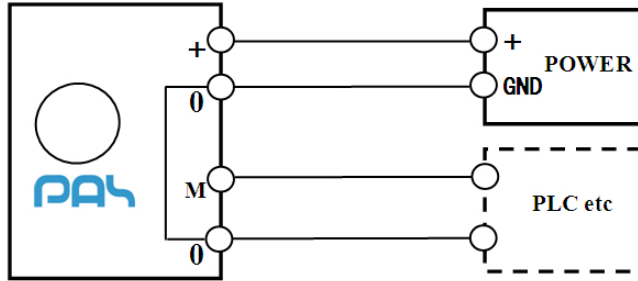
|    |                               |                      |
|----|-------------------------------|----------------------|
| Ta | Ambient operating temperature | -25 - +70 °C         |
| Ts | Ambient storage temperature   | -40 - +85 °C         |
| W  | Mass                          | 550g                 |
| St | Standards                     | IEC688:1992;EN61326  |
| Ha | Ambient operating humidity    | 20-90% RH            |
|    | Case material                 | According to UL94-V0 |

#### 5. Dimensions



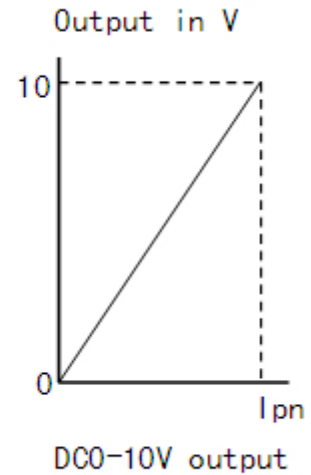
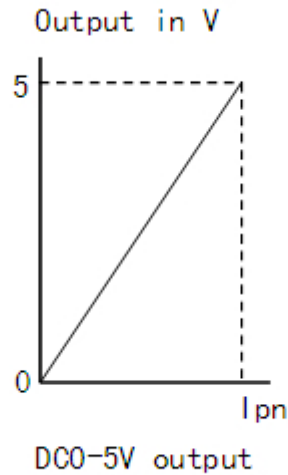
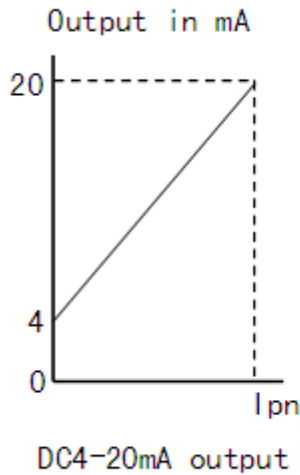
|                     |                                 |
|---------------------|---------------------------------|
| General tolerance   | $\pm 1\text{mm}$                |
| Primary window size | 104 x 22mm                      |
| Fastening           | Bottom: 2 x $\phi 5.5\text{mm}$ |

## 6. Connection



| Pin | Definition          |
|-----|---------------------|
| 1   | (+)supply voltage+  |
| 2   | (0)supply Gnd       |
| 3   | (M)output signal +  |
| 4   | (0) output signal - |

## 7. Output figure



## 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.