

Single phase AC current transducer

CE-IJ03-32BH1-0.5

1 Overview

This device is a AC current isolation transducer, input and output are not common-grounded, input signal is AC current, output signal is 0-5V. With characteristics of high precision, high voltage isolation, low temperature drift, small size, easy installation, comply with international standards. Can widely used in telecommunications, electricity, railways, industrial control and other fields.

2 Case style

H1 style: Length ×Width ×Height=21mm×21mm×30mm



Figure 1 H1 case style

3 Part Number

CE-IJ03-32BH1, there into:

IJ03: indicates the single phase AC current input;

-3: indicates 0-5V output;

2: indicates auxiliary power supply is +12V

B: indicates the current input perforated aperture is $\Phi 6.5\text{mm}$;

H1: Product case style model, refer to article 5.

4 Specifications

Test conditions: auxiliary power supply: +12V

room temperature: 25°C;

Input range: 0~0.5~ 30A;

Accuracy: class 0.5 (adopts default error);

Operating condition: 0~50°C;

Temperature drift: 500 ppm/°C;

Isolation voltage: 2500 V DC;

Load capacity: $\geq 2\text{ k}\Omega$;

Response time: $\leq 200\text{ ms}$;

Rated power consumption: $\leq 0.4\text{W}$;

Output ripple: $\leq 10\text{mV}$;

Frequency range: 45~65Hz (the highest is 5K, need to specify when ordering);

Surge impact immunity:

Power port first-level $\pm 0.5\text{KV}$ (L-N/2 Ω / integrated wave)

Analog I /O port first-level I/O $\pm 0.5\text{KV}$

(L-N/40 Ω /integrated wave);

Impulse immunity: input/powerport $\pm 2\text{KV}$

Analog I /O port $\pm 1\text{KV}$;

Input overload capacity: 20 times and less than 500A, 5 times per second;

Operating condition: Temperature: -10~60°C;

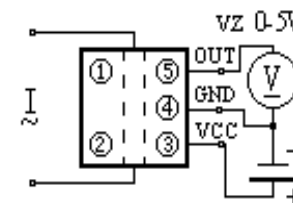
Humidity: $\leq 95\%$ (No dew);

Storage condition: Temperature: -55~65°C;

Humidity: $\leq 95\%$ (No dew).

5. Connection diagram

Figure 2, connection diagram



Pin 3: VCC, positive terminal of auxiliary power supply;

Pin 4: GND, negative terminal of auxiliary power supply;

Pin 5: OUT, voltage output.

Other undefined pins can not be used for other purposes.

6 Mounting method

Adopts PCB plate welding mounting, welding mounting aperture of the 5 pins are all 1mm.

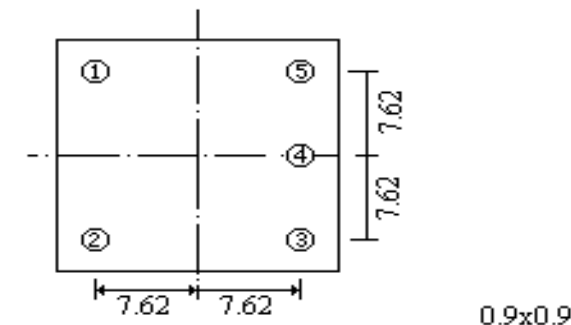


Figure 3: PCB plate welding diagram

7 Notes

7.1 Verify the part number and description are correct according to the packing list and product labels.

7.2 Apply power to the transducers only after a through checking the input signal and power supply according to

connections diagram.

7.3 The transducer should only be used in environment without Dew, conductive dust and damaged insulation, metal corrosive gases.

7.4 If a group of transducers are mounted together, keep a space more than 10mm between adjacent units.

7.5 The transducer's zero point and accuracy have been calibrated before delivery, users should use the instrument which the accuracy is superior to class 0.2 to retest the accuracy.

7.6 Integrated structure of the transducer, non-removable, and should avoid collision and fall, don't modify or tear off any labels of the product.

7.7 There is no lightning protection circuit inside the transducers. Please pay attention to lightning protection when the input and output feeders of the transducers are exposed to adverse weather conditions.

7.8 Users should particularly specify when ordering if has other requirements for the technical specification of the product.