

### Hall split core current sensor

Open loop split core type, Sub-plate installation, terminal output. Detect DC, AC and pulse current, High insulation between primary side and the vice side circuit.



Front view

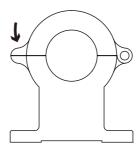
Back view

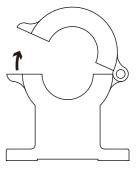
Fixed hole view Opening view

## Installation diagram

### Product features

- •Light weight
- •Low power consumption
- •Good linearity
- •No insertion loss
- Fast response time
- Good anti-interference ability





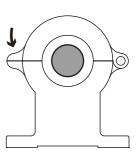
1.Loosen the screw

2.Open up

### Product application

- •Railway
- •Metallurgical
- •Welding machine
- Robot
- Motor
- Inverter power supply
- Variable frequency governor

3.In the lead



4. Tighten the screws

•Uninterrupted power supply and communication power supply



| Electrical parameters: ( The following parameters are typical values and actual values will be subject to product testing ) |                            |                                     |                      |            |                    |                     | Remarks:              |   |
|---|----------------------------|-------------------------------------|----------------------|------------|--------------------|---------------------|-----------------------|---|
| $I_{_{PN}}$   | Rated input                | $\pm 100 \text{\AA}$                | $\pm 300 \text{\AA}$ | $\pm500$ A | $\pm600$ A         | $\pm800$ A          | $\pm 1000 \text{\AA}$ | Standard input  |
| Ipm   | Input<br>measurement range | $\pm 120 \mathrm{A}$                | $\pm 360 \mathrm{A}$ | $\pm600$ A | $\pm720\mathrm{A}$ | $\pm960 \mathrm{A}$ | $\pm 1200 \mathrm{A}$ | Default is 1.2 times of rated input                           |
| Vout  | Rated output               | 2.5V $\pm$ 0.625V                   |                      |            |                    |                     |                       | Standard output   |
| Х   | Accuracy                   | 1 %                                 |                      |            |                    |                     |                       | I=I <sub>PN</sub>   |
| εL  | Linearity                  | 1 %                                 |                      |            |                    |                     |                       | $I=0^{\sim} \pm I_{PN}$                                       |
| Vс  | Supply voltage             | + 5 V                               |                      |            |                    |                     |                       | Supply voltage range±5%                                       |
| Ιc  | Current consumption        | $\leq 16$ m A                       |                      |            |                    |                     |                       | Reference will be subject to the measured                     |
| R1  | Load impedance             | $\geq 10 \text{K} \Omega$           |                      |            |                    |                     |                       | Collection port impedance while lower voltage affect accuracy |
| Voe   | Zero offset voltage        | $\leq \pm 15 \mathrm{mV}$           |                      |            |                    |                     |                       | TA=25℃  |
| Tr  | Response time              | ≤5 µ s                              |                      |            |                    |                     |                       | Reference will be subject to the measured                     |
| N.w   | Weight                     | 170g                                |                      |            |                    |                     |                       | Reference will be subject to the measured                     |
| Ta  | Operation temperature      | $-10 \sim +70 \ ^{\circ}\mathrm{C}$ |                      |            |                    |                     |                       |   |
| Ts  | Storage temperature        | $-25 \sim +70 \ ^\circ \mathrm{C}$  |                      |            |                    |                     |                       |   |
| Bw  | Band width                 | DC <sup>~</sup> 25KHz               |                      |            |                    |                     |                       | Factory test according to DC                                  |
| Vd  | Delectric strength         | 2.5KV 50Hz 1min                     |                      |            |                    |                     |                       |   |

#### Factory commissioning :

#### Calculation formula: 2.5V±0.625V 0V datum

1. Debugging with 0V as the reference point(acquiescence) Forward direction: 2.5+  $(I/I_{PN})$  \*0.625

2. Debug with Vref as the reference point(optional) Reverse

Reverse direction: 2.5-  $(I/I_{PN})$  \*0.625

#### Instructions for use:

- 1. According to the connection mode of correct connection
- 2. The direction shown by the arrow is positive
- 3. With hole measurement, response time and following the speed for the best
- 4. Faulty wiring can lead to product damage and output uncertainty

#### Safe operation:

\*Please read this specification carefully before use.

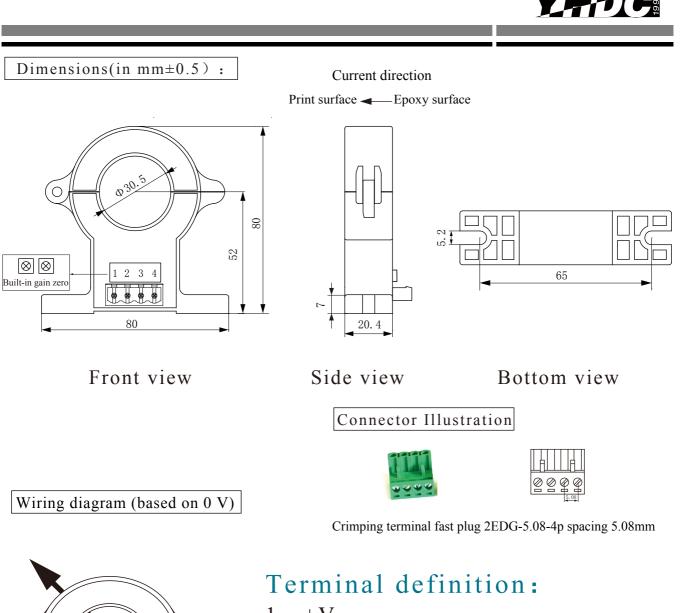
\*When you need to move the product, please be sure to disconnect the power and all the connected cables.

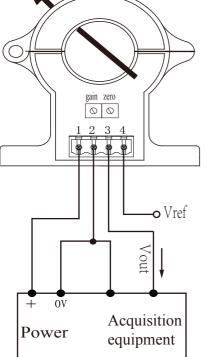
\*If found shell, devices attached to the fixed parts, wire, or have any damaged, please immediately deal with hidden dangers.

\*If there is any doubt about the safe operation of the equipment, the equipment and the corresponding accessories should be closed immediately, and the fastest time for troubleshooting.

#### Proclamations:

As our products are constantly being improved and updated, we reserve the right to modify the content of this specification at any time without prior notice.





1: +V

- 2: 0V
- 3: Vout
- 4: Vref (Can be suspended, not grounded)

# Potentiometer definition:

- Left: gain
- right: zero

× Detection :

(1) Choose the auxiliary power supply with small ripple ( $\leq 10$ mV) ②Switch on auxiliary power

<sup>③</sup>The auxiliary power is connected to the sensor

(4) The sensor detects the primary current