

# Hall split core current sensor

Open loop split core type, suspension indtallation, terminal output. Detect DC, AC and pulse current, High insulation between primary side and the vice side circuit.



Front view



Epoxy view

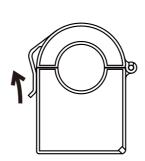


Opening view

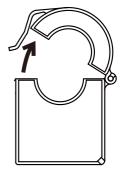
### Product features

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

# Installation diagram



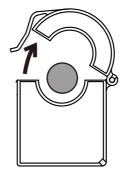
1. Loosen the card buckle



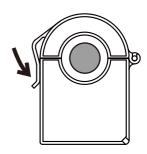
2. Open up

## Product application

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



3. In the lead



4. Fasten card buckle

•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:

| IP   | Rated input             | ±100A                              | ±200A       | ±300A                | ±400A      | ±500A      | Standard input<br>Can be customized example: 150A                                |
|------|-------------------------|------------------------------------|-------------|----------------------|------------|------------|--|
| IPM  | Input measurement range | $\pm 150 \mathrm{A}$               | $\pm 300 A$ | $\pm 450 \mathrm{A}$ | $\pm500$ A | $\pm500$ A | Defaults to 1.5 times the rated input, and the largest 500 a (saturated) or less |
| VOUT | Rated output            | $2.5V \pm 0.625V$                  |             |                      |            |            | Can be customized other output example: 2.5V±1V 2.5V±2V Etc.                     |
| X    | Accuracy                | 1%                                 |             |                      |            |            | I=IP   |
| εL   | Linearity               | 1%                                 |             |                      |            |            | I=0 <sup>~</sup> ±IP   |
| VC   | Supply voltage          | + 5 V                              |             |                      |            |            | Supply voltage range±5%  |
| IC   | Current consumption     | 15mA                               |             |                      |            |            | Reference will be subject to the measured  |
| RL   | Load impedance          | ≥10KΩ                              |             |                      |            |            | Collection port impedance while lower voltage affect accuracy                    |
| VOE  | Zero offset voltage     | $\leq$ $\pm$ 15mV                  |             |                      |            |            | TA=25°C  |
| TR   | Response time           | <3 μ s                             |             |                      |            |            | Reference will be subject to the measured  |
| N.W  | Weight                  | 46 g                               |             |                      |            |            | Reference will be subject to the measured  |
| Ta   | Operation temperature   | -10 ∼ $+70$ °C                     |             |                      |            |            |  |
| Ts   | Storage temperature     | -25~+85 °C                         |             |                      |            |            |  |
| BW   | Band width              | $\mathtt{DC}^{\sim}25\mathtt{KHz}$ |             |                      |            |            | 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/IP) \*0.625
- 2. Debug with Vref as the reference point(optional)

Reverse direction: 2.5-(I/IP)\*0.625

#### Instruction for use:

- 1. According to the connection mode of correct connection
- 2. The direction indicated by an arrow for the positive current direction
- 3. Response time and tracking progress are the best when the hole is measured
- 4. Faulty wiring can lead to product damage and output uncertainty

#### Safe operation:

- \*Please read this specification carefully before using the product.
- \*When the product needs to be moved, please be sure to cut off the power and unplug all the connecting cables connected to it.
- \*If found shell, fixed pieces, the power cord, connection cables, or connected to the equipment has any damage, please power off the device with immediately.
- \*If running doubts about the safety of the equipment, all equipment must be switched off and the corresponding accessories, and in the fastest time of illness.

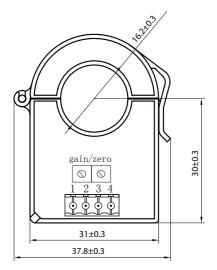
#### The statement:

As our products have been continuously improved and updated, we reserve the right to modify the content of this specification at any time.

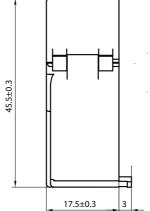


## Dimensions (in $mm \pm 0.5$ ):

Schematic diagram of connector:



positive — Epoxy surface





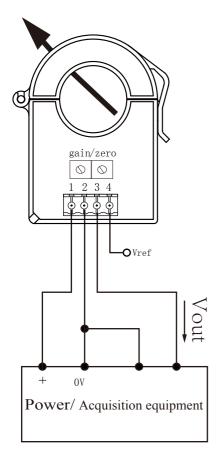


KF2EDGK-3.81-4P, spacing 3.81

Front view

Side view

Wiring diagram :(based on 0V)



## Terminal definition:

1: +V

2: 0V

3: Vout

4: Vref (Can be hung up)

## Potentiometer definition:

left: gain

right: zero

## **X** Detection:

- ①Choose the auxiliary power supply with small ripple ( $\leq 10$ mV)
- ②Switch on auxiliary power
- ③The auxiliary power is connected to the sensor
- 4 The sensor detects the primary current