

### Hall split core current sensor

Open loop split core type, hanging installation, cable output. Detect DC, AC and pulse current, High insulation between primary side and the vice side circuit.







Front view

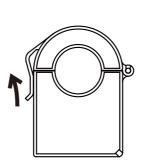
Epoxy view

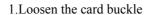
Opening view

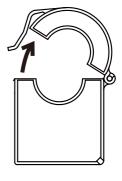
#### Product features

- •Light weight
- •Low power consumption
- Good linearity
- No insertion loss
- Fast response time
- Good anti-interference ability
- •Protection grade:IP63

## Installation diagram



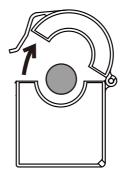




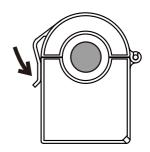
2.Open up

### Product application

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



3.In the lead



4.Fasten card buckle



# Electrical parameters: ( The following parameters are typical values and actual values will be subject to product testing )

### Remarks:

$I_{_{\mathrm{PN}}}$	Rated input	$\pm50$ A	±100A	±200A	$\pm 300 \mathrm{A}$	$\pm 400 \mathrm{A}$	$\pm500$ A	Standard input
Ipm	Input measurement range	$\pm75$ A	$\pm 150 \mathrm{A}$	$\pm 300 \mathrm{A}$	$\pm 450 \mathrm{A}$	$\pm 500 A$	$\pm500$ A	Default is 1.5 times of rated input, and maximum \( \leq 500 A \) (saturation)
Vout	Rated output	$2.5V \pm 0.625V$						
X	Accuracy	1 %						$I = I_{PN}$
εL	Linearity	1 %						$I=0^{\sim} \pm I_{PN}$
Vс	Supply voltage	+5 V						Supply voltage range±5%
Ιc	Current consumption	$\leq 16 \mathrm{mA}$						Reference will be subject to the measured
R1	Load impedance	≥10KΩ						Collection port impedance while lower voltage affect accuracy
Voe	Zero offset voltage	$\leq \pm 15 \mathrm{mV}$						TA=25°C
Tr	Response time	≤5 μ s						Reference will be subject to the measured
N.w	Weight	60g						Reference will be subject to the measured
Та	Operation temperature	$-10\sim$ $+70$ $^{\circ}\mathrm{C}$						
Ts	Storage temperature	-25~+70°C						
Bw	Band width	${\tt DC}^{\sim}{\tt 25KHz}$						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:  $2.5 + (1/I_{pN}) *0.625$
- 2. Debug with Vref as the reference point(optional) Reverse direction:  $2.5-(1/I_{pN})$  \*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:

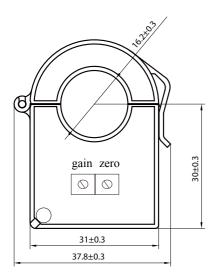
- \*Please read this specification carefully before use.
- \*When you need to move the product, please be sure to disconnect the power and all the connected cables.
- \*If found shell, devices attached to the fixed parts, wire, or have any damaged, please immediately deal with hidden dangers.
- \*If 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.



#### Dimensions(in mm±0.5):



Front view

Cable:

Epoxy surface

Cable specification:

0.2mm² four-core shielding wire

Four core colors:

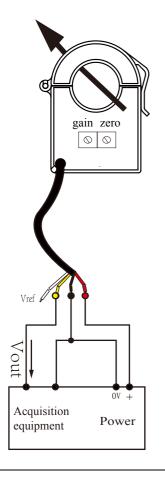
red, black, yellow and white

Cable length: 50cm

Side view

17.5±0.3

### Wiring diagram (based on 0 V)



### Cable definition:

red: +V

positive

45.5±0.3

black: 0V

yellow: Vout

white: Vref (Hoverability)

# Potentiometer definition:

Left: gain

right: zero

### **X** Detection:

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