HAS2009

YHDC®

Hall closed loop current sensor

Sub-plate mount, terminal output.Detect DC,AC and pulse current, High insulation between primary side and the vice side circuit.
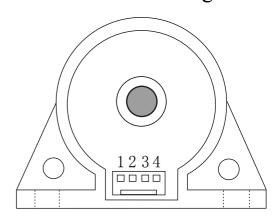
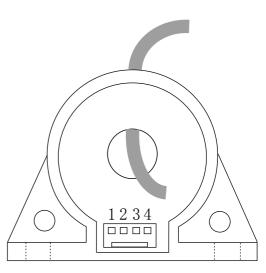Front view   Epoxy view   Fixed hole view

Product features

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

Installation diagram

1 2 3 4

1 2 3 4

Product application

- Railway
- Metallurgical
- Welding machine
- Robot
- Motor
- Inverter power supply
- Variable frequency governor
- 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	±20A	±50A	±100A	Standard input
Ipm	Input measurement range	±30A	±75A	±150A	The default is 1.5 times the rated input
$Vout$	Rated output	2.5V±0.625V			Standard output
X	Accuracy	1%			$I=I_{PN}$
εL	Linearity	0.1%			$I=0\sim\pm I_{PN}$
Vc	Supply voltage	+5V			Supply voltage range±5%
Ic	Current consumption	≤15mA+Is			Reference will be subject to the measured
$R1$	Load impedance	≥10KΩ			Collection port impedance while lower voltage affect accuracy
Voe	Zero offset voltage	≤±15mV			TA=25℃
Tr	Response time	<1μs			Reference will be subject to the measured
N.w	Weight	34g			Reference will be subject to the measured
Ta	Operation temperature	−25～+70℃			
Ts	Storage temperature	−25～+70℃			
Bw	Band width	DC~150KHz			Factory test according to DC
Vd	Delectric strength	3.5KV 50Hz 1min			

Factory commissioning :

1. Debugging with 0V as the reference point(acquiescence)

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

Calculation formula：2.5V±0.625V 0V datum

Forward direction：$2.5+（I/I_{PN}）*0.625$

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

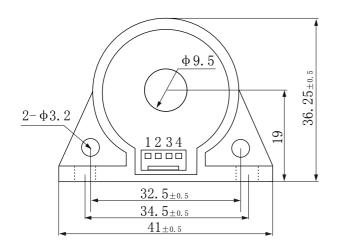4. Faulty wiring can lead to product damage and output uncertainty

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.
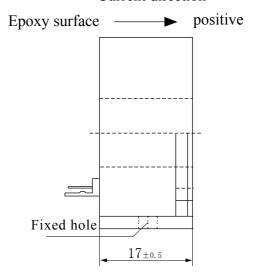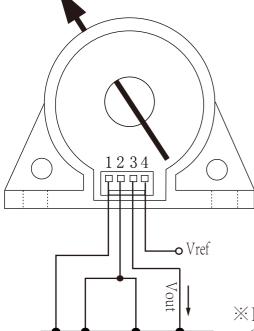
Dimensions(in mm±0.5）：

Current direction

Epoxy surface ——→ positive

Φ9.5

2-Φ3.2

1 2 3 4

36.25±0.5

19

32.5±0.5
34.5±0.5
41±0.5

Front view

Fixed hole

17±0.5

Side view

Wiring diagram (based on 0 V)

1 2 3 4

Vref

Vout

+V   0V

Power

Acquisition
equipment

Connector Illustration：

Quick plug which spacing 2.54 mm

Terminal definition:

1： +V

2： 0V

3： Vout

4： Vref（It can be suspended, not grounded）

※Detection：

①Choose the auxiliary power supply with small ripple (≤10mV)

②Switch on auxiliary power

③The auxiliary power is connected to the sensor

④The sensor detects the primary current