

HS23-C SERIES CURRENT SENSOR/TRANSDUCER

1. Features:

- 1) The opening and closing type through the heart, the terminal leads out;
- 2)Open-loop Hall effect principle, fast response, low current consumption;
- 3 For testing DC, AC and pulsating current;
- 4) Fully enclosed, high isolation and pressure resistance;
- ⑤High mechanical strength, high temperature and high humidity environment.

2. Ambient conditions:

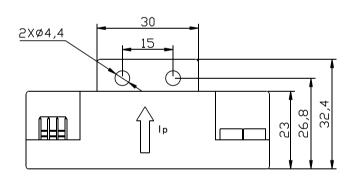
- ①Working environment temperature: -25 °C \sim +85 °C;
- ②Storage environment temperature: -25 °C \sim +85 °C;
- ③Relative humidity: $\leq 90\%$ when the temperature is $40 \,^{\circ}$ C, no condensation;
- 4 Atmospheric pressure: 860~1060mbar (about 650 ~ 800mmHg).

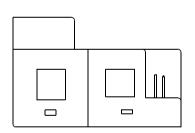
3. Safety features:

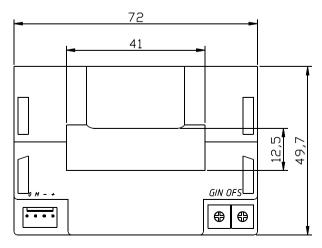
- ①Insulation resistance: greater than $1000M\Omega$ in normal state;
- ②Dielectric strength: can withstand power frequency 4000V/1 minute;
- ③Flame retardancy: in line with UL94-V0 standard;
- ④Insulation heat resistance class: B class (130 °C).



4. Outline drawing and installation dimensions: as shown in the following figure (Unit:mm)







Instruction:

+: +15V

-: -15V

M: Vout

0: GND

GIN: magnitude regulation

OFS: zero point adjustment

5. Performance Data

Model	HS23-	HS23-	HS23-	HS23-	HS23-
Technical	нs23- 200А-С	300A-C	400A-C	нs23- 500А-С	600A-C
Parameter					
Rated input current IPN	200A	300A	400A	500A	600A
Measuring range I_{PM}	±300A	±450A	±600A	±750A	±900A
Rated output voltage VSN	$4V\pm40 \mathrm{mV}$				
Operating Voltage	$\pm 12 \sim \pm 15$ VDC($\pm 5\%$)				
Current consumption	$\pm 20 \mathrm{mA}$				
Load Resistance	$\geq 10 \mathrm{k}\Omega$				
Linearity	<±1%				
Zero offset voltage	<±20mV				
Response time	<1µs				
Bandwidth	DC to 50kHz				
Temperature drift	<±1mV/ °C				

6. Instructions for use and precautions

- ①In order to obtain a positive output voltage at the output, the input current must flow in the direction indicated by the arrow.
- ②When using, first connect the load and connect the working voltage (\pm 15V), and then connect the input current.
- ③ Secondary connection:
 - +:+15VDC
 - **-:**-15VDC
 - M: output terminal
 - $0:\pm 15V$ supply relative to zero

7. Applications

- DC frequency conversion speed regulation, servo motor
- Switched Mode Power Supplies, Uninterruptible Power Supplies
- Inverter power supply
- Automotive Electronics
- Power supplies for welding applications