# **HDC-800WA Series Hall Current Sensor**

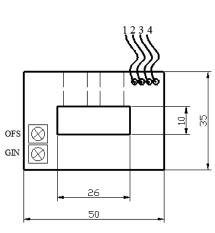
## Introduction

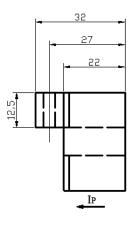
HDC-800WA Series Hall current transducer is the new generation product based on Hall effect. It is able to measure DC, AC, pulse and other currents with irregular waves under the condition of electrical isolation.

# △Electrical Parameters (Ta=25°C)

| Туре                               |                 |   | VID G 400VV |           |
|------------------------------------|-----------------|---|-------------|-----------|
| Parameters                         | Symbols         | HDC-200WA                               | HDC-400WA   | HDC-800WA |
| Nominal measuring current          | $I_{PN}$        | 200A DC                                 | 400A DC     | 800A DC   |
| Linear range                       | $I_P$           | 0~600A                                  | 0~1000A     | 0~1000A   |
| Nominal output voltage             | $V_{SN}$        | $\pm 4V \pm 0.04V (R_L=10K \Omega)$     |             |           |
| Zero offset voltage                | Vo              | $\leq \pm 0.04 V(I_{PN}=0)$             |             |           |
| Temperature drift of bridge offset | V <sub>OT</sub> | $\leq \pm 1 \text{mV}/^{\circ}\text{C}$ |             |           |
| Linear error                       | ξL              | ±1%                                     |             |           |
| Response time                      | Tr              | ≤5 µ S                                  |             |           |
| Supply voltage                     | Vc              | ±15V±5%                                 |             |           |
| Isolation voltage                  | $V_d$           | 2.5KV/50 or 60Hz/1min                   |             |           |
| Power dissipation current          | $I_{C}$         | ±20mA                                   |             |           |
| Frequency bandwidth                | f               | DC~50KH <sub>Z</sub> (-3dB)             |             |           |
| Operating temperature              | Та              | -25℃~+85℃                               |             |           |
| Storage temperature                | Ts              | -40 °C ~+90 °C                          |             |           |

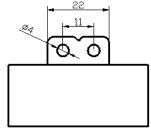
# $\triangle$ Dimensions: (mm)





Front view

Left view



Vertical view



#### Features:

- ◆ Use open-loop curren transducer based on Hall effect
- ◆ Adopt UL94V-0-recognized insulated casing
- ◆Flexible mounting
- ◆Low power consumption
- ◆Punching way has no insertion loss
- ◆Small size, light weight

### Applications:

- ◆ AC variable-frequency speed control system
- ◆Uninterruptible power supply (UPS)
- ◆Electric vehicle
- ◆Battery supply
- ◆ Power supply for electric welding machine
- ◆Communication power supply

## **Instructions for Use:**

- ◆Connect the wire of transducer in correct way as required.
- ◆Inputting measured current from punched core of transducer, the in-phase voltage signal can be obtained from output end by sampling.
- ◆ The arrow indicates positive current direction.

#### **Connection and adjustment:**

- **♦**1(red wire): +Vc (+15V)
- extstyle 2(blue wire): -Vc (-15V)
- ◆3(yellow wire): Output
- ♦4(black wire): 0V
- ♦OFS: Offset
- ♦GIN: Gain