

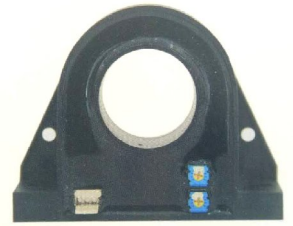
# HDC-1000HTA Series Hall Current Sensor

## Introduction

HDC-1000HTA 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)

| Type                               |          | HDC-100HTA            | HDC-200HTA | HDC-500HTA | HDC-1000HTA |
|------------------------------------|----------|-----------------------|------------|------------|-------------|
| Parameters                         | Symbols  |                       |            |            |             |
| Nominal measuring current          | $I_{PN}$ | 100A                  | 200A       | 500A       | 1000A       |
| Linear range                       | $I_p$    | 0~±300A               | 0~±600A    | 0~±1500A   | 0~±1800A    |
| Nominal output voltage             | $V_{SN}$ | ±4V±0.04V             |            |            |             |
| Zero offset voltage                | $V_o$    | ≤±0.03V( $I_{PN}=0$ ) |            |            |             |
| Temperature drift of bridge offset | $V_{OT}$ | ≤±1mV/°C              |            |            |             |
| Linear error                       | $\xi_L$  | ±1%                   |            |            |             |
| Response time                      | $T_r$    | ≤5 μ S                |            |            |             |
| Supply voltage                     | $V_c$    | ±15V±5%               |            |            |             |
| Isolation voltage                  | $V_d$    | 3.0KV/50 or 60Hz/1min |            |            |             |
| Power dissipation current          | $I_c$    | ±20mA                 |            |            |             |
| Frequency bandwidth                | $f$      | DC~50KHz(-3dB)        |            |            |             |
| Operating temperature              | $T_a$    | -25°C~+85°C           |            |            |             |
| Storage temperature                | $T_s$    | -40°C~+90°C           |            |            |             |



## Features:

- ◆ Use open-loop current transducer based on Hall effect
- ◆ Adopt UL94V-0-recognized insulated casing
- ◆ Small size and space saving
- ◆ Low power consumption
- ◆ High immunity against external disturbance

## Applications

- ◆ AC variable-frequency speed control system and servo motor
- ◆ Uninterruptible power supply (UPS)
- ◆ Switched-mode power supply
- ◆ Power supply for electric welding machine

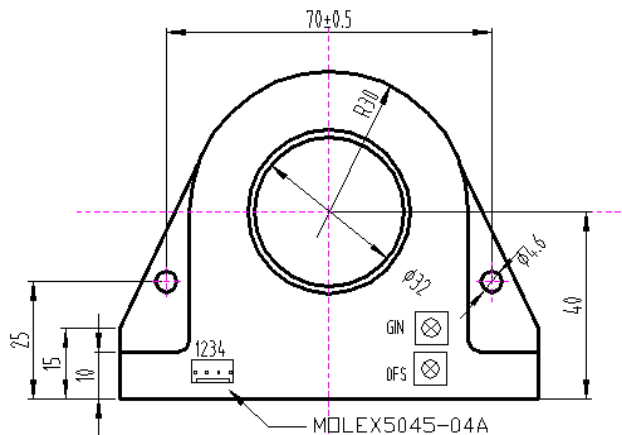
## Instructions for Use:

- ◆ 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.

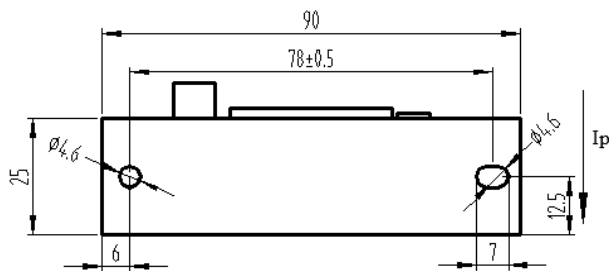
## Connection and adjustment:

- ◆ 1: +Vc (+15V)
- ◆ 2: -Vc (-15V)
- ◆ 3: Output
- ◆ 4: 0V
- ◆ OFS: Offset
- ◆ GIN: Gain

## △Dimensions: (mm)



Front view



Bottom view