

HNC-500US Series Hall Current Sensor

Introduction

HNC-500US 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 | | HNC-100US | HNC-200US | HNC-400US | HNC-500US |
|------------------------------------|----------|-----------------------|--------------|------------|------------|
| Parameters | Symbols | | | | |
| Nominal measuring current | I_{PN} | 100A | 200A | 400A | 500A |
| Linear range | I_P | 0~±200A | 0~±500A | 0~±600A | 0~±600A |
| Turns ratio | K_N | 1:2000 | 1:2000 | 1:2000 | 1:2500 |
| Coil resistance | R_i | 30 Ω | 30 Ω | 30 Ω | 40 Ω |
| Nominal output current | I_{SN} | ±50mA±0.25mA | ±100mA±0.5mA | ±200mA±1mA | ±200mA±1mA |
| Zero offset current | I_o | ≤ ±0.5mA | | | |
| Linear error | ξ_L | ±0.5% | | | |
| Supply voltage | V_c | ±15V ±5% | | | |
| Response time | T_r | ≤1 μ S | | | |
| Temperature drift of bridge offset | I_{OT} | ≤ ±0.5mA | | | |
| Recommended load resistance | R_M | <50 Ω | | | |
| Isolation voltage | V_d | 6.0KV/50 or 60HZ/1min | | | |
| Frequency bandwidth | f | DC~ 100KHZ (-3dB) | | | |
| Operating temperature | T_a | -25°C~+85°C | | | |
| Storage temperature | T_s | -40°C~+90°C | | | |



Features:

- ◆ Use close-loop current transducer based on Hall effect
- ◆ Adopt UL94V-0-recognized insulated casing
- ◆ Excellent linearity
- ◆ Optimized response time
- ◆ Punching way has no insertion loss
- ◆ High immunity against external disturbance

Applications:

- ◆ AC variable-frequency speed control system and servo motor
- ◆ Uninterruptible power supplies (UPS)
- ◆ Battery supply
- ◆ Power supply for electric welding machine
- ◆ Communication power supply
- ◆ Electric system
- ◆ Railway system

Instructions for Use:

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

Connection and adjustment:

- ◆ -: -Vc (-15V)
- ◆ M: Output
- ◆ +: +Vc (+15V)

△Dimension: (mm)

