HDC-600HAM Series Hall Current Sensor

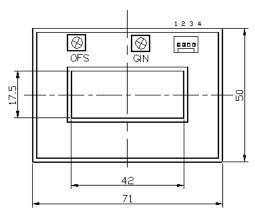
Introduction

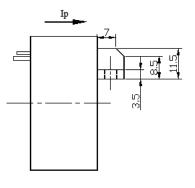
HDC-600HAM Series Hall current transducer is the new generation product based on Hall effect. It is able to measure DC, AC, pulse and other currents with irregular waves under the condition of electrical isolation.

\triangle Electrical Parameters (Ta=25°C)

| Туре | | | | | |
|------------------------------------|-----------------------------|---------------------------------------|------------|------------|------------|
| Parameters | Symbols | HDC-100HAM | HDC-400HAM | HDC-500HAM | HDC-600HAM |
| Nominal measuring current | I_{PN} | 100A | 400A | 500A | 600A |
| Linear range | I_P | 0~±300A | 0~±1200A | 0~±1500A | 0~±1800A |
| Nominal output voltage | $V_{\scriptscriptstyle SN}$ | $\pm 4V \pm 0.04V (R_L = 10K \Omega)$ | | | |
| Zero offset voltage | Vo | $\leq \pm 0.03 \text{V}(I_{PN}=0)$ | | | |
| Temperature drift of bridge offset | V _{OT} | ≤±1mV/°C | | | |
| Linear error | ξL | ±1% | | | |
| Response time | Tr | ≤5 µ S | | | |
| Supply voltage | Vc | ±15V±5% | | | |
| Isolation voltage | V_d | 3.0KV/50 or 60H _Z /1min | | | |
| Power dissipation curren | I_{C} | ±20mA | | | |
| Frequency bandwidth | f | DC~30KH _Z (-3dB) | | | |
| Operating temperature | Та | -25℃~+85℃ | | | |
| Storage temperature | Ts | -40℃~+90℃ | | | |

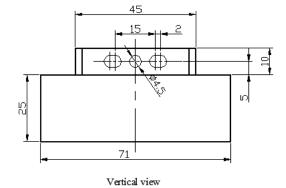
△Dimensions: (mm)





Front view

Left view





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.
- ◆ The arrow indicates positive current direction.

Connection and adjustment:

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