

HDC-300LB Series Hall Current Sensor

Introduction

HDC-300LB 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-50LB	HDC-100LB	HDC-200LB	HDC-300LB
Parameters	Symbols				
Nominal measuring current	I_{PN}	50A	100A	200A	300A
Linear range	I_P	0~±150A	0~±300A	0~±500A	0~±500A
Nominal output voltage	V_{SN}	±4V±0.04V($R_L=10K\Omega$)			
Zero offset voltage	V_O	≤±0.03V($I_{PN}=0$)			
Temperature drift of bridge offset	V_{OT}	≤±1.5mV/°C	≤±1mV/°C		
Linear error	ξ_L	±1%			
Response time	T_r	5 μ S Type 7 μ S Max			
Supply voltage	V_C	±15V±5%			
Isolation voltage	V_d	2.5KV/50 or 60Hz/min			
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
- ◆ Output voltage signal
- ◆ Low temperature drift
- ◆ Wide frequency bandwidth
- ◆ High immunity against external disturbance

Applications:

- ◆ AC variable-frequency speed control system and servo motor
- ◆ Uninterruptible power supply (UPS)
- ◆ Switched-mode power supply
- ◆ 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 current/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
- ◆ 5: NC
- ◆ OFS: Offset
- ◆ GIN: Gain

△Dimensions: (mm)

