

HDC-1500HAT Series Hall Current Sensor

Introduction

HDC-1500HAT 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-500HAT	HDC-1000HAT	HDC-1500HAT
Parameters	Symbols			
Nominal measuring current	I_{PN}	500A	1000A	1500A
Linear range	I_P	0~±1500A	0~±2500A	0~±2500A
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}	±1mV/°C		
Linear error	ξ_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
- ◆ Pass UL certification (S.N.: E466588)
- ◆ Pass CE certification (S.N.: A001E130424042E)
- ◆ Excellent linearity
- ◆ Low power consumption
- ◆ High immunity against external disturbance
- ◆ Punching way has no insertion loss

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 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)

