

HDC-500DH Series Hall Current Sensor

Introduction

HDC-500DH 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℃)

Type		HDC-50DH	HDC-200DH	HDC-300DH	HDC-500DH
Parameters	Symbols				
Nominal measuring current	I_{PN}	50A	200A	300A	500A
Linear range	I_P	0~100A	0~400A	0~600A	0~1000A
Nominal output voltage	V_{SN}	$\pm 4V \pm 0.04V (R_L = 10K \Omega)$			
Zero offset voltage	V_O	$\leq \pm 0.04V (I_{PN} = 0)$			
Temperature drift of bridge offset	V_{OT}	$\leq \pm 1mV/^\circ C$			
Linear error	ξ_L	$\pm 1\%$			
Response time	T_r	$\leq 5 \mu S$			
Supply voltage	V_C	$\pm 15V \pm 5\%$			
Isolation voltage	V_d	2.5KV/50 or 60Hz/1min			
Power dissipation current	I_C	$\pm 20mA$			
Frequency bandwidth	f	DC~50KHz(-3dB)			
Operating temperature	T_a	$-25^\circ C \sim +85^\circ C$			
Storage temperature	T_s	$-40^\circ C \sim +90^\circ C$			

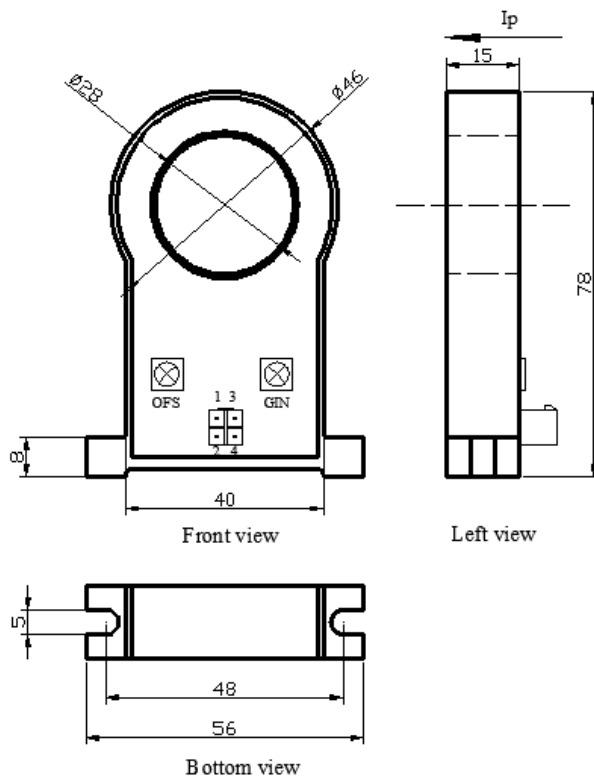
Features:

- ◆ Use open-loop current transducer based on Hall effect
- ◆ Adopt UL94V-0-recognized insulated casing
- ◆ Small size ,light weight
- ◆ Low power consumption
- ◆ Punching way has no insertion loss
- ◆ Flexible mounting

Applications:

- ◆ AC Variable-frequency speed control system
- ◆ Uninterruptible power supply (UPS)
- ◆ Electric vehicle
- ◆ Battery supply
- ◆ Power supply for electric welding machine
- ◆ Communication power supply

△Dimensions: (mm)



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