

HDC-500HAL Series Hall Current Sensor

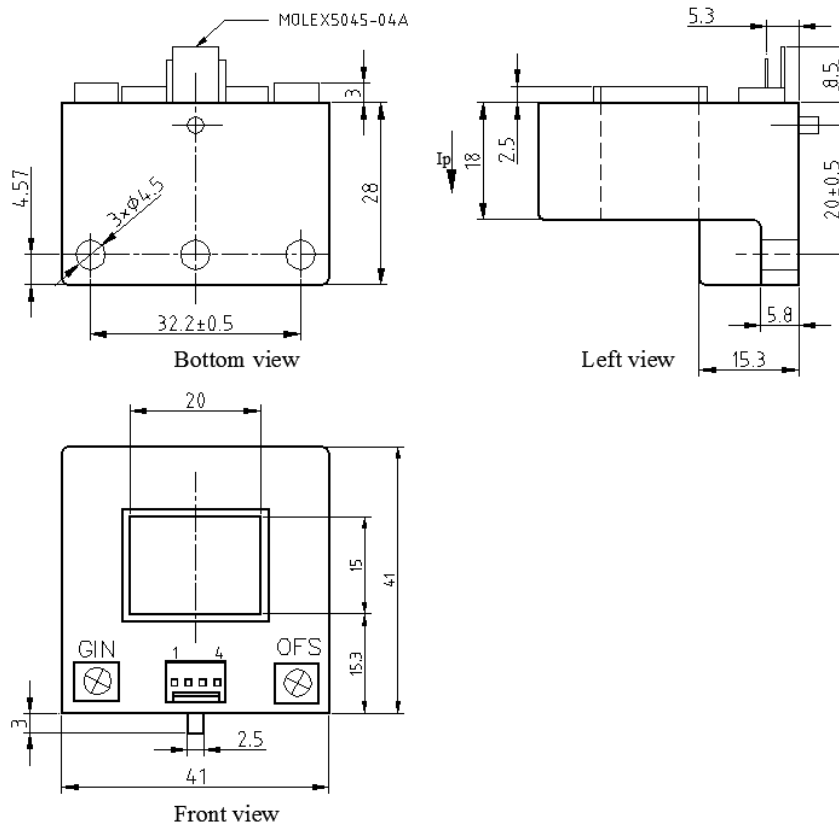
Introduction

HDC-500HAL 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-100HAL	HDC-200HAL	HDC-300HAL	HDC-500HAL
Parameters	Symbols				
Nominal measuring current	I_{PN}	100A	200A	300A	500A
Linear range	I_P	0~±300A	0~±600A	0~±900A	0~±1000A
Nominal output voltage	V_{SN}	±4V±0.04V(R _L =10KΩ)			
Zero offset voltage	V_O	≤±0.04V(I _{PN} =0)			
Temperature drift of bridge	V_{OT}	≤±1mV/°C			
Linear error	ξ_L	±0.5%			
Response time	T_r	≤5 μS			
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			

△Dimensions: (mm)



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