

HDC-5000KA Series Hall Current Sensor

Introduction

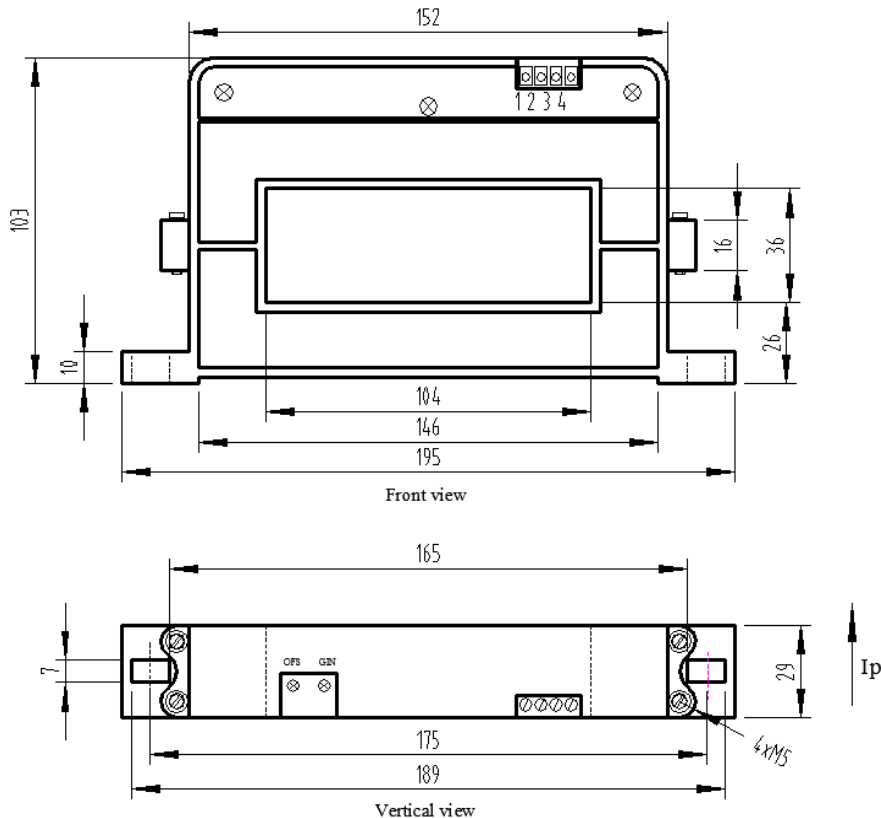
HDC-5000KA Series Hall current transducer is the new generation product based on Hall effect. It is able to measure DC, AC, pulse and other currents with irregular waves under the condition of electrical isolation.



△Electrical Parameters (Ta=25°C)

Type		HDC-800KA	HDC-1000KA	HDC-2000KA	HDC-5000KA
Parameters	Symbols				
Nominal measuring current	I_{PN}	800A	1000A	2000A	5000A
Linear range	I_P	0~±1600A	0~±2000A	0~±3000A	0~±7500A
Nominal output voltage	V_{SN}	±4V±0.04V			
Zero offset voltage	V_O	≤±0.04V($I_{PN}=0$)			
Temperature drift of bridge offset	V_{OT}	≤±1mV/°C			
Linear error	ξ_L	±1%			
Response time	T_r	≤7 μS			
Supply voltage	V_C	±15V±5%			
Isolation voltage	V_d	6.0KV/50 or 60Hz/1min			
Power dissipation current	I_C	±30mA			
Frequency bandwidth	f	DC~20KHz(-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
- ◆ Busbar-mounted and panel-mounted
- ◆ High insulation between primary side and secondary side
- ◆ Punching way has no insertion loss
- ◆ Dimidiate structure, easy for mounting

Applications:

- ◆ Communication power supply
- ◆ Uninterruptible power supply (UPS)
- ◆ Switched-mode power supply
- ◆ Power supply for electric welding machine
- ◆ Battery supply
- ◆ Circuitry
- ◆ Railway system
- ◆ Variable-frequency speed control system

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
- ◆ OFS: Offset
- ◆ GIN: Gain