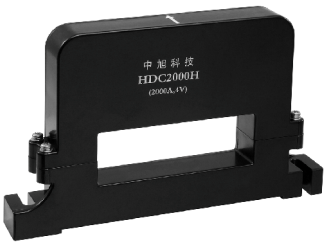
HDC-3000H Series Hall Current Sensor

Introduction

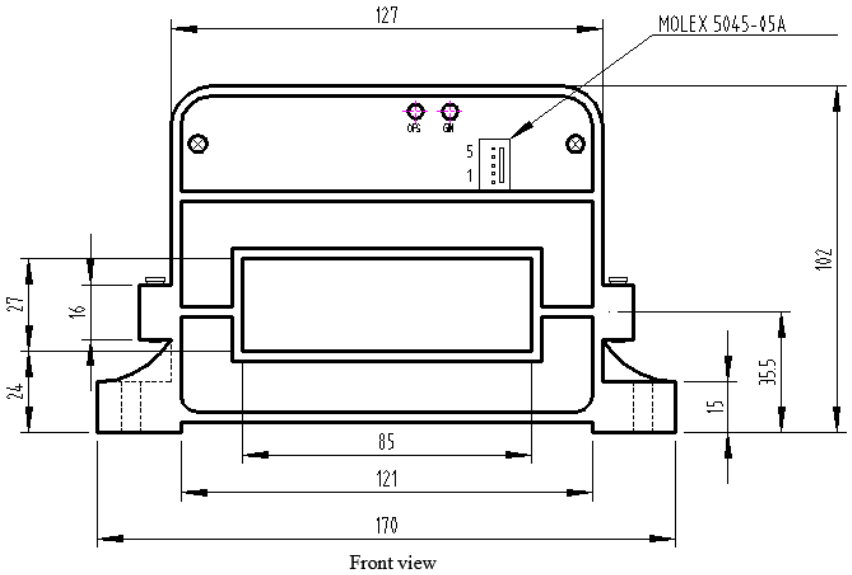
HDC-3000H Series Hall current transducer is the new generation product based on Hall effect. It is able to measure DC, AC, pulse and other currents with irregular waves under the condition of electrical isolation.



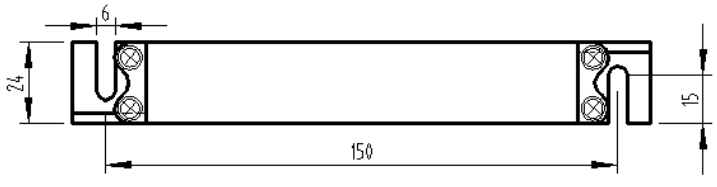
△Electrical Parameters (Ta＝25℃)

Type		HDC-600H	HDC-1200H	HDC-1800H	HDC-2400H	HDC-3000H
Parameters	Symbols					
Nominal measuring current	I_{PN}	600A	1200A	1800A	2400A	3000A
Linear range	I_P	0~±900A	0~±1800A	0~±2700A	0~±3600A	0~±4500A
Nominal output voltage	V_{SN}	±4V±0.04V(R_L=10KΩ)				
Zero offset voltage	Vo	≤±0.025V(I_{PN}=0)				
Temperature drift of bridge offset	V_{OT}	≤±1mV/℃				
Linear error	ξ_L	±1%				
Response time	Tr	≤7μS				
Supply voltage	Vc	±15V±5%				
Isolation voltage	V_d	5.0KV/50 or 60Hz/1min				
Power dissipation current	I_C	±30mA				
Frequency bandwidth	f	DC~50KHz(-3dB)				
Operating temperature	Ta	-25℃~+85℃				
Storage temperature	Ts	-40℃~85℃				

△ Dimensions：(mm)



Front view



Bottom view

Features：

◆Use open-loop current transducer based on Hall effect

◆ Adopt UL94V-0-recognized insulated casing

◆Small sized and space saving

◆Low power consumption

◆High immunity against external disturbance

Applications：

◆ AC variable-frequency speed control system and servo motor

◆Uninterruptible power suppers (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 input end of transducer, the in-phase current/voltage signal can be obtained from output end by sampling.

Connection and adjustment：

◆1：+Vc（+15V）

◆2：0V

◆3：-Vc（-15V）

◆4：NC

◆5：Output

◆OFS：Offset

◆GIN：Gain