HDC-2000HAX Series Hall Current Sensor

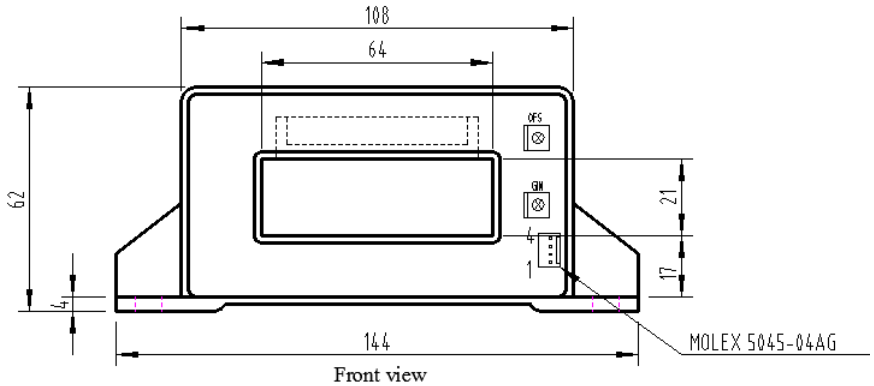
Introduction

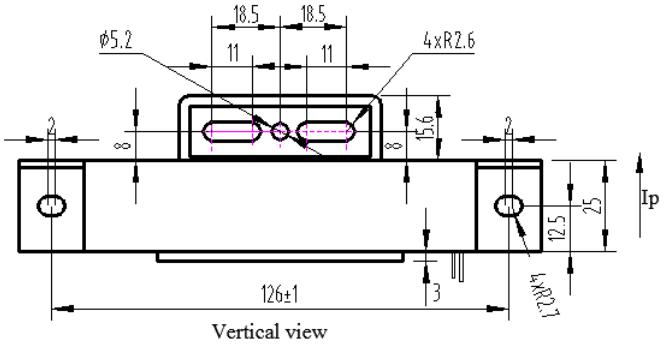
HDC-2000HAX Series Hall current transducer is the new generation product based on Hall effect. It is able to measure DC, AC, pulse and other currents with irregular waves under the condition of electrical isolation.

△Electrical Parameters (Ta＝25℃)

Type		HDC-500HAX	HDC-1000HAX	HDC-1500HAX	HDC-2000HAX
Parameters	Symbols				
Nominal measuring current	I_{PN}	500A	1000A	1500A	2000A
Linear range	I_P	0~±1500A	0~±3000A	0~±4500A	0~±5500A
Nominal output voltage	V_{SN}	±4V±0.04V(R_L=10KΩ)			
Zero offset voltage	Vo	≤±0.03V(I_{PN}=0)			
Temperature drift of bridge offset	V_{OT}	≤±1mV/℃			
Linear error	ξ_L	±1%			
Response time	Tr	≤5μS			
Supply voltage	Vc	±15V±5%			
Isolation voltage	V_d	5.0KV/50 or 60Hz/1min			
Power dissipation current	I_C	±20mA			
Frequency bandwidth	f	DC~ 50KHz (-3dB)			
Operating temperature	Ta	-25℃~+85℃			
Storage temperature	Ts	-40℃~+90℃			

△Dimensions：(mm)





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.

◆The arrow indicates positive current direction.

Connection and adjustment：

◆1：+Vc（+15V）

◆2：-Vc（-15V）

◆3：Output

◆4：0V

◆OFS：Offset

◆GIN：Gain