HNC-25SY/C Series Hall Current Sensor

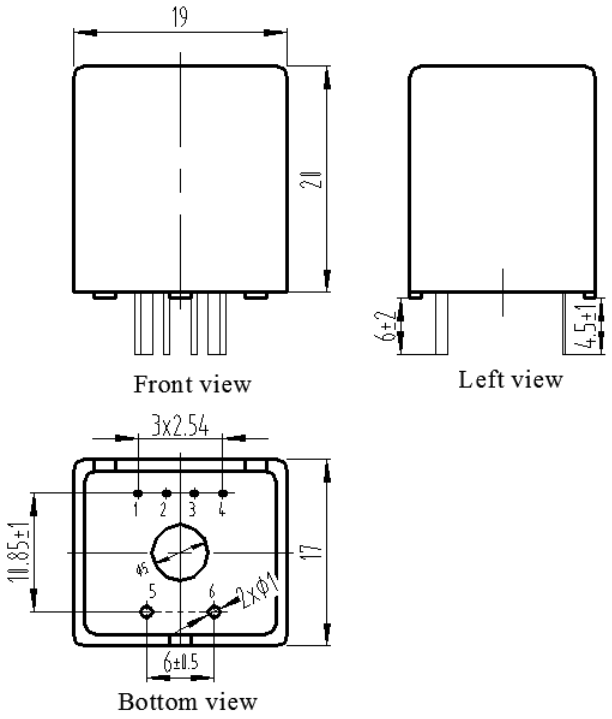
Introduction

HNC-25SY/C 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		HNC-05SY/C	HNC-10SY/C	HNC-20SY/C	HNC-25SY/C
Parameters	Symbols				
Nominal measuring current	I_{PN}	5A	10A	20A	25A
Linear range	I_P	0~±7.5A	0~±15A	0~±30A	0~±37.5A
Turns ratio	K_N	8:1000	4:1000	2:1000	2:1250
Coil resistance	Ri	53Ω			
Nominal output current	I_{SN}	40 mA±1%			
Zero offset current	Io	≤±0. 2 mA			
Temperature drift of bridge offset	I_{OT}	±0. 5 mA			
Linear error	ξ_L	±0.25%			
Response time	Tr	≤1 μ S			
Supply voltage	Vc	±15V±5%			
Isolation voltage	V_d	2.0KV/50 or 60Hz/1min			
Recommended load resistance	RM	50 Ω ~150 Ω			
Power dissipation current	I_C	(15+ I_S) mA			
Frequency bandwidth	f	DC~100KHz(-3dB)			
Operating temperature	Ta	-25℃~+85℃			
Storage temperature	Ts	-40℃~+90℃			

△Dimension：(mm)



Features：

◆ Use close-loop current transducer based on Hall effect

◆Pass UL certification（S.N.：E466588）

◆High precision

◆Low temperature drift

◆Wide frequency bandwidth

◆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

◆Battery 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 current signal can be obtained from output end by sampling.

Pin arrangement：

◆1：-Vc（-15V）

◆2： 0V

◆3：+Vc（+15V）

◆4：Output

◆5：primary In

◆6：primary Out