

HNC-25SYB Series Hall Current Sensor

Introduction

HNC-25SYB 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		HNC-03SYB	HNC-05SYB	HNC-10SYB	HNC-20SYB	HNC-25SYB
Parameters	Symbols					
Nominal measuring current	I_{PN}	3A	5A	10A	20A	25A
Linear range	I_P	0~±6A	0~±10A	0~±20A	0~±40A	0~±50A
Turns ratio	K_N	13:1000	8:1000	4:1000	2:1000	2:1000
Nominal output voltage	V_{SN}	±4V±0.04V($R_L=10K\Omega$)				
Zero offset voltage	V_O	≤±30 mV				
Temperature drift of bridge offset	V_{OT}	≤±1 mV/°C				
Linear error	ξ_L	±0.25%				
Response time	T_r	≤1 μS				
Supply voltage	V_c	±15V±5%				
Isolation voltage	V_d	2.0KV/50 or 60Hz/1min				
Power dissipation current	I_C	(15+N*I _p /1000) mA				
Frequency bandwidth	f	DC~100KHz(-3dB)				
Operating temperature	Ta	-25°C~+85°C				
Storage temperature	Ts	-40°C~+90°C				



Features:

- ◆ Use close-loop current transducer based on Hall effect
- ◆ Pass UL certification (S.N.: E466588)
- ◆ Output voltage signal
- ◆ Low temperature drift
- ◆ Wide frequency bandwidth
- ◆ High immunity against external disturbance

Applications:

- ◆ AC variable-frequency speed control system and servo motor
- ◆ Uninterruptible power supplies (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 voltage signal can be obtained from output end by sampling.

Pin arrangement:

- ◆ 1: Output
- ◆ 2: +Vc (+15V)
- ◆ 3: -Vc (-15V)
- ◆ 4: 0V
- ◆ 5: primary Out
- ◆ 6: primary In

△Dimension: (mm)

