

# HNC-25SY Series Hall Current Sensor

## Introduction

HNC-25SY 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-03SY	HNC-05SY	HNC-10SY	HNC-20SY	HNC-25SY
Parameters	Symbols					
Nominal measuring current	$I_{PN}$	3A	5A	10A	20A	25A
Linear range	$I_p$	0~±4.5A	0~±7.5A	0~±15A	0~±30A	0~±37.5A
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	$\xi_L$	±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 <sub>p</sub> /1000) mA				
Frequency bandwidth	$f$	DC~100KHz(-3dB)				
Operating temperature	$T_a$	-25°C~+85°C				
Storage temperature	$T_s$	-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: -Vc (-15V)
- ◆ 2: 0V
- ◆ 3: +Vc (+15V)
- ◆ 4: Output
- ◆ 5: primary In
- ◆ 6: primary Out

## △Dimension: (mm)

