# **HNC-25SY Series Hall Current Sensor**

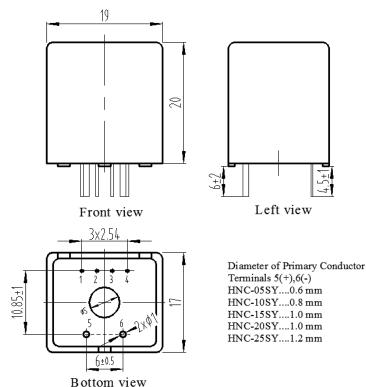
# Introduction

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)

Туре						
Parameters	Symbols		HNC-05SY	HNC-10SY	HNC-20SY	HNC-25SY
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	$K_{\rm N}$	13:1000	8:1000	4:1000	2:1000	2:1000
Nominal output voltage	$V_{SN}$	$\pm 4V \pm 0.04 V (R_L = 10 K \Omega)$				
Zero offset voltage	Vo	≤±30 mV				
Temperature drift of bridge offset	V <sub>OT</sub>	≤±1 mV/℃				
Linear error	ξL	±0.25%				
Response time	Tr	≤1 µ S				
Supply voltage	Vc	±15V±5%				
Isolation voltage	$V_d$	2.0KV/50 or 60Hz/1min				
Power dissipation current	I <sub>C</sub>	(15+N*Ip/1000) mA				
Frequency bandwidth	f	DC~100KH <sub>Z</sub> (-3dB)				
Operating temperature	Та	-25 °C~+85 °C				
Storage temperature	Ts	-40°C∼+90°C				

# $\triangle$ **Dimension:** (mm)





#### 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 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 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

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