# **HNC-500US Series Hall Current Sensor**

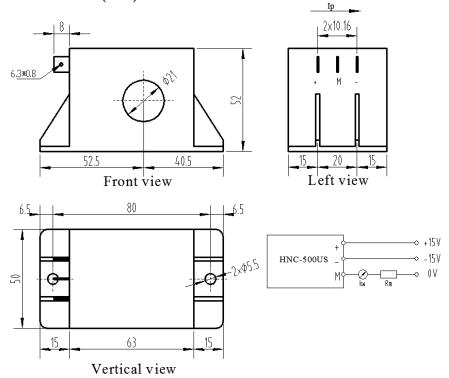
### Introduction

HNC-500US 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.

# $\triangle$ Electrical Parameters (Ta=25°C)

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Туре		HNC-100US	IDIC 2001IC	IINIC 400IIC	IDIC FOOLIS
Parameters	Symbols		HNC-200US	HNC-400US	HNC-500US
Nominal measuring current	$I_{PN}$	100A	200A	400A	500A
Linear range	$I_P$	0~±200A	0~±500A	0~±600A	0~±600A
Turns ratio	$K_N$	1:2000	1:2000	1:2000	1:2500
Coil resistance	Ri	30 Ω	30 Ω	30 Ω	40 Ω
Nominal output current	$I_{SN}$	±50mA±0.25mA	±100mA±0.5mA	±200mA±1mA	±200mA±1mA
Zero offset current	Io	≤±0.5mA			
Linear error	$\xi_{ m L}$	±0.5%			
Supply voltage	Vc	±15V ±5%			
Response time	Tr	≤1 µ S			
Temperature drift of bridge offset	I <sub>OT</sub>	≤±0.5mA			
Recommended load resistance	RM	<50 Ω			
Isolation voltage	$V_d$	6.0KV/50 or 60H <sub>Z</sub> /1min			
Frequency bandwidth	f	DC~ 100KH <sub>Z</sub> (-3dB)			
Operating temperature	Та	-25℃~+85℃			
Storage temperature	Ts	-40°C∼+90°C			

# $\triangle$ Dimension: (mm)





#### Features:

- ◆Use close-loop current transducer based on Hall effect
- ◆ Adopt UL94V-0-recognized insulated casing
- ◆Excellent linearity
- ◆Optimized response time
- ◆ Punching way has no insertion loss
- ◆ High immunity against external disturbance
- ◆ Wide frequency bandwidth

### **Applications:**

- ◆ AC variable-frequency speed control system and servo motor
- ◆Uninterruptible power suppers (UPS)
- ◆Battery supply
- ◆ Power supply for electric welding machine
- ◆Communication power supply
- ◆Electric system
- ◆Railway system

# **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.
- ◆ The arrow indicates positive current direction

## **Connection and adjustment:**

- **♦**-: -Vc (-15V)
- ◆M: Output
- **♦**+: +Vc (+15V)