

HNC-1500LF Series Hall Current Sensor

Introduction

HNC-1500LF 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-600LF	HNC-800LF	HNC-1000LF	HNC-1500LF
Parameters	Symbols				
Nominal measuring current	I_{PN}	600A	800A	1000A	1500A
Linear range	I_P	0~±1000A	0~±2000A	0~±2000A	0~±2000A
Turns ratio	K_N	1:5000	1:5000	1:5000	1:5000
Coil resistance	R_i	45Ω	45Ω	45Ω	45Ω
Nominal output current	I_{SN}	±120mA±0.6mA	±160mA±0.8mA	±200mA±1mA	±300mA±1.5mA
Zero offset current	I_o	≤±1.0mA			
Linear error	ξ_L	±0.2%			
Supply voltage	V_c	±15V ±5%~±24V ±5%			
Response time	T_r	≤1 μ S			
Power dissipation current	I_c	(30+Is) mA			
Temperature drift of bridge offset	I_{OT}	≤±0.8mA			
Recommended load resistance	R_M	5~50Ω	5~40Ω	5~30Ω	5~20Ω
Isolation voltage	V_d	3.0KV/50 or 60Hz/1min			
Frequency bandwidth	f	DC~ 100KHZ (-1dB)			
Operating temperature	T_a	-25°C~+85°C			
Storage temperature	T_s	-40°C~+90°C			

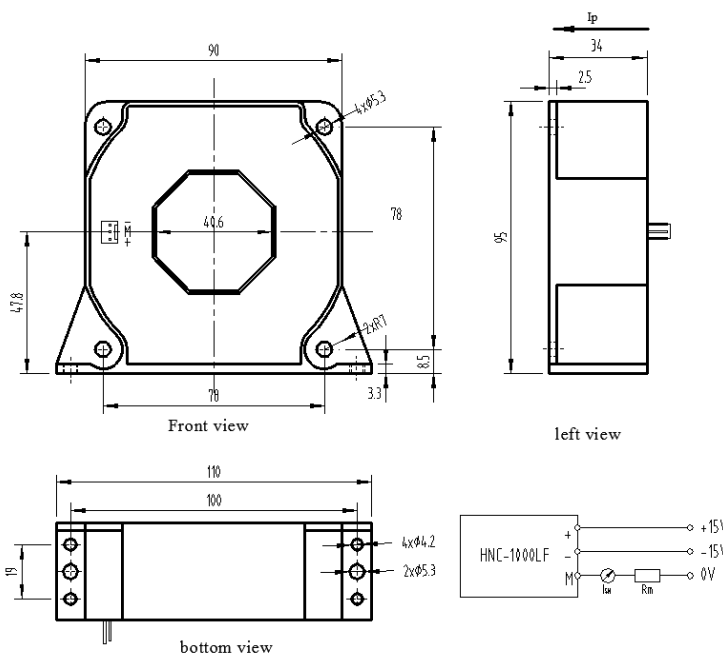
Features:

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

Applications:

- ◆ AC variable-frequency speed control system and servo motor
- ◆ Uninterruptible power supplies (UPS)
- ◆ Battery supply
- ◆ Power supply for electric welding machine
- ◆ Switched-mode power supply

△Dimension: (mm)



Instructions for Use:

- ◆ Connect the wire of transducer in correct way as required.
- ◆ Inputting measured current from input end 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)