HNC-1000LTD Series Hall Current Sensor

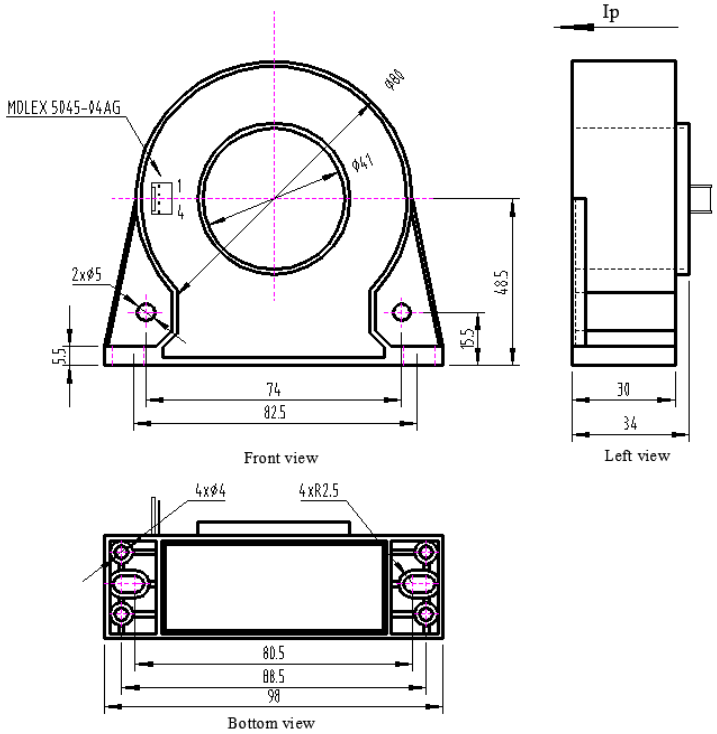
Introduction

HNC-1000LTD 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℃)

Type		HNC-300LTD	HNC-400LTD	HNC-500LTD	HNC-800LTD	HNC-1000LTD
Parameters	Symbols					
Nominal measuring current	I_{PN}	300A	400A	500A	800A	1000A
Linear range	I_P	0~±600A	0~±600A	0~±750A	0~±1200A	0~±1200A
Turns ratio	K_N	1:2000	1:3000	1:4000	1:4000	1:4000
Coil resistance	R_i	25Ω	33Ω	45Ω	45Ω	45Ω
Nominal output current	I_{SN}	150mA±0.5%	133mA±0.5%	125mA±0.5%	200mA±0.5%	250mA±0.5%
Zero offset current	Io	≤±0.4mA				
Linear error	ξ_L	±0.1%				
Supply voltage	Vc	±15V ±5%				
Response time	Tr	≤1 μ S				
Temperature drift of bridge offset	I_{OT}	±0.2mA Type ±0.6mA Max				
Power dissipation current	I_C	(30+Is) mA				
Recommended load resistance	RM	10~55 Ω	10~65 Ω	5~60 Ω	0~20 Ω	0~12 Ω
Isolation voltage	V_d	6.0KV/50 or 60HZ/1min				
Frequency bandwidth	f	DC~ 100KHZ (-3dB)				
Operating temperature	Ta	-25℃~+85℃				
Storage temperature	Ts	-40℃~+90℃				

△Dimension：(mm)



Features：

◆Use close-loop current transducer based on Hall effect

◆ Adopt UL94V-0-recognized insulated casing

◆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 input end of transducer, the in-phase current signal can be obtained from output end by sampling.

Connection and adjustment：

◆1：+Vc（+15V）

◆2：-Vc（-15V）

◆3：Output

◆4：NC