HNC-2000LFA Series Hall Current Sensor

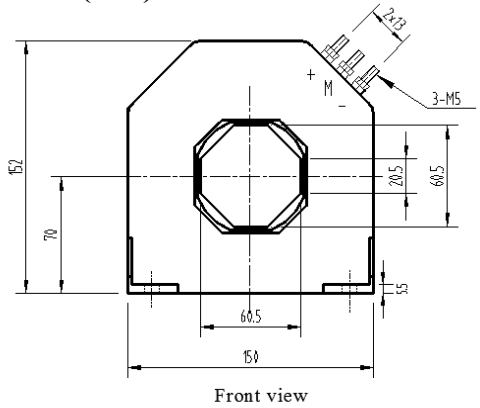
Introduction

HNC-2000LFA 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.

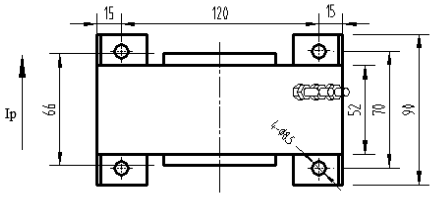
△Electrical Parameters (Ta＝25℃)

Type		HNC-2000LFA
Parameters	Symbols	
Nominal measuring current	I_{PN}	2000A
Linear range	I_P	0~±3000A(@Vc±24V)
Turns ratio	K_N	1:5000
Coil resistance	R_i	25Ω
Nominal output current	I_{SN}	±400mA±1.2mA
Zero offset current	Io	≤±0.5mA
Linear error	ξ_L	≤±0.1%
Supply voltage	Vc	±15V~±24V ±5%
Response time	Tr	≤1μS
Power dissipation current	I_C	(30+ I_S) mA
Temperature drift of bridge offset	I_{OT}	≤±0.6mA
Recommended load resistance	RM	Vc±15V 0~8Ω at 2000A Max 0~5Ω at 2200A Max
		Vc±24V 5~29Ω at 2000A Max 5~11Ω at 2200A Max
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℃

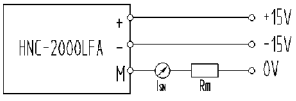
△Dimension：(mm)



Front view



Vertical view



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 suppers (UPS)

◆Battery supply

◆Communication power 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.

◆The arrow indicates positive current direction.

Connection and adjustment：

◆－：-Vc

◆M：Output

◆+：+Vc