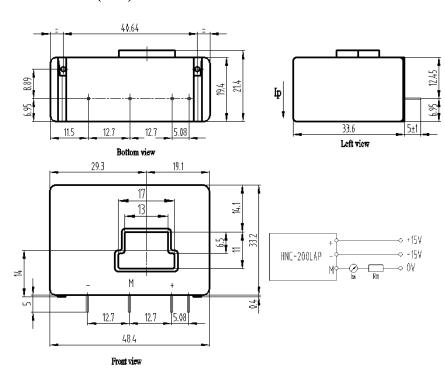# HNC-200LAP Series Hall Current Sensor

Introduction

HNC-200LAP 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 Parameters	Symbols	HNC-50LAP	HNC-100LAP	HNC-150LAP	HNC-200LAP
Nominal measuring current	I_{PN}	50A	100A	150A	200A
Linear range	I_P	0~±75A	0~±150A	0~±220A	0~±300A
Turns ratio	K_N	1:1000	1:2000	1:1500	1:2000
Coil resistance	R_i	35Ω	68Ω	47Ω	68Ω
Nominal output current	I_{SN}	50mA±0.8%	50mA±0.8%	100mA±0.8%	100mA±0.8%
Zero offset current	I_o	±0.2 mA		±0.15 mA	
Linear error	ξ_L	±0.15%			
Supply voltage	V_c	±15V ±5%			
Response time	T_r	≤1 μS			
Power dissipation current	I_C	(18+ I_S) mA			
Temperature drift of bridge offset	I_{OT}	±0.5mA		±0.3mA	
Recommended load resistance	RM	35~200Ω	25~160Ω	5~65Ω	0~40Ω
Isolation voltage	V_d	2.5KV/50 or 60H_Z/1min			
Frequency bandwidth	f	DC~ 100KH$_Z$ (-3dB)			
Operating temperature	Ta	-25℃~+85℃			
Storage temperature	Ts	-40℃~+90℃			

Features：

◆ Use close-loop current transducer based on Hall effect

◆ Adopt UL94V-0-recognized insulated casing

◆High precision

◆Excellent linearity

◆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)

◆Battery supply

◆ Power supply for electric welding machine

◆Switched-mode power supply

△Dimension：(mm)

Bottom view

Left view

HNC-200LAP

Front view

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）

◆-：-Vc（-15V）

◆M：Output