HNC-200B/C Series Hall Current Sensor

Introduction

HNC-200B/C 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-25B/C	HNC-50B/C	HNC-100B/C	HNC-200B/C
Nominal measuring current	I_{PN}	25A	50A	100A	200A
Linear range	I_P	0~±38A	0~±75A	0~±150A	0~±250A
Turns ratio	K_N	1:1000	1:1000	1:2000	1:2000
Coil resistance	R_i	35Ω	35Ω	86Ω	86Ω
Nominal output current	I_{SN}	25 mA	50mA	50mA	100mA
Recommended load resistance	R_M	80~430Ω	45~200Ω	45~130Ω	0~15Ω
Zero offset current	I_o	±0.1 mA Type ±0.3mA Max			
Linear error	ξ_L	＜0.15%			
Supply voltage	V_c	±15V ±5%			
Response time	T_r	≤1μS			
Temperature drift of bridge offset	I_{OT}	±0.15mA Type ±0.5mA Max			
Power dissipation current	I_C	(15+Is) mA			
Isolation voltage	V_d	2.5KV/50 or 60H$_Z$/1min			
Frequency bandwidth	f	DC~ 100KH$_Z$ (-3dB)			
Operating temperature	T_a	-25℃~+85℃			
Storage temperature	T_s	-40℃~+90℃			

### 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

△Dimension：（mm）

Front view

Left view

Bottom view
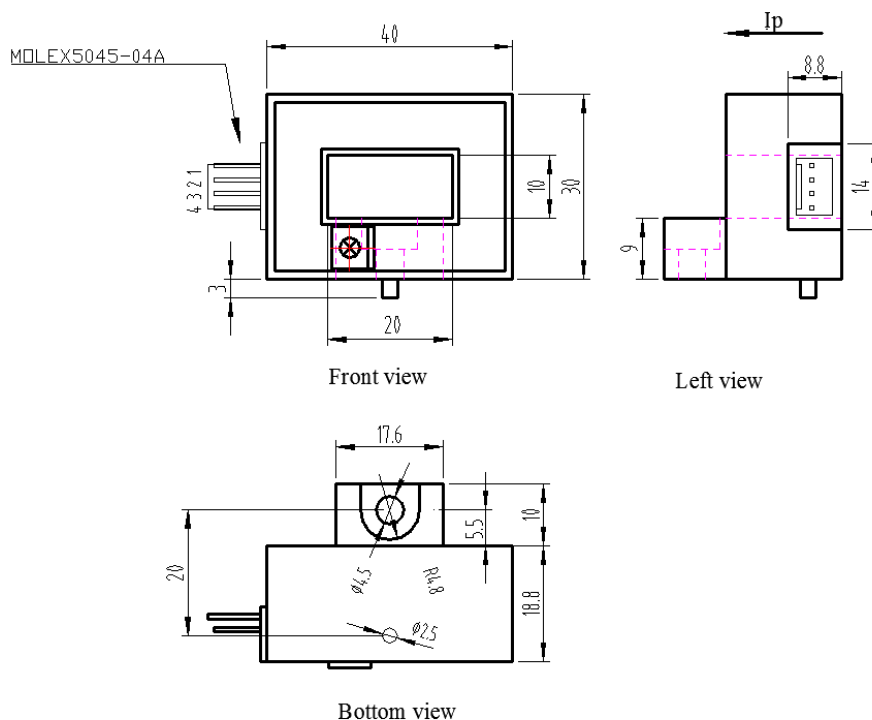
Instructions for Use：

◆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：

◆1：+Vc（+15V）
◆2：-Vc（-15V）
◆3：Output
◆4：NC