

NACL200P1-S6 电流传感器 Current Transducer

版本: A

产品说明

Applications

NACL200P1-S6系列高精度闭环型霍尔电流传感器的初、次级之间是绝缘的, 具有超强抗干扰能力; 用于测量直流、交流和脉动电流。

NACL200P1-S6 series high-precision current sensor is a closed loop device based on the measuring principle of the hall effect, with a galvanic isolation between primary and secondary circuit. It has strong anti-jamming ability and it provides accurate electronic measurement of DC, AC or pulsed currents.



产品优点 Advantages	产品应用领域 Applications	参照标准 Standards
高精度 Excellent accuracy	变频调速系统 Variable speed drives	UL 94-V0
温度系数小 Low temperature of offset	通信电源 Battery supplied applications	EN50178:1998
体积小 Small size	不间断电源 UPS Uninterruptible Power Supplies	

主要电气参数 Main electrical data (Ta=+25℃)

额定测量电流 I_{PN}	Primary nominal current rms	200A
测量范围 I_p (@ ±24V)	Primary current measuring range	0 ~ ±300A
电源电压 V_c	Supply voltage	±12V ~ ±15V × (1±5%)
匝比 K	Turns ratio	1:2000
额定测量输出 I_{SN} (@ $I_p = \pm I_{PN}$)	Secondary nominal current rms	100mA
负载电阻 R_L (@ ±12V, ±200A)	Load resister	25℃
(@ ±15V, ±200A)		0Ω ~ 26Ω
(@ ±15V, ±200A)		0Ω ~ 56Ω
(@ ±15V, ±300A)		0Ω ~ 8Ω
二次侧电流消耗 I_c	Static Current consumption	≤16mA + 输出测量电流 I_{SN}

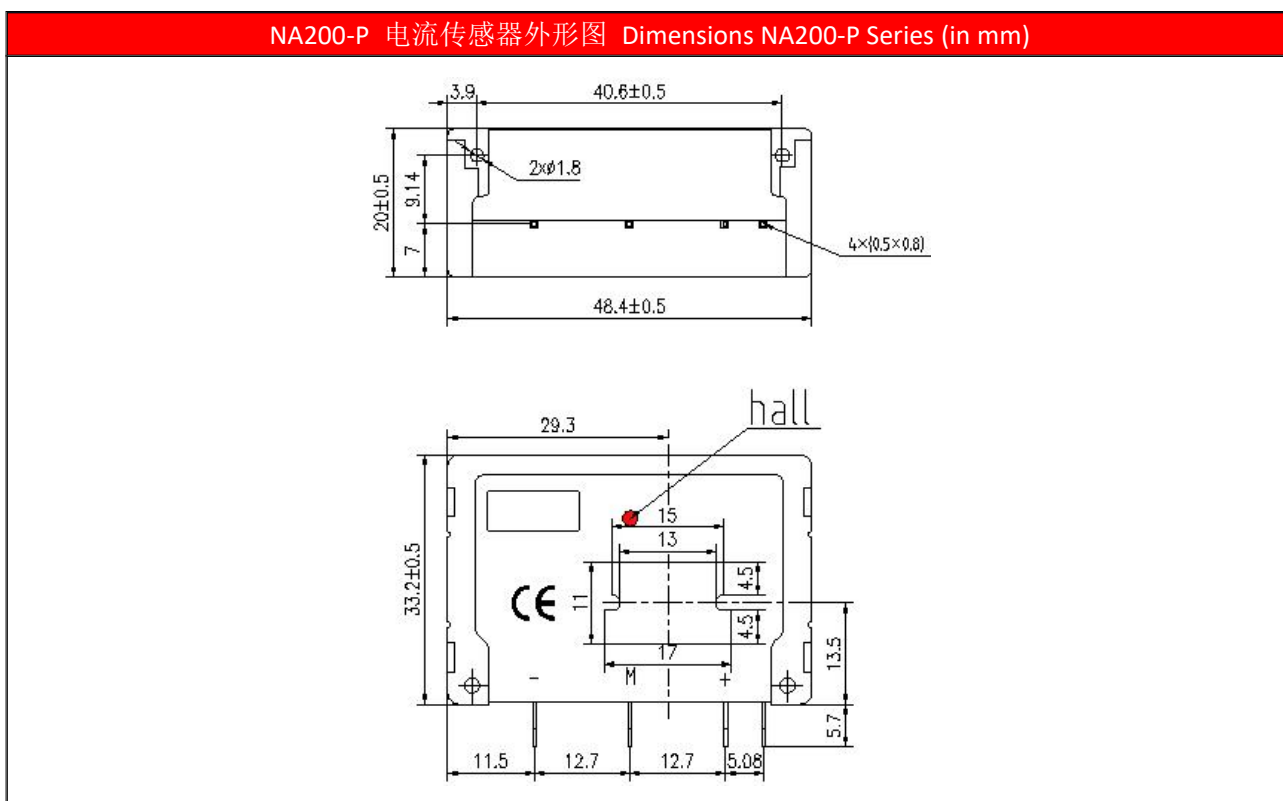
精度 - 动态参数 Accuracy - Dynamic performance data

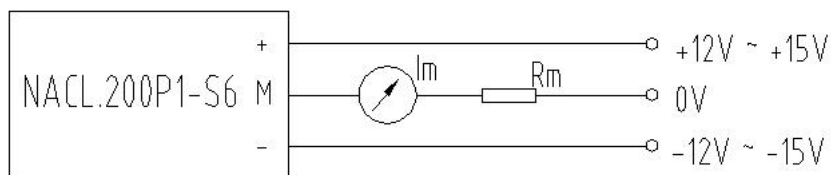
基本误差 δ_i (@Ta=+25℃, $I_p=I_{PN}$)	Overall Accuracy	≤±0.6%
线性度误差 δ_L (@Ta=+25℃, $I_p=I_{PN}$)	Linearity error	≤0.15%
零点输出误差 δ_z (Ta=+25℃)	Electrical offset current	≤±0.25mA

零点温度漂移 δ_{zt} ($T_a = -25^{\circ}\text{C} \sim +85^{\circ}\text{C}$)	Thermal drift	$\leq \pm 0.25\text{mA}$ (@ $0^{\circ}\text{C} \sim +70^{\circ}\text{C}$) $\leq \pm 0.25\text{mA}$ (@ $-25^{\circ}\text{C} \sim +85^{\circ}\text{C}$)
响应时间 t_r (@ $di/dt = 100\text{A}/\mu\text{s}$, $90\% I_{PN}$)	Response time	$\leq 1 \mu\text{s}$
带宽 BW (-1dB)	Frequency bandwidth (-1dB)	DC ~ 100 kHz

一般数据 General data		
工作温度 T_a	Ambient operating temperature	$-25^{\circ}\text{C} \sim +85^{\circ}\text{C}$
储存温度 T_s	Ambient storage temperature	$-40^{\circ}\text{C} \sim +90^{\circ}\text{C}$
重量	Mass	$\leq 50\text{g}$

绝缘参数 Insulation data		
绝缘电压 U_d (@50Hz, 1min)	Rms voltage for AC insulation test	3KV
绝缘电阻 R_{is} (@2500V)	Isolation resistance	$\geq 500 \text{ M}\Omega$

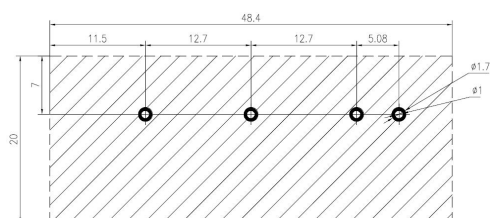




机械特征 Mechanical characteristics

备注 Remark

1. 传感器安装方式：电路板焊接安装
Installation method: circuit board welding installation
2. 次边连接端子尺寸：0.63 mm×0.56mm
connector size: 0.63 mm×0.56mm
3. 原边安装方孔：13 mm×11mm
The original installation square hole: 13 mm×11mm
4. 推荐封装（单位 mm）：
Recommend encapsulation (mm):



产品的箭头方向为 I_p 的方向。
It will be in a forward direction when the I_p flows according to the direction of the arrowhead.