NA50-P/SP1　(NACL.50P-S6/SP1) Current Transducer

版本：A

产 品 说 明　Applications

NACL.50P-S6/SP1 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。

NACL.50P-S6/SP1 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	EN 60947-1:2004
体积小 Small size	不间断电源 UPS Uninterruptible Power Supplies	EN50178:1998

主要电气参数 Main electrical data (At Ta=+25℃)		
额定测量电流 I_{PN}	Primary nominal current rms	50A
测量范围 I_P (@±24V)	Primary current measuring range	0～±100A
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} ($@I_p=±I_{pn}$)	Secondary nominal current rms	25mA
负载电阻R_L	Load resister	25℃
(@±12V, ±50A)		0Ω ～210Ω
(@±12V, ±100A)		0Ω ～30Ω
(@±15V, ±50A)		300Ω ～330Ω
(@±15V, ±100A)		30Ω ～90Ω
二次侧电流消耗 I_C	Static Current consumption	≤10mA +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	≤±0.65%
线性度误差δ_L ($@Ta=+25℃, I_p=I_{PN}$)	Linearity error	≤0.2%
零点输出误差δ_Z(Ta=+25℃)	Electrical offset voltage	≤±0.1mA
零点温度漂移δ_{Zt} (Ta=-25℃～+85℃)	Temperature coefficient of δ_{Zt}	≤±0.25mA (@ 0℃~+70℃)
		≤±0.3mA (@-25℃~+85℃)

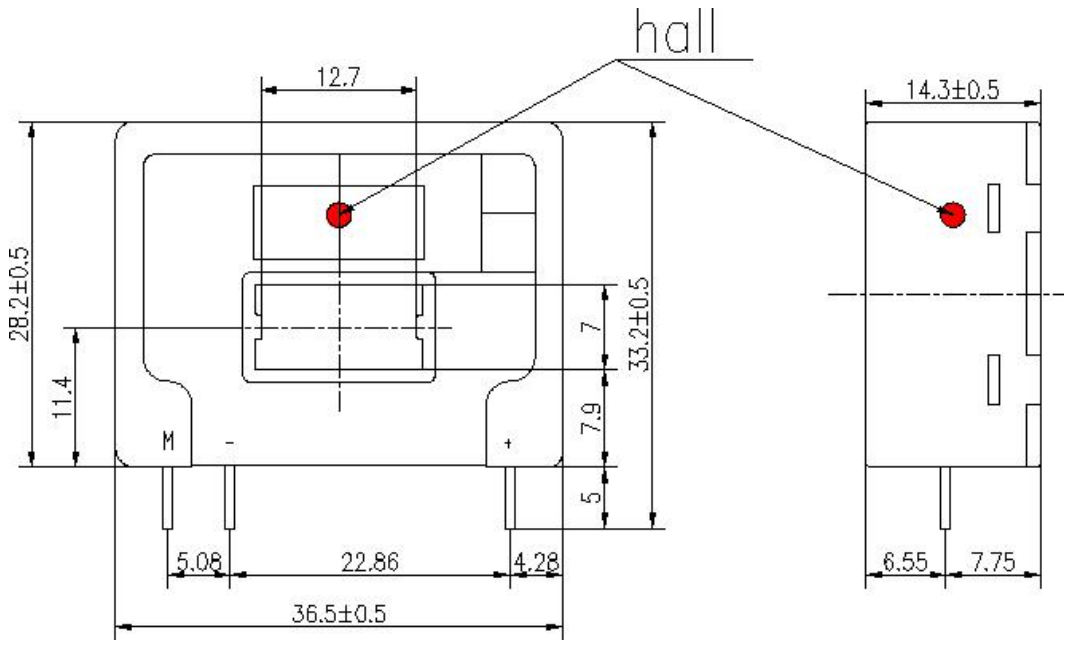
We reserve the right to carry out modifications on its transducers; in order to improve them,without prior notice.

响应时间 t_r (@di/dt=100A/us ,90% I_{PN})	Step response time	≤1 us
带宽 BW（-3dB）	Frequency bandwidth（-1dB）	DC～100 kHz

一般数据 General data		
工作温度 Ta	Ambient operating temperature	-25℃~+85℃
储存温度 Ts	Ambient storage temperature	-40℃~+90℃
重量	Mass	≤20g

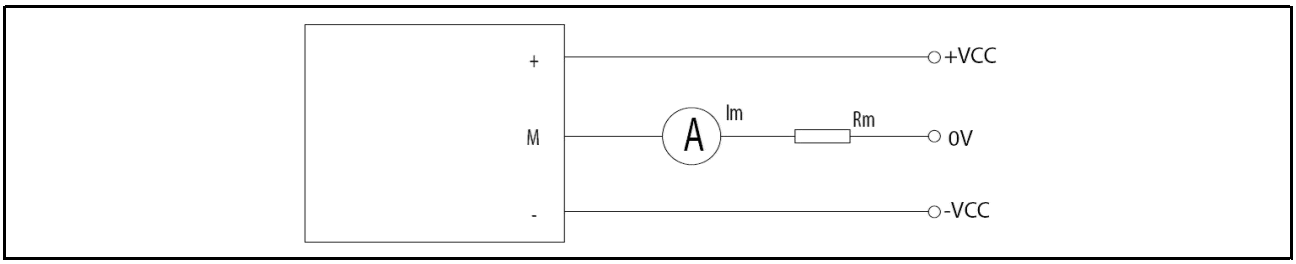
绝缘参数 Insulation data		
绝缘电压 U_d (@50Hz,1min)	Rms voltage for AC insulation test	2.5KV
绝缘电阻R_{IS} (@2500V)	Isolation resistance	≥500 MΩ

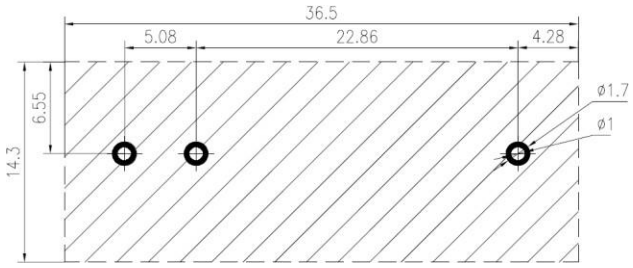
NA50-P/SP1(R)NACL.50P-S6/SP1 Dimensions (in mm)



电气连接 Connection

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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： 7×12.7mm The original installation square hole: 7×12.7mm 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.

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