

NACL.125P-S6/SP3 电流传感器 Current Transducer

版本: A

产品说明

Applications

该磁平衡式霍尔电流传感器适用于对交流、直流和脉动电流的隔离精确测量，测量时一次侧与二次侧之间完全绝缘。

For the electronic measurement of currents: AC, DC IMPL., etc., with galvanic isolation between the primary (high power) and the secondary (electronic) circuits.



产品优点 Advantages	产品应用 Applications	参照标准 Standards
高精度 Excellent accuracy	交流变频器 AC variable speed drives	GB/T 25119-2010
线性度好 Very good linearity	私服电机驱动 Servo motor drives	EN50178
低温漂 Low temperature drift	电池供电 Battery supplied applications	EN50155
宽频带 Wide frequency bandwidth	变流器/逆变器 converter /inverter	
快速响应 Optimized response time		

主要电气参数 Main electrical data		
额定测量电流 I_{PN} (A)	Primary nominal current rms	125
测量范围 I_p (A)	Primary current measuring range	0~±200
匝比	Conversion ratio	1:1000
电源电压 V_C (V)	Supply voltage	DC±(12~15)×(1±5%)V
额定测量输出 I_{SN} (mA)	Secondary nominal current rms	125mA
测量电阻 R_M (Ω)	Measuring resistance	
	@ ±12V, ±125A: 22Ω ~56Ω	
	@ ±12V, ±200A: 18Ω ~26Ω	
	@ ±15V, ±125A: 47Ω ~80Ω	
	@ ±15V, ±200A: 33Ω ~43Ω	
二次侧电流消耗 I_c (@±15V)	Current consumption	≤12mA+ Secondary output current I_{SN}
隔离耐压	Isolation test: Between the primary circuit to the secondary circuit	3kVrms/50Hz/1min

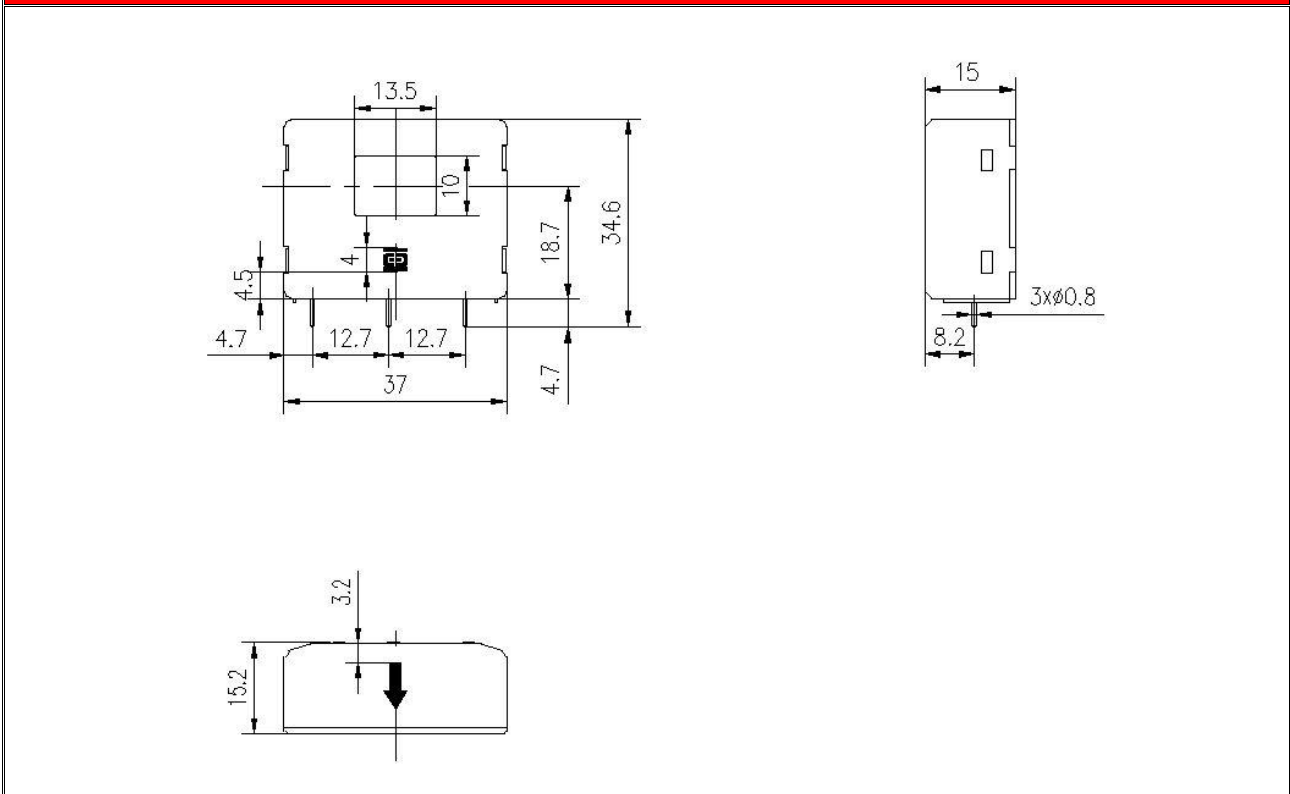
精度 - 动态参数 Accuracy - Dynamic performance data		
基本误差 δ_i (@ I_{PN} , $T_A=25^\circ\text{C}$)	Overall Accuracy	≤±0.5%
线性度误差 δ_L (@ I_{PN} , $T_A=25^\circ\text{C}$)	Linearity error	<0.1%
零点输出电流 I_O	Offset current	≤±0.2mA

(@I _p =0, T _A =25°C)		
零点温漂 I _{OT}	Thermal drift	≤ ±0.6mA (@-40°C~+85°C)
响应时间 t _r	Response time to 90% of I _{PN} step	≤ 1us
di/dt 精确度	di/dt Accurately followed	> 100A/us
频率带宽 BW	Frequency bandwidth(-1dB)	DC..100kHz

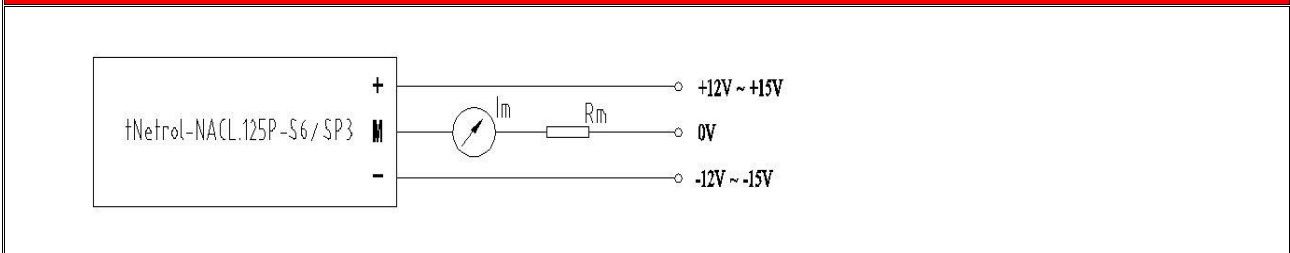
一般数据 General data

工作温度 T _a	Ambient operating temperature	-40°C~+85°C
储存温度 T _s	Ambient storage temperature	-40°C~+90°C
重量 m	Mass	20g

外形图 Dimensions (in mm)




电气连接 Connection



机械特征 Mechanical characteristics

备注 Remark

<p>1. 原边通孔: $13.5 \times 10\text{mm}$ The original hole: $13.5 \times 10\text{mm}$</p> <p>2. 次边电气连接: $3 \times \varnothing 0.7$ Electrical connections: $3 \times \varnothing 0.7$</p>	<ol style="list-style-type: none">1. 当测量电流方向与传感器上标示的  方向一致时，传感器输出 I_{SN} 为正。When measuring the current direction of arrow mark on direction and sensor, the sensor output I_{SN} is positive.2. 产品二次侧连接线优选屏蔽线，屏蔽层接近产品端连接线可接机壳，负电源或电源 0V。Product secondary side connecting line optimization shielding wire, cable shielding layer close to the product end can connect chassis, negative power or power 0 v.3. 电量传感器安装螺钉孔的垂直度要求：要求在国家标准 8 级或以上(或 0.06 以下)。Power sensor mounting screw hole of the vertical degree requirements: requirements in the national standard grade 8 or above (or below 0.06).4. 电量传感器安装面平面度要求：Sensor mounting surface flatness requirements: (a).大平面安装平面度国家标准 11 级或以上（或平面起伏小于 0.25mm）； Planeness national standard installation grade 11 or above (or surface fluctuation is less than 0.25 mm); (b).安装面加有小圆凸台设计时平面度要求达国家标准 12 级或以上（或平面起伏小于 0.5mm）； When mounting surface with a small round convex platform design flatness requirement of national standard grade 12 or more (or less than 0.5 mm) in plane ups and downs;5. 未注公差 $\pm 0.2\text{mm}$； Did not note the tolerance $+ / - 0.2 \text{ mm}$;
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