

**产品说明**
**Applications**

**NACL100P-P6** 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。

**NACL100P-P6** 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°C)

额定测量电流 $I_{PN}$	Primary nominal current rms	100A
测量范围 $I_p$	Primary current measuring range	0~±150A
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	50mA
负载电阻 $R_L$	Load resister	25°C
(@ ±12V, ±100A)		0Ω~42Ω
(@ ±12V, ±120A)		0Ω~14Ω
(@ ±15V, ±100A)		20Ω~100Ω
(@ ±15V, ±150A)		20Ω~25Ω
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 $\delta_i$ (@Ta=+25°C, $I_p=I_{PN}$ )	Overall Accuracy	≤±0.7%
线性度误差 $\delta_L$ (@Ta=+25°C, $I_p=I_{PN}$ )	Linearity error	≤0.2%
零点输出误差 $\delta_z$ (Ta=+25°C)	Electrical offset voltage	≤±0.1mA
零点温度漂移 $\delta_{zt}$ (Ta=-40°C~+85°C)	Temperature coefficient of $\delta_{zt}$	≤±0.25mA (@-25°C~+85°C)
		≤±0.5mA(@-40°C~+25°C)
响应时间 $t_r$	Step response time	≤1 us

@di/dt=100A/us ,90% I <sub>PN</sub> )		
带宽 BW (-3dB)	Frequency bandwidth (-1dB)	DC~100 kHz

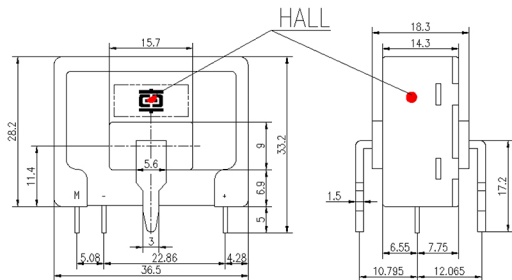
### 一般数据 General data

工作温度 T <sub>a</sub>	Ambient operating temperature	-40℃~+85℃
储存温度 T <sub>s</sub>	Ambient storage temperature	-45℃~+90℃
重量	Mass	≤25g

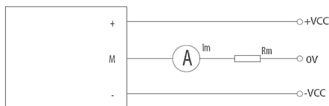
### 绝缘参数 Insulation data

绝缘电压 U <sub>d</sub> (@50Hz,1min)	Rms voltage for AC insulation test	2.5KV
绝缘电阻 R <sub>is</sub> (@2500V)	Isolation resistance	≥500 MΩ

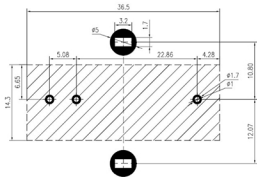
### NACL100P-P6 电流传感器外形图 Dimensions NACL100P-P6 Series (in mm)



### 电气连接 Connection



1. 传感器安装方式：电路板焊接安装
2. 次边连接端子尺寸：0.63 mm×0.56mm
3. 推荐封装（单位 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.