NACL.1000Q-S3/N 电流传感器 Current Transducer

版本：A

产 品 说 明 Applications

NACL.1000Q-S3/N 磁平衡霍尔电流传感器适用于对交流、直流、脉冲电流的隔离精确测量，测量时一次侧与二次侧间完全绝缘。

For the electronic measurement of currents: AC, DC， pulsed …， with galvanic separation between the primary circuits and the secondary 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 EN50155
线性度好 Very good linearity	变流器/逆变器 converter /inverter	
低温漂 Low temperature drift	UPS/SVG	
宽频带 Wide frequency bandwidth		
快速响应 Optimized response time		

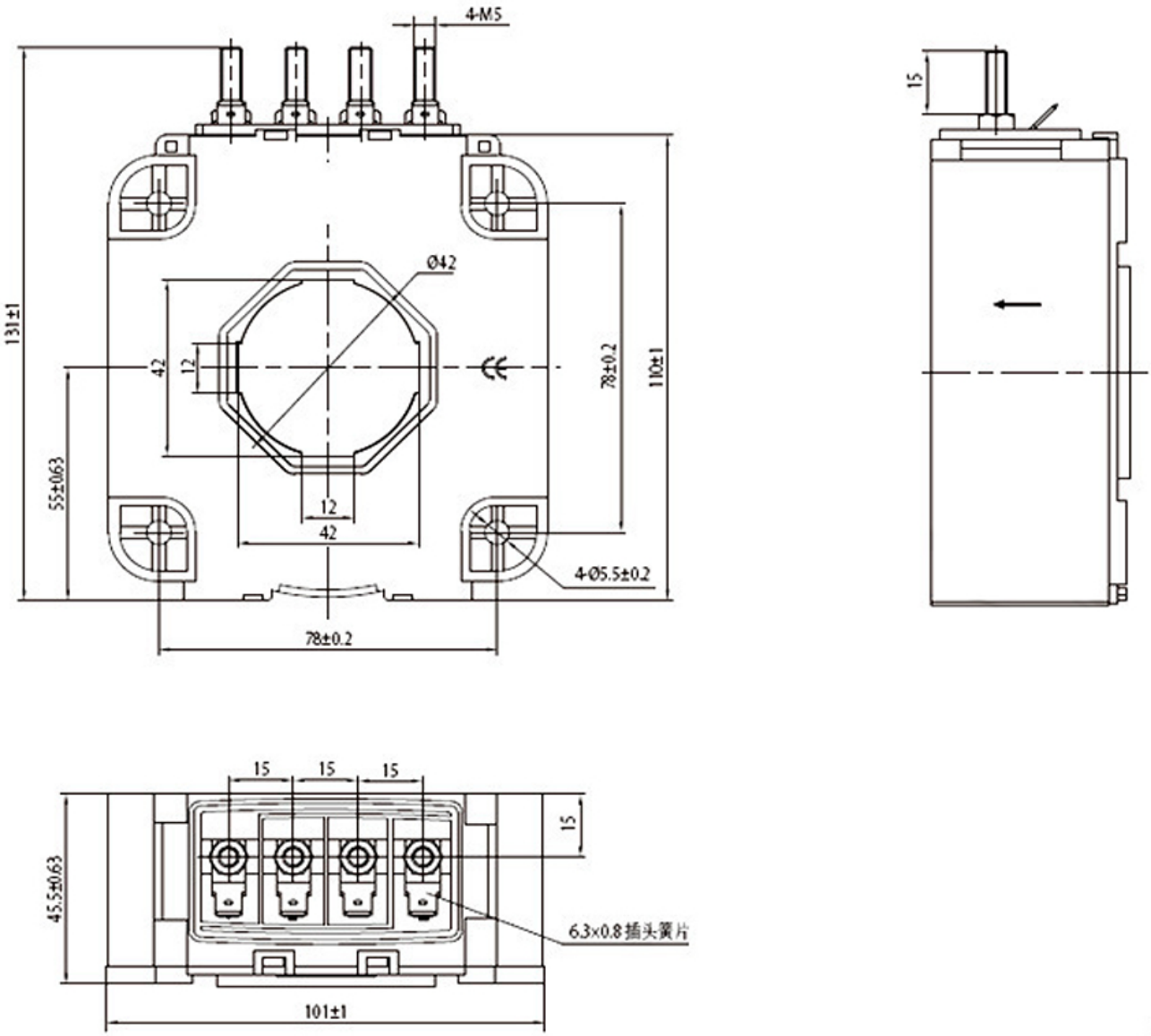
主要电气参数 Main electrical data (@±I_{PN}, T_A = 25℃)		
额定测量电流 I_{PN} (A)	Primary nominal current	1000
测量范围 I_{PM} (A)	Primary current measuring range	±2400
电源电压 V_C	Supply voltage	DC±(15~24)×(1±5%)V
电流消耗 I_C(@±24V)	Current consumption	≤±30mA+I_{SN}
额定测量输出 I_{SN}	Output current	200mA
匝比	Conversion ratio	1:5000
负载电阻 R_M	Load resistance	@±15V, ±1000A:0~15Ω @±15V, ±1200A:0~7Ω @±24V, ±1000A:0~50Ω @±24V, ±2000A:0~7Ω

精度 - 动态参数 Accuracy - Dynamic performance data		
基本误差 δ_i(@I_{PN}， T_A=25℃) (@I_{PN}, T_A=-40℃~+85℃)	Overall Accuracy	≤±0.4% ≤±1%
线性度 δ_L (@I_{PN}， T_A=25℃)	Linearity error	≤±0.1%
零点输出电流 I_O (@IP=0， TA = 25℃)	Offset current	≤±0.5mA
零点温度漂移I_{OT} (T_A=-40℃~+85℃)	Temperature coefficient of δ_{Zt}	≤±1.0mA
响应时间 T_R(90% of I_{PN}&di/dt > 50 A/μS)	Step response time to 90 % of I_{PN}	≤1μS

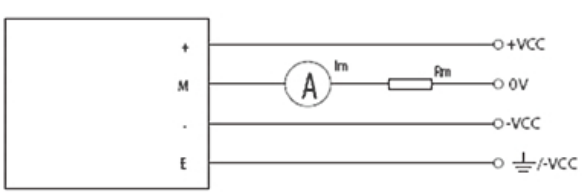
一般数据 General data		
工作温度 Ta	Ambient operating temperature	-40~+85℃
储存温度 Ts	Ambient storage temperature	-45~+90℃
重量 m	Mass	≤900g

绝缘耐压 Insulation coordination		
耐压	Voltage for AC insulation test, 50Hz,1min	13.4kV

NACL.1000Q-S3/N 电流传感器外形图 Dimensions NACL.1000Q-S3/N Series (in mm)



电气连接 Connection



机械特征 Mechanical characteristics	备注 Remark
1. 传感器安装孔径：4× ϕ 5.5mm Sensors installed aperture: 4 x ϕ 5.5 mm	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 ISN 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±0.5mm；Did not note the tolerance + / - 0.5 mm;
2. 推荐使用： M5 螺栓固定 It is recommended to use: M5 bolt	
3. 安装固定力矩： 3.5N • m The installation of fixed torque: 3.5 N · m	
4. 原边通孔： ϕ 42mm The original hole: ϕ 42mm	
5. 次边电气连接： M5 的螺栓（或 6.3×0.8 的插头簧片） Electrical connections: The plug of the M5 bolt (or 6.3 x 0.8 reed)	