NT2000C-S/SP5 电流传感器 Current Transducer

版本：C

产 品 说 明　Applications

NT2000C-S/SP5 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.

CE RoHS COMPLIANT

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 EN50178 EN50155
线性度好 Very good linearity	私服电机驱动 Servo motor drives	
低温漂 Low temperature drift	电池供电 Battery supplied applications	
宽频带 Wide frequency bandwidth	变流器/逆变器 converter /inverter	
快速响应 Optimized response time	UPS/SVG	

主要电气参数 Main electrical data (@±I_{PN}, T_A = 25℃)		
额定测量电流 I_{PN}	Primary nominal current	2000A
测量范围 I_{PM}	Primary current measuring range	±3800A
电源电压 V_C	Supply voltage	DC±(15~24)×(1±5%)V
电流消耗 I_C(@±24V)	Current consumption	≤±35mA+I_{SN}
额定测量输出 I_{SN}	Output current	500mA
匝比	Conversion ratio	1:4000
负载电阻 R_M	Load resistance	@±15V, ±2000A: 0Ω~8Ω @±15V, ±2400A: 0Ω~4.5Ω @±24V, ±2000A: 3Ω~25Ω @±24V, ±3800A: 3Ω~5.5Ω

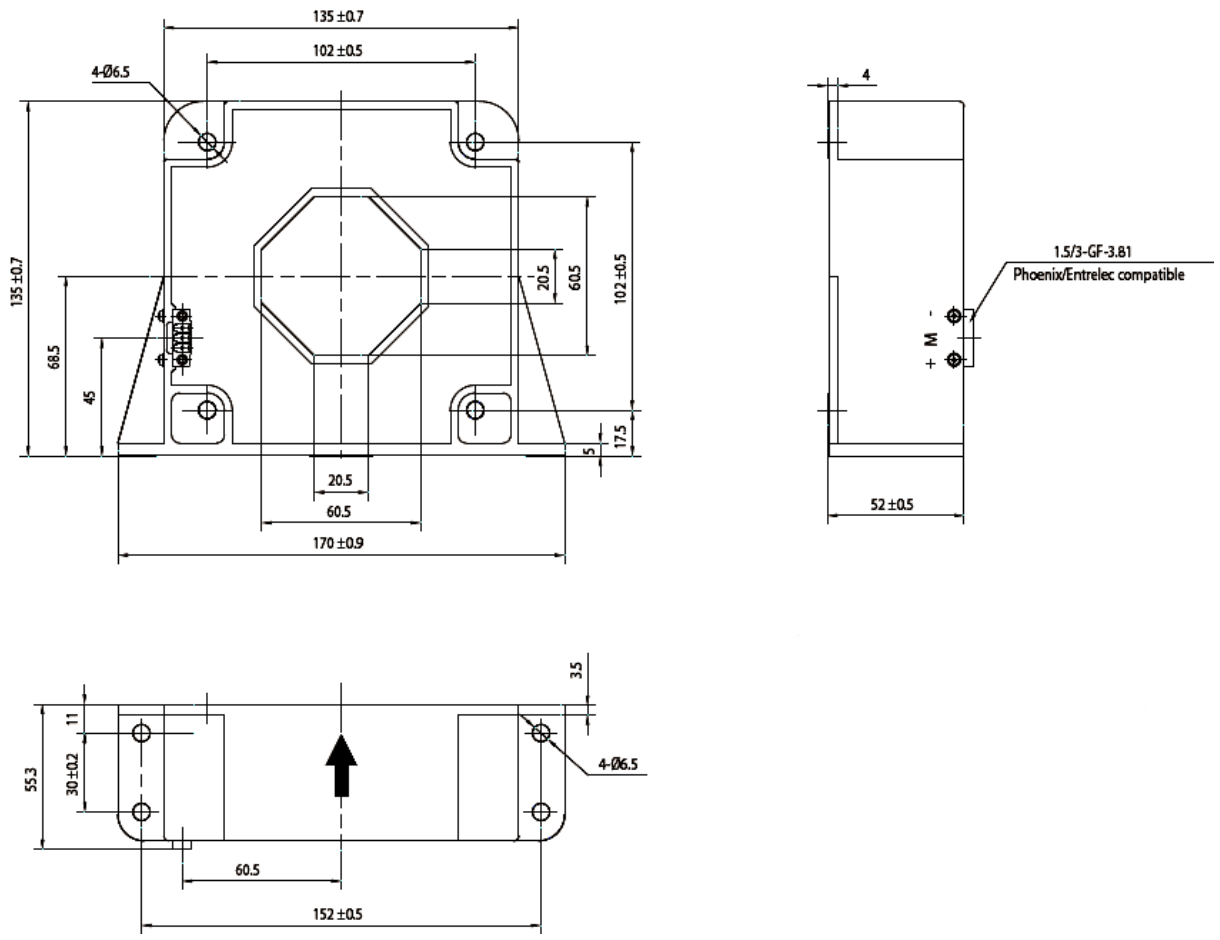
精度 - 动态参数 Accuracy - Dynamic performance data		
基本误差δ_i(@I_{PN}，T_A=25℃)	Overall Accuracy	≤±0.5%
线性度δ_L(@I_{PN}，T_A=25℃)	Linearity error	<0.1%
零点输出电流 I_O (@I_P=0，T_A = 25℃)	Offset current	≤±0.4mA
零点温度漂移I_{OT}	Thermal drift	≤±0.5mA(-25~+85℃)
响应时间 T_R(90% of I_{PN}&di/dt > 50 A/μS)	Step response time to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

一般数据 General data

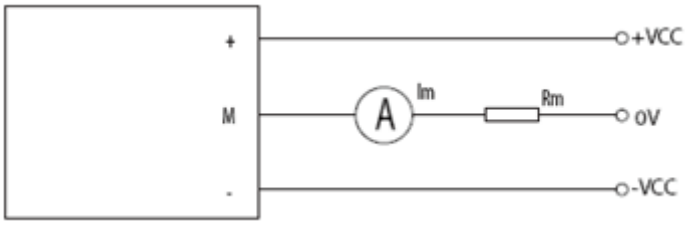
工作温度 Ta	Ambient operating temperature	-40~+85℃
储存温度 Ts	Ambient storage temperature	-45~+90℃
重量 m	Mass	≤1500g

绝缘耐压 Insulation coordination		
耐压	Voltage for AC insulation test, 50Hz,1min	3kV

NT2000C-S/SP5 电流传感器外形图 Dimensions NACL.2000B1-S5/SP1 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 6.5mm Sensors installed aperture: 4 xφ 6.5 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±1mm；Did not note the tolerance + / - 1 mm;
2. 推荐使用： M6 螺栓固定 It is recommended to use: M6 bolt	
3. 安装固定力矩： 4.5N • m The installation of fixed torque: 4.5 N · m	
4. 原边通孔： φ 60.5mm The original hole: φ 60.5mm	
5. 次边电气连接： phoenix 1.5/3-GF-3.81 Electrical connections: phoenix 1.5/3-GF-3.81	