NVCT.4000C-11/R 电压传感器 Voltage Transducer

版本：A

产 品 说 明

该系列磁调制式电压感器适用于对交流、直流和脉动电压的隔离精确测量，测量时一次侧与二次侧之间完全绝缘。

Applications

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



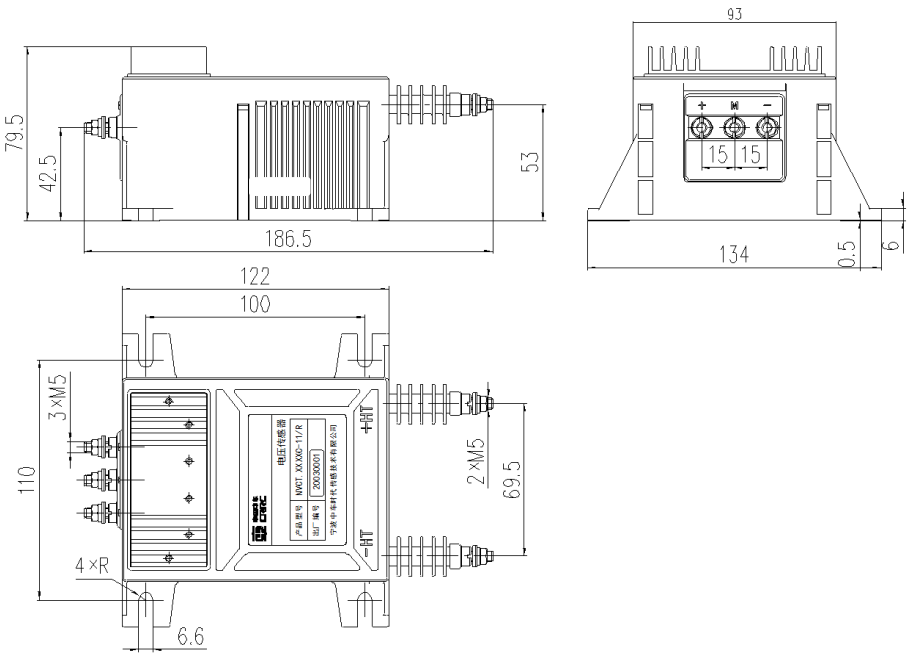
产品优点 Advantages	产品应用 Applications	参照标准 Standards
高精度 Excellent accuracy	交流变频器 AC variable speed drives	EN 50155
线性度好 Very good linearity	电池供电 Battery supplied applications	
低温漂 Low temperature drift	变流器/逆变器 converter /inverter	
宽频带 Wide frequency bandwidth	UPS/SVG	
快速响应 Optimized response time		

主要电气参数 Main electrical data		
额定测量电压 V_{PN}（V）	Primary nominal voltage rms	4000
测量范围 V_P（V）	Primary voltage measuring range	0～±6000
电源电压 V_C（V）	Supply voltage	±24× (1±10%) V
额定测量输出 I_{SN}(mA)	Secondary nominal current rms	50mA
测量电阻 R_M（Ω）	Measuring resistance	@V_{PN} 0Ω ~ 140Ω @V_P 50Ω ~ 90Ω
二次侧电流消耗 I_C(@±24V)	Current consumption	≤50mA+ Secondary output current I_{SN}
隔离耐压	Isolation test: Between the primary circuit to the secondary circuit	10.4kVrms/50Hz/1min

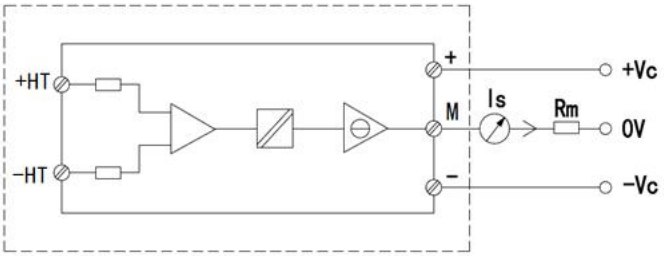
精度 - 动态参数 Accuracy - Dynamic performance data		
基本误差 δi (@I_{PN}，T_A=25℃)	Overall Accuracy	≤±0.8%
线性度误差 δL (@I_{PN}，T_A=25℃)	Linearity error	＜0.1%
零点输出电流 I_O (@I_P=0，T_A=25℃)	Offset current	≤±0.2mA
零点温漂 IOT	Thermal drift	≤±0.5mA（-40℃~+85℃)
响应时间 t_r	Response time to 90% of I_{PN} step	≤50us

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	≤800g

外形图 Dimensions (in mm)



电气连接 Connection



机械特征 Mechanical characteristics	
未注公差 General tolerance	±1 mm
传感器安装方式一(推荐) Transducer fastening （Recommended） 力矩 fastening torque	4 hole ø6.6mm 4 M6 steel screws 4.5N

备注 Remark

1. +HT 接测量电压为正时，传感器输出 I_{SN} 为正。IS is positive When a positive voltage is applied on +HT
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

原边电气连接 Primary connection 原边固定力矩 Primary fastening torque	M5 steel screws 2.2N
次边电气连接 Secondary connection 原边固定力矩 Secondary fastening torque	M5 steel screws 2.2N

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;