NVCT.1000-13/SP2R 电压传感器 Voltage Transducer

版本：A

产 品 说 明 Applications

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。

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	GB/T 25119
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		

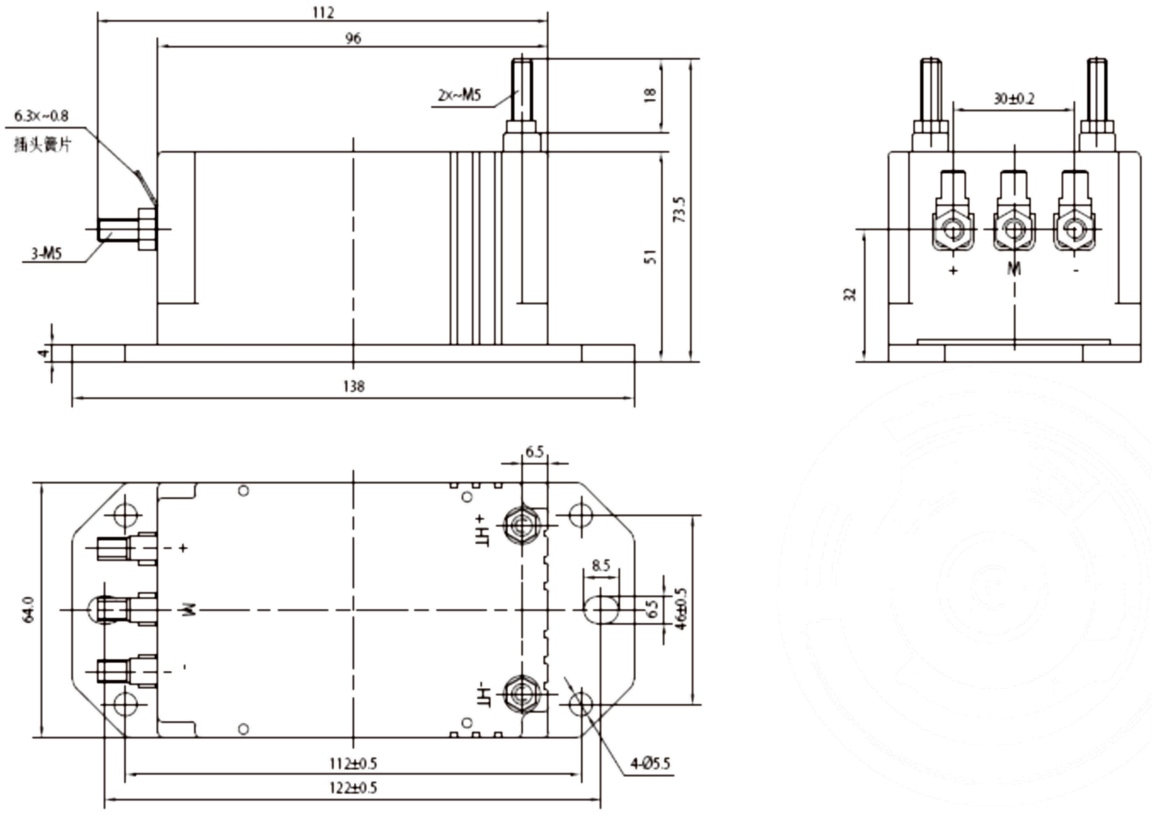
主要电气参数 Main electrical data		
额定测量电压 V_{PN}（V）	Primary nominal voltage rms	1000
测量范围 V_P（V）	Primary voltage measuring range	0～±1500
电源电压 V_C（V）	Supply voltage	DC±(15~24)×(1±5%)V
额定测量输出 I_{SN}(mA)	Secondary nominal current rms	50mA
测量电阻 R_M（Ω）	Measuring resistance	@V_{PN} 0Ω ~ 100Ω @V_P 50Ω ~ 100Ω
二次侧电流消耗 I_C(@±24V)	Current consumption	≤45mA+ Secondary output current I_{SN}
隔离耐压	Isolation test: Between the primary circuit to the secondary circuit	7kVrms/50Hz/1min

精度 - 动态参数 Accuracy - Dynamic performance data		
基本误差 δi (@I_{PN}，T_A=25℃)	Overall Accuracy	≤±1%
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	≤±0.25mA
零点温漂 IOT	Thermal drift	≤±0.75mA（-40℃~+85℃）
响应时间 t_r	Response time to 90% of I_{PN} step	≤50us

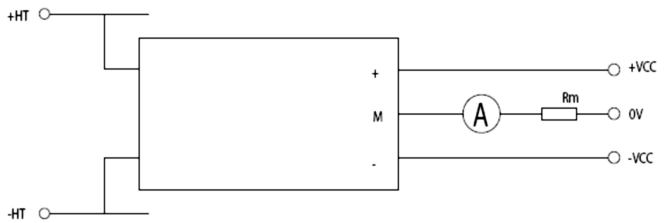
一般数据 General data		
工作温度 Ta	Ambient operating temperature	-40℃~+85℃
储存温度 Ts	Ambient storage temperature	-45℃~+90℃
重量 m	Mass	≤420g

We reserve the right to carry out modifications on its transducers; in order to improve them,without prior notice.

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	2 hole ø6.6mm 2 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

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传感器安装方式二(推荐) Transducer fastening （Recommended） 力矩 fastening torque	4 hole ø5.5mm 4 M5 steel screws 3.5N
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 or 6.3*0.8 plug 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;

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