

**Netrol-NVCL.500-13/R 电压传感器 Voltage Transducer**

版本: A

产品说明

Applications

该磁平衡式电压传感器适用于对交流、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		

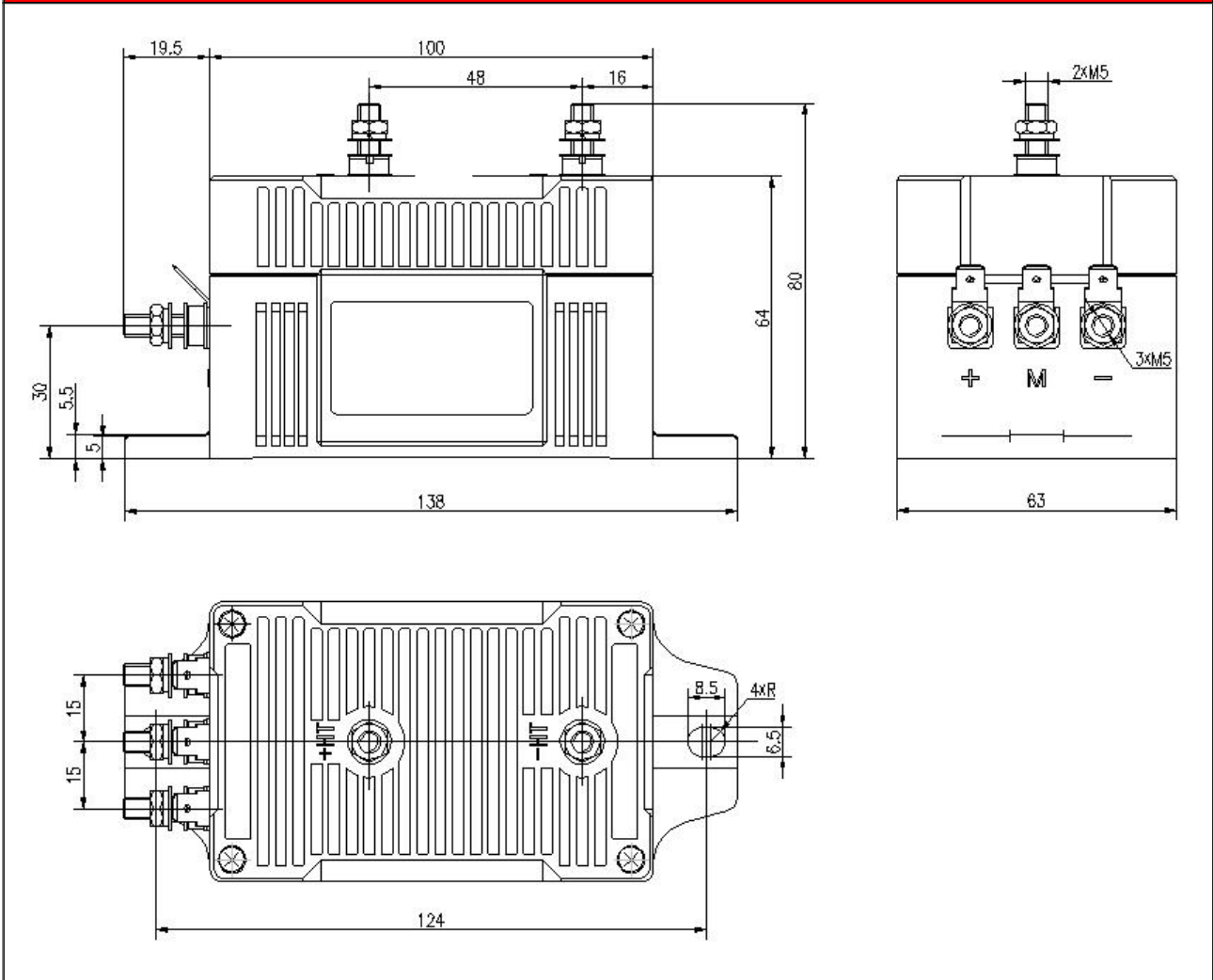
主要电气参数 Main electrical data		
额定测量电压 $V_{PN}$ (V)	Primary nominal voltage rms	500
测量范围 $V_P$ (V)	Primary voltage measuring range	0~±750
电源电压 $V_C$ (V)	Supply voltage	DC±(15~24)×(1±10%)V
额定测量输出 $I_{SN}$ (mA)	Secondary nominal current rms	50mA
测量电阻 $R_M$ (Ω)	Measuring resistance	$V_{PN}$ : 0Ω ~ 100Ω (@±15V) $V_{PN}$ : 60Ω ~ 200Ω (@±24V)
二次侧电流消耗 $I_C$ (@±24V)	Current consumption	≤30mA+ Secondary output current $I_{SN}$
隔离耐压	Isolation test: Between the primary circuit to the secondary circuit	6kVrms/50Hz/1min

精度 - 动态参数 Accuracy - Dynamic performance data		
基本误差 $\delta_i$ (@ $I_{PN}$ , $T_A=25^\circ\text{C}$ )	Overall Accuracy	≤±0.7%
线性度误差 $\delta_L$ (@ $I_{PN}$ , $T_A=25^\circ\text{C}$ )	Linearity error	<0.1%
零点输出电流 $I_o$ (@ $I_P=0$ , $T_A=25^\circ\text{C}$ )	Offset current	≤±0.2mA
零点温漂 IOT	Thermal drift	≤±0.8mA (-40°C~+85°C)
响应时间 $t_r$	Response time to 90% of $I_{PN}$ step	≤85us

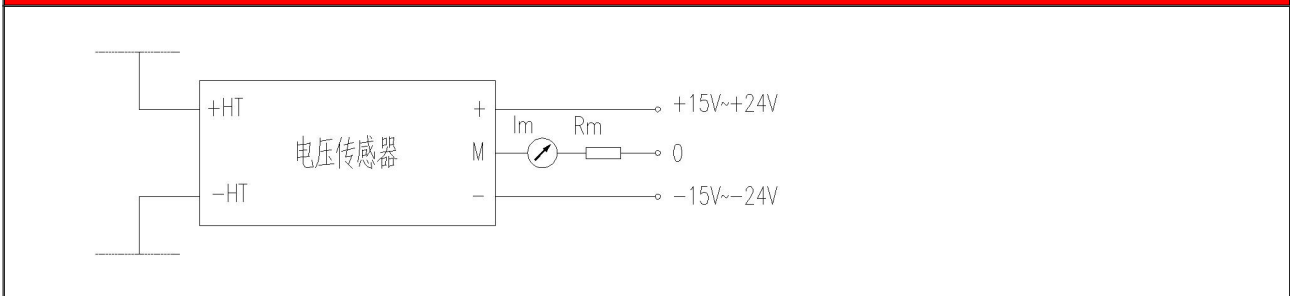
一般数据 General data

工作温度 Ta	Ambient operating temperature	-40°C~+85°C
储存温度 Ts	Ambient storage temperature	-55°C~+90°C
重量 m	Mass	≤700g

外形图 Dimensions (in mm)



电气连接 Connection



机械特征 Mechanical characteristics		备注 Remark
未注公差 General tolerance	$\pm 1 \text{ mm}$	<ol style="list-style-type: none"> <li>1. +HT 接测量电压为正时，传感器输出 <math>I_{SN}</math> 为正。IS is positive When a positive voltage is applied on +HT</li> <li>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.</li> <li>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).</li> <li>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;</li> <li>5. 未注公差 <math>\pm 1\text{mm}</math>; Did not note the tolerance + / - 1 mm;</li> </ol>
传感器安装方式(推荐) Transducer fastening (Recommended) 力矩 fastening torque	2 hole $\phi 6.5\text{mm}$ 2 M6 steel screws 4.5N	
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	