NV100-1000V/SP7 电压传感器 Voltage Transducer

版本：A

产 品 说 明 Applications

该磁平衡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.



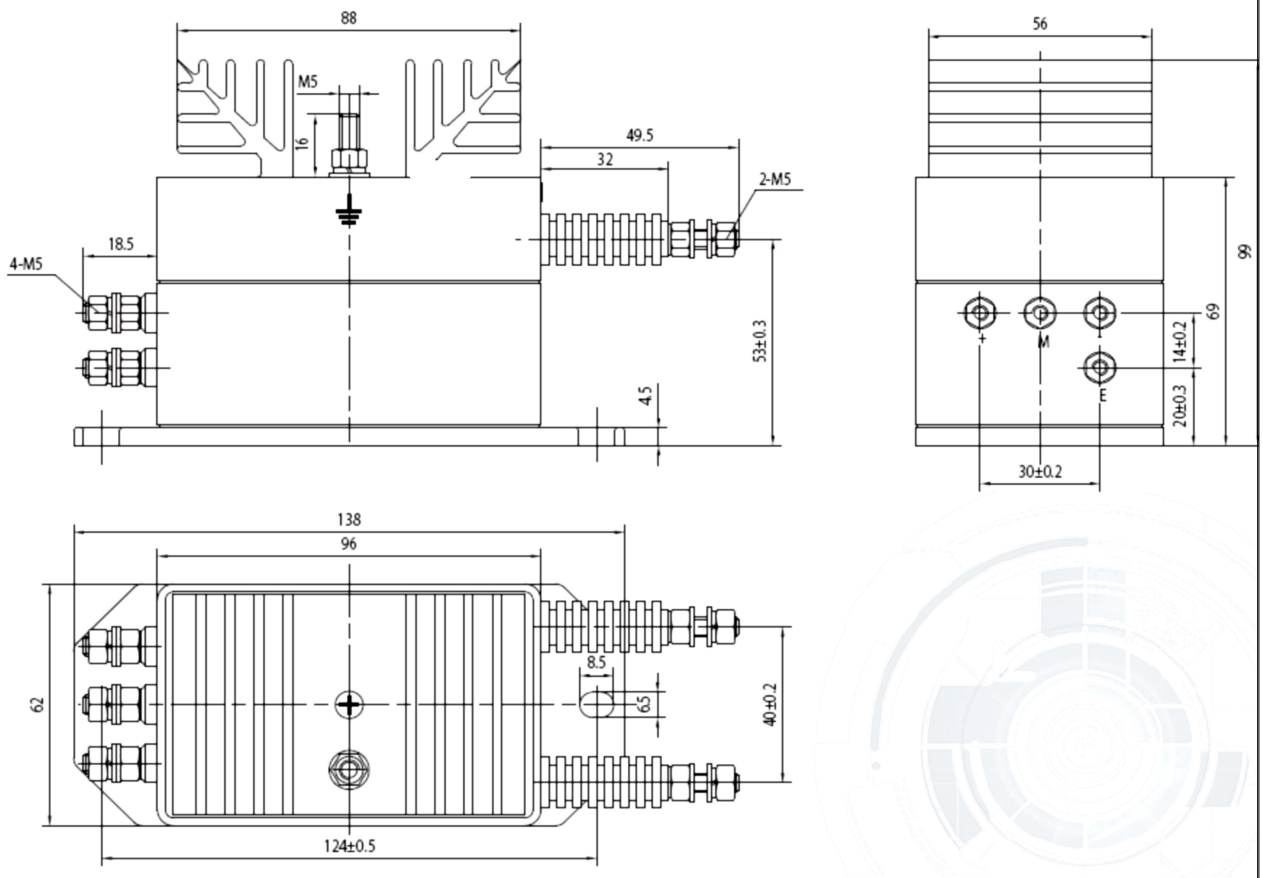
产品优点 Advantages	产品应用 Applications	参照标准 Standards
高精度 Excellent accuracy	交流变频器 AC variable speed drives	EN50178
线性度好 Very good linearity	电池供电 Battery supplied applications	EN50155
低温漂 Low temperature drift	变流器/逆变器 converter /inverter	
宽频带 Wide frequency bandwidth	UPS/SVG	
快速响应 Optimized response time		

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±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	1000V：0Ω ~ 100Ω (@±15V) 1000V：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	7kVrms/50Hz/1min

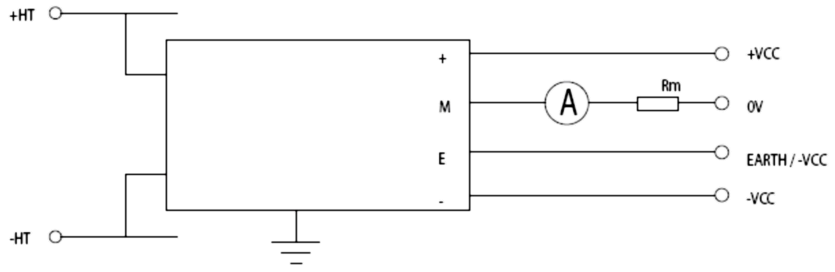
精度 - 动态参数 Accuracy - Dynamic performance data		
基本误差 δi (@I_{PN}，T_A=25℃)	Overall Accuracy	≤±0.7%
线性度误差 δL (@I_{PN}，T_A=25℃)	Linearity error	＜0.1%
零点输出电流 I_O (@I_P=0，T_A=25℃)	Offset current	≤±0.2mA
零点温漂 IOT	Thermal drift	≤±0.8mA（-40℃~+85℃）
响应时间 t_r	Response time to 90% of I_{PN} step	≤50us

一般数据 General data		
工作温度 Ta	Ambient operating temperature	-40℃~+85℃
储存温度 Ts	Ambient storage temperature	-40℃~+85℃
重量 m	Mass	≤850g

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	±1 mm	1.+HT 接测量电压为正时，传感器输出 I_{SN} 为正。I_{SN} 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 。It is preferred to use shielding wire for secondary side connecting, cable shielding layer close to the product end could be connected to the housing, negative power terminal or 0 V(GND). 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)。The perpendicularity of the mounting screw holes should be no less than grade 8 of the China national standard . 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) ； Flatness should be no less than grade 11 of the China national standard (or surface fluctuation be 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) ； If a small lug boss exists on the mounting surface, then flatness should be no less than grade 1 2 of the China national standard (or surface fluctuation be less than 0.5 mm) ;
传感器安装方式一(推荐) Transducer fastening （Recommended） 力矩 fastening torque	2 hole ø6.5mm 2 M6 steel screws 4.5N	
原边电气连接 Primary connection	M5 steel screws 2.2N	
次边电气连接 Secondary connection	M5 steel screws 2.2N	