FSV3000EVT2 系列高精度电压传感器

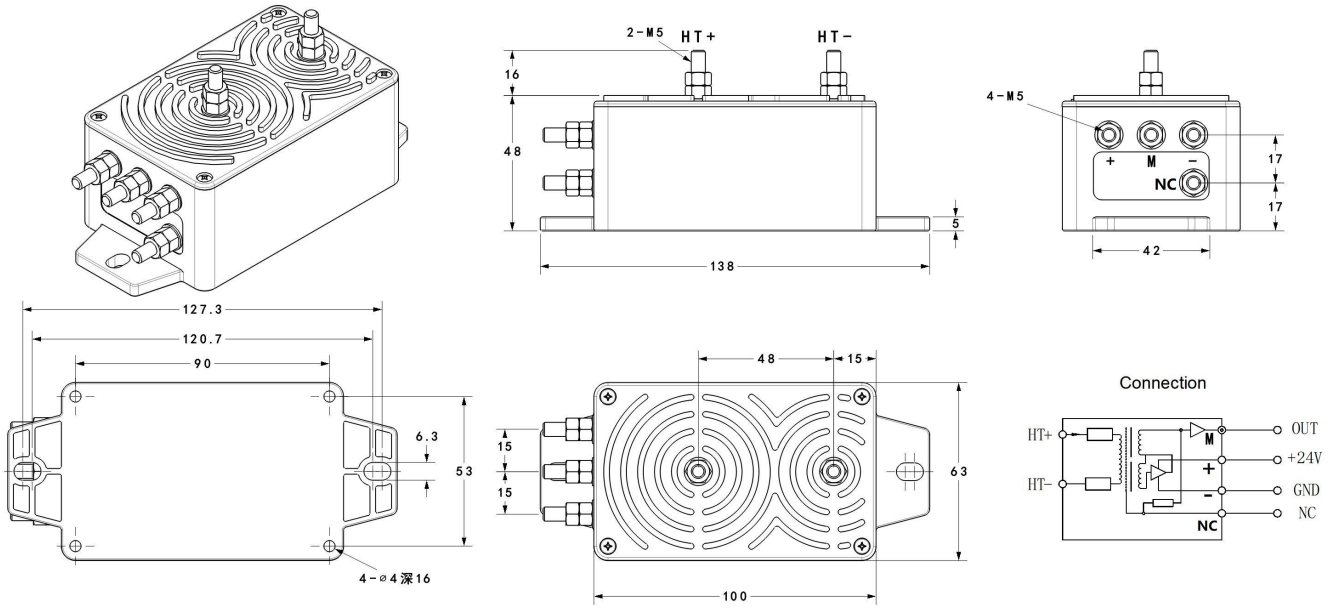
应用磁通门闭环原理的电压传感器，经过 TRMS 计算后，将被测电压转换成与原边电压成比例输出的直流电流或电压的电压传感器，能在电隔离条件下测量直流、交流、脉冲以及各种不规则波形的电压。具有高精确度、高线性度、高集成度、体积小结构简单、长期工作稳定的特点。

Voltage sensors applying the fluxgate closed-loop principle to convert the measured voltage into a DC current or voltage proportional to the primary voltage after TRMS calculation.Voltage transducers that convert the measured voltage into a DC current or voltage output proportional to the original voltage after TRMS calculation are capable of measuring DC, AC, pulse and various irregular waveform voltages under galvanic isolation.The voltage sensor can measure DC, AC, pulse and all kinds of irregular waveforms under galvanic isolation conditions. It is characterized by high accuracy, high linearity, high integration, small size and simple structure, and stable long-term operation.

电参数/Electrical characteristics								
	型号 Type	FSV050EVT2	FSV200EVT2	FSV500EVT2	FSV1000EVT2	FSV2000EVT2	FSV3000EVT2	
V_{PN}	原边额定输入电压 Primary nominal	50	200	500	1000	2000	3000	V
V_P	原边电压测量范围 Measuring range	±120%						
V_{OUT}	副边额定输出电压 Nominal output	5 或 10						V
V_C	电源电压 Supply voltage	+20～+32(±5%)						V
I_C	电流消耗 Current consumption	V_P=0		<50				mA
V_d	绝缘电压 Insulation voltage	在原边与副边电路之间 6kV 有效值/50Hz/1 分钟						
ε_L	线性度 Linearity	<0.1						%FS
X	精度 accurate	T_A=25℃ V_C=+24V		±1				%
V_O	零点失调电压 Offset voltage	T_A=25℃		<±35				mV
V_{OT}	失调电压温漂 Thermal drift of	V_P=0 T_A=-25～+85℃		<±0.5				mV/℃
Tr	响应时间 Response time	<150						μs
f	频带宽度(-3dB) Frequency bandwidth(-3dB)	DC，20～6000						Hz

T_A	工作环境温度 Ambient operating temperature	-25～+85						℃
T_S	贮存环境温度 Ambient storage temperature	-40～+100						℃
R_p	输入内阻(约) Input internal resistance	50K	200K	0.5M	1.0M	2.0M	3.0M	Ω
R_L	负载电阻 Load resistance	≥5K						Ω
C_L	负载电阻 Load resistance	＜5						nF
m	质量(约) standard	480						g
	标准 standard	Q/320115QHKJ01-2016						

外形尺寸(㎜)/Dimensions of drawing(mm)



使用说明/Remarks

1、传感器错误的接线可能导致模块损坏。

Incorrect wiring of the sensor may cause damage to the module.

2、传感器通电后，当被测电压从传感器输入 HT+端和 HT-端接入，即可在输出端测得同相电压值。

The sensor is energized, when the measured voltage from the sensor input HT + terminal and HT - terminal access, you can measure the same phase voltage value at the output.

3、传感器安装使用环境应无导电尘埃及腐蚀性。

The environment in which the sensor is installed and used should be free of conductive dust and corrosion.

4、传感器安装好后，操作人员勿触摸任何裸露导电部分。必要时可对传感器进行防护，如加防护罩等。

Once the sensor is installed, the operator should not touch any exposed conductive parts. If necessary, the sensor can be protected, such as adding protective cover.