

FS1500CKT5 新能源电动汽车传感器



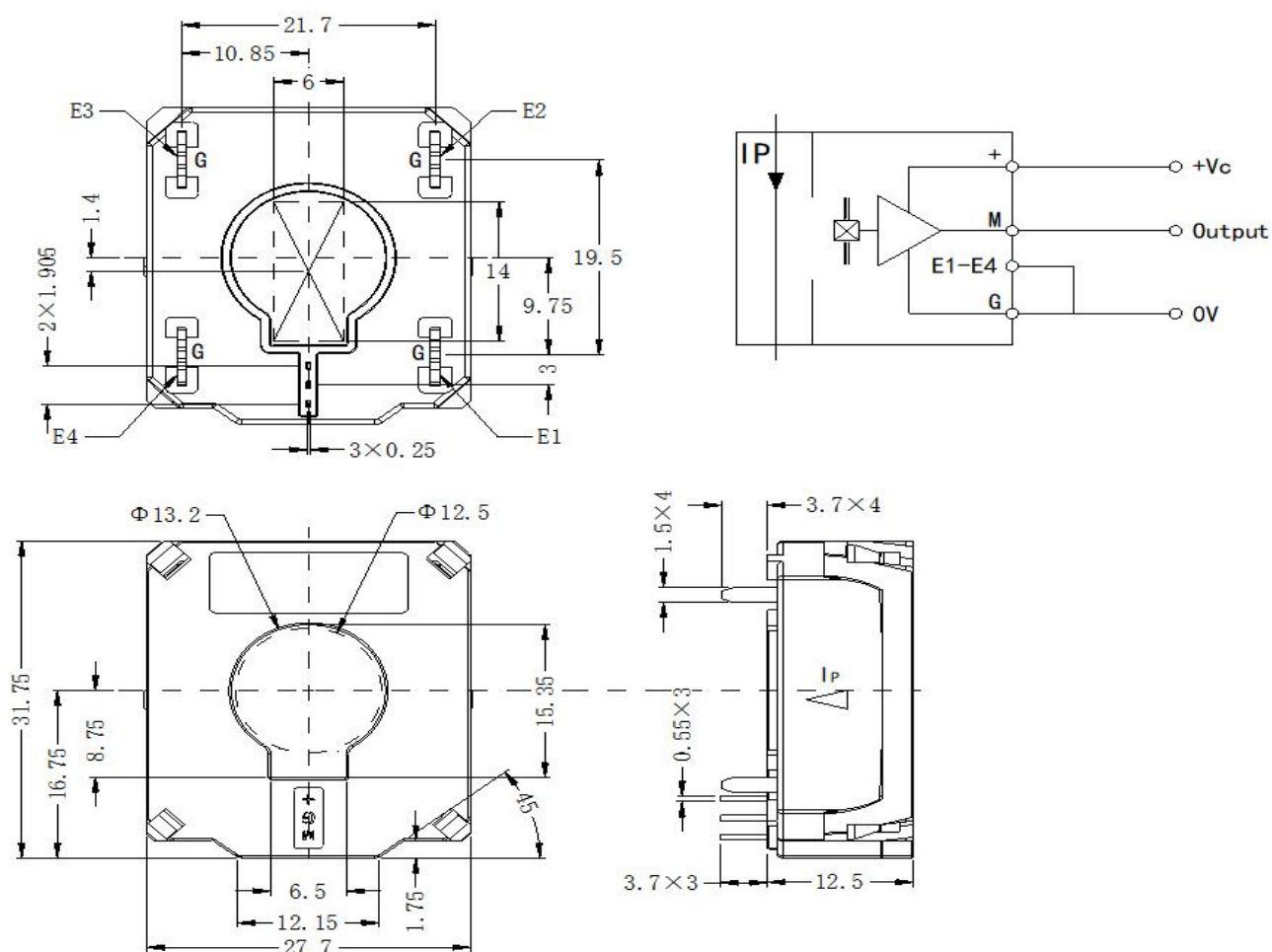
应用霍尔效应原理研制的开环电流传感器,能在原边与副边电隔离条件下测量直流、交流、脉冲以及各种不规则波形的电流。

Open loop current sensor based on the principle of Hall-effect It can be used for measuring AC,DC, pulsed and mixed current.

电参数/Electrical characteristics								
	型号 Type	FS100CKT5	FS300CKT5	FS500CKT5	FS800CKT5	FS1000CKT5	FS1500CKT5	
I _{PN}	原边额定输入电流 Primary nominal input current	100A	300A	500A	800A	1000A	1500A	A
I _P	原边电流测量范围 Measuring range of primary current	0~±120A	0~±360A	0~±600A	0~±960A	0~±1200A	0~±1500A	A
V _{SN}	副边额定输出电压 Secondary nominal output voltage	2.5±2						V
V _C	电源电压 Supply voltage	+5 (±5%)						V
I _C	电流消耗 Current consumption	<20						mA
V _d	绝缘电压 Insulation voltage	在原边与副边电路之间 3 KV 有效值/50Hz/1 分钟						
ε _L	线性度 Linearity	<0.5						%FS
V ₀	零点失调电压 Zero offset voltage	T _A =25℃	2.5±0.015				V	
V _{OM}	磁失调电压 Residual voltage	I _{PN} →0	<±10				mV	
V _{OT}	失调电压温漂 Thermal drift of V0	I _p =0 T _A =-25~+85℃	<±0.5				mV/℃	
T _R	响应时间 Response time	≤5						μs
f	频带宽度(-3dB) Frequency bandwidth(-3dB)	DC~50						kHz
T _A	工作环境温度 Ambient operating temperature	-40~+125						℃

T_s	贮存环境温度 Ambient storage temperature	-40~+150	°C
R_L	负载电阻 Load resistance	$\geq 10K$	Ω
	标准 Standard	GI/FS-0105	

外形尺寸 (mm) /Dimensions of drawing(mm)



V_{out}	G	V_{cc}
输出	地 (电源 COM)	电源 (+5v)

使用说明/Remarks

1. 在IP 按箭头方向流动时, IS 是正向;

When the IP address flows in the arrow direction, IS is in the forward direction.

2. 初级导体温度不应超过 100℃;

Primary conductor temperature should not exceed 100°C.

3. 母排完全充满初级穿孔时动态表现 (di/dt 和响应时间为最佳);

The dynamic performance (di/dt and response time) is the best when the bus bar is fully filled with primary perforations.

4. 为了达到最佳的磁耦合, 初级线匝应绕在传感器顶部;

In order to achieve the best magnetic coupling, the primary turns should be wound around the top of the sensor.

5. 可以根据客户的要求来定制产品。

Products can be customized according to customer requirements.