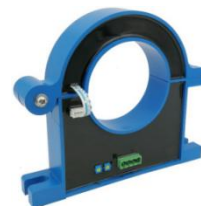


FS20000EK5 系列霍尔可拆卸大电流传感器

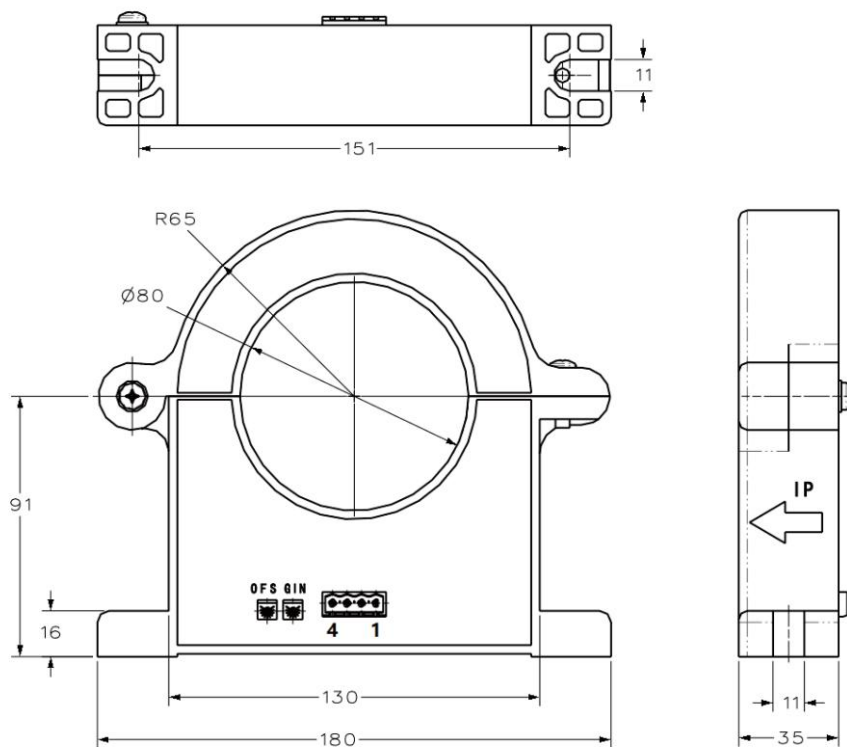


应用霍尔效应开环原理的电流传感器，能在电隔离条件下测量直流、交流、脉冲以及各种不规则波形的电流。

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	FS500EK5	FS1000EK5	FS5000EK5	FS8000EK5	FS12000EK5	FS20000EK5	
I_{PN}	原边额定输入电流 Primary nominal input current	500	1000	5000	8000	12000	20000	A
I_P	原边电流测量范围 Measuring range of primary current	0~±1000	0~±2400	0~±6000	0~±10000	0~±14000	0~±24000	A
V_{OUT}	副边额定输出电压 Nominal output voltage	4或5(±1%)						V
V_C	电源电压 Supply voltage	±12~±15(±5%)						V
I_C	电流消耗 Current consumption	<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 6kV RMS /50Hz/1 min between primary and secondary side circuits						
ϵ_L	线性度 Linearity	<1						%FS
V_0	零点失调电压 Offset voltage	$T_A=25^{\circ}\text{C}$ <25						mV
V_{OM}	磁失调电压 Residual voltage	$I_{PN} \rightarrow 0$ <20						mV
V_{OT}	失调电压温漂 Thermal drift of V_0	$I_{PN}=0$ $T_A=-25\sim+85^{\circ}\text{C}$ <±1						mV/°C
T_r	响应时间 Response time	≤10						μs
f	频带宽度(-3dB) Frequency Bandwidth (-3dB)	DC~6						kHz
T_A	工作环境温度 Ambient operating temperature	-40~+85						°C
T_S	贮存环境温度 Ambient storage temperature	-40~+100						°C
R_L	负载电阻 Load resistance	≥10K						Ω
m	质量(约) Mass (approx.)	1165						g
	标准 Standard	GI/FS-0105						

外形尺寸(mm)/Dimensions of drawing(mm)



引脚说明: 1, +12V 2, -12V 3, Vout 4, 0V(电源地) OFS, 零点调节 GIN, 幅度调节

Elucidation: 1: +12V 2: -12V 3: Vout 4: 0V (GND) OFS: Zero adjustment GIN: Gain adjustment

使用说明/Remarks

1. 错误的接线可能导致传感器损坏。传感器通电后, 当被测电流从传感器箭头方向穿过, 即可在输出端测得同相电压值。
Incorrect wiring may cause damage to the sensor. After the sensor is powered on, when the measured current passes through the arrow direction of the sensor, the in-phase voltage value can be measured at the output end.

2. 传感器的输出幅度可根据用户需求进行适当的调节。

The output amplitude of the sensor can be adjusted according to the user's needs.

3、由于外壳材料为塑料, 安装时螺栓不要太用力, 以免压坏传感器。

Because the shell material is plastic, the bolt should not be too hard during installation, so as not to crush the sensor.

4、为了达到最佳的测试精度, 过流铜排或电缆应安装在传感器中心位置。

For optimal test accuracy, the overcurrent copper bar or cable should be installed in the center of the sensor.

5、可按用户需求定制不同额定输入电流和输出电压的传感器。

Sensors with different rated input current and output voltage can be customized according to user requirements.