

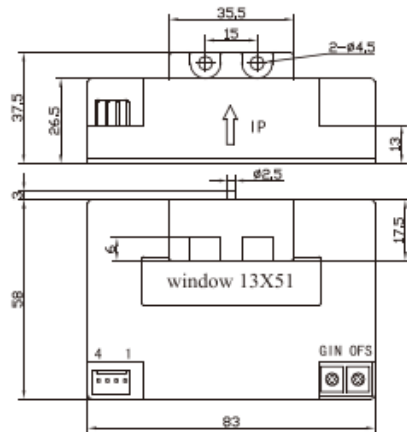
FSM600FA系列霍尔电流传感器



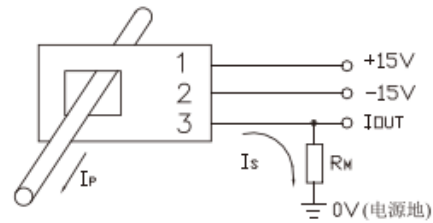
应用霍尔效应闭环原理的电流传感器，能在电隔离条件下测量直流、交流、脉冲以及各种不规则波形的电流。
Open loop current sensor based on the principle of Hall-effect. It can be used for measuring AC, DC, pulsed and mixed current.

电参数/Electrical characteristics							
	型号 Type	FSM200FA	FSM300FA	FSM400FA	FSM500FA	FSM600FA	
I_{PN}	原边额定输入电流 Primary nominal input current	200	300	400	500	600	A
I_p	原边电流测量范围 Measuring range of primary current	0~±300	0~±450	0~+600	0~±750	0~±800	A
I_{SN}	副边额定输出有效电流 Secondary nominal output current	100±0.5%					mA
K_N	匝数比 Conversion ratio	1:2000	1:3000	1:4000	1:5000	1:6000	
R_M	测量电阻($V_c=±15V/I_p$) Measuring resistance($V_c=±15V/I_p$)	0~88	0~76	0~63	0~46	0~32	Ω
	($V_c=±15V/I_p$)	0~50	0~38	0~25	0~8	0~4	Ω
	($V_c=±18V/I_p$)	0~117	0~105	0~92	0~75	0~61	Ω
	($V_c=±18V/I_p$)	0~69	0~57	0~44	0~27	0~24	Ω
V_c	电源电压 Supply voltage	±15~18(±5%)					V
I_c	电流消耗 Current consumption	$V_c=±15V$ 20+ I_s					mA
V_d	绝缘电压 Insulation voltage	在原边与副边电路之间2.5KV有效值/50Hz/1分钟					
εL	线性度 Linearity	<0.1					%FS
X	精度 Accuracy	$T_A=-25^{\circ}C$ $V_c=±15V$ ±0.5					%
I_o	零点失调电流 Zero offset current	$T_A=25^{\circ}C$ <±0.30					mA
I_{OM}	磁失调电流 Residual current	$I_p \rightarrow 0$ <±0.20					mA
I_{OT}	失调电流温漂 Thermal drift of I_O	$I_p=0$ $T_A=-25\sim+85^{\circ}C$ <±0.5					mA
T_r	响应时间 Response time	<1					μs
f	频带宽度(-3dB) Frequency bandwidth(-3dB)	DC~100					kHz
T_A	工作环境温度 Ambient operating temperature	-25~+85					$^{\circ}C$
T_s	贮存环境温度 Ambient storage temperature	-40~+100					$^{\circ}C$
R_s	副边线圈内阻 $T_A=25^{\circ}C$ Secondary coil resistance($T_A=25^{\circ}C$)	19	31	44	61	75	Ω
	标准 Standard	GI/FS-0105					

外形尺寸(mm)/Dimensions of drawing (mm)



外部接线图/External wiring diagram



引脚说明: 1: +15V 2: -15V 3: IOUT 4: 空 OFS: 零点调节
Elucidation: 1: +15V 2: -15V 3: IOUT 4: No connection
OFS: Zero adjustment

使用说明/Remarks

- 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流值。
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 current value can be measured at the output end.
- 母排完全充满原边穿孔时动态特性最佳(di/dt和响应时间)。
Best dynamic performance (di/dt and response time) when the busbar is fully full of primary side perforations.
- 根据客户需求，可选择电压输出形式。
According to customer demand, the voltage output form can be selected.