



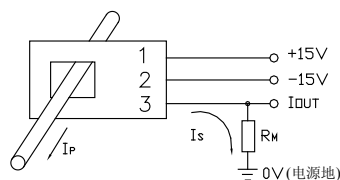
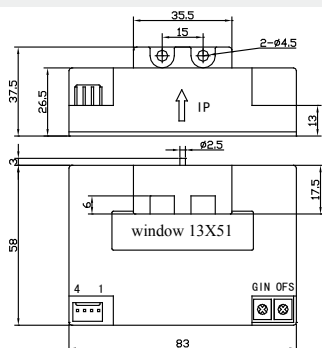
应用霍尔效应开环原理的电流传感器，能在电隔离条件下测量直流、交流、脉冲以及各种不规则波形的电流。
Open loop current sensor based on the principle of Hall-effect. It can be used for measuring AC, DC, pulsed and mixed current.

电参数/Electrical characteristics

型号 Type	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	
	测量电阻 ($V_C=±15V/I_{PN}$) Measuring resistance ($V_C=±15V/I_{PN}$)		0~88	0~76	0~63	0~46	0~32	Ω
R_M	$(V_C=±15V/I_P)$		0~50	0~38	0~25	0~8	0~4	Ω
	$(V_C=±18V/I_{PN})$		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					
ϵ_L	线性度 Linearity		<0.1					%FS
X	精度 Accuracy		$T_A=-25^\circ C$ $V_C=±15V$	±0.7				%
I_0	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_0		$I_P=0$ $T_A=-25 \sim +85^\circ C$	<±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



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。
 - 母排完全充满原边穿孔时动态特性最佳(di/dt和响应时间)。
 - 根据客户需求，可选择电压输出形式。
- Incorrect connection may lead to the damage of the sensor. ISN is positive when the IP flows in the direction of the arrow.
·Dynamic performance (di/dt and response time) are best with a primary bar in the center of the through-hole.