

FSM050LX 系列霍尔电流传感器

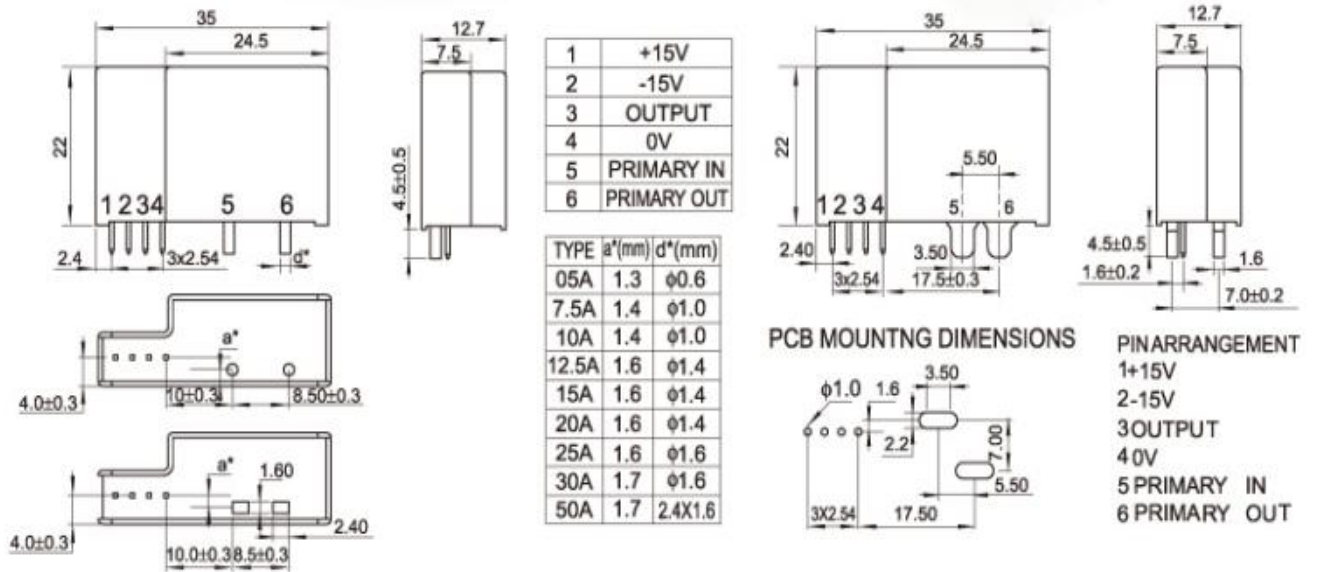


应用霍尔效应闭环原理的电流传感器，能在电隔离条件下测量直流、交流、脉冲以及各种不规则波形的电流。

Closed 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	FSM005LX	FSM010LX	FSM015LX	FSM020LX	FSM025LX	FSM030LX	FSM050LX	FSM075LX	
I_{PN} 原边额定输入电流 Primary nominal input current	5A	10A	15A	20A	25A	30A	50A	75A	
I_P 原边电流测量范围 Measuring range of primary current	0~±16A	0~±32A	0~±48A	0~±64A	0~±80A	0~±96A	0~±150A	0~±150A	
输入引脚尺寸 mm Input pin size mm	Φ0.8	Φ0.8	Φ1.0	Φ1.4	Φ1.4	Φ1.6	2X1.6X1.5	2X1.6X1.5	
K_N 匝数比 Conversion ratio	3:1500	2:2000	1:1500	1:2000	1:2500	1:3000	1:2500	1:3750	
R 内接测量电阻 Ω Built-in measuring resistance Ω	400±0.1%	400±0.1%	400±0.1%	400±0.1%	400±0.1%	400±0.1%	200±0.1%	200±0.1%	
V_{OUT} 副边额定输出电压 Nominal output voltage	4±0.5%								V
V_C 电源电压 Supply voltage	±15(±5%)								V
I_C 静态功耗 Static power consumption	<15								mA
V_d 绝缘电压 Insulation voltage	在原边与副边电路之间 5 KV 有效值/50Hz/1 分钟 5 KV RMS /50Hz/1 min between primary and secondary side circuits								
ϵ_L 线性度 Linearity	<0.1								%FS
X di/dt 跟随精度 di/dt follows accuracy	>50								A/μs
V_0 零点电失调电压 Zero offset voltage	±20								mV
V_{OT} 失调电压温漂 Thermal drift of V_0	$I_{PN}=0$	$T_A=-40\sim+85^\circ\text{C}$		<±0.5				mV/°C	
T_r 响应时间 Response time	<1								us
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~+125								°C
标准 Standard	GI/FS-0105								

外形尺寸及引脚说明/Dimensions of drawing Pin elucidation



使用说明/Instructions

- 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.
- 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.
- 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.