

K-FK15D5H 开环系列可拆卸霍尔电流传感器

K-FK15D5H Series Open-loop Hall Current sensor

简介 Feature:

- 应用开环原理制作的可拆卸霍尔电流传感器
Open-loop current transducer using the hall effect
- 电流传感器的初、次级是绝缘的，能够测量直流，交流，脉冲等
For the electronic measurement of currents: DC, AC, pulsed, ..., with galvanic separation between primary circuit and secondary circuit
- 供电: DC $\pm 12 \dots 15V$
Supply voltage: DC $\pm 12 \dots 15V$
- 可拆卸结构 Removable structure



RoHS



特性与应用 Advantages & Applications:

特 性 Advantages	应 用 Applications
- 易安装 Easy installation - 低功耗 Low power consumption - 测量范围宽 Only one design for wide current ratings range - 抗干扰能力强 High immunity to external interference - 无插入损耗 no insertion losses	- 变频器应用 The application of variable frequency electrical appliances - AC/DC 变速驱动 AC/DC variable-speed drive - 开关电源 Switched Mode Power Supplies (SMPS) - UPS 不间断电源 Uninterruptible Power Supplies (UPS) - 逆变器上的应用 The applications of inverter

电气参数 Electrical data: ($T_a=25^{\circ}C$, $V_c=\pm 15VDC$, $R_L=10K\Omega$)

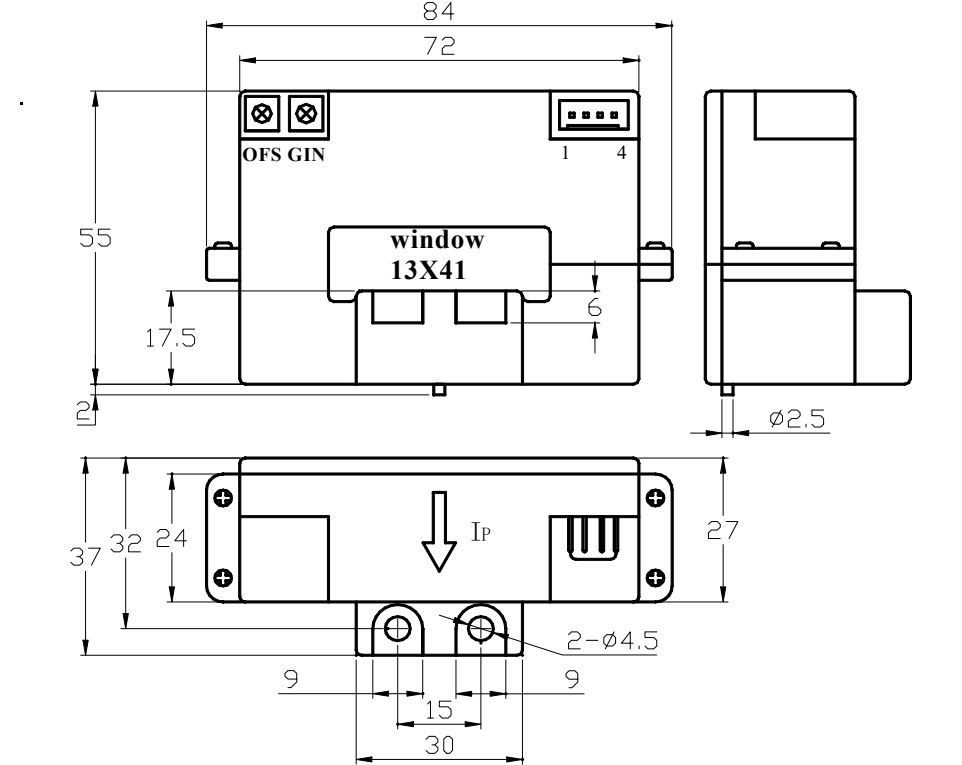
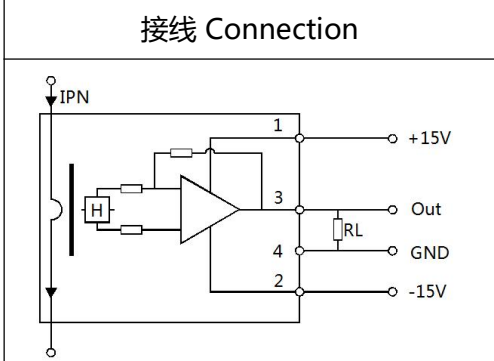
型号 Type		K200 FK15D5H	K400 FK15D5H	K800 FK15D5H	K1000 FK15D5H	K1200 FK15D5H	K2000 FK15D5H	Unit
参数 Parameter	符 号 Symbol							
额定输入 Rated input	IPN	200	400	800	1000	1200	2000	A
测量范围 Measuring range	IP	0 ~ ± 400	0 ~ ± 800	0 ~ ± 1600	0 ~ ± 2000	0 ~ ± 2400	0 ~ ± 4000	A
输出电压 Output voltage	Vo	$\pm 5.0 \cdot (IP/IPN)$						V
负载电阻 Load resistance	RL	> 10						K Ω
供电电压 Supply voltage	VC	$(\pm 12 \sim \pm 15) \pm 5\%$						V
精度 Accuracy	XG	@IPN, $T=25^{\circ}C$ < ± 0.5						%
偏移电压 Offset voltage	VOE	@IP=0, $T=25^{\circ}C$ < ± 20						mV
零点温度漂移 Temperature variation of VOE	VOT	@IP=0, $-40 \sim +85^{\circ}C$ < ± 1.0						mV/ $^{\circ}C$
磁滞失调电压 Hysteresis offset voltage	VOH	@IP=0, after 1*IPN < ± 20						mV
线性度 Linearity error	ϵ_r	< 0.5						%FS
跟随精度 di/dt		> 100						A/ μs
响应时间 Response time	tra	@90% of IPN < 5.0						μs
静态功耗 Power consumption	IC	20						mA
带宽 Bandwidth	BW	@-3dB, IPN DC-20						KHZ
绝缘电压 Insulation voltage	Vd	@50/60Hz, 1min, AC 5.0						KV

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总体参数 General data:

参数 Parameter	符号 Symbol	数值 Value	单位 Unit
工作温度 Operating temperature	TA	-40 ~ +85	°C
储存温度 Storage temperature	Ts	-55 ~ +125	°C
重量 Mass	m	235	g
外壳材料 Plastic material	PBT G30/G15, UL94- V0		
标准 Standards	IEC60950-1:2001		
	EN50178:1998		
	SJ20790-2000		

结构参数 Dimensions(mm):

	接线 Connection
	
	公差 General tolerance
总公差 General tolerance: < ±0.5mm	
初级过孔尺寸 Primary through-hole: 13*41±0.20	
次级连接器型号 Connection of Secondary : 2510-04A (Instead of Molex 5045-04A)	

备注 Remarks:

- 1,当被测电流通过传感器的初级引脚时, 在输出端有对应的电压信号输出。(注意: 错误的接线可能损坏传感器)
When the current will be measured goes through the primary pin of a sensor,the voltage will be measured at the output end.(Note:The false wiring may result in the damage the sensor).
- 2,可以根据客户的要求设计不同额定电流的产品, 并且传感器的输出电压时可选择的;
Custom design in the different rated input current and the output voltage are available.
- 3,母排完全充满孔时, 动态性能最佳;
The dynamic performance is the best when the primary hole if fully filled with;
- 4,初级导体温度不应超过 100°C;
The primary conductor should be <100°C;