



## KLY-HK-BY10 Series Open Loop Hall Current Sensor

### KLY-HK-BY10系列开环型霍尔电流传感器



KLY-HK-BY10 series sensors are current sensors with Holzer effect and open loop principle. They are applied to measure DC, AC and pulse current under the condition of electric isolation.

KLY-HK-BY10系列传感器是应用霍尔效应开环原理的电流传感器，应用在电隔离条件下测量直流、交流、脉冲电流。

#### Products Features

Excellent accuracy  
Very good linearity  
Optimized response time  
No insertion losses

#### 产品特点

精度高  
良好的线性度  
最佳的响应时间  
无插入损耗

抗干扰能力强  
低温度漂移  
频带宽

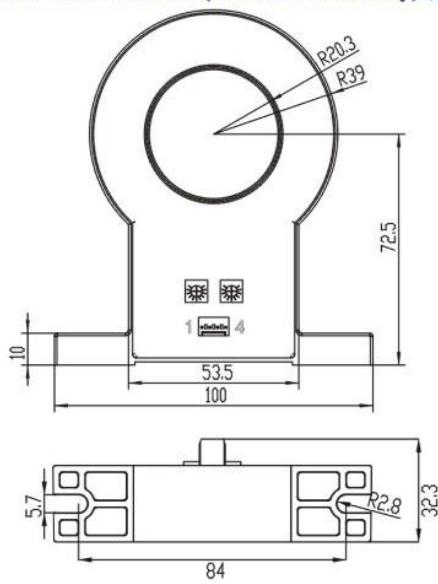
#### Instructions 使用说明

1. Incorrect wiring may cause the damage of sensor.
1. 保证接线正确，错误的接线可能会导致传感器损坏。
2. When the measured current through the center hole of the sensor, the current will be measured at the output end.
2. 当待测电流通过传感器的穿心孔，可在输出端测得电流大小。
3. The dynamic performance (di/dt and the response time) is the best when the primary hole is fully filled with the bus bar.
3. 母排完全充满初级穿孔时动态表现(Di/dt和响应时间)为最佳。
4. User can adjust the output extent of sensor if necessary.
4. 传感器输出幅度可根据用户需求进行适当的调节。
5. Rated input current and output voltage of sensor can be customized.
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。

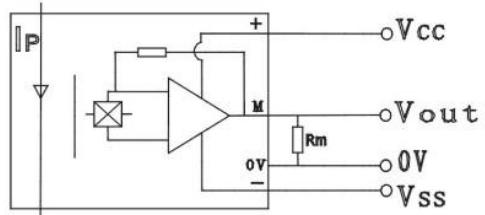
#### Electrical Data( $T_a=25^{\circ}\text{C} \pm 5^{\circ}\text{C}$ )电气参数

Parameters 参数	Type 型号	KLY-HK-BY10-0E1A					
	Rated input 额定测量电流 $I_{pn}$	$\pm 200\text{A}$	$\pm 400\text{A}$	$\pm 600\text{A}$	$\pm 800\text{A}$	$\pm 1000\text{A}$	$\pm 2000\text{A}$
Measure range 测量范围 $I_p$	$\pm 400\text{A}$	$\pm 800\text{A}$	$\pm 1200\text{A}$	$\pm 1600\text{A}$	$\pm 2000\text{A}$	$\pm 3000\text{A}$	
Rated output voltage 额定输出电压 $V_s$							$\pm 4\text{V}(\pm 1\%)$
Supply voltage 电源电压 $V_{cc}$							$\pm 15\text{V}(\pm 5\%)$
Current consumption 功耗电流 $I_c$							$<20\text{mA}$
Offset voltage 零点失调电压 $V_0$							$<\pm 25\text{mV}$
Offset voltage drift 失调电压温漂 $V_{od}$	$@ I_p=0, T_d = -40^{\circ}\text{C} \sim +85^{\circ}\text{C}$						$<\pm 1\text{mV}/^{\circ}\text{C}$
Hysteresis offset voltage 磁失调电压 $V_{oh}$							$<\pm 30\text{mV}$
Linearity 线性度 $\epsilon_L$							$<1\%FS$
Response time 响应时间 $T_r$	$@ 50\text{A}/\mu\text{s}, 10\% - 90\%$						$<5\text{ }\mu\text{s}$
Galvanic isolation 绝缘电压 $V_d$	$@ 50\text{Hz}, \text{AC}, 1\text{min}$						$3\text{kV}$
Frequency bandwidth 频带宽度	$@ -3\text{db}$						$\text{DC} \sim 20\text{K Hz}$
Load resistance 负载电阻 $R_m$							$\geq 10\text{K }\Omega$
Operating temperature 工作环境温度 $T_a$							$-40^{\circ}\text{C} \sim +85^{\circ}\text{C}$
Storage temperature 贮存环境温度 $T_s$							$-40^{\circ}\text{C} \sim +100^{\circ}\text{C}$
Mass(approx) 毛重(约) $m$							$300\text{g}$
Standards 执行标准							$\text{JB/T 7490-2007}$

#### Mechanical Dimension(for Reference Only) 结构参数



#### Circuit Connection Diagram 电路连接示意图



管脚定义 Pin Definition  
1. + (Vcc)  
2. - (Vss)  
3. M (Vout)  
4. G (GND)

Casing material 外壳材料: 符合UL94-V0