

TKC-HAX 系列开环型霍尔电流传感器

TKC-HAX Series Open Loop Mode Hall Effect Current Sensor



TKC-HAX 系列开环型霍尔电流传感器的初、次级之间是绝缘的，用于控制、测量直流、交流和脉冲电流。

TKC-HAX series current sensor is an open loop device based on the measuring principle of the hall effect, with a galvanic isolation between primary and secondary circuit. It provides accurate electronic measurement of DC, AC or pulsed currents.

电参数 Electrical data (Ta=25°C ±5°C, RL=2KΩ, CL=10000PF)

型号 Type 参数 Parameter	TKC 500HAX	TKC 600HAX	TKC 800HAX	TKC 1000HAX	TKC 1500HAX	TKC 2000HAX	TKC 2500HAX	TKC 3000HAX	TKC 5000HAX	单位 Unit
额定输入电流 (Ipn) Rated input (Ipn)	±500	±600	±800	±1000	±1500	±2000	±2500	±3000	±5000	A
测量电流范围 (Ip) Measure range (Ip)	±1500	±1800	±2400	±3000	±4500	±6000	±6000	±6000	±10000	A
额定输出电压 Rated output voltage	@Ip=±Ipn ±4±1%									V
电源电压 Supply voltage	±15 ±5%									V
功耗电流 Power Consumption	+28, -15									mA
失调电压 Offset voltage	@Ip=0 ±20									mV
磁失调电压 Magnetic offset	@Ip=±Ipn-0 ±10									mV
失调电压温漂 Offset drift	@ -40~+85°C ≤±0.5									mV/°C
幅度电压温漂 Output drift	@ -40~+85°C ≤±0.5									mV/°C
线性度 Linearity	@Ip=0-±Ipn ≤±1									%FS
精度 Accuracy	@ IPN , Ta=25°C (excluding offset) ≤±1									%FS
响应时间 Response time	@50A/μ S, 10%-90% ≤5									μ S
带宽 Bandwidth	@ -3dB DC...25									KHz
绝缘电压 Galvanic isolation	@ 50HZ/60HZ, AC, 1min 5									KV
绝缘阻抗 Isolation resistance	@ DC 500V 1000									MΩ

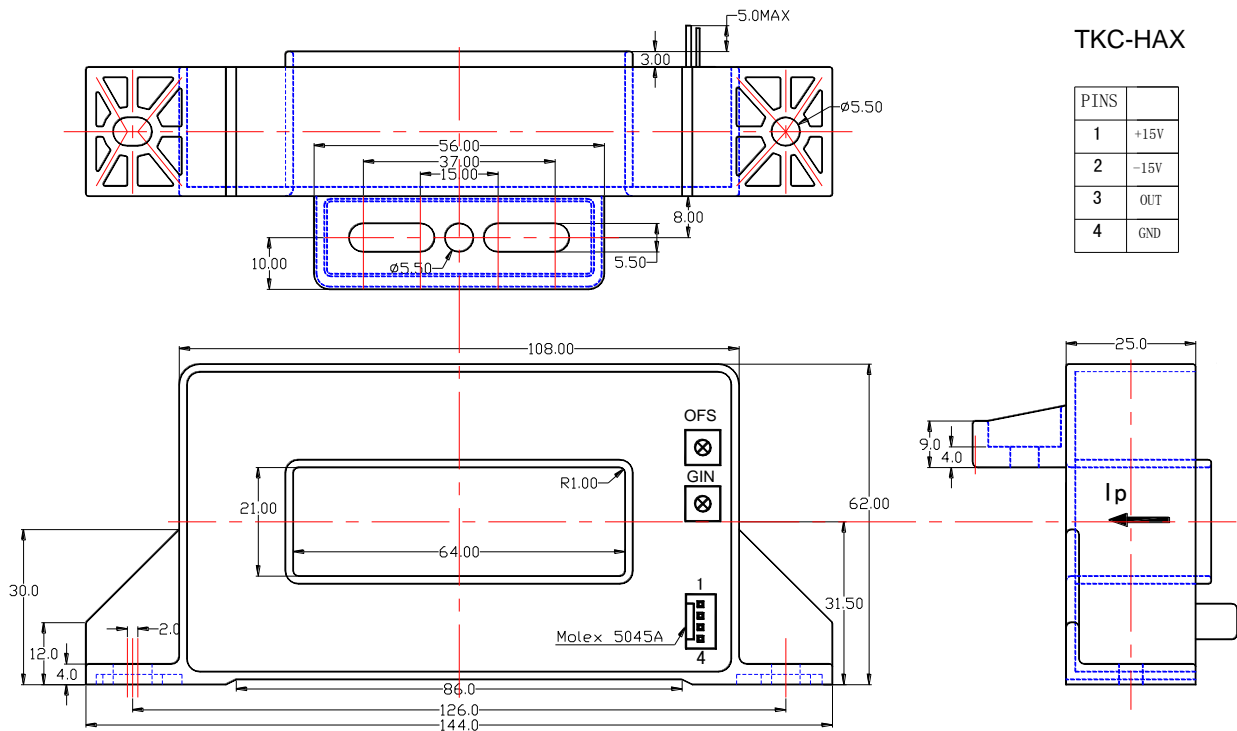
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应用 Applications

- 变频调速系统
Variable speed drives
- 电焊机
Welding machine
- 通讯电源
Battery supplied applications
- 不间断电源 UPS
Uninterruptible Power Supplies (UPS)
- 电化学
Electrochemical

结构参数 Mechanical dimension(for reference only)



Remarks:

1. All dimensions are in mm.
2. General tolerance $\pm 1\text{mm}$.

使用说明 Directions for use

1. 当待测电流从传感器穿过，即可在输出端测得电压大小。(注意：错误的接线可能导致传感器损坏)
When the current will be measured goes through a sensor, the voltage will be measured at the output end.
(Note: The false wiring may result in the damage of the sensor).
2. 传感器的输出幅度可根据用户需要进行适当调节。
Customs can adjust Output amplitude of the sensor by needs.

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3. 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。
 Custom design in the different rated input current and the output voltage are available.

执行标准 Standards

- UL94-V0.
- EN60947-1:2004
- IEC60950-1:2001
- EN50178:1998
- SJ 20790-2000

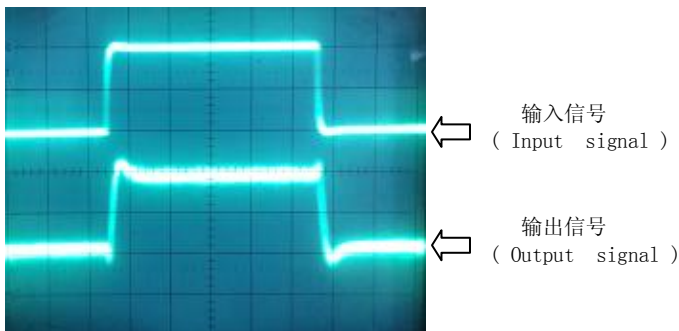
总体参数 General date

	数值 Value	单位 Unit	符号 Symbol
工作温度 Operating temperature	-40 to +85	°C	TA
储存温度 Storage temperature	-40 to +125	°C	TS
毛重(约) Mass(approx)	520	g	M

特性图 Characteristics chart

脉冲电流信号响应特性

Pulse current signal response characteristic



抗脉冲电压干扰特性

Effects of impulse noise

