

TKC-EKA 系列开环型可拆卸霍尔电流传感器

TKC-EKA Series Open Loop Mode Dismountable Hall Effect Current Sensor



TKC-EKA 系列开环型可拆卸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-EKA series dismountable hall effect current sensor is a 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℃±5℃, RL=2KΩ, CL=10000PF)

参数 Parameter 型号 Type	TKC50EKA	TKC100EKA	TKC200EKA	TKC300EKA	TKC400EKA	TKC500EKA	单位 Unit
额定输入电流 (I _{pn}) Rated current (I _{pn})	±50	±100	±200	±300	±400	±500	A
测量电流范围 (I _p) Measuring range (I _p)	±100	±200	±400	±600	±800	±1000	A
额定输出电压 Rated output	@I _p =±I _{pn} ±4±1%						V
电源电压 Supply voltage	±15±5%						V
功耗电流 Power Consumption	+25, -10						mA
失调电压 Offset voltage	@I _p =0 ±20						mV
磁失调电压 Magnetic offset	@I _p =±I _{pn} -0 ±20						mV
失调电压温漂 Offset drift	@ -40~+85℃ ≤±1						mV/℃
输出电压温漂 output drift	@ -40~+85℃ ≤±1						mV/℃
线性度 Linearity	@I _p =0-±I _{pn} ≤1						%FS
响应时间 Response time	@50A/μ S, 10%-90% ≤5						μ S
绝缘电压 Galvanic isolation	@ 50Hz, AC, 1min 2.5						KV
绝缘阻抗 Isolation resistance	@ DC 500V 1000						MΩ

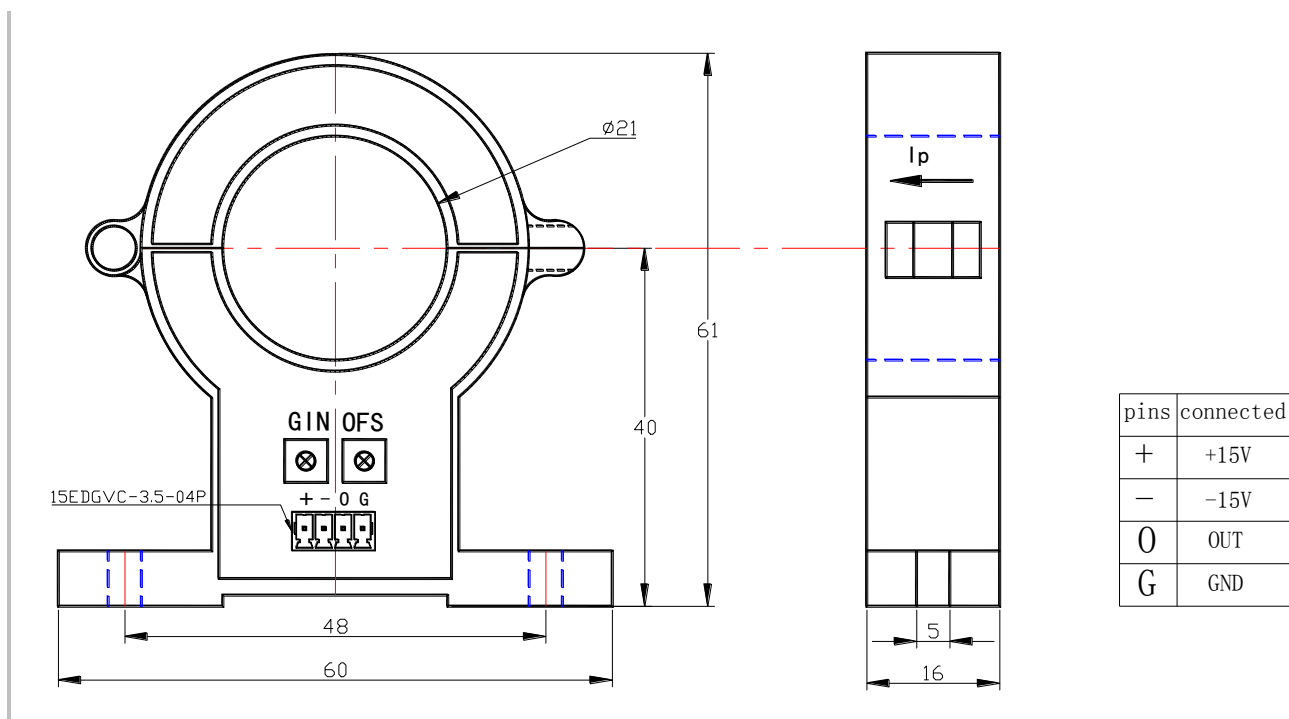
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应用 Applications

- 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. 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.

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执行标准 Standards

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

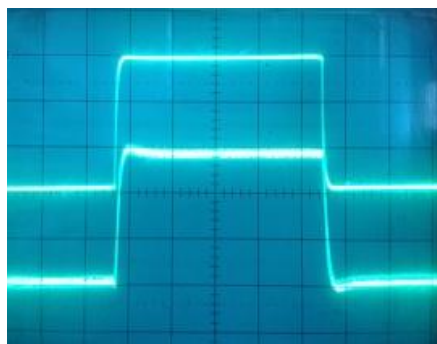
总体参数 General data

	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)	72	g	M

特性图 Characteristics chart

脉冲电流信号响应特性

Pulse current signal response characteristic

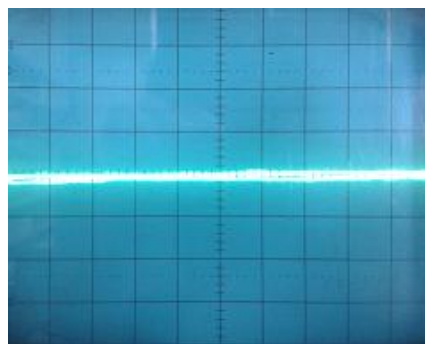


输入信号
(Input signal)

输出信号
(Output signal)

抗脉冲电压干扰特性

Effects of impulse noise



输出电压
(Output voltage)