

TKC-KD 系列开环型可拆卸霍尔电流变送器 TKC-KD Series Open Loop Mode Dismountable Hall Effect Current Transmitter



TKC-KD 系列可拆卸霍尔电流变送器是应用霍尔效应原理开发的新一代电流传感器，能在电隔离条件下测量交流、脉冲以及各种不规则波形的电流。

TKC-KD series current sensor is dismantlable, which is an open loop device, based on the measuring principle of the hall effect, with a galvanic isolation between primary and secondary circuit. It can measure AC pulse and various irregular wave current in electrical isolation conditions.

电参数 Electrical data (Ta=25°C ±5°C)

参数 Parameter	TKC100KD	TKC300KD	TKC500KD	TKC800KD	TKC1000KD	TKC2000KD	单位 Unit
额定输入电流(I _p AC) Rated current(I _p AC)	100	300	500	800	1000	2000	A
测量电流范围(I _p AC) Measuring range(I _p AC)	150	450	750	1200	1500	2500	A
额定输出电压 (DC) Rated output (DC)	@I _p =±I _{pn} ±5±1%						V
电源电压 Supply voltage	±15 ±5%						V
功耗电流 Power Consumption	+35, -20						mA
失调电压 Offset voltage	@I _p =0 ±30						mV
失调电压温漂 Offset drift	@ -40~+85°C ≤±1						mV/°C
输出电压温漂 Output drift	@ -40~+85°C ≤±1						mV/°C
线性度 Linearity	@I _p =0-±I _{pn} ≤0.5						%FS
响应时间 Response time	≤200						ms
带宽 Bandwidth	@-3dB 40~6000						Hz
绝缘电压 Galvanic isolation	@ 50Hz, AC, 1min 5.0						KV

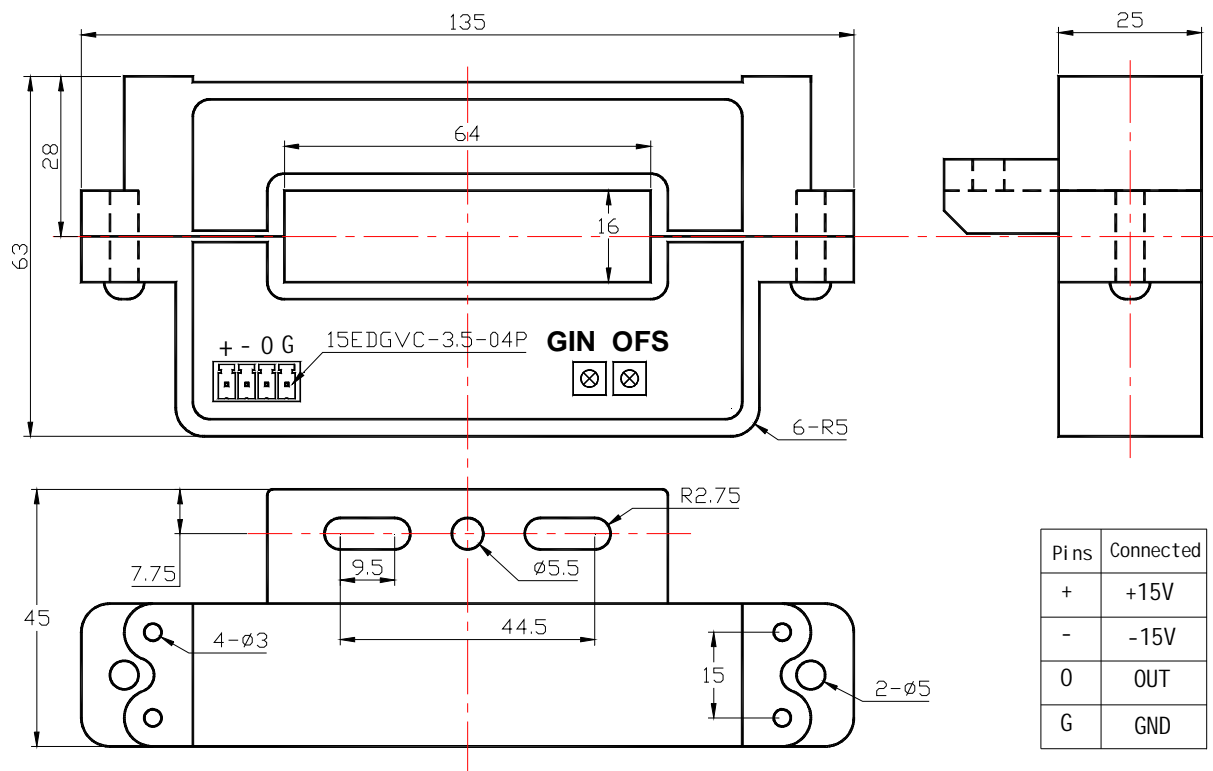
TKC-KD 系列开环型可拆卸霍尔电流变送器

TKC-KD Series Open Loop Mode Dismountable Hall Effect Current Transmitter

应用 Applications

- I 变频调速系统
Variable speed drives
- I 不间断电源 UPS
Uninterruptible power supplies (UPS)
- I 斩波器
Wave chopper
- I 电池电源
Battery supplied applications
- I 电焊机电源
Welding machine power
- I 通信电源
Telecommunication power

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. 当待测电流从变送器穿过，即可在输出端测得电压大小。(注意：错误的接线可能导致变送器损坏)
When the current will be measured goes through a transmitter, the voltage will be measured at the output end.
(Note: The false wiring may result in the damage of the transmitter)
2. 变送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 transmitter by needs.
3. 可按用户需求定制不同额定输入电流和输出电压的变送器。

TKC-KD 系列开环型可拆卸霍尔电流变送器

TKC-KD Series Open Loop Mode Dismountable Hall Effect Current Transmitter

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

4. 安装时，过流孔可拆开，使用方便。

When installing, the overflow hole can be disassembled, it's easy to use.

执行标准 Standards

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

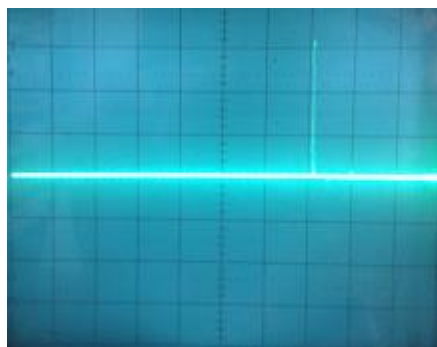
总体参数 General data

	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)	400	g	M

特性图 Characteristics chart

抗脉冲电压干扰特性

Effects of impulse noise



← 输出电压
(Output voltage)