

# TKC-KDRA 系列真有效值可拆卸霍尔电流变送器

## TKC-KDRA Series RMS Dismountable Hall Effect Current Transmitter



TKC-KDRA 系列真有效值霍尔可拆卸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直流、交流、脉冲以及各种不规则波形的电流。

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

**电参数 Electrical data (Ta=25°C ±5°C, RL=250Ω, CL=10000PF)**

参数 Parameter	型 Type	TKC400 KDRA	TKC300 KDRA	TKC500 KDRA	TKC800 KDRA	TKC1000 KDRA	TKC2000 KDRA	单位 Unit
额定输入电流 (I <sub>pn</sub> ) Rated input (I <sub>pn</sub> )		100	300	500	800	1000	2000	A
测量电流范围 (I <sub>p</sub> ) Measure range (I <sub>p</sub> )		200	600	1000	1600	2000	3000	A
额定输出电流 (I <sub>o</sub> DC) Rated output (I <sub>o</sub> DC)	@I <sub>p</sub> =±I <sub>pn</sub>	4~20±1%						mA
电源电压 Supply voltage		+24V±5.0%						V
功耗电流 Power consumption		+35±I <sub>o</sub>						mA
线性度 Linearity	@I <sub>p</sub> =0-±I <sub>pn</sub>	≤0.5						%FS
零点电流 Zero current	@I <sub>p</sub> =0	+4±0.1						mA
失调电流温漂 Offset drift	@ -40~+85°C	≤±0.005						mA/°C
输出电流温漂 Output drift	@ -40~+85°C	≤±0.005						mA/°C
线性度 Linearity	@I <sub>p</sub> =0-±I <sub>pn</sub>	≤0.5						%FS
响应时间 Response time		≤200						mS
带宽 Bandwidth	@-3dB	DC~6000						HZ
绝缘电压 Galvanic isolation	@ 50Hz, AC, 1min	5.0						KV

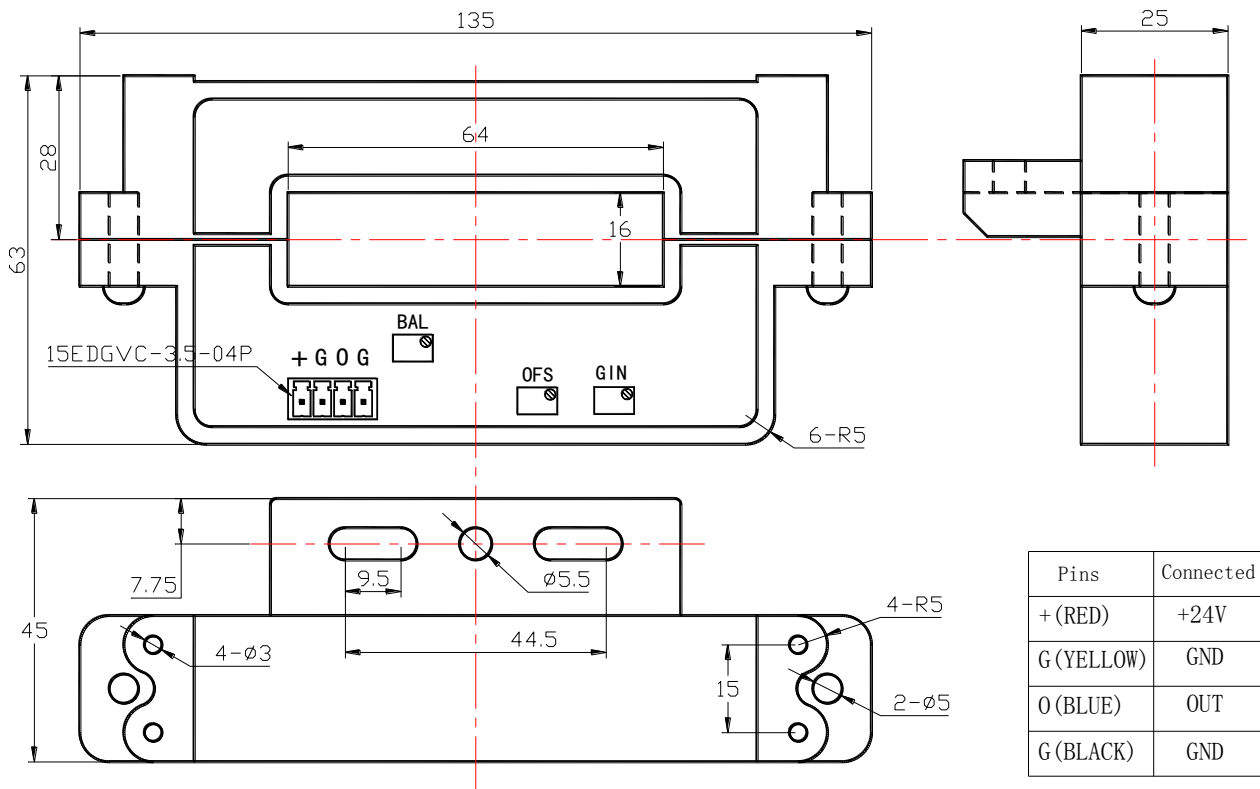
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## TKC-KDRA Series RMS Dismountable Hall Effect Current Transmitter

### 应用 Applications

- 变频调速系统  
Variable speed drives
- 不间断电源 UPS  
Uninterruptible power supplies (UPS)
- 斩波器  
Wave chopper
- 电池电源  
Battery supplied applications
- 电焊机电源  
Welding machine power
- 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  $\pm 1$ 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流大小。(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 current 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。  
The output amplitude of the transmitter can be adjusted according to users' requirements.

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## TKC-KDRA Series RMS Dismountable Hall Effect Current Transmitter

- 可按用户需求定制不同额定输入电流和输出电流的变送器。  
Custom design in the different rated input current and the output current are available.
- 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

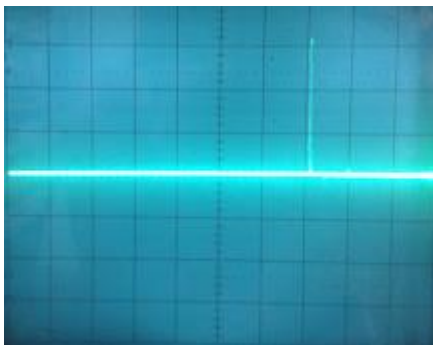
- UL94-V0.
- EN60947-1:2004
- IEC60950-1:2001
- EN50178:1998
- SJ 20790-2000

### 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)	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 )