

## TKC-N/NR 系列开环型霍尔电流传感器 TKC-N/NR Series Open Loop Mode Hall Effect Current Sensor



TKC-N/NR 系列开环型电流传感器的初、次级之间是绝缘的，可用于测量直流、交流和脉冲电流。

The TKC-N/NR 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)**

参数 Parameter	型号 Type	TKC100N/NR	TKC200N/NR	TKC300N/NR	TKC400N/NR	TKC500N/NR	TKC600N/NR	单位 Unit
额定输入电流 (Ipn) Rated input (Ipn)		±100	±200	±300	±400	±500	±600	A
测量电流范围 (Ip) Measure range (Ip)		±300	±600	±900	±1000	±1000	±1000	A
额定输出电压 Rated output	@Ip=±Ipn	±4 ±1%						V
电源电压 Supply voltage		±15 ±5%						V
功耗电流 Power consumption		+18, -10						mA
零点失调电压 Offset voltage	@Ip=0	≤25						mV
磁失调电压 Magnetic offset	@Ip=±Ipn	≤±30						mV
失调电压温漂 Offset drift	@ -40°C ~ +85°C	≤±0.5						mV/°C
输出电压温漂 Output drift	@ -40°C ~ +85°C	≤±0.5						mV/°C
线性度 Linearity	@Ip=0-±Ipn	≤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	3.0						KV

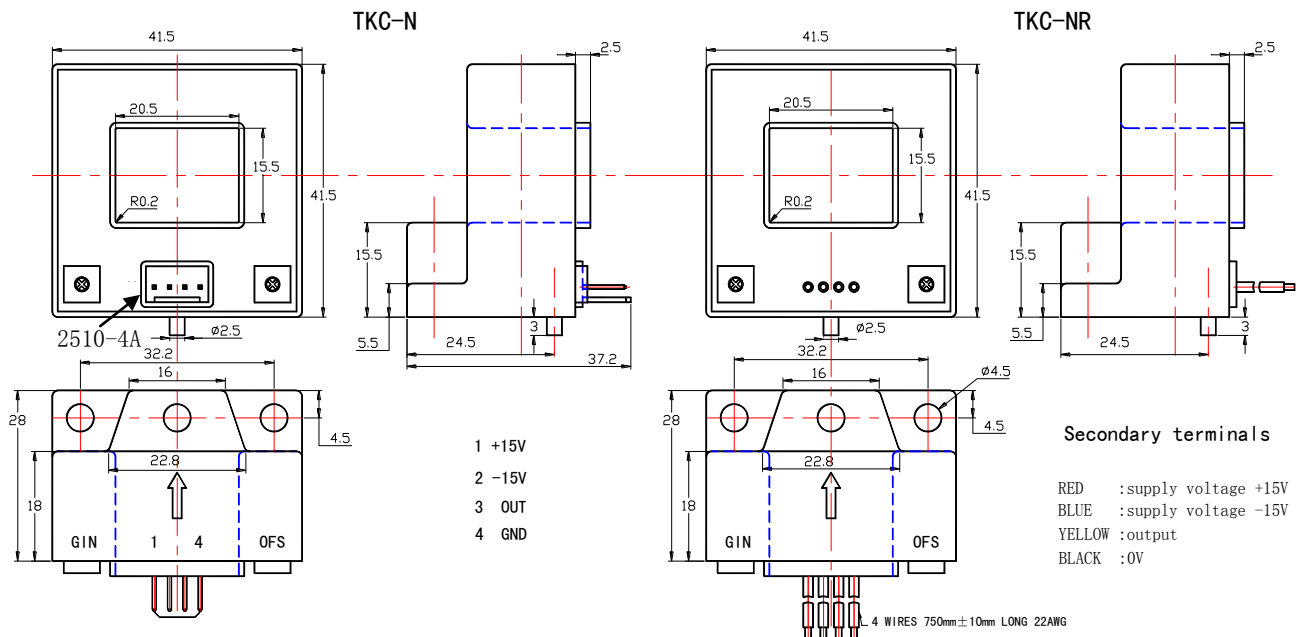
# TKC-N/NR 系列开环型霍尔电流传感器

## TKC-N/NR Series Open Loop Mode Hall Effect Current Sensor

### 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
- 开关电源(SMPS)  
Switched Mode Power Supplies (SMPS)

### 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.
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。

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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

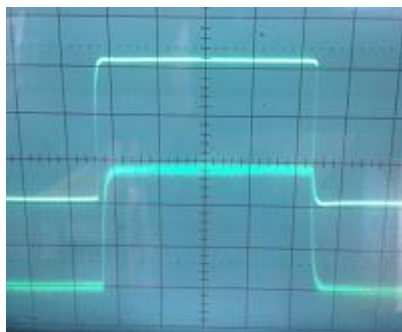
### 总体参数 General data

	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)	79	g	M

### 特性图 Characteristics chart

脉冲电流信号响应特性

Pulse current signal response characteristic

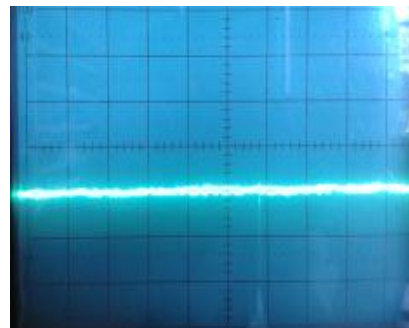


← 输入信号  
( Input signal )

← 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 )