

## TKC-TG2 系列两相霍尔电流传感器

### TKC-TG2 Series Two-phase Hall Effect Current Sensor



TKC-TG2 系列电流传感器的初、次级之间是绝缘的；用于两相直流、交流和脉冲电流的测量。

The TG2 series current sensor is a open loop device based on the principle of the hall effect, with a galvanic isolation between primary and secondary circuit. It provides accurate electronic measurement of three phase DC, AC or pulsed currents.

**电参数 Electrical data (R<sub>L</sub>=5.1KΩ, C<sub>L</sub>=1000PF)**

型号 Type 参数 Parameter	TKC81.5TG2	TKC96.7TG2	TKC122.2TG2	TKC147.6TG2	单位 Unit
额定输入电流 (I <sub>pn</sub> ) Rated input (I <sub>pn</sub> )	±81.5	±96.7	±122.2	±147.6	A
测量电流范围 (I <sub>p</sub> ) Measure range (I <sub>p</sub> )	±110.0	±130.5	±165.0	±199.3	A
额定输出电压 Rated output	± 6.0 ± 1.5%FS				V
电源电压 Supply voltage	±12 ±5%				V
功耗电流 Power consumption	≤60				mA
电失调电压 Offset voltage	≤±30				mV
磁失调电压 Magnetic offset voltage	@ I <sub>P</sub> =I <sub>PN</sub> ≤±30				mV
失调电压温漂 Offset voltage drift	@ -10~+80°C ≤±4.0				mV
幅度电压温漂 Amplitude voltage drift	@ -10~+80°C 0.1				%/°C
线性度 Linearity	@ I <sub>P</sub> =I <sub>PN</sub> ≤1.0				%FS
响应时间 Response time	@ I <sub>P</sub> =I <sub>PN</sub> ≤8				μ S
过渡特性 Transition characteristics	@ di/dt, I <sub>pn</sub> /us ≤±10%				V
绝缘电压 Galvanic isolation	@ 50HZ/60HZ, AC, 1min 2.5				KV
绝缘阻抗 Isolation resistance	@ DC 500V 500				MΩ

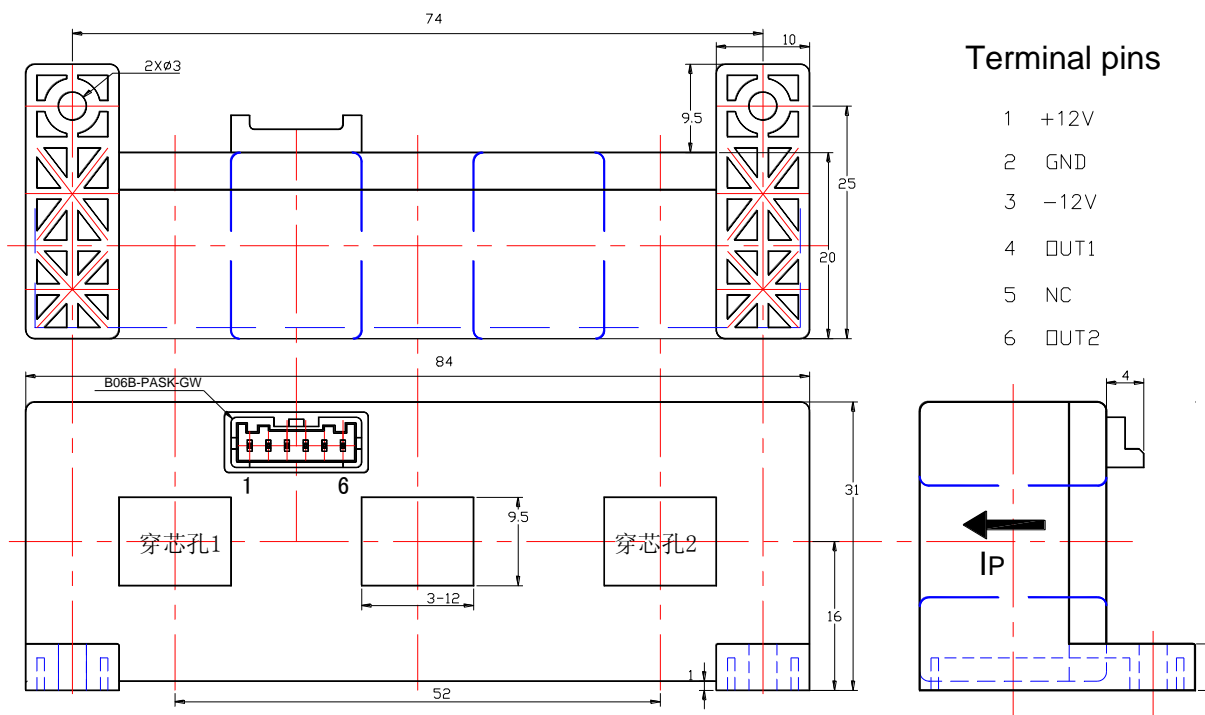
# TKC-TG2 系列两相霍尔电流传感器

## TKC-TG2 Series Two-phase 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

### 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. 产品箭头的方向为  $I_p$  方向。  
It will be in a forward direction when the  $I_p$  flows according to the direction of the arrowhead.
2. 初级导体温度不应超过  $120^\circ\text{C}$ 。  
The primary conductor should be  $\leq 120^\circ\text{C}$ .
3. 母排完全充满初级穿孔时动态表现 ( $di/dt$  和响应时间) 为最佳。  
The dynamic performance ( $di/dt$  and the response time) is the best when the primary hole is fully filled with the bus bar.
4. 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)

# TKC-TG2 系列两相霍尔电流传感器

## TKC-TG2 Series Two-phase Hall Effect Current Sensor

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)

- 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.
- 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

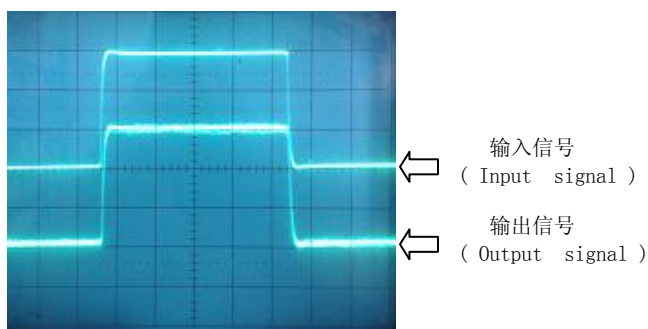
### 总体参数 General date

	数值 Value	单位 Unit	符号 Symbol
工作温度 Operating temperature	-10~+80	°C	TA
储存温度 Storage temperature	-25~+105	°C	TS
毛重(约) Mass (approx)	104	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

