



# TKC-H 系列开环型可拆卸霍尔电流传感器

## TKC-H Series Open Loop Mode Dismountable Hall Effect Current Sensor

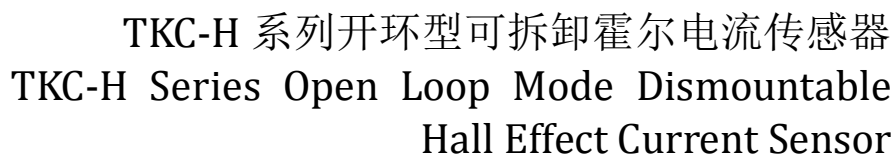


TKC-H 系列可拆卸霍尔电流传感器的初、次级之间是绝缘的，可用于测量直流、交流和脉冲电流。

TKC-H series is a kind of dismountable current sensor, 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 provides accurate electronic measurement of DC、AC or pulsed currents.

### 电参数 Electrical data (Ta=25℃±5℃, RL=2KΩ, CL=10000PF)

| 型号<br>Type                                                    | TKC600H                                  | TKC1200H | TKC1800H | TKC2400H | TKC3000H | 单位<br>Unit |
|---------------------------------------------------------------|------------------------------------------|----------|----------|----------|----------|------------|
| 参数<br>Parameter                                               |                                          |          |          |          |          |            |
| 额定输入电流 (I <sub>pn</sub> )<br>Rated current (I <sub>pn</sub> ) | ±600                                     | ±1200    | ±1800    | ±2400    | ±3000    | A          |
| 测量电流范围 (I <sub>p</sub> )<br>Measuring range (I <sub>p</sub> ) | ±1200                                    | ±2400    | ±2700    | ±3600    | ±4500    | A          |
| 额定输出电压<br>Rated output voltage                                | @I <sub>p</sub> =±I <sub>pn</sub> ±4±1%  |          |          |          |          | V          |
| 电源电压<br>Supply voltage                                        | ±15±5%                                   |          |          |          |          | V          |
| 功耗电流<br>Power Consumption                                     | +25, -10                                 |          |          |          |          | mA         |
| 失调电压<br>Offset voltage                                        | @I <sub>p</sub> =0 ±20                   |          |          |          |          | mV         |
| 磁失调电压<br>Magnetic offset                                      | @I <sub>p</sub> =±I <sub>pn</sub> -0 ±20 |          |          |          |          | mV         |
| 失调电压温漂<br>Offset voltage drift                                | @ -40~+85℃ ≤±1                           |          |          |          |          | mV/℃       |
| 输出电压温漂<br>output drift                                        | @ -40~+85℃ ≤±1                           |          |          |          |          | mV/℃       |
| 线性度<br>Linearity                                              | @I <sub>p</sub> =0-±I <sub>pn</sub> ≤1   |          |          |          |          | %FS        |
| 响应时间<br>Response time                                         | @50A/ μS, 10%-90% ≤7                     |          |          |          |          | μS         |
| 绝缘电压<br>Galvanic isolation                                    | @ 50Hz, AC, 1min 6                       |          |          |          |          | KV         |



- 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

Technical drawing of a mechanical part, showing front and side views with dimensions and labels.

**Front View (Top):**

- Overall width: 127
- Overall height: 24
- Central vertical feature:  $l_p$  (pointing down)
- Left side feature:  $2-R3$  (pointing to a fillet)
- Right side feature:  $24$  (height dimension)

**Side View (Bottom):**

- Overall width: 127
- Overall height: 102
- Top section height: 36
- Bottom section height: 15
- Central horizontal feature:  $27$  (height dimension)
- Left side feature:  $4-R1.5$  (pointing to a fillet)
- Right side feature:  $36$  (height dimension)
- Internal features:
  - $OFS$  (Offset)
  - $GIN$  (Grounding)
  - $2510-5A$  (Component label)
  - $5$  (Pin number)
  - $1$  (Pin number)
- Dimensions:
  - 85 (Distance from left edge to center)
  - 121 (Distance from left edge to right edge)
  - 150 (Distance from left edge to right edge)
  - 170 (Distance from left edge to right edge)

| Pins     | Connected   |
|----------|-------------|
| <b>1</b> | <b>+15V</b> |
| <b>2</b> | <b>GND</b>  |
| <b>3</b> | <b>-15V</b> |
| <b>4</b> | <b>NC</b>   |
| <b>5</b> | <b>OUT</b>  |

1. All dimensions are in mm.
2. General tolerance  $\pm 1\text{mm}$ .

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~~ 2510-5A)



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- 传感器的输出幅度可根据用户需要进行适当调节。  
The output amplitude of the sensor can be adjusted according to users' requirements.
- 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 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   | -40to +125 | °C      | TS        |
| 毛重(约) Mass(approx)         | 602        | g       | M         |

### 特性图 Characteristics chart

抗脉冲电压干扰特性  
Effects of impulse noise

