

TKC-GT Series Open Loop Mode Hall Effect Current Sensor



TKC-GT 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.

Electrical data (Ta=25°C±5°C, RL=2KΩ,CL=10000PF)

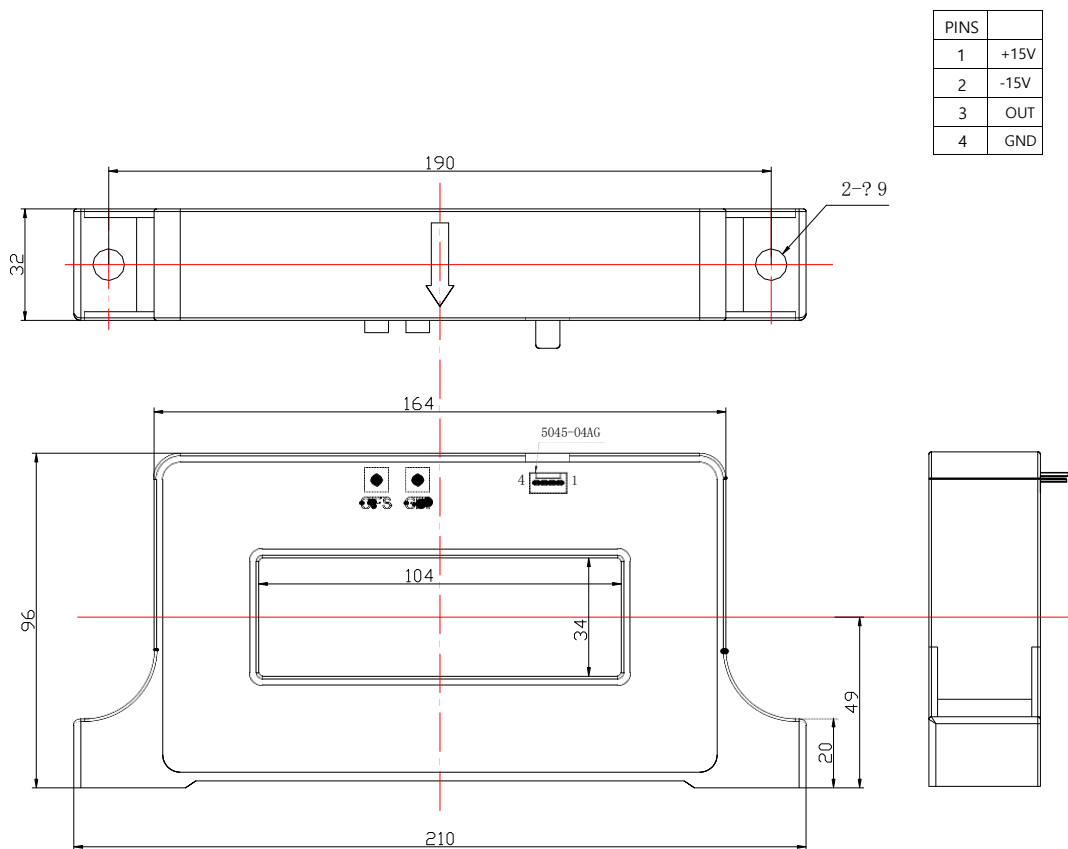
Type Parameter	TKC- 500GT	TKC- 800GT	TKC- 1000GT	TKC- 2000GT	TKC- 3000GT	TKC- 4000GT	TKC- 5000GT	Unit
Rated input (Ipn)	±500	±800	±1000	±2000	±3000	±4000	±5000	A
Measure range(Ip)	±1500	±2400	±3000	±6000	±9000	±10000	±10000	A
Rated output	@Ip=±Ipn ±4±1%							V
Supply voltage	±15±5%							V
Power Consumption	+18,-10							mA
Offset voltage	@Ip=0 ≤±15							mV
Magnetic offset	@Ip=±Ipn ≤±20							mV
Offset drift	≤±0.5 (Typ) , ≤±0.75 (Max)							mV/°C
Output drift	≤±0.5 (Typ) , ≤±0.75 (Max)							mV/°C
Linearity	@Ip=0-±Ipn ≤1							%FS
Response time	@50A/μS, 10%-90% ≤10							μS
Band-width	@-3dB DC-25							KHz
Galvanic isolation	@ 50HZ,AC,1min 5.0							KV

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Applications

- Variable speed drives
- Welding machine
- Battery supplied applications
- Uninterruptible Power Supplies (UPS)
- Electrochemical

Mechanical dimension (for reference only)



Remarks :

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

Directions for use

1. 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)

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2. Customs can adjust the output amplitude of the sensor by needs.
3. Custom design in the different rated input current and the output voltage are available.

Standards

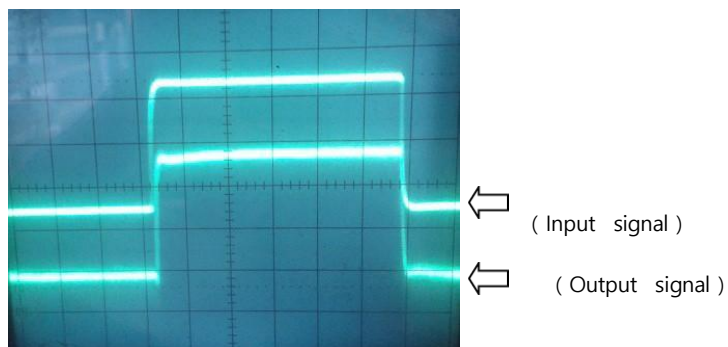
UL94-V0.
EN60947-1:2004
IEC60950-1:2001
EN50178:1998
SJ 20790-2000

General data

	Value	Unit	Symbol
Operating temperature	-40 to +105	°C	TA
Storage temperature	-40 to +125	°C	TS
Mass(approx)	GT:1600	g	M

Characteristics chart

Pulse current signal response



Effects of impulse noise

