TKC-E Series Open Loop Mode Hall Effect Current Sensor

TKC-E series current sensor is an 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 DC, AC or pulsed currents.

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

Parameter \ Type	TKC50E	TKC75E	TKC100E	TKC150E	TKC200E	TKC300E	TKC400E	TKC500E	Unit
Rated input (Ipn)	±50	±75	±100	±150	±200	±300	±400	±500	A
Measure range(Ip)	±150	±225	±300	±450	±600	±900	±1000	±1000	A
Rated output	@Ip=±Ipn	±4±1%							V
Supply voltage	±15±5%								V
Power Consumption	+18,-10								mA
Offset voltage	@Ip=0	±20							mV
Magnetic Offset	±25	±20							mV
Offset drift	≤±1.5	≤±1.0							mV/℃
output drift	≤±1.5	≤±1.0							mV/℃
Linearity	@Ip=0-±Ipn	≤1							%FS
Response time	@50A/μS, 10%-90%	≤3							μS
Band-width	@-3dB	DC-25							KHz
Galvanic isolation	@ 50HZ,AC,1min	2.5							KV

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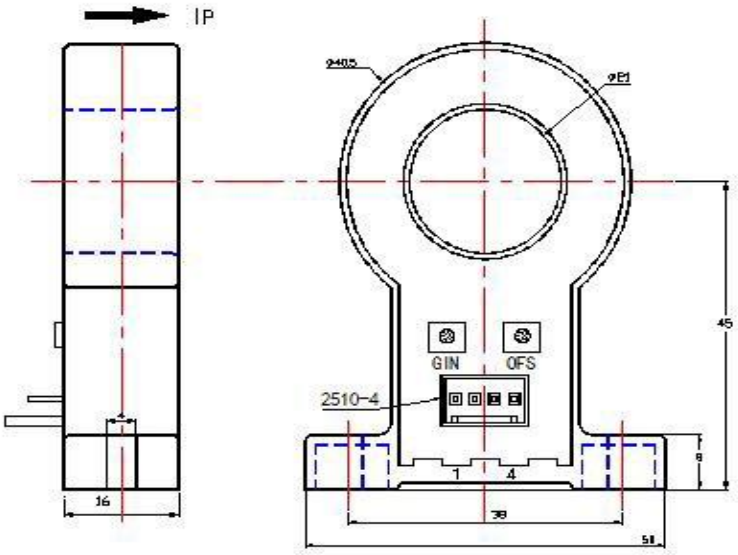
Applications

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

Mechanical dimension (for reference only)



PINS	CONNECTED
1	+15V
2	-15V
3	OUT
4	GND

Remarks :

1. All dimensions are in mm.
2. General tolerance ±1mm.

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)
2. Customs can adjust 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

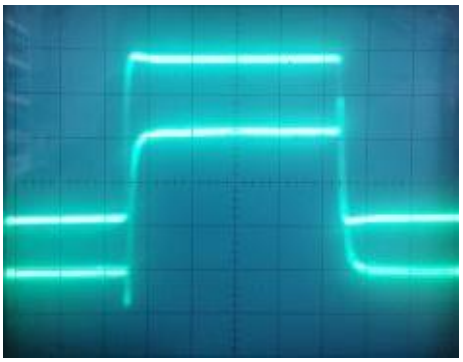
SJ 20790-2000

General data

	Value	Unit	Symbol
Operating temperature	-40 to +105	ºC	TA
Storage temperature	-40 to +125	ºC	TS
Mass(approx)	44	g	M

Characteristics chart

Pulse current signal response characteristic



Effects of impulse noise