TKC-PT3 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.

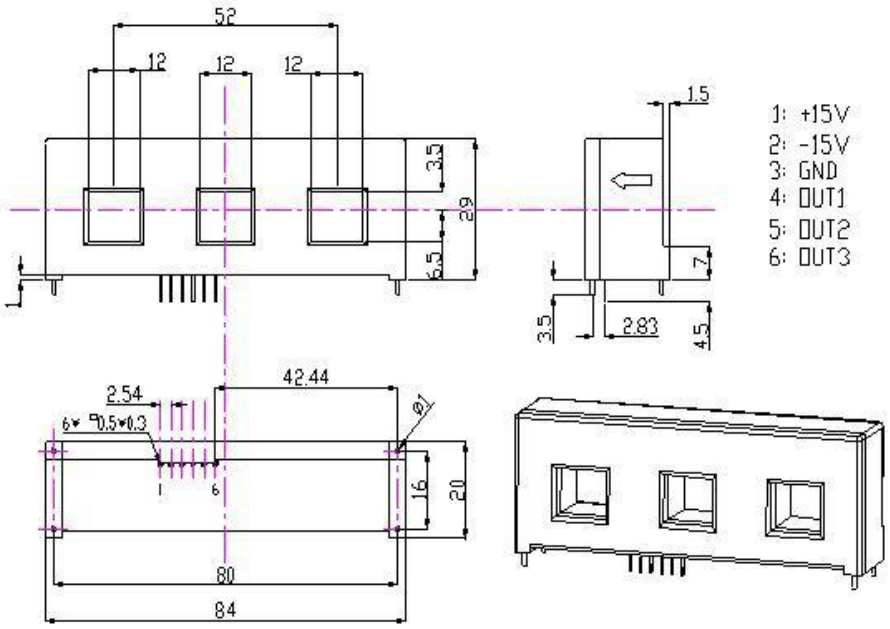
Electrical data （R_L=10kΩ,C_L=10000PF）

Parameter \ Type	TKC50PT3	TKC100PT3	TKC150PT3	TKC200PT3	Unit
Rated input current (I_{PN})	±50	±100	±150	±200	A
Measure current range (I_P)	±150	±300	±450	±600	A
Rated output voltage	±4±1.5%				V
Supply voltage	±15±5%				V
Consumption current	≤60				mA
Offset voltage	@Ta=25℃、铁芯消磁后	≤±50			mV
Hysteresis	@ If=0～1×I_P	≤±150			mV
Offset voltage drift	≤±2.0				mV/℃
Amplitude voltage drift	0.08				%/℃
Linearity	@ If=I_P	≤1.0			%FS
Response time	@ di/dt=100A/μS或IPN/μs的较小一方	≤10			μS
Band-width	@-3dB	DC-25			KHz
Galvanic isolation	@ 50HZ/60Hz,AC,1min	2.5（导体通孔-端子一括间）			KV
Isolation resistance	@ DC 500V	500（导体通孔-端子一括间）			MΩ

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 ±1mm

Directions for use

1. It will be in a forward direction when the Ip flows according to the direction of the arrowhead.
2. The primary conductor should be≤120℃.
3. The dynamic performance (di/dt and the response time) is the best when the primary hole is fully filled with the bus bar.

4. 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)
5. Customs can adjust Output amplitude of the sensor by needs.
6. 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

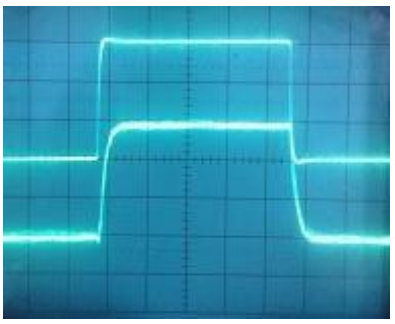
SJ 20790-2000

General date

	Value	Unit	Symbol
Operating temperature	-40 ~ +105	ºC	TA
Storage temperature	-40 ~ +125	ºC	TS
Mass(approx)	99	g	M

Characteristics chart

Pulse current signal response characteristic



Effects of impulse noise