



TKC-DT52series 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.

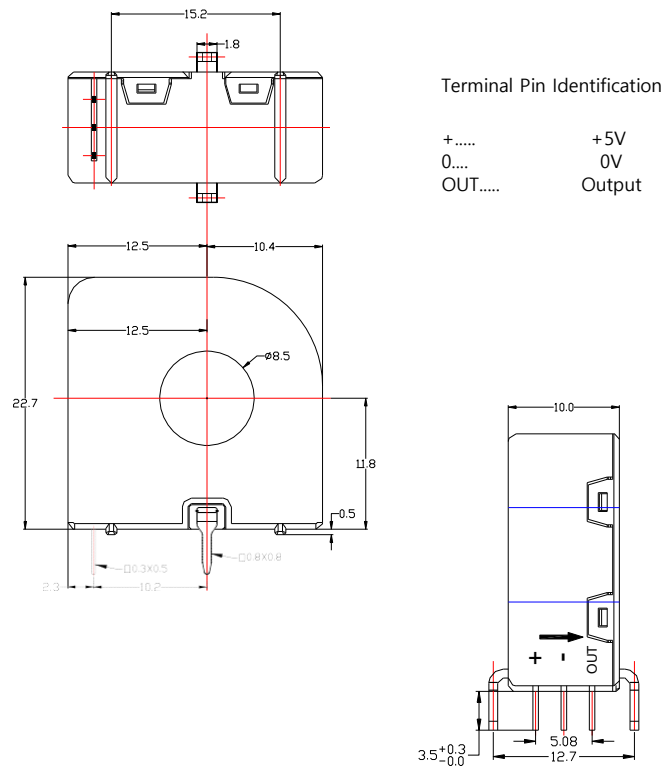
**Electrical data (Ta=25°C±5°C, RL=10KΩ, CL=10000PF)**

<div><div>Type</div><div>Parameter</div></div>	TKC 15DT52	TKC 20DT52	TKC 30DT52	TKC 40DT52	TKC 50DT52	TKC 75DT52	TKC 80DT52	TKC 100DT52	Unit
Rated input	±15	±20	±30	±40	±50	±75	±80	±100	A
Measure range (Ip)	±16.5	±22	±33	±44	±55	±82.5	±88	±110	A
Rated output	@Ip=±Ipn ±2.0±1%								V
Zero voltage	@Ip=0 1/2 VCC±1%								V
Supply voltage	+5±5%								V
Power Consumption	≤10								mA
Zero offset voltage	≤±20								mV
Magnetic offset voltage	±15	±10							mV
Offset voltage drift	≤±1.2	≤±1							mV/°C
Output drift	≤±1.2	≤±1							mV/°C
Linearity	@Ip=0-±Ipn ≤1								%FS
Response time	@50A/μS, 10%-90% ≤0.5								MS
Band- width	@-3dB DC-25								KHz
Galvanic isolation	@ 50HZ, AC,1min 2.5								KV

## Applications

- AC variable speed drives
- Static converters for DC motor drives
- Variable speed drives
- Power supplies for welding applications
- Battery supplied applications
- Uninterruptible Power Supplies (UPS)
- Switched Mode Power Supplies (SMPS)

## 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)
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

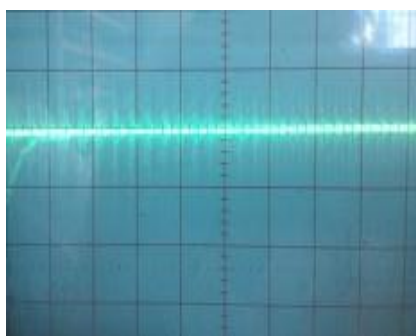
UL94-V0  
EN60947-1:2004  
IEC60950-1:2001  
EN50178:1998  
SJ 20790-2000

## General data

	Value	Unit	Symbol
Operating temperature	-40 to +105	°C	TA
Storage temperature	-50 to +150	°C	TS
Mass(approx)	10	g	M

## Characteristics chart

Effects of impulse noise



Input current-Output Voltage characteristic

