



TKC-BS1 series current sensor 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.

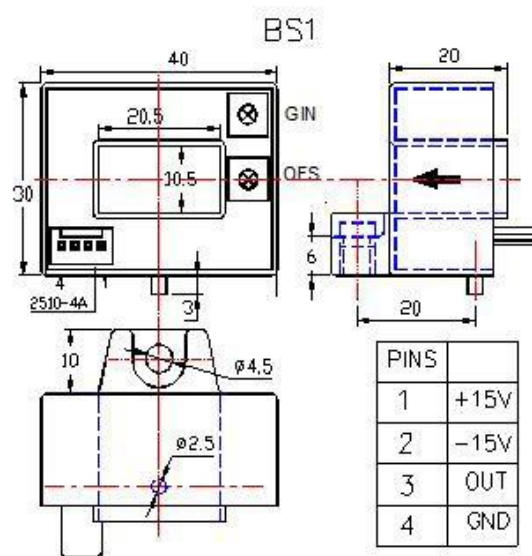
Electrical data (Ta=25°C±5°C,RL=10KΩ,CL=10000PF)

<div>Type</div> <div>Parameter</div>	TKC-50 BS1	TKC-75 BS1	TKC-100 BS1	TKC-200 BS1	TKC-300 BS1	TKC-400 BS1	TKC-500 BS1	TKC-600 BS1	Unit
Rated input (Ipn)	±50	±75	±100	±200	±300	±400	±500	±600	A
Measure range (Ip)	±150	±225	±300	±600	±900	±900	±900	±900	A
Rated output	@Ip=±Ipn ±4±1%								V
Supply voltage	±15 ±5%								V
Power Consumption	+15,-10								mA
Offset voltage	±25								mV
Magnetic offset	±30	±25							mV
Offset drift	≤±1.5	≤±1.0 (Typ) , ≤±1.5 (Max)							mV/°C
output drift	≤±1.5	≤±1.0 (Typ) , ≤±1.5 (Max)							mV/°C
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

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

Standards

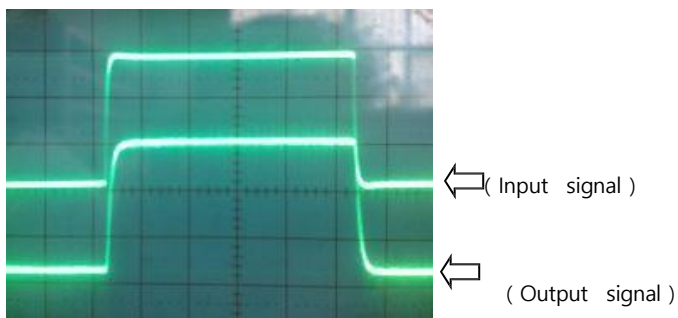
- UL94-V0
- EN60947-1:2004
- IEC60950-1:2001
- EN50178:1998
- SJ 20790-2000

General date

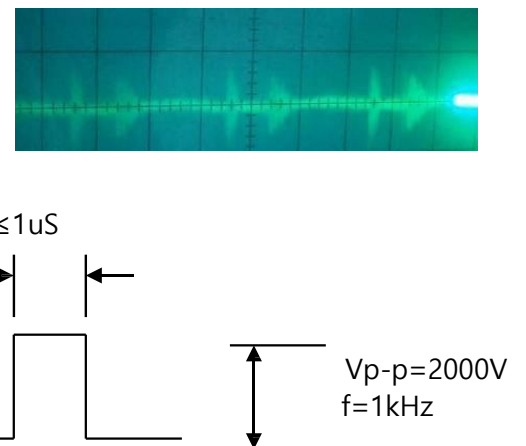
	Value	Unit	Symbol
Operating temperature	-40 to +105	°C	TA
Storage temperature	-40 to +125	°C	TS
Mass(approx)	65	g	M

Characteristics chart

Pulse current signal response characteristic



Effects of impulse noise



Input current-Output Voltage characteristic

