



TKC-BRF565 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 measurements of DC, AC or pulsed currents.

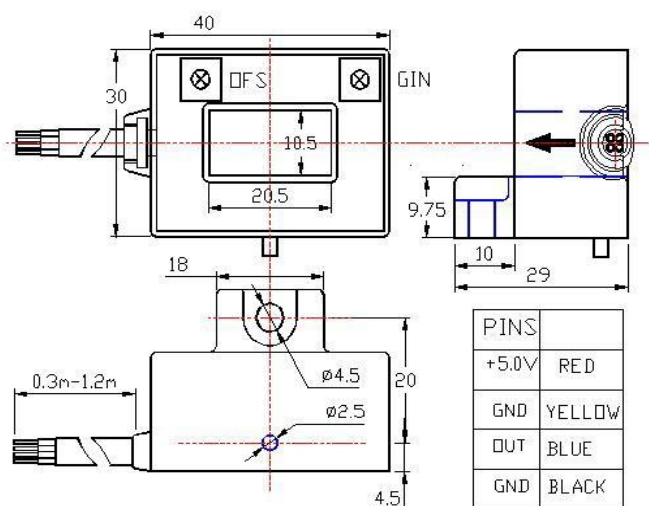
## Electrical data (Ta=25°C±5°C, RL=2KΩ, CL=10000PF)

Type Parameter	TKC50 BRF565	TKC100 BRF565	TKC200 BRF565	TKC300 BRF565	TKC400 BRF565	TKC500 BRF565	TKC600 BRF565	Unit
Rated input (Ipn)	±50	±100	±200	±300	±400	±500	±600	A
Measure range	±150	±300	±600	±900	±900	±900	±900	A
Rated output	@Ip=±Ipn ±0.625±1%							V
Zero voltage	@Ip=0 2.5±0.5%							V
Reference voltage	2.5±0.5%							V
Supply voltage	+5±5%							V
Power Consumption	≤20							mA
Zero offset voltage	≤±20							mV
Magnetic offset	±15	±10						mV
Offset drift	≤±1.0	≤±0.5						mV/°C
output drift	≤±1.0	≤±0.5						mV/°C
Linearity	@Ip=0-±Ipn ≤1							%FS
Response time	@50A/μS, 10%-90% ≤3							μS
Bandwidth	@(-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 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 output voltage are available.

## Standards

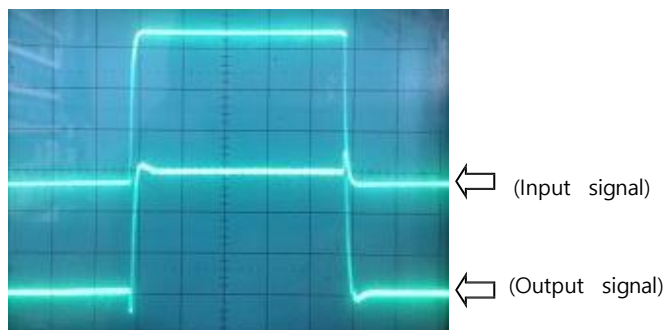
UL94-V0  
EN60947-1:2004  
IEC60950-1:2001  
EN50178:1998  
SJ 20790-2000

## General data

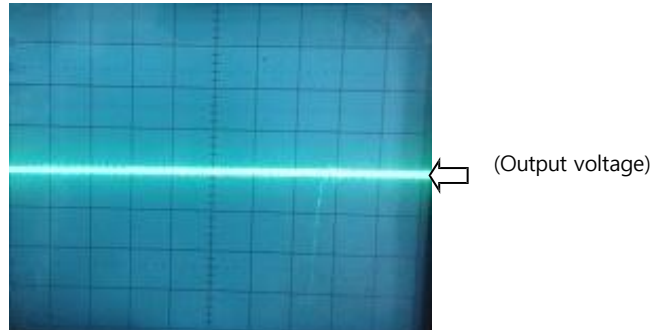
	Value	Unit	Symbol
Operating temperature	-40 to +105	°C	TA
Storage temperature	-40 to +125	°C	TS
Mass(approx)	80	g	M

## Characteristics chart

Pulse current signal response characteristic



Effects of impulse noise



Current-Output Voltage characteristic