

# **TKC-BSFR5** Series Open Loop Mode Hall Effect Current Sensor





TKC-BSFR5 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)

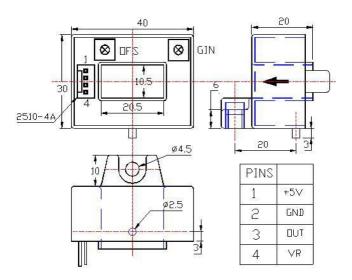
Type Parameter	TKC50 BSFR5	TKC100 BSFR5	TKC200 BSFR5	TKC300 BSFR5	TKC400 BSFR5	TKC500 BSFR5	TKC600 BSFR5	Unit
Rated input (Ipn)	±50	±100	±200	±300	±400	±500	±600	А
Measure range	±100	±200	±400	±600	±800	±900	±900	А
Rated output	@Ip=±Ipn ±1±1%						V	
Zero voltage	@lp=0 2.5±0.5%					V		
Reference voltage	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	@lp=0-±lpı	@lp=0-±lpn ≤1				%FS		
Response time	@50A/μS,	10%-90% ≤3					μS	
Bandwidt h	@-3dB			DC-25				KHz
Galvanic isolation	@ 50HZ,AC,1min 2.5						KV	

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### **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 ±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 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.



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### Standards

UL94-V0

EN60947-1:2004

IEC60950-1:2001

EN50178:1998

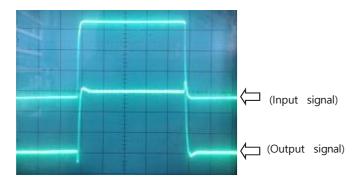
SJ 20790-2000

## **General date**

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

### **Characteristics chart**

## Pulse current signal response characteristic



## Effects of impulse noise

