

TKC-BSF5 Series Open Loop Mode Hall Effect Current Sensor





TKC-BSF5 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 measurement of DC, AC or pulsed currents.

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

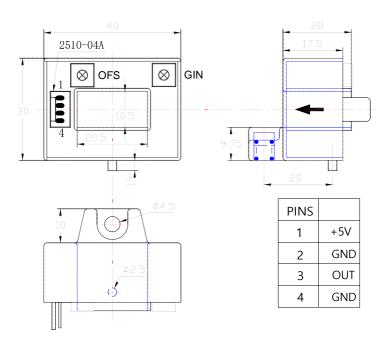
Type Parameter	TKC-50 BSF5	TKC-100 BSF5	TKC-200 BSF5	TKC-300 BSF5	TKC-400 BSF5	TKC-500 BSF5	TKC-600 BSF5	Unit
Rated input	±50	±100	±200	±300	±400	±500	±600	А
Measure range	±100	±200	±400	±600	±800	±900	±900	А
Rated output	@lp=±lpn ±1±1%					V		
Zero voltage	@Ip=0 2.5±0.5%						V	
Reference voltage	2.5±0.5%					V		
Supply voltage	+5±5%						V	
Power Consumption	≤20						mA	
Zero offset voltage	≤±20						mV	
Magnetic offset	±15	±15 ±10					mV	
Offset drift	≤±1.0	≤±0.5					mV/°C	
output drift	≤±1.0	≤±0.5					mV/°C	
Linearity	@lp=0-±lpn	on ≤1					%FS	
Response time	@50A/μS, 1	uS, 10%-90% ≤3					μS	
Band- width	@-3dB	DC-25					KHz	
Galvanic isolation	@ 50HZ,AC,1	@ 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 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.



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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)	65	g	М

Characteristics chart

Pulse current signal response characteristic

(Input signal)

Effects of impulse noise

