

TKC-BSF122 Series Open Loop Mode Hall Effect Current Sensor





TKC-BSF122 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 measurements of DC,AC or pulse currents.

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

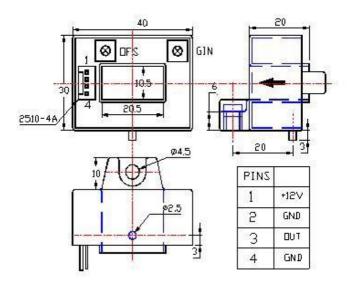
Type Parameter	TKC50 BSF122	TKC100 BSF122	TKC200 BSF122	TKC300 BSF122	TKC400 BSF122	TKC500 BSF122	TKC600 BSF122	Unit
Rated input (Ipn)	±50	±100	±200	±300	±400	±500	±600	А
Measure range	±55	±110	±220	±330	±440	±550	±660	А
Rated output	@lp=±lpn					V		
Zero voltage	@Ip=0 2.5±0.5%				V			
Reference voltage	2.5±0.5%				V			
Supply voltage	+12±5%					V		
Power Consumption	≤20					mA		
Zero offset voltage	≤±20					mV		
Magnetic offset	±15 ±10				mV			
Offset drift	≤±1.5	≤±1.5 ≤±1.0				mV/°C		
output drift	≤±1.5	±1.5 ≤±1.0				mV/°C		
Linearity	@lp=0-±lpn	@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

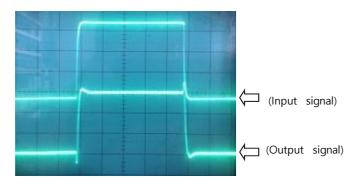
SJ 20790-2000

General date

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

Characteristics chart

Pulse current signal response characteristic



Effects of impulse noise

