

TKC-BAR Series Open Loop Mode Hall Effect





TKC-BAR series open loop mode 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)

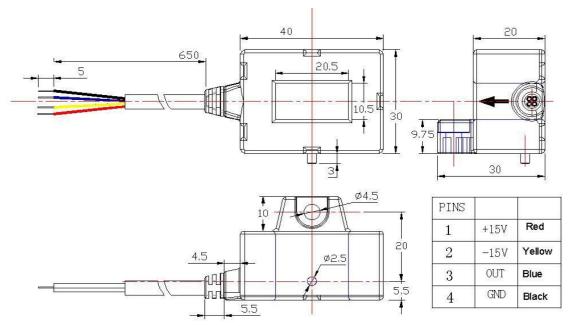
Type Parameter	TKC-50 BAR	TKC-75 BAR	TKC-100 BAR	TKC-200 BAR	TKC-300 BAR	TKC-400 BAR	TKC-500 BAR	TKC-600 BAR	Unit
Rated input (Ipn)	±50	±75	±100	±200	±300	±400	±500	±600	А
Measure range (lp)	±150	±225	±300	±600	±900	±900	±900	±900	А
Rated output	@lp=±lpn ±4±1%						V		
Supply voltage	±15 ±5%						V		
Power consumption	≤±15						mA		
Offset voltage	±25						mV		
Magnetic offset	±30	±30					mV		
Offset drift	≤±1.0 ≤±0.75						mV/℃		
Output drift	≤±1.0 ≤±0.75						mV/°C		
Linearity	@lp=0-±lpn ≤1						%FS		
Response time	@50A/μS, 10%-90% ≤3						μS		
Band- width	@-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)



The wiring harness model, length, and connector model can all be customized according to customer needs

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

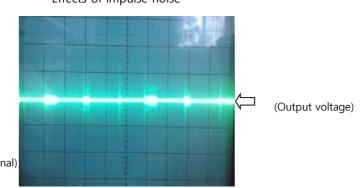
	Value	Unit	Symbol
Operating temperature	-40 to +105	°C	TA
Storage temperature	-40to +125	°C	TS
Mass(approx)	75	g	М

Characteristics chart

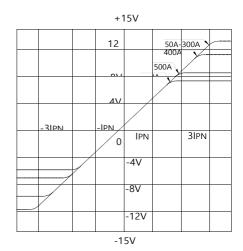
Pulse current signal response

← (Input signal) ← (Output signal)

Effects of impulse noise



Input current-Output Voltage



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