

TKC-BP2 Series Open Loop Mode Hall Effect





TKC-BP2 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 measurement of DC, AC or pulsed currents.

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

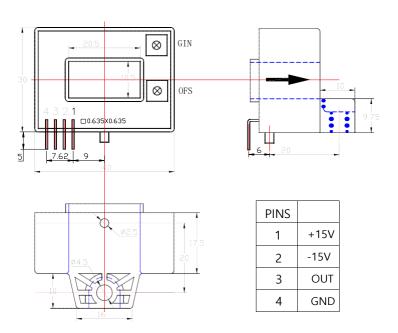
Type Parameter	TKC-50 BP2	TKC-75 BP2	TKC-100 BP2	TKC-200 BP2	TKC-300 BP2	TKC-400 BP2	TKC-500 BP2	TKC-600 BP2	Unit
Rated input	±50	±75	±100	±200	±300	±400	±500	±600	А
Measure range	±150	±225	±300	±600	±900	±900	±900	±900	А
Rated output	@lp=±lp	@lp=±lpn ±4±1%						V	
Supply voltage	±15 ±5%					V			
Consumption	+18,-10						mA		
Offset voltage	@Ip=0 ±25						mV		
Magnetic offset	±30 ±25						mV		
Offset drift	≤±1.5 ≤±1.0						mV/°C		
output drift	≤±1.5	≤±1.0						mV/°C	
Linearity	lp=0-±lp	p=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)



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

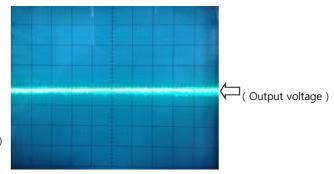
	Value	Unit	Symbol
Operating temperature	-40 to +105	°C	TA
Storage temperature	-40 to +125	°C	TS
Mass(approx)	65	g	М

Characteristics chart

Pulse current signal response characteristic

(Input signal) (Output signal)

Effects of impulse noise



Input current-Output Voltage characteristic

