

# **TKC-BS2A** Series Open Loop Mode Hall Effect Current Sensor





TKCBS2A 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- 50BS2A	TKC- 75BS2A	TKC- 100BS2A	TKC- 150BS2A	TKC- 200BS2A	TKC- 300BS2A	TKC- 400BS2A	TKC- 600BS2A	Unit
Rated input current	±50	±75	±100	±150	±200	±300	±400	±600	А
Measure current range	±100	150	±200	±300	±400	±600	±800	±900	А
Rated output voltage	±5±1%					V			
Supply voltage	±15 ±5%					V			
Offset voltage	±25					mV			
Consumption Current	≤25					mA			
Magnetic offset voltage	±30 ±25					mV			
Offset voltage drift	≤± 1.5					mV/°C			
output drift						mV/°C			
Linearity	≤1					%FS			
Response time	≤3					μS			
Bandwidth	@-3dB DC-25					KHz			
Galvanic isolation	@ 50HZ , AC , 1min 2.5					KV			



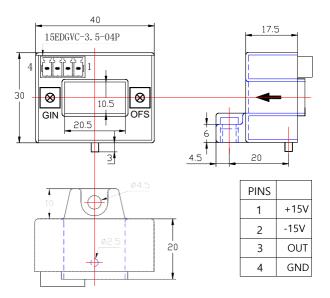
## TKC-BS2A Series Open Loop Mode Hall

### Effect Current Sensor

#### **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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### **Effect Current Sensor**

#### Standards

UL94-V0

EN60947-1:2004

IEC60950-1:2001

EN50178:1998

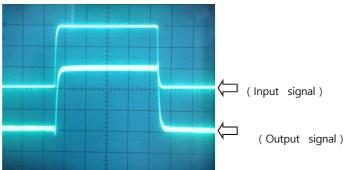
SJ 20790-2000

#### **General data**

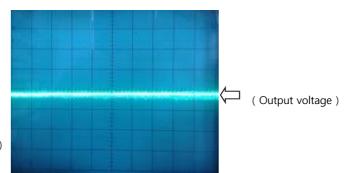
	Value	Unit	Symbol
Operating temperature	-40 to +105	°C	TA
Storage temperature	-40 to +125	°C	TS
Mass(approx)	65	q	М

#### Characteristics chart

Pulse current signal response characteristic



Effects of impulse noise



Input current-Output Voltage characteristic

