TKC-EKB420/24 Series Open Loop Mode Dismountable Hall Effect Current Sensor

TKC-EKB420/24 series dismountable current transmitter is an open loop device based on the principle of the hall effect, with a galvanic isolation between primary and secondary circuit. It provides accurate electronic measurement of AC or pulsed currents.

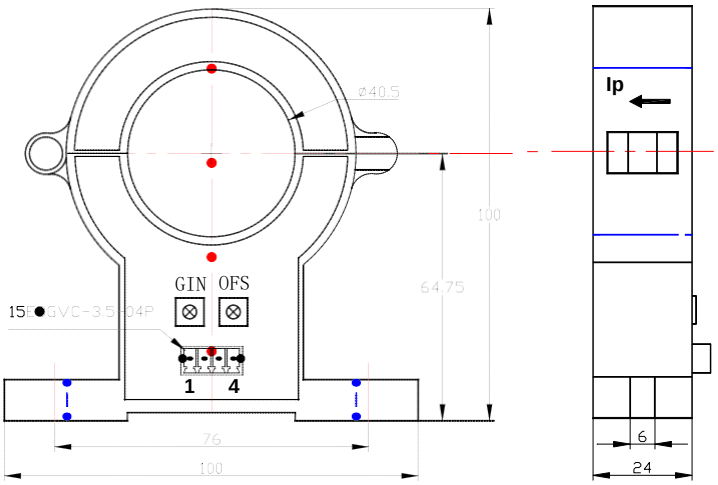
Electrical data (Ta=25℃±5℃)

Parameter \ Type	TKC100 EKB420/24	TKC200 EKB420/24	TKC500 EKB420/24	TKC1000 EKB420/24	TKC1500 EKB420/24	TKC2000 EKB420/24	Unit
Rated current (Ipn)	100	200	500	1000	1500	2000	A
Measuring range (Ip)	-25-+200	-50-+400	-125-+1000	-250-+2000	-375-+3000	-500-+3000	A
Rated output (Io DC)	@Ip=Ipn	4-20±1.0%					mA
Supply voltage	24±5%						V
Power Consumption	+35+Io						mA
Zero current	@Ip=0	4±0.1					mA
Offset drift	≤±0.005						mA/℃
Output drift	≤±0.005						mA/℃
Linearity	@Ip=Ipn AC	≤1					%FS
Response time	≤5						uS
Band-width	@-3dB	DC-25					KHz
Galvanic isolation	@ 50HZ， AC ，1min	2.5					KV

Applications

- Variable speed drives
- Welding machine
- Battery supplied applications
- Uninterruptible Power Supplies (UPS)
- Electrochemical

Mechanical dimension (for reference only)



PIN	CONNETE
1	+12/24V
2	GND
3	OUTPUT
4	GND

Remarks :

1. All dimensions are in mm.
2. General tolerance ±1mm.

Directions for use

1. When the current will be measured goes through a transmitter, the current will be measured at the output end. (Note: The false wiring may result in the damage of the transmitter).

2. Customs can adjust output amplitude of the transmitter by needs.

3. Custom design in the different rated input current and the output current are available.

Standards

UL94-V0

EN60947-1:2004

IEC60950-1:2001

EN50178:1998

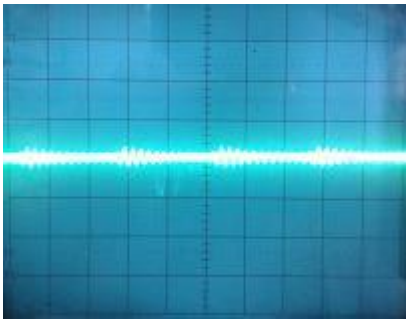
SJ 20790-2000

General data

	Value	Unit	Symbol
Operating temperature	-40 to +105	ºC	TA
Storage temperature	-40 to +125	ºC	TS
Mass(approx)	283	g	M

Characteristics chart

Effects of impulse noise



⇦ (Output voltage)