TKC-DHR420 Series High precision RMS Hall Effect Current Transmitter

TKC-DHR420 series current sensor is a true RMS device based on the measuring principle of the hall effect, with a galvanic isolation between primary and secondary circuit, the size of primary doesn't affect test precision, no matter the location of primary in the hole of current sensor, it uses for precision measurement of DC, AC and pulse current.

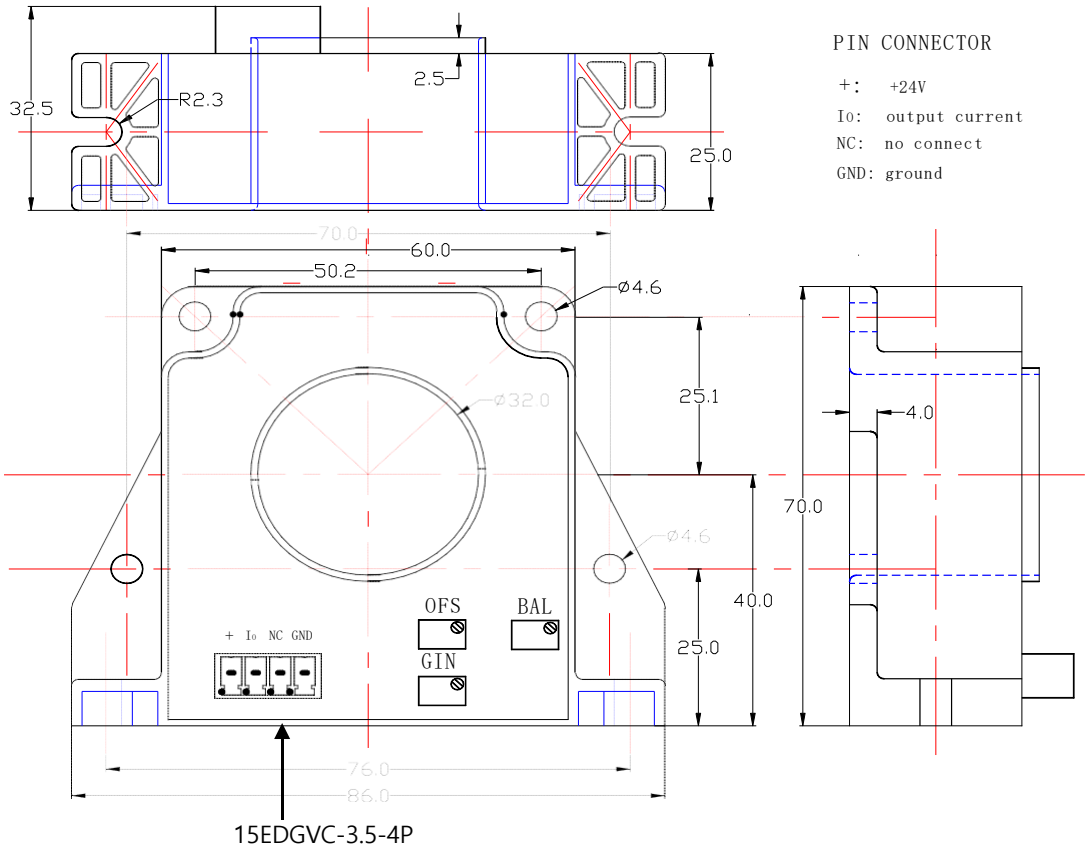
Electrical data (Ta=25℃±5℃)

Parameter \ Type	TKC100 DHR420	TKC200 DHR420	TKC300 DHR420	TKC400 DHR420	TKC500 DHR420	TKC600 DHR420	TKC800 DHR420	TKC900 DHR420	TKC1000 DHR420	Unit
Rated input (Ipn)	±100	±200	±300	±400	±500	±600	±800	±900	±1000	A
Measure range (Ip)	±300	±600	±900	±1200	±1500	±1500	±1500	±1500	±1500	A
Rated output (Io DC)	@Ip=±Ipn	4～20±0.5%								mA
Supply voltage	20-30±5%									V
Power consumption	≤ 36+Io									mA
Zero current	@Ip=0	4±0.2								mA
Offset drift	≤±5.0									μA /℃
output drift	≤±5.0									μA /℃
Linearity	@Ip=0-±Ipn	≤0.5								%FS
Response time	≤200									mS
Band-width	@-3dB	DC-25								KHz
Galvanic isolation	@ 50HZ, AC,1min	4.0								KV

Applications

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

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 transmitter, the voltage 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

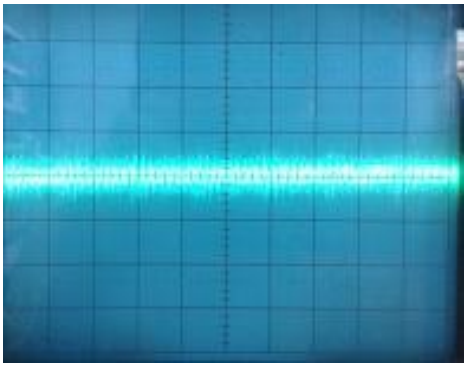
SJ 20790-2000

General data

	Value	Unit	Symbol
Operating temperature	-40 to +105	ºC	TA
Storage temperature	-40 to +125	ºC	TS
Mass(approx)	200	g	M

Characteristics chart

Effects of impulse noise



⇦ (Output voltage)