Split Core Hall effect Current Sensor

SCY10



Product description

Features

- Based on Hall effect measurement principle, open loop circuit mode.
- The isolation voltage between primary and secondary is greater than 3000VAC.
- Can be opened and closed up and down, no need to disassemble the busbar, easy to install.
- Comply with UL94-V0 flame retardant rating.

Performance

- It can measure DC, AC, pulse, and various irregular waveform currents of cable conductors under isolation conditions.
- Wide measurement range, fast response speed, low zero drift, low temperature drift, high accuracy and good linearity.
- Dynamic performance (di/dt and response time) is optimal when the busbar is fully filled with primary perforations.
- Strong ability to resist external electromagnetic interference (BCI, EFT, CS, CE, ESD, dv/dt, etc.).

Application

It can be widely used in communication power supply, UPS, photovoltaic inverter, electric vehicle drive and other products.

Implementation standards

- GB/T 7665-2005
- JB/T 7490-2007
- JB/T 25480-2010
- JB/T 9473-2020
- SJ 20792-2000

Certification







Technical Parameters

Model	SCY10-								
Parameters (25°C)	800A	1000A	1200A	1500A	2000A	2500A	3000A		
Primary Current (A)I _{PN}	800A	1000A	1200A	1500A	2000A	2500A	3000A		
Primary Current Max. Peak Value (A) I _{PM}	±2400A	±3000A	±3600A	±4000A	±4000A	±4000A	±4000 A		
Output voltage (V) V_{out} @ $\pm I_{PN}$, R_L =10 $K\Omega$				±4V±1%					

Electrical Data

Item	Min.	Typical	Max.	Unit
Input power supply voltage range Vc (±5%) (Remark 1, Remark 2)	±11	±15	±18	V_{DC}
Current consumption Ic	-	±15	±20	mA
Withstand resistance R _{INS} @500V DC	1000	-	-	ΜΩ
Output voltage Vout @ I_{PN} , R_L =10K Ω , T_A =25°C	$V_{OUT} = 4.04 * \frac{R_L}{102 + R_L} * \frac{I_P}{I_{PN}} + V_{OE}$			V
Output internal resistance R _{OUT}	-	102	-	Ω
Load Resistance R _L (Remark 3)	1	10	ı	ΚΩ
Accuracy X @I _{PN} , T _A = 25 °C	-	±1	-	%
Linearity ε_L @ R_L =10K Ω , T_A = 25°C	-	±1	-	%I _{PN}
Offset voltage $V_{OE}@T_A=25^{\circ}C$	-	±20	±25	mV
Hysteresis voltage V _{OM} @ I _{PN} →0	-	±10	±20	mV
Temperature Coefficient of Offset Voltage TCV _{OE}	-	±0.5	±1	mV/°C
Output voltage temperature coefficient TCV _{out}	-	±0.08	±0.15	%/°C
Response time $t_D @ 0 \rightarrow I_{PN (Remark 4)}$	-	3	5	us
Ambient operating temperature T _A	-40	25	125	$^{\circ}$
Ambient storage temperature T _s	-40	25	125	$^{\circ}$
Withstand voltage V _D @50Hz,60s,0.1mA	-	3000	-	V _{AC}
Weight m	-	1280	-	g

Remarks:

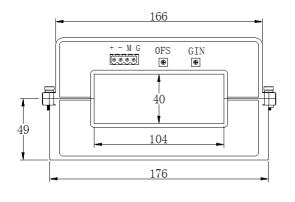
1. VC is less than the minimum value, which will lead to inaccurate measurement, VC is greater than the maximum value, which may cause permanent failure of the measurement device.

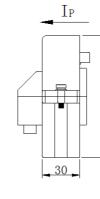
Shenzhen SoCan Technologies Co.,Ltd

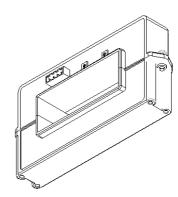
SoCan is committed to continuously improving product quality, and the company reserves the right to update its products.

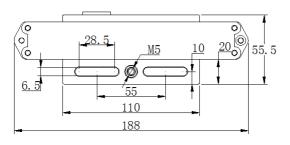
2. When \pm 12V<VC< \pm 15V, the measurement range will be reduced.

Dimensions (in mm)

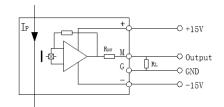












Notes:

1. Size error: ±1mm;

2. Primary aperture: □104*40mm;

3. Output terminal: 2EDGVC-5.08-4P

Mating plug: 2EDGK-5.08-4P;

- 4. The IP indication direction is the positive direction of the current, OFS is the zero adjustment, and GIN is the output regulation;
- 5. Incorrect wiring may cause damage to the sensor.