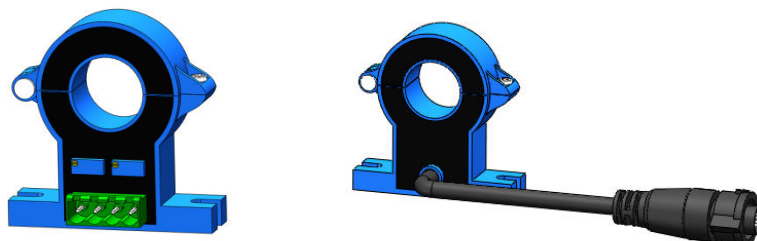


Split Core Hall effect Current Sensor

SCY6, SCY6R

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.
- Provide lead output and use automotive special connectors (SCY6R Series)

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



Shenzhen SoCan Technologies Co.,Ltd

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

www.szsocan.com

Technical Parameters

Model Parameters (25℃)	SCY6-/SCY6R-				
	50A	100A	200A	300A	500A
Primary Current (A) I_{PN}	50A	100A	200A	300A	500A
Primary Current Max. Peak Value (A) I_{PM}	±100A	±200A	±400A	±600A	±1000A
Output voltage (V) V_{out} @± I_{PN} , $R_L=10K\Omega$	±4V (±1%)				

Electrical Data

Item	Min.	Typical	Max.	Unit
Input power supply voltage range V_c (±5%) (Remark 1, Remark 2)	±11	±12	±18	V _{DC}
Current consumption I_c	-	±15	±20	mA
Withstand resistance R_{INS} @500V DC	1000	-	-	MΩ
Output voltage V_{out} @ I_{PN} , $R_L=10K\Omega$, $T_A=25^\circ C$	$V_{OUT} = 4.04 * \frac{R_L}{102 + R_L} * \frac{I_P}{I_{PN}} + V_{OE}$			V
Output internal resistance R_{OUT}	-	102	-	Ω
Load Resistance R_L (Remark 3)	-	10	-	KΩ
Accuracy X @ I_{PN} , $T_A=25^\circ C$	-	±1	-	%
Linearity ε_L @ $R_L=10K\Omega$, $T_A=25^\circ C$	-	±1	-	% I_{PN}
Offset voltage V_{OE} @ $T_A=25^\circ C$	-	±20	±30	mV
Hysteresis voltage V_{OM} @ $I_{PN} \rightarrow 0$	-	±15	±25	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	°C
Ambient storage temperature T_s	-40	25	125	°C
Withstand voltage $V_D@50Hz, 60s, 0.1mA$		3000		V _{AC}
Weight m		65		g

Remarks:

VC less than the minimum value will result in inaccurate measurements, and VC greater than the

Shenzhen SoCan Technologies Co.,Ltd

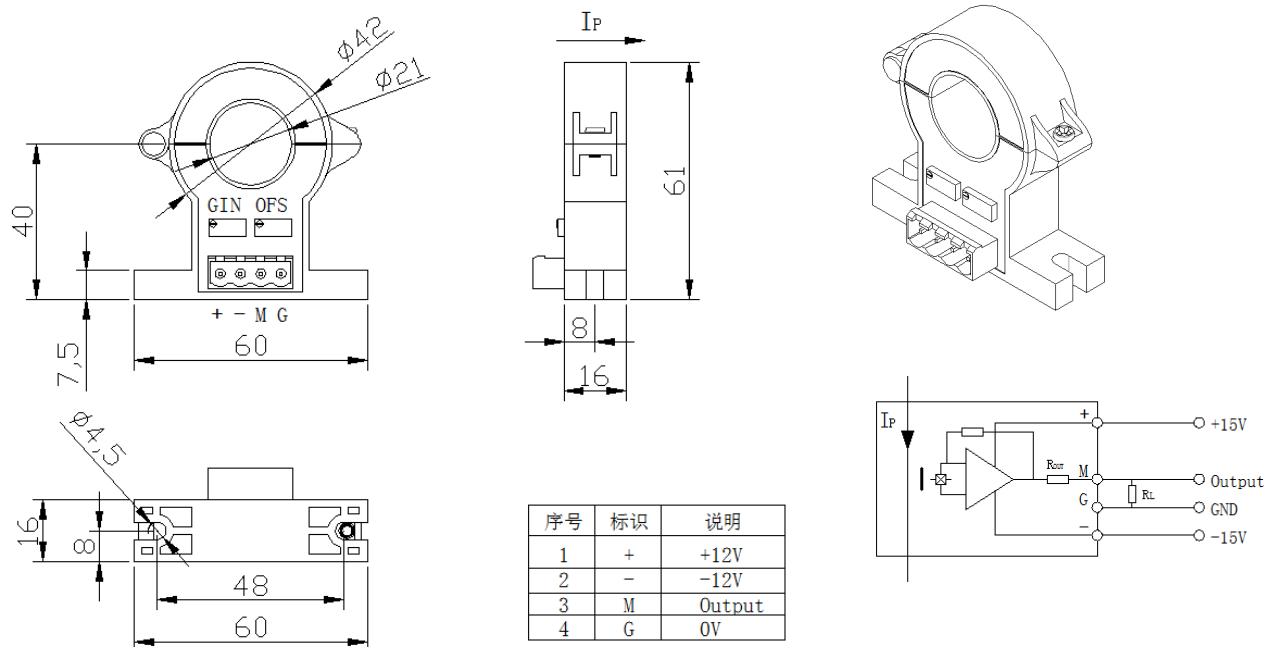
SoCan is committed to continuously improving product quality, and the company reserves the right to update its products.

www.szsocan.com

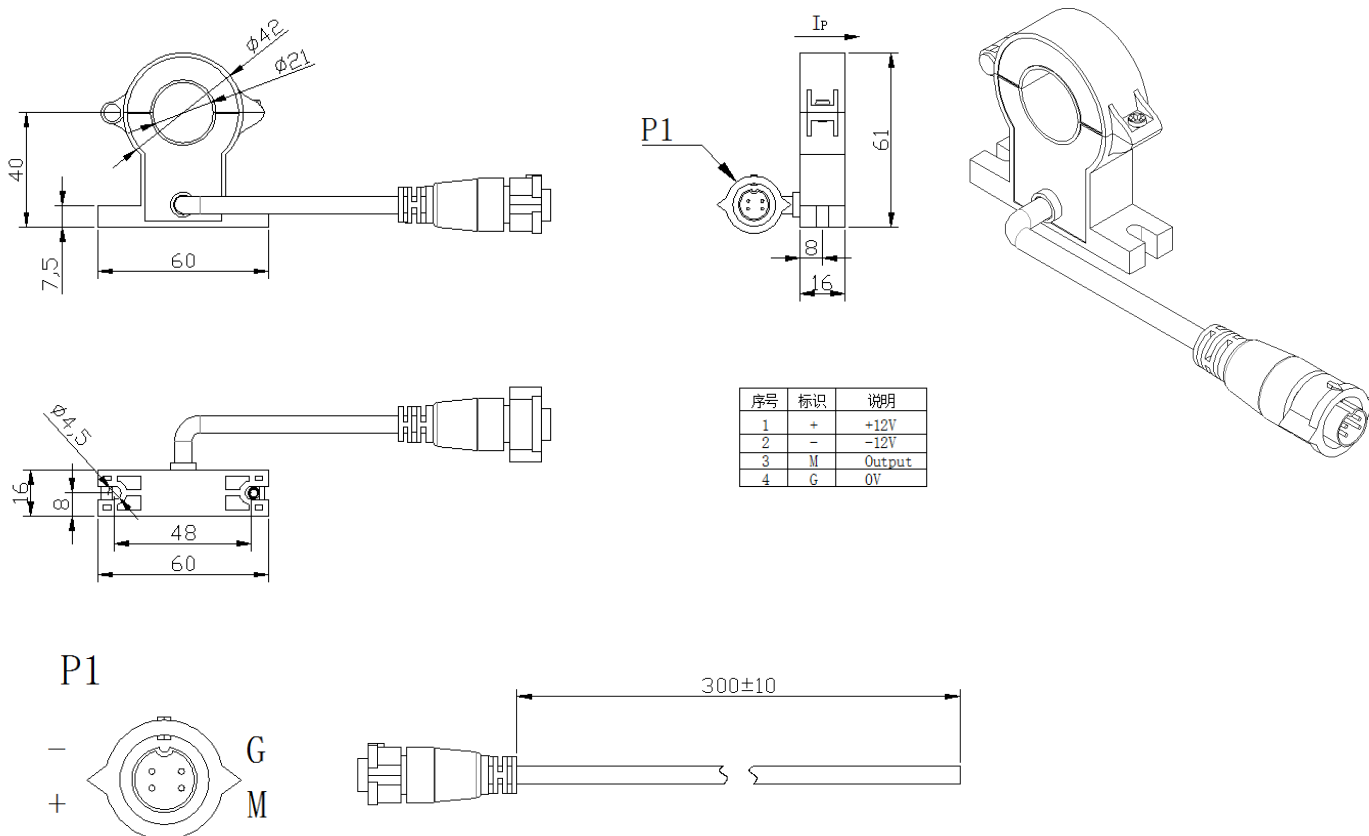
maximum value will cause the measurement device to fail permanently.

Dimensions (in mm)

SCY6T



SCY6R



Shenzhen SoCan Technologies Co.,Ltd

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

www.szsocan.com

Notes:

1. Size error: $\pm 1\text{mm}$;
2. Primary aperture: $\phi 21\text{mm}$;
3. SCY6T output terminal: 2EDGVC-5.08-4P
4. SCY6R output interface: Amphenol BD-04AFMM-QL8XX
5. The IP indication direction is the positive direction of the current, OFS is the zero adjustment, and GIN is the output regulation;
6. Incorrect wiring may cause damage to the sensor.