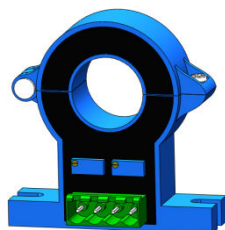


Split Core Hall effect Current Sensor

SCY6D

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



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Technical Parameters

Model Parameters (25℃)	SCY6D-				
	50A	100A	200A	300A	500A
Primary Current (A) I_{PN}	50A	100A	200A	300A	500A
Primary Current Max. Peak Value (A) I_{PM}	$\pm 50A$	$\pm 100A$	$\pm 200A$	$\pm 300A$	$\pm 500A$
Output voltage (V) V_{out} @ $\pm I_{PN}$, $R_L=10K\Omega$	2.5V $\pm$ 2.0V ($\pm 1\%$)				

Electrical Data

Item	Min.	Typical	Max.	Unit
Input power supply voltage range V_c ($\pm 5\%$) (Remark 1, Remark 2)	–	+12	+15	V_{DC}
Current consumption I_c	–	+15	+20	mA
Withstand resistance R_{INS} @500V DC	1000	–	–	M Ω
Output voltage V_{out} @ I_{PN} , $R_L=10K\Omega$, $T_A=25^\circ C$	$V_{OUT} = 2.5 + 2.02 * \frac{R_L}{100 + R_L} * \frac{I_P}{I_{PN}} + V_{OE}$			V
Output internal resistance R_{OUT}	–	102	–	Ω
Load Resistance R_L (Remark 3)	–	10	–	K Ω
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/ $^\circ C$
Output voltage temperature coefficient TCV_{out}	–	± 0.08	± 0.15	%/ $^\circ C$
Response time t_D @ $0 \rightarrow I_{PN}$ (Remark 4)	–	3	5	μs
Ambient operating temperature T_A	–40	25	125	$^\circ C$
Ambient storage temperature T_s	–40	25	125	$^\circ C$
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

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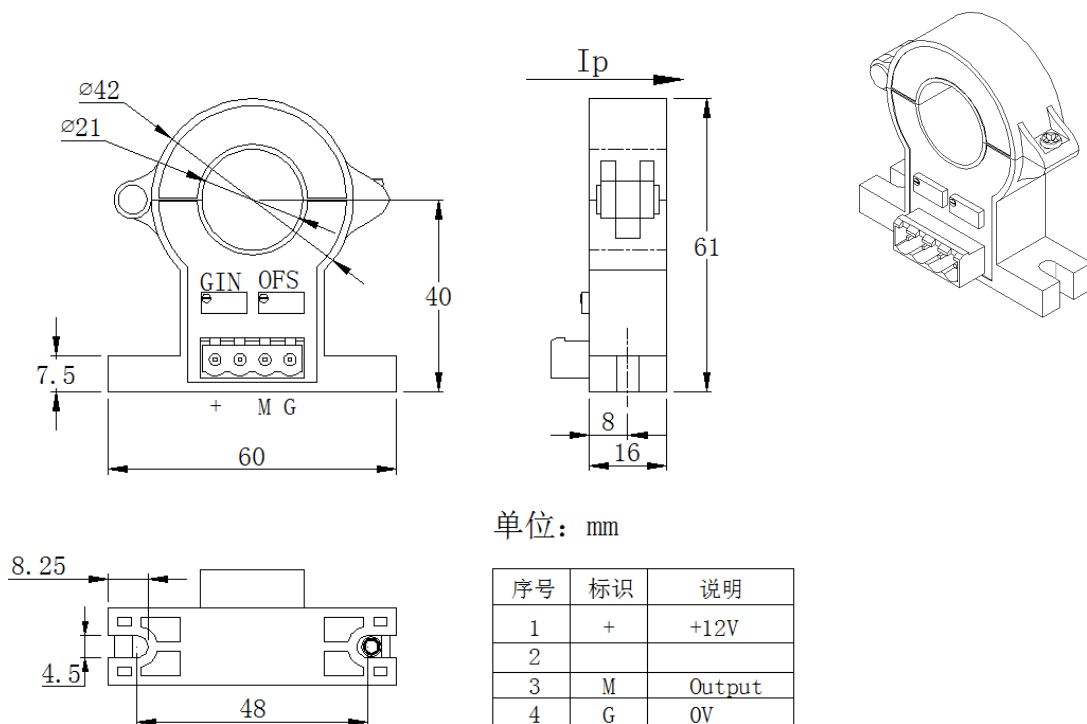
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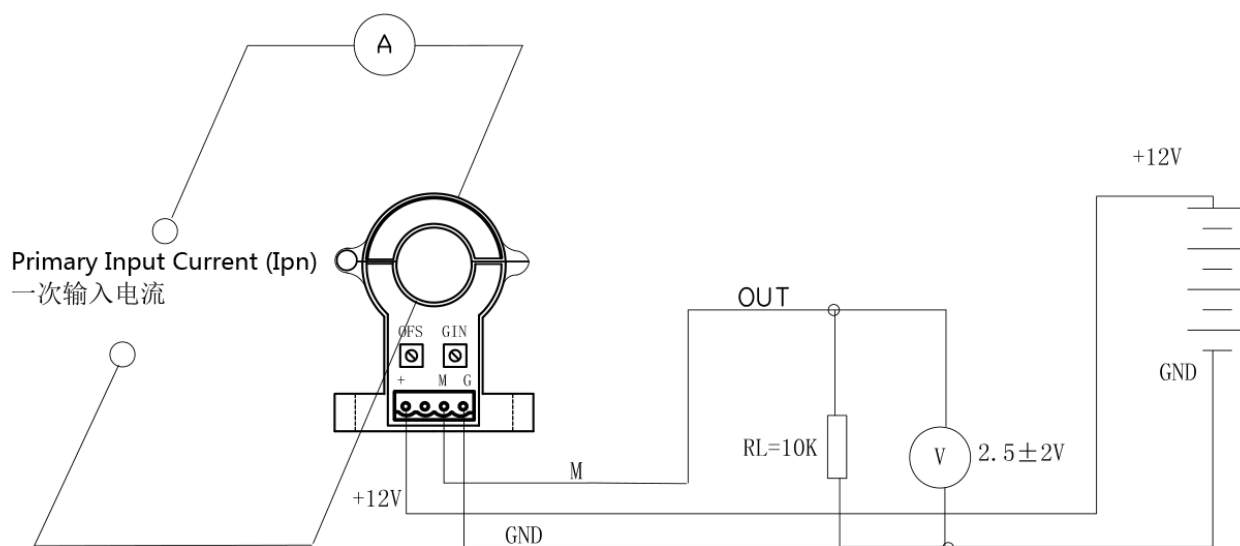
maximum value will cause the measurement device to fail permanently.

Dimensions (in mm)

SCY6D



Wiring Connection Reference:



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Notes:

1. Size error: $\pm 1\text{mm}$;
2. Primary aperture: $\varnothing 21\text{mm}$;
3. SCY6D output terminal: 2EDGVC-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.