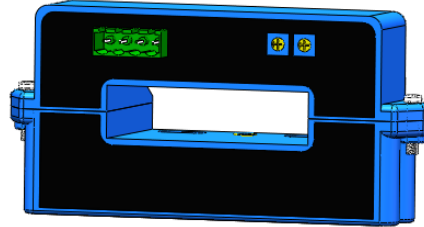
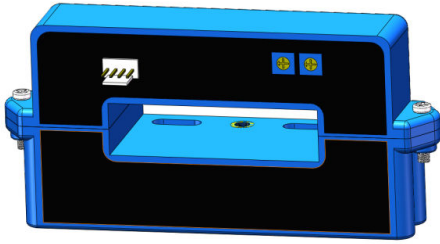


# Split Core Hall effect Current Sensor



## SCY5D

### 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	SCY5D-						
	300A	500A	800A	1000A	1200A	1500A	2000A
Parameters (25°C)	300A	500A	800A	1000A	1200A	1500A	2000A
Primary Current (A) $I_{PN}$	300A	500A	800A	1000A	1200A	1500A	2000A
Primary Current Max. Peak Value (A) $I_{PM}$	±300A	±500A	±800A	±1000A	±1200A	±1500A	±2000A
Output voltage (V) $V_{out}$ @± $I_{PN}$ , $R_L=10K\Omega$	2.5V±2.0V (±1%)						

## Electrical Data

Item	Min.	Typical	Max.	Unit
Input power supply voltage range $V_c$ (±5%) (Remark )	-	+12	+15	$V_{DC}$
Current consumption $I_c$	-	+15	+20	mA
Withstand resistance $R_{INS}$ @500V DC	1000	-	-	MΩ
Output voltage $V_{out}$ @ $I_{PN}$ , $R_L=10K\Omega$ , $T_A=25^\circ C$	$V_{OUT} = 2.5 + 2.02 * \frac{R_L}{100 + R_L} * \frac{I_P}{I_{PN}} + V_{OE}$			V
Output internal resistance $R_{OUT}$	-	102	-	Ω
Load Resistance $R_L$ (Remark 3)	-	10	-	KΩ
Accuracy X @ $I_{PN}$ , $T_A=25^\circ C$	-	±1	-	%
Linearity $\epsilon_L$ @ $R_L=10K\Omega$ , $T_A=25^\circ C$	-	±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		370		g

Remarks:

VC is less than the minimum value, which will lead to inaccurate measurement, VC is greater than

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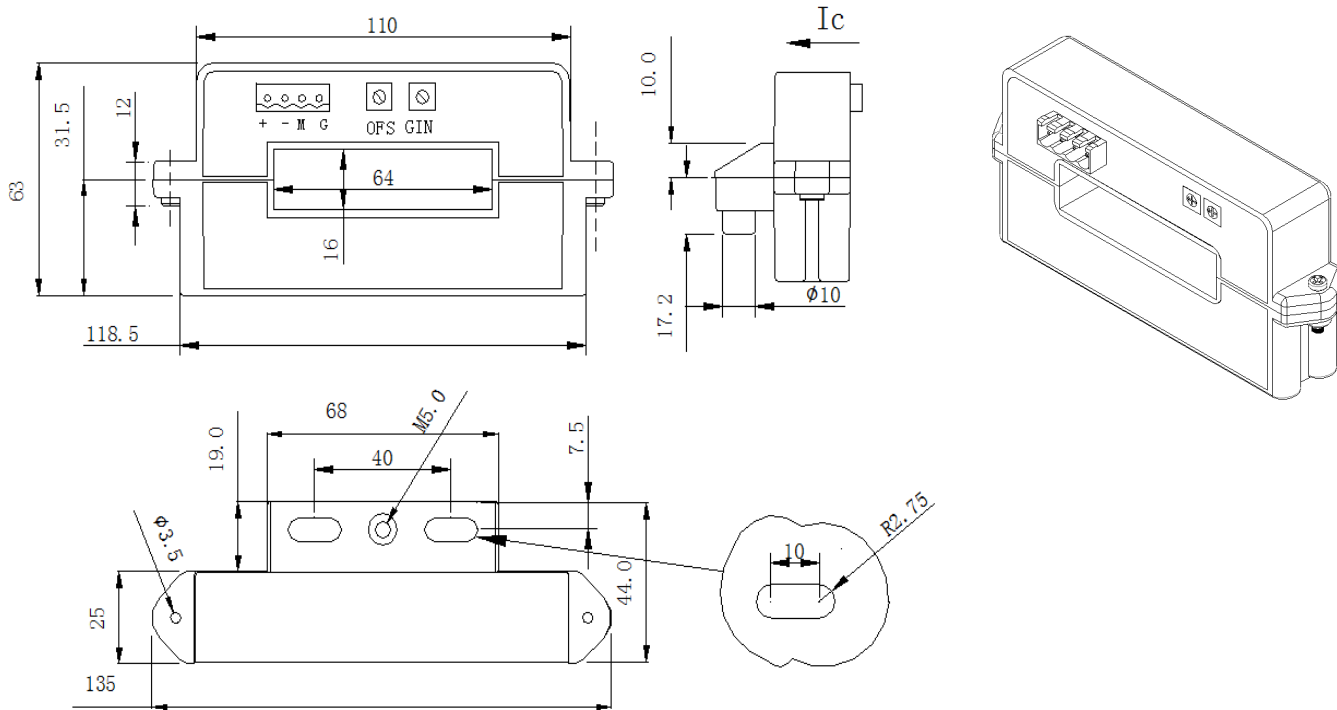
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the maximum value, which may cause permanent failure of the measurement device.

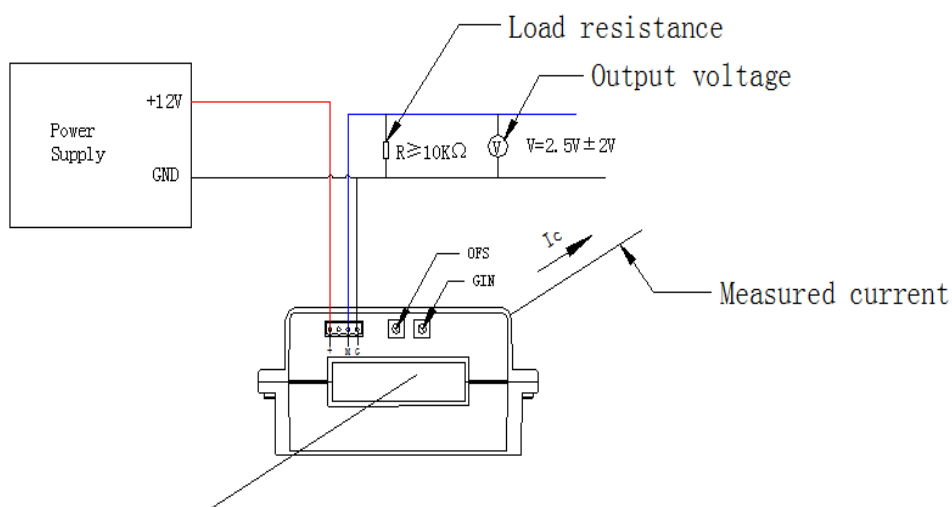
## Dimensions (in mm)

### SCY5D



Terminal Pin	Function
(1) +	+12V
(2) -	
(3) M	Output
(4) G	0V

## Wiring circuit diagram



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Notes:

1. Size error:  $\pm 1\text{mm}$ ;
2. Primary aperture:  $\square 64*16\text{mm}$ ;
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.

Remark:

1. SCY5D series can be opened and closed up and down, without removing the bus bar, and it is convenient to install.
2. Based on open-loop principle, it can measure DC, AC and Pulse current.
3. Square perforation, aperture  $64*16\text{mm}$ , mainly measure copper conductor current.
4. Features: High accuracy, low power consumption, high reliability and strong overload capacity.
5. SCY5D is a customized product. If any other requirements, please contact us.