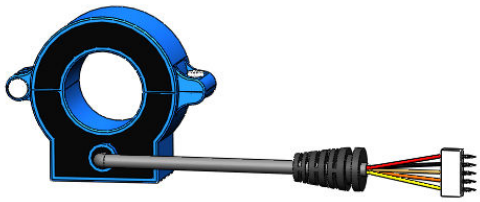
Split Core Hall effect Current Sensor

SCY15C



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.
- Dual channel measurement in one sensor, high channel measure 0~750A, 0~1000A, low channel measure 0~75A, 0~100A.
- Comply with UL94-V0 flame retardant rating.
- Use automotive-specific lead connector output

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

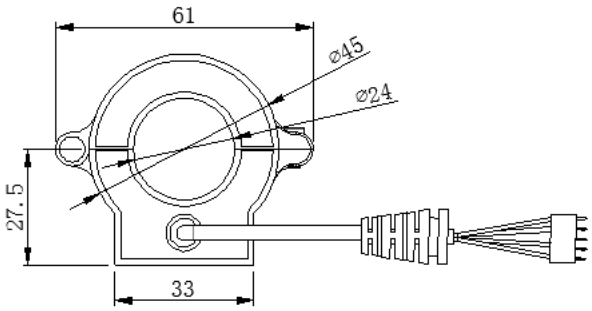
Parameters(25℃) \ Model	SCY15C-	
	750A	1000A
High Primary Current (I_{PH})	750A	1000A
Low Primary Current (I_{PL})	75A	100A
Saturation Current (I_P)	750AT	1000AT

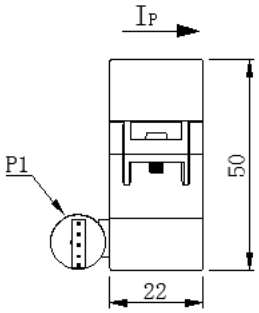
Electrical Data

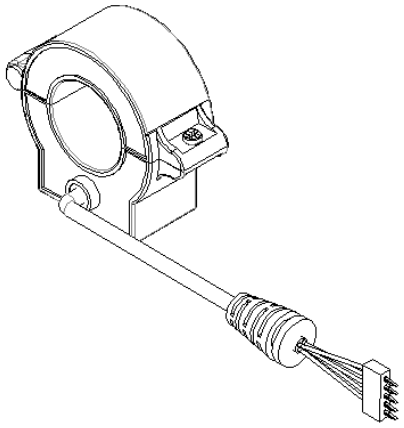
Item	Min.	Typical	Max.	Unit
Input power supply voltage range Vc （±5%）（Remark 1，Remark 2）	-	±5	-	V_{DC}
Current consumption Ic	-	±25	±30	mA
Withstand resistance R_{INS} @500V DC	1000	-	-	MΩ
Output voltage Vout @I_{PN}, R_L=25KΩ，T_A= 25℃	$V_{OUT} = 4.518 * \frac{R_L}{102 + R_L} * \frac{I_P}{I_{PN}} + V_{OE}$			V
Output internal resistance R_{OUT}	-	102	-	Ω
Load Resistance R_L（Remark 3）	-	25	-	KΩ
Accuracy X @I_{PN}，T_A= 25℃	M1:±1% M2：±2%			%
Linearity ε_L @R_L=25KΩ，T_A= 25℃	-	±1	-	%I_{PN}
Offset voltage V_{OE} @T_A= 25℃	M1:±20mV M2：±50mV			mV
Hysteresis voltage V_{OM} @ I_{PN}→0	M1:±20mV M2：±50mV			mV
Temperature Coefficient of Offset Voltage TCV_{OE}	-	±1	±2	mV/℃
Output voltage temperature coefficient TCV_{out}	-	±0.08	±0.15	%/℃
Response time t_D @ 0→I_{PN} (Remark 4)	-	5	7	us
Ambient operating temperature T_A	-40	25	80	℃
Ambient storage temperature T_s	-40	25	80	℃
Withstand voltage V_D@50Hz,60s,0.1mA		3000		V_{AC}
Weight m		80		g

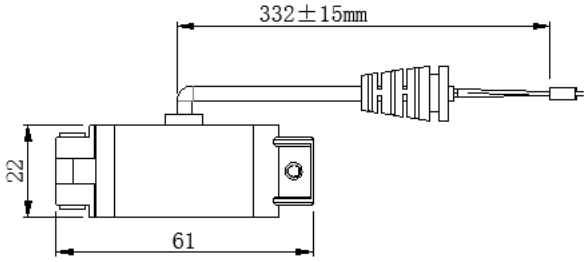
Dimensions (in mm)

SCY15C

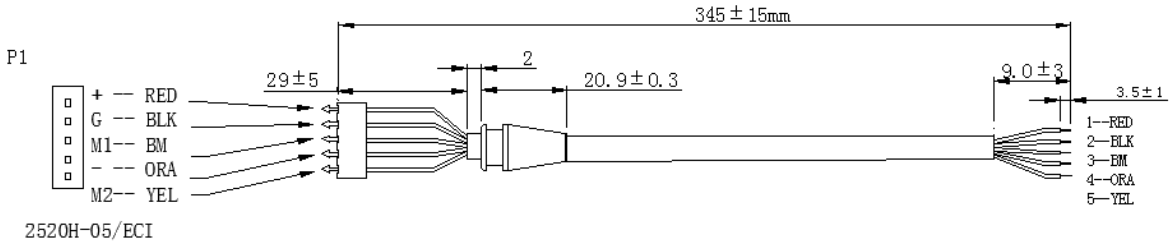




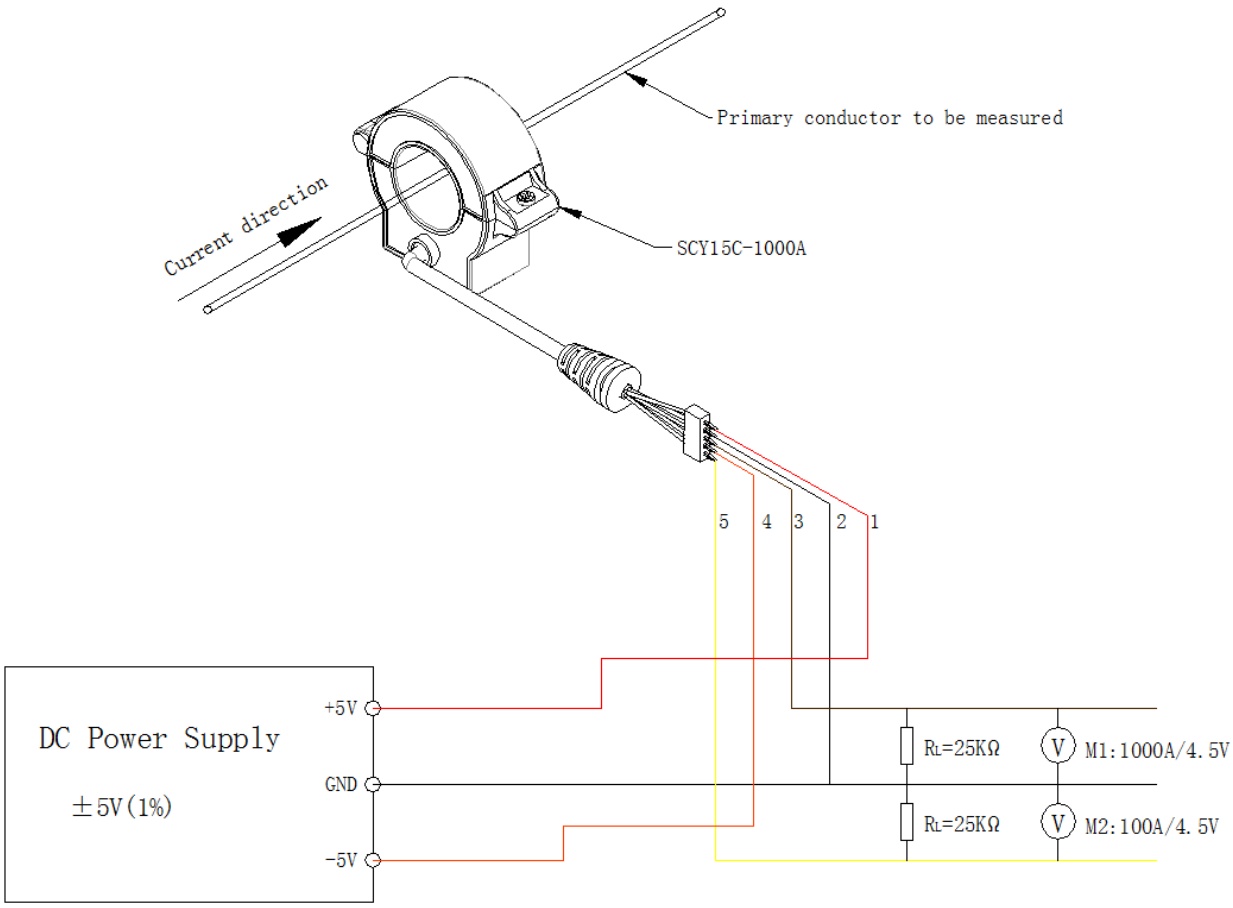




序号	标识	说明	颜色
1	+	+5V	RED 红
2	G	GND	BLK 黑
3	M1	750A OUT	BM 棕
4	-	-5V	ORA 橙
5	M2	75A OUT	YEL 黄



Wiring Reference:



Notes:

1. Size error: ±0.5mm;

2. Primary aperture: φ24mm;

3. SCY15C wire shell: 2520H-05/ECI,

Terminal: 2521-2/ECI;

4. The IP indication direction is the positive direction of the current;

5. Incorrect wiring may cause damage to the sensor.