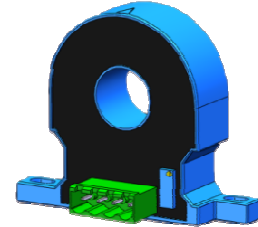


DC Leakage Current Sensor



SCD1

Product description

Features

- SCD series DC leakage current sensor, using the principle of magnetic modulation closed-loop, for isolated measurement of DC milliamper small current.
- The isolation voltage between primary and secondary is greater than 3000VAC.
- Temperature compensation circuit control, zero drift, accurate measurement.
- Perforated input, unplugging terminals, screw fastening flat mounting.
- Overall size(mm): 72(L)×18(W)×60(H); Aperture: 18mm
- Comply with UL94-V0 flame retardant rating.

Applications

- Widely used in emerging industries and fields such as electric power, industrial automation, solar photovoltaic, etc.

Implementation standards

- GB/T 7665-2005
- JB/T 25480-2010
- JB/T 11205-2011
- SJ 20790-2000

Certification



Shenzhen SoCan Technologies Co.,Ltd

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Technical Parameters

Model Parameters (25°C)	SCD1-				
	10mA	20mA	50mA	100mA	1A
Primary Current I_{PN} (DC)	10mA	20mA	50mA	100mA	1A
Primary Current Max. Peak Value I_{PM} (DC)	±12mA	±24mA	±60mA	±120mA	±1.2A
Output voltage V_{out} @± I_{PN} , $R_L=10K\Omega$	±5V±1%				

Electrical Data

Item	Min.	Typical	Max.	Unit
Input power supply voltage range V_c (±5%) (Remark 1)	±11	±12	±18	V_{DC}
Current consumption I_c	-	±10	-	mA
Withstand resistance R_{INS} @500V DC	1000	-	-	$M\Omega$
Output voltage V_{out} @ I_{PN} , $R_L=10K\Omega$, $T_A=25^\circ C$	4.950	5.000	5.050	V
Output internal resistance R_{OUT}	-	100	-	Ω
Load Resistance R_L	-	10	-	$K\Omega$
Accuracy X @ I_{PN} , $T_A=25^\circ C$	-	±1	-	%
Linearity ϵ_L @ $R_L=10K\Omega$, $T_A=25^\circ C$	-	±0.5	-	%
Offset voltage V_{OE} @ $T_A=25^\circ C$	-	±50	-	mV
Temperature coefficient of offset voltage TCV_{OE}	-	±1	±2	mV/°C
Response Time t_D @ $0 \rightarrow I_{PN}$	-	500	900	ms
Operating ambient temperature range T_A	-10	25	75	°C
Storage ambient temperature range T_s	-25	25	85	°C
Insulation withstand voltage V_D @50Hz, 60s, 0.1mA		3000		V_{AC}
Weight m		70		g

Remark:

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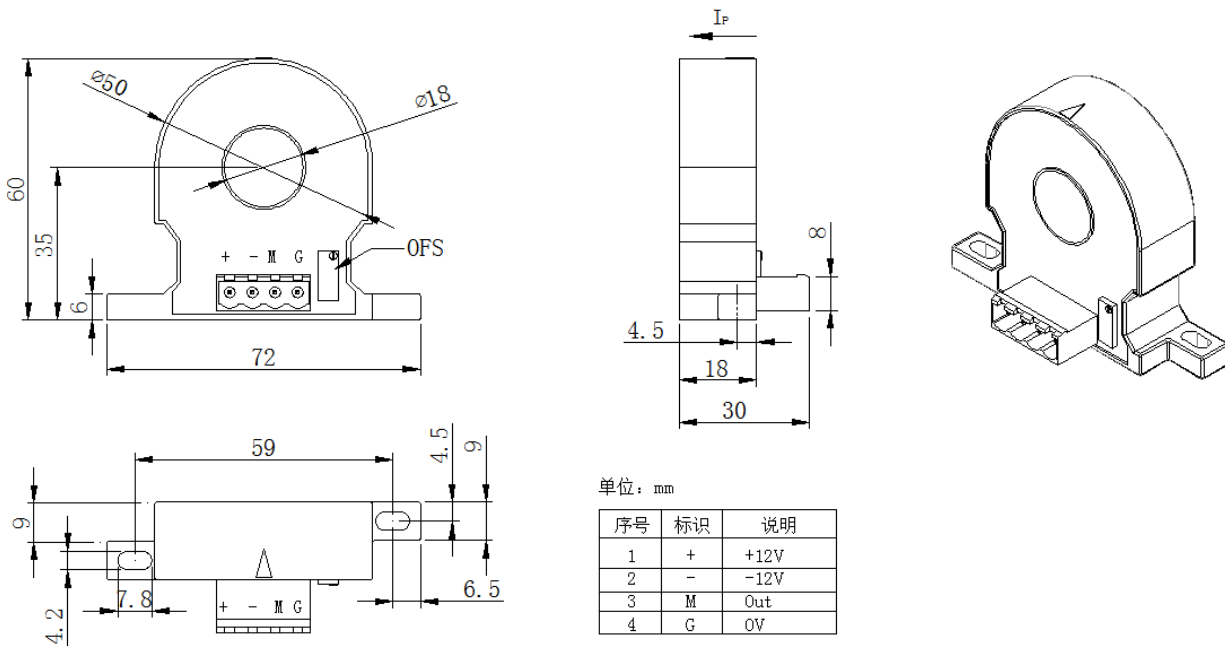
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1. If VC is less than the minimum value, the measurement will be inaccurate. If VC is greater than the maximum value, it may cause permanent failure of the measuring device.

$$2. V_{OUT} = 5.05 * \frac{R_L}{100 + R_L} * \frac{I_P}{I_{PN}} + V_{OE}$$

Dimensions (in mm):



Notes:

1. Size error: ± 0.5 mm;
2. Primary aperture: $\phi 18$ mm;
3. Fastening hole: $\phi 4.2 * 3.6$ mm*2;
4. Output terminal: 2EDGVC-5.08-4P;
5. The IP indication direction is the positive direction of the current, and the OFS is the zero adjustment;
6. Incorrect wiring may cause damage to the sensor;
7. The zero voltage of the sensor can be adjusted appropriately according to the needs of users;