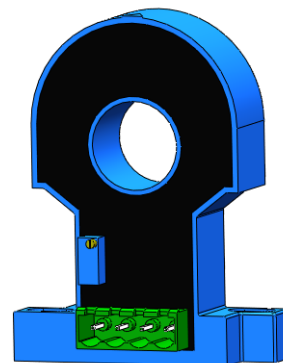


DC Leakage Current Sensor

SCD6



Product description

Features

- SCD series DC leakage current sensor, using the principle of magnetic modulation closed-loop, for isolated measurement of DC milliamperere 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): 53(L)×16(W)×70(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

Implementation standards:



Technical Parameters

Model Parameters (25°C)	SCD6-				
	10mA	20mA	50mA	100mA	1A
Primary Current I_{PN} (DC)	10mA	20mA	50mA	100mA	1A
Primary Current Max. Peak Value I_{PM} (DC)	$\pm 12\text{mA}$	$\pm 24\text{mA}$	$\pm 60\text{mA}$	$\pm 120\text{mA}$	$\pm 1.2\text{A}$
Output voltage V_{out} @ $\pm I_{PN}$, $R_L=10\text{K}\Omega$	$\pm 5\text{V} \pm 1\%$				

Electrical Data

Item	Min.	Typical	Max.	Unit
Input power supply voltage range $V_C (\pm 5\%)$ (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} , $R_L=10\text{K}\Omega$, $T_A=25^\circ\text{C}$	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} , $T_A=25^\circ\text{C}$	-	± 1	-	%
Linearity ε_L @ $R_L=10\text{K}\Omega$, $T_A=25^\circ\text{C}$	-	± 0.5	-	%
Offset voltage V_{OE} @ $T_A=25^\circ\text{C}$	-	± 50	-	mV
Temperature coefficient of offset voltage TCV_{OE}	-	± 1	± 2	$\text{mV}/^\circ\text{C}$
Response Time t_D @ $0 \rightarrow I_{PN}$	-	500	900	ms
Operating ambient temperature range T_A	-10	25	75	$^\circ\text{C}$
Storage ambient temperature range T_s	-25	25	85	$^\circ\text{C}$
Insulation withstand voltage $V_D@50\text{Hz}$, 60s, 0.1mA		3000		V_{AC}
Weight m		60		g

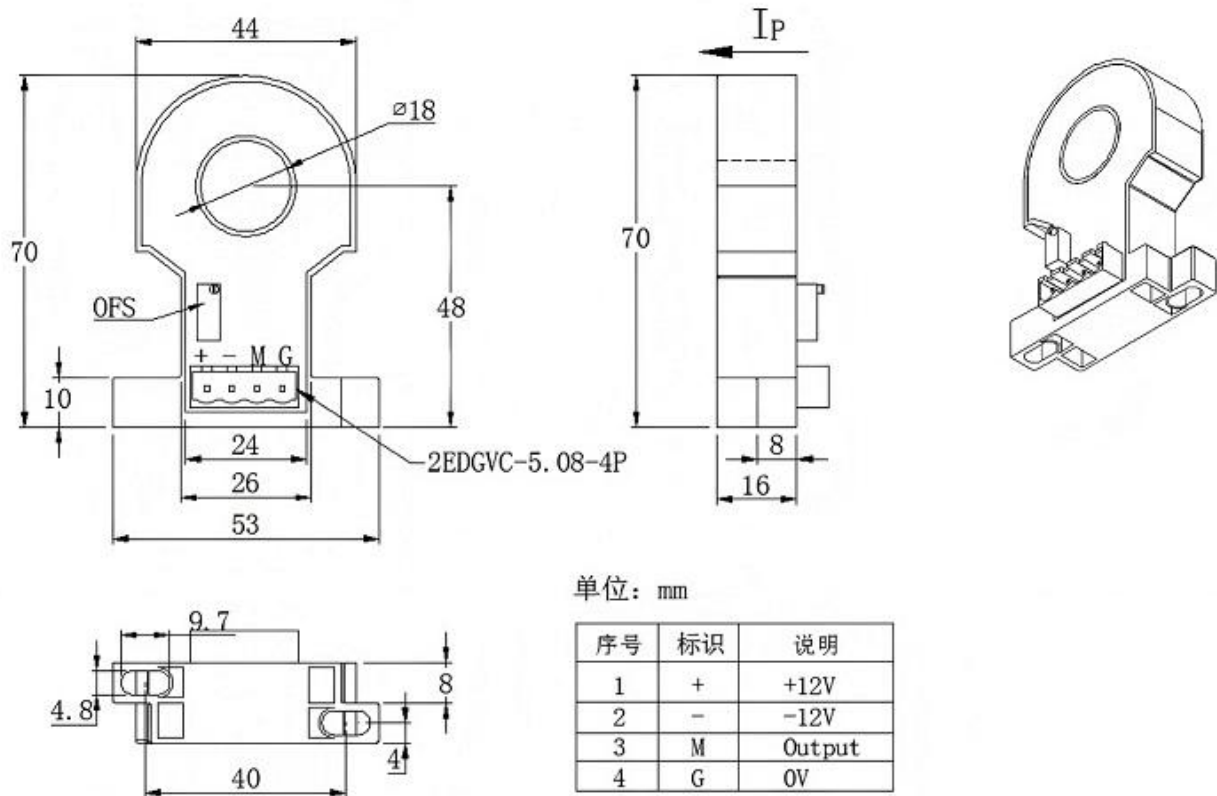
Remark:

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.

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

Dimensions (in mm):

产品外形尺寸(单位: mm)



Notes:

1. Size error: ± 0.5 mm;
2. Primary aperture: $\phi 18$ mm;
3. Fastening hole: $\phi 4.8 \times 4.9$ mm*2;
4. Output terminal: 2EDGVC-5.08-4P;
5. The I_P 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;

Shenzhen SoCan Technologies Co.,Ltd

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

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