



# DATA SHEET

## Split Core DC Leakage Current Sensor

**PN: CHD\_SH15D5**

**IPN=50~5000mA**

### Feature

- Split Core DC Leakage Current Sensor develops on base of magnetic modulation closed loop principle
- Apply unique patented technology for measure tiny current (mA level)
- Supply voltage: DC  $\pm 12\sim 15$  V

### Advantages

- High accuracy
- Easy installation
- Wide current measuring range
- Optimized response time
- Low power consumption
- High immunity to external interference
- Very good linearity
- Can be customized

### Applications

- The current detection of the lift
- DC panel detection
- The signal system
- Current differential detection
- AC variable-speed drive/ Servo drive
- UPS and Inverter applications



RoHS

### Electrical data: (Ta=25°C, Vc= ±15VDC, RL=10K Ω)

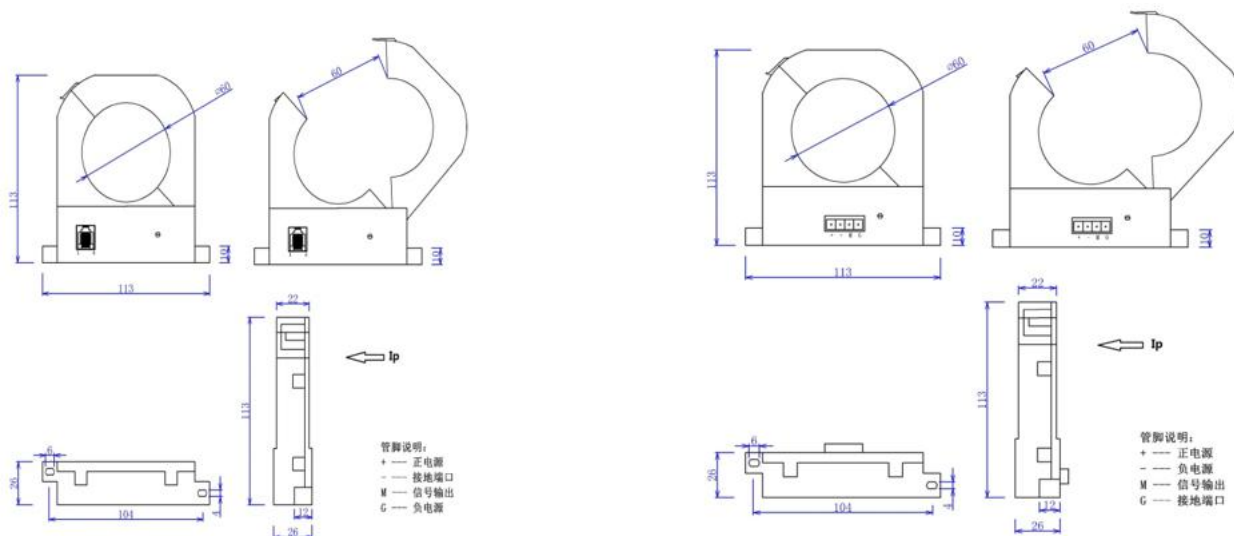
Parameter Ref	CHD50 SH15D_	CHD100 SH15D_	CHD200 SH15D_	CHD500 SH15D_	CHD1000 SH15D_	CHD2000 SH15D_	CHD5000 SH15D_
Rated input $I_{PN}$ (mA DC)	$\pm 50$	$\pm 100$	$\pm 200$	$\pm 500$	$\pm 1000$	$\pm 2000$	$\pm 5000$
Measuring range $I_P$ (mA DC)	0~ $\pm 100$	0~ $\pm 200$	0~ $\pm 400$	0~ $\pm 800$	0~ $\pm 2000$	0~ $\pm 3000$	0~ $\pm 8000$
Output voltage $V_O$ (V)	DC $\pm 5V$ , 4-20mA, 0-20mA ( $\pm 3\%$ )						
Supply voltage $V_{CC}$ (V)	$(\pm 12\sim 15) \pm 5\%$						
Accuracy $X_G$ (%)	@IPN,T=25°C			$\leq \pm 1$			
Offset voltage $V_{OE}$ (mV)	@IP=0,T=25°C			$< \pm 200$ mV			
Temperature variation of $V_{OE}$ $V_{OT}$ (mV/°C)	@IP=0,-20 ~ +60°C			$\leq \pm 8.0$			
Linearity error $\epsilon_r$ (%FS)				$\leq 1.0$			
Current consumption $I_C$ (mA)				$< 20$ mA			
Insulation voltage	@50/60Hz, 1min			2.5kV rms			



## General data:

Parameter	Value
Operating temperature TA(°C)	-25 +70
Storage temperature TS(°C)	-40~+85
Load resistance (RL)	≥10K
Plastic material	PBT G30/G15, UL94- V0;
Standards	IEC60950-1:2001
	EN50178:1998
	SJ20790-2000

## Dimensions(mm):



**Pin definition:** 1: + (V<sub>cc</sub>) 2: - (V<sub>cc</sub>) 3: M (V<sub>out</sub>) 4: G(GND) OFS: Zero adjustment (5.08 connector)  
 1: + (V<sub>cc</sub>) 2: G(GND) 3: M (V<sub>out</sub>) 4: - (V<sub>cc</sub>) OFS: Zero adjustment (4P RJ11)

## Remarks:

- During the installation process, on the sensor, close attention should be paid to side core interface is aligned, not forcibly closed.
- When the current goes through the primary pin of a sensor, the voltage will be measured at the output end.
- Custom design is available for the different rated input current and the output voltage.
- The dynamic performance is the best when the primary hole if fully filled with.
- The primary conductor should be <100°C.

**WARNING : Incorrect wiring may cause damage to the sensor.**



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