

DATA SHEET

DC Leakage Current Sensor



PN: CHD_SC15D5

IPN=10~1000mA

Feature

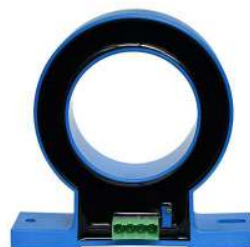
- DC Leakage Current Sensor develops on base of magnetic modulation closed loop principle
- Apply unique patented technology for measure tiny current (mA level)
- Supply voltage: DC $\pm 12\sim 15$ V

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

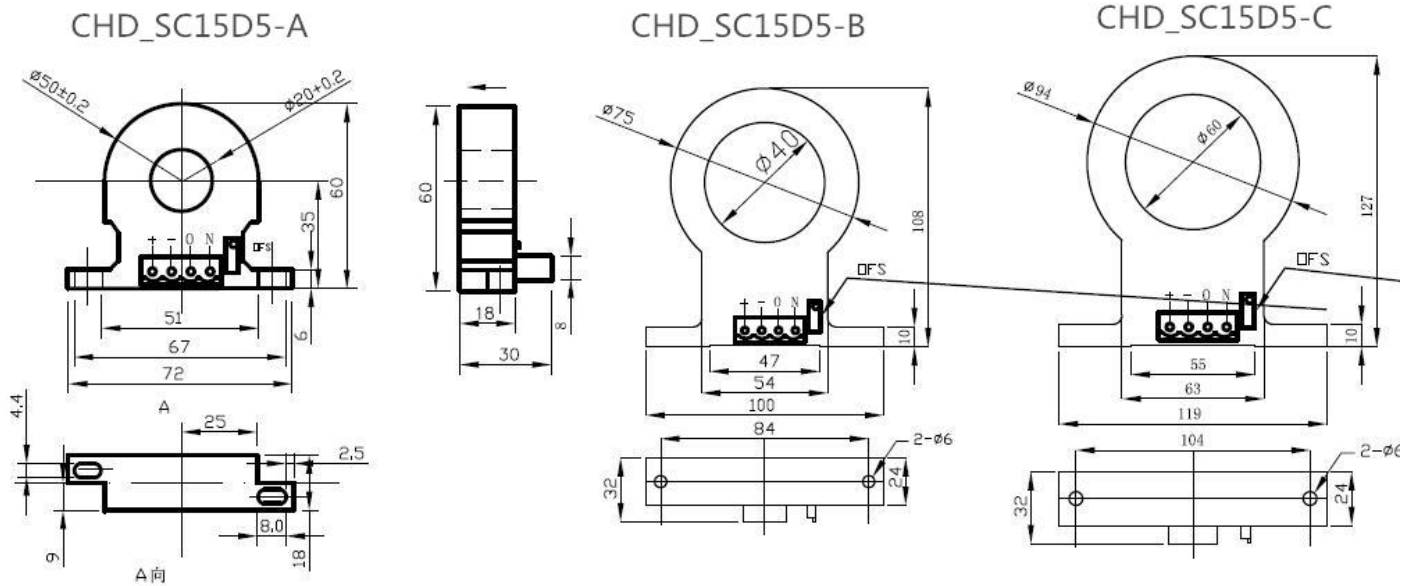
Electrical data: (Ta=25°C, Vc=±15VDC, RL=10KΩ)

Parmeter \ Ref	CHD10 SC15D5	CHD20 SC15D5	CHD100 SC15D5	CHD01 SC15D5
Rated input Ipn	±10mA DC	±20mA DC	±100mA DC	±1A DC
Measuring range Ip	0~±20mA DC	0~±40mA DC	0~±200mA DC	0~±1.5A DC
Output voltage Vo(V)	±5.0*(IP/IPN)			
Supply voltage VC(V)	(±12~±15) ±5%			
Accuracy XG(%)	@IPN,T=25°C	≤±1		
Offset voltage VOE(mV)	@IP=0,T=25°C	CHD_SC15D5-A <±100mV, CHD_SC15D5-B <±150mV, CHD_SC15D5-C <±150mV		
Temperature variation of VOE VOT(mV/°C)	@IP=0,-20 ~ +80°C	≤±1.0		
resolution	10uA			
Linearity error εr(%FS)	≤1.0			
Anti-interference characteristics	@H=50A DC/m	< ±5mV		
Power consumption IC(mA)	<13mA			
Insulation voltage	@50/60Hz, 1min	3kV rms		

General data:

Parameter	Value
Operating temperature TA(°C)	-10 ~ +75
Storage temperature TS(°C)	-25~ +85
Mass	CHD_SC15D5-A 105g, CHD_SC15D5-B 280g, CHD_SC15D5-C 420g
Plastic material	PBT G30/G15, UL94- V0;
Standards	IEC60950-1:2001
	EN50178:1998
	SJ20790-2000

Dimensions(mm):



General tolerance: $\pm 0.5\text{mm}$

Primary through-hole:

CHD_SC15D5-A: $D20 \pm 0.15\text{mm}$

CHD_SC15D5-B: $D40 \pm 0.15\text{mm}$

CHD_SC15D5-C: $D60 \pm 0.15\text{mm}$

Remarks:

- 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 is fully filled with.
- The primary conductor should be $< 100^\circ\text{C}</math>.$

WARNING : Incorrect wiring may cause damage to the sensor.