DATA SHEET
DC Leakage Current Sensor

PN: CHD_ES15D5 | **IPN=20/200/500mA**

Feature

- DC leakage current sensor using the Flux-gate principle
- Capable measurement of tiny DC current signal, with galvanic separation between primary circuit and secondary circuit
- Supply voltage: DC ±12~18 V

Advantages

- Easy installation
- Only one design for wide current ratings range
- Low power consumption
- High immunity to external interference

Applications

- The current detection of the lift
- DC panel detection
- The signal system
- Current differential detection

CE RoHS

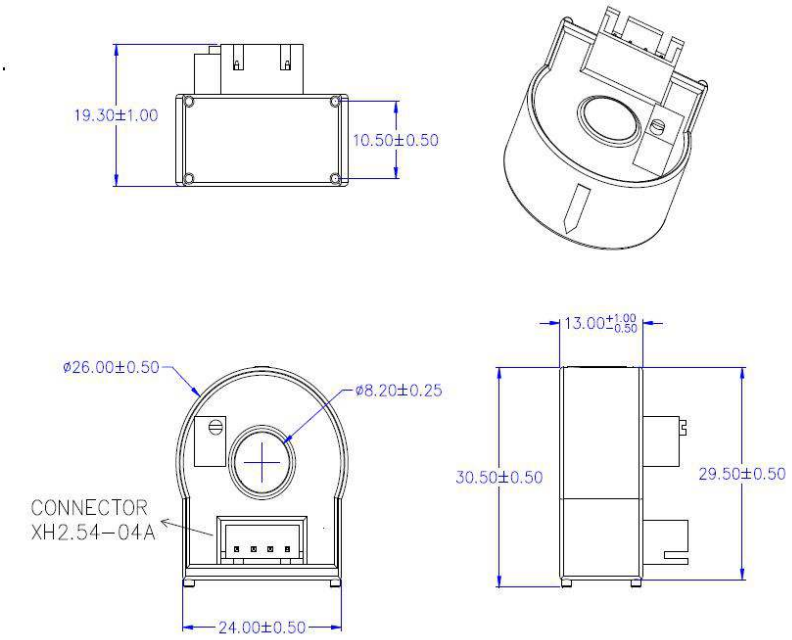
Electrical data：（Ta=25℃，Vc= ±15VDC,RL=10KΩ）

Parmeter \ Ref	CHD20ES15D5	CHD200ES15D5	CHD500ES15D5
Rated input Ipn(mA) DC	20	200	500
Measuring range Ip(A)	0~±28	0~±280	0~±700
Output voltage Vo(V)	±5.0*(IP/IPN),DC		
Load resistance R_L (KΩ)	>10		
Supply voltage VC(V)	（±12 ～±18） ±5%		
Accuracy XG(%)	@IPN,T=25°C	≤±2.0	
Offset voltage VOE(V)	@IP=0,T=25°C	<±0.3	
Temperature variation of VOE VOT (V/°C)	@IP=0,-40 ~ +85°C	<±0.8	
Hysteresis offset voltage VOH(mV)	@IP=0,after 1*IPN	≤±25	
Linearity error εr(%FS)	＜1.0		
Response time tra(ms)	@90% of IPN	＜200	
Power consumption IC(mA)	15+Is		
Bandwidth BW(KHZ)	@-3dB,IPN	DC	
Insulation voltage Vd(KV)	@50/60Hz, 1min,AC	3.0	

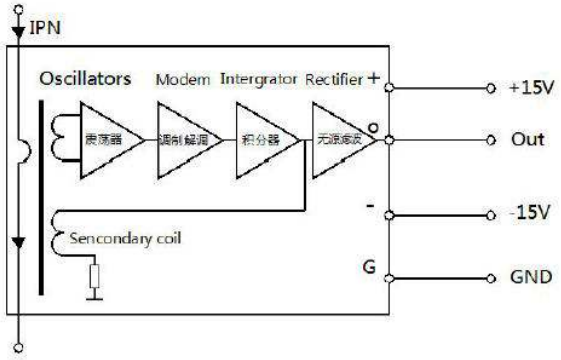
General data：

Parameter	Value
Operating temperature TA(°C)	-20 ~ +85
Storage temperature TS(°C)	-40~ +125
Mass M(g)	13
Plastic material	PBT G30/G15, UL94- V0;
Standards	IEC60950-1:2001
	EN50178:1998
	SJ20790-2000

Dimensions(mm):



Connection



General tolerance

Primary through-hole: D 8.2 + 0.25

Connection of Secondary: Male XH2.54-04A

Accessories:

Female (XH2.54-04Y)*1PCS

Metal Terminal (XH-T)*4PCS

Remarks：

- 1. Setting the jump value of the door valve is about 1.3V.
- 2. The primary current is 10mA, that is to say, if the primary current is 2mA, 5 T or more will be needed.
- 3. When environment (temperature) offset + normal temperature zero offset is - 1.1V, @10mA, the sensor output is 2.5V (relative zero output), then the actual voltage output is 2.5V-1.1V = 1.4V > 1.3V, the product will jump trigger, but in fact the maximum offset will not exceed 0.8V.
- 4. When the ambient (temperature) offset + normal temperature zero offset is greater than 0, the output of the sensor is 2.5V (relative zero output) at 10mA, and the actual output of the voltage is 2.5V + positive >= 2.5V > 1.3V, the jump trigger will occur.
- 5. All environmental impacts and product self-effects can be avoided through the above-mentioned settings.

WARNING : Incorrect wiring may cause damage to the sensor.