DATA SHEET
DC Leakage Current Sensor

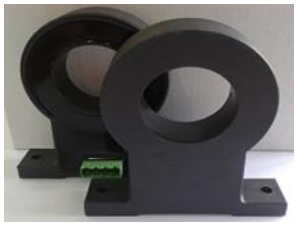
PN: CHD_EA15D5	IPN=10~50mA

Feature

- CHD_EB15D5 series DC leakage current sensor is a series of new device developed according to principle of electromagnetic induction.
- Its low current is stable. It is highly insulating between its primary coil and secondary coil.
- This sensor is used to measure current of signal system, circuit, and leakage monitoring system, as well as to measure current difference.
- Supply voltage: DC ±12~15 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



CE RoHS

Applications

- The current detection of the lift
- DC panel detection
- The signal system
- Current differential detection
- Smart electric vehicle charging stations
- UPS and Inverter applications

Electrical data(Ta=25℃±5℃):

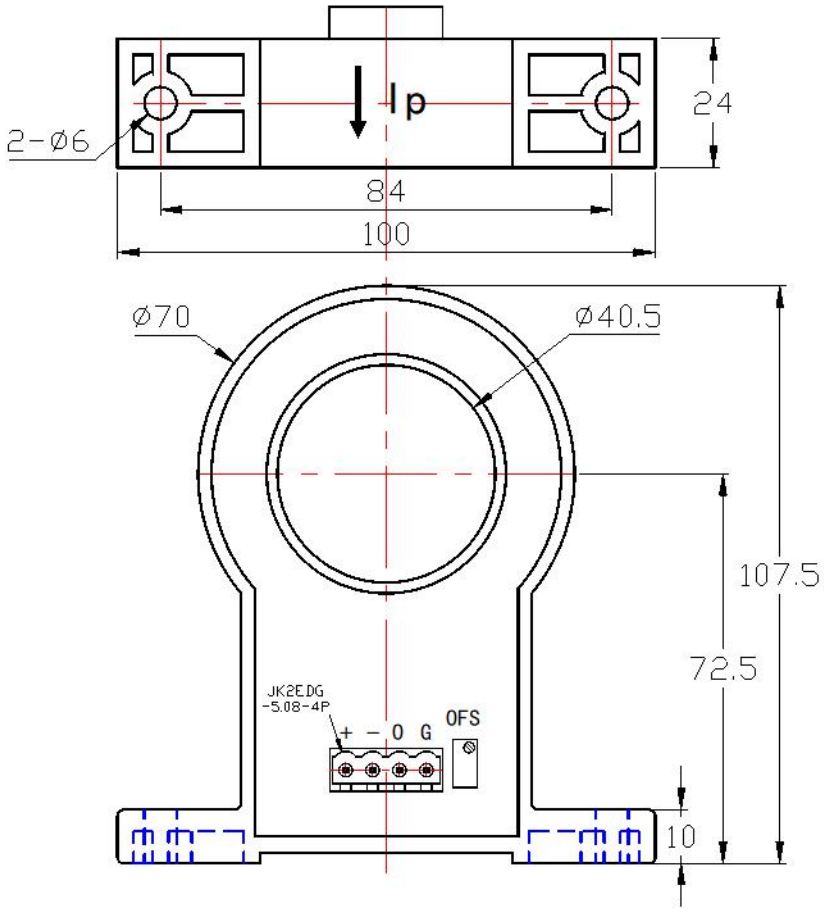
Ref	CHD10EA12D5	CHD20EA12D5	CHD30EA12D5	CHD40EA12D5	CHD50EA12D5
Rated input Ipn (DC)	10mA	20mA	30mA	40mA	50mA
Measuring range Ip (DC)	0～±20mA	0～±40mA	0～±60mA	0～±80mA	0～±100mA
Turns ratio(Np/Ns) (T)	1:50	1:100	1:150	1:200	1:250
Rated output voltage	@Ip=±Ipn	±5V±1%			
Supply voltage Vcc	DC±12V~±15V(±5%)				
Current consumption Ic	20mA+IpX(Np/Ns)				
Offset voltage	@Ip=0	≤±50mV			
Offset voltage drift	@ -40℃ ~ 85℃	≤±1.5mV/℃			
Linearity	@Ip=0-±Ipn	< 1% FS			
Response time	≤50mS				

Galvanic isolation Vd	@ 50HZ,AC,1min	2.5KV

General data：

Parameter	Value
Operating temperature TA(°C)	-40 ~ +85
Storage temperature TS(°C)	-40~ +125
Mass M(g)	252
Standards	UL94-V0
	EN60947-1:2004
	IEC60950-1:2001
	EN50178:1998
	SJ 20790-2000

Dimensions(mm)：

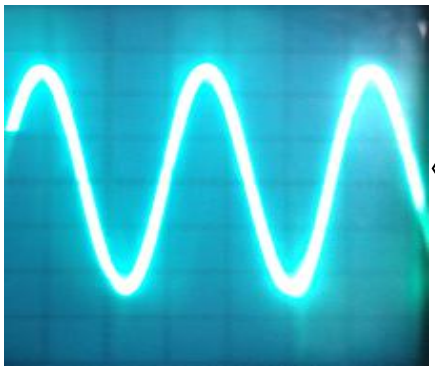


Pins	Connected
1	+15V
2	-15V
3	OUT
4	GND

1. All dimensions are in mm.
2. General tolerance:< ±1mm
3. Primary through-hole： D40.5mm

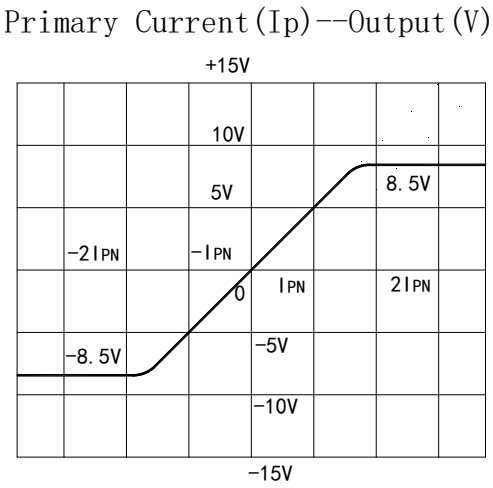
Characteristics chart:

Characteristic of Output Noise Voltage



⇦ (Noise voltage)

Input Current-Output Voltage



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 if fully filled with.
- The primary conductor should be <100°C.

WARNING : Incorrect wiring may cause damage to the sensor.