



# DATA SHEET

## DC Leakage Current Sensor

**P/N: CHD50LCT15D5**

**$I_{PN}=\pm 50\text{mA}$**

### Feature

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

### 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: ( $T_a=25^\circ\text{C}$ , $V_c=\pm 15\text{VDC}$ )

Parameter Ref	CHD50LCT15D5
Rated input $I_{pn}$	$\pm 50\text{ mA DC}$
Measuring range $I_p$	$0\sim\pm 75\text{mA}$
Turns ratio( $N_p/N_s$ ) (T)	1:100
Output voltage $V_o(\text{V})$	@ $I_p=\pm I_{pn}$ $\pm 5\pm 1\%$
Supply voltage $V_c(\text{V})$	$(\pm 12\sim\pm 15)\pm 5\%$
Accuracy $X_G(\%)$	@ $I_{PN}, T=25^\circ\text{C}$ $\leq \pm 1$
Offset voltage $V_{OE}(\text{mV})$	@ $I_p=0, T=25^\circ\text{C}$ $<\pm 50$
Offset voltage drift $V_{OT}(\text{mV}/^\circ\text{C})$	@ $I_p=0, -40\sim+85^\circ\text{C}$ $\leq \pm 1$
Linearity error $\varepsilon_r(\%\text{FS})$	$\leq 1$
Response time $t_{ra}(\text{mS})$	$\leq 30$
Consumption current (mA)	$20+I_p X(N_p/N_s)$



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## Characteristics chart:

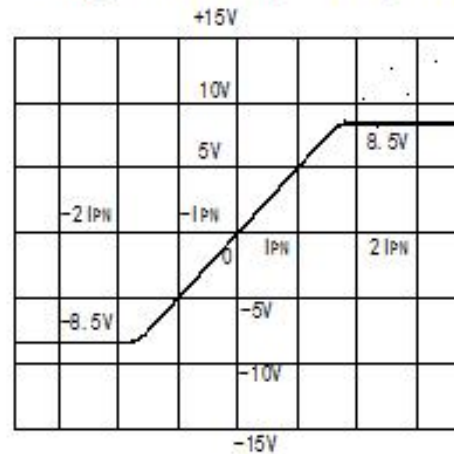
Characteristic of Output Noise Voltage



输出噪声电压  
(Noise voltage)

Input Current-Output Voltage

Primary Current ( $I_p$ ) — Output (V)



## 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  $<100^{\circ}\text{C}$ .

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



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