



DATA SHEET

DC Leakage Current Sensor

PN: CHD_E15D5

IPN=01~100mA

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)

Parmeter	Ref	CHD01	CHD05	CHD10	CHD20	CHD30	CHD40	CHD50	CHD100
		E15D5	E15D5	E15D5	E15D5	E15D5	E15D5	E15D5	E15D5
Rated input Ipn(mA) DC		01	05	10	20	30	40	50	100
Measuring range Ip(A)		0~±02	0~±10	0~±20	0~±40	0~±60	0~±80	0~±100	0~±200
Output voltage Vo(V)		$\pm 5.0 * (IP/IPN)$							
Supply voltage VC(V)		$(\pm 12 \sim \pm 15) \pm 5\%$							
Accuracy XG(%)		@IPN, T=25°C			$\leq \pm 1$				
Offset voltage VOE(mV)		@IP=0, T=25°C			$< \pm 30$				
Temperature variation of VOE VOT(mV/°C)		@IP=0, -20 ~ +80°C			$\leq \pm 1.5$				
Hysteresis offset voltage VOH(mV)		@IP=0, after 1*IPN			$\leq \pm 30$				
Linearity error ϵ_r (%FS)		≤ 1.0							
Response time tra(ms)		@90% of IPN			≤ 20				
Power consumption IC(mA)		$15 + I_s$							
Bandwidth BW(KHZ)		@-3dB, IPN			DC				



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Insulation voltage Vd(KV)	@50/60Hz, 1min,AC	3.0
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General data:

Parameter	Value
Operating temperature TA(°C)	-20 ~ +80
Storage temperature TS(°C)	-40~ +85
Mass M(g)	75
Plastic material	PBT G30/G15, UL94- V0;
Standards	IEC60950-1:2001
	EN50178:1998
	SJ20790-2000

Dimensions(mm):

	Connection															
	<table border="1" style="margin-left: auto; margin-right: auto;"> <thead> <tr> <th colspan="3">端子说明</th> </tr> </thead> <tbody> <tr> <td>+</td> <td>1</td> <td>+15V</td> </tr> <tr> <td>-</td> <td>2</td> <td>-15V</td> </tr> <tr> <td>M</td> <td>3</td> <td>Out</td> </tr> <tr> <td>G</td> <td>4</td> <td>GND</td> </tr> </tbody> </table>	端子说明			+	1	+15V	-	2	-15V	M	3	Out	G	4	GND
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+	1	+15V														
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M	3	Out														
G	4	GND														
General tolerance																
General tolerance: $\pm 0.5\text{mm}$ Primary through-hole : $D20 \pm 0.15\text{mm}$ Secondary pin: 2EDG5.08-04P																

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 <math>< 100^{\circ}\text{C}</math>.

WARNING : Incorrect wiring may cause damage to the sensor.



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