

DATA SHEET

DC Leakage Current Sensor

PN: CHD_ET15D5-S1

$I_{PN}=5\sim 100\text{mA}$

Feature

- DC leakage current sensor using the Flux-gate principle
- For the electronic measurement of currents: small DC single, with galvanic separation between primary circuit and secondary circuit
- Supply voltage: DC $\pm 12\sim 15\text{ V}$



Advantages

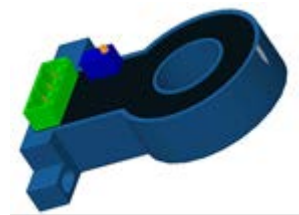
- Easy installation
- Only one design for wide current ratings range time
- Low power consumption
- High immunity to external interference

- Can be customized
- Optimized response



Applications

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



RoHS

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

Parameter Ref	CHD05 ET15D5- S1	CHD10 ET15D5- S1	CHD20 ET15D5- S1	CHD30 ET15D5- S1	CHD40 ET15D5- S1	CHD50 ET15D5- S1	CHD100 ET15D5- S1
Rated input $I_{pn}(\text{mA})$ DC	5	10	20	30	40	50	100
Measuring range $I_p(\text{mA})$	0~±7	0~±14	0~±28	0~±42	0~±56	0~±70	0~±140
Output voltage $V_o(\text{V})$	$\pm 5.0 * (I_p / I_{PN}), \text{DC}$						
Load resistance (R_L)	>10						
Supply voltage $V_C(\text{V})$	$(\pm 12 \sim \pm 15) \pm 5\%$						
Accuracy $X_G(\%)$	@ $I_{PN}, T=25^\circ\text{C}$			$\leq \pm 1.0$			
Offset voltage $V_{OE}(\text{mV})$	@ $I_p=0, T=25^\circ\text{C}$			$< \pm 50$			
Temperature variation of V_{OE} $V_{OT}(\text{mV}/^\circ\text{C})$	@ $I_p=0, -40 \sim +85^\circ\text{C}$			$\leq \pm 2.0$			
Hysteresis offset voltage $V_{OH}(\text{mV})$	@ $I_p=0$, after $1 * I_{PN}$			$\leq \pm 25$			
Linearity error $\varepsilon_r(\%FS)$	< 1.0						
Response time $t_{ra}(\text{ms})$	@ 90% of I_{PN}			< 300			
Power consumption $I_C(\text{mA})$	$9.0 + I_s$						



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Bandwidth BW(KHZ)	@-3dB, I _{PN}	DC
Insulation voltage Vd(KV)	@50/60Hz, 1min,AC	3.0

General data:

Parameter	Value
Operating temperature TA(°C)	-10 ~ +70
Storage temperature TS(°C)	-25 ~ +70
Mass M(g)	65
Plastic material	PBT G30/G15, UL94- V0;
Standards	IEC60950-1:2001
	EN50178:1998
	SJ20790-2000

Dimensions(mm):

接线 Connection

公差 General tolerance

总公差
General tolerance: $\pm 0.5\text{mm}$
初级过孔尺寸
Primary through-hole: $D 20.0 \pm 0.15$
次级连接器型号 Connection of Secondary :
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.

