



DATA SHEET

Hall Effect Current Sensor

PN: CHK_HAX15D4

IPN=500-2500A

Feature

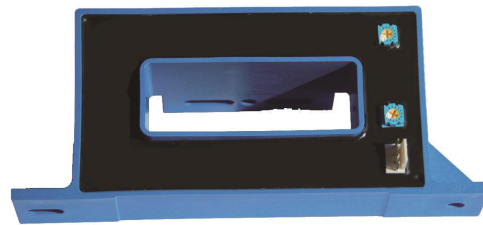
- Open- loop
- Capable measurement of currents: DC, AC, pulse with galvanic isolation between primary circuit and secondary circuit.
- Supply voltage: DC $\pm 12\sim 15V$

Advantages

- High accuracy
- Easy installation
- No insertion losses
- Low power consumption
- Wide current measuring range
- High immunity to external interference
- Very good linearity
- Can be customized

Applications

- Inverter applications
- AC/DC variable-speed drive
- Uninterruptible Power Supplies (UPS)
- Switched Mode Power Supplies (SMPS)
- Frequency drive control home appliances



RoHS



Electrical data: ($T_a=25^\circ C$, $V_c=\pm 15VDC$, $R_L=1.0K\Omega$)

Parameter \ Ref	CHK500 HAX15D4	CHK800 HAX15D4	CHK1000 HAX15D4	CHK1500 HAX15D4	CHK2000 HAX15D4	CHK2500 HAX15D4
Rated input $I_{pn}(A)$	500	800	1000	1500	2000	2500
Measuring range $I_p(A)$	0 \sim ± 1500	0 \sim ± 2400	0 \sim ± 3000	0 \sim ± 4500	0 \sim ± 5500	0 \sim ± 5500
Output voltage $V_o(V)$	$\pm 4.0*(IP/IPN)$					
Load resistance $R_L(K\Omega)$	>1.0					
Supply voltage $V_C(V)$	$(\pm 12\sim \pm 15) \pm 5\%$					
Accuracy $XG(\%)$	@IPN, $T=25^\circ C$		$< \pm 1.0$			
Offset voltage $VOE(mV)$	@IP=0, $T=25^\circ C$		$< \pm 20$			
Temperature variation of VOE $VOT(mV/^\circ C)$	@IP=0, $-40 \sim +85^\circ C$		$< \pm 1.0$			
Temperature variation of VOE $VOT(mV/^\circ C)$	@IPN, $-40 \sim +85^\circ C$		$< \pm 0.1 \%$			
Hysteresis offset voltage $VOH(mV)$	@IP=0, after $1*IPN$		$< \pm 20$			
Linearity error $\epsilon_r(\%FS)$	< 1.0					
Di/dt accurately followed ($A/\mu s$)	> 100					
Response time $t_{ra}(\mu s)$	@90% of IPN		< 5.0			



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Power consumption IC(mA)	15	
Bandwidth Bw(KHZ)	@-3dB, IPN	DC-20
Insulation voltage Vd(KV)	@50/60Hz, 1min,AC	5.0

General data:

Parameter	Value
Operating temperature TA(°C)	-40 ~ +85
Storage temperature TS(°C)	-55~ +125
Mass M(g)	450
Plastic material	PBT G30/G15, UL94- V0;
Standards	IEC60950-1:2001
	EN50178:1998
	SJ20790-2000

Dimensions(mm):

	<p style="text-align: center;">Connection</p> <p style="text-align: center;">General tolerance</p> <p>General tolerance: <math>\pm 0.5\text{mm}</math> Primary through-hole : 21*64±0.3 Connection of Secondary : 2510-04A (Instead of Molex 5045-04A)</p>
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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.

