



DATA SHEET

Hall Effect Current Sensor

PN: CHK_FK15D4H

IPN=200-2000A

Feature

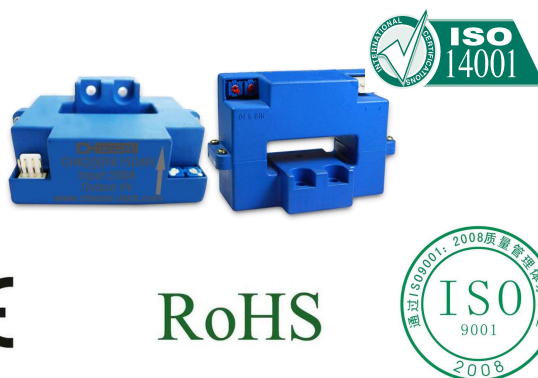
- Open- loop
- Capable measurement of currents: DC, AC,pulse with galvanic isolation between primary circuit and secondary circuit.
- Supply voltage: DC $\pm 12\sim 15V$
- Removable structure

Advantages

- Excellent 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: ($T_a=25^{\circ}C$, $V_c=\pm 15VDC, R_L=10K\Omega$)

Parmeter	Ref	CHK200 FK15D4H	CHK400 FK15D4H	CHK800 FK15D4H	CHK1000 FK15D4H	CHK1200 FK15D4H	CHK2000 FK15D4H
Rated input $I_{pn}(A)$		200	400	800	1000	1200	2000
Measuring range $I_p(A)$		0 $\sim\pm 600$	0 $\sim\pm 1200$	0 $\sim\pm 2400$	0 $\sim\pm 3000$	0 $\sim\pm 3600$	0 $\sim\pm 4000$
Output voltage $V_o(V)$		$\pm 4.0*(IP/IPN)$					
Load resistance $R_L(K\Omega)$		> 10					
Supply voltage $V_C(V)$		$(\pm 12\sim\pm 15) \pm 5\%$					
Accuracy $XG(\%)$		@IPN, $T=25^{\circ}C$		$< \pm 0.5$			
Offset voltage $VOE(mV)$		@IP=0, $T=25^{\circ}C$		$< \pm 20$			
Temperature variation of VOE $VOT(mV/^{\circ}C)$		@IP=0, $-40 \sim +85^{\circ}C$		$< \pm 1.0$			
Hysteresis offset voltage $VOH(mV)$		@IP=0, after $1*IPN$		$< \pm 20$			
Linearity error $\epsilon_r(\%FS)$		< 0.5					
Di/dt accurately followed ($A/\mu s$)		> 100					
Response time $t_{ra}(\mu s)$		@90% of IPN		< 5.0			
Power consumption $I_C(mA)$		20					
Bandwidth $B_w(KHZ)$		@-3dB, IPN		DC-20			
Insulation voltage $V_d(KV)$		@50/60Hz, 1min, AC		5.0			



Cheemi Technology Co., Ltd

Tel: 025-85996365 E-mail: info@cheemi-tech.com www.cheemi-tech.com
 Add: N22, Xianlongwan, Xianyin South Road, Qixia District, Nanjing - China.

General data:	
Parameter	Value
Operating temperature TA(°C)	-40 ~ +85
Storage temperature TS(°C)	-55~ +125
Mass M(g)	235
Plastic material	PBT G30/G15, UL94- V0;
Standards	IEC60950-1:2001
	EN50178:1998
	SJ20790-2000

Dimensions(mm):	
	<p style="text-align: center;">Connection</p>
General tolerance	
<p>General tolerance: <math>\leq \pm 0.5\text{mm}</math> Primary through-hole : 13*41± 0.20 Connection of Secondary : 2510-04A (Instead of Molex 5045-04A)</p>	

Remarks:
<ul style="list-style-type: none"> ➤ 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 <math>< 100^{\circ}\text{C}</math>.
WARNING : Incorrect wiring may cause damage to the sensor.

