



DATA SHEET

Hall Effect Current Sensor

PN: CHK_HCDA24S0/4

IPN=5000-20000A

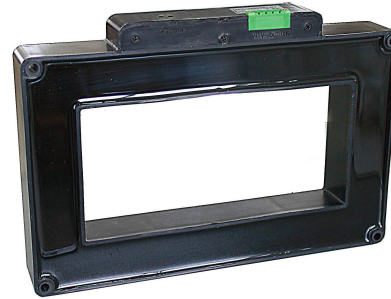
Feature

- Open- loop current transducer using the hall effect
- Capable measurement of currents: DC, AC, pulse with galvanic isolation between primary circuit and secondary circuit.
- Output signal can be directly acquisition-ed by the PLC or DSP terminal control system.
- Supply voltage: DC +12.0~24.0V

Advantages

- Easy installation
- No insertion losses
- Low power consumption
- Wide current measuring range
- High immunity to external interference

- Can be customized



RoHS

Applications

- The application of variable frequency electrical appliances
- AC/DC variable-speed drive
- Uninterruptible Power Supplies (UPS)
- Switched Mode Power Supplies (SMPS)
- Inverter applications

Electrical data: (Ta=25°C, Vc=+24.0VDC)

Parameter \ Ref	CHK5000 HCDA24S0/4	CHK6000 HCDA24S0/4	CHK10000 HCDA24S0/4	CHK15000 HCDA24S0/4	CHK20000 HCDA24S0/4
Rated input Ipn(A)	5000	6000	10000	15000	20000
Measuring range Ip(A)	0 ~ +6000	0 ~ +7200	0 ~ +12000	0 ~ +18000	0 ~ +22000
Output current Io(mA)	@CHK-HCDA24S4		4.0+16.0*(IP/IPN),DC		
Output current Io(mA)	@IP=0,CHK-HCDA24S4		4.0±0.15,DC		
Output current Io(mA)	@CHK-HCDA24S0		+20.0*(IP/IPN),DC		
Offset current IOE(mA)	@IP=0,CHK-HCDA24S0		< +0.2		
Supply voltage VC(V)	+12.0~+24.0 ±5%				
Accuracy XG(%)	@IPN,T=25°C		< ±1.0		
Temperature variation of IOE IOT(mA/°C)	@IP=0,-40 ~ +85°C		< ±0.005		
Linearity error εr(%FS)	< 1.0				
Response time tra(ms)	@90% of IPN		<20		
Power consumption IC(mA)	25+IO				



Cheemi Technology Co., Ltd

Bandwidth Bw(KHZ)	@-3dB,IPN	DC-2.0
Insulation voltage Vd(KV)	@50/60Hz, 1min,AC	6.0

General data:

Parameter	Value
Operating temperature TA(°C)	-40 ~ +85
Storage temperature TS(°C)	-55 ~ +125
Mass M(g)	6300
Plastic material	PBT G30/G15, UL94- V0;
Standards	IEC60950-1:2001
	EN50178:1998
	SJ20790-2000

Dimensions(mm):

Connection

General tolerance

General tolerance: $\pm 0.5\text{mm}$
 Primary through-hole : 100*210MM
 Connection of Secondary : 15EDGK3.81-04P

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.

