



DATA SHEET

Hall Effect Current Sensor

PN: CHK_EKADA12S12

IPN=50-600A

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 +12.0V

Advantages

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

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)

Parmeter \ Ref	CHK50EKA DA12S12	CHK100EK ADA12S12	CHK200EK ADA12S12	CHK300EK ADA12S12	CHK400EK ADA12S12	CHK600EK ADA12S12
Rated input Ipn(A)	50	100	200	300	400	600
Measuring range Ip(A)	0 ~ ±100	0 ~ ±200	0 ~ ±400	0 ~ ±600	0 ~ ±800	0 ~ ±1200
Output current Io(mA)	@CHK-EKADA12S12 12.0±8.0*(IP/IPN), DC					
Output current Io(mA)	@IP=0,CHK-EKADA12S12 12.0±0.2, DC					
Supply voltage Vc(V)	+12.0±5%					
Accuracy Xg(%)	@IPN,T=25°C < ±1.5					
Temperature variation of I _{OE} I _{OT} (mA/°C)	@IP=0,-40 ~ +85°C < ±0.005					
Linearity error r(%FS)	< 0.5					
Response time tra(ms)	@90% of IPN < 20					
Power consumption IC(mA)	15+I _o					
Bandwidth Bw(KHZ)	@-3dB,IPN DC-2.0					
Insulation voltage Vd(KV)	@50/60Hz, 1min,AC 3.0					



General data:	
Parameter	Value
Operating temperature TA(°C)	-40 ~ +85
Storage temperature TS(°C)	-55~ +125
Mass M(g)	70
Plastic material	PBT G30/G15, UL94- V0;
Standards	IEC60950-1:2001
	EN50178:1998
	SJ20790-2000

Dimensions(mm):		
CHK-EKADA12S12M	CHK-EKADA12S12S	Connection
		<p>General tolerance</p> <p>General tolerance: <math>\pm 0.5\text{mm}</math></p> <p>Primary through-hole: $D21.0 \pm 0.3$</p> <p>Connection of Secondary :</p> <p>CHK-EKADA12S12M: 2510-04A (Instead of Molex 5045-04A)</p> <p>CHK-EKADA12S12S: 15EDGK3.81-04P</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 is fully filled with. ➤ The primary conductor should be <math>< 100^{\circ}\text{C}</math>.
<p>WARNING : Incorrect wiring may cause damage to the sensor.</p>

