



DATA SHEET

Hall Effect Current Sensor

PN: CHK_EKBDA12S12

IPN=200-2000A

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 acquisitioned by the PLC or DSP terminal control system.

Advantages

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

Applications

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

- Supply voltage: DC +12.0V

- Can be customized



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

Parameter \ Ref	CHK200EKB DA12S12	CHK600EKB DA12S12	CHK800EKB DA12S12	CHK1000EK BDA12S12	CHK1500EK BDA12S12	CHK2000EKB DA12S12
Rated input Ipn(A)	200	600	800	1000	1500	2000
Measuring range Ip(A)	0 ~ ±400	0 ~ ±600	0 ~ ±1600	0 ~ ±2000	0 ~ ±3000	0 ~ ±4000
Output current Io(mA)	@CHK-EKBDA12S12		12.0±8.0*(IP/IPN), DC			
Output current Io(mA)	@IP=0,CHK-EKBDA12S12		12.0±0.2, DC			
Supply voltage Vc(V)			+12.0 ±5%			
Accuracy XG(%)	@IPN,T=25°C		<±1.5			
Temperature variation of IOE IoT(mA/°C)	@IP=0,-40 ~ +85°C		<±0.005			
Linearity error er(%FS)			<0.5			
Response time tra(ms)	@90% of IPN		<20			
Power consumption Ic(mA)			15+Io			
Bandwidth Bw(KHZ)	@-3dB,Ipn		DC-2.0			



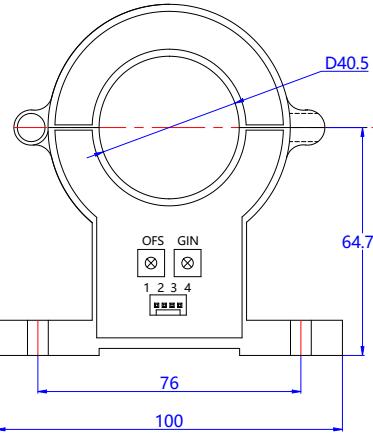
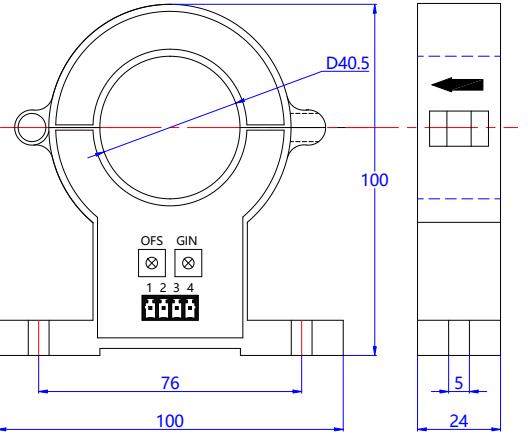
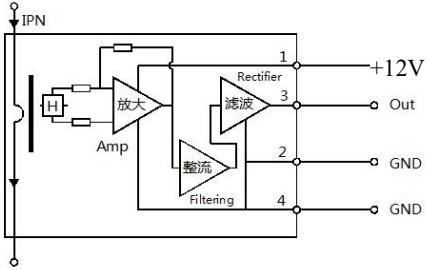
Cheemi Technology Co., Ltd

Insulation voltage Vd(KV)	@50/60Hz, 1min,AC	3.0
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General data:

Parameter	Value
Operating temperature TA(°C)	-40 ~ +85
Storage temperature TS(°C)	-55~ +125
Mass M(g)	120
Plastic material	PBT G30/G15, UL94- V0; IEC60950-1:2001
Standards	EN50178:1998 SJ20790-2000

Dimensions(mm):

CHK-EKBDA12S12M	CHK-EKBDA12S12S	Connection
		 <p>General tolerance</p> <p>General tolerance:< ±0.5mm Primary through-hole: D40.5±0.3 Connection of Secondary : CHK-EKBDA12S12M: 2510-04A (Instead of Molex 5045-04A) CHK-EKBDA12S12S: 15EDGK3.81-04P</p>

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 if fully filled with.
- The primary conductor should be <100°C.

WARNING : Incorrect wiring may cause damage to the sensor.

