



DATA SHEET

Hall Effect Current Sensor

PN: CHK_EKBDA12S12-S20	I _{PN} =200-2000A
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Feature

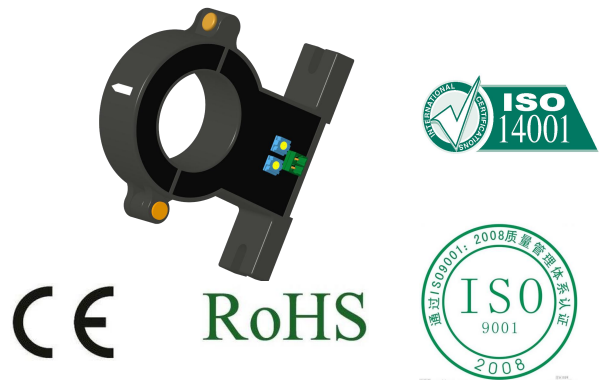
- Open- loop current transducer using the hall effect
- Capable measurement of currents: DC, AC,pulse with galvanic isolation between primary circuit and secondary circuit.
- Output signal can be directly acquisition-ed by the PLC or DSP terminal control system.
- Supply voltage: DC +12.0V
- Output mode: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

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=+12.0VDC)

Parameter	Ref	CHK200EKBDA 12S12-S20	CHK600EKBDA 12S12-S20	CHK800EKBDA 12S12-S20	CHK1000EKBDA 12S12-S20	CHK1500EKBDA 12S12-S20	CHK2000EKBDA 12S12-S20
Rated input I _{PN} (A)		200	600	800	1000	1500	2000
Measuring range I _p (A)		0 ~ ±400	0 ~ ±1200	0 ~ ±1600	0 ~ ±2000	0 ~ ±3000	0 ~ ±4000
Output current I _o (mA)		@CHK-EKBDA12S12-S20 12.0±8.0*(I _p /I _{PN}), DC					
Output current I _o (mA)		@I _p =0, CHK-EKBDA12S12-S20 12.0±0.2, DC					
Supply voltage V _c (V)		+12.0 ±5%					
Accuracy X _G (%)		@I _{PN} , T=25°C < ±1.5					
Temperature variation of I _{OE} I _{OT} (mA/°C)		@I _p =0, -40 ~ +85°C < ±0.005					
Linearity error ε _r (%FS)		< 0.5					
Response time τ _{ra} (ms)		@90% of I _{PN} <20					
Power consumption I _c (mA)		12					
Bandwidth B _w (KHZ)		@-3dB, I _{PN} DC-2.0					



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;
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: $D40.5 \pm 0.3$ Connection of Secondary : 15EDGVC-3.81-02P</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 <math>< 100^{\circ}\text{C}</math>.

WARNING : Incorrect wiring may cause damage to the sensor.

