



DATA SHEET

Hall Effect Current Sensor

PN: CHK_BR15S4

IPN=50-600A

Feature

- Open- loop
- Capable measurement of currents: DC, AC, pulse with galvanic isolation between primary circuit and secondary circuit.
- Supply voltage: DC +15V

Advantages

- Easy installation
- No insertion losses
- Low power consumption
- Wide current measuring range
- High immunity to external interference
- 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: (Ta=25°C, Vc=+15.0VDC, RL=1KΩ)

Parmeter \ Ref	CHK50 BR15S4	CHK100 BR12S4	CHK200 BR12S4	CHK300 BR12S4	CHK400 BR12S4	CHK600 BR12S4
Rated input I _{pn} (A)	50	100	200	300	400	600
Measuring range I _p (A)	0~+100	0~+200	0~+400	0~+600	0~+800	0~+900
Output voltage V _o (V)	+4.0*(IP/IPN)					
Load resistance R _L (KΩ)	>2.0					
Supply voltage V _C (V)	+15.0±5%					
Accuracy X _G (%)	@IPN, T=25°C		< ±1.0			
Offset voltage V _{OE} (mV)	@IP=0, T=25°C		< +40			
Temperature variation of V _{OE} V _{OT} (mV/°C)	@IP=0, -40 ~ +85°C		< ±1.0			
Hysteresis offset voltage V _{OH} (mV)	@IP=0, after 1*IPN		< +25			
Linearity error ε _r (%FS)	< 1.0					
Di/dt accurately followed (A/μs)	> 100					
Response time τ _{ra} (μs)	@90% of IPN		< 3.0			
Power consumption I _C (mA)	15					
Bandwidth B _w (KHZ)	@IPN		DC-DC			
Insulation voltage V _d (KV)	@50/60Hz, 1min, AC		2.5			



General data:	
Parameter	Value
Operating temperature TA(°C)	-40 ~ +85
Storage temperature TS(°C)	-55 ~ +125
Mass M(g)	65
Plastic material	PBT G30/G15, UL94- V0;
Standards	IEC60950-1:2001
	EN50178:1998
	SJ20790-2000

Dimensions(mm):	
	<p>Connection</p>
	<p>General tolerance</p> <p>General tolerance: <math>\lt; \pm 0.5\text{mm}</math> Primary through-hole : <math>10.5 \times 20.5 \pm 0.2</math> Connection of secondary : 4 core cable length L=650mm;</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>\lt; 100^\circ\text{C}</math>.
<p>WARNING : Incorrect wiring may cause damage to the sensor.</p>

