DATA SHEET
Hall Effect Current Sensor

PN: CHK_BS15D4 | **IPN=50-600A**

Feature

- Open- loop
- Supply voltage: DC ±12~15V
- Capable measurement of currents: DC, AC,pulse with galvanic isolation between primary circuit and secondary circuit.

Advantages

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

Applications

- Inverter applications
- AC/DC variable-speed drive
- Uninterruptible Power Supplies (UPS)
- Switched Mode Power Supplies (SMPS)
- Frequency drive control home appliances

Electrical data：（Ta=25℃， Vc=±15.0VDC,RL=1.0KΩ）

Parmeter \ Ref	CHK50 BS15D4	CHK100 BS15D4	CHK200 BS15D4	CHK300 BS15D4	CHK400 BS15D4	CHK600 BS15D4
Rated input Ipn(A)	50	100	200	300	400	600
Measuring range Ip(A)	0～±150	0～±300	0～±600	0～±900	0～±900	0～±900
Output voltage Vo(V)	±4.0*(IP/IPN)					
Load resistance RL(KΩ)	>1.0					
Supply voltage VC(V)	(±12~±15) ±5%					
Accuracy XG(%)	@IPN,T=25°C < ±1.0					
Offset voltage VOE(mV)	@IP=0,T=25°C < ±25					
Temperature variation of VOE VOT(mV/°C)	@IP=0,-40 ~ +85°C < ±1.0					
Hysteresis offset voltage VOH(mV)	@IP=0,after 1*IPN < ±25					
Linearity error εr(%FS)	< 1.0					
Di/dt accurately followed（A/μs）	> 100					
Response time tra(μs)	@90% of IPN < 3.0					
Power consumption IC(mA)	15					

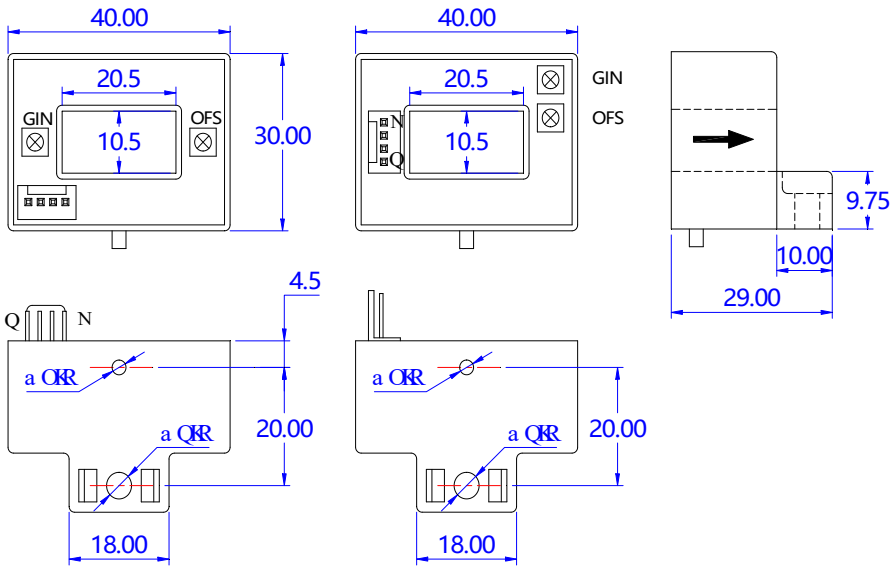
Bandwidth Bw(KHZ)	@-3dB, IPN	DC-20
Insulation voltage Vd(KV)	@50/60Hz, 1min,AC	2.5

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

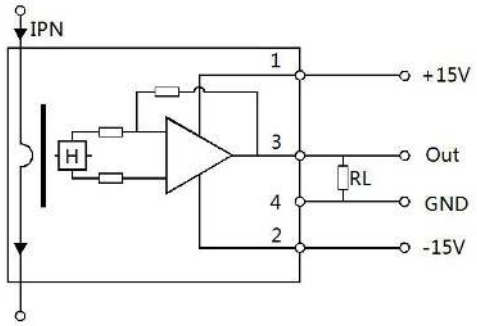
Dimensions(mm):

CHK_BS15D4A



CHK_BS15D4B

Connection



CHK_BS15D4C

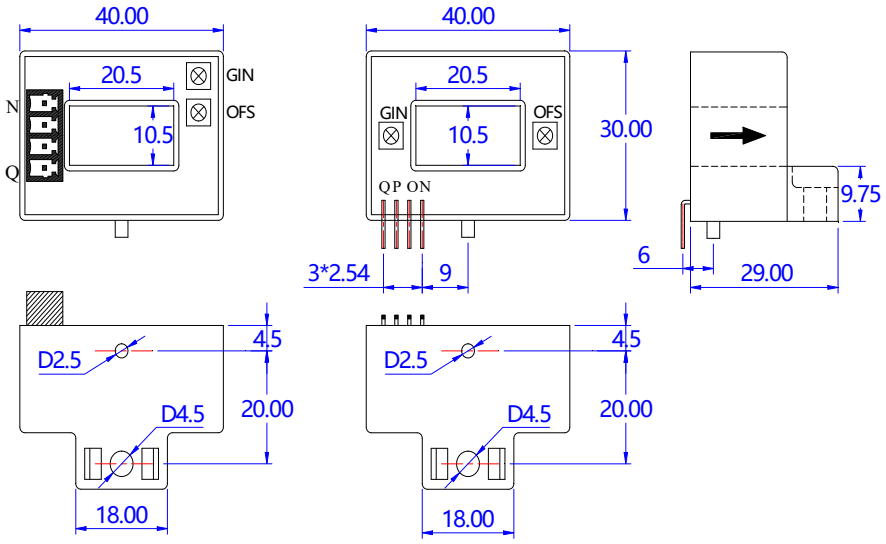
CHK_BS15D4D

General tolerance

General tolerance:< ±0.5mm

Primary through-hole：10.5*20.5±0.3

Connection of Secondary :
CHK_BS15D4A/B:
2510-04A (Instead of Molex 5045-04A)
CHK_BS15D4C: 15EDGK3.81-04P
CHK_BS15D4D: 4pin 0.65*0.65mm



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.