DATA SHEET
Hall Effect Current Sensor

PN: CHK_EKB15D4 | **IPN=200-2000A**

Feature

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

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=10KΩ）

Parmeter \ Ref	CHK100 EKB15D4	CHK200 EKB15D4	CHK400 EKB15D4	CHK800 EKB15D4	CHK1000 EKB15D4	CHK1200 EKB15D4	CHK2000 EKB15D4
Rated input Ipn(A)	100	200	400	800	1000	1200	2000
Measuring range Ip(A)	0～±300	0～±600	0～±1200	0～±2400	0～±3000	0～±3600	0～±4000
Output voltage Vo(V)	±4.0*(IP/IPN)						
Load resistance RL(KΩ)	>10						
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			<5.0			
Power consumption IC(mA)	15						

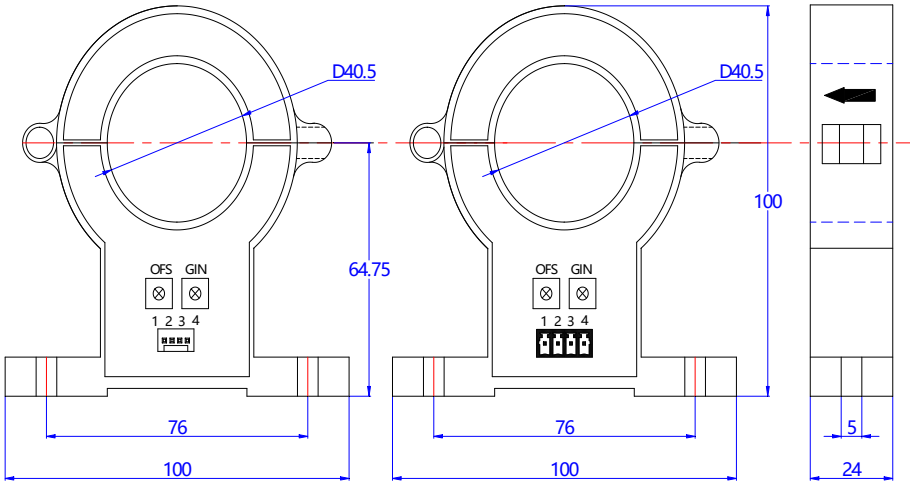
Bandwidth Bw(KHZ)	@-3dB, IPN	DC-20
Insulation voltage Vd(KV)	@50/60Hz, 1min,AC	3.0

General data:

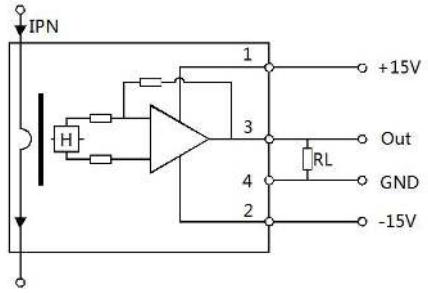
Parameter	Value
Operating temperature TA(°C)	-40 ~ +85
Storage temperature TS(°C)	-55~ +125
Mass M(g)	120
Plastic material	PBT G30/G15, UL94- V0;
Standards	IEC60950-1:2001
	EN50178:1998
	SJ20790-2000

Dimensions(mm):

CHK-EKB15D4M | CHK-EKB15D4S



Connection



General tolerance

General tolerance:< ±0.5mm

Primary through-hole: D40.5±0.20

Connection of Secondary :

CHK-EKB15D4M:

2510-04A (Instead of Molex 5045-04A)

CHK-EKB15D4S: 15EDGK3.81-04P

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.