DATA SHEET
Hall Effect Current Sensor

PN: CHK_KB15D5 | **IPN=1000-10000A**

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

- High 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=±15VDC,RL=10KΩ）

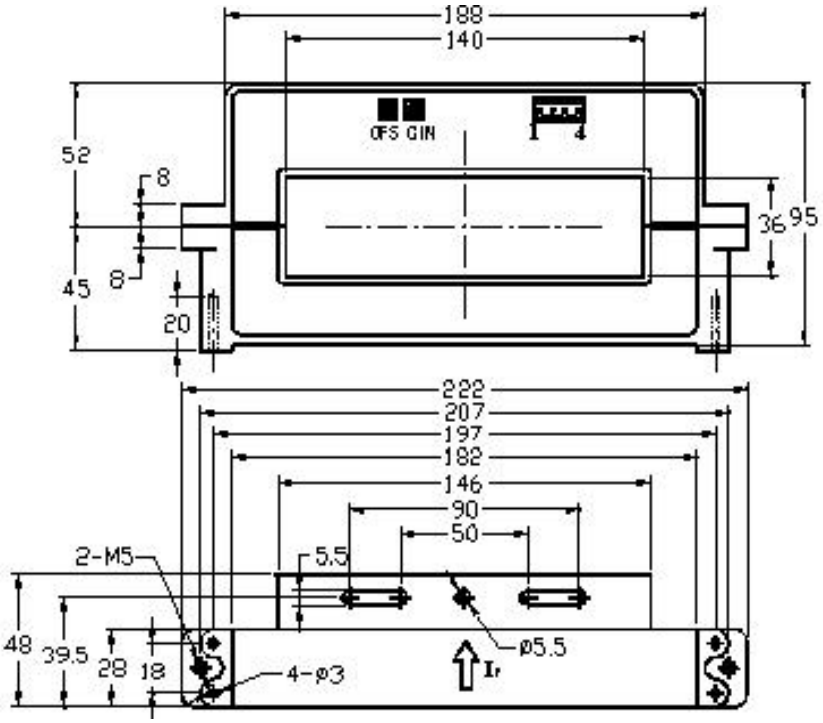
Parmeter \ Ref	CHK1000 KB15D5	CHK3000 KB15D5	CHK4000 KB15D5	CHK5000 KB15D5	CHK8000 KB15D5	CHK10000 KB15D5
Rated input Ipn(A)	1000	3000	4000	5000	8000	10000
Measuring range Ip(A)	0～±2000	0～±6000	0～±8000	0～±10000	0～±12000	0～±12000
Output voltage Vo(V)	±5.0*(IP/IPN)					
Load resistance RL(KΩ)	>10					
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	<7.0				
Power consumption IC(mA)	15					

Bandwidth Bw(KHZ)	@-3dB, IPN	DC-20
Insulation voltage Vd(KV)	@50/60Hz, 1min,AC	6.0

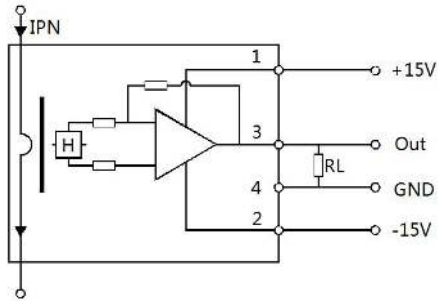
General data:

Parameter	Value
Operating temperature TA(°C)	-40 ~ +85
Storage temperature TS(°C)	-55~ +125
Mass M(g)	1220
Plastic material	PBT G30/G15, UL94- V0;
Standards	IEC60950-1:2001
	EN50178:1998
	SJ20790-2000

Dimensions(mm):



Connection



General tolerance

General tolerance:< ±0.5mm

Primary through-hole：36*140±0.3

Connection of Secondary : DG303-5.0-04P

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.