DATA SHEET
Hall Effect Current Sensor

PN: CHB_LFD15D120/150/200S1 | **IPN=300~1000A**

Feature

- Closed- loop (compensated) current transducer
- Capable measurement of currents: DC, AC,pulse with galvanic isolation between primary circuit and secondary circuit.
- Supply voltage: DC ±15~24V
- S1--connector Model S3P-VH

Advantages

- High accuracy
- Easy installation
- Low temperature drift
- Optimized response time
- High immunity to external interference
- Very good linearity
- 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℃，Vc= ±15VDC）

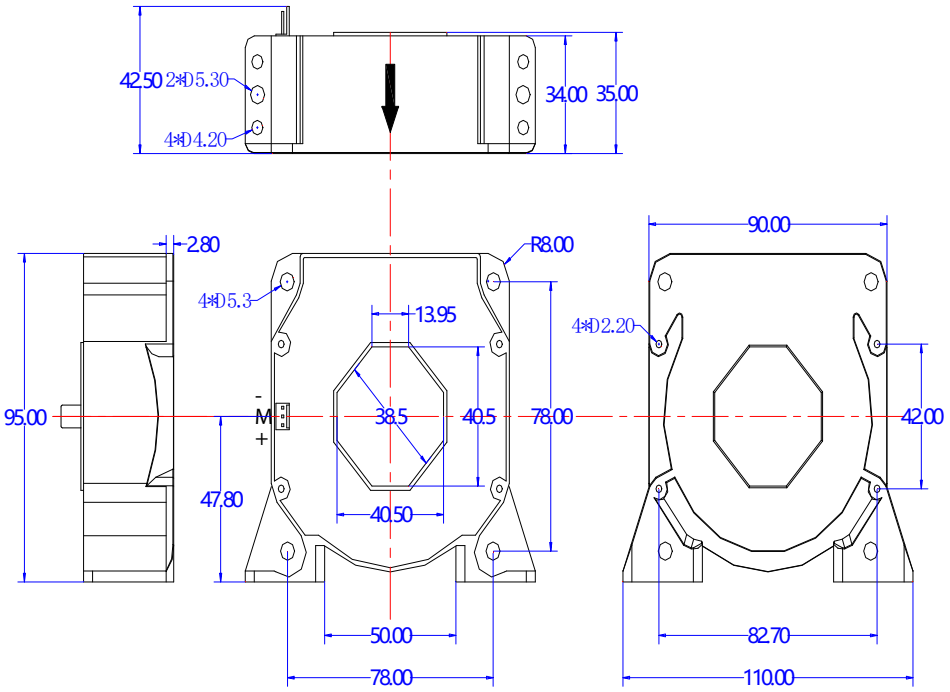
Parmeter \ Ref	CHB300LFD15 D150S1	CHB600LFD15 D120S1	CHB1000LFD15 D200S1	CHB1300LFD15 D260S1	CHB1300LFD15 D325S1
Rated input Ipn(A)	300	600	1000	1300	1300
Measuring range Ip(A)	0～±900	0～±1500	0～±1500	0～±1500	0～±3000
Turns ratio Np/NS (T)	1:2000	1:5000	1:5000	1:5000	1:4000
Output current rms IS(mA)	±150*IP/IPN	±120*IP/IPN	±200*IP/IPN	±260*IP/IPN	±325*IP/IPN
Secondary coil resistance RS (Ω)	25	39	39	39	43
Inside resistance RM (Ω)	[(VC-0.5V)/(IS*0.001)]-RS				
Supply voltage VC(V)	(±15～±24) ±5%				
Accuracy XG(%)	@IPN,T=25°C	< ±0.2			
Offset current IOE(mA)	@IP=0,T=25°C	< ±0.2			
Temperature variation of IOE IOT(mA/°C)	@IP=0,-40～+85°C	< ±0.5			
Linearity error εr(%FS)	< 0.1				
Di/dt（A/μs）	> 100				
Response time tra(μs)	@90% of IPN	< 1.0			
Power consumption IC(mA)	20+Is				

Bandwidth BW(KHZ)	@-3dB,IPN	DC-150
Insulation voltage Vd(KV)	@50/60Hz, 1min,AC	6.0

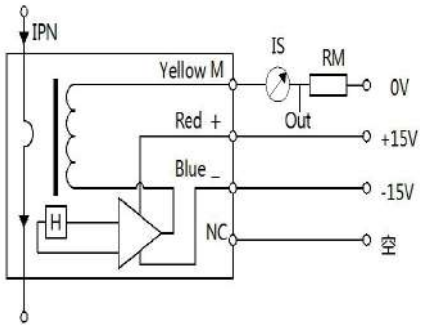
General data:

Parameter	Value
Operating temperature TA(°C)	-40 ~ +85
Storage temperature TS(°C)	-55~ +125
Mass M(g)	620
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：D 38.5±0.2
Connection of Secondary :
S3P-VH (S1)

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.