DATA SHEET
Hall Effect Current Sensor

PN: CHB_LTC15D | **IPN=10~1300A**

Feature

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

Advantages

- High accuracy
- Easy installation
- Low temperature drift
- Optimized response time
- High immunity to external interference
- Very good linearity
- Can be customized

Applications

- Variable speed drives
- Welding machine
- Battery supplied applications
- Uninterruptible Power Supplies (UPS)
- Electrochemical

CE RoHS

Electrical data Ta=25℃ Vc= ±15VDC

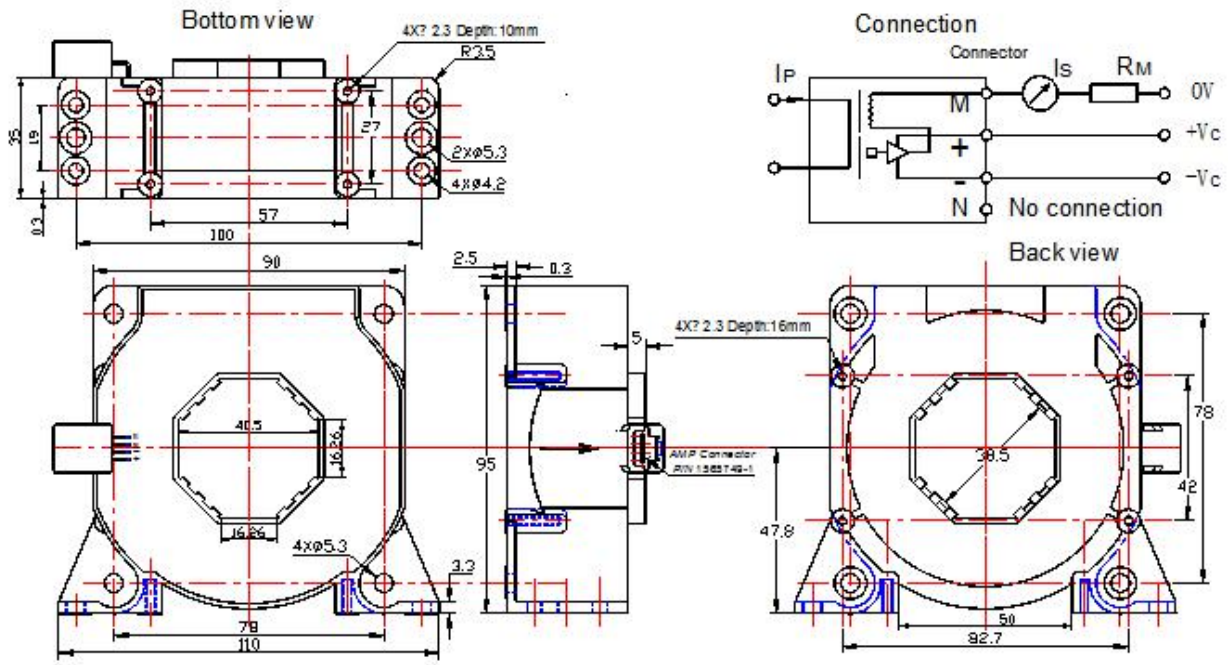
Parmeter \ Ref	CHB1000LTC15D	CHB1300LTC15D
Rated input Ipn(A)	10-1000	13-1300
Measuring range Ip(A)	2000	3000
Turns ratio Np/NS (T)	1:4000	1:4000
Output current rms IS(mA)	2.5±0.1%FS(10A), 250±0.1%FS(1000A)	3.25±0.1%FS(13A), 325±0.1%FS(1300A)
Secondary coil resistance RS (Ω)	@ 70℃ 35	@ 70℃ 28
Measure resister with ±15V RM (Ω)	@±1000Amax 0(min) 20(max)	@±1300Amax 0(min) 12(max)
	@±1200Amax 0(min) 7.5(max)	@±1500Amax 0(min) 8.2(max)
Measure resister with ±24V RM (Ω)	@±1000Amax 0(min) 65(max)	@±1300Amax 0(min) 43(max)
	@±2000Amax 0(min) 7.5(max)	@±3000Amax 0(min) 3(max)
Supply voltage VC(V)	±15～±24	
Offset current drift(mA)	@ -40℃～85℃ ≤±0.5	
Accuracy XG(%)	@IPN,T=25°C < ±0.1	
Linearity error εr(%FS)	@Ip=0-±Ipn ≤ 0.05	

Di/dt accurately followed A/μs	> 100	
Response time tra(μs)	@100A/μS,10%-90%	<1.0
Power consumption IC(mA)	≤20+IpX(Np/Ns)	
Bandwidth BW(KHZ)	@ -3Db	DC…150
Insulation voltage Vd(KV)	@ 50HZ,AC,1min	6

General data

Parameter	Value
Operating temperature TA(°C)	-40 ~ +85
Storage temperature TS(°C)	-40~ +125
Mass M(g)	543
Plastic material	UL94-V0.
Standards	EN60947-1:2004
	IEC60950-1:2001
	EN50178:1998
	SJ 20790-2000

Dimensions(mm):

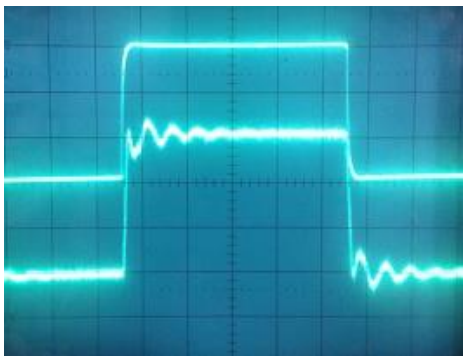


Remarks

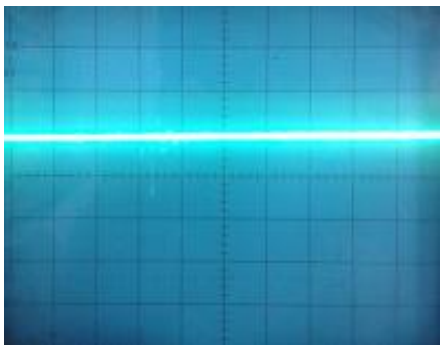
1. All dimensions are in mm.
2. General tolerance ±1mm.

Characteristics chart:

Pulse current signal response characteristic



Effects of impulse noise



Directions for use

- When the current goes through the primary pin of a sensor, the voltage will be measured at the output end.
- Is will be in a forward direction when the Ip flows according to the direction of arrowhead.
- 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 ⩽120°C.
- The primary turns should be at the top of the sensor for the best magnetic coupling.

WARNING : Incorrect wiring may cause damage to the sensor.