DATA SHEET
Hall Effect Current Sensor

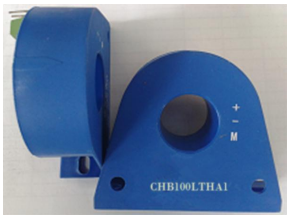
PN: CHB_LTHA15D	IPN=100~300A

Feature

- Closed- loop (compensated) current transducer
- Supply voltage: DC ±12~18V
- 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

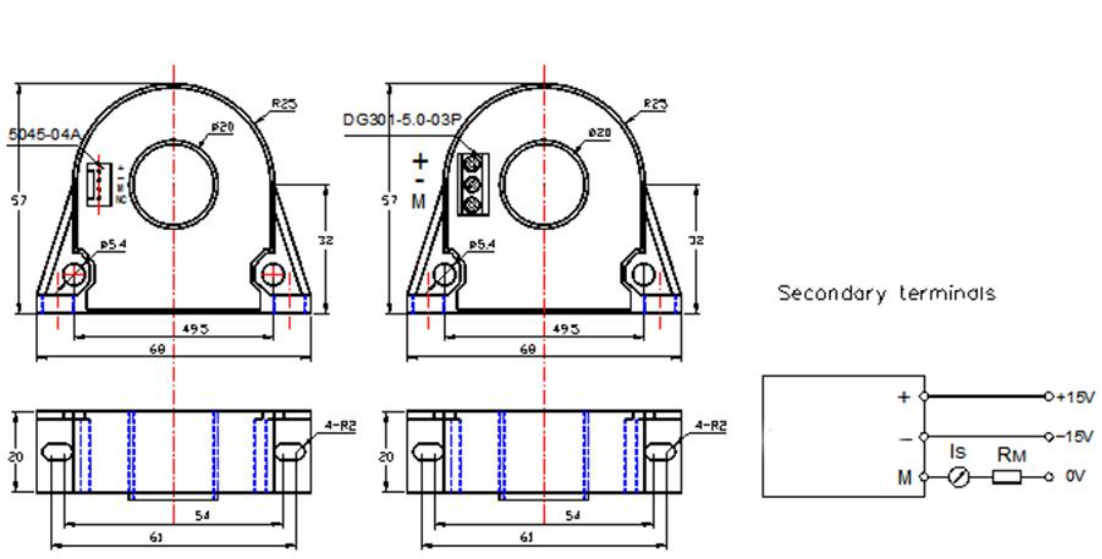
Parmeter \ Ref	CHB100LTHA1 CHB100LTHA2	CHB200LTHA1 CHB200LTHA2	CHB300LTHA1 CHB300LTHA2	CHB300LTHA1 CHB300LTHA2
Rated input Ipn(A)	100	200	300	300
Measuring range Ip(A)	300（±18V，80Ω）	600（±18V，20Ω）	750（±18V，10Ω）	900 （ ±18V ，3.0Ω）
Turns ratio Np/NS (T)	1:2000	1:2000	1:2000	1:3000
Output current rms IS(mA)	50±0.2%	100±0.2%	150±0.2%	100±0.2%
Secondary coil resistance RS (Ω)	25	35	30	52
Measure resister with ±12V RM (Ω)	@100Amax 190(max)	@200Amax 68(max)	@300Amax 39(max)	@300Amax 56(max)
	@200Amax 80(max)	@500Amax 7.5(max)	@500Amax 12(max)	@600Amax 2.0(max)
Measure resister with ±15V RM (Ω)	@100Amax 250(max)	@200Amax 100(max)	@300Amax 62(max)	@300Amax 91(max)
	@200Amax 110(max)	@500Amax 20(max)	@700Amax 10(max)	@750Amax 2.0(max)
Supply voltage VC(V)	±12～±18			

Offset current drift(mA)	@ -40℃～85℃	≤±0.5
Accuracy XG(%)	@IPN,T=25°C	< ±0.1
Linearity error εr(%FS)	@Ip=0-±Ipn	≤0.1
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)	79
Plastic material	UL94-V0.
Standards	EN60947-1:2004
	IEC60950-1:2001
	EN50178:1998
	SJ 20790-2000

Dimensions(mm):

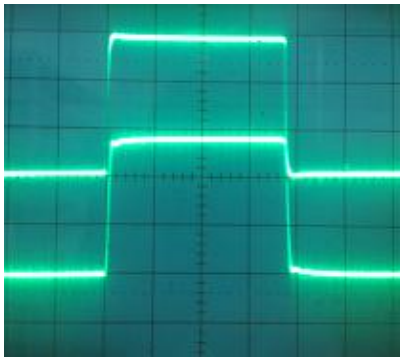


Remarks

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

Characteristics chart:

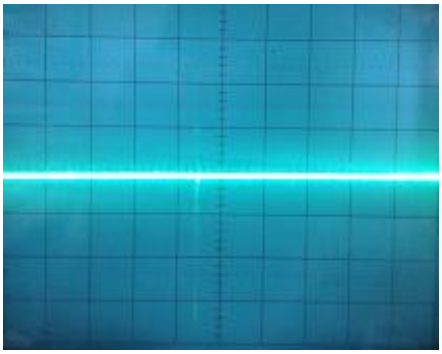
Pulse current signal response characteristic



⇦input signal

⇦ output signal

Effects of impulse noise



⇦ Output voltage

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 ⩽100°C.

WARNING : Incorrect wiring may cause damage to the sensor.