



# DATA SHEET

## Hall Effect Current Sensor

PN: CHB\_LFBH15D

IPN=10-1000A

### 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  $\pm 15\sim 24V$

### Advantages

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

### Applications

- AC variable speed drives and servo motor drives
- Static converters for DC motor drives
- Battery supplied applications
- Uninterruptible Power Supplies (UPS)
- Switched Mode Power Supplies (SMPS)
- Power supplies for welding applications.



RoHS

Electrical data		Ta=25°C Vc= ±15VDC	
Parmeter	Ref	CHB1000LFBH15D	
Rated input Ip(A)		1000	
Measuring range Ip(A)		2000	
Turns ratio Np/NS (T)		1:5000	
Output current rms IS(mA)		200±0.1%FS	
Secondary coil resistance RS (Ω)	@ 70°C	56	
Measure resister RM (Ω)	with±15V @±1000Amax	0(min)	10(max)
	with±15V @±1200Amax	0(min)	1.0(max)
	with±24V @±1000Amax	0(min)	55(max)
	with±24V @±2000Amax	0(min)	1.0(max)
Supply voltage VC(V)		( ±15 ~ ±24 ) ±5%	
Offset current IOE(mA)	@Ip=0	≤ ±0.2	
Offset drift(mA)	@ -40°C ~ 85°C	≤ ±0.5	

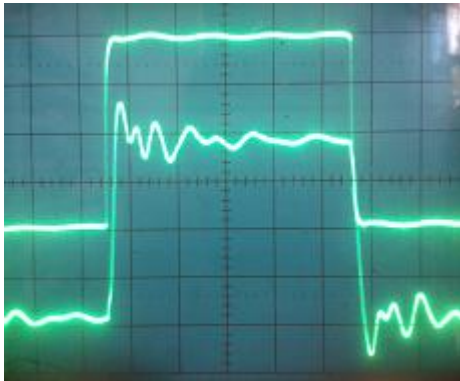




1. All dimensions are in mm.
2. General tolerance  $\pm 1$ mm.

## Characteristics chart:

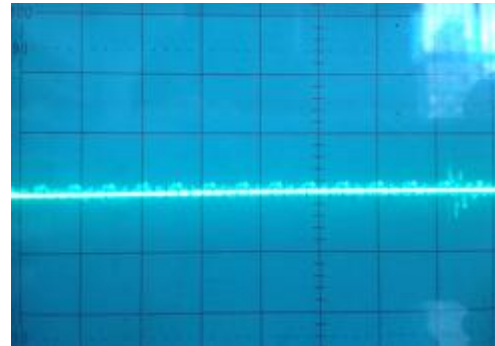
Pulse current signal response characteristic



← 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.
- It will be in a forward direction when the  $I_p$  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 is fully filled with.
- The primary conductor should be  $\leq 120^\circ\text{C}$ .

**WARNING : Incorrect wiring may cause damage to the sensor.**

