DATA SHEET
Hall Effect Current Sensor

PN: CHB100LTS15D100L2	I_{PN}=100A

Feature

- Closed- loop (compensated) current transducer
- Supply voltage: DC ±12~18V
- High accuracy type, it can really measure resolution 1000:1
- Capable precision measurement of currents: DC, AC,pulse with galvanic isolation between primary circuit and secondary circuit.

Advantages

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

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.

CE RoHS

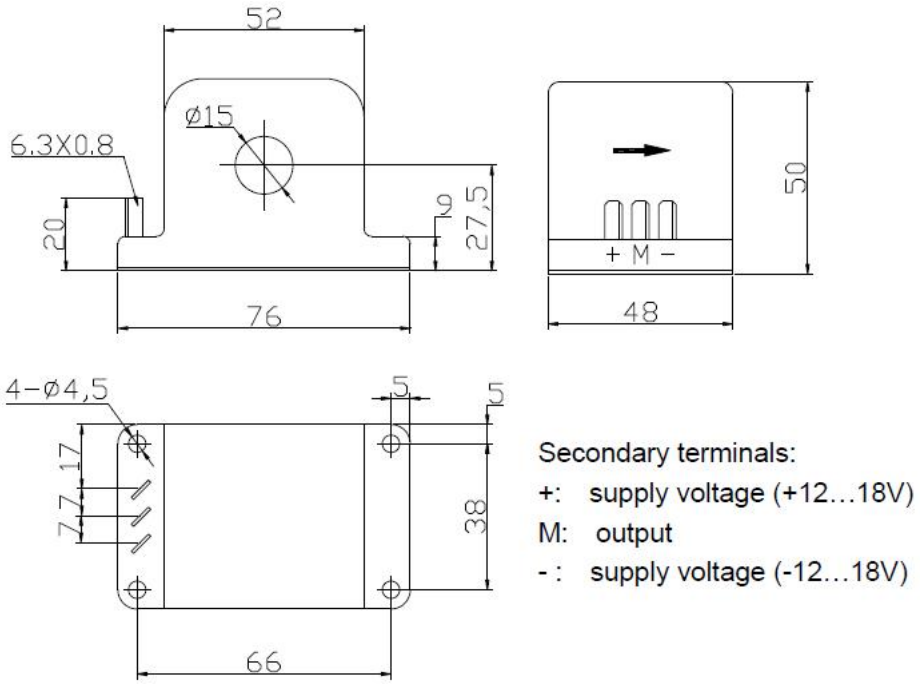
Electrical data：（Ta=25℃±5℃）

Parameter \ Ref	CHB100LTS15D100L2
Rated input Ipn(A)	100
Measuring range Ip(A)	0~±200
Turns ratio Np/NS (T)	1:1000
Output current (A)	Nominal output current 100mA, for primary nominal current I_N =100A
Measure resister R_M (Ω)	with±12V @100Amax 0(min) 75(max)
	with±12V @200Amax 0(min) 25(max)
	with±18V @100Amax 30(min) 135(max)
	with±18V @200Amax 30(min) 55(max)
Accuracy (Ta =+25)	I_N ±0.8%
Supply voltage VC(V)	(±12～±18) ±5%
Isolation voltage	Between primary and secondary circuit: 6KV RMS/50Hz/1min.
Offset current (Ta =+25℃)	±0.3mA max, for primary current I_N=0
Temperature drift	I_M of 0.02%/℃ (-25℃…+85℃)

Linearity error εr(%FS)	@Ip=0-±Ipn	≤0.1
Di/dt accurately followed（A/μs）		> 50
Response time tra(μs)	@50A/μS	＜1
Frequency bandwidth		0~100KHz
Current consumption		28mA+I_M (Output current)
Secondary resistance		25Ω（Ta =+70℃）
Primary resistance		-----

General data：	
Parameter	**Value**
Operating temperature TA(°C)	-50℃…+85℃
Storage temperature TS(°C)	-60℃…+90℃
Mass M(g)	150
Plastic material	UL94-V0.
Standards	EN60947-1:2004
	IEC60950-1:2001
	EN50178:1998
	SJ 20790-2000

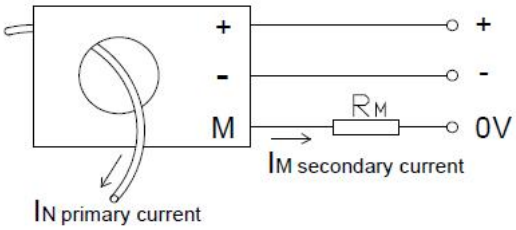
Dimensions(mm):



Remarks：

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

Wiring diagram:



Remarks：

Output I_M is positive, when the primary current flows in the direction of the arrow.

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.

WARNING : Incorrect wiring may cause damage to the sensor.