DATA SHEET
Hall Effect Current Sensor

PN: CHB_LA15D25/50	IPN=25~100A

Feature

- Closed- loop (compensated) current transducer
- Supply voltage: DC ±12~15 V
- 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

- The application of induction cooker
- AC/DC variable-speed drive
- Uninterruptible Power Supplies (UPS)
- Switched Mode Power Supplies (SMPS)
- Inverter applications

CE RoHS

Electrical data：（Ta=25℃，Vc= ±15VDC）

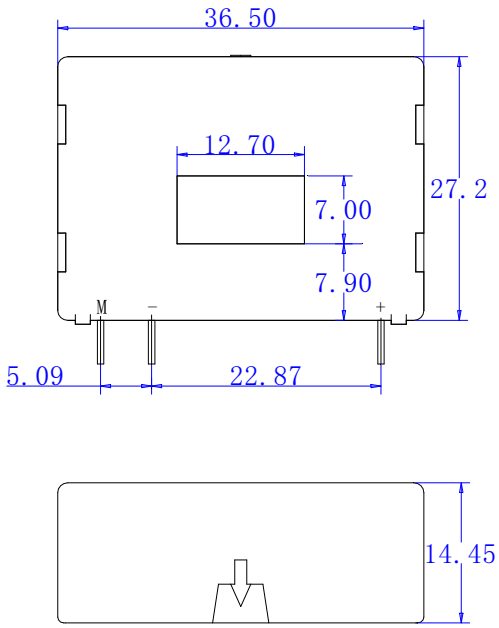
Parmeter \ Ref	CHB25 LA15D25	CHB50 LA15D50	CHB75 LA15D50	CHB100 LA15D50
Rated input Ipn(A)	25	50	75	100
Measuring range Ip(A)	0～±55	0～±70	0～±105	0～±150
Turns ratio Np/NS (T)	1:1000	1:1000	1:1500	1:2000
Output current rms IS(mA)	±25*IP/IPN	±50*IP/IPN	±50*IP/IPN	±50*IP/IPN
Secondary coil resistance RS (Ω)	30	30	65	112
Inside resistance RM (Ω)	[(VC-2.0V)/(IS*0.001)]-RS			
Supply voltage VC(V)	(±12～±15) ±5%			
Accuracy XG(%)	@IPN,T=25°C	< ±0.5		
Offset current IOE(mA)	@IP=0,T=25°C	< ±0.2		
Temperature variation of IOE IOT(mA/°C)	@IP=0,-40～+85°C	< ±0.005		
Linearity error εr(%FS)	< 0.1			
Di/dt accurately followed（A/μs）	> 100			
Response time tra(μs)	@90% of IPN	< 1.0		
Power consumption IC(mA)	15+Is			
Bandwidth BW(KHZ)	@-3dB,IPN	DC-200		

Insulation voltage Vd(KV)	@50/60Hz, 1min,AC	2.5

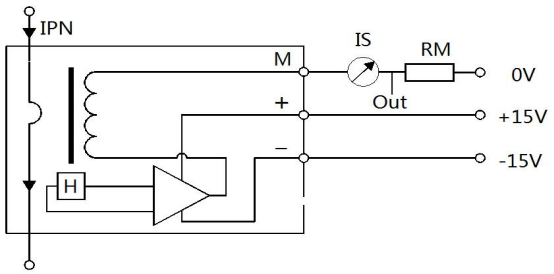
General data:

Parameter	Value
Operating temperature TA(°C)	-40 ~ +85
Storage temperature TS(°C)	-55~ +125
Mass M(g)	22
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：7.0*12.7±0.15mm

Secondary pin:3pin： 0.6*0.65

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.