DATA SHEET
Hall Effect Current Sensor

PN: CHB_LXA15D20 | **IPN=05~50A**

Feature

- Closed- loop (compensated) current transducer
- Supply voltage: DC ±12~15V
- Capable measurement of currents: DC, AC,pulse with galvanic isolation between primary circuit and secondary circuit.
- PCB installation

Advantages

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

Applications

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

CE RoHS

Electrical data：（Ta=25℃， Vc= ±15VDC）

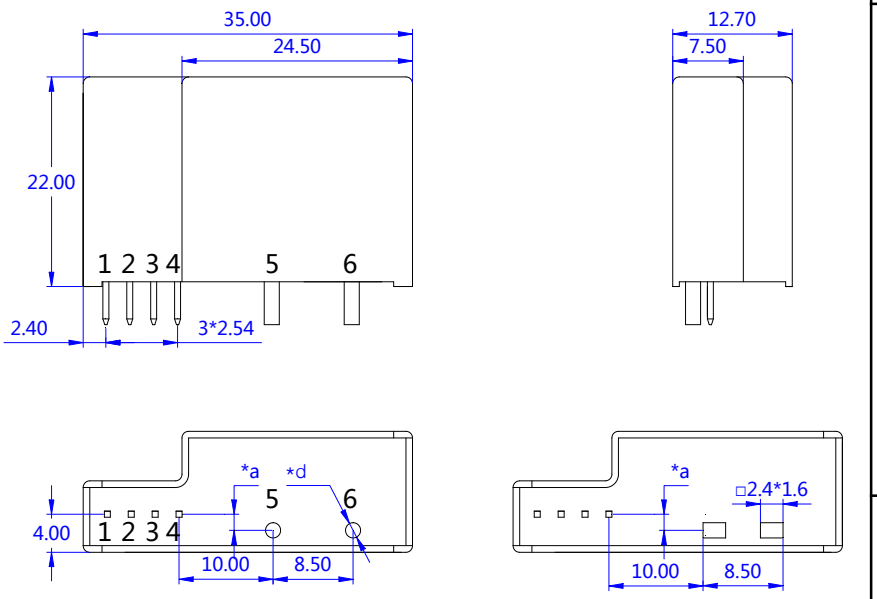
Parmeter / Ref	CHB05LX A15D20	CHB10LX A15D20	CHB15LX A15D20	CHB20LX A15D20	CHB30LX A15D20	CHB50LX A15D20
Rated input Ipn(A)	05	10	15	20	30	50
Measuring range Ip(A)	0～±10	0～±20	0～±30	0～±40	0～±60	0～±100
Size of Input pin *d (MM)	Ø0.6	Ø0.8	Ø1.0	Ø1.4	Ø1.6	2×□1.6×1.5
Turns ratio Np/NS (T)	4:1000	3:1500	2:1500	1:1000	1:1500	1:2500
Inside resistance RM (Ω)	50~400±0.1%					
Output current rms IS(mA)	±20.0*(IP/IPN)					
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）	> 50					
Response time tra(μs)	@90% of IPN < 1.0					
Power consumption IC(mA)	15+Is					

Bandwidth BW(KHZ)	@-3dB,IPN	DC-100
Insulation voltage Vd(KV)	@50/60Hz, 1min,AC	5.0

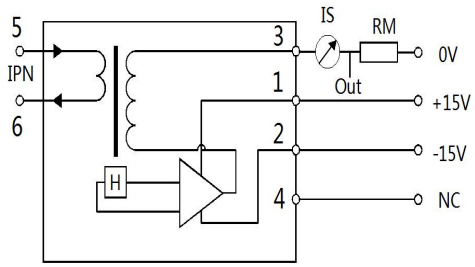
General data:

Parameter	Value
Operating temperature TA(°C)	-40 ~ +85
Storage temperature TS(°C)	-55~ +125
Mass M(g)	12
Plastic material	PBT G30/G15, UL94- V0;
Standards	IEC60950-1:2001
	EN50178:1998
	SJ20790-2000

Dimensions(mm):



Connection



General tolerance

General tolerance:< ±0.5mm
Secondary Pin size :0.25*0.5±0.1mm

Size of primary pin & Distance (mm)

Type	05LX	10LX	15LX	20LX	25LX	30LX	40LX	50LX
*a	1.3	1.4	1.6	1.6	1.6	1.7	1.7	1.7
*d	0.6	0.8	1.0	1.4	1.4	1.6	1.6	2.4* 1.6

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.