Cheemi Technology Co., Ltd

DATA SHEET
Hall Effect Current Sensor

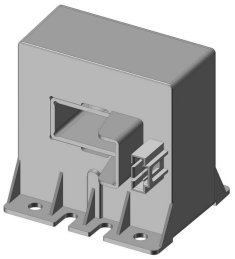
P/N: CHB_LAE15D150/200M | **I_{PN}=50~300A**

Feature

- Closed- loop (compensated) current transducer
- Supply voltage: DC ±12~18 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 ISO 14001 ISO 9001:2008

Electrical data：（Ta=25℃，Vc= ±15VDC）

Parameter / Ref	CHB50 LAE15D500M	CHB100 LAE15D100M	CHB200 LAE15D100M	CHB300 LAE15D150M	CHB300 LAE15D60M	CHB500 LAE15D250M
Rated input Ipn(A)	50	100	200	300	300	500
Measuring range Ip(A)	0～±150	0～±300	0～±600	0～±700	0～±700	0～±700
Turns ratio Np/NS (T)	1:1000	1:1000	1:2000	1:2000	1:5000	1:2000
Output current rms IS(mA)	±50*IP/IPN	±100*IP/IPN	±100*IP/IPN	±150*IP/IPN	±60*IP/IPN	±250*IP/IPN
Secondary coil resistance RS (Ω)	15	15	33	100 (only for referance)	100 (only for referance)	33
Inside resistance RM (Ω)	[(VC-0.5V)/(IS*0.001)]-RS					
Supply voltage VC(V)	(±12～±18) ±5%			(±18～±24) ±5%		(±12～±18) ±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 < ±0.5					
Linearity error εr(%FS)	< 0.1					
Di/dt accurately followed （A/μs）	> 100					
Response time tra(μs)	@90% of IPN < 1.0					

Cheemi Technology Co., Ltd
Tel: 025-85996365 E-mail: info@cheemi-tech.com www. cheemi-tech.com
Add:N22, Xianlongwan, Xianyin South Road, Qixia District, Nanjing - China.

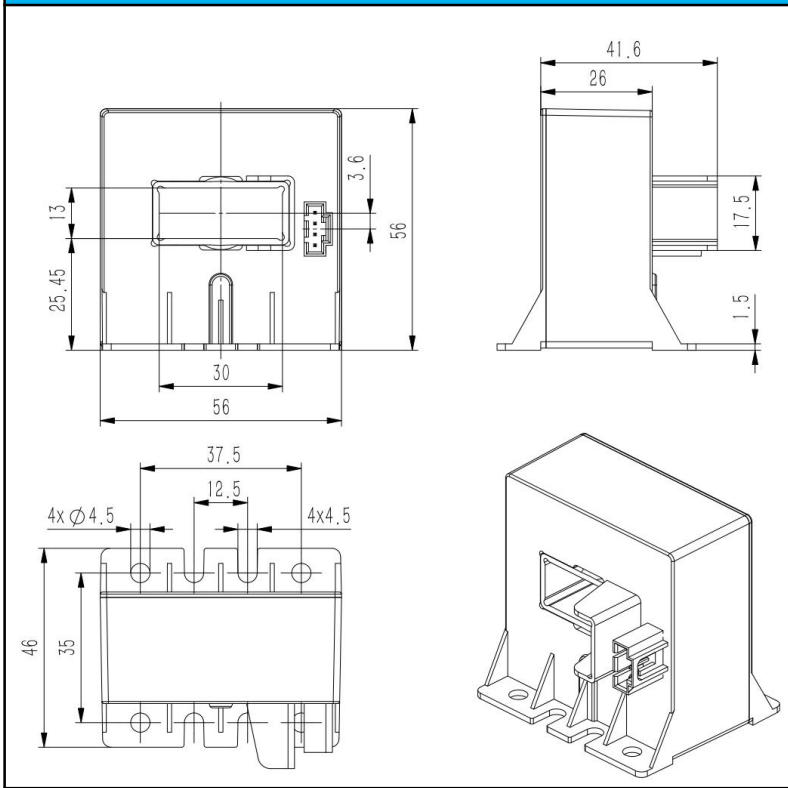
Cheemi Technology Co., Ltd

Power consumption IC(mA)	25+Is	
Bandwidth BW(KHZ)	@-3dB,IPN	DC-100
Insulation voltage Vd(KV)	@50/60Hz, 1min,AC	5.5

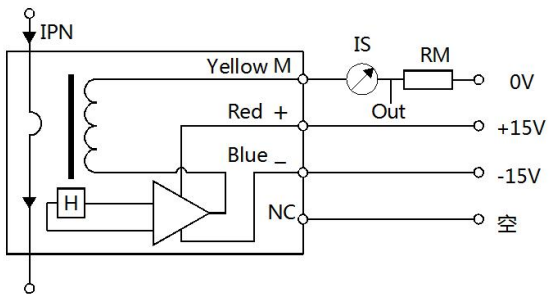
General data:

Parameter	Value
Operating temperature TA(°C)	-40 ~ +85
Storage temperature TS(°C)	-55~ +125
Mass M(g)	130
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：13*30±0.15mm

Secondary pin: MOLEX 70543-0003

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.

Cheemi Technology Co., Ltd

Tel: 025-85996365 E-mail: info@cheemi-tech.com www. cheemi-tech.com

Add:N22, Xianlongwan, Xianyin South Road, Qixia District, Nanjing - China.