



DATA SHEET

Hall Effect Current Sensor

P/N: CHB_LAE15D100M

$I_{PN}=100\sim400A$

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 $\pm 15\sim 24V$

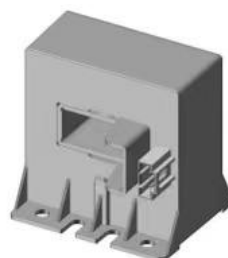
Advantages

- High accuracy
- Easy installation
- Low temperature drift
- Optimized response time
- High immunity to external interference

- Very good linearity
- Can be customized

Applications

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



RoHS

Electrical data: ($T_a=25^\circ C$, $V_c=\pm 15VDC$)

Parameter \ Ref	CHB100LAE 15D100M	CHB200LAE 15D100M	CHB300LAE 15D150M	CHB300LAE 15D100M	CHB300LAE 15D60M	CHB400LAE 15D100M	CHB500LAE 15D250M
Rated input $I_{pn}(A)$	100	200	300	300	300	400	500
Measuring range $I_p(A)$	$0 \sim \pm 350$	$0 \sim \pm 600$	$0 \sim \pm 600$	$0 \sim \pm 700$	$0 \sim \pm 700$	$0 \sim \pm 700$	$0 \sim \pm 700$
Turns ratio $N_p/N_s (T)$	1:1000	1:2000	1:2000	1:3000	1:5000	1:4000	1:2000
Output current rms $I_s(mA)$	$\pm 100 * I_p / I_{PN}$	$\pm 100 * I_p / I_{PN}$	$\pm 150 * I_p / I_{PN}$	$\pm 100 * I_p / I_{PN}$	$\pm 60 * I_p / I_{PN}$	$\pm 100 * I_p / I_{PN}$	$\pm 250 * I_p / I_{PN}$
Secondary coil resistance $R_s (\Omega)$	10	18	18	40	88	60	33
Inside resistance $R_M (\Omega)$	$[(V_c - 0.5V) / (I_s * 0.001)] - R_s$						
Supply voltage $V_c(V)$	$(\pm 15 \sim \pm 24) \pm 5\%$						
Accuracy $X_G(\%)$	@ $I_{PN}, T=25^\circ C$			$< \pm 0.5$			
Offset current $I_{OE}(mA)$	@ $I_p=0, T=25^\circ C$			$< \pm 0.2$			
Temperature variation of I_{OE} $I_{OT}(mA/^\circ C)$	@ $I_p=0, -40 \sim +85^\circ C$			$< \pm 0.5$			
Linearity error $\varepsilon_r(\%FS)$				< 0.1			
Di/dt accurately followed ($A/\mu s$)				> 100			
Response time $t_{ra}(\mu s)$	@90% of I_{PN}			< 1.0			
Power consumption $I_c(mA)$				$25 + I_s$			



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.

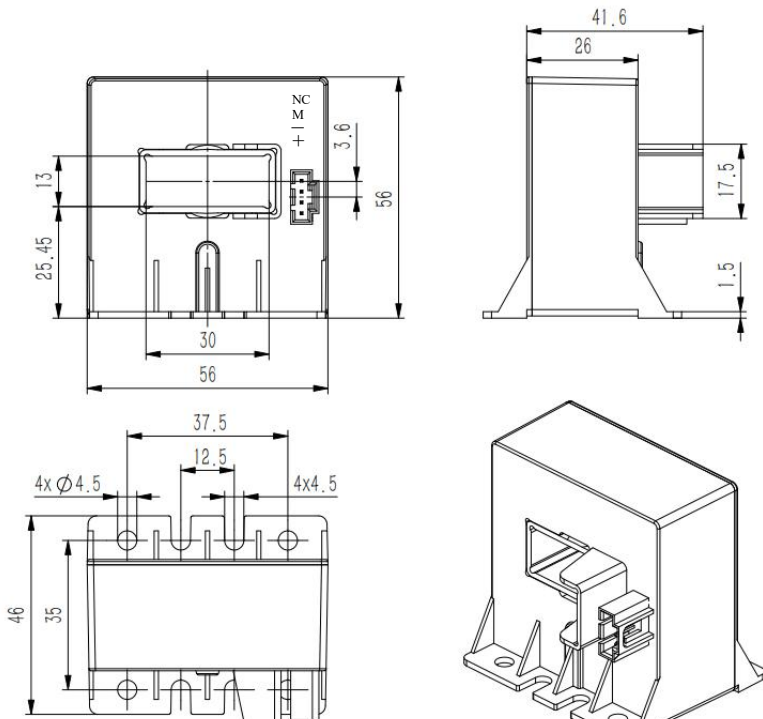
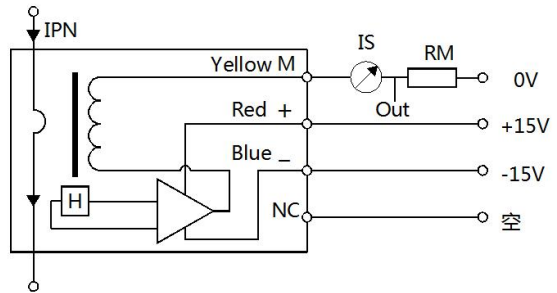
Cheemi Technology Co., Ltd

Bandwidth BW(KHZ)	@-3dB, I _{PN}	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 Mating connector: MOLEX 5057-9404

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 is 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.