Cheemi Technology Co., Ltd

DATA SHEET
Hall Effect Current Sensor

PN: CHB_LAE15D100	IPN=100~400A

Feature

- Closed- loop (compensated) current transducer
- Supply voltage: DC ±15~24 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°C， Vc= ±15VDC）

Parameter \ Ref	CHB100 LAE15D100	CHB200LAE 15D100	CHB300 LAE15D100	CHB300 LAE15D60	CHB400 LAE15D100	CHB400 LAE15D80
Rated input Ipn(A)	100	200	300	300	400	400
Measuring range Ip(A)	0～±350	0～±600	0～±700	0～±700	0～±700	0～±700
Turns ratio Np/NS (T)	1:1000	1:2000	1:3000	1:5000	1:4000	1:5000
Output current rms I_S(mA)	±100*I_P/I_{PN}	±100*I_P/I_{PN}	±100*I_P/I_{PN}	±60*I_P/I_{PN}	±100*I_P/I_{PN}	±80*I_P/I_{PN}
Secondary coil resistance R_S (Ω)	10	18	40	88	60	88
Inside resistance R_M (Ω)	[(VC-0.5V)/(IS*0.001)]-R_S					
Supply voltage VC(V)	(±15～±24) ±5%					
Accuracy X_G(%)	@I_{PN},T=25°C	< ±0.5				
Offset current I_{OE}(mA)	@I_P=0,T=25°C	< ±0.2				
Temperature variation of I_{OE} I_{OT}(mA/°C)	@I_P=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 I_{PN}	< 1.0				
Power consumption I_C(mA)	25+Is					

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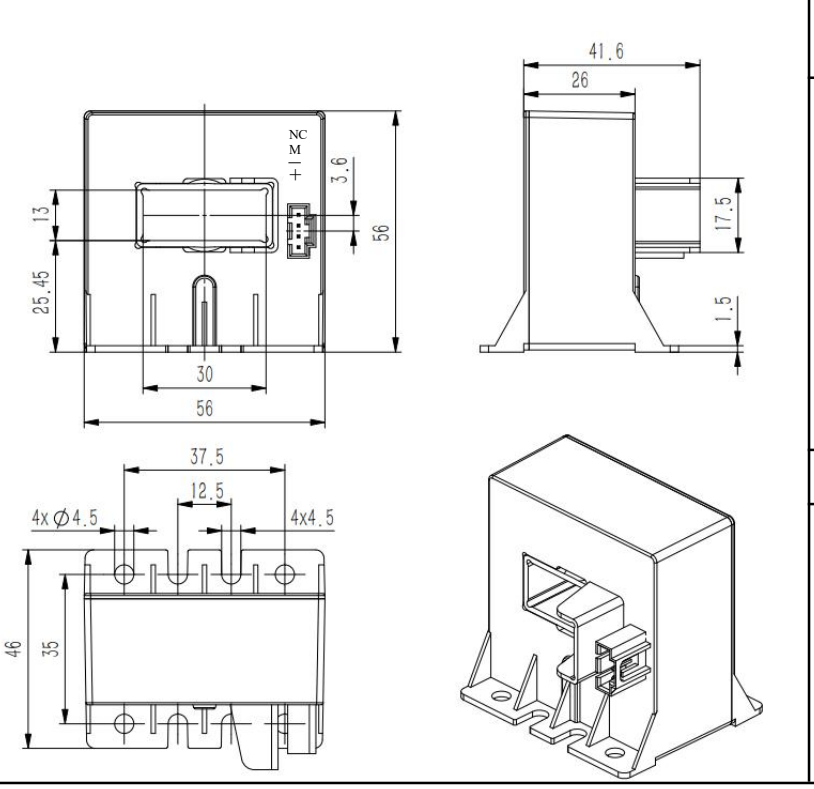
Bandwidth BW(KHZ)	@-3dB,I_{PN}	DC-100
Insulation voltage Vd(KV)	@50/60Hz, 1min,AC	5.5

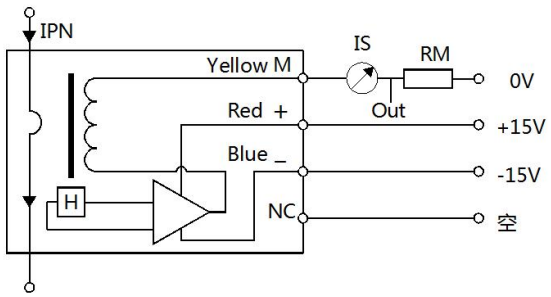
General data：

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

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.

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