Cheemi Technology Co., Ltd

DATA SHEET
Hall Effect Current Sensor

P/N: CHB_LFT15D100SP	I_{PN}=200~500A

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 ±15~24V
- Molex 4.2mm 2*2P

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 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）

Parameter \ Ref	CHB200LFT15 D100SP	CHB300LFT15 D100SP	CHB500LFT15 D125SP	CHB500LFT15 D100SP
Rated input Ipn(A)	200	300	500	500
Measuring range Ip(A)	0～±628	0～±940	0～±1920	0～±1570
Turns ratio Np/NS (T)	1:2000	1:3000	1:4000	1:5000
Output current rms IS(mA)	Ip/Ns (±100)	Ip/Ns (±100)	Ip/Ns (±125)	Ip/Ns (±100)
Secondary coil resistance R_S (Ω)	21	31	52	52
Inside resistance R_M (Ω)	$R_{M\,max} = N_S \frac{Vc_{min} - 0.5\,V}{I_P} - R_{S\,max} - 1.1\,\Omega$			
Supply voltage V_C(V)	(±15～±24) ±5%			
Accuracy X_G(%)	@I_{PN},T=25°C	< ±0.2		
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			

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.

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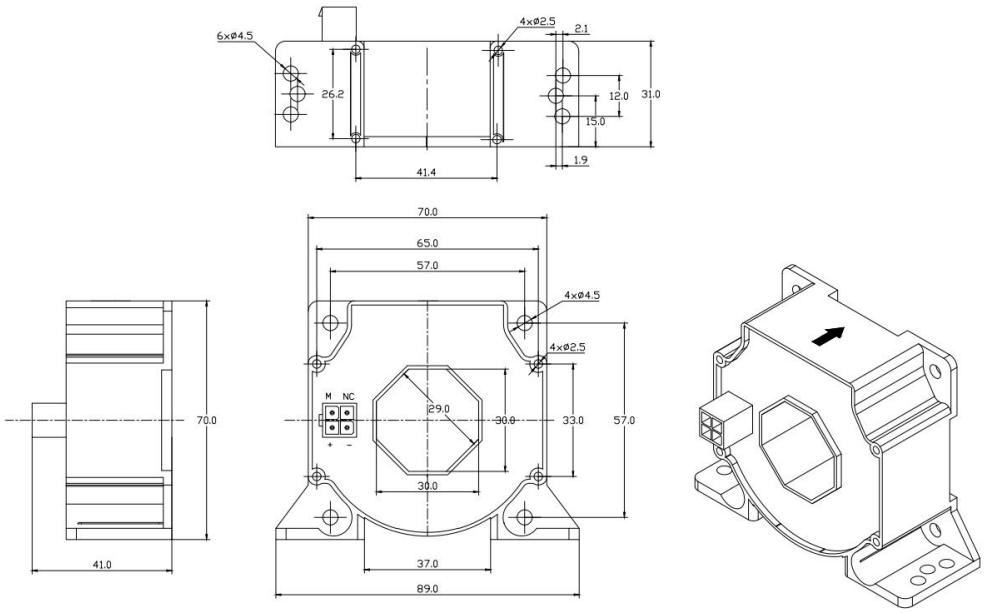
Di/dt（A/μs）		> 100
Response time tra(μs)	@90% of I_{PN}	< 1.0
Power consumption IC(mA)		20+Is
Bandwidth BW(KHZ)	@-3dB,I_{PN}	DC-150
Insulation voltage Vd(KV)	@50/60Hz, 1min,AC	6.0

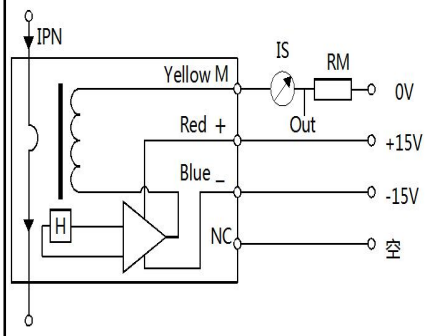
General data：

Parameter	Value
Operating temperature TA(°C)	-40~ +85
Storage temperature TS(°C)	-50~ +90
Mass M(g)	300
Plastic material	PBT G30/G15, UL94- V0;
Standards	IEC60950-1:2001
	EN50178:1998
	SJ20790-2000
	EN50155:2021

Dimensions(mm):



Connection



General tolerance

General tolerance:< ±0.5mm

Primary through-hole： D 28±0.2

Connection of Secondary :
SP: Molex 39-28-1043
(4.2mm 2*2P)
Mini-Fit Jr 5566 Series

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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