*Cheemi Technology Co., Ltd*

# DATA SHEET
# Hall Effect Current Sensor

**PN: CHB_LFD15D120/150/200S1** | **IPN=300~1000A**

## 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
- S1--connector Model S3P-VH

## 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）**

| Parmeter \ Ref | CHB300LFD15 D150S1 | CHB500LFD15 D100S1 | CHB1000LFD15 D200S1 |
|---|---|---|---|
| Rated input Ipn(A) | 300 | 500 | 1000 |
| Measuring range Ip(A) | 0～±900 | 0～±1500 | 0～±1500 |
| Turns ratio Np/NS (T) | 1:2000 | 1:5000 | 1:5000 |
| Output current rms IS(mA) | ±150*IP/IPN | ±100*IP/IPN | ±200*IP/IPN |
| Secondary coil resistance RS (Ω) | 25 | 35 | 39 |
| Inside resistance RM (Ω) | [(VC-0.5V)/(IS*0.001)]-RS | | |
| Supply voltage VC(V) | (±15～±24) ±5% | | |
| Accuracy XG(%) | @IPN,T=25°C | < ±0.2 | |
| 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（A/μs） | > 100 | | |
| Response time tra(μs) | @90% of IPN | < 1.0 | |

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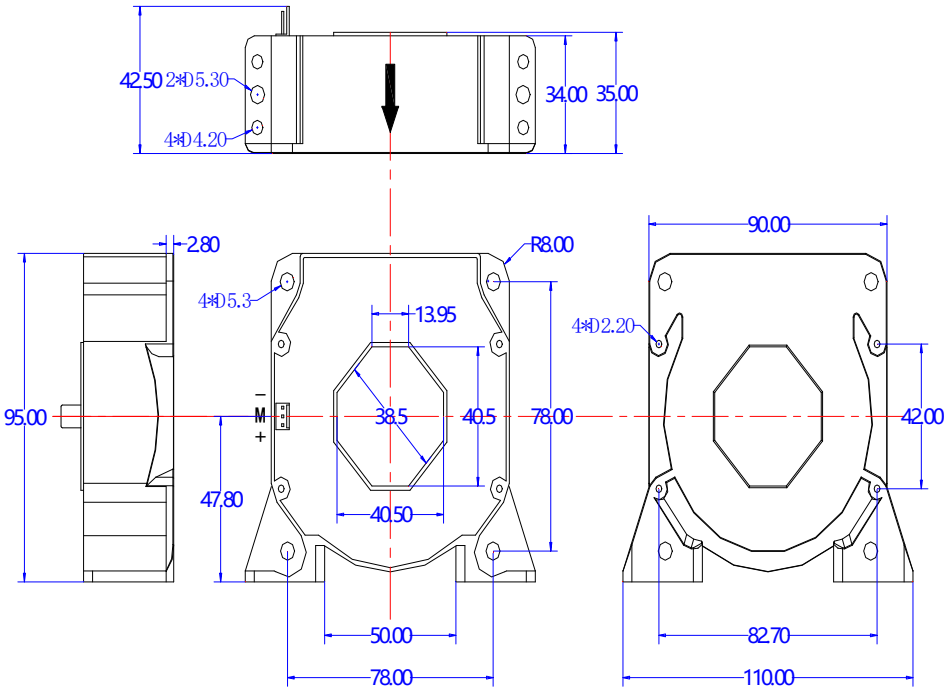
| | | |
|---|---|---|
| Power consumption IC(mA) | 20+Is | |
| Bandwidth BW(KHZ) | @-3dB,IPN | DC-150 |
| Insulation voltage Vd(KV) | @50/60Hz, 1min,AC | 6.0 |

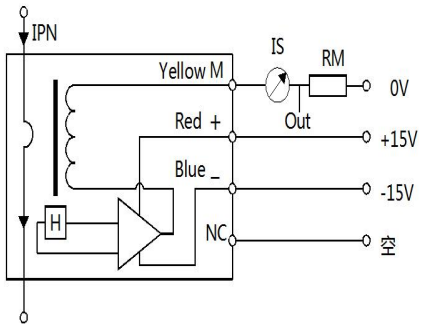
## General data:

| Parameter | Value |
|---|---|
| Operating temperature TA(°C) | -40 ~ +85 |
| Storage temperature TS(°C ) | -55~ +125 |
| Mass M(g ) | 620 |
| 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: D 38.5±0.2
Connection of Secondary :
S3P-VH (S1)

## 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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