



DATA SHEET

Hall Effect Current Sensor

PN: CHB1000LFD15D200-S6T2

I_{PN}=1000A

Feature

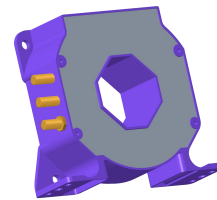
- Closed- loop (compensated) current transducer
- Capable measurement of currents: DC, AC,pulse with galvanic isolation between primary circuit and secondary circuit.
- Supply voltage: DC ±15~24V
- S6--connector Model M5*16-3

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



RoHS

Electrical data: (T_a=25°C, V_c= ±15VDC)

Parameter	Ref	CHB1000LFD15D200-S6T2
Rated input I _{pn} (A)		1000
Measuring range I _p (A)		0 ~ ±1500
Turns ratio N _p /N _s (T)		1:5000
Output current rms I _s (mA)		±200*I _p /I _{PN}
Secondary coil resistance R _s (Ω)	@I _{PN} , T=75°C	43
Measuring resistance R _M (Ω)		[(V _c -0.6V)/(I _s *0.001)]-R _s
	@±15V, 1000A, 75°C	0~25
	@±15V, 1400A, 75°C	0~5
	@±24V, 1000A, 75°C	15-60
	@±24V, 1500A, 75°C	15-30
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



Cheemi Technology Co., Ltd

Temperature variation of I_{OE} $I_{OT}(mA/°C)$	@ $I_P=0,-40 \sim +85°C$	$< \pm 0.5$
Linearity error $\epsilon_r(\%FS)$		< 0.1
$Di/dt (A/\mu s)$		> 100
Response time $t_{ra}(\mu s)$	@90% of I_{PN}	< 1.0
Power consumption $I_c(mA)$		$20+I_s$
Bandwidth $BW(KHZ)$	@-3dB, I_{PN}	DC-100
Insulation voltage $V_d(KV)$	@50/60Hz, 1min, AC	6.0

General data:

Parameter	Value
Operating temperature $T_A(°C)$	-50 ~ +85
Storage temperature $T_S(°C)$	-55 ~ +125
Mass $M(g)$	650
Plastic material	PBT G30/G15, UL94- V0;
Standards	IEC60950-1:2001
	EN50178:1998
	SJ20790-2000

Dimensions(mm):

	<p style="text-align: center;">Connection</p>
	<p style="text-align: center;">General tolerance</p> <p>General tolerance: $< \pm 0.5mm$ Primary through-hole: $D 38.5 \pm 0.2$ Connection of Secondary : M5 (S6)</p>

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.

Cheemi Technology Co., Ltd



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.*