

DATA SHEET Hall Effect Current Sensor



PN: BJHCS-F

IPN = 200A - 400A - 600A - 800A 1000A - 2000A

Features

Open loop

- Supply voltage : ±15V DC
- Through hole primary

- **Highly insulated**
- Low power consumption
- Fast response time
- Frame mounting
- Voltage output

- Can be customized



- Monitoring and measurement
- **Battery applications**
- Uninterruptible power supplies (UPS)
- Switching power supplies (SMPS)

EJHCS.F.400A	
By Tech Power electronics	
L'électronics	CE
	COMPLIANT
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ELECTRICAL DATA						
BJHCS-F	200A	400A	600A	800A	1000A	2000A
Nominal rms current I _{PN} (A)	200	400	600	800	1000	2000
Sensed current range I _{PM} (A)	±400	±800	±1200	±1600	±2000	±3000
Rated output voltage @ I_{PN} (V)	±4					
Static current consumption I _C (mA)	15					
Supply voltage V _C (Vdc)	±15 ^{± 0,5%}					

ACCURACY DYNAMIC PERFORMANCE		GENERAL CHARACTERISTICS			
Accuracy X _G @ I _{PN} , T=25°C	± 1	%	Operating temperature	-40 to +85	°C
Zero offset voltage V _{OE} @ I _P =0, T=25°C	± 15	mV	Storage temperature	-40 to +125	°C
Offset voltage drift V _{OE} @ -40°C to +85°C	≤ ± 0,5	mV/°C	Insulation voltage (50 Hz, 1min)	5	KV
Hysteresis offset voltage V _{OH} @ -40°C to +85°C	≤ ± 30	mV			
Linearity error ϵ_L	≤ 1	% FS			
Response time tr	≤ 5	μs			



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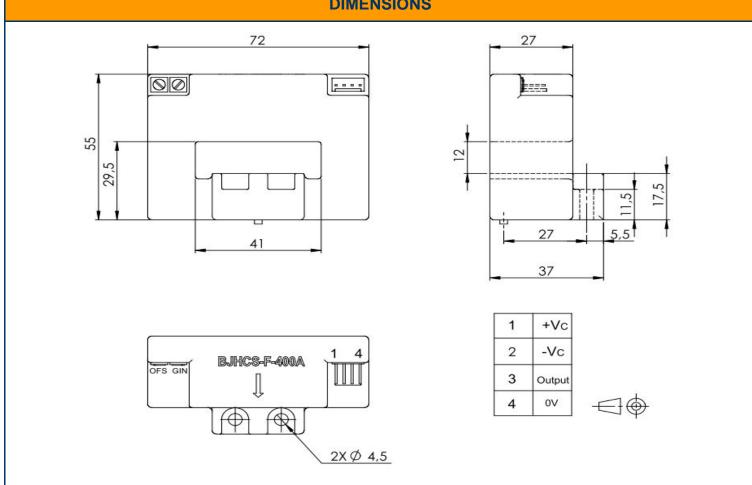
Components

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DIMENSIONS



MECHANICAL CARACTERISTICS		
General tolerance	± 0,2 mm	
Primary square through hole size	41 x 12 mm	
Terminal connection	Molex 5045-04A	
Transducer fastening	2 holes \emptyset 4,5 mm	

Cautions :

- I_{S} is positive when I_{P} flows in accordance whith the arrow direction (see the top of the sensor);
- Primary conductor temperature should not exceed 100°C;
- Best dynamic performances (di/dt and response time) are achieved with a single electrical conductor completely filling the through hole;
- To achieve the best magnetic coupling, the primary winding must be wound around the top edge of the sensor.

Required connection circuit :



WARNING : Incorrect wiring may cause damage to the sensor.



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