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Representative photograph, actual product appearance may vary.

Due to regional agency approval requirements, some products may not be available in your area. Please contact your regional Honeywell office regarding your product of choice.

CSNA111

CSN Series closed loop current sensor, measures AC, DC or impulse current, 50 A nominal, ± 70 amp range, 1000 turn

- **Features**
 - Current sensing up to 1200 amps
 - Measures ac, dc and impulse currents
 Competitive cost/performance ratio

 - Rapid response High overload capability
 - High level of electrical isolation between primary and secondary circuits
 - Industrial operating temperature range
 - Small size and weight

Typical Applications

- Variable speed drives
- Overcurrent protection
- Ground fault detectors
- Current feedback control systems
- Robotics
- UPS and telecommunication power supplies
- Welding power supplies
- Automotive Battery management systems
- Wattmeters

Description

The CSN Series of closed loop current sensors are based on the principles of the Magnetoresistive or Hall effects, and the null balance or zero magnetic flux method (feedback system). The magnetic flux in the sensor core is constantly controlled at zero. The amount of current required to balance zero flux is the measure of the primary current flowing through the conductor, multiplied by the ratio of the primary to secondary windings. This closed loop current is the output from the device and presents an image of the primary current reduced by the number of secondary turns at any time. This current can be expressed as a voltage by passing it through a resistor.

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Product Specifications		
Sensor Type	Closed Loop Linear	
Sensed Current Type	ac or dc	
Sensed Current Range	± 70 A	
Package Style	Thru Hole PCB Mount	
Output Type	Current	
Maximum Continuous Current	± 70 A	
Supply Current	± 10 mA + output	
Supply Voltage	± 15.0 Vdc	
Offset Current	< ± 0.2 mA	
Offset Current Drift	< ± 0.6 mA	
Coil Resistance @ 70 °C	90 Ohm	
Response Time	< 1 µs	
Coil Turns	1000	
Output Nominal	50 mA	
Operating Temperature Range	0 °C to 70 °C [32 °F to 158 °F]	
Storage Temperature Range	-40 °C to 90 °C [-40 °F to 194 °F]	
Minimum Measuring Resistance	40 Ohm	
Maximum Measuring Resistance	135 Ohm	
Housing Material	Polycarbonate/ABS blend (UL94-V0)	
Mounting	PCB on 3 pins	
Pinout Style	Offset	
Accuracy	± 0.5 %	
Availability	Global	
Comment	"Classic" sensor style.	
UNSPSC Code	411121	
UNSPSC Commodity	411121 Transducers	

Series N	lame
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CSN Series

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I. MOUNTING HOLES 0.95 DIA. 2. INK COLOUR GREY. 16.30 DATE CODE CATALOGUE LISTING 6.35 25.70 25.45 60 о 0 0.63 4 3.97 7.42 27.94 40.5

Mounting Dimensions - for reference only (mm)

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A WARNING

PERSONAL INJURY

DO NOT USE these products as safety or emergency stop devices, or in any other application where failure of the product could result in personal injury.

Failure to comply with these instructions could result in death or serious injury.

🛦 WARNING

MISUSE OF DOCUMENTATION

- The information presented in this product sheet (or catalog) is for reference only. DO NOT USE this document as product installation information.
- Complete installation, operation and maintenance information is provided in the instructions supplied with each product.

Failure to comply with these instructions could result in death or serious injury.

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