

Honeywell

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Honeywell Sensing and Control

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Representative photograph, actual product appearance may vary.

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CSNL281-006

CSN Series closed loop current sensor, measures AC, DC or impulse current, 300 A nominal, ± 750 amp range, Molex gold pin conn 2000 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 principle of the Magneto-resistive 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 the zero flux is the measure of the primary current flowing through the conductor, multiplied by the ratio of the primary to secondary windings. The closed loop current is the output from the device and presents an impedance that is the primary current reduced by the number of secondary turns at any point. This current can be expressed as a voltage by passing it through a resistor.

Product Specifications	
Sensor Type	Closed Loop Linear
Sensed Current Type	ac or dc
Sensed Current Range	± 750 A
Package Style	PCB Attached
Output Type	Current

Maximum Continuous Current	± 400 A
Supply Current	± 22 mA + output
Supply Voltage	± 24.0 Vdc
Offset Current	< ± 0.3 mA
Offset Current Drift	< ± 0.5 mA
Coil Resistance @ 70 °C	25 Ohm
Response Time	< 0.5 µs
Coil Turns	2000
Output Nominal	150 mA
Operating Temperature Range	-40 °C to 85 °C [-40 °F to 185 °F]
Storage Temperature Range	-40 °C to 90 °C [-40 °F to 194 °F]
Minimum Measuring Resistance	20 Ohm
Maximum Measuring Resistance	80 Ohm
Housing Material	Unfilled PBT (UL94-V0)
Mounting	Panel
Pinout Style	Molex (3-way)
Accuracy	± 0.5 %
Availability	Global
Comment	Extended measuring range and gold pin Molex connect
UNSPSC Code	411121
UNSPSC Commodity	411121 Transducers
Series Name	CSN Series

*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.*