



CSNJ481-001



Actual product appearance may vary.

CSN Series closed loop current sensor, measures ac, dc or impulse current, 300 A nominal, ± 600 amp range, busbar, 2000 turn

Features

- Current sensing up to 1275 amps (depending on product listing)
- 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

Potential 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.

Product Specifications	
Product Type	Closed Loop Linear
Sensed Current Type	ac or dc
Sensed Current Range	±600 A
Package Style	Housed
Output Type	Current
Maximum Continuous Current	±600 A
Nominal Operate Current @ 25 °C	300 A RMS
Supply Current	±14 mA + output
Supply Voltage	±12.0 Vdc to ±18.0 Vdc
Offset Current	< ±0.3 mA
Offset Current Drift	< ±0.5 mA
Coil Resistance @ 25 °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	0 Ohm
Maximum Measuring Resistance	50 Ohm
Housing Material	Unfilled PBT (UL94-V0)
Mounting	Panel
Pinout Style	Spade terminals (x 3)
Accuracy	±0.5 %
Availability	Global
Comment	Standard 300 A housed sensor; fitted with busbar.
UNSPSC Code	411121
UNSPSC Commodity	411121 Transducers
Series Name	CSN

ISO MET
SCALE PRINT

Honeywell

**300A NULL BALANCE
CURRENT SENSOR**

CATALOGUE LISTING
CSNJ SERIES
MTG - CSN-189

CHARACTERISTICS

CAT. LISTING	ISSUE NO.	OPERATING TEMPERATURE	SUPPLY	HOUSING MATERIAL	SENSING RANGE		OUTPUT NOMINAL	MAXIMUM COIL RESISTANCE AT 70°C	NUMBER OF TURNS	PRIMARY CONNECTION
					NOMINAL	MAXIMUM				
CSNJ481	1	-40°C TO +85°C	±12v TO ±18v	POLYCARBONATE/ ABS BLEND	300A	600A	150mA	25 Ω	2000 ±1	THROUGH HOLE
CSNJ481-001	1	-40°C TO +85°C	±12v TO ±18v	POLYCARBONATE/ ABS BLEND	300A	600A	150mA	25 Ω	2000 ±1	BUSBAR
CSNJ481-002	1	-40°C TO +85°C	±12v TO ±18v	POLYCARBONATE/ ABS BLEND	300A	600A	150mA	25 Ω	2000 ±1	THROUGH HOLE

NOTES:-

1. INK COLOUR BLACK.

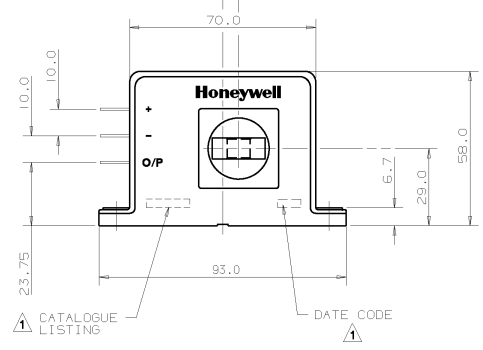
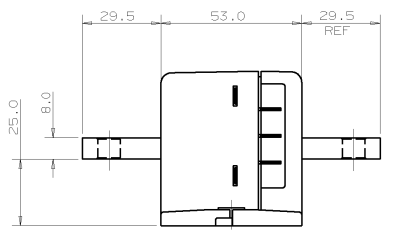
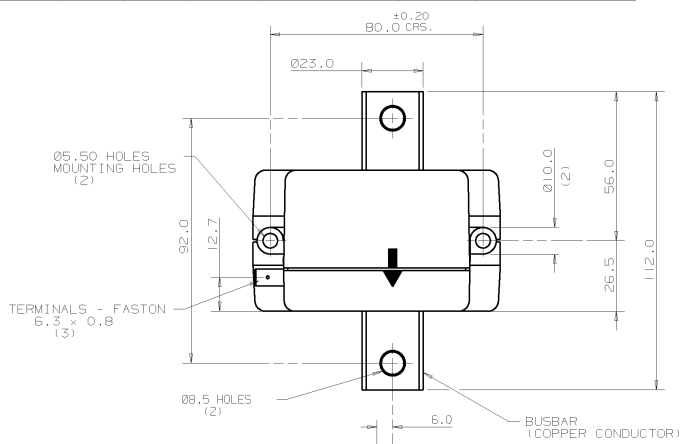
**CSNJ SERIES
MTG - CSN-189**

ISSUE 1
DRAWING NUMBER
RELEASE NUMBER A295-02A

REVISIONS

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CHECK
DESIGN
AUTHORITY

REPLACES



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THIRD ANGLE PROJECTION

SCALE:- 1/1

DIMENSIONS ARE IN MILLIMETRES

MODIFY ON CAD3D SYSTEM ONLY

GENERAL TOLERANCE = ±0.30