

Features

- Formerly a Riedon™ product
- Current rating: 300 to 1200 A
- Standard tolerance $\pm 0.25\%$
- 0.042 to 0.333 m Ω resistance
- Non-inductive metal element
- Manganin™ resistive element
- RoHS compliant*

Applications

- Frequency converters
- Current sensing

RSI Series – Riedon™ DC Ammeter Shunts / Busbar Shunts by Bourns

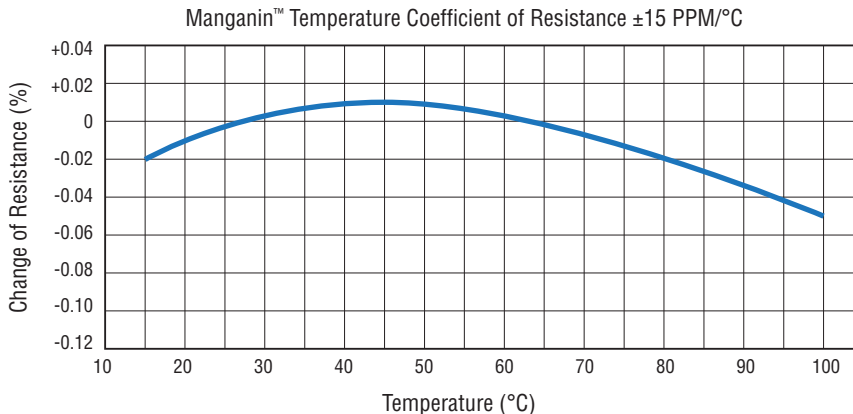
Electrical Characteristics

Model	Rated Current (A)	Operating Current (A)	Resistance (m Ω)	
			50 mV Output	100 mV Output
RSI-300	300	200	0.167	0.333
RSI-400	400	266.67	0.125	0.250
RSI-500	500	333.33	0.100	0.200
RSI-600	600	400	0.083	0.167
RSI-750	750	500	0.067	0.133
RSI-800	800	533.33	0.0625	0.125
RSI-1000	1000	666.67	0.050	0.100
RSI-1200	1200	800	0.042	0.083

Operating Current Derating

For continuous operation, it is recommended that shunts are not operated at more than two thirds (2/3) the rated current under normal conditions per IEEE standards for DC instrument shunts. At ambient temperatures above 40 °C, the current must be further derated to prevent damage.

TCR Curve



Note: Applies to resistance element only

Additional Information

Click these links for more information:



General Specifications

Rated Output50 mV, 100 mV,
 Custom Available
 Voltage Tolerance $\pm 0.25\%$ Standard
 Operating Temperature
 -40 °C to +70 °C
 Storage Temperature
 -55 °C to +80 °C

Materials

ConstructionFlame resistant all-metal
 Resistance Element..... Manganin™
 Terminal Block.....Brass

How to Order

RSI - 300 - 50 - S

Model _____

Rated Current (see table) _____
 100 = 100 A

Voltage Output (mV) _____
 50 = 50 mV
 100 = 100 mV

Packaging Option _____
 (blank) = Standard Bulk Packaging
 -S = Individual Box Packaging



CALIFORNIA WARNING Can expose you to lead, a carcinogen and reproductive toxicant.
 See www.P65Warnings.ca.gov

*RoHS Directive 2015/863, Mar 31, 2015 and Annex.

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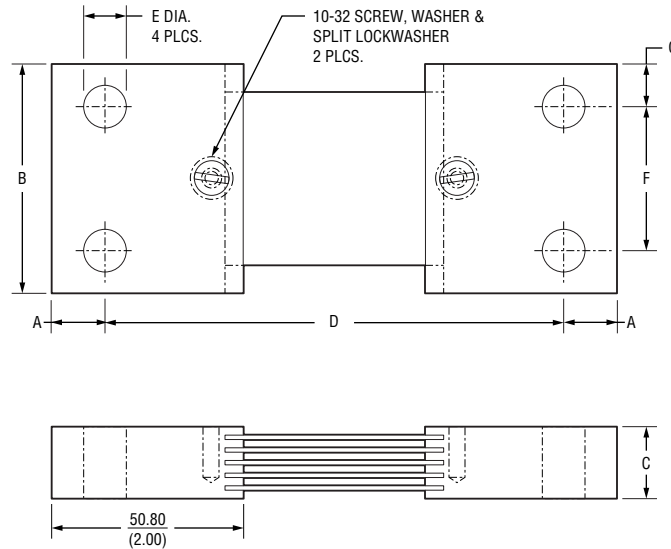
In April 2023, BE Services Company, Inc., a subsidiary of Bourns, Inc., purchased certain assets of Riedon, Inc., including its logo and trademarks and the right to continue to manufacture former Riedon™ products.

“Riedon Logo” is a registered trademark of BE Services Company, Inc., in the United States.

“Riedon” is a trademark of BE Services Company, Inc.

“Manganin” is a trademark of Isabellenhütte Heusler GmbH & Co.

Product Dimensions



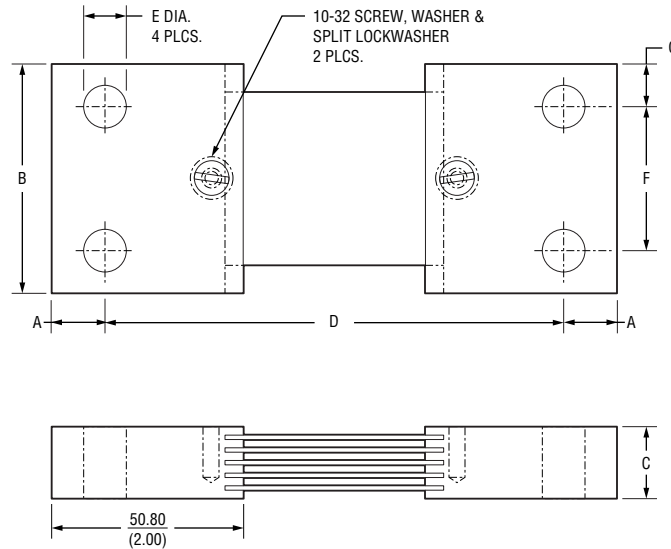
50 mV Output Models

Model	A	B	C	D ± 0.89 (0.035)	E	F	G
RSI-300	14.29 (0.563)	44.45 (1.750)	12.70 (0.500)	120.65 (4.750)	11.12 (0.438)	25.40 (1.000)	9.53 (0.375)
RSI-400		50.80 (2.000)	19.05 (0.750)			31.75 (1.250)	9.53 (0.375)
RSI-500		50.80 (2.000)	19.05 (0.750)			31.75 (1.250)	9.53 (0.375)
RSI-600		50.80 (2.000)	19.05 (0.750)			31.75 (1.250)	9.53 (0.375)
RSI-750		57.15 (2.250)	19.05 (0.750)			38.10 (1.500)	9.53 (0.375)
RSI-800		60.33 (2.375)	19.05 (0.750)			38.10 (1.500)	11.12 (0.438)
RSI-1000		63.50 (2.500)	25.40 (1.000)			38.10 (1.500)	12.70 (0.500)
RSI-1200		73.03 (2.875)	25.40 (1.000)			38.10 (1.500)	17.46 (0.687)

DIMENSIONS: $\frac{\text{MM}}{\text{(INCHES)}}$

Dimension tolerances: ±0.381 mm (±0.015 in.) for hole diameters. All other dimensions have a ±0.762 mm (±0.030 in.) tolerance

Product Dimensions



100 mV Output Models

Model	A	B	C	D	E	F	G
RSI-300	14.29 (0.563)	44.45 (1.750)	12.70 (0.500)	168.28 (6.625)	11.12 (0.438)	25.40 (1.000)	9.53 (0.375)
RSI-400		50.80 (2.000)	19.05 (0.750)			31.75 (1.250)	9.53 (0.375)
RSI-500		50.80 (2.000)	19.05 (0.750)			31.75 (1.250)	9.53 (0.375)
RSI-600		50.80 (2.000)	19.05 (0.750)			31.75 (1.250)	9.53 (0.375)
RSI-750		57.15 (2.250)	19.05 (0.750)			38.10 (1.500)	9.53 (0.375)
RSI-800		60.33 (2.375)	19.05 (0.750)			38.10 (1.500)	11.12 (0.438)
RSI-1000		63.50 (2.500)	25.40 (1.000)			38.10 (1.500)	12.70 (0.500)
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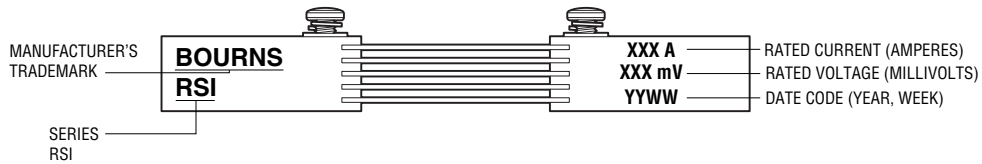
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Specifications are subject to change without notice.

Users should verify actual device performance in their specific applications.

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Typical Part Marking



Packaging Specifications

Standard Package Type

Model	Qty. per Package	Packaging
RSI	1	Wrapped in cellulose wadding

Individual Package Type

Model	Qty. per Package	Packaging (WxLxH)
RSI	1	Individual box (8.97 x 3.65 x 1.75 in.)

BOURNS®

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REV. 08/25

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