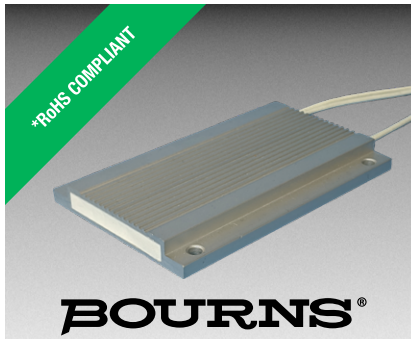




Features

- Formerly a Riedon™ product
- Wirewound technology
- Power ratings from 100 to 500 watts
- Resistance range of 1 to 5 K Ω
- Tolerances of 1 %, 5 %, or 10 %
- Ultra-slim 12 mm profile
- Compact packaging
- RoHS compliant*

Applications

- Renewable energy
- Power converters
- Motor drives

BRS Series – Riedon™ Slim Profile High Power Metal Clad Braking Resistors by Bourns

Electrical Characteristics

Bourns Part Number	Power Rating with Heat Sink (W)	Resistance Range (Ω)
BRS100	100	1 - 1.0K
BRS150	150	1 - 1.0K
BRS200	200	1 - 2.0K
BRS250	250	1 - 2.5K
BRS300 ¹	300	1 - 3.0K
BRS400 ¹	400	1 - 4.0K
BRS500 ¹	500	1 - 5.0K

Note:

1. Stated power rating is dependent on the resistor being mounted to a panel or heat sink of adequate mass to prevent the resistor surface from exceeding 200 °C. See temperature rise and derating curves for more information.

Environmental Specifications

Parameter	Specification
Operating Temperature Range	-55 °C to +200 °C
TCR	< 260 PPM/°C maximum
Dielectric Withstanding Voltage	2500 VAC
Insulation Resistance	20 M Ω minimum
Short Time Overload	± 1 % + 0.05 Ω 5 times rated power for 5 seconds
Moisture Resistance	± 2 % + 0.05 Ω 40 °C, 95 % RH, 100 VDC case to terminal, 500 hours
Load Life	± 5 % + 0.05 Ω 90 minutes rated power, 30 minutes off, 500 hours
Thermal Shock	± 2 % + 0.05 Ω 30 minutes rated power, 15 minutes -25 °C
Vibration	± 1 % + 0.05 Ω 10 Hz - 55 Hz - 10 Hz (1 minute) 2 hours each direction
Moisture Load Life	± 2 % + 0.05 Ω 40 °C, 95 % RH, 90 minutes 10 % rated power, 30 minutes off, 500 hours
Terminals	200 $\pm$ 10 mm (7.87 $\pm$ 0.39 in.) Silicone heat-resistant wire 16 ga (1.39 mm ²), white

Additional Information

Click these links for more information:



How To Order

BRS 200 - 10R J 1

Model _____
 BRS = Braking Resistor, Slim

Power Rating w/Heat Sink _____
 100 = 100 W
 150 = 150 W
 200 = 200 W
 250 = 250 W
 300 = 300 W
 400 = 400 W
 500 = 500 W

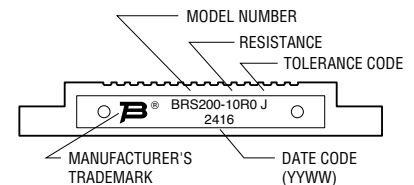
Resistance (Ω) _____
 0.1 - 5.0K

Tolerance _____
 F = ± 1 %
 J = ± 5 %
 K = ± 10 %

Internal Code _____
 0 to 9

Typical Part Marking

Represents total content. Layout may vary.



Packaging Specifications

Bulk..... 10 pcs. per box



WARNING Cancer and Reproductive Harm
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.

BOURNS®

Technical drawing of a 4-PLCS* sensor assembly, showing side and top views with dimensions in mm and inches.

Side View Dimensions:

- Top flange width: 12 (.472)
- Bottom flange width: 6 (.236)
- Overall height: W1

Top View Dimensions:

- Overall width: 200 ± 10 (7.83 ± .39)
- Overall length: L1
- Distance from left edge to first hole center: L3
- Distance between hole centers: L2
- Distance from last hole center to right edge: L3
- Hole diameter: 5.30 (.209)
- Hole type: DIA. THRU HOLES 4 PLCS*
- Material: 16 ga. Silicone Insulated
- Overall height: W2

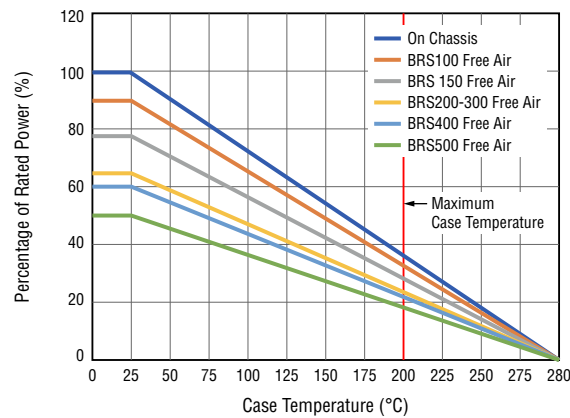
DIMENSIONS: MM (INCHES)

*BRS300 - BRS500 include six mounting holes

Model	L1 $\frac{\pm 1.0}{(0.04)}$	L2 $\frac{\pm 0.5}{(0.020)}$	W1 $\frac{\pm 0.5}{(0.020)}$	W2 $\frac{\pm 0.5}{(0.020)}$
BRS100	$\frac{90}{(3.54)}$	$\frac{70}{(2.76)}$	$\frac{80}{(3.15)}$	$\frac{70}{(2.76)}$
BRS150	$\frac{120}{(4.72)}$	$\frac{100}{(3.94)}$		
BRS200	$\frac{150}{(5.91)}$	$\frac{130}{(5.12)}$		
BRS250	$\frac{180}{(7.08)}$	$\frac{160}{(6.30)}$		
BRS300	$\frac{210}{(8.27)}$	$\frac{190}{(7.48)}$		
BRS400	$\frac{270}{(10.63)}$	$\frac{250}{(9.84)}$		
BRS500	$\frac{330}{(12.99)}$	$\frac{310}{(12.20)}$		

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Power Derating



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[20/45MK1K000HE](#) [C300KR75E](#) [HS300 2K2 J](#) [C1606-20KJI](#) [HD600 H 1R35 K](#) [AHP25W-100RF](#) [AHP25W-1KF](#) [AHP25W-3R3F](#)
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[RBSF1000R9000KGB1A](#) [RBSF07504R820KGB1A](#) [RBEF0050R3400KFB1A](#) [RBEF01351R150KFB1A](#) [RBEF03002R400KFB1A](#)
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