

**WIRE WOUND RESISTORS  
SILICONE COATED TYPE**

**RSR**

**SERIES**

**EDGE WOUND**

**Silicone Coated**

**Power Resistors Heavy Duty  
Industrial Applications**

- Type 'A' compatible for using with Amp type connectors.
- Flame retardant coating compatible with UL standards.
  - 40W to 1000W
  - R05 to 30R

**AEC-Q200 Qualified**

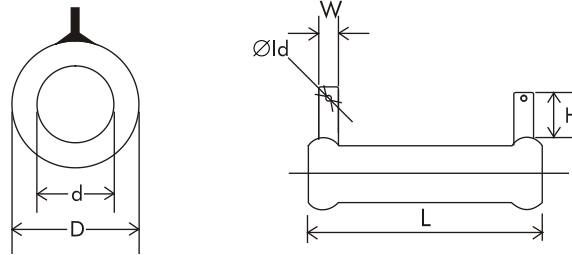




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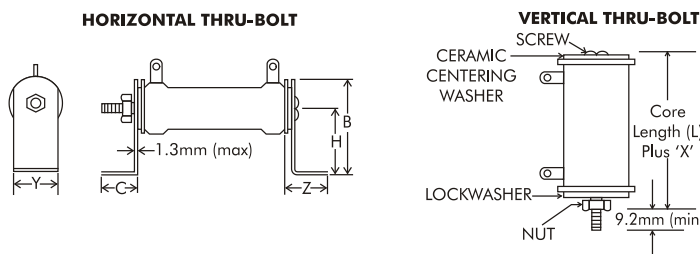
**PHYSICAL CONFIGURATION**



TYPE	POWER RATING at 70°C	DIMENSIONS (mm)						MOUNTING HARDWARE AVAILABLE	RESISTANCE RANGE		INDICATIVE WEIGHT PER PC (gms)
		L ±3	* D ±2	d ±1	W ±0.35	Øld ±0.3	H +2/-0		min	max	
RR40A	40W	75.0	30.0	14.3	4.75	1.4	6.35	102/303	R05	1R9	63.0
RR40B	40W	75.0	30.0	14.3	5.0	3.0	8.5	102/303	R05	1R9	64.5
RR50A	50W	100.0	30.0	14.3	4.75	1.4	6.35	102/303	R07	2R0	80.0
RR50B	50W	100.0	30.0	14.3	5.0	3.0	8.5	102/303	R07	2R0	82.0
RR60A	60W	115.0	30.0	14.3	6.35	1.65	8.5	102/303	R075	2R2	95.0
RR60B	60W	115.0	30.0	14.3	8.0	4.3	11.0	102/303	R075	2R2	97.0
RR80A	80W	130.0	30.0	14.3	6.35	1.65	8.5	102/303	R09	3R0	102.0
RR80B	80W	130.0	30.0	14.3	8.0	4.3	11.0	102/303	R09	3R0	104.0
RR100A	100W	105.0	37.0	19.1	6.35	1.65	8.5	103/303	R10	2R9	112.0
RR100B	100W	105.0	37.0	19.1	8.0	4.3	11.0	103/303	R10	2R9	115.0
RR120A	120W	115.0	37.0	19.1	6.35	1.65	8.5	103/303	R10	4R0	123.0
RR120B	120W	115.0	37.0	19.1	8.0	4.3	11.0	103/303	R10	4R0	125.0
RR150A	150W	140.0	37.0	19.1	6.35	1.65	8.5	103/303	R20	5R0	187.0
RR150B	150W	140.0	37.0	19.1	8.0	4.3	11.0	103/303	R20	5R0	190.0
RR200A	200W	200.0	37.0	19.1	6.35	1.65	8.5	103/303	R20	7R0	242.0
RR200B	200W	200.0	37.0	19.1	8.0	4.3	11.0	103/303	R20	7R0	245.0
RR300A	300W	250.0	48.0	24.0	6.35	1.65	8.5	104/304	R50	10R	573.0
RR300B	300W	250.0	48.0	24.0	8.0	4.3	11.0	104/304	R50	10R	575.0
RR400A	400W	300.0	48.0	24.0	6.35	1.65	8.5	104/304	R50	14R	740.0
RR400B	400W	300.0	48.0	24.0	8.0	4.3	11.0	104/304	R50	14R	744.0
RR500A	500W	300.0	58.0	27.0	6.35	1.65	8.5	104/304	1R0	18R	1180.0
RR500B	500W	300.0	58.0	27.0	8.0	4.3	11.0	104/304	1R0	18R	1190.0
RR600A	600W	330.0	58.0	27.0	6.35	1.65	8.5	104/304	1R0	20R	1300.0
RR600B	600W	330.0	58.0	27.0	8.0	4.3	11.0	104/304	1R0	20R	1310.0
RR1000A	1000W	380.0	78.0	48.5	6.35	1.65	9.5	105/305	1R0	30R	1840
RR1000B	1000W	380.0	78.0	48.5	8.0	4.3	12.0	105/305	1R0	30R	1860

- \* D-Dimensions given are indicative and could exceed tolerances given depending on resistance value being wound.
- \* Resistor types suffixed with 'A' are compatible with Amp 187 connectors from 40 watt to 50 watt size and are compatible with Amp 250 connectors from 60 watt to 600 watt size. Resistor types suffixed with 'B' have large center holes in the lugs-refer Øld, to facilitate attaching cables to them by using nut & bolt or soldering after threading the wires through them.

**MOUNTING SPECIFICATIONS**

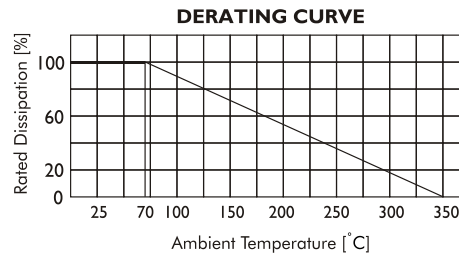




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BRACKET TYPE	Y ±1.0mm	Z ±2mm	H ±2mm	MOUNTING SLOT ±0.5mm	C ±2mm	B ±2mm
102	20.0	25.0	33.0	5.5 x 11.0	20.0	46.0
103	32.0	30.0	37.0	7.0 x 11.0	22.0	54.0
104	48.0	32.0	57.0	7.0 x 11.0	23.0	82.0
105	72.0	40.0	65.0	8.5 x 12.0	30.0	101.0

BRACKET TYPE	X (APPROXIMATE) (mm)
303	15.0
304	16.0
305	26.0



## ELECTRICAL AND ENVIRONMENTAL CHARACTERISTICS / DATA

PARAMETER/PERFORMANCE TEST & TEST METHOD	PERFORMANCE REQUIREMENTS
<b>Power Rating</b> (Rated Ambient Temperature)	Full Power dissipation at 70°C and linearly derated to zero at 350°C (Refer Derating curve above).
<b>Resistance Tolerances Available</b>	±10% (K) ± 5(J) on request.
<b>Temperature Range</b>	-55°C to + 350°C with suitable derating as per derating curve above.
<b>Voltage Rating / Limiting Voltage / Max working Voltage</b>	$V = \sqrt{P \times R}$
<b>Temperature Co-efficient</b>	< 1R0 ± 120 ppm /°C ; < 1R0 ± 80 ppm /°C > 1R0 ± 60 ppm /°C
<b>Short Time Overload</b> (10 x Rated Power for 5 secs)	$\Delta R \pm [2\% + R05]$

## TYPICAL APPLICATIONS

In RSR series, a corrugated alloy tape is wound edgewise or flat onto a ceramic tube which is coated with a silicone cement which is compatible with UL standards.

This ribbed construction puts both sides of the resistive element in contact with air thus creating a convection area four times greater than that obtained with normal wire wound resistors.

These resistors are designed primarily to withstand heavy overload surges upto max 7 times their rated wattage for 10 to 15 seconds (max). This characteristic makes them most suitable for controlling motors requiring high dissipation, low resistance values and high current capacity.

## ORDERING INFORMATION

Series	HTR Type	Packing	Resistance Value	Tolerance	Type of Mounting Hardware
RSR	RR200B/RR200B*	Bulk RR200B/RR200B*	3R0	K	103 / 303

1. For RoHS version - RR200B \*
2. For Non inductive type - N RR200B