

REOHM R 151

Load- and discharge resistor, max. continuous power: 300 W



Unique Selling Point

- Very flat and compact construction with notches for a vertical mounting
- Easy installation
- Short-circuit proof
- Suitable for use with any frequency drive
- Use even in rough conditions
- Good heat dissipation, assembly on heat sink possible
- Highly resistive on overload

Description

The charging resistor R 151 is a current limiting resistor for the charging and discharging of capacitors and limits, for example, the current flowing into the intermediate circuit capacitor inrush current. They are available as a braking resistor (BW Series) or as a charging resistor (Series R).

Typical Applications:

- Drive Technology
- Wind power, solar energies
- Railway engineering
- Electromobility

Available as UL version

The profile resistors REOhm 151 are also UL-certified and have a power of 50 W up to 30 W (also as a combination).

Maximum energy with minimum space

- In case of failure of resistor, this will become highly resistive.
- Suitable for IP20 - IP54 applications
- Test voltage: 2.5 kV AC (at 900 V rated voltage)

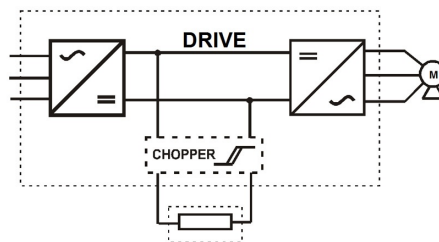
Optional

- With temperature switch
- Cover for protection against high surface temperatures

Technical Data

- Resistance values : 1.1 - 2000 Ohm
- Continuous power : 50 - 300 W
- max. operating voltage : 900 V

Circuit example



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Technical data

Type	Resistance values R [Ohm]	Continuous output [W]	max. operating voltage U [V]
R 151 / 50	1.1 - 200	50	900
R 151 / 100	3 - 300	100	
R 151 / 150	4 - 300	150	
R 151 / 200	5-1,000	200	
R 151 / 250	5-1,000	250	
R 151 / 300	7-2,000	300	

Higher power ratings on request

Note

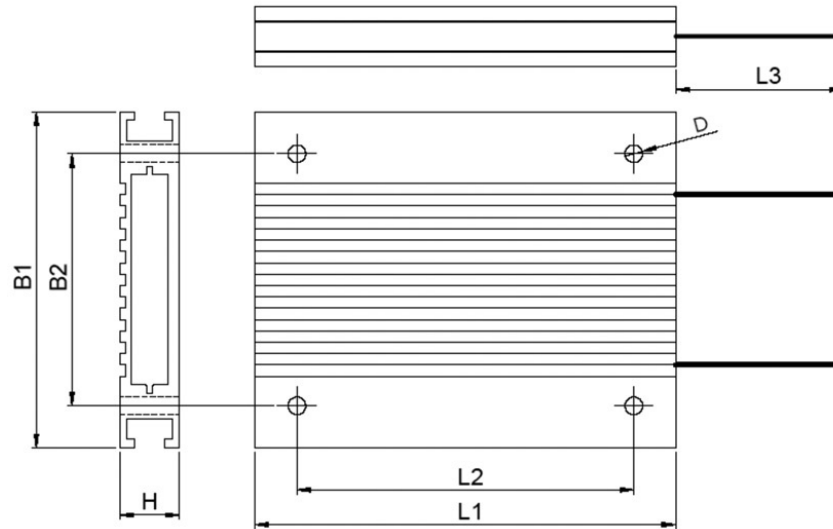
The ratings apply for 100% duty cycle and free access and exit of cooling air.

In general: If the ambient temperature is higher than 40 °C, the continuous power must be reduced by 5% per 10 K temperature rise.

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Dimension drawings



Dimensions

Type	B1 [mm]	B2 [mm]	H1 [mm]	L1 [mm]	L2 [mm]	L3 [mm]	D [mm]	Connections
R 151 / 50 /...	80	60	14	70	50	250	4.2	2 x AWG 18,UL 1659
R 151 / 100 /...	80	60	14	110	80	250	4.2	2 x AWG 18,UL 1659
R 151 / 150 /...	80	60	14	160	130	250	4.2	2 x AWG 18,UL 1659
R 151 / 200 /...	80	60	14	210-216	180	250	4.2	2 x AWG 18,UL 1659
R 151 / 250 /...	80	60	14	260	230	250	4.2	2 x AWG 18,UL 1659
R 151 / 300 /...	80	60	14	310	280	250	4.2	2 x AWG 18,UL 1659

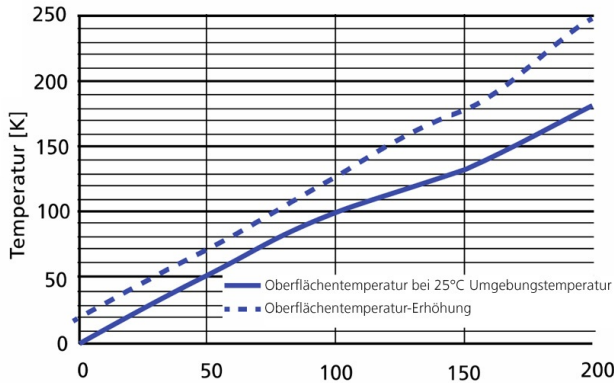
Other mounting-variations possible as customization

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Surface temperature as a function of load

Surface temperature REOhm 151 / 100



Surface temperature increase, even over temperature, describes the increase in surface temperature when loaded.

Load diagram

The power ratings apply for continuous duty. The power ratings can be increased in short-time operation, in the function of duty cycle, by multiplication with the relevant factor from the diagram below or according to the formula as follows.

$$P_{\max} = \frac{P \cdot 100}{ED[\%]}$$

P_{\max} = Maximale Impulsleistung

P = Dauerleistung bei ED=100%

$$ED[\%] = \frac{ED[s]}{SD[s]} \cdot 100$$

ED = Einschaltdauer

SD = Zykluszeit max 120 Sek.

Überlastfaktor

