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REOHM series 154

Max. continous power: 200 W



Unique Selling Point

- Small dimensions
- Fast connection
- Short-circuit proof
- Matching to any frequency converter
- Less additional mounting area
- Compact shape
- High-resistance at overload
- Vertical and horizontal installation

Description

The braking resistor REOHM 154 protects the machine from a voltage rise in the intermediate circuit, if an electric machine operates as a generator (Electromotive brake). The current reduces also the speed of the machine.

The serie REOHM 154 is available as braking resistor (series BW) or as charging resistor (series R).

As 154 R (Charging resistor, damping resistor, filter resistance, etc.)

The charging resistor is a current limiting resistor for the charging and discharging of capacitors and limitates for example the current flowing into the intermediate circuit capacitor inrush current. For this the device must be designed for a high single pulse energy and nominal voltage. The inductance of the resistor contributes to limit the inrush current, so wirewound resistors are the right choice.

Typical Applications:

- Drive Technology
- Renewable energy
- Electromobility

Maximum energy with minimum space

- The compact design enables the use in all applications where little space is available (for example in cabinet and frequency converter)
- Unity-Version can be assem-bled as low-profile and upright
- In case of failure of resistor, this will become highly resis-tive
- Test voltage: 2,5 kV AC (at 900 V rated voltage)

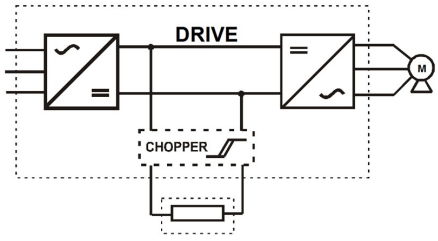
Optional

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

Technical Data

- Resistance values : 2,2 - 500 Ohm
- Continuous power : 50 - 200 W
- max. operating voltage : 900 V

Circuit example



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Technical data

Type	Resistance value R [Ohm]	with 25°C and surface temperature of.../P [W]		max. Operation voltage U [V]
		200K	250K	
154 / 50	10 - 100	50	60	
154 / 100	3 - 500	100	150	
154 / 150	2,2 -160	120	160	900
154 / 200	5 - 200	140	180	
154 / 250	5 - 250	160	200	

Higher power ratings on request

Note

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

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

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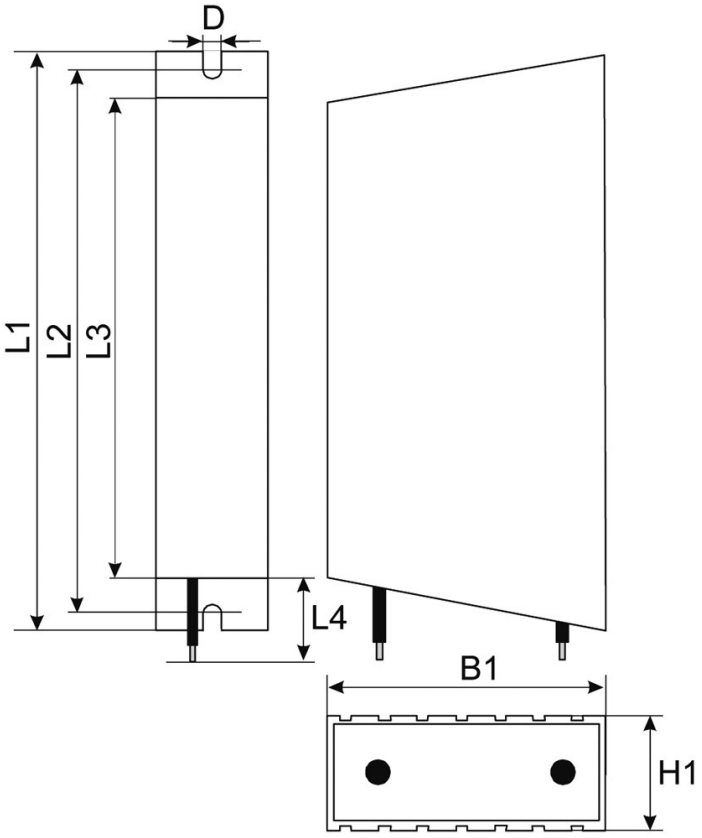
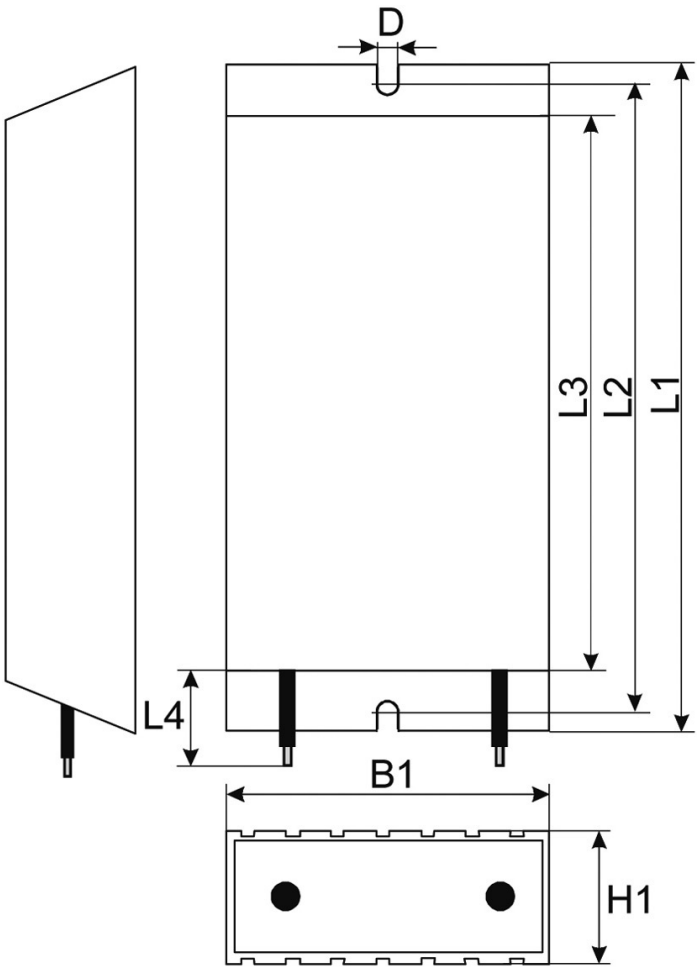
Dimension drawings

Horizontal version



Upright mounting



Dimensions

Type	B1 [mm]	H1 [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	D [mm]	Connection wire
154 / 50	40	21	150	135	120	250	5,5	2 x AWG 14,UL 1659
154 / 100	40	21	170	155	140	250	5,5	2 x AWG 14,UL 1659
154 / 150	40	21	210	195	180	250	5,5	2 x AWG 14,UL 1659
154 / 200	40	21	250	235	220	250	5,5	2 x AWG 14,UL 1659
154 / 250	40	21	290	275	260	250	5,5	2 x AWG 14,UL 1659

Other fixing dimensions possible

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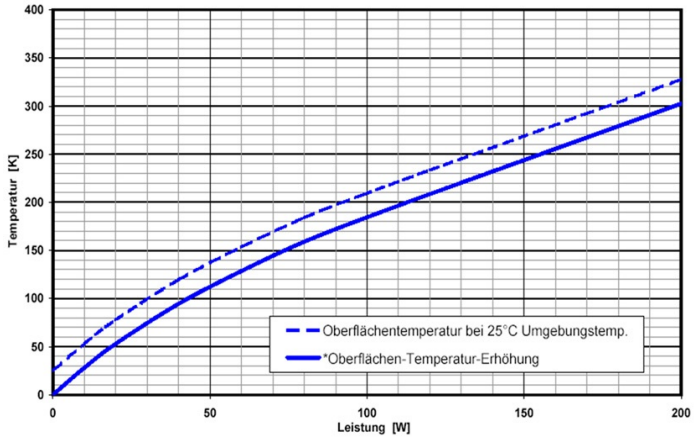
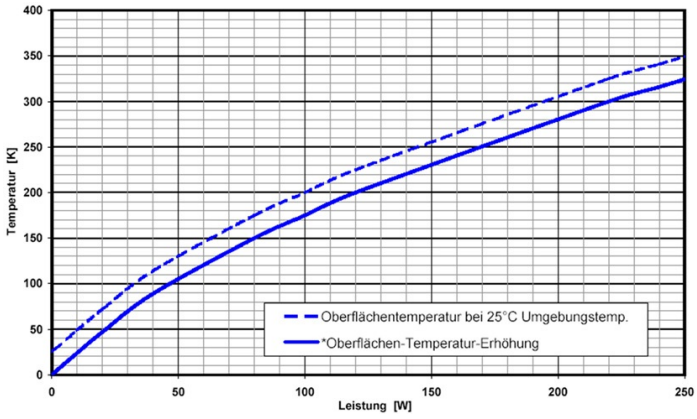
Surface temperature in function of power

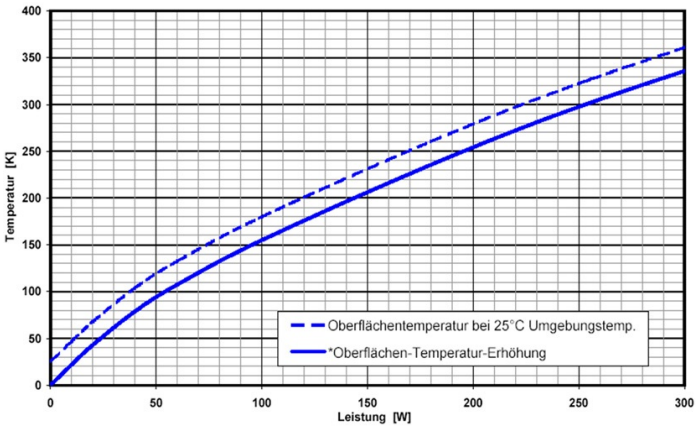
Surface temperature REOhm 154 / 100



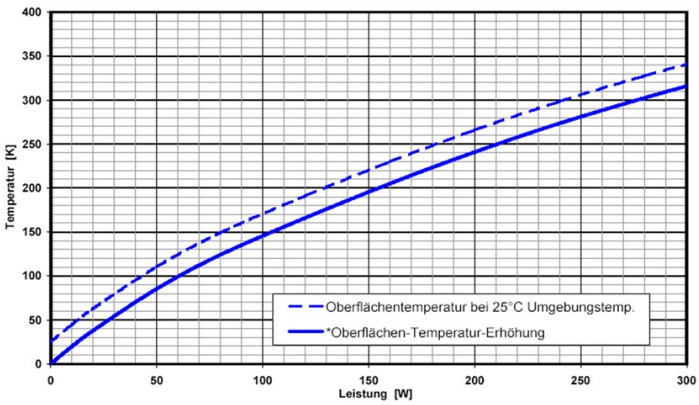
Surface temperature REOhm 154 / 150



Surface temperature REOhm 154 / 200



Surface temperature REOhm 154 / 250



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

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Load diagram

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

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

P_{max} = **Maximale Impulsleistung**

P = **Dauerleistung bei ED=100%**

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

ED = **Einschaltdauer**

SD = **Zykluszeit max 120 Sek.**

