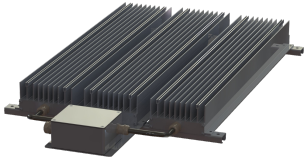


REOHM series 155 - Combination

Max. continuous power: 30.000 W



Unique Selling Point

- EMC cables and screw connections
- Easy installation
- Suitable for the use with any frequency drive
- Compact modular structure
- High protection rating up to IP 65
- Good heat dissipation
- 4-hole fixing for easy assembly

Description

As BW (Braking resistor)

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

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

The charging resistor 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. 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.

Maximum energy with minimum space

- This braking resistor of the REOHM series is very compact with high capacity
- Maximum energy is provided in smallest space and very high protection rating
- The resistor is to be assembled vertically with the terminal box at the bottom
- Sufficient convection is to be ensured
- Ratings higher than 22kW require a separate terminal box
- Test voltage: 2,5 kV AC (at 900 V rated voltage)
- Ambient temperature: -10...+40°C
- Max. temperature: >300°C

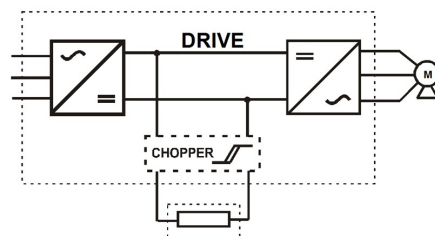
Optional

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

Technical Data

- Resistance values : 0,8 - 820 Ohm
- Continuous power : 4000 - 30000 W
- max. operating voltage : 900 V

Circuit example



REOHM series 155 - Combination

Max. continuous power: 30.000 W

Technical data

Type	Resistance value R [Ohm]	Continuous power P [W]	max. operation voltage U [V]
155 / 4000	10-200	4000	900
155 / 5000	6-500	5000	
155 / 6000	4-600	6000	
155 / 7500	3-600	7500	
155 / 9000	2,1-750	9000	
155 / 10000	2,1-820	10000	
155 / 12000	2-740	12.000	
155 / 15000	1,5-700	15.000	
155 / 18000	1,2-630	18.000	
155 / 22000	1-560	22.000	
155 / 24000	0,9-580	24.000	
155 / 27000	0,8-600	27.000	
155 / 30000	0,8-600	30.000	

Higher power ratings on request

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

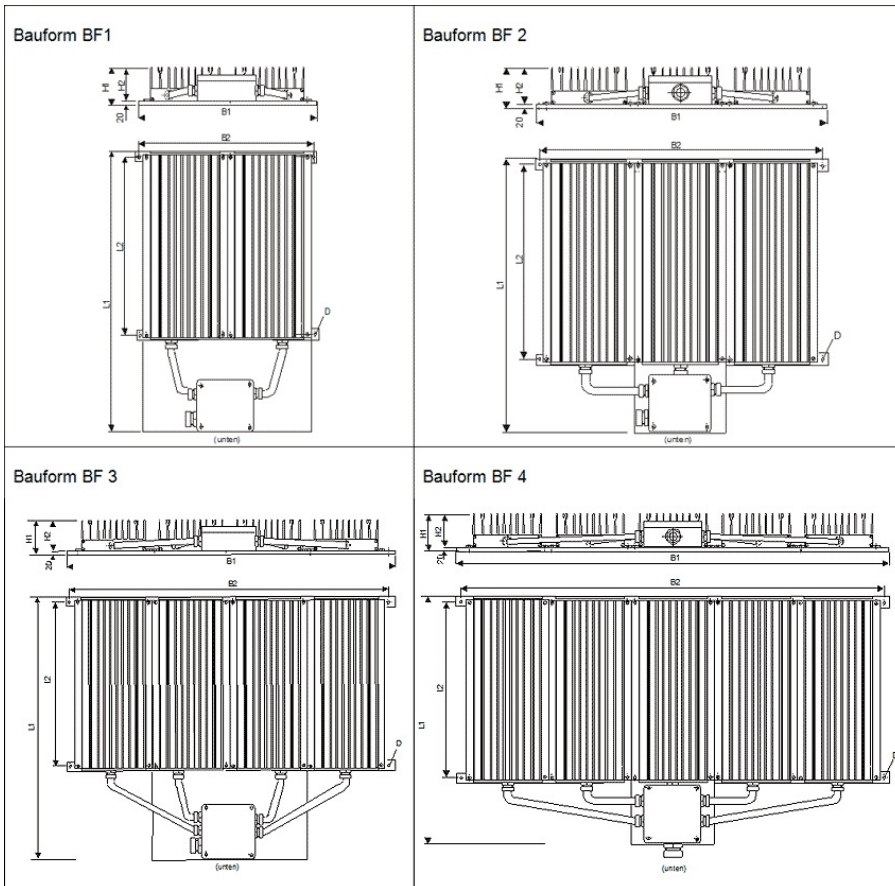
In general: Is the ambient temperature higher than 40 °C, the continuous power must be reduced by 5 % per 10 K temperature rise.

REOHM series 155 - Combination

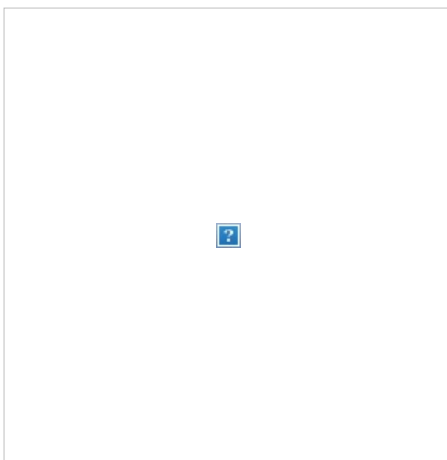
Max. continuous power: 30.000 W

Dimension drawing

The designs below show the resistors as IP54 / 64 / 65 with a terminal box and cable gland. With IP20 they are provided with terminal and wires.



Design IP 20



REOHM series 155 - Combination

Max. continuous power: 30.000 W

Dimensions

Type	L1 [mm]	L2 [mm]	B1 [mm]	B2 [mm]	H1 [mm]	H2 [mm]	D [mm]	Cable gland	Terminal	Design
155 / 4000	750	500	420	390	95	75	8,5	M25	10 mm ²	BF 1
155 / 5000	880	630	420	390	95	75	8,5	M25	10 mm ²	BF 1
155 / 6000	970	720	420	390	95	75	8,5	M25	10 mm ²	BF 1
155 / 7500	880	630	590	560	95	75	8,5	M25	10 mm ²	BF 2
155 / 9000	970	720	590	560	95	75	8,5	M25	10 mm ²	BF 2
155 / 10000	750	500	940	910	95	75	8,5	M32	16 mm ²	BF 4
155 / 12000	970	720	770	740	95	75	8,5	M32	16 mm ²	BF 3
155 / 15000	970	720	940	910	95	75	8,5	M32	16 mm ²	BF 4
155 / 18000	970	720	2x590	2x560	95	75	8,5	M32	35 mm ²	2x BF 2
155 / 22000	880	630	3x590	3x560	95	75	8,5	M32	35 mm ²	3x BF 2
155 / 24000	970	720	2x770	2x740	95	75	8,5	M32	35 mm ²	2x BF 3
155 / 27000	970	720	3x590	3x560	95	75	8,5	M32	35 mm ²	3x BF 2
155 / 30000	970	720	2x940	2x910	95	75	8,5	M32	35 mm ²	2x BF 4

Other fixing dimensions possible

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

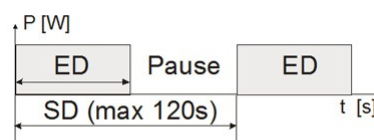
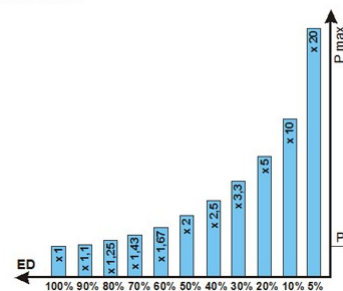
P = Dauerleistung bei ED=100%

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

ED = Einschaltdauer

SD = Zykluszeit max 120 Sek.

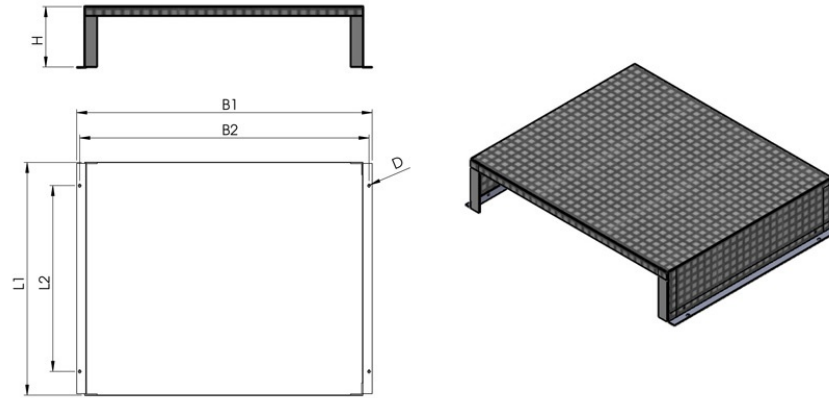
Überlastfaktor



REOHM series 155 - Combination

Max. continuous power: 30.000 W

Touch protection



Dimensions of touch protection

Type	L1 [mm]	L2 [mm]	B1 [mm]	B2 [mm]	H [mm]	D [mm]
155 / 4000	700	620	520	500	200	7,0x10,0
155 / 5000	800	720	520	500	200	7,0x10,0
155 / 6000	900	820	520	500	200	7,0x10,0
155 / 7500	800	720	690	670	200	7,0x10,0
155 / 9000	900	820	690	670	200	7,0x10,0
155 / 12000	900	820	870	850	200	7,0x10,0
155 / 15000	900	820	1040	1020	200	7,0x10,0
155 / 18000	900	820	2 x 690	2 x 670	200	7,0x10,0
155 / 24000	900	820	2 x 870	2 x 850	200	7,0x10,0
155 / 27000	900	820	3 x 690	3 x 670	200	7,0x10,0
155 / 30000	900	820	2 x 1040	2 x 1020	200	7,0x10,0