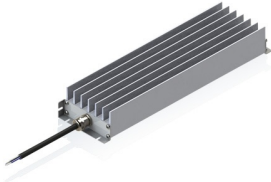


REOhm series 156 (UL)

Max. continuous power: 7.500 W



Unique Selling Point

- compact construction
- easy installation
- short-circuit proof
- suitable for the use with any frequency drive
- use even in rough conditions
- standing or lying assembly
- highly resistive on overload

Description

The BW 156 braking is designed for drives with frequency converters of small to medium output. Installation in and outside the control cabinet is possible. In addition to the high protection class IP66, the profile resistors REOHM 156 are also UL-certified and have a power of 50 W up to 7.500 W (as combination).

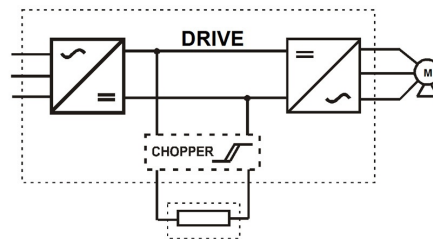
Optional

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

Technical Data

- Resistance values : 0,3 - 2000 Ohm
- Continuous power : 400 - 7500 W
- max. operating voltage : 900 V

Circuit example



REOhm series 156 (UL)

Max. continuous power: 7.500 W

Technical data

Type	Resistance values R [Ohm]	Continuous power at 25° C P [W]	Max. operating voltage U [V DC] / [V AC]
BW 156/400	0,3 - 2000	400	900 / 600
BW 156/600	0,3 - 2000	600	900 / 600
BW 156/800	1 - 2000	800	900 / 600
BW 156/1000	1 - 2000	1000	900 / 600
BW 156/1200	1 - 2000	1200	900 / 600
BW 156/1500	1 - 2000	1500	900 / 600
BW 156/2000	0,5 - 1000	2000	900 / 600
BW 156/2400	0,5 - 1000	2400	900 / 600
BW 156/3000	0,5 - 1000	3000	900 / 600
BW 156/4500	0,3 - 1000	4500	900 / 600
BW 156/6000	0,3 - 1000	6000	900 / 600
BW 156/7500	0,3 - 1000	7500	900 / 600

Higher power ratings on request

Note

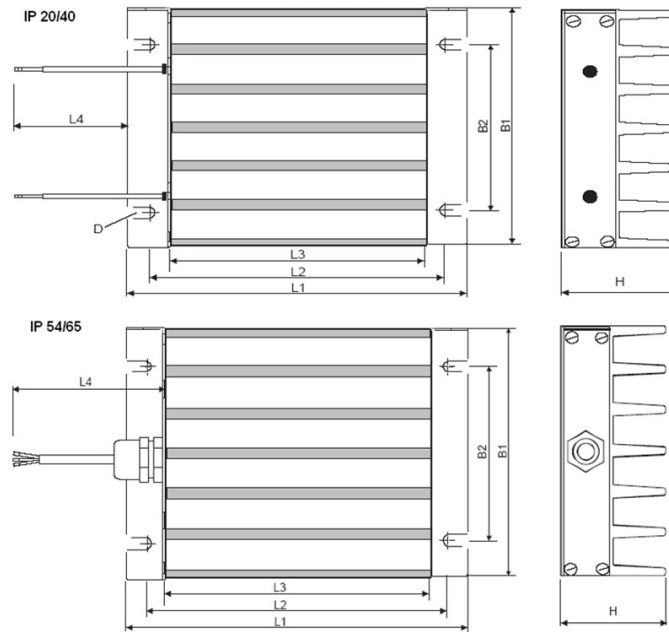
The ratings apply for 100 % duty cycle and free access and exit of cooling air.

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

REOhm series 156 (UL)

Max. continuous power: 7.500 W

Dimension drawings - Single resistor up to 1500 W



Dimensions

Type	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	B1 [mm]	B2 [mm]	H [mm]	D [mm]	Connection cable
BW 156/400	170	155	140	500	103	70	53	4,5	IP20/40 PTFE AWG14
BW 156/600	230	215	200	500	103	70	53	4,5	
BW 156/800	300	285	270	500	103	70	53	4,5	
BW 156/1000	370	355	340	500	103	70	53	4,5	
BW 156/1200	450	435	420	500	103	70	53	4,5	
BW 156/1500	600	585	570	500	103	70	53	4,5	

Type	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	B1 [mm]	B2 [mm]	H [mm]	D [mm]	Connection line
BW 156/400	174	159	140	500	103	70	53	4,5	IP54/65 shielded connection cable 3x1,5 mm ²
BW 156/600	234	219	200	500	103	70	53	4,5	
BW 156/800	304	289	270	500	103	70	53	4,5	
BW 156/1000	374	359	340	500	103	70	53	4,5	
BW 156/1200	454	439	420	500	103	70	53	4,5	
BW 156/1500	604	589	570	500	103	70	53	4,5	

Other fixing dimensions possible

REOhm series 156 (UL)

Max. continuous power: 7.500 W

Design with different protection ratings

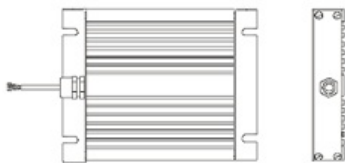
IP20 / IP40



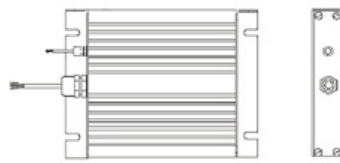
IP20 / IP40 with temperature switch



IP54 / IP65



IP54 / IP65 or higher with temperature switch



Protection ratings

Depending on the design and execution various types of protection ratings can be realized up to IP66. At protection ratings less than / equal IP40 the temperature increase must be at the surface resistance max. 300K. For a higher degree of protection (> IP40) a maximum temperature increase of 200K is allowed.

Attention! Duration overtemperature values of > 200 K could result to an impairment of protection rating.

Overvoltage protection

It is possible to control the temperature of the resistance by using a temperature switch. In case of exceeding a rated temperature the temperature switch opens and can, for example, trigger an existing signaling contact. The temperature switch is mounted externally in protection class IP20 / IP40 and provided with two connection strands.

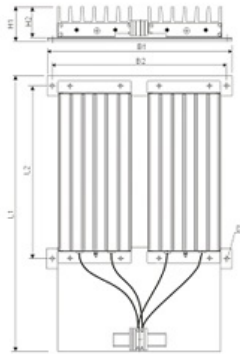
At IP54 / IP65 or higher, the temperature switch is integrated in the resistance and provided the connection with a temperature resistant cable.

REOhm series 156 (UL)

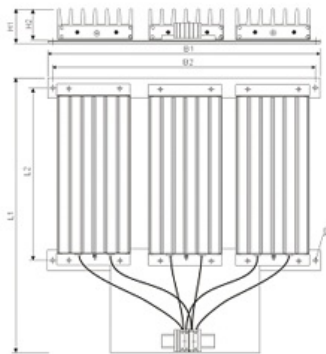
Max. continuous power: 7.500 W

Dimension drawings - Resistor combination up to 7500 W

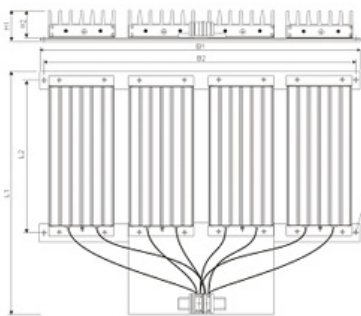
B1



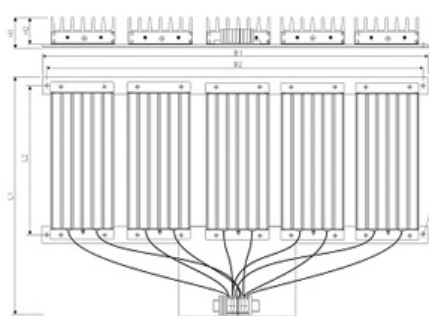
B2



B3



B4



REOhm series 156 (UL)

Max. continuous power: 7.500 W

Dimensions - Resistor combination up to 7500 W

Type	L1 [mm]	L2 [mm]	B1 [mm]	B2 [mm]	H1 [mm]	H2 [mm]	D [mm]	design [mm]	Connection cable
BW 156/2000	600	360	300	270	73	53	8,5	BF 1	IP20/40 PTFE AWG14
BW 156/2400	680	440	300	270	73	53	8,5	BF 1	
BW 156/3000	830	590	300	270	73	53	8,5	BF 1	
BW 156/4500	830	590	430	400	73	53	8,5	BF 2	
BW 156/6000	830	590	560	530	73	53	8,5	BF 3	
BW 156/7500	830	590	690	660	73	53	8,5	BF 4	

Type	L1 [mm]	L2 [mm]	B1 [mm]	B2 [mm]	H1 [mm]	H2 [mm]	D [mm]	design [mm]	Connection cable
BW 156/2000	600	364	300	270	73	53	8,5	BF 1	IP54 shielded connection cable 3x1,5 mm ²
BW 156/2400	680	444	300	270	73	53	8,5	BF 1	
BW 156/3000	830	594	300	270	73	53	8,5	BF 1	
BW 156/4500	830	594	430	400	73	53	8,5	BF 2	
BW 156/ 6000	830	594	560	530	73	53	8,5	BF 3	
BW 156/7500	830	594	690	660	73	53	8,5	BF 4	

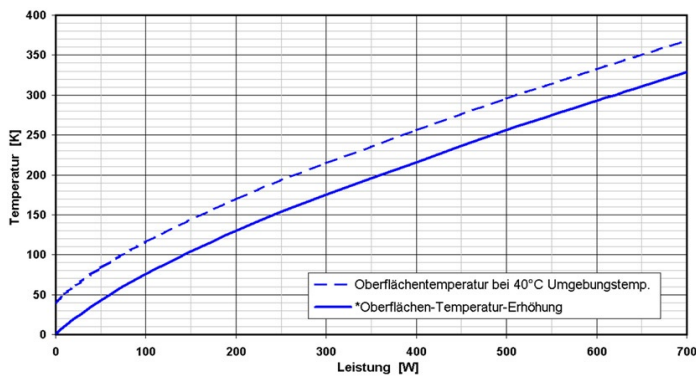
Other fixing dimensions possible.

REOhm series 156 (UL)

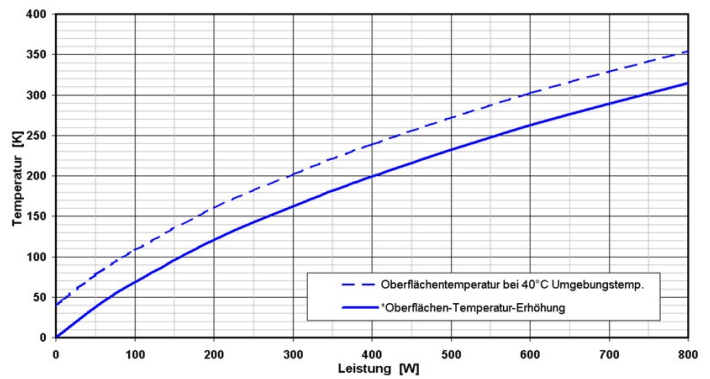
Max. continuous power: 7.500 W

Surface temperature as a function of load

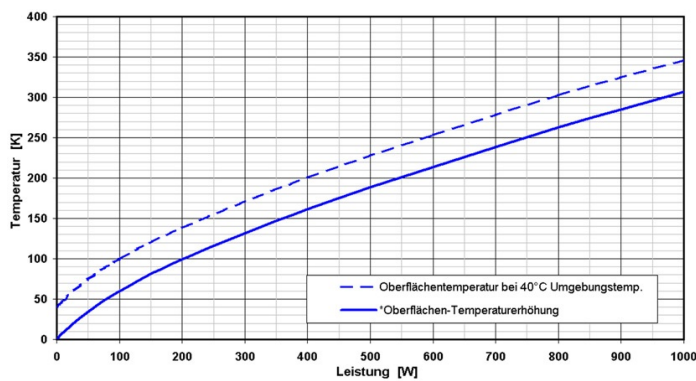
Surface temperature BW 156 / 400



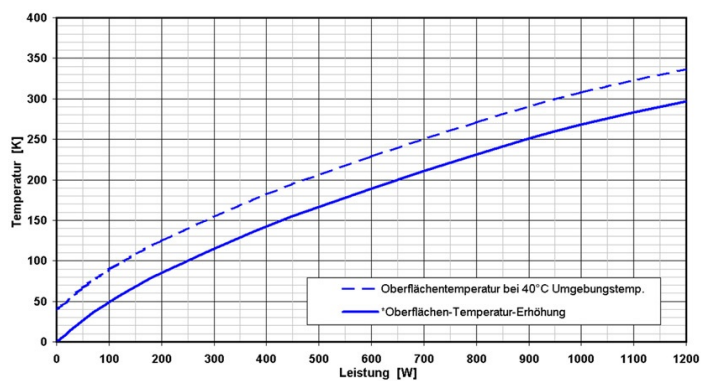
Surface temperature BW 156 / 600



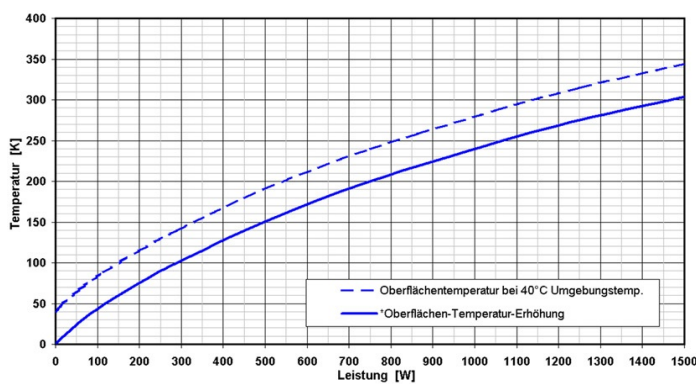
Surface temperature BW 156 / 800



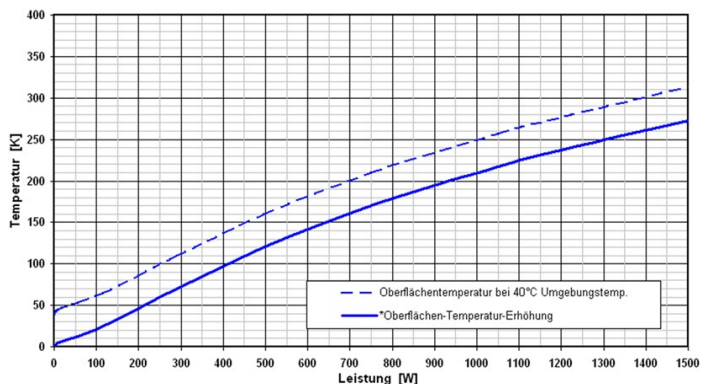
Surface temperature BW 156 / 1000



Surface temperature BW 156 / 1200



Surface temperature BW 156 / 1500



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

REOhm series 156 (UL)

Max. continuous power: 7.500 W

Load diagram

These performances are valid for continuous operation. The power values may be increased in the short-term operation as a function of the duty cycle multiplied by the appropriate factor in the following diagram, or by the following formula.

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

P_{\max} = Maximale Impulsleistung /
Maximum pulse power

P = Dauerleistung bei ED=100% /
Continuous power for
continuous 100%

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

ED = Einschaltdauer
Duty cycle

SD = Zykluszeit max 120 Sek.
Cycle time max 120 sec.

