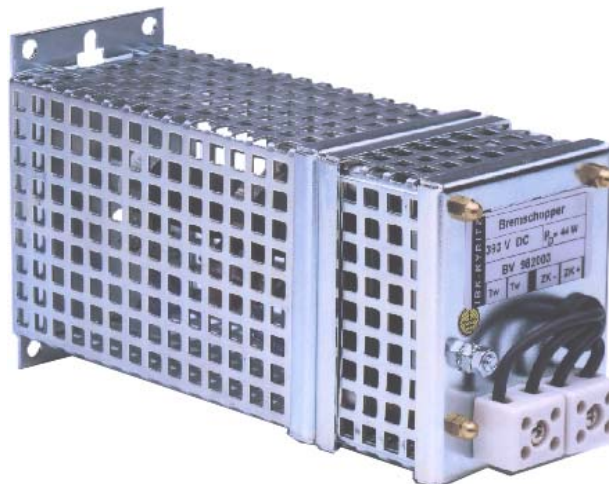


Braking Resistors With braking chopper

Series BW 300
Type BW 301/...
Type BW 303/...

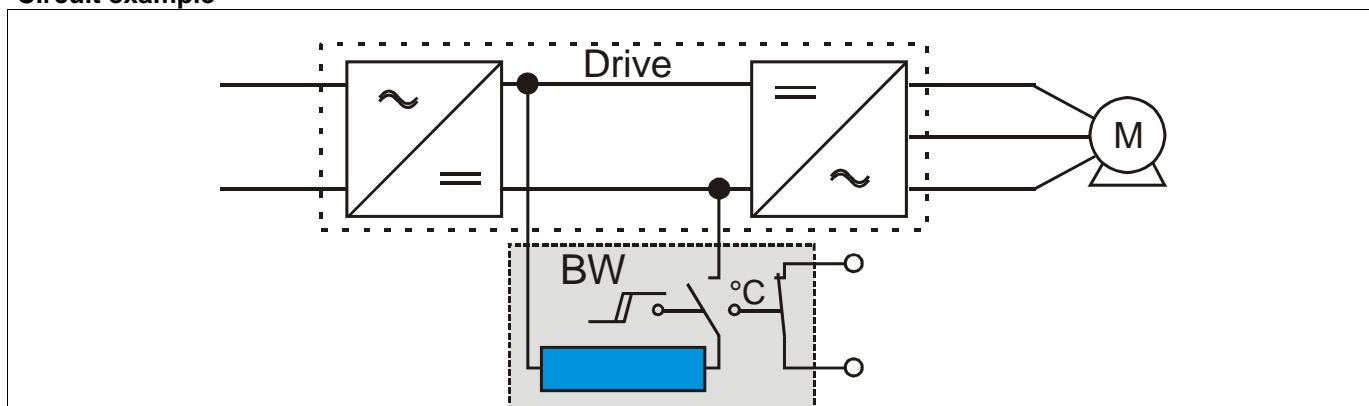
Applications:

Conversion of braking energy into heat for drives with quick speed variations **without the use of additional electronics.**



	Test voltage L-N 2100 V DC 1 s L/N-PE 2700 V DC 1s
Overload see diagram	Climatic rating DIN IEC 60068-1

Circuit example



Benefits:

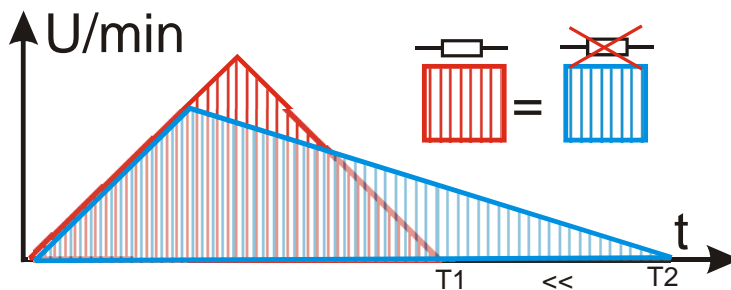
- Decelerating a load with large inertia
- Increase the control torque of the inverter
- For frequently repeated ON/OFF cycles
- Compact construction
- Easy installation
- Suitable for the use with any frequency drive
- Compact design
- Continuous power: Max. 450W
- Dielectric strength
- CE Marked
- DIN 41 480 compliant

Technical data

Type	Response voltage [V]	Switch-off [V]	Continuous power [W]	Temperature switch [°C]	R [Ω]
BW 301/44	395	375	44	200	180
BW 301/88	395	375	88	200	90
BW 301/132	395	375	132	200	60
BW 303/88	681	660	88	200	160
BW 303/150	681	660	150	200	100
BW 303/300	681	660	300	200	50
BW 303/450	681	660	450	200	33

Dynamics Increase

The use of a chopper resistor enables to considerably increase the dynamics on a drive-motor-combination within only a few minutes. This often means a strong increase of productivity. For instance, it is possible to reduce the setting times with a better speed utilization up to the final point.



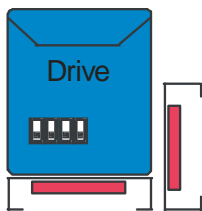
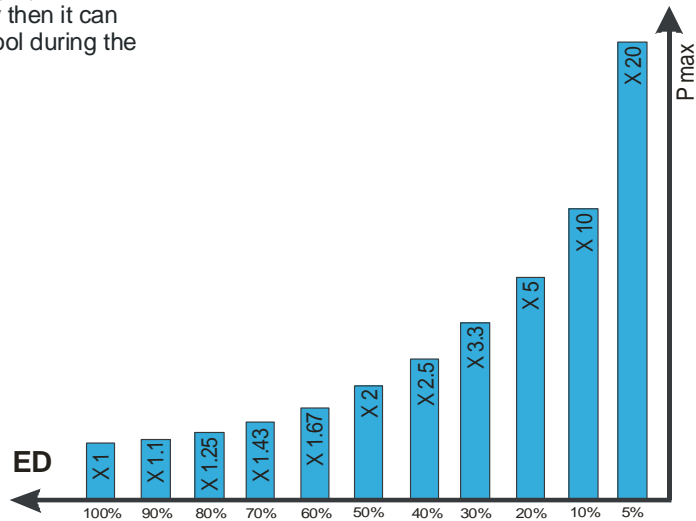
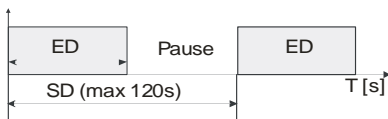
Power Rating Calculation

A braking resistor is selected according to the systems duty cycle requirements. If the resistor is not being used continuously then it can be used for a higher power rating because it has time to cool during the "rest" period. To calculate, the following formula is used:

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

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

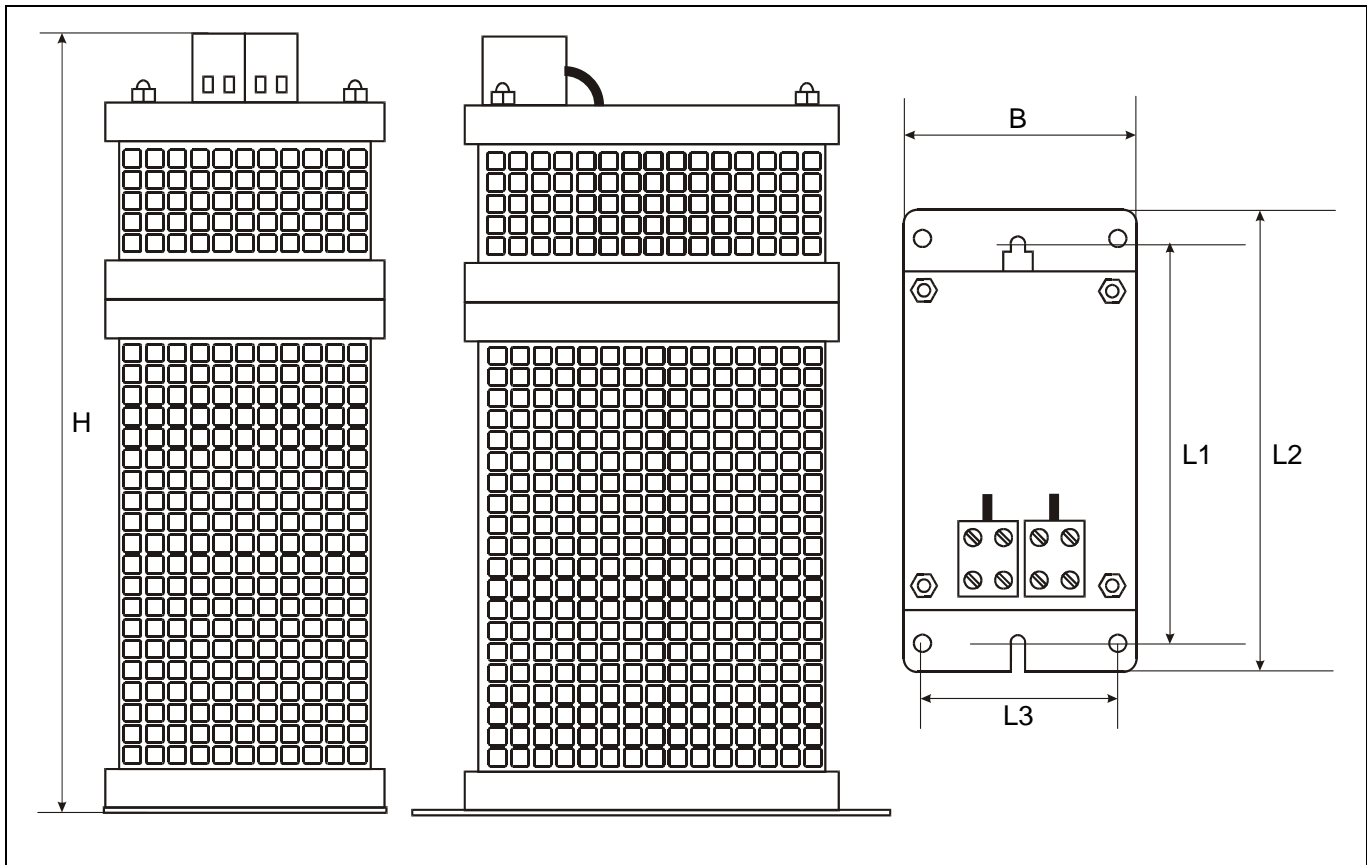
Where ED = Duty Cycle
SD = Cycle time



REO-USA, Inc. can offer virtually any braking resistor design to suit any frequency drive, with optional mounting methods: such as footprint, book style, or compact. The footprint version is particularly useful for retrofit applications because no extra panel space is required. Most constructions are in a modular form that is easy to install.

Additional forced air cooling can be fitted to some versions and this greatly increases their power rating, or alternatively enables use within a confined space, such as an IP65 enclosure for food quality or clean room applications.

Dimension Drawing



Type	B [mm]	H [mm]	L1 [mm]	L2 [mm]	L3 [mm]	Connection
BW 301/44	65	190	90	100	45	2.5 mm ²
BW 301/88	65	190	90	100	45	2.5 mm ²
BW 301/132	65	190	170	180	45	2.5 mm ²
BW 303/88	135	220	180	195	105	6 mm ²
BW 303/150	135	220	180	195	105	6 mm ²
BW 303/300	135	220	180	195	105	6 mm ²
BW 303/450	135	220	180	195	105	6 mm ²