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Brake resistor BWD500072

Here is a 3D model!
If you do not see a 3D model, please download the pdf file and open it with the Acrobat Reader.

Order data

BWx500xxx — classification

- resistance (two digit resistance values with leading „0“)
- power (nominal power 200 Watt, 500 Watt at 35% on time)
- version (D, S, G or T)

Description:

Kurzschlussfester, eigensicherer[1)] Short-circuit-proof, self-protecting (see footnote 1) resistor for operation on converters (brake transistors), protection class IP65 in an anodized aluminium casing.

Nominal capacity (W)	Dimensions (mm)	Resistance value (Ohm)
200 (500 at ED = 35%, ϑ_A = 20 °C)	216 x 80 x 15	72,0

Technical data:

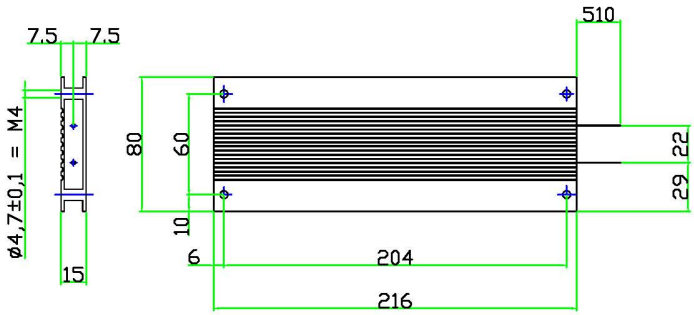
Parameters	Symbol	Value	Unit	Conditions
Tolerance		± 5	%	room temperature
Weight	m	ca. 0.55	kg	
Storing temperature	ϑ_S	-25 ... +85	°C	

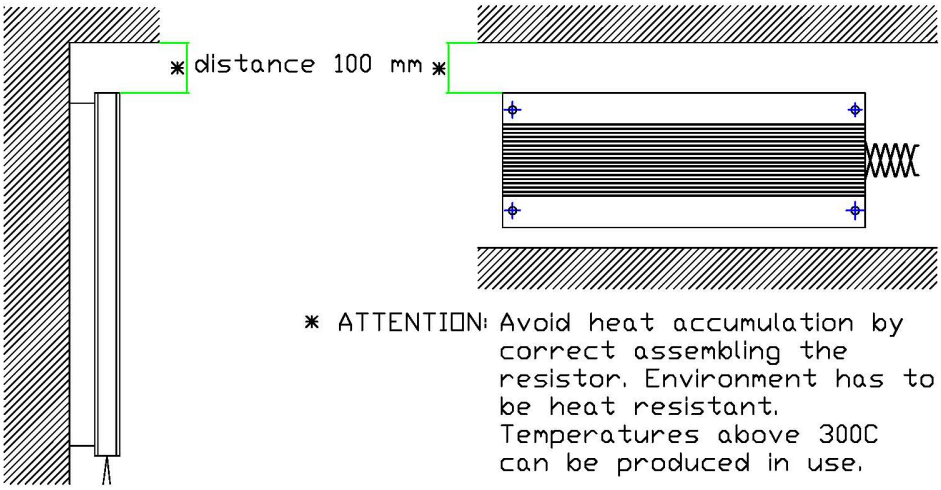
Limit values (ϑ_A = 20 °C, if nothing else is stated):

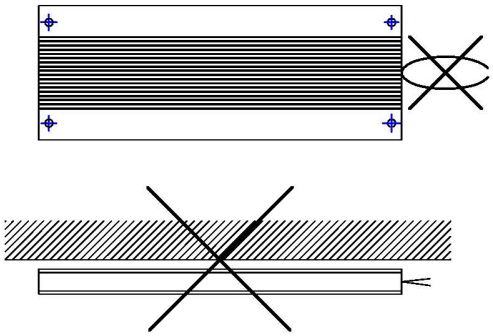
Parameters	Symbol	Value	Unit	Conditions
Max. permissible operating voltage	U_B	≤700 AC ≤1.000 DC	V	considering "self protection"
	U_B	≤650 AC ≤850 DC	V	considering CSA and UL approvals
Energy consumption	Q	7,5 15,0	kJ	at 1,2s (ED 1%) at 7,2s (ED 6%)
Insulation voltage	U_{ISO}	≥ 4.000	V	AC; f = 50 Hz; t = 1 min
Casing temperature	ϑ_C	≤250	°C	free convection
Temperature coefficient	TK	20 ... 100	10^{-6}/K	
Insulation resistance	R_{ISO}	≥ 100	MΩ	$U_{meï¿½}$ = 1000 VDC
Inductance	L	≤ 30	µH	f = 300 kHz, $U_{meï¿½}$ = 50 mV
Capacity against housing	C	≤ 300	pF	f = 300 kHz, $U_{meï¿½}$ = 50 mV
Thermic time factor	τ	ca. 550	sec	Casing BWD500xxx
Max. permissible wire temperature	ϑ_{hot}	max. + 600	°C	
Approvals				cCSAus (CSA project# 1185101) dURus (UL file# E233422) (beide basierend auf CSA-C22.2 No. 0-M91 und No. 14-95 sowie UL 508)

[1)]: Self protection: With constant overload and free convection
1. No short circuit
2. No fault to frame
3. Self-extinguishing - no fire
4. No melting of casing

Warning:
Mounted in areas without free air change surface temperatures up to 350 degrees Celsius can be reached



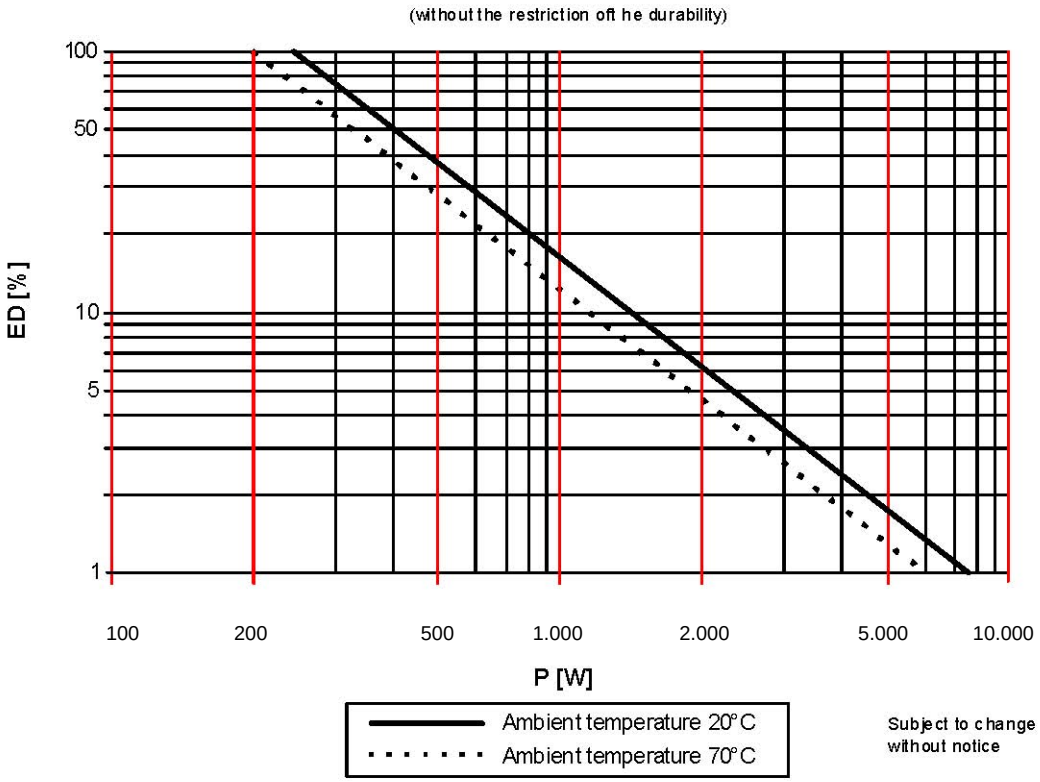




Please be absolutely aware of the following:

> **Only skilled workers are permitted to mount and connect.**
> **Beware of electically conductivity - the resistor unit must be grounded.**
> **Mecanical supporting is necessary in case of overload in the front part - otherwise there is a risk of breakage!**
>
> **WARNING: High surface temperature can occur during operation !**

Pulse carrying capacity, brake resistor



Our brake resistor unit is covering any operation requirement in the range below the curveBWx500xxx

General set up:
1. Fundamentally the usual cycle time is 120 seconds
2. The casing temperature can be determined applying the average performance on the included temperature diagram. The average performance can be determined as follows: P_m = P[W] x ED[%] / 100. If you add 5K to the respective value in the temperature diagramm you will have the casing temperature in respect to the pulse capacity.

Casing temperature Brake resistor BWD500072

At an ON period ED = 100 %
Maximum temperature = 250 ï¿½C