

Brake resistor BWx600

Short-circuit proof, „intrinsicly safe“² resistor for use in inverters (brake transistors) in an anodized aluminum case, IP65¹ protection class.



Rated power (W)
240 (600 with duty cycle
ED = 35%, $\vartheta_A = 20^\circ\text{C}$)

Resistance (Ohm)
5, 10, 14, 18, 22, 27, 33, 47, 72,
80, 100, 150, 200, 220, 300

Dimensions (mm)
Enclosure: 216 x 80 x 30
Wiring: length 510±40
Ø AWG16 or 2.5 mm²
PTFE isolated,
UL Style 1659



Versions



BWD600



BWG600



BWS600



BWT600
without CSA and UL approval

¹ Test conditions: Water jet from nozzle 6.3 mm inside diameter, flow rate 12.5 l / min +/- 5%, water pressure according to volume flow, distance 2.5-3m, test duration 3min.

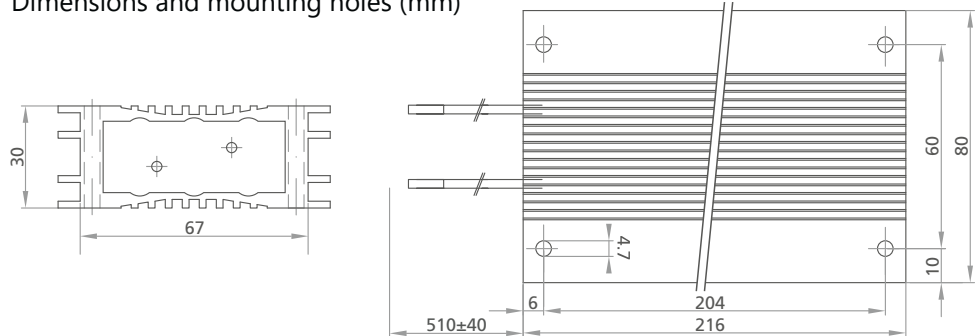
² With fourfold type power and free convection.
1. no short-circuit, 2. no fault to frame, 3. self-extinguishing, 4. no melting of casing. Type power always corresponds to 35% duty cycle of the respective resistor type.

Technical specifications

($\vartheta_A = 20^\circ\text{C}$, unless otherwise specified)

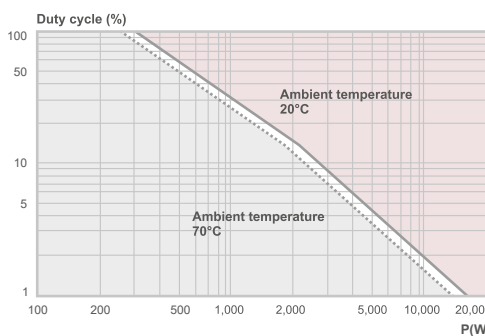
Parameter	Symbol	Value	Unit	Conditions
Tolerance (resistance)		± 5	%	Room temperature
Temperature coefficient	TK	20 ... 100	10 ⁻⁶ /K	
Insulation resistance	R _{ISO}	≥ 100	MΩ	U _{mess} = 1,000 VDC
Inductance	L	≤ 30	μH	f = 300 kHz, U _{mess} = 50 mV
Capacity against enclosure	C	≤ 300	pF	f = 300 kHz, U _{mess} = 50 mV
Thermal time constant	τ	approx. 600	s	
Weight	m	1,050	g	
Certifications	cCSAus			Standard CSA-C22.2 and UL508
	cURus			Standard CSA-C22.2 and UL508
Energy absorption	Q	13	kJ	with 1.2 s (1% duty cycle)
		26	kJ	with 7.2 s (6% duty cycle)
Maximum permissible operating voltage	U _B	≤ 700 AC	V	Taking into consideration the „intrinsic safety“ ²
		≤ 1,000 DC	V	according to CSA and UL
		≤ 600 AC	V	
		≤ 848 DC	V	
Isolation voltage	U _{iso}	≥ 4,000 AC	V	f = 50 Hz; t = 1 s
Max. permissible case temp.	ϑ _C	≤ 250	°C	unobstructed convection
Storage temperature	ϑ _S	-25 ... +85	°C	

Dimensions and mounting holes (mm)



Pulse loading capacity

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Case temperature

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With duty cycle ED = 100%
Maximum permissible temperature T = 250 °C

