

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

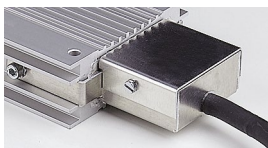
Dimensions (mm)
Enclosure: 216 x 80 x 30
Wiring: length 510±40
Ø AWG14 or 2.5 mm²
PTFE isolated,
UL Style 1659



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.

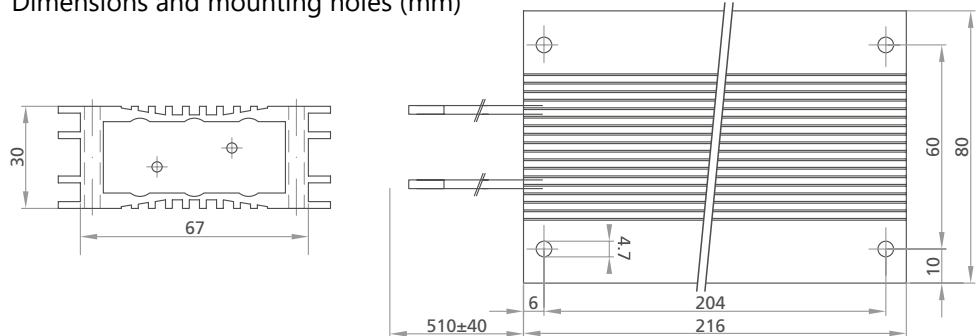
² With fourfold type power and free convection. 1. no short-circuit, 2. no fault to frame, 3. self-extinguishing, 4. no melting of casing. Type power always corresponds to 35% duty cycle of the respective resistor type.

Technical specifications

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

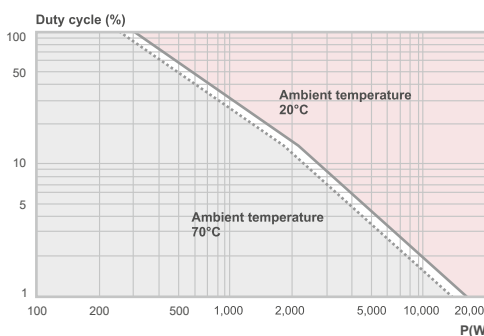
| Parameter | Symbol | Value | Unit | Conditions |
|---------------------------------------|------------------|-------------|---------------------|---|
| Tolerance (resistance) | | ± 5 | % | Room temperature |
| Temperature coefficient | TK | 20 ... 100 | 10 ⁻⁶ /K | |
| Insulation resistance | R _{ISO} | ≥ 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

