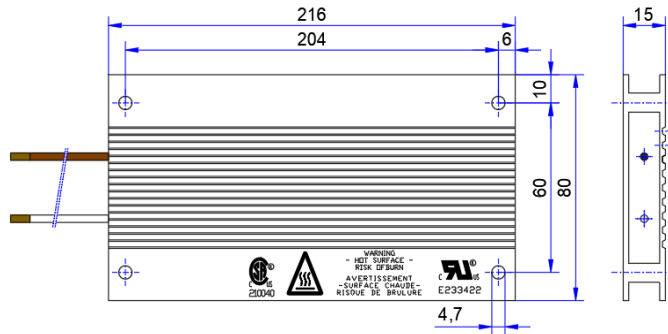


Brake resistor BWD500050FE CACR-LE2-50-W500



Description:

Short-circuit-proof, self-protecting¹⁾ in anodized aluminium casings, protection class according to IP65²⁾, for operation on converters (brake transistors). For detailed dimensions refer to the technical drawing (on request).



Technical data ($\vartheta_A = 20^\circ\text{C}$, if nothing else is stated):

Nominal capacity (W)	Dimensions LxWxH (mm)		Resistance values (Ohm)	
200 (500 at ED = 35%, $\vartheta_A = 20^\circ\text{C}$)	216 x 80 x 15		50	
Parameters	Symbol	Value	Unit	Conditions
Tolerance		± 5	%	room temperature
Weight	m	approx 0,55	kg	
Connecting wire	A	1,5 (AWG16)	mm ²	PTFE isolated, UL Style 1659
	L	510 $\pm$ 40	mm	
Storing temperature	ϑ_S	-25 ... +85	°C	
Max. permissible operating voltage	U_B	≤ 700 AC ≤ 1000 DC	V	considering "self-protection" ¹⁾
	U_B	≤ 600 AC# * ≤ 850 DC*	V	considering CSA# and UL*
Energy consumption	E	7,5 15	kJ	with 1,2s (1% ED) with 7,2s (6% ED)
Insulation voltage	U_{ISO}	≥ 4000	V	AC; f = 50 Hz; t = 1 s
Max. permissible casing temperature	ϑ_C	≤ 250	°C	free convection
Temperature coefficient	TK	20 ... 100	10 ⁻⁶ /K	
Insulation resistance	R_{ISO}	≥ 100	M Ω	$U_{MEAS} = 1000$ VDC
Inductance	L	≤ 30	μH	f = 300 kHz, $U_{MEAS} = 50$ mV
Capacity against housing	C	≤ 300	pF	f = 300 kHz, $U_{MEAS} = 50$ mV
Thermic time factor	τ	Approx 550	sec	Casing BWD500xxx
Max. permissible wire temperature	ϑ_{hot}	max. + 600	°C	
Approbation				cCSAus (CSA file# 210040) cURus (UL file# E233422) (both based on CSA-C22.2 and UL 508)

1): Self-protection:

- At four time type capacity and free convection
1. No short circuit
 2. No fault to frame
 3. Self-extinguishing
 4. No melting of casing

Warning:

Mounted in areas without free air change surface no fire temperatures up to 350 degrees Celsius can be reached.

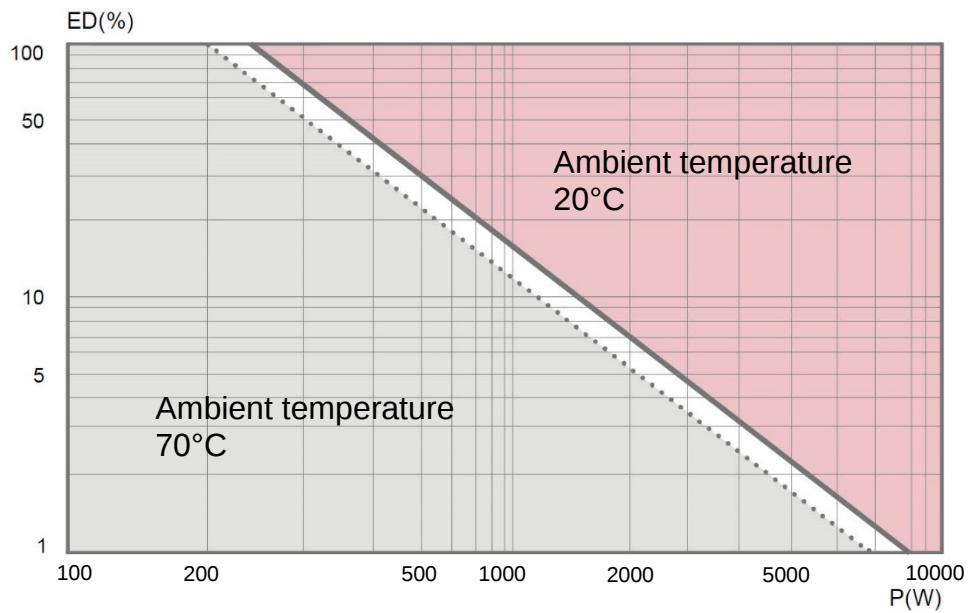
2): Test conditions: Water jet from nozzle 6,3mm inside diameter, flow rate 12,5l/min +/-5%, water pressure according to volume flow, distance 2,5-3m, test duration 3min

Michael Koch GmbH, Zum Grenzgraben 28, 76698 Ubstadt-Weiher, Germany, Tel.: +49 7251 9626200
mail@bremsenergie.de, www.bremsenergie.de, mail@brakeenergy.com, www.brakeenergy.com



Pulse carrying capacity BWD500050FE

(without limitation the endurance)



This brake resistors cover any operation requirement in the range below the curve.

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: $P_m = P[W] \times ED[\%] / 100$. If you add 5K to the respective value in the temperature diagram, you will have the casing temperature in respect to the pulse capacity.

Housing temperature BWD500050FE

(At an ON-period ED = 100%, Maximum temperature = 250°C)

