

Brake resistor - BWD600300K03LIP65FE CACR-KL2-100-W1800



Description:

Short-circuit-proof, self-protecting¹⁾ resistor unit for operation on converters (brake transistors) consisting of 3 resistor modules in anodized aluminium casings. Protection class according to IP65²⁾, interconnected by spring-type terminals. For detailed measurements, see technical drawing (on request).

Nominal capacity (W)	Dimensions LxWxH (mm)	Resistance values (Ohm)
720 (1800 at ED = 35%, $\vartheta_A = 20^\circ\text{C}$)	229 x 216 x 91,5	300

Technical data:

Parameters	Symbol	Value	Unit	Conditions
Tolerance		± 5	%	Room temperature
Weight	m	approx 4,5	kg	
Connction data terminal Conductor cross-section		Max. 6	mm ²	Depending on the design of the cable cross-section
Storing temperature	ϑ_S	-25 ... +85	°C	

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

Parameters	Symbol	Value	Unit	Conditions
Max. permissible operating voltage	U_B	$\leq 700 \text{ AC}$ $\leq 1000 \text{ DC}$	V	considering "self protection" ¹⁾
	U_B	$\leq 600 \text{ AC}^{*}$ $\leq 850 \text{ DC}^{*}$	V	considering CSA [#] and UL [*]
Energy consumption	E	13 26	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	MΩ	$U_{MEAS} = 1000 \text{ VDC}$
Inductance	L	≤ 30	μH	f = 300 kHz, $U_{MEAS} = 50 \text{ mV}$
Capacity against housing	C	≤ 300	pF	f = 300 kHz, $U_{MEAS} = 50 \text{ mV}$
Thermic time factor	τ	Approx 600	sec	Casing BWD600xxx
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 – 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.

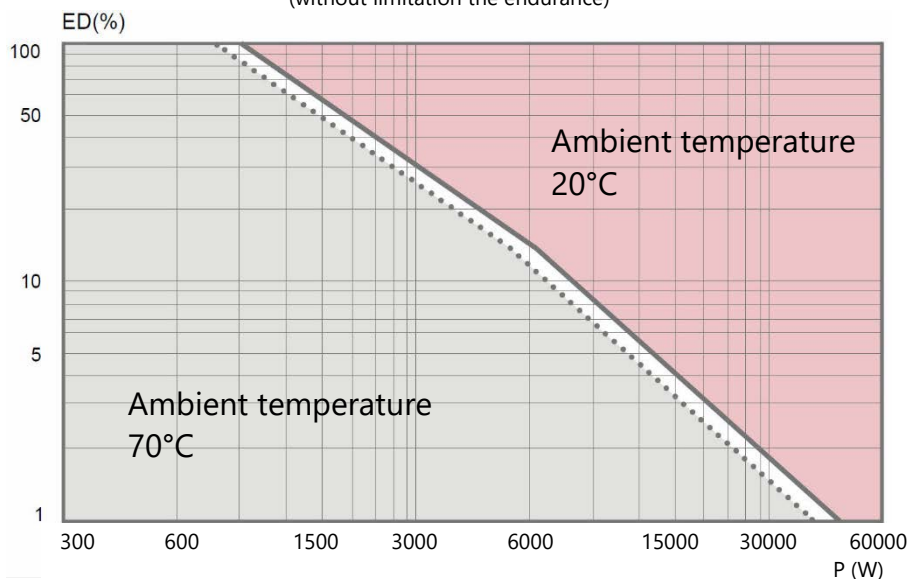
- 2): Test conditions: Water jet from nozzle 6,3mm inside diameter, flow rate 12,5l/min +/-5%, water pressure according to volume flow, distance 2,5-3m, test duration 3min

*Sc = single components



Pulse carrying capacity BWD600300K03LIP65FE

(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 BWD600300K03LIP65FE

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

