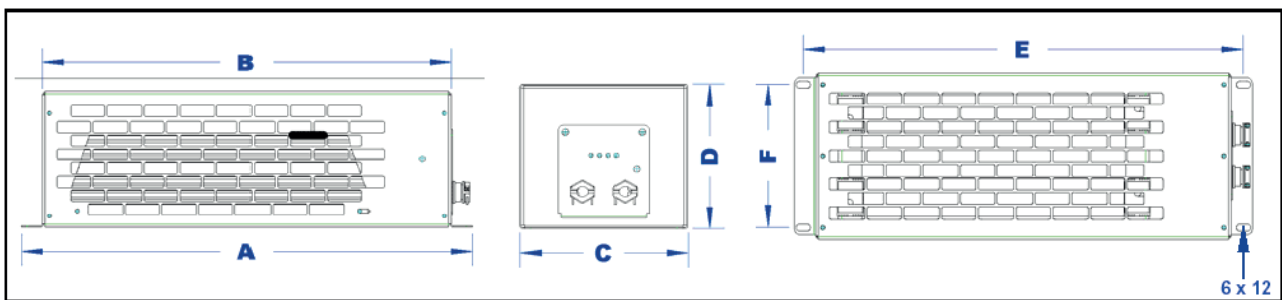




# ALUMINIUM CASE BRAKING RESISTORS MODEL HWG

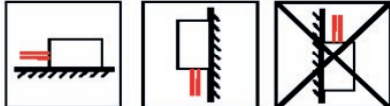
## TECHNICAL DESIGN



## GENERAL FEATURES

High power resistors of series HWG are resistor subassemblies which are characterized by their high impulse strength. They comprise up to 4 pieces of the wire wound high power resistors VHPR which were developed for their function as brake resistors. The protection against accidental contact is ensured with a housing out of sendzimir zinc coated steel plate with inner connecting terminals. The feeding of line is ensured by a metric screwed cable gland. The system of protection IP 65 of the single resistor elements makes the use possible also in difficult climatic conditions. A temperature control is available on request.

On request: special desires of customer as leads, tap/circuit, inductivity, capacity, thermal control, etc.

Type: HWG ....		VHPR 100		VHPR 200		VHPR 300		VHPR 400		VHPR 500	
Style		V	H	V	H	V	H	V	H	V	H
Housing dimensions (mm)	Nr. of VHPR	A	245	295	345	395	445				
		B	207	257	307	357	407				
	1	D	95	95	120	95	120	95	120	95	120
	2	C <sub>1</sub>	70	95		95		95		95	
	3	C <sub>2</sub>			140		140		140		140
Fixing dimensions (mm)	4	C <sub>3</sub>			230		230		230		230
		C <sub>4</sub>			300		300		300		300
	1	E	228	278	328	378	428				
	2	F <sub>1</sub>	50	70	70	70	70	70	70	70	70
	3	F <sub>2</sub>			120		120		120		120
Mounting position	4	F <sub>3</sub>			210		210		210		210
		F <sub>4</sub>			280		280		280		280
											

## GENERAL FEATURES

HWG's types with		VHPR 100	VHPR 200	VHPR 300	VHPR 400	VHPR 500
<b>Resistance range *)<sup>1</sup></b>	Ω	R10 - 1K4	R15 - 2K5	R20 - 3K3	R25 - 4K7	R30 - 7K5
<b>Resistance tolerance *)<sup>1</sup></b>	%	F (1%); G (2%); J (5%); K (10%)				
<b>Temperature coefficient *)<sup>1</sup></b>	10 <sup>-6</sup> K <sup>-1</sup>	-80 .. 200				
<b>Insulation resistance *)<sup>2</sup></b>	MΩ	> 20				
<b>Operating voltage Ub *)<sup>4</sup></b>	V <sub>AC</sub> f=50Hz	<= 1000				
<b>Testing voltage Up</b>	V <sub>AC</sub> f=50Hz 1min.	4000				
<b>Power rating P<sub>40</sub></b>	W	100	200 to 800	300 to 1200	400 to 1600	500 to 2000
<b>Derating of power</b>	Lineare	From 40 °C = P <sub>N</sub> to 200 °C = 0,25 P <sub>N</sub>				
<b>Max. impulse energy *)<sup>4</sup></b>	kWs	10				
<b>Protection level of resistor element</b>	-	IP 65				
<b>Protection level of resistor subassembly</b>		IP 20				
<b>Climatic category (IEC 68-1)</b>	-	40 / 155 / 21				
<b>Temperature range</b>	°C	-40 .. 200				
<b>Long term test (P<sub>N</sub> 40 °C 1000h)</b>	%	3				
<b>Long term environmental test (IEC 115-1/23)</b>	%	2				
<b>Periodical change of temperature (IEC 68 2.14)</b>	%	2				
<b>Kind of terminal</b>	-	connecting terminals inside				
<b>Weight</b>	g (ca.)	On request				

\*)<sup>1</sup> - without cables

\*)<sup>2</sup> - Voltage = 1000 VDC

\*)<sup>3</sup> - as a function of the resistance

\*)<sup>4</sup> - Silicon/white PTFE white, black or brown, referring to the required operating voltage or testing voltage, length tolerance: ± 6 mm

Leads cases (different lengths, styles and insulations are possible)