

# **CBR 295 - 525W**

The ALPHA - CBR 295 range of compact high pulse load resistors are used for a multiple of applications including variable speed drives, cranes, elevators and escalators as well as being used in electronic circuits for capacitor discharges, voltage balancing and filters. Due to the construction of the CBR range of resistors they are particularly suited to high impulse applications.



# Basic ratings and ordering codes:

Part number	Part name	Ohm value [Ω]	Pulse load [W] T.amb = 40°C, cycle time 120s				
			Duty 1s	Duty 5s	Duty 10s	Duty 20s	Duty 40s
ZH9293168777	CBR-V 295 CH 777 6R8 KT	6.8	30300	8300	4800	2800	1600
ZH9293210777	CBR-V 295 CH 777 10R KT	10	25000	7400	4500	2700	1600
ZH9293222777	CBR-V 295 CH 777 22R KT	22	25000	7600	4600	2700	1600
Z9293247777	CBR-V 295 C 777 47R KT	47	25000	6000	3600	2300	1450
Z9293310777	CBR-V 295 C 777 100R KT	100	22500	5600	3400	2200	1450

### Product highlights

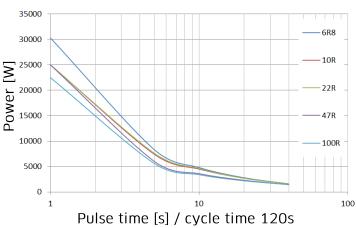
- Nominal power rating 525W @ 40°C ambient
   natural air cooling
- Cable connections 300mm AWG 16 (1.3mm²)
- High pulse load capability
- High IP class (IP54)
- Fully insulated

- Low thermal drift (100ppm/K)
- UL approved
- External thermal switch option
- Fixed ohm values (E6)
- Low noise

#### Constant load graph



# Pulse overload graph





General specifications						
Temperature Coefficient:		100 ppm/K				
Dielectric strength		3500 VAC @ 1 minute				
Insulation Resistance:		> 20MΩ / case housing				
Environmental:		-40 °C / +70 °C				
Surface temperature	At 40°C ambient	290°C @ nominal power. No heatsink is required. When heatsin or forced air is used nominal power can be increased				
De-rating		Linear: 40°C = Pn to 70°C = 0.85 * Pn				
De-rating vertical mounting		no de-rating				
De-rating at high altitudes	1000 m 1500 m 3000 m	no de-rating 0.94 * Pn 0.82 * Pn				
Mounting instructions	3000 111	It is recommended to keep a distance of 200mm to the nearest object to prevent heating of neighboring components.  If two or more brake resistors are mounted next to each other the distance between should be 400mm.  Shorter distance requires de-rating.				
Cooling		The nominal power of the resistors refers to cooling conditions with Free Natural Air. Cooling at 40°C ambient.				
Vibration	1 - 13 Hz 13 - 100 Hz	Acc. To EN 60068-2-6 frequency range 1 - 100Hz Acceleration / Amplitude ± 1mm @ ± 0.7G				
Corrosive resistance		Acc. EN 60721-2-1: C2 medium				
Resistance tolerance		± 10%				
Working voltage		UL: 600VAC. IEC: 690VAC / 1100VDC				
Time constant for heating up		1000 s				
Switch temperature		180°C				
Minimum current / voltage	Thermal	10mA / 2V				
Rated current / voltage	switch	2.5A @ 250 VAC cos φ=1 Normally Closed				
Dielectric voltage		2000VAC (3500VAC between TS and R)				

