

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:

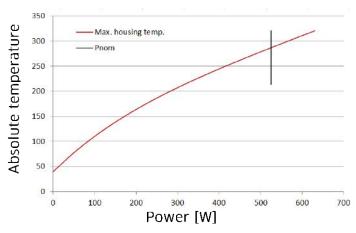
| Part number | Part name | Ohm value [Ω] | Pulse load [W] T.amb = 40°C, cycle time 120s | | | | |
|--------------|-------------------------|------------------|--|---------|----------|----------|----------|
| | | | Duty 1s | Duty 5s | Duty 10s | Duty 20s | Duty 40s |
| ZH9293168777 | CBR-V 295 CH 777 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

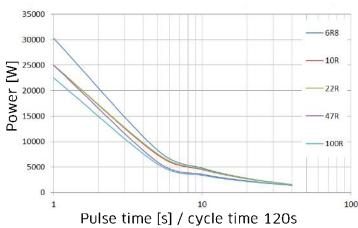
- Nominal power rating 525W @ 40°C ambient
 natural air cooling
- Cable connections 300mm AWG 16 (1.3mm²)
- High pulse load capability
- High IP class (IP54)
- Fully insulated

- 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 | no de-rating 0.94 * Pn | | | | |
| | 3000 m | 0.82 * Pn | | | | |
| Mounting instructions | | 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 / 850VDC IEC: 690VAC / 975VDC | | | | |
| 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) | | | | |

