



The CAH 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 CAH range of resistors they are particularly suited to high impulse applications.



Basic ratings and ordering codes:

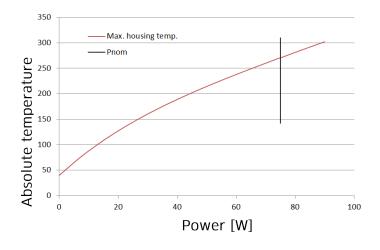
Part number	Part name	Ohm value $[\Omega]$	Pulse load [W] T.amb = 40°C, cycle time 120s				
			Duty 1s	Duty 5s	Duty 10s	Duty 20s	Duty 40s
Z1163210777	CAH 165 C 777 10R KT	10	4300	1050	660	435	225
Z1163215777	CAH 165 C 777 15R KT	15	3600	965	625	420	225
Z1163222777	CAH 165 C 777 22R KT	22	3800	980	630	425	225
Z1163233777	CAH 165 C 777 33R KT	33	2900	935	675	440	220
Z1163247777	CAH 165 C 777 47R KT	47	2200	845	635	445	220
Z1163268777	CAH 165 C 777 68R KT	68	1850	805	620	445	225
Z1163310777	CAH 165 C 777 100R KT	100	1700	785	615	440	220
Z1163315777	CAH 165 C 777 150R KT	150	1650	780	615	445	220
Z1163322777	CAH 165 C 777 220R KT	220	1500	775	610	440	220

Product highlights

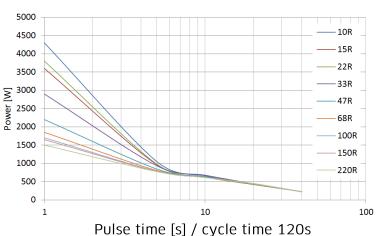
- Nominal power rating 75W @ 40°C ambient natural air cooling
- Cable connections 300mm AWG 16 (1.3mm²)
- High pulse load capability
- High IP class (IP54)
- Fully insulated

- 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	270°C @ nominal power. No heatsink is required. When heatsink 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. IEC: 690VAC / 1100VDC				
Time constant for heating up		1000 s				
Switch temperature		180°C				
Rating		2.5A / 250VAC Normally Closed				
Minimum current / voltage	Thermal	10mA / 2V				
Rated current / voltage	switch	2.5A @ 250 VAC cos φ=1				
Dielectric voltage		2000VAC (3500VAC between TS and R)				

