

Power Resistor

PWR-R



Features

- high adiabatic impulses
- compact construction
- high protection class

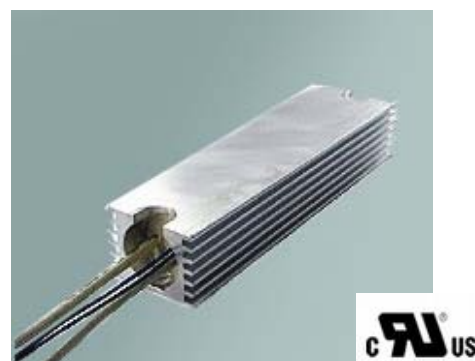
Applications

- brake resistor
- capacity discharge
- heating resistor
- snubber resistor

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Power Resistor

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technology matters

Electrical characteristics	R 150	R 200	R 300	
Nominal load @ 25°C	150 W	200 W	300 W	(1)
Load (without cooling)	45 W	60 W	70 W	
Load (ED 30 % without cooling)	120 W	160 W	240 W	
Resistance range	2 - 270 Ω	3 - 330 Ω	4 - 560 Ω	(2)
Resistance range UL	1,3 - 180 Ω	1,8 - 240 Ω	3,6 - 120 Ω	
Resistance tolerance	± 10 % (J = 5 %)			(2)
Max. Working voltage	1000 V	1000 V	1500 V	
Working voltage	√PR			
Pulse load in 5s	1,5 KW	2,0 KW	3,0 KW	
Inductance	< 0,2 mH at 1 KHz			
Thermal time constant	12 - 16 min.			(3)
Stability	5 %			
Insulation resistance	10G Ω at 500 V _{bc}			
Dielectric withstanding voltage	4000 VAC, 50 Hz, 60 s			
Temperature coefficient	± 150 ppm/°C			

Electrical characteristics	R 400	R 500	R 600	
Nominal load @ 25°C	400 W	500 W	600 W	(1)
Load (without cooling)	80 W	100 W	120 W	
Load (ED 30 % without cooling)	320 W	400 W	480 W	
Resistance range	5,6 - 820 Ω	6 - 1000 Ω	8 - 1600 Ω	(2)
Resistance range UL	5,6 - 620 Ω	7,5 - 470 Ω		
Resistance tolerance	± 10% (J = 5 %)			(2)
Max. Working voltage	2000 V	2300 V	2800 V	
Working voltage	√PR			
Pulse load in 5s	4 KW	5 KW	6 KW	
Inductance	< 0,2 mH at 1 KHz			
Thermal time constant	12 - 16 min.			(3)
Stability	5 %			
Insulation resistance	10G Ω at 500 V _{DC}			
Dielectric withstanding voltage	4000 VAC, 50 Hz, 60 s			
Temperature coefficient	± 150 ppm/°C			

Specifications subject to change without notice

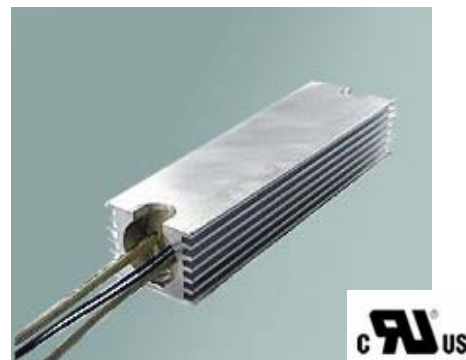
(1) surface temperature 250°C at heatsink surface 250 cm²

(2) other values on request

(3) thermal time constant to reach operating temperature at nominal load

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Mechanical characteristics	R 150	R 200	R 300	R 400	R 500	R 600
Weight	180 g	208 g	310 g	400 g	515 g	635 g
Protection class	IP55					

Environmental characteristics

Storage temperature	- 10°C ÷ + 50°C
Operating temperature	- 50°C ÷ + 200°C
Climatic class	50/200/56

Material

Housing	aluminium
Cable standard	UL SIFGL single core AWG16 style 3071, 200°C 600 V (1)
Cable optional	UL PTFE single core AWG16 style 1199, 200°C 600 V
Cable optional	UL FEP single core AWG16 style 10203, 200°C 1000 V
Cable length standard	300 mm (2)
Temperature switch	Microtherm T 11-A-180-10-L340-300-U116-P110

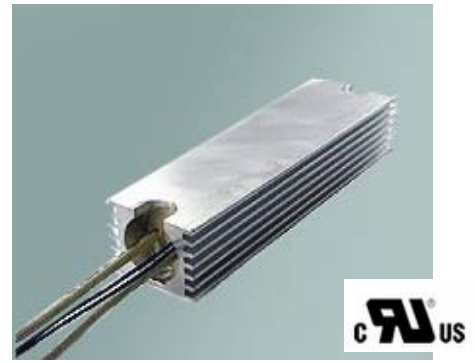
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(1) other values on request

(2) other length on request

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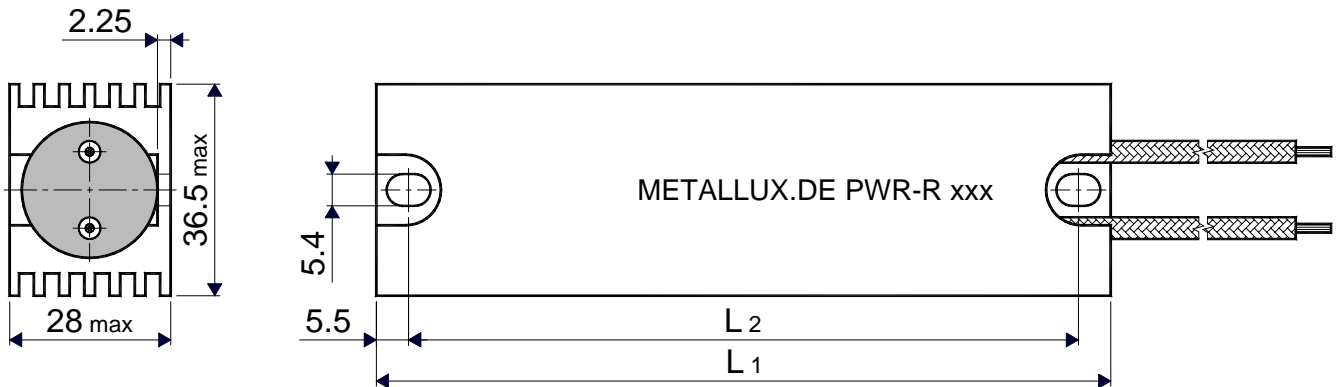
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Drawing



Drawing	R 150	R 200	R 300	R 400	R 500	R 600
Length L1	90 mm	105 mm	155 mm	200 mm	260 mm	320 mm
Centre distance L2	79 mm	94 mm	144 mm	189 mm	249 mm	309 mm

How to order

Type	Design	Temperature switch (option)	Power	Resistance value	Resistance tolerance	Cable type and length, if different to the standard
PWR	R	T	200	100 Ω	10 %	300 mm Cable

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