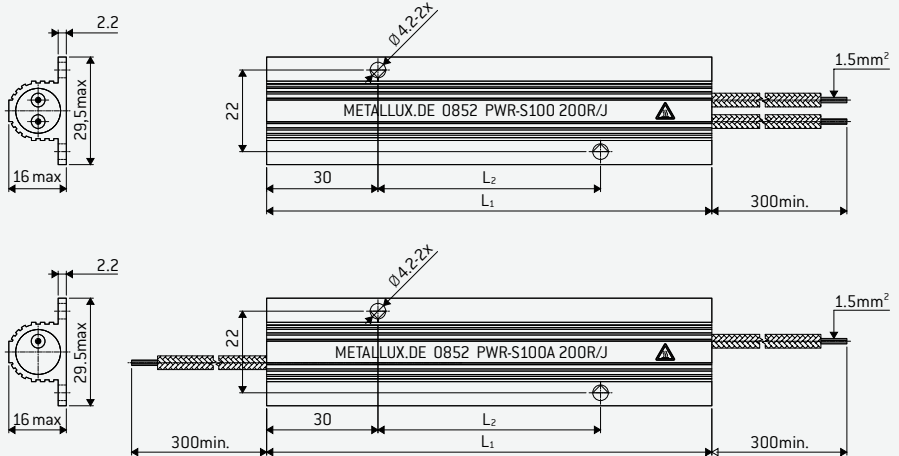


# PWR-S WIRE POWER RESISTOR IN ALUMINIUM CASING



Wire resistors in aluminium profile combine the high pulse load capacity of conventional resistor materials with optimised thermal conduction and a high degree of protection. Assembly on a surface with good thermal conduction properties improves the heat dissipation additionally and leads to an increased load capacity. The series PWR-S satisfies the requirements of UL508 and is particularly suitable for applications as brake resistor, charging and discharging resistor, or also as heating resistor.



## TYPE SELECTION AND DIMENSIONS

Type	Without cooling		With cooling	Resistance values	Max. voltage	L <sub>1</sub>	L <sub>2</sub>	L <sub>3</sub>	/g/
	P <sub>NDC=30%</sub> /W/	P <sub>NDC=100%</sub> /W/	P <sub>N</sub> at 25°C						
PWR-S30	20	10	30W	0R8 – 51R	300V $\cong$	(40)	(30)	(5)	25
PWR-S45	30	15	45W	0R9 – 56R	400V $\cong$	55	25	15	35
PWR-S60	40	20	60W	1R5 – 110R	600V $\cong$	77	47	15	52
PWR-S90	60	30	90W	2R2 – 160R	700V $\cong$	104	64	20	73

## SAMPLE ORDER

PWR-S30 35 R/J 150 mm connection lines

**Inductance** < 0.2 mH at 1 KHz

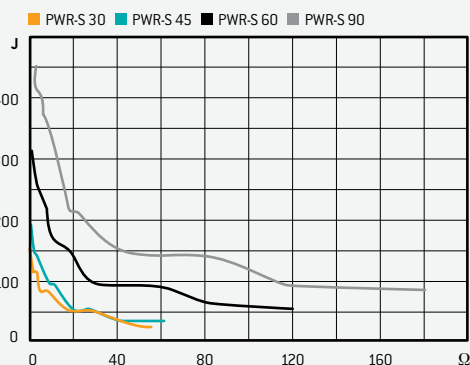
**Time constant** 6.6 to 7.1 min.

**Degree of protection** IP 55 (opt. IP 65)

**Storage temperature** 10°C to +50°C

The duty cycle DC in percent is based on a cycle time of 120 sec.

## PULSE ENERGY



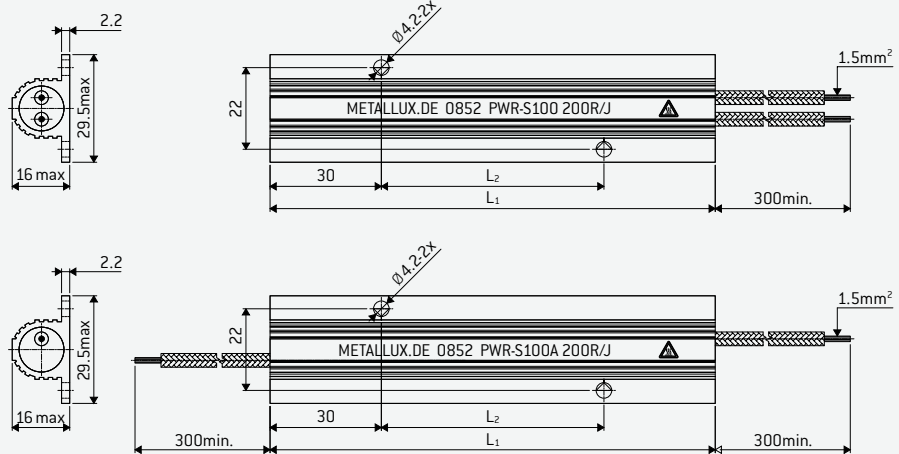
## PARAMETER

<b>Max. surface temperature</b>	250°C
<b>Tolerance</b>	± 5%
<b>Temperature coefficient TC</b>	≤ ± 150 ppm/K
<b>Stability at P<sub>nominal</sub> @ 25°C, 1000 h</b>	± 5%
<b>Max. overload capacity</b>	10 x P <sub>NDC=100%</sub> , 5 sec
<b>Insulation resistance at 500VDC</b>	≥ 10 GΩ
<b>Test voltage</b>	4000 V $\cong$
<b>Connection lines</b>	UL SIFGL wire line AWG16 style 3071, 200°C, 600V UL PTFE wire line AWG16 style 1199, 200°, 600V UL FEP wire line AWG16 style 10203, 200°C, 600V

# PWR-S WIRE POWER RESISTOR IN ALUMINIUM CASING (2)



Wire resistors in aluminium profile combine the high pulse load capacity of conventional resistor materials with optimised thermal conduction and a high degree of protection. Assembly on a surface with good thermal conduction properties improves the heat dissipation additionally and leads to an increased load capacity. The series PWR-S satisfies the requirements of UL508 and is particularly suitable for applications as brake resistor, charging and discharging resistor, or also as heating resistor.



## TYPE SELECTION AND DIMENSIONS

Type	Without cooling		With cooling	Resistance values	Max. voltage	L <sub>1</sub>	L <sub>2</sub>	/g/
	P <sub>NDC</sub> =30% /W/	P <sub>NDC</sub> =100% /W/	P <sub>N</sub> at 25°C					
PWR-S100	70	30	100 W	2R4 – 180R	700 V $\cong$	120	60	86
PWR-S100A	70	30	100 W	2R0 – 130R	700 V $\cong$	120	60	86
PWR-S125	85	40	125 W	3R9 – 300R	800 V $\cong$	165	105	115
PWR-S125A	85	40	125 W	3R0 – 220R	800 V $\cong$	165	105	115
PWR-S150	100	45	150 W	4R3 – 300R	1000 V $\cong$	180	120	120
PWR-S150A	100	45	150 W	3R3 – 240R	1000 V $\cong$	180	120	120

## SAMPLE ORDER

PWR-S125 50 R/J 300 mm connection lines

**Inductance** < 0.2 mH at 1 KHz

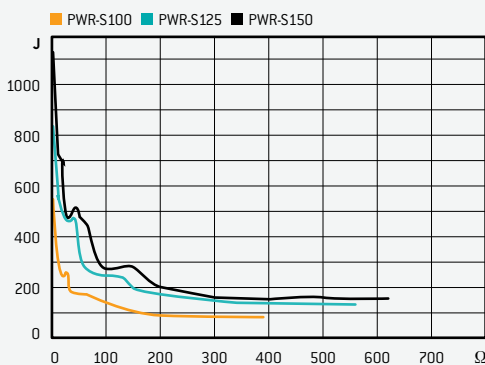
**Time constant** 6.6 to 7.1 min.

**Degree of protection** IP55 (opt. IP65)

**Storage temperature** -10°C at +50°C

The duty cycle DC in percent is based on a cycle time of 120 sec.

## PULSE ENERGY



## PARAMETER

<b>Max. surface temperature</b>	250°C
<b>Tolerance</b>	± 5% (J); ± 10% (K)
<b>Temperature coefficient TC</b>	≤ ± 150 ppm/K
<b>Stability at P<sub>nominal</sub> @ 25°C, 1000 h</b>	± 5%
<b>Max. overload capacity</b>	10 x P <sub>NDC</sub> =100%, 5 sec
<b>Insulation resistance at 500VDC</b>	≥ 10 GΩ
<b>Test voltage</b>	4000 V $\cong$
<b>Connection lines</b>	UL SIFGL wire line AWG16 style 3071, 200°C, 600V UL PTFE wire line AWG16 style 1199, 200°, 600V UL FEP wire line AWG16 style 10203, 200°C, 600V