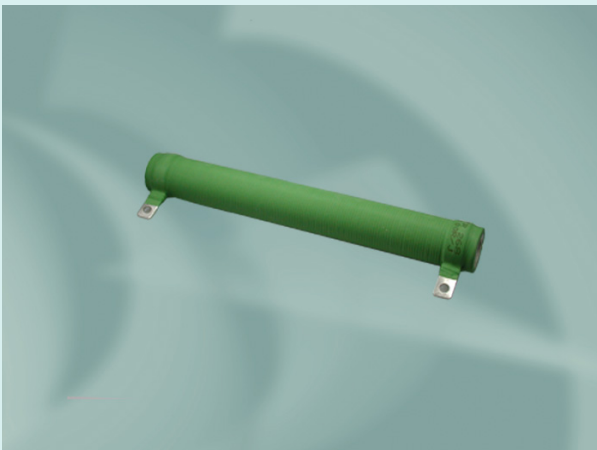


Power Resistor

PWR-TR 3xx

cemented wire wound tube resistor



Features

- nominal power 75W to 1300W
- high load density
- robust construction
- optional self locking
- adjustable

Applikations

- braking resistor
- discharging resistor
- protectiv resistor
- snubber resistor

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Power Resistor

PWR-TR 3xx

cemented wire wound tube resistor



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technology matters

Electrical characteristics	TR 301	TR 302	TR 303	TR 304	
Nominal load @ 25°C	75 W	100 W	150 W	200 W	(1)
Resistance range	0,4 Ω - 47 KΩ	0,6 Ω - 82 KΩ	0,9 Ω - 110 KΩ	1,2 Ω - 120 KΩ	(2)
Resistance tolerance	± 10 % (J = 5 %)				
Working voltage	√PR				
Insulation testing voltage	1200 VAC	1500 VAC	2000 VAC	2500 VAC	
Inductance	< 0,5 mH at 1 KHz				
Stability @25°C, P _n , 1000 h	5 %				
Temperature coefficient	± 150 ppm/°C				

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Electrical characteristics	TR 305	TR 306	TR 307	TR 308	
Nominal load @ 25°C	200 W	300 W	400 W	500 W	(1)
Resistance range	0,7 Ω - 82 KΩ	1,0 Ω - 120 KΩ	1,5 Ω - 160 KΩ	2,6 Ω - 200 KΩ	(2)
Resistance tolerance	± 10% (J = 5 %)				
Working voltage	√PR				
Insulation testing voltage	2000 VAC	2500 VAC	2750 VAC	3000 VAC	
Inductance	< 0,5 mH at 1 KHz				
Stability @ 25°C, P _n , 1000 h	5 %				
Temperature coefficient	± 150 ppm/°C				

Options

PWR-TRR	Typ with setting cap, resistance value is adjustable
PWR-TRS	Typ with thermal clamp fuse, rating of request

Specifications subject to change without notice

- (1) surface temperature 300°C at nominal power
(2) other values on request

Power Resistor

PWR-TR 3xx

cemented wire wound tube resistor



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technology matters

Electrical characteristics	TR 309	TR 310	TR 320	
Nominal load @ 25°C	750 W	1000 W	1300 W	(1)
Resistance range	3,6 Ω - 130 KΩ	4,7 Ω - 180 KΩ	6,2 Ω - 180 KΩ	(2)
Resistance tolerance	± 10 % (J = 5 %)			
Working voltage	\sqrt{PR}			
Insulation testing voltage	4000 VAC	4500 VAC	4500 VAC	
Inductance	< 0,5 mH at 1 KHz			
Stability @25°C, P _n , 1000 h	5 %			
Temperature coefficient	± 150 ppm/°C			

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Options

PWR-TRR	Typ with setting cap, resistance value is adjustable
PWR-TRS	Typ with thermal clamp fuse, rating of request

Specifications subject to change without notice

- (1) surface temperature 300°C at nominal power
(2) other values on request

Power Resistor

PWR-TR 3xx

cemented wire wound tube resistor



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technology matters

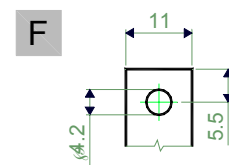
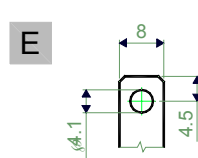
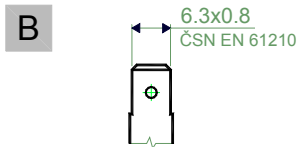
Mechanical datas	TR 301	TR 302	TR 303	TR 304	TR 305	TR 306
Weight	130 g	180 g	270 g	400 g	300 g	400 g
Protection class	IP 00					

Environmental datas

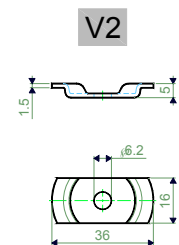
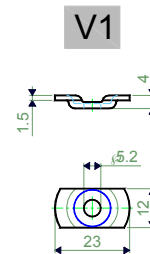
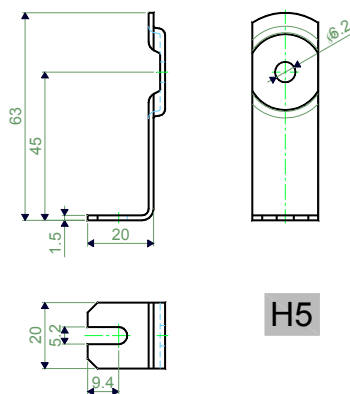
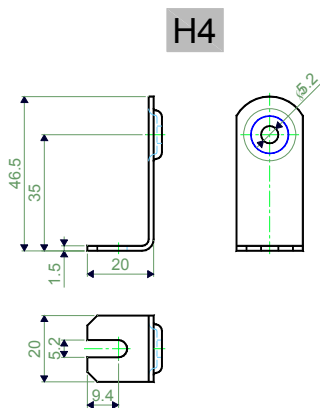
Storage temperature	- 10°C ÷ + 50°C
Operating temperature	- 50°C ÷ + 350°C
Climatic class	50/200/56

Material

Leads for TR	B, E	B, E	B, E	B, E	F	F	(1)
Leads for setting cap TRR	E	E	E	E	F	F	
Leads for TRS	B	B	B	B	B	B	



Mounting accessories	V1, H4	V1, H4	V1, H4	V1, H4	V2, H5	V2, H5	(2)
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Specifications subject to change without notice

(1) other leads on request

(2) other mounting accessories on request

Power Resistor

PWR-TR 3xx

cemented wire wound tube resistor



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technology matters

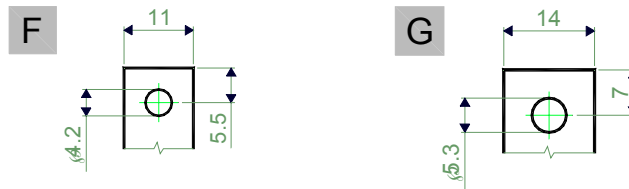
Mechanical datas	TR 307	TR 308	TR 309	TR 310	TR 320
Weight	550 g	700 g	2200 g	2800 g	3500 g
Protection class	IP 00				

Environmental datas

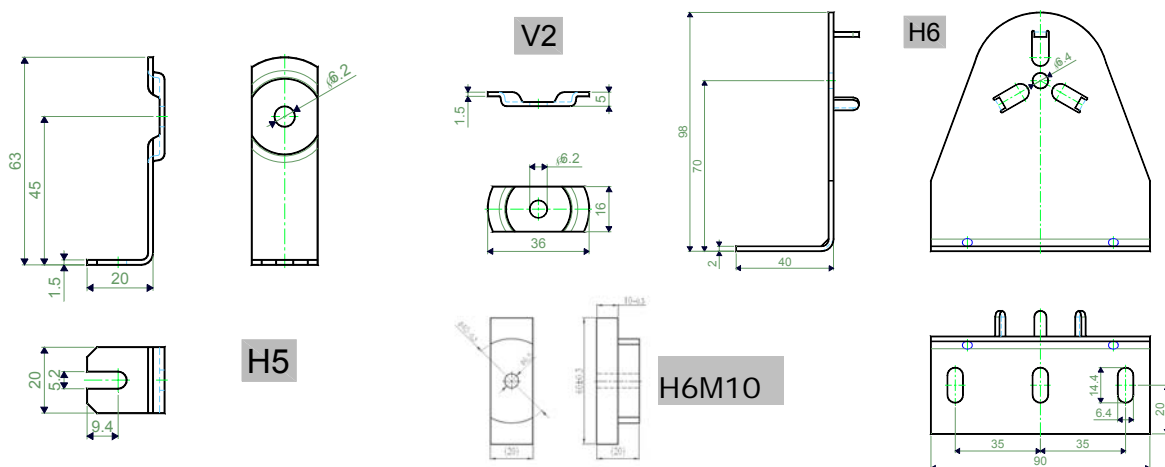
Storage temperature	- 10°C ÷ + 50°C
Operating temperature	- 50°C ÷ + 350°C
Climatic class	50/200/56

Material

Leads for TR	F	F	G	G	G	(1)
Leads for setting cap TRR	F	F	G	G	G	



Mounting accessories	V2, H5	V2, H5	H6, H6M10	H6, H6M10	H6, H6M10	(2)
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Specifications subject to change without notice

(1) other leads on request

(2) other mounting accessories on request

Power Resistor

PWR-TR 3xx

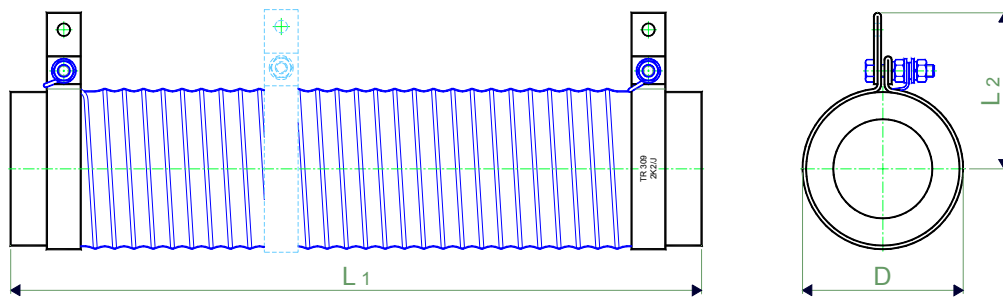
cemented wire wound tube resistor



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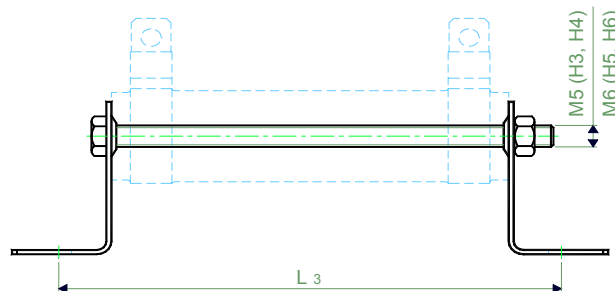
technology matters

Drawing



Dimension	TR 301	TR 302	TR 303	TR 304	TR 305	TR 306
Length L ₁	100 mm±1,8	135 mm±2,5	200 mm±3,8	275 mm±4,6	130 mm±3,0	182 mm±3,4
Diameter D	35 mm	35 mm	35 mm	35 mm	47 mm	47 mm
Dimension L ₂	40 mm	40 mm	40 mm	40 mm	50 mm	50 mm
Dimension L ₃	124 mm±1	160 mm±1	226 mm±1	302 mm±1	155 mm±1	208 mm±1

Dimension	TR 307	TR 308	TR 309	TR 310	TR 320
Length L ₁	250 mm±4,2	310 mm±5,0	390 mm±5,5	515 mm±6,8	660 mm±6,8
Diameter D	47 mm	47 mm	68 mm	68 mm	68 mm
Dimension L ₂	50 mm	50 mm	68 mm	68 mm	68 mm
Dimension L ₃	277 mm±1	337 mm±1	430 mm±1	555 mm±1	700 mm±1



How to order

Typ	Design	Setting cap / clamp fuse (Option)	Power typ	Resistance value	Resistance tolerance	Leads	Holder
PWR	TR	R / S	307	100 Ω	10 %	F	V2