N. 571020

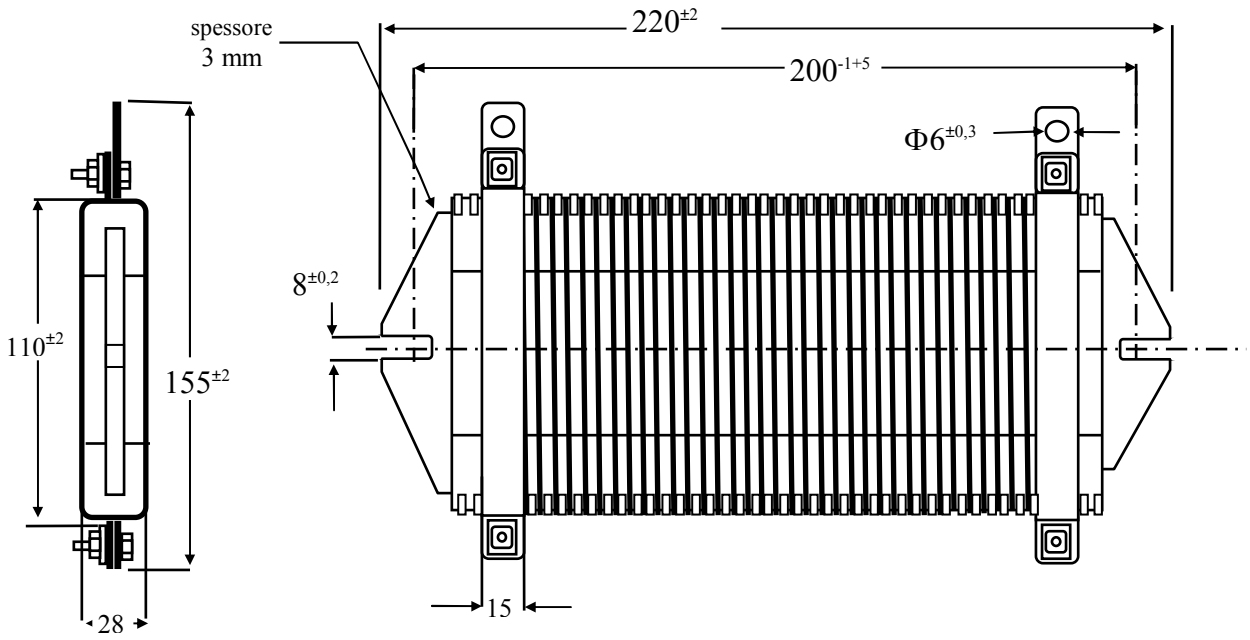
foglio 1 di 1

SPECIFICA MATERIALE

Approval Walter Cerutti
Verified Mauro Pellegatta
Revision 2 **22/10/04**
Emission DT **28.3.1997**

RESISTORE DI POTENZA AVVOLTO SU TELAIO METALLICO Mod. RDP600

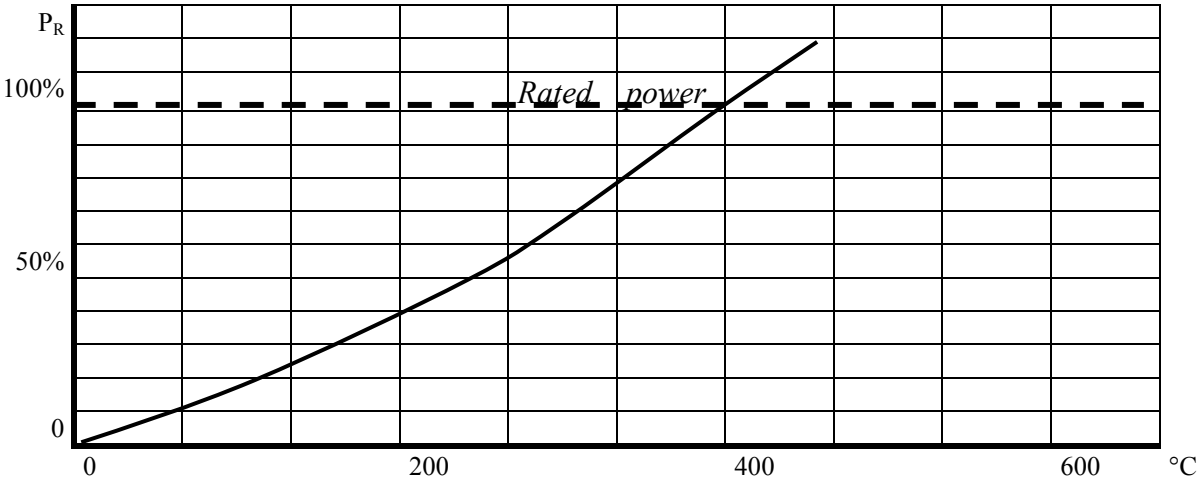
POWER RESISTOR WOUND ON METALLIC FRAME Mod. RDP600



1. Potenza nomin. a 25°C (P_R)	*600 W*	*Rated power @ 25°C(P_R)*
2. Temperatura superficiale @ P_R	*375°C*	*Surface temperature @ P_R*
3. Gamma dei valori resistivi	0,22÷24 Ω	*Resistance range*
4. Tolleranza	*±5% 10%*	*Resistance tolerance*
5. Temperatura superficiale ammessa	*450°C*	*Surface temperature limit*
6. Tensione Limite (impulsiva)	*1.500 V*	*Limiting element voltage (impulse)*
7. Sovraccarico	*6 kW x 5 sec*	*Overload*
8. Coefficiente di temperatura	*150 ppm/°C*	*Temperature coefficient*

9. Incremento della temperatura superficiale in funzione del carico

Surface temperature rise related to power dissipation.



S.I.R. Società Italiana Resistor
I 21053 Castellanza - Via Isonzo 13
Tel.0331.504.828 - Fax 0331.504.565

N. 571096

foglio 1 di 1

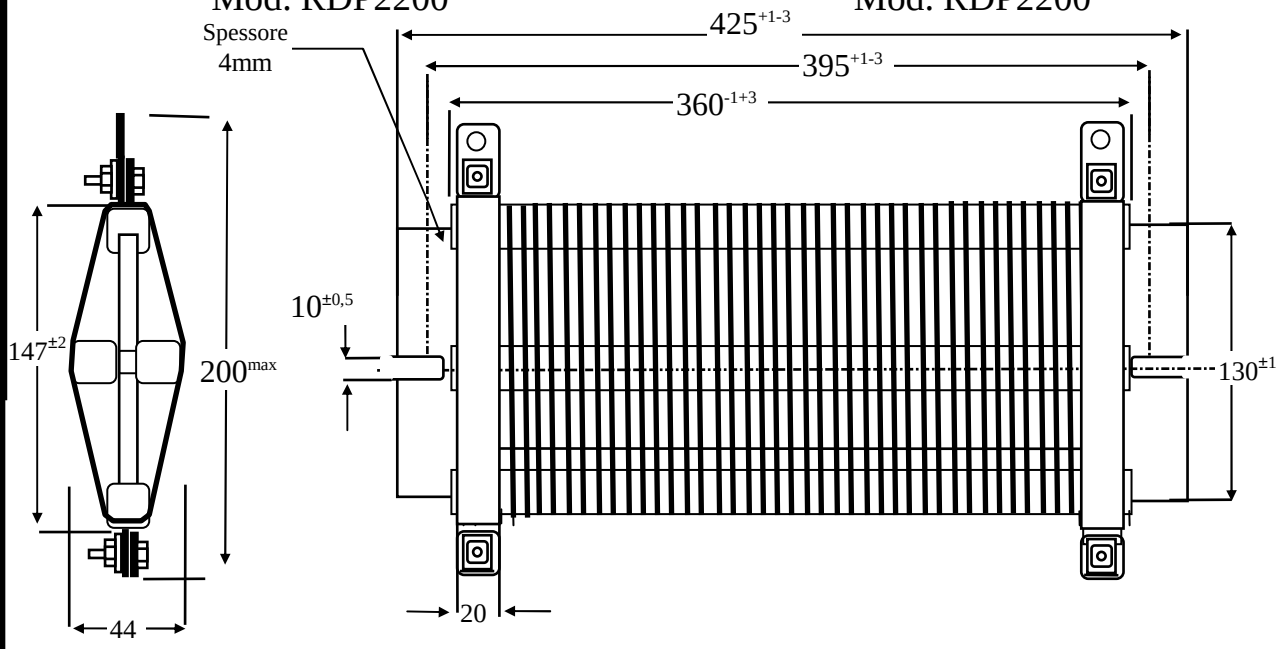
FOGLIO DATI
DATA SHEET

Approvaz. Walter Cerutti
Verifica Mauro Pellegatta

Revisione1 14/02/05
Emissione DT 14/02/03

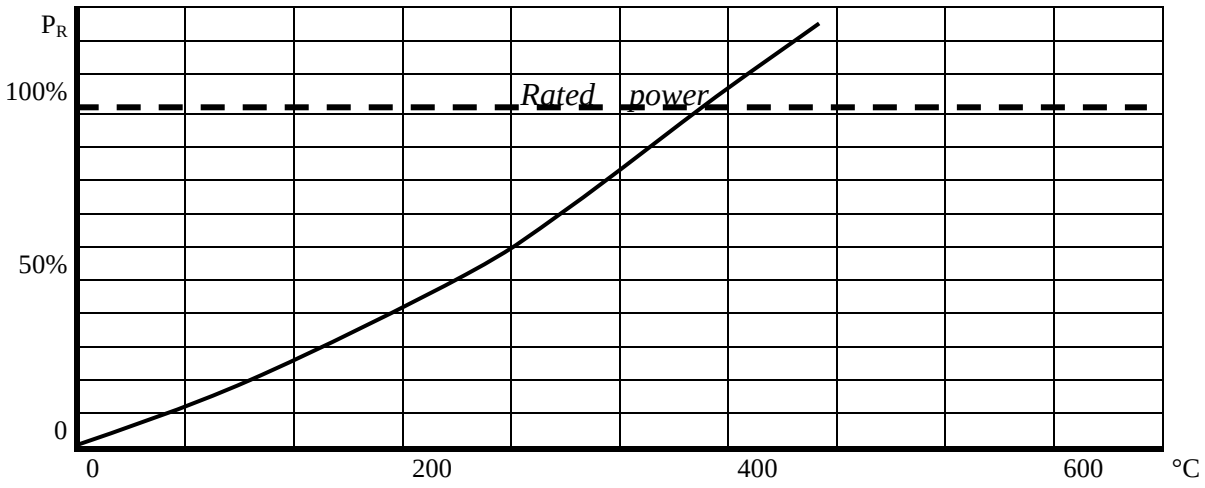
RESISTORE DI POTENZA AVVOLTO SU TELAIO METALLICO
Mod. RDP2200

POWER RESISTOR WOUND ON METALLIC FRAME
Mod. RDP2200

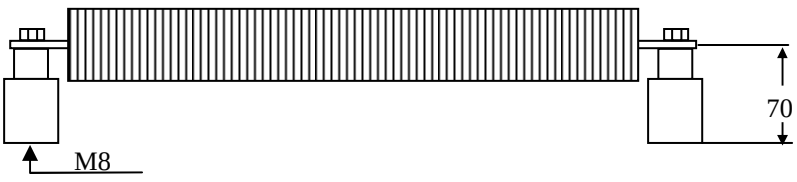


1. Potenza nomin. a 25°C (P_R)	*2500 W*	*Rated power @ 25°C(P_R)*
2. Temperatura superficiale @ P_R	*375°C*	*Surface temperature @ P_R*
3. Gamma dei valori resistivi	0,3÷80	*Resistance range*
4. Tolleranza	*±5%*	*Resistance tolerance*
5. Temperatura superficiale ammessa	*450°C*	*Surface temperature limit*
6. Tensione Limite (impulsiva)	*4.000 V*	*Limiting element voltage (impulse)*
7. Sovraccarico	*25kW x 5 sec*	*Overload*
8. Coefficiente di temperatura	*150 ppm/°C*	*Temperature coefficient*

9. Incremento della temperatura superficiale in funzione del carico — *Surface temperature rise related to power dissipation.*



Insulated Supports



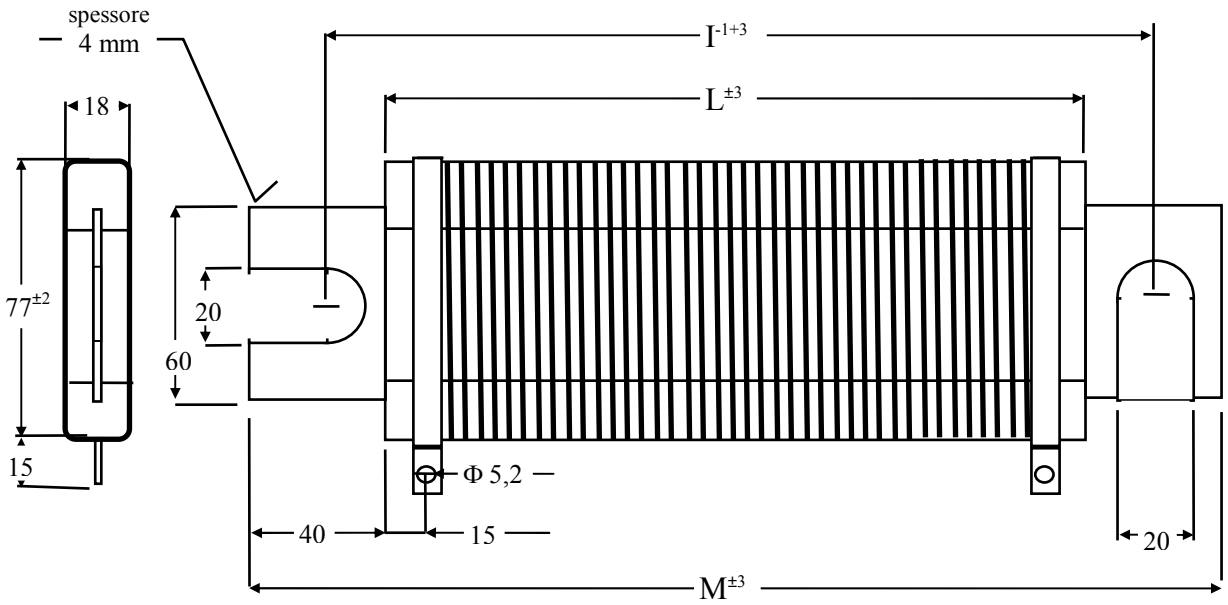
S.I.R. Società Italiana Resistor
I 21053 Castellanza - Via Isonzo 13
Tel.0331.504.828 - Fax 0331.504.565

FOGLIO DATI
DATA SHEET

Approval Walter Cerutti
Verified Mauro Pellegatta

Revision 2 **21.5.1998**
Emission DT **16.01.96**

HIGH POWER WIRE WOUND RESISTORS ON METALLIC BAR
Mod. RDP



1. SPECIFICATION

Dimensions	RDP 70.240	RDP 70.300	RDP 70.360	RDP 70.420	RDP 70.480
I mm	280	340	400	460	520
L mm	240	300	360	420	480
M mm	320	380	440	500	560

The SIR RDP style is a range of high power resistors, designed to obtain very high power resistors groups by stacking many resistor units.

These characteristics make the resistors RDP very valuable for the applications where high reliability is required even in heavy duties as:

- dynamic braking **- snubber resistors** **- inverter**
- capacitor charge limiting **- traction general employment**

The rated power of RDP is especially elevated, and this characteristic is obtained by using special materials able to withstand temperature higher than 600°C, without damage.
The support bar may be supplied in stainless steel, on request.
This Data sheet will provide, with the necessary pieces of information and application notes, for a first definition of a required resistor.

S.I.R. Società Italiana Resistor
I 21053 Castellanza - Via Isonzo 13
Tel.0331.504.828 - Fax 0331.504.565

FOGLIO DATI
DATA SHEET

Approval Walter Cerutti
Verified Mauro Pellegatta

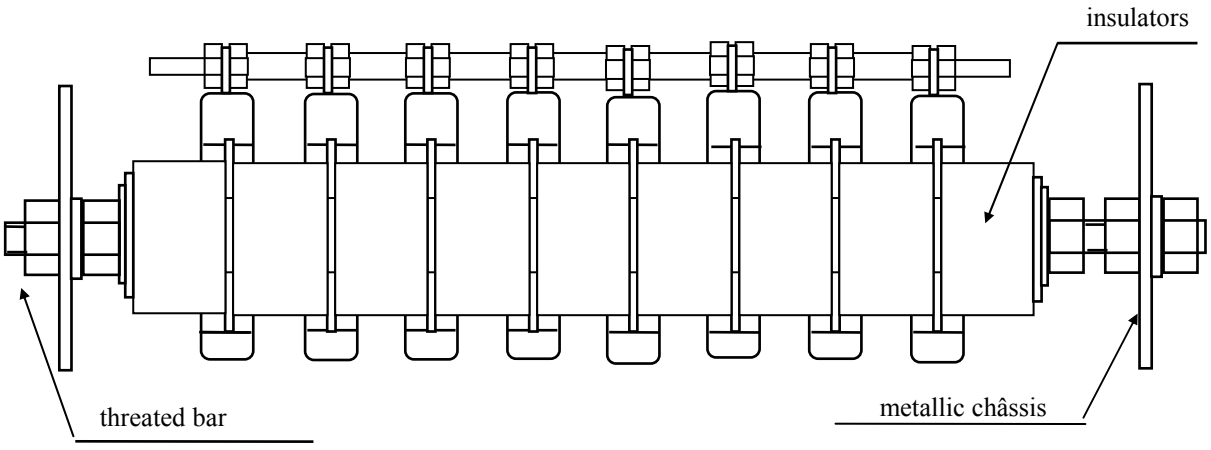
Revision 2 **21.5.1998**
Emission DT **16.01.96**

2. ELECTRICAL SPECIFICATIONS

CHARACTERISTICS	RDP 70.240	RDP 70.300	RDP 70.360	RDP 70.420	RDP 70.480
Power rating (Pn) W	600	750	900	1050	1200
Surface temperature rise @ Pn	365°C	375°C	375°C	380°C	380°C
Max.Power W	700	850	1050	1250	1600
Resistance range Ω	1 ÷30	1 ÷38	1 ÷45	2 ÷54	2 ÷61
Tolerance for Resistance values	±5%				
Inductance @ 1.000 Hz μH (Stainless steel bar execution only)	60÷600	70÷750	80÷900	90÷1000	100÷1200
Limiting element voltage V	3.500				
Insulation resistance @ 1000 V_{DC}	≥10.000 MΩ				
Dielectric strength @ 50Hz per 1'	4.000Vrms.				

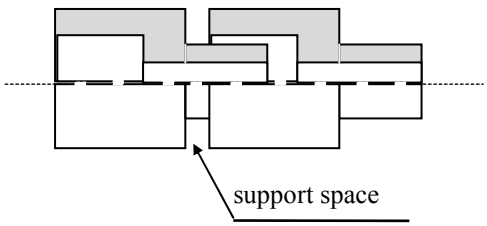
3. STACKING

The following sketch give a idea how to stack some resistors units to achieve a group.

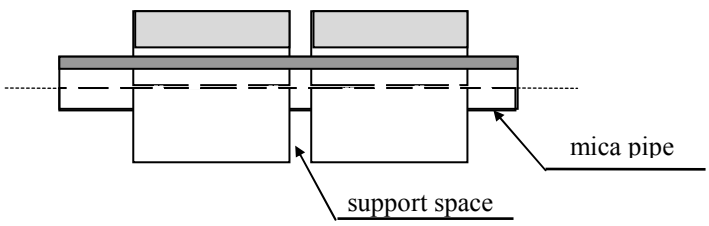


Insulators may be like the following figure.

Dielectric strength 6000V.



Dielectric strength 12000V



S.I.R. Società Italiana Resistor
I 21053 Castellanza - Via Isonzo 13
Tel.0331.504.828 - Fax 0331.504.565

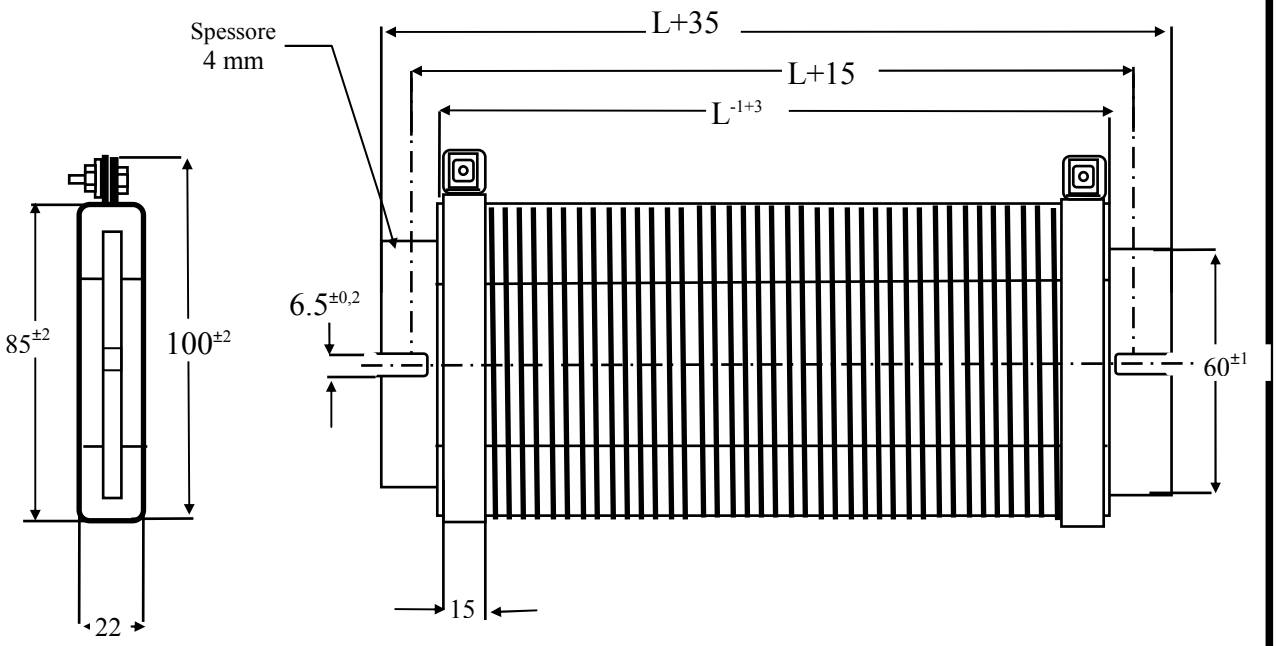
N. 571300

foglio 1 di 1

DATA SHEET
FOGLIO DATI

Approval Walter Cerutti
Verified Mauro Pellegatta
Revision 0 **13/11/00**
Emission DT **13/11/00**

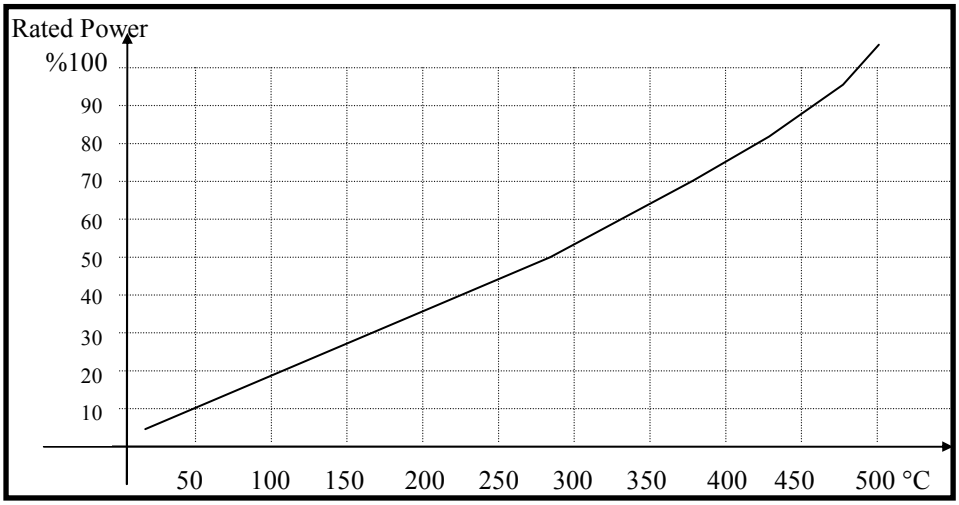
≥ RESISTORE DI POTENZA AVVOLTO SU TELAIO METALLICO
HIGH POWER WIRE WOUND RESISTOR ON METALLIC BAR



1. Caratteristiche elettriche	RDP 800	RDP 1000	RDP 1200	RDP 1400	RDP 1600	RDP 1800	*Electrical Characteristics*
Dimensione "L" mm	240	300	360	420	480	540	***Dimension "L" mm***
1.1.Gamma valori resistivi	0,5Ω 30 Ω	0,6 39Ω	0,75Ω 47Ω	0,9Ω 52 Ω	1,2Ω 60Ω	1,8 68Ω	***Resistance range .***
1.2.Tolleranza	±10% - ±5%						***Tolerance.***
1.3.Coefficiente di temperatura	150 ppm/°C						***Temperature coefficient ..***
1.4.Potenza nominale @ 25°C	800 W	1000 W	1200 W	1400 W	1600 W	1800 W	***Power rating***
1.5.Tensione limite	950V	1050 V	1150 V	1250 V	1350 V	1400 V	***Limiting element voltage***
1.6.Rigidità dielettrica (1'@ 50Hz)	3000 V						***Dielectric strength.***
1.7.Resist. di isolamento	≥1000MΩ						***Isolation resistance.***

2. Aumento della temperatura superficiale in funzione del carico

Surface temperature rise . related to power dissipation .



S.I.R. Società Italiana Resistori
I 21053 Castellanza - Via Isonzo 13
Tel.0331.504.828 - Fax 0331.504.565

N. 571200A

foglio 1 di 1

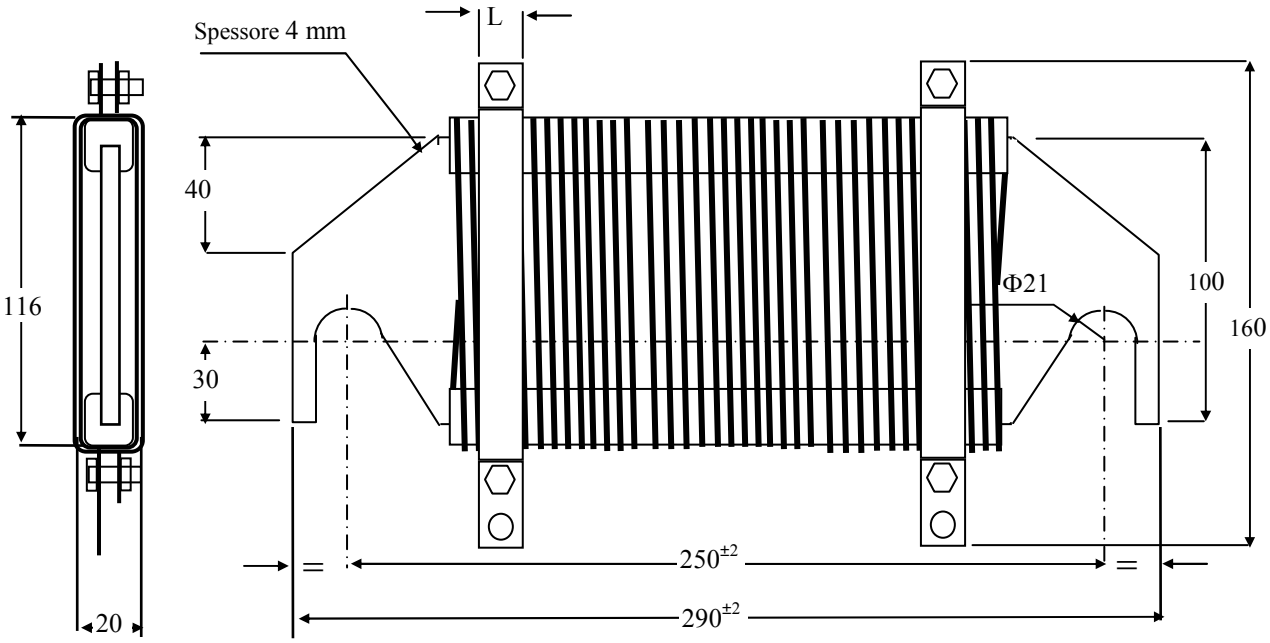
FOGLIO DATI
DATA SHEET

Approvaz. Walter Cerutti
Verifica Mauro Pellegatta

Revisione0 27/09/05
Emissione DT 27/09/03

RESISTORE REGOLABILE AVVOLTO SU TELAIO METALLICO
Mod. RDPR900S

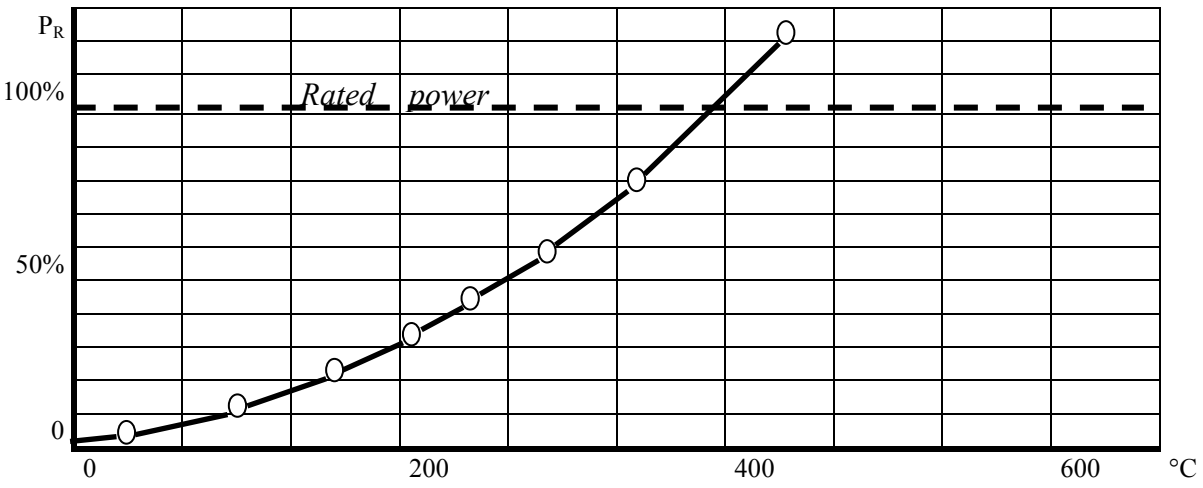
ADJUSTABLE RESISTOR WOUND ON METALLIC FRAME
Mod. RDPR900S



1. Potenza nomin. a 25°C (P_R)	*900 W*	*Rated power @ 25°C(P_R)*
2. Aumento della Temperatura superficiale @ P_R	*375°C*	*Surface temperature rise@ P_R*
3. Gamma dei valori resistivi	0,2÷100 Ω	*Resistance range*
4. Tolleranza	*±5%*	*Resistance tolerance*
5. Temperatura superficiale ammessa	*450°C*	*Surface temperature limit*
6. Tensione Limite	*1.500 V*	*Limiting element voltage*
7. Sovraccarico	*50 kW x 5 sec*	*Overload*
8. Coefficiente di temperatura	*150 ppm/°C*	*Temperature coefficient*

9. Incremento della temperatura superficiale in funzione del carico

Surface temperature rise related to power dissipation.



S.I.R. Società Italiana Resistor
I 21053 Castellanza - Via Isonzo 13
Tel.0331.504.828 - Fax 0331.504.565