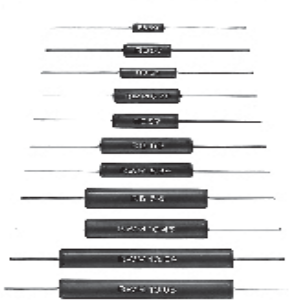
Enamelled Wirewound Power Resistors
Axial Leads



As a result of more than 50 years of experience and continuous improvements the RWM Series of resistors features proven reliability in AC or DC applications.

The high quality of the RWM resides mainly in the use of a proprietary VISHAY SFERNICE enamel fired at high temperature and free from any compound liable to corrode the resistive wire.

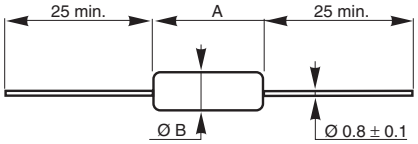
FEATURES

- High dissipation
- High reliability level
  - – Fire Proof
  - – Great Mechanical Strength
  - – Excellent Endurance
  - – Good Environmental Protection
  - – Conformal Vitreous Enamel
  - – All Welded Construction
- Low ohmic values

The performance of this series of professional resistors fully meets the requirements of the following specifications:

- – NF C 83-210-001
- – CECC 40201-001
- – BS - CECC 40201-002

DIMENSIONS in millimeters



TECHNICAL SPECIFICATIONS

VISHAY SFERNICE STYLES	DESIGNATIONS		POWER RATING			Ohmic Range in Relation to Tolerance ± 5 % E24 Series	Qualified Ohmic Range NF C 83-210	Limiting Element Voltage	Critical Resistance	DIMENSIONS IN MM		Weight in g
	CECC 40201 -001 NFC 83-210 -001	BS CECC 40201 -002	at + 70 °C	at + 25 °C	With Surface Temp. ≤ + 450 °C					A	Ø B	
RWM 4 x 10	RB59	JB	2.6 W	3 W	5.5 W	0.1 Ω 10 kΩ	0.1 Ω 10 kΩ	120 V	4.8 kΩ	12 ± 1	5.5 ± 1	1
RWM 4 x 22	RB61	HB	4.5 W	5 W	7 W	0.1 Ω 16 kΩ	0.1 Ω 6.8 kΩ	300 V	–	22.1 ± 1	5.5 ± 1	2
RWM 5 x 26	RB57	–	6 W	7 W	10 W	0.1 Ω 27 kΩ	0.15 Ω 10 kΩ	350 V	18.8 kΩ	24.7 ± 1	7.4 ± 1.5	3
RWM 6 x 22	RB57	KB	6 W	7 W	10 W	0.1 Ω 39 kΩ	0.15 Ω 39 kΩ	350 V	17.5 kΩ	18 ± 1	6.5 ± 1	2.2
RWM 8 x 26	RB60	–	7 W	8 W	10 W	0.1 Ω 27 kΩ	–	500 V	–	24.7 ± 1	7.4 ± 1.5	3
RWM 6 x 34	RB60	–	7 W	8 W	12 W	0.33 Ω 36 kΩ	0.33 Ω 15 kΩ	500 V	31 kΩ	33.7 ± 1	7.4 ± 1.5	4
RWM 8 x 34	RB58	–	9.5 W	11 W	14 W	0.33 Ω 36 kΩ	–	650 V	–	33.7 ± 1	7.4 ± 1.5	4
RWM 8 x 45	RB58	–	9.5 W	11 W	20 W	0.47 Ω 62 kΩ	0.47 Ω 33 kΩ	650 V	38 kΩ	45.8 ± 2	9.4 ± 1.5	8
RWM 10 x 45	–	–	21 W	25 W	25 W	0.47 Ω 62 kΩ	–	800 V	25.6 kΩ	45.8 ± 2	9.4 ± 1.5	8
RWM 10 x 64	–	–	21 W	25 W	25 W	0.68 Ω 100 kΩ	–	800 V	25.6 kΩ	63.8 ± 1	9.4 ± 1.5	14
RWM 10 x 65	–	–	25.8 W	30 W	30 W	0.68 Ω 100 kΩ	–	800 V	21.3 kΩ	63.8 ± 1	9.4 ± 1.5	14

Undergoes European Quality Insurance System (CECC)

For technical questions, contact sfer@vishay.com

PERFORMANCE

CECC 40201			TYPICAL DRIFTS
TESTS	**CONDITIONS**	**REQUIREMENTS**	
Short Time Overload	10 Pr during 10 s. 25 °C ambient	± (2 % + 0.1 Ω)	± (0.5% + 0.05 Ω)
Temperature Cycling	– 55 °C + 200 °C	± (1 % + 0.05 Ω)	± (0.5 % + 0.05 Ω)
Humidity (Steady State)	56 days 40 °C Ambient - R.H. 95 %	± (5 % + 0.1 Ω)	± (0.5 % + 0.05 Ω)
Terminal Strength	Tensile test: 20 N 2 successive bending 2 full rotations of 180°	± (1 % + 0.05 Ω)	± (0.1 % + 0.05 Ω)
Load Life	1000 h at Pr 90/30 Cycle 25 °C ambient	± (5 % + 0.1 Ω)	± (1.5 % + 0.05 Ω)

OVERLOAD

Heavy overloads can be endured in the form of short pulses < 0.1 s. Particular requirements should be submitted to Vishay Sfernice, specifying peak voltage, cycle and environmental conditions.

RECOMMENDATIONS FOR USE

Since these components are high dissipation power resistors, customers are advised to use a high melting point solder.

For low ohmic values, the measurement becomes critical and the connecting wires resistance is to be included. The value is measured at 5mm from the resistor body.

Group Mounting

In a still atmosphere, a distance between axes equal to five times the resistor's diameter is recommended.

Cabinet Mounting

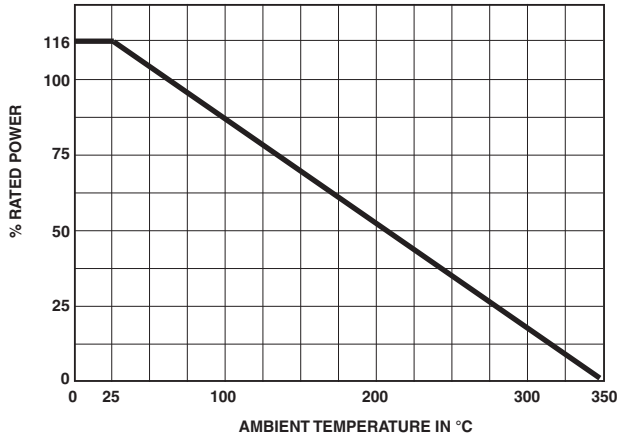
- Unventilated box: dissipation should be reduced (see dimensional drawing).
- Forced ventilation: if conditions are appropriate, dissipation may be doubled or even trebled.
- In any case: the surface temperature at the hottest point should not exceed 450 °C.

These aspects should be considered by the end user.

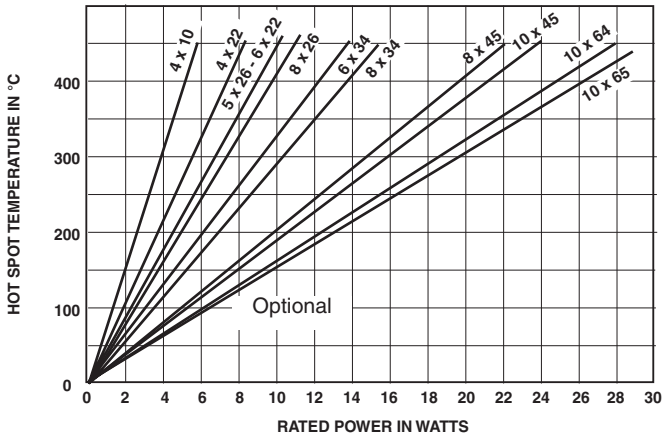
ELECTRICAL SPECIFICATIONS

Tolerance	**Standard**	± 5 %
	On request	± 1 % to ± 10 %
Temperature Coefficient	+ 75 ppm/°C typical	
Dielectric Withstanding Voltage NF EN 140000		500 VRMS - 1 minute - 10 mA
Inductance		non inductive (Ayrton-Perry)winding available

POWER RATING CHART



TYPICAL TEMPERATURE RISE



MARKING

Sfernice trademark, model and style, CECC style, if applicable (except for the smallest model due to lack of space: (4 x 10 or RB 59), ohmic value, resistance tolerance, manufacturing date (year - month).

ORDERING INFORMATION

RWM	**8 x 45**		**XXX**	**1.6 kΩ**	**± 5 %**	
MODEL	STYLE	NI OPTIONAL	SPECIAL DESIGN	OHMIC VALUE	TOLERANCE	PACKAGING
		Non Inductive Winding	Method N° Optional	Custom items are subject to extra charge and min. order. Please see price list.		

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