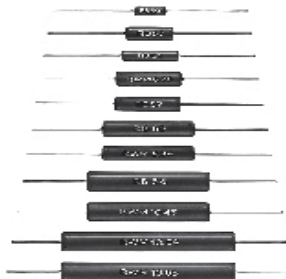


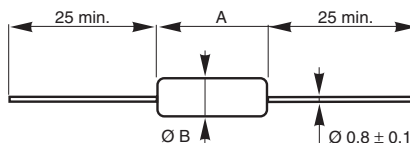
## Enamelled Wirewound Power Resistors Axial Leads



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.

### DIMENSIONS in millimeters



### 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

| 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<br>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<br>10 kΩ  | 0.1 Ω<br>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<br>16 kΩ  | 0.1 Ω<br>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<br>27 kΩ  | 0.15 Ω<br>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<br>39 kΩ  | 0.15 Ω<br>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<br>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<br>36 kΩ                                       | 0.33 Ω<br>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<br>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<br>62 kΩ                                       | 0.47 Ω<br>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<br>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<br>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<br>100 kΩ                                      | –                                 | 800 V                    | 21.3 kΩ             | 63.8 ± 1         | 9.4 ± 1.5 | 14          |

Undergoes European Quality Insurance System (CECC)



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

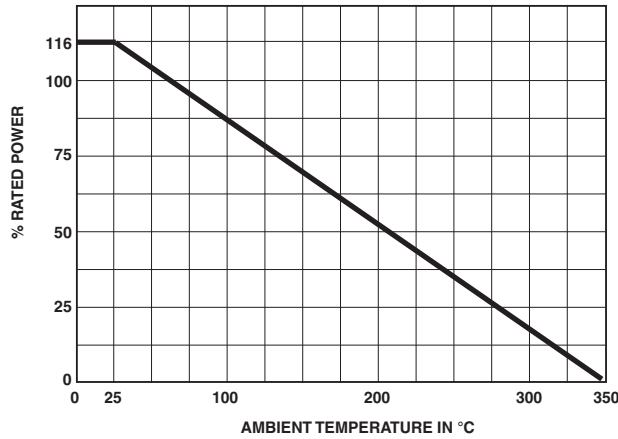
- Unventilated box: dissipation should be reduced (see dimensional drawing).
- Forced ventilation: if conditions are appropriate, dissipation may be doubled or even trebled.
- In any case: the surface temperature at the hottest point should not exceed 450 °C.

These aspects should be considered by the end user.

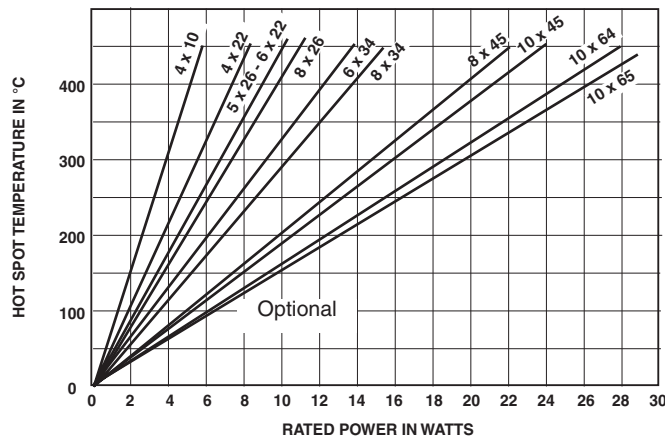
| <b>ELECTRICAL SPECIFICATIONS</b>                    |   |
|---|---|
| <b>Tolerance</b>                                    | Standard ± 5 %                                |
|   | On request ± 1 % to ± 10 %                    |
| Temperature Coefficient                             | + 75 ppm/°C typical                           |
| <b>Dielectric Withstanding Voltage NF EN 140000</b> | 500 VRMS - 1 minute - 10 mA                   |
| <b>Inductance</b>                                   | 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.<br>Please see price list. |           |           |



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