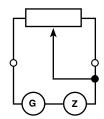
# **Resistive Products**

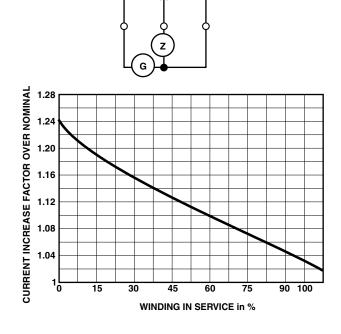
**Application Note** 

# Wirewound Rheostats and Potentiometers Characteristics

#### **RHEOSTAT MODE**



### POTENTIOMETER MODE



# **FEATURES**

- 12 W to 500 W at 25 °C
- CCTU 05-03B



Material categorization:
For definitions of compliance please see <a href="https://www.vishay.com/doc?99912">www.vishay.com/doc?99912</a>

The performance of RT-RTE rheostats exceeds the requirements of specification CCTU 05-03B.

They have been designed for heavy duty applications such as repeated overloads, transients, shock and vibration conditions.

#### **RT VITREOUS SERIES**

Six sizes are available capable of dissipating 12 W, 25 W, 55 W, 100 W, 250 W or 500 W at 25 °C.

The resistive wire is protected by a proprietary Vishay Sfernice enamel fired at high temperature and free from any compound that could cause corrosion of the wire.

The maximum operating temperature of the RT series is  $320~^{\circ}\text{C}$ .

### **GANGED UNITS**

Ganged units are available with different combinations of power and ohmic values (see datasheet).

#### **GRADED WINDINGS**

These are recommended when the ratio is  $\frac{I_{\text{max.}}}{I_{\text{min.}}} > 2$ 

# **MAXIMUM OVERLOAD**

In rheostat use, the winding current decreases in relation to the number of turns being used.

When part of the winding is used the current can be increased in accordance with the graph on the left.

Substantially heavier overloads can be applied in short impulses and we would be pleased to advise on this type of application, on receipt of the following information:

- proposed rheostat usage
- current level
- operating cycles specifying duration of overload "ON", "OFF" periods

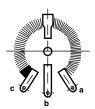
Document Number: 50024



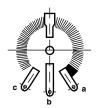
# **Wirewound Rheostats and Potentiometers Characteristics**

# **SPECIAL FEATURES**

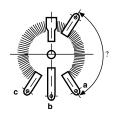
OFF POSITION LEFT Code No.: 213700



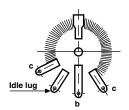
OFF POSITION RIGHT Code No.: 213600



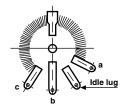
FIXED TAPPINGS, ONE OR MORE Code No.: RTP Not available for RT12 and RT500



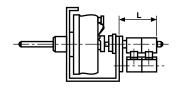
IDLE LUG LEFT Code No.: DB1 Not available for RT12 and RT500



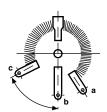
IDLE LUG RIGHT Code No.: DB2 Not available for RT12 and RT500



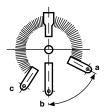
DOUBLE MINI SWITCH Not available for RT12



REDUCED LEFT TRAVEL Not available for RT12 and RT500



REDUCED RIGHT TRAVEL Not available for RT12 and RT500



Other special features are available.

PLICATION NO

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Please consult Vishay Sfernice for all of your rheostat requirements.

 ${\color{orange} \coprod}$  All the positionings are defined when the shaft end is viewed (contrary to the above windings) clockwise detent.

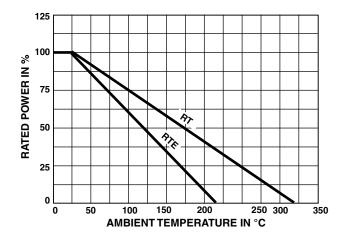
| DIMENSIONS in millimeters              |        |    |  |  |  |
|--|--------|----|--|--|--|
| DOUBLE MINI SWITCH FOR SERIES AND SIZE | CODE   | L  |  |  |  |
| RT25                                   | 219410 | 29 |  |  |  |
| RT55                                   | 219430 | 33 |  |  |  |
| RT100                                  | 219450 | 33 |  |  |  |
| RT230                                  | 219470 | 35 |  |  |  |
| RT500                                  | 219480 | 35 |  |  |  |
|  |        |    |  |  |  |

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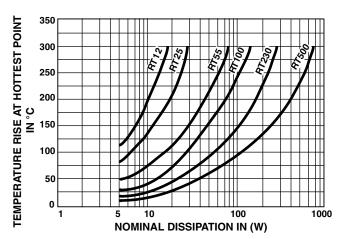


# **Wirewound Rheostats and Potentiometers Characteristics**

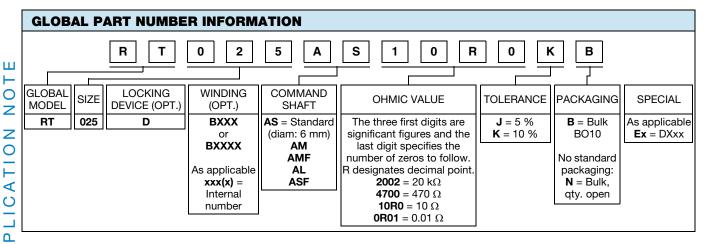
# **POWER RATING**



# **TEMPERATURE RISE**



| ORDERING INFORMATION |       |         |             |           |           |                |  |  |
|----------------------|-------|---------|-------------|-----------|-----------|----------------|--|--|
| RT                   | 025   | ASF     | 2201        | K         | В         | XXX            |  |  |
| MODEL                | STYLE | SPINDLE | OHMIC VALUE | TOLERANCE | PACKAGING | SPECIAL DESIGN |  |  |



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