

Corrib® resistors are ideal for applications involving high currents at very low resistance values—as low as 0.1Ω for the 300 Watt unit. These large, heavy-duty resistors are designed to withstand frequent start-stop cycles characteristic of motor starting, dynamic braking and other similar applications. Special order units are available to accommodate up to 1500 watts.

Corrifs® are manufactured with corrugated resistive wire. To accelerate cooling, the wire is securely fused to the ceramic core by the protective vitreous enamel coating to improve durability. Corrib resistors are hollow-core units which can be securely fastened to chassis surfaces with thru bolts and brackets.

## FEATURES

- Also available in low cost Centohm or Silicone coating. Consult Ohmite.
- Ribbed construction aids in rapid cooling.
- Designed for equipment requiring low resistance loads at low ohmic values and high current capacity.
- Especially constructed for motor starting, dynamic braking, etc.
- RoHS compliant product available. Add "E" suffix to part number to specify.

## SPECIFICATIONS

### Material

**Coating:** Lead free vitreous enamel except for extreme low resistance 35 watt models, and very large models (1000 watts and up), which are supplied in Silicone Ceramic.

**Core:** Tubular Ceramic.

**Terminals:** Tinned lug with hole.

**Adjustable Lug:** Supplied with adjustable 300 watt models. Part No. 1974-A or 1974-B.

### Electrical

**Tolerance:** ±10% (K)

**Power rating:** Based on 25°C free air rating.

**Derating:** Linearly from 100% @ +25°C to 0% @ +400°C.

**Overload:** 10 times rated wattage for 5 seconds.

**Temperature coefficient:** ±400 ppm/°C.

**Dielectric withstanding voltage:** 1000 VAC measured from terminal to mounting bracket.

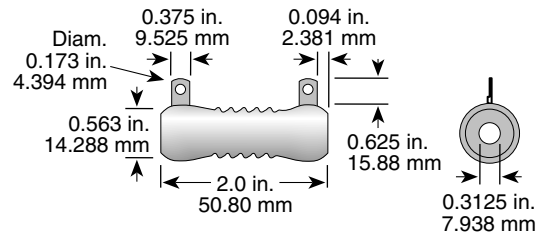
**To calculate max. amps:** use the formula  $\sqrt{P/R}$



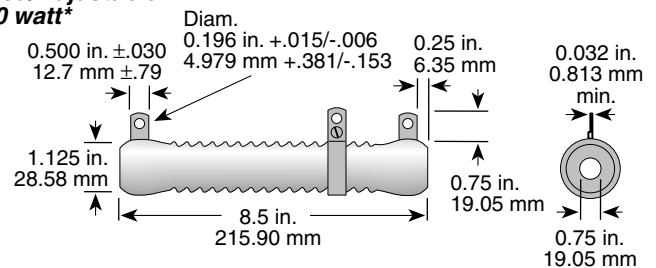
# 280 Series

## Corrib® Fixed and Adjustable Vitreous Enamel Power

### Fixed 35 watt



### Fixed/Adjustable 300 watt\*



\* for values over 0.16Ω, terminal dimensions same as 35 watt at above.

### ORDERING INFO

Coating  
Blank = Vitreous  
C = Centohm  
S = Silicone

**RoHS Compliant**

C 300 K R 10 E

Series    Wattage    Tolerance    Ohms  
C = Fixed    K = 10%    example:  
E = Adjustable    1R0 = 1 Ω  
250 = 250 Ω  
1K0 = 1,000 Ω  
25K = 25,000 Ω  
25K5 = 25,500 Ω

## RESISTOR HARDWARE

### Thru Bolts Mounting Brackets for 300 Watt Corrib

Includes 2 each bracket, bolt, washers (centering, mica, lock) and nut. Note: Single unit mounting contains 1 each bolt and nut; 2 each all Washers.

| Part No.                           | Slotted                              | Elongated | No. of Resistors | Mounting Derating % |
|------------------------------------|--------------------------------------|-----------|------------------|---------------------|
| 6110-8 <sup>1</sup> / <sub>2</sub> | 6126-P-8 <sup>1</sup> / <sub>2</sub> | 1         | 100%             |                     |
| -                                  | 6127-P-8 <sup>1</sup> / <sub>2</sub> | 2         | 83%              |                     |
| -                                  | 6128-P-8 <sup>1</sup> / <sub>2</sub> | 3         | 80%              |                     |
| -                                  | 6129-P-8 <sup>1</sup> / <sub>2</sub> | 4         | 80%              |                     |

### Lugs for 300 Watt Adjustable Corrib

| Part No.  | Resistance | Part No. | Resistance |
|-----------|------------|----------|------------|
| 1974-A    | 0.40       | 1974-B   | 0.10       |
| 1/16 wire | 0.50       | 1/8 wire | 0.12       |
|           | 0.63       |          | 0.16       |
|           | 1.00       |          | 0.20       |
|           | 1.50       |          | 0.25       |
|           | 1.60       |          | 0.31       |
|           | 2.00       |          | 0.80       |
|           | 2.50       |          | 1.20       |
|           | 3.10       |          |            |
|           | 4.00       |          |            |
|           | 5.00       |          |            |
|           | 6.30       |          |            |
|           | 8.00       |          |            |
|           | 10.00      |          |            |
|           | 12.00      |          |            |
|           | 16.00      |          |            |
|           | 20.00      |          |            |
|           | 25.00      |          |            |
|           | 30.00      |          |            |
|           | 48.00      |          |            |
|           | 50.00      |          |            |

### MADE-TO-ORDER PARTS

2 8 0 3 0 0 P 4 5 1 2 R 0 0 K

| Series                          | Wattage & Core Code               | Terminal Type                              | Ohms   | Tolerance                                    |
|---------------------------------|-----------------------------------|--|--|--|
| 280 = Fixed<br>230 = Adjustable | See "Core and Terminal Selection" | See "Resistor Terminals for Tubular Cores" | Example:<br>R0200 = 0.02 Ω<br>R2000 = 0.2 Ω<br>2R500 = 2.5 Ω<br>10R00 = 10 Ω | F = 1%<br>H = 3%<br>J = 5%<br>K = 10% (std.) |

See website for custom core info

## STANDARD PART NUMBERS FOR 280 SERIES

| Ohmic value | Wattage  |    |     | Ohmic value | Wattage  |    |     |
|-------------|----------|----|-----|-------------|----------|----|-----|
|             | Part No. | 35 | 300 |             | Part No. | 35 | 300 |
| 0.02        | R02E     | ✓  | ✓   | 0.8         | R80E     | ✓  | ✓   |
| 0.04        | R04E     | ✓  | ✓   | 1.0         | 1R0E     | ✓  | ✓   |
| 0.06        | R06E     | ✓  | ✓   | 1.2         | 1R2E     | ✓  | ✓   |
| 0.08        | R08E     | ✓  | ✓   | 1.25        | 1R25E    | ✓  | ✓   |
| 0.1         | R10E     | ✓  | ✓   | 1.6         | 1R6E     | ✓  | ✓   |
| 0.12        | R12E     | ✓  | ✓   | 2.0         | 2R0E     | ✓  | ✓   |
| 0.15        | R15E     | ✓  | ✓   | 2.5         | 2R5E     | ✓  | ✓   |
| 0.16        | R16E     | ✓  | ✓   | 3.1         | 3R1E     | ✓  | ✓   |
| 0.2         | R20E     | ✓  | ✓   | 4.0         | 4R0E     | ✓  | ✓   |
| 0.25        | R25E     | ✓  | ✓   | 5.0         | 5R0E     | ✓  | ✓   |
| 0.3         | R30E     | ✓  | ✓   | 6.3         | 6R3E     | ✓  | ✓   |
| 0.31        | R31E     | ✓  | ✓   | 8.0         | 8R0E     | ✓  | ✓   |
| 0.4         | R40E     | ✓  | ✓   | 10.0        | 10RE     | ✓  | ✓   |
| 0.5         | R50E     | ✓  | ✓   | 12.0        | 12RE     | ✓  | ✓   |
| 0.6         | R60E     | ✓  | ✓   | 16.0        | 16RE     | ✓  | ✓   |
| 0.63        | R63E     | ✓  | ✓   | 20.0        | 20RE     | ✓  | ✓   |
|             |          |    |     | 100.0       | 100E     | ✓  | ✓   |

| Other Available Sizes (Partial List) |         |             |           |           |           |
|--------------------------------------|---------|-------------|-----------|-----------|-----------|
| Prefix*                              | Wattage | Core Length | Core O.D. | Min. Ohms | Max. Ohms |
| C90                                  | 90      | 4.0"        | 0.563"    | 0.021     | 12        |
| C100                                 | 100     | 3.5"        | 0.75"     | 0.021     | 11        |
| C110                                 | 110     | 5.0"        | 0.563"    | 0.029     | 16        |
| C135                                 | 135     | 6.0"        | 0.563"    | 0.028     | 21        |
| C150                                 | 150     | 5.0"        | 1.0"      | 0.043     | 27        |
| C160                                 | 160     | 6.0"        | 0.75"     | 0.038     | 26        |
| C180                                 | 180     | 6.5"        | 0.75"     | 0.031     | 29        |
| C190                                 | 190     | 6.0"        | 1.0"      | 0.056     | 35        |
| C215                                 | 215     | 7.0"        | 1.0"      | 0.068     | 43        |
| C220                                 | 220     | 6.0"        | 1.125"    | 0.063     | 39        |
| C270                                 | 270     | 5.0"        | 1.5"      | 0.065     | 41        |
| C375                                 | 375     | 10.5"       | 1.125"    | 0.130     | 80        |
| C500                                 | 500     | 10.5"       | 1.625"    | 0.190     | 117       |
| C750                                 | 750     | 12.0"       | 2.5"      | 0.310     | 198       |
| C1000                                | 1000    | 15.0"       | 2.5"      | 0.410     | 258       |
| C1500                                | 1500    | 20.0"       | 2.5"      | 0.560     | 358       |

\*Substitute "C" in prefix with "E" for adjustable versions.

✓ = Standard values; check availability using the worldwide inventory search at [www.ohmite.com](http://www.ohmite.com)