

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.

Corribs® 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 (750 watts and up), which are supplied in Silicone Ceramic.

Core: Tubular Ceramic.

Terminals: Tinned lug with hole. RoHS solder composition is 96% Sn, 3.5% Ag, 0.5% Cu

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.

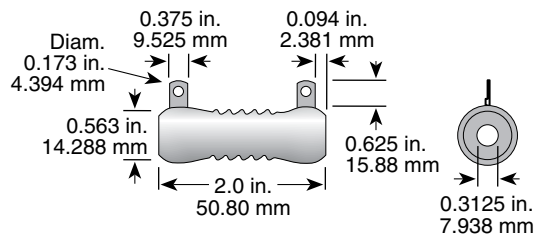
Derating: Linearly from 100% @ +25°C to 0% @ +400°C.



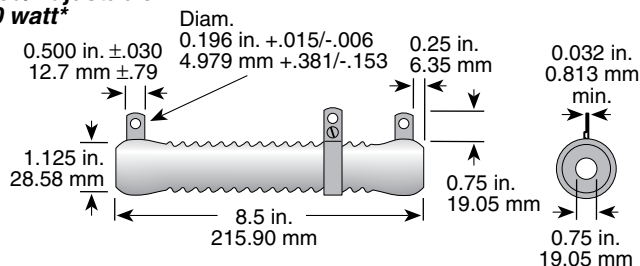
280 Series

Corrib® Fixed and Adjustable Vitreous Enamel Power

Fixed 35 watt



Fixed/Adjustable 300 watt*



* for values over 0.1Ω, 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

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 230 = Adjustable | See "Core and Terminal Selection" | See "Resistor Terminals for Tubular Cores" | Example: R0200 = 0.02 Ω R2000 = 0.2 Ω 2R500 = 2.5 Ω 10R00 = 10 Ω | F = 1% H = 3% J = 5% K = 10% (std.) |

See website for custom core info

STANDARD PART NUMBERS FOR 280 SERIES

| Ohmic value | Wattage | | | Ohmic value | Wattage | | | Other Available Sizes (Partial List) | | | | | |
|-------------|----------|----|-----|-------------|----------|----|-----|--------------------------------------|---------|---------|-------------|-----------|-----------|
| | Part No. | 35 | 300 | | Part No. | 35 | 300 | 300 (Adjustable) | Prefix* | Wattage | Core Length | Core O.D. | Min. Ohms |
| 0.02 | R02E | | | 0.8 | R80E | | ✓ | C90 | 90 | 4.0" | 0.563" | 0.021 | 12 |
| 0.04 | R04E | | | 1.0 | 1R0E | | ✓ | C100 | 100 | 3.5" | 0.75" | 0.021 | 11 |
| 0.06 | R06E | | | 1.2 | 1R2E | | ✓ | C110 | 110 | 5.0" | 0.563" | 0.029 | 16 |
| 0.08 | R08E | | | 1.25 | 1R25E | | ✓ | C135 | 135 | 6.0" | 0.563" | 0.028 | 21 |
| 0.1 | R10E | ✓ | ✓ | 1.6 | 1R6E | | ✓ | C150 | 150 | 5.0" | 1.0" | 0.043 | 27 |
| 0.12 | R12E | ✓ | ✓ | 2.0 | 2R0E | | ✓ | C160 | 160 | 6.0" | 0.75" | 0.038 | 26 |
| 0.15 | R15E | | ✓ | 2.5 | 2R5E | | ✓ | C180 | 180 | 6.5" | 0.75" | 0.031 | 29 |
| 0.16 | R16E | | ✓ | 3.1 | 3R1E | | ✓ | C190 | 190 | 6.0" | 1.0" | 0.056 | 35 |
| 0.2 | R20E | ✓ | ✓ | 4.0 | 4R0E | | ✓ | C215 | 215 | 7.0" | 1.0" | 0.068 | 43 |
| 0.25 | R25E | ✓ | ✓ | 5.0 | 5R0E | | ✓ | C220 | 220 | 6.0" | 1.125" | 0.063 | 39 |
| 0.3 | R30E | | ✓ | 6.3 | 6R3E | | ✓ | C270 | 270 | 5.0" | 1.5" | 0.065 | 41 |
| 0.31 | R31E | ✓ | ✓ | 8.0 | 8R0E | | ✓ | C375 | 375 | 10.5" | 1.125" | 0.130 | 80 |
| 0.4 | R40E | ✓ | ✓ | 8.0 | 8R0E | | ✓ | C500 | 500 | 10.5" | 1.625" | 0.190 | 117 |
| 0.5 | R50E | ✓ | ✓ | 10.0 | 10RE | | ✓ | C750 | 750 | 12.0" | 2.5" | 0.310 | 198 |
| 0.6 | R60E | ✓ | ✓ | 12.0 | 12RE | | ✓ | C1000 | 1000 | 15.0" | 2.5" | 0.410 | 258 |
| 0.63 | R63E | ✓ | ✓ | 16.0 | 16RE | | ✓ | C1500 | 1500 | 20.0" | 2.5" | 0.560 | 358 |
| | | | | 20.0 | 20RE | | ✓ | | | | | | |
| | | | | 100.0 | 100E | | ✓ | | | | | | |

*Substitute "C" in prefix with "E" for adjustable versions. ✓ = Standard values; check availability using the worldwide inventory search at www.ohmite.com

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 $\sqrt{P/R}$

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. | No. of Resistors | Moun. Derat. % |
|--------------------------------------|------------------|----------------|
| 6110-8 ¹ / ₂ | 1 | 100% |
| 6126-P-8 ¹ / ₂ | 2 | 83% |
| 6127-P-8 ¹ / ₂ | 3 | 80% |
| 6128-P-8 ¹ / ₂ | 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 | | |