

# 280 Series

## Corrib® Fixed and Adjustable Vitreous Enamel Power Resistors

Corrib® resistors are ideal for applications involving high currents at very low resistance values—as low as 0.1Ω for the 300 Watt units. 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.

Corrubs® 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

- 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.

### 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.

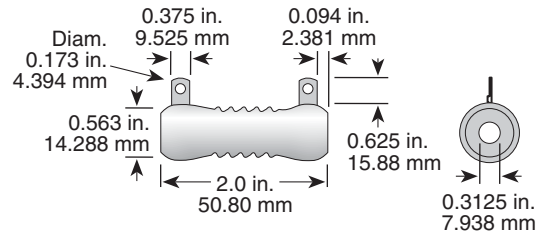
**Overload:** 10 times rated wattage for 5 seconds.

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

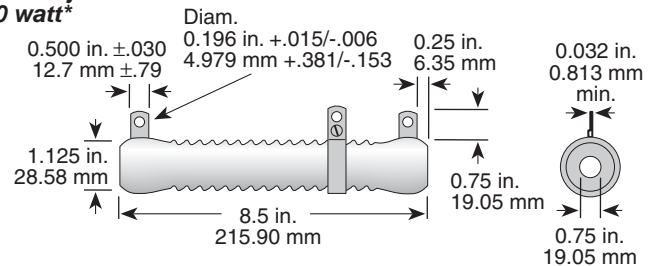
**Dielectric withstanding voltage:** 1000 VAC measured from terminal to mounting bracket.

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

#### Fixed 35 watt



#### Fixed/Adjustable 300 watt\*



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

Also available in low cost Centohm coating. Consult Factory.

### 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	Mounting Derating %
6110-8 <sup>1</sup> / <sub>2</sub>	1	100%
6126-P-8 <sup>1</sup> / <sub>2</sub>	2	83%
6127-P-8 <sup>1</sup> / <sub>2</sub>	3	80%
6128-P-8 <sup>1</sup> / <sub>2</sub>	4	80%

#### Extra Adjustable Lugs for 300 Watt Adjustable Corrib

Part No.	For 300 Watt Adjustable Corrib
1974-A	E300KR10 - E300KR63 E300K1R0 - E300K5R0 E300K8R0 - E300K20R
1974-B	E300KR10 - E300KR31 E300KR80 & E300K6R3

### STOCK PART NUMBERS FOR STANDARD RESISTANCE VALUES

Ohmic value	Wattage			Ohmic value	Wattage		
	Part No. Prefix Suffix	35	300 (Adjustable)		Part No. Prefix Suffix	35	300 (Adjustable)
0.02	R02	✱		0.8	R80	✱	✓
0.04	R04	✱		1.0	R10	✱	✓
0.06	R06	✱		1.2	R12	✱	✓
0.08	R08	✱		1.25	R125	✱	
0.1	410	✱	✱	1.6	R16	✱	✓
0.12	R12	✱	✓	2.0	R20	✱	✓
0.15	R15	✱		2.5	R25	✓	✓
0.16	R16	✱	✱	3.1	R31	✱	✱
0.2	R20	✱	✓	4.0	R40	✱	✱
0.25	R25	✱	✓	5.0	R50	✓	✱
0.3	R30	✱		6.3	R63	✱	✱
0.31	R31	✱	✱	8.0	R80	✱	✱
0.4	R40	✱	✓	10.0	R10R	✱	✱
0.5	R50	✱	✱	12.0	R12R	✱	✱
0.6	R60	✱	✱	16.0	R16R	✱	✱
0.63	R63	✓	✓	20.0	R20R	✱	✱
				100.0	R100		

#### 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.

✱ = Most popular stock values

✓ = Stock values

✱ = Non-stock values subject to minimum handling charge per item