# 280 Series

Vitreous Enamel Power

**Corrib® Fixed and Adjustable** 



### Fixed 35 watt



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

Corrib<sup>®</sup> resistors are ideal for applications involving high currents at very low resistance values—as low as  $0.1\Omega$  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<sup>®</sup> 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.

### <u>FEATURES</u>

- 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.

### <u>S P E C I F I C A T I O N S</u>

### 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

**Resistance:** Max. 63Ω for 300W version

- 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  $\sqrt{P/R}$

### MADE-TO-ORDER PARTS

# 2 8 0 3 0 0 P 4 5 1 2 R 0 0 K<sub>7</sub>

Series Wattage & 280 = Fixed Core Code S 230 = Adjustable See "Core and Terminal Selection" T See website for custom core info

 Terminal Type
 Ohms

 See "Resistor
 Example: 

 Terminals for
 R0200 = 0.02 Ω

 Tubular Cores"
 R2000 = 0.2 Ω

 10R00 = 10 Ω
 10R00

 Tolerance

 le:
 F = 1% 

 = 0.02 Ω
 H = 3% 

 = 0.2 Ω
 J = 5% 

 = 2.5 Ω
 K = 10% (std.)

### ORDERING INFO

 $\label{eq:constraint} \begin{array}{c} \mbox{Coating} \\ \mbox{Blank} = Vitreous \\ \mbox{C} = Centohm \\ \mbox{S} = Silicone \\ \end{array} \qquad \mbox{Romental bound of the second of$ 

## STANDARD PART NUMBERS FOR 280 SERIES

Wattage				Wattage				Other Available Sizes (Partial List)						
Part No. Prefix ➤ Suffix ¥	35	300	E300K <b>300</b> (Adjustable)	Ohmic value	Part No.		300	E300K <b>300</b> (Adjustable)	Prefix*	Wattage	Core Length	Core O.D.	Min. Ohms	Max. Ohms
·월 Prefix >	×	No.	0K- usta	nic	Prefix >	¥	-YO	0K- usta	C90	90	4.0"	0.563"	0.021	12
Suffix ¥	C35K	C300K	E300K- (Adjusta	Ohr	Suffix ¥	C35K	C300K	E300K (Adjusta	C100	100	3.5"	0.75"	0.021	11
0.02				0.8				~	C110	110	5.0"	0.563"	0.029	16
0.04 — R04E				1.0			~	~	C135	135	6.0"	0.563"	0.028	21
0.06 — R06E				1.2	1R2E		V	·	C150	150	5.0"	1.0"	0.043	27
0.08 — R08E				1.2			•		C160	160	6.0"	0.75"	0.038	26
0.1 — R10E		~	~	1.6			~	~	C180	180	6.5"	0.75"	0.031	29
0.12 — R12E		v	v	2.0	2R0E		~	· ·	C190	190	6.0"	1.0"	0.056	35
0.15 — R15E		Ť	•	2.5	2R5E		~	~	C215	215	7.0"	1.0"	0.068	43
0.16 — R16E			~	3.1	3R1E		~	~	C220	220	6.0"	1.125"	0.063	39
0.2 — R20E		~	v	4.0	4R0E		V	~	C270	270	5.0"	1.5"	0.065	41
0.25 — R25E		~	~	5.0			~	~	C375	375	10.5"	1.125"	0.130	80
0.3 — R30E		-		6.3	6R3E		V	V	C500	500	10.5"	1.625"	0.190	117
0.31 — R31E		~	~	8.0			~	~	C750	750	12.0"	2.5"	0.310	198
0.4 — R40E		2	v	10.0			~	~	C1000	1000	15.0"	2.5"	0.410	258
0.5 — R50E		2	~	12.0			~	~	C1500	1500	20.0"	2.5"	0.560	358
0.6 — R60E		•	•	16.0			V	~	*Substi	tute "C" in	🖌 = St	andard valu	es: checl	<pre>c availability</pre>
0.63 — R63E		~	~	20.0	20RE		v	~		vith "E" for		ing the wor		
63.0 — 63RE adjustable versions. search at www.ohmite.com														

### **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.

Pa	rt No.	No. of Res-	Moun. Derat.		
Slotted	Elongated	istors	%		
6110-8 <sup>1</sup> /2	6126-P-8 <sup>1</sup> /2	1	100%		
-	6127-P-8 <sup>1</sup> /2	2	83%		
-	6128-P-8 <sup>1</sup> /2	3	80%		
-	6129-P-8 <sup>1</sup> /2	4	80%		

#### Lugs for 300 Watt Adjustable Corrib

Part	Resis-	Part	Resis-
No.	tance	No.	tance
<b>1974-A</b> <sup>1</sup> / <sub>16</sub> wire	$\begin{array}{c} 0.40\\ 0.50\\ 0.63\\ 1.00\\ 1.50\\ 2.00\\ 2.50\\ 3.10\\ 4.00\\ 5.00\\ 6.30\\ 8.00\\ 10.00\\ 12.00\\ 12.00\\ 12.00\\ 25.00\\ 30.00\\ 25.00\\ 30.00\\ 50.00\\ \end{array}$	<b>1974-B</b> <sup>1</sup> / <sub>8</sub> wire	0.10 0.12 0.20 0.25 0.31 0.80 1.20