

# 280 Series

## Corrib® Fixed and Adjustable Vitreous Enamel Power

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.

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

- Also available in 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.

### CHARACTERISTICS

<b>Coating</b>	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
<b>Core</b>	Tubular Ceramic
<b>Terminals</b>	Tinned lug with hole. RoHS solder composition is 96% Sn, 3.5% Ag, 0.5% Cu
<b>Adjustable Lug</b>	Supplied with adjustable 300 watt models. Part No. 1974-A or 1974-B
<b>Resistance</b>	Max. 63Ω for 300W version
<b>Tolerance</b>	±10% (K)
<b>Power rating</b>	Based on 25°C free air rating
<b>Derating</b>	Linearly from 100% @ +25°C to 0% @ +400°C
<b>Overload</b>	10 times rated wattage for 5 seconds
<b>Temperature coefficient</b>	±400 ppm/°C
<b>Dielectric with-standing voltage</b>	1000 VAC measured from terminal to mounting bracket
<b>To calculate max. amps</b>	use the formula $\sqrt{P/R}$

### RESISTOR HARDWARE

#### Thru Bolts Mounting Brackets for 300 Watt Corrib

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

Part No.		No. of Resistors	Moun. Derat. %
Slotted	Elongated		
6110-81/2	6126-P-81/2	1	100%
-	6127-P-81/2	2	83%
-	6128-P-81/2	3	80%
-	6129-P-81/2	4	80%

#### Lugs for 300 Watt Adjustable Corrib

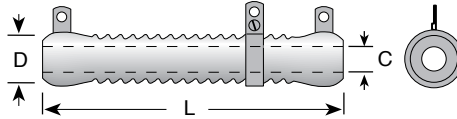
Part No.	Res.	Part No.	Res.
<b>1974-A</b>	0.40	<b>1974-B</b>	0.10
<sup>1/16</sup> wire	0.50	<sup>1/8</sup> wire	0.12
	0.63		0.16
	1.00		0.20
	1.50		0.25
	1.60		0.31
	2.00		0.80
	2.50		1.20
	3.10		
	4.00		
	5.00		
	6.30		
	8.00		
	10.00		
	12.00		
	16.00		
	20.00		
	25.00		
	30.00		
	48.00		
	50.00		

(continued)

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### DIMENSIONS



### Core and Terminal Selection for Made to Order Type

Free Air Wattage Rating	Core Dimensions			Code for Core Dia.	Ohms Min.	Ohms Max.	Term. Type	Free Air Wattage Rating	Core Dimensions			Code for Core Dia.	Ohms Min.	Ohms Max.	Term. Type
	D: OD	C: ID	L: Length						D: OD	C: ID	L: Length				
1500	2.50"	1.75"	20.0" (508.00mm)	S	0.56	358	45	315	1.00"	0.625"	10.0" (254.00mm)	N	0.11	67	45
1000	(63.5mm)	(44.45mm)	15.0" (381.00mm)	S	0.41	258		215	(25.40mm)	(15.88mm)	7.0" (177.60mm)	N	0.068	43	
750			12.0" (304.80mm)	S	0.31	198		190			6.0" (152.40mm)	N	0.056	35	
380			6.0" (152.40mm)	S	0.13	78		150			5.0" (127.00mm)	N	0.043	27	
								125			4.0" (101.60mm)	N	0.031	19	
550	1.625"	1.125"	11.75" (298.45mm)	R	0.21	133	45	180	0.75"	0.50"	6.5" (165.10mm)	M	0.031	29	45
500	(41.28mm)	(28.58mm)	10.50" (266.70mm)	R	0.19	117		160	(19.05mm)	(12.70mm)	6.0" (152.40mm)	M	0.038	26	
400			8.5" (215.90mm)	R	0.14	91		140			5.0" (127.00mm)	M	0.028	20	
								105			4.0" (101.60mm)	M	0.020	14	
270	1.50"	1.125"	5.0" (127.00mm)	Q	0.065	41	45	100			3.5" (88.90mm)	M	0.021	11	
	(38.10mm)	(28.58mm)													
395	1.125"	0.75"	11.25" (285.75mm)	P	0.14	87	45	135	0.563"	0.313"	6.0" (152.40mm)	K	0.028	21	46
375	(28.58mm)	(19.05mm)	10.5" (266.70mm)	P	0.13	80		110	(14.30mm)	(7.95mm)	5.0" (127.00mm)	K	0.029	16	
300			8.5" (215.90mm)	P	0.099	63		90			4.0" (101.60mm)	K	0.021	12	46
220			6.0" (152.40mm)	P	0.063	39		35			2.0" (50.80mm)	K	0.0097	0.11	
185			5.0" (127.00mm)	P	0.05	30									
155			4.25" (107.95mm)	P	0.038	25			0.563"	0.313"	2.0" (50.80mm)	K	0.12	5.6	40
140			4.0" (101.6mm)	P	0.04	20			(14.30mm)	(7.95mm)					

### ORDERING INFORMATION

#### Standard

Coating  
Blank = Vitreous  
C = Centohm  
S = Silicone

RoHS Compliant

**C 300 K R 10 E**

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

#### Made-to-order

See website for custom core info

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

Series: 230 = Adjustable, 280 = Fixed, 480 = Silicone fixed, 680 = Centohm fixed  
Wattage & Core Code: See "Core and Terminal Selection"  
Terminal Type: See "Resistor Terminals for Tubular Cores"  
Ohms: Example: R0200 = 0.02 Ω, R2000 = 0.2 Ω, 2R500 = 2.5 Ω, 10R00 = 10 Ω  
Tolerance: F = 1%, H = 3%, J = 5%, K = 10% (std.)

**NOTE: Wattages above 750 watts come with silicone coating.**

#### Standard part numbers for 280 series

C300KR10E	C300K2R0E	E300K10RE	E300K6R3E
C300KR12E	C300K2R5E	E300K12RE	E300K8R0E
C300KR20E	C300K3R1E	E300K16RE	E300KR10E
C300KR25E	C300K4R0E	E300K1R0E	E300KR12E
C300KR31E	C300K5R0E	E300K1R6E	E300KR16E
C300KR40E	C300K6R3E	E300K20RE	E300KR20E
C300KR50E	C300K8R0E	E300K2R0E	E300KR25E
C300KR63E	C300K10RE	E300K2R5E	E300KR31E
C300K1R0E	C300K12RE	E300K3R1E	E300KR40E
C300K1R2E	C300K16RE	E300K4R0E	E300KR50E
C300K1R6E	C300K20RE	E300K5R0E	E300KR63E
			E300KR80E