



## Universal Edgewound Power Resistor (EDGU), Wirewound Resistors, Industrial Power



### FEATURES

- Universal Mount EDGU series are a direct replacement for competitors' products
- Resistance-alloy ribbon wire is coiled on edge and supported on specially designed porcelain insulators
- Open coil construction allows efficient heat dissipation and easily accommodates reasonable overloads and surges
- Insulators provide proper turn-to-turn spacing and insulation from support bars
- Terminals are welded to the resistive wire for a reliable electrical connection
- Wirewound
- Material categorization: for definitions of compliance please see [www.vishay.com/doc?99912](http://www.vishay.com/doc?99912)



**RoHS**  
COMPLIANT

### STANDARD ELECTRICAL SPECIFICATIONS

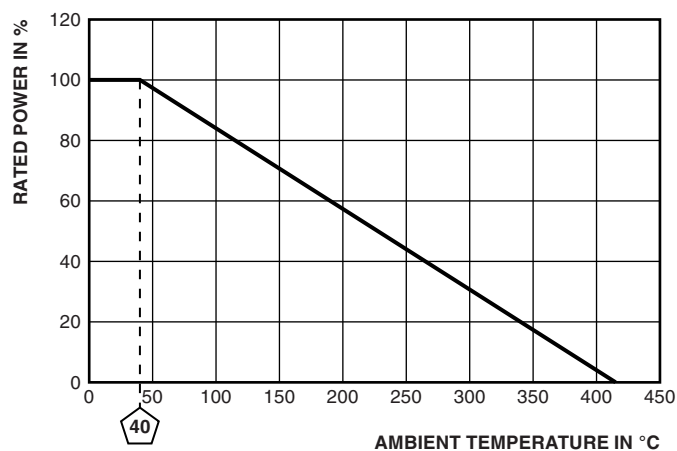
GLOBAL MODEL	POWER RATING W	RESISTANCE RANGE $\Omega$	TOLERANCE $\pm$ %
EDGU0400	400	0.053 to 1.23	10
EDGU0600	600	0.084 to 1.93	10
EDGU0800	800	0.115 to 2.64	10
EDGU1000	1000	0.146 to 3.35	10
EDGU1200	1200	0.176 to 4.04	10
EDGU1400	1400	0.200 to 4.73	10
EDGU1600	1600	0.237 to 5.44	10

### PRODUCT RATINGS - AVAILABLE CURRENT, POWER, AND RESISTANCE VALUES

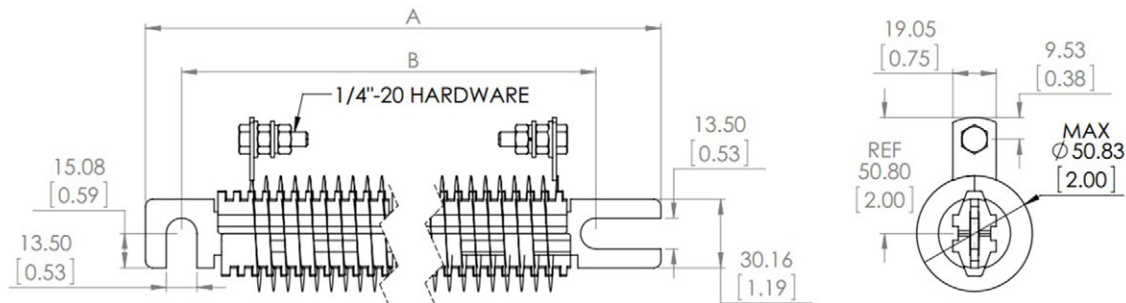
CURRENT A	RESISTANCE $\Omega$						
	400 W	600 W	800 W	1000 W	1200 W	1400 W	1600 W
85	0.0530	0.0840	0.1150	0.1460	0.1760	0.2000	0.2370
80	0.0600	0.0940	0.1290	0.1630	0.1970	0.2240	0.2650
75	0.0680	0.1060	0.1450	0.1830	0.2210	0.2510	0.2980
70	0.0760	0.1190	0.1620	0.2060	0.2490	0.2820	0.3350
67	0.0850	0.1340	0.1830	0.2320	0.2800	0.3180	0.3770
63	0.0970	0.1510	0.2050	0.2620	0.3150	0.3690	0.4220
60	0.1070	0.1680	0.2300	0.2920	0.3520	0.4130	0.4740
56	0.1220	0.1920	0.2610	0.3320	0.4000	0.4700	0.5400
53	0.1360	0.2150	0.2950	0.3740	0.4580	0.5300	0.6080
50	0.1520	0.2400	0.3280	0.4150	0.5040	0.5900	0.6780
47	0.1720	0.2700	0.3690	0.4660	0.5720	0.6630	0.7600
45	0.1910	0.3000	0.4100	0.5200	0.6270	0.7350	0.8450
41.5	0.2300	0.3480	0.4650	0.5900	0.7000	0.8300	0.9400
40	0.2420	0.3800	0.5200	0.6600	0.7960	0.9300	1.070
37.4	0.2740	0.4300	0.5850	0.7400	0.8970	1.050	1.210
35	0.3120	0.4900	0.6750	0.8500	1.050	1.200	1.380
33	0.3520	0.5500	0.7500	0.9500	1.150	1.340	1.540
31	0.3950	0.6200	0.8450	1.070	1.290	1.520	1.750
29.6	0.4320	0.6850	0.9450	1.200	1.450	1.700	1.950
27.6	0.5000	0.7850	1.070	1.360	1.640	1.920	2.200
26	0.5600	0.8750	1.190	1.510	1.830	2.140	2.450
24.7	0.6280	0.9800	1.340	1.690	2.050	2.400	2.750
23.9	0.6660	1.050	1.420	1.810	2.200	2.570	2.970
22.5	0.7500	1.180	1.610	2.030	2.460	2.900	3.320
22	0.7900	1.240	1.690	2.130	2.580	3.040	3.480
20.7	0.8860	1.390	1.900	2.400	2.910	3.400	3.910
19.6	0.9900	1.560	2.130	2.700	3.260	3.830	4.400
18.5	1.110	1.740	2.370	3.000	3.620	4.250	4.900
17.2	1.230	1.930	2.640	3.350	4.040	4.730	5.440

**TECHNICAL SPECIFICATIONS**

PARAMETER	UNIT	RESISTOR CHARACTERISTICS
Power rating	W	400 to 1600
Resistance range	$\Omega$	0.053 to 5.44
Resistance tolerance	%	10
TCR	ppm/°C	$\pm 400, \pm 180, \pm 130, \pm 20$ (varies by wattage and resistance)
Operating temperature	°C	-55 to +350
Temperature rise	°C	375 above an ambient of 40 °C
Maximum altitude	f.a.s.l. (m.a.s.l.)	derate above 4921 f.a.s.l. (1500 m.a.s.l.)
Short-term overload (surge)		10 x rated power for 5 s
Surge windings		n/a
Maximum working voltage		$(P \times R)^{1/2}$
Insulation resistance	$\Omega$	1M
Dielectric voltage	V <sub>RMS</sub>	2500 for 6 s
Creepage	inch (mm)	0.50 (12.7) typical
Terminal sleeves		n/a
Inductance	$\mu$ H	n/a
Non-inductive winding		n/a
Terminal strength	lb	n/a
Electrical or mechanical customization		available: <a href="http://www.vishay.com/doc?31858">www.vishay.com/doc?31858</a>

**DERATING CURVE****MATERIAL SPECIFICATIONS**

Element	stainless steel, copper-nickel, nickel-chrome
Core	electrical porcelain
Coating	none
Standard terminals	stainless steel
Part marking	part number, value, date code, MRC
Terminal hardware	cold rolled steel and zinc (hex free, trivalent clear) coating

**DIMENSIONS** in inches (millimeters)

GLOBAL MODEL	A	B	WEIGHT g
EDGU0400	8.875 (225.4)	7.125 (180.9)	525
EDGU0600	11.875 (301.6)	10.125 (257.2)	600
EDGU0800	14.875 (377.8)	13.125 (333.4)	800
EDGU1000	17.875 (454.0)	16.125 (409.6)	900
EDGU1200	20.875 (530.2)	19.125 (485.8)	1100
EDGU1400	23.875 (606.4)	22.125 (561.9)	1300
EDGU1600	26.875 (682.6)	25.125 (638.2)	1500

**METRIC OPTIONS AVAILABLE****Metric Hardware on Terminal Lugs**

Use terminal designation "1" example: EDGU10001R000K1B00

**Note**

- If "1" is selected for the terminal option, the resistor thru bolt will also be metric.

**GLOBAL PART NUMBER INFORMATION**

Global Part Numbering example: EDGU1200R4580KXB00 (EDGU1200 0.458 10 % 3/4LSteel712 B)

E	D	G	U	1	2	0	0	R	4	5	8	0	K	X	B	0	0
MODEL (3 digits)			VALUE (5 digits)				TOLERANCE (1 digit)		TERMINAL (1 digit)			PACKAGING (1 digit)		SPECIAL (2 digits)			
EDGU0400 EDGU0600 EDGU0800 EDGU1000 EDGU1200 EDGU1400 EDGU1600			R = decimal R1500 = 0.15 Ω  Check datasheet for available value range.				K = ± 10 %		X = 3/4" lug with steel hardware (3/4LSteel712)			B = bulk		00 = standard			



## Disclaimer

ALL PRODUCT, PRODUCT SPECIFICATIONS AND DATA ARE SUBJECT TO CHANGE WITHOUT NOTICE TO IMPROVE RELIABILITY, FUNCTION OR DESIGN OR OTHERWISE.

Vishay Intertechnology, Inc., its affiliates, agents, and employees, and all persons acting on its or their behalf (collectively, "Vishay"), disclaim any and all liability for any errors, inaccuracies or incompleteness contained in any datasheet or in any other disclosure relating to any product.

Vishay makes no warranty, representation or guarantee regarding the suitability of the products for any particular purpose or the continuing production of any product. To the maximum extent permitted by applicable law, Vishay disclaims (i) any and all liability arising out of the application or use of any product, (ii) any and all liability, including without limitation special, consequential or incidental damages, and (iii) any and all implied warranties, including warranties of fitness for particular purpose, non-infringement and merchantability.

Statements regarding the suitability of products for certain types of applications are based on Vishay's knowledge of typical requirements that are often placed on Vishay products in generic applications. Such statements are not binding statements about the suitability of products for a particular application. It is the customer's responsibility to validate that a particular product with the properties described in the product specification is suitable for use in a particular application. Parameters provided in datasheets and / or specifications may vary in different applications and performance may vary over time. All operating parameters, including typical parameters, must be validated for each customer application by the customer's technical experts. Product specifications do not expand or otherwise modify Vishay's terms and conditions of purchase, including but not limited to the warranty expressed therein.

Hyperlinks included in this datasheet may direct users to third-party websites. These links are provided as a convenience and for informational purposes only. Inclusion of these hyperlinks does not constitute an endorsement or an approval by Vishay of any of the products, services or opinions of the corporation, organization or individual associated with the third-party website. Vishay disclaims any and all liability and bears no responsibility for the accuracy, legality or content of the third-party website or for that of subsequent links.

Vishay products are not designed for use in life-saving or life-sustaining applications or any application in which the failure of the Vishay product could result in personal injury or death unless specifically qualified in writing by Vishay. Customers using or selling Vishay products not expressly indicated for use in such applications do so at their own risk. Please contact authorized Vishay personnel to obtain written terms and conditions regarding products designed for such applications.

No license, express or implied, by estoppel or otherwise, to any intellectual property rights is granted by this document or by any conduct of Vishay. Product names and markings noted herein may be trademarks of their respective owners.