

# 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

RoHS COMPLIANT

- 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 <a href="https://www.vishav.com/doc?99912"><u>www.vishav.com/doc?99912</u></a>

STANDARD ELECTRICAL SPECIFICATIONS					
GLOBAL MODEL	POWER RATING W	RESISTANCE RANGE $\Omega$	TOLERANCE ± %		
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		

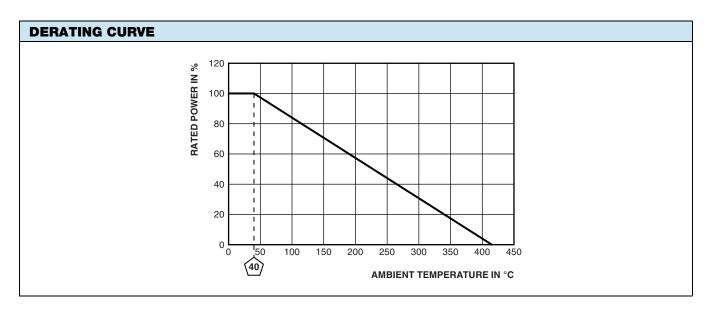
CURRENT A	$\begin{array}{c} \textbf{RESISTANCE} \\ \Omega \end{array}$						
	400 W	600 W	800 W	1000 W	1200 W	1400 W	1600 W
85	0.0530	0.0840	0.1150	0.1460	0.1760	0.2000	0.2370
80	0.0600	0.0940	0.1290	0.1630	0.1970	0.2240	0.2650
75	0.0680	0.1060	0.1450	0.1830	0.2210	0.2510	0.2980
70	0.0760	0.1190	0.1620	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

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# Vishay Milwaukee

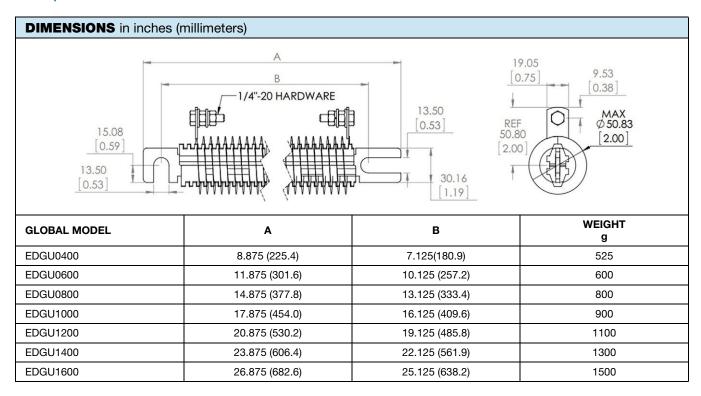
TECHNICAL SPECIFICATIONS				
PARAMETER	UNIT	RESISTOR CHARACTERISTICS		
Power rating	W	400 to 1600		
Resistance range	Ω	0.053 to 5.44		
Resistance tolerance	%	10		
TCR	ppm/°C	± 400, ± 180, ± 130, ± 20 (varies by wattage and resistance)		
Operating temperature	°C	-55 to +350		
Temperature rise	°C	375 above 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 x R) <sup>1/2</sup>		
Insulation resistance	Ω	1M		
Dielectric voltage	V <sub>RMS</sub>	2500 for 6 s		
Creepage	inch (mm)	0.50 (12.7) typical		
Terminal sleeves		n/a		
Inductance	μΗ	n/a		
Non-inductive winding		n/a		
Terminal strength	lb	n/a		
Electrical or mechanical customization		available: www.vishay.com/doc?31858		



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				







#### **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 Number	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	$\mathbf{R}=$ decimal $\mathbf{R1500}=0.15~\Omega$ Check datasheet for available value range.	<b>K</b> = ± 10 %	X = 3/4" lug with steel hardware (3/4LSteel712)	<b>B</b> = bulk	00 = standard		



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