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 accomodates 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

Pb-free

RoHS COMPLIANT

STANDARD ELECTRICAL SPECIFICATIONS

GLOBAL MODEL	POWER RATING W	RESISTANCE RANGE Ω	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

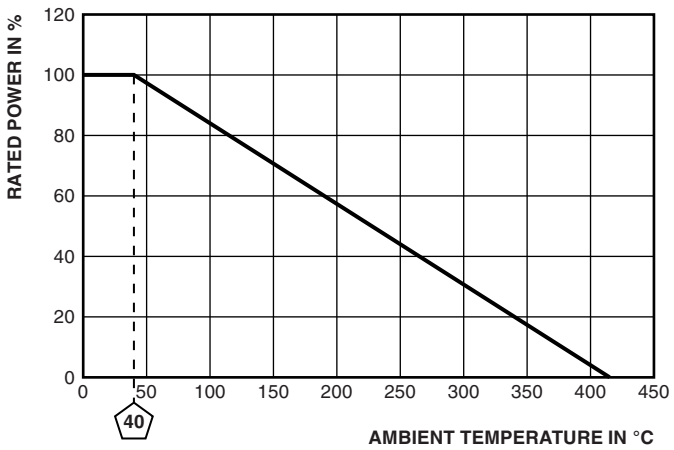
PRODUCT RATINGS - AVAILABLE CURRENT, POWER, AND RESISTANCE VALUES

CURRENT A	RESISTANCE Ω						
	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	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		$(P \times R)^{1/2}$
Insulation resistance	Ω	1M
Dielectric voltage	V_{RMS}	2500 for 6 s
Creepage	inch (mm)	0.50 (12.7) typical
Terminal sleeves		n/a
Inductance	µH	n/a
Non-inductive winding		n/a
Terminal strength	lb	n/a
Electrical or mechanical customization		available: www.vishay.com/doc?31858

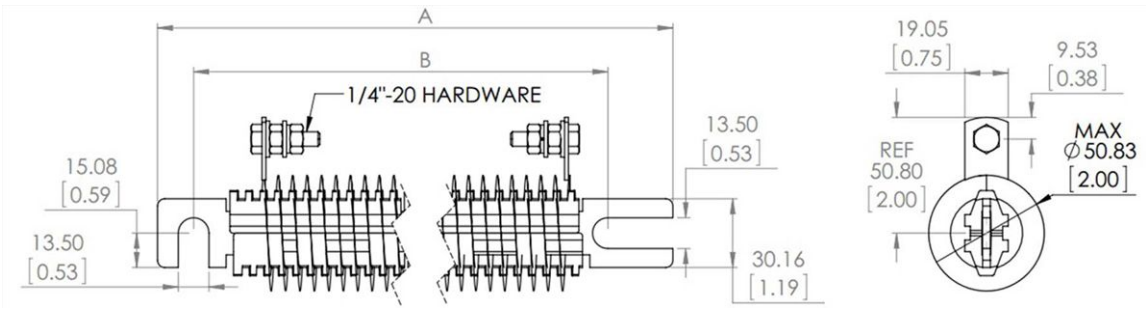
DERATING CURVE



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

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

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