

## Stud Mount Edgewound Power Resistor (EDGS), Wirewound Resistors, Industrial Power


**FEATURES**

- 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 threaded stud mount
- 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**

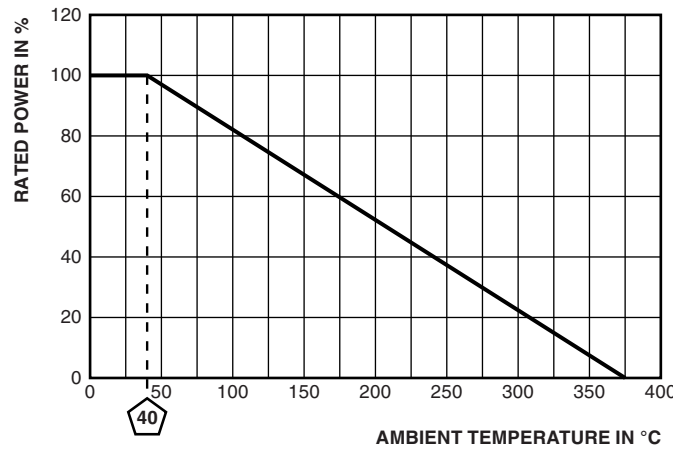
STANDARD ELECTRICAL SPECIFICATIONS			
GLOBAL MODEL	POWER RATING W	RESISTANCE RANGE $\Omega$	TOLERANCE $\pm$ %
EDGS0400	400	0.053 to 1.23	10
EDGS0600	600	0.084 to 1.93	10
EDGS0800	800	0.115 to 2.64	10
EDGS1000	1000	0.146 to 3.35	10
EDGS1200	1200	0.176 to 4.04	10
EDGS1400	1400	0.200 to 4.73	10
EDGS1600	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



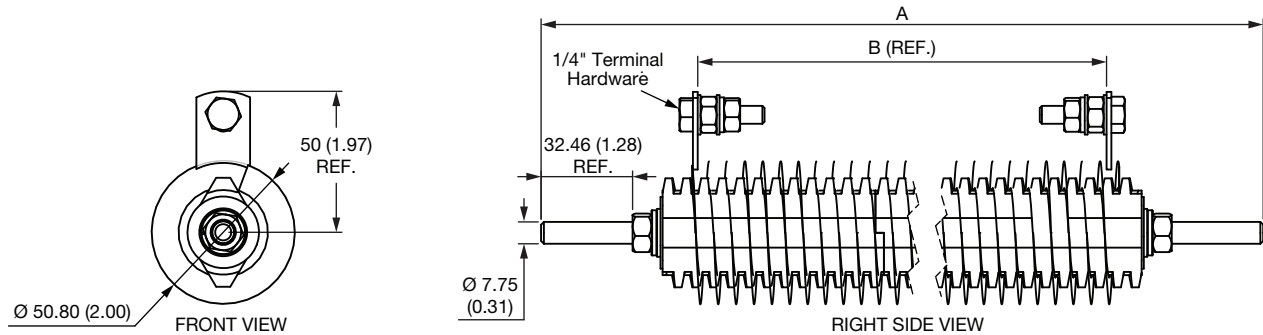
TECHNICAL SPECIFICATIONS		
PARAMETER	UNIT	RESISTOR CHARACTERISTICS
Power rating	W	400 to 1600
Resistance range	$\Omega$	0.053 to 5.44
Resistance tolerance	%	10
TCR	ppm/ $^{\circ}$ C	$\pm 400, \pm 180, \pm 130, \pm 20$ (varies by wattage and resistance)
Operating temperature	$^{\circ}$ C	-55 to +350
Temperature rise	$^{\circ}$ C	375 above an ambient of 40 $^{\circ}$ 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**



**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
EDGS0400	9.375 (238.125)	5.125 (130.2)	525
EDGS0600	12.375 (314.3)	8.125 (206.4)	600
EDGS0800	15.375 (390.5)	11.0 (279.4)	800
EDGS1000	18.375 (466.7)	14.0 (355.6)	900
EDGS1200	21.375 (542.9)	17.0 (431.8)	1100
EDGS1400	24.375 (619.3)	20.0 (508)	1300
EDGS1600	27.375 (695.3)	23.0 (584.2)	1500

**Note**

- Type: EDG Stud Mount
- Power: varies
- Tolerance:  $\pm 10\%$

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

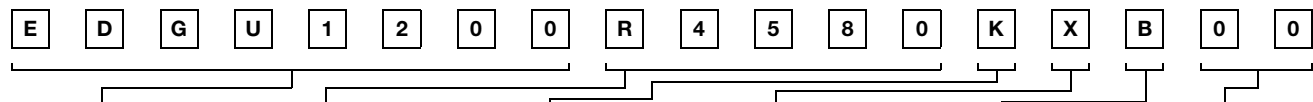
Use terminal designation "1" example: EDGS10001R000K1B00

**Note**

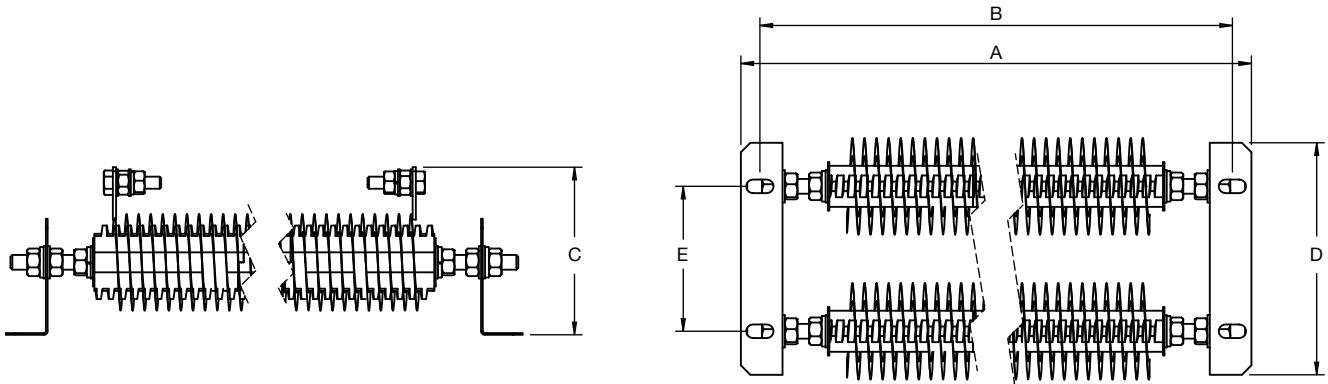
- If "1" is selected for the terminal option, the resistor thru bolt will also be metric.

**GLOBAL PART NUMBER INFORMATION**

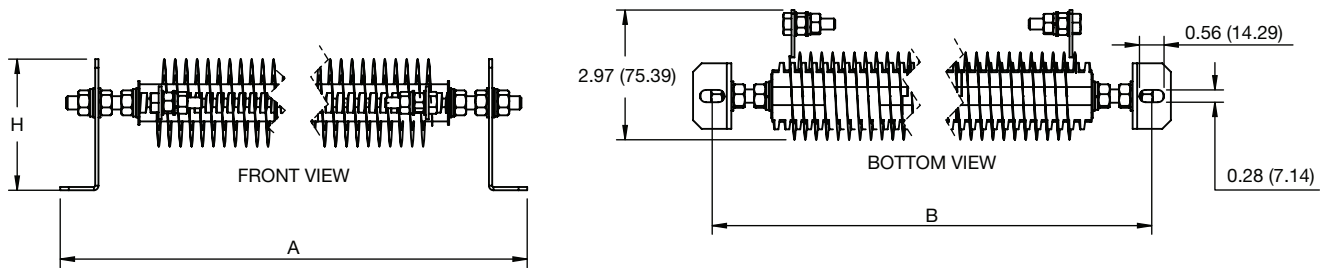
Global Part Numbering example: EDGU1200R4580KXB00 (EDGU1200 0.458 10 % 3/4LSteel712 B)



MODEL (3 digits)	VALUE (5 digits)	TOLERANCE (1 digit)	TERMINAL (1 digit)	PACKAGING (1 digit)	SPECIAL (2 digits)
EDGS0400 EDGS0600 EDGS0800 EDGS1000 EDGS1200 EDGS1400 EDGS1600	R = decimal R1500 = 0.15 $\Omega$  Check datasheet for available value range.	K = $\pm 10\%$	X = 3/4" lug with steel hardware (3/4LSteel712)	B = bulk	00 = standard

**HORIZONTAL BRACKET ASSEMBLY DIMENSIONS** in inches (millimeters)


GLOBAL MODEL	OVERALL LENGTH A	MTG DIM B	HEIGHT C
EDGS0400	9.38 (238.0)	8.5 (216.0)	3.5 (88.1)
EDGS0600	12.37 (314.0)	11.5 (292.0)	3.5 (88.1)
EDGS0800	15.6 (397.0)	14.75 (374.0)	3.5 (88.1)
EDGS1000	18.6 (472.5)	17.75 (450.0)	3.5 (88.1)
EDGS1200	21.6 (548.6)	20.75 (526.4)	3.5 (88.1)
EDGS1400	24.6 (624.8)	23.75 (602.6)	3.5 (88.1)
EDGS1600	27.6 (701.0)	26.75 (678.0)	3.5 (88.1)
NUMBER OF RESISTORS MOUNTED HORIZONTALLY	OVERALL WIDTH D	MTG CENTERS E	
2	4.8 (122.0)	3.0 (76.2)	
3	7.8 (198.2)	3.0 (76.2)	
4	10.8 (274.4)	3.0 (76.2)	
5	13.8 (350.6)	6.0 (152.4)	
6	16.8 (426.8)	6.0 (152.4)	
7	19.8 (503.0)	9.0 (228.6)	
8	22.8 (579.2)	9.0 (228.6)	
9	25.8 (655.4)	12.0 (304.8)	
10	28.8 (731.6)	12.0 (304.8)	
11	31.8 (807.8)	12.0 (304.8)	

**VERTICAL BRACKET ASSEMBLY DIMENSIONS** in inches (millimeters)


GLOBAL MODEL	OVERALL LENGTH A	MTG DIM B	HEIGHT C
EDGS0400 - 1 High	9.38 (238.0)	8.5 (216.0)	3.0 (76.2)
EDGS0400 - 2 High	9.38 (238.0)	8.5 (216.0)	6.0 (152.4)
EDGS0400 - 3 High	9.38 (238.0)	8.5 (216.0)	9.0 (228.6)
EDGS0600 - 1 High	12.37 (314.0)	11.5 (292.0)	3.0 (76.2)
EDGS0600 - 2 High	12.37 (314.0)	11.5 (292.0)	6.0 (152.4)
EDGS0600 - 3 High	12.37 (314.0)	11.5 (292.0)	9.0 (228.6)
EDGS0800 - 1 High	15.6 (397.0)	14.75 (374.0)	3.0 (76.2)
EDGS0800 - 2 High	15.6 (397.0)	14.75 (374.0)	6.0 (152.4)
EDGS0800 - 3 High	15.6 (397.0)	14.75 (374.0)	9.0 (228.6)
EDGS1000 - 1 High	18.6 (472.5)	17.75 (450.0)	3.0 (76.2)
EDGS1000 - 2 High	18.6 (472.5)	17.75 (450.0)	6.0 (152.4)
EDGS1000 - 3 High	18.6 (472.5)	17.75 (450.0)	9.0 (228.6)
EDGS1200 - 1 High	21.6 (548.6)	20.75 (526.4)	3.0 (76.2)
EDGS1200 - 2 High	21.6 (548.6)	20.75 (526.4)	6.0 (152.4)
EDGS1200 - 3 High	21.6 (548.6)	20.75 (526.4)	9.0 (228.6)
EDGS1400 - 1 High	24.6 (624.8)	23.75 (602.6)	3.0 (76.2)
EDGS1400 - 2 High	24.6 (624.8)	23.75 (602.6)	6.0 (152.4)
EDGS1400 - 3 High	24.6 (624.8)	23.75 (602.6)	9.0 (228.6)
EDGS1600 - 1 High	27.6 (701.0)	26.75 (678.0)	3.0 (76.2)
EDGS1600 - 2 High	27.6 (701.0)	26.75 (678.0)	6.0 (152.4)
EDGS1600 - 3 High	27.6 (701.0)	26.75 (678.0)	9.0 (228.6)



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