



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



RoHS
COMPLIANT

STANDARD ELECTRICAL SPECIFICATIONS

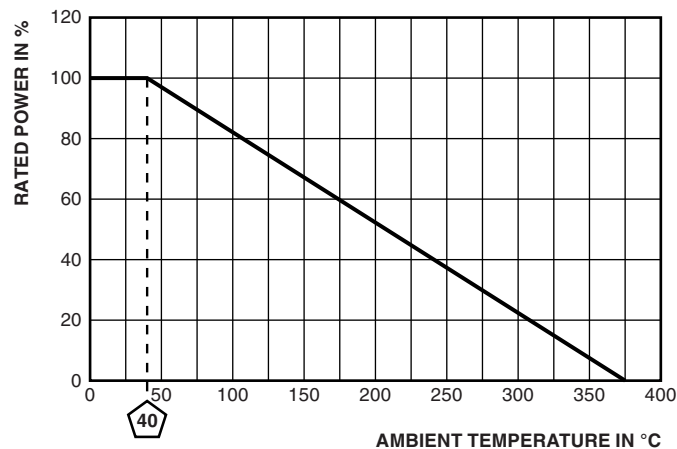
| GLOBAL MODEL | POWER RATING W | RESISTANCE RANGE Ω | TOLERANCE \pm % |
|--------------|-------------------|------------------------------|----------------------|
| EDGS0400 | 400 | 0.053 to 1.23 | 10 |
| EDGS0600 | 600 | 0.084 to 1.93 | 10 |
| EDGS0800 | 800 | 0.115 to 2.64 | 10 |
| EDGS1000 | 1000 | 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

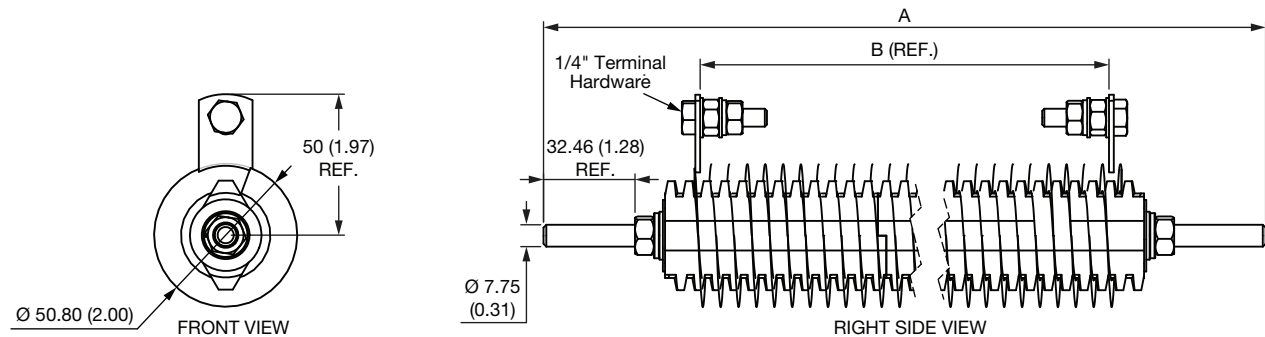
| CURRENT A | RESISTANCE Ω | | | | | | |
|--------------|------------------------|--------|--------|--------|--------|--------|--------|
| | 400 W | 600 W | 800 W | 1000 W | 1200 W | 1400 W | 1600 W |
| 85 | 0.0530 | 0.0840 | 0.1150 | 0.1460 | 0.1760 | 0.2000 | 0.2370 |
| 80 | 0.0600 | 0.0940 | 0.1290 | 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 | $\pm 400, \pm 180, \pm 130, \pm 20$ (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 | Ω | 1M |
| Dielectric voltage | V _{RMS} | 2500 for 6 s |
| Creepage | inch (mm) | 0.50 (12.7) typical |
| Terminal sleeves | | n/a |
| Inductance | μ H | n/a |
| Non-inductive winding | | n/a |
| Terminal strength | lb | n/a |
| Electrical or mechanical customization | | available: www.vishay.com/doc?31858 |

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

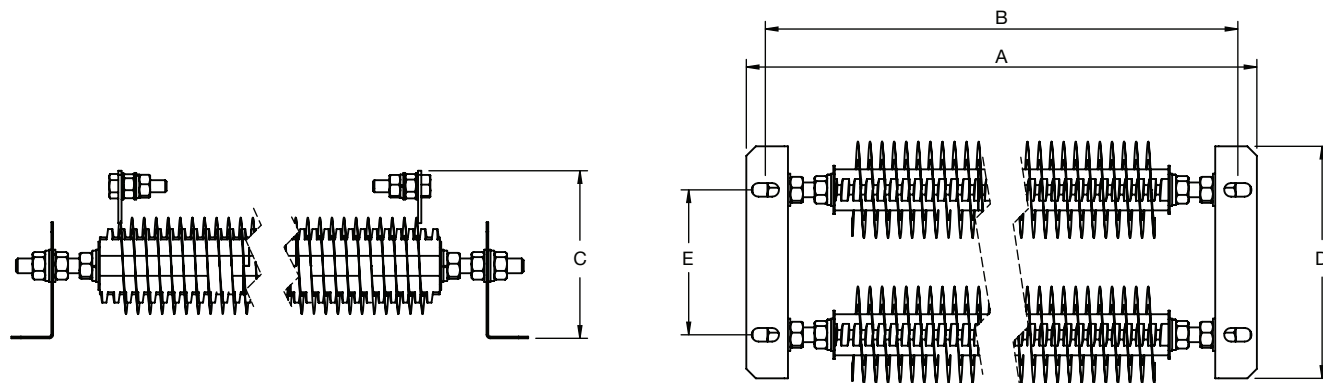
Note

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

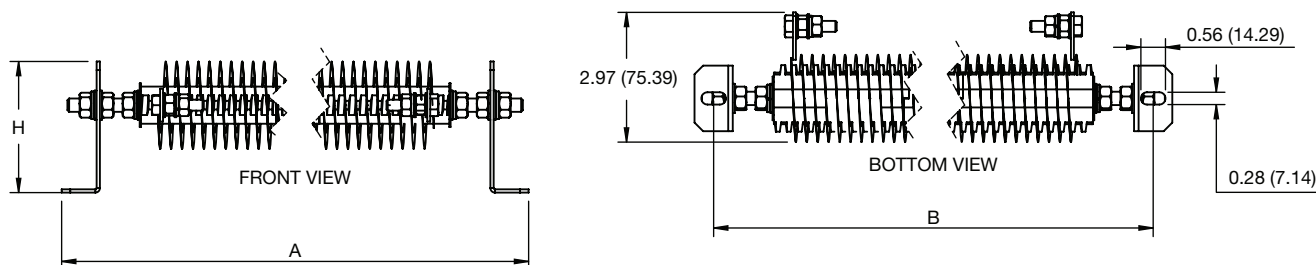
GLOBAL PART NUMBER INFORMATION

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

| | | | | | | | | | | | | | | | | | |
|--|---|---|--|---|---|---|---|------------------------|---|---|---|---|------------------------|---|-----------------------|---|---|
| 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) | | |
| EDGS0400 EDGS0600 EDGS0800 EDGS1000 EDGS1200 EDGS1400 EDGS1600 | | | R = decimal R1500 = 0.15 Ω 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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