

RL-6600

POWER-DISC INDUCTOR

DESCRIPTION

- Low Profile Drum Inductor

ENVIRONMENTAL DATA

- Storage temperature range: -55°C to +130°C
- Operating temperature range: -40°C to +130°C

PACKAGING INFORMATION

- Packaging information: pg. 509

FEATURES & APPLICATIONS

- Available in 114 standard values covering a wide range of inductance and currents
- High saturation flux density material makes these coils ideal for use in switching regulated power supply applications
- Used wherever high current choke values in a small physical height are needed
- Typical applications include: switching regulators, power amplifiers, power supplies, speaker crossover networks, RFI suppression, SCR, and TRIAC controls

Verify operation with sample in actual circuit. Order samples at www.rencousa.com.

MECHANICAL DIMENSIONS

U.S. Standard (mm)

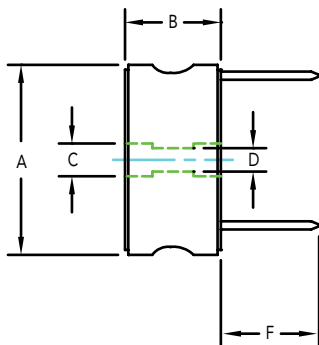
| PART NUMBER | A (MAX.) | B (MAX.) | C (MAX.) | D (REF.) | F (MIN.) |
|-------------|--------------|--------------|--------------|-----------|--------------|
| RL-6600-1 | 1.60 (40.64) | 0.75 (19.04) | 0.290 (7.37) | FOR 8/32" | 1.60 (40.64) |
| RL-6600-2 | 2.00 (50.80) | 0.75 (19.04) | 0.360 (9.14) | SCREW | 2.00 (50.80) |
| RL-6600-3 | 2.40 (60.96) | 0.85 (21.59) | 0.360 (9.14) | W/ WASHER | 2.40 (60.96) |

SEE SPECIFICATION TABLES FOR "E" DIMENSIONS

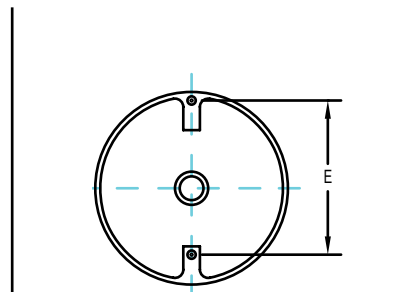
PART NUMBER PART WEIGHT

| | |
|-----------|-----------------|
| RL-6600-1 | 60.0g (2.12oz) |
| RL-6600-2 | 124.0g (4.38oz) |
| RL-6600-3 | 197.0g (6.95oz) |

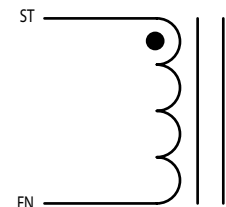
SIDE VIEW



BOTTOM VIEW



SCHEMATIC



RENCO ELECTRONICS INC.

595 International Place, Rockledge, FL 32955-4200 USA • www.rencousa.com • ISO 9001 Certified
Toll Free Engineering Hot Line: 800.645.5828 • P: 321.637.1000 • F: 321.637.1600



RL-6600-1

| Renco Part No. RL-6600-1 | Inductance (μ H) | DCR Max. (Ohms) | Isat (A) | Irms (A) | Dimension "E" Approx. |
|-----------------------------|--------------------------|--------------------|-------------|-------------|--------------------------|
| RL-6600-1-2.2 | 2.2 | 0.0028 | 152.0 | 28.20 | 1.10 |
| RL-6600-1-3.9 | 3.9 | 0.0037 | 118.2 | 27.20 | 1.10 |
| RL-6600-1-4.7 | 4.7 | 0.0040 | 96.7 | 25.70 | 1.10 |
| RL-6600-1-6.8 | 6.8 | 0.0048 | 81.9 | 23.70 | 1.10 |
| RL-6600-1-8.2 | 8.2 | 0.0055 | 71.0 | 22.00 | 1.16 |
| RL-6600-1-12 | 12.0 | 0.0067 | 62.6 | 20.70 | 1.16 |
| RL-6600-1-15 | 15.0 | 0.0070 | 56.0 | 20.50 | 1.16 |
| RL-6600-1-18 | 18.0 | 0.0094 | 50.7 | 20.50 | 1.16 |
| RL-6600-1-22 | 22.0 | 0.0103 | 46.3 | 20.40 | 1.18 |
| RL-6600-1-27 | 27.0 | 0.0121 | 39.4 | 18.90 | 1.18 |
| RL-6600-1-33 | 33.0 | 0.0163 | 36.7 | 14.00 | 1.17 |
| RL-6600-1-39 | 39.0 | 0.0173 | 34.3 | 13.60 | 1.17 |
| RL-6600-1-47 | 47.0 | 0.0196 | 30.4 | 12.80 | 1.17 |
| RL-6600-1-56 | 56.0 | 0.0208 | 28.8 | 12.40 | 1.18 |
| RL-6600-1-68 | 68.0 | 0.0292 | 26.0 | 10.70 | 1.17 |
| RL-6600-1-82 | 82.0 | 0.0319 | 23.7 | 10.20 | 1.18 |
| RL-6600-1-100 | 100.0 | 0.0348 | 21.7 | 9.80 | 1.18 |
| RL-6600-1-120 | 120.0 | 0.0480 | 19.4 | 8.30 | 1.18 |
| RL-6600-1-150 | 150.0 | 0.0530 | 17.5 | 7.90 | 1.18 |
| RL-6600-1-180 | 180.0 | 0.0743 | 15.9 | 6.40 | 1.18 |
| RL-6600-1-220 | 220.0 | 0.0833 | 14.6 | 6.00 | 1.19 |
| RL-6600-1-270 | 270.0 | 0.0940 | 12.8 | 5.70 | 1.19 |
| RL-6600-1-330 | 330.0 | 0.1270 | 11.7 | 4.80 | 1.12 |
| RL-6600-1-390 | 390.0 | 0.1380 | 10.8 | 4.60 | 1.12 |
| RL-6600-1-470 | 470.0 | 0.1840 | 9.8 | 4.10 | 1.12 |
| RL-6600-1-560 | 560.0 | 0.2030 | 9.0 | 3.90 | 1.12 |
| RL-6600-1-680 | 680.0 | 0.2790 | 8.1 | 3.20 | 1.12 |
| RL-6600-1-820 | 820.0 | 0.3140 | 7.5 | 3.10 | 1.12 |
| RL-6600-1-1000 | 1000.0 | 0.3480 | 6.7 | 2.90 | 1.14 |
| RL-6600-1-1200 | 1200.0 | 0.4940 | 6.2 | 2.40 | 1.15 |
| RL-6600-1-1500 | 1500.0 | 0.5480 | 5.5 | 2.30 | 1.14 |
| RL-6600-1-1800 | 1800.0 | 0.7320 | 5.1 | 1.95 | 1.14 |
| RL-6600-1-2200 | 2200.0 | 0.8090 | 4.5 | 1.80 | 1.12 |
| RL-6600-1-2700 | 2700.0 | 1.1200 | 4.1 | 1.56 | 1.13 |
| RL-6600-1-3300 | 3300.0 | 1.1820 | 3.7 | 1.46 | 1.13 |
| RL-6600-1-3900 | 3900.0 | 1.3800 | 3.4 | 1.40 | 1.13 |

NOTES:

1. ELECTRICAL SPECIFICATIONS MEASURED AT 25°C
2. Isat - DC CURRENT THAT WILL CAUSE INDUCTANCE TO DROP BY 5%
3. Irms - CURRENT THAT CAUSES THE TEMPERATURE TO RISE APPROX. 40°C ABOVE AMBIENT OF 25°C
4. INDUCTANCE \pm 10% TESTED AT 10 kHz, 0.1 Vrms. VALUES 10 μ H AND BELOW ARE \pm 20%
5. PART FINISHED WITH 135°C POLYOLEFIN SLEEVING THAT MEETS UL-224 VW-1



RENCO ELECTRONICS INC.

595 International Place, Rockledge, FL 32955-4200 USA • www.rencousa.com • ISO 9001 Certified
Toll Free Engineering Hot Line: 800.645.5828 • P: 321.637.1000 • F: 321.637.1600



RL-6600-2

| Renco Part No. RL-6600-2 | Inductance (μ H) | DCR Max. (Ohms) | Isat (A) | Irms (A) | Dimension "E" Approx. |
|-----------------------------|--------------------------|--------------------|-------------|-------------|--------------------------|
| RL-6600-2-2.2 | 2.2 | 0.0021 | 205.00 | 34.70 | 1.21 |
| RL-6600-2-3.3 | 3.3 | 0.0026 | 147.00 | 33.70 | 1.29 |
| RL-6600-2-5.6 | 5.6 | 0.0036 | 114.00 | 31.00 | 1.29 |
| RL-6600-2-8.2 | 8.2 | 0.0041 | 93.50 | 30.40 | 1.29 |
| RL-6600-2-12 | 12.0 | 0.0047 | 79.00 | 29.60 | 1.37 |
| RL-6600-2-15 | 15.0 | 0.0055 | 68.50 | 27.60 | 1.39 |
| RL-6600-2-18 | 18.0 | 0.0062 | 60.50 | 25.90 | 1.37 |
| RL-6600-2-22 | 22.0 | 0.0068 | 54.10 | 24.50 | 1.37 |
| RL-6600-2-27 | 27.0 | 0.0077 | 48.90 | 23.30 | 1.37 |
| RL-6600-2-33 | 33.0 | 0.0084 | 44.70 | 22.30 | 1.37 |
| RL-6600-2-39 | 39.0 | 0.0112 | 41.40 | 18.40 | 1.37 |
| RL-6600-2-47 | 47.0 | 0.0132 | 35.40 | 18.00 | 1.37 |
| RL-6600-2-56 | 56.0 | 0.0142 | 33.20 | 17.50 | 1.44 |
| RL-6600-2-68 | 68.0 | 0.0180 | 31.20 | 15.60 | 1.44 |
| RL-6600-2-82 | 82.0 | 0.0202 | 27.80 | 14.80 | 1.43 |
| RL-6600-2-100 | 100.0 | 0.0223 | 25.10 | 14.00 | 1.43 |
| RL-6600-2-120 | 120.0 | 0.0324 | 22.80 | 11.70 | 1.44 |
| RL-6600-2-150 | 150.0 | 0.0368 | 20.20 | 11.00 | 1.44 |
| RL-6600-2-180 | 180.0 | 0.0468 | 18.70 | 9.50 | 1.44 |
| RL-6600-2-220 | 220.0 | 0.0520 | 16.90 | 9.00 | 1.44 |
| RL-6600-2-270 | 270.0 | 0.0587 | 14.90 | 8.50 | 1.46 |
| RL-6600-2-330 | 330.0 | 0.0780 | 14.10 | 7.80 | 1.46 |
| RL-6600-2-390 | 390.0 | 0.0844 | 13.00 | 7.50 | 1.45 |
| RL-6600-2-470 | 470.0 | 0.1200 | 11.50 | 6.50 | 1.43 |
| RL-6600-2-560 | 560.0 | 0.1310 | 10.60 | 6.20 | 1.44 |
| RL-6600-2-680 | 680.0 | 0.1420 | 9.80 | 6.00 | 1.46 |
| RL-6600-2-820 | 820.0 | 0.1870 | 8.80 | 4.90 | 1.45 |
| RL-6600-2-1000 | 1000.0 | 0.2060 | 8.00 | 4.70 | 1.45 |
| RL-6600-2-1200 | 1200.0 | 0.3010 | 7.40 | 3.85 | 1.45 |
| RL-6600-2-1500 | 1500.0 | 0.3530 | 6.60 | 3.74 | 1.46 |
| RL-6600-2-1800 | 1800.0 | 0.3830 | 5.80 | 3.43 | 1.46 |
| RL-6600-2-2200 | 2200.0 | 0.5480 | 5.40 | 2.90 | 1.45 |
| RL-6600-2-2700 | 2700.0 | 0.7930 | 4.74 | 2.28 | 1.46 |
| RL-6600-2-3300 | 3300.0 | 0.8740 | 4.30 | 2.15 | 1.45 |
| RL-6600-2-3900 | 3900.0 | 0.9480 | 3.97 | 2.08 | 1.46 |
| RL-6600-2-4700 | 4700.0 | 1.2400 | 3.60 | 2.00 | 1.45 |
| RL-6600-2-5600 | 5600.0 | 1.4000 | 3.30 | 1.88 | 1.46 |
| RL-6600-2-6800 | 6800.0 | 1.8400 | 3.00 | 1.80 | 1.46 |
| RL-6600-2-8200 | 8200.0 | 2.3800 | 2.79 | 1.50 | 1.47 |
| RL-6600-2-10000 | 10000.0 | 2.7500 | 2.53 | 1.40 | 1.47 |

NOTES:

- ELECTRICAL SPECIFICATIONS MEASURED AT 25°C
- Isat - DC CURRENT THAT WILL CAUSE INDUCTANCE TO DROP BY 5%
- Irms - CURRENT THAT CAUSES THE TEMPERATURE TO RISE APPROX. 40°C ABOVE AMBIENT OF 25°C
- INDUCTANCE \pm 10% TESTED AT 10 kHz, 0.1 Vrms. VALUES 10 μ H AND BELOW ARE \pm 20%
- PART FINISHED WITH 135°C POLYOLEFIN SLEEVING THAT MEETS UL-224 VW-1



RENCO ELECTRONICS INC.

595 International Place, Rockledge, FL 32955-4200 USA • www.rencousa.com • ISO 9001 Certified
Toll Free Engineering Hot Line: 800.645.5828 • P: 321.637.1000 • F: 321.637.1600



RL-6600-3

| Renco Part No. RL-6600-3 | Inductance (μ H) | DCR Max. (Ohms) | Isat (A) | Irms (A) | Dimension "E" Approx. |
|-----------------------------|--------------------------|--------------------|-------------|-------------|--------------------------|
| RL-6600-3-1.0 | 1.0 | 0.0018 | 350.00 | 44.00 | 1.52 |
| RL-6600-3-2.2 | 2.2 | 0.0024 | 213.00 | 40.00 | 1.52 |
| RL-6600-3-4.7 | 4.7 | 0.0030 | 152.00 | 36.00 | 1.60 |
| RL-6600-3-8.2 | 8.2 | 0.0042 | 118.00 | 32.00 | 1.29 |
| RL-6600-3-12 | 12.0 | 0.0053 | 97.00 | 30.00 | 1.64 |
| RL-6600-3-15 | 15.0 | 0.0060 | 82.00 | 28.00 | 1.69 |
| RL-6600-3-18 | 18.0 | 0.0067 | 71.00 | 27.00 | 1.77 |
| RL-6600-3-22 | 22.0 | 0.0076 | 62.00 | 26.00 | 1.77 |
| RL-6600-3-27 | 27.0 | 0.0085 | 56.00 | 24.00 | 1.77 |
| RL-6600-3-33 | 33.0 | 0.0094 | 51.00 | 23.00 | 1.86 |
| RL-6600-3-39 | 39.0 | 0.0130 | 46.00 | 20.00 | 1.86 |
| RL-6600-3-47 | 47.0 | 0.0150 | 42.00 | 19.00 | 1.78 |
| RL-6600-3-56 | 56.0 | 0.0160 | 39.00 | 18.00 | 1.88 |
| RL-6600-3-68 | 68.0 | 0.0210 | 36.00 | 16.00 | 1.88 |
| RL-6600-3-82 | 82.0 | 0.0240 | 32.00 | 14.00 | 1.82 |
| RL-6600-3-100 | 100.0 | 0.0310 | 30.00 | 13.00 | 1.77 |
| RL-6600-3-120 | 120.0 | 0.0350 | 27.00 | 12.00 | 1.87 |
| RL-6600-3-150 | 150.0 | 0.0450 | 25.00 | 11.00 | 1.77 |
| RL-6600-3-180 | 180.0 | 0.0550 | 22.00 | 9.50 | 1.83 |
| RL-6600-3-220 | 220.0 | 0.0750 | 20.00 | 8.00 | 1.75 |
| RL-6600-3-270 | 270.0 | 0.0840 | 18.00 | 8.00 | 1.80 |
| RL-6600-3-330 | 330.0 | 0.0930 | 16.00 | 7.50 | 1.80 |
| RL-6600-3-390 | 390.0 | 0.1270 | 15.00 | 6.50 | 1.80 |
| RL-6600-3-470 | 470.0 | 0.1380 | 14.00 | 6.00 | 1.80 |
| RL-6600-3-560 | 560.0 | 0.1920 | 13.00 | 5.00 | 1.80 |
| RL-6600-3-680 | 680.0 | 0.2100 | 11.00 | 5.00 | 1.76 |
| RL-6600-3-820 | 820.0 | 0.2870 | 10.00 | 4.00 | 1.69 |
| RL-6600-3-1000 | 1000.0 | 0.3200 | 9.50 | 4.00 | 1.72 |
| RL-6600-3-1200 | 1200.0 | 0.3490 | 8.50 | 3.80 | 1.76 |
| RL-6600-3-1500 | 1500.0 | 0.4920 | 7.80 | 3.20 | 1.72 |
| RL-6600-3-1800 | 1800.0 | 0.5440 | 7.00 | 3.00 | 1.75 |
| RL-6600-3-2200 | 2200.0 | 0.6910 | 6.25 | 2.30 | 1.71 |
| RL-6600-3-2700 | 2700.0 | 0.7640 | 5.65 | 2.20 | 1.77 |
| RL-6600-3-3300 | 3300.0 | 1.0270 | 5.21 | 1.98 | 1.71 |
| RL-6600-3-3900 | 3900.0 | 1.1130 | 4.79 | 1.90 | 1.70 |
| RL-6600-3-4700 | 4700.0 | 1.5650 | 4.36 | 1.65 | 1.72 |
| RL-6600-3-5600 | 5600.0 | 1.7000 | 4.00 | 1.58 | 1.72 |
| RL-6600-3-6800 | 6800.0 | 1.8540 | 3.58 | 1.50 | 1.46 |

NOTES:

1. ELECTRICAL SPECIFICATIONS MEASURED AT 25°C
2. Isat - DC CURRENT THAT WILL CAUSE INDUCTANCE TO DROP BY 5%
3. Irms - CURRENT THAT CAUSES THE TEMPERATURE TO RISE APPROX. 40°C ABOVE AMBIENT OF 25°C
4. INDUCTANCE \pm 10% TESTED AT 10 kHz, 0.1 Vrms. VALUES 10 μ H AND BELOW ARE \pm 20%
5. PART FINISHED WITH 135°C POLYOLEFIN SLEEVING THAT MEETS UL-224 VW-1



RENCO ELECTRONICS INC.

595 International Place, Rockledge, FL 32955-4200 USA • www.rencousa.com • ISO 9001 Certified
Toll Free Engineering Hot Line: 800.645.5828 • P: 321.637.1000 • F: 321.637.1600

