# 1/C CU 2000V NL-EPR RHH/RHW-2 Thermoset SOLONON LSZH-TS TRACTION POWER CABLE

Traction Power Cable 2000 Volt Single Conductor Copper, No Lead Ethylene Propylene Rubber (NL-EPR) insulation RHH/RHW-2 Thermoset SOLONON® Low Smoke Zero Halogen (LSZH-TS) Jacket

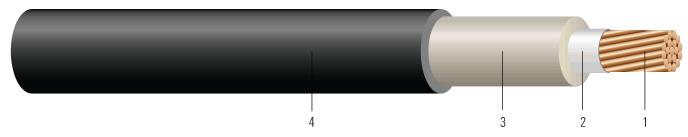


Image not to scale. See Table 1 for dimensions.

#### **CONSTRUCTION:**

- 1. **Conductor:** Stranded bare copper per ASTM B3. Center strand embossed with "Southwire, Year, Plant" when required
- 2. **Binder Tape**: Mylar Tape
- 3. Insulation: No Lead Ethylene Propylene Rubber (NLEPR)
- 4. Overall Jacket: Thermoset SOLONON® Low Smoke Zero Halogen (LSZH-TS) Jacket

### **APPLICATIONS AND FEATURES:**

Southwire 2000V No Lead NL-EPR/SOLONON Traction Power Cable is suited for use in mass transit and general industry applications where flexibility, fire resistance, and low smoke generation are a concern. May be installed in wet or dry locations in cable trays or raceways. These cables are capable of operating continuously at a conductor temperature not in excess of 90°C for normal operation, 130°C for emergency overload conditions, and 250°C for short circuit conditions. Resistance to moisture and most oils, acids, and alkalis with an overall durable LSZH XLPO jacket. Meets Flame Spread and Smoke Release requirements of NFPA 130. Rated for 1000 lbs./FT maximum sidewall pressure. Alternate constructions available upon request.

#### **SPECIFICATIONS:**

- ASTM B3 Soft or Annealed Copper Wire
- ASTM B8 Concentric-Lay-Stranded Copper Conductors
- ASTM B172 Standard Specification for Rope-Lay-Stranded Copper Conductors Having Bunch-Stranded Copper Conductors
- ASTM B173 Rope-Lay-Stranded Copper Conductors Having Concentric-Stranded Members
- UL 44 Thermoset-Insulated Wires and Cables
- UL 1685 Vertical-Tray Fire Propagation and Smoke Release Test (1/0 and Larger)
- ICEA S-95-658 (NEMA WC70) Power Cables Rated 2000 Volts or Less for the Distribution of Electrical Energy
- IEEE 1202 FT4 Flame Test (70,000) BTU/hr Vertical Tray Test
- NFPA 130 Standard for Fixed Guideway Transit and Passenger Rail Systems (250kcmil & Larger)

## **SAMPLE PRINT LEGEND:**

{SQFTG} SOUTHWIRE® E30117 {UL} XXX KCMIL RHH OR RHW-2 XX MILS NL-EPR XX MILS SOLONON® PRI/PRII -40°C FT4 ST1 FOR CT USE SUN RES 2000V --- {CSA} 156205 XXX KCMIL RW90 XX MILS NL-EPR XX MILS SOLONON® 90°C DRY 90°C WET TC-ER 2KV -40°C PRI PRII FT4-ST1 SR











Table 1 – Physical and Electrical Data

| Stock<br>Number | Cond.<br>Size | Strand<br>Class | Strand<br>Count   | Diameter Over<br>Conductor | Insul.<br>Thickness | Jacket<br>Thickness | Approx.<br>OD | Approx.<br>Weight | DC Resistance<br>@ 25°C | AC Resistance<br>@ 75°C | Max Pull<br>Tension |
|-----------------|---------------|-----------------|-------------------|----------------------------|---------------------|---------------------|---------------|-------------------|-------------------------|-------------------------|---------------------|
|                 | AWG/<br>kcmil |                 | No. of<br>Strands | inch                       | mil                 | mil                 | inch          | lb/1000ft         | Ω/1000ft                | Ω/1000ft                | lb                  |
| 647083          | 1/0           | В               | 19                | 0.362                      | 65                  | 45                  | 0.598         | 428               | 0.102                   | 0.1323                  | 854                 |
| TBA             | 250           | В               | 37                | 0.558                      | 75                  | 65                  | 0.838         | 947               | 0.043                   | 0.053                   | 2000                |
| 644487          | 350           | В               | 37                | 0.641                      | 75                  | 65                  | 0.944         | 1296              | 0.031                   | 0.039                   | 2800                |
| 890433          | 500           | В               | 37                | 0.766                      | 75                  | 65                  | 1.063         | 1791              | 0.022                   | 0.029                   | 4000                |
| 585827          | 500           | D               | 91                | 0.791                      | 75                  | 65                  | 1.088         | 1798              | 0.022                   | 0.029                   | 4000                |
| 671312          | 500           | D               | 91                | 0.791                      | 90                  | 65                  | 1.120         | 1826              | 0.022                   | 0.029                   | 4000                |
| 669725          | 500           | Н               | 427               | 0.909                      | 105                 | 65                  | 1.271         | 1961              | 0.022                   | 0.029                   | 4000                |
| TBA             | 750           | В               | 61                | 0.968                      | 90                  | 65                  | 1.282         | 2601              | 0.014                   | 0.022                   | 6000                |
| 563581          | 750           | D               | 127               | 0.968                      | 90                  | 65                  | 1.297         | 2650              | 0.014                   | 0.022                   | 6000                |
| 647082          | 1000          | D               | 127               | 1.118                      | 90                  | 65                  | 1.450         | 3468              | 0.011                   | 0.018                   | 8000                |
| TBA             | 1500          | В               | 91                | 1.370                      | 115                 | 95                  | 1.790         | 5228              | 0.007                   | 0.016                   | 10000               |
| TBA             | 2000          | В               | 127               | 1.583                      | 115                 | 95                  | 2.003         | 6852              | 0.005                   | 0.016                   | 10000               |

All dimensions are nominal and subject to normal manufacturing tolerances

Thicknesses shown as Minimum Average values









<sup>♦</sup> Cable marked with this symbol is a standard stock item