



AL 2000V EPDM Insulation Thermoset CPE Jacket. RHH/RHW-2/RW90 UL & CSA MSHA Approved

Class B Compact Aluminum conductor. Composite wall EPDM/CPE insulation. UL Listed as 2kV Type RHH/RHW-2 Rated 90°C Dry and Wet, 1/0 & larger rated FT4 and For CT Use (Cable Tray). CSA Listed as 2kV Type RW90, 1/0 & larger rated FT4 and TC-ER. For use in Cable Trays.



Image not to scale. See Table 1 for dimensions.

CONSTRUCTION:

1. **Conductor:** 8000 Series ACM Aluminum Class B stranded conductor.
2. **Binder Tape:** Mylar Tape
3. **Insulation:** 2 Layer Ethylene Propylene Diene Monomer/Chlorinated Polyethylene (EPR/CPE)

APPLICATIONS AND FEATURES:

2kV Aluminum RHH/RHW-2 and RW90 is electrical power cable approved for use per the NEC® and Canadian CE Code as power cable in wet or dry locations, indoors or out, with composite rubber insulation providing flexibility, toughness, and oil resistance making the cable particularly suited for downtower wind turbine applications. Rated for use at temperatures down to -40°C to 90°C.

SPECIFICATIONS:

- ASTM B801 Concentric-Lay-Stranded Conductors of 8000 Series Aluminum Alloy
- UL 44 Thermoset-Insulated Wires and Cables
- CSA C22.2 No. 38 Thermoset-insulated wires and cables
- IEEE 1202 FT4 Flame Test (70,000) BTU/hr Vertical Tray Test (1/0 and Larger)
- MSHA Approved
- CSA Standard C22.2 No. 38 File Listing LL90458

SAMPLE PRINT LEGEND:

{SQFTG} SOUTHWIRE XXXX KCMIL (XXX{mm²}) AL COMPACT CONDUCTOR E30117 {UL} TYPE RHH/RHW-2 90°C DRY 90°C WET 2KV -40°C PRI PRII SR FOR CT USE FT4 --- CSA LL90458 RW90 90°C DRY 90°C WET TC-ER 2KV -40°C PRI PRII FT1 FT4 SR --- P-07-KA100013-MSHA





Table 1 – Weights and Measurements

| Stock Number | Cond. Size | Strand | Min. Avg. Insul. Thickness | Overall Jacket Thickness | Approx. OD | Approx. Weight | Min Bending Radius | Max Pull Tension | DC Resistance @ 25°C | AC Resistance @ 75°C | Inductive Reactance @ 60Hz | Allowable Ampacity In Raceway 90°C† |
|--------------|------------|--------|----------------------------|--------------------------|------------|----------------|--------------------|------------------|----------------------|----------------------|----------------------------|-------------------------------------|
| | AWG/Kcmil | No. | mil | mil | inch | lb/1000ft | inch | lb | Ω/1000ft | Ω/1000ft | Ω/1000ft | Amp |
| TBA | 1/0 | 19 | 65 | 45 | 0.516 | 161 | 2.0 | 633 | 0.168 | 0.201 | 0.044 | 135 |
| TBA | 2/0 | 19 | 65 | 45 | 0.556 | 193 | 2.2 | 798 | 0.133 | 0.160 | 0.043 | 150 |
| TBA | 3/0 | 19 | 65 | 45 | 0.602 | 233 | 2.4 | 1006 | 0.105 | 0.126 | 0.042 | 175 |
| TBA | 4/0 | 19 | 65 | 45 | 0.654 | 282 | 2.6 | 1269 | 0.084 | 0.100 | 0.041 | 205 |
| TBA | 250 | 35 | 75 | 65 | 0.730 | 342 | 2.9 | 1500 | 0.071 | 0.086 | 0.041 | 230 |
| TBA | 350 | 35 | 75 | 65 | 0.825 | 452 | 3.3 | 2100 | 0.05 | 0.062 | 0.040 | 280 |
| TBA | 400 | 35 | 75 | 65 | 0.869 | 507 | 3.4 | 2400 | 0.044 | 0.054 | 0.040 | 305 |
| 673091 | 500 | 34 | 75 | 65 | 1.024 | 699 | 3.7 | 3000 | 0.035 | 0.044 | 0.039 | 350 |
| 644208 | 600 | 37 | 90 | 65 | 1.129 | 838 | 5.6 | 3600 | 0.029 | 0.037 | 0.039 | 385 |
| 643661 | 700 | 58 | 90 | 65 | 1.173 | 930 | 5.8 | 4200 | 0.025 | 0.033 | 0.038 | 425 |
| TBA | 750 | 61 | 90 | 65 | 1.148 | 907 | 5.7 | 4500 | 0.024 | 0.031 | 0.038 | 435 |
| 644209 | 1000 | 61 | 90 | 65 | 1.376 | 1283 | 6.8 | 6000 | 0.018 | 0.025 | 0.037 | 500 |

All dimensions are nominal and subject to normal manufacturing tolerances

◊ Cable marked with this symbol is a standard stock item

* Strand count meets minimum number per ASTM

Table 2 – Weights and Measurements (Metric)

| Stock Number | Cond. Size | Strand | Min. Avg. Insul. Thickness | Jacket Thickness ¹ | Approx. OD | Approx. Weight | Min Bending Radius | Max Pull Tension | DC Resistance @ 25°C | AC Resistance @ 75°C | Inductive Reactance @ 60Hz | Allowable Ampacity In Raceway 90°C |
|--------------|------------|--------|----------------------------|-------------------------------|------------|----------------|--------------------|------------------|----------------------|----------------------|----------------------------|------------------------------------|
| | AWG/Kcmil | No. | mm | mm | mm | kg/km | mm | newton | Ω/km | Ω/km | Ω/km | Amp |
| TBA | 1/0 | 19 | 1.65 | 1.14 | 13.11 | 240 | 50.80 | 2817 | 0.55 | 0.66 | 0.1444 | 135 |
| TBA | 2/0 | 19 | 1.65 | 1.14 | 14.12 | 287 | 55.88 | 3551 | 0.44 | 0.52 | 0.1411 | 150 |
| TBA | 3/0 | 19 | 1.65 | 1.14 | 15.29 | 347 | 60.96 | 4477 | 0.34 | 0.41 | 0.1378 | 175 |
| TBA | 4/0 | 19 | 1.65 | 1.14 | 16.61 | 420 | 66.04 | 5647 | 0.28 | 0.33 | 0.1345 | 205 |
| TBA | 250 | 35 | 1.91 | 1.65 | 18.54 | 509 | 73.66 | 6675 | 0.23 | 0.28 | 0.1345 | 230 |
| TBA | 350 | 35 | 1.91 | 1.65 | 20.96 | 673 | 83.82 | 9345 | 0.16 | 0.20 | 0.1312 | 280 |
| TBA | 400 | 35 | 1.91 | 1.65 | 22.07 | 754 | 86.36 | 10680 | 0.14 | 0.18 | 0.1312 | 305 |
| 673091 | 500 | 34 | 1.91 | 1.65 | 26.01 | 1040 | 93.98 | 13350 | 0.11 | 0.14 | 0.1280 | 350 |
| 644208 | 600 | 37 | 2.29 | 1.65 | 28.68 | 1247 | 142.24 | 16020 | 0.10 | 0.12 | 0.1280 | 385 |
| 643661 | 700 | 58 | 2.29 | 1.65 | 29.79 | 1384 | 147.32 | 18690 | 0.08 | 0.11 | 0.1247 | 425 |
| TBA | 750 | 61 | 2.29 | 1.65 | 29.16 | 1350 | 144.78 | 20025 | 0.08 | 0.10 | 0.1247 | 435 |
| 644209 | 1000 | 61 | 2.29 | 1.65 | 34.95 | 1909 | 172.72 | 26700 | 0.06 | 0.08 | 0.1214 | 500 |

All dimensions are nominal and subject to normal manufacturing tolerances

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* Strand count meets minimum number per ASTM

