# Okoguard®-Okolon® TS-CPE

## 5 & 8kV Nonshielded Internal Wiring Power Cable

Compressed Stranded Conductor
Copper Conductor/90°C Rating Dry

**A** Uncoated Compressed Conductor
**B** Strand Screen-Extruded Semiconducting EPR
**C** Insulation-Okoguard EPR
**D** Jacket-Okolon TS-CPE

### Insulation

Okoguard is Okonite's registered trade name for its exclusive ethylene-propylene rubber (EPR) based, thermosetting compound, whose optimum balance of electrical and physical properties is unequalled in other solid dielectrics. Okoguard insulation, with the distinctive red color and a totally integrated EPR system, provides the optimum balance for long, problem free service.

### Jacket

The Okolon TS-CPE jacket on this cable is a vulcanized chloronated polyethylene based compound which is mechanically rugged, flame, discharge and oil resistant.

### Applications

Okoguard-Okolon TS-CPE 5 & 8kV cables are heavy duty nonshielded cables that are intended solely for use as factory-installed wiring in equipment (internal wiring), in industrial applications where such cable systems are maintained by trained personnel, not as type MV. This cable must be routed or otherwise protected such that contact by persons is not possible while the cable is energized. Typical applications are for OEM equipment such as switchgear, transformers, etc.

### Specifications

**Conductor:** Annealed uncoated copper compressed stranded per ASTM B-8.
**Strand Screen:** Extruded semiconducting EPR strand screen. Meets or exceeds electrical and physical requirements of ICEA S-96-659/NEMA WC71 (5kV only) and UL 2460.
**Insulation:** Meets or exceeds electrical and physical requirements of ICEA S-96-659/NEMA WC71 (5kV only) and UL 2460.
**Jacket:** Meets or exceeds electrical and physical requirements of ICEA S-96-659/NEMA WC71 (5kV only) and UL 2460 for chloronated polyethylene jackets.
1/C nonshielded cables can surface discharge in service when in a random phase spacing or when in contact with grounded surfaces.

### Product Features

- Okoguard cables meet or exceed all recognized industry standards (UL, NEMA/ICEA).
- UL recognized component wire.
- 90°C continuous operating temperature.
- 130°C emergency rating.
- 250°C short circuit rating.
- Exceptional resistance to “treeing”.
- Stress cones not required.
- Resistant to most oils, acids and alkalies.

# Okoguard -Okolon TS-CPE

## 5 & 8kV Nonshielded Internal Wiring Power Cable

Compressed Stranded Conductor
Copper Conductor/90°C Rating Dry

**Product Data**
**Section 6: Sheet 7**

### 5kV Cables

| Catalog Number (1) | Conductor Size AWG or kcmil | Conductor Size - mm² | Insulation Thickness - mils | Insulation Thickness - mm | Jacket Thickness - mils | Jacket Thickness - mm | Approx. O.D. - Inches | Approx. O.D. - mm | Approx. Net Weight lbs./1000' | Approx. Ship Weight lbs./1000' | Ampacities (2) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 114-24-2600 | 8(7x) | 8.4 | 125 | 3.18 | 80 | 2.03 | 0.61 | 15.5 | 230 | 265 | 83 |
| 114-24-2602 | 6(7x) | 13.3 | 125 | 3.18 | 80 | 2.03 | 0.65 | 16.5 | 275 | 310 | 110 |
| 114-24-2604 | 4(7x) | 21.2 | 125 | 3.18 | 80 | 2.03 | 0.69 | 17.6 | 345 | 380 | 145 |
| 114-24-2606 | 2(7x) | 33.6 | 125 | 3.18 | 80 | 2.03 | 0.75 | 19.1 | 450 | 510 | 190 |
| 114-24-2608 | 1(19x) | 42.4 | 125 | 3.18 | 80 | 2.03 | 0.79 | 20.1 | 520 | 580 | 225 |
| 114-24-2610 | 1/0(19x) | 53.5 | 125 | 3.18 | 80 | 2.03 | 0.83 | 21.1 | 605 | 665 | 260 |
| 114-24-2612 | 2/0(19x) | 67.4 | 125 | 3.18 | 80 | 2.03 | 0.88 | 22.3 | 710 | 770 | 300 |
| 114-24-2614 | 3/0(19x) | 85.0 | 125 | 3.18 | 95 | 2.41 | 0.96 | 24.3 | 870 | 960 | 345 |
| 114-24-2616 | 4/0(19x) | 107.0 | 125 | 3.18 | 95 | 2.41 | 1.01 | 2.57 | 1035 | 1125 | 400 |
| 114-24-2618 | 250(37x) | 127.0 | 140 | 3.56 | 110 | 2.79 | 1.13 | 28.8 | 1255 | 1345 | 445 |
| 114-24-2620 | 350(37x) | 177.0 | 140 | 3.56 | 110 | 2.79 | 1.24 | 31.4 | 1620 | 1725 | 550 |
| 114-24-2622 | 500(37x) | 253.0 | 140 | 3.56 | 110 | 2.79 | 1.37 | 34.7 | 2155 | 2280 | 695 |
| 114-24-2630 | 750(61x) | 380.0 | 155 | 3.94 | 125 | 3.18 | 1.62 | 41.1 | 3140 | 3320 | 900 |
| 114-24-2640 | 1000(61x) | 507.0 | 155 | 3.94 | 125 | 3.18 | 1.77 | 44.9 | 4000 | 4250 | 1075 |

### 8kV Cables

| Catalog Number (1) | Conductor Size AWG or kcmil | Conductor Size - mm² | Insulation Thickness - mils | Insulation Thickness - mm | Jacket Thickness - mils | Jacket Thickness - mm | Approx. O.D. - Inches | Approx. O.D. - mm | Approx. Net Weight lbs./1000' | Approx. Ship Weight lbs./1000' | Ampacities (2) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 115-24-2933 | 6(7x) | 13.3 | 180 | 4.57 | 80 | 2.03 | 0.76 | 19.4 | 350 | 410 | 110 |
| 115-24-2935 | 4(7x) | 21.2 | 180 | 4.57 | 95 | 2.41 | 0.84 | 21.3 | 450 | 510 | 150 |
| 115-24-2937 | 2(7x) | 33.6 | 180 | 4.57 | 95 | 2.41 | 0.90 | 22.8 | 565 | 625 | 195 |
| 115-24-2939 | 1(19x) | 42.4 | 180 | 4.57 | 95 | 2.41 | 0.94 | 23.8 | 640 | 700 | 225 |
| 115-24-2941 | 1/0(19x) | 53.5 | 180 | 4.57 | 95 | 2.41 | 0.98 | 24.8 | 730 | 820 | 260 |
| 115-24-2943 | 2/0(19x) | 67.4 | 180 | 4.57 | 95 | 2.41 | 1.02 | 25.9 | 840 | 930 | 300 |
| 115-24-2945 | 3/0(19x) | 85.0 | 180 | 4.57 | 110 | 2.79 | 1.10 | 28.0 | 1015 | 1105 | 345 |
| 115-24-2947 | 4/0(19x) | 107.0 | 180 | 4.57 | 110 | 2.79 | 1.16 | 29.4 | 1185 | 1275 | 400 |
| 115-24-2949 | 250(37x) | 127.0 | 210 | 5.33 | 110 | 2.79 | 1.28 | 32.4 | 1415 | 1520 | 445 |
| 115-24-2952 | 350(37x) | 177.0 | 210 | 5.33 | 110 | 2.79 | 1.38 | 35.0 | 1795 | 1920 | 550 |
| 115-24-2953 | 500(37x) | 253.0 | 210 | 5.33 | 110 | 2.79 | 1.51 | 38.3 | 2345 | 2525 | 685 |
| 115-24-2955 | 750(61x) | 380.0 | 235 | 5.97 | 125 | 3.18 | 1.78 | 45.2 | 3395 | 3645 | 885 |
| 115-24-2957 | 1000(61x) | 507.0 | 250 | 6.35 | 140 | 3.56 | 1.99 | 50.6 | 4405 | 4805 | 1060 |

**Aluminum Conductors**
(1) Aluminum conductors are available on special order. To order aluminum conductors, change the first three digit of the catalog number from 114 to 134 for 5kV cables or 115 to 135 for 8kV cables.

**Ampacities**
(2) Ampacities are in accordance with NEC Table 311.60(C)(69)for a single conductor, in air at an ambient temperature of 40°C and a conductor temperature of 90°C. Derating factors may be needed depending upon the application.



THE OKONITE COMPANY
Ramsey, New Jersey 07446