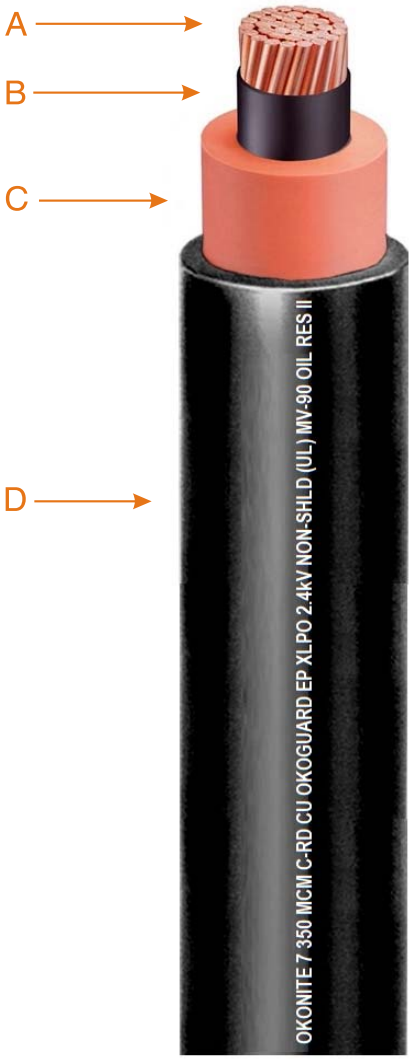
Okoguard®-Okoclear®-TS Type MV-90

2.4 kV Nonshielded Power Cable

One Okopact® (Compact Stranded)
Copper Conductor/90°C Rating Wet or Dry
For Cable Tray Use - Sunlight Resistant



A Uncoated, Okopact (Compact Stranded) Copper Conductor
B Strand Screen-Extruded Semiconducting EPR
C Insulation-Okoguard EPR
D Jacket-Okoclear-TS XLPO-LSZH

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 Okoclear-TS jacket on this cable is a low smoke, non-halogenated, vulcanized crosslinked polyolefin (XLPO) based compound. It provides excellent resistance to mechanical abuse, flame, weathering, most oils, acids and alkalis.

Applications

Okoguard-Okoclear-TS 2.4 kV cables are heavy duty nonshielded cables designed for use at up to 2.4 kV phase-to-phase in wet or dry locations in accordance with the NEC.

Okoguard-Okoclear-TS nonshielded cables are recommended for power distribution and motor circuits in generating plants and substations; in industrial and commercial buildings. Cables are designed for applications where in the event of a fire, smoke or halogen off gases could be a concern.

Single conductors may be installed in industrial or commercial occupancies in triplexed or random lay in any raceway or duct in wet or dry locations, or in open runs as permitted by the NEC.

Sizes 1/0 AWG and larger, may be installed in cable trays where permitted by NEC Section 315.32(3).

Specifications

Conductor: Uncoated copper compact stranded per ASTM B-496.

Strand Screen: Extruded semiconducting EPR strand screen. Meets or exceeds electrical and physical requirements of ICEA S-96-659/NEMA WC71 and UL 1072.

Insulation: Meets or exceeds electrical and physical requirements of ICEA S-96-659/NEMA WC71 and UL 1072.

Jacket: Meets or exceeds electrical and physical requirements of ICEA S-96-659/NEMA WC71 for Type II crosslinked polyolefin jackets.

1/C non-shielded 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 and IEEE).

- 90°C continuous operating temperature.
- 130°C emergency rating.
- 250°C short circuit rating.
- Sizes 1/0 AWG & larger: Passes the UL & IEEE 383-1974 Vertical Tray Flame Test.
- Sizes 1/0 AWG & larger: UL listed for cable tray use and limited smoke.
- Excellent corona resistance.
- Exceptional resistance to "treeing".
- Stress cones not required.
- Moisture resistant.
- Resistant to most oils, acids, and alkalis.
- UL listed: MV-90, Sunlight Resistant, Oil Res II.

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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) Conduit in Air	Ampacities (3) Underground Duct	Ampacities (4) Cable Tray	Conduit Size Inches (5)*
114-24-4213	8	8.4	125	3.18	80	2.03	0.60	15.1	215	250	55	64	–	2
114-24-4217	6	13.3	125	3.18	80	2.03	0.63	16.0	260	295	75	85	–	2
114-24-4219	4	21.2	125	3.18	80	2.03	0.67	17.1	328	368	97	110	–	2
114-24-4221	2	33.6	125	3.18	80	2.03	0.73	18.6	427	492	130	145	–	2
114-24-4223	1	42.4	125	3.18	80	2.03	0.76	19.4	493	558	155	170	–	2½
114-24-4225	1/0	53.5	125	3.18	80	2.03	0.80	20.3	580	645	180	195	260	2½
114-24-4227	2/0	67.4	125	3.18	80	2.03	0.88	22.4	682	742	205	220	300	2½
114-24-4229	3/0	85.0	125	3.18	95	2.41	0.96	24.5	838	908	240	250	345	3
114-24-4231	4/0	107.0	125	3.18	95	2.41	0.97	24.6	991	1086	280	290	400	3
114-24-4233	250	127.0	140	3.56	110	2.79	1.08	27.4	1198	1293	315	320	445	3
114-24-4237	350	177.0	140	3.56	110	2.79	1.18	29.9	1555	1660	385	385	550	3½
114-24-4243	500	253.0	140	3.56	110	2.79	1.29	32.9	2075	2205	475	470	695	3½
114-24-4249	750	380.0	155	3.94	125	3.18	1.54	39.0	3034	3224	600	585	900	5
114-24-4251	1000	507.0	155	3.94	125	3.18	1.70	43.0	3891	4141	690	670	1075	5

Okonite's web site, www.okonite.com contains the most up to date information.

(1) Aluminum conductors are available on special order.

Ampacities

(2) Ampacities are in accordance with Table 315.60(C)(7) of the NEC for three single Type MV-90 conductors, or single conductors twisted together (triplexed) and installed in an isolated conduit in air at an ambient temperature of 40°C and a conductor temperature of 90°C.

(3) Ampacities are in accordance with Table 315.60(C)(11) of the NEC for three single conductors or triplexed cable in one underground raceway, three feet deep with a conductor temperature of 90°C, 100% Load Factor, an ambient earth temperature of 20°C, and thermal resistance (RHO) of 90.

(4) Ampacities for cable in cable tray are in accordance with the NEC, Section 392.80(B)(2)(2), Table 315.60(C)(3) (copper), for single conductor cables installed in a single layer, in uncovered tray, with a maintained spacing of 1 cable OD or more at 90°C conductor temperature and 40°C ambient temperature.

Refer to the NEC, IEEE/ICEA-S-135 Power Cable Ampacities, or the Okonite Engineering Data Bulletin for other ambient temperatures, circuit configurations or installation requirements.

(5) Recommended size of rigid or nonmetallic conduit for three conductors based on 40% maximum fill .

*The jam ratio, conduit I.D. to cable O.D. should be checked to avoid possible jamming.