



Okoguard®-Okoseal® Type MV-90

2.4 kV Nonshielded Power Cable

One Okopact® (Compact Stranded) Copper Conductor
90°C Rating Wet or Dry



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

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 of electrical and physical properties for long, problem free service.

Jackets

The Okoseal (PVC) jacket supplied with this cable is mechanically rugged and has excellent resistance to oil, acids and most chemicals.

Applications

Okoguard-Okoseal 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 NEC Section 310.6.

Okoguard-Okoseal nonshielded cables are recommended for power distribution and motor circuits in generating plants and substations; in industrial and commercial buildings.

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 NEC Article 396.

Specifications

Conductor: Annealed 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 polyvinyl chloride jackets and UL 1072.

UL Listed as Type MV-90 in accordance with UL 1072.

1/C 2.4 kV 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, IEEE).
- 90°C continuous operating temperature.
- 130°C emergency rating.
- 250°C short circuit rating.
- Excellent corona resistance.
- Exceptional resistance to “treeing”.
- Stress cones not required.
- Moisture resistant.
- Resistant to most oils, acids, and alkalis.
- Sunlight Resistant.
- UL Listed as Oil Res II.

Okoguard-Okoseal Type MV-90

2.4 kV Nonshielded Power Cable

One Okopact (Compact Stranded)

Copper Conductor/90°C Rating Wet or Dry

Product Data Section 2: Sheet 1



Catalog Number (1)	Conductor Size AWG or kcmil		Conductor Size - mm ²		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		Conduit Size (4)* Inches	
114-24-3215	8	8.4	125	3.18	80	2.01	0.60	15.1	210	240	55	64	2													
114-24-3217	6	13.3	125	3.18	80	2.03	0.63	16.0	250	285	75	85	2													
114-24-3219	4	21.2	125	3.18	80	2.03	0.67	17.1	320	345	97	110	2													
114-24-3221	2	33.6	125	3.18	80	2.03	0.73	18.6	420	480	130	145	2													
114-24-3223	1	42.4	125	3.18	80	2.03	0.76	19.4	485	545	155	170	2 ½													
114-24-3225	1/0	53.5	125	3.18	80	2.03	0.80	20.3	565	625	180	195	2 ½													
114-24-3227	2/0	67.4	125	3.18	80	2.03	0.84	21.3	670	730	205	220	2 ½													
114-24-3229	3/0	85.0	125	3.18	95	2.41	0.92	23.3	820	910	240	250	3													
114-24-3231	4/0	107.0	125	3.18	95	2.41	0.97	24.5	975	1065	280	290	3													
114-24-3233	250	127.0	140	3.56	110	2.79	1.08	27.4	1180	1270	315	320	3													
114-24-3237	350	177.0	140	3.56	110	2.79	1.18	29.9	1535	1640	385	385	3 ½													
114-24-3243	500	253.0	140	3.56	110	2.79	1.29	32.9	2050	2175	475	470	3 ½													
114-24-3249	750	380.0	155	3.94	125	3.18	1.54	39.0	3000	3180	600	585	5													
114-24-3251	1000	507.0	155	3.94	125	3.18	1.69	43.0	3855	4105	690	670	5													

Visit Okonite's web site, www.okonite.com for the most up to date dimensions.

Aluminum Okopact Conductors

(1) Aluminum conductors are available on special order.

Ampacities

(2) Ampacities are in accordance with Table 310.73 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 310.77 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) Recommended sizes of rigid or nonmetallic conduit for 3 conductors based on 40% maximum fill.

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