Okoguard® Okoclear-TS Type MV-105

15kV Okoguard Shielded Power Cable

3 Okopact® (Compact Stranded) Copper Conductors/105°C Rating
100% & 133% Insulation Level
For Cable Tray Use-Sunlight Resistant-For Direct Burial

A Uncoated Okopact (Compact Stranded) Copper Conductors
B Extruded Semiconducting EPR Strand Screen
C Okoguard Insulation (EPR)
D Extruded Semiconducting EPR Insulation Screen
E Phase Identification Tape
F Okopact Copper Grounding Conductor
G Uncoated Copper Shield
H Fillers and Binder Tape
J Jacket-Black Okoclear-TS (XLPO)l

Insulation

Okoguard Is Okonite's registered trade name for its exclusive ethylene-propylene rubber (EPR) base, thermosetting compound, whose optimum balance of electrical and physical properties is unequaled 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.

Assembly

The Type MV-105 conductors are assembled with fillers and a binder tape overall. One bare stranded copper ground conductor is placed in one of the outer interstices.

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 shielded three conductor Okoclear-TS Type MV-105 power cables are recommended for distribution circuits, and for feeders or branch circuits in industrial and utility power distribution systems. Type MV cables may be installed in wet or dry locations, indoors or outdoors (exposed to sunlight), in any raceway or underground duct, directly buried, cable tray, or messenger supported in industrial establishments and electric utilities.

Specifications

Conductors: 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-93-639/NEMA WC74, CSA C68.10 and UL 1072.
Insulation: Okoguard meets or exceeds the electrical and physical requirements of ICEA S-93-639/NEMA WC74, CSA C68.10 and UL 1072. The insulated conductors are tested in accordance with AEIC CS8.
Insulation Screen: Extruded semiconducting EPR insulation screen per ICEA S-93-639/NEMA WC74, AEIC CS8, CSA C68.10 and UL 1072.
Shield: 5 mil uncoated copper tape helically applied with 12.5% nominal overlap.
Phase Identification: Color coded (black, red, blue) polyester ribbon laid longitudinally under the copper tape shield.
Grounding Conductor: Uncoated copper compact stranded per ASTM B-496 and sized in accordance with UL 1072.
Assembly: Cabled with fillers and ground wire in the interstices, binder tape overall.
Jacket: Meets or exceeds electrical and physical requirements of ICEA S-93-639/NEMA WC74, CSA C68.10 and UL 1072 for Type II crosslinked polyolefin jackets UL Listed as Type MV-105, sunlight resistant for use in cable tray, and for direct burial in accordance with UL 1072.

Product Features

- Triple tandem extruded, all EPR system.
- Complete prepackaged, color coded, factory tested wiring system.
- Passes the UL 1072, IEEE 383 and IEEE 1202/FT4 Vertical Tray Flame Tests.
- Complies with NEC Section 336.36 and is suitable for direct buried when installed in accordance with NEC Sections 250.4(A)(5).
- Minimum installation temperature of -40°C.
- Excellent corona resistance.
- Screens are clean stripping.
- Exceptional resistance to “treeing”.
- Improved Temperature Rating.
- UL listed: MV-105, Sunlight Resistant, Cable Tray Use, and Oil Res I & II.

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For Cable Tray Use-Sunlight Resistant-For Direct Burial

Catalog Number (1)	Conductor Size AWG/kcmil		Conductor Size - mm^2	Approx. Diameter over Insulation (in.)		Grounding Conductor Size - Awg/kcmil		Grounding Conductor Size - mm^2	Approx. Core O.D. - Inches		Approx. Core O.D. - 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 in Cable Tray (2)	Ampacities Direct Burial (3)
Okoguard Insulation: 175 mils (4.45mm), 100% Insulation Level																									
115-23-2766	2	33.6	0.67	6	13.3	1.59	40.4	110	2.79	1.85	47.0	2487	2724	185	200										
115-23-2768	1/0	53.5	0.74	4	21.2	1.74	44.2	110	2.79	2.00	50.8	3153	3421	240	255										
115-23-2770	2/0	67.4	0.78	4	21.2	1.82	42.2	110	2.79	2.09	53.1	3626	4073	275	290										
115-23-2772	4/0	107.0	0.88	3	26.7	2.04	51.8	110	2.79	2.29	58.2	4758	5214	360	375										
115-23-2774	250	127.0	0.93	3	26.7	2.15	54.6	110	2.79	2.42	61.5	5455	5929	400	410										
115-23-2776	350	177.0	1.03	2	33.6	2.36	59.9	110	2.79	2.60	66.0	6620	7178	490	495										
115-23-2778	500	253.0	1.14	1	42.4	2.61	66.3	140	3.56	2.91	73.9	8721	9615	600	590										
115-23-2780	750	380.0	1.32	1/0	53.5	2.99	75.9	140	3.56	3.29	83.6	12022	13276	745	720										
Okoguard Insulation: 220 mils (5.59mm), 133% Insulation Level																									
115-23-2802	2	33.6	0.76	6	13.3	1.79	45.5	110	2.79	2.03	51.6	2970	3238	185	200										
115-23-2804	1/0	53.5	0.83	4	21.2	1.93	49.0	110	2.79	2.18	55.4	3566	4013	240	255										
115-23-2806	2/0	67.4	0.87	4	21.2	2.02	51.3	110	2.79	2.26	57.4	4029	4476	275	290										
115-23-2808	4/0	107.0	0.97	3	26.7	2.24	56.9	110	2.79	2.48	63.0	5279	5753	360	375										
115-23-2810	250	127.0	1.03	3	26.7	2.36	60.0	110	2.79	2.59	65.8	5801	6359	400	410										
115-23-2812	350	177.0	1.12	2	33.6	2.56	65.0	140	3.56	2.85	72.4	7396	8122	490	495										
115-23-2814	500	253.0	1.24	1	42.4	2.81	71.4	140	3.56	3.11	79.0	9362	10365	600	590										
115-23-2816	750	380.0	1.41	1/0	53.5	3.19	81.0	140	3.56	3.49	88.6	12742	14266	745	720										

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

▲ **Authorized stock item.** Available from our Customer Service Centers.

Aluminum Conductors

(1) Aluminum conductors available on special orders.

Ampacities

(2) Ampacities are in accordance with Table 315.60(C)(5) of the NEC for an insulated three conductor cable, isolated in air, with a conductor operating temperature of 105°C and an ambient air temperature of 40°C.

(3) Ampacities are in accordance with Table 315.60(C)(17) of the NEC for an insulated three conductor cable directly buried in the earth with a conductor operating temperature of 105°C, ambient earth temperature of 20°C, 100% load factor, thermal resistance (RHO) of 90.

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

THE OKONITE COMPANY
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