Okoguard®-Okoclear-TS®

UL Type RHH/RHW/RHW-2, CSA RW90*

UL 600/1000V and CSA 600V Power and Control
Copper Conductor/90°C Wet or Dry
For Cable Tray Use - Sunlight Resistant

A Uncoated, Copper Conductor
B Composite Okoguard-Okoclear-TS

Composite Insulation

Okoguard-Okoclear-TS is a composite insulation consisting of a layer of ethylene propylene rubber (EPR) and covered with a thermosetting low-smoke non-halogenated cross-linked polyolefin (XLPO).
The advantages of Okoguard EPR, with a proven track record of over 40 years as a medium voltage insulation, are now offered in low voltage cables. Okoclear-TS is Okonite's trade name for its thermoset low-smoke non-halogenated XLPO.

Applications

Okoguard-Okoclear-TS 600/1000V Power and Control Cables are recommended for use in all low voltage circuits where continuity of service is the prime consideration. Ideal for applications where smoke or halogen off gases are a concern in the event of a fire.These cables may be installed in wet or dry locations, indoors or outdoors, in raceways, underground ducts, or lashed to a messenger for aerial installation. These cables may also be installed in cable tray (size 1/0 AWG and larger per NEC 392.10(B)(1)).

Specifications

Conductor: Uncoated soft copper per ASTM B-3. Solid per ASTM B-3. Sizes smaller than #8 are compress stranded per ASTM B-8. Sizes #8 and larger are compact stranded per ASTM B-496.
Insulation: Meets or exceeds all requirements of ICEA S-95-658, NEMA WC-70 and UL 44.

Listed by Underwriters Laboratories, Inc. as Type RHH or RHW-2 and sunlight resistant. Sizes 1/0 AWG and larger are marked for use in cable tray.

Listed by CSA as RW90, -40°C, FT1, SR, Hal Free, PRI, PRII, GRI, and GRII for sizes 1/0 AWG - 2000 KCMIL. Sizes 500-2000 KCMIL are rated TC, TC-ER, and FT4-ST1. 1000V and 2000V constructions are also available.

*Sizes 1/0 AWG - 2000 kcmil

Product Features

- Low smoke zero halogen design.
- Sizes 1/0 AWG and larger pass the Vertical Tray Flame Test with limited smoke requirements of UL 1685 for use in cable tray.
- UL Sizes 1/0 & larger are marked ST1.
- Passes the IEEE 383-1974 Vertical Tray Flame Test.
- Sizes 500 kcmil & larger pass the Vertical Tray Flame Test with limited smoke requirement of UL1685-IEEE 1202 exposure.
- Oil Resistant I & II.
- Extreme heat resistance:
  90°C continuous rating, wet or dry
  130°C emergency overload rating
  250°C short circuit rating
- Exceptional resistance to deformation at high temperature.
- Stable electrical properties.
- Low SIC and power factor.
- Low moisture absorption.
- Mechanically rugged.
- Resistant to weather, most oils, acids and alkalies.
- Most flexible, easier to install and terminate than XLPE insulation.

Composite Insulation Thickness (mils)		
Conductor (AWG/kcmil)	**Okoguard**	**Okoclear-TS**
14-9	30	15
8	45	15
6-2	45	30
1-4/0	55	45
250-500	65	65
750-1000	80	65

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Catalog Number	Conductor size AWG kcmil	Number of Strands	Composite Insulation Thickness - mils	Composite Insulation Thickness - mm	Approx. O.D. - Inches	Approx. O.D. - mm	Approx. Net Weight lbs./1000'	Approx. Ship Weight lbs./1000'	90°C Wet (1)** NEC Ampacity	75°C Wet (1)* NEC Ampacity	ICEA Ampacity (2)
112-24-2491	14	1	45	1.14	0.16	4.13	23	46	15	15	24
112-24-2501	14	7	45	1.14	0.17	4.34	25	48	15	15	24
112-24-2511	12	1	45	1.14	0.18	4.57	32	55	20	20	30
112-24-2521	12	7	45	1.14	0.19	4.80	34	57	20	20	30
112-24-2621	10	1	45	1.14	0.20	5.11	46	69	30	30	42
112-24-2631	10	7	45	1.14	0.21	5.41	49	72	30	30	42
112-24-2661	9	7	45	1.14	0.23	5.74	59	82	30	30	48
112-24-2671	8	7	60	1.52	0.27	6.73	75	98	55	50	55
112-24-2681	6	7	75	1.91	0.33	8.46	120	145	75	65	75
112-24-2841	4	7	75	1.91	0.38	9.58	174	197	95	85	97
112-24-2851	2	7	75	1.91	0.43	11.00	258	281	130	115	130
112-24-2861	1	19	100	2.54	0.52	13.16	342	365	150	130	156
112-24-2881	1/0	19	100	2.54	0.56	14.10	417	449	170	150	179
112-24-2911	2/0	19	100	2.54	0.60	15.14	509	541	195	175	204
112-24-2931	3/0	19	100	2.54	0.64	16.33	625	657	225	200	242
112-24-2941	4/0	19	100	2.54	0.70	17.68	769	808	260	230	278
112-24-2951	250	37	130	3.30	0.80	20.40	944	999	290	255	317
112-24-2961	350	37	130	3.30	0.90	22.76	1273	1328	350	310	384
112-24-2971	500	37	130	3.30	1.01	25.73	1759	1836	430	380	477
112-24-2201	750	61	145	3.68	1.21	30.78	2598	2698	535	475	598
112-24-2211	1000	61	145	3.68	1.36	34.49	3400	3577	615	545	689

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

(1) Ampacities are based on Table 310.16 of the National Electrical Code for these 90°C rated conductors at an ambient temperature of 30°C. The 75°C wet column is provided for additional information.

The ampacities shown apply to open runs of cable, installation in any approved raceway, direct burial in the earth, or as aerial cable on a messenger. Derating for more than three current carrying conductors within a raceway is in accordance with NEC 310.15(C)(1).

(2) Based on three (3) conductors in a single enclosed or exposed conduit. Capacities based on 40°C air ambient using ICEA methods. For 30°C ambient multiply values by 1.10; for 50°C multiply by .90. For other ambients or installation conditions refer to Engineering Data Book EHB..

The ampacities shown also apply to cables installed in cable tray in accordance with NEC Section 392.80.

*Sizes 1/0 AWG - 2000 kcmil

**Current limited to 15, 20 and 30 amps per Section 240.4(D)(3) of the NEC for #14, #12 and #10 AWG, respectively.

THE OKONITE COMPANY

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