

Okoguard-Okolon[®] TS-CPE Type RHH or RHW-2 or USE-2**, VW-1, FT-4, CSA RW-90

UL 600/1000V and CSA 600V Power and Control

Copper Conductor/90°C Wet or Dry

For Cable Tray Use-Sunlight Resistant-For Direct Burial



A Uncoated, Copper Conductor
B Composite Okoguard/Okolon
TS-CPE Insulation

Composite Insulation

Okoguard-Okolon TS-CPE is Okonite's trade name for its composite insulation system consisting of a layer of EPR and covered with a chlorinated polyethylene (CPE) thermoset compound.

The advantages of Okoguard EPR, with a proven track record of over 50 years as a medium voltage insulation, are now offered in low voltage cables. Okolon TS-CPE is Okonite's trade name for its chlorinated polyethylene (CPE) thermoset compound.

Applications

Okoguard-Okolon TS-CPE 600/1000V Power and Control Cables are recommended for use in all low voltage circuits where uninterrupted service is essential. These cables may be installed in wet or dry locations, indoors or outdoors, in raceways, underground ducts, directly buried in the earth, 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 Standards 44 and 854.

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

Listed by CSA as RW-90, -40C, FT1 (1/0 and larger: FT4), sunlight resistant.

** Sizes 12 AWG and larger, with exception to 6 AWG

Product Features

- Sizes 1/0 AWG and larger pass the Vertical Tray Flame Test requirements of UL 1581 for use in cable tray.
- Passes the IEEE 383-1974 Vertical Tray Flame Test. (sizes #6 AWG and larger)
- Passes the IEEE 1202 Vertical Tray Flame Test. (sizes 1/0 AWG & larger)
- 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 alkalis.
- More flexible, easier to install and terminate than XLPE insulation.
- UL and CSA Listed.
- Multiple Conductor Constructions Available.

Composite Insulation Thickness (mils)		
Conductor (AWG/kcmil)	Okoguard	Okolon TS-CPE
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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Product Data
Section 3: Sheet 1



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)
112-24-2061	14	1	45	1.14	0.16	4.06	23	28	15	15	24
▲ 112-24-2071	14	7	45	1.14	0.17	4.57	25	30	15	15	24
112-24-2091	12	1	45	1.14	0.18	4.57	32	37	20	20	30
▲ 112-24-2101	12	7	45	1.14	0.19	4.83	34	39	20	20	30
112-24-2121	10	1	45	1.14	0.20	5.08	46	51	30	30	42
▲ 112-24-2131	10	7	45	1.14	0.21	5.33	49	54	30	30	42
112-24-2171	9	19	45	1.14	0.23	5.84	58	63	30	30	48
▲ 112-24-2191	8	7	60	1.52	0.27	6.86	75	82	55	50	55
▲ 112-24-2221	6	7	75	1.91	0.33	8.38	119	130	75	65	75
▲ 112-24-2251	4	7	75	1.91	0.38	9.75	173	184	95	85	97
▲ 112-24-2311	2	7	75	1.91	0.43	11.00	257	280	130	115	130
112-24-2331	1	19	100	2.54	0.52	13.16	340	372	150	130	156
▲ 112-24-2351	1/0	19	100	2.54	0.56	14.10	414	446	170	150	179
▲ 112-24-2371	2/0	19	100	2.54	0.60	15.14	507	539	195	175	204
112-24-2391	3/0	19	100	2.54	0.64	16.33	622	654	225	200	242
▲ 112-24-2411	4/0	19	100	2.54	0.70	17.68	766	805	260	230	278
▲ 112-24-2431	250	37	130	3.30	0.80	20.32	938	993	290	255	317
▲ 112-24-2471	350	37	130	3.30	0.89	22.61	1265	1320	350	310	384
▲ 112-24-2531	500	37	130	3.30	1.01	25.65	1750	1827	430	380	477
▲ 112-24-2591	750	61	145	3.68	1.21	30.73	2590	2690	535	475	598
▲ 112-24-2651	1000	61	145	3.68	1.36	34.54	3391	3568	615	545	689

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

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

To order a color other than black, change the last digit of the catalog number as follows:			
White	2	Orange	5
Red	3	Blue	6
Green	4	Yellow	7
Example: To order #14/Sol - Red, the catalog number would be 112-24-2063.			

(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.

For ampacities in cable tray, see NEC Section 392.80.

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

**Sizes 12 AWG and larger, with exception to 6 AWG.