Okoguard®-Okolon® TS-CPE

5 & 8 kV Nonshielded Internal Wiring Power Cable

Compressed Stranded Conductor
Copper Conductor/90°C Rating Dry

A Uncoated Compressed Copper Conductor
B Strand Screen-Extruded Semiconducting EPR
C Insulation-Okoguard EPR
D Jacket-Okolon TS-CPE

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 Okolon TS-CPE jacket on this cable is a vulcanized chloronated polyethylene based compound which is mechanically rugged, flame, discharge and oil resistant.

Applications

Okoguard-Okolon TS-CPE 5 & 8 kV cables are heavy duty nonshielded cables that are intended solely for use as factory-installed wiring in equipment (internal wiring), in industrial applications where such cable systems are maintained by trained personnel, not as type MV. This cable must be routed or otherwise protected such that contact by persons is not possible while the cable is energized.

Typical applications are for OEM equipment such as switchgear, transformers, etc.

Specifications

Conductor: Annealed uncoated copper compressed stranded per ASTM B-8.

Strand Screen: Extruded semiconducting EPR strand screen. Meets or exceeds electrical and physical requirements of ICEA S-96-659/NEMA WC71 (5kV only) and UL 2460.

Insulation: Meets or exceeds electrical and physical requirements of ICEA S-96-659/NEMA WC71 (5kV only) and UL 2460.

Jacket: Meets or exceeds electrical and physical requirements of ICEA S-96-659/NEMA WC71 (5kV only) and UL 2460 for chloronated polyethylene jackets.

1/C 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).
- UL recognized component wire.
- 90°C continuous operating temperature.
- 130°C emergency rating.
- 250°C short circuit rating
- Exceptional resistance to “treeing”.
- Stress cones not required.
- Resistant to most oils, acids, and alkalies.

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Compressed Stranded Conductor
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Product Data
Section 6: Sheet 7

5kV Cables

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)
114-24-2600	8(7x)	8.4	125	3.18	80	2.03	0.61	15.5	230	265	83
114-24-2602	6(7x)	13.3	125	3.18	80	2.03	0.65	16.5	275	310	110
114-24-2604	4(7x)	21.2	125	3.18	80	2.03	0.69	17.6	345	380	145
114-24-2606	2(7x)	33.6	125	3.18	80	2.03	0.75	19.1	450	510	190
114-24-2608	1(19x)	42.4	125	3.18	80	2.03	0.79	20.1	520	580	225
114-24-2610	1/0(19x)	53.5	125	3.18	80	2.03	0.83	21.1	605	665	260
114-24-2612	2/0(19x)	67.4	125	3.18	80	2.03	0.88	22.3	710	770	300
114-24-2614	3/0(19x)	85.0	125	3.18	95	2.41	0.96	24.3	870	960	345
114-24-2616	4/0(19x)	107.0	125	3.18	95	2.41	1.01	2.57	1035	1125	400
114-24-2618	250(37x)	127.0	140	3.56	110	2.79	1.13	28.8	1255	1345	445
114-24-2620	350(37x)	177.0	140	3.56	110	2.79	1.24	31.4	1620	1725	550
114-24-2622	500(37x)	253.0	140	3.56	110	2.79	1.37	34.7	2155	2280	695
114-24-2630	750(61x)	380.0	155	3.94	125	3.18	1.62	41.1	3140	3320	900
114-24-2640	1000(61x)	507.0	155	3.94	125	3.18	1.77	44.9	4000	4250	1075

8kV Cables

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)
115-24-2933	6(7x)	13.3	180	4.57	80	2.03	0.76	19.4	350	410	110
115-24-2935	4(7x)	21.2	180	4.57	95	2.41	0.84	21.3	450	510	150
115-24-2937	2(7x)	33.6	180	4.57	95	2.41	0.90	22.8	565	625	195
115-24-2939	1(19x)	42.4	180	4.57	95	2.41	0.94	23.8	640	700	225
115-24-2941	1/0(19x)	53.5	180	4.57	95	2.41	0.98	24.8	730	820	260
115-24-2943	2/0(19x)	67.4	180	4.57	95	2.41	1.02	25.9	840	930	300
115-24-2945	3/0(19x)	85.0	180	4.57	110	2.79	1.10	28.0	1015	1105	345
115-24-2947	4/0(19x)	107.0	180	4.57	110	2.79	1.16	29.4	1185	1275	400
115-24-2949	250(37x)	127.0	210	5.33	110	2.79	1.28	32.4	1415	1520	445
115-24-2952	350(37x)	177.0	210	5.33	110	2.79	1.38	35.0	1795	1920	550
115-24-2953	500(37x)	253.0	210	5.33	110	2.79	1.51	38.3	2345	2525	685
115-24-2955	750(61x)	380.0	235	5.97	125	3.18	1.78	45.2	3395	3645	885
115-24-2957	1000(61x)	507.0	250	6.35	140	3.56	1.99	50.6	4405	4805	1060

Aluminum Conductors

(1) Aluminum conductors are available on special order. To order aluminum conductors, change the first three digits of the catalog number from114 to 134 for 5kV cables or 115 to 135 for 8kv cables.

Ampacities

(2) Ampacities are in accordance with NEC Table 310.60(C)(69) for a single conductor, in air at an ambient temperature of 40°C and a conductor temperature of 90°C. Derating factors may be needed depending upon the application.

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