



CUBOND Power Cable

with 3 XHHW-2 and 1 bare grounding conductor / copper shield / CPE jacket / 600 volt





Applications

For utility and industrial circuits where a highly moistureresistant cable is required. Suitable for AC or DC use in wet or dry locations and can be used as aerial cables, installed in conduit or trays or can be directly buried.

Cross-linked polyethylene (XLPE) insulated conductors have excellent physical and electrical properties with a high degree of flame-retardancy. The bond that is formed between the copolymer-coated shield and the CPE jacket offers superior oil, chemical and moisture resistance.

These cables are manufactured to meet the requirements of the ICEA 70,000 and 210,000 BTU/hr vertical tray flame tests as detailed in ICEA T-29-520 and T-30-520.

Specifications and Ratings

- UL Standard 44 and 1277
- ICEA S-73-532 (NEMA WC 57) and S-95-658 (NEMA WC-70)

Design Parameters

CONDUCTORS: Bare soft copper per ASTM B 3, Class B concentrically stranded per ASTM B 8.

BARE GROUND CONDUCTORS: Bare soft copper Class B stranded (7 strands) per ASTM B 3 and ASTM B 8.

INSULATION: Heat and moisture-resistant thermoset crosslinked polyethylene (XLPE) meeting the requirements of ICEA S-95-658 (NEMA WC 70) rated for continuous use at 90°C dry and wet to meet UL 44 for XHHW-2 wire.

CURCUIT IDENTIFICATION:Conductor insulation is black and coded alphanumerically in accordance with NEMA WC-57 Method 4.

ASSEMBLY: Three insulated conductors are cabled with a bare ground, with non-hygroscopic fillers where necessary to form a round compact core and wrapped with a Mylar binder.

SHIELD: Longitudinally-corrugated 6 mil copolymer coated copper tape (CUBOND) with a minimum overlap of 12.5%. The copolymer-coated shield provides a bond between the shield and jacket to form a moisture barrier.

JACKET: Heat, moisture and sunlight resistant black CPE jacket to meet ICEA S-95-658 (NEMA WC 70) with thickness meeting UL1277.



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Part Number	Number of Conductors	AWG/KCMIL Size	Stranding	Insulation Thickness in (mm)	Ground Size AWG	Copper Shield Thickness in (mm)	Jacket Thickness in (mm)	Cable Outer Diameter in (mm)	Approximate Cable Weight Lbs/Mft (Kg/ Km)
382473	3	8	7/.0486	.045 (1.1)	10	.006 (.15)	.060 (1.5)	.730 (18.5)	401 (597)
382474	3	6	7/.0612	.045 (1.1)	8	.006 (.15)	.060 (1.5)	.825 (20.9)	558 (830)
382475	3	4	7/.0772	.045 (1.1)	8	.006 (.15)	.080 (2.0)	.965 (24.5)	785 (1168)
382476	3	3	7/.0867	.045 (1.1)	6	.006 (.15)	.080 (2.0)	1.035 (26.3)	945 (1406)
382477	3	2	7/.0974	.045 (1.1)	6	.006 (.15)	.080 (2.0)	1.100 (27.9)	1107 (1647)
382478	3	1	19/.0664	.055 (1.4)	6	.006 (.15)	.080 (2.0)	1.225 (31.1)	1356 (2018)
382479	3	1/0	19/.0745	.055 (1.4)	6	.006 (.15)	.080 (2.0)	1.320 (33.5)	1581 (2353)
382480	3	2/0	19/.0837	.055 (1.4)	6	.006 (.15)	.080 (2.0)	1.420 (36.1)	1893 (2817)
382481	3	3/0	19/.0940	.055 (1.4)	4	.006 (.15)	.080 (2.0)	1.530 (38.9)	2384 (3547)
382482	3	4/0	19/.1055	.055 (1.4)	4	.006 (.15)	.080 (2.0)	1.660 (42.2)	2830 (4211)
382483	3	250 KCMIL	37/.0822	.065 (1.7)	4	.006 (.15)	.110 (2.8)	1.870 (47.5)	3390 (5044)
382484	3	350 KCMIL	37/.0973	.065 (1.7)	3	.006 (.15)	.110 (2.8)	2.105 (53.5)	4536 (6750)
382485	3	500 KCMIL	37/.1162	.065 (1.7)	2	.006 (.15)	.110 (2.8)	2.395 (60.8)	6178 (9193)

Optional features available are: 1) Flexible stranded conductors; 2) Tin-coated copper conductors per ASTM B33;

³⁾ Flame-retardant ethylene propylene rubber (FREP) insulated conductors; 4) 2000 volt rating; 5) Aluminum shield.

The data herein is approximate and subject to normal manufacturing tolerances. These specifications are subject to change without notice. Consult factory for a variety of alternate constructions for specific applications.