

Uniblend® CPE

EPR/Copper Tape Shield with Overall CPE Jacket,
Medium-Voltage Power, Shielded 15 kV
UL Type MV-105, 133% Ins. Level, 220 Mils, Three Conductor

**Product Construction:****Conductor:**

- 2 AWG thru 1000 kcmil annealed bare copper compact Class B strand

Extruded Strand Shield (ESS):

- Extruded thermoset semi-conducting stress-control layer over conductor

Insulation:

- Lead-free Ethylene Propylene Rubber (EPR) insulation, contrasting in color to the black semi-conducting shield layers

Extruded Insulation Shield (EIS):

- Thermoset semi-conducting polymeric layer free stripping from insulation

Metallic Shield:

- Annealed copper tape with an overlap of 25%

Grounding Conductor:

- 1 bare grounding conductor may be in contact with metallic shielding tape

Overall Jacket:

- Flame-retardant, moisture- and sunlight-resistant Chlorinated Polyethylene (CPE)

Options:

- STRANDFILL® – blocked conductor. Tested in accordance with ICEA T-31-610

Applications:

- Suited for use in a broad range of commercial, industrial and utility applications, where reliability is the major concern, space is limited and ease of installation is critical
- In wet or dry locations when installed in accordance with NEC
- In aerial, direct burial, conduit, open tray and underground duct installations

Features:

- Rated at 105°C
- Excellent heat, moisture and sunlight resistance
- Outstanding corona resistance
- Flexibility for easy handling
- Easy Glider® low friction technology for easy cable pulling

Features (cont'd):

- High dielectric strength
- Low moisture absorption
- Electrical stability under stress
- Low dielectric loss
- Chemical-resistant
- Meets cold bend test at -35°C
- 105°C rating for continuous operation
- 140°C rating for emergency overload conditions
- 250°C rating for short circuit conditions

Compliances:

- National Electrical Code (NEC)
- UL 1072
- ICEA S-93-639/NEMA WC74
- ICEA S-97-682
- AEIC CS8-13 (AEIC CS8-20, Optional)
- UL listed as Type MV-105 for use in accordance with NEC, UL File # E518856
- UL 1685 (70,000 BTU/hr)
- OSHA Acceptable
- RoHS Compliant

Optional Flame Tests:

- IEEE 1202 (70,000 BTU/hr)/CSA FT4

Packaging:

- Material cut to length and shipped on non-returnable wood reels. Lengths in excess of 10,000 lbs. are provided on returnable steel reels that require a deposit
- Extra charges apply for cuts less than 1000 ft., lagging, pulling eyes, paralleling and plexing

CATALOG NUMBER	COND. SIZE (AWG/ kcmil)	NOMINAL CONDUCTOR DIAMETER	INSULATION DIAMETER INCHES		GROUND WIRE (AWG)	NOMINAL JACKET THICKNESS		NOMINAL CABLE				COPPER WEIGHT		AMPACITY					
		INCHES	MIN.	MAX.		IN	mm	DIAMETER		WEIGHT				CONDUIT IN AIR (1)		UNDERGROUND DUCT (2)		TRAY (3)	
								LBS/ 1000 FT	kg/ km	LBS/ 1000 FT	kg/ km	90°C	105°C	90°C	105°C	90°C	105°C		
15 kV¥, UL TYPE MV-105, 133% INS. LEVEL, 220 MILS, THREE CONDUCTOR																			
15593.440205	2	0.27	0.710	0.800	6	0.110	2.79	2.06	52.32	2249	3347	907	1350	145	165	150	160	165	185
15593.445105	1/0	0.34	0.780	0.865	4	0.110	2.79	2.20	55.88	2811	4183	1337	1990	195	215	195	210	215	240
15593.445205	2/0	0.38	0.820	0.905	4	0.110	2.79	2.29	58.17	3154	4694	1604	2386	220	245	220	235	245	275
15593.445405	4/0	0.48	0.920	1.005	3	0.110	2.79	2.50	63.50	4167	6201	2392	3560	290	320	285	305	325	360
15593.446005	250	0.52	0.970	1.060	2	0.110	2.79	2.62	66.55	4775	7106	2805	4175	315	350	310	335	360	400
15593.446205	350	0.62	1.070	1.155	2	0.110	2.79	2.82	71.63	6182	9200	3760	5596	385	430	375	400	435	490
15593.446505	500	0.74	1.190	1.275	1	0.140	3.56	3.12	79.25	7686	11438	5232	7786	470	525	450	485	535	600
15593.447005	750	0.91	1.370	1.460	1/0	0.140	3.56	3.49	88.65	10978	16337	7675	11422	570	635	545	585	670	745
15593.447505	1000	1.06	1.520	1.610	2/0	0.140	3.56	3.86	98.04	13983	20809	10123	15064	650	725	615	660	770	860

Dimensions and weights are nominal. Subject to industry tolerances.

* Non-stock item; minimum runs apply. Please consult Customer Service for price and delivery.

(1) Ampacities are in accordance with Table 310.60(C)(75) of the NEC for three conductor copper cable in isolated conduit in air based on a conductor temperature of 90°C (194°F) or 105°C (221°F), temperature denoted in column header, and an ambient air temperature of 40°C (104°F).

(2) Ampacities are in accordance with Table 310.60(C)(79) of the NEC for three conductor copper cable in underground ducts (three conductors per duct), based on a conductor temperature of 90°C (194°F) or 105°C (221°F), temperature denoted in column header, and an ambient earth temperature of 20°C (68°F), electrical duct arrangement per Figure 310.60 Detail 1, 100% load factor, and earth thermal resistance (rho) of 90.

(3) Ampacities are based on three conductor Type MV-105 cables in single layer in an uncovered tray with maintained spacing of not less than one cable diameter between cables, in accordance with Section 392.80(B)(1) of the NEC at an ambient air temperature of 40°C (104°F); the ampacities are per Table 310.60(C)(71), operating temperature denoted in column header. For cable trays with unventilated covers for more than 6 feet, the ampacities shall not exceed 95% of the values in NEC Table 310.60(C)(75).

¥ 100% insulation level is available upon request.

Note: a) All sizes are "FOR CT USE".

b) The NESC Lightning bolt symbol is on all Uniblend® constructions.

