GenFree® Uniblend®

EPR/Copper Tape Shield/LSZH, Medium-Voltage Power, Shielded 25 kV and 35 kV UL Type MV-105/STI, 133%/100% Ins. Levels, 345 Mils



Product Construction:

Conductor:

 1/0 AWG thru 1000 kcmil annealed bare copper compact Class B strand

Extruded Strand Shield (ESS):

• Extruded thermoset semi-conducting stresscontrol 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%

Overall Jacket:

 Lead-free, moisture- and sunlight-resistant Low-Smoke, Zero-Halogen Polyolefin (LSZH)

Options:

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

Applications:

- Superior performance in petrochemical plants, pulp and paper mills, sewage and water treatment plants, environmental protection systems, railroads, mines, utility power generating stations, steel mills, textile plants
- and other industrial three-phase applications • For use in wet or dry locations when installed in accordance with NEC
- · For use in aerial, conduit, open tray and
- underground duct installations • For use in direct burial if installed in a system with a ground conductor that is in close proximity, and conforms with NEC 250.4(A)(5)

Features:

- Rated at 105°C
- \cdot Excellent heat, moisture and sunlight resistance
- Excellent flame resistance
- Outstanding corona resistance
 Flovibility for easy bandling
- Flexibility for easy handling
 Easy Glider[®] low friction technology for easy
- cable pulling
- High dielectric strength
- Low moisture absorption
- Electrical stability under stress
 Low dielectric loss
- Chemical-resistant
- Meets cold bend test at -35°C



Features (cont'd):

- 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
- ICEA T-33-655
- · AEIC CS8 -13 (AEIC CS8-20, Optional)
- CSA C68.10
 CSA C22.2 No. 230 Type TC-ER (Sizes 1/0 AWG and larger)
- UL listed as Type MV-105 for use in accordance with NEC, UL File # E518856
- UL 1685 (Sizes 1/0 AWG and larger) UL Flame Exposure Test
- UL 1685 Vertical Flame and ST1 Smoke Release Test
- Sizes 1/0 AWG and larger are listed and marked "Sunlight-Resistant FOR CT USE" in accordance with NEC
- IEEE 1202 (70,000 BTU/hr)/CSA FT4
- EPA 40 CFR, Part 261 for leachable lead content per TCLP method
- OSHA Acceptable
 RoHS Compliant

Packaging:

- Material cut to length and shipped on nonreturnable 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 triplexing

		NOMINAL	INSULATION DIAMETER INCHES		GROUND	NOMINAL JACKET THICKNESS		NOMINAL CABLE					AMPACITY						
	COND.	CONDUCTOR DIAMETER						DIAMETER		WEIGHT		COPPER WEIGHT		CONDUIT IN AIR (1)		UNDERGROUND DUCT (2)		TRAY (3)	
CATALOG NUMBER	(AWG/ kcmil)	INCHES	MIN.	MAX.	WIRE (AWG)	IN	mm	IN	mm	LBS/ 1000 FT	kg/ km	LBS/ 1000 FT	kg/ km	90°C	105°C	90°C	105°C	90°C	105°C
25 kV¥ & 35 kV¥¥, UL TYPE MV-105, 133%/100% INS. LEVEL, 345 MILS, THREE CONDUCTOR																			
15493.485105	1/0	0.34	1.020	1.120	4	0.110	2.79	2.75	69.85	3738	5563	1402	2086	195	215	195	210	215	240
15493.485205	2/0	0.38	1.060	1.160	4	0.110	2.79	2.81	71.37	4061	6043	1675	2493	220	245	220	235	245	275
15493.485405	4/0	0.48	1.160	1.260	3	0.140	3.56	3.09	78.49	5269	7842	2457	3656	290	320	285	305	325	360
15493.486005	250	0.52	1.210	1.315	2	0.140	3.56	3.22	81.79	5938	8837	2870	4271	315	350	310	335	360	400
15493.486205	350	0.62	1.310	1.410	2	0.140	3.56	3.42	86.87	7084	10542	3825	5692	385	430	375	400	435	490
15493.486505	500	0.74	1.430	1.530	1	0.140	3.56	3.67	93.22	8829	13138	5297	7882	470	525	450	485	535	600
15493,487005	750	0.91	1.610	1.710	1/0	0.140	3.56	4.10	104.14	12030	17903	7750	11533	570	635	545	585	670	745

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)(73) of the NEC for triplexed or three single conductor copper cables 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)(77) of the NEC for triplexed or three single conductor copper cables 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), lectrical duct arrangement per Figure 310.60 Detail 1, 100% load factor, and earth thermal resistance (rh0) of 90.

(3) Ampacities are based on single conductor Type MV-105 sizes #1/0 AWG and larger in an uncovered tray in accordance with Section 392.80(B)(2) of the NEC at an ambient air temperature of 40° C (104° F) the ampacities are based on 75% of the values per Table 310.60(C)(69), operating temperature denoted in column header. For cable trays with unventilated covers for more than 6 feet, the ampacities shall not exceed 70% of the values per Table 310.60(C)(69). ¥ 100% insulation level is available upon request.

¥¥ 133% insulation level is available upon request

Note: a) Sizes smaller than 1/0 AWG do not include "FOR CT USE".

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





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