Aluminum Uniblend[®] PVC

EPR/Copper Tape Shield/PVC, Medium-Voltage Power, Shielded 35 kV UL Type MV-105, 133% Ins. Levels, 420 Mils

Product Construction:

Conductor:

·1/0 AWG thru 1000 kcmil 1350 aluminum compressed 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%

Jacket:

·Low-friction, lead-free, flame-retardant, moisture- and sunlight-resistant Polyvinyl Chloride (PVC)

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



Applications (cont'd):

- 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
- ·Easy Glider[®] low friction technology for easy cable pulling
- · Excellent heat, moisture and sunlight resistance •Excellent flame resistance
- Outstanding corona resistance
- ·Flexibility for easy handling
- 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)
- •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 # E90501
- ·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

	COND. SIZE (AWG/ kcmil)	NOMINAL CONDUCTOR DIAMETER	INSULATION DIAMETER INCHES		NOMINAL JACKET THICKNESS		NOMINAL CABLE								AMPACITY					
CATALOG NUMBER							DIAMETER		WEIGHT		ALUMINUM WEIGHT		COPPER WEIGHT		CONDUIT IN AIR (1)		UNDERGROUND DUCT (2)		TRAY (3)	
		INCHES	MIN.	MAX.	IN	mm	IN	mm	LBS/ 1000 FT	kg/ km	LBS/ 1000 FT	kg/ km	LBS/ 1000 FT	kg/ km	90°C	105°C	90°C	105°C	90°C	105°C

35 kV, UL TYPE MV-105, 133% INS. LEVEL, 420 MILS

17071.135109	1/0	0.36	1.060	1.265	0.080	2.03	1.51	38.28	1057	1573	101	150	114	170	150	170	155	165	150	170	5
17071.135209	2/0	0.41	1.200	1.305	0.080	2.03	1.55	39.37	1125	1674	128	190	117	175	175	200	175	190	175	195	5
17071.135309	3/0	0.46	1.245	1.355	0.080	2.03	1.60	40.67	1207	1796	161	240	122	181	200	225	200	215	205	225	5
17071.135409	4/0	0.51	1.300	1.405	0.080	2.03	1.66	42.09	1300	1934	203	302	127	189	230	260	230	245	235	265	5
17071.136009	250	0.56	1.350	1.460	0.080	2.03	1.71	43.51	1391	2069	239	356	131	195	255	290	250	270	260	290	5
17071.136209	350	0.66	1.450	1.555	0.110	2.79	1.88	47.65	1693	2520	336	499	140	208	310	350	305	330	325	360	6
17071.136509	500	0.79	1.570	1.675	0.110	2.79	2.01	51.10	1967	2928	478	711	150	224	385	430	370	400	400	450	6
17071.137009	750	0.97	1.750	1.860	0.110	2.79	2.19	55.65	2411	3588	717	1067	166	247	485	540	455	490	515	585	8
17071.137509	1000	1.12	1.900	2.010	0.110	2.79	2.34	59.44	2816	4191	956	1422	180	268	565	640	525	565	620	705	8

Dimensions and weights are nominal. Subject to industry tolerances.

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[2] Ampacities are in accordance with Table 310.60(C)[78] of the NEC for triplexed or three single conductor aluminum 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), electrical duct arrangement per Figure 310.60 Detail 1, 100% load factor, and earth thermal resistance (rho) 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)(70), 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)(70). (4) Based on nominal cable diameters, three single cables in the duct (PVC Schedule 40) with no ground wire and a maximum of 40% fill. Jam ratio has been considered but should be checked for individual installations. Note: a) All sizes are "FOR CT USE"

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







