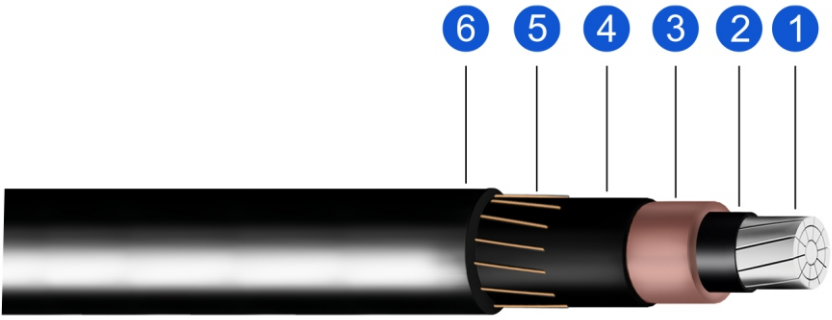
EPRONAX AL TYPE MV-105 5 kV 100% and 133% I.L.

AL/EPR/WIRE SCREEN/PVC JACKET POWER CABLE



CONSTRUCTION

1- Conductor: Class B compact stranded 1350 aluminum as per ASTM B-400.
2- Conductor shield: Extruded thermoset semi-conducting stress control layer
3- Insulation: Ethylene propylene rubber (EPR).
4- Insulation shield: Extruded thermoset strippable semi-conducting insulation shield.
5- Copper wires shield: one-third neutral concentric round annealed bare copper wires helically applied over the insulation shield.
6- Jacket: black flame retardant, sunlight and oil resistant I polyvinyl chloride (PVC).

FEATURES AND APPLICATIONS

- EPRONAX AL MV-105 is suitable for use in wet or dry locations, in open air (exposed to sunlight), raceways, troughs, ducts and direct burial.
- Typical installations include feeder or branch circuits in generating stations, industrial and commercial installations.
- Rated at maximum operating temperature of 105 °C for normal operation, 140 °C for emergency overload and 250 °C for short-circuit conditions.
- Superior current carrying capacity.
- True triple and dry curing extrusion system.
- Excellent flexibility.
- Excellent corona and moisture resistance.
- Cold bend tested at -35 °C.
- NEC guidelines must be followed for proper application.
- UL listed as MV-105 under file E-500191.
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STANDARDS

ASTM B-400 - Standard Specification for Compact Round Concentric-Lay-Stranded Aluminum 1350 Conductors
ASTM B-3 - Standard Specification for Soft or Annealed Copper Wire
UL 1072 - Medium-Voltage Power Cables
ICEA S-93-639 - 5-46 kV Shielded Power Cable for use in the Transmission and Distribubtion of Electric Energy

EPRONAX AL TYPE MV-105 5 kV 100% and 133% I.L.

AL/EPR/WIRE SCREEN/PVC JACKET POWER CABLE

ALUMINUM CONDUCTOR, 5 kV 100 % INSULATION LEVEL, 90 MILS

PRODUCT CODE	COND. SIZE (AWG or kcmil)	NOMINAL CONDUCTOR DIAMETER (inches)	NOMINAL INSULATION DIAM. (inches)	NOMINAL INSULATION SHIELD DIAM. (inches)	NOMINAL DIAMETER OVER JACKET (inches)	APPROX. WEIGHT (lb/kft)			AMPACITY (A)		CONDUIT SIZE (inches)
						ALUMINUM	COPPER	TOTAL	CONDUIT IN AIR (1)	UNDERGROUND DUCT (2)	
831301045	4	0.21	0.469	0.531	0.794	88	196	778	85	93	3
831301047	2	0.27	0.522	0.585	0.878	140	196	935	115	125	3
831301048	1	0.30	0.554	0.617	0.909	176	196	1006	135	140	3
831301049	1/0	0.33	0.591	0.654	0.946	223	196	1094	155	160	3
831301050	2/0	0.37	0.631	0.694	0.986	279	229	1222	175	185	3
831301051	3/0	0.42	0.677	0.740	1.032	354	295	1405	210	210	3
831301052	4/0	0.47	0.731	0.794	1.086	445	360	1612	240	245	3 ½
831301053	250	0.52	0.774	0.837	1.130	527	426	1799	280	270	3 ½
831301054	350	0.61	0.869	0.932	1.224	736	589	2257	340	325	3 ½
831301057	500	0.73	0.991	1.054	1.346	1061	819	2917	425	400	4
831301060	750	0.90	1.156	1.219	1.612	1592	1252	4223	545	505	5
831301062	1000	1.06	1.312	1.375	1.828	2133	1670	5532	645	590	6

ALUMINUM CONDUCTOR, 5 kV 133 % INSULATION LEVEL, 115 MILS

PRODUCT CODE	COND. SIZE (AWG or kcmil)	NOMINAL CONDUCTOR DIAMETER (inches)	NOMINAL INSULATION DIAM. (inches)	NOMINAL INSULATION SHIELD DIAM. (inches)	NOMINAL DIAMETER OVER JACKET (inches)	APPROX. WEIGHT (lb/kft)			AMPACITY (A)		CONDUIT SIZE (inches)
						ALUMINUM	COPPER	TOTAL	CONDUIT IN AIR (1)	UNDERGROUND DUCT (2)	
833201045	4	0.21	0.489	0.552	0.844	88	196	855	85	93	3
833201047	2	0.27	0.543	0.606	0.898	140	196	967	115	125	3
833201048	1	0.30	0.574	0.637	0.930	176	196	1039	135	140	3
833201049	1/0	0.33	0.612	0.675	0.967	223	196	1128	155	160	3
833201050	2/0	0.37	0.651	0.714	1.006	279	229	1258	175	185	3
833201051	3/0	0.42	0.698	0.761	1.053	354	295	1443	210	210	3
833201052	4/0	0.47	0.752	0.815	1.107	445	360	1652	240	245	3 ½
833201053	250	0.52	0.795	0.858	1.150	527	426	1841	280	270	3 ½
833201054	350	0.61	0.889	0.952	1.244	736	589	2302	340	325	4
833201057	500	0.73	1.011	1.074	1.367	1061	819	2967	425	400	4
833201060	750	0.90	1.177	1.240	1.633	1592	1252	4282	545	505	5
833201062	1000	1.06	1.332	1.395	1.848	2133	1670	5598	645	590	6

(1) Ampacities are in accordance with table 310.60(C)(74) of the NEC for insulated triplexed or three single-conductor aluminum cables in isolated conduit in air based on conductor temperatures of 105°C (221°F) and ambient air temperature of 40°C (104°F).

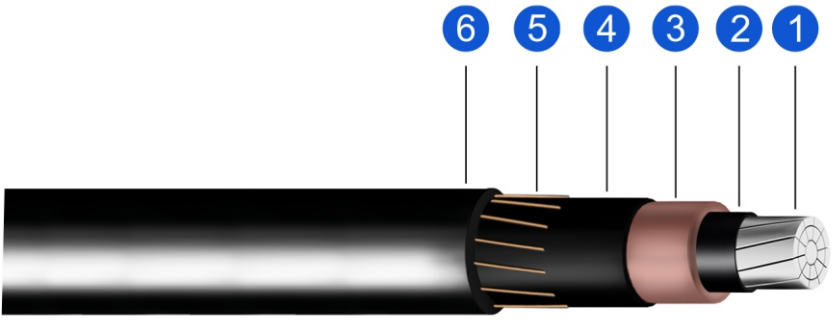
(2) Ampacities are in accordance with table 310.60(C)(78) of the NEC for three single-insulated aluminum conductors in underground electrical ducts (three conductors per electrical duct) based on ambient earth temperature of 20°C (68°F) electrical duct arrangement in accordance with figure 31060 detail 1 100 percent load factor thermal resistance (rho) of 90 conductor temperatures of 105°C (221°F).

Jam ratio has not been considered and should be checked to avoid possible jamming.

Values are nominal and subject to manufacturing tolerances.

EPRONAX AL TYPE MV-105 8 kV 100% and 133% I.L.

AL/EPR/WIRE SCREEN/PVC JACKET POWER CABLE



CONSTRUCTION

1- Conductor: Class B compact stranded 1350 aluminum as per ASTM B-400.
2- Conductor shield: Extruded thermoset semi-conducting stress control layer
3- Insulation: Ethylene propylene rubber (EPR).
4- Insulation shield: Extruded thermoset strippable semi-conducting insulation shield.
5- Copper wires shield: one-third neutral concentric round annealed bare copper wires helically applied over the insulation shield.
6- Jacket: black flame retardant, sunlight and oil resistant I polyvinyl chloride (PVC).

FEATURES AND APPLICATIONS

- EPRONAX AL MV-105 is suitable for use in wet or dry locations, in open air (exposed to sunlight), raceways, troughs, ducts and direct burial.
- Typical installations include feeder or branch circuits in generating stations, industrial and commercial installations.
- Rated at maximum operating temperature of 105 °C for normal operation, 140 °C for emergency overload and 250 °C for short-circuit conditions.
- Superior current carrying capacity.
- True triple and dry curing extrusion system.
- Excellent flexibility.
- Excellent corona and moisture resistance.
- Cold bend tested at -35 °C.
- NEC guidelines must be followed for proper application.
- UL listed as MV-105 under file E-500191.
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STANDARDS

ASTM B-400 - Standard Specification for Compact Round Concentric-Lay-Stranded Aluminum 1350 Conductors
ASTM B-3 - Standard Specification for Soft or Annealed Copper Wire
UL 1072 - Medium-Voltage Power Cables
ICEA S-93-639 - 5-46 kV Shielded Power Cable for use in the Transmission and Distribubtion of Electric Energy

EPRONAX AL TYPE MV-105 8 kV 100% and 133% I.L.

AL/EPR/WIRE SCREEN/PVC JACKET POWER CABLE

ALUMINUM CONDUCTOR, 8 kV 100 % INSULATION LEVEL, 115 MILS

PRODUCT CODE	COND. SIZE (AWG or kcmil)	NOMINAL CONDUCTOR DIAMETER (inches)	NOMINAL INSULATION DIAM. (inches)	NOMINAL INSULATION SHIELD DIAM. (inches)	NOMINAL DIAMETER OVER JACKET (inches)	APPROX. WEIGHT (lb/kft)			AMPACITY (A)		CONDUIT SIZE (inches)
						ALUMINUM	COPPER	TOTAL	CONDUIT IN AIR (1)	UNDERGROUND DUCT (2)	
831401045	4	0.21	0.518	0.581	0.873	88	196	899	94	98	3
831401047	2	0.27	0.572	0.635	0.927	140	196	1015	130	130	3
831401048	1	0.30	0.604	0.667	0.959	176	196	1088	150	145	3
831401049	1/0	0.33	0.641	0.704	0.996	223	196	1179	170	165	3
831401050	2/0	0.37	0.680	0.743	1.035	279	229	1311	200	190	3
831401051	3/0	0.42	0.727	0.790	1.082	354	295	1498	225	215	3
831401052	4/0	0.47	0.781	0.844	1.136	445	360	1710	260	245	3 ½
831401053	250	0.52	0.824	0.887	1.179	527	426	1901	290	270	3 ½
831401054	350	0.61	0.919	0.981	1.274	736	589	2367	350	330	4
831401057	500	0.73	1.041	1.104	1.396	1061	819	3038	430	400	5
831401060	750	0.90	1.206	1.269	1.722	1592	1252	4561	540	490	5
831401062	1000	1.06	1.361	1.424	1.877	2133	1670	5694	640	565	6

ALUMINUM CONDUCTOR, 8 kV 133 % INSULATION LEVEL, 140 MILS

PRODUCT CODE	COND. SIZE (AWG or kcmil)	NOMINAL CONDUCTOR DIAMETER (inches)	NOMINAL INSULATION DIAM. (inches)	NOMINAL INSULATION SHIELD DIAM. (inches)	NOMINAL DIAMETER OVER JACKET (inches)	APPROX. WEIGHT (lb/kft)			AMPACITY (A)		CONDUIT SIZE (inches)
						ALUMINUM	COPPER	TOTAL	CONDUIT IN AIR (1)	UNDERGROUND DUCT (2)	
833301045	4	0.21	0.569	0.631	0.924	88	196	980	94	98	3
833301047	2	0.27	0.622	0.685	0.978	140	196	1100	130	130	3
833301048	1	0.30	0.654	0.717	1.009	176	196	1176	150	145	3
833301049	1/0	0.33	0.691	0.754	1.046	223	196	1271	170	165	3
833301050	2/0	0.37	0.731	0.794	1.086	279	229	1406	200	190	3
833301051	3/0	0.42	0.777	0.840	1.132	354	295	1597	225	215	3 ½
833301052	4/0	0.47	0.831	0.894	1.186	445	360	1815	260	245	3 ½
833301053	250	0.52	0.874	0.937	1.230	527	426	2009	290	270	3 ½
833301054	350	0.61	0.969	1.032	1.324	736	589	2483	350	330	4
833301057	500	0.73	1.091	1.154	1.446	1061	819	3166	430	400	5
833301060	750	0.90	1.256	1.319	1.772	1592	1252	4716	540	490	5
833301062	1000	1.06	1.412	1.475	1.928	2133	1670	5863	640	565	6

(1) Ampacities are in accordance with table 310.60(C)(74) of the NEC for insulated triplexed or three single-conductor aluminum cables in isolated conduit in air based on conductor temperatures of 105°C (221°F) and ambient air temperature of 40°C (104°F).

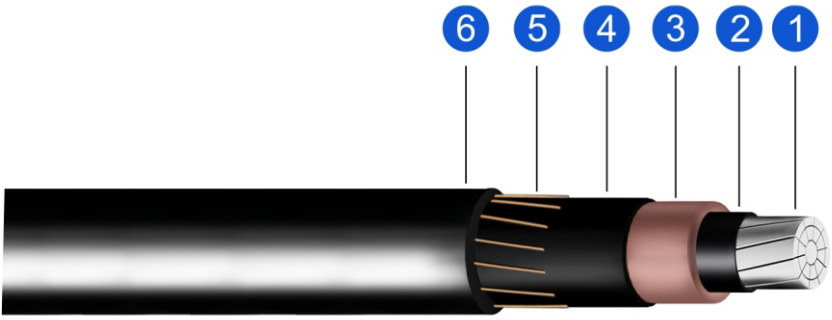
(2) Ampacities are in accordance with table 310.60(C)(78) of the NEC for three single-insulated aluminum conductors in underground electrical ducts (three conductors per electrical duct) based on ambient earth temperature of 20°C (68°F) electrical duct arrangement in accordance with figure 31060 detail 1 100 percent load factor thermal resistance (rho) of 90 conductor temperatures of 105°C (221°F).

Jam ratio has not been considered and should be checked to avoid possible jamming.

Values are nominal and subject to manufacturing tolerances.

EPRONAX AL TYPE MV-105 15 kV 100% and 133% I.L.

AL/EPR/WIRE SCREEN/PVC JACKET POWER CABLE



CONSTRUCTION

1- Conductor: Class B compact stranded 1350 aluminum as per ASTM B-400.
2- Conductor shield: Extruded thermoset semi-conducting stress control layer
3- Insulation: Ethylene propylene rubber (EPR).
4- Insulation shield: Extruded thermoset strippable semi-conducting insulation shield.
5- Copper wires shield: one-third neutral concentric round annealed bare copper wires helically applied over the insulation shield.
6- Jacket: black flame retardant, sunlight and oil resistant I polyvinyl chloride (PVC).

FEATURES AND APPLICATIONS

- EPRONAX AL MV-105 is suitable for use in wet or dry locations, in open air (exposed to sunlight), raceways, troughs, ducts and direct burial.
- Typical installations include feeder or branch circuits in generating stations, industrial and commercial installations.
- Rated at maximum operating temperature of 105 °C for normal operation, 140 °C for emergency overload and 250 °C for short-circuit conditions.
- Superior current carrying capacity.
- True triple and dry curing extrusion system.
- Excellent flexibility.
- Excellent corona and moisture resistance.
- Cold bend tested at -35 °C.
- NEC guidelines must be followed for proper application.
- UL listed as MV-105 under file E-500191.
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STANDARDS

ASTM B-400 - Standard Specification for Compact Round Concentric-Lay-Stranded Aluminum 1350 Conductors
ASTM B-3 - Standard Specification for Soft or Annealed Copper Wire
UL 1072 - Medium-Voltage Power Cables
ICEA S-93-639 - 5-46 kV Shielded Power Cable for use in the Transmission and Distribubtion of Electric Energy

EPRONAX AL TYPE MV-105 15 kV 100% and 133% I.L.

AL/EPR/WIRE SCREEN/PVC JACKET POWER CABLE

ALUMINUM CONDUCTOR, 15 kV 100 % INSULATION LEVEL, 175 MILS

PRODUCT CODE	COND. SIZE (AWG or kcmil)	NOMINAL CONDUCTOR DIAMETER (inches)	NOMINAL INSULATION DIAM. (inches)	NOMINAL INSULATION SHIELD DIAM. (inches)	NOMINAL DIAMETER OVER JACKET (inches)	APPROX. WEIGHT (lb/kft)			AMPACITY (A)		CONDUIT SIZE (inches)
						ALUMINUM	COPPER	TOTAL	CONDUIT IN AIR (1)	UNDERGROUND DUCT (2)	
831501047	2	0.27	0.682	0.745	1.037	140	196	1207	130	130	3
831501048	1	0.30	0.714	0.777	1.069	176	196	1287	150	145	3
831501049	1/0	0.33	0.751	0.814	1.106	223	196	1385	170	165	3
831501050	2/0	0.37	0.791	0.854	1.146	279	229	1525	200	190	3 ½
831501051	3/0	0.42	0.837	0.900	1.192	354	295	1721	225	215	3 ½
831501052	4/0	0.47	0.891	0.954	1.246	445	360	1944	260	245	3 ½
831501053	250	0.52	0.934	0.997	1.289	527	426	2143	290	270	4
831501054	350	0.61	1.029	1.092	1.384	736	589	2628	350	330	4
831501057	500	0.73	1.151	1.214	1.506	1061	819	3323	430	400	5
831501060	750	0.90	1.316	1.379	1.832	1592	1252	4906	540	490	6
831501062	1000	1.06	1.472	1.535	1.987	2133	1670	6070	640	565	6

ALUMINUM CONDUCTOR, 15 kV 133 % INSULATION LEVEL, 220 MILS

PRODUCT CODE	COND. SIZE (AWG or kcmil)	NOMINAL CONDUCTOR DIAMETER (inches)	NOMINAL INSULATION DIAM. (inches)	NOMINAL INSULATION SHIELD DIAM. (inches)	NOMINAL DIAMETER OVER JACKET (inches)	APPROX. WEIGHT (lb/kft)			AMPACITY (A)		CONDUIT SIZE (inches)
						ALUMINUM	COPPER	TOTAL	CONDUIT IN AIR (1)	UNDERGROUND DUCT (2)	
833401047	2	0.27	0.772	0.835	1.127	140	196	1380	130	130	3 ½
833401048	1	0.30	0.804	0.867	1.159	176	196	1465	150	145	3 ½
833401049	1/0	0.33	0.841	0.904	1.196	223	196	1569	170	165	3 ½
833401050	2/0	0.37	0.880	0.943	1.235	279	229	1715	200	190	3 ½
833401051	3/0	0.42	0.927	0.990	1.282	354	295	1918	225	215	3 ½
833401052	4/0	0.47	0.981	1.044	1.336	445	360	2150	260	245	4
833401053	250	0.52	1.024	1.087	1.379	527	426	2356	290	270	4
833401054	350	0.61	1.119	1.181	1.474	736	589	2856	350	330	5
833401057	500	0.73	1.241	1.304	1.596	1061	819	3571	430	400	5
833401060	750	0.90	1.406	1.469	1.922	1592	1252	5204	540	490	6
833401062	1000	1.06	1.561	1.624	2.077	2133	1670	6392	640	565	6

(1) Ampacities are in accordance with table 310.60(C)(74) of the NEC for insulated triplexed or three single-conductor aluminum cables in isolated conduit in air based on conductor temperatures of 105°C (221°F) and ambient air temperature of 40°C (104°F).

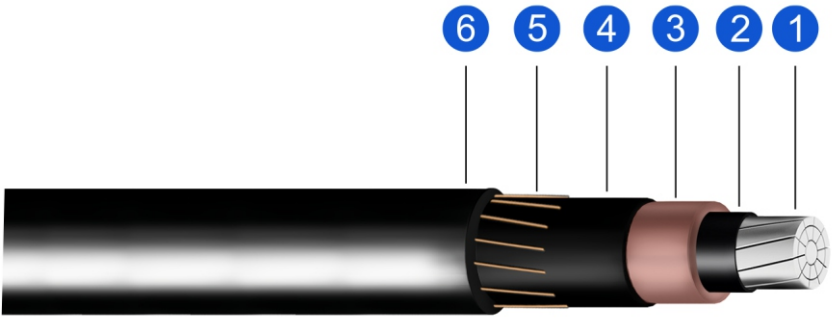
(2) Ampacities are in accordance with table 310.60(C)(78) of the NEC for three single-insulated aluminum conductors in underground electrical ducts (three conductors per electrical duct) based on ambient earth temperature of 20°C (68°F) electrical duct arrangement in accordance with figure 31060 detail 1 100 percent load factor thermal resistance (rho) of 90 conductor temperatures of 105°C (221°F).

Jam ratio has not been considered and should be checked to avoid possible jamming.

Values are nominal and subject to manufacturing tolerances.

EPRONAX AL TYPE MV-105 25 kV 100% and 133% I.L.

AL/EPR/WIRE SCREEN/PVC JACKET POWER CABLE



CONSTRUCTION

1- Conductor: Class B compact stranded 1350 aluminum as per ASTM B-400.
2- Conductor shield: Extruded thermoset semi-conducting stress control layer
3- Insulation: Ethylene propylene rubber (EPR).
4- Insulation shield: Extruded thermoset strippable semi-conducting insulation shield.
5- Copper wires shield: one-third neutral concentric round annealed bare copper wires helically applied over the insulation shield.
6- Jacket: black flame retardant, sunlight and oil resistant I polyvinyl chloride (PVC).

FEATURES AND APPLICATIONS

- EPRONAX AL MV-105 is suitable for use in wet or dry locations, in open air (exposed to sunlight), raceways, troughs, ducts and direct burial.
- Typical installations include feeder or branch circuits in generating stations, industrial and commercial installations.
- Rated at maximum operating temperature of 105 °C for normal operation, 140 °C for emergency overload and 250 °C for short-circuit conditions.
- Superior current carrying capacity.
- True triple and dry curing extrusion system.
- Excellent flexibility.
- Excellent corona and moisture resistance.
- Cold bend tested at -35 °C.
- NEC guidelines must be followed for proper application.
- UL listed as MV-105 under file E-500191.
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STANDARDS

ASTM B-400 - Standard Specification for Compact Round Concentric-Lay-Stranded Aluminum 1350 Conductors
ASTM B-3 - Standard Specification for Soft or Annealed Copper Wire
UL 1072 - Medium-Voltage Power Cables
ICEA S-93-639 - 5-46 kV Shielded Power Cable for use in the Transmission and Distribubtion of Electric Energy

EPRONAX AL TYPE MV-105 25 kV 100% and 133% I.L.

AL/EPR/WIRE SCREEN/PVC JACKET POWER CABLE

ALUMINUM CONDUCTOR, 25 kV 100 % INSULATION LEVEL, 260 MILS

PRODUCT CODE	COND. SIZE (AWG or kcmil)	NOMINAL CONDUCTOR DIAMETER (inches)	NOMINAL INSULATION DIAM. (inches)	NOMINAL INSULATION SHIELD DIAM. (inches)	NOMINAL DIAMETER OVER JACKET (inches)	APPROX. WEIGHT (lb/kft)			AMPACITY (A)		CONDUIT SIZE (inches)
						ALUMINUM	COPPER	TOTAL	CONDUIT IN AIR (1)	UNDERGROUND DUCT (2)	
831601048	1	0.30	0.874	0.937	1.229	176	196	1613	150	145	3 ½
831601049	1/0	0.33	0.911	0.974	1.266	223	196	1722	170	165	3 ½
831601050	2/0	0.37	0.950	1.013	1.306	279	229	1873	200	190	4
831601051	3/0	0.42	0.997	1.060	1.352	354	295	2082	225	215	4
831601052	4/0	0.47	1.051	1.114	1.406	445	360	2321	260	245	4
831601053	250	0.52	1.094	1.157	1.449	527	426	2533	290	270	5
831601054	350	0.61	1.189	1.252	1.544	736	589	3044	350	330	5
831601057	500	0.73	1.311	1.374	1.726	1061	819	3969	430	400	5
831601060	750	0.90	1.476	1.539	1.992	1592	1252	5446	540	490	6
831601062	1000	1.06	1.631	1.694	2.147	2133	1670	6654	640	565	6

ALUMINUM CONDUCTOR, 25 kV 133 % INSULATION LEVEL, 320 MILS

PRODUCT CODE	COND. SIZE (AWG or kcmil)	NOMINAL CONDUCTOR DIAMETER (inches)	NOMINAL INSULATION DIAM. (inches)	NOMINAL INSULATION SHIELD DIAM. (inches)	NOMINAL DIAMETER OVER JACKET (inches)	APPROX. WEIGHT (lb/kft)			AMPACITY (A)		CONDUIT SIZE (inches)
						ALUMINUM	COPPER	TOTAL	CONDUIT IN AIR (1)	UNDERGROUND DUCT (2)	
833501048	1	0.30	0.994	1.057	1.349	176	196	1889	150	145	4
833501049	1/0	0.33	1.031	1.094	1.387	223	196	2006	170	165	4
833501050	2/0	0.37	1.071	1.134	1.426	279	229	2165	200	190	4
833501051	3/0	0.42	1.117	1.180	1.472	354	295	2385	225	215	4
833501052	4/0	0.47	1.171	1.234	1.526	445	360	2635	260	245	5
833501053	250	0.52	1.215	1.278	1.570	527	426	2856	290	270	5
833501054	350	0.61	1.309	1.372	1.724	736	589	3582	350	330	5
833501057	500	0.73	1.431	1.494	1.846	1061	819	4352	430	400	6
833501060	750	0.90	1.596	1.659	2.112	1592	1252	5882	540	490	6
833501062	1000	1.06	1.752	1.815	2.268	2133	1670	7124	640	565	7

(1) Ampacities are in accordance with table 310.60(C)(74) of the NEC for insulated triplexed or three single-conductor aluminum cables in isolated conduit in air based on conductor temperatures of 105°C (221°F) and ambient air temperature of 40°C (104°F).

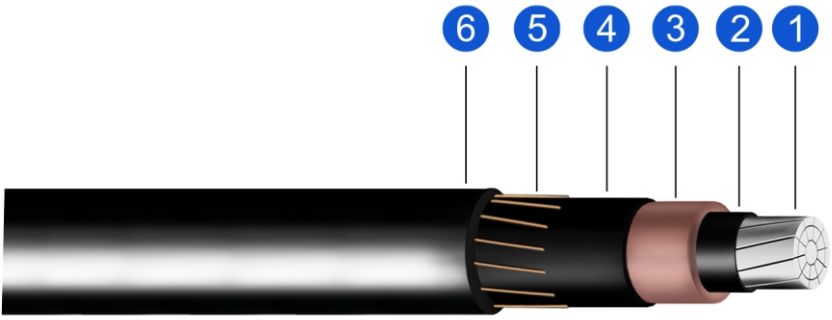
(2) Ampacities are in accordance with table 310.60(C)(78) of the NEC for three single-insulated aluminum conductors in underground electrical ducts (three conductors per electrical duct) based on ambient earth temperature of 20°C (68°F) electrical duct arrangement in accordance with figure 31060 detail 1 100 percent load factor thermal resistance (rho) of 90 conductor temperatures of 105°C (221°F).

Jam ratio has not been considered and should be checked to avoid possible jamming.

Values are nominal and subject to manufacturing tolerances.

EPRONAX AL TYPE MV-105 35 kV 100% I.L.

AL/EPR/WIRE SCREEN/PVC JACKET POWER CABLE



CONSTRUCTION

1- Conductor: Class B compact stranded 1350 aluminum as per ASTM B-400.
2- Conductor shield: Extruded thermoset semi-conducting stress control layer
3- Insulation: Ethylene propylene rubber (EPR).
4- Insulation shield: Extruded thermoset strippable semi-conducting insulation shield.
5- Copper wires shield: one-third neutral concentric round annealed bare copper wires helically applied over the insulation shield.
6- Jacket: black flame retardant, sunlight and oil resistant I polyvinyl chloride (PVC).

FEATURES AND APPLICATIONS

- EPRONAX AL MV-105 is suitable for use in wet or dry locations, in open air (exposed to sunlight), raceways, troughs, ducts and direct burial.
- Typical installations include feeder or branch circuits in generating stations, industrial and commercial installations.
- Rated at maximum operating temperature of 105 °C for normal operation, 140 °C for emergency overload and 250 °C for short-circuit conditions.
- Superior current carrying capacity.
- True triple and dry curing extrusion system.
- Excellent flexibility.
- Excellent corona and moisture resistance.
- Cold bend tested at -35 °C.
- NEC guidelines must be followed for proper application.
- UL listed as MV-105 under file E-500191.
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STANDARDS

ASTM B-400 - Standard Specification for Compact Round Concentric-Lay-Stranded Aluminum 1350 Conductors
ASTM B-3 - Standard Specification for Soft or Annealed Copper Wire
UL 1072 - Medium-Voltage Power Cables
ICEA S-93-639 - 5-46 kV Shielded Power Cable for use in the Transmission and Distribubtion of Electric Energy

ALUMINUM CONDUCTOR, 35 kV 100 % INSULATION LEVEL, 345 MILS

PRODUCT CODE	COND. SIZE (AWG or kcmil)	NOMINAL CONDUCTOR DIAMETER (inches)	NOMINAL INSULATION DIAM. (inches)	NOMINAL INSULATION SHIELD DIAM. (inches)	NOMINAL DIAMETER OVER JACKET (inches)	APPROX. WEIGHT (lb/kft)			AMPACITY (A)		CONDUIT SIZE (inches)
						ALUMINUM	COPPER	TOTAL	CONDUIT IN AIR (1)	UNDERGROUND DUCT (2)	
831701049	1/0	0.33	1.081	1.144	1.436	223	196	2131	170	165	4
831701050	2/0	0.37	1.120	1.183	1.476	279	229	2293	200	190	5
831701051	3/0	0.42	1.167	1.230	1.522	354	295	2517	225	215	5
831701052	4/0	0.47	1.221	1.284	1.576	445	360	2772	260	245	5
831701053	250	0.52	1.264	1.327	1.619	527	426	2997	290	270	5
831701054	350	0.61	1.359	1.422	1.774	736	589	3736	350	330	5
831701057	500	0.73	1.481	1.544	1.896	1061	819	4517	430	400	6
831701060	750	0.90	1.646	1.709	2.162	1592	1252	6069	540	490	6
831701062	1000	1.06	1.802	1.865	2.317	2133	1670	7325	640	565	7

(1) Ampacities are in accordance with table 310.60(C)(74) of the NEC for insulated triplexed or three single-conductor aluminum cables in isolated conduit in air based on conductor temperatures of 105°C (221°F) and ambient air temperature of 40°C (104°F).

(2) Ampacities are in accordance with table 310.60(C)(78) of the NEC for three single-insulated aluminum conductors in underground electrical ducts (three conductors per electrical duct) based on ambient earth temperature of 20°C (68°F) electrical duct arrangement in accordance with figure 31060 detail 1 100 percent load factor thermal resistance (rho) of 90 conductor temperatures of 105°C (221°F).

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