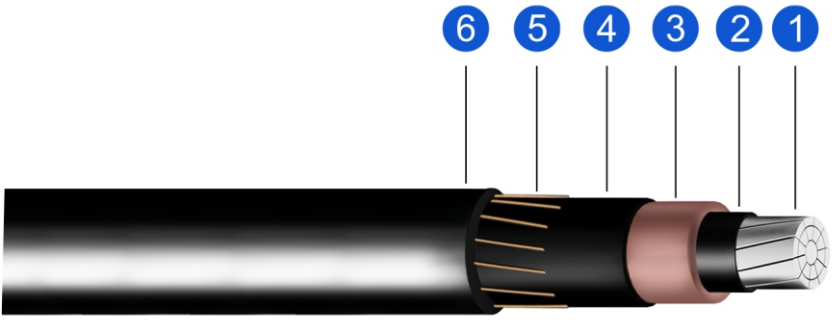
EPRONAX AL TYPE MV- 90 15 kV 100% and 133% I.L.

AL/EPR/WIRE SCREEN/LLDPE 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 sunlight linear low density thermoplastic polyethylene (LLDPE).

FEATURES AND APPLICATIONS

- EPRONAX AL MV-90 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 90 °C for normal operation, 130 °C for emergency overload and 250 °C for short-circuit conditions.
- 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.

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 Distribution of Electric Energy

EPRONAX AL TYPE MV- 90 15 kV 100% and 133% I.L.

AL/EPR/WIRE SCREEN/LLDPE 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)	
827901047	2	0.27	0.682	0.745	1.037	140	196	497	115	120	3
827901048	1	0.30	0.714	0.777	1.069	176	196	531	130	135	3
827901049	1/0	0.33	0.751	0.814	1.106	223	196	573	150	155	3
827901050	2/0	0.37	0.791	0.854	1.146	279	229	634	175	175	3
827901051	3/0	0.42	0.837	0.900	1.192	354	295	721	200	200	3
827901052	4/0	0.47	0.891	0.954	1.246	445	360	820	230	230	3 ½
827901053	250	0.52	0.934	0.997	1.289	527	426	908	255	250	3 ½
827901054	350	0.61	1.029	1.092	1.384	736	589	1124	310	305	4
827901057	500	0.73	1.151	1.214	1.506	1061	819	1434	385	370	4
827901060	750	0.90	1.316	1.379	1.832	1592	1252	2094	485	455	5
827901062	1000	1.06	1.472	1.535	1.987	2133	1670	2612	565	525	5

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)	
829801047	2	0.27	0.772	0.835	1.127	140	196	570	115	120	3
829801048	1	0.30	0.804	0.867	1.159	176	196	606	130	135	3
829801049	1/0	0.33	0.841	0.904	1.196	223	196	651	150	155	3
829801050	2/0	0.37	0.880	0.943	1.235	279	229	715	175	175	3 ½
829801051	3/0	0.42	0.927	0.990	1.282	354	295	805	200	200	3 ½
829801052	4/0	0.47	0.981	1.044	1.336	445	360	908	230	230	3 ½
829801053	250	0.52	1.024	1.087	1.379	527	426	999	255	250	3 ½
829801054	350	0.61	1.119	1.181	1.474	736	589	1221	310	305	4
829801057	500	0.73	1.241	1.304	1.596	1061	819	1540	385	370	5
829801060	750	0.90	1.406	1.469	1.922	1592	1252	2221	485	455	5
829801062	1000	1.06	1.561	1.624	2.077	2133	1670	2749	565	525	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 90°C (194 °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 90°C (194°F).

(3) Ampacities are in accordance with Section 392.80(B)(2) of the NEC for single Type MV-90 conductor cables or single conductors cabled together (triplexed, quadruplexed, etc) installed in uncovered cable tray at ambient temperature of 40°C (104°F) and conductor temperatures of 90°C (194°F)
The ampacities shall not exceed 75 percent of the allowable ampacities in Table 310.60(C) (70). Where the cable trays are covered for more than 18 m (6 ft) with solid unventilated covers the ampacities for 1/0 AWG and larger single conductor cables shall not exceed 93 percent of the values shown above.
Jam ratio has not been considered and should be checked to avoid possible jamming.

Values are nominal and subject to manufacturing tolerances.