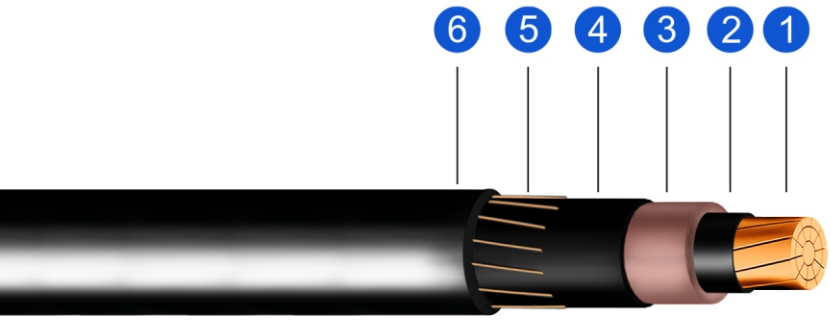
EPRONAX TYPE MV-90 25 kV 100% and 133% I.L.

EPR/WIRE SCREEN/LLDPE JACKET POWER CABLE



CERTIFIED

CONSTRUCTION

1- Conductor: Compact class B stranded soft annealed bare copper as per ASTM B-496.
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 type 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-90 under file E-500191.

STANDARDS

ASTM B-3 - Standard Specification for Soft or Annealed Copper Wire
ASTM B-496 - Standard Specification for Compact Round Concentric-Lay-Stranded Copper Conductors.
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

COPPER 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)
						COPPER	TOTAL	CONDUIT IN AIR (1)	UNDERGROUND DUCT (2)	
820801048	1	0.30	0.874	0.937	1.229	815	868	170	175	3 ½
820801049	1/0	0.33	0.911	0.974	1.266	1032	989	195	200	3 ½
820801050	2/0	0.37	0.950	1.013	1.306	1291	1131	225	230	4
820801051	3/0	0.42	0.997	1.060	1.352	1630	1312	260	260	4
820801052	4/0	0.47	1.051	1.114	1.406	2066	1541	295	295	4
820801053	250	0.52	1.094	1.157	1.449	2433	1733	330	325	5
820801054	350	0.61	1.189	1.252	1.544	3390	2221	395	390	5
820801057	500	0.73	1.311	1.374	1.826	4868	3104	480	465	5
820801060	750	0.90	1.476	1.539	1.992	7359	4330	585	565	6
820801062	1000	1.06	1.631	1.694	2.147	9752	5507	675	640	6

COPPER 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)
						COPPER	TOTAL	CONDUIT IN AIR (1)	UNDERGROUND DUCT (2)	
822701048	1	0.30	0.994	1.057	1.349	815	985	170	175	4
822701049	1/0	0.33	1.031	1.094	1.387	1032	1111	195	200	4
822701050	2/0	0.37	1.071	1.134	1.426	1291	1256	225	230	4
822701051	3/0	0.42	1.117	1.180	1.472	1630	1442	260	260	5
822701052	4/0	0.47	1.171	1.234	1.526	2066	1676	295	295	5
822701053	250	0.52	1.215	1.278	1.570	2433	1872	330	325	5
822701054	350	0.61	1.309	1.372	1.724	3390	2434	395	390	5
822701057	500	0.73	1.431	1.494	1.947	4868	3275	480	465	6
822701060	750	0.90	1.596	1.659	2.112	7359	4517	585	565	6
822701062	1000	1.06	1.752	1.815	2.268	9752	5709	675	640	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 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.