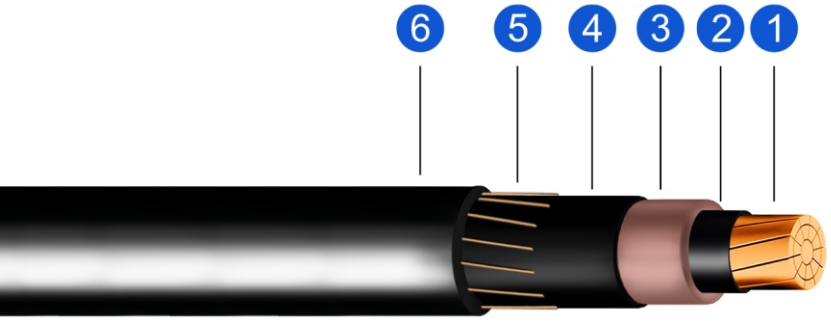
EPRONAX TYPE MV-105 35 kV 100% I.L.

EPR/WIRE SCREEN/PVC JACKET POWER CABLE



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 tape 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 type 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.

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, 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)
						COPPER	TOTAL	CONDUIT IN AIR (1)	UNDERGROUND DUCT (2)	
824501049	1/0	0.33	1.081	1.144	1.436	1032	2732	215	215	4
824501050	2/0	0.37	1.120	1.183	1.476	1291	3060	255	245	5
824501051	3/0	0.42	1.167	1.230	1.522	1630	3480	290	275	5
824501052	4/0	0.47	1.221	1.284	1.576	2066	4006	330	315	5
824501053	250	0.52	1.264	1.327	1.619	2433	4447	365	345	5
824501054	350	0.61	1.359	1.422	1.774	3390	5759	440	415	5
824501057	500	0.73	1.481	1.544	1.996	4868	7712	535	500	6
824501060	750	0.90	1.646	1.709	2.162	7359	10487	655	610	6
824501062	1000	1.06	1.802	1.865	2.317	9752	13153	755	690	7

(1) Ampacities are in accordance with table 310.60(C)(73) of the NEC for insulated triplexed or three single-conductor copper 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)(77) of the NEC for three single-insulated copper 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.