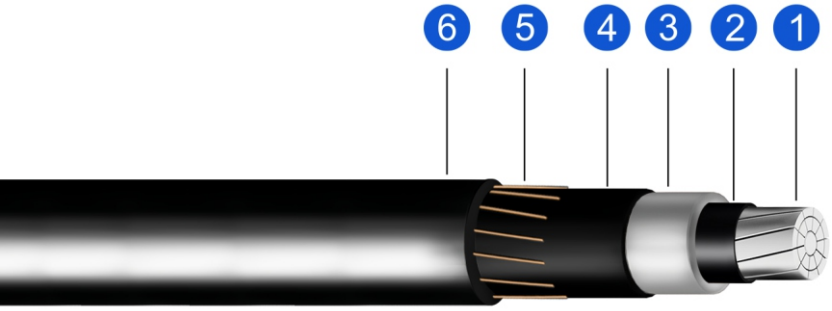
INDULINK AL TYPE MV-90 8 kV 100% and 133% I.L.

AL/XLPE/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: Tree-retardant cross-linked polyethylene (TR-XLPE).
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

- INDULINK 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.
- Superior current carrying capacity.
- True triple and dry curing extrusion system.
- 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 Distribubtion of Electric Energy

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)	
841201045	4	0.21	0.518	0.581	0.873	88	196	863	84	91	3
841201047	2	0.27	0.572	0.635	0.927	140	196	973	115	120	3
841201048	1	0.30	0.604	0.667	0.959	176	196	1043	130	135	3
841201049	1/0	0.33	0.641	0.704	0.996	223	196	1131	150	155	3
841201050	2/0	0.37	0.680	0.743	1.035	279	229	1259	175	175	3
841201051	3/0	0.42	0.727	0.790	1.082	354	295	1441	200	200	3
841201052	4/0	0.47	0.781	0.844	1.136	445	360	1649	230	230	3 ½
841201053	250	0.52	0.824	0.887	1.179	527	426	1836	255	250	3 ½
841201054	350	0.61	0.919	0.981	1.274	736	589	2292	310	305	4
841201057	500	0.73	1.041	1.104	1.396	1061	819	2952	385	370	5
841201060	750	0.90	1.206	1.269	1.722	1592	1252	4459	485	455	5
841201062	1000	1.06	1.361	1.424	1.877	2133	1670	5578	565	525	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)	
842901045	4	0.21	0.569	0.631	0.924	88	196	933	84	91	3
842901047	2	0.27	0.622	0.685	0.978	140	196	1047	115	120	3
842901048	1	0.30	0.654	0.717	1.009	176	196	1120	130	135	3
842901049	1/0	0.33	0.691	0.754	1.046	223	196	1210	150	155	3
842901050	2/0	0.37	0.731	0.794	1.086	279	229	1341	175	175	3
842901051	3/0	0.42	0.777	0.840	1.132	354	295	1527	200	200	3 ½
842901052	4/0	0.47	0.831	0.894	1.186	445	360	1738	230	230	3 ½
842901053	250	0.52	0.874	0.937	1.230	527	426	1928	255	250	3 ½
842901054	350	0.61	0.969	1.032	1.324	736	589	2392	310	305	4
842901057	500	0.73	1.091	1.154	1.446	1061	819	3061	385	370	5
842901060	750	0.90	1.256	1.319	1.772	1592	1252	4592	485	455	5
842901062	1000	1.06	1.412	1.475	1.928	2133	1670	5722	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).

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

Values are nominal and subject to manufacturing tolerances.