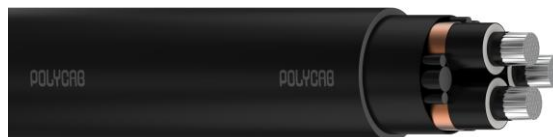


POLYCARB MEDIUM VOLTAGE HIGH TENSION CABLE CONFORMING TO ICEA S-93-639 (NEMA WC-74)



Polycab Medium Voltage High Tension cables of voltage grade ranging from 5 kV to 36 kV are suitable to use in conduits, ducts, troughs, trays, direct burial in wet and dry conditions for power supply to wide networks. These cables are available with EPR insulation (XLPE insulation available on demand) having temperature rating of 105°C.

These cables are halogen free flame retardant in characteristic and provide continuous load and Extra- protection from short circuit and Fire.

Conductor: High conductivity annealed plain stranded compacted aluminium / copper conductor produced in-house from state-of-the art machine.

Conductor Screen: an extruded layer of cross-linkable semi conducting compound to eliminate sharp points on conductor surface and also nullifies chance of electric discharge at interface between conductor / insulation

Insulation: In-house developed high insulation resistance Ethylene Propylene Rubber thermoset insulation compound. (XLPE insulation available on demand)

Non-metallic Insulation Screen: an extruded layer of cross-linkable semi conducting compound, applied in triple extrusion with conductor screen and insulation extrusion, to eliminate micro voids and curing resulting longer life of cables

Metallic Screen: a helically applied copper tape screen to carry fault current (corrugated/round wire copper screen is optional)

Laying Up: in case of 3 core Cable, insulated cores laid up together with in-house developed fillers to maintain circularity of cable and optional ground wire for earthing purpose

Wrapping tape: in case of 3 core cable, a wrapping tape applied over laid up core assembly

Optional Armour: to give mechanical protection and also acts as return path for earth fault current

Outer Sheath: In-house developed thermoplastic compound having low emission of smoke and corrosive gases when exposed to fire.

The construction is based on the application and requirement of the user against ICEA S-93-639 / NEMA WC-74.



[POLYCARB MV SC CU SCR ICEA S-93-639 5KV \(or\) 8KV](#)



[POLYCARB MV SC CU SCR ICEA S-93-639 8KV](#)



[POLYCARB MV SC CU SCR ICEA S-93-639 15KV](#)



[POLYCARB MV SC CU SCR ICEA S-93-639 25KV](#)



[POLYCAB MV SC CU SCR ICEA S-93-639 35KV](#)



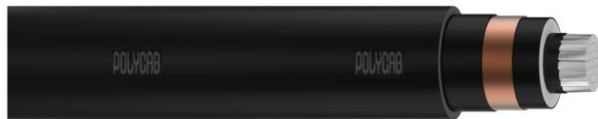
[POLYCAB MV SC AL SCR ICEA S-93-639 5KV \(or\) 8KV](#)



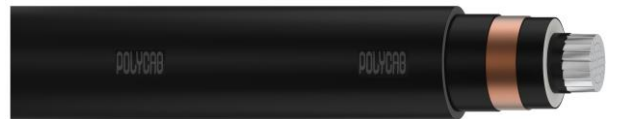
[POLYCAB MV SC AL SCR ICEA S-93-639 8KV](#)



[POLYCAB MV SC AL SCR ICEA S-93-639 15KV](#)



[POLYCAB MV SC AL SCR ICEA S-93-639 25KV](#)



[POLYCAB MV SC AL SCR ICEA S-93-639 35KV](#)



[POLYCAB MV MC CU SCR ICEA S-93-639 5KV \(or\) 8kv](#)



[POLYCAB MV MC AL SCR ICEA S-93-639 8KV](#)



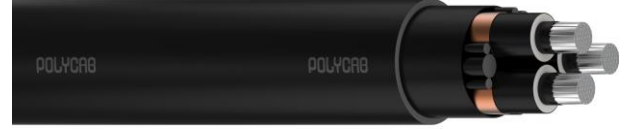
[POLYCAB MV MC AL SCR ICEA S-93-639 15KV](#)



[POLYCAB MV MC AL SCR ICEA S-93-639 25KV](#)



[POLYCAB MV MC CU SCR ICEA S-93-639 35KV](#)



[POLYCAB MV MC AL SCR ICEA S-93-639 5KV \(or\) 8kv](#)



[POLYCAB MV MC AL SCR ICEA S-93-639 8KV](#)



[POLYCAB MV MC AL SCR ICEA S-93-639 15KV](#)



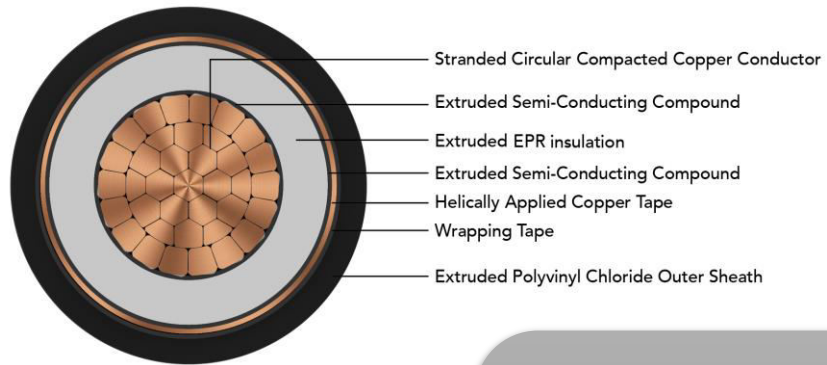
[POLYCAB MV MC AL SCR ICEA S-93-639 25KV](#)



[POLYCAB MV MC AL SCR ICEA S-93-639 35KV](#)

POLYCAB MV SC SCR ICEA S-93-639 5KV (or) 8 KV

MV Cable with Copper Conductor, EPR Insulation and Copper Screen



Outstanding Features

- Flame retardant
- High life
- Sunlight resistant
- Oil, Acid and Alkalies resistant
- Corona resistant
- Treeing resistant
- Moisture resistant

Application

POLYCAB MV 5 KV EPR insulated with Copper conductor single core cable is suitable to use in conduits, ducts, troughs, trays, direct burial in wet and dry conditions for power supply to wide networks.

Voltage Rating

Nominal Voltage: 5 kV AC (100% / 133%) or 8 kV AC (100%)

Operation Temperature

Operating temperature: -35°C to +105°C
 Emergency operating temperature: 140°C
 Max. Short Circuit Temperature: 250°C

Construction

- Conductor: Circular Compacted Copper conductor as per ASTM B496
- Conductor Screen: Extruded Semi-conductive compound
- Insulation: Extruded EPR (TR-XLPE will be provided on demand)
- Insulation Screen: Extruded Semi-conductive compound
- Metallic Insulation Screen: Helically applied copper tape
(Round wire / Corrugated copper screen will be provided on demand)
- Outer Sheath: Extruded Polyvinyl Chloride, Colour: Black
(Alternative Sheath: CPE Outer Sheath or LSZH Outer sheath, and parameters will change accordingly)

Bending Radius: 12D

D is overall diameter of cable

Standard and References:

ASTM B496
 ICEA S-93-639 (NEMA WC-74)
 UL 1072
 UL 1685 / FT-1
 IEEE 1202
 UL 2556

Voltage Rating (kV AC)	High Voltage Test (kV AC)	Min. Partial discharge test (kV AC)	
		100% level	133% level
5	18	4	5
8	23	6	8

Compliance

- Conductor resistance ICEA S-93-639
- Insulation resistance ICEA S-93-639
- Vertical Tray Flame UL 1685
- Smoke Release UL 1685
- Flame Test IEEE 1202



OUR ACCREDITATION



POLYCAB MV SC SCR ICEA S-93-639 5KV (or) 8 KV

MV Cable with Copper Conductor, EPR Insulation and Copper Screen

DIMENSIONS, WEIGHT AND AMPACITY:

133% insulation (5kv) and 100% insulation (8kv):

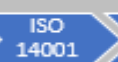
Product Code	No. of Cores	Core Cross sectional Area	Nominal Diameter			Weight (Approx.)	Current rating *	
			Under metallic screen	Over metallic screen	Overall		Directly buried in ground	In air
	No.	AWG / MCM	mm	mm	mm	Kg/Km	Amps	
MVIC36CRUAYF001C002AA001P	1	2 AWG	15.1	15.6	19.0	650	140	210
MVIC36CRUAYF001C001AA001P	1	1 AWG	15.9	16.4	19.5	750	160	240
MVIC36CRUAYF001C1X0AA001P	1	1/0 AWG	16.9	17.4	20.5	900	185	285
MVIC36CRUAYF001C2X0AA001P	1	2/0 AWG	17.9	18.4	21.5	1050	215	330
MVIC36CRUAYF001C3X0AA001P	1	3/0 AWG	19.1	19.6	23.5	1300	245	385
MVIC36CRUAYF001C4X0AA001P	1	4/0 AWG	20.4	20.9	25.0	1500	285	445
MVIC36CRUAYF001C250CA001P	1	250 MCM	21.7	22.2	26.5	1750	315	500
MVIC36CRUAYF001C350CA001P	1	350 MCM	24.1	24.6	28.5	2250	385	625
MVIC36CRUAYF001C500CA001P	1	500 MCM	27.2	27.7	31.5	3000	470	765
MVIC36CRUAYF001C600CA001P	1	600 MCM	29.7	30.2	34.5	3600	520	855
MVIC36CRUAYF001C750CA001P	1	750 MCM	32.1	32.7	36.5	4350	585	970
MVIC36CRUAYF001C01KCA001P	1	1000 MCM	35.7	36.2	40.0	5550	675	1155

100% insulation (5kv):

Product Code	No. of Cores	Core Cross sectional Area	Nominal Diameter			Weight (Approx.)	Current rating *	
			Under metallic screen	Over metallic screen	Overall		Directly buried in ground	In air
	No.	AWG / MCM	mm	mm	mm	Kg/Km	Amps	
MVIC36CRUAYF001C002AA002P	1	2 AWG	13.8	14.3	17.5	600	140	210
MVIC36CRUAYF001C001AA002P	1	1 AWG	14.7	15.2	18.5	700	160	240
MVIC36CRUAYF001C1X0AA002P	1	1/0 AWG	15.6	16.1	19.5	850	185	285
MVIC36CRUAYF001C2X0AA002P	1	2/0 AWG	16.6	17.2	20.5	1000	215	330
MVIC36CRUAYF001C3X0AA002P	1	3/0 AWG	17.8	18.3	21.5	1200	245	385
MVIC36CRUAYF001C4X0AA002P	1	4/0 AWG	19.2	19.7	23.5	1450	285	445
MVIC36CRUAYF001C250CA002P	1	250 MCM	20.4	20.9	25.0	1650	315	500
MVIC36CRUAYF001C350CA002P	1	350 MCM	22.9	23.4	27.5	2200	385	625
MVIC36CRUAYF001C500CA002P	1	500 MCM	25.9	26.4	30.5	2950	470	765
MVIC36CRUAYF001C600CA002P	1	600 MCM	27.9	28.4	32.5	3450	520	855
MVIC36CRUAYF001C750CA002P	1	750 MCM	30.3	30.8	35.0	4200	585	970
MVIC36CRUAYF001C01KCA002P	1	1000 MCM	33.8	34.3	38.5	5400	675	1155

* Current Rating based on Table 310.16 (20°C Ambient Ground Temperature) and Table 310.17 (30°C Ambient Air Temperature) of National Electric Code

OUR ACCREDITATION



POLYCAB MV SC SCR ICEA S-93-639 5KV (or) 8 KV

MV Cable with Copper Conductor, EPR Insulation and Copper Screen

ELECTRICAL CHARACTERISTICS:

133% insulation:

No. of Cores	Core Cross sectional Area	Nom. DC Resistance at 25°C	Nom. AC Resistance at 90°C	Approx. Capacitance	Approx. Inductance	Approx. Reactance	Max. pulling tension on conductor	Charging Current per phase	Positive sequence impedance	Electric Stress at Conductor Screen	Short circuit rating	
											Phase conductor	Metallic screen
No.	AWG / MCM	Ω/km	Ω/km	μF/km	mH/km	Ω/km	kN	Amps/Km	Ohms/Km	kV/mm	kA/S	
1	2 AWG	0.531	0.666	0.30	0.41	0.15	2.4	0.56	0.68	2.1	4.8	2.0
1	1 AWG	0.423	0.528	0.32	0.39	0.15	3.0	0.60	0.55	2.1	6.1	2.1
1	1/0 AWG	0.335	0.420	0.35	0.38	0.14	3.7	0.66	0.44	2.0	7.7	2.2
1	2/0 AWG	0.266	0.331	0.38	0.36	0.13	4.7	0.71	0.36	1.9	9.7	2.3
1	3/0 AWG	0.211	0.266	0.41	0.35	0.13	6.0	0.78	0.30	1.9	12.2	2.5
1	4/0 AWG	0.167	0.210	0.45	0.34	0.13	7.5	0.85	0.25	1.9	15.3	2.6
1	250 MCM	0.141	0.177	0.49	0.33	0.13	8.9	0.92	0.22	1.8	18.1	2.8
1	350 MCM	0.101	0.128	0.56	0.31	0.12	12.4	1.05	0.17	1.7	25.4	3.1
1	500 MCM	0.071	0.092	0.64	0.30	0.11	17.7	1.21	0.15	1.7	36.2	3.5
1	600 MCM	0.059	0.076	0.72	0.30	0.11	21.3	1.35	0.13	1.5	43.5	3.8
1	750 MCM	0.047	0.066	0.79	0.29	0.11	26.6	1.48	0.13	1.5	54.4	4.1
1	1000 MCM	0.035	0.052	0.89	0.27	0.10	35.4	1.67	0.12	1.5	72.5	4.5

100% insulation:

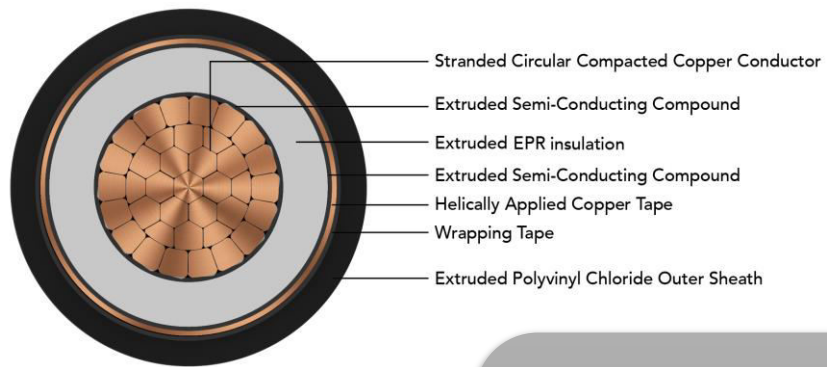
No. of Cores	Core Cross sectional Area	Nom. DC Resistance at 25°C	Nom. AC Resistance at 90°C	Approx. Capacitance	Approx. Inductance	Approx. Reactance	Max. pulling tension on conductor	Charging Current per phase	Positive sequence impedance	Electric Stress at Conductor Screen	Short circuit rating	
											Phase conductor	Metallic screen
No.	AWG / MCM	Ω/km	Ω/km	μF/km	mH/km	Ω/km	kN	Amps/Km	Ohms/Km	kV/mm	kA/S	
1	2 AWG	0.531	0.666	0.36	0.39	0.15	2.4	0.68	1.11	2.5	4.8	1.8
1	1 AWG	0.423	0.528	0.39	0.38	0.14	3.0	0.73	0.88	2.4	6.1	1.9
1	1/0 AWG	0.335	0.420	0.42	0.37	0.14	3.7	0.80	0.71	2.4	7.7	2.0
1	2/0 AWG	0.266	0.331	0.46	0.35	0.13	4.7	0.87	0.56	2.3	9.7	2.2
1	3/0 AWG	0.211	0.266	0.51	0.33	0.13	6.0	0.95	0.45	2.2	12.2	2.3
1	4/0 AWG	0.167	0.210	0.56	0.33	0.12	7.5	1.05	0.37	2.2	15.3	2.5
1	250 MCM	0.141	0.177	0.60	0.32	0.12	8.9	1.14	0.32	2.1	18.1	2.6
1	350 MCM	0.101	0.128	0.69	0.30	0.11	12.4	1.30	0.24	2.0	25.4	2.9
1	500 MCM	0.071	0.092	0.80	0.29	0.11	17.7	1.51	0.18	2.0	36.2	3.3
1	600 MCM	0.059	0.076	0.88	0.28	0.11	21.3	1.65	0.16	1.9	43.5	3.6
1	750 MCM	0.047	0.066	0.96	0.28	0.10	26.6	1.82	0.14	1.9	54.4	3.9
1	1000 MCM	0.035	0.052	1.09	0.27	0.10	35.4	2.06	0.13	1.9	72.5	4.3

OUR ACCREDITATION



POLYCAB MV SC SCR UAR ICEA S-93-639 8KV

MV Cable with Copper Conductor, EPR Insulation and Copper Screen



Outstanding Features

- Flame retardant
- High life
- Sunlight resistant
- Oil, Acid and Alkalies resistant
- Corona resistant
- Treeing resistant
- Moisture resistant

Application

POLYCAB MV 8KV EPR insulated with Copper conductor single core cable is suitable to use in conduits, ducts, troughs, trays, direct burial in wet and dry conditions for power supply to wide networks.

Voltage Rating

Nominal Voltage: 8kV AC

Operation Temperature

Operating temperature: -35°C to +105°C
 Emergency operating temperature: 140°C
 Max. Short Circuit Temperature: 250°C

Construction

- Conductor: Circular Compacted Copper conductor as per ASTM B496
- Conductor Screen: Extruded Semi-conductive compound
- Insulation: Extruded EPR (TR-XLPE will be provided on demand)
- Insulation Screen: Extruded Semi-conductive compound
- Metallic Insulation Screen: Helically applied copper tape
(Round wire / Corrugated copper screen will be provided on demand)
- Outer Sheath: Extruded Polyvinyl Chloride, Colour: Black
(Alternative Sheath: CPE Outer Sheath or LSZH Outer sheath, and parameters will change accordingly)

Bending Radius: 12D

D is overall diameter of cable

Standard and References:

ASTM B496
 ICEA S-93-639 (NEMA WC-74)
 UL 1072
 UL 1685 / FT-1
 IEEE 1202
 UL 2556

Voltage Rating (kV AC)	High Voltage Test (kV AC)		Min. Partial discharge test (kV AC)	
	100% level	133% level	100% level	133% level
8	23	28	6	8

Compliance

- Conductor resistance ICEA S-93-639
- Insulation resistance ICEA S-93-639
- Vertical Tray Flame UL 1685
- Smoke release UL 1685
- Flame Test IEEE 1202



OUR ACCREDITATION



POLYCAB MV SC SCR UAR ICEA S-93-639 8KV

MV Cable with Copper Conductor, EPR Insulation and Copper Screen

DIMENSIONS, WEIGHT AND AMPACITY:

133% insulation:

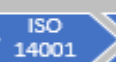
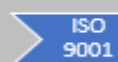
Product Code	No. of Cores	Core Cross sectional Area	Nominal Diameter			Weight (Approx.)	Current rating *	
			Under metallic screen	Over metallic screen	Overall		Directly buried in ground	In air
	No.	AWG / MCM	mm	mm	mm	Kg/Km	Amps	
MVIC48CRUAYF001C002AA001P	1	2 AWG	16.4	16.9	20.0	700	140	210
MVIC48CRUAYF001C001AA001P	1	1 AWG	17.2	17.7	21.0	800	160	240
MVIC48CRUAYF001C1X0AA001P	1	1/0 AWG	18.1	18.6	22.5	1000	185	285
MVIC48CRUAYF001C2X0AA001P	1	2/0 AWG	19.2	19.7	24.0	1150	215	330
MVIC48CRUAYF001C3X0AA001P	1	3/0 AWG	20.4	20.9	25.0	1350	245	385
MVIC48CRUAYF001C4X0AA001P	1	4/0 AWG	21.7	22.2	26.5	1550	285	445
MVIC48CRUAYF001C250CA001P	1	250 MCM	23.0	23.5	27.5	1800	315	500
MVIC48CRUAYF001C350CA001P	1	350 MCM	25.4	25.9	30.0	2300	385	625
MVIC48CRUAYF001C500CA001P	1	500 MCM	28.4	28.9	33.0	3100	470	765
MVIC48CRUAYF001C600CA001P	1	600 MCM	30.5	31.0	35.0	3600	520	855
MVIC48CRUAYF001C750CA001P	1	750 MCM	32.9	33.4	37.5	4350	585	970
MVIC48CRUAYF001C01KCA001P	1	1000 MCM	36.4	36.9	41.0	5600	675	1155

100% insulation:

Product Code	No. of Cores	Core Cross sectional Area	Nominal Diameter			Weight (Approx.)	Current rating *	
			Under metallic screen	Over metallic screen	Overall		Directly buried in ground	In air
	No.	AWG / MCM	mm	mm	mm	Kg/Km	Amps	
MVIC48CRUAYF001C002AA002P	1	2 AWG	15.1	15.6	19.0	650	140	210
MVIC48CRUAYF001C001AA002P	1	1 AWG	15.9	16.4	19.5	750	160	240
MVIC48CRUAYF001C1X0AA002P	1	1/0 AWG	16.9	17.4	20.5	900	185	285
MVIC48CRUAYF001C2X0AA002P	1	2/0 AWG	17.9	18.4	21.5	1050	215	330
MVIC48CRUAYF001C3X0AA002P	1	3/0 AWG	19.1	19.6	23.5	1300	245	385
MVIC48CRUAYF001C4X0AA002P	1	4/0 AWG	20.4	20.9	25.0	1500	285	445
MVIC48CRUAYF001C250CA002P	1	250 MCM	21.7	22.2	26.5	1750	315	500
MVIC48CRUAYF001C350CA002P	1	350 MCM	24.1	24.6	28.5	2250	385	625
MVIC48CRUAYF001C500CA002P	1	500 MCM	27.2	27.7	31.5	3000	470	765
MVIC48CRUAYF001C600CA002P	1	600 MCM	29.7	30.2	34.5	3600	520	855
MVIC48CRUAYF001C750CA002P	1	750 MCM	32.1	32.7	36.5	4350	585	970
MVIC48CRUAYF001C01KCA002P	1	1000 MCM	35.7	36.2	40.0	5550	675	1155

* Current Rating based on Table 310.16 (20°C Ambient Ground Temperature) and Table 310.17 (30°C Ambient Air Temperature) of National Electric Code

OUR ACCREDITATION



POLYCAB MV SC SCR UAR ICEA S-93-639 8KV

MV Cable with Copper Conductor, EPR Insulation and Copper Screen

ELECTRICAL CHARACTERISTICS:

133% insulation:

No. of Cores	Core Cross sectional Area	Nom. DC Resistance at 25°C	Nom. AC Resistance at 90°C	Approx. Capacitance	Approx. Inductance	Approx. Reactance	Max. pulling tension on conductor	Charging Current per phase	Positive sequence impedance	Electric Stress at Conductor Screen	Short circuit rating	
											Phase conductor	Metallic screen
No.	AWG / MCM	Ω/km	Ω/km	μF/km	mH/km	Ω/km	kN	Amps/Km	Ohms/Km	kV/mm	kA/S	
1	2 AWG	0.531	0.666	0.26	0.42	0.16	2.4	0.77	0.69	3.0	4.8	2.1
1	1 AWG	0.423	0.528	0.28	0.41	0.15	3.0	0.83	0.55	2.9	6.1	2.2
1	1/0 AWG	0.335	0.420	0.30	0.40	0.15	3.7	0.90	0.45	2.8	7.7	2.3
1	2/0 AWG	0.266	0.331	0.32	0.38	0.14	4.7	0.98	0.36	2.7	9.7	2.5
1	3/0 AWG	0.211	0.266	0.35	0.36	0.14	6.0	1.06	0.30	2.7	12.2	2.6
1	4/0 AWG	0.167	0.210	0.38	0.35	0.13	7.5	1.16	0.25	2.6	15.3	2.8
1	250 MCM	0.141	0.177	0.41	0.34	0.13	8.9	1.25	0.22	2.5	18.1	3.0
1	350 MCM	0.101	0.128	0.47	0.32	0.12	12.4	1.42	0.18	2.4	25.4	3.3
1	500 MCM	0.071	0.092	0.54	0.31	0.12	17.7	1.64	0.15	2.3	36.2	3.6
1	600 MCM	0.059	0.076	0.59	0.30	0.11	21.3	1.78	0.14	2.2	43.5	3.9
1	750 MCM	0.047	0.066	0.65	0.29	0.11	26.6	1.95	0.13	2.2	54.4	4.2
1	1000 MCM	0.035	0.052	0.73	0.28	0.11	35.4	2.20	0.12	2.2	72.5	4.6

100% insulation:

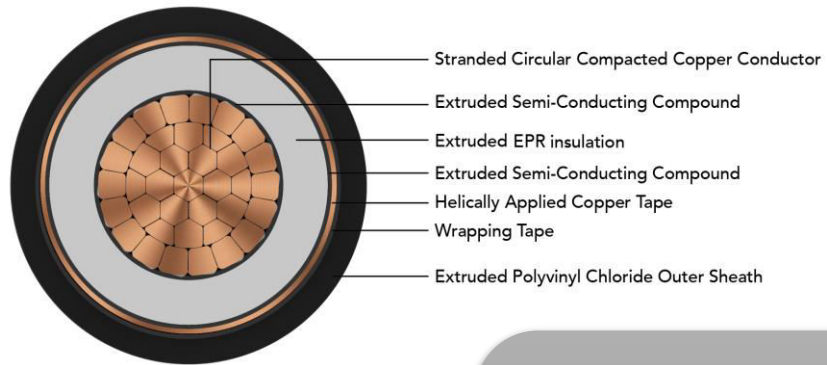
No. of Cores	Core Cross sectional Area	Nom. DC Resistance at 25°C	Nom. AC Resistance at 90°C	Approx. Capacitance	Approx. Inductance	Approx. Reactance	Max. pulling tension on conductor	Charging Current per phase	Positive sequence impedance	Electric Stress at Conductor Screen	Short circuit rating	
											Phase conductor	Metallic screen
No.	AWG / MCM	Ω/km	Ω/km	μF/km	mH/km	Ω/km	kN	Amps/Km	Ohms/Km	kV/mm	kA/S	
1	2 AWG	0.531	0.666	0.30	0.41	0.15	2.4	0.56	0.68	2.1	4.8	2.0
1	1 AWG	0.423	0.528	0.32	0.39	0.15	3.0	0.60	0.55	2.1	6.1	2.1
1	1/0 AWG	0.335	0.420	0.35	0.38	0.14	3.7	0.66	0.44	2.0	7.7	2.2
1	2/0 AWG	0.266	0.331	0.38	0.36	0.13	4.7	0.71	0.36	1.9	9.7	2.3
1	3/0 AWG	0.211	0.266	0.41	0.35	0.13	6.0	0.78	0.30	1.9	12.2	2.5
1	4/0 AWG	0.167	0.210	0.45	0.34	0.13	7.5	0.85	0.25	1.9	15.3	2.6
1	250 MCM	0.141	0.177	0.49	0.33	0.13	8.9	0.92	0.22	1.8	18.1	2.8
1	350 MCM	0.101	0.128	0.56	0.31	0.12	12.4	1.05	0.17	1.7	25.4	3.1
1	500 MCM	0.071	0.092	0.64	0.30	0.11	17.7	1.21	0.15	1.7	36.2	3.5
1	600 MCM	0.059	0.076	0.72	0.30	0.11	21.3	1.35	0.13	1.5	43.5	3.8
1	750 MCM	0.047	0.066	0.79	0.29	0.11	26.6	1.48	0.13	1.5	54.4	4.1
1	1000 MCM	0.035	0.052	0.89	0.27	0.10	35.4	1.67	0.12	1.5	72.5	4.5

OUR ACCREDITATION



POLYCAB MV SC SCR ICEA S-93-639 15KV

MV Cable with Copper Conductor, EPR Insulation and Copper Screen



Outstanding Features

- Flame retardant
- High life
- Sunlight resistant
- Oil, Acid and Alkalies resistant
- Corona resistant
- Treeing resistant
- Moisture resistant

Application

POLYCAB MV 15KV EPR insulated with Copper conductor single core cable is suitable to use in conduits, ducts, troughs, trays, direct burial in wet and dry conditions for power supply to wide networks.

Voltage Rating

Nominal Voltage: 15kV AC

Operation Temperature

Operating temperature: -35°C to +105°C
 Emergency operating temperature: 140°C
 Max. Short Circuit Temperature: 250°C

Construction

- Conductor: Circular Compacted Copper conductor as per ASTM B496
- Conductor Screen: Extruded Semi-conductive compound
- Insulation: Extruded EPR (TR-XLPE will be provided on demand)
- Insulation Screen: Extruded Semi-conductive compound
- Metallic Insulation Screen: Helically applied copper tape
(Round wire / Corrugated copper screen will be provided on demand)
- Outer Sheath: Extruded Polyvinyl Chloride, Colour: Black
(Alternative Sheath: CPE Outer Sheath or LSZH Outer sheath, and parameters will change accordingly)

Bending Radius: 12D

D is overall diameter of cable

Standard and References:

- ASTM B496
- ICEA S-93-639 (NEMA WC-74)
- UL 1072
- UL 1685 / FT-1
- IEEE 1202
- UL 2556

Voltage Rating (kV AC)	High Voltage Test (kV AC)		Min. Partial discharge test (kV AC)	
	100% level	133% level	100% level	133% level
15	35	44	11	15

Compliance

- Conductor resistance ICEA S-93-639
- Insulation resistance ICEA S-93-639
- Vertical Tray Flame UL 1685
- Smoke release UL 1685
- Flame Test IEEE 1202



OUR ACCREDITATION



POLYCAB MV SC SCR ICEA S-93-639 15KV

MV Cable with Copper Conductor, EPR Insulation and Copper Screen

DIMENSIONS, WEIGHT AND AMPACITY:

133% insulation:

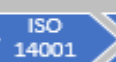
Product Code	No. of Cores	Core Cross sectional Area	Nominal Diameter			Weight (Approx.)	Current rating *	
			Under metallic screen	Over metallic screen	Overall		Directly buried in ground	In air
	No.	AWG / MCM	mm	mm	mm	Kg/Km	Amps	
MVIC37CRUAYF001C002AA001P	1	2 AWG	20.4	20.9	25.0	950	140	210
MVIC37CRUAYF001C001AA001P	1	1 AWG	21.3	21.8	26.0	1050	160	240
MVIC37CRUAYF001C1X0AA001P	1	1/0 AWG	22.2	22.7	27.0	1200	185	285
MVIC37CRUAYF001C2X0AA001P	1	2/0 AWG	23.3	23.8	28.0	1350	215	330
MVIC37CRUAYF001C3X0AA001P	1	3/0 AWG	24.4	24.9	29.0	1550	245	385
MVIC37CRUAYF001C4X0AA001P	1	4/0 AWG	25.8	26.3	30.5	1800	285	445
MVIC37CRUAYF001C250CA001P	1	250 MCM	27.0	27.6	31.5	2050	315	500
MVIC37CRUAYF001C350CA001P	1	350 MCM	29.5	30.0	34.0	2600	385	625
MVIC37CRUAYF001C500CA001P	1	500 MCM	32.5	33.0	37.0	3350	470	765
MVIC37CRUAYF001C600CA001P	1	600 MCM	35.1	35.6	39.5	3950	520	855
MVIC37CRUAYF001C750CA001P	1	750 MCM	37.5	38.0	42.0	4750	585	970
MVIC37CRUAYF001C01KCA001P	1	1000 MCM	41.0	41.5	47.0	6150	675	1155

100% insulation:

Product Code	No. of Cores	Core Cross sectional Area	Nominal Diameter			Weight (Approx.)	Current rating *	
			Under metallic screen	Over metallic screen	Overall		Directly buried in ground	In air
	No.	AWG / MCM	mm	mm	mm	Kg/Km	Amps	
MVIC37CRUAYF001C002AA002P	1	2 AWG	18.1	18.7	22.0	800	140	210
MVIC37CRUAYF001C001AA002P	1	1 AWG	19.0	19.5	23.5	950	160	240
MVIC37CRUAYF001C1X0AA002P	1	1/0 AWG	19.9	20.4	24.5	1050	185	285
MVIC37CRUAYF001C2X0AA002P	1	2/0 AWG	21.0	21.5	25.5	1250	215	330
MVIC37CRUAYF001C3X0AA002P	1	3/0 AWG	22.2	22.7	26.5	1450	245	385
MVIC37CRUAYF001C4X0AA002P	1	4/0 AWG	23.5	24.0	28.0	1650	285	445
MVIC37CRUAYF001C250CA002P	1	250 MCM	24.8	25.3	29.5	1900	315	500
MVIC37CRUAYF001C350CA002P	1	350 MCM	27.2	27.7	31.5	2450	385	625
MVIC37CRUAYF001C500CA002P	1	500 MCM	30.2	30.7	35.0	3200	470	765
MVIC37CRUAYF001C600CA002P	1	600 MCM	32.2	32.7	37.0	3750	520	855
MVIC37CRUAYF001C750CA002P	1	750 MCM	34.6	35.1	39.0	4500	585	970
MVIC37CRUAYF001C01KCA002P	1	1000 MCM	38.2	38.7	44.5	5900	675	1155

* Current Rating based on Table 310.16 (20°C Ambient Ground Temperature) and Table 310.17 (30°C Ambient Air Temperature) of National Electric Code

OUR ACCREDITATION



POLYCAB MV SC SCR ICEA S-93-639 15KV

MV Cable with Copper Conductor, EPR Insulation and Copper Screen

ELECTRICAL CHARACTERISTICS:

133% insulation:

No. of Cores	Core Cross sectional Area	Nom. DC Resistance at 25°C	Nom. AC Resistance at 90°C	Approx. Capacitance	Approx. Inductance	Approx. Reactance	Max. pulling tension on conductor	Charging Current per phase	Positive sequence impedance	Electric Stress at Conductor Screen	Short circuit rating	
											Phase conductor	Metallic screen
No.	AWG / MCM	Ω/km	Ω/km	μF/km	mH/km	Ω/km	kN	Amps/Km	Ohms/Km	kV/mm	kA/S	
1	2 AWG	0.531	0.666	0.19	0.46	0.18	2.4	1.05	0.69	1.61	4.3	4.8
1	1 AWG	0.423	0.528	0.20	0.45	0.17	3.0	1.13	0.56	1.43	4.1	6.1
1	1/0 AWG	0.335	0.420	0.21	0.43	0.16	3.7	1.21	0.45	1.29	4.0	7.7
1	2/0 AWG	0.266	0.331	0.23	0.41	0.15	4.7	1.30	0.37	1.16	3.8	9.7
1	3/0 AWG	0.211	0.266	0.25	0.39	0.15	6.0	1.41	0.30	1.06	3.7	12.2
1	4/0 AWG	0.167	0.210	0.27	0.38	0.14	7.5	1.52	0.25	0.96	3.6	15.3
1	250 MCM	0.141	0.177	0.29	0.37	0.14	8.9	1.64	0.23	0.89	3.4	18.1
1	350 MCM	0.101	0.128	0.33	0.35	0.13	12.4	1.84	0.18	0.79	3.3	25.4
1	500 MCM	0.071	0.092	0.37	0.33	0.12	17.7	2.11	0.15	0.69	3.2	36.2
1	600 MCM	0.059	0.076	0.41	0.32	0.12	21.3	2.33	0.14	0.56	3.0	43.5
1	750 MCM	0.047	0.066	0.45	0.31	0.12	26.6	2.53	0.14	0.59	2.9	54.4
1	1000 MCM	0.035	0.052	0.50	0.31	0.12	35.4	2.83	0.13	0.53	2.8	72.5

100% insulation:

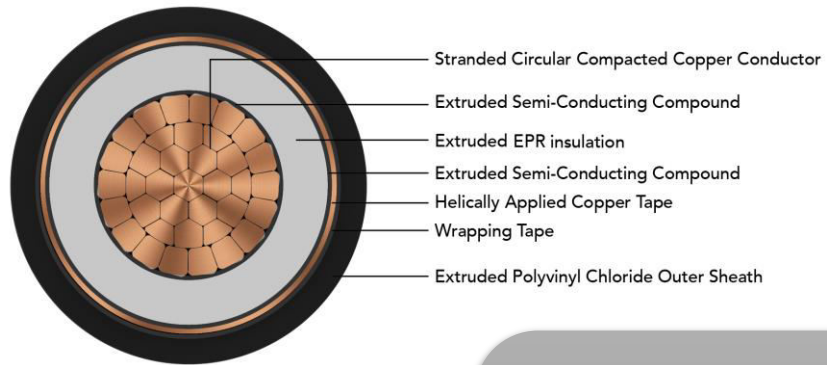
No. of Cores	Core Cross sectional Area	Nom. DC Resistance at 25°C	Nom. AC Resistance at 90°C	Approx. Capacitance	Approx. Inductance	Approx. Reactance	Max. pulling tension on conductor	Charging Current per phase	Positive sequence impedance	Electric Stress at Conductor Screen	Short circuit rating	
											Phase conductor	Metallic screen
No.	AWG / MCM	Ω/km	Ω/km	μF/km	mH/km	Ω/km	kN	Amps/Km	Ohms/Km	kV/mm	kA/S	
1	2 AWG	0.531	0.666	0.22	0.44	0.17	2.4	1.23	0.69	1.72	4.9	4.8
1	1 AWG	0.423	0.528	0.23	0.43	0.16	3.0	1.32	0.56	1.54	4.8	6.1
1	1/0 AWG	0.335	0.420	0.25	0.41	0.16	3.7	1.43	0.45	1.38	4.6	7.7
1	2/0 AWG	0.266	0.331	0.27	0.39	0.15	4.7	1.54	0.36	1.25	4.4	9.7
1	3/0 AWG	0.211	0.266	0.30	0.38	0.14	6.0	1.67	0.30	1.14	4.3	12.2
1	4/0 AWG	0.167	0.210	0.32	0.36	0.14	7.5	1.81	0.25	1.03	4.2	15.3
1	250 MCM	0.141	0.177	0.35	0.35	0.13	8.9	1.95	0.22	0.96	4.0	18.1
1	350 MCM	0.101	0.128	0.39	0.33	0.13	12.4	2.22	0.18	0.84	3.9	25.4
1	500 MCM	0.071	0.092	0.45	0.32	0.12	17.7	2.54	0.15	0.73	3.7	36.2
1	600 MCM	0.059	0.076	0.49	0.31	0.12	21.3	2.76	0.14	0.60	3.6	43.5
1	750 MCM	0.047	0.066	0.53	0.30	0.11	26.6	3.01	0.13	0.63	3.5	54.4
1	1000 MCM	0.035	0.052	0.60	0.29	0.11	35.4	3.39	0.12	0.56	3.5	72.5

OUR ACCREDITATION



POLYCAB MV SC SCR ICEA S-93-639 25KV

MV Cable with Copper Conductor, EPR Insulation and Copper Screen



Outstanding Features

- Flame retardant
- High life
- Sunlight resistant
- Oil, Acid and Alkalies resistant
- Corona resistant
- Treeing resistant
- Moisture resistant

Application

POLYCAB MV 25KV EPR insulated with Copper conductor single core cable is suitable to use in conduits, ducts, troughs, trays, direct burial in wet and dry conditions for power supply to wide networks.

Voltage Rating

Nominal Voltage: 25kV AC

Operation Temperature

Operating temperature: -35°C to +105°C
 Emergency operating temperature: 140°C
 Max. Short Circuit Temperature: 250°C

Construction

- Conductor: Circular Compacted Copper conductor as per ASTM B496
- Conductor Screen: Extruded Semi-conductive compound
- Insulation: Extruded EPR (TR-XLPE will be provided on demand)
- Insulation Screen: Extruded Semi-conductive compound
- Metallic Insulation Screen: Helically applied copper tape
(Round wire / Corrugated copper screen will be provided on demand)
- Outer Sheath: Extruded Polyvinyl Chloride, Colour: Black
(Alternative Sheath: CPE Outer Sheath or LSZH Outer sheath, and parameters will change accordingly)

Standard and References:

ASTM B496
 ICEA S-93-639 (NEMA WC-74)
 UL 1072
 UL 1685 / FT-1
 IEEE 1202
 UL 2556

Voltage Rating (kV AC)	High Voltage Test (kV AC)	
	100% level	133% level
25	52	64

Compliance

- Conductor resistance ICEA S-93-639
- Insulation resistance ICEA S-93-639
- Vertical Tray Flame UL 1685
- Smoke release UL 1685
- Flame Test IEEE 1202

Bending Radius: 12D

D is overall diameter of cable



OUR ACCREDITATION



POLYCAB MV SC SCR ICEA S-93-639 25KV

MV Cable with Copper Conductor, EPR Insulation and Copper Screen

DIMENSIONS, WEIGHT AND AMPACITY:

133% insulation:

Product Code	No. of Cores	Core Cross sectional Area	Nominal Diameter			Weight (Approx.)	Current rating *	
			Under metallic screen	Over metallic screen	Overall		Directly buried in ground	In air
	No.	AWG / MCM	mm	mm	mm	Kg/Km	Amps	
MVIC32CRUAYF001C002AA001P	1	2 AWG	25.5	26.0	30.0	1250	140	210
MVIC32CRUAYF001C001AA001P	1	1 AWG	26.3	26.9	31.0	1350	160	240
MVIC32CRUAYF001C1X0AA001P	1	1/0 AWG	27.3	27.8	32.0	1500	185	285
MVIC32CRUAYF001C2X0AA001P	1	2/0 AWG	28.3	28.8	33.0	1650	215	330
MVIC32CRUAYF001C3X0AA001P	1	3/0 AWG	29.5	30.0	34.0	1900	245	385
MVIC32CRUAYF001C4X0AA001P	1	4/0 AWG	30.8	31.3	35.5	2150	285	445
MVIC32CRUAYF001C250CA001P	1	250 MCM	32.1	32.6	36.5	2400	315	500
MVIC32CRUAYF001C350CA001P	1	350 MCM	34.5	35.1	39.0	2950	385	625
MVIC32CRUAYF001C500CA001P	1	500 MCM	37.6	38.1	42.0	3800	470	765
MVIC32CRUAYF001C600CA001P	1	600 MCM	40.2	40.7	44.5	4400	520	855
MVIC32CRUAYF001C750CA001P	1	750 MCM	42.6	43.1	47.0	5200	585	970
MVIC32CRUAYF001C01KCA001P	1	1000 MCM	46.1	46.6	52.0	6650	675	1155

100% insulation:

Product Code	No. of Cores	Core Cross sectional Area	Nominal Diameter			Weight (Approx.)	Current rating *	
			Under metallic screen	Over metallic screen	Overall		Directly buried in ground	In air
	No.	AWG / MCM	mm	mm	mm	Kg/Km	Amps	
MVIC32CRUAYF001C002AA002P	1	2 AWG	22.5	23.0	27.0	1050	140	210
MVIC32CRUAYF001C001AA002P	1	1 AWG	23.3	23.8	28.0	1150	160	240
MVIC32CRUAYF001C1X0AA002P	1	1/0 AWG	24.2	24.7	29.0	1300	185	285
MVIC32CRUAYF001C2X0AA002P	1	2/0 AWG	25.3	25.8	30.0	1500	215	330
MVIC32CRUAYF001C3X0AA002P	1	3/0 AWG	26.5	27.0	31.0	1700	245	385
MVIC32CRUAYF001C4X0AA002P	1	4/0 AWG	27.8	28.3	32.5	1950	285	445
MVIC32CRUAYF001C250CA002P	1	250 MCM	29.1	29.6	33.5	2150	315	500
MVIC32CRUAYF001C350CA002P	1	350 MCM	31.5	32.0	36.0	2750	385	625
MVIC32CRUAYF001C500CA002P	1	500 MCM	34.5	35.0	39.0	3550	470	765
MVIC32CRUAYF001C600CA002P	1	600 MCM	36.5	37.1	42.5	4250	520	855
MVIC32CRUAYF001C750CA002P	1	750 MCM	39.0	39.5	45.0	5000	585	970
MVIC32CRUAYF001C01KCA002P	1	1000 MCM	42.5	43.0	48.5	6300	675	1155

* Current Rating based on Table 310.16 (20°C Ambient Ground Temperature) and Table 310.17 (30°C Ambient Air Temperature) of National Electric Code

OUR ACCREDITATION



POLYCAB MV SC SCR ICEA S-93-639 25KV

MV Cable with Copper Conductor, EPR Insulation and Copper Screen

ELECTRICAL CHARACTERISTICS:

133% insulation:

No. of Cores	Core Cross sectional Area	Nom. DC Resistance at 25°C	Nom. AC Resistance at 90°C	Approx. Capacitance	Approx. Inductance	Approx. Reactance	Max. pulling tension on conductor	Charging Current per phase	Positive sequence impedance	Electric Stress at Conductor Screen	Short circuit rating	
											Phase conductor	Metallic screen
No.	AWG / MCM	Ω/km	Ω/km	μF/km	mH/km	Ω/km	kN	Amps/Km	Ohms/Km	kV/mm	kA/S	
1	2 AWG	0.531	0.666	0.15	0.50	0.19	2.4	1.39	0.69	5.8	4.8	3.3
1	1 AWG	0.423	0.528	0.16	0.48	0.18	3.0	1.48	0.56	5.6	6.1	3.4
1	1/0 AWG	0.335	0.420	0.17	0.47	0.18	3.7	1.57	0.46	5.3	7.7	3.5
1	2/0 AWG	0.266	0.331	0.18	0.44	0.17	4.7	1.68	0.37	5.1	9.7	3.6
1	3/0 AWG	0.211	0.266	0.19	0.42	0.16	6.0	1.81	0.31	4.9	12.2	3.8
1	4/0 AWG	0.167	0.210	0.21	0.41	0.15	7.5	1.94	0.26	4.7	15.3	3.9
1	250 MCM	0.141	0.177	0.22	0.40	0.15	8.9	2.07	0.23	4.5	18.1	4.1
1	350 MCM	0.101	0.128	0.25	0.38	0.14	12.4	2.32	0.19	4.3	25.4	4.4
1	500 MCM	0.071	0.092	0.28	0.35	0.13	17.7	2.62	0.16	4.1	36.2	4.8
1	600 MCM	0.059	0.076	0.31	0.35	0.13	21.3	2.88	0.15	3.8	43.5	5.1
1	750 MCM	0.047	0.066	0.33	0.34	0.13	26.6	3.11	0.14	3.7	54.4	5.4
1	1000 MCM	0.035	0.052	0.37	0.33	0.12	35.4	3.46	0.13	3.6	72.5	5.9

100% insulation:

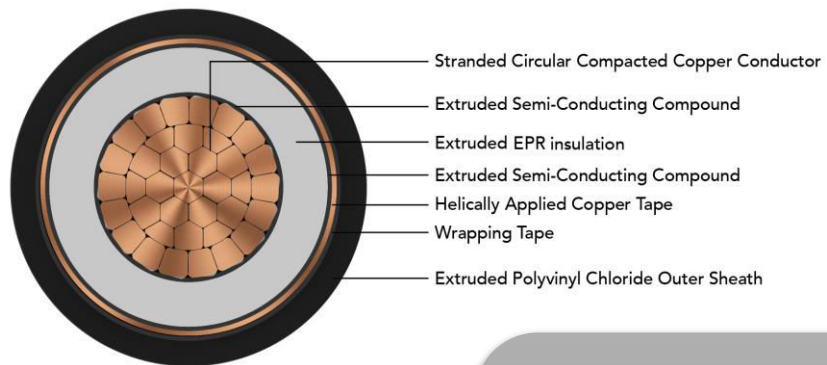
No. of Cores	Core Cross sectional Area	Nom. DC Resistance at 25°C	Nom. AC Resistance at 90°C	Approx. Capacitance	Approx. Inductance	Approx. Reactance	Max. pulling tension on conductor	Charging Current per phase	Positive sequence impedance	Electric Stress at Conductor Screen	Short circuit rating	
											Phase conductor	Metallic screen
No.	AWG / MCM	Ω/km	Ω/km	μF/km	mH/km	Ω/km	kN	Amps/Km	Ohms/Km	kV/mm	kA/S	
1	2 AWG	0.531	0.666	0.17	0.48	0.18	2.4	1.58	0.69	6.5	4.8	2.9
1	1 AWG	0.423	0.528	0.18	0.46	0.17	3.0	1.68	0.56	6.2	6.1	3.0
1	1/0 AWG	0.335	0.420	0.19	0.45	0.17	3.7	1.80	0.45	6.0	7.7	3.1
1	2/0 AWG	0.266	0.331	0.21	0.42	0.16	4.7	1.94	0.37	5.7	9.7	3.2
1	3/0 AWG	0.211	0.266	0.22	0.41	0.15	6.0	2.08	0.31	5.5	12.2	3.4
1	4/0 AWG	0.167	0.210	0.24	0.39	0.15	7.5	2.25	0.26	5.3	15.3	3.6
1	250 MCM	0.141	0.177	0.26	0.38	0.14	8.9	2.41	0.23	5.1	18.1	3.7
1	350 MCM	0.101	0.128	0.29	0.36	0.14	12.4	2.70	0.19	4.9	25.4	4.0
1	500 MCM	0.071	0.092	0.33	0.34	0.13	17.7	3.07	0.16	4.7	36.2	4.4
1	600 MCM	0.059	0.076	0.35	0.34	0.13	21.3	3.32	0.15	4.5	43.5	4.7
1	750 MCM	0.047	0.066	0.38	0.33	0.12	26.6	3.61	0.14	4.4	54.4	5.0
1	1000 MCM	0.035	0.052	0.43	0.31	0.12	35.4	4.03	0.13	4.3	72.5	5.4

OUR ACCREDITATION



POLYCAB MV SC SCR ICEA S-93-639 35KV

MV Cable with Copper Conductor, EPR Insulation and Copper Screen



Outstanding Features

- Flame retardant
- High life
- Sunlight resistant
- Oil, Acid and Alkalies resistant
- Corona resistant
- Treeing resistant
- Moisture resistant

Application

POLYCAB MV 35KV EPR insulated with Copper conductor single core cable is suitable to use in conduits, ducts, troughs, trays, direct burial in wet and dry conditions for power supply to wide networks.

Voltage Rating

Nominal Voltage: 35kV AC

Operation Temperature

Operating temperature: -35°C to +105°C
 Emergency operating temperature: 140°C
 Max. Short Circuit Temperature: 250°C

Construction

- Conductor: Circular Compacted Copper conductor as per ASTM B496
- Conductor Screen: Extruded Semi-conductive compound
- Insulation: Extruded EPR (TR-XLPE will be provided on demand)
- Insulation Screen: Extruded Semi-conductive compound
- Metallic Insulation Screen: Helically applied copper tape
(Round wire / Corrugated copper screen will be provided on demand)
- Outer Sheath: Extruded Polyvinyl Chloride, Colour: Black
(Alternative Sheath: CPE Outer Sheath or LSZH Outer sheath, and parameters will change accordingly)

Standard and References:

- ASTM B496
- ICEA S-93-639 (NEMA WC-74)
- UL 1072
- UL 1685 / FT-1
- IEEE 1202
- UL 2556

Voltage Rating (kV AC)	High Voltage Test (kV AC)	
	100% level	133% level
35	69	84

Compliance

- Conductor resistance ICEA S-93-639
- Insulation resistance ICEA S-93-639
- Vertical Tray Flame UL 1685
- Smoke release UL 1685
- Flame Test IEEE 1202

Bending Radius: 12D

D is overall diameter of cable



OUR ACCREDITATION



POLYCAB MV SC SCR ICEA S-93-639 35KV

MV Cable with Copper Conductor, EPR Insulation and Copper Screen

DIMENSIONS, WEIGHT AND AMPACITY:

133% insulation:

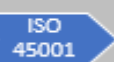
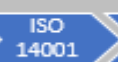
Product Code	No. of Cores	Core Cross sectional Area	Nominal Diameter			Weight (Approx.)	Current rating *	
			Under metallic screen	Over metallic screen	Overall		Directly buried in ground	In air
	No.	AWG / MCM	mm	mm	mm	Kg/Km	Amps	
MVIC46CRUAYF001C1X0AA001P	1	1/0 AWG	32.4	32.9	37.0	1850	185	285
MVIC46CRUAYF001C2X0AA001P	1	2/0 AWG	33.4	33.9	38.0	2050	215	330
MVIC46CRUAYF001C3X0AA001P	1	3/0 AWG	34.6	35.1	39.0	2250	245	385
MVIC46CRUAYF001C4X0AA001P	1	4/0 AWG	35.9	36.4	40.5	2550	285	445
MVIC46CRUAYF001C250CA001P	1	250 MCM	37.2	37.7	42.0	2800	315	500
MVIC46CRUAYF001C350CA001P	1	350 MCM	39.6	40.1	44.0	3400	385	625
MVIC46CRUAYF001C500CA001P	1	500 MCM	42.7	43.2	48.5	4400	470	765
MVIC46CRUAYF001C600CA001P	1	600 MCM	45.2	45.7	51.5	5050	520	855
MVIC46CRUAYF001C750CA001P	1	750 MCM	47.6	48.1	53.5	5900	585	970
MVIC46CRUAYF001C01KCA001P	1	1000 MCM	51.2	51.7	57.5	7250	675	1155

100% insulation:

Product Code	No. of Cores	Core Cross sectional Area	Nominal Diameter			Weight (Approx.)	Current rating *	
			Under metallic screen	Over metallic screen	Overall		Directly buried in ground	In air
	No.	AWG / MCM	mm	mm	mm	Kg/Km	Amps	
MVIC46CRUAYF001C1X0AA002P	1	1/0 AWG	28.5	29.1	33.0	1600	185	285
MVIC46CRUAYF001C2X0AA002P	1	2/0 AWG	29.6	30.1	34.0	1750	215	330
MVIC46CRUAYF001C3X0AA002P	1	3/0 AWG	30.8	31.3	35.5	2000	245	385
MVIC46CRUAYF001C4X0AA002P	1	4/0 AWG	32.1	32.6	36.5	2250	285	445
MVIC46CRUAYF001C250CA002P	1	250 MCM	33.4	33.9	38.0	2500	315	500
MVIC46CRUAYF001C350CA002P	1	350 MCM	35.8	36.3	40.5	3050	385	625
MVIC46CRUAYF001C500CA002P	1	500 MCM	38.8	39.4	43.5	3900	470	765
MVIC46CRUAYF001C600CA002P	1	600 MCM	40.9	41.4	47.0	4600	520	855
MVIC46CRUAYF001C750CA002P	1	750 MCM	43.3	43.8	49.5	5450	585	970
MVIC46CRUAYF001C01KCA002P	1	1000 MCM	46.8	47.3	53.0	6750	675	1155

* Current Rating based on Table 310.16 (20°C Ambient Ground Temperature) and Table 310.17 (30°C Ambient Air Temperature) of National Electric Code

OUR ACCREDITATION



POLYCAB MV SC SCR ICEA S-93-639 35KV

MV Cable with Copper Conductor, EPR Insulation and Copper Screen

ELECTRICAL CHARACTERISTICS:

133% insulation:

No. of Cores	Core Cross sectional Area	Nom. DC Resistance at 25°C	Nom. AC Resistance at 90°C	Approx. Capacitance	Approx. Inductance	Approx. Reactance	Max. pulling tension on conductor	Charging Current per phase	Positive sequence impedance	Electric Stress at Conductor Screen	Short circuit rating	
											Phase conductor	Metallic screen
No.	AWG / MCM	Ω/km	Ω/km	μF/km	mH/km	Ω/km	kN	Amps/Km	Ohms/Km	kV/mm	kA/S	
1	1/0 AWG	0.335	0.420	0.14	0.50	0.19	3.7	1.87	0.46	6.4	7.7	4.1
1	2/0 AWG	0.266	0.331	0.15	0.47	0.18	4.7	1.99	0.38	6.1	9.7	4.3
1	3/0 AWG	0.211	0.266	0.16	0.45	0.17	6.0	2.12	0.32	5.8	12.2	4.4
1	4/0 AWG	0.167	0.210	0.17	0.44	0.16	7.5	2.27	0.27	5.5	15.3	4.6
1	250 MCM	0.141	0.177	0.18	0.42	0.16	8.9	2.41	0.24	5.3	18.1	4.7
1	350 MCM	0.101	0.128	0.20	0.40	0.15	12.4	2.68	0.20	5.0	25.4	5.0
1	500 MCM	0.071	0.092	0.23	0.38	0.15	17.7	3.01	0.17	4.7	36.2	5.4
1	600 MCM	0.059	0.076	0.25	0.38	0.14	21.3	3.28	0.16	4.5	43.5	5.7
1	750 MCM	0.047	0.066	0.27	0.36	0.14	26.6	3.54	0.15	4.4	54.4	6.1
1	1000 MCM	0.035	0.052	0.30	0.35	0.13	35.4	3.91	0.14	4.2	72.5	6.5

100% insulation:

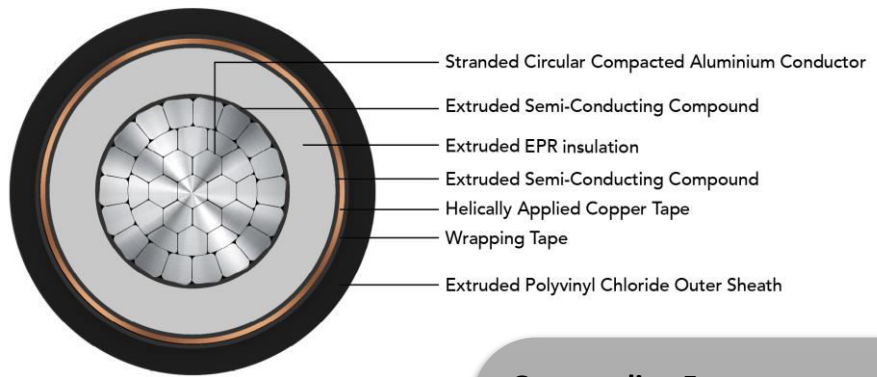
No. of Cores	Core Cross sectional Area	Nom. DC Resistance at 25°C	Nom. AC Resistance at 90°C	Approx. Capacitance	Approx. Inductance	Approx. Reactance	Max. pulling tension on conductor	Charging Current per phase	Positive sequence impedance	Electric Stress at Conductor Screen	Short circuit rating	
											Phase conductor	Metallic screen
No.	AWG / MCM	Ω/km	Ω/km	μF/km	mH/km	Ω/km	kN	Amps/Km	Ohms/Km	kV/mm	kA/S	
1	1/0 AWG	0.335	0.420	0.16	0.47	0.18	3.7	2.10	0.46	7.1	7.7	3.7
1	2/0 AWG	0.266	0.331	0.17	0.45	0.17	4.7	2.25	0.37	6.8	9.7	3.8
1	3/0 AWG	0.211	0.266	0.18	0.43	0.16	6.0	2.41	0.31	6.5	12.2	3.9
1	4/0 AWG	0.167	0.210	0.20	0.42	0.16	7.5	2.58	0.26	6.2	15.3	4.1
1	250 MCM	0.141	0.177	0.21	0.41	0.15	8.9	2.75	0.23	6.0	18.1	4.3
1	350 MCM	0.101	0.128	0.23	0.38	0.14	12.4	3.07	0.19	5.7	25.4	4.6
1	500 MCM	0.071	0.092	0.26	0.36	0.14	17.7	3.47	0.16	5.4	36.2	4.9
1	600 MCM	0.059	0.076	0.28	0.36	0.14	21.3	3.73	0.16	5.2	43.5	5.2
1	750 MCM	0.047	0.066	0.31	0.35	0.13	26.6	4.04	0.15	5.1	54.4	5.5
1	1000 MCM	0.035	0.052	0.34	0.33	0.12	35.4	4.49	0.14	4.9	72.5	5.9

OUR ACCREDITATION



POLYCAB MV SC SCR ICEA S-93-639 5KV (or) 8 KV

MV Cable with Aluminium Conductor, EPR Insulation and Copper Screen



Outstanding Features

- Flame retardant
- High life
- Sunlight resistant
- Oil, Acid and Alkalies resistant
- Corona resistant
- Treeing resistant
- Moisture resistant

Application

POLYCAB MV 5 KV EPR insulated with Aluminium conductor single core cable is suitable to use in conduits, ducts, troughs, trays, direct burial in wet and dry conditions for power supply to wide networks.

Voltage Rating

Nominal Voltage: 5 kV AC (100% / 133%) or 8 kV AC (100%)

Operation Temperature

Operating temperature: -35°C to +105°C
 Emergency operating temperature: 140°C
 Max. Short Circuit Temperature: 250°C

Construction

- Conductor: Circular Compacted Aluminium conductor as per ASTM B496
- Conductor Screen: Extruded Semi-conductive compound
- Insulation: Extruded EPR (TR-XLPE will be provided on demand)
- Insulation Screen: Extruded Semi-conductive compound
- Metallic Insulation Screen: Helically applied copper tape
(Round wire / Corrugated copper screen will be provided on demand)
- Outer Sheath: Extruded Polyvinyl Chloride, Colour: Black
(Alternative Sheath: CPE Outer Sheath or LSZH Outer sheath, and parameters will change accordingly)

Bending Radius: 12D

D is overall diameter of cable

Standard and References:

ASTM B496
 ICEA S-93-639 (NEMA WC-74)
 UL 1072
 UL 1685 / FT-1
 IEEE 1202
 UL 2556

Voltage Rating (kV AC)	High Voltage Test (kV AC)	Min. Partial discharge test (kV AC)	
		100% level	133% level
5	18	4	5
8	23	6	8

Compliance

- Conductor resistance ICEA S-93-639
- Insulation resistance ICEA S-93-639
- Vertical Tray Flame UL 1685
- Smoke Release UL 1685
- Flame Test IEEE 1202



OUR ACCREDITATION



POLYCAB MV SC SCR ICEA S-93-639 5KV (or) 8 KV

MV Cable with Aluminium Conductor, EPR Insulation and Copper Screen

DIMENSIONS, WEIGHT AND AMPACITY:

133% insulation (5kv) and 100% insulation (8kv):

Product Code	No. of Cores	Core Cross sectional Area	Nominal Diameter			Weight (Approx.)	Current rating *	
			Under metallic screen	Over metallic screen	Overall		Directly buried in ground	In air
	No.	AWG / MCM	mm	mm	mm	Kg/Km	Amps	
MVIC36ARUAYF001C002AA001P	1	2 AWG	15.1	15.6	19.0	450	110	165
MVIC36ARUAYF001C001AA001P	1	1 AWG	15.9	16.4	19.5	500	125	195
MVIC36ARUAYF001C1X0AA001P	1	1/0 AWG	16.9	17.4	20.5	550	150	225
MVIC36ARUAYF001C2X0AA001P	1	2/0 AWG	17.9	18.4	21.5	650	165	260
MVIC36ARUAYF001C3X0AA001P	1	3/0 AWG	19.1	19.6	23.5	750	190	300
MVIC36ARUAYF001C4X0AA001P	1	4/0 AWG	20.4	20.9	25.0	850	225	345
MVIC36ARUAYF001C250CA001P	1	250 MCM	21.7	22.2	26.5	950	250	390
MVIC36ARUAYF001C350CA001P	1	350 MCM	24.1	24.6	28.5	1150	285	490
MVIC36ARUAYF001C500CA001P	1	500 MCM	27.2	27.7	31.5	1450	385	600
MVIC36ARUAYF001C600CA001P	1	600 MCM	29.7	30.2	34.5	1700	420	675
MVIC36ARUAYF001C750CA001P	1	750 MCM	32.1	32.7	36.5	2000	475	770
MVIC36ARUAYF001C01KCA001P	1	1000 MCM	35.7	36.2	40.0	2450	545	925

100% insulation (5kv):

Product Code	No. of Cores	Core Cross sectional Area	Nominal Diameter			Weight (Approx.)	Current rating *	
			Under metallic screen	Over metallic screen	Overall		Directly buried in ground	In air
	No.	AWG / MCM	mm	mm	mm	Kg/Km	Amps	
MVIC36ARUAYF001C002AA002P	1	2 AWG	13.8	14.3	17.5	400	110	165
MVIC36ARUAYF001C001AA002P	1	1 AWG	14.7	15.2	18.5	450	125	195
MVIC36ARUAYF001C1X0AA002P	1	1/0 AWG	15.6	16.1	19.5	500	150	225
MVIC36ARUAYF001C2X0AA002P	1	2/0 AWG	16.6	17.2	20.5	550	165	260
MVIC36ARUAYF001C3X0AA002P	1	3/0 AWG	17.8	18.3	21.5	650	190	300
MVIC36ARUAYF001C4X0AA002P	1	4/0 AWG	19.2	19.7	23.5	800	225	345
MVIC36ARUAYF001C250CA002P	1	250 MCM	20.4	20.9	25.0	900	250	390
MVIC36ARUAYF001C350CA002P	1	350 MCM	22.9	23.4	27.5	1100	285	490
MVIC36ARUAYF001C500CA002P	1	500 MCM	25.9	26.4	30.5	1350	385	600
MVIC36ARUAYF001C600CA002P	1	600 MCM	27.9	28.4	32.5	1550	420	675
MVIC36ARUAYF001C750CA002P	1	750 MCM	30.3	30.8	35.0	1850	475	770
MVIC36ARUAYF001C01KCA002P	1	1000 MCM	33.8	34.3	38.5	2300	545	925

* Current Rating based on Table 310.16 (20°C Ambient Ground Temperature) and Table 310.17 (30°C Ambient Air Temperature) of National Electric Code

OUR ACCREDITATION



POLYCAB MV SC SCR ICEA S-93-639 5KV (or) 8 KV

MV Cable with Aluminium Conductor, EPR Insulation and Copper Screen

ELECTRICAL CHARACTERISTICS:

133% insulation:

No. of Cores	Core Cross sectional Area	Nom. DC Resistance at 25°C	Nom. AC Resistance at 90°C	Approx. Capacitance	Approx. Inductance	Approx. Reactance	Max. pulling tension on conductor	Charging Current per phase	Positive sequence impedance	Electric Stress at Conductor Screen	Short circuit rating	
											Phase conductor	Metallic screen
No.	AWG / MCM	Ω/km	Ω/km	μF/km	mH/km	Ω/km	kN	Amps/Km	Ohms/Km	kV/mm	kA/S	
1	2 AWG	0.531	0.666	0.30	0.41	0.15	1.7	0.56	2.36	2.1	3.0	2.0
1	1 AWG	0.423	0.528	0.32	0.39	0.15	2.1	0.60	2.07	2.1	3.8	2.1
1	1/0 AWG	0.335	0.420	0.35	0.38	0.14	2.7	0.66	1.82	2.0	4.8	2.2
1	2/0 AWG	0.266	0.331	0.38	0.36	0.13	3.4	0.71	1.62	1.9	6.0	2.3
1	3/0 AWG	0.211	0.266	0.41	0.35	0.13	4.3	0.78	1.44	1.9	7.6	2.5
1	4/0 AWG	0.167	0.210	0.45	0.34	0.13	5.4	0.85	1.28	1.9	9.6	2.6
1	250 MCM	0.141	0.177	0.49	0.33	0.13	6.4	0.92	1.18	1.8	11.3	2.8
1	350 MCM	0.101	0.128	0.56	0.31	0.12	8.9	1.05	1.01	1.7	15.9	3.1
1	500 MCM	0.071	0.092	0.64	0.30	0.11	12.8	1.21	0.86	1.7	22.6	3.5
1	600 MCM	0.059	0.076	0.72	0.30	0.11	15.3	1.35	0.78	1.5	27.2	3.8
1	750 MCM	0.047	0.066	0.79	0.29	0.11	19.2	1.48	0.70	1.5	34.0	4.1
1	1000 MCM	0.035	0.052	0.89	0.27	0.10	25.5	1.67	0.62	1.5	45.3	4.5

100% insulation:

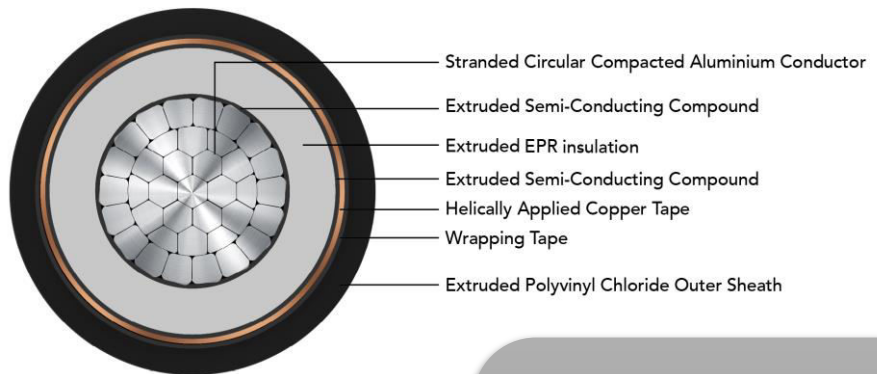
No. of Cores	Core Cross sectional Area	Nom. DC Resistance at 25°C	Nom. AC Resistance at 90°C	Approx. Capacitance	Approx. Inductance	Approx. Reactance	Max. pulling tension on conductor	Charging Current per phase	Positive sequence impedance	Electric Stress at Conductor Screen	Short circuit rating	
											Phase conductor	Metallic screen
No.	AWG / MCM	Ω/km	Ω/km	μF/km	mH/km	Ω/km	kN	Amps/Km	Ohms/Km	kV/mm	kA/S	
1	2 AWG	0.531	0.666	0.36	0.39	0.15	1.7	0.68	2.47	2.5	3.0	1.8
1	1 AWG	0.423	0.528	0.39	0.38	0.14	2.1	0.73	2.17	2.4	3.8	1.9
1	1/0 AWG	0.335	0.420	0.42	0.37	0.14	2.7	0.80	1.91	2.4	4.8	2.0
1	2/0 AWG	0.266	0.331	0.46	0.35	0.13	3.4	0.87	1.69	2.3	6.0	2.2
1	3/0 AWG	0.211	0.266	0.51	0.33	0.13	4.3	0.95	1.51	2.2	7.6	2.3
1	4/0 AWG	0.167	0.210	0.56	0.33	0.12	5.4	1.05	1.34	2.2	9.6	2.5
1	250 MCM	0.141	0.177	0.60	0.32	0.12	6.4	1.14	1.23	2.1	11.3	2.6
1	350 MCM	0.101	0.128	0.69	0.30	0.11	8.9	1.30	1.05	2.0	15.9	2.9
1	500 MCM	0.071	0.092	0.80	0.29	0.11	12.8	1.51	0.89	2.0	22.6	3.3
1	600 MCM	0.059	0.076	0.88	0.28	0.11	15.3	1.65	0.82	1.9	27.2	3.6
1	750 MCM	0.047	0.066	0.96	0.28	0.10	19.2	1.82	0.74	1.9	34.0	3.9
1	1000 MCM	0.035	0.052	1.09	0.27	0.10	25.5	2.06	0.65	1.9	45.3	4.3

OUR ACCREDITATION



POLYCAB MV SC SCR ICEA S-93-639 8KV

MV Cable with Aluminium Conductor, EPR Insulation and Copper Screen



Outstanding Features

- Flame retardant
- High life
- Sunlight resistant
- Oil, Acid and Alkalies resistant
- Corona resistant
- Treeing resistant
- Moisture resistant

Application

POLYCAB MV 8KV EPR insulated with Aluminium conductor single core cable is suitable to use in conduits, ducts, troughs, trays, direct burial in wet and dry conditions for power supply to wide networks.

Voltage Rating

Nominal Voltage: 8kV AC

Operation Temperature

Operating temperature: -35°C to +105°C
 Emergency operating temperature: 140°C
 Max. Short Circuit Temperature: 250°C

Construction

- Conductor: Circular Compacted Aluminium conductor as per ASTM B496
- Conductor Screen: Extruded Semi-conductive compound
- Insulation: Extruded EPR (TR-XLPE will be provided on demand)
- Insulation Screen: Extruded Semi-conductive compound
- Metallic Insulation Screen: Helically applied copper tape
(Round wire / Corrugated copper screen will be provided on demand)
- Outer Sheath: Extruded Polyvinyl Chloride, Colour: Black
(Alternative Sheath: CPE Outer Sheath or LSZH Outer sheath, and parameters will change accordingly)

Standard and References:

ASTM B496
 ICEA S-93-639 (NEMA WC-74)
 UL 1072
 UL 1685 / FT-1
 IEEE 1202
 UL 2556

Voltage Rating (kV AC)	High Voltage Test (kV AC)		Min. Partial discharge test (kV AC)	
	100% level	133% level	100% level	133% level
8	23	28	6	8

Compliance

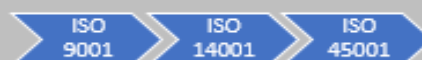
- Conductor resistance ICEA S-93-639
- Insulation resistance ICEA S-93-639
- Vertical Tray Flame UL 1685
- Smoke release UL 1685
- Flame Test IEEE 1202

Bending Radius: 12D

D is overall diameter of cable



OUR ACCREDITATION



POLYCAB MV SC SCR ICEA S-93-639 8KV

MV Cable with Aluminium Conductor, EPR Insulation and Copper Screen

DIMENSIONS, WEIGHT AND AMPACITY:

133% insulation:

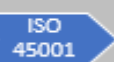
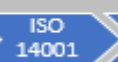
Product Code	No. of Cores	Core Cross sectional Area	Nominal Diameter			Weight (Approx.)	Current rating *	
			Under metallic screen	Over metallic screen	Overall		Directly buried in ground	In air
	No.	AWG / MCM	mm	mm	mm	Kg/Km	Amps	
MVIC48ARUAYF001C002AA001P	1	2 AWG	16.4	16.9	20.0	500	110	165
MVIC48ARUAYF001C001AA001P	1	1 AWG	17.2	17.7	21.0	550	125	195
MVIC48ARUAYF001C1X0AA001P	1	1/0 AWG	18.1	18.6	22.5	650	150	225
MVIC48ARUAYF001C2X0AA001P	1	2/0 AWG	19.2	19.7	24.0	700	165	260
MVIC48ARUAYF001C3X0AA001P	1	3/0 AWG	20.4	20.9	25.0	800	190	300
MVIC48ARUAYF001C4X0AA001P	1	4/0 AWG	21.7	22.2	26.5	900	225	345
MVIC48ARUAYF001C250CA001P	1	250 MCM	16.4	16.9	20.0	500	250	390
MVIC48ARUAYF001C350CA001P	1	350 MCM	17.2	17.7	21.0	550	285	490
MVIC48ARUAYF001C500CA001P	1	500 MCM	18.1	18.6	22.5	650	385	600
MVIC48ARUAYF001C600CA001P	1	600 MCM	19.2	19.7	24.0	700	420	675
MVIC48ARUAYF001C750CA001P	1	750 MCM	20.4	20.9	25.0	800	475	770
MVIC48ARUAYF001C01KCA001P	1	1000 MCM	21.7	22.2	26.5	900	545	925

100% insulation:

Product Code	No. of Cores	Core Cross sectional Area	Nominal Diameter			Weight (Approx.)	Current rating *	
			Under metallic screen	Over metallic screen	Overall		Directly buried in ground	In air
	No.	AWG / MCM	mm	mm	mm	Kg/Km	Amps	
MVIC48ARUAYF001C002AA002P	1	2 AWG	15.1	15.6	19.0	450	110	165
MVIC48ARUAYF001C001AA002P	1	1 AWG	15.9	16.4	19.5	500	125	195
MVIC48ARUAYF001C1X0AA002P	1	1/0 AWG	16.9	17.4	20.5	550	150	225
MVIC48ARUAYF001C2X0AA002P	1	2/0 AWG	17.9	18.4	21.5	650	165	260
MVIC48ARUAYF001C3X0AA002P	1	3/0 AWG	19.1	19.6	23.5	750	190	300
MVIC48ARUAYF001C4X0AA002P	1	4/0 AWG	20.4	20.9	25.0	850	225	345
MVIC48ARUAYF001C250CA002P	1	250 MCM	21.7	22.2	26.5	950	250	390
MVIC48ARUAYF001C350CA002P	1	350 MCM	24.1	24.6	28.5	1150	285	490
MVIC48ARUAYF001C500CA002P	1	500 MCM	27.2	27.7	31.5	1450	385	600
MVIC48ARUAYF001C600CA002P	1	600 MCM	29.7	30.2	34.5	1700	420	675
MVIC48ARUAYF001C750CA002P	1	750 MCM	32.1	32.7	36.5	2000	475	770
MVIC48ARUAYF001C01KCA002P	1	1000 MCM	35.7	36.2	40.0	2450	545	925

* Current Rating based on Table 310.16 (20°C Ambient Ground Temperature) and Table 310.17 (30°C Ambient Air Temperature) of National Electric Code

OUR ACCREDITATION



POLYCAB MV SC SCR ICEA S-93-639 8KV

MV Cable with Aluminium Conductor, EPR Insulation and Copper Screen

ELECTRICAL CHARACTERISTICS:

133% insulation:

No. of Cores	Core Cross sectional Area	Nom. DC Resistance at 25°C	Nom. AC Resistance at 90°C	Approx. Capacitance	Approx. Inductance	Approx. Reactance	Max. pulling tension on conductor	Charging Current per phase	Positive sequence impedance	Electric Stress at Conductor Screen	Short circuit rating	
											Phase conductor	Metallic screen
No.	AWG / MCM	Ω/km	Ω/km	μF/km	mH/km	Ω/km	kN	Amps/Km	Ohms/Km	kV/mm	kA/S	
1	2 AWG	0.531	0.666	0.26	0.42	0.16	1.7	0.77	1.11	3.0	3.0	2.1
1	1 AWG	0.423	0.528	0.28	0.41	0.15	2.1	0.83	0.89	2.9	3.8	2.2
1	1/0 AWG	0.335	0.420	0.30	0.40	0.15	2.7	0.90	0.71	2.8	4.8	2.3
1	2/0 AWG	0.266	0.331	0.32	0.38	0.14	3.4	0.98	0.57	2.7	6.0	2.5
1	3/0 AWG	0.211	0.266	0.35	0.36	0.14	4.3	1.06	0.46	2.7	7.6	2.6
1	4/0 AWG	0.167	0.210	0.38	0.35	0.13	5.4	1.16	0.37	2.6	9.6	2.8
1	250 MCM	0.141	0.177	0.41	0.34	0.13	6.4	1.25	0.32	2.5	11.3	3.0
1	350 MCM	0.101	0.128	0.47	0.32	0.12	8.9	1.42	0.24	2.4	15.9	3.3
1	500 MCM	0.071	0.092	0.54	0.31	0.12	12.8	1.64	0.19	2.3	22.6	3.6
1	600 MCM	0.059	0.076	0.59	0.30	0.11	15.3	1.78	0.17	2.2	27.2	3.9
1	750 MCM	0.047	0.066	0.65	0.29	0.11	19.2	1.95	0.15	2.2	34.0	4.2
1	1000 MCM	0.035	0.052	0.73	0.28	0.10	25.5	2.20	0.13	2.2	45.3	4.6

100% insulation:

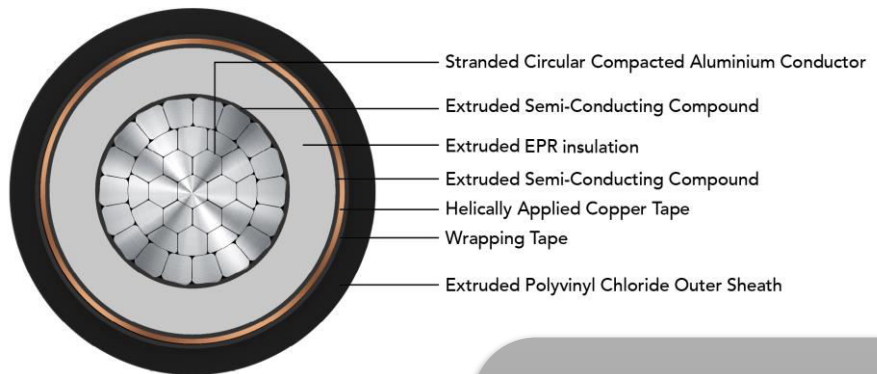
No. of Cores	Core Cross sectional Area	Nom. DC Resistance at 25°C	Nom. AC Resistance at 90°C	Approx. Capacitance	Approx. Inductance	Approx. Reactance	Max. pulling tension on conductor	Charging Current per phase	Positive sequence impedance	Electric Stress at Conductor Screen	Short circuit rating	
											Phase conductor	Metallic screen
No.	AWG / MCM	Ω/km	Ω/km	μF/km	mH/km	Ω/km	kN	Amps/Km	Ohms/Km	kV/mm	kA/S	
1	2 AWG	0.531	0.666	0.30	0.41	0.15	1.7	0.56	2.36	2.1	3.0	2.0
1	1 AWG	0.423	0.528	0.32	0.39	0.15	2.1	0.60	2.07	2.1	3.8	2.1
1	1/0 AWG	0.335	0.420	0.35	0.38	0.14	2.7	0.66	1.82	2.0	4.8	2.2
1	2/0 AWG	0.266	0.331	0.38	0.36	0.13	3.4	0.71	1.62	1.9	6.0	2.3
1	3/0 AWG	0.211	0.266	0.41	0.35	0.13	4.3	0.78	1.44	1.9	7.6	2.5
1	4/0 AWG	0.167	0.210	0.45	0.34	0.13	5.4	0.85	1.28	1.9	9.6	2.6
1	250 MCM	0.141	0.177	0.49	0.33	0.13	6.4	0.92	1.18	1.8	11.3	2.8
1	350 MCM	0.101	0.128	0.56	0.31	0.12	8.9	1.05	1.01	1.7	15.9	3.1
1	500 MCM	0.071	0.092	0.64	0.30	0.11	12.8	1.21	0.86	1.7	22.6	3.5
1	600 MCM	0.059	0.076	0.72	0.30	0.11	15.3	1.35	0.78	1.5	27.2	3.8
1	750 MCM	0.047	0.066	0.79	0.29	0.11	19.2	1.48	0.70	1.5	34.0	4.1
1	1000 MCM	0.035	0.052	0.89	0.27	0.10	25.5	1.67	0.62	1.5	45.3	4.5

OUR ACCREDITATION



POLYCAB MV SC SCR ICEA S-93-639 15KV

MV Cable with Aluminium Conductor, EPR Insulation and Copper Screen



Outstanding Features

- Flame retardant
- High life
- Sunlight resistant
- Oil, Acid and Alkalies resistant
- Corona resistant
- Treeing resistant
- Moisture resistant

Application

POLYCAB MV 15KV EPR insulated with Aluminium conductor single core cable is suitable to use in conduits, ducts, troughs, trays, direct burial in wet and dry conditions for power supply to wide networks.

Voltage Rating

Nominal Voltage: 15kV AC

Operation Temperature

Operating temperature: -35°C to +105°C
 Emergency operating temperature: 140°C
 Max. Short Circuit Temperature: 250°C

Standard and References:

ASTM B496
 ICEA S-93-639 (NEMA WC-74)
 UL 1072
 UL 1685 / FT-1
 IEEE 1202
 UL 2556

Construction

- Conductor: Circular Compacted Aluminium conductor as per ASTM B496
- Conductor Screen: Extruded Semi-conductive compound
- Insulation: Extruded EPR
- Insulation: Extruded EPR (TR-XLPE will be provided on demand)
- Insulation Screen: Extruded Semi-conductive compound
- Metallic Insulation Screen: Helically applied copper tape
(Round wire / Corrugated copper screen will be provided on demand)
- Outer Sheath: Extruded Polyvinyl Chloride, Colour: Black
(Alternative Sheath: CPE Outer Sheath or LSZH Outer sheath, and parameters will change accordingly)

Voltage Rating (kV AC)	High Voltage Test (kV AC)		Min. Partial discharge test (kV AC)	
	100% level	133% level	100% level	133% level
15	35	44	11	15

Compliance

- Conductor resistance ICEA S-93-639
- Insulation resistance ICEA S-93-639
- Vertical Tray Flame UL 1685
- Smoke release UL 1685
- Flame Test IEEE 1202



Bending Radius: 12D

D is overall diameter of cable

OUR ACCREDITATION



POLYCAB MV SC SCR ICEA S-93-639 15KV

MV Cable with Aluminium Conductor, EPR Insulation and Copper Screen

DIMENSIONS, WEIGHT AND AMPACITY:

133% insulation:

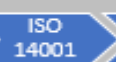
Product Code	No. of Cores	Core Cross sectional Area	Nominal Diameter			Weight (Approx.)	Current rating *	
			Under metallic screen	Over metallic screen	Overall		Directly buried in ground	In air
	No.	AWG / MCM	mm	mm	mm	Kg/Km	Amps	
MVIC37ARUAYF001C002AA001P	1	2 AWG	20.4	20.9	25.0	750	110	165
MVIC37ARUAYF001C001AA001P	1	1 AWG	21.3	21.8	26.0	800	125	195
MVIC37ARUAYF001C1X0AA001P	1	1/0 AWG	22.2	22.7	27.0	850	150	225
MVIC37ARUAYF001C2X0AA001P	1	2/0 AWG	23.3	23.8	28.0	950	165	260
MVIC37ARUAYF001C3X0AA001P	1	3/0 AWG	24.4	24.9	29.0	1050	190	300
MVIC37ARUAYF001C4X0AA001P	1	4/0 AWG	25.8	26.3	30.5	1150	225	345
MVIC37ARUAYF001C250CA001P	1	250 MCM	27.0	27.6	31.5	1250	250	390
MVIC37ARUAYF001C350CA001P	1	350 MCM	29.5	30.0	34.0	1500	285	490
MVIC37ARUAYF001C500CA001P	1	500 MCM	32.5	33.0	37.0	1800	385	600
MVIC37ARUAYF001C600CA001P	1	600 MCM	35.1	35.6	39.5	2050	420	675
MVIC37ARUAYF001C750CA001P	1	750 MCM	37.5	38.0	42.0	2400	475	770
MVIC37ARUAYF001C01KCA001P	1	1000 MCM	41.0	41.5	47.0	3050	545	925

100% insulation:

Product Code	No. of Cores	Core Cross sectional Area	Nominal Diameter			Weight (Approx.)	Current rating *	
			Under metallic screen	Over metallic screen	Overall		Directly buried in ground	In air
	No.	AWG / MCM	mm	mm	mm	Kg/Km	Amps	
MVIC37ARUAYF001C002AA002P	1	2 AWG	18.1	18.7	22.5	600	110	165
MVIC37ARUAYF001C001AA002P	1	1 AWG	19.0	19.5	23.5	700	125	195
MVIC37ARUAYF001C1X0AA002P	1	1/0 AWG	19.9	20.4	24.5	750	150	225
MVIC37ARUAYF001C2X0AA002P	1	2/0 AWG	21.0	21.5	25.5	800	165	260
MVIC37ARUAYF001C3X0AA002P	1	3/0 AWG	22.2	22.7	26.5	900	190	300
MVIC37ARUAYF001C4X0AA002P	1	4/0 AWG	23.5	24.0	28.0	1000	225	345
MVIC37ARUAYF001C250CA002P	1	250 MCM	24.8	25.3	29.5	1100	250	390
MVIC37ARUAYF001C350CA002P	1	350 MCM	27.2	27.7	31.5	1350	285	490
MVIC37ARUAYF001C500CA002P	1	500 MCM	30.2	30.7	35.0	1650	385	600
MVIC37ARUAYF001C600CA002P	1	600 MCM	32.2	32.7	37.0	1850	420	675
MVIC37ARUAYF001C750CA002P	1	750 MCM	34.6	35.1	39.0	2150	475	770
MVIC37ARUAYF001C01KCA002P	1	1000 MCM	38.2	38.7	44.5	2750	545	925

* Current Rating based on Table 310.16 (20°C Ambient Ground Temperature) and Table 310.17 (30°C Ambient Air Temperature) of National Electric Code

OUR ACCREDITATION



POLYCAB MV SC SCR ICEA S-93-639 15KV

MV Cable with Aluminium Conductor, EPR Insulation and Copper Screen

ELECTRICAL CHARACTERISTICS:

133% insulation:

No. of Cores	Core Cross sectional Area	Nom. DC Resistance at 25°C	Nom. AC Resistance at 90°C	Approx. Capacitance	Approx. Inductance	Approx. Reactance	Max. pulling tension on conductor	Charging Current per phase	Positive sequence impedance	Electric Stress at Conductor Screen	Short circuit rating	
											Phase conductor	Metallic screen
No.	AWG / MCM	Ω/km	Ω/km	μF/km	mH/km	Ω/km	kN	Amps/Km	Ohms/Km	kV/mm	kA/S	
1	2 AWG	0.531	0.666	0.19	0.46	0.18	1.7	1.05	1.11	4.3	3.0	2.6
1	1 AWG	0.423	0.528	0.20	0.45	0.17	2.1	1.13	0.89	4.1	3.8	2.7
1	1/0 AWG	0.335	0.420	0.21	0.43	0.16	2.7	1.21	0.71	4.0	4.8	2.9
1	2/0 AWG	0.266	0.331	0.23	0.41	0.15	3.4	1.30	0.57	3.8	6.0	3.0
1	3/0 AWG	0.211	0.266	0.25	0.39	0.15	4.3	1.41	0.46	3.7	7.6	3.1
1	4/0 AWG	0.167	0.210	0.27	0.38	0.14	5.4	1.52	0.38	3.6	9.6	3.3
1	250 MCM	0.141	0.177	0.29	0.37	0.14	6.4	1.64	0.33	3.4	11.3	3.5
1	350 MCM	0.101	0.128	0.33	0.35	0.13	8.9	1.84	0.25	3.3	15.9	3.8
1	500 MCM	0.071	0.092	0.37	0.33	0.12	12.8	2.11	0.19	3.2	22.6	4.1
1	600 MCM	0.059	0.076	0.41	0.32	0.12	15.3	2.33	0.17	3.0	27.2	4.5
1	750 MCM	0.047	0.066	0.45	0.31	0.12	19.2	2.53	0.16	2.9	34.0	4.8
1	1000 MCM	0.035	0.052	0.50	0.31	0.12	25.5	2.83	0.14	2.8	45.3	5.2

100% insulation:

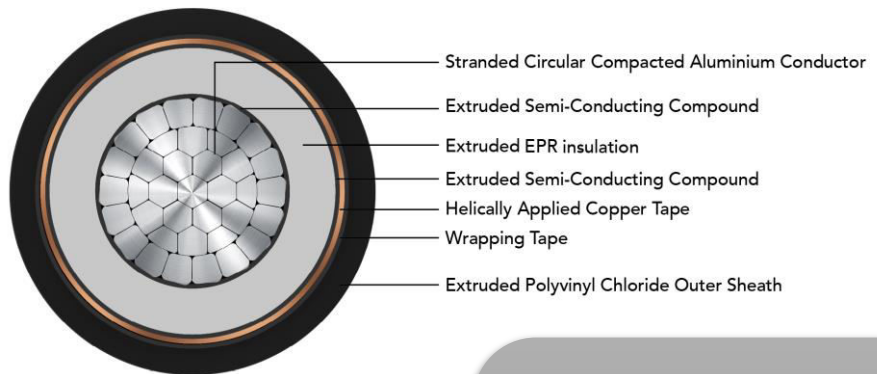
No. of Cores	Core Cross sectional Area	Nom. DC Resistance at 25°C	Nom. AC Resistance at 90°C	Approx. Capacitance	Approx. Inductance	Approx. Reactance	Max. pulling tension on conductor	Charging Current per phase	Positive sequence impedance	Electric Stress at Conductor Screen	Short circuit rating	
											Phase conductor	Metallic screen
No.	AWG / MCM	Ω/km	Ω/km	μF/km	mH/km	Ω/km	kN	Amps/Km	Ohms/Km	kV/mm	kA/S	
1	2 AWG	0.531	0.666	0.22	0.44	0.17	1.7	1.23	1.11	4.9	3.0	2.3
1	1 AWG	0.423	0.528	0.23	0.43	0.16	2.1	1.32	0.89	4.8	3.8	2.5
1	1/0 AWG	0.335	0.420	0.25	0.41	0.16	2.7	1.43	0.71	4.6	4.8	2.6
1	2/0 AWG	0.266	0.331	0.27	0.39	0.15	3.4	1.54	0.57	4.4	6.0	2.7
1	3/0 AWG	0.211	0.266	0.30	0.38	0.14	4.3	1.67	0.46	4.3	7.6	2.9
1	4/0 AWG	0.167	0.210	0.32	0.36	0.14	5.4	1.81	0.37	4.2	9.6	3.0
1	250 MCM	0.141	0.177	0.35	0.35	0.13	6.4	1.95	0.32	4.0	11.3	3.2
1	350 MCM	0.101	0.128	0.39	0.33	0.13	8.9	2.22	0.25	3.9	15.9	3.5
1	500 MCM	0.071	0.092	0.45	0.32	0.12	12.8	2.54	0.19	3.7	22.6	3.9
1	600 MCM	0.059	0.076	0.49	0.31	0.12	15.3	2.76	0.17	3.6	27.2	4.1
1	750 MCM	0.047	0.066	0.53	0.30	0.11	19.2	3.01	0.15	3.5	34.0	4.4
1	1000 MCM	0.035	0.052	0.60	0.29	0.11	25.5	3.39	0.13	3.5	45.3	4.9

OUR ACCREDITATION



POLYCAB MV SC SCR ICEA S-93-639 25KV

MV Cable with Aluminium Conductor, EPR Insulation and Copper Screen



Outstanding Features

- Flame retardant
- High life
- Sunlight resistant
- Oil, Acid and Alkalies resistant
- Corona resistant
- Treeing resistant
- Moisture resistant

Application

POLYCAB MV 25KV EPR insulated with Aluminium conductor single core cable is suitable to use in conduits, ducts, troughs, trays, direct burial in wet and dry conditions for power supply to wide networks.

Voltage Rating

Nominal Voltage: 25kV AC

Operation Temperature

Operating temperature: -35°C to +105°C
 Emergency operating temperature: 140°C
 Max. Short Circuit Temperature: 250°C

Construction

- Conductor: Circular Compacted Aluminium conductor as per ASTM B496
- Conductor Screen: Extruded Semi-conductive compound
- Insulation: Extruded EPR (TR-XLPE will be provided on demand)
- Insulation Screen: Extruded Semi-conductive compound
- Metallic Insulation Screen: Helically applied copper tape
(Round wire / Corrugated copper screen will be provided on demand)
- Outer Sheath: Extruded Polyvinyl Chloride, Colour: Black
(Alternative Sheath: CPE Outer Sheath or LSZH Outer sheath, and parameters will change accordingly)

Standard and References:

ASTM B496
 ICEA S-93-639 (NEMA WC-74)
 UL 1072
 UL 1685 / FT-1
 IEEE 1202
 UL 2556

Voltage Rating (kV AC)	High Voltage Test (kV AC)	
	100% level	133% level
25	52	64

Compliance

- Conductor resistance ICEA S-93-639
- Insulation resistance ICEA S-93-639
- Vertical Tray Flame UL 1685
- Smoke release UL 1685
- Flame Test IEEE 1202

Bending Radius: 12D

D is overall diameter of cable



OUR ACCREDITATION



POLYCAB MV SC SCR ICEA S-93-639 25KV

MV Cable with Aluminium Conductor, EPR Insulation and Copper Screen

DIMENSIONS, WEIGHT AND AMPACITY:

133% insulation:

Product Code	No. of Cores	Core Cross sectional Area	Nominal Diameter			Weight (Approx.)	Current rating *	
			Under metallic screen	Over metallic screen	Overall		Directly buried in ground	In air
	No.	AWG / MCM	mm	mm	mm	Kg/Km	Amps	
MVIC32ARUAYF001C002AA001P	1	2 AWG	25.5	26.0	30.0	1050	110	165
MVIC32ARUAYF001C001AA001P	1	1 AWG	26.3	26.9	31.0	1100	125	195
MVIC32ARUAYF001C1X0AA001P	1	1/0 AWG	27.3	27.8	32.0	1150	150	225
MVIC32ARUAYF001C2X0AA001P	1	2/0 AWG	28.3	28.8	33.0	1250	165	260
MVIC32ARUAYF001C3X0AA001P	1	3/0 AWG	29.5	30.0	34.0	1350	190	300
MVIC32ARUAYF001C4X0AA001P	1	4/0 AWG	30.8	31.3	35.5	1500	225	345
MVIC32ARUAYF001C250CA001P	1	250 MCM	32.1	32.6	36.5	1600	250	390
MVIC32ARUAYF001C350CA001P	1	350 MCM	34.5	35.1	39.0	1850	285	490
MVIC32ARUAYF001C500CA001P	1	500 MCM	37.6	38.1	42.0	2200	385	600
MVIC32ARUAYF001C600CA001P	1	600 MCM	40.2	40.7	44.5	2500	420	675
MVIC32ARUAYF001C750CA001P	1	750 MCM	42.6	43.1	47.0	2850	475	770
MVIC32ARUAYF001C01KCA001P	1	1000 MCM	46.1	46.6	52.0	3550	545	925

100% insulation:

Product Code	No. of Cores	Core Cross sectional Area	Nominal Diameter			Weight (Approx.)	Current rating *	
			Under metallic screen	Over metallic screen	Overall		Directly buried in ground	In air
	No.	AWG / MCM	mm	mm	mm	Kg/Km	Amps	
MVIC32ARUAYF001C002AA002P	1	2 AWG	22.5	23.0	27.0	850	110	165
MVIC32ARUAYF001C001AA002P	1	1 AWG	23.3	23.8	28.0	900	125	195
MVIC32ARUAYF001C1X0AA002P	1	1/0 AWG	24.2	24.7	29.0	1000	150	225
MVIC32ARUAYF001C2X0AA002P	1	2/0 AWG	25.3	25.8	30.0	1050	165	260
MVIC32ARUAYF001C3X0AA002P	1	3/0 AWG	26.5	27.0	31.0	1150	190	300
MVIC32ARUAYF001C4X0AA002P	1	4/0 AWG	27.8	28.3	32.5	1300	225	345
MVIC32ARUAYF001C250CA002P	1	250 MCM	29.1	29.6	33.5	1400	250	390
MVIC32ARUAYF001C350CA002P	1	350 MCM	31.5	32.0	36.0	1650	285	490
MVIC32ARUAYF001C500CA002P	1	500 MCM	34.5	35.0	39.0	1950	385	600
MVIC32ARUAYF001C600CA002P	1	600 MCM	36.5	37.1	42.5	2350	420	675
MVIC32ARUAYF001C750CA002P	1	750 MCM	39.0	39.5	45.0	2650	475	770
MVIC32ARUAYF001C01KCA002P	1	1000 MCM	42.5	43.0	48.5	3150	545	925

* Current Rating based on Table 310.16 (20°C Ambient Ground Temperature) and Table 310.17 (30°C Ambient Air Temperature) of National Electric Code

OUR ACCREDITATION



POLYCAB MV SC SCR ICEA S-93-639 25KV

MV Cable with Aluminium Conductor, EPR Insulation and Copper Screen

ELECTRICAL CHARACTERISTICS:

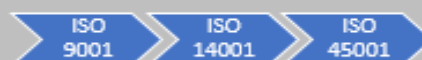
133% insulation:

No. of Cores	Core Cross sectional Area	Nom. DC Resistance at 25°C	Nom. AC Resistance at 90°C	Approx. Capacitance	Approx. Inductance	Approx. Reactance	Max. pulling tension on conductor	Charging Current per phase	Positive sequence impedance	Electric Stress at Conductor Screen	Short circuit rating	
											Phase conductor	Metallic screen
No.	AWG / MCM	Ω/km	Ω/km	μF/km	mH/km	Ω/km	kN	Amps/Km	Ohms/Km	kV/mm	kA/S	
1	2 AWG	0.531	0.666	0.15	0.50	0.19	1.7	1.39	1.12	5.8	3.0	3.3
1	1 AWG	0.423	0.528	0.16	0.48	0.18	2.1	1.48	0.89	5.6	3.8	3.4
1	1/0 AWG	0.335	0.420	0.17	0.47	0.18	2.7	1.57	0.72	5.3	4.8	3.5
1	2/0 AWG	0.266	0.331	0.18	0.44	0.17	3.4	1.68	0.57	5.1	6.0	3.6
1	3/0 AWG	0.211	0.266	0.19	0.42	0.16	4.3	1.81	0.46	4.9	7.6	3.8
1	4/0 AWG	0.167	0.210	0.21	0.41	0.15	5.4	1.94	0.38	4.7	9.6	3.9
1	250 MCM	0.141	0.177	0.22	0.40	0.15	6.4	2.07	0.33	4.5	11.3	4.1
1	350 MCM	0.101	0.128	0.25	0.38	0.14	8.9	2.32	0.25	4.3	15.9	4.4
1	500 MCM	0.071	0.092	0.28	0.35	0.13	12.8	2.62	0.20	4.1	22.6	4.8
1	600 MCM	0.059	0.076	0.31	0.35	0.13	15.3	2.88	0.18	3.8	27.2	5.1
1	750 MCM	0.047	0.066	0.33	0.34	0.13	19.2	3.11	0.16	3.7	34.0	5.4
1	1000 MCM	0.035	0.052	0.37	0.33	0.12	25.5	3.46	0.14	3.6	45.3	5.9

100% insulation:

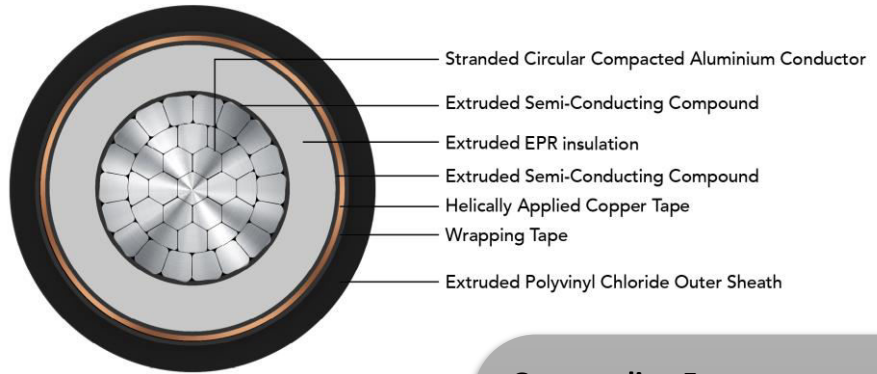
No. of Cores	Core Cross sectional Area	Nom. DC Resistance at 25°C	Nom. AC Resistance at 90°C	Approx. Capacitance	Approx. Inductance	Approx. Reactance	Max. pulling tension on conductor	Charging Current per phase	Positive sequence impedance	Electric Stress at Conductor Screen	Short circuit rating	
											Phase conductor	Metallic screen
No.	AWG / MCM	Ω/km	Ω/km	μF/km	mH/km	Ω/km	kN	Amps/Km	Ohms/Km	kV/mm	kA/S	
1	2 AWG	0.531	0.666	0.17	0.48	0.18	1.7	1.58	1.11	6.5	3.0	2.9
1	1 AWG	0.423	0.528	0.18	0.46	0.17	2.1	1.68	0.89	6.2	3.8	3.0
1	1/0 AWG	0.335	0.420	0.19	0.45	0.17	2.7	1.80	0.71	6.0	4.8	3.1
1	2/0 AWG	0.266	0.331	0.21	0.42	0.16	3.4	1.94	0.57	5.7	6.0	3.2
1	3/0 AWG	0.211	0.266	0.22	0.41	0.15	4.3	2.08	0.46	5.5	7.6	3.4
1	4/0 AWG	0.167	0.210	0.24	0.39	0.15	5.4	2.25	0.38	5.3	9.6	3.6
1	250 MCM	0.141	0.177	0.26	0.38	0.14	6.4	2.41	0.33	5.1	11.3	3.7
1	350 MCM	0.101	0.128	0.29	0.36	0.14	8.9	2.70	0.25	4.9	15.9	4.0
1	500 MCM	0.071	0.092	0.33	0.34	0.13	12.8	3.07	0.20	4.7	22.6	4.4
1	600 MCM	0.059	0.076	0.35	0.34	0.13	15.3	3.32	0.18	4.5	27.2	4.7
1	750 MCM	0.047	0.066	0.38	0.33	0.12	19.2	3.61	0.16	4.4	34.0	5.0
1	1000 MCM	0.035	0.052	0.43	0.31	0.12	25.5	4.03	0.14	4.3	45.3	5.4

OUR ACCREDITATION



POLYCAB MV SC SCR ICEA S-93-639 35KV

MV Cable with Aluminium Conductor, EPR Insulation and Copper Screen



Outstanding Features

- Flame retardant
- High life
- Sunlight resistant
- Oil, Acid and Alkalies resistant
- Corona resistant
- Treeing resistant
- Moisture resistant

Application

POLYCAB MV 35KV EPR insulated with Aluminium conductor single core cable is suitable to use in conduits, ducts, troughs, trays, direct burial in wet and dry conditions for power supply to wide networks.

Voltage Rating

Nominal Voltage: 35kV AC

Operation Temperature

Operating temperature: -35°C to +105°C
Emergency operating temperature: 140°C
Max. Short Circuit Temperature: 250°C

Construction

- Conductor: Circular Compacted Aluminium conductor as per ASTM B496
- Conductor Screen: Extruded Semi-conductive compound
- Insulation: Extruded EPR (TR-XLPE will be provided on demand)
- Insulation Screen: Extruded Semi-conductive compound
- Metallic Insulation Screen: Helically applied copper tape
(Round wire / Corrugated copper screen will be provided on demand)
- Outer Sheath: Extruded Polyvinyl Chloride, Colour: Black
(Alternative Sheath: CPE Outer Sheath or LSZH Outer sheath, and parameters will change accordingly)

Bending Radius: 12D

D is overall diameter of cable

Standard and References:

ASTM B496
ICEA S-93-639 (NEMA WC-74)
UL 1072
UL 1685 / FT-1
IEEE 1202
UL 2556

Voltage Rating (kV AC)	High Voltage Test (kV AC)	
	100% level	133% level
35	69	84

Compliance

- Conductor resistance ICEA S-93-639
- Insulation resistance ICEA S-93-639
- Vertical Tray Flame UL 1685
- Smoke release UL 1685
- Flame Test IEEE 1202



OUR ACCREDITATION



POLYCAB MV SC SCR ICEA S-93-639 35KV

MV Cable with Aluminium Conductor, EPR Insulation and Copper Screen

DIMENSIONS, WEIGHT AND AMPACITY:

133% insulation:

Product Code	No. of Cores	Core Cross sectional Area	Nominal Diameter			Weight (Approx.)	Current rating *	
			Under metallic screen	Over metallic screen	Overall		Directly buried in ground	In air
	No.	AWG / MCM	mm	mm	mm	Kg/Km	Amps	
MVIC46ARUAYF001C1X0AA001P	1	1/0 AWG	32.4	32.9	37.0	1550	150	225
MVIC46ARUAYF001C2X0AA001P	1	2/0 AWG	33.4	33.9	38.0	1650	165	260
MVIC46ARUAYF001C3X0AA001P	1	3/0 AWG	34.6	35.1	39.0	1750	190	300
MVIC46ARUAYF001C4X0AA001P	1	4/0 AWG	35.9	36.4	40.5	1900	225	345
MVIC46ARUAYF001C250CA001P	1	250 MCM	37.2	37.7	42.0	2000	250	390
MVIC46ARUAYF001C350CA001P	1	350 MCM	39.6	40.1	44.0	2300	285	490
MVIC46ARUAYF001C500CA001P	1	500 MCM	42.7	43.2	48.5	2850	385	600
MVIC46ARUAYF001C600CA001P	1	600 MCM	45.2	45.7	51.5	3150	420	675
MVIC46ARUAYF001C750CA001P	1	750 MCM	47.6	48.1	53.5	3550	475	770
MVIC46ARUAYF001C01KCA001P	1	1000 MCM	51.2	51.7	57.5	4100	545	925

100% insulation:

Product Code	No. of Cores	Core Cross sectional Area	Nominal Diameter			Weight (Approx.)	Current rating *	
			Under metallic screen	Over metallic screen	Overall		Directly buried in ground	In air
	No.	AWG / MCM	mm	mm	mm	Kg/Km	Amps	
MVIC46ARUAYF001C1X0AA002P	1	1/0 AWG	28.5	29.1	33.0	1250	150	225
MVIC46ARUAYF001C2X0AA002P	1	2/0 AWG	29.6	30.1	34.0	1350	165	260
MVIC46ARUAYF001C3X0AA002P	1	3/0 AWG	30.8	31.3	35.5	1450	190	300
MVIC46ARUAYF001C4X0AA002P	1	4/0 AWG	32.1	32.6	36.5	1600	225	345
MVIC46ARUAYF001C250CA002P	1	250 MCM	33.4	33.9	38.0	1700	250	390
MVIC46ARUAYF001C350CA002P	1	350 MCM	35.8	36.3	40.5	1950	285	490
MVIC46ARUAYF001C500CA002P	1	500 MCM	38.8	39.4	43.5	2350	385	600
MVIC46ARUAYF001C600CA002P	1	600 MCM	40.9	41.4	47.0	2750	420	675
MVIC46ARUAYF001C750CA002P	1	750 MCM	43.3	43.8	49.5	3100	475	770
MVIC46ARUAYF001C01KCA002P	1	1000 MCM	46.8	47.3	53.0	3600	545	925

* Current Rating based on Table 310.16 (20°C Ambient Ground Temperature) and Table 310.17 (30°C Ambient Air Temperature) of National Electric Code

OUR ACCREDITATION



POLYCAB MV SC SCR ICEA S-93-639 35KV

MV Cable with Aluminium Conductor, EPR Insulation and Copper Screen

ELECTRICAL CHARACTERISTICS:

133% insulation:

No. of Cores	Core Cross sectional Area	Nom. DC Resistance at 25°C	Nom. AC Resistance at 90°C	Approx. Capacitance	Approx. Inductance	Approx. Reactance	Max. pulling tension on conductor	Charging Current per phase	Positive sequence impedance	Electric Stress at Conductor Screen	Short circuit rating	
											Phase conductor	Metallic screen
No.	AWG / MCM	Ω/km	Ω/km	μF/km	mH/km	Ω/km	kN	Amps/Km	Ohms/Km	kV/mm	kA/S	
1	1/0 AWG	0.335	0.420	0.14	0.49	0.19	2.7	1.84	0.72	6.4	4.8	4.1
1	2/0 AWG	0.266	0.331	0.15	0.47	0.18	3.4	1.96	0.58	6.1	6.0	4.3
1	3/0 AWG	0.211	0.266	0.16	0.45	0.17	4.3	2.10	0.47	5.8	7.6	4.4
1	4/0 AWG	0.167	0.210	0.17	0.43	0.16	5.4	2.24	0.38	5.5	9.6	4.6
1	250 MCM	0.141	0.177	0.18	0.42	0.16	6.4	2.41	0.34	5.3	11.3	4.7
1	350 MCM	0.101	0.128	0.20	0.40	0.15	8.9	2.68	0.26	5.0	15.9	5.0
1	500 MCM	0.071	0.092	0.23	0.38	0.15	12.8	3.01	0.21	4.7	22.6	5.4
1	600 MCM	0.059	0.076	0.25	0.38	0.14	15.3	3.28	0.19	4.5	27.2	5.7
1	750 MCM	0.047	0.066	0.27	0.36	0.14	19.2	3.54	0.17	4.4	34.0	6.1
1	1000 MCM	0.035	0.052	0.30	0.35	0.13	25.5	3.91	0.15	4.2	45.3	6.5

100% insulation:

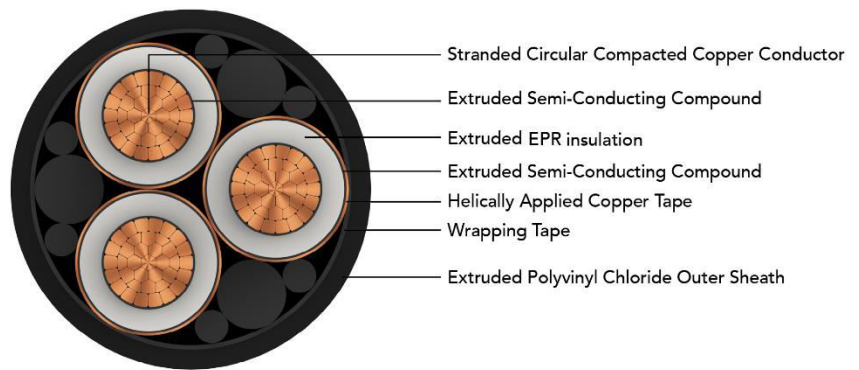
No. of Cores	Core Cross sectional Area	Nom. DC Resistance at 25°C	Nom. AC Resistance at 90°C	Approx. Capacitance	Approx. Inductance	Approx. Reactance	Max. pulling tension on conductor	Charging Current per phase	Positive sequence impedance	Electric Stress at Conductor Screen	Short circuit rating	
											Phase conductor	Metallic screen
No.	AWG / MCM	Ω/km	Ω/km	μF/km	mH/km	Ω/km	kN	Amps/Km	Ohms/Km	kV/mm	kA/S	
1	1/0 AWG	0.335	0.420	0.16	0.47	0.18	2.7	2.10	0.72	7.1	4.8	3.7
1	2/0 AWG	0.266	0.331	0.17	0.45	0.17	3.4	2.25	0.58	6.8	6.0	3.8
1	3/0 AWG	0.211	0.266	0.18	0.43	0.16	4.3	2.41	0.46	6.5	7.6	3.9
1	4/0 AWG	0.167	0.210	0.20	0.42	0.16	5.4	2.58	0.38	6.2	9.6	4.1
1	250 MCM	0.141	0.177	0.21	0.41	0.15	6.4	2.75	0.33	6.0	11.3	4.3
1	350 MCM	0.101	0.128	0.23	0.38	0.14	8.9	3.07	0.26	5.7	15.9	4.6
1	500 MCM	0.071	0.092	0.26	0.36	0.14	12.8	3.47	0.20	5.4	22.6	4.9
1	600 MCM	0.059	0.076	0.28	0.36	0.14	15.3	3.73	0.18	5.2	27.2	5.2
1	750 MCM	0.047	0.066	0.31	0.35	0.13	19.2	4.04	0.16	5.1	34.0	5.5
1	1000 MCM	0.035	0.052	0.34	0.33	0.12	25.5	4.49	0.15	4.9	45.3	5.9

OUR ACCREDITATION



POLYCAB MV MC SCR ICEA S-93-639 5KV (or) 8KV

MV Cable with Copper Conductor, EPR Insulation and Copper Screen



Outstanding Features

- Flame retardant
- High life
- Sunlight resistant
- Oil, Acid and Alkalies resistant
- Corona resistant
- Treeing resistant
- Moisture resistant

Application

POLYCAB MV 5 KV EPR insulated with Copper conductor Three core cable is suitable to use in conduits, ducts, troughs, trays, direct burial in wet and dry conditions for power supply to wide networks.

Voltage Rating

Nominal Voltage: 5kV AC (100% / 133%) or 8kV AC (100%)

Operation Temperature

Operating temperature: -35°C to +105°C
 Emergency operating temperature: 140°C
 Max. Short Circuit Temperature: 250°C

Construction

- Conductor: Circular Compacted Copper conductor as per ASTM B496
- Conductor Screen: Extruded Semi-conductive compound
- Insulation: Extruded EPR (TR-XLPE will be provided on demand)
- Insulation Screen: Extruded Semi-conductive compound
- Metallic Insulation Screen: Helically applied copper tape
(Round / Corrugated copper screen will be provided on demand)
- Cores assembled together along with fillers (and ground wire optional)
- Binder: Wrapping tape
- (Armour will be provided on demand)
- Outer Sheath: Extruded Polyvinyl Chloride, Colour: Black
(Alternative Sheath: CPE Outer Sheath or LSZH Outer sheath, and parameters will change accordingly)

Standard and References:

ASTM B496
 ICEA S-93-639 (NEMA WC-74)
 UL 1072
 UL 1685 / FT-1
 IEEE 1202
 UL 2556

Voltage Rating (kV AC)	High Voltage Test (kV AC)	Min. Partial discharge test (kV AC)	
		100% level	133% level
5	18	4	5

Compliance

- Conductor resistance ICEA S-93-639
- Insulation resistance ICEA S-93-639
- Vertical Tray Flame UL 1685
- Smoke Release UL 1685
- Flame Test IEEE 1202



Bending Radius: 7D

D is overall diameter of cable

OUR ACCREDITATION



POLYCAB MV MC SCR ICEA S-93-639 5KV (or) 8KV

MV Cable with Copper Conductor, EPR Insulation and Copper Screen

DIMENSIONS, WEIGHT AND AMPACITY:

133% insulation (5kv) and 100% insulation (8kv):

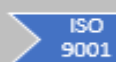
Product Code	No. of Cores	Core Cross sectional Area	Nominal Diameter			Weight (Approx.)	Current rating *	
			Under metallic screen	Over metallic screen	Overall		Directly buried in ground	In air
	No.	AWG / MCM	mm	mm	mm	Kg/Km	Amps	
MVIC36CRUAYF003C002AA001P	3	2 AWG	15.1	15.6	37.5	2250	130	155
MVIC36CRUAYF003C001AA001P	3	1 AWG	15.9	16.4	39.5	2550	150	175
MVIC36CRUAYF003C1X0AA001P	3	1/0 AWG	16.9	17.4	41.5	2950	170	205
MVIC36CRUAYF003C2X0AA001P	3	2/0 AWG	17.9	18.4	44.0	3500	200	240
MVIC36CRUAYF003C3X0AA001P	3	3/0 AWG	19.1	19.6	48.0	4250	225	280
MVIC36CRUAYF003C4X0AA001P	3	4/0 AWG	20.4	20.9	51.0	5000	265	320
MVIC36CRUAYF003C250CA001P	3	250 MCM	21.7	22.2	53.5	5650	290	360
MVIC36CRUAYF003C350CA001P	3	350 MCM	24.1	24.6	59.0	7350	355	450
MVIC36CRUAYF003C500CA001P	3	500 MCM	27.2	27.7	65.5	9750	435	550
MVIC36CRUAYF003C600CA001P	3	600 MCM	29.7	30.2	72.0	11750	480	615
MVIC36CRUAYF003C750CA001P	3	750 MCM	32.1	32.7	77.5	14100	540	695
MVIC36CRUAYF003C01KCA001P	3	1000 MCM	35.7	36.2	85.0	17900	620	830

100% insulation (5kv):

Product Code	No. of Cores	Core Cross sectional Area	Nominal Diameter			Weight (Approx.)	Current rating *	
			Under metallic screen	Over metallic screen	Overall		Directly buried in ground	In air
	No.	AWG / MCM	mm	mm	mm	Kg/Km	Amps	
MVIC36CRUAYF003C002AA002P	3	2 AWG	13.8	14.3	35.0	2100	130	155
MVIC36CRUAYF003C001AA002P	3	1 AWG	14.7	15.2	37.0	2400	150	175
MVIC36CRUAYF003C1X0AA002P	3	1/0 AWG	15.6	16.1	39.0	2750	170	205
MVIC36CRUAYF003C2X0AA002P	3	2/0 AWG	16.6	17.2	41.0	3300	200	240
MVIC36CRUAYF003C3X0AA002P	3	3/0 AWG	17.8	18.3	43.5	3900	225	280
MVIC36CRUAYF003C4X0AA002P	3	4/0 AWG	19.2	19.7	48.0	4800	265	320
MVIC36CRUAYF003C250CA002P	3	250 MCM	20.4	20.9	51.0	5450	290	360
MVIC36CRUAYF003C350CA002P	3	350 MCM	22.9	23.4	56.0	7100	355	450
MVIC36CRUAYF003C500CA002P	3	500 MCM	25.9	26.4	62.5	9500	435	550
MVIC36CRUAYF003C600CA002P	3	600 MCM	27.9	28.4	67.0	11150	480	615
MVIC36CRUAYF003C750CA002P	3	750 MCM	30.3	30.8	73.5	13650	540	695
MVIC36CRUAYF003C01KCA002P	3	1000 MCM	33.8	34.3	81.0	17450	620	830

* Current Rating is based on Table 310.16 (20°C Ambient Ground Temperature) and Table 310.17 (30°C Ambient Air Temperature) of National Electric Code

OUR ACCREDITATION



POLYCAB MV MC SCR ICEA S-93-639 5KV (or) 8KV

MV Cable with Copper Conductor, EPR Insulation and Copper Screen

ELECTRICAL CHARACTERISTICS:

133% insulation:

No. of Cores	Core Cross sectional Area	Nom. DC Resistance at 25°C	Nom. AC Resistance at 90°C	Approx. Capacitance	Approx. Inductance	Approx. Reactance	Max. pulling tension on conductor	Charging Current per phase	Positive sequence impedance	Electric Stress at Conductor Screen	Short circuit rating	
											Phase conductor	Metallic screen
No.	AWG / MCM	Ω/km	Ω/km	μF/km	mH/km	Ω/km	kN	Amps/Km	Ohms/Km	kV/mm	kA/S	
1	2 AWG	0.531	0.666	0.30	0.37	0.14	2.4	0.56	0.68	2.1	4.8	2.0
1	1 AWG	0.423	0.528	0.32	0.36	0.13	3.0	0.60	0.55	2.1	6.1	2.1
1	1/0 AWG	0.335	0.420	0.35	0.34	0.13	3.7	0.66	0.44	2.0	7.7	2.2
1	2/0 AWG	0.266	0.331	0.38	0.32	0.12	4.7	0.71	0.36	1.9	9.7	2.3
1	3/0 AWG	0.211	0.266	0.41	0.31	0.12	6.0	0.78	0.29	1.9	12.2	2.5
1	4/0 AWG	0.167	0.210	0.45	0.30	0.11	7.5	0.85	0.24	1.9	15.3	2.6
1	250 MCM	0.141	0.177	0.49	0.30	0.11	8.9	0.92	0.21	1.8	18.1	2.8
1	350 MCM	0.101	0.128	0.56	0.28	0.11	12.4	1.05	0.17	1.7	25.4	3.1
1	500 MCM	0.071	0.092	0.64	0.27	0.10	17.7	1.21	0.14	1.7	36.2	3.5
1	600 MCM	0.059	0.076	0.72	0.27	0.10	21.3	1.35	0.13	1.5	43.5	3.8
1	750 MCM	0.047	0.066	0.79	0.26	0.10	26.6	1.48	0.12	1.5	54.4	4.1
1	1000 MCM	0.035	0.052	0.89	0.25	0.10	35.4	1.67	0.11	1.5	72.5	4.5

100% insulation:

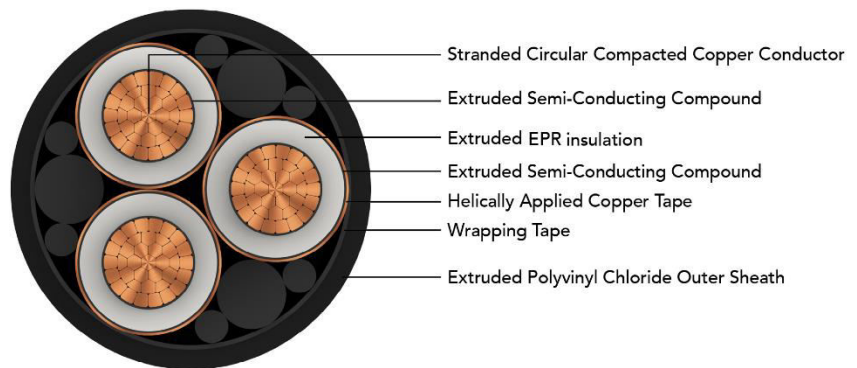
No. of Cores	Core Cross sectional Area	Nom. DC Resistance at 25°C	Nom. AC Resistance at 90°C	Approx. Capacitance	Approx. Inductance	Approx. Reactance	Max. pulling tension on conductor	Charging Current per phase	Positive sequence impedance	Electric Stress at Conductor Screen	Short circuit rating	
											Phase conductor	Metallic screen
No.	AWG / MCM	Ω/km	Ω/km	μF/km	mH/km	Ω/km	kN	Amps/Km	Ohms/Km	kV/mm	kA/S	
1	2 AWG	0.531	0.666	0.36	0.35	0.13	2.4	0.68	1.10	2.5	4.8	1.8
1	1 AWG	0.423	0.528	0.39	0.34	0.13	3.0	0.73	0.88	2.4	6.1	1.9
1	1/0 AWG	0.335	0.420	0.42	0.33	0.12	3.7	0.80	0.70	2.4	7.7	2.0
1	2/0 AWG	0.266	0.331	0.46	0.31	0.12	4.7	0.87	0.56	2.3	9.7	2.2
1	3/0 AWG	0.211	0.266	0.51	0.30	0.11	6.0	0.95	0.45	2.2	12.2	2.3
1	4/0 AWG	0.167	0.210	0.56	0.29	0.11	7.5	1.05	0.36	2.2	15.3	2.5
1	250 MCM	0.141	0.177	0.60	0.29	0.11	8.9	1.14	0.31	2.1	18.1	2.6
1	350 MCM	0.101	0.128	0.69	0.27	0.10	12.4	1.30	0.23	2.0	25.4	2.9
1	500 MCM	0.071	0.092	0.80	0.26	0.10	17.7	1.51	0.18	2.0	36.2	3.3
1	600 MCM	0.059	0.076	0.88	0.26	0.10	21.3	1.65	0.16	1.9	43.5	3.6
1	750 MCM	0.047	0.066	0.96	0.25	0.09	26.6	1.82	0.14	1.9	54.4	3.9
1	1000 MCM	0.035	0.052	1.09	0.24	0.09	35.4	2.06	0.12	1.9	72.5	4.3

OUR ACCREDITATION



POLYCAB MV MC SCR ICEA S-93-639 8KV

MV Cable with Copper Conductor, EPR Insulation and Copper Screen



Outstanding Features

- Flame retardant
- High life
- Sunlight resistant
- Oil, Acid and Alkalies resistant
- Corona resistant
- Treeing resistant
- Moisture resistant

Application

POLYCAB MV 8KV EPR insulated with Copper conductor Three core cable is suitable to use in conduits, ducts, troughs, trays, direct burial in wet and dry conditions for power supply to wide networks.

Voltage Rating

Nominal Voltage: 8kV AC

Operation Temperature

Operating temperature: -35°C to +105°C
 Emergency operating temperature: 140°C
 Max. Short Circuit Temperature: 250°C

Construction

- Conductor: Circular Compacted Copper conductor as per ASTM B496
- Conductor Screen: Extruded Semi-conductive compound
- Insulation: Extruded EPR (TR-XLPE will be provided on demand)
- Insulation Screen: Extruded Semi-conductive compound
- Metallic Insulation Screen: Helically applied copper tape
(Round / Corrugated copper screen will be provided on demand)
- Cores assembled together along with fillers (and ground wire optional)
- Binder: Wrapping tape
- (Armour will be provided on demand)
- Outer Sheath: Extruded Polyvinyl Chloride, Colour: Black
(Alternative Sheath: CPE Outer Sheath or LSZH Outer sheath, and parameters will change accordingly)

Standard and References:

- ASTM B496
- ICEA S-93-639 (NEMA WC-74)
- UL 1072
- UL 1685 / FT-1
- IEEE 1202
- UL 2556

Voltage Rating (kV AC)	High Voltage Test (kV AC)		Min. Partial discharge test (kV AC)	
	100% level	133% level	100% level	133% level
8	23	28	6	8

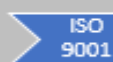
Compliance

- Conductor resistance ICEA S-93-639
- Insulation resistance ICEA S-93-639
- Vertical Tray Flame UL 1685
- Smoke Release UL 1685
- Flame Test IEEE 1202



Bending Radius: 7D

OUR ACCREDITATION



POLYCAB MV MC SCR ICEA S-93-639 8KV

MV Cable with Copper Conductor, EPR Insulation and Copper Screen

DIMENSIONS, WEIGHT AND AMPACITY:

133% insulation:

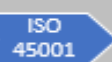
Product Code	No. of Cores	Core Cross sectional Area	Nominal Diameter			Weight (Approx.)	Current rating *	
			Under metallic screen	Over metallic screen	Overall		Directly buried in ground	In air
	No.	AWG / MCM	mm	mm	mm	Kg/Km	Amps	
MVIC48CRUAYF003C002AA001P	3	2 AWG	16.4	16.9	40.5	2400	130	155
MVIC48CRUAYF003C001AA001P	3	1 AWG	17.2	17.7	42.5	2750	150	175
MVIC48CRUAYF003C1X0AA001P	3	1/0 AWG	18.1	18.6	46.0	3300	170	205
MVIC48CRUAYF003C2X0AA001P	3	2/0 AWG	19.2	19.7	48.0	3850	200	240
MVIC48CRUAYF003C3X0AA001P	3	3/0 AWG	20.4	20.9	50.5	4450	225	280
MVIC48CRUAYF003C4X0AA001P	3	4/0 AWG	21.7	22.2	53.5	5200	265	320
MVIC48CRUAYF003C250CA001P	3	250 MCM	23.0	23.5	56.5	5900	290	360
MVIC48CRUAYF003C350CA001P	3	350 MCM	25.4	25.9	61.5	7600	355	450
MVIC48CRUAYF003C500CA001P	3	500 MCM	28.4	28.9	68.0	10050	435	550
MVIC48CRUAYF003C600CA001P	3	600 MCM	31.0	31.5	75.0	12050	480	615
MVIC48CRUAYF003C750CA001P	3	750 MCM	33.4	33.9	80.0	14400	540	695
MVIC48CRUAYF003C01KCA001P	3	1000 MCM	36.9	37.4	87.5	18250	620	830

100% insulation:

Product Code	No. of Cores	Core Cross sectional Area	Nominal Diameter			Weight (Approx.)	Current rating *	
			Under metallic screen	Over metallic screen	Overall		Directly buried in ground	In air
	No.	AWG / MCM	mm	mm	mm	Kg/Km	Amps	
MVIC48CRUAYF003C002AA002P	3	2 AWG	15.1	15.6	37.5	2250	130	155
MVIC48CRUAYF003C001AA002P	3	1 AWG	15.9	16.4	39.5	2550	150	175
MVIC48CRUAYF003C1X0AA002P	3	1/0 AWG	16.9	17.4	41.5	2950	170	205
MVIC48CRUAYF003C2X0AA002P	3	2/0 AWG	17.9	18.4	44.0	3500	200	240
MVIC48CRUAYF003C3X0AA002P	3	3/0 AWG	19.1	19.6	48.0	4250	225	280
MVIC48CRUAYF003C4X0AA002P	3	4/0 AWG	20.4	20.9	51.0	5000	265	320
MVIC48CRUAYF003C250CA002P	3	250 MCM	21.7	22.2	53.5	5650	290	360
MVIC48CRUAYF003C350CA002P	3	350 MCM	24.1	24.6	59.0	7350	355	450
MVIC48CRUAYF003C500CA002P	3	500 MCM	27.2	27.7	65.5	9750	435	550
MVIC48CRUAYF003C600CA002P	3	600 MCM	29.7	30.2	72.0	11750	480	615
MVIC48CRUAYF003C750CA002P	3	750 MCM	32.1	32.7	77.5	14100	540	695
MVIC48CRUAYF003C01KCA002P	3	1000 MCM	35.7	36.2	85.0	17900	620	830

* Current Rating is based on Table 310.16 (20°C Ambient Ground Temperature) and Table 310.17 (30°C Ambient Air Temperature) of National Electric Code

OUR ACCREDITATION



POLYCAB MV MC SCR ICEA S-93-639 8KV

MV Cable with Copper Conductor, EPR Insulation and Copper Screen

ELECTRICAL CHARACTERISTICS:

133% insulation:

No. of Cores	Core Cross sectional Area	Nom. DC Resistance at 25°C	Nom. AC Resistance at 90°C	Approx. Capacitance	Approx. Inductance	Approx. Reactance	Max. pulling tension on conductor	Charging Current per phase	Positive sequence impedance	Electric Stress at Conductor Screen	Short circuit rating	
											Phase conductor	Metallic screen
No.	AWG / MCM	Ω/km	Ω/km	μF/km	mH/km	Ω/km	kN	Amps/Km	Ohms/Km	kV/mm	kA/S	
1	2 AWG	0.531	0.666	0.26	0.38	0.15	2.4	0.77	0.68	3.0	4.8	2.1
1	1 AWG	0.423	0.528	0.28	0.37	0.14	3.0	0.83	0.55	2.9	6.1	2.2
1	1/0 AWG	0.335	0.420	0.30	0.36	0.14	3.7	0.90	0.44	2.8	7.7	2.3
1	2/0 AWG	0.266	0.331	0.32	0.34	0.13	4.7	0.98	0.36	2.7	9.7	2.5
1	3/0 AWG	0.211	0.266	0.35	0.33	0.12	6.0	1.06	0.29	2.7	12.2	2.6
1	4/0 AWG	0.167	0.210	0.38	0.32	0.12	7.5	1.16	0.24	2.6	15.3	2.8
1	250 MCM	0.141	0.177	0.41	0.31	0.12	8.9	1.25	0.21	2.5	18.1	3.0
1	350 MCM	0.101	0.128	0.47	0.29	0.11	12.4	1.42	0.17	2.4	25.4	3.3
1	500 MCM	0.071	0.092	0.54	0.28	0.11	17.7	1.64	0.14	2.3	36.2	3.6
1	600 MCM	0.059	0.076	0.60	0.28	0.10	21.3	1.82	0.13	2.1	43.5	4.0
1	750 MCM	0.047	0.066	0.66	0.27	0.10	26.6	1.99	0.12	2.1	54.4	4.3
1	1000 MCM	0.035	0.052	0.74	0.26	0.10	35.4	2.24	0.11	2.1	72.5	4.7

100% insulation:

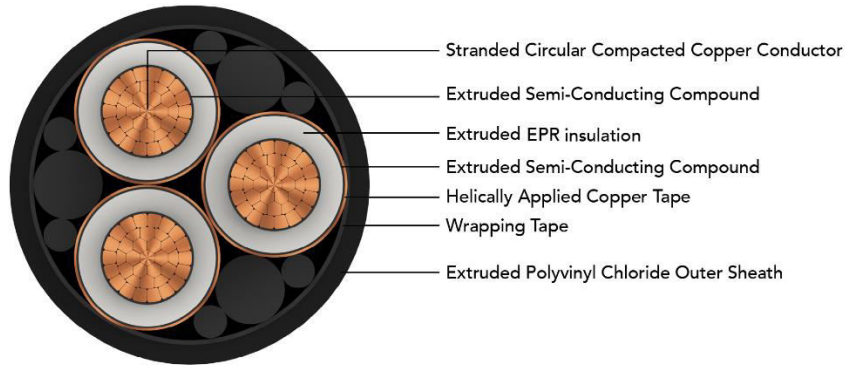
No. of Cores	Core Cross sectional Area	Nom. DC Resistance at 25°C	Nom. AC Resistance at 90°C	Approx. Capacitance	Approx. Inductance	Approx. Reactance	Max. pulling tension on conductor	Charging Current per phase	Positive sequence impedance	Electric Stress at Conductor Screen	Short circuit rating	
											Phase conductor	Metallic screen
No.	AWG / MCM	Ω/km	Ω/km	μF/km	mH/km	Ω/km	kN	Amps/Km	Ohms/Km	kV/mm	kA/S	
1	2 AWG	0.531	0.666	0.30	0.37	0.14	2.4	0.56	0.68	2.1	4.8	2.0
1	1 AWG	0.423	0.528	0.32	0.36	0.13	3.0	0.60	0.55	2.1	6.1	2.1
1	1/0 AWG	0.335	0.420	0.35	0.34	0.13	3.7	0.66	0.44	2.0	7.7	2.2
1	2/0 AWG	0.266	0.331	0.38	0.32	0.12	4.7	0.71	0.36	1.9	9.7	2.3
1	3/0 AWG	0.211	0.266	0.41	0.31	0.12	6.0	0.78	0.29	1.9	12.2	2.5
1	4/0 AWG	0.167	0.210	0.45	0.30	0.11	7.5	0.85	0.24	1.9	15.3	2.6
1	250 MCM	0.141	0.177	0.49	0.30	0.11	8.9	0.92	0.21	1.8	18.1	2.8
1	350 MCM	0.101	0.128	0.56	0.28	0.11	12.4	1.05	0.17	1.7	25.4	3.1
1	500 MCM	0.071	0.092	0.64	0.27	0.10	17.7	1.21	0.14	1.7	36.2	3.5
1	600 MCM	0.059	0.076	0.72	0.27	0.10	21.3	1.35	0.13	1.5	43.5	3.8
1	750 MCM	0.047	0.066	0.79	0.26	0.10	26.6	1.48	0.12	1.5	54.4	4.1
1	1000 MCM	0.035	0.052	0.89	0.25	0.10	35.4	1.67	0.11	1.5	72.5	4.5

OUR ACCREDITATION



POLYCAB MV MC SCR ICEA S-93-639 15KV

MV Cable with Copper Conductor, EPR Insulation and Copper Screen



Outstanding Features

- Flame retardant
- High life
- Sunlight resistant
- Oil, Acid and Alkalies resistant
- Corona resistant
- Treeing resistant
- Moisture resistant

Application

POLYCAB MV 15KV EPR insulated with Copper conductor Three core cable is suitable to use in conduits, ducts, troughs, trays, direct burial in wet and dry conditions for power supply to wide networks.

Voltage Rating

Nominal Voltage: 15kV AC

Operation Temperature

Operating temperature: -35°C to +105°C
 Emergency operating temperature: 140°C
 Max. Short Circuit Temperature: 250°C

Construction

- Conductor: Circular Compacted Copper conductor as per ASTM B496
- Conductor Screen: Extruded Semi-conductive compound
- Insulation: Extruded EPR (TR-XLPE will be provided on demand)
- Insulation Screen: Extruded Semi-conductive compound
- Metallic Insulation Screen: Helically applied copper tape
(Round / Corrugated copper screen will be provided on demand)
- Cores assembled together along with fillers (and ground wire optional)
- Binder: Wrapping tape
- (Armour will be provided on demand)
- Outer Sheath: Extruded Polyvinyl Chloride, Colour: Black
(Alternative Sheath: CPE Outer Sheath or LSZH Outer sheath, and parameters will change accordingly)

Standard and References:

- ASTM B496
- ICEA S-93-639 (NEMA WC-74)
- UL 1072
- UL 1685 / FT-1
- IEEE 1202
- UL 2556

Voltage Rating (kV AC)	High Voltage Test (kV AC)		Min. Partial discharge test (kV AC)	
	100% level	133% level	100% level	133% level
15	35	44	11	15

Compliance

- Conductor resistance ICEA S-93-639
- Insulation resistance ICEA S-93-639
- Vertical Tray Flame UL 1685
- Smoke Release UL 1685
- Flame Test IEEE 1202



Bending Radius: 7D

D is overall diameter of cable

OUR ACCREDITATION



POLYCAB MV MC SCR ICEA S-93-639 15KV

MV Cable with Copper Conductor, EPR Insulation and Copper Screen

DIMENSIONS, WEIGHT AND AMPACITY:

133% insulation:

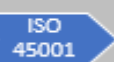
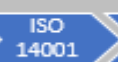
Product Code	No. of Cores	Core Cross sectional Area	Nominal Diameter			Weight (Approx.)	Current rating *	
			Under metallic screen	Over metallic screen	Overall		Directly buried in ground	In air
	No.	AWG / MCM	mm	mm	mm	Kg/Km	Amps	
MVIC37CRUAYF003C002AA001P	3	2 AWG	20.4	20.9	51.0	3200	130	155
MVIC37CRUAYF003C001AA001P	3	1 AWG	21.3	21.8	52.5	3550	150	175
MVIC37CRUAYF003C1X0AA001P	3	1/0 AWG	22.2	22.7	54.5	4000	170	205
MVIC37CRUAYF003C2X0AA001P	3	2/0 AWG	23.3	23.8	57.0	4600	200	240
MVIC37CRUAYF003C3X0AA001P	3	3/0 AWG	24.4	24.9	59.5	5200	225	280
MVIC37CRUAYF003C4X0AA001P	3	4/0 AWG	25.8	26.3	62.5	6000	265	320
MVIC37CRUAYF003C250CA001P	3	250 MCM	27.0	27.6	65.0	6700	290	360
MVIC37CRUAYF003C350CA001P	3	350 MCM	29.5	30.0	70.5	8450	355	450
MVIC37CRUAYF003C500CA001P	3	500 MCM	32.5	33.0	78.0	11200	435	550
MVIC37CRUAYF003C600CA001P	3	600 MCM	35.1	35.6	83.5	13100	480	615
MVIC37CRUAYF003C750CA001P	3	750 MCM	37.5	38.0	89.0	15500	540	695
MVIC37CRUAYF003C01KCA001P	3	1000 MCM	41.0	41.5	96.5	19450	620	830

100% insulation:

Product Code	No. of Cores	Core Cross sectional Area	Nominal Diameter			Weight (Approx.)	Current rating *	
			Under metallic screen	Over metallic screen	Overall		Directly buried in ground	In air
	No.	AWG / MCM	mm	mm	mm	Kg/Km	Amps	
MVIC37CRUAYF003C002AA002P	3	2 AWG	18.1	18.7	46.0	2850	130	155
MVIC37CRUAYF003C001AA002P	3	1 AWG	19.0	19.5	47.5	3200	150	175
MVIC37CRUAYF003C1X0AA002P	3	1/0 AWG	19.9	20.4	49.5	3600	170	205
MVIC37CRUAYF003C2X0AA002P	3	2/0 AWG	21.0	21.5	52.0	4150	200	240
MVIC37CRUAYF003C3X0AA002P	3	3/0 AWG	22.2	22.7	54.5	4800	225	280
MVIC37CRUAYF003C4X0AA002P	3	4/0 AWG	23.5	24.0	57.5	5550	265	320
MVIC37CRUAYF003C250CA002P	3	250 MCM	24.8	25.3	60.0	6250	290	360
MVIC37CRUAYF003C350CA002P	3	350 MCM	27.2	27.7	65.5	7950	355	450
MVIC37CRUAYF003C500CA002P	3	500 MCM	30.2	30.7	73.0	10650	435	550
MVIC37CRUAYF003C600CA002P	3	600 MCM	32.2	32.7	77.5	12350	480	615
MVIC37CRUAYF003C750CA002P	3	750 MCM	34.6	35.1	82.5	14750	540	695
MVIC37CRUAYF003C01KCA002P	3	1000 MCM	38.2	38.7	90.5	18600	620	830

* Current Rating is based on Table 310.16 (20°C Ambient Ground Temperature) and Table 310.17 (30°C Ambient Air Temperature) of National Electric Code

OUR ACCREDITATION



POLYCAB MV MC SCR ICEA S-93-639 15KV

MV Cable with Copper Conductor, EPR Insulation and Copper Screen

ELECTRICAL CHARACTERISTICS:

133% insulation:

No. of Cores	Core Cross sectional Area	Nom. DC Resistance at 25°C	Nom. AC Resistance at 90°C	Approx. Capacitance	Approx. Inductance	Approx. Reactance	Max. pulling tension on conductor	Charging Current per phase	Positive sequence impedance	Electric Stress at Conductor Screen	Short circuit rating	
											Phase conductor	Metallic screen
No.	AWG / MCM	Ω/km	Ω/km	μF/km	mH/km	Ω/km	kN	Amps/Km	Ohms/Km	kV/mm	kA/S	
1	2 AWG	0.531	0.666	0.19	0.43	0.16	2.4	1.05	0.69	4.3	4.8	2.6
1	1 AWG	0.423	0.528	0.20	0.41	0.16	3.0	1.13	0.55	4.1	6.1	2.7
1	1/0 AWG	0.335	0.420	0.21	0.40	0.15	3.7	1.21	0.45	4.0	7.7	2.9
1	2/0 AWG	0.266	0.331	0.23	0.38	0.14	4.7	1.30	0.36	3.8	9.7	3.0
1	3/0 AWG	0.211	0.266	0.25	0.36	0.14	6.0	1.41	0.30	3.7	12.2	3.1
1	4/0 AWG	0.167	0.210	0.27	0.35	0.13	7.5	1.52	0.25	3.6	15.3	3.3
1	250 MCM	0.141	0.177	0.29	0.34	0.13	8.9	1.64	0.22	3.4	18.1	3.5
1	350 MCM	0.101	0.128	0.33	0.32	0.12	12.4	1.84	0.18	3.3	25.4	3.8
1	500 MCM	0.071	0.092	0.37	0.31	0.12	17.7	2.11	0.15	3.2	36.2	4.1
1	600 MCM	0.059	0.076	0.41	0.30	0.11	21.3	2.33	0.14	3.0	43.5	4.5
1	750 MCM	0.047	0.066	0.45	0.29	0.11	26.6	2.53	0.13	2.9	54.4	4.8
1	1000 MCM	0.035	0.052	0.50	0.28	0.11	35.4	2.83	0.12	2.8	72.5	5.2

100% insulation:

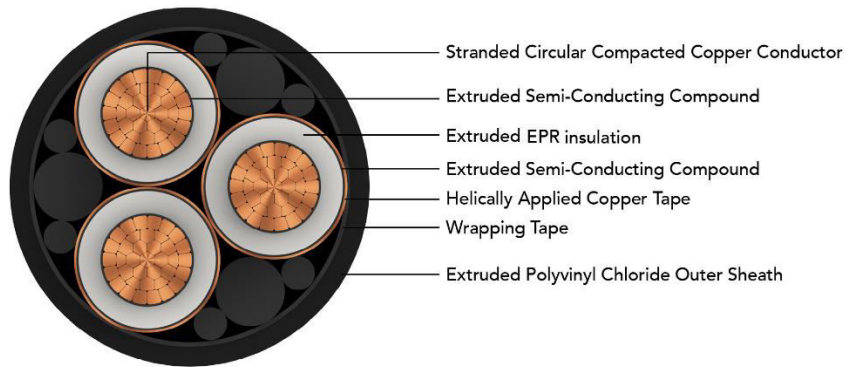
No. of Cores	Core Cross sectional Area	Nom. DC Resistance at 25°C	Nom. AC Resistance at 90°C	Approx. Capacitance	Approx. Inductance	Approx. Reactance	Max. pulling tension on conductor	Charging Current per phase	Positive sequence impedance	Electric Stress at Conductor Screen	Short circuit rating	
											Phase conductor	Metallic screen
No.	AWG / MCM	Ω/km	Ω/km	μF/km	mH/km	Ω/km	kN	Amps/Km	Ohms/Km	kV/mm	kA/S	
1	2 AWG	0.531	0.666	0.22	0.40	0.15	2.4	1.23	1.11	4.9	4.8	2.3
1	1 AWG	0.423	0.528	0.23	0.39	0.15	3.0	1.32	0.88	4.8	6.1	2.5
1	1/0 AWG	0.335	0.420	0.25	0.38	0.14	3.7	1.43	0.71	4.6	7.7	2.6
1	2/0 AWG	0.266	0.331	0.27	0.35	0.13	4.7	1.54	0.56	4.4	9.7	2.7
1	3/0 AWG	0.211	0.266	0.30	0.34	0.13	6.0	1.67	0.45	4.3	12.2	2.9
1	4/0 AWG	0.167	0.210	0.32	0.33	0.12	7.5	1.81	0.37	4.2	15.3	3.0
1	250 MCM	0.141	0.177	0.35	0.32	0.12	8.9	1.95	0.32	4.0	18.1	3.2
1	350 MCM	0.101	0.128	0.39	0.31	0.12	12.4	2.22	0.24	3.9	25.4	3.5
1	500 MCM	0.071	0.092	0.45	0.29	0.11	17.7	2.54	0.18	3.7	36.2	3.9
1	600 MCM	0.059	0.076	0.49	0.29	0.11	21.3	2.76	0.16	3.6	43.5	4.1
1	750 MCM	0.047	0.066	0.53	0.28	0.10	26.6	3.01	0.14	3.5	54.4	4.4
1	1000 MCM	0.035	0.052	0.60	0.27	0.10	35.4	3.39	0.13	3.5	72.5	4.9

OUR ACCREDITATION



POLYCAB MV MC SCR ICEA S-93-639 25KV

MV Cable with Copper Conductor, EPR Insulation and Copper Screen



Outstanding Features

- Flame retardant
- High life
- Sunlight resistant
- Oil, Acid and Alkalies resistant
- Corona resistant
- Treeing resistant
- Moisture resistant

Application

POLYCAB MV 25KV EPR insulated with Copper conductor Three core cable is suitable to use in conduits, ducts, troughs, trays, direct burial in wet and dry conditions for power supply to wide networks.

Voltage Rating

Nominal Voltage: 25kV AC

Operation Temperature

Operating temperature: -35°C to +105°C
 Emergency operating temperature: 140°C
 Max. Short Circuit Temperature: 250°C

Construction

- Conductor: Circular Compacted Copper conductor as per ASTM B496
- Conductor Screen: Extruded Semi-conductive compound
- Insulation: Extruded EPR (TR-XLPE will be provided on demand)
- Insulation Screen: Extruded Semi-conductive compound
- Metallic Insulation Screen: Helically applied copper tape
(Round / Corrugated copper screen will be provided on demand)
- Cores assembled together along with fillers (and ground wire optional)
- Binder: Wrapping tape
- (Armour will be provided on demand)
- Outer Sheath: Extruded Polyvinyl Chloride, Colour: Black
(Alternative Sheath: CPE Outer Sheath or LSZH Outer sheath, and parameters will change accordingly)

Bending Radius: 7D

D is overall diameter of cable

Standard and References:

- ASTM B496
- ICEA S-93-639 (NEMA WC-74)
- UL 1072
- UL 1685 / FT-1
- IEEE 1202
- UL 2556

Voltage Rating (kV AC)	High Voltage Test (kV AC)	
	100% level	133% level
25	52	64

Compliance

- Conductor resistance ICEA S-93-639
- Insulation resistance ICEA S-93-639
- Vertical Tray Flame UL 1685
- Smoke Release UL 1685
- Flame Test IEEE 1202



OUR ACCREDITATION



POLYCAB MV MC SCR ICEA S-93-639 25KV

MV Cable with Copper Conductor, EPR Insulation and Copper Screen

DIMENSIONS, WEIGHT AND AMPACITY:

133% insulation:

Product Code	No. of Cores	Core Cross sectional Area	Nominal Diameter			Weight (Approx.)	Current rating *	
			Under metallic screen	Over metallic screen	Overall		Directly buried in ground	In air
	No.	AWG / MCM	mm	mm	mm	Kg/Km	Amps	
MVIC32CRUAYF001C002AA001P	3	2 AWG	25.5	26.0	62.0	4150	130	155
MVIC32CRUAYF001C001AA001P	3	1 AWG	26.3	26.9	63.5	4550	150	175
MVIC32CRUAYF001C1X0AA001P	3	1/0 AWG	27.3	27.8	65.5	5000	170	205
MVIC32CRUAYF001C2X0AA001P	3	2/0 AWG	28.3	28.8	68.0	5600	200	240
MVIC32CRUAYF001C3X0AA001P	3	3/0 AWG	29.5	30.0	70.5	6300	225	280
MVIC32CRUAYF001C4X0AA001P	3	4/0 AWG	30.8	31.3	74.5	7300	265	320
MVIC32CRUAYF001C250CA001P	3	250 MCM	32.1	32.6	77.5	8050	290	360
MVIC32CRUAYF001C350CA001P	3	350 MCM	34.5	35.1	82.5	9900	355	450
MVIC32CRUAYF001C500CA001P	3	500 MCM	37.6	38.1	89.0	12550	435	550
MVIC32CRUAYF001C600CA001P	3	600 MCM	40.2	40.7	94.5	14500	480	615
MVIC32CRUAYF001C750CA001P	3	750 MCM	42.6	43.1	100.0	17000	540	695
MVIC32CRUAYF001C01KCA001P	3	1000 MCM	46.1	46.6	107.5	21050	620	830

100% insulation:

Product Code	No. of Cores	Core Cross sectional Area	Nominal Diameter			Weight (Approx.)	Current rating *	
			Under metallic screen	Over metallic screen	Overall		Directly buried in ground	In air
	No.	AWG / MCM	mm	mm	mm	Kg/Km	Amps	
MVIC32CRUAYF001C002AA002P	3	2 AWG	22.5	23.0	55.0	3600	130	155
MVIC32CRUAYF001C001AA002P	3	1 AWG	23.3	23.8	57.0	3950	150	175
MVIC32CRUAYF001C1X0AA002P	3	1/0 AWG	24.2	24.7	59.0	4350	170	205
MVIC32CRUAYF001C2X0AA002P	3	2/0 AWG	25.3	25.8	61.5	4950	200	240
MVIC32CRUAYF001C3X0AA002P	3	3/0 AWG	26.5	27.0	64.0	5600	225	280
MVIC32CRUAYF001C4X0AA002P	3	4/0 AWG	27.8	28.3	66.5	6400	265	320
MVIC32CRUAYF001C250CA002P	3	250 MCM	29.1	29.6	69.5	7150	290	360
MVIC32CRUAYF001C350CA002P	3	350 MCM	31.5	32.0	76.0	9150	355	450
MVIC32CRUAYF001C500CA002P	3	500 MCM	34.5	35.0	82.5	11700	435	550
MVIC32CRUAYF001C600CA002P	3	600 MCM	36.5	37.1	87.0	13500	480	615
MVIC32CRUAYF001C750CA002P	3	750 MCM	39.0	39.5	92.0	15950	540	695
MVIC32CRUAYF001C01KCA002P	3	1000 MCM	42.5	43.0	99.5	19900	620	830

* Current Rating is in accordance with Table 310.16 (20°C Ambient Ground Temperature) and Table 310.17 (30°C Ambient Air Temperature) of National Electric Code

OUR ACCREDITATION



POLYCAB MV MC SCR ICEA S-93-639 25KV

MV Cable with Copper Conductor, EPR Insulation and Copper Screen

ELECTRICAL CHARACTERISTICS:

133% insulation:

No. of Cores	Core Cross sectional Area	Nom. DC Resistance at 25°C	Nom. AC Resistance at 90°C	Approx. Capacitance	Approx. Inductance	Approx. Reactance	Max. pulling tension on conductor	Charging Current per phase	Positive sequence impedance	Electric Stress at Conductor Screen	Short circuit rating	
											Phase conductor	Metallic screen
No.	AWG / MCM	Ω/km	Ω/km	μF/km	mH/km	Ω/km	kN	Amps/Km	Ohms/Km	kV/mm	kA/S	
1	2 AWG	0.531	0.666	0.15	0.47	0.18	2.4	1.39	0.69	5.8	4.8	3.3
1	1 AWG	0.423	0.528	0.16	0.45	0.17	3.0	1.48	0.56	5.6	6.1	3.4
1	1/0 AWG	0.335	0.420	0.17	0.44	0.17	3.7	1.57	0.45	5.3	7.7	3.5
1	2/0 AWG	0.266	0.331	0.18	0.41	0.16	4.7	1.68	0.37	5.1	9.7	3.6
1	3/0 AWG	0.211	0.266	0.19	0.40	0.15	6.0	1.81	0.31	4.9	12.2	3.8
1	4/0 AWG	0.167	0.210	0.21	0.38	0.15	7.5	1.94	0.26	4.7	15.3	3.9
1	250 MCM	0.141	0.177	0.22	0.38	0.14	8.9	2.07	0.23	4.5	18.1	4.1
1	350 MCM	0.101	0.128	0.25	0.35	0.13	12.4	2.32	0.19	4.3	25.4	4.4
1	500 MCM	0.071	0.092	0.28	0.33	0.13	17.7	2.62	0.16	4.1	36.2	4.8
1	600 MCM	0.059	0.076	0.31	0.33	0.12	21.3	2.88	0.15	3.8	43.5	5.1
1	750 MCM	0.047	0.066	0.33	0.32	0.12	26.6	3.11	0.14	3.7	54.4	5.4
1	1000 MCM	0.035	0.052	0.37	0.30	0.11	35.4	3.46	0.13	3.6	72.5	5.9

100% insulation:

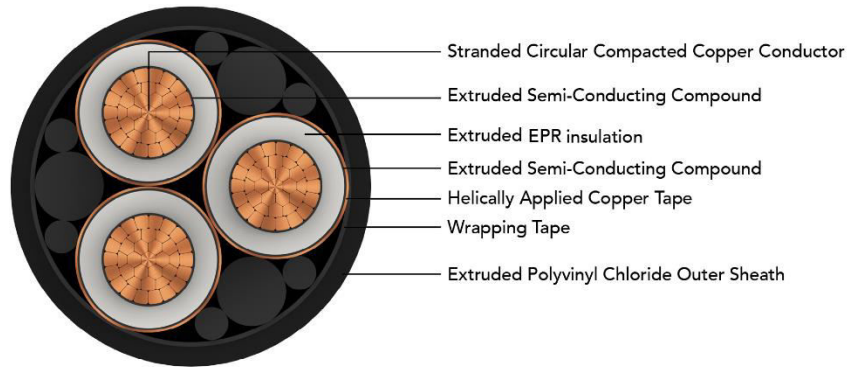
No. of Cores	Core Cross sectional Area	Nom. DC Resistance at 25°C	Nom. AC Resistance at 90°C	Approx. Capacitance	Approx. Inductance	Approx. Reactance	Max. pulling tension on conductor	Charging Current per phase	Positive sequence impedance	Electric Stress at Conductor Screen	Short circuit rating	
											Phase conductor	Metallic screen
No.	AWG / MCM	Ω/km	Ω/km	μF/km	mH/km	Ω/km	kN	Amps/Km	Ohms/Km	kV/mm	kA/S	
1	2 AWG	0.531	0.666	0.17	0.45	0.17	2.4	1.58	1.11	6.5	4.8	2.9
1	1 AWG	0.423	0.528	0.18	0.43	0.16	3.0	1.68	0.88	6.2	6.1	3.0
1	1/0 AWG	0.335	0.420	0.19	0.42	0.16	3.7	1.80	0.71	6.0	7.7	3.1
1	2/0 AWG	0.266	0.331	0.21	0.39	0.15	4.7	1.94	0.57	5.7	9.7	3.2
1	3/0 AWG	0.211	0.266	0.22	0.38	0.14	6.0	2.08	0.46	5.5	12.2	3.4
1	4/0 AWG	0.167	0.210	0.24	0.36	0.14	7.5	2.25	0.37	5.3	15.3	3.6
1	250 MCM	0.141	0.177	0.26	0.36	0.13	8.9	2.41	0.32	5.1	18.1	3.7
1	350 MCM	0.101	0.128	0.29	0.34	0.13	12.4	2.70	0.25	4.9	25.4	4.0
1	500 MCM	0.071	0.092	0.33	0.32	0.12	17.7	3.07	0.19	4.7	36.2	4.4
1	600 MCM	0.059	0.076	0.35	0.31	0.12	21.3	3.32	0.17	4.5	43.5	4.7
1	750 MCM	0.047	0.066	0.38	0.30	0.11	26.6	3.61	0.15	4.4	54.4	5.0
1	1000 MCM	0.035	0.052	0.43	0.29	0.11	35.4	4.03	0.13	4.3	72.5	5.4

OUR ACCREDITATION



POLYCAB MV MC SCR ICEA S-93-639 35KV

MV Cable with Copper Conductor, EPR Insulation and Copper Screen



Outstanding Features

- Flame retardant
- High life
- Sunlight resistant
- Oil, Acid and Alkalies resistant
- Corona resistant
- Treeing resistant
- Moisture resistant

Application

POLYCAB MV 35KV EPR insulated with Copper conductor Three core cable is suitable to use in conduits, ducts, troughs, trays, direct burial in wet and dry conditions for power supply to wide networks.

Voltage Rating

Nominal Voltage: 35kV AC

Operation Temperature

Operating temperature: -35°C to +105°C
 Emergency operating temperature: 140°C
 Max. Short Circuit Temperature: 250°C

Construction

- Conductor: Circular Compacted Copper conductor as per ASTM B496
- Conductor Screen: Extruded Semi-conductive compound
- Insulation: Extruded EPR (TR-XLPE will be provided on demand)
- Insulation Screen: Extruded Semi-conductive compound
- Metallic Insulation Screen: Helically applied copper tape
(Round / Corrugated copper screen will be provided on demand)
- Cores assembled together along with fillers (and ground wire optional)
- Binder: Wrapping tape
- (Armour will be provided on demand)
- Outer Sheath: Extruded Polyvinyl Chloride, Colour: Black
(Alternative Sheath: CPE Outer Sheath or LSZH Outer sheath, and parameters will change accordingly)

Standard and References:

- ASTM B496
- ICEA S-93-639 (NEMA WC-74)
- UL 1072
- UL 1685 / FT-1
- IEEE 1202
- UL 2556

Voltage Rating (kV AC)	High Voltage Test (kV AC)	
	100% level	133% level
35	69	84

Compliance

- Conductor resistance ICEA S-93-639
- Insulation resistance ICEA S-93-639
- Vertical Tray Flame UL 1685
- Smoke Release UL 1685
- Flame Test IEEE 1202



Bending Radius: 7D

D is overall diameter of cable

OUR ACCREDITATION



POLYCAB MV MC SCR ICEA S-93-639 35KV

MV Cable with Copper Conductor, EPR Insulation and Copper Screen

DIMENSIONS, WEIGHT AND AMPACITY:

133% insulation:

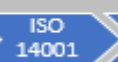
Product Code	No. of Cores	Core Cross sectional Area	Nominal Diameter			Weight (Approx.)	Current rating *	
			Under metallic screen	Over metallic screen	Overall		Directly buried in ground	In air
	No.	AWG / MCM	mm	mm	mm	Kg/Km	Amps	
MVIC46CRUAYF001C002AA001P	3	2 AWG	30.6	31.1	74.0	5450	130	155
MVIC46CRUAYF001C001AA001P	3	1 AWG	31.4	31.9	75.8	5900	150	175
MVIC46CRUAYF001C1X0AA001P	3	1/0 AWG	32.4	32.9	77.8	6350	170	205
MVIC46CRUAYF001C2X0AA001P	3	2/0 AWG	33.4	33.9	80.1	7000	200	240
MVIC46CRUAYF001C3X0AA001P	3	3/0 AWG	34.6	35.1	82.6	7750	225	280
MVIC46CRUAYF001C4X0AA001P	3	4/0 AWG	35.9	36.4	85.5	8600	265	320
MVIC46CRUAYF001C250CA001P	3	250 MCM	37.2	37.7	88.3	9400	290	360
MVIC46CRUAYF001C350CA001P	3	350 MCM	39.6	40.1	93.5	11300	355	450
MVIC46CRUAYF001C500CA001P	3	500 MCM	42.7	43.2	100.0	14000	435	550
MVIC46CRUAYF001C600CA001P	3	600 MCM	45.2	45.7	105.6	16100	480	615
MVIC46CRUAYF001C750CA001P	3	750 MCM	47.6	48.1	110.8	18650	540	695
MVIC46CRUAYF001C01KCA001P	3	1000 MCM	51.2	51.7	118.4	22750	620	830

100% insulation:

Product Code	No. of Cores	Core Cross sectional Area	Nominal Diameter			Weight (Approx.)	Current rating *	
			Under metallic screen	Over metallic screen	Overall		Directly buried in ground	In air
	No.	AWG / MCM	mm	mm	mm	Kg/Km	Amps	
MVIC46CRUAYF001C002AA002P	3	2 AWG	26.8	27.3	64.5	4450	130	155
MVIC46CRUAYF001C001AA002P	3	1 AWG	27.6	28.1	66.3	4800	150	175
MVIC46CRUAYF001C1X0AA002P	3	1/0 AWG	28.5	29.1	68.4	5250	170	205
MVIC46CRUAYF001C2X0AA002P	3	2/0 AWG	29.6	30.1	70.6	5900	200	240
MVIC46CRUAYF001C3X0AA002P	3	3/0 AWG	30.8	31.3	74.4	6800	225	280
MVIC46CRUAYF001C4X0AA002P	3	4/0 AWG	32.1	32.6	77.2	7600	265	320
MVIC46CRUAYF001C250CA002P	3	250 MCM	33.4	33.9	80.0	8400	290	360
MVIC46CRUAYF001C350CA002P	3	350 MCM	35.8	36.3	85.3	10250	355	450
MVIC46CRUAYF001C500CA002P	3	500 MCM	38.8	39.4	91.8	12900	435	550
MVIC46CRUAYF001C600CA002P	3	600 MCM	40.9	41.4	96.2	14750	480	615
MVIC46CRUAYF001C750CA002P	3	750 MCM	43.3	43.8	101.4	17200	540	695
MVIC46CRUAYF001C01KCA002P	3	1000 MCM	46.8	47.3	109.0	21250	620	830

* Current Rating is in accordance with Table 310.16 (20°C Ambient Ground Temperature) and Table 310.17 (30°C Ambient Air Temperature) of National Electric Code

OUR ACCREDITATION



POLYCAB MV MC SCR ICEA S-93-639 35KV

MV Cable with Copper Conductor, EPR Insulation and Copper Screen

ELECTRICAL CHARACTERISTICS:

133% insulation:

No. of Cores	Core Cross sectional Area	Nom. DC Resistance at 25°C	Nom. AC Resistance at 90°C	Approx. Capacitance	Approx. Inductance	Approx. Reactance	Max. pulling tension on conductor	Charging Current per phase	Positive sequence impedance	Electric Stress at Conductor Screen	Short circuit rating	
											Phase conductor	Metallic screen
No.	AWG / MCM	Ω/km	Ω/km	μF/km	mH/km	Ω/km	kN	Amps/Km	Ohms/Km	kV/mm	kA/S	
1	2 AWG	0.531	0.666	0.13	0.51	0.19	2.4	1.66	0.69	7.1	4.8	3.9
1	1 AWG	0.423	0.528	0.13	0.49	0.19	3.0	1.76	0.56	6.7	6.1	4.0
1	1/0 AWG	0.335	0.420	0.14	0.47	0.18	3.7	1.87	0.46	6.4	7.7	4.1
1	2/0 AWG	0.266	0.331	0.15	0.45	0.17	4.7	1.99	0.37	6.1	9.7	4.3
1	3/0 AWG	0.211	0.266	0.16	0.43	0.16	6.0	2.12	0.31	5.8	12.2	4.4
1	4/0 AWG	0.167	0.210	0.17	0.41	0.16	7.5	2.27	0.26	5.5	15.3	4.6
1	250 MCM	0.141	0.177	0.18	0.40	0.15	8.9	2.41	0.23	5.3	18.1	4.7
1	350 MCM	0.101	0.128	0.20	0.38	0.14	12.4	2.68	0.19	5.0	25.4	5.0
1	500 MCM	0.071	0.092	0.23	0.36	0.14	17.7	3.01	0.16	4.7	36.2	5.4
1	600 MCM	0.059	0.076	0.25	0.35	0.13	21.3	3.28	0.15	4.5	43.5	5.7
1	750 MCM	0.047	0.066	0.27	0.34	0.13	26.6	3.54	0.14	4.4	54.4	6.1
1	1000 MCM	0.035	0.052	0.30	0.32	0.12	35.4	3.91	0.13	4.2	72.5	6.5

100% insulation:

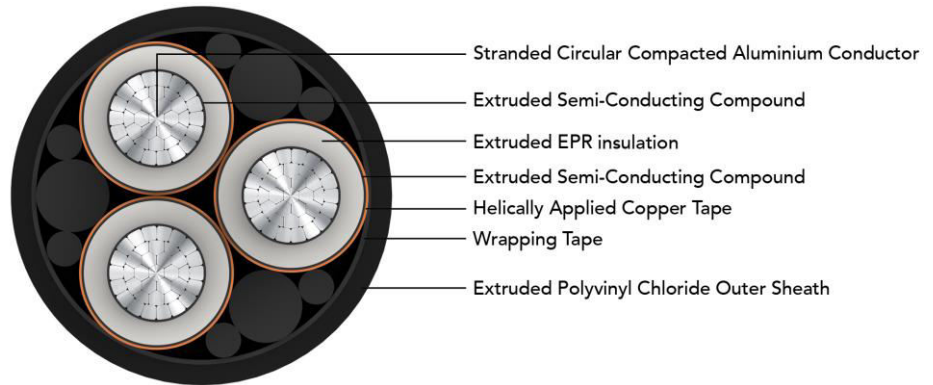
No. of Cores	Core Cross sectional Area	Nom. DC Resistance at 25°C	Nom. AC Resistance at 90°C	Approx. Capacitance	Approx. Inductance	Approx. Reactance	Max. pulling tension on conductor	Charging Current per phase	Positive sequence impedance	Electric Stress at Conductor Screen	Short circuit rating	
											Phase conductor	Metallic screen
No.	AWG / MCM	Ω/km	Ω/km	μF/km	mH/km	Ω/km	kN	Amps/Km	Ohms/Km	kV/mm	kA/S	
1	2 AWG	0.531	0.666	0.14	0.48	0.18	2.4	1.86	1.11	7.8	4.8	3.4
1	1 AWG	0.423	0.528	0.15	0.46	0.18	3.0	1.97	0.89	7.5	6.1	3.5
1	1/0 AWG	0.335	0.420	0.16	0.45	0.17	3.7	2.10	0.71	7.1	7.7	3.7
1	2/0 AWG	0.266	0.331	0.17	0.42	0.16	4.7	2.25	0.57	6.8	9.7	3.8
1	3/0 AWG	0.211	0.266	0.18	0.41	0.15	6.0	2.41	0.46	6.5	12.2	3.9
1	4/0 AWG	0.167	0.210	0.20	0.39	0.15	7.5	2.58	0.38	6.2	15.3	4.1
1	250 MCM	0.141	0.177	0.21	0.38	0.14	8.9	2.75	0.33	6.0	18.1	4.3
1	350 MCM	0.101	0.128	0.23	0.36	0.14	12.4	3.07	0.25	5.7	25.4	4.6
1	500 MCM	0.071	0.092	0.26	0.34	0.13	17.7	3.47	0.19	5.4	36.2	4.9
1	600 MCM	0.059	0.076	0.28	0.33	0.13	21.3	3.73	0.18	5.2	43.5	5.2
1	750 MCM	0.047	0.066	0.31	0.32	0.12	26.6	4.04	0.16	5.1	54.4	5.5
1	1000 MCM	0.035	0.052	0.34	0.31	0.12	35.4	4.49	0.14	4.9	72.5	5.9

OUR ACCREDITATION



POLYCAB MV MC SCR ICEA S-93-639 5KV (or) 8KV

MV Cable with Aluminium Conductor, EPR Insulation and Copper Screen



Outstanding Features

- Flame retardant
- High life
- Sunlight resistant
- Oil, Acid and Alkalies resistant
- Corona resistant
- Treeing resistant
- Moisture resistant

Application

POLYCAB MV 5 KV EPR insulated with Aluminium conductor Three core cable is suitable to use in conduits, ducts, troughs, trays, direct burial in wet and dry conditions for power supply to wide networks.

Voltage Rating

Nominal Voltage: 5kV AC (100% / 133%) or 8kV AC (100%)

Operation Temperature

Operating temperature: -35°C to +105°C
 Emergency operating temperature: 140°C
 Max. Short Circuit Temperature: 250°C

Construction

- Conductor: Circular Compacted Aluminium conductor as per ASTM B496
- Conductor Screen: Extruded Semi-conductive compound
- Insulation: Extruded EPR (TR-XLPE will be provided on demand)
- Insulation Screen: Extruded Semi-conductive compound
- Metallic Insulation Screen: Helically applied copper tape
(Round / Corrugated copper screen will be provided on demand)
- Cores assembled together along with fillers (and ground wire optional)
- Binder: Wrapping tape
- (Armour will be provided on demand)
- Outer Sheath: Extruded Polyvinyl Chloride, Colour: Black
(Alternative Sheath: CPE Outer Sheath or LSZH Outer sheath, and parameters will change accordingly)

Standard and References:

ASTM B496
 ICEA S-93-639 (NEMA WC-74)
 UL 1072
 UL 1685 / FT-1
 IEEE 1202
 UL 2556

Voltage Rating (kV AC)	High Voltage Test (kV AC)	Min. Partial discharge test (kV AC)	
		100% level	133% level
5	18	4	5

Compliance

- Conductor resistance ICEA S-93-639
- Insulation resistance ICEA S-93-639
- Vertical Tray Flame UL 1685
- Smoke Release UL 1685
- Flame Test IEEE 1202



Bending Radius: 7D

D is overall diameter of cable

OUR ACCREDITATION



POLYCAB MV MC SCR ICEA S-93-639 5KV (or) 8KV

MV Cable with Aluminium Conductor, EPR Insulation and Copper Screen

DIMENSIONS, WEIGHT AND AMPACITY:

133% insulation (5kv) and 100% insulation (8kv):

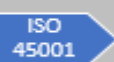
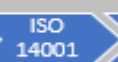
Product Code	No. of Cores	Core Cross sectional Area	Nominal Diameter			Weight (Approx.)	Current rating *	
			Under metallic screen	Over metallic screen	Overall		Directly buried in ground	In air
	No.	AWG / MCM	mm	mm	mm	Kg/Km	Amps	
MVIC36ARUAYF003C002AA001P	3	2 AWG	15.1	15.6	37.5	1600	105	120
MVIC36ARUAYF003C001AA001P	3	1 AWG	15.9	16.4	39.5	1750	115	140
MVIC36ARUAYF003C1X0AA001P	3	1/0 AWG	16.9	17.4	41.5	1950	140	165
MVIC36ARUAYF003C2X0AA001P	3	2/0 AWG	17.9	18.4	44.0	2200	155	190
MVIC36ARUAYF003C3X0AA001P	3	3/0 AWG	19.1	19.6	48.0	2650	175	215
MVIC36ARUAYF003C4X0AA001P	3	4/0 AWG	20.4	20.9	51.0	2950	210	250
MVIC36ARUAYF003C250CA001P	3	250 MCM	21.7	22.2	53.5	3250	230	280
MVIC36ARUAYF003C350CA001P	3	350 MCM	24.1	24.6	59.0	4000	265	355
MVIC36ARUAYF003C500CA001P	3	500 MCM	27.2	27.7	65.5	4950	355	430
MVIC36ARUAYF003C600CA001P	3	600 MCM	29.7	30.2	72.0	6000	390	485
MVIC36ARUAYF003C750CA001P	3	750 MCM	32.1	32.7	77.5	6900	440	555
MVIC36ARUAYF003C01KCA001P	3	1000 MCM	35.7	36.2	85.0	8350	505	665

100% insulation (5kv):

Product Code	No. of Cores	Core Cross sectional Area	Nominal Diameter			Weight (Approx.)	Current rating *	
			Under metallic screen	Over metallic screen	Overall		Directly buried in ground	In air
	No.	AWG / MCM	mm	mm	mm	Kg/Km	Amps	
MVIC36ARUAYF003C002AA002P	3	2 AWG	13.8	14.3	35.0	1450	105	120
MVIC36ARUAYF003C001AA002P	3	1 AWG	14.7	15.2	37.0	1600	115	140
MVIC36ARUAYF003C1X0AA002P	3	1/0 AWG	15.6	16.1	39.0	1750	140	165
MVIC36ARUAYF003C2X0AA002P	3	2/0 AWG	16.6	17.2	41.0	2050	155	190
MVIC36ARUAYF003C3X0AA002P	3	3/0 AWG	17.8	18.3	43.5	2300	175	215
MVIC36ARUAYF003C4X0AA002P	3	4/0 AWG	19.2	19.7	48.0	2750	210	250
MVIC36ARUAYF003C250CA002P	3	250 MCM	20.4	20.9	51.0	3050	230	280
MVIC36ARUAYF003C350CA002P	3	350 MCM	22.9	23.4	56.0	3750	265	355
MVIC36ARUAYF003C500CA002P	3	500 MCM	25.9	26.4	62.5	4700	355	430
MVIC36ARUAYF003C600CA002P	3	600 MCM	27.9	28.4	67.0	5400	390	485
MVIC36ARUAYF003C750CA002P	3	750 MCM	30.3	30.8	73.5	6450	440	555
MVIC36ARUAYF003C01KCA002P	3	1000 MCM	33.8	34.3	81.0	7850	505	665

* Current Rating is in accordance with Table 310.16 (20°C Ambient Ground Temperature) and Table 310.17 (30°C Ambient Air Temperature) of National Electric Code

OUR ACCREDITATION



POLYCAB MV MC SCR ICEA S-93-639 5KV (or) 8KV

MV Cable with Aluminium Conductor, EPR Insulation and Copper Screen

ELECTRICAL CHARACTERISTICS:

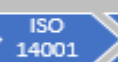
133% insulation:

No. of Cores	Core Cross sectional Area	Nom. DC Resistance at 25°C	Nom. AC Resistance at 90°C	Approx. Capacitance	Approx. Inductance	Approx. Reactance	Max. pulling tension on conductor	Charging Current per phase	Positive sequence impedance	Electric Stress at Conductor Screen	Short circuit rating	
											Phase conductor	Metallic screen
No.	AWG / MCM	Ω/km	Ω/km	μF/km	mH/km	Ω/km	kN	Amps/Km	Ohms/Km	kV/mm	kA/S	
1	2 AWG	0.531	0.666	0.30	0.37	0.14	1.7	0.56	1.11	2.1	3.0	2.0
1	1 AWG	0.423	0.528	0.32	0.36	0.13	2.1	0.60	0.88	2.1	3.8	2.1
1	1/0 AWG	0.335	0.420	0.35	0.34	0.13	2.7	0.66	0.71	2.0	4.8	2.2
1	2/0 AWG	0.266	0.331	0.38	0.32	0.12	3.4	0.71	0.56	1.9	6.0	2.3
1	3/0 AWG	0.211	0.266	0.41	0.31	0.12	4.3	0.78	0.45	1.9	7.6	2.5
1	4/0 AWG	0.167	0.210	0.45	0.30	0.11	5.4	0.85	0.37	1.9	9.6	2.6
1	250 MCM	0.141	0.177	0.49	0.30	0.11	6.4	0.92	0.31	1.8	11.3	2.8
1	350 MCM	0.101	0.128	0.56	0.28	0.11	8.9	1.05	0.24	1.7	15.9	3.1
1	500 MCM	0.071	0.092	0.64	0.27	0.10	12.8	1.21	0.18	1.7	22.6	3.5
1	600 MCM	0.059	0.076	0.72	0.27	0.10	15.3	1.35	0.16	1.5	27.2	3.8
1	750 MCM	0.047	0.066	0.79	0.26	0.10	19.2	1.48	0.14	1.5	34.0	4.1
1	1000 MCM	0.035	0.052	0.89	0.25	0.10	25.5	1.67	0.12	1.5	45.3	4.5

100% insulation:

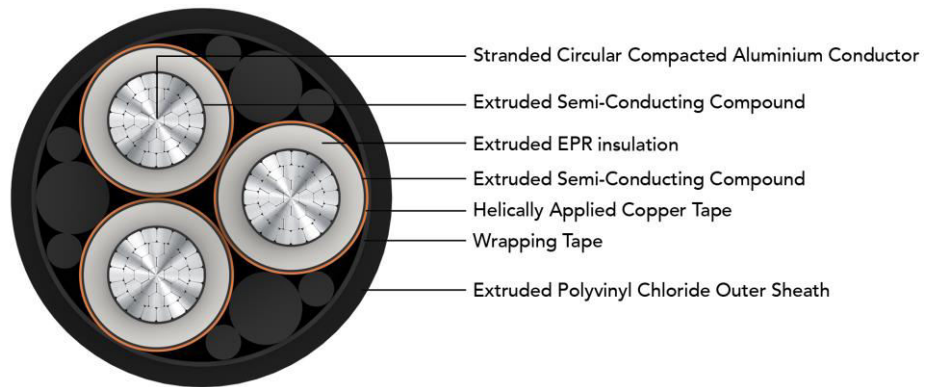
No. of Cores	Core Cross sectional Area	Nom. DC Resistance at 25°C	Nom. AC Resistance at 90°C	Approx. Capacitance	Approx. Inductance	Approx. Reactance	Max. pulling tension on conductor	Charging Current per phase	Positive sequence impedance	Electric Stress at Conductor Screen	Short circuit rating	
											Phase conductor	Metallic screen
No.	AWG / MCM	Ω/km	Ω/km	μF/km	mH/km	Ω/km	kN	Amps/Km	Ohms/Km	kV/mm	kA/S	
1	2 AWG	0.531	0.666	0.36	0.35	0.13	1.7	0.68	1.11	2.5	3.0	1.8
1	1 AWG	0.423	0.528	0.39	0.34	0.13	2.1	0.73	0.88	2.4	3.8	1.9
1	1/0 AWG	0.335	0.420	0.42	0.33	0.12	2.7	0.80	0.71	2.4	4.8	2.0
1	2/0 AWG	0.266	0.331	0.46	0.31	0.12	3.4	0.87	0.56	2.3	6.0	2.2
1	3/0 AWG	0.211	0.266	0.51	0.30	0.11	4.3	0.95	0.45	2.2	7.6	2.3
1	4/0 AWG	0.167	0.210	0.56	0.29	0.11	5.4	1.05	0.36	2.2	9.6	2.5
1	250 MCM	0.141	0.177	0.60	0.29	0.11	6.4	1.14	0.31	2.1	11.3	2.6
1	350 MCM	0.101	0.128	0.69	0.27	0.10	8.9	1.30	0.24	2.0	15.9	2.9
1	500 MCM	0.071	0.092	0.80	0.26	0.10	12.8	1.51	0.18	2.0	22.6	3.3
1	600 MCM	0.059	0.076	0.88	0.26	0.10	15.3	1.65	0.16	1.9	27.2	3.6
1	750 MCM	0.047	0.066	0.96	0.25	0.09	19.2	1.82	0.14	1.9	34.0	3.9
1	1000 MCM	0.035	0.052	1.09	0.24	0.09	25.5	2.06	0.12	1.9	45.3	4.3

OUR ACCREDITATION



POLYCAB MV MC SCR ICEA S-93-639 8KV

MV Cable with Aluminium Conductor, EPR Insulation and Copper Screen



Outstanding Features

- Flame retardant
- High life
- Sunlight resistant
- Oil, Acid and Alkalies resistant
- Corona resistant
- Treeing resistant
- Moisture resistant

Application

POLYCAB MV 8KV EPR insulated with Aluminium conductor Three core cable is suitable to use in conduits, ducts, troughs, trays, direct burial in wet and dry conditions for power supply to wide networks.

Voltage Rating

Nominal Voltage: 8kV AC

Operation Temperature

Operating temperature: -35°C to +105°C
 Emergency operating temperature: 140°C
 Max. Short Circuit Temperature: 250°C

Construction

- Conductor: Circular Compacted Aluminium conductor as per ASTM B496
- Conductor Screen: Extruded Semi-conductive compound
- Insulation: Extruded EPR (TR-XLPE will be provided on demand)
- Insulation Screen: Extruded Semi-conductive compound
- Metallic Insulation Screen: Helically applied copper tape
(Round / Corrugated copper screen will be provided on demand)
- Cores assembled together along with fillers (and ground wire optional)
- Binder: Wrapping tape
- (Armour will be provided on demand)
- Outer Sheath: Extruded Polyvinyl Chloride, Colour: Black
(Alternative Sheath: CPE Outer Sheath or LSZH Outer sheath, and parameters will change accordingly)

Standard and References:

- ASTM B496
- ICEA S-93-639 (NEMA WC-74)
- UL 1072
- UL 1685 / FT-1
- IEEE 1202
- UL 2556

Voltage Rating (kV AC)	High Voltage Test (kV AC)		Min. Partial discharge test (kV AC)	
	100% level	133% level	100% level	133% level
8	23	28	6	8

Compliance

- Conductor resistance ICEA S-93-639
- Insulation resistance ICEA S-93-639
- Vertical Tray Flame UL 1685
- Smoke Release UL 1685
- Flame Test IEEE 1202



Bending Radius: 7D

D is overall diameter of cable

OUR ACCREDITATION



POLYCAB MV MC SCR ICEA S-93-639 8KV

MV Cable with Aluminium Conductor, EPR Insulation and Copper Screen

DIMENSIONS, WEIGHT AND AMPACITY:

133% insulation:

Product Code	No. of Cores	Core Cross sectional Area	Nominal Diameter			Weight (Approx.)	Current rating *	
			Under metallic screen	Over metallic screen	Overall		Directly buried in ground	In air
	No.	AWG / MCM	mm	mm	mm	Kg/Km	Amps	
MVIC48ARUAYF003C002AA001P	3	2 AWG	16.4	16.9	40.5	1800	105	120
MVIC48ARUAYF003C001AA001P	3	1 AWG	17.2	17.7	42.5	1950	115	140
MVIC48ARUAYF003C1X0AA001P	3	1/0 AWG	18.1	18.6	46.0	2300	140	165
MVIC48ARUAYF003C2X0AA001P	3	2/0 AWG	19.2	19.7	48.0	2600	155	190
MVIC48ARUAYF003C3X0AA001P	3	3/0 AWG	20.4	20.9	50.5	2850	175	215
MVIC48ARUAYF003C4X0AA001P	3	4/0 AWG	21.7	22.2	53.5	3200	210	250
MVIC48ARUAYF003C250CA001P	3	250 MCM	23.0	23.5	56.5	3500	230	280
MVIC48ARUAYF003C350CA001P	3	350 MCM	25.4	25.9	61.5	4250	265	355
MVIC48ARUAYF003C500CA001P	3	500 MCM	28.4	28.9	68.0	5250	355	430
MVIC48ARUAYF003C600CA001P	3	600 MCM	31.0	31.5	75.0	6300	390	485
MVIC48ARUAYF003C750CA001P	3	750 MCM	33.4	33.9	80.0	7200	440	555
MVIC48ARUAYF003C01KCA001P	3	1000 MCM	36.9	37.4	87.5	8700	505	665

100% insulation:

Product Code	No. of Cores	Core Cross sectional Area	Nominal Diameter			Weight (Approx.)	Current rating *	
			Under metallic screen	Over metallic screen	Overall		Directly buried in ground	In air
	No.	AWG / MCM	mm	mm	mm	Kg/Km	Amps	
MVIC48ARUAYF003C002AA002P	3	2 AWG	15.1	15.6	37.5	1600	105	120
MVIC48ARUAYF003C001AA002P	3	1 AWG	15.9	16.4	39.5	1750	115	140
MVIC48ARUAYF003C1X0AA002P	3	1/0 AWG	16.9	17.4	41.5	1950	140	165
MVIC48ARUAYF003C2X0AA002P	3	2/0 AWG	17.9	18.4	44.0	2200	155	190
MVIC48ARUAYF003C3X0AA002P	3	3/0 AWG	19.1	19.6	48.0	2650	175	215
MVIC48ARUAYF003C4X0AA002P	3	4/0 AWG	20.4	20.9	51.0	2950	210	250
MVIC48ARUAYF003C250CA002P	3	250 MCM	21.7	22.2	53.5	3250	230	280
MVIC48ARUAYF003C350CA002P	3	350 MCM	24.1	24.6	59.0	4000	265	355
MVIC48ARUAYF003C500CA002P	3	500 MCM	27.2	27.7	65.5	4950	355	430
MVIC48ARUAYF003C600CA002P	3	600 MCM	29.7	30.2	72.0	6000	390	485
MVIC48ARUAYF003C750CA002P	3	750 MCM	32.1	32.7	77.5	6900	440	555
MVIC48ARUAYF003C01KCA002P	3	1000 MCM	35.7	36.2	85.0	8350	505	665

* Current Rating is based on Table 310.16 (20°C Ambient Ground Temperature) and Table 310.17 (30°C Ambient Air Temperature) of National Electric Code

OUR ACCREDITATION



POLYCAB MV MC SCR ICEA S-93-639 8KV

MV Cable with Aluminium Conductor, EPR Insulation and Copper Screen

ELECTRICAL CHARACTERISTICS:

133% insulation:

No. of Cores	Core Cross sectional Area	Nom. DC Resistance at 25°C	Nom. AC Resistance at 90°C	Approx. Capacitance	Approx. Inductance	Approx. Reactance	Max. pulling tension on conductor	Charging Current per phase	Positive sequence impedance	Electric Stress at Conductor Screen	Short circuit rating	
											Phase conductor	Metallic screen
No.	AWG / MCM	Ω/km	Ω/km	μF/km	mH/km	Ω/km	kN	Amps/Km	Ohms/Km	kV/mm	kA/S	
1	2 AWG	0.531	0.666	0.26	0.38	0.15	1.7	0.77	1.11	3.0	3.0	2.1
1	1 AWG	0.423	0.528	0.28	0.37	0.14	2.1	0.83	0.88	2.9	3.8	2.2
1	1/0 AWG	0.335	0.420	0.30	0.36	0.14	2.7	0.90	0.71	2.8	4.8	2.3
1	2/0 AWG	0.266	0.331	0.32	0.34	0.13	3.4	0.98	0.56	2.7	6.0	2.5
1	3/0 AWG	0.211	0.266	0.35	0.33	0.12	4.3	1.06	0.45	2.7	7.6	2.6
1	4/0 AWG	0.167	0.210	0.38	0.32	0.12	5.4	1.16	0.37	2.6	9.6	2.8
1	250 MCM	0.141	0.177	0.41	0.31	0.12	6.4	1.25	0.32	2.5	11.3	3.0
1	350 MCM	0.101	0.128	0.47	0.29	0.11	8.9	1.42	0.24	2.4	15.9	3.3
1	500 MCM	0.071	0.092	0.54	0.28	0.11	12.8	1.64	0.18	2.3	22.6	3.6
1	600 MCM	0.059	0.076	0.60	0.28	0.10	15.3	1.82	0.16	2.1	27.2	4.0
1	750 MCM	0.047	0.066	0.66	0.27	0.10	19.2	1.99	0.14	2.1	34.0	4.3
1	1000 MCM	0.035	0.052	0.74	0.26	0.10	25.5	2.24	0.12	2.1	45.3	4.7

100% insulation:

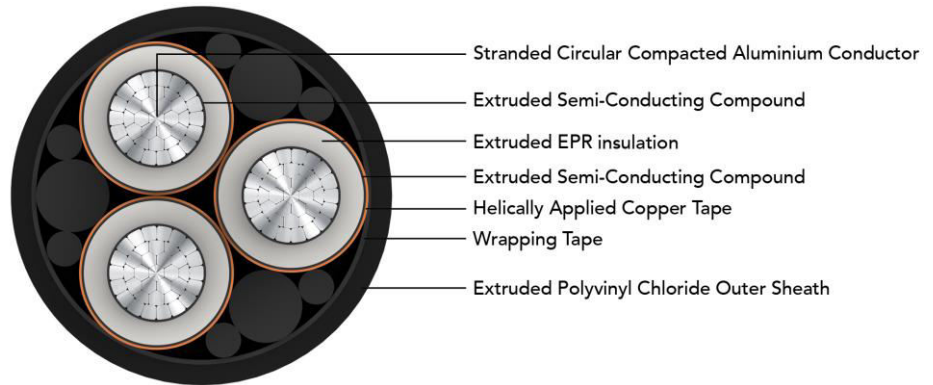
No. of Cores	Core Cross sectional Area	Nom. DC Resistance at 25°C	Nom. AC Resistance at 90°C	Approx. Capacitance	Approx. Inductance	Approx. Reactance	Max. pulling tension on conductor	Charging Current per phase	Positive sequence impedance	Electric Stress at Conductor Screen	Short circuit rating	
											Phase conductor	Metallic screen
No.	AWG / MCM	Ω/km	Ω/km	μF/km	mH/km	Ω/km	kN	Amps/Km	Ohms/Km	kV/mm	kA/S	
1	2 AWG	0.531	0.666	0.30	0.37	0.14	1.7	0.56	1.11	2.1	3.0	2.0
1	1 AWG	0.423	0.528	0.32	0.36	0.13	2.1	0.60	0.88	2.1	3.8	2.1
1	1/0 AWG	0.335	0.420	0.35	0.34	0.13	2.7	0.66	0.71	2.0	4.8	2.2
1	2/0 AWG	0.266	0.331	0.38	0.32	0.12	3.4	0.71	0.56	1.9	6.0	2.3
1	3/0 AWG	0.211	0.266	0.41	0.31	0.12	4.3	0.78	0.45	1.9	7.6	2.5
1	4/0 AWG	0.167	0.210	0.45	0.30	0.11	5.4	0.85	0.37	1.9	9.6	2.6
1	250 MCM	0.141	0.177	0.49	0.30	0.11	6.4	0.92	0.31	1.8	11.3	2.8
1	350 MCM	0.101	0.128	0.56	0.28	0.11	8.9	1.05	0.24	1.7	15.9	3.1
1	500 MCM	0.071	0.092	0.64	0.27	0.10	12.8	1.21	0.18	1.7	22.6	3.5
1	600 MCM	0.059	0.076	0.72	0.27	0.10	15.3	1.35	0.16	1.5	27.2	3.8
1	750 MCM	0.047	0.066	0.79	0.26	0.10	19.2	1.48	0.14	1.5	34.0	4.1
1	1000 MCM	0.035	0.052	0.89	0.25	0.10	25.5	1.67	0.12	1.5	45.3	4.5

OUR ACCREDITATION



POLYCAB MV MC SCR ICEA S-93-639 15KV

MV Cable with Aluminium Conductor, EPR Insulation and Copper Screen



Outstanding Features

- Flame retardant
- High life
- Sunlight resistant
- Oil, Acid and Alkalies resistant
- Corona resistant
- Treeing resistant
- Moisture resistant

Application

POLYCAB MV 15KV EPR insulated with Aluminium conductor Three core cable is suitable to use in conduits, ducts, troughs, trays, direct burial in wet and dry conditions for power supply to wide networks.

Voltage Rating

Nominal Voltage: 15kV AC

Operation Temperature

Operating temperature: -35°C to +105°C
 Emergency operating temperature: 140°C
 Max. Short Circuit Temperature: 250°C

Construction

- Conductor: Circular Compacted Aluminium conductor as per ASTM B496
- Conductor Screen: Extruded Semi-conductive compound
- Insulation: Extruded EPR (TR-XLPE will be provided on demand)
- Insulation Screen: Extruded Semi-conductive compound
- Metallic Insulation Screen: Helically applied copper tape
(Round / Corrugated copper screen will be provided on demand)
- Cores assembled together along with fillers (and ground wire optional)
- Binder: Wrapping tape
- (Armour will be provided on demand)
- Outer Sheath: Extruded Polyvinyl Chloride, Colour: Black
(Alternative Sheath: CPE Outer Sheath or LSZH Outer sheath, and parameters will change accordingly)

Standard and References:

- ASTM B496
- ICEA S-93-639 (NEMA WC-74)
- UL 1072
- UL 1685 / FT-1
- IEEE 1202
- UL 2556

Voltage Rating (kV AC)	High Voltage Test (kV AC)		Min. Partial discharge test (kV AC)	
	100% level	133% level	100% level	133% level
15	35	44	11	15

Compliance

- Conductor resistance ICEA S-93-639
- Insulation resistance ICEA S-93-639
- Vertical Tray Flame UL 1685
- Smoke Release UL 1685
- Flame Test IEEE 1202



Bending Radius: 7D

D is overall diameter of cable

OUR ACCREDITATION



POLYCAB MV MC SCR ICEA S-93-639 15KV

MV Cable with Aluminium Conductor, EPR Insulation and Copper Screen

DIMENSIONS, WEIGHT AND AMPACITY:

133% insulation:

Product Code	No. of Cores	Core Cross sectional Area	Nominal Diameter			Weight (Approx.)	Current rating *	
			Under metallic screen	Over metallic screen	Overall		Directly buried in ground	In air
	No.	AWG / MCM	mm	mm	mm	Kg/Km	Amps	
MVIC37ARUAYF003C002AA001P	3	2 AWG	20.4	20.9	51.0	2600	105	120
MVIC37ARUAYF003C001AA001P	3	1 AWG	21.3	21.8	52.5	2750	115	140
MVIC37ARUAYF003C1X0AA001P	3	1/0 AWG	22.2	22.7	54.5	3000	140	165
MVIC37ARUAYF003C2X0AA001P	3	2/0 AWG	23.3	23.8	57.0	3300	155	190
MVIC37ARUAYF003C3X0AA001P	3	3/0 AWG	24.4	24.9	59.5	3600	175	215
MVIC37ARUAYF003C4X0AA001P	3	4/0 AWG	25.8	26.3	62.5	3950	210	250
MVIC37ARUAYF003C250CA001P	3	250 MCM	27.0	27.6	65.0	4300	230	280
MVIC37ARUAYF003C350CA001P	3	350 MCM	29.5	30.0	70.5	5100	265	355
MVIC37ARUAYF003C500CA001P	3	500 MCM	32.5	33.0	78.0	6400	355	430
MVIC37ARUAYF003C600CA001P	3	600 MCM	35.1	35.6	83.5	7350	390	485
MVIC37ARUAYF003C750CA001P	3	750 MCM	37.5	38.0	89.0	8300	440	555
MVIC37ARUAYF003C01KCA001P	3	1000 MCM	41.0	41.5	96.5	9850	505	665

100% insulation:

Product Code	No. of Cores	Core Cross sectional Area	Nominal Diameter			Weight (Approx.)	Current rating *	
			Under metallic screen	Over metallic screen	Overall		Directly buried in ground	In air
	No.	AWG / MCM	mm	mm	mm	Kg/Km	Amps	
MVIC37ARUAYF003C002AA002P	3	2 AWG	18.1	18.7	46.0	2200	105	120
MVIC37ARUAYF003C001AA002P	3	1 AWG	19.0	19.5	47.5	2400	115	140
MVIC37ARUAYF003C1X0AA002P	3	1/0 AWG	19.9	20.4	49.5	2600	140	165
MVIC37ARUAYF003C2X0AA002P	3	2/0 AWG	21.0	21.5	52.0	2900	155	190
MVIC37ARUAYF003C3X0AA002P	3	3/0 AWG	22.2	22.7	54.5	3150	175	215
MVIC37ARUAYF003C4X0AA002P	3	4/0 AWG	23.5	24.0	57.5	3500	210	250
MVIC37ARUAYF003C250CA002P	3	250 MCM	24.8	25.3	60.0	3850	230	280
MVIC37ARUAYF003C350CA002P	3	350 MCM	27.2	27.7	65.5	4600	265	355
MVIC37ARUAYF003C500CA002P	3	500 MCM	30.2	30.7	73.0	5850	355	430
MVIC37ARUAYF003C600CA002P	3	600 MCM	32.2	32.7	77.5	6600	390	485
MVIC37ARUAYF003C750CA002P	3	750 MCM	34.6	35.1	82.5	7550	440	555
MVIC37ARUAYF003C01KCA002P	3	1000 MCM	38.2	38.7	90.5	9050	505	665

* Current Rating is based on Table 310.16 (20°C Ambient Ground Temperature) and Table 310.17 (30°C Ambient Air Temperature) of National Electric Code

OUR ACCREDITATION



POLYCAB MV MC SCR ICEA S-93-639 15KV

MV Cable with Aluminium Conductor, EPR Insulation and Copper Screen

ELECTRICAL CHARACTERISTICS:

133% insulation:

No. of Cores	Core Cross sectional Area	Nom. DC Resistance at 25°C	Nom. AC Resistance at 90°C	Approx. Capacitance	Approx. Inductance	Approx. Reactance	Max. pulling tension on conductor	Charging Current per phase	Positive sequence impedance	Electric Stress at Conductor Screen	Short circuit rating	
											Phase conductor	Metallic screen
No.	AWG / MCM	Ω/km	Ω/km	μF/km	mH/km	Ω/km	kN	Amps/Km	Ohms/Km	kV/mm	kA/S	
1	2 AWG	0.531	0.666	0.19	0.43	0.16	1.7	1.05	1.11	4.3	3.0	2.6
1	1 AWG	0.423	0.528	0.20	0.41	0.16	2.1	1.13	0.89	4.1	3.8	2.7
1	1/0 AWG	0.335	0.420	0.21	0.40	0.15	2.7	1.21	0.71	4.0	4.8	2.9
1	2/0 AWG	0.266	0.331	0.23	0.38	0.14	3.4	1.30	0.57	3.8	6.0	3.0
1	3/0 AWG	0.211	0.266	0.25	0.36	0.14	4.3	1.41	0.46	3.7	7.6	3.1
1	4/0 AWG	0.167	0.210	0.27	0.35	0.13	5.4	1.52	0.37	3.6	9.6	3.3
1	250 MCM	0.141	0.177	0.29	0.34	0.13	6.4	1.64	0.32	3.4	11.3	3.5
1	350 MCM	0.101	0.128	0.33	0.32	0.12	8.9	1.84	0.24	3.3	15.9	3.8
1	500 MCM	0.071	0.092	0.37	0.31	0.12	12.8	2.11	0.19	3.2	22.6	4.1
1	600 MCM	0.059	0.076	0.41	0.30	0.11	15.3	2.33	0.17	3.0	27.2	4.5
1	750 MCM	0.047	0.066	0.45	0.29	0.11	19.2	2.53	0.15	2.9	34.0	4.8
1	1000 MCM	0.035	0.052	0.50	0.28	0.11	25.5	2.83	0.13	2.8	45.3	5.2

100% insulation:

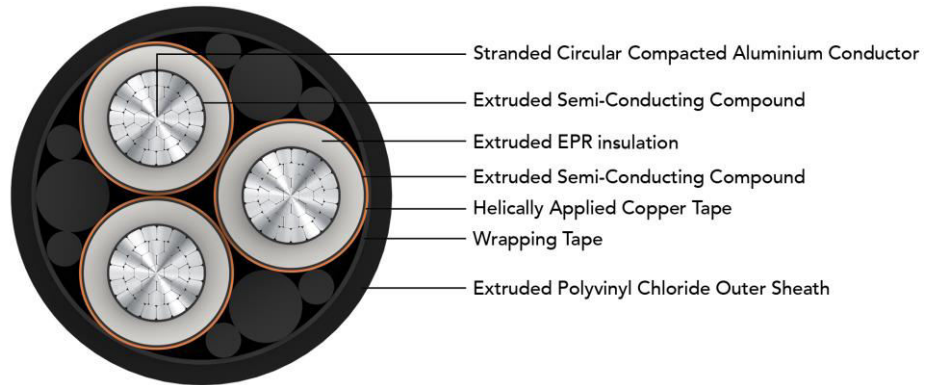
No. of Cores	Core Cross sectional Area	Nom. DC Resistance at 25°C	Nom. AC Resistance at 90°C	Approx. Capacitance	Approx. Inductance	Approx. Reactance	Max. pulling tension on conductor	Charging Current per phase	Positive sequence impedance	Electric Stress at Conductor Screen	Short circuit rating	
											Phase conductor	Metallic screen
No.	AWG / MCM	Ω/km	Ω/km	μF/km	mH/km	Ω/km	kN	Amps/Km	Ohms/Km	kV/mm	kA/S	
1	2 AWG	0.531	0.666	0.22	0.40	0.15	1.7	1.23	1.11	4.9	3.0	2.3
1	1 AWG	0.423	0.528	0.23	0.39	0.15	2.1	1.32	0.88	4.8	3.8	2.5
1	1/0 AWG	0.335	0.420	0.25	0.38	0.14	2.7	1.43	0.71	4.6	4.8	2.6
1	2/0 AWG	0.266	0.331	0.27	0.35	0.13	3.4	1.54	0.57	4.4	6.0	2.7
1	3/0 AWG	0.211	0.266	0.30	0.34	0.13	4.3	1.67	0.45	4.3	7.6	2.9
1	4/0 AWG	0.167	0.210	0.32	0.33	0.12	5.4	1.81	0.37	4.2	9.6	3.0
1	250 MCM	0.141	0.177	0.35	0.32	0.12	6.4	1.95	0.32	4.0	11.3	3.2
1	350 MCM	0.101	0.128	0.39	0.31	0.12	8.9	2.22	0.24	3.9	15.9	3.5
1	500 MCM	0.071	0.092	0.45	0.29	0.11	12.8	2.54	0.18	3.7	22.6	3.9
1	600 MCM	0.059	0.076	0.49	0.29	0.11	15.3	2.76	0.17	3.6	27.2	4.1
1	750 MCM	0.047	0.066	0.53	0.28	0.10	19.2	3.01	0.15	3.5	34.0	4.4
1	1000 MCM	0.035	0.052	0.60	0.27	0.10	25.5	3.39	0.13	3.5	45.3	4.9

OUR ACCREDITATION



POLYCAB MV MC SCR ICEA S-93-639 25KV

MV Cable with Aluminium Conductor, EPR Insulation and Copper Screen



Outstanding Features

- Flame retardant
- High life
- Sunlight resistant
- Oil, Acid and Alkalies resistant
- Corona resistant
- Treeing resistant
- Moisture resistant

Application

POLYCAB MV 25KV EPR insulated with Aluminium conductor Three core cable is suitable to use in conduits, ducts, troughs, trays, direct burial in wet and dry conditions for power supply to wide networks.

Voltage Rating

Nominal Voltage: 25kV AC

Operation Temperature

Operating temperature: -35°C to +105°C
 Emergency operating temperature: 140°C
 Max. Short Circuit Temperature: 250°C

Construction

- Conductor: Circular Compacted Aluminium conductor as per ASTM B496
- Conductor Screen: Extruded Semi-conductive compound
- Insulation: Extruded EPR (TR-XLPE will be provided on demand)
- Insulation Screen: Extruded Semi-conductive compound
- Metallic Insulation Screen: Helically applied copper tape
(Round / Corrugated copper screen will be provided on demand)
- Cores assembled together along with fillers (and ground wire optional)
- Binder: Wrapping tape
- (Armour will be provided on demand)
- Outer Sheath: Extruded Polyvinyl Chloride, Colour: Black
(Alternative Sheath: CPE Outer Sheath or LSZH Outer sheath, and parameters will change accordingly)

Standard and References:

- ASTM B496
- ICEA S-93-639 (NEMA WC-74)
- UL 1072
- UL 1685 / FT-1
- IEEE 1202
- UL 2556

Voltage Rating (kV AC)	High Voltage Test (kV AC)	
	100% level	133% level
25	52	64

Compliance

- Conductor resistance ICEA S-93-639
- Insulation resistance ICEA S-93-639
- Vertical Tray Flame UL 1685
- Smoke Release UL 1685
- Flame Test IEEE 1202



Bending Radius: 7D

D is overall diameter of cable

OUR ACCREDITATION



POLYCAB MV MC SCR ICEA S-93-639 25KV

MV Cable with Aluminium Conductor, EPR Insulation and Copper Screen

DIMENSIONS, WEIGHT AND AMPACITY:

133% insulation:

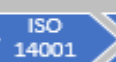
Product Code	No. of Cores	Core Cross sectional Area	Nominal Diameter			Weight (Approx.)	Current rating *	
			Under metallic screen	Over metallic screen	Overall		Directly buried in ground	In air
	No.	AWG / MCM	mm	mm	mm	Kg/Km	Amps	
MVIC32ARUAYF001C002AA001P	3	2 AWG	25.5	26.0	62.0	3550	105	120
MVIC32ARUAYF001C001AA001P	3	1 AWG	26.3	26.9	63.5	3750	115	140
MVIC32ARUAYF001C1X0AA001P	3	1/0 AWG	27.3	27.8	65.5	4000	140	165
MVIC32ARUAYF001C2X0AA001P	3	2/0 AWG	28.3	28.8	68.0	4350	155	190
MVIC32ARUAYF001C3X0AA001P	3	3/0 AWG	29.5	30.0	70.5	4650	175	215
MVIC32ARUAYF001C4X0AA001P	3	4/0 AWG	30.8	31.3	74.5	5250	210	250
MVIC32ARUAYF001C250CA001P	3	250 MCM	32.1	32.6	77.5	5650	230	280
MVIC32ARUAYF001C350CA001P	3	350 MCM	34.5	35.1	82.5	6550	265	355
MVIC32ARUAYF001C500CA001P	3	500 MCM	37.6	38.1	89.0	7750	355	430
MVIC32ARUAYF001C600CA001P	3	600 MCM	40.2	40.7	94.5	8750	390	485
MVIC32ARUAYF001C750CA001P	3	750 MCM	42.6	43.1	100.0	9800	440	555
MVIC32ARUAYF001C01KCA001P	3	1000 MCM	46.1	46.6	107.5	11450	505	665

100% insulation:

Product Code	No. of Cores	Core Cross sectional Area	Nominal Diameter			Weight (Approx.)	Current rating *	
			Under metallic screen	Over metallic screen	Overall		Directly buried in ground	In air
	No.	AWG / MCM	mm	mm	mm	Kg/Km	Amps	
MVIC32ARUAYF001C002AA002P	3	2 AWG	22.5	23.0	55.0	2950	105	120
MVIC32ARUAYF001C001AA002P	3	1 AWG	23.3	23.8	57.0	3150	115	140
MVIC32ARUAYF001C1X0AA002P	3	1/0 AWG	24.2	24.7	59.0	3350	140	165
MVIC32ARUAYF001C2X0AA002P	3	2/0 AWG	25.3	25.8	61.5	3700	155	190
MVIC32ARUAYF001C3X0AA002P	3	3/0 AWG	26.5	27.0	64.0	4000	175	215
MVIC32ARUAYF001C4X0AA002P	3	4/0 AWG	27.8	28.3	66.5	4400	210	250
MVIC32ARUAYF001C250CA002P	3	250 MCM	29.1	29.6	69.5	4750	230	280
MVIC32ARUAYF001C350CA002P	3	350 MCM	31.5	32.0	76.0	5750	265	355
MVIC32ARUAYF001C500CA002P	3	500 MCM	34.5	35.0	82.5	6900	355	430
MVIC32ARUAYF001C600CA002P	3	600 MCM	36.5	37.1	87.0	7750	390	485
MVIC32ARUAYF001C750CA002P	3	750 MCM	39.0	39.5	92.0	8750	440	555
MVIC32ARUAYF001C01KCA002P	3	1000 MCM	42.5	43.0	99.5	10300	505	665

* Current Rating is based on Table 310.16 (20°C Ambient Ground Temperature) and Table 310.17 (30°C Ambient Air Temperature) of National Electric Code

OUR ACCREDITATION



POLYCAB MV MC SCR ICEA S-93-639 25KV

MV Cable with Aluminium Conductor, EPR Insulation and Copper Screen

ELECTRICAL CHARACTERISTICS:

133% insulation:

No. of Cores	Core Cross sectional Area	Nom. DC Resistance at 25°C	Nom. AC Resistance at 90°C	Approx. Capacitance	Approx. Inductance	Approx. Reactance	Max. pulling tension on conductor	Charging Current per phase	Positive sequence impedance	Electric Stress at Conductor Screen	Short circuit rating	
											Phase conductor	Metallic screen
No.	AWG / MCM	Ω/km	Ω/km	μF/km	mH/km	Ω/km	kN	Amps/Km	Ohms/Km	kV/mm	kA/S	
1	2 AWG	0.531	0.666	0.15	0.47	0.18	2.4	1.39	1.11	5.8	3.0	3.3
1	1 AWG	0.423	0.528	0.16	0.45	0.17	3.0	1.48	0.89	5.6	3.8	3.4
1	1/0 AWG	0.335	0.420	0.17	0.44	0.17	3.7	1.57	0.71	5.3	4.8	3.5
1	2/0 AWG	0.266	0.331	0.18	0.41	0.16	4.7	1.68	0.57	5.1	6.0	3.6
1	3/0 AWG	0.211	0.266	0.19	0.40	0.15	6.0	1.81	0.46	4.9	7.6	3.8
1	4/0 AWG	0.167	0.210	0.21	0.38	0.15	7.5	1.94	0.38	4.7	9.6	3.9
1	250 MCM	0.141	0.177	0.22	0.38	0.14	8.9	2.07	0.33	4.5	11.3	4.1
1	350 MCM	0.101	0.128	0.25	0.35	0.13	12.4	2.32	0.25	4.3	15.9	4.4
1	500 MCM	0.071	0.092	0.28	0.33	0.13	17.7	2.62	0.19	4.1	22.6	4.8
1	600 MCM	0.059	0.076	0.31	0.33	0.12	21.3	2.88	0.18	3.8	27.2	5.1
1	750 MCM	0.047	0.066	0.33	0.32	0.12	26.6	3.11	0.16	3.7	34.0	5.4
1	1000 MCM	0.035	0.052	0.37	0.30	0.11	35.4	3.46	0.14	3.6	45.3	5.9

100% insulation:

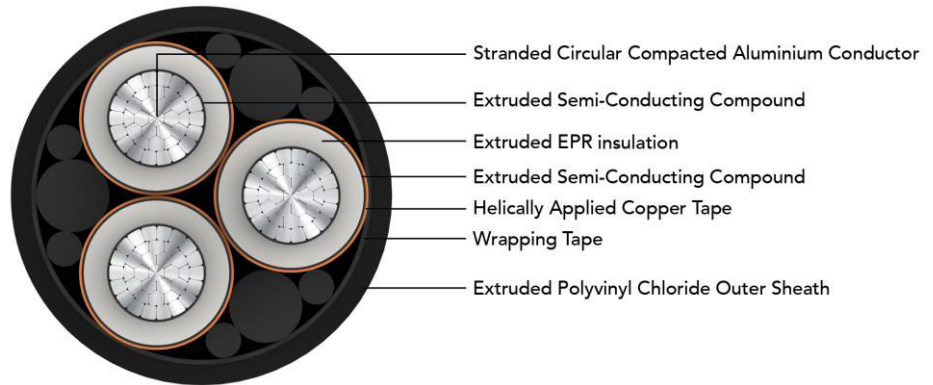
No. of Cores	Core Cross sectional Area	Nom. DC Resistance at 25°C	Nom. AC Resistance at 90°C	Approx. Capacitance	Approx. Inductance	Approx. Reactance	Max. pulling tension on conductor	Charging Current per phase	Positive sequence impedance	Electric Stress at Conductor Screen	Short circuit rating	
											Phase conductor	Metallic screen
No.	AWG / MCM	Ω/km	Ω/km	μF/km	mH/km	Ω/km	kN	Amps/Km	Ohms/Km	kV/mm	kA/S	
1	2 AWG	0.531	0.666	0.17	0.45	0.17	2.4	1.58	1.11	6.5	3.0	2.9
1	1 AWG	0.423	0.528	0.18	0.43	0.16	3.0	1.68	0.89	6.2	3.8	3.0
1	1/0 AWG	0.335	0.420	0.19	0.42	0.16	3.7	1.80	0.71	6.0	4.8	3.1
1	2/0 AWG	0.266	0.331	0.21	0.39	0.15	4.7	1.94	0.57	5.7	6.0	3.2
1	3/0 AWG	0.211	0.266	0.22	0.38	0.14	6.0	2.08	0.46	5.5	7.6	3.4
1	4/0 AWG	0.167	0.210	0.24	0.36	0.14	7.5	2.25	0.37	5.3	9.6	3.6
1	250 MCM	0.141	0.177	0.26	0.36	0.13	8.9	2.41	0.32	5.1	11.3	3.7
1	350 MCM	0.101	0.128	0.29	0.34	0.13	12.4	2.70	0.25	4.9	15.9	4.0
1	500 MCM	0.071	0.092	0.33	0.32	0.12	17.7	3.07	0.19	4.7	22.6	4.4
1	600 MCM	0.059	0.076	0.35	0.31	0.12	21.3	3.32	0.17	4.5	27.2	4.7
1	750 MCM	0.047	0.066	0.38	0.30	0.11	26.6	3.61	0.15	4.4	34.0	5.0
1	1000 MCM	0.035	0.052	0.43	0.29	0.11	35.4	4.03	0.13	4.3	45.3	5.4

OUR ACCREDITATION



POLYCAB MV MC SCR ICEA S-93-639 35KV

MV Cable with Aluminium Conductor, EPR Insulation and Copper Screen



Outstanding Features

- Flame retardant
- High life
- Sunlight resistant
- Oil, Acid and Alkalies resistant
- Corona resistant
- Treeing resistant
- Moisture resistant

Application

POLYCAB MV 35KV EPR insulated with Aluminium conductor Three core cable is suitable to use in conduits, ducts, troughs, trays, direct burial in wet and dry conditions for power supply to wide networks.

Voltage Rating

Nominal Voltage: 35kV AC

Operation Temperature

Operating temperature: -35°C to +105°C
 Emergency operating temperature: 140°C
 Max. Short Circuit Temperature: 250°C

Construction

- Conductor: Circular Compacted Aluminium conductor as per ASTM B496
- Conductor Screen: Extruded Semi-conductive compound
- Insulation: Extruded EPR (TR-XLPE will be provided on demand)
- Insulation Screen: Extruded Semi-conductive compound
- Metallic Insulation Screen: Helically applied copper tape
(Round / Corrugated copper screen will be provided on demand)
- Cores assembled together along with fillers (and ground wire optional)
- Binder: Wrapping tape
- (Armour will be provided on demand)
- Outer Sheath: Extruded Polyvinyl Chloride, Colour: Black
(Alternative Sheath: CPE Outer Sheath or LSZH Outer sheath, and parameters will change accordingly)

Standard and References:

- ASTM B496
- ICEA S-93-639 (NEMA WC-74)
- UL 1072
- UL 1685 / FT-1
- IEEE 1202
- UL 2556

Voltage Rating (kV AC)	High Voltage Test (kV AC)	
	100% level	133% level
35	69	84

Compliance

- Conductor resistance ICEA S-93-639
- Insulation resistance ICEA S-93-639
- Vertical Tray Flame UL 1685
- Smoke Release UL 1685
- Flame Test IEEE 1202



Bending Radius: 7D

D is overall diameter of cable

OUR ACCREDITATION



POLYCAB MV MC SCR ICEA S-93-639 35KV

MV Cable with Aluminium Conductor, EPR Insulation and Copper Screen

DIMENSIONS, WEIGHT AND AMPACITY:

133% insulation:

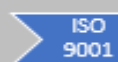
Product Code	No. of Cores	Core Cross sectional Area	Nominal Diameter			Weight (Approx.)	Current rating *	
			Under metallic screen	Over metallic screen	Overall		Directly buried in ground	In air
	No.	AWG / MCM	mm	mm	mm	Kg/Km	Amps	
MVIC46ARUAYF001C002AA001P	3	2 AWG	30.6	31.1	74.0	4850	105	120
MVIC46ARUAYF001C001AA001P	3	1 AWG	31.4	31.9	75.8	5050	115	140
MVIC46ARUAYF001C1X0AA001P	3	1/0 AWG	32.4	32.9	77.8	5350	140	165
MVIC46ARUAYF001C2X0AA001P	3	2/0 AWG	33.4	33.9	80.1	5750	155	190
MVIC46ARUAYF001C3X0AA001P	3	3/0 AWG	34.6	35.1	82.6	6100	175	215
MVIC46ARUAYF001C4X0AA001P	3	4/0 AWG	35.9	36.4	85.5	6550	210	250
MVIC46ARUAYF001C250CA001P	3	250 MCM	37.2	37.7	88.3	7000	230	280
MVIC46ARUAYF001C350CA001P	3	350 MCM	39.6	40.1	93.5	7950	265	355
MVIC46ARUAYF001C500CA001P	3	500 MCM	42.7	43.2	100.0	9200	355	430
MVIC46ARUAYF001C600CA001P	3	600 MCM	45.2	45.7	105.6	10300	390	485
MVIC46ARUAYF001C750CA001P	3	750 MCM	47.6	48.1	110.8	11450	440	555
MVIC46ARUAYF001C01KCA001P	3	1000 MCM	51.2	51.7	118.4	13200	505	665

100% insulation:

Product Code	No. of Cores	Core Cross sectional Area	Nominal Diameter			Weight (Approx.)	Current rating *	
			Under metallic screen	Over metallic screen	Overall		Directly buried in ground	In air
	No.	AWG / MCM	mm	mm	mm	Kg/Km	Amps	
MVIC46ARUAYF001C002AA002P	3	2 AWG	26.8	27.3	64.5	3800	105	120
MVIC46ARUAYF001C001AA002P	3	1 AWG	27.6	28.1	66.3	4000	115	140
MVIC46ARUAYF001C1X0AA002P	3	1/0 AWG	28.5	29.1	68.4	4250	140	165
MVIC46ARUAYF001C2X0AA002P	3	2/0 AWG	29.6	30.1	70.6	4600	155	190
MVIC46ARUAYF001C3X0AA002P	3	3/0 AWG	30.8	31.3	74.4	5150	175	215
MVIC46ARUAYF001C4X0AA002P	3	4/0 AWG	32.1	32.6	77.2	5600	210	250
MVIC46ARUAYF001C250CA002P	3	250 MCM	33.4	33.9	80.0	6000	230	280
MVIC46ARUAYF001C350CA002P	3	350 MCM	35.8	36.3	85.3	6850	265	355
MVIC46ARUAYF001C500CA002P	3	500 MCM	38.8	39.4	91.8	8100	355	430
MVIC46ARUAYF001C600CA002P	3	600 MCM	40.9	41.4	96.2	8950	390	485
MVIC46ARUAYF001C750CA002P	3	750 MCM	43.3	43.8	101.4	10000	440	555
MVIC46ARUAYF001C01KCA002P	3	1000 MCM	46.8	47.3	109.0	11700	505	665

* Current Rating is in accordance with Table 310.16 (20°C Ambient Ground Temperature) and Table 310.17 (30°C Ambient Air Temperature) of National Electric Code

OUR ACCREDITATION



POLYCAB MV MC SCR ICEA S-93-639 35KV

MV Cable with Aluminium Conductor, EPR Insulation and Copper Screen

ELECTRICAL CHARACTERISTICS:

133% insulation:

No. of Cores	Core Cross sectional Area	Nom. DC Resistance at 25°C	Nom. AC Resistance at 90°C	Approx. Capacitance	Approx. Inductance	Approx. Reactance	Max. pulling tension on conductor	Charging Current per phase	Positive sequence impedance	Electric Stress at Conductor Screen	Short circuit rating	
											Phase conductor	Metallic screen
No.	AWG / MCM	Ω/km	Ω/km	μF/km	mH/km	Ω/km	kN	Amps/Km	Ohms/Km	kV/mm	kA/S	
1	2 AWG	0.531	0.666	0.13	0.51	0.19	1.7	1.66	1.12	7.1	3.0	3.9
1	1 AWG	0.423	0.528	0.13	0.49	0.19	2.1	1.76	0.89	6.7	3.8	4.0
1	1/0 AWG	0.335	0.420	0.14	0.47	0.18	2.7	1.87	0.72	6.4	4.8	4.1
1	2/0 AWG	0.266	0.331	0.15	0.45	0.17	3.4	1.99	0.58	6.1	6.0	4.3
1	3/0 AWG	0.211	0.266	0.16	0.43	0.16	4.3	2.12	0.46	5.8	7.6	4.4
1	4/0 AWG	0.167	0.210	0.17	0.41	0.16	5.4	2.27	0.38	5.5	9.6	4.6
1	250 MCM	0.141	0.177	0.18	0.40	0.15	6.4	2.41	0.33	5.3	11.3	4.7
1	350 MCM	0.101	0.128	0.20	0.38	0.14	8.9	2.68	0.26	5.0	15.9	5.0
1	500 MCM	0.071	0.092	0.23	0.36	0.14	12.8	3.01	0.20	4.7	22.6	5.4
1	600 MCM	0.059	0.076	0.25	0.35	0.13	15.3	3.28	0.18	4.5	27.2	5.7
1	750 MCM	0.047	0.066	0.27	0.34	0.13	19.2	3.54	0.16	4.4	34.0	6.1
1	1000 MCM	0.035	0.052	0.30	0.32	0.12	25.5	3.91	0.14	4.2	45.3	6.5

100% insulation:

No. of Cores	Core Cross sectional Area	Nom. DC Resistance at 25°C	Nom. AC Resistance at 90°C	Approx. Capacitance	Approx. Inductance	Approx. Reactance	Max. pulling tension on conductor	Charging Current per phase	Positive sequence impedance	Electric Stress at Conductor Screen	Short circuit rating	
											Phase conductor	Metallic screen
No.	AWG / MCM	Ω/km	Ω/km	μF/km	mH/km	Ω/km	kN	Amps/Km	Ohms/Km	kV/mm	kA/S	
1	2 AWG	0.531	0.666	0.14	0.48	0.18	1.7	1.86	1.11	7.8	3.0	3.4
1	1 AWG	0.423	0.528	0.15	0.46	0.18	2.1	1.97	0.89	7.5	3.8	3.5
1	1/0 AWG	0.335	0.420	0.16	0.45	0.17	2.7	2.10	0.71	7.1	4.8	3.7
1	2/0 AWG	0.266	0.331	0.17	0.42	0.16	3.4	2.25	0.57	6.8	6.0	3.8
1	3/0 AWG	0.211	0.266	0.18	0.41	0.15	4.3	2.41	0.46	6.5	7.6	3.9
1	4/0 AWG	0.167	0.210	0.20	0.39	0.15	5.4	2.58	0.38	6.2	9.6	4.1
1	250 MCM	0.141	0.177	0.21	0.38	0.14	6.4	2.75	0.33	6.0	11.3	4.3
1	350 MCM	0.101	0.128	0.23	0.36	0.14	8.9	3.07	0.25	5.7	15.9	4.6
1	500 MCM	0.071	0.092	0.26	0.34	0.13	12.8	3.47	0.20	5.4	22.6	4.9
1	600 MCM	0.059	0.076	0.28	0.33	0.13	15.3	3.73	0.18	5.2	27.2	5.2
1	750 MCM	0.047	0.066	0.31	0.32	0.12	19.2	4.04	0.16	5.1	34.0	5.5
1	1000 MCM	0.035	0.052	0.34	0.31	0.12	25.5	4.49	0.14	4.9	45.3	5.9

OUR ACCREDITATION

