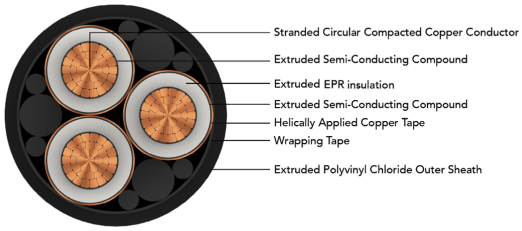
POLYCAB MV MC CU SCR ICEA S-93-639 25KV
MV Cable with Copper Conductor, EPR Insulation and Copper Screen



Images not to scale. Follow table for dimensions

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.

CHARACTERISTICS

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
Bending Radius: 7D
D is overall diameter of cable

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)

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

OUTSTANDING FEATURES

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

STANDARD FOLLOWS

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

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 ACCREDITATIONS

APPROVAL

POLYCAB MV MC CU 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	Current rating *	
			Under metallic screen	Over metallic screen	Overall	(Approx.)	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	Current rating *	
			Under metallic screen	Over metallic screen	Overall	(Approx.)	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

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POLYCAB
IDEAS. CONNECTED.

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