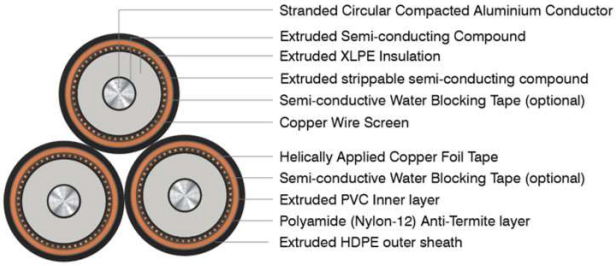
POLYCAB TRIPLEX ANTI-TERMITE MV AS/NZS 1429.1 6.35/11 (12) KV

MV Cable AL Conductor, XLPE Insulation, Cu Screen - Triplex



Images not to scale. Follow table for dimensions

APPLICATION

POLYCAB MV 6.35/11 KV XLPE insulated with Aluminium conductor Triplex cable is suitable to use for power supply to wide networks i.e. Commercial, Industrial and Urban / Residential.

CHARACTERISTICS

Voltage Rating
Nominal Voltage: 6.35/11 (12) kV
Operation Temperature
Min. installation temperature: 0°C
Operating temperature: -25°C to +90°C
Emergency operating temperature: 105°C
(max. operation of 36hrs, at 3 periods for 12 consecutive months use)
Max. Short Circuit Temperature: 250°C
Bending Radius:
Fixed Installation: 20D
During Installation: 30D
D is diameter over nylon

CONSTRUCTION

- Conductor: Stranded Compacted Circular aluminium conductor as per AS/NZS 1125
- Conductor Screen: Extruded Semi-conductive compound
- Insulation: XLPE
- Insulation Screen: Extruded Strippable Semi-conductive compound
- Longitudinal Water blocking : Water blocking tape above and below copper screen (Optional)
- Metallic Insulation Screen: Copper Wire Screen + helically applied copper tape (E/F current capacity – Based on requirement)

Composite sheath

- Inner layer : Extruded Polyvinyl Chloride, Colour: Orange
- Termite Protection: Polyamide (Nylon -12)
- Outer layer: HDPE (Black)

Three Single Core Cables twisted and assembled to form triplex formation

OUTSTANDING FEATURES

- Long life
- UV resistant
- Resistant to chemical exposure
- Resistant to water (AD7/AD8 with HDPE)
- Resistant to weather exposure
- Termite resistant

STANDARD FOLLOWS

AS/NZS 1429.1
AS/NZS 1125
AS/NZS 3008

COMPLIANCE

• Conductor resistance	AS/NZS 1125
• Insulation resistance	AS/NZS 1429.1
• Voltage test	AS/NZS 1429.1

OUR ACCREDITATIONS

NABL

APPROVAL

FQC CE CPRI APPROVED

NOTES

High Voltage Test (kV AC)	Partial discharge test (kV AC)		Impulse test Voltage (kV peak)
	200% to rated voltage	150% to rated voltage	
21	13	17	95

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DIMENSIONSAL CHARACTERISTICS:

Product Code	No. of Single Cores	Core Cross sectional Area	Nominal Diameter		
			Over Screen	Each Phase	Overall
	No.	mm^2	mm	mm	mm
MVNZ17AXUAPH001T016SAXXXX	3	16	16.5	20.0	44.0
MVNZ17AXUAPH001T025SAXXXX	3	25	17.8	22.0	46.0
MVNZ17AXUAPH001T035SAXXXX	3	35	18.8	23.0	49.0
MVNZ17AXUAPH001T050SAXXXX	3	50	19.9	24.0	51.0
MVNZ17AXUAPH001T070SAXXXX	3	70	21.5	25.0	54.0
MVNZ17AXUAPH001T095SAXXXX	3	95	23.1	27.0	58.0
MVNZ17AXUAPH001T120SAXXXX	3	120	24.7	29.0	61.0
MVNZ17AXUAPH001T150SAXXXX	3	150	26.0	30.0	65.0
MVNZ17AXUAPH001T185SAXXXX	3	185	27.7	32.0	68.0
MVNZ17AXUAPH001T240SAXXXX	3	240	30.0	34.0	74.0
MVNZ17AXUAPH001T300SAXXXX	3	300	32.2	37.0	79.0
MVNZ17AXUAPH001T400SAXXXX	3	400	34.9	40.0	85.0
MVNZ17AXUAPH001T500SAXXXX	3	500	38.3	43.0	93.0

• Above mentioned parameters are based on 3kA/sec earth fault current capacity of copper screen

ELECTRICAL CHARACTERISTICS:

No. of Cores	Core Cross sectional Area	Max. DC Resistance at 20°C	Max. AC Resistance at 90°C	Approx. Capacitance	Approx. Inductance	Approx. Reactance	Continuous Current Rating @ ambient 45°C		
							Buried direct in ground	In a buried duct	In Air
No.	mm^2	Ω/km	Ω/km	µF/km	mH/km	Ω/km	Amps		
3 x 1	16	1.91	2.449	0.17	0.497	0.156	78	67	84
3 x 1	25	1.2	1.539	0.2	0.460	0.144	100	87	110
3 x 1	35	0.868	1.113	0.22	0.437	0.137	119	103	132
3 x 1	50	0.641	0.822	0.25	0.417	0.131	140	122	158
3 x 1	70	0.443	0.568	0.28	0.385	0.121	171	150	196
3 x 1	95	0.32	0.411	0.31	0.367	0.115	203	179	236

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							Buried direct in ground	In a buried duct	In Air
No.	mm^2	Ω/km	Ω/km	µF/km	mH/km	Ω/km	Amps		
3 x 1	120	0.253	0.325	0.35	0.349	0.110	232	205	273
3 x 1	150	0.206	0.265	0.37	0.340	0.107	260	231	309
3 x 1	185	0.164	0.211	0.41	0.329	0.103	294	262	355
3 x 1	240	0.125	0.161	0.46	0.317	0.099	340	305	415
3 x 1	300	0.1	0.130	0.5	0.306	0.096	384	346	475
3 x 1	400	0.0778	0.102	0.56	0.296	0.093	438	398	552
3 x 1	500	0.0605	0.080	0.63	0.286	0.090	505	460	646

*: Current Ratings are based on IEC 60502-2 & IEC 60287, Max. Conductor Temperature at 90®C, Ambient temperature at 30®C in Air / at 20®C in Ground, Thermal resistivity of Soil 1.5 k.m/W & for earthenware ducts 1.2k.m/W and Depth of Laying 0.8m.

Current rating de-rating factors for other than 30®C ambient air temperature.

20	25	35	40	45	50	55	60
1.08	1.04	0.96	0.91	0.87	0.82	0.76	0.71

Current rating de-rating factors for other than 20®C ground temperature.

10	15	25	30	35	40	45	50
1.07	1.04	0.96	0.93	0.89	0.85	0.80	0.76

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No. of Cores	Core Cross sectional Area	Max. pulling tension on conductor	Charging Current per phase	Zero sequence impedance	Electric Stress at Conductor Screen	Short circuit rating of phase conductor
No.	mm^2	kN	Amps/Km	Ohms/Km	kV/mm	kA, 1 sec
3 x 1	16	0.8	0.34	3.6	2.9	1.5
3 x 1	25	1.3	0.4	2.7	2.7	2.4
3 x 1	35	1.8	0.44	2.3	2.6	3.3
3 x 1	50	2.5	0.5	2.0	2.5	4.7
3 x 1	70	3.5	0.56	1.7	2.4	6.6
3 x 1	95	4.8	0.62	1.6	2.3	9.0
3 x 1	120	6.0	0.7	1.5	2.3	11.3
3 x 1	150	7.5	0.74	1.4	2.3	14.2
3 x 1	185	9.3	0.82	1.4	2.2	17.4
3 x 1	240	12.0	0.92	1.3	2.2	22.6
3 x 1	300	15.0	1	1.3	2.2	28.3
3 x 1	400	20.0	1.12	1.3	2.1	37.6
3 x 1	500	25.0	1.26	1.2	2.1	47.2