POLYCAB MEDIUM VOLTAGE HIGH TENSION CABLE CONFORMING TO IS 7098-P2

Polycab Single core and three core medium voltage high tension cables of voltage grade ranging from 1.9/3.3kV to 19/33 kV are widely used for power distribution, external and direct burial applications in power network system, underground, and in cable ducting. These cables are available with XLPE insulation having temperature rating of 90°C.

These cables are also available with 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 cross-linked polyethylene thermoset insulation compound.

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

Metallic Screen: A helically applied copper tape screen to carry fault current

Laying Up: in case of 3 cores Cable, insulated cores laid up together with in-house developed fillers to maintain circularity of cable

Inner Sheath: In-house developed thermoplastic PVC compound/ halogen free compound having low emission of smoke and corrosive gases when exposed to fire and also ensures circular shape of cable

Armour: Aluminium / Galvanised Steel Round Wire Armoured to give mechanical protection and also acts as return path for earth fault current

Outer Sheath: In-house developed thermoplastic PVC compound/ halogen free 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 IS 7098-2

1C_2XWaY_2XFaY_1.9 3.3 KV(E)

1C_A2XWaY_A2XFaY_1.9_ 3.3 KV(E)

1C_2XWaY_2XFaY_3.3 3.3 KV (E)

1C_A2XWaY_A2XFaY_3.3 3.3 KV(UE)

1C_2XWaY_2XFaY_3.8_6.6 KV(E)

1C_A2XWaY_A2XFaY_3.8_6.6 KV(E)

1C_2XWaY_2XFaY_6.6_6.6 KV(UE)

1C_A2XWaY_A2XFaY_6.6_6.6 KV(UE)

1C_2XWaY_2XFaY_6.35_11 KV(E)

1C_A2XWaY_A2XFaY_6.35_11 KV(E)

1C_2XWaY_2XFaY_11_11 KV(UE)

1C_A2XWaY_A2XFaY_11_11 KV(UE)

1C_2XWaY_2XFaY_12.7_22 KV(E)

1C_A2XWaY_A2XFaY_12.7_22 KV(E)

1C_2XWaY_2XFaY_19_33 KV(E)

1C_A2XWaY_A2XFaY_19_33 KV(E)

3C_2XWY_2XFY_1.9 3.3 KV(E)

3C_A2XWY_A2XFY_1.9 3.3 KV(E)

3C_2XWY_2XFY_3.3 3.3 KV(UE)

3C_A2XWY_A2XFY_3.3_3.3 KV(UE)

3C_2XWY_2XFY_3.8_6.6 KV(E)

3C_A2XWY_A2XFY_3.8_6.6 KV(E)

3C_2XWY_2XFY_6.6_6.6 KV(UE)

3C_A2XWY_A2XFY_6.6_6.6 KV(UE)

3C_2XWY_2XFY_6.35_11 KV(E)

3C_A2XWY_A2XFY_6.35_11 KV(E)

3C_2XWY_2XFY_11_11 KV(UE)

3C_A2XWY_A2XFY_11_11 KV(UE)

3C_2XWY_2XFY_12.7_22 KV(E)

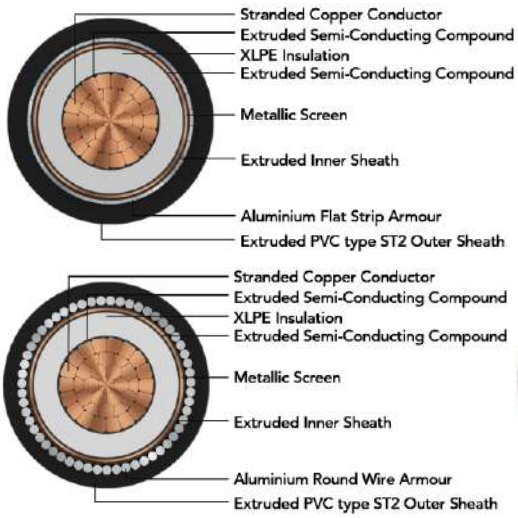
3C_A2XWY_A2XFY_12.7_22 KV(E)

3C_2XWY_2XFY_19_33 KV(E)

3C_A2XWY_A2XFY_19_33 KV(E)

POLYCAB MV SC Cu IS 7098-2 1.9/3.3 KV(E)

Medium Voltage Single Core Copper Armoured Cable, 1.9/3.3 KV (E) AC



Outstanding Features

- Flame retardant
- High life
- UV resistant

Application

POLYCAB MV 1.9/3.3 KV(E) XLPE insulated with copper conductor single core cable is suitable to use for power distribution for external and direct burial applications in power network system.

Voltage Rating

Nominal Voltage: 1.9/3.3 KV (E)

Operation Temperature

Max. operating temperature: +90°C
Max. Short Circuit Temperature: 250°C

Construction

- Conductor: Circular Compacted Copper conductor as per IS 8130, class 2
- Conductor Screen: Extruded Semi-conductive compound
- Insulation: XLPE
- Non-Metallic Insulation Screen: Extruded Semi-conductive compound
- Metallic Insulation Screen: Copper tape screen
- Inner Sheath: Extruded Polyvinyl Chloride
- Armour: Aluminium Round/Flat Wire Armoured
- Outer Sheath: Extruded Polyvinyl Chloride

Note:

- Inner sheath available with FR/ FRLS
- Outer/ Inner available with FR/FRLS

Colour: Black

Bending Radius:

Fixed Installation: 15D
D is overall diameter of cable

Standard and References:

IS 8130:2013
IS 5831:1984
IS 3975:1979
IS 7098-2:2011

Test Voltage

10kV AC 50 Hz

Compliance

Conductor resistance	IS 8130
Insulation resistance	IS 7098-2
Flammability test	IEC 60332-1-2
Partial Discharge test	IS 7098-2

OUR ACCREDITATION

ISO 9001 ISO 14001 ISO 45001

NABL ABS IRS

POLYCAB MV SC Cu IS 7098-2 1.9/3.3 KV(E)

Medium Voltage Single Core Copper Armoured Cable, 1.9/3.3 KV (E) AC

DIMENSIONS AND WEIGHTS:

Product Code	No. of Cores	Core Cross sectional Area	Nominal Diameter			Weight (Approx.)
			Under armour	Over armour	Overall	
2XWaY	No.	mm²	mm	mm	mm	Kg/Km
MVIS10CXAWY2001C025SA001S	1C	25	13.3	16.5	19.3	623
MVIS10CXAWY2001C035SA001S	1C	35	14.5	17.7	20.5	745
MVIS10CXAWY2001C050SA001S	1C	50	16.0	19.2	22.0	933
MVIS10CXAWY2001C070SA001S	1C	70	17.6	20.8	23.6	1153
MVIS10CXAWY2001C095SA001S	1C	95	19.4	22.6	25.4	1438
MVIS10CXAWY2001C120SA001S	1C	120	21.0	24.2	27.0	1711
MVIS10CXAWY2001C150SA001S	1C	150	22.7	25.9	29.0	2068
MVIS10CXAWY2001C185SA001S	1C	185	24.4	27.6	30.7	2421
MVIS10CXAWY2001C240SA001S	1C	240	27.0	31.0	34.2	3101
MVIS10CXAWY2001C300SA001S	1C	300	29.5	33.5	36.6	3766
MVIS10CXAWY2001C400SA001S	1C	400	32.9	36.9	40.4	4763
MVIS10CXAWY2001C500SA001S	1C	500	36.8	40.8	44.6	5953
MVIS10CXAWY2001C630SA001S	1C	630	40.6	45.6	49.7	7434
MVIS10CXAWY2001C800SA001S	1C	800	45.3	50.3	54.7	9232
MVIS10CXAWY2001C01KSA001S	1C	1000	50.2	55.2	59.9	11361
2XFaY						
MVIS10CXAFY2001C025SA001S	1C	25	13.3	14.9	17.4	531
MVIS10CXAFY2001C035SA001S	1C	35	14.5	16.1	18.9	662
MVIS10CXAFY2001C050SA001S	1C	50	16.0	17.6	20.4	840
MVIS10CXAFY2001C070SA001S	1C	70	17.6	19.2	22.0	1051
MVIS10CXAFY2001C095SA001S	1C	95	19.4	21.0	23.8	1327
MVIS10CXAFY2001C120SA001S	1C	120	21.0	22.6	25.4	1591
MVIS10CXAFY2001C150SA001S	1C	150	22.7	24.3	27.1	1915
MVIS10CXAFY2001C185SA001S	1C	185	24.4	26.0	29.1	2287
MVIS10CXAFY2001C240SA001S	1C	240	27.0	28.6	31.8	2872
MVIS10CXAFY2001C300SA001S	1C	300	29.5	31.1	34.2	3516
MVIS10CXAFY2001C400SA001S	1C	400	32.9	34.5	37.7	4452
MVIS10CXAFY2001C500SA001S	1C	500	36.8	38.4	41.9	5605
MVIS10CXAFY2001C630SA001S	1C	630	40.6	42.2	45.9	6896
MVIS10CXAFY2001C800SA001S	1C	800	45.3	46.9	51.0	8647
MVIS10CXAFY2001C01KSA001S	1C	1000	50.2	51.8	56.2	10702

The above data is approximate & subject to manufacturing tolerance.

POLYCAB MV SC Cu IS 7098-2 1.9/3.3 KV(E)

Medium Voltage Single Core Copper Armoured Cable, 1.9/3.3 KV (E) AC

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	
No.	mm²	Ω/km	Ω/km	µF/km	mH/km		Ω/km	
					2XFaY	2XWaY	2XFaY	2XWaY
1	25	0.727	0.932	0.22	0.40	0.42	0.13	0.13
1	35	0.524	0.672	0.25	0.38	0.40	0.12	0.13
1	50	0.387	0.496	0.29	0.35	0.37	0.11	0.12
1	70	0.268	0.344	0.33	0.34	0.35	0.11	0.11
1	95	0.193	0.248	0.38	0.32	0.34	0.10	0.11
1	120	0.153	0.197	0.41	0.31	0.32	0.10	0.10
1	150	0.124	0.159	0.46	0.30	0.31	0.09	0.10
1	185	0.0991	0.128	0.50	0.29	0.30	0.09	0.10
1	240	0.0754	0.098	0.56	0.28	0.30	0.09	0.09
1	300	0.0601	0.078	0.62	0.27	0.29	0.09	0.09
1	400	0.047	0.062	0.68	0.27	0.28	0.08	0.09
1	500	0.0366	0.049	0.72	0.26	0.28	0.08	0.09
1	630	0.0283	0.038	0.75	0.26	0.28	0.08	0.09
1	800	0.0221	0.031	0.77	0.26	0.27	0.08	0.09
1	1000	0.0176	0.026	0.81	0.25	0.27	0.08	0.08

CURRENT CARRYING CAPACITY:

Nominal area of conductor	Buried direct in the ground		In single -way Ducts		In air	
	Trefoil	Flat touching	Trefoil ducts	Flat touching ducts	Trefoil	Flat Touching
Sqmm	A	A	A	A	A	A
25	127	130	113	111	148	151
35	151	155	135	132	179	183
50	178	181	158	154	214	218
70	216	220	192	187	267	271
95	256	260	227	220	323	327
120	290	292	257	247	374	376
150	323	323	285	272	422	422
185	362	359	319	302	484	481
240	411	398	361	333	565	550
300	456	435	400	363	641	615
400	508	474	443	393	734	690
500	559	509	486	420	828	761
630	611	543	529	446	929	834
800	638	549	549	447	1002	872
1000	672	569	575	460	1083	927

Air Ambient temperature: 40°C
Ground ambient temperature: 30°C
Conductor operating temperature: 90°C
The above table is in accordance with IS 3961(part 7):2016

POLYCAB MV SC Cu IS 7098-2 1.9/3.3 KV(E)

Medium Voltage Single Core Copper Armoured Cable, 1.9/3.3 KV (E) AC

De-Rating Factor

Rating factor for variation in ambient air temperature for cable in free air

Ambient air Temperature	25˚C	30˚C	35˚C	40˚C	45˚C	50˚C	55˚C	60˚C
De-Rating Factor	1.14	1.10	1.05	1.00	0.95	0.89	0.84	0.77

Maximum conductor temperature 90˚C

Rating factor for variation in ground temperature for direct buried cables.

Ground Temperature	15˚C	20˚C	25˚C	30˚C	35˚C	40˚C	45˚C	50˚C
De-Rating Factor	1.12	1.08	1.04	1.00	0.96	0.91	0.87	0.82

Maximum conductor temperature 90˚C

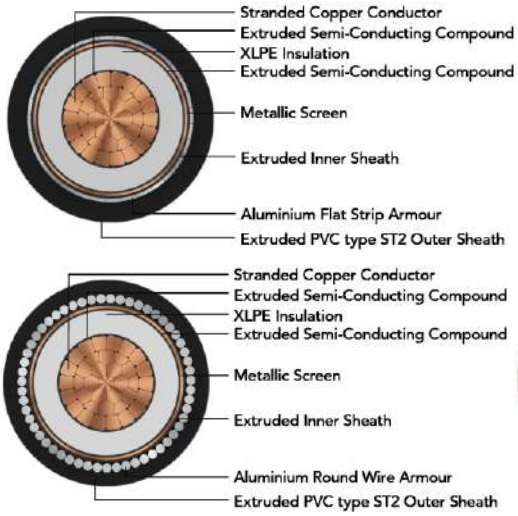
Rating factor for variation in ground temperature for cable in duct.

Ground Temperature	15˚C	20˚C	25˚C	30˚C	35˚C	40˚C	45˚C	50˚C
De-Rating Factor	1.12	1.08	1.04	1.00	0.96	0.91	0.87	0.82

Maximum conductor temperature 90˚C

POLYCAB MV SC Cu IS 7098-2, 3.3/3.3 KV(UE)

Medium Voltage Single Core Copper Armoured Cable, 3.3/3.3 KV (UE) AC



Outstanding Features

- Flame retardant
- High life
- UV resistant

Application

POLYCAB MV 3.3/3.3 KV(UE) XLPE insulated with copper conductor single core cable is suitable to use for power distribution for external and direct burial applications in power network system.

Voltage Rating

Nominal Voltage: 3.3/3.3 KV (UE)

Operation Temperature

Max. operating temperature: +90°C
Max. Short Circuit Temperature: 250°C

Construction

- Conductor: Circular Compacted Copper conductor as per IS 8130, class 2
- Conductor Screen: Extruded Semi-conductive compound
- Insulation: XLPE
- Non-Metallic Insulation Screen: Extruded Semi-conductive compound
- Metallic Insulation Screen: Copper tape screen
- Inner Sheath: Extruded Polyvinyl Chloride
- Armour: Aluminium Round/Flat Wire Armoured
- Outer Sheath: Extruded Polyvinyl Chloride,

Colour: Black

Note:

- Inner sheath available with FR/ FRLS
- Outer/ Inner available with FR/FRLS

Standard and References:

IS 8130:2013
IS 5831:1984
IS 3975:1979
IS 7098-2:2011

Test Voltage

10kV AC 50 Hz

Compliance

• Conductor resistance	IS 8130
• Insulation resistance	IS 7098-2
• Flammability test	IEC 60332-1-2
• Partial Discharge test	IS 7098-2

Bending Radius:

Fixed Installation: 15D
D is overall diameter of cable

POLYCAB MV SC Cu IS 7098-2, 3.3/3.3 KV(UE)

Medium Voltage Single Core Copper Armoured Cable, 3.3/3.3 KV (UE) AC

DIMENSIONS AND WEIGHTS:

Product Code	No. of Cores	Core Cross sectional Area	Nominal Diameter			Weight (Approx.)
			Under armour	Over armour	Overall	
2XWaY	No.	mm²	mm	mm	mm	Kg/Km
MVIS14CXAWY2001C025SA001S	1C	25	13.3	16.5	19.3	623
MVIS14CXAWY2001C035SA001S	1C	35	14.5	17.7	20.5	745
MVIS14CXAWY2001C050SA001S	1C	50	16.0	19.2	22.0	933
MVIS14CXAWY2001C070SA001S	1C	70	17.6	20.8	23.6	1153
MVIS14CXAWY2001C095SA001S	1C	95	19.4	22.6	25.4	1438
MVIS14CXAWY2001C120SA001S	1C	120	21.0	24.2	27.0	1711
MVIS14CXAWY2001C150SA001S	1C	150	22.7	25.9	29.0	2068
MVIS14CXAWY2001C185SA001S	1C	185	24.4	27.6	30.7	2421
MVIS14CXAWY2001C240SA001S	1C	240	27.0	31.0	34.2	3101
MVIS14CXAWY2001C300SA001S	1C	300	29.5	33.5	36.6	3766
MVIS14CXAWY2001C400SA001S	1C	400	32.9	36.9	40.4	4763
MVIS14CXAWY2001C500SA001S	1C	500	36.8	40.8	44.6	5953
MVIS14CXAWY2001C630SA001S	1C	630	40.6	45.6	49.7	7434
MVIS14CXAWY2001C800SA001S	1C	800	45.3	50.3	54.7	9232
MVIS14CXAWY2001C01KSA001S	1C	1000	50.2	55.2	59.9	11361
2XFaY						
MVIS14CXAFY2001C025SA001S	1C	25	13.3	14.9	17.4	531
MVIS14CXAFY2001C035SA001S	1C	35	14.5	16.1	18.9	662
MVIS14CXAFY2001C050SA001S	1C	50	16.0	17.6	20.4	840
MVIS14CXAFY2001C070SA001S	1C	70	17.6	19.2	22.0	1051
MVIS14CXAFY2001C095SA001S	1C	95	19.4	21.0	23.8	1327
MVIS14CXAFY2001C120SA001S	1C	120	21.0	22.6	25.4	1591
MVIS14CXAFY2001C150SA001S	1C	150	22.7	24.3	27.1	1915
MVIS14CXAFY2001C185SA001S	1C	185	24.4	26.0	29.1	2287
MVIS14CXAFY2001C240SA001S	1C	240	27.0	28.6	31.8	2872
MVIS14CXAFY2001C300SA001S	1C	300	29.5	31.1	34.2	3516
MVIS14CXAFY2001C400SA001S	1C	400	32.9	34.5	37.7	4452
MVIS14CXAFY2001C500SA001S	1C	500	36.8	38.4	41.9	5605
MVIS14CXAFY2001C630SA001S	1C	630	40.6	42.2	45.9	6896
MVIS14CXAFY2001C800SA001S	1C	800	45.3	46.9	51.0	8647
MVIS14CXAFY2001C01KSA001S	1C	1000	50.2	51.8	56.2	10702

The above data is approximate & subject to manufacturing tolerance.

POLYCAB MV SC Cu IS 7098-2, 3.3/3.3 KV(UE)

Medium Voltage Single Core Copper Armoured Cable, 3.3/3.3 KV (UE) AC

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	
No.	mm²	Ω/km	Ω/km	µF/km	mH/km		Ω/km	
					2XFaY	2XWaY	2XFaY	2XWaY
1	25	0.727	0.932	0.22	0.40	0.42	0.13	0.13
1	35	0.524	0.672	0.25	0.38	0.40	0.12	0.13
1	50	0.387	0.496	0.29	0.35	0.37	0.11	0.12
1	70	0.268	0.344	0.33	0.34	0.35	0.11	0.11
1	95	0.193	0.248	0.38	0.32	0.34	0.10	0.11
1	120	0.153	0.197	0.41	0.31	0.32	0.10	0.10
1	150	0.124	0.159	0.46	0.30	0.31	0.09	0.10
1	185	0.0991	0.128	0.50	0.29	0.30	0.09	0.10
1	240	0.0754	0.098	0.56	0.28	0.30	0.09	0.09
1	300	0.0601	0.078	0.62	0.27	0.29	0.09	0.09
1	400	0.047	0.062	0.68	0.27	0.28	0.08	0.09
1	500	0.0366	0.049	0.72	0.26	0.28	0.08	0.09
1	630	0.0283	0.038	0.75	0.26	0.28	0.08	0.09
1	800	0.0221	0.031	0.77	0.26	0.27	0.08	0.09
1	1000	0.0176	0.026	0.81	0.25	0.27	0.08	0.08

CURRENT CARRYING CAPACITY:

Nominal area of conductor	Buried direct in the ground		In single -way Ducts		In air	
	Trefoil	Flat touching	Trefoil ducts	Flat touching ducts	Trefoil	Flat Touching
Sqmm	A	A	A	A	A	A
25	127	130	113	111	148	151
35	151	155	135	132	179	183
50	178	181	158	154	214	218
70	216	220	192	187	267	271
95	256	260	227	220	323	327
120	290	292	257	247	374	376
150	323	323	285	272	422	422
185	362	359	319	302	484	481
240	411	398	361	333	565	550
300	456	435	400	363	641	615
400	508	474	443	393	734	690
500	559	509	486	420	828	761
630	611	543	529	446	929	834
800	638	549	549	447	1002	872
1000	672	569	575	460	1083	927

Air Ambient temperature: 40˚C
Ground ambient temperature: 30˚C
Conductor operating temperature: 90˚C
The above table is in accordance with IS 3961(part 7):2016

POLYCAB MV SC Cu IS 7098-2, 3.3/3.3 KV(UE)

Medium Voltage Single Core Copper Armoured Cable, 3.3/3.3 KV (UE) AC

De-Rating Factor

Rating factor for variation in ambient air temperature for cable in free air

Ambient air Temperature	25˚C	30˚C	35˚C	40˚C	45˚C	50˚C	55˚C	60˚C
De-Rating Factor	1.14	1.10	1.05	1.00	0.95	0.89	0.84	0.77

Maximum conductor temperature 90˚C

Rating factor for variation in ground temperature for direct buried cables.

Ground Temperature	15˚C	20˚C	25˚C	30˚C	35˚C	40˚C	45˚C	50˚C
De-Rating Factor	1.12	1.08	1.04	1.00	0.96	0.91	0.87	0.82

Maximum conductor temperature 90˚C

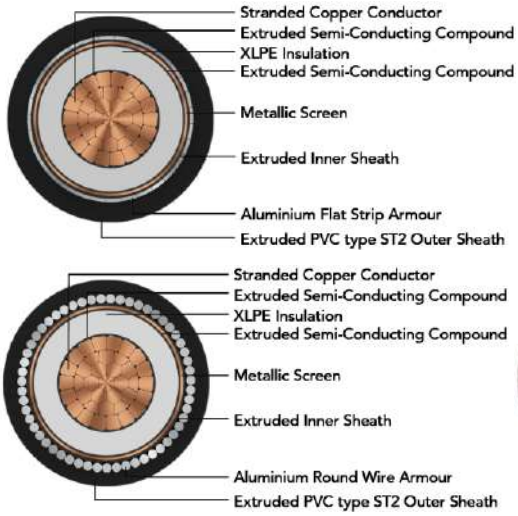
Rating factor for variation in ground temperature for cable in duct.

Ground Temperature	15˚C	20˚C	25˚C	30˚C	35˚C	40˚C	45˚C	50˚C
De-Rating Factor	1.12	1.08	1.04	1.00	0.96	0.91	0.87	0.82

Maximum conductor temperature 90˚C

POLYCAB MV SC Cu IS 7098-2, 3.8/6.6 KV(E)

Medium Voltage Single Core Copper Armoured Cable, 3.8/6.6 KV (E) AC



Outstanding Features

- Flame retardant
- High life
- UV resistant

Application

POLYCAB MV 3.8/6.6 KV(E) XLPE insulated with copper conductor single core cable is suitable to use for power distribution for external and direct burial applications in power network system.

Voltage Rating

Nominal Voltage: 3.8/6.6 KV (E)

Operation Temperature

Max. operating temperature: 90°C
Max. Short Circuit Temperature: 250°C

Construction

- Conductor: Circular Compacted Copper conductor as per IS 8130, class 2
- Conductor Screen: Extruded Semi-conductive compound
- Insulation: XLPE
- Non-Metallic Insulation Screen: Extruded Semi-conductive compound
- Metallic Insulation Screen: Copper tape screen
- Inner Sheath: Extruded Polyvinyl Chloride
- Armour: Aluminium Round/Flat Wire Armoured
- Outer Sheath: Extruded Polyvinyl Chloride,

Colour: Black

Note:

- Inner sheath available with FR/ FRLS
- Outer/ Inner available with FR/FRLS

Bending Radius:

Fixed Installation: 15D
D is overall diameter of cable

Standard and References:

IS 8130:2013
IS 5831:1984
IS 3975:1979
IS 7098-2:2011

Test Voltage

13kV AC 50 Hz

Impulse voltage test

60 kV

Compliance

Conductor resistance	IS 8130
Insulation resistance	IS 7098-2
Flammability test	IEC 60332-1-2
Partial Discharge test	IS 7098-2

POLYCAB MV SC Cu IS 7098-2, 3.8/6.6 KV(E)

Medium Voltage Single Core Copper Armoured Cable, 3.8/6.6 KV (E) AC

DIMENSIONS AND WEIGHTS:

Product Code	No. of Cores	Core Cross sectional Area	Nominal Diameter			Weight (Approx.)
			Under armour	Over armour	Overall	
2XWaY	No.	mm²	mm	mm	mm	Kg/Km
MVIS15CXAWY2001C025SA001S	1C	25	13.9	17.1	19.9	647
MVIS15CXAWY2001C035SA001S	1C	35	15.1	18.3	21.1	769
MVIS15CXAWY2001C050SA001S	1C	50	16.6	19.8	22.6	958
MVIS15CXAWY2001C070SA001S	1C	70	18.2	21.4	24.2	1180
MVIS15CXAWY2001C095SA001S	1C	95	20.0	23.2	26.0	1467
MVIS15CXAWY2001C120SA001S	1C	120	21.6	24.8	27.6	1741
MVIS15CXAWY2001C150SA001S	1C	150	23.3	26.5	29.6	2100
MVIS15CXAWY2001C185SA001S	1C	185	25.0	28.2	31.3	2461
MVIS15CXAWY2001C240SA001S	1C	240	27.6	31.6	34.8	3141
MVIS15CXAWY2001C300SA001S	1C	300	30.5	34.5	37.6	3831
MVIS15CXAWY2001C400SA001S	1C	400	34.3	38.3	41.8	4868
MVIS15CXAWY2001C500SA001S	1C	500	38.2	42.2	46.0	6076
MVIS15CXAWY2001C630SA001S	1C	630	41.6	46.6	50.7	7523
MVIS15CXAWY2001C800SA001S	1C	800	45.7	50.7	55.1	9279
MVIS15CXAWY2001C01KSA001S	1C	1000	50.4	55.4	60.1	11379
2XFaY						
MVIS15CXAFY2001C025SA001S	1C	25	13.9	15.5	18.3	562
MVIS15CXAFY2001C035SA001S	1C	35	15.1	16.7	19.5	681
MVIS15CXAFY2001C050SA001S	1C	50	16.6	18.2	21.0	867
MVIS15CXAFY2001C070SA001S	1C	70	18.2	19.8	22.6	1079
MVIS15CXAFY2001C095SA001S	1C	95	20.0	21.6	24.4	1351
MVIS15CXAFY2001C120SA001S	1C	120	21.6	23.2	26.0	1615
MVIS15CXAFY2001C150SA001S	1C	150	23.3	24.9	27.7	1948
MVIS15CXAFY2001C185SA001S	1C	185	25.0	26.6	29.7	2315
MVIS15CXAFY2001C240SA001S	1C	240	27.6	29.2	32.4	2903
MVIS15CXAFY2001C300SA001S	1C	300	30.5	32.1	35.2	3572
MVIS15CXAFY2001C400SA001S	1C	400	34.3	35.9	39.4	4576
MVIS15CXAFY2001C500SA001S	1C	500	38.2	39.8	43.3	5715
MVIS15CXAFY2001C630SA001S	1C	630	41.6	43.2	46.9	6977
MVIS15CXAFY2001C800SA001S	1C	800	45.7	47.3	51.4	8680
MVIS15CXAFY2001C01KSA001S	1C	1000	50.4	52.0	56.4	10720

The above data is approximate & subject to manufacturing tolerance.

POLYCAB MV SC Cu IS 7098-2, 3.8/6.6 KV(E)

Medium Voltage Single Core Copper Armoured Cable, 3.8/6.6 KV (E) AC

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	
No.	mm²	Ω/km	Ω/km	µF/km	mH/km		Ω/km	
					2XFaY	2XWaY	2XFaY	2XWaY
1	25	0.727	0.932	0.21	0.41	0.43	0.13	0.13
1	35	0.524	0.672	0.23	0.39	0.41	0.12	0.13
1	50	0.387	0.496	0.27	0.36	0.38	0.11	0.12
1	70	0.268	0.344	0.30	0.34	0.36	0.11	0.11
1	95	0.193	0.248	0.35	0.33	0.34	0.10	0.11
1	120	0.153	0.197	0.38	0.31	0.33	0.10	0.10
1	150	0.124	0.159	0.42	0.30	0.32	0.10	0.10
1	185	0.0991	0.128	0.46	0.30	0.31	0.09	0.10
1	240	0.0754	0.098	0.51	0.29	0.30	0.09	0.09
1	300	0.0601	0.078	0.54	0.28	0.29	0.09	0.09
1	400	0.047	0.062	0.56	0.28	0.29	0.09	0.09
1	500	0.0366	0.049	0.60	0.27	0.28	0.08	0.09
1	630	0.0283	0.038	0.66	0.26	0.28	0.08	0.09
1	800	0.0221	0.031	0.73	0.26	0.27	0.08	0.09
1	1000	0.0176	0.026	0.79	0.26	0.27	0.08	0.08

CURRENT CARRYING CAPACITY:

Nominal area of conductor	Buried direct in the ground		In single -way Ducts		In air	
	Trefoil	Flat touching	Trefoil ducts	Flat touching ducts	Trefoil	Flat Touching
Sqmm	A	A	A	A	A	A
25	127	130	113	111	148	151
35	151	155	135	132	179	183
50	178	181	158	154	214	218
70	216	220	192	187	267	271
95	256	260	227	220	323	327
120	290	292	257	247	374	376
150	323	323	285	272	422	422
185	362	359	319	302	484	481
240	411	398	361	333	565	550
300	456	435	400	363	641	615
400	508	474	443	393	734	690
500	559	509	486	420	828	761
630	611	543	529	446	929	834
800	638	549	549	447	1002	872
1000	672	569	575	460	1083	927

Air Ambient temperature: 40˚C
Ground ambient temperature: 30˚C
Conductor operating temperature: 90˚C
The above table is in accordance with IS 3961(part 7):2016

POLYCAB MV SC Cu IS 7098-2, 3.8/6.6 KV(E)

Medium Voltage Single Core Copper Armoured Cable, 3.8/6.6 KV (E) AC

De-Rating Factor

Rating factor for variation in ambient air temperature for cable in free air

Ambient air Temperature	25˚C	30˚C	35˚C	40˚C	45˚C	50˚C	55˚C	60˚C
De-Rating Factor	1.14	1.10	1.05	1.00	0.95	0.89	0.84	0.77

Maximum conductor temperature 90˚C

Rating factor for variation in ground temperature for direct buried cables.

Ground Temperature	15˚C	20˚C	25˚C	30˚C	35˚C	40˚C	45˚C	50˚C
De-Rating Factor	1.12	1.08	1.04	1.00	0.96	0.91	0.87	0.82

Maximum conductor temperature 90˚C

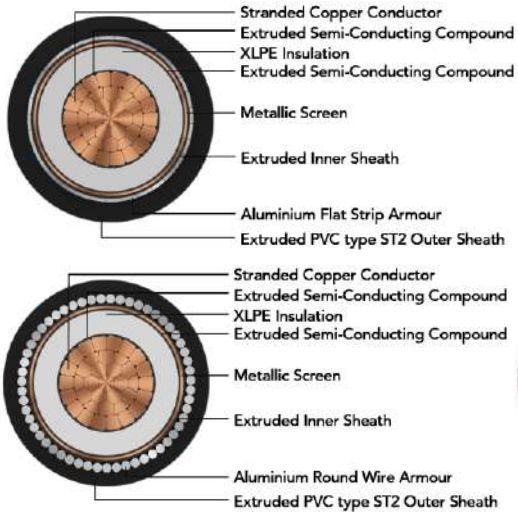
Rating factor for variation in ground temperature for cable in duct.

Ground Temperature	15˚C	20˚C	25˚C	30˚C	35˚C	40˚C	45˚C	50˚C
De-Rating Factor	1.12	1.08	1.04	1.00	0.96	0.91	0.87	0.82

Maximum conductor temperature 90˚C

POLYCAB MV SC Cu IS 7098-2, 6.6/6.6 KV(UE)

Medium Voltage Single Core Copper Armoured Cable, 6.6/6.6 KV (UE) AC



Outstanding Features

- Flame retardant
- High life
- UV resistant

Application

POLYCAB MV 6.6/6.6 KV(UE) XLPE insulated with copper conductor single core cable is suitable to use for power distribution for external and direct burial applications in power network system.

Voltage Rating

Nominal Voltage: 6.6/6.6 KV (UE)

Operation Temperature

Max. operating temperature: 90°C
Max. Short Circuit Temperature: 250°C

Construction

- Conductor: Circular Compacted Copper conductor as per IS 8130, class 2
- Conductor Screen: Extruded Semi-conductive compound
- Insulation: XLPE
- Non-Metallic Insulation Screen: Extruded Semi-conductive compound
- Metallic Insulation Screen: Copper tape screen
- Inner Sheath: Extruded Polyvinyl Chloride
- Armour: Aluminium Round/Flat Wire Armoured
- Outer Sheath: Extruded Polyvinyl Chloride,

Colour: Black

Note:

- Inner sheath available with FR/ FRLS
- Outer/ Inner available with FR/FRLS

Bending Radius:

Fixed Installation: 15D
D is overall diameter of cable

Standard and References:

IS 8130:2013
IS 5831:1984
IS 3975:1979
IS 7098-2:2011

Test Voltage

21kV AC 50 Hz

Impulse test Voltage

75 KV

Compliance

Conductor resistance	IS 8130
Insulation resistance	IS 7098-2
Flammability test	IEC 60332-1-2
Partial Discharge test	IS 7098-2

POLYCAB MV SC Cu IS 7098-2, 6.6/6.6 KV(UE)

Medium Voltage Single Core Copper Armoured Cable, 6.6/6.6 KV (UE) AC

DIMENSIONS AND WEIGHTS:

Product Code	No. of Cores	Core Cross sectional Area	Nominal Diameter			Weight (Approx.)
			Under armour	Over armour	Overall	
2XWaY	No.	mm²	mm	mm	mm	Kg/Km
MVIS18CXAWY2001C025SA001S	1C	25	15.5	18.7	21.5	713
MVIS18CXAWY2001C035SA001S	1C	35	16.7	19.9	22.7	839
MVIS18CXAWY2001C050SA001S	1C	50	18.2	21.4	24.2	1032
MVIS18CXAWY2001C070SA001S	1C	70	19.8	23.0	25.8	1258
MVIS18CXAWY2001C095SA001S	1C	95	21.6	24.8	27.6	1549
MVIS18CXAWY2001C120SA001S	1C	120	23.2	26.4	29.5	1850
MVIS18CXAWY2001C150SA001S	1C	150	24.9	28.1	31.2	2191
MVIS18CXAWY2001C185SA001S	1C	185	26.8	30.8	33.9	2652
MVIS18CXAWY2001C240SA001S	1C	240	29.2	33.2	36.4	3244
MVIS18CXAWY2001C300SA001S	1C	300	31.7	35.7	39.2	3948
MVIS18CXAWY2001C400SA001S	1C	400	34.9	38.9	42.4	4915
MVIS18CXAWY2001C500SA001S	1C	500	38.4	42.4	46.2	6090
MVIS18CXAWY2001C630SA001S	1C	630	41.8	46.8	50.9	7539
MVIS18CXAWY2001C800SA001S	1C	800	45.9	50.9	55.3	9295
MVIS18CXAWY2001C01KSA001S	1C	1000	50.4	55.4	60.1	11379
2XFaY						
MVIS18CXAFY2001C025SA001S	1C	25	15.5	17.1	19.9	626
MVIS18CXAFY2001C035SA001S	1C	35	16.7	18.3	21.1	748
MVIS18CXAFY2001C050SA001S	1C	50	18.2	19.8	22.6	931
MVIS18CXAFY2001C070SA001S	1C	70	19.8	21.4	24.2	1147
MVIS18CXAFY2001C095SA001S	1C	95	21.6	23.2	26.0	1423
MVIS18CXAFY2001C120SA001S	1C	120	23.2	24.8	27.6	1698
MVIS18CXAFY2001C150SA001S	1C	150	24.9	26.5	29.6	2052
MVIS18CXAFY2001C185SA001S	1C	185	26.8	28.4	31.5	2423
MVIS18CXAFY2001C240SA001S	1C	240	29.2	30.8	34.0	2995
MVIS18CXAFY2001C300SA001S	1C	300	31.7	33.3	36.4	3648
MVIS18CXAFY2001C400SA001S	1C	400	34.9	36.5	40.0	4621
MVIS18CXAFY2001C500SA001S	1C	500	38.4	40.0	43.8	5763
MVIS18CXAFY2001C630SA001S	1C	630	41.8	43.4	47.1	6993
MVIS18CXAFY2001C800SA001S	1C	800	45.9	47.5	51.6	8703
MVIS18CXAFY2001C01KSA001S	1C	1000	50.4	52.0	56.4	10720

The above data is approximate & subject to manufacturing tolerance

POLYCAB MV SC Cu IS 7098-2, 6.6/6.6 KV(UE)

Medium Voltage Single Core Copper Armoured Cable, 6.6/6.6 KV (UE) AC

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	
No.	mm²	Ω/km	Ω/km	µF/km	mH/km		Ω/km	
					2XFaY	2XWaY	2XFaY	2XWaY
1	25	0.727	0.932	0.18	0.43	0.44	0.13	0.14
1	35	0.524	0.672	0.20	0.41	0.42	0.13	0.13
1	50	0.387	0.496	0.23	0.38	0.39	0.12	0.12
1	70	0.268	0.344	0.25	0.36	0.37	0.11	0.12
1	95	0.193	0.248	0.29	0.34	0.35	0.11	0.11
1	120	0.153	0.197	0.32	0.33	0.34	0.10	0.11
1	150	0.124	0.159	0.35	0.32	0.33	0.10	0.10
1	185	0.0991	0.128	0.38	0.31	0.32	0.10	0.10
1	240	0.0754	0.098	0.42	0.30	0.31	0.09	0.10
1	300	0.0601	0.078	0.47	0.29	0.30	0.09	0.09
1	400	0.047	0.062	0.52	0.28	0.29	0.09	0.09
1	500	0.0366	0.049	0.58	0.27	0.28	0.09	0.09
1	630	0.0283	0.038	0.64	0.27	0.28	0.08	0.09
1	800	0.0221	0.031	0.72	0.26	0.27	0.08	0.09
1	1000	0.0176	0.026	0.79	0.26	0.27	0.08	0.08

CURRENT CARRYING CAPACITY:

Nominal area of conductor	Buried direct in the ground		In single -way Ducts		In air	
	Trefoil	Flat touching	Trefoil ducts	Flat touching ducts	Trefoil	Flat Touching
Sqmm	A	A	A	A	A	A
25	127	130	113	111	150	153
35	151	155	134	132	181	185
50	178	181	158	154	216	219
70	216	220	191	186	269	273
95	257	259	227	219	326	329
120	290	292	256	246	376	378
150	323	323	285	272	424	425
185	360	354	317	297	487	480
240	411	398	361	332	568	552
300	456	435	399	362	643	616
400	508	474	443	392	735	690
500	559	510	486	420	828	761
630	611	544	529	446	930	835
800	639	550	550	448	1003	873
1000	672	569	575	460	1083	927

Air Ambient temperature: 40˚C
Ground ambient temperature: 30˚C
Conductor operating temperature: 90˚C
The above table is in accordance with IS 3961(part 7):2016

POLYCAB MV SC Cu IS 7098-2, 6.6/6.6 KV(UE)

Medium Voltage Single Core Copper Armoured Cable, 6.6/6.6 KV (UE) AC

De-Rating Factor

Rating factor for variation in ambient air temperature for cable in free air

Ambient air Temperature	25˚C	30˚C	35˚C	40˚C	45˚C	50˚C	55˚C	60˚C
De-Rating Factor	1.14	1.10	1.05	1.00	0.95	0.89	0.84	0.77

Maximum conductor temperature 90˚C

Rating factor for variation in ground temperature for direct buried cables.

Ground Temperature	15˚C	20˚C	25˚C	30˚C	35˚C	40˚C	45˚C	50˚C
De-Rating Factor	1.12	1.08	1.04	1.00	0.96	0.91	0.87	0.82

Maximum conductor temperature 90˚C

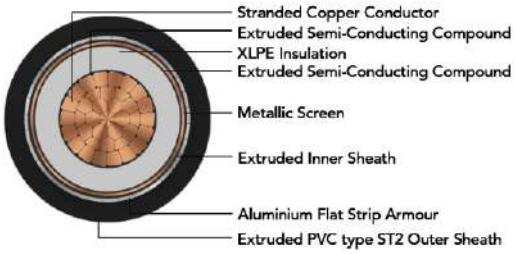
Rating factor for variation in ground temperature for cable in duct.

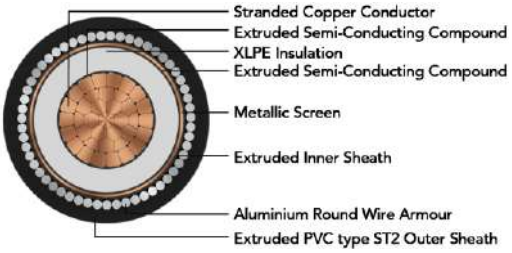
Ground Temperature	15˚C	20˚C	25˚C	30˚C	35˚C	40˚C	45˚C	50˚C
De-Rating Factor	1.12	1.08	1.04	1.00	0.96	0.91	0.87	0.82

Maximum conductor temperature 90˚C

POLYCAB MV SC Cu IS 7098-2, 6.35/11 KV(E)

Medium Voltage Single Core Copper Armoured Cable, 6.35/11 KV (E) AC





Outstanding Features

- Flame retardant
- High life
- UV resistant

Application

POLYCAB MV 6.35/11 KV(E) XLPE insulated with copper conductor single core cable is suitable to use for power distribution for external and direct burial applications in power network system.

Voltage Rating

Nominal Voltage: 6.35/11 KV (E)

Operation Temperature

Max. operating temperature: 90°C
Max. Short Circuit Temperature: 250°C

Construction

- Conductor: Circular Compacted Copper conductor as per IS 8130, class 2
- Conductor Screen: Extruded Semi-conductive compound
- Insulation: XLPE
- Non-Metallic Insulation Screen: Extruded Semi-conductive compound
- Metallic Insulation Screen: Copper tape screen
- Inner Sheath: Extruded Polyvinyl Chloride
- Armour: Aluminium Round/Flat Wire Armoured
- Outer Sheath: Extruded Polyvinyl Chloride,

Colour: Black

Note:

- Inner sheath available with FR/ FRLS
- Outer/ Inner available with FR/FRLS

Standard and References:

IS 8130:2013
IS 5831:1984
IS 3975:1979
IS 7098-2:2011

Test Voltage

21kV AC 50 Hz

Impulse test Voltage

75 KV

Compliance

Conductor resistance	IS 8130
Insulation resistance	IS 7098-2
Flammability test	IEC 60332-1-2
Partial Discharge test	IS 7098-2

Bending Radius:

Fixed Installation: 15D
D is overall diameter of cable

POLYCAB MV SC Cu IS 7098-2, 6.35/11 KV(E)

Medium Voltage Single Core Copper Armoured Cable, 6.35/11 KV (E) AC

DIMENSIONS AND WEIGHTS:

Product Code	No. of Cores	Core Cross sectional Area	Nominal Diameter			Weight (Approx.)
			Under armour	Over armour	Overall	
2XWaY	No.	mm²	mm	mm	mm	Kg/Km
MVIS17CXAWY2001C025SA001S	1C	25	15.5	18.7	21.5	713
MVIS17CXAWY2001C035SA001S	1C	35	16.7	19.9	22.7	839
MVIS17CXAWY2001C050SA001S	1C	50	18.2	21.4	24.2	1032
MVIS17CXAWY2001C070SA001S	1C	70	19.8	23.0	25.8	1258
MVIS17CXAWY2001C095SA001S	1C	95	21.6	24.8	27.6	1549
MVIS17CXAWY2001C120SA001S	1C	120	23.2	26.4	29.5	1850
MVIS17CXAWY2001C150SA001S	1C	150	24.9	28.1	31.2	2191
MVIS17CXAWY2001C185SA001S	1C	185	26.8	30.8	33.9	2652
MVIS17CXAWY2001C240SA001S	1C	240	29.2	33.2	36.4	3244
MVIS17CXAWY2001C300SA001S	1C	300	31.7	35.7	39.2	3948
MVIS17CXAWY2001C400SA001S	1C	400	34.9	38.9	42.4	4915
MVIS17CXAWY2001C500SA001S	1C	500	38.4	42.4	46.2	6090
MVIS17CXAWY2001C630SA001S	1C	630	41.8	46.8	50.9	7539
MVIS17CXAWY2001C800SA001S	1C	800	45.9	50.9	55.3	9295
MVIS17CXAWY2001C01KSA001S	1C	1000	50.4	55.4	60.1	11379
2XFaY						
MVIS17CXAFY2001C025SA001S	1C	25	15.5	17.1	19.9	626
MVIS17CXAFY2001C035SA001S	1C	35	16.7	18.3	21.1	748
MVIS17CXAFY2001C050SA001S	1C	50	18.2	19.8	22.6	931
MVIS17CXAFY2001C070SA001S	1C	70	19.8	21.4	24.2	1147
MVIS17CXAFY2001C095SA001S	1C	95	21.6	23.2	26.0	1423
MVIS17CXAFY2001C120SA001S	1C	120	23.2	24.8	27.6	1698
MVIS17CXAFY2001C150SA001S	1C	150	24.9	26.5	29.6	2052
MVIS17CXAFY2001C185SA001S	1C	185	26.8	28.4	31.5	2423
MVIS17CXAFY2001C240SA001S	1C	240	29.2	30.8	34.0	2995
MVIS17CXAFY2001C300SA001S	1C	300	31.7	33.3	36.4	3648
MVIS17CXAFY2001C400SA001S	1C	400	34.9	36.5	40.0	4621
MVIS17CXAFY2001C500SA001S	1C	500	38.4	40.0	43.8	5763
MVIS17CXAFY2001C630SA001S	1C	630	41.8	43.4	47.1	6993
MVIS17CXAFY2001C800SA001S	1C	800	45.9	47.5	51.6	8703
MVIS17CXAFY2001C01KSA001S	1C	1000	50.4	52.0	56.4	10720

The above data is approximate & subject to manufacturing tolerance.

POLYCAB MV SC Cu IS 7098-2, 6.35/11 KV(E)

Medium Voltage Single Core Copper Armoured Cable, 6.35/11 KV (E) AC

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	
No.	mm²	Ω/km	Ω/km	µF/km	mH/km		Ω/km	
					2XFaY	2XWaY	2XFaY	2XWaY
1	25	0.727	0.932	0.18	0.43	0.44	0.13	0.14
1	35	0.524	0.672	0.20	0.41	0.42	0.13	0.13
1	50	0.387	0.496	0.23	0.38	0.39	0.12	0.12
1	70	0.268	0.344	0.25	0.36	0.37	0.11	0.12
1	95	0.193	0.248	0.29	0.34	0.35	0.11	0.11
1	120	0.153	0.197	0.32	0.33	0.34	0.10	0.11
1	150	0.124	0.159	0.35	0.32	0.33	0.10	0.10
1	185	0.0991	0.128	0.38	0.31	0.32	0.10	0.10
1	240	0.0754	0.098	0.42	0.30	0.31	0.09	0.10
1	300	0.0601	0.078	0.47	0.29	0.30	0.09	0.09
1	400	0.047	0.062	0.52	0.28	0.29	0.09	0.09
1	500	0.0366	0.049	0.58	0.27	0.28	0.09	0.09
1	630	0.0283	0.038	0.64	0.27	0.28	0.08	0.09
1	800	0.0221	0.031	0.72	0.26	0.27	0.08	0.09
1	1000	0.0176	0.026	0.79	0.26	0.27	0.08	0.08

CURRENT CARRYING CAPACITY:

Nominal area of conductor	Buried direct in the ground		In single -way Ducts		In air	
	Trefoil	Flat touching	Trefoil ducts	Flat touching ducts	Trefoil	Flat Touching
Sqmm	A	A	A	A	A	A
25	127	130	113	111	150	153
35	151	155	134	132	181	185
50	178	181	158	154	216	219
70	216	220	191	186	269	273
95	257	259	227	219	326	329
120	290	292	256	246	376	378
150	323	323	285	272	424	425
185	360	354	317	297	487	480
240	411	398	361	332	568	552
300	456	435	399	362	643	616
400	508	474	443	392	735	690
500	559	510	486	420	828	761
630	611	544	529	446	930	835
800	639	550	550	448	1003	873
1000	672	569	575	460	1083	927

Air Ambient temperature: 40˚C
Ground ambient temperature: 30˚C
Conductor operating temperature: 90˚C
The above table is in accordance with IS 3961(part 7):2016

POLYCAB MV SC Cu IS 7098-2, 6.35/11 KV(E)

Medium Voltage Single Core Copper Armoured Cable, 6.35/11 KV (E) AC

De-Rating Factor

Rating factor for variation in ambient air temperature for cable in free air

Ambient air Temperature	25˚C	30˚C	35˚C	40˚C	45˚C	50˚C	55˚C	60˚C
De-Rating Factor	1.14	1.10	1.05	1.00	0.95	0.89	0.84	0.77

Maximum conductor temperature 90˚C

Rating factor for variation in ground temperature for direct buried cables.

Ground Temperature	15˚C	20˚C	25˚C	30˚C	35˚C	40˚C	45˚C	50˚C
De-Rating Factor	1.12	1.08	1.04	1.00	0.96	0.91	0.87	0.82

Maximum conductor temperature 90˚C

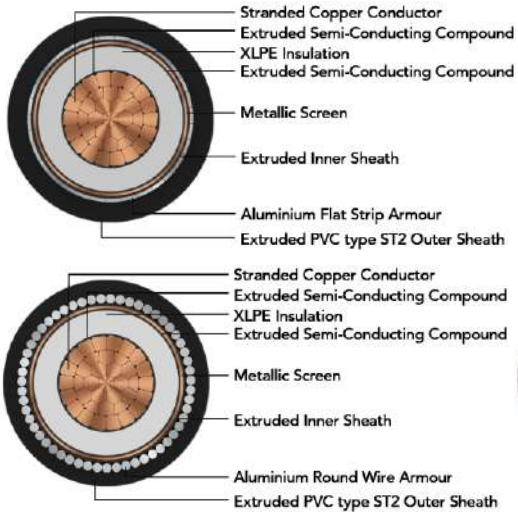
Rating factor for variation in ground temperature for cable in duct.

Ground Temperature	15˚C	20˚C	25˚C	30˚C	35˚C	40˚C	45˚C	50˚C
De-Rating Factor	1.12	1.08	1.04	1.00	0.96	0.91	0.87	0.82

Maximum conductor temperature 90˚C

POLYCAB MV SC Cu IS 7098-2, 11/11 KV(UE)

Medium Voltage Single Core Copper Armoured Cable, 11/11 KV (UE) AC



Outstanding Features

- Flame retardant
- High life
- UV resistant

Application

POLYCAB MV 11/11 KV(UE) XLPE insulated with copper conductor single core cable is suitable to use for power distribution for external and direct burial applications in power network system.

Voltage Rating

Nominal Voltage: 11/11 KV (UE)

Operation Temperature

Max. operating temperature: 90°C
Max. Short Circuit Temperature: 250°C

Construction

- Conductor: Circular Compacted Copper conductor as per IS 8130, class 2
- Conductor Screen: Extruded Semi-conductive compound
- Insulation: XLPE
- Non-Metallic Insulation Screen: Extruded Semi-conductive compound
- Metallic Insulation Screen: Copper tape screen
- Inner Sheath: Extruded Polyvinyl Chloride
- Armour: Aluminium Round/Flat Wire Armoured
- Outer Sheath: Extruded Polyvinyl Chloride

Colour: Black

Note:

- Inner sheath available with FR/ FRLS
- Outer/ Inner available with FR/FRLS

Standard and References:

IS 8130:2013
IS 5831:1984
IS 3975:1979
IS 7098-2:2011

Test Voltage

35kV AC 50 Hz

Impulse test Voltage

95 KV

Compliance

• Conductor resistance	IS 8130
• Insulation resistance	IS 7098-2
• Flammability test	IEC 60332-1-2
• Partial Discharge test	IS 7098-2

Bending Radius:

Fixed Installation: 15D
D is overall diameter of cable

POLYCAB MV SC Cu IS 7098-2, 11/11 KV(UE)

Medium Voltage Single Core Copper Armoured Cable, 11/11 KV (UE) AC

DIMENSIONS AND WEIGHTS:

Product Code	No. of Cores	Core Cross sectional Area	Nominal Diameter			Weight (Approx.)
			Under armour	Over armour	Overall	
2XWaY	No.	mm²	mm	mm	mm	Kg/Km
MVIS11CXAWY2001C025SA001S	1C	25	19.3	22.5	25.3	888
MVIS11CXAWY2001C035SA001S	1C	35	20.5	23.7	26.5	1025
MVIS11CXAWY2001C050SA001S	1C	50	22.0	25.2	28.4	1249
MVIS11CXAWY2001C070SA001S	1C	70	23.6	26.8	29.9	1486
MVIS11CXAWY2001C095SA001S	1C	95	25.4	29.4	32.5	1855
MVIS11CXAWY2001C120SA001S	1C	120	27.2	31.2	34.3	2168
MVIS11CXAWY2001C150SA001S	1C	150	28.9	32.9	36.0	2530
MVIS11CXAWY2001C185SA001S	1C	185	30.6	34.6	37.7	2909
MVIS11CXAWY2001C240SA001S	1C	240	33.0	37.0	40.5	3547
MVIS11CXAWY2001C300SA001S	1C	300	35.5	39.5	43.0	4237
MVIS11CXAWY2001C400SA001S	1C	400	38.9	42.9	46.7	5289
MVIS11CXAWY2001C500SA001S	1C	500	42.2	47.2	51.3	6617
MVIS11CXAWY2001C630SA001S	1C	630	45.6	50.6	55.0	7952
MVIS11CXAWY2001C800SA001S	1C	800	49.9	54.9	59.3	9720
MVIS11CXAWY2001C01KSA001S	1C	1000	54.2	59.2	63.9	11807
2XFaY						
MVIS11CXAFY2001C025SA001S	1C	25	19.3	20.9	23.7	782
MVIS11CXAFY2001C035SA001S	1C	35	20.5	22.1	24.9	910
MVIS11CXAFY2001C050SA001S	1C	50	22.0	23.6	26.4	1103
MVIS11CXAFY2001C070SA001S	1C	70	23.6	25.2	28.3	1350
MVIS11CXAFY2001C095SA001S	1C	95	25.4	27.0	30.1	1638
MVIS11CXAFY2001C120SA001S	1C	120	27.2	28.8	31.9	1939
MVIS11CXAFY2001C150SA001S	1C	150	28.9	30.5	33.6	2281
MVIS11CXAFY2001C185SA001S	1C	185	30.6	32.2	35.3	2649
MVIS11CXAFY2001C240SA001S	1C	240	33.0	34.6	37.8	3236
MVIS11CXAFY2001C300SA001S	1C	300	35.5	37.1	40.6	3934
MVIS11CXAFY2001C400SA001S	1C	400	38.9	40.5	44.3	4953
MVIS11CXAFY2001C500SA001S	1C	500	42.2	43.8	47.6	6064
MVIS11CXAFY2001C630SA001S	1C	630	45.6	47.2	51.3	7353
MVIS11CXAFY2001C800SA001S	1C	800	49.9	51.5	55.9	9121
MVIS11CXAFY2001C01KSA001S	1C	1000	54.2	55.8	60.5	11145

The above data is approximate & subject to manufacturing tolerance.

POLYCAB MV SC Cu IS 7098-2, 11/11 KV(UE)

Medium Voltage Single Core Copper Armoured Cable, 11/11 KV (UE) AC

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	
No.	mm²	Ω/km	Ω/km	µF/km	mH/km		Ω/km	
					2XFaY	2XWaY	2XFaY	2XWaY
1	25	0.727	0.932	0.14	0.46	0.48	0.15	0.15
1	35	0.524	0.672	0.15	0.44	0.45	0.14	0.14
1	50	0.387	0.496	0.17	0.41	0.42	0.13	0.13
1	70	0.268	0.344	0.19	0.39	0.40	0.12	0.13
1	95	0.193	0.248	0.21	0.37	0.38	0.12	0.12
1	120	0.153	0.197	0.23	0.35	0.37	0.11	0.12
1	150	0.124	0.159	0.25	0.34	0.36	0.11	0.11
1	185	0.0991	0.128	0.27	0.33	0.35	0.10	0.11
1	240	0.0754	0.098	0.30	0.32	0.33	0.10	0.10
1	300	0.0601	0.078	0.33	0.31	0.32	0.10	0.10
1	400	0.047	0.062	0.37	0.30	0.31	0.09	0.10
1	500	0.0366	0.049	0.41	0.29	0.30	0.09	0.10
1	630	0.0283	0.038	0.45	0.28	0.30	0.09	0.09
1	800	0.0221	0.031	0.50	0.28	0.29	0.09	0.09
1	1000	0.0176	0.026	0.55	0.27	0.28	0.08	0.09

The above data is approximate & subject to manufacturing tolerance.

CURRENT CARRYING CAPACITY:

Nominal area of conductor	Buried direct in the ground		In single -way Ducts		In air	
	Trefoil	Flat touching	Trefoil ducts	Flat touching ducts	Trefoil	Flat Touching
Sqmm	A	A	A	A	A	A
25	127	130	113	111	150	153
35	151	155	134	132	181	185
50	178	181	158	154	216	219
70	216	220	191	186	269	273
95	257	259	227	219	326	329
120	290	292	256	246	376	378
150	323	323	285	272	424	425
185	360	354	317	297	487	480
240	411	398	361	332	568	552
300	456	435	399	362	643	616
400	508	474	443	392	735	690
500	559	510	486	420	828	761
630	611	544	529	446	930	835
800	639	550	550	448	1003	873
1000	672	569	575	460	1083	927

Air Ambient temperature: 40˚C
Ground ambient temperature: 30˚C
Conductor operating temperature: 90˚C
The above table is in accordance with IS 3961(part 7):2016

POLYCAB MV SC Cu IS 7098-2, 11/11 KV(UE)

Medium Voltage Single Core Copper Armoured Cable, 11/11 KV (UE) AC

De-Rating Factor

Rating factor for variation in ambient air temperature for cable in free air

Ambient air Temperature	25˚C	30˚C	35˚C	40˚C	45˚C	50˚C	55˚C	60˚C
De-Rating Factor	1.14	1.10	1.05	1.00	0.95	0.89	0.84	0.77

Maximum conductor temperature 90˚C

Rating factor for variation in ground temperature for direct buried cables.

Ground Temperature	15˚C	20˚C	25˚C	30˚C	35˚C	40˚C	45˚C	50˚C
De-Rating Factor	1.12	1.08	1.04	1.00	0.96	0.91	0.87	0.82

Maximum conductor temperature 90˚C

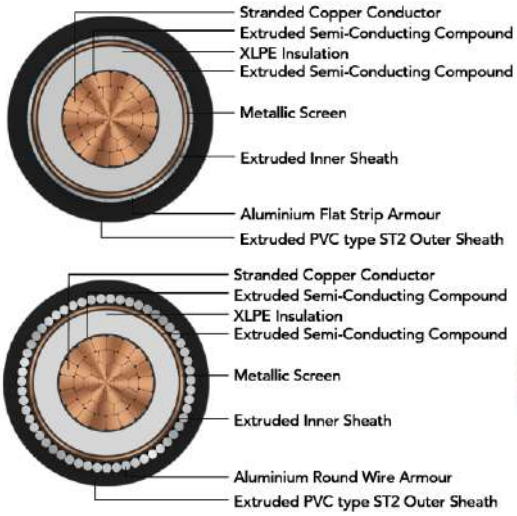
Rating factor for variation in ground temperature for cable in duct.

Ground Temperature	15˚C	20˚C	25˚C	30˚C	35˚C	40˚C	45˚C	50˚C
De-Rating Factor	1.12	1.08	1.04	1.00	0.96	0.91	0.87	0.82

Maximum conductor temperature 90˚C

POLYCAB MV SC Cu IS 7098-2, 12.7/22 KV(E)

Medium Voltage Single Core Copper Armoured Cable,12.7/22 KV (E) AC



Outstanding Features

- Flame retardant
- High life
- UV resistant

Application

POLYCAB MV 12.7/22 KV(E) XLPE insulated with copper conductor single core cable is suitable to use for power distribution for external and direct burial applications in power network system.

Voltage Rating

Nominal Voltage: 12.7/22 KV (E)

Operation Temperature

Max. operating temperature: 90°C
Max. Short Circuit Temperature: 250°C

Construction

- Conductor: Circular Compacted Copper conductor as per IS 8130, class 2
- Conductor Screen: Extruded Semi-conductive compound
- Insulation: XLPE
- Non-Metallic Insulation Screen: Extruded Semi-conductive compound
- Metallic Insulation Screen: Copper tape screen
- Inner Sheath: Extruded Polyvinyl Chloride
- Armour: Aluminium Round/Flat Wire Armoured
- Outer Sheath: Extruded Polyvinyl Chloride

Colour: Black

Note:

- Inner sheath available with FR/ FRLS
- Outer/ Inner available with FR/FRLS

Bending Radius:

Fixed Installation: 20D
D is overall diameter of cable

Standard and References:

IS 8130:2013
IS 5831:1984
IS 3975:1979
IS 7098-2:2011

Test Voltage

42kV AC 50 Hz

Impulse test Voltage

125 KV

Compliance

Conductor resistance	IS 8130
Insulation resistance	IS 7098-2
Flammability test	IEC 60332-1-2
Partial Discharge test	IS 7098-2

OUR ACRREDITATION

ISO 9001 ISO 14001 ISO 45001

NABL ABS IRS

POLYCAB MV SC Cu IS 7098-2, 12.7/22 KV(E)

Medium Voltage Single Core Copper Armoured Cable,12.7/22 KV (E) AC

DIMENSIONS AND WEIGHTS:

Product Code	No. of Cores	Core Cross sectional Area	Nominal Diameter			Weight (Approx.)
			Under armour	Over armour	Overall	
2XWaY	No.	mm²	mm	mm	mm	Kg/Km
MVIS12CXAWY2001C035SA001S	1C	35	21.5	24.7	27.5	1077
MVIS12CXAWY2001C050SA001S	1C	50	23.0	26.2	29.4	1305
MVIS12CXAWY2001C070SA001S	1C	70	24.6	27.8	30.9	1544
MVIS12CXAWY2001C095SA001S	1C	95	26.6	30.6	33.7	1937
MVIS12CXAWY2001C120SA001S	1C	120	28.2	32.2	35.3	2238
MVIS12CXAWY2001C150SA001S	1C	150	29.9	33.9	37.0	2594
MVIS12CXAWY2001C185SA001S	1C	185	31.6	35.6	39.0	3006
MVIS12CXAWY2001C240SA001S	1C	240	34.0	38.0	41.5	3627
MVIS12CXAWY2001C300SA001S	1C	300	36.7	40.7	44.5	4375
MVIS12CXAWY2001C400SA001S	1C	400	39.9	43.9	47.7	5370
MVIS12CXAWY2001C500SA001S	1C	500	43.2	48.2	52.3	6709
MVIS12CXAWY2001C630SA001S	1C	630	46.8	51.8	56.2	8075
MVIS12CXAWY2001C800SA001S	1C	800	50.9	55.9	60.6	9871
MVIS12CXAWY2001C01KSA001S	1C	1000	55.2	61.5	66.5	12234
2XFaY						
MVIS12CXAFY2001C035SA001S	1C	35	21.5	23.1	25.9	951
MVIS12CXAFY2001C050SA001S	1C	50	23.0	24.6	27.4	1153
MVIS12CXAFY2001C070SA001S	1C	70	24.6	26.2	29.3	1404
MVIS12CXAFY2001C095SA001S	1C	95	26.6	28.2	31.3	1709
MVIS12CXAFY2001C120SA001S	1C	120	28.2	29.8	32.9	1998
MVIS12CXAFY2001C150SA001S	1C	150	29.9	31.5	34.6	2343
MVIS12CXAFY2001C185SA001S	1C	185	31.6	33.2	36.3	2706
MVIS12CXAFY2001C240SA001S	1C	240	34.0	35.6	39.1	3334
MVIS12CXAFY2001C300SA001S	1C	300	36.7	38.3	41.8	4027
MVIS12CXAFY2001C400SA001S	1C	400	39.9	41.5	45.3	5032
MVIS12CXAFY2001C500SA001S	1C	500	43.2	44.8	48.6	6142
MVIS12CXAFY2001C630SA001S	1C	630	46.8	48.4	52.5	7469
MVIS12CXAFY2001C800SA001S	1C	800	50.9	52.5	56.9	9212
MVIS12CXAFY2001C01KSA001S	1C	1000	55.2	56.8	61.5	11251

The above data is approximate & subject to manufacturing tolerance

POLYCAB MV SC Cu IS 7098-2, 12.7/22 KV(E)

Medium Voltage Single Core Copper Armoured Cable,12.7/22 KV (E) AC

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	
No.	mm²	Ω/km	Ω/km	µF/km	mH/km		Ω/km	
					2XFaY	2XWaY	2XFaY	2XWaY
1	35	0.524	0.672	0.14	0.45	0.46	0.14	0.14
1	50	0.387	0.496	0.16	0.41	0.43	0.13	0.13
1	70	0.268	0.344	0.18	0.40	0.41	0.12	0.13
1	95	0.193	0.248	0.20	0.38	0.39	0.12	0.12
1	120	0.153	0.197	0.22	0.36	0.38	0.11	0.12
1	150	0.124	0.159	0.24	0.35	0.36	0.11	0.11
1	185	0.0991	0.128	0.26	0.34	0.35	0.11	0.11
1	240	0.0754	0.098	0.28	0.32	0.34	0.10	0.11
1	300	0.0601	0.078	0.31	0.31	0.33	0.10	0.10
1	400	0.047	0.062	0.35	0.30	0.31	0.10	0.10
1	500	0.0366	0.049	0.38	0.29	0.31	0.09	0.10
1	630	0.0283	0.038	0.42	0.29	0.30	0.09	0.09
1	800	0.0221	0.031	0.47	0.28	0.29	0.09	0.09
1	1000	0.0176	0.026	0.51	0.27	0.29	0.09	0.09

CURRENT CARRYING CAPACITY:

Nominal area of conductor	Buried direct in the ground		In single -way Ducts		In air	
	Trefoil	Flat touching	Trefoil ducts	Flat touching ducts	Trefoil	Flat Touching
Sqmm	A	A	A	A	A	A
35	150	153	132	129	185	188
50	176	178	154	150	224	227
70	214	215	187	180	278	280
95	253	253	221	212	336	336
120	285	284	249	236	386	384
150	317	313	276	260	434	429
185	355	346	308	286	494	485
240	404	387	350	320	575	556
300	442	413	382	339	644	611
400	490	449	422	367	734	683
500	538	482	462	393	825	753
630	586	513	501	416	920	823
800	629	540	550	447	1014	890
1000	643	552	560	453	1074	938

Air Ambient temperature: 40˚C
Ground ambient temperature: 30˚C
Conductor operating temperature: 90˚C
The above table is in accordance with IS 3961(part 7):2016

POLYCAB MV SC Cu IS 7098-2, 12.7/22 KV(E)

Medium Voltage Single Core Copper Armoured Cable,12.7/22 KV (E) AC

De-Rating Factor

Rating factor for variation in ambient air temperature for cable in free air

Ambient air Temperature	25˚C	30˚C	35˚C	40˚C	45˚C	50˚C	55˚C	60˚C
De-Rating Factor	1.14	1.10	1.05	1.00	0.95	0.89	0.84	0.77

Maximum conductor temperature 90˚C

Rating factor for variation in ground temperature for direct buried cables.

Ground Temperature	15˚C	20˚C	25˚C	30˚C	35˚C	40˚C	45˚C	50˚C
De-Rating Factor	1.12	1.08	1.04	1.00	0.96	0.91	0.87	0.82

Maximum conductor temperature 90˚C

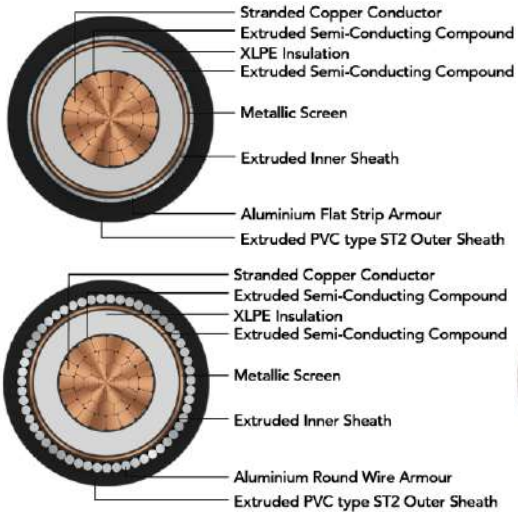
Rating factor for variation in ground temperature for cable in duct.

Ground Temperature	15˚C	20˚C	25˚C	30˚C	35˚C	40˚C	45˚C	50˚C
De-Rating Factor	1.12	1.08	1.04	1.00	0.96	0.91	0.87	0.82

Maximum conductor temperature 90˚C

POLYCAB MV SC Cu IS 7098-2, 19/33 KV(E)

Medium Voltage Single Core Copper Armoured Cable,19/33 KV (E) AC



Outstanding Features

- Flame retardant
- High life
- UV resistant

Application

POLYCAB MV 19/33 KV(E) XLPE insulated with copper conductor single core cable is suitable to use for power distribution for external and direct burial applications in power network system.

Voltage Rating

Nominal Voltage: 19/33 KV (E)

Operation Temperature

Max. operating temperature: 90°C
Max. Short Circuit Temperature: 250°C

Construction

- Conductor: Circular Compacted Copper conductor as per IS 8130, class 2
- Conductor Screen: Extruded Semi-conductive compound
- Insulation: XLPE
- Non-Metallic Insulation Screen: Extruded Semi-conductive compound
- Metallic Insulation Screen: Copper tape screen
- Inner Sheath: Extruded Polyvinyl Chloride
- Armour: Aluminium Round/Flat Wire Armoured
- Outer Sheath: Extruded Polyvinyl Chloride

Colour: Black

Note:

- Inner sheath available with FR/ FRLS
- Outer/ Inner available with FR/FRLS

Standard and References:

IS 8130:2013
IS 5831:1984
IS 3975:1979
IS 7098-2:2011

Test Voltage

63kV AC 50 Hz

Impulse test Voltage

170 KV

Compliance

• Conductor resistance	IS 8130
• Insulation resistance	IS 7098-2
• Flammability test	IEC 60332-1-2
• Partial Discharge test	IS 7098-2

Bending Radius:

Fixed Installation: 20D
D is overall diameter of cable

POLYCAB MV SC Cu IS 7098-2, 19/33 KV(E)

Medium Voltage Single Core Copper Armoured Cable,19/33 KV (E) AC

DIMENSIONS AND WEIGHTS:

Product Code	No. of Cores	Core Cross sectional Area	Nominal Diameter			Weight (Approx.)
			Under armour	Over armour	Overall	
2XWaY	No.	mm²	mm	mm	mm	Kg/Km
MVIS13CXAWY2001C035SA001S	1C	35	27.3	31.3	34.4	1514
MVIS13CXAWY2001C050SA001S	1C	50	28.8	32.8	36.0	1743
MVIS13CXAWY2001C070SA001S	1C	70	30.4	34.4	37.5	1998
MVIS13CXAWY2001C095SA001S	1C	95	32.2	36.2	39.7	2354
MVIS13CXAWY2001C120SA001S	1C	120	33.8	37.8	41.2	2670
MVIS13CXAWY2001C150SA001S	1C	150	35.5	39.5	42.9	3042
MVIS13CXAWY2001C185SA001S	1C	185	37.4	41.4	45.1	3495
MVIS13CXAWY2001C240SA001S	1C	240	39.8	43.8	47.6	4140
MVIS13CXAWY2001C300SA001S	1C	300	42.3	47.3	51.4	5054
MVIS13CXAWY2001C400SA001S	1C	400	45.5	50.5	54.9	6133
MVIS13CXAWY2001C500SA001S	1C	500	49.0	54.0	58.4	7342
MVIS13CXAWY2001C630SA001S	1C	630	52.4	57.4	62.1	8721
MVIS13CXAWY2001C800SA001S	1C	800	56.7	63.0	68.0	10863
MVIS13CXAWY2001C01KSA001S	1C	1000	61.0	67.3	72.6	13015
2XFaY						
MVIS13CXAFY2001C035SA001S	1C	35	27.3	28.9	32.0	1284
MVIS13CXAFY2001C050SA001S	1C	50	28.8	30.4	33.6	1495
MVIS13CXAFY2001C070SA001S	1C	70	30.4	32.0	35.1	1739
MVIS13CXAFY2001C095SA001S	1C	95	32.2	33.8	36.9	2052
MVIS13CXAFY2001C120SA001S	1C	120	33.8	35.4	38.8	2378
MVIS13CXAFY2001C150SA001S	1C	150	35.5	37.1	40.5	2740
MVIS13CXAFY2001C185SA001S	1C	185	37.4	39.0	42.4	3145
MVIS13CXAFY2001C240SA001S	1C	240	39.8	41.4	45.2	3803
MVIS13CXAFY2001C300SA001S	1C	300	42.3	43.9	47.7	4501
MVIS13CXAFY2001C400SA001S	1C	400	45.5	47.1	51.2	5534
MVIS13CXAFY2001C500SA001S	1C	500	49.0	50.6	55.0	6750
MVIS13CXAFY2001C630SA001S	1C	630	52.4	54.0	58.4	8048
MVIS13CXAFY2001C800SA001S	1C	800	56.7	58.3	63.0	9864
MVIS13CXAFY2001C01KSA001S	1C	1000	61.0	62.6	67.6	11944

The above data is approximate & subject to manufacturing tolerance.

POLYCAB MV SC Cu IS 7098-2, 19/33 KV(E)

Medium Voltage Single Core Copper Armoured Cable,19/33 KV (E) AC

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	
No.	mm²	Ω/km	Ω/km	µF/km	mH/km		Ω/km	
					2XFaY	2XWaY	2XFaY	2XWaY
1	35	0.524	0.672	0.11	0.49	0.50	0.15	0.16
1	50	0.387	0.496	0.13	0.45	0.47	0.14	0.15
1	70	0.268	0.344	0.14	0.43	0.44	0.14	0.14
1	95	0.193	0.248	0.15	0.41	0.42	0.13	0.13
1	120	0.153	0.197	0.17	0.39	0.41	0.12	0.13
1	150	0.124	0.159	0.18	0.38	0.39	0.12	0.12
1	185	0.0991	0.128	0.19	0.37	0.38	0.12	0.12
1	240	0.0754	0.098	0.21	0.35	0.36	0.11	0.11
1	300	0.0601	0.078	0.23	0.34	0.36	0.11	0.11
1	400	0.047	0.062	0.26	0.33	0.34	0.10	0.11
1	500	0.0366	0.049	0.28	0.32	0.33	0.10	0.10
1	630	0.0283	0.038	0.31	0.31	0.32	0.10	0.10
1	800	0.0221	0.031	0.34	0.30	0.32	0.09	0.10
1	1000	0.0176	0.026	0.38	0.29	0.31	0.09	0.10

CURRENT CARRYING CAPACITY:

Nominal area of conductor	Buried direct in the ground		In single -way Ducts		In air	
	Trefoil	Flat touching	Trefoil ducts	Flat touching ducts	Trefoil	Flat Touching
Sqmm	A	A	A	A	A	A
35	150	153	132	129	185	188
50	176	178	154	150	224	227
70	214	215	187	180	278	280
95	253	253	221	212	336	336
120	285	284	249	236	386	384
150	317	313	276	260	434	429
185	355	346	308	286	494	485
240	404	387	350	320	575	556
300	442	413	382	339	644	611
400	490	449	422	367	734	683
500	538	482	462	393	825	753
630	586	513	501	416	920	823
800	629	540	550	447	1014	890
1000	643	552	560	453	1074	938

Air Ambient temperature: 40°C
Ground ambient temperature: 30°C
Conductor operating temperature: 90°C
The above table is in accordance with IS 3961(part 7):2016

POLYCAB MV SC Cu IS 7098-2, 19/33 KV(E)

Medium Voltage Single Core Copper Armoured Cable,19/33 KV (E) AC

De-Rating Factor

Rating factor for variation in ambient air temperature for cable in free air

Ambient air Temperature	25˚C	30˚C	35˚C	40˚C	45˚C	50˚C	55˚C	60˚C
De-Rating Factor	1.14	1.10	1.05	1.00	0.95	0.89	0.84	0.77

Maximum conductor temperature 90˚C

Rating factor for variation in ground temperature for direct buried cables.

Ground Temperature	15˚C	20˚C	25˚C	30˚C	35˚C	40˚C	45˚C	50˚C
De-Rating Factor	1.12	1.08	1.04	1.00	0.96	0.91	0.87	0.82

Maximum conductor temperature 90˚C

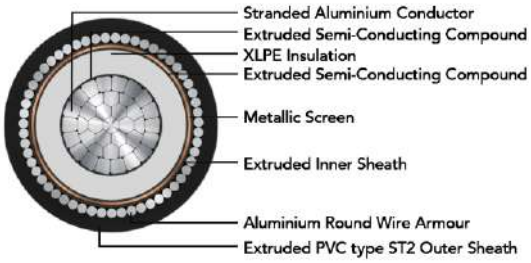
Rating factor for variation in ground temperature for cable in duct.

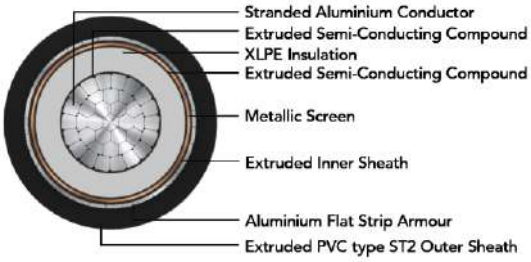
Ground Temperature	15˚C	20˚C	25˚C	30˚C	35˚C	40˚C	45˚C	50˚C
De-Rating Factor	1.12	1.08	1.04	1.00	0.96	0.91	0.87	0.82

Maximum conductor temperature 90˚C

POLYCAB MV SC Al IS 7098-2, 1.9/3.3 KV(E)

Medium Voltage Single Core Aluminium Armoured Cable, 1.9/3.3 KV (E)





Outstanding Features

- Flame retardant
- High life
- UV resistant

Application

POLYCAB MV 1.9/3.3 KV(E) XLPE insulated with aluminium conductor single core cable is suitable to use for power distribution for external and direct burial applications in power network system.

Voltage Rating

Nominal Voltage: 1.9/3.3 KV (E)

Operation Temperature

Max. operating temperature: +90°C
Max. Short Circuit Temperature: 250°C

Construction

- Conductor: Circular Compacted Aluminium conductor as per IS 8130, class 2
- Conductor Screen: Extruded Semi-conductive compound
- Insulation: XLPE
- Non-Metallic Insulation Screen: Extruded Semi-conductive compound
- Metallic Insulation Screen: Copper tape screen
- Inner Sheath: Extruded Polyvinyl Chloride
- Armour: Aluminium Round/Flat Wire Armoured
- Outer Sheath: Extruded Polyvinyl Chloride,

Colour: Black

Note:

- Inner sheath available with FR/ FRLS
- Outer/ Inner available with FR/FRLS

Bending Radius:

Fixed Installation: 15D
D is overall diameter of cable

Standard and References:

IS 8130:2013
IS 5831:1984
IS 3975:1979
IS 7098-2:2011

Test Voltage

10kV AC 50 Hz

Compliance

• Conductor resistance	IS 8130
• Insulation resistance	IS 7098-2
• Flammability test	IEC 60332-1-2
• Partial Discharge test	IS 7098-2

POLYCAB MV SC Al IS 7098-2, 1.9/3.3 KV(E)

Medium Voltage Single Core Aluminium Armoured Cable, 1.9/3.3 KV (E)

DIMENSIONS AND WEIGHTS:

Product Code	No. of Cores	Core Cross sectional Area	Nominal Diameter			Weight (Approx.)
			Under armour	Over armour	Overall	
A2XWaY	No.	mm²	mm	mm	mm	Kg/Km
MVIS10AXAWY2001C025SA001S	1C	25	13.3	16.5	19.3	464
MVIS10AXAWY2001C035SA001S	1C	35	14.5	17.7	20.5	524
MVIS10AXAWY2001C050SA001S	1C	50	16.0	19.2	22.0	614
MVIS10AXAWY2001C070SA001S	1C	70	17.6	20.8	23.6	714
MVIS10AXAWY2001C095SA001S	1C	95	19.4	22.6	25.4	840
MVIS10AXAWY2001C120SA001S	1C	120	21.0	24.2	27.0	955
MVIS10AXAWY2001C150SA001S	1C	150	22.7	25.9	29.0	1114
MVIS10AXAWY2001C185SA001S	1C	185	24.4	27.6	30.7	1257
MVIS10AXAWY2001C240SA001S	1C	240	27.0	31.0	34.2	1584
MVIS10AXAWY2001C300SA001S	1C	300	29.5	33.5	36.6	1846
MVIS10AXAWY2001C400SA001S	1C	400	32.9	36.9	40.4	2256
MVIS10AXAWY2001C500SA001S	1C	500	36.8	40.8	44.6	2759
MVIS10AXAWY2001C630SA001S	1C	630	40.6	45.6	49.7	3455
MVIS10AXAWY2001C800SA001S	1C	800	45.3	50.3	54.7	4184
MVIS10AXAWY2001C01KSA001S	1C	1000	50.2	55.2	59.9	5053
A2XFaY						
MVIS10AXAFY2001C025SA001S	1C	25	13.3	14.9	17.4	372
MVIS10AXAFY2001C035SA001S	1C	35	14.5	16.1	18.9	441
MVIS10AXAFY2001C050SA001S	1C	50	16.0	17.6	20.4	521
MVIS10AXAFY2001C070SA001S	1C	70	17.6	19.2	22.0	611
MVIS10AXAFY2001C095SA001S	1C	95	19.4	21.0	23.8	729
MVIS10AXAFY2001C120SA001S	1C	120	21.0	22.6	25.4	835
MVIS10AXAFY2001C150SA001S	1C	150	22.7	24.3	27.1	962
MVIS10AXAFY2001C185SA001S	1C	185	24.4	26.0	29.1	1122
MVIS10AXAFY2001C240SA001S	1C	240	27.0	28.6	31.8	1354
MVIS10AXAFY2001C300SA001S	1C	300	29.5	31.1	34.2	1596
MVIS10AXAFY2001C400SA001S	1C	400	32.9	34.5	37.7	1944
MVIS10AXAFY2001C500SA001S	1C	500	36.8	38.4	41.9	2412
MVIS10AXAFY2001C630SA001S	1C	630	40.6	42.2	45.9	2917
MVIS10AXAFY2001C800SA001S	1C	800	45.3	46.9	51.0	3599
MVIS10AXAFY2001C01KSA001S	1C	1000	50.2	51.8	56.2	4394

The above data is approximate & subject to manufacturing tolerance.

POLYCAB MV SC Al IS 7098-2, 1.9/3.3 KV(E)

Medium Voltage Single Core Aluminium Armoured Cable, 1.9/3.3 KV (E)

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	
No.	mm²	Ω/km	Ω/km	µF/km	mH/km		Ω/km	
					A2XFaY	A2XWaY	A2XFaY	A2XWaY
1	25	1.2	1.539	0.22	0.40	0.42	0.13	0.13
1	35	0.868	1.113	0.25	0.38	0.40	0.12	0.13
1	50	0.641	0.822	0.29	0.35	0.37	0.11	0.12
1	70	0.443	0.568	0.33	0.34	0.35	0.11	0.11
1	95	0.32	0.410	0.38	0.32	0.34	0.10	0.11
1	120	0.253	0.325	0.41	0.31	0.32	0.10	0.10
1	150	0.206	0.264	0.46	0.30	0.31	0.09	0.10
1	185	0.164	0.211	0.50	0.29	0.30	0.09	0.10
1	240	0.125	0.161	0.56	0.28	0.30	0.09	0.09
1	300	0.1	0.129	0.62	0.27	0.29	0.09	0.09
1	400	0.0778	0.101	0.68	0.27	0.28	0.08	0.09
1	500	0.0605	0.079	0.72	0.26	0.28	0.08	0.09
1	630	0.0469	0.061	0.75	0.26	0.28	0.08	0.09
1	800	0.0367	0.049	0.77	0.26	0.27	0.08	0.09
1	1000	0.0291	0.039	0.81	0.25	0.27	0.08	0.08

CURRENT CARRYING CAPACITY:

Nominal area of conductor	Buried direct in the ground		In single -way Ducts		In air	
	Trefoil	Flat touching	Trefoil ducts	Flat touching ducts	Trefoil	Flat Touching
Sqmm	A	A	A	A	A	A
25	99	101	88	87	115	118
35	117	120	104	103	139	142
50	138	141	123	120	166	169
70	168	172	149	146	208	212
95	200	204	177	172	252	256
120	227	230	201	195	292	296
150	252	255	223	215	329	333
185	285	287	251	241	380	383
240	326	323	286	270	448	444
300	365	357	319	298	511	502
400	412	397	359	329	593	574
500	461	436	401	360	680	647
630	514	475	445	390	777	725
800	552	495	476	403	863	780
1000	595	523	509	423	954	846

Air Ambient temperature: 40˚C
Ground ambient temperature: 30˚C
Conductor operating temperature: 90˚C
The above table is in accordance with IS 3961(part 7):2016

POLYCAB MV SC Al IS 7098-2, 1.9/3.3 KV(E)

Medium Voltage Single Core Aluminium Armoured Cable, 1.9/3.3 KV (E)

De-Rating Factor

Rating factor for variation in ambient air temperature for cable in free air

Ambient air Temperature	25˚C	30˚C	35˚C	40˚C	45˚C	50˚C	55˚C	60˚C
De-Rating Factor	1.14	1.10	1.05	1.00	0.95	0.89	0.84	0.77

Maximum conductor temperature 90˚C

Rating factor for variation in ground temperature for direct buried cables.

Ground Temperature	15˚C	20˚C	25˚C	30˚C	35˚C	40˚C	45˚C	50˚C
De-Rating Factor	1.12	1.08	1.04	1.00	0.96	0.91	0.87	0.82

Maximum conductor temperature 90˚C

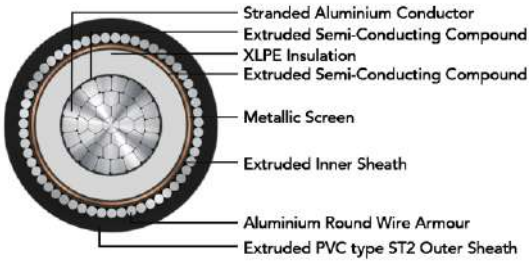
Rating factor for variation in ground temperature for cable in duct.

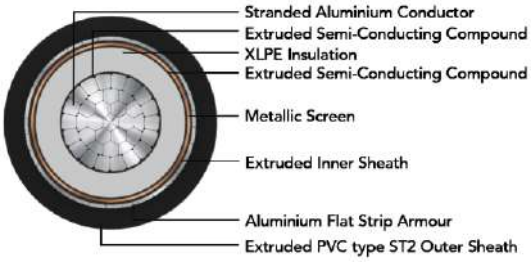
Ground Temperature	15˚C	20˚C	25˚C	30˚C	35˚C	40˚C	45˚C	50˚C
De-Rating Factor	1.12	1.08	1.04	1.00	0.96	0.91	0.87	0.82

Maximum conductor temperature 90˚C

POLYCAB MV SC Al IS 7098-2, 3.3/3.3 KV(UE)

Medium Voltage Single Core Aluminium Armoured Cable, 3.3/3.3 KV (UE)





Outstanding Features

- Flame retardant
- High life
- UV resistant

Application

POLYCAB MV 3.3/3.3 KV(UE) XLPE insulated with aluminium conductor single core cable is suitable to use for power distribution for external and direct burial applications in power network system.

Voltage Rating

Nominal Voltage: 3.3/3.3 KV (UE)

Operation Temperature

Max. operating temperature: +90°C
Max. Short Circuit Temperature: 250°C

Construction

- Conductor: Circular Compacted Aluminium conductor as per IS 8130, class 2
- Conductor Screen: Extruded Semi-conductive compound
- Insulation: XLPE
- Non-Metallic Insulation Screen: Extruded Semi-conductive compound
- Metallic Insulation Screen: Copper tape screen
- Inner Sheath: Extruded Polyvinyl Chloride
- Armour: Aluminium Round/Flat Wire Armoured
- Outer Sheath: Extruded Polyvinyl Chloride

Colour: Black

Note:

- Inner sheath available with FR/ FRLS
- Outer/ Inner available with FR/FRLS

Bending Radius:

Fixed Installation: 15D
D is overall diameter of cable

Standard and References:

IS 8130:2013
IS 5831:1984
IS 3975:1979
IS 7098-2:2011

Test Voltage

10kV AC 50 Hz

Compliance

• Conductor resistance	IS 8130
• Insulation resistance	IS 7098-2
• Flammability test	IEC 60332-1-2
• Partial Discharge test	IS 7098-2

POLYCAB MV SC Al IS 7098-2, 3.3/3.3 KV(UE)

Medium Voltage Single Core Aluminium Armoured Cable, 3.3/3.3 KV (UE)

DIMENSIONS AND WEIGHTS:

Product Code	No. of Cores	Core Cross sectional Area	Nominal Diameter			Weight (Approx.)
			Under armour	Over armour	Overall	
A2XWaY	No.	mm²	mm	mm	mm	Kg/Km
MVIS14AXAWY2001C025SA001S	1C	25	13.3	16.5	19.3	464
MVIS14AXAWY2001C035SA001S	1C	35	14.5	17.7	20.5	524
MVIS14AXAWY2001C050SA001S	1C	50	16.0	19.2	22.0	614
MVIS14AXAWY2001C070SA001S	1C	70	17.6	20.8	23.6	714
MVIS14AXAWY2001C095SA001S	1C	95	19.4	22.6	25.4	840
MVIS14AXAWY2001C120SA001S	1C	120	21.0	24.2	27.0	955
MVIS14AXAWY2001C150SA001S	1C	150	22.7	25.9	29.0	1114
MVIS14AXAWY2001C185SA001S	1C	185	24.4	27.6	30.7	1257
MVIS14AXAWY2001C240SA001S	1C	240	27.0	31.0	34.2	1584
MVIS14AXAWY2001C300SA001S	1C	300	29.5	33.5	36.6	1846
MVIS14AXAWY2001C400SA001S	1C	400	32.9	36.9	40.4	2256
MVIS14AXAWY2001C500SA001S	1C	500	36.8	40.8	44.6	2759
MVIS14AXAWY2001C630SA001S	1C	630	40.6	45.6	49.7	3455
MVIS14AXAWY2001C800SA001S	1C	800	45.3	50.3	54.7	4184
MVIS14AXAWY2001C01KSA001S	1C	1000	50.2	55.2	59.9	5053
A2XFaY						
MVIS14AXAFY2001C025SA001S	1C	25	13.3	14.9	17.4	372
MVIS14AXAFY2001C035SA001S	1C	35	14.5	16.1	18.9	441
MVIS14AXAFY2001C050SA001S	1C	50	16.0	17.6	20.4	521
MVIS14AXAFY2001C070SA001S	1C	70	17.6	19.2	22.0	611
MVIS14AXAFY2001C095SA001S	1C	95	19.4	21.0	23.8	729
MVIS14AXAFY2001C120SA001S	1C	120	21.0	22.6	25.4	835
MVIS14AXAFY2001C150SA001S	1C	150	22.7	24.3	27.1	962
MVIS14AXAFY2001C185SA001S	1C	185	24.4	26.0	29.1	1122
MVIS14AXAFY2001C240SA001S	1C	240	27.0	28.6	31.8	1354
MVIS14AXAFY2001C300SA001S	1C	300	29.5	31.1	34.2	1596
MVIS14AXAFY2001C400SA001S	1C	400	32.9	34.5	37.7	1944
MVIS14AXAFY2001C500SA001S	1C	500	36.8	38.4	41.9	2412
MVIS14AXAFY2001C630SA001S	1C	630	40.6	42.2	45.9	2917
MVIS14AXAFY2001C800SA001S	1C	800	45.3	46.9	51.0	3599
MVIS14AXAFY2001C01KSA001S	1C	1000	50.2	51.8	56.2	4394

The above data is approximate & subject to manufacturing tolerance.

POLYCAB MV SC Al IS 7098-2, 3.3/3.3 KV(UE)

Medium Voltage Single Core Aluminium Armoured Cable, 3.3/3.3 KV (UE)

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	
No.	mm²	Ω/km	Ω/km	µF/km	mH/km		Ω/km	
					A2XFaY	A2XWaY	A2XFaY	A2XWaY
1	25	1.2	1.539	0.22	0.40	0.42	0.13	0.13
1	35	0.868	1.113	0.25	0.38	0.40	0.12	0.13
1	50	0.641	0.822	0.29	0.35	0.37	0.11	0.12
1	70	0.443	0.568	0.33	0.34	0.35	0.11	0.11
1	95	0.32	0.410	0.38	0.32	0.34	0.10	0.11
1	120	0.253	0.325	0.41	0.31	0.32	0.10	0.10
1	150	0.206	0.264	0.46	0.30	0.31	0.09	0.10
1	185	0.164	0.211	0.50	0.29	0.30	0.09	0.10
1	240	0.125	0.161	0.56	0.28	0.30	0.09	0.09
1	300	0.1	0.129	0.62	0.27	0.29	0.09	0.09
1	400	0.0778	0.101	0.68	0.27	0.28	0.08	0.09
1	500	0.0605	0.079	0.72	0.26	0.28	0.08	0.09
1	630	0.0469	0.061	0.75	0.26	0.28	0.08	0.09
1	800	0.0367	0.049	0.77	0.26	0.27	0.08	0.09
1	1000	0.0291	0.039	0.81	0.25	0.27	0.08	0.08

CURRENT CARRYING CAPACITY:

Nominal area of conductor	Buried direct in the ground		In single -way Ducts		In air	
	Trefoil	Flat touching	Trefoil ducts	Flat touching ducts	Trefoil	Flat Touching
Sqmm	A	A	A	A	A	A
25	99	101	88	87	115	118
35	117	120	104	103	139	142
50	138	141	123	120	166	169
70	168	172	149	146	208	212
95	200	204	177	172	252	256
120	227	230	201	195	292	296
150	252	255	223	215	329	333
185	285	287	251	241	380	383
240	326	323	286	270	448	444
300	365	357	319	298	511	502
400	412	397	359	329	593	574
500	461	436	401	360	680	647
630	514	475	445	390	777	725
800	552	495	476	403	863	780
1000	595	523	509	423	954	846

Air Ambient temperature: 40˚C
Ground ambient temperature: 30˚C
Conductor operating temperature: 90˚C
The above table is in accordance with IS 3961(part 7):2016

POLYCAB MV SC Al IS 7098-2, 3.3/3.3 KV(UE)

Medium Voltage Single Core Aluminium Armoured Cable, 3.3/3.3 KV (UE)

De-Rating Factor

Rating factor for variation in ambient air temperature for cable in free air

Ambient air Temperature	25˚C	30˚C	35˚C	40˚C	45˚C	50˚C	55˚C	60˚C
De-Rating Factor	1.14	1.10	1.05	1.00	0.95	0.89	0.84	0.77

Maximum conductor temperature 90˚C

Rating factor for variation in ground temperature for direct buried cables.

Ground Temperature	15˚C	20˚C	25˚C	30˚C	35˚C	40˚C	45˚C	50˚C
De-Rating Factor	1.12	1.08	1.04	1.00	0.96	0.91	0.87	0.82

Maximum conductor temperature 90˚C

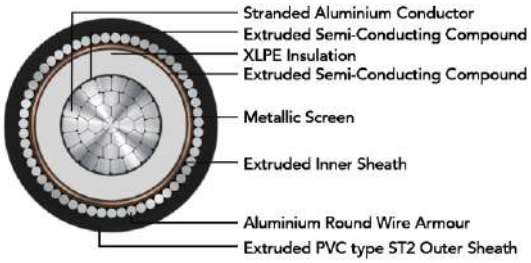
Rating factor for variation in ground temperature for cable in duct.

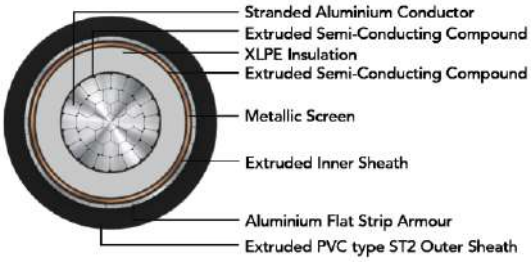
Ground Temperature	15˚C	20˚C	25˚C	30˚C	35˚C	40˚C	45˚C	50˚C
De-Rating Factor	1.12	1.08	1.04	1.00	0.96	0.91	0.87	0.82

Maximum conductor temperature 90˚C

POLYCAB MV SC Al IS 7098-2, 3.8/6.6 KV(E)

Medium Voltage Single Core Aluminium Armoured Cable, 3.8/6.6 KV (E)





Outstanding Features

- Flame retardant
- High life
- UV resistant

Application

POLYCAB MV 3.8/6.6 KV(E) XLPE insulated with aluminium conductor single core cable is suitable to use for power distribution for external and direct burial applications in power network system.

Voltage Rating

Nominal Voltage: 3.8/6.6 KV (E)

Operation Temperature

Max. operating temperature: 90°C
Max. Short Circuit Temperature: 250°C

Construction

- Conductor: Circular Compacted Aluminium conductor as per IS 8130, class 2
- Conductor Screen: Extruded Semi-conductive compound
- Insulation: XLPE
- Non-Metallic Insulation Screen: Extruded Semi-conductive compound
- Metallic Insulation Screen: Copper tape screen
- Inner Sheath: Extruded Polyvinyl Chloride
- Armour: Aluminium Round/Flat Wire Armoured
- Outer Sheath: Extruded Polyvinyl Chloride

Colour: Black

Note:

- Inner sheath available with FR/ FRLS
- Outer/ Inner available with FR/FRLS

Standard and References:

IS 8130:2013
IS 5831:1984
IS 3975:1979
IS 7098-2:2011

Test Voltage

13kV AC 50 Hz

Impulse voltage Test

60kV

Compliance

Conductor resistance	IS 8130
Insulation resistance	IS 7098-2
Flammability test	IEC 60332-1-2
Partial Discharge test	IS 7098-2

Bending Radius:

Fixed Installation: 15D
D is overall diameter of cable

POLYCAB MV SC Al IS 7098-2, 3.8/6.6 KV(E)

Medium Voltage Single Core Aluminium Armoured Cable, 3.8/6.6 KV (E)

DIMENSIONS AND WEIGHTS:

Product Code	No. of Cores	Core Cross sectional Area	Nominal Diameter			Weight (Approx.)
			Under armour	Over armour	Overall	
A2XWaY	No.	mm^2	mm	mm	mm	Kg/Km
MVIS15AXAWY2001C025SA001S	1C	25	13.9	17.1	19.9	488
MVIS15AXAWY2001C035SA001S	1C	35	15.1	18.3	21.1	549
MVIS15AXAWY2001C050SA001S	1C	50	16.6	19.8	22.6	640
MVIS15AXAWY2001C070SA001S	1C	70	18.2	21.4	24.2	741
MVIS15AXAWY2001C095SA001S	1C	95	20.0	23.2	26.0	869
MVIS15AXAWY2001C120SA001S	1C	120	21.6	24.8	27.6	986
MVIS15AXAWY2001C150SA001S	1C	150	23.3	26.5	29.6	1147
MVIS15AXAWY2001C185SA001S	1C	185	25.0	28.2	31.3	1296
MVIS15AXAWY2001C240SA001S	1C	240	27.6	31.6	34.8	1624
MVIS15AXAWY2001C300SA001S	1C	300	30.5	34.5	37.6	1911
MVIS15AXAWY2001C400SA001S	1C	400	34.3	38.3	41.8	2360
MVIS15AXAWY2001C500SA001S	1C	500	38.2	42.2	46.0	2883
MVIS15AXAWY2001C630SA001S	1C	630	41.6	46.6	50.7	3545
MVIS15AXAWY2001C800SA001S	1C	800	45.7	50.7	55.1	4231
MVIS15AXAWY2001C01KSA001S	1C	1000	50.4	55.4	60.1	5071
A2XFaY						
MVIS15AXAFY2001C025SA001S	1C	25	13.9	15.5	18.3	403
MVIS15AXAFY2001C035SA001S	1C	35	15.1	16.7	19.5	460
MVIS15AXAFY2001C050SA001S	1C	50	16.6	18.2	21.0	548
MVIS15AXAFY2001C070SA001S	1C	70	18.2	19.8	22.6	640
MVIS15AXAFY2001C095SA001S	1C	95	20.0	21.6	24.4	752
MVIS15AXAFY2001C120SA001S	1C	120	21.6	23.2	26.0	860
MVIS15AXAFY2001C150SA001S	1C	150	23.3	24.9	27.7	995
MVIS15AXAFY2001C185SA001S	1C	185	25.0	26.6	29.7	1151
MVIS15AXAFY2001C240SA001S	1C	240	27.6	29.2	32.4	1386
MVIS15AXAFY2001C300SA001S	1C	300	30.5	32.1	35.2	1652
MVIS15AXAFY2001C400SA001S	1C	400	34.3	35.9	39.4	2068
MVIS15AXAFY2001C500SA001S	1C	500	38.2	39.8	43.3	2522
MVIS15AXAFY2001C630SA001S	1C	630	41.6	43.2	46.9	2999
MVIS15AXAFY2001C800SA001S	1C	800	45.7	47.3	51.4	3632
MVIS15AXAFY2001C01KSA001S	1C	1000	50.4	52.0	56.4	4412

The above data is approximate & subject to manufacturing tolerance.

POLYCAB MV SC Al IS 7098-2, 3.8/6.6 KV(E)

Medium Voltage Single Core Aluminium Armoured Cable, 3.8/6.6 KV (E)

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	
No.	mm²	Ω/km	Ω/km	µF/km	mH/km		Ω/km	
					A2XFaY	A2XWaY	A2XFaY	A2XWaY
1	25	1.2	1.539	0.21	0.41	0.43	0.13	0.13
1	35	0.868	1.113	0.23	0.39	0.41	0.12	0.13
1	50	0.641	0.822	0.27	0.36	0.38	0.11	0.12
1	70	0.443	0.568	0.30	0.34	0.36	0.11	0.11
1	95	0.32	0.410	0.35	0.33	0.34	0.10	0.11
1	120	0.253	0.325	0.38	0.31	0.33	0.10	0.10
1	150	0.206	0.264	0.42	0.30	0.32	0.10	0.10
1	185	0.164	0.211	0.46	0.30	0.31	0.09	0.10
1	240	0.125	0.161	0.51	0.29	0.30	0.09	0.09
1	300	0.1	0.129	0.54	0.28	0.29	0.09	0.09
1	400	0.0778	0.101	0.56	0.28	0.29	0.09	0.09
1	500	0.0605	0.079	0.60	0.27	0.28	0.08	0.09
1	630	0.0469	0.061	0.66	0.26	0.28	0.08	0.09
1	800	0.0367	0.049	0.73	0.26	0.27	0.08	0.09
1	1000	0.0291	0.039	0.79	0.26	0.27	0.08	0.08

CURRENT CARRYING CAPACITY:

Nominal area of conductor	Buried direct in the ground		In single -way Ducts		In air	
	Trefoil	Flat touching	Trefoil ducts	Flat touching ducts	Trefoil	Flat Touching
Sqmm	A	A	A	A	A	A
25	99	101	88	87	115	118
35	117	120	104	103	139	142
50	138	141	123	120	166	169
70	168	172	149	146	208	212
95	200	204	177	172	252	256
120	227	230	201	195	292	296
150	252	255	223	215	329	333
185	285	287	251	241	380	383
240	326	323	286	270	448	444
300	365	357	319	298	511	502
400	412	397	359	329	593	574
500	461	436	401	360	680	647
630	514	475	445	390	777	725
800	552	495	476	403	863	780
1000	595	523	509	423	954	846

Air Ambient temperature: 40˚C
Ground ambient temperature: 30˚C
Conductor operating temperature: 90˚C
The above table is in accordance with IS 3961(part 7):2016

POLYCAB MV SC Al IS 7098-2, 3.8/6.6 KV(E)

Medium Voltage Single Core Aluminium Armoured Cable, 3.8/6.6 KV (E)

De-Rating Factor

Rating factor for variation in ambient air temperature for cable in free air

Ambient air Temperature	25˚C	30˚C	35˚C	40˚C	45˚C	50˚C	55˚C	60˚C
De-Rating Factor	1.14	1.10	1.05	1.00	0.95	0.89	0.84	0.77

Maximum conductor temperature 90˚C

Rating factor for variation in ground temperature for direct buried cables.

Ground Temperature	15˚C	20˚C	25˚C	30˚C	35˚C	40˚C	45˚C	50˚C
De-Rating Factor	1.12	1.08	1.04	1.00	0.96	0.91	0.87	0.82

Maximum conductor temperature 90˚C

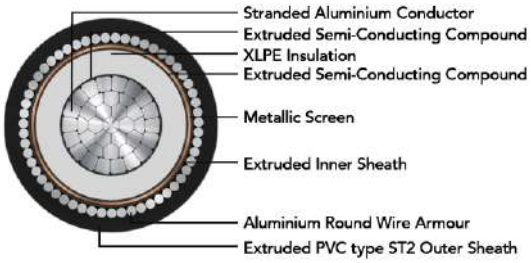
Rating factor for variation in ground temperature for cable in duct.

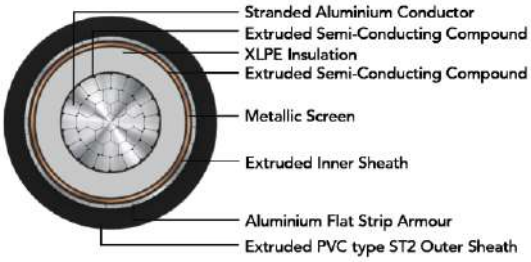
Ground Temperature	15˚C	20˚C	25˚C	30˚C	35˚C	40˚C	45˚C	50˚C
De-Rating Factor	1.12	1.08	1.04	1.00	0.96	0.91	0.87	0.82

Maximum conductor temperature 90˚C

POLYCAB MV SC Al IS 7098-2, 6.6/6.6 KV(UE)

Medium Voltage Single Core Aluminium Armoured Cable, 6.6/6.6 KV (UE)





Outstanding Features

- Flame retardant
- High life
- UV resistant

Application

POLYCAB MV 6.6/6.6 KV(UE) XLPE insulated with aluminium conductor single core cable is suitable to use for power distribution for external and direct burial applications in power network system.

Voltage Rating

Nominal Voltage: 6.6/6.6 KV (UE)

Operation Temperature

Max. operating temperature: +90°C
Max. Short Circuit Temperature: 250°C

Construction

- Conductor: Circular Compacted Aluminium conductor as per IS 8130, class 2
- Conductor Screen: Extruded Semi-conductive compound
- Insulation: XLPE
- Non-Metallic Insulation Screen: Extruded Semi-conductive compound
- Metallic Insulation Screen: Copper tape screen
- Inner Sheath: Extruded Polyvinyl Chloride
- Armour: Aluminium Round/Flat Wire Armoured
- Outer Sheath: Extruded Polyvinyl Chloride

Colour: Black

Note:

- Inner sheath available with FR/ FRLS
- Outer/ Inner available with FR/FRLS

Bending Radius:

Fixed Installation: 15D
D is overall diameter of cable

Standard and References:

IS 8130:2013
IS 5831:1984
IS 3975:1979
IS 7098-2:2011

Test Voltage

21kV AC 50 Hz

Impulse test Voltage

75 KV

Compliance

Conductor resistance	IS 8130
Insulation resistance	IS 7098-2
Flammability test	IEC 60332-1-2
Partial Discharge test	IS 7098-2

POLYCAB MV SC Al IS 7098-2, 6.6/6.6 KV(UE)

Medium Voltage Single Core Aluminium Armoured Cable, 6.6/6.6 KV (UE)

DIMENSIONS AND WEIGHTS:

Product Code	No. of Cores	Core Cross sectional Area	Nominal Diameter			Weight (Approx.)
			Under armour	Over armour	Overall	
A2XWaY	No.	mm^2	mm	mm	mm	Kg/Km
MVIS18AXAWY2001C025SA001S	1C	25	15.5	18.7	21.5	555
MVIS18AXAWY2001C035SA001S	1C	35	16.7	19.9	22.7	619
MVIS18AXAWY2001C050SA001S	1C	50	18.2	21.4	24.2	713
MVIS18AXAWY2001C070SA001S	1C	70	19.8	23.0	25.8	819
MVIS18AXAWY2001C095SA001S	1C	95	21.6	24.8	27.6	951
MVIS18AXAWY2001C120SA001S	1C	120	23.2	26.4	29.5	1094
MVIS18AXAWY2001C150SA001S	1C	150	24.9	28.1	31.2	1238
MVIS18AXAWY2001C185SA001S	1C	185	26.8	30.8	33.9	1488
MVIS18AXAWY2001C240SA001S	1C	240	29.2	33.2	36.4	1727
MVIS18AXAWY2001C300SA001S	1C	300	31.7	35.7	39.2	2028
MVIS18AXAWY2001C400SA001S	1C	400	34.9	38.9	42.4	2407
MVIS18AXAWY2001C500SA001S	1C	500	38.4	42.4	46.2	2897
MVIS18AXAWY2001C630SA001S	1C	630	41.8	46.8	50.9	3560
MVIS18AXAWY2001C800SA001S	1C	800	45.9	50.9	55.3	4247
MVIS18AXAWY2001C01KSA001S	1C	1000	50.4	55.4	60.1	5071
A2XFaY						
MVIS18AXAFY2001C025SA001S	1C	25	15.5	17.1	19.9	467
MVIS18AXAFY2001C035SA001S	1C	35	16.7	18.3	21.1	527
MVIS18AXAFY2001C050SA001S	1C	50	18.2	19.8	22.6	612
MVIS18AXAFY2001C070SA001S	1C	70	19.8	21.4	24.2	708
MVIS18AXAFY2001C095SA001S	1C	95	21.6	23.2	26.0	825
MVIS18AXAFY2001C120SA001S	1C	120	23.2	24.8	27.6	943
MVIS18AXAFY2001C150SA001S	1C	150	24.9	26.5	29.6	1098
MVIS18AXAFY2001C185SA001S	1C	185	26.8	28.4	31.5	1258
MVIS18AXAFY2001C240SA001S	1C	240	29.2	30.8	34.0	1478
MVIS18AXAFY2001C300SA001S	1C	300	31.7	33.3	36.4	1728
MVIS18AXAFY2001C400SA001S	1C	400	34.9	36.5	40.0	2113
MVIS18AXAFY2001C500SA001S	1C	500	38.4	40.0	43.8	2570
MVIS18AXAFY2001C630SA001S	1C	630	41.8	43.4	47.1	3014
MVIS18AXAFY2001C800SA001S	1C	800	45.9	47.5	51.6	3655
MVIS18AXAFY2001C01KSA001S	1C	1000	50.4	52.0	56.4	4412

The above data is approximate & subject to manufacturing tolerance.

POLYCAB MV SC Al IS 7098-2, 6.6/6.6 KV(UE)

Medium Voltage Single Core Aluminium Armoured Cable, 6.6/6.6 KV (UE)

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	
No.	mm²	Ω/km	Ω/km	µF/km	mH/km		Ω/km	
					A2XFaY	A2XWaY	A2XFaY	A2XWaY
1	25	1.2	1.539	0.18	0.43	0.44	0.13	0.14
1	35	0.868	1.113	0.20	0.41	0.42	0.13	0.13
1	50	0.641	0.822	0.23	0.38	0.39	0.12	0.12
1	70	0.443	0.568	0.25	0.36	0.37	0.11	0.12
1	95	0.32	0.410	0.29	0.34	0.35	0.11	0.11
1	120	0.253	0.325	0.32	0.33	0.34	0.10	0.11
1	150	0.206	0.264	0.35	0.32	0.33	0.10	0.10
1	185	0.164	0.211	0.38	0.31	0.32	0.10	0.10
1	240	0.125	0.161	0.42	0.30	0.31	0.09	0.10
1	300	0.1	0.129	0.47	0.29	0.30	0.09	0.09
1	400	0.0778	0.101	0.52	0.28	0.29	0.09	0.09
1	500	0.0605	0.079	0.58	0.27	0.28	0.09	0.09
1	630	0.0469	0.061	0.64	0.27	0.28	0.08	0.09
1	800	0.0367	0.049	0.72	0.26	0.27	0.08	0.09
1	1000	0.0291	0.039	0.79	0.26	0.27	0.08	0.08

CURRENT CARRYING CAPACITY:

Nominal area of conductor	Buried direct in the ground		In single -way Ducts		In air	
	Trefoil	Flat touching	Trefoil ducts	Flat touching ducts	Trefoil	Flat Touching
Sqmm	A	A	A	A	A	A
25	99	101	88	86	116	119
35	118	120	104	102	140	143
50	138	141	122	120	167	171
70	168	172	149	146	209	213
95	200	204	177	172	254	258
120	227	230	200	194	294	298
150	252	255	223	215	331	335
185	284	284	250	238	383	384
240	326	323	286	270	450	446
300	365	357	319	297	512	503
400	412	397	359	329	594	575
500	461	436	401	360	680	647
630	514	476	445	390	778	725
800	553	496	476	404	863	781
1000	595	523	509	423	954	846

v Air Ambient temperature: 40˚C
Ground ambient temperature: 30˚C
Conductor operating temperature: 90˚C
The above table is in accordance with IS 3961(part 7):2016

POLYCAB MV SC Al IS 7098-2, 6.6/6.6 KV(UE)

Medium Voltage Single Core Aluminium Armoured Cable, 6.6/6.6 KV (UE)

De-Rating Factor

Rating factor for variation in ambient air temperature for cable in free air

Ambient air Temperature	25˚C	30˚C	35˚C	40˚C	45˚C	50˚C	55˚C	60˚C
De-Rating Factor	1.14	1.10	1.05	1.00	0.95	0.89	0.84	0.77

Maximum conductor temperature 90˚C

Rating factor for variation in ground temperature for direct buried cables.

Ground Temperature	15˚C	20˚C	25˚C	30˚C	35˚C	40˚C	45˚C	50˚C
De-Rating Factor	1.12	1.08	1.04	1.00	0.96	0.91	0.87	0.82

Maximum conductor temperature 90˚C

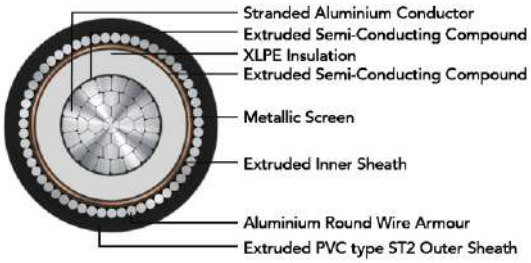
Rating factor for variation in ground temperature for cable in duct.

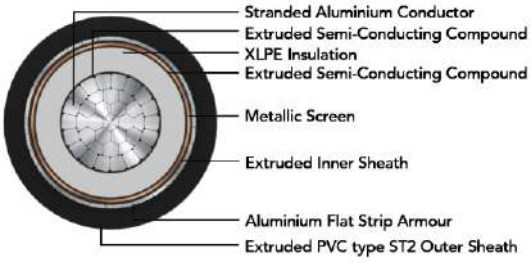
Ground Temperature	15˚C	20˚C	25˚C	30˚C	35˚C	40˚C	45˚C	50˚C
De-Rating Factor	1.12	1.08	1.04	1.00	0.96	0.91	0.87	0.82

Maximum conductor temperature 90˚C

POLYCAB MV SC Al IS 7098-2, 6.35/11 KV(E)

Medium Voltage Single Core Aluminium Armoured Cable, 6.35/11 KV (E)





Outstanding Features

- Flame retardant
- High life
- UV resistant

Application

POLYCAB MV 6.35/11 KV(E) XLPE insulated with aluminium conductor single core cable is suitable to use for power distribution for external and direct burial applications in power network system.

Voltage Rating

Nominal Voltage: 6.35/11 KV (E)

Operation Temperature

Max. operating temperature: +90°C
Max. Short Circuit Temperature: 250°C

Construction

- Conductor: Circular Compacted Aluminium conductor as per IS 8130, class 2
- Conductor Screen: Extruded Semi-conductive compound
- Insulation: XLPE
- Non-Metallic Insulation Screen: Extruded Semi-conductive compound
- Metallic Insulation Screen: Copper tape screen
- Inner Sheath: Extruded Polyvinyl Chloride
- Armour: Aluminium Round/Flat Wire Armoured
- Outer Sheath: Extruded Polyvinyl Chloride

Colour: Black

Note:

- Inner sheath available with FR/ FRLS
- Outer/ Inner available with FR/FRLS

Bending Radius:

Fixed Installation: 15D
D is overall diameter of cable

Standard and References:

IS 8130:2013
IS 5831:1984
IS 3975:1979
IS 7098-2:2011

Test Voltage

21kV AC 50 Hz

Impulse test Voltage

75 KV

Compliance

• Conductor resistance	IS 8130
• Insulation resistance	IS 7098-2
• Flammability test	IEC 60332-1-2
• Partial Discharge test	IS 7098-2

POLYCAB MV SC Al IS 7098-2, 6.35/11 KV(E)

Medium Voltage Single Core Aluminium Armoured Cable, 6.35/11 KV (E)

DIMENSIONS AND WEIGHTS:

Product Code	No. of Cores	Core Cross sectional Area	Nominal Diameter			Weight (Approx.)
			Under armour	Over armour	Overall	
A2XWaY	No.	mm^2	mm	mm	mm	Kg/Km
MVIS17AXAWY2001C025SA001S	1C	25	15.5	18.7	21.5	555
MVIS17AXAWY2001C035SA001S	1C	35	16.7	19.9	22.7	619
MVIS17AXAWY2001C050SA001S	1C	50	18.2	21.4	24.2	713
MVIS17AXAWY2001C070SA001S	1C	70	19.8	23.0	25.8	819
MVIS17AXAWY2001C095SA001S	1C	95	21.6	24.8	27.6	951
MVIS17AXAWY2001C120SA001S	1C	120	23.2	26.4	29.5	1094
MVIS17AXAWY2001C150SA001S	1C	150	24.9	28.1	31.2	1238
MVIS17AXAWY2001C185SA001S	1C	185	26.8	30.8	33.9	1488
MVIS17AXAWY2001C240SA001S	1C	240	29.2	33.2	36.4	1727
MVIS17AXAWY2001C300SA001S	1C	300	31.7	35.7	39.2	2028
MVIS17AXAWY2001C400SA001S	1C	400	34.9	38.9	42.4	2407
MVIS17AXAWY2001C500SA001S	1C	500	38.4	42.4	46.2	2897
MVIS17AXAWY2001C630SA001S	1C	630	41.8	46.8	50.9	3560
MVIS17AXAWY2001C800SA001S	1C	800	45.9	50.9	55.3	4247
MVIS17AXAWY2001C01KSA001S	1C	1000	50.4	55.4	60.1	5071
A2XFaY						
MVIS17AXAFY2001C025SA001S	1C	25	15.5	17.1	19.9	467
MVIS17AXAFY2001C035SA001S	1C	35	16.7	18.3	21.1	527
MVIS17AXAFY2001C050SA001S	1C	50	18.2	19.8	22.6	612
MVIS17AXAFY2001C070SA001S	1C	70	19.8	21.4	24.2	708
MVIS17AXAFY2001C095SA001S	1C	95	21.6	23.2	26.0	825
MVIS17AXAFY2001C120SA001S	1C	120	23.2	24.8	27.6	943
MVIS17AXAFY2001C150SA001S	1C	150	24.9	26.5	29.6	1098
MVIS17AXAFY2001C185SA001S	1C	185	26.8	28.4	31.5	1258
MVIS17AXAFY2001C240SA001S	1C	240	29.2	30.8	34.0	1478
MVIS17AXAFY2001C300SA001S	1C	300	31.7	33.3	36.4	1728
MVIS17AXAFY2001C400SA001S	1C	400	34.9	36.5	40.0	2113
MVIS17AXAFY2001C500SA001S	1C	500	38.4	40.0	43.8	2570
MVIS17AXAFY2001C630SA001S	1C	630	41.8	43.4	47.1	3014
MVIS17AXAFY2001C800SA001S	1C	800	45.9	47.5	51.6	3655
MVIS17AXAFY2001C01KSA001S	1C	1000	50.4	52.0	56.4	4412

The above data is approximate & subject to manufacturing tolerance.

POLYCAB MV SC Al IS 7098-2, 6.35/11 KV(E)

Medium Voltage Single Core Aluminium Armoured Cable, 6.35/11 KV (E)

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	
No.	mm²	Ω/km	Ω/km	µF/km	mH/km		Ω/km	
					A2XFaY	A2XWaY	A2XFaY	A2XWaY
1	25	1.2	1.539	0.18	0.43	0.44	0.13	0.14
1	35	0.868	1.113	0.20	0.41	0.42	0.13	0.13
1	50	0.641	0.822	0.23	0.38	0.39	0.12	0.12
1	70	0.443	0.568	0.25	0.36	0.37	0.11	0.12
1	95	0.32	0.410	0.29	0.34	0.35	0.11	0.11
1	120	0.253	0.325	0.32	0.33	0.34	0.10	0.11
1	150	0.206	0.264	0.35	0.32	0.33	0.10	0.10
1	185	0.164	0.211	0.38	0.31	0.32	0.10	0.10
1	240	0.125	0.161	0.42	0.30	0.31	0.09	0.10
1	300	0.1	0.129	0.47	0.29	0.30	0.09	0.09
1	400	0.0778	0.101	0.52	0.28	0.29	0.09	0.09
1	500	0.0605	0.079	0.58	0.27	0.28	0.09	0.09
1	630	0.0469	0.061	0.64	0.27	0.28	0.08	0.09
1	800	0.0367	0.049	0.72	0.26	0.27	0.08	0.09
1	1000	0.0291	0.039	0.79	0.26	0.27	0.08	0.08

CURRENT CARRYING CAPACITY:

Nominal area of conductor	Buried direct in the ground		In single -way Ducts		In air	
	Trefoil	Flat touching	Trefoil ducts	Flat touching ducts	Trefoil	Flat Touching
Sqmm	A	A	A	A	A	A
25	99	101	88	86	116	119
35	118	120	104	102	140	143
50	138	141	122	120	167	171
70	168	172	149	146	209	213
95	200	204	177	172	254	258
120	227	230	200	194	294	298
150	252	255	223	215	331	335
185	284	284	250	238	383	384
240	326	323	286	270	450	446
300	365	357	319	297	512	503
400	412	397	359	329	594	575
500	461	436	401	360	680	647
630	514	476	445	390	778	725
800	553	496	476	404	863	781
1000	595	523	509	423	954	846

Air Ambient temperature: 40˚C
Ground ambient temperature: 30˚C
Conductor operating temperature: 90˚C
The above table is in accordance with IS 3961(part 7):2016

POLYCAB MV SC Al IS 7098-2, 6.35/11 KV(E)

Medium Voltage Single Core Aluminium Armoured Cable, 6.35/11 KV (E)

De-Rating Factor

Rating factor for variation in ambient air temperature for cable in free air

Ambient air Temperature	25˚C	30˚C	35˚C	40˚C	45˚C	50˚C	55˚C	60˚C
De-Rating Factor	1.14	1.10	1.05	1.00	0.95	0.89	0.84	0.77

Maximum conductor temperature 90˚C

Rating factor for variation in ground temperature for direct buried cables.

Ground Temperature	15˚C	20˚C	25˚C	30˚C	35˚C	40˚C	45˚C	50˚C
De-Rating Factor	1.12	1.08	1.04	1.00	0.96	0.91	0.87	0.82

Maximum conductor temperature 90˚C

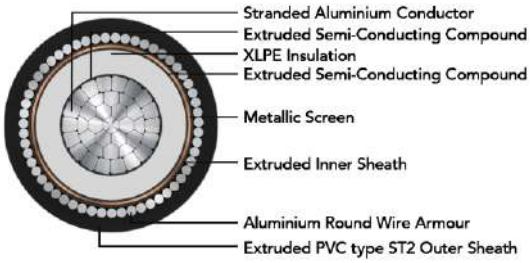
Rating factor for variation in ground temperature for cable in duct.

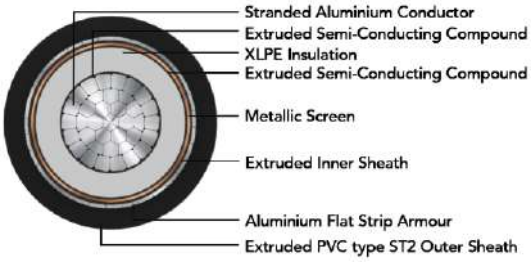
Ground Temperature	15˚C	20˚C	25˚C	30˚C	35˚C	40˚C	45˚C	50˚C
De-Rating Factor	1.12	1.08	1.04	1.00	0.96	0.91	0.87	0.82

Maximum conductor temperature 90˚C

POLYCAB MV SC Al IS 7098-2, 11/11 KV(UE)

Medium Voltage Single Core Aluminium Armoured Cable, 11/11 KV (UE) AC





Outstanding Features

- Flame retardant
- High life
- UV resistant

Application

POLYCAB MV 11/11 KV(UE) XLPE insulated with aluminium conductor single core cable is suitable to use for power distribution for external and direct burial applications in power network system.

Voltage Rating

Nominal Voltage: 11/11 KV (UE)

Operation Temperature

Max. operating temperature: +90°C
Max. Short Circuit Temperature: 250°C

Construction

- Conductor: Circular Compacted Aluminium conductor as per IS 8130, class 2
- Conductor Screen: Extruded Semi-conductive compound
- Insulation: XLPE
- Non-Metallic Insulation Screen: Extruded Semi-conductive compound
- Metallic Insulation Screen: Copper tape screen
- Inner Sheath: Extruded Polyvinyl Chloride
- Armour: Aluminium Round/Flat Wire Armoured
- Outer Sheath: Extruded Polyvinyl Chloride,

Colour: Black

Note:

- Inner sheath available with FR/ FRLS
- Outer/ Inner available with FR/FRLS

Bending Radius:

Fixed Installation: 15D
D is overall diameter of cable

Standard and References:

IS 8130:2013
IS 5831:1984
IS 3975:1979
IS 7098-2:2011

Test Voltage

35kV AC 50 Hz

Impulse test Voltage

95 KV

Compliance

Conductor resistance	IS 8130
Insulation resistance	IS 7098-2
Flammability test	IEC 60332-1-2
Partial Discharge test	IS 7098-2

POLYCAB MV SC Al IS 7098-2, 11/11 KV(UE)

Medium Voltage Single Core Aluminium Armoured Cable, 11/11 KV (UE) AC

DIMENSIONS AND WEIGHTS:

Product Code	No. of Cores	Core Cross sectional Area	Nominal Diameter			Weight (Approx.)
			Under armour	Over armour	Overall	
A2XWaY	No.	mm²	mm	mm	mm	Kg/Km
MVIS11AXAWY2001C025SA001S	1C	25	19.3	22.5	25.3	729
MVIS11AXAWY2001C035SA001S	1C	35	20.5	23.7	26.5	805
MVIS11AXAWY2001C050SA001S	1C	50	22.0	25.2	28.4	931
MVIS11AXAWY2001C070SA001S	1C	70	23.6	26.8	29.9	1047
MVIS11AXAWY2001C095SA001S	1C	95	25.4	29.4	32.5	1257
MVIS11AXAWY2001C120SA001S	1C	120	27.2	31.2	34.3	1413
MVIS11AXAWY2001C150SA001S	1C	150	28.9	32.9	36.0	1577
MVIS11AXAWY2001C185SA001S	1C	185	30.6	34.6	37.7	1745
MVIS11AXAWY2001C240SA001S	1C	240	33.0	37.0	40.5	2030
MVIS11AXAWY2001C300SA001S	1C	300	35.5	39.5	43.0	2317
MVIS11AXAWY2001C400SA001S	1C	400	38.9	42.9	46.7	2781
MVIS11AXAWY2001C500SA001S	1C	500	42.2	47.2	51.3	3424
MVIS11AXAWY2001C630SA001S	1C	630	45.6	50.6	55.0	3974
MVIS11AXAWY2001C800SA001S	1C	800	49.9	54.9	59.3	4672
MVIS11AXAWY2001C01KSA001S	1C	1000	54.2	59.2	63.9	5499
A2XFaY						
MVIS11AXAFY2001C025SA001S	1C	25	19.3	20.9	23.7	623
MVIS11AXAFY2001C035SA001S	1C	35	20.5	22.1	24.9	690
MVIS11AXAFY2001C050SA001S	1C	50	22.0	23.6	26.4	784
MVIS11AXAFY2001C070SA001S	1C	70	23.6	25.2	28.3	911
MVIS11AXAFY2001C095SA001S	1C	95	25.4	27.0	30.1	1040
MVIS11AXAFY2001C120SA001S	1C	120	27.2	28.8	31.9	1183
MVIS11AXAFY2001C150SA001S	1C	150	28.9	30.5	33.6	1328
MVIS11AXAFY2001C185SA001S	1C	185	30.6	32.2	35.3	1484
MVIS11AXAFY2001C240SA001S	1C	240	33.0	34.6	37.8	1719
MVIS11AXAFY2001C300SA001S	1C	300	35.5	37.1	40.6	2014
MVIS11AXAFY2001C400SA001S	1C	400	38.9	40.5	44.3	2445
MVIS11AXAFY2001C500SA001S	1C	500	42.2	43.8	47.6	2871
MVIS11AXAFY2001C630SA001S	1C	630	45.6	47.2	51.3	3375
MVIS11AXAFY2001C800SA001S	1C	800	49.9	51.5	55.9	4073
MVIS11AXAFY2001C01KSA001S	1C	1000	54.2	55.8	60.5	4837

The above data is approximate & subject to manufacturing tolerance.

POLYCAB MV SC Al IS 7098-2, 11/11 KV(UE)

Medium Voltage Single Core Aluminium Armoured Cable, 11/11 KV (UE) AC

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	
No.	mm²	Ω/km	Ω/km	µF/km	mH/km		Ω/km	
					A2XFaY	A2XWaY	A2XFaY	A2XWaY
1	25	1.2	1.539	0.14	0.46	0.48	0.15	0.15
1	35	0.868	1.113	0.15	0.44	0.45	0.14	0.14
1	50	0.641	0.822	0.17	0.41	0.42	0.13	0.13
1	70	0.443	0.568	0.19	0.39	0.40	0.12	0.13
1	95	0.32	0.410	0.21	0.37	0.38	0.12	0.12
1	120	0.253	0.325	0.23	0.35	0.37	0.11	0.12
1	150	0.206	0.264	0.25	0.34	0.36	0.11	0.11
1	185	0.164	0.211	0.27	0.33	0.35	0.10	0.11
1	240	0.125	0.161	0.30	0.32	0.33	0.10	0.10
1	300	0.1	0.129	0.33	0.31	0.32	0.10	0.10
1	400	0.0778	0.101	0.37	0.30	0.31	0.09	0.10
1	500	0.0605	0.079	0.41	0.29	0.30	0.09	0.10
1	630	0.0469	0.061	0.45	0.28	0.30	0.09	0.09
1	800	0.0367	0.049	0.50	0.28	0.29	0.09	0.09
1	1000	0.0291	0.039	0.55	0.27	0.28	0.08	0.09

CURRENT CARRYING CAPACITY:

Nominal area of conductor	Buried direct in the ground		In single -way Ducts		In air	
	Trefoil	Flat touching	Trefoil ducts	Flat touching ducts	Trefoil	Flat Touching
Sqmm	A	A	A	A	A	A
25	99	101	88	86	116	119
35	118	120	104	102	140	143
50	138	141	122	120	167	171
70	168	172	149	146	209	213
95	200	204	177	172	254	258
120	227	230	200	194	294	298
150	252	255	223	215	331	335
185	284	284	250	238	383	384
240	326	323	286	270	450	446
300	365	357	319	297	512	503
400	412	397	359	329	594	575
500	461	436	401	360	680	647
630	514	476	445	390	778	725
800	553	496	476	404	863	781
1000	595	523	509	423	954	846

Air Ambient temperature: 40˚C
Ground ambient temperature: 30˚C
Conductor operating temperature: 90˚C
The above table is in accordance with IS 3961(part 7):2016

De-Rating Factor

Rating factor for variation in ambient air temperature for cable in free air

Ambient air Temperature	25˚C	30˚C	35˚C	40˚C	45˚C	50˚C	55˚C	60˚C
De-Rating Factor	1.14	1.10	1.05	1.00	0.95	0.89	0.84	0.77

Maximum conductor temperature 90˚C

Rating factor for variation in ground temperature for direct buried cables.

Ground Temperature	15˚C	20˚C	25˚C	30˚C	35˚C	40˚C	45˚C	50˚C
De-Rating Factor	1.12	1.08	1.04	1.00	0.96	0.91	0.87	0.82

Maximum conductor temperature 90˚C

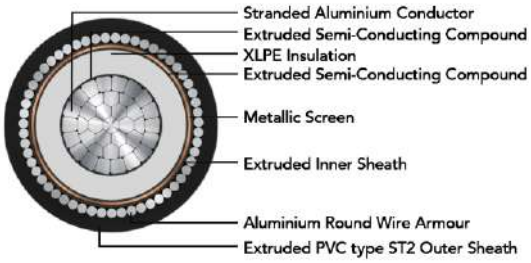
Rating factor for variation in ground temperature for cable in duct.

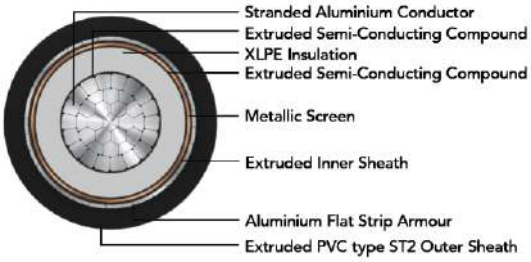
Ground Temperature	15˚C	20˚C	25˚C	30˚C	35˚C	40˚C	45˚C	50˚C
De-Rating Factor	1.12	1.08	1.04	1.00	0.96	0.91	0.87	0.82

Maximum conductor temperature 90˚C

POLYCAB MV SC Al IS 7098-2, 12.7/22 KV(E)

Medium Voltage Single Core Aluminium Armoured Cable, 12.7/22 KV (E) AC





Outstanding Features

- Flame retardant
- High life
- UV resistant

Application

POLYCAB MV 12.7/22 KV(E) XLPE insulated with aluminium conductor single core cable is suitable to use for power distribution for external and direct burial applications in power network system.

Voltage Rating

Nominal Voltage: 12.7/22 KV (E)

Operation Temperature

Max. operating temperature: +90°C
Max. Short Circuit Temperature: 250°C

Construction

- Conductor: Circular Compacted Aluminium conductor as per IS 8130, class 2
- Conductor Screen: Extruded Semi-conductive compound
- Insulation: XLPE
- Non-Metallic Insulation Screen: Extruded Semi-conductive compound
- Metallic Insulation Screen: Copper tape screen
- Inner Sheath: Extruded Polyvinyl Chloride
- Armour: Aluminium Round/Flat Wire Armoured
- Outer Sheath: Extruded Polyvinyl Chloride

Colour: Black

Note:

- Inner sheath available with FR/ FRLS
- Outer/ Inner available with FR/FRLS

Bending Radius:

Fixed Installation: 20D
D is overall diameter of cable

Standard and References:

IS 8130:2013
IS 5831:1984
IS 3975:1979
IS 7098-2:2011

Test Voltage

42kV AC 50 Hz

Impulse test Voltage

125 KV

Compliance

• Conductor resistance	IS 8130
• Insulation resistance	IS 7098-2
• Flammability test	IEC 60332-1-2
• Partial Discharge test	IS 7098-2

POLYCAB MV SC Al IS 7098-2, 12.7/22 KV(E)

Medium Voltage Single Core Aluminium Armoured Cable, 12.7/22 KV (E) AC

DIMENSIONS AND WEIGHTS:

Product Code	No. of Cores	Core Cross sectional Area	Nominal Diameter			Weight (Approx.)
			Under armour	Over armour	Overall	
A2XWaY	No.	mm^2	mm	mm	mm	Kg/Km
MVIS12AXAWY2001C035SA001S	1C	35	21.5	24.7	27.5	857
MVIS12AXAWY2001C050SA001S	1C	50	23.0	26.2	29.4	986
MVIS12AXAWY2001C070SA001S	1C	70	24.6	27.8	30.9	1104
MVIS12AXAWY2001C095SA001S	1C	95	26.6	30.6	33.7	1339
MVIS12AXAWY2001C120SA001S	1C	120	28.2	32.2	35.3	1482
MVIS12AXAWY2001C150SA001S	1C	150	29.9	33.9	37.0	1640
MVIS12AXAWY2001C185SA001S	1C	185	31.6	35.6	39.0	1841
MVIS12AXAWY2001C240SA001S	1C	240	34.0	38.0	41.5	2110
MVIS12AXAWY2001C300SA001S	1C	300	36.7	40.7	44.5	2455
MVIS12AXA\WY2001C400SA001S	1C	400	39.9	43.9	47.7	2862
MVIS12AXAWY2001C500SA001S	1C	500	43.2	48.2	52.3	3516
MVIS12AXAWY2001C630SA001S	1C	630	46.8	51.8	56.2	4096
MVIS12AXAWY2001C800SA001S	1C	800	50.9	55.9	60.6	4823
MVIS12AXAWY2001C01KSA001S	1C	1000	55.2	61.5	66.5	5925
A2XFaY						
MVIS12AXAFY2001C035SA001S	1C	35	21.5	23.1	25.9	731
MVIS12AXAFY2001C050SA001S	1C	50	23.0	24.6	27.4	834
MVIS12AXAFY2001C070SA001S	1C	70	24.6	26.2	29.3	965
MVIS12AXAFY2001C095SA001S	1C	95	26.6	28.2	31.3	1111
MVIS12AXAFY2001C120SA001S	1C	120	28.2	29.8	32.9	1242
MVIS12AXAFY2001C150SA001S	1C	150	29.9	31.5	34.6	1390
MVIS12AXAFY2001C185SA001S	1C	185	31.6	33.2	36.3	1542
MVIS12AXAFY2001C240SA001S	1C	240	34.0	35.6	39.1	1817
MVIS12AXAFY2001C300SA001S	1C	300	36.7	38.3	41.8	2107
MVIS12AXAFY2001C400SA001S	1C	400	39.9	41.5	45.3	2525
MVIS12AXAFY2001C500SA001S	1C	500	43.2	44.8	48.6	2948
MVIS12AXAFY2001C630SA001S	1C	630	46.8	48.4	52.5	3490
MVIS12AXAFY2001C800SA001S	1C	800	50.9	52.5	56.9	4164
MVIS12AXAFY2001C01KSA001S	1C	1000	55.2	56.8	61.5	4943

The above data is approximate & subject to manufacturing tolerance.

POLYCAB MV SC Al IS 7098-2, 12.7/22 KV(E)

Medium Voltage Single Core Aluminium Armoured Cable, 12.7/22 KV (E) AC

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	
No.	mm²	Ω/km	Ω/km	µF/km	mH/km		Ω/km	
					A2XFaY	A2XWaY	A2XFaY	A2XWaY
1	35	0.868	1.113	0.14	0.45	0.46	0.14	0.14
1	50	0.641	0.822	0.16	0.41	0.43	0.13	0.13
1	70	0.443	0.568	0.18	0.40	0.41	0.12	0.13
1	95	0.32	0.410	0.20	0.38	0.39	0.12	0.12
1	120	0.253	0.325	0.22	0.36	0.38	0.11	0.12
1	150	0.206	0.264	0.24	0.35	0.36	0.11	0.11
1	185	0.164	0.211	0.26	0.34	0.35	0.11	0.11
1	240	0.125	0.161	0.28	0.32	0.34	0.10	0.11
1	300	0.1	0.129	0.31	0.31	0.33	0.10	0.10
1	400	0.0778	0.101	0.35	0.30	0.31	0.10	0.10
1	500	0.0605	0.079	0.38	0.29	0.31	0.09	0.10
1	630	0.0469	0.061	0.42	0.29	0.30	0.09	0.09
1	800	0.0367	0.049	0.47	0.28	0.29	0.09	0.09
1	1000	0.0291	0.039	0.51	0.27	0.29	0.09	0.09

CURRENT CARRYING CAPACITY:

Nominal area of conductor	Buried direct in the ground		In single -way Ducts		In air	
	Trefoil	Flat touching	Trefoil ducts	Flat touching ducts	Trefoil	Flat Touching
Sqmm	A	A	A	A	A	A
35	116	119	102	101	144	146
50	137	139	120	117	174	177
70	167	169	146	142	217	220
95	198	200	172	167	262	264
120	224	225	195	188	302	303
150	249	249	217	207	339	340
185	280	279	243	231	389	387
240	321	316	278	261	455	449
300	355	343	307	282	515	501
400	400	380	345	312	594	571
500	447	417	384	340	678	641
630	496	453	424	367	770	715
800	543	486	475	402	866	789
1000	572	508	498	417	944	851

Air Ambient temperature: 40˚C
Ground ambient temperature: 30˚C
Conductor operating temperature: 90˚C
The above table is in accordance with IS 3961(part 7):2016

POLYCAB MV SC Al IS 7098-2, 12.7/22 KV(E)

Medium Voltage Single Core Aluminium Armoured Cable, 12.7/22 KV (E) AC

De-Rating Factor

Rating factor for variation in ambient air temperature for cable in free air

Ambient air Temperature	25˚C	30˚C	35˚C	40˚C	45˚C	50˚C	55˚C	60˚C
De-Rating Factor	1.14	1.10	1.05	1.00	0.95	0.89	0.84	0.77

Maximum conductor temperature 90˚C

Rating factor for variation in ground temperature for direct buried cables.

Ground Temperature	15˚C	20˚C	25˚C	30˚C	35˚C	40˚C	45˚C	50˚C
De-Rating Factor	1.12	1.08	1.04	1.00	0.96	0.91	0.87	0.82

Maximum conductor temperature 90˚C

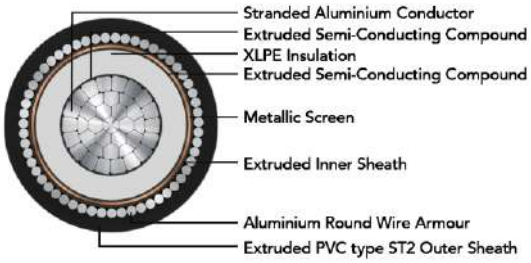
Rating factor for variation in ground temperature for cable in duct.

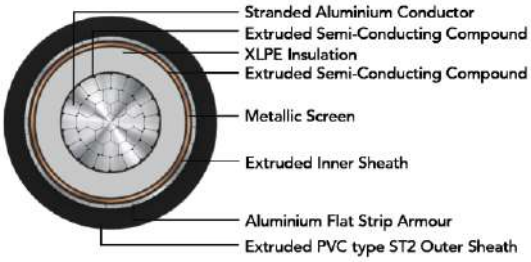
Ground Temperature	15˚C	20˚C	25˚C	30˚C	35˚C	40˚C	45˚C	50˚C
De-Rating Factor	1.12	1.08	1.04	1.00	0.96	0.91	0.87	0.82

Maximum conductor temperature 90˚C

POLYCAB MV SC Al IS 7098-2, 19/33 KV(E)

Medium Voltage Single Core Aluminium Armoured Cable, 19/33 KV (E) AC





Outstanding Features

- Flame retardant
- High life
- UV resistant

Application

POLYCAB MV 19/33 KV(E) XLPE insulated with aluminium conductor single core cable is suitable to use for power distribution for external and direct burial applications in power network system.

Voltage Rating

Nominal Voltage: 19/33 KV (E)

Operation Temperature

Max. operating temperature: +90°C
Max. Short Circuit Temperature: 250°C

Construction

- Conductor: Circular Compacted Aluminium conductor as per IS 8130, class 2
- Conductor Screen: Extruded Semi-conductive compound
- Insulation: XLPE
- Non-Metallic Insulation Screen: Extruded Semi-conductive compound
- Metallic Insulation Screen: Copper tape screen
- Inner Sheath: Extruded Polyvinyl Chloride
- Armour: Aluminium Round/Flat Wire Armoured
- Outer Sheath: Extruded Polyvinyl Chloride

Colour: Black

Note:

- Inner sheath available with FR/ FRLS
- Outer/ Inner available with FR/FRLS

Bending Radius:

Fixed Installation: 20D
D is overall diameter of cable

Standard and References:

IS 8130:2013
IS 5831:1984
IS 3975:1979
IS 7098-2:2011

Test Voltage

63kV AC 50 Hz

Impulse test Voltage

170 KV

Compliance

Conductor resistance	IS 8130
Insulation resistance	IS 7098-2
Flammability test	IEC 60332-1-2
Partial Discharge test	IS 7098-2

POLYCAB MV SC Al IS 7098-2, 19/33 KV(E)

Medium Voltage Single Core Aluminium Armoured Cable, 19/33 KV (E) AC

DIMENSIONS AND WEIGHTS:

Product Code	No. of Cores	Core Cross sectional Area	Nominal Diameter			Weight (Approx.)
			Under armour	Over armour	Overall	
A2XWaY	No.	mm^2	mm	mm	mm	Kg/Km
MVIS13AXAWY2001C035SA001S	1C	35	27.3	31.3	34.4	1294
MVIS13AXAWY2001C050SA001S	1C	50	28.8	32.8	36.0	1424
MVIS13AXAWY2001C070SA001S	1C	70	30.4	34.4	37.5	1558
MVIS13AXAWY2001C095SA001S	1C	95	32.2	36.2	39.7	1756
MVIS13AXAWY2001C120SA001S	1C	120	33.8	37.8	41.2	1914
MVIS13AXAWY2001C150SA001S	1C	150	35.5	39.5	42.9	2089
MVIS13AXAWY2001C185SA001S	1C	185	37.4	41.4	45.1	2330
MVIS13AXAWY2001C240SA001S	1C	240	39.8	43.8	47.6	2623
MVIS13AXAWY2001C300SA001S	1C	300	42.3	47.3	51.4	3134
MVIS13AXAWY2001C400SA001S	1C	400	45.5	50.5	54.9	3625
MVIS13AXAWY2001C500SA001S	1C	500	49.0	54.0	58.4	4149
MVIS13AXAWY2001C630SA001S	1C	630	52.4	57.4	62.1	4743
MVIS13AXAWY2001C800SA001S	1C	800	56.7	63.0	68.0	5815
MVIS13AXAWY2001C01KSA001S	1C	1000	61.0	67.3	72.6	6706
A2XFaY						
MVIS13AXAFY2001C035SA001S	1C	35	27.3	28.9	32.0	1064
MVIS13AXAFY2001C050SA001S	1C	50	28.8	30.4	33.6	1176
MVIS13AXAFY2001C070SA001S	1C	70	30.4	32.0	35.1	1299
MVIS13AXAFY2001C095SA001S	1C	95	32.2	33.8	36.9	1454
MVIS13AXAFY2001C120SA001S	1C	120	33.8	35.4	38.8	1622
MVIS13AXAFY2001C150SA001S	1C	150	35.5	37.1	40.5	1786
MVIS13AXAFY2001C185SA001S	1C	185	37.4	39.0	42.4	1981
MVIS13AXAFY2001C240SA001S	1C	240	39.8	41.4	45.2	2286
MVIS13AXAFY2001C300SA001S	1C	300	42.3	43.9	47.7	2581
MVIS13AXAFY2001C400SA001S	1C	400	45.5	47.1	51.2	3026
MVIS13AXAFY2001C500SA001S	1C	500	49.0	50.6	55.0	3557
MVIS13AXAFY2001C630SA001S	1C	630	52.4	54.0	58.4	4069
MVIS13AXAFY2001C800SA001S	1C	800	56.7	58.3	63.0	4816
MVIS13AXAFY2001C01KSA001S	1C	1000	61.0	62.6	67.6	5635

The above data is approximate & subject to manufacturing tolerance.

POLYCAB MV SC Al IS 7098-2, 19/33 KV(E)

Medium Voltage Single Core Aluminium Armoured Cable, 19/33 KV (E) AC

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	
No.	mm²	Ω/km	Ω/km	µF/km	mH/km		Ω/km	
					A2XFaY	A2XWaY	A2XFaY	A2XWaY
1	35	0.868	1.113	0.11	0.49	0.50	0.15	0.16
1	50	0.641	0.822	0.13	0.45	0.47	0.14	0.15
1	70	0.443	0.568	0.14	0.43	0.44	0.14	0.14
1	95	0.32	0.410	0.15	0.41	0.42	0.13	0.13
1	120	0.253	0.325	0.17	0.39	0.41	0.12	0.13
1	150	0.206	0.264	0.18	0.38	0.39	0.12	0.12
1	185	0.164	0.211	0.19	0.37	0.38	0.12	0.12
1	240	0.125	0.161	0.21	0.35	0.36	0.11	0.11
1	300	0.1	0.129	0.23	0.34	0.36	0.11	0.11
1	400	0.0778	0.101	0.26	0.33	0.34	0.10	0.11
1	500	0.0605	0.079	0.28	0.32	0.33	0.10	0.10
1	630	0.0469	0.061	0.31	0.31	0.32	0.10	0.10
1	800	0.0367	0.049	0.34	0.30	0.32	0.09	0.10
1	1000	0.0291	0.039	0.38	0.29	0.31	0.09	0.10

CURRENT CARRYING CAPACITY:

Nominal area of conductor	Buried direct in the ground		In single -way Ducts		In air	
	Trefoil	Flat touching	Trefoil ducts	Flat touching ducts	Trefoil	Flat Touching
Sqmm	A	A	A	A	A	A
35	116	119	102	101	144	146
50	137	139	120	117	174	177
70	167	169	146	142	217	220
95	198	200	172	167	262	264
120	224	225	195	188	302	303
150	249	249	217	207	339	340
185	280	279	243	231	389	387
240	321	316	278	261	455	449
300	355	343	307	282	515	501
400	400	380	345	312	594	571
500	447	417	384	340	678	641
630	496	453	424	367	770	715
800	543	486	475	402	866	789
1000	572	508	498	417	944	851

Air Ambient temperature: 40˚C
Ground ambient temperature: 30˚C
Conductor operating temperature: 90˚C
The above table is in accordance with IS 3961(part 7):2016

POLYCAB MV SC Al IS 7098-2, 19/33 KV(E)

Medium Voltage Single Core Aluminium Armoured Cable, 19/33 KV (E) AC

De-Rating Factor

Rating factor for variation in ambient air temperature for cable in free air

Ambient air Temperature	25˚C	30˚C	35˚C	40˚C	45˚C	50˚C	55˚C	60˚C
De-Rating Factor	1.14	1.10	1.05	1.00	0.95	0.89	0.84	0.77

Maximum conductor temperature 90˚C

Rating factor for variation in ground temperature for direct buried cables.

Ground Temperature	15˚C	20˚C	25˚C	30˚C	35˚C	40˚C	45˚C	50˚C
De-Rating Factor	1.12	1.08	1.04	1.00	0.96	0.91	0.87	0.82

Maximum conductor temperature 90˚C

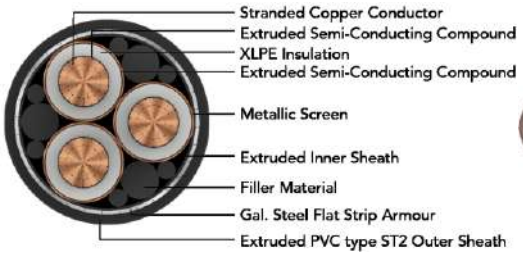
Rating factor for variation in ground temperature for cable in duct.

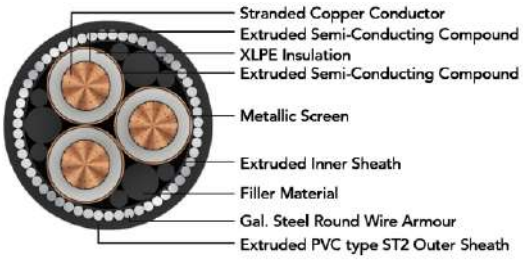
Ground Temperature	15˚C	20˚C	25˚C	30˚C	35˚C	40˚C	45˚C	50˚C
De-Rating Factor	1.12	1.08	1.04	1.00	0.96	0.91	0.87	0.82

Maximum conductor temperature 90˚C

POLYCAB MV MC Cu IS 7098-2 1.9/3.3 KV(E)

Medium Voltage Multi Core Copper Armoured Cable, 1.9/3.3 KV (E) AC





Outstanding Features

- Flame retardant
- High life
- UV resistant

Application

POLYCAB MV 1.9/3.3 KV(E) XLPE insulated with coppe conductor single core cable is suitable to use for power distribution for external and direct burial applications in power network system.

Voltage Rating

Nominal Voltage: 1.9/3.3 KV (E)

Operation Temperature

Max. operating temperature: +90°C
Max. Short Circuit Temperature: 250°C

Construction

- Conductor: Circular Compacted Copper conductor as per IS 8130, class 2
- Conductor Screen: Extruded Semi-conductive compound
- Insulation: XLPE
- Non-Metallic Insulation Screen: Extruded Semi-conductive compound
- Metallic Insulation Screen: Copper tape screen
- Inner Sheath: Extruded Polyvinyl Chloride
- Armour: Galvanised steel Round/Flat Wire Armoured
- Outer Sheath: Extruded Polyvinyl Chloride

Colour: Black

Note:

- Inner sheath available with FR/ FRLS
- Outer/ Inner available with FR/FRLS

Standard and References:

IS 8130:2013
IS 5831:1984
IS 3975:1979
IS 7098-2:2011

Test Voltage

10kV AC 50 Hz

Compliance

- Conductor resistance IS 8130
- Insulation resistance IS 7098-2
- Flammability test IEC 60332-1-2
- Partial Discharge test IS 7098-2

Bending Radius:

Fixed Installation: 15D
D is overall diameter of cable

POLYCAB MV MC Cu IS 7098-2 1.9/3.3 KV(E)

Medium Voltage Multi Core Copper Armoured Cable, 1.9/3.3 KV (E) AC

DIMENSIONS AND WEIGHTS:

Product Code	No. of Cores	Core Cross sectional Area	Nominal Diameter			Weight (Approx.)
			Under armour	Over armour	Overall	
2XWY	No.	mm²	mm	mm	mm	Kg/Km
MVIS10CXSWY2003C025SA001S	3C	25	27.0	31.0	34.2	2455
MVIS10CXSWY2003C035SA001S	3C	35	29.5	33.5	36.6	2904
MVIS10CXSWY2003C050SA001S	3C	50	32.8	36.8	40.3	3601
MVIS10CXSWY2003C070SA001S	3C	70	36.5	40.5	44.2	4451
MVIS10CXSWY2003C095SA001S	3C	95	40.3	45.3	49.4	5862
MVIS10CXSWY2003C120SA001S	3C	120	43.7	48.7	52.8	6838
MVIS10CXSWY2003C150SA001S	3C	150	47.6	52.6	57.0	8114
MVIS10CXSWY2003C185SA001S	3C	185	51.2	56.2	61.0	9431
MVIS10CXSWY2003C240SA001S	3C	240	56.8	63.1	68.1	12276
MVIS10CXSWY2003C300SA001S	3C	300	62.2	68.5	73.8	14655
MVIS10CXSWY2003C400SA001S	3C	400	69.1	75.4	81.4	18123
MVIS10CXSWY2003C500SA001S	3C	500	77.1	85.1	91.1	23406
MVIS10CXSWY2003C630SA001S	3C	630	85.2	93.2	99.2	27955
2XFY						
MVIS10CXSFY2003C025SA001S	3C	25	27.0	28.6	31.8	1827
MVIS10CXSFY2003C035SA001S	3C	35	29.5	31.1	34.2	2216
MVIS10CXSFY2003C050SA001S	3C	50	32.8	34.4	37.6	2796
MVIS10CXSFY2003C070SA001S	3C	70	36.5	38.1	41.5	3551
MVIS10CXSFY2003C095SA001S	3C	95	40.3	41.9	45.7	4480
MVIS10CXSFY2003C120SA001S	3C	120	43.7	45.3	49.4	5395
MVIS10CXSFY2003C150SA001S	3C	150	47.6	49.2	53.3	6492
MVIS10CXSFY2003C185SA001S	3C	185	51.2	52.8	57.2	7667
MVIS10CXSFY2003C240SA001S	3C	240	56.8	58.4	63.1	9596
MVIS10CXSFY2003C300SA001S	3C	300	62.2	63.8	68.8	11737
MVIS10CXSFY2003C400SA001S	3C	400	69.1	70.7	76.4	14878
MVIS10CXSFY2003C500SA001S	3C	500	77.1	78.7	84.7	18533
MVIS10CXSFY2003C630SA001S	3C	630	85.2	86.8	92.8	22603

The above data is approximate & subject to manufacturing tolerance.

POLYCAB MV MC Cu IS 7098-2 1.9/3.3 KV(E)

Medium Voltage Multi Core Copper Armoured Cable, 1.9/3.3 KV (E) AC

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	
No.	mm²	Ω/km	Ω/km	µF/km	mH/km		Ω/km	
					2XFY	2XWY	2XFY	2XWY
3	25	0.727	0.932	0.24	0.33	0.33	0.103	0.103
3	35	0.524	0.672	0.27	0.31	0.31	0.099	0.099
3	50	0.387	0.496	0.32	0.29	0.29	0.091	0.091
3	70	0.268	0.344	0.36	0.28	0.28	0.088	0.088
3	95	0.193	0.248	0.41	0.27	0.27	0.084	0.084
3	120	0.153	0.197	0.46	0.26	0.26	0.081	0.081
3	150	0.124	0.159	0.51	0.25	0.25	0.079	0.079
3	185	0.0991	0.128	0.55	0.25	0.25	0.078	0.078
3	240	0.0754	0.098	0.62	0.24	0.24	0.075	0.075
3	300	0.0601	0.078	0.69	0.24	0.24	0.074	0.074
3	400	0.047	0.062	0.78	0.23	0.23	0.072	0.072
3	500	0.0366	0.049	0.81	0.23	0.23	0.072	0.072
3	630	0.0283	0.038	0.84	0.23	0.23	0.071	0.071

CURRENT CARRYING CAPACITY:

Nominal area of conductor	Buried direct in ground	In a buried duct	In air
Sqmm	A	A	A
25	121	104	132
35	144	124	159
50	169	146	188
70	206	178	234
95	246	212	284
120	278	240	326
150	310	268	368
185	350	302	422
240	401	353	492
300	449	395	559
400	506	445	642
500	565	497	730

Air Ambient temperature: 40˚C
Ground ambient temperature: 30˚C
Conductor operating temperature: 90˚C
The above table is in accordance with IS 3961(part 7):2016

POLYCAB MV MC Cu IS 7098-2 1.9/3.3 KV(E)

Medium Voltage Multi Core Copper Armoured Cable, 1.9/3.3 KV (E) AC

De-Rating Factor

Rating factor for variation in ambient air temperature for cable in free air

Ambient air Temperature	25˚C	30˚C	35˚C	40˚C	45˚C	50˚C	55˚C	60˚C
De-Rating Factor	1.14	1.10	1.05	1.00	0.95	0.89	0.84	0.77

Maximum conductor temperature 90˚C

Rating factor for variation in ground temperature for direct buried cables.

Ground Temperature	15˚C	20˚C	25˚C	30˚C	35˚C	40˚C	45˚C	50˚C
De-Rating Factor	1.12	1.08	1.04	1.00	0.96	0.91	0.87	0.82

Maximum conductor temperature 90˚C

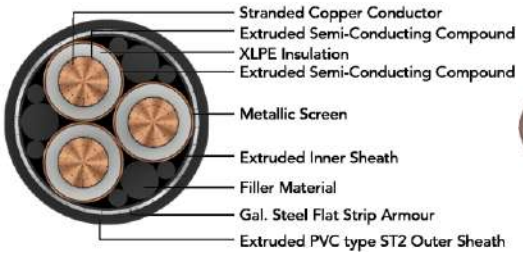
Rating factor for variation in ground temperature for cable in duct.

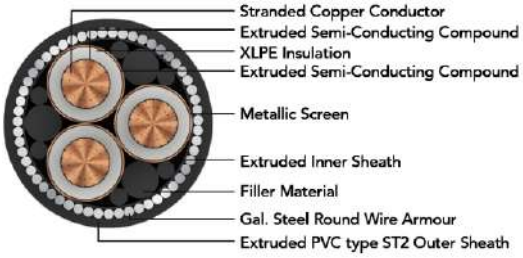
Ground Temperature	15˚C	20˚C	25˚C	30˚C	35˚C	40˚C	45˚C	50˚C
De-Rating Factor	1.12	1.08	1.04	1.00	0.96	0.91	0.87	0.82

Maximum conductor temperature 90˚C

POLYCAB MV MC Cu IS 7098-2, 3.3/3.3 KV(UE)

Medium Voltage Multi Core Copper Armoured Cable, 3.3/3.3 KV (UE) AC





Outstanding Features

- Flame retardant
- High life
- UV resistant

Application

POLYCAB MV 3.3/3.3 KV(UE) XLPE insulated with copper conductor single core cable is suitable to use for power distribution for external and direct burial applications in power network system.

Voltage Rating

Nominal Voltage: 3.3/3.3 KV (UE)

Operation Temperature

Max. operating temperature: +90°C
Max. Short Circuit Temperature: 250°C

Construction

- Conductor: Circular Compacted Copper conductor as per IS 8130, class 2
- Conductor Screen: Extruded Semi-conductive compound
- Insulation: XLPE
- Non-Metallic Insulation Screen: Extruded Semi-conductive compound
- Metallic Insulation Screen: Copper tape screen
- Inner Sheath: Extruded Polyvinyl Chloride
- Armour: Galvanised steel Round/Flat Wire Armoured
- Outer Sheath: Extruded Polyvinyl Chloride

Colour: Black

Note:

- Inner sheath available with FR/ FRLS
- Outer/ Inner available with FR/FRLS

Bending Radius:

Fixed Installation: 15D
D is overall diameter of cable

Standard and References:

IS 8130:2013
IS 5831:1984
IS 3975:1979
IS 7098-2:2011

Test Voltage

10kV AC 50 Hz

Compliance

• Conductor resistance	IS 8130
• Insulation resistance	IS 7098-2
• Flammability test	IEC 60332-1-2
• Partial Discharge test	IS 7098-2

POLYCAB MV MC Cu IS 7098-2, 3.3/3.3 KV(UE)

Medium Voltage Multi Core Copper Armoured Cable, 3.3/3.3 KV (UE) AC

DIMENSIONS AND WEIGHTS:

Product Code	No. of Cores	Core Cross sectional Area	Nominal Diameter			Weight (Approx.)
			Under armour	Over armour	Overall	
2XWY	No.	mm^2	mm	mm	mm	Kg/Km
MVIS14CXSWY2003C025SA001S	3C	25	27.0	31.0	34.2	2455
MVIS14CXSWY2003C035SA001S	3C	35	29.5	33.5	36.6	2904
MVIS14CXSWY2003C050SA001S	3C	50	32.8	36.8	40.3	3601
MVIS14CXSWY2003C070SA001S	3C	70	36.5	40.5	44.2	4451
MVIS14CXSWY2003C095SA001S	3C	95	40.3	45.3	49.4	5862
MVIS14CXSWY2003C120SA001S	3C	120	43.7	48.7	52.8	6838
MVIS14CXSWY2003C150SA001S	3C	150	47.6	52.6	57.0	8114
MVIS14CXSWY2003C185SA001S	3C	185	51.2	56.2	61.0	9431
MVIS14CXSWY2003C240SA001S	3C	240	56.8	63.1	68.1	12276
MVIS14CXSWY2003C300SA001S	3C	300	62.2	68.5	73.8	14655
MVIS14CXSWY2003C400SA001S	3C	400	69.1	75.4	81.4	18123
MVIS14CXSWY2003C500SA001S	3C	500	77.1	85.1	91.1	23406
MVIS14CXSWY2003C630SA001S	3C	630	85.2	93.2	99.2	27955
2XFY						
MVIS14CXSFY2003C025SA001S	3C	25	27.0	28.6	31.8	1827
MVIS14CXSFY2003C035SA001S	3C	35	29.5	31.1	34.2	2216
MVIS14CXSFY2003C050SA001S	3C	50	32.8	34.4	37.6	2796
MVIS14CXSFY2003C070SA001S	3C	70	36.5	38.1	41.5	3551
MVIS14CXSFY2003C095SA001S	3C	95	40.3	41.9	45.7	4480
MVIS14CXSFY2003C120SA001S	3C	120	43.7	45.3	49.4	5395
MVIS14CXSFY2003C150SA001S	3C	150	47.6	49.2	53.3	6492
MVIS14CXSFY2003C185SA001S	3C	185	51.2	52.8	57.2	7667
MVIS14CXSFY2003C240SA001S	3C	240	56.8	58.4	63.1	9596
MVIS14CXSFY2003C300SA001S	3C	300	62.2	63.8	68.8	11737
MVIS14CXSFY2003C400SA001S	3C	400	69.1	70.7	76.4	14878
MVIS14CXSFY2003C500SA001S	3C	500	77.1	78.7	84.7	18533
MVIS14CXSFY2003C630SA001S	3C	630	85.2	86.8	92.8	22603

The above data is approximate & subject to manufacturing tolerance.

POLYCAB MV MC Cu IS 7098-2, 3.3/3.3 KV(UE)

Medium Voltage Multi Core Copper Armoured Cable, 3.3/3.3 KV (UE) AC

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	
No.	mm²	Ω/km	Ω/km	µF/km	mH/km		Ω/km	
					2XFY	2XWY	2XFY	2XWY
3	25	0.727	0.932	0.24	0.33	0.33	0.103	0.103
3	35	0.524	0.672	0.27	0.31	0.31	0.099	0.099
3	50	0.387	0.496	0.32	0.29	0.29	0.091	0.091
3	70	0.268	0.344	0.36	0.28	0.28	0.088	0.088
3	95	0.193	0.248	0.41	0.27	0.27	0.084	0.084
3	120	0.153	0.197	0.46	0.26	0.26	0.081	0.081
3	150	0.124	0.159	0.51	0.25	0.25	0.079	0.079
3	185	0.0991	0.128	0.55	0.25	0.25	0.078	0.078
3	240	0.0754	0.098	0.62	0.24	0.24	0.075	0.075
3	300	0.0601	0.078	0.69	0.24	0.24	0.074	0.074
3	400	0.047	0.062	0.78	0.23	0.23	0.072	0.072
3	500	0.0366	0.049	0.81	0.23	0.23	0.072	0.072
3	630	0.0283	0.038	0.84	0.23	0.23	0.071	0.071

CURRENT CARRYING CAPACITY:

Nominal area of conductor	Buried direct in ground	In a buried duct	In air
Sqmm	A	A	A
25	121	104	132
35	144	124	159
50	169	146	188
70	206	178	234
95	246	212	284
120	278	240	326
150	310	268	368
185	350	302	422
240	401	353	492
300	449	395	559
400	506	445	642
500	565	497	730

Air Ambient temperature: 40˚C
Ground ambient temperature: 30˚C
Conductor operating temperature: 90˚C
The above table is in accordance with IS 3961(part 7):2016

POLYCAB MV MC Cu IS 7098-2, 3.3/3.3 KV(UE)

Medium Voltage Multi Core Copper Armoured Cable, 3.3/3.3 KV (UE) AC

De-Rating Factor

Rating factor for variation in ambient air temperature for cable in free air

Ambient air Temperature	25˚C	30˚C	35˚C	40˚C	45˚C	50˚C	55˚C	60˚C
De-Rating Factor	1.14	1.10	1.05	1.00	0.95	0.89	0.84	0.77

Maximum conductor temperature 90˚C

Rating factor for variation in ground temperature for direct buried cables.

Ground Temperature	15˚C	20˚C	25˚C	30˚C	35˚C	40˚C	45˚C	50˚C
De-Rating Factor	1.12	1.08	1.04	1.00	0.96	0.91	0.87	0.82

Maximum conductor temperature 90˚C

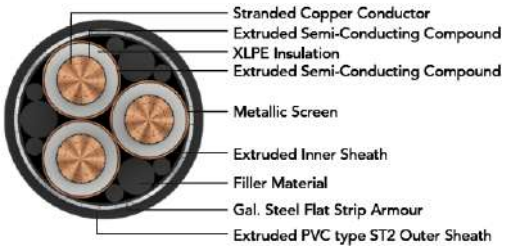
Rating factor for variation in ground temperature for cable in duct.

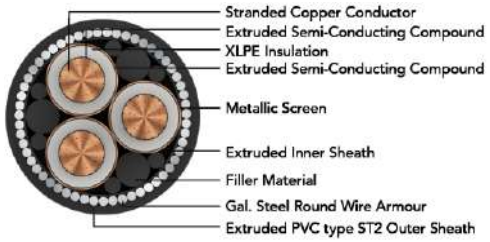
Ground Temperature	15˚C	20˚C	25˚C	30˚C	35˚C	40˚C	45˚C	50˚C
De-Rating Factor	1.12	1.08	1.04	1.00	0.96	0.91	0.87	0.82

Maximum conductor temperature 90˚C

POLYCAB MV MC Cu IS 7098-2, 3.8/6.6 KV(E)

Medium Voltage Multi Core Copper Armoured Cable, 3.8/6.6 KV (E) AC





Outstanding Features

- Flame retardant
- High life
- UV resistant

Application

POLYCAB MV 3.8/6.6 KV(E) XLPE insulated with copper conductor multi core cable is suitable to use for power distribution for external and direct burial applications in power network system.

Voltage Rating

Nominal Voltage: 3.8/6.6 KV (E)

Operation Temperature

Max. operating temperature: 90°C
Max. Short Circuit Temperature: 250°C

Construction

- Conductor: Circular Compacted Copper conductor as per IS 8130, class 2
- Conductor Screen: Extruded Semi-conductive compound
- Insulation: XLPE
- Non-Metallic Insulation Screen: Extruded Semi-conductive compound
- Metallic Insulation Screen: Copper tape screen
- Inner Sheath: Extruded Polyvinyl Chloride
- Armour: Galvanised steel Round/Flat Wire Armoured
- Outer Sheath: Extruded Polyvinyl Chloride

Colour: Black

Note:

- Inner sheath available with FR/ FRLS
- Outer/ Inner available with FR/FRLS

Bending Radius:

Fixed Installation: 15D
D is overall diameter of cable

Standard and References:

IS 8130:2013
IS 5831:1984
IS 3975:1979
IS 7098-2:2011

Test Voltage

13kV AC 50 Hz

Impulse voltage test

60 kV

Compliance

• Conductor resistance	IS 8130
• Insulation resistance	IS 7098-2
• Flammability test	IEC 60332-1-2
• Partial Discharge test	IS 7098-2

POLYCAB MV MC Cu IS 7098-2, 3.8/6.6 KV(E)

Medium Voltage Multi Core Copper Armoured Cable, 3.8/6.6 KV (E) AC

DIMENSIONS AND WEIGHTS:

Product Code	No. of Cores	Core Cross sectional Area	Nominal Diameter			Weight (Approx.)
			Under armour	Over armour	Overall	
2XWY	No.	mm²	mm	mm	mm	Kg/Km
MVIS15CXSWY2003C025SA001S	3C	25	29.6	33.6	36.7	2683
MVIS15CXSWY2003C035SA001S	3C	35	32.1	36.1	39.5	3171
MVIS15CXSWY2003C050SA001S	3C	50	35.4	39.4	42.9	3851
MVIS15CXSWY2003C070SA001S	3C	70	39.1	43.1	46.8	4716
MVIS15CXSWY2003C095SA001S	3C	95	42.9	47.9	52.0	6161
MVIS15CXSWY2003C120SA001S	3C	120	46.5	51.5	55.9	7256
MVIS15CXSWY2003C150SA001S	3C	150	50.2	55.2	60.0	8528
MVIS15CXSWY2003C185SA001S	3C	185	53.8	58.8	63.5	9773
MVIS15CXSWY2003C240SA001S	3C	240	59.4	65.7	71.0	12765
MVIS15CXSWY2003C300SA001S	3C	300	65.6	71.9	77.6	15324
MVIS15CXSWY2003C400SA001S	3C	400	73.8	81.8	87.8	20183
MVIS15CXSWY2003C500SA001S	3C	500	81.8	89.8	95.8	24411
MVIS15CXSWY2003C630SA001S	3C	630	89.1	97.1	103.1	28792
2XFY						
MVIS15CXSFY2003C025SA001S	3C	25	29.6	31.2	34.3	1995
MVIS15CXSFY2003C035SA001S	3C	35	32.1	33.7	36.8	2392
MVIS15CXSFY2003C050SA001S	3C	50	35.4	37.0	40.5	3016
MVIS15CXSFY2003C070SA001S	3C	70	39.1	40.7	44.4	3789
MVIS15CXSFY2003C095SA001S	3C	95	42.9	44.5	48.3	4699
MVIS15CXSFY2003C120SA001S	3C	120	46.5	48.1	52.2	5653
MVIS15CXSFY2003C150SA001S	3C	150	50.2	51.8	56.2	6784
MVIS15CXSFY2003C185SA001S	3C	185	53.8	55.4	60.1	7977
MVIS15CXSFY2003C240SA001S	3C	240	59.4	61.0	66.0	9933
MVIS15CXSFY2003C300SA001S	3C	300	65.6	67.2	72.6	12211
MVIS15CXSFY2003C400SA001S	3C	400	73.8	75.4	81.4	15550
MVIS15CXSFY2003C500SA001S	3C	500	81.8	83.4	89.4	19218
MVIS15CXSFY2003C630SA001S	3C	630	89.1	90.7	96.7	23199

The above data is approximate & subject to manufacturing tolerance

POLYCAB MV MC Cu IS 7098-2, 3.8/6.6 KV(E)

Medium Voltage Multi Core Copper Armoured Cable, 3.8/6.6 KV (E) AC

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	
No.	mm²	Ω/km	Ω/km	µF/km	mH/km		Ω/km	
					2XFY	2XWY	2XFY	2XWY
3	25	0.727	0.932	0.21	0.35	0.35	0.109	0.109
3	35	0.524	0.672	0.23	0.33	0.33	0.104	0.104
3	50	0.387	0.496	0.27	0.31	0.31	0.096	0.096
3	70	0.268	0.344	0.30	0.29	0.29	0.092	0.092
3	95	0.193	0.248	0.35	0.28	0.28	0.089	0.089
3	120	0.153	0.197	0.38	0.27	0.27	0.085	0.085
3	150	0.124	0.159	0.42	0.26	0.26	0.083	0.083
3	185	0.0991	0.128	0.46	0.26	0.26	0.081	0.081
3	240	0.0754	0.098	0.51	0.25	0.25	0.078	0.078
3	300	0.0601	0.078	0.54	0.25	0.25	0.077	0.077
3	400	0.047	0.062	0.56	0.24	0.24	0.077	0.077
3	500	0.0366	0.049	0.60	0.24	0.24	0.076	0.076
3	630	0.0283	0.038	0.66	0.24	0.24	0.074	0.074

CURRENT CARRYING CAPACITY:

Nominal area of conductor	Buried direct in ground	In a buried duct	In air
Sqmm	A	A	A
25	121	104	132
35	144	124	159
50	169	146	188
70	206	178	234
95	246	212	284
120	278	240	326
150	310	268	368
185	350	302	422
240	401	353	492
300	449	395	559
400	506	445	642
500	565	497	730

Air Ambient temperature: 40˚C
Ground ambient temperature: 30˚C
Conductor operating temperature: 90˚C
The above table is in accordance with IS 3961(part 7):2016

POLYCAB MV MC Cu IS 7098-2, 3.8/6.6 KV(E)

Medium Voltage Multi Core Copper Armoured Cable, 3.8/6.6 KV (E) AC

De-Rating Factor

Rating factor for variation in ambient air temperature for cable in free air

Ambient air Temperature	25˚C	30˚C	35˚C	40˚C	45˚C	50˚C	55˚C	60˚C
De-Rating Factor	1.14	1.10	1.05	1.00	0.95	0.89	0.84	0.77

Maximum conductor temperature 90˚C

Rating factor for variation in ground temperature for direct buried cables.

Ground Temperature	15˚C	20˚C	25˚C	30˚C	35˚C	40˚C	45˚C	50˚C
De-Rating Factor	1.12	1.08	1.04	1.00	0.96	0.91	0.87	0.82

Maximum conductor temperature 90˚C

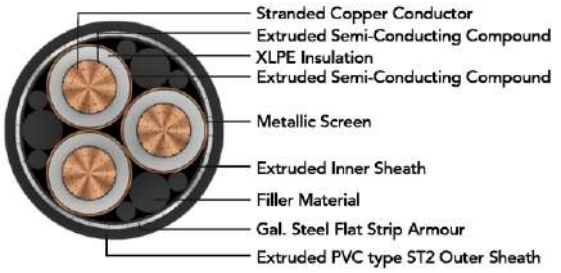
Rating factor for variation in ground temperature for cable in duct.

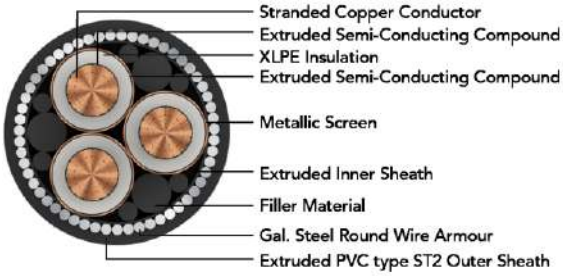
Ground Temperature	15˚C	20˚C	25˚C	30˚C	35˚C	40˚C	45˚C	50˚C
De-Rating Factor	1.12	1.08	1.04	1.00	0.96	0.91	0.87	0.82

Maximum conductor temperature 90˚C

POLYCAB MV MC Cu IS 7098-2, 6.6/6.6 KV(UE)

Medium Voltage Multi Core Copper Armoured Cable, 6.6/6.6 KV (UE) AC





Outstanding Features

- Flame retardant
- High life
- UV resistant

Application

POLYCAB MV 6.6/6.6 KV(UE) XLPE insulated with copper conductor multi core cable is suitable to use for power distribution for external and direct burial applications in power network system.

Voltage Rating

Nominal Voltage: 6.6/6.6 KV (UE)

Operation Temperature

Max. operating temperature: 90°C
Max. Short Circuit Temperature: 250°C

Construction

- Conductor: Circular Compacted Copper conductor as per IS 8130, class 2
- Conductor Screen: Extruded Semi-conductive compound
- Insulation: XLPE
- Non-Metallic Insulation Screen: Extruded Semi-conductive compound
- Metallic Insulation Screen: Copper tape screen
- Inner Sheath: Extruded Polyvinyl Chloride
- Armour: Galvanised steel Round/Flat Wire Armoured
- Outer Sheath: Extruded Polyvinyl Chloride

Colour: Black

Note:

- Inner sheath available with FR/ FRLS
- Outer/ Inner available with FR/FRLS

Bending Radius:

Fixed Installation: 15D
D is overall diameter of cable

Standard and References:

IS 8130:2013
IS 5831:1984
IS 3975:1979
IS 7098-2:2011

Test Voltage

21kV AC 50 Hz

Impulse test Voltage

75 KV

Compliance

• Conductor resistance	IS 8130
• Insulation resistance	IS 7098-2
• Flammability test	IEC 60332-1-2
• Partial Discharge test	IS 7098-2

POLYCAB MV MC Cu IS 7098-2, 6.6/6.6 KV(UE)

Medium Voltage Multi Core Copper Armoured Cable, 6.6/6.6 KV (UE) AC

DIMENSIONS AND WEIGHTS:

Product Code	No. of Cores	Core Cross sectional Area	Nominal Diameter			Weight (Approx.)
			Under armour	Over armour	Overall	
2XWY	No.	mm²	mm	mm	mm	Kg/Km
MVIS18CXSWY2003C025SA001S	3C	25	33.1	37.1	40.5	3024
MVIS18CXSWY2003C035SA001S	3C	35	35.6	39.6	43.0	3495
MVIS18CXSWY2003C050SA001S	3C	50	39.1	43.1	46.8	4273
MVIS18CXSWY2003C070SA001S	3C	70	42.5	47.5	51.6	5546
MVIS18CXSWY2003C095SA001S	3C	95	46.6	51.6	56.0	6681
MVIS18CXSWY2003C120SA001S	3C	120	49.9	54.9	59.3	7689
MVIS18CXSWY2003C150SA001S	3C	150	53.7	58.7	63.4	8981
MVIS18CXSWY2003C185SA001S	3C	185	57.5	63.8	68.8	11104
MVIS18CXSWY2003C240SA001S	3C	240	62.8	69.1	74.5	13298
MVIS18CXSWY2003C300SA001S	3C	300	68.2	74.5	80.2	15793
MVIS18CXSWY2003C400SA001S	3C	400	75.1	83.1	89.1	20539
MVIS18CXSWY2003C500SA001S	3C	500	82.2	90.2	96.2	24467
MVIS18CXSWY2003C630SA001S	3C	630	89.5	97.5	103.5	28952
2XFY						
MVIS18CXSFY2003C025SA001S	3C	25	33.1	34.7	37.8	2219
MVIS18CXSFY2003C035SA001S	3C	35	35.6	37.2	40.6	2660
MVIS18CXSFY2003C050SA001S	3C	50	39.1	40.7	44.4	3346
MVIS18CXSFY2003C070SA001S	3C	70	42.5	44.1	47.9	4085
MVIS18CXSFY2003C095SA001S	3C	95	46.6	48.2	52.3	5079
MVIS18CXSFY2003C120SA001S	3C	120	49.9	51.5	55.9	6031
MVIS18CXSFY2003C150SA001S	3C	150	53.7	55.3	60.0	7185
MVIS18CXSFY2003C185SA001S	3C	185	57.5	59.1	63.8	8382
MVIS18CXSFY2003C240SA001S	3C	240	62.8	64.4	69.5	10337
MVIS18CXSFY2003C300SA001S	3C	300	68.2	69.8	75.2	12532
MVIS18CXSFY2003C400SA001S	3C	400	75.1	76.7	82.7	15746
MVIS18CXSFY2003C500SA001S	3C	500	82.2	83.8	89.8	19275
MVIS18CXSFY2003C630SA001S	3C	630	89.5	91.1	97.1	23280

The above data is approximate & subject to manufacturing tolerance.

POLYCAB MV MC Cu IS 7098-2, 6.6/6.6 KV(UE)

Medium Voltage Multi Core Copper Armoured Cable, 6.6/6.6 KV (UE) AC

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	
No.	mm²	Ω/km	Ω/km	µF/km	mH/km		Ω/km	
					2XFY	2XWY	2XFY	2XWY
3	25	0.727	0.932	0.18	0.37	0.37	0.116	0.116
3	35	0.524	0.672	0.20	0.35	0.35	0.111	0.111
3	50	0.387	0.496	0.23	0.33	0.33	0.102	0.102
3	70	0.268	0.344	0.25	0.31	0.31	0.098	0.098
3	95	0.193	0.248	0.29	0.30	0.30	0.093	0.093
3	120	0.153	0.197	0.32	0.29	0.29	0.090	0.090
3	150	0.124	0.159	0.35	0.28	0.28	0.087	0.087
3	185	0.0991	0.128	0.38	0.27	0.27	0.085	0.085
3	240	0.0754	0.098	0.42	0.26	0.26	0.082	0.082
3	300	0.0601	0.078	0.47	0.25	0.25	0.080	0.080
3	400	0.047	0.062	0.52	0.25	0.25	0.078	0.078
3	500	0.0366	0.049	0.58	0.24	0.24	0.076	0.076
3	630	0.0283	0.038	0.64	0.24	0.24	0.074	0.074

CURRENT CARRYING CAPACITY:

Nominal area of conductor	Buried direct in ground	In a buried duct	In air
Sqmm	A	A	A
25	121	105	133
35	144	125	160
50	169	146	191
70	207	179	237
95	245	213	286
120	278	241	329
150	311	269	371
185	349	308	422
240	401	354	493
300	449	396	560
400	506	446	643
500	565	497	731

Air Ambient temperature: 40˚C
Ground ambient temperature: 30˚C
Conductor operating temperature: 90˚C
The above table is in accordance with IS 3961(part 7):2016

POLYCAB MV MC Cu IS 7098-2, 6.6/6.6 KV(UE)

Medium Voltage Multi Core Copper Armoured Cable, 6.6/6.6 KV (UE) AC

De-Rating Factor

Rating factor for variation in ambient air temperature for cable in free air

Ambient air Temperature	25˚C	30˚C	35˚C	40˚C	45˚C	50˚C	55˚C	60˚C
De-Rating Factor	1.14	1.10	1.05	1.00	0.95	0.89	0.84	0.77

Maximum conductor temperature 90˚C

Rating factor for variation in ground temperature for direct buried cables.

Ground Temperature	15˚C	20˚C	25˚C	30˚C	35˚C	40˚C	45˚C	50˚C
De-Rating Factor	1.12	1.08	1.04	1.00	0.96	0.91	0.87	0.82

Maximum conductor temperature 90˚C

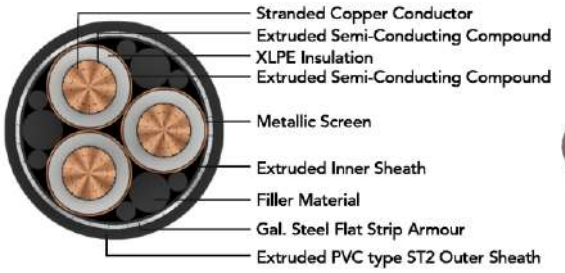
Rating factor for variation in ground temperature for cable in duct.

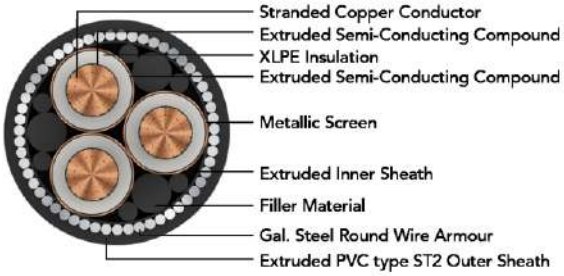
Ground Temperature	15˚C	20˚C	25˚C	30˚C	35˚C	40˚C	45˚C	50˚C
De-Rating Factor	1.12	1.08	1.04	1.00	0.96	0.91	0.87	0.82

Maximum conductor temperature 90˚C

POLYCAB MV MC Cu IS 7098-2, 6.35/11 KV(E)

Medium Voltage Multi Core Copper Armoured Cable, 6.35/11 KV (E) AC





Outstanding Features

- Flame retardant
- High life
- UV resistant

Application

POLYCAB MV 6.35/11 KV(E) XLPE insulated with copper conductor multi core cable is suitable to use for power distribution for external and direct burial applications in power network system.

Voltage Rating

Nominal Voltage: 6.35/11 KV (E)

Operation Temperature

Max. operating temperature: 90°C
Max. Short Circuit Temperature: 250°C

Construction

- Conductor: Circular Compacted Copper conductor as per IS 8130, class 2
- Conductor Screen: Extruded Semi-conductive compound
- Insulation: XLPE
- Non-Metallic Insulation Screen: Extruded Semi-conductive compound
- Metallic Insulation Screen: Copper tape screen
- Inner Sheath: Extruded Polyvinyl Chloride
- Armour: Galvanised steel Round/Flat Wire Armoured
- Outer Sheath: Extruded Polyvinyl Chloride

Colour: Black

Note:

- Inner sheath available with FR/ FRLS
- Outer/ Inner available with FR/FRLS

Bending Radius:

Fixed Installation: 15D
D is overall diameter of cable

Standard and References:

IS 8130:2013
IS 5831:1984
IS 3975:1979
IS 7098-2:2011

Test Voltage

21kV AC 50 Hz

Impulse test Voltage

75 KV

Compliance

• Conductor resistance	IS 8130
• Insulation resistance	IS 7098-2
• Flammability test	IEC 60332-1-2
• Partial Discharge test	IS 7098-2

POLYCAB MV MC Cu IS 7098-2, 6.35/11 KV(E)

Medium Voltage Multi Core Copper Armoured Cable, 6.35/11 KV (E) AC

DIMENSIONS AND WEIGHTS:

Product Code	No. of Cores	Core Cross sectional Area	Nominal Diameter			Weight (Approx.)
			Under armour	Over armour	Overall	
2XWY	No.	mm²	mm	mm	mm	Kg/Km
MVIS17CXSWY2003C025SA001S	3C	25	33.1	37.1	40.5	3024
MVIS17CXSWY2003C035SA001S	3C	35	35.6	39.6	43.0	3495
MVIS17CXSWY2003C050SA001S	3C	50	39.1	43.1	46.8	4273
MVIS17CXSWY2003C070SA001S	3C	70	42.5	47.5	51.6	5546
MVIS17CXSWY2003C095SA001S	3C	95	46.6	51.6	56.0	6681
MVIS17CXSWY2003C120SA001S	3C	120	49.9	54.9	59.3	7689
MVIS17CXSWY2003C150SA001S	3C	150	53.7	58.7	63.4	8981
MVIS17CXSWY2003C185SA001S	3C	185	57.5	63.8	68.8	11104
MVIS17CXSWY2003C240SA001S	3C	240	62.8	69.1	74.5	13298
MVIS17CXSWY2003C300SA001S	3C	300	68.2	74.5	80.2	15793
MVIS17CXSWY2003C400SA001S	3C	400	75.1	83.1	89.1	20539
MVIS17CXSWY2003C500SA001S	3C	500	82.2	90.2	96.2	24467
MVIS17CXSWY2003C630SA001S	3C	630	89.5	97.5	103.5	28952
2XFY						
MVIS17CXSFY2003C025SA001S	3C	25	33.1	34.7	37.8	2219
MVIS17CXSFY2003C035SA001S	3C	35	35.6	37.2	40.6	2660
MVIS17CXSFY2003C050SA001S	3C	50	39.1	40.7	44.4	3346
MVIS17CXSFY2003C070SA001S	3C	70	42.5	44.1	47.9	4085
MVIS17CXSFY2003C095SA001S	3C	95	46.6	48.2	52.3	5079
MVIS17CXSFY2003C120SA001S	3C	120	49.9	51.5	55.9	6031
MVIS17CXSFY2003C150SA001S	3C	150	53.7	55.3	60.0	7185
MVIS17CXSFY2003C185SA001S	3C	185	57.5	59.1	63.8	8382
MVIS17CXSFY2003C240SA001S	3C	240	62.8	64.4	69.5	10337
MVIS17CXSFY2003C300SA001S	3C	300	68.2	69.8	75.2	12532
MVIS17CXSFY2003C400SA001S	3C	400	75.1	76.7	82.7	15746
MVIS17CXSFY2003C500SA001S	3C	500	82.2	83.8	89.8	19275
MVIS17CXSFY2003C630SA001S	3C	630	89.5	91.1	97.1	23280

The above data is approximate & subject to manufacturing tolerance.

POLYCAB MV MC Cu IS 7098-2, 6.35/11 KV(E)

Medium Voltage Multi Core Copper Armoured Cable, 6.35/11 KV (E) AC

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	
No.	mm²	Ω/km	Ω/km	µF/km	mH/km		Ω/km	
					2XFY	2XWY	2XFY	2XWY
3	25	0.727	0.932	0.18	0.37	0.37	0.116	0.116
3	35	0.524	0.672	0.20	0.35	0.35	0.111	0.111
3	50	0.387	0.496	0.23	0.33	0.33	0.102	0.102
3	70	0.268	0.344	0.25	0.31	0.31	0.098	0.098
3	95	0.193	0.248	0.29	0.30	0.30	0.093	0.093
3	120	0.153	0.197	0.32	0.29	0.29	0.090	0.090
3	150	0.124	0.159	0.35	0.28	0.28	0.087	0.087
3	185	0.0991	0.128	0.38	0.27	0.27	0.085	0.085
3	240	0.0754	0.098	0.42	0.26	0.26	0.082	0.082
3	300	0.0601	0.078	0.47	0.25	0.25	0.080	0.080
3	400	0.047	0.062	0.52	0.25	0.25	0.078	0.078
3	500	0.0366	0.049	0.58	0.24	0.24	0.076	0.076
3	630	0.0283	0.038	0.64	0.24	0.24	0.074	0.074

CURRENT CARRYING CAPACITY:

Nominal area of conductor	Buried direct in ground	In a buried duct	In air
Sqmm	A	A	A
25	121	105	133
35	144	125	160
50	169	146	191
70	207	179	237
95	245	213	286
120	278	241	329
150	311	269	371
185	349	308	422
240	401	354	493
300	449	396	560
400	506	446	643
500	565	497	731

Air Ambient temperature: 40˚C
Ground ambient temperature: 30˚C
Conductor operating temperature: 90˚C
The above table is in accordance with IS 3961(part 7):2016

POLYCAB MV MC Cu IS 7098-2, 6.35/11 KV(E)

Medium Voltage Multi Core Copper Armoured Cable, 6.35/11 KV (E) AC

De-Rating Factor

Rating factor for variation in ambient air temperature for cable in free air

Ambient air Temperature	25˚C	30˚C	35˚C	40˚C	45˚C	50˚C	55˚C	60˚C
De-Rating Factor	1.14	1.10	1.05	1.00	0.95	0.89	0.84	0.77

Maximum conductor temperature 90˚C

Rating factor for variation in ground temperature for direct buried cables.

Ground Temperature	15˚C	20˚C	25˚C	30˚C	35˚C	40˚C	45˚C	50˚C
De-Rating Factor	1.12	1.08	1.04	1.00	0.96	0.91	0.87	0.82

Maximum conductor temperature 90˚C

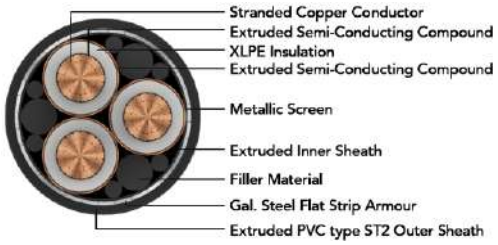
Rating factor for variation in ground temperature for cable in duct.

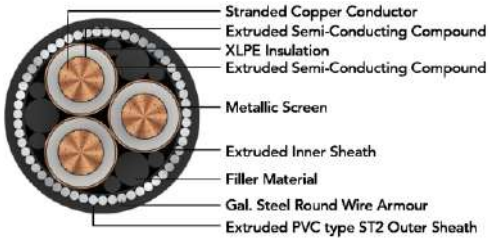
Ground Temperature	15˚C	20˚C	25˚C	30˚C	35˚C	40˚C	45˚C	50˚C
De-Rating Factor	1.12	1.08	1.04	1.00	0.96	0.91	0.87	0.82

Maximum conductor temperature 90˚C

POLYCAB MV MC Cu IS 7098-2, 11/11 KV(UE)

Medium Voltage Multi Core Copper Armoured Cable, 11/11 KV (UE) AC





Outstanding Features

- Flame retardant
- High life
- UV resistant

Application

POLYCAB MV 11/11 KV(UE) XLPE insulated with copper conductor multi core cable is suitable to use for power distribution for external and direct burial applications in power network system.

Voltage Rating

Nominal Voltage: 11/11 KV (UE)

Operation Temperature

Max. operating temperature: 90°C
Max. Short Circuit Temperature: 250°C

Construction

- Conductor: Circular Compacted Copper conductor as per IS 8130, class 2
- Conductor Screen: Extruded Semi-conductive compound
- Insulation: XLPE
- Non-Metallic Insulation Screen: Extruded Semi-conductive compound
- Metallic Insulation Screen: Copper tape screen
- Inner Sheath: Extruded Polyvinyl Chloride
- Armour: Galvanised steel Round/Flat Wire Armoured
- Outer Sheath: Extruded Polyvinyl Chloride

Colour: Black

Note:

- Inner sheath available with FR/ FRLS
- Outer/ Inner available with FR/FRLS

Bending Radius:

Fixed Installation: 15D
D is overall diameter of cable

Standard and References:

IS 8130:2013
IS 5831:1984
IS 3975:1979
IS 7098-2:2011

Test Voltage

35kV AC 50 Hz

Impulse test Voltage

95 KV

Compliance

Conductor resistance	IS 8130
Insulation resistance	IS 7098-2
Flammability test	IEC 60332-1-2
Partial Discharge test	IS 7098-2

POLYCAB MV MC Cu IS 7098-2, 11/11 KV(UE)

Medium Voltage Multi Core Copper Armoured Cable, 11/11 KV (UE) AC

DIMENSIONS AND WEIGHTS:

Product Code	No. of Cores	Core Cross sectional Area	Nominal Diameter			Weight (Approx.)
			Under armour	Over armour	Overall	
2XWY	No.	mm²	mm	mm	mm	Kg/Km
MVIS11CXSWY2003C025SA001S	3C	25	41.5	46.5	50.6	4399
MVIS11CXSWY2003C035SA001S	3C	35	44.0	49.0	53.0	4920
MVIS11CXSWY2003C050SA001S	3C	50	47.5	52.5	56.9	5761
MVIS11CXSWY2003C070SA001S	3C	70	50.9	55.9	60.7	6729
MVIS11CXSWY2003C095SA001S	3C	95	54.8	59.8	64.5	7808
MVIS11CXSWY2003C120SA001S	3C	120	58.4	64.7	69.7	9740
MVIS11CXSWY2003C150SA001S	3C	150	62.1	68.4	73.8	11082
MVIS11CXSWY2003C185SA001S	3C	185	65.7	72.0	77.7	12545
MVIS11CXSWY2003C240SA001S	3C	240	71.0	79.0	85.0	15997
MVIS11CXSWY2003C300SA001S	3C	300	76.4	84.4	90.4	18627
MVIS11CXSWY2003C400SA001S	3C	400	83.3	91.3	97.3	22181
MVIS11CXSWY2003C500SA001S	3C	500	90.5	98.5	104.5	26290
MVIS11CXSWY2003C630SA001S	3C	630	97.7	105.7	111.7	30757
2XFY						
MVIS11CXSFY2003C025SA001S	3C	25	41.5	43.1	46.8	2957
MVIS11CXSFY2003C035SA001S	3C	35	44.0	45.6	49.6	3438
MVIS11CXSFY2003C050SA001S	3C	50	47.5	49.1	53.2	4139
MVIS11CXSFY2003C070SA001S	3C	70	50.9	52.5	56.9	4965
MVIS11CXSFY2003C095SA001S	3C	95	54.8	56.4	61.1	5993
MVIS11CXSFY2003C120SA001S	3C	120	58.4	60.0	64.7	6956
MVIS11CXSFY2003C150SA001S	3C	150	62.1	63.7	68.7	8164
MVIS11CXSFY2003C185SA001S	3C	185	65.7	67.3	72.7	9433
MVIS11CXSFY2003C240SA001S	3C	240	71.0	72.6	78.3	11463
MVIS11CXASFY2003C300SA001S	3C	300	76.4	78.0	84.0	13755
MVIS11CXSFY2003C400SA001S	3C	400	83.3	84.9	90.9	16909
MVIS11CXSFY2003C500SA001S	3C	500	90.5	92.1	98.1	20538
MVIS11CXSFY2003C630SA001S	3C	630	97.7	99.3	105.3	24605

The above data is approximate & subject to manufacturing tolerance.

POLYCAB MV MC Cu IS 7098-2, 11/11 KV(UE)

Medium Voltage Multi Core Copper Armoured Cable, 11/11 KV (UE) AC

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	
No.	mm²	Ω/km	Ω/km	µF/km	mH/km		Ω/km	
					2XFY	2XWY	2XFY	2XWY
3	25	0.727	0.932	0.14	0.42	0.42	0.131	0.131
3	35	0.524	0.672	0.15	0.40	0.40	0.124	0.124
3	50	0.387	0.496	0.17	0.36	0.36	0.114	0.114
3	70	0.268	0.344	0.19	0.35	0.35	0.109	0.109
3	95	0.193	0.248	0.21	0.33	0.33	0.104	0.104
3	120	0.153	0.197	0.23	0.32	0.32	0.100	0.100
3	150	0.124	0.159	0.25	0.31	0.31	0.096	0.096
3	185	0.0991	0.128	0.27	0.30	0.30	0.094	0.094
3	240	0.0754	0.098	0.30	0.29	0.29	0.090	0.090
3	300	0.0601	0.078	0.33	0.28	0.28	0.087	0.087
3	400	0.047	0.062	0.37	0.27	0.27	0.084	0.084
3	500	0.0366	0.049	0.41	0.26	0.26	0.082	0.082
3	630	0.0283	0.038	0.45	0.25	0.25	0.080	0.080

CURRENT CARRYING CAPACITY:

Nominal area of conductor	Buried direct in ground	In a buried duct	In air
Sqmm	A	A	A
25	121	105	133
35	144	125	160
50	169	146	191
70	207	179	237
95	245	213	286
120	278	241	329
150	311	269	371
185	349	308	422
240	401	354	493
300	449	396	560
400	506	446	643
500	565	497	731

Air Ambient temperature: 40˚C
Ground ambient temperature: 30˚C
Conductor operating temperature: 90˚C
The above table is in accordance with IS 3961(part 7):2016

POLYCAB MV MC Cu IS 7098-2, 11/11 KV(UE)

Medium Voltage Multi Core Copper Armoured Cable, 11/11 KV (UE) AC

De-Rating Factor

Rating factor for variation in ambient air temperature for cable in free air

Ambient air Temperature	25˚C	30˚C	35˚C	40˚C	45˚C	50˚C	55˚C	60˚C
De-Rating Factor	1.14	1.10	1.05	1.00	0.95	0.89	0.84	0.77

Maximum conductor temperature 90˚C

Rating factor for variation in ground temperature for direct buried cables.

Ground Temperature	15˚C	20˚C	25˚C	30˚C	35˚C	40˚C	45˚C	50˚C
De-Rating Factor	1.12	1.08	1.04	1.00	0.96	0.91	0.87	0.82

Maximum conductor temperature 90˚C

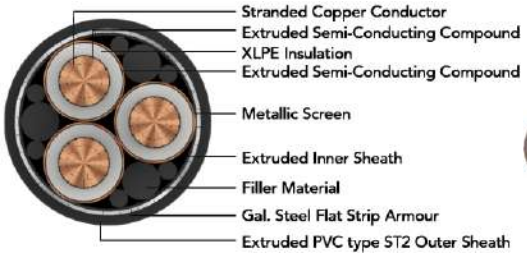
Rating factor for variation in ground temperature for cable in duct.

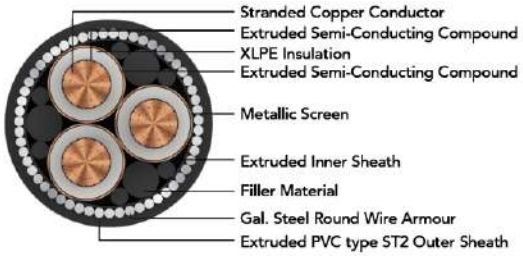
Ground Temperature	15˚C	20˚C	25˚C	30˚C	35˚C	40˚C	45˚C	50˚C
De-Rating Factor	1.12	1.08	1.04	1.00	0.96	0.91	0.87	0.82

Maximum conductor temperature 90˚C

POLYCAB MV MC Cu IS 7098-2, 12.7/22 KV(E)

Medium Voltage Multi Core Copper Armoured Cable,12.7/22 KV (E) AC





Outstanding Features

- Flame retardant
- High life
- UV resistant

Application

POLYCAB MV 12.7/22 KV(E) XLPE insulated with copper conductor multi core cable is suitable to use for power distribution for external and direct burial applications in power network system.

Voltage Rating

Nominal Voltage: 12.7/22 KV (E)

Operation Temperature

Max. operating temperature: 90°C
Max. Short Circuit Temperature: 250°C

Construction

- Conductor: Circular Compacted Copper conductor as per IS 8130, class 2
- Conductor Screen: Extruded Semi-conductive compound
- Insulation: XLPE
- Non-Metallic Insulation Screen: Extruded Semi-conductive compound
- Metallic Insulation Screen: Copper tape screen
- Inner Sheath: Extruded Polyvinyl Chloride
- Armour: Galvanised steel Round/Flat Wire Armoured
- Outer Sheath: Extruded Polyvinyl Chloride

Colour: Black

Note:

- Inner sheath available with FR/ FRLS
- Outer/ Inner available with FR/FRLS

Standard and References:

IS 8130:2013
IS 5831:1984
IS 3975:1979
IS 7098-2:2011

Test Voltage

42kV AC 50 Hz

Impulse test Voltage

125 KV

Compliance

• Conductor resistance	IS 8130
• Insulation resistance	IS 7098-2
• Flammability test	IEC 60332-1-2
• Partial Discharge test	IS 7098-2

Bending Radius:

Fixed Installation: 15D
D is overall diameter of cable

POLYCAB MV MC Cu IS 7098-2, 12.7/22 KV(E)

Medium Voltage Multi Core Copper Armoured Cable,12.7/22 KV (E) AC

DIMENSIONS AND WEIGHTS:

Product Code	No. of Cores	Core Cross sectional Area	Nominal Diameter			Weight (Approx.)
			Under armour	Over armour	Overall	
2XWY	No.	mm²	mm	mm	mm	Kg/Km
MVIS12CXSWY2003C035SA001S	3C	35	46.3	51.3	55.7	5267
MVIS12CXSWY2003C050SA001S	3C	50	49.7	54.7	59.1	6053
MVIS12CXSWY2003C070SA001S	3C	70	53.1	58.1	62.8	6993
MVIS12CXSWY2003C095SA001S	3C	95	57.2	63.5	68.5	8983
MVIS12CXSWY2003C120SA001S	3C	120	60.5	66.8	72.2	10131
MVIS12CXSWY2003C150SA001S	3C	150	64.3	70.6	76.2	11550
MVIS12CXSWY2003C185SA001S	3C	185	67.9	74.2	79.8	12904
MVIS12CXSWY2003C240SA001S	3C	240	73.2	81.2	87.2	16451
MVIS12CXSWY2003C300SA001S	3C	300	78.6	86.6	92.6	18996
MVIS12CXSWY2003C400SA001S	3C	400	85.5	93.5	99.5	22671
MVIS12CXSWY2003C500SA001S	3C	500	92.6	100.6	106.6	26701
MVIS12CXSWY2003C630SA001S	3C	630	99.9	107.9	113.9	31290
2XFY						
MVIS12CXSFY2003C035SA001S	3C	35	46.3	47.9	52.0	3664
MVIS12CXSFY2003C050SA001S	3C	50	49.7	51.3	55.7	4375
MVIS12CXSFY2003C070SA001S	3C	70	53.1	54.7	59.1	5170
MVIS12CXSFY2003C095SA001S	3C	95	57.2	58.8	63.5	6241
MVIS12CXSFY2003C120SA001S	3C	120	60.5	62.1	67.2	7257
MVIS12CXSFY2003C150SA001S	3C	150	64.3	65.9	71.2	8481
MVIS12CXSFY2003C185SA001S	3C	185	67.9	69.5	74.8	9706
MVIS12CXSFY2003C240SA001S	3C	240	73.2	74.8	80.5	11755
MVIS12CXSFY2003C300SA001S	3C	300	78.6	80.2	86.2	14044
MVIS12CXSFY2003C400SA001S	3C	400	85.5	87.1	93.1	17238
MVIS12CXSFY2003C500SA001S	3C	500	92.6	94.2	100.2	20869
MVIS12CXSFY2003C630SA001S	3C	630	99.9	101.5	107.5	24978

The above data is approximate & subject to manufacturing tolerance.

POLYCAB MV MC Cu IS 7098-2, 12.7/22 KV(E)

Medium Voltage Multi Core Copper Armoured Cable,12.7/22 KV (E) AC

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	
No.	mm²	Ω/km	Ω/km	µF/km	mH/km		Ω/km	
					2XFY	2XWY	2XFY	2XWY
3	35	0.524	0.672	0.14	0.41	0.41	0.127	0.127
3	50	0.387	0.496	0.16	0.37	0.37	0.117	0.117
3	70	0.268	0.344	0.18	0.36	0.36	0.112	0.112
3	95	0.193	0.248	0.20	0.34	0.34	0.106	0.106
3	120	0.153	0.197	0.22	0.32	0.32	0.102	0.102
3	150	0.124	0.159	0.24	0.31	0.31	0.098	0.098
3	185	0.0991	0.128	0.26	0.30	0.30	0.096	0.096
3	240	0.0754	0.098	0.28	0.29	0.29	0.092	0.092
3	300	0.0601	0.078	0.31	0.28	0.28	0.089	0.089
3	400	0.047	0.062	0.35	0.27	0.27	0.086	0.086
3	500	0.0366	0.049	0.38	0.27	0.27	0.083	0.083
3	630	0.0283	0.038	0.42	0.26	0.26	0.081	0.081

CURRENT CARRYING CAPACITY:

Nominal area of conductor	Buried direct in ground	In a buried duct	In air
Sqmm	A	A	A
35	143	125	164
50	167	150	196
70	204	183	243
95	243	217	293
120	276	246	336
150	307	275	378
185	346	313	431
240	398	360	503
300	446	403	571
400	503	453	655
500	563	507	745

Air Ambient temperature: 40˚C
Ground ambient temperature: 30˚C
Conductor operating temperature: 90˚C
The above table is in accordance with IS 3961(part 7):2016

POLYCAB MV MC Cu IS 7098-2, 12.7/22 KV(E)

Medium Voltage Multi Core Copper Armoured Cable,12.7/22 KV (E) AC

De-Rating Factor

Rating factor for variation in ambient air temperature for cable in free air

Ambient air Temperature	25˚C	30˚C	35˚C	40˚C	45˚C	50˚C	55˚C	60˚C
De-Rating Factor	1.14	1.10	1.05	1.00	0.95	0.89	0.84	0.77

Maximum conductor temperature 90˚C

Rating factor for variation in ground temperature for direct buried cables.

Ground Temperature	15˚C	20˚C	25˚C	30˚C	35˚C	40˚C	45˚C	50˚C
De-Rating Factor	1.12	1.08	1.04	1.00	0.96	0.91	0.87	0.82

Maximum conductor temperature 90˚C

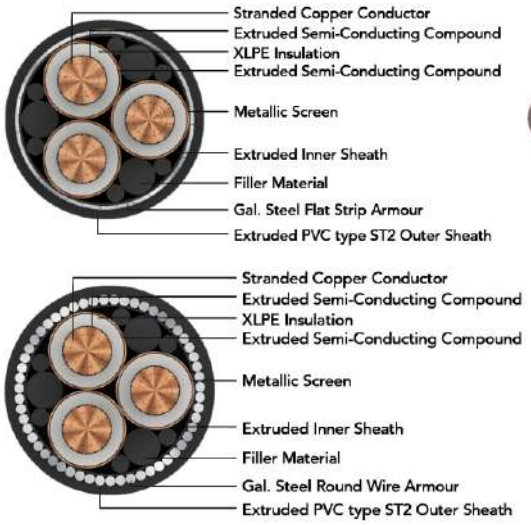
Rating factor for variation in ground temperature for cable in duct.

Ground Temperature	15˚C	20˚C	25˚C	30˚C	35˚C	40˚C	45˚C	50˚C
De-Rating Factor	1.12	1.08	1.04	1.00	0.96	0.91	0.87	0.82

Maximum conductor temperature 90˚C

POLYCAB MV MC Cu IS 7098-2, 19/33 KV(E)

Medium Voltage Multi Core Copper Armoured Cable,19/33 KV (E) AC



Outstanding Features

- Flame retardant
- High life
- UV resistant

Application

POLYCAB MV 19/33 KV(E) XLPE insulated with copper conductor single core cable is suitable to use for power distribution for external and direct burial applications in power network system.

Voltage Rating

Nominal Voltage: 19/33 KV (E)

Operation Temperature

Max. operating temperature: 90°C
Max. Short Circuit Temperature: 250°C

Construction

- Conductor: Circular Compacted Copper conductor as per IS 8130, class 2
- Conductor Screen: Extruded Semi-conductive compound
- Insulation: XLPE
- Non-Metallic Insulation Screen: Extruded Semi-conductive compound
- Metallic Insulation Screen: Copper tape screen
- Inner Sheath: Extruded Polyvinyl Chloride
- Armour: Galvanised steel Round/Flat Wire Armoured
- Outer Sheath: Extruded Polyvinyl Chloride

Colour: Black

Note:

- Inner sheath available with FR/ FRLS
- Outer/ Inner available with FR/FRLS

Bending Radius:

Fixed Installation: 15D
D is overall diameter of cable

Standard and References:

IS 8130:2013
IS 5831:1984
IS 3975:1979
IS 7098-2:2011

Test Voltage

63kV AC 50 Hz

Impulse test Voltage

170 KV

Compliance

• Conductor resistance	IS 8130
• Insulation resistance	IS 7098-2
• Flammability test	IEC 60332-1-2
• Partial Discharge test	IS 7098-2

POLYCAB MV MC Cu IS 7098-2, 19/33 KV(E)

Medium Voltage Multi Core Copper Armoured Cable,19/33 KV (E) AC

DIMENSIONS AND WEIGHTS:

Product Code	No. of Cores	Core Cross sectional Area	Nominal Diameter			Weight (Approx.)
			Under armour	Over armour	Overall	
2XWY	No.	mm²	mm	mm	mm	Kg/Km
MVIS13CXSWY2003C035SA001S	3C	35	58.6	64.9	70.0	7790
MVIS13CXSWY2003C050SA001S	3C	50	62.0	68.3	73.6	8725
MVIS13CXSWY2003C070SA001S	3C	70	65.4	71.7	77.4	9836
MVIS13CXSWY2003C095SA001S	3C	95	69.3	75.6	81.6	11157
MVIS13CXSWY2003C120SA001S	3C	120	72.6	80.6	86.6	13573
MVIS13CXSWY2003C150SA001S	3C	150	76.4	84.4	90.4	14953
MVIS13CXSWY2003C185SA001S	3C	185	79.9	87.9	93.9	16484
MVIS13CXSWY2003C240SA001S	3C	240	85.3	93.3	99.3	18887
MVIS13CXSWY2003C300SA001S	3C	300	90.7	98.7	104.7	21622
MVIS13CXSWY2003C400SA001S	3C	400	97.6	105.6	111.6	25313
MVIS13CXSWY2003C500SA001S	3C	500	104.7	112.7	118.7	29561
MVIS13CXSWY2003C630SA001S	3C	630	112.0	120.0	126.0	34171
2XFY						
MVIS13CXSFY2003C035SA001S	3C	35	58.6	60.2	65.3	5076
MVIS13CXSFY2003C050SA001S	3C	50	62.0	63.6	68.6	5808
MVIS13CXSFY2003C070SA001S	3C	70	65.4	67.0	72.3	6724
MVIS13CXSFY2003C095SA001S	3C	95	69.3	70.9	76.5	7850
MVIS13CXSFY2003C120SA001S	3C	120	72.6	74.2	79.9	8878
MVIS13CXSFY2003C150SA001S	3C	150	76.4	78.0	84.0	10160
MVIS13CXSFY2003C185SA001S	3C	185	79.9	81.5	87.5	11451
MVIS13CXSFY2003C240SA001S	3C	240	85.3	86.9	92.9	13534
MVIS13CXSFY2003C300SA001S	3C	300	90.7	92.3	98.3	15870
MVIS13CXSFY2003C400SA001S	3C	400	97.6	99.2	105.2	19160
MVIS13CXSFY2003C500SA001S	3C	500	104.7	106.3	112.3	22929
MVIS13CXSFY2003C630SA001S	3C	630	112.0	113.6	119.6	27139

The above data is approximate & subject to manufacturing tolerance.

POLYCAB MV MC Cu IS 7098-2, 19/33 KV(E)

Medium Voltage Multi Core Copper Armoured Cable,19/33 KV (E) AC

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	
No.	mm²	Ω/km	Ω/km	µF/km	mH/km		Ω/km	
					2XFY	2XWY	2XFY	2XWY
3	35	0.524	0.672	0.11	0.45	0.45	0.142	0.142
3	50	0.387	0.496	0.13	0.42	0.42	0.131	0.131
3	70	0.268	0.344	0.14	0.40	0.40	0.125	0.125
3	95	0.193	0.248	0.15	0.38	0.38	0.119	0.119
3	120	0.153	0.197	0.17	0.36	0.36	0.114	0.114
3	150	0.124	0.159	0.18	0.35	0.35	0.110	0.110
3	185	0.0991	0.128	0.19	0.34	0.34	0.106	0.106
3	240	0.0754	0.098	0.21	0.32	0.32	0.102	0.102
3	300	0.0601	0.078	0.23	0.31	0.31	0.098	0.098
3	400	0.047	0.062	0.26	0.30	0.30	0.094	0.094
3	500	0.0366	0.049	0.28	0.29	0.29	0.091	0.091
3	630	0.0283	0.038	0.31	0.28	0.28	0.089	0.089

CURRENT CARRYING CAPACITY:

Nominal area of conductor	Buried direct in ground	In a buried duct	In air
Sqmm	A	A	A
35	143	125	164
50	167	150	196
70	204	183	243
95	243	217	293
120	276	246	336
150	307	275	378
185	346	313	431
240	398	360	503
300	446	403	571
400	503	453	655
500	563	507	745

Air Ambient temperature: 40˚C
Ground ambient temperature: 30˚C
Conductor operating temperature: 90˚C
The above table is in accordance with IS 3961(part 7):2016

POLYCAB MV MC Cu IS 7098-2, 19/33 KV(E)

Medium Voltage Multi Core Copper Armoured Cable,19/33 KV (E) AC

De-Rating Factor

Rating factor for variation in ambient air temperature for cable in free air

Ambient air Temperature	25˚C	30˚C	35˚C	40˚C	45˚C	50˚C	55˚C	60˚C
De-Rating Factor	1.14	1.10	1.05	1.00	0.95	0.89	0.84	0.77

Maximum conductor temperature 90˚C

Rating factor for variation in ground temperature for direct buried cables.

Ground Temperature	15˚C	20˚C	25˚C	30˚C	35˚C	40˚C	45˚C	50˚C
De-Rating Factor	1.12	1.08	1.04	1.00	0.96	0.91	0.87	0.82

Maximum conductor temperature 90˚C

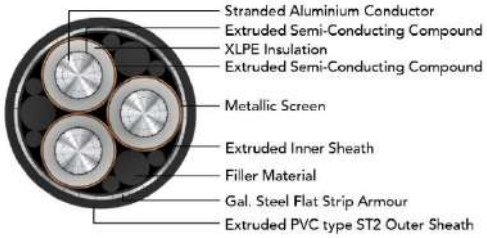
Rating factor for variation in ground temperature for cable in duct.

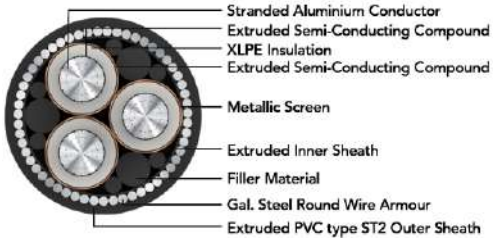
Ground Temperature	15˚C	20˚C	25˚C	30˚C	35˚C	40˚C	45˚C	50˚C
De-Rating Factor	1.12	1.08	1.04	1.00	0.96	0.91	0.87	0.82

Maximum conductor temperature 90˚C

POLYCAB MV MC Al IS 7098-2, 1.9/3.3 KV(E)

Medium Voltage Multi Core Aluminium Armoured Cable, 1.9/3.3 KV (E) AC





Outstanding Features

- Flame retardant
- High life
- UV resistant

Application

POLYCAB MV 1.9/3.3 KV(E) XLPE insulated with aluminium conductor single core cable is suitable to use for power distribution for external and direct burial applications in power network system.

Voltage Rating

Nominal Voltage: 1.9/3.3 KV (E)

Operation Temperature

Max. operating temperature: 90°C
Max. Short Circuit Temperature: 250°C

Construction

- Conductor: Circular Compacted Aluminium conductor as per IS 8130, class 2
- Conductor Screen: Extruded Semi-conductive compound
- Insulation: XLPE
- Non-Metallic Insulation Screen: Extruded Semi-conductive compound
- Metallic Insulation Screen: Copper tape screen
- Inner Sheath: Extruded Polyvinyl Chloride
- Armour: Galvanised steel Round/Flat Wire Armoured
- Outer Sheath: Extruded Polyvinyl Chloride

Colour: Black

Note:

- Inner sheath available with FR/ FRLS
- Outer/ Inner available with FR/FRLS

Bending Radius:

Fixed Installation: 15D
D is overall diameter of cable

Standard and References:

IS 8130:2013
IS 5831:1984
IS 3975:1979
IS 7098-2:2011

Test Voltage

10kV AC 50 Hz

Compliance

- Conductor resistance IS 8130
- Insulation resistance IS 7098-2
- Flammability test IEC 60332-1-2
- Partial Discharge test IS 7098-2

POLYCAB MV MC Al IS 7098-2, 1.9/3.3 KV(E)

Medium Voltage Multi Core Aluminium Armoured Cable, 1.9/3.3 KV (E) AC

DIMENSIONS AND WEIGHTS:

Product Code	No. of Cores	Core Cross sectional Area	Nominal Diameter			Weight (Approx.)
			Under armour	Over armour	Overall	
A2XWY	No.	mm²	mm	mm	mm	Kg/Km
MVIS10AXSWY2003C025SA001S	3C	25	27.0	31.0	34.2	1979
MVIS10AXSWY2003C035SA001S	3C	35	29.5	33.5	36.6	2243
MVIS10AXSWY2003C050SA001S	3C	50	32.8	36.8	40.3	2644
MVIS10AXSWY2003C070SA001S	3C	70	36.5	40.5	44.2	3132
MVIS10AXSWY2003C095SA001S	3C	95	40.3	45.3	49.4	4068
MVIS10AXSWY2003C120SA001S	3C	120	43.7	48.7	52.8	4570
MVIS10AXSWY2003C150SA001S	3C	150	47.6	52.6	57.0	5254
MVIS10AXSWY2003C185SA001S	3C	185	51.2	56.2	61.0	5937
MVIS10AXSWY2003C240SA001S	3C	240	56.8	63.1	68.1	7725
MVIS10AXSWY2003C300SA001S	3C	300	62.2	68.5	73.8	8895
MVIS10AXSWY2003C400SA001S	3C	400	69.1	75.4	81.4	10599
MVIS10AXSWY2003C500SA001S	3C	500	77.1	85.1	91.1	13825
MVIS10AXSWY2003C630SA001S	3C	630	85.2	93.2	99.2	16020
A2XFY						
MVIS10AXSFY2003C025SA001S	3C	25	27.0	28.6	31.8	1351
MVIS10AXSFY2003C035SA001S	3C	35	29.5	31.1	34.2	1555
MVIS10AXSFY2003C050SA001S	3C	50	32.8	34.4	37.6	1840
MVIS10AXSFY2003C070SA001S	3C	70	36.5	38.1	41.5	2233
MVIS10AXSFY2003C095SA001S	3C	95	40.3	41.9	45.7	2686
MVIS10AXSFY2003C120SA001S	3C	120	43.7	45.3	49.4	3127
MVIS10AXSFY2003C150SA001S	3C	150	47.6	49.2	53.3	3632
MVIS10AXSFY2003C185SA001S	3C	185	51.2	52.8	57.2	4174
MVIS10AXSFY2003C240SA001S	3C	240	56.8	58.4	63.1	5045
MVIS10AXSFY2003C300SA001S	3C	300	62.2	63.8	68.8	5977
MVIS10AXSFY2003C400SA001S	3C	400	69.1	70.7	76.4	7354
MVIS10AXSFY2003C500SA001S	3C	500	77.1	78.7	84.7	8953
MVIS10AXSFY2003C630SA001S	3C	630	85.2	86.8	92.8	10667

The above data is approximate & subject to manufacturing tolerance.

POLYCAB MV MC Al IS 7098-2, 1.9/3.3 KV(E)

Medium Voltage Multi Core Aluminium Armoured Cable, 1.9/3.3 KV (E) AC

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	
No.	mm²	Ω/km	Ω/km	µF/km	mH/km		Ω/km	
					A2XFY	A2XWY	A2XFY	A2XWY
3	25	1.2	1.539	0.24	0.32	0.33	0.101	0.103
3	35	0.868	1.113	0.27	0.31	0.31	0.099	0.099
3	50	0.641	0.822	0.32	0.29	0.29	0.091	0.091
3	70	0.443	0.568	0.36	0.28	0.28	0.088	0.088
3	95	0.32	0.410	0.41	0.27	0.27	0.084	0.084
3	120	0.253	0.325	0.46	0.26	0.26	0.081	0.081
3	150	0.206	0.264	0.51	0.25	0.25	0.079	0.079
3	185	0.164	0.211	0.55	0.25	0.25	0.078	0.078
3	240	0.125	0.161	0.62	0.24	0.24	0.075	0.075
3	300	0.1	0.129	0.69	0.24	0.24	0.074	0.074
3	400	0.0778	0.101	0.78	0.23	0.23	0.072	0.072
3	500	0.0605	0.079	0.81	0.23	0.23	0.072	0.072
3	630	0.0469	0.061	0.84	0.23	0.23	0.071	0.071

CURRENT CARRYING CAPACITY:

Nominal area of conductor	Buried direct in ground	In a buried duct	In air
Sqmm	A	A	A
25	94	81	102
35	112	96	123
50	131	113	146
70	160	138	182
95	191	165	221
120	216	187	254
150	241	208	286
185	273	236	330
240	315	277	385
300	354	312	440
400	403	355	512
500	457	403	590

Air Ambient temperature: 40˚C
Ground ambient temperature: 30˚C
Conductor operating temperature: 90˚C
The above table is in accordance with IS 3961(part 7):2016

POLYCAB MV MC Al IS 7098-2, 1.9/3.3 KV(E)

Medium Voltage Multi Core Aluminium Armoured Cable, 1.9/3.3 KV (E) AC

De-Rating Factor

Rating factor for variation in ambient air temperature for cable in free air

Ambient air Temperature	25˚C	30˚C	35˚C	40˚C	45˚C	50˚C	55˚C	60˚C
De-Rating Factor	1.14	1.10	1.05	1.00	0.95	0.89	0.84	0.77

Maximum conductor temperature 90˚C

Rating factor for variation in ground temperature for direct buried cables.

Ground Temperature	15˚C	20˚C	25˚C	30˚C	35˚C	40˚C	45˚C	50˚C
De-Rating Factor	1.12	1.08	1.04	1.00	0.96	0.91	0.87	0.82

Maximum conductor temperature 90˚C

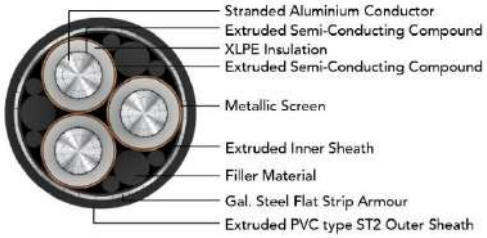
Rating factor for variation in ground temperature for cable in duct.

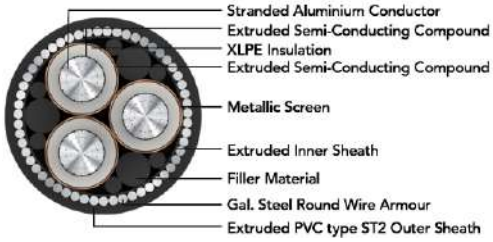
Ground Temperature	15˚C	20˚C	25˚C	30˚C	35˚C	40˚C	45˚C	50˚C
De-Rating Factor	1.12	1.08	1.04	1.00	0.96	0.91	0.87	0.82

Maximum conductor temperature 90˚C

POLYCAB MV MC Al IS 7098-2, 3.3/3.3 KV(UE)

Medium Voltage Multi Core Aluminium Armoured Cable, 3.3/3.3 KV (UE)





Outstanding Features

- Flame retardant
- High life
- UV resistant

Application

POLYCAB MV 3.3/3.3 KV(UE) XLPE insulated with aluminium conductor single core cable is suitable to use for power distribution for external and direct burial applications in power network system.

Voltage Rating

Nominal Voltage: 3.3/3.3 KV (UE)

Operation Temperature

Max. operating temperature: 90°C
Max. Short Circuit Temperature: 250°C

Construction

- Conductor: Circular Compacted Aluminium conductor as per IS 8130, class 2
- Conductor Screen: Extruded Semi-conductive compound
- Insulation: XLPE
- Non-Metallic Insulation Screen: Extruded Semi-conductive compound
- Metallic Insulation Screen: Copper tape screen
- Inner Sheath: Extruded Polyvinyl Chloride
- Armour: Galvanised steel Round/Flat Wire Armoured
- Outer Sheath: Extruded Polyvinyl Chloride

Colour: Black

Note:

- Inner sheath available with FR/ FRLS
- Outer/ Inner available with FR/FRLS

Standard and References:

IS 8130:2013
IS 5831:1984
IS 3975:1979
IS 7098-2:2011

Test Voltage

10kV AC 50 Hz

Compliance

• Conductor resistance	IS 8130
• Insulation resistance	IS 7098-2
• Flammability test	IEC 60332-1-2
• Partial Discharge test	IS 7098-2

Bending Radius:

Fixed Installation: 15D
D is overall diameter of cable

POLYCAB MV MC Al IS 7098-2, 3.3/3.3 KV(UE)

Medium Voltage Multi Core Aluminium Armoured Cable, 3.3/3.3 KV (UE)

DIMENSIONS AND WEIGHTS:

Product Code	No. of Cores	Core Cross sectional Area	Nominal Diameter			Weight (Approx.)
			Under armour	Over armour	Overall	
A2XWY	No.	mm²	mm	mm	mm	Kg/Km
MVIS14AXSWY2003C025SA001S	3C	25	27.0	31.0	34.2	1979
MVIS14AXSWY2003C035SA001S	3C	35	29.5	33.5	36.6	2243
MVIS14AXSWY2003C050SA001S	3C	50	32.8	36.8	40.3	2644
MVIS14AXSWY2003C070SA001S	3C	70	36.5	40.5	44.2	3132
MVIS14AXSWY2003C095SA001S	3C	95	40.3	45.3	49.4	4068
MVIS14AXSWY2003C120SA001S	3C	120	43.7	48.7	52.8	4570
MVIS14AXSWY2003C150SA001S	3C	150	47.6	52.6	57.0	5254
MVIS14AXSWY2003C185SA001S	3C	185	51.2	56.2	61.0	5937
MVIS14AXSWY2003C240SA001S	3C	240	56.8	63.1	68.1	7725
MVIS14AXSWY2003C300SA001S	3C	300	62.2	68.5	73.8	8895
MVIS14AXSWY2003C400SA001S	3C	400	69.1	75.4	81.4	10599
MVIS14AXSWY2003C500SA001S	3C	500	77.1	85.1	91.1	13825
MVIS14AXSWY2003C630SA001S	3C	630	85.2	93.2	99.2	16020
A2XFY						
MVIS14AXSFY2003C025SA001S	3C	25	27.0	28.6	31.8	1351
MVIS14AXSFY2003C035SA001S	3C	35	29.5	31.1	34.2	1555
MVIS14AXSFY2003C050SA001S	3C	50	32.8	34.4	37.6	1840
MVIS14AXSFY2003C070SA001S	3C	70	36.5	38.1	41.5	2233
MVIS14AXSFY2003C095SA001S	3C	95	40.3	41.9	45.7	2686
MVIS14AXSFY2003C120SA001S	3C	120	43.7	45.3	49.4	3127
MVIS14AXSFY2003C150SA001S	3C	150	47.6	49.2	53.3	3632
MVIS14AXSFY2003C185SA001S	3C	185	51.2	52.8	57.2	4174
MVIS14AXSFY2003C240SA001S	3C	240	56.8	58.4	63.1	5045
MVIS14AXSFY2003C300SA001S	3C	300	62.2	63.8	68.8	5977
MVIS14AXSFY2003C400SA001S	3C	400	69.1	70.7	76.4	7354
MVIS14AXSFY2003C500SA001S	3C	500	77.1	78.7	84.7	8953
MVIS14AXSFY2003C630SA001S	3C	630	85.2	86.8	92.8	10667

The above data is approximate & subject to manufacturing tolerance.

POLYCAB MV MC Al IS 7098-2, 3.3/3.3 KV(UE)

Medium Voltage Multi Core Aluminium Armoured Cable, 3.3/3.3 KV (UE)

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	
No.	mm²	Ω/km	Ω/km	µF/km	mH/km		Ω/km	
					A2XFY	A2XWY	A2XFY	A2XWY
3	25	1.2	1.539	0.24	0.32	0.33	0.101	0.103
3	35	0.868	1.113	0.27	0.31	0.31	0.099	0.099
3	50	0.641	0.822	0.32	0.29	0.29	0.091	0.091
3	70	0.443	0.568	0.36	0.28	0.28	0.088	0.088
3	95	0.32	0.410	0.41	0.27	0.27	0.084	0.084
3	120	0.253	0.325	0.46	0.26	0.26	0.081	0.081
3	150	0.206	0.264	0.51	0.25	0.25	0.079	0.079
3	185	0.164	0.211	0.55	0.25	0.25	0.078	0.078
3	240	0.125	0.161	0.62	0.24	0.24	0.075	0.075
3	300	0.1	0.129	0.69	0.24	0.24	0.074	0.074
3	400	0.0778	0.101	0.78	0.23	0.23	0.072	0.072
3	500	0.0605	0.079	0.81	0.23	0.23	0.072	0.072
3	630	0.0469	0.061	0.84	0.23	0.23	0.071	0.071

CURRENT CARRYING CAPACITY:

Nominal area of conductor	Buried direct in ground	In a buried duct	In air
Sqmm	A	A	A
25	94	81	102
35	112	96	123
50	131	113	146
70	160	138	182
95	191	165	221
120	216	187	254
150	241	208	286
185	273	236	330
240	315	277	385
300	354	312	440
400	403	355	512
500	457	403	590

Air Ambient temperature: 40˚C
Ground ambient temperature: 30˚C
Conductor operating temperature: 90˚C
The above table is in accordance with IS 3961(part 7):2016

Medium Voltage Multi Core Aluminium Armoured Cable, 3.3/3.3 KV (UE)

De-Rating Factor

Rating factor for variation in ambient air temperature for cable in free air

Ambient air Temperature	25˚C	30˚C	35˚C	40˚C	45˚C	50˚C	55˚C	60˚C
De-Rating Factor	1.14	1.10	1.05	1.00	0.95	0.89	0.84	0.77

Maximum conductor temperature 90˚C

Rating factor for variation in ground temperature for direct buried cables.

Ground Temperature	15˚C	20˚C	25˚C	30˚C	35˚C	40˚C	45˚C	50˚C
De-Rating Factor	1.12	1.08	1.04	1.00	0.96	0.91	0.87	0.82

Maximum conductor temperature 90˚C

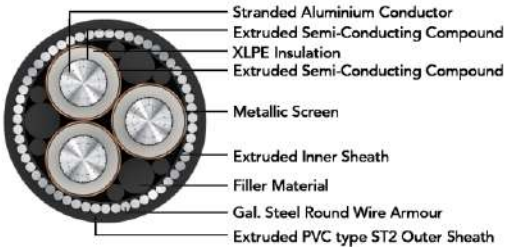
Rating factor for variation in ground temperature for cable in duct.

Ground Temperature	15˚C	20˚C	25˚C	30˚C	35˚C	40˚C	45˚C	50˚C
De-Rating Factor	1.12	1.08	1.04	1.00	0.96	0.91	0.87	0.82

Maximum conductor temperature 90˚C

POLYCAB MV MC Al IS 7098-2, 3.8/6.6 KV(E)

Medium Voltage Multi Core Aluminium Armoured Cable, 3.8/6.6 KV (E) AC



Outstanding Features

- Flame retardant
- High life
- UV resistant

Application

POLYCAB MV 3.8/6.6 KV(E) XLPE insulated with aluminium conductor Multi core cable is suitable to use for power distribution for external and direct burial applications in power network system.

Voltage Rating

Nominal Voltage: 3.8/6.6 KV (E)

Operation Temperature

Max. operating temperature: 90°C
Max. Short Circuit Temperature: 250°C

Construction

- Conductor: Circular Compacted Aluminium conductor as per IS 8130, class 2
- Conductor Screen: Extruded Semi-conductive compound
- Insulation: XLPE
- Non-Metallic Insulation Screen: Extruded Semi-conductive compound
- Metallic Insulation Screen: Copper tape screen
- Inner Sheath: Extruded Polyvinyl Chloride
- Armour: Galvanised steel Round/Flat Wire Armoured
- Outer Sheath: Extruded Polyvinyl Chloride

Colour: Black

Note:

- Inner sheath available with FR/ FRLS
- Outer/ Inner available with FR/FRLS

Standard and References:

IS 8130:2013
IS 5831:1984
IS 3975:1979
IS 7098-2:2011

Test Voltage

13kV AC 50 Hz

Impulse voltage Test

60kV

Compliance

• Conductor resistance	IS 8130
• Insulation resistance	IS 7098-2
• Flammability test	IEC 60332-1-2
• Partial Discharge test	IS 7098-2

Bending Radius:

Fixed Installation: 15D
D is overall diameter of cable

POLYCAB MV MC Al IS 7098-2, 3.8/6.6 KV(E)

Medium Voltage Multi Core Aluminium Armoured Cable, 3.8/6.6 KV (E) AC

DIMENSIONS AND WEIGHTS:

Product Code	No. of Cores	Core Cross sectional Area	Nominal Diameter			Weight (Approx.)
			Under armour	Over armour	Overall	
A2XWY	No.	mm^2	mm	mm	mm	Kg/Km
MVIS15AXSWY2003C025SA001S	3C	25	29.6	33.6	36.7	2206
MVIS15AXSWY2003C035SA001S	3C	35	32.1	36.1	39.5	2510
MVIS15AXSWY2003C050SA001S	3C	50	35.4	39.4	42.9	2894
MVIS15AXSWY2003C070SA001S	3C	70	39.1	43.1	46.8	3398
MVIS15AXSWY2003C095SA001S	3C	95	42.9	47.9	52.0	4367
MVIS15AXSWY2003C120SA001S	3C	120	46.5	51.5	55.9	4988
MVIS15AXSWY2003C150SA001S	3C	150	50.2	55.2	60.0	5668
MVIS15AXSWY2003C185SA001S	3C	185	53.8	58.8	63.5	6279
MVIS15AXSWY2003C240SA001S	3C	240	59.4	65.7	71.0	8213
MVIS15AXSWY2003C300SA001S	3C	300	65.6	71.9	77.6	9564
MVIS15AXSWY2003C400SA001S	3C	400	73.8	81.8	87.8	12660
MVIS15AXSWY2003C500SA001S	3C	500	81.8	89.8	95.8	14830
MVIS15AXSWY2003C630SA001S	3C	630	89.1	97.1	103.1	16856
A2XFY						
MVIS15AXSFY2003C025SA001S	3C	25	29.6	31.2	34.3	1518
MVIS15AXSFY2003C035SA001S	3C	35	32.1	33.7	36.8	1731
MVIS15AXSFY2003C050SA001S	3C	50	35.4	37.0	40.5	2059
MVIS15AXSFY2003C070SA001S	3C	70	39.1	40.7	44.4	2471
MVIS15AXSFY2003C095SA001S	3C	95	42.9	44.5	48.3	2905
MVIS15AXSFY2003C120SA001S	3C	120	46.5	48.1	52.2	3386
MVIS15AXSFY2003C150SA001S	3C	150	50.2	51.8	56.2	3924
MVIS15AXSFY2003C185SA001S	3C	185	53.8	55.4	60.1	4484
MVIS15AXSFY2003C240SA001S	3C	240	59.4	61.0	66.0	5382
MVIS15AXSFY2003C300SA001S	3C	300	65.6	67.2	72.6	6451
MVIS15AXSFY2003C400SA001S	3C	400	73.8	75.4	81.4	8027
MVIS15AXSFY2003C500SA001S	3C	500	81.8	83.4	89.4	9638
MVIS15AXSFY2003C630SA001S	3C	630	89.1	90.7	96.7	11263

The above data is approximate & subject to manufacturing tolerance.

POLYCAB MV MC Al IS 7098-2, 3.8/6.6 KV(E)

Medium Voltage Multi Core Aluminium Armoured Cable, 3.8/6.6 KV (E) AC

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	
No.	mm²	Ω/km	Ω/km	µF/km	mH/km		Ω/km	
					A2XFY	A2XWY	A2XFY	A2XWY
3	25	1.2	1.539	0.21	0.35	0.35	0.109	0.109
3	35	0.868	1.113	0.23	0.33	0.33	0.104	0.104
3	50	0.641	0.822	0.27	0.31	0.31	0.096	0.096
3	70	0.443	0.568	0.30	0.29	0.29	0.092	0.092
3	95	0.32	0.410	0.35	0.28	0.28	0.089	0.089
3	120	0.253	0.325	0.38	0.27	0.27	0.085	0.085
3	150	0.206	0.264	0.42	0.26	0.26	0.083	0.083
3	185	0.164	0.211	0.46	0.26	0.26	0.081	0.081
3	240	0.125	0.161	0.51	0.25	0.25	0.078	0.078
3	300	0.1	0.129	0.54	0.25	0.25	0.077	0.077
3	400	0.0778	0.101	0.56	0.24	0.24	0.077	0.077
3	500	0.0605	0.079	0.60	0.24	0.24	0.076	0.076
3	630	0.0469	0.061	0.66	0.24	0.24	0.074	0.074

CURRENT CARRYING CAPACITY:

Nominal area of conductor	Buried direct in ground	In a buried duct	In air
Sqmm	A	A	A
25	94	81	102
35	112	96	123
50	131	113	146
70	160	138	182
95	191	165	221
120	216	187	254
150	241	208	286
185	273	236	330
240	315	277	385
300	354	312	440
400	403	355	512
500	457	403	590

Air Ambient temperature: 40°C
Ground ambient temperature: 30°C
Conductor operating temperature: 90°C
The above table is in accordance with IS 3961(part 7):2016

POLYCAB MV MC Al IS 7098-2, 3.8/6.6 KV(E)

Medium Voltage Multi Core Aluminium Armoured Cable, 3.8/6.6 KV (E) AC

De-Rating Factor

Rating factor for variation in ambient air temperature for cable in free air

Ambient air Temperature	25˚C	30˚C	35˚C	40˚C	45˚C	50˚C	55˚C	60˚C
De-Rating Factor	1.14	1.10	1.05	1.00	0.95	0.89	0.84	0.77

Maximum conductor temperature 90˚C

Rating factor for variation in ground temperature for direct buried cables.

Ground Temperature	15˚C	20˚C	25˚C	30˚C	35˚C	40˚C	45˚C	50˚C
De-Rating Factor	1.12	1.08	1.04	1.00	0.96	0.91	0.87	0.82

Maximum conductor temperature 90˚C

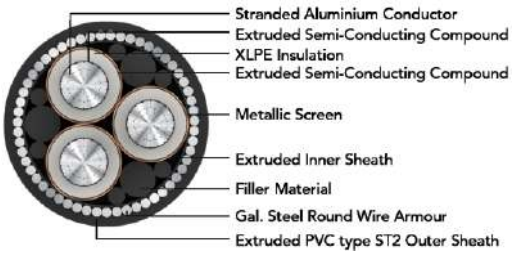
Rating factor for variation in ground temperature for cable in duct.

Ground Temperature	15˚C	20˚C	25˚C	30˚C	35˚C	40˚C	45˚C	50˚C
De-Rating Factor	1.12	1.08	1.04	1.00	0.96	0.91	0.87	0.82

Maximum conductor temperature 90˚C

POLYCAB MV MC Al IS 7098-2, 6.6/6.6 KV(UE)

Medium Voltage Multi Core Aluminium Armoured Cable, 6.6/6.6 KV (UE)



Outstanding Features

- Flame retardant
- High life
- UV resistant

Application

POLYCAB MV 6.6/6.6 KV(UE) XLPE insulated with aluminium conductor Multi core cable is suitable to use for power distribution for external and direct burial applications in power network system.

Voltage Rating

Nominal Voltage: 6.6/6.6 KV (UE)

Operation Temperature

Max. operating temperature: +90°C
Max. Short Circuit Temperature: 250°C

Construction

- Conductor: Circular Compacted Aluminium conductor as per IS 8130, class 2
- Conductor Screen: Extruded Semi-conductive compound
- Insulation: XLPE
- Non-Metallic Insulation Screen: Extruded Semi-conductive compound
- Metallic Insulation Screen: Copper tape screen
- Inner Sheath: Extruded Polyvinyl Chloride
- Armour: Galvanised steel Round/Flat Wire Armoured
- Outer Sheath: Extruded Polyvinyl Chloride

Colour: Black

Note:

- Inner sheath available with FR/ FRLS
- Outer/ Inner available with FR/FRLS

Bending Radius:

Fixed Installation: 15D
D is overall diameter of cable

Standard and References:

IS 8130:2013
IS 5831:1984
IS 3975:1979
IS 7098-2:2011

Test Voltage

21kV AC 50 Hz

Impulse test Voltage

75 KV

Compliance

• Conductor resistance	IS 8130
• Insulation resistance	IS 7098-2
• Flammability test	IEC 60332-1-2
• Partial Discharge test	IS 7098-2

POLYCAB MV MC Al IS 7098-2, 6.6/6.6 KV(UE)

Medium Voltage Multi Core Aluminium Armoured Cable, 6.6/6.6 KV (UE)

DIMENSIONS AND WEIGHTS:

Product Code	No. of Cores	Core Cross sectional Area	Nominal Diameter			Weight (Approx.)
			Under armour	Over armour	Overall	
A2XWY	No.	mm^2	mm	mm	mm	Kg/Km
MVIS18AXSWY2003C025SA001S	3C	25	33.1	37.1	40.5	2547
MVIS18AXSWY2003C035SA001S	3C	35	35.6	39.6	43.0	2834
MVIS18AXSWY2003C050SA001S	3C	50	39.1	43.1	46.8	3316
MVIS18AXSWY2003C070SA001S	3C	70	42.5	47.5	51.6	4228
MVIS18AXSWY2003C095SA001S	3C	95	46.6	51.6	56.0	4887
MVIS18AXSWY2003C120SA001S	3C	120	49.9	54.9	59.3	5422
MVIS18AXSWY2003C150SA001S	3C	150	53.7	58.7	63.4	6121
MVIS18AXSWY2003C185SA001S	3C	185	57.5	63.8	68.8	7611
MVIS18AXSWY2003C240SA001S	3C	240	62.8	69.1	74.5	8747
MVIS18AXSWY2003C300SA001S	3C	300	68.2	74.5	80.2	10033
MVIS18AXSWY2003C400SA001S	3C	400	75.1	83.1	89.1	13016
MVIS18AXSWY2003C500SA001S	3C	500	82.2	90.2	96.2	14887
MVIS18AXSWY2003C630SA001S	3C	630	89.5	97.5	103.5	17017
A2XFY						
MVIS18AXSFY2003C025SA001S	3C	25	33.1	34.7	37.8	1742
MVIS18AXSFY2003C035SA001S	3C	35	35.6	37.2	40.6	1999
MVIS18AXSFY2003C050SA001S	3C	50	39.1	40.7	44.4	2389
MVIS18AXSFY2003C070SA001S	3C	70	42.5	44.1	47.9	2767
MVIS18AXSFY2003C095SA001S	3C	95	46.6	48.2	52.3	3284
MVIS18AXSFY2003C120SA001S	3C	120	49.9	51.5	55.9	3764
MVIS18AXSFY2003C150SA001S	3C	150	53.7	55.3	60.0	4325
MVIS18AXSFY2003C185SA001S	3C	185	57.5	59.1	63.8	4888
MVIS18AXSFY2003C240SA001S	3C	240	62.8	64.4	69.5	5786
MVIS18AXSFY2003C300SA001S	3C	300	68.2	69.8	75.2	6772
MVIS18AXSFY2003C400SA001S	3C	400	75.1	76.7	82.7	8223
MVIS18AXSFY2003C500SA001S	3C	500	82.2	83.8	89.8	9694
MVIS18AXSFY2003C630SA001S	3C	630	89.5	91.1	97.1	11344

The above data is approximate & subject to manufacturing tolerance

POLYCAB MV MC Al IS 7098-2, 6.6/6.6 KV(UE)

Medium Voltage Multi Core Aluminium Armoured Cable, 6.6/6.6 KV (UE)

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	
No.	mm²	Ω/km	Ω/km	µF/km	mH/km		Ω/km	
					A2XFY	A2XWY	A2XFY	A2XWY
3	25	1.2	1.539	0.18	0.37	0.37	0.116	0.116
3	35	0.868	1.113	0.20	0.35	0.35	0.111	0.111
3	50	0.641	0.822	0.23	0.33	0.33	0.102	0.102
3	70	0.443	0.568	0.25	0.31	0.31	0.098	0.098
3	95	0.32	0.410	0.29	0.30	0.30	0.093	0.093
3	120	0.253	0.325	0.32	0.29	0.29	0.090	0.090
3	150	0.206	0.264	0.35	0.28	0.28	0.087	0.087
3	185	0.164	0.211	0.38	0.27	0.27	0.085	0.085
3	240	0.125	0.161	0.42	0.26	0.26	0.082	0.082
3	300	0.1	0.129	0.47	0.25	0.25	0.080	0.080
3	400	0.0778	0.101	0.52	0.25	0.25	0.078	0.078
3	500	0.0605	0.079	0.58	0.24	0.24	0.076	0.076
3	630	0.0469	0.061	0.64	0.24	0.24	0.074	0.074

CURRENT CARRYING CAPACITY:

Nominal area of conductor	Buried direct in ground	In a buried duct	In air
Sqmm	A	A	A
25	94	81	103
35	112	97	124
50	131	114	148
70	161	139	184
95	190	165	222
120	216	188	256
150	242	209	288
185	273	240	330
240	315	278	387
300	354	312	441
400	404	356	512
500	457	403	590

Air Ambient temperature: 40°C
Ground ambient temperature: 30°C
Conductor operating temperature: 90°C
The above table is in accordance with IS 3961(part 7):2016

Medium Voltage Multi Core Aluminium Armoured Cable, 6.6/6.6 KV (UE)

De-Rating Factor

Rating factor for variation in ambient air temperature for cable in free air

Ambient air Temperature	25˚C	30˚C	35˚C	40˚C	45˚C	50˚C	55˚C	60˚C
De-Rating Factor	1.14	1.10	1.05	1.00	0.95	0.89	0.84	0.77

Maximum conductor temperature 90˚C

Rating factor for variation in ground temperature for direct buried cables.

Ground Temperature	15˚C	20˚C	25˚C	30˚C	35˚C	40˚C	45˚C	50˚C
De-Rating Factor	1.12	1.08	1.04	1.00	0.96	0.91	0.87	0.82

Maximum conductor temperature 90˚C

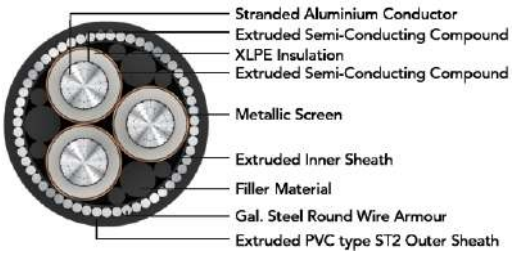
Rating factor for variation in ground temperature for cable in duct.

Ground Temperature	15˚C	20˚C	25˚C	30˚C	35˚C	40˚C	45˚C	50˚C
De-Rating Factor	1.12	1.08	1.04	1.00	0.96	0.91	0.87	0.82

Maximum conductor temperature 90˚C

POLYCAB MV MC Al IS 7098-2, 6.35/11 KV(E)

Medium Voltage Multi Core Aluminium Armoured Cable, 6.35/11 KV (E)



Outstanding Features

- Flame retardant
- High life
- UV resistant

Application

POLYCAB MV 6.35/11 KV(E) XLPE insulated with aluminium conductor Multi core cable is suitable to use for power distribution for external and direct burial applications in power network system.

Voltage Rating

Nominal Voltage: 6.35/11 KV (E)

Operation Temperature

Max. operating temperature: +90°C
Max. Short Circuit Temperature: 250°C

Construction

- Conductor: Circular Compacted Aluminium conductor as per IS 8130, class 2
- Conductor Screen: Extruded Semi-conductive compound
- Insulation: XLPE
- Non-Metallic Insulation Screen: Extruded Semi-conductive compound
- Metallic Insulation Screen: Copper tape screen
- Inner Sheath: Extruded Polyvinyl Chloride
- Armour: Galvanised steel Round/Flat Wire Armoured
- Outer Sheath: Extruded Polyvinyl Chloride

Colour: Black

Note:

- Inner sheath available with FR/ FRLS
- Outer/ Inner available with FR/FRLS

Bending Radius:

Fixed Installation: 15D
D is overall diameter of cable

Standard and References:

IS 8130:2013
IS 5831:1984
IS 3975:1979
IS 7098-2:2011

Test Voltage

21kV AC 50 Hz

Impulse test Voltage

75 KV

Compliance

• Conductor resistance	IS 8130
• Insulation resistance	IS 7098-2
• Flammability test	IEC 60332-1-2
• Partial Discharge test	IS 7098-2

POLYCAB MV MC Al IS 7098-2, 6.35/11 KV(E)

Medium Voltage Multi Core Aluminium Armoured Cable, 6.35/11 KV (E)

DIMENSIONS AND WEIGHTS:

Product Code	No. of Cores	Core Cross sectional Area	Nominal Diameter			Weight (Approx.)
			Under armour	Over armour	Overall	
A2XWY	No.	mm^2	mm	mm	mm	Kg/Km
MVIS17AXSWY2003C025SA001S	3C	25	33.1	37.1	40.5	2547
MVIS17AXSWY2003C035SA001S	3C	35	35.6	39.6	43.0	2834
MVIS17AXSWY2003C050SA001S	3C	50	39.1	43.1	46.8	3316
MVIS17AXSWY2003C070SA001S	3C	70	42.5	47.5	51.6	4228
MVIS17AXSWY2003C095SA001S	3C	95	46.6	51.6	56.0	4887
MVIS17AXSWY2003C120SA001S	3C	120	49.9	54.9	59.3	5422
MVIS17AXSWY2003C150SA001S	3C	150	53.7	58.7	63.4	6121
MVIS17AXSWY2003C185SA001S	3C	185	57.5	63.8	68.8	7611
MVIS17AXSWY2003C240SA001S	3C	240	62.8	69.1	74.5	8747
MVIS17AXSWY2003C300SA001S	3C	300	68.2	74.5	80.2	10033
MVIS17AXSWY2003C400SA001S	3C	400	75.1	83.1	89.1	13016
MVIS17AXSWY2003C500SA001S	3C	500	82.2	90.2	96.2	14887
MVIS17AXSWY2003C630SA001S	3C	630	89.5	97.5	103.5	17017
A2XFY						
MVIS17AXSFY2003C025SA001S	3C	25	33.1	34.7	37.8	1742
MVIS17AXSFY2003C035SA001S	3C	35	35.6	37.2	40.6	1999
MVIS17AXSFY2003C050SA001S	3C	50	39.1	40.7	44.4	2389
MVIS17AXSFY2003C070SA001S	3C	70	42.5	44.1	47.9	2767
MVIS17AXSFY2003C095SA001S	3C	95	46.6	48.2	52.3	3284
MVIS17AXSFY2003C120SA001S	3C	120	49.9	51.5	55.9	3764
MVIS17AXSFY2003C150SA001S	3C	150	53.7	55.3	60.0	4325
MVIS17AXSFY2003C185SA001S	3C	185	57.5	59.1	63.8	4888
MVIS17AXSFY2003C240SA001S	3C	240	62.8	64.4	69.5	5786
MVIS17AXSFY2003C300SA001S	3C	300	68.2	69.8	75.2	6772
MVIS17AXSFY2003C400SA001S	3C	400	75.1	76.7	82.7	8223
MVIS17AXSFY2003C500SA001S	3C	500	82.2	83.8	89.8	9694
MVIS17AXSFY2003C630SA001S	3C	630	89.5	91.1	97.1	11344

The above data is approximate & subject to manufacturing tolerance.

POLYCAB MV MC Al IS 7098-2, 6.35/11 KV(E)

Medium Voltage Multi Core Aluminium Armoured Cable, 6.35/11 KV (E)

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	
No.	mm²	Ω/km	Ω/km	µF/km	mH/km		Ω/km	
					A2XFY	A2XWY	A2XFY	A2XWY
3	25	1.2	1.539	0.18	0.37	0.37	0.116	0.116
3	35	0.868	1.113	0.20	0.35	0.35	0.111	0.111
3	50	0.641	0.822	0.23	0.33	0.33	0.102	0.102
3	70	0.443	0.568	0.25	0.31	0.31	0.098	0.098
3	95	0.32	0.410	0.29	0.30	0.30	0.093	0.093
3	120	0.253	0.325	0.32	0.29	0.29	0.090	0.090
3	150	0.206	0.264	0.35	0.28	0.28	0.087	0.087
3	185	0.164	0.211	0.38	0.27	0.27	0.085	0.085
3	240	0.125	0.161	0.42	0.26	0.26	0.082	0.082
3	300	0.1	0.129	0.47	0.25	0.25	0.080	0.080
3	400	0.0778	0.101	0.52	0.25	0.25	0.078	0.078
3	500	0.0605	0.079	0.58	0.24	0.24	0.076	0.076
3	630	0.0469	0.061	0.64	0.24	0.24	0.074	0.074

CURRENT CARRYING CAPACITY:

Nominal area of conductor	Buried direct in ground	In a buried duct	In air
Sqmm	A	A	A
25	94	81	103
35	112	97	124
50	131	114	148
70	161	139	184
95	190	165	222
120	216	188	256
150	242	209	288
185	273	240	330
240	315	278	387
300	354	312	441
400	404	356	512
500	457	403	590

Air Ambient temperature: 40°C
Ground ambient temperature: 30°C
Conductor operating temperature: 90°C
The above table is in accordance with IS 3961(part 7):2016

De-Rating Factor

Rating factor for variation in ambient air temperature for cable in free air

Ambient air Temperature	25˚C	30˚C	35˚C	40˚C	45˚C	50˚C	55˚C	60˚C
De-Rating Factor	1.14	1.10	1.05	1.00	0.95	0.89	0.84	0.77

Maximum conductor temperature 90˚C

Rating factor for variation in ground temperature for direct buried cables.

Ground Temperature	15˚C	20˚C	25˚C	30˚C	35˚C	40˚C	45˚C	50˚C
De-Rating Factor	1.12	1.08	1.04	1.00	0.96	0.91	0.87	0.82

Maximum conductor temperature 90˚C

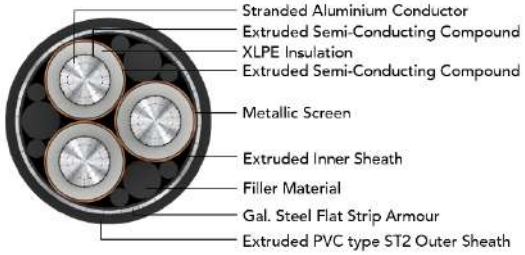
Rating factor for variation in ground temperature for cable in duct.

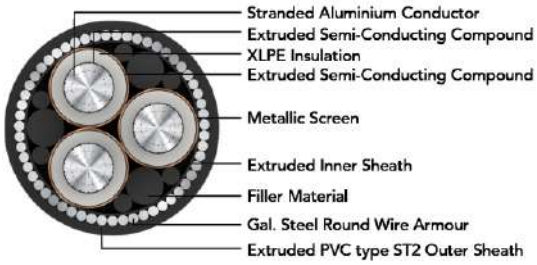
Ground Temperature	15˚C	20˚C	25˚C	30˚C	35˚C	40˚C	45˚C	50˚C
De-Rating Factor	1.12	1.08	1.04	1.00	0.96	0.91	0.87	0.82

Maximum conductor temperature 90˚C

POLYCAB MV MC Al IS 7098-2, 11/11 KV(UE)

Medium Voltage Multi Core Aluminium Armoured Cable, 11/11 KV (UE) AC





Outstanding Features

- Flame retardant
- High life
- UV resistant

Application

POLYCAB MV 11/11 KV(UE) XLPE insulated with aluminium conductor multi core cable is suitable to use for power distribution for external and direct burial applications in power network system.

Voltage Rating

Nominal Voltage: 11/11 KV (UE)

Operation Temperature

Max. operating temperature: +90°C
Max. Short Circuit Temperature: 250°C

Construction

- Conductor: Circular Compacted Aluminium conductor as per IS 8130, class 2
- Conductor Screen: Extruded Semi-conductive compound
- Insulation: XLPE
- Non-Metallic Insulation Screen: Extruded Semi-conductive compound
- Metallic Insulation Screen: Copper tape screen
- Inner Sheath: Extruded Polyvinyl Chloride
- Armour: Galvanised steel Round/Flat Wire Armoured
- Outer Sheath: Extruded Polyvinyl Chloride

Colour: Black

Note:

- Inner sheath available with FR/ FRLS
- Outer/ Inner available with FR/FRLS

Bending Radius:

Fixed Installation: 15D
D is overall diameter of cable

Standard and References:

IS 8130:2013
IS 5831:1984
IS 3975:1979
IS 7098-2:2011

Test Voltage

35kV AC 50 Hz

Impulse test Voltage

95 KV

Compliance

• Conductor resistance	IS 8130
• Insulation resistance	IS 7098-2
• Flammability test	IEC 60332-1-2
• Partial Discharge test	IS 7098-2

POLYCAB MV MC Al IS 7098-2, 11/11 KV(UE)

Medium Voltage Multi Core Aluminium Armoured Cable, 11/11 KV (UE) AC

DIMENSIONS AND WEIGHTS:

Product Code	No. of Cores	Core Cross sectional Area	Nominal Diameter			Weight (Approx.)
			Under armour	Over armour	Overall	
A2XWY	No.	mm²	mm	mm	mm	Kg/Km
MVIS11AXSWY2003C025SA001S	3C	25	41.5	46.5	50.6	3922
MVIS11AXSWY2003C035SA001S	3C	35	44.0	49.0	53.0	4259
MVIS11AXSWY2003C050SA001S	3C	50	47.5	52.5	56.9	4805
MVIS11AXSWY2003C070SA001S	3C	70	50.9	55.9	60.7	5411
MVIS11AXSWY2003C095SA001S	3C	95	54.8	59.8	64.5	6014
MVIS11AXSWY2003C120SA001S	3C	120	58.4	64.7	69.7	7473
MVIS11AXSWY2003C150SA001S	3C	150	62.1	68.4	73.8	8222
MVIS11AXSWY2003C185SA001S	3C	185	65.7	72.0	77.7	9051
MVIS11AXSWY2003C240SA001S	3C	240	71.0	79.0	85.0	11446
MVIS11AXSWY2003C300SA001S	3C	300	76.4	84.4	90.4	12867
MVIS11AXSWY2003C400SA001S	3C	400	83.3	91.3	97.3	14658
MVIS11AXSWY2003C500SA001S	3C	500	90.5	98.5	104.5	16710
MVIS11AXSWY2003C630SA001S	3C	630	97.7	105.7	111.7	18822
A2XFY						
MVIS11AXSFY2003C025SA001S	3C	25	41.5	43.1	46.8	2481
MVIS11AXSFY2003C035SA001S	3C	35	44.0	45.6	49.6	2777
MVIS11AXSFY2003C050SA001S	3C	50	47.5	49.1	53.2	3182
MVIS11AXSFY2003C070SA001S	3C	70	50.9	52.5	56.9	3647
MVIS11AXSFY2003C095SA001S	3C	95	54.8	56.4	61.1	4199
MVIS11AXSFY2003C120SA001S	3C	120	58.4	60.0	64.7	4688
MVIS11AXSFY2003C150SA001S	3C	150	62.1	63.7	68.7	5304
MVIS11AXSFY2003C185SA001S	3C	185	65.7	67.3	72.7	5939
MVIS11AXSFY2003C240SA001S	3C	240	71.0	72.6	78.3	6912
MVIS11AXSFY2003C300SA001S	3C	300	76.4	78.0	84.0	7995
MVIS11AXSFY2003C400SA001S	3C	400	83.3	84.9	90.9	9385
MVIS11AXSFY2003C500SA001S	3C	500	90.5	92.1	98.1	10957
MVIS11AXSFY2003C630SA001S	3C	630	97.7	99.3	105.3	12669

The above data is approximate & subject to manufacturing tolerance.

POLYCAB MV MC Al IS 7098-2, 11/11 KV(UE)

Medium Voltage Multi Core Aluminium Armoured Cable, 11/11 KV (UE) AC

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	
No.	mm²	Ω/km	Ω/km	µF/km	mH/km		Ω/km	
					A2XFY	A2XWY	A2XFY	A2XWY
3	25	1.2	1.539	0.14	0.42	0.42	0.131	0.131
3	35	0.868	1.113	0.15	0.40	0.40	0.124	0.124
3	50	0.641	0.822	0.17	0.36	0.36	0.114	0.114
3	70	0.443	0.568	0.19	0.35	0.35	0.109	0.109
3	95	0.32	0.410	0.21	0.33	0.33	0.104	0.104
3	120	0.253	0.325	0.23	0.32	0.32	0.100	0.100
3	150	0.206	0.264	0.25	0.31	0.31	0.096	0.096
3	185	0.164	0.211	0.27	0.30	0.30	0.094	0.094
3	240	0.125	0.161	0.30	0.29	0.29	0.090	0.090
3	300	0.1	0.129	0.33	0.28	0.28	0.087	0.087
3	400	0.0778	0.101	0.37	0.27	0.27	0.084	0.084
3	500	0.0605	0.079	0.41	0.26	0.26	0.082	0.082
3	630	0.0469	0.061	0.45	0.25	0.25	0.080	0.080

CURRENT CARRYING CAPACITY:

Nominal area of conductor	Buried direct in ground	In a buried duct	In air
Sqmm	A	A	A
25	94	81	103
35	112	97	124
50	131	114	148
70	161	139	184
95	190	165	222
120	216	188	256
150	242	209	288
185	273	240	330
240	315	278	387
300	354	312	441
400	404	356	512
500	457	403	590

Air Ambient temperature: 40˚C
Ground ambient temperature: 30˚C
Conductor operating temperature: 90˚C
The above table is in accordance with IS 3961(part 7):2016

POLYCAB MV MC Al IS 7098-2, 11/11 KV(UE)

Medium Voltage Multi Core Aluminium Armoured Cable, 11/11 KV (UE) AC

De-Rating Factor

Rating factor for variation in ambient air temperature for cable in free air

Ambient air Temperature	25˚C	30˚C	35˚C	40˚C	45˚C	50˚C	55˚C	60˚C
De-Rating Factor	1.14	1.10	1.05	1.00	0.95	0.89	0.84	0.77

Maximum conductor temperature 90˚C

Rating factor for variation in ground temperature for direct buried cables.

Ground Temperature	15˚C	20˚C	25˚C	30˚C	35˚C	40˚C	45˚C	50˚C
De-Rating Factor	1.12	1.08	1.04	1.00	0.96	0.91	0.87	0.82

Maximum conductor temperature 90˚C

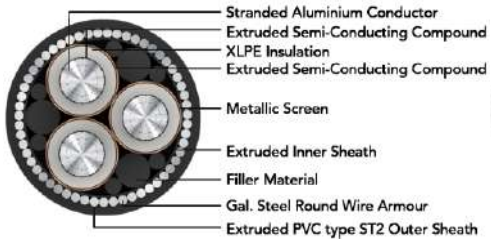
Rating factor for variation in ground temperature for cable in duct.

Ground Temperature	15˚C	20˚C	25˚C	30˚C	35˚C	40˚C	45˚C	50˚C
De-Rating Factor	1.12	1.08	1.04	1.00	0.96	0.91	0.87	0.82

Maximum conductor temperature 90˚C

POLYCAB MV MC Al IS 7098-2, 12.7/22 KV(E)

Medium Voltage Multi Core Aluminium Armoured Cable, 12.7/22 KV (E) AC



Outstanding Features

- Flame retardant
- High life
- UV resistant

Application

POLYCAB MV 12.7/22 KV(E) XLPE insulated with aluminium conductor multi core cable is suitable to use for power distribution for external and direct burial applications in power network system.

Voltage Rating

Nominal Voltage: 12.7/22 KV (E)

Operation Temperature

Max. operating temperature: +90°C
Max. Short Circuit Temperature: 250°C

Construction

- Conductor: Circular Compacted Aluminium conductor as per IS 8130, class 2
- Conductor Screen: Extruded Semi-conductive compound
- Insulation: XLPE
- Non-Metallic Insulation Screen: Extruded Semi-conductive compound
- Metallic Insulation Screen: Copper tape screen
- Inner Sheath: Extruded Polyvinyl Chloride
- Armour: Galvanised steel Round/Flat Wire Armoured
- Outer Sheath: Extruded Polyvinyl Chloride

Colour: Black

Note:

- Inner sheath available with FR/ FRLS
- Outer/ Inner available with FR/FRLS

Bending Radius:

Fixed Installation: 15D
D is overall diameter of cable

Standard and References:

IS 8130:2013
IS 5831:1984
IS 3975:1979
IS 7098-2:2011

Test Voltage

42kV AC 50 Hz

Impulse test Voltage

125 KV

Compliance

• Conductor resistance	IS 8130
• Insulation resistance	IS 7098-2
• Flammability test	IEC 60332-1-2
• Partial Discharge test	IS 7098-2

OUR ACCREDITATION

ISO 9001 ISO 14001 ISO 45001

NABL ABS IRS

POLYCAB MV MC Al IS 7098-2, 12.7/22 KV(E)

Medium Voltage Multi Core Aluminium Armoured Cable, 12.7/22 KV (E) AC

DIMENSIONS AND WEIGHTS:

Product Code	No. of Cores	Core Cross sectional Area	Nominal Diameter			Weight (Approx.)
			Under armour	Over armour	Overall	
A2XWY	No.	mm^2	mm	mm	mm	Kg/Km
MVIS12AXSWY2003C035SA001S	3C	35	46.3	51.3	55.7	4606
MVIS12AXSWY2003C050SA001S	3C	50	49.7	54.7	59.1	5096
MVIS12AXSWY2003C070SA001S	3C	70	53.1	58.1	62.8	5675
MVIS12AXSWY2003C095SA001S	3C	95	57.2	63.5	68.5	7188
MVIS12AXSWY2003C120SA001S	3C	120	60.5	66.8	72.2	7864
MVIS12AXSWY2003C150SA001S	3C	150	64.3	70.6	76.2	8690
MVIS12AXSWY2003C185SA001S	3C	185	67.9	74.2	79.8	9411
MVIS12AXSWY2003C240SA001S	3C	240	73.2	81.2	87.2	11899
MVIS12AXSWY2003C300SA001S	3C	300	78.6	86.6	92.6	13236
MVIS12AXSWY2003C400SA001S	3C	400	85.5	93.5	99.5	15148
MVIS12AXSWY2003C500SA001S	3C	500	92.6	100.6	106.6	17121
MVIS12AXSWY2003C630SA001S	3C	630	99.9	107.9	113.9	19354
A2XFY						
MVIS12AXSFY2003C035SA001S	3C	35	46.3	47.9	52.0	3003
MVIS12AXSFY2003C050SA001S	3C	50	49.7	51.3	55.7	3418
MVIS12AXSFY2003C070SA001S	3C	70	53.1	54.7	59.1	3852
MVIS12AXSFY2003C095SA001S	3C	95	57.2	58.8	63.5	4447
MVIS12AXSFY2003C120SA001S	3C	120	60.5	62.1	67.2	4989
MVIS12AXSFY2003C150SA001S	3C	150	64.3	65.9	71.2	5621
MVIS12AXSFY2003C185SA001S	3C	185	67.9	69.5	74.8	6213
MVIS12AXSFY2003C240SA001S	3C	240	73.2	74.8	80.5	7204
MVIS12AXSFY2003C300SA001S	3C	300	78.6	80.2	86.2	8284
MVIS12AXSFY2003C400SA001S	3C	400	85.5	87.1	93.1	9715
MVIS12AXSFY2003C500SA001S	3C	500	92.6	94.2	100.2	11288
MVIS12AXSFY2003C630SA001S	3C	630	99.9	101.5	107.5	13042

The above data is approximate & subject to manufacturing tolerance.

POLYCAB MV MC Al IS 7098-2, 12.7/22 KV(E)

Medium Voltage Multi Core Aluminium Armoured Cable, 12.7/22 KV (E) AC

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	
No.	mm²	Ω/km	Ω/km	µF/km	mH/km		Ω/km	
					A2XFY	A2XWY	A2XFY	A2XWY
3	35	0.868	1.113	0.14	0.41	0.41	0.127	0.127
3	50	0.641	0.822	0.16	0.37	0.37	0.117	0.117
3	70	0.443	0.568	0.18	0.36	0.36	0.112	0.112
3	95	0.32	0.410	0.20	0.34	0.34	0.106	0.106
3	120	0.253	0.325	0.22	0.32	0.32	0.102	0.102
3	150	0.206	0.264	0.24	0.31	0.31	0.098	0.098
3	185	0.164	0.211	0.26	0.30	0.30	0.096	0.096
3	240	0.125	0.161	0.28	0.29	0.29	0.092	0.092
3	300	0.1	0.129	0.31	0.28	0.28	0.089	0.089
3	400	0.0778	0.101	0.35	0.27	0.27	0.086	0.086
3	500	0.0605	0.079	0.38	0.27	0.27	0.083	0.083
3	630	0.0469	0.061	0.42	0.26	0.26	0.081	0.081

CURRENT CARRYING CAPACITY:

Nominal area of conductor	Buried direct in ground	In a buried duct	In air
Sqmm	A	A	A
35	111	97	127
50	130	116	152
70	159	142	189
95	189	169	227
120	215	192	262
150	239	214	294
185	270	245	336
240	312	282	393
300	351	317	448
400	400	361	519
500	454	408	598

Air Ambient temperature: 40˚C
Ground ambient temperature: 30˚C
Conductor operating temperature: 90˚C
The above table is in accordance with IS 3961(part 7):2016

POLYCAB MV MC Al IS 7098-2, 12.7/22 KV(E)

Medium Voltage Multi Core Aluminium Armoured Cable, 12.7/22 KV (E) AC

De-Rating Factor

Rating factor for variation in ambient air temperature for cable in free air

Ambient air Temperature	25˚C	30˚C	35˚C	40˚C	45˚C	50˚C	55˚C	60˚C
De-Rating Factor	1.14	1.10	1.05	1.00	0.95	0.89	0.84	0.77

Maximum conductor temperature 90˚C

Rating factor for variation in ground temperature for direct buried cables.

Ground Temperature	15˚C	20˚C	25˚C	30˚C	35˚C	40˚C	45˚C	50˚C
De-Rating Factor	1.12	1.08	1.04	1.00	0.96	0.91	0.87	0.82

Maximum conductor temperature 90˚C

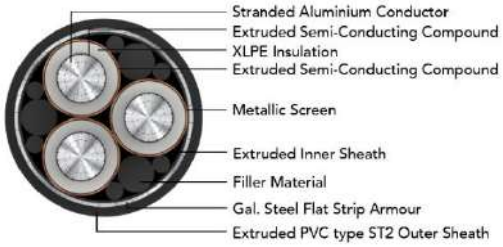
Rating factor for variation in ground temperature for cable in duct.

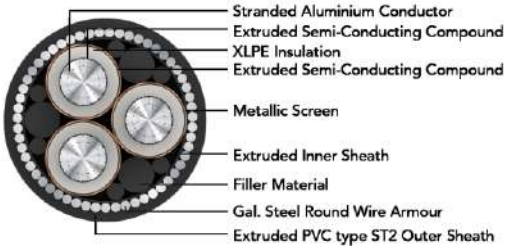
Ground Temperature	15˚C	20˚C	25˚C	30˚C	35˚C	40˚C	45˚C	50˚C
De-Rating Factor	1.12	1.08	1.04	1.00	0.96	0.91	0.87	0.82

Maximum conductor temperature 90˚C

POLYCAB MV MC Al IS 7098-2, 19/33 KV(E)

Medium Voltage Multi Core Aluminium Armoured Cable, 19/33 KV (E) AC





Outstanding Features

- Flame retardant
- High life
- UV resistant

Application

POLYCAB MV 19/33 KV(E) XLPE insulated with aluminium conductor multi core cable is suitable to use for power distribution for external and direct burial applications in power network system.

Voltage Rating

Nominal Voltage: 19/33 KV (E)

Operation Temperature

Max. operating temperature: +90°C
Max. Short Circuit Temperature: 250°C

Construction

- Conductor: Circular Compacted Aluminium conductor as per IS 8130, class 2
- Conductor Screen: Extruded Semi-conductive compound
- Insulation: XLPE
- Non-Metallic Insulation Screen: Extruded Semi-conductive compound
- Metallic Insulation Screen: Copper tape screen
- Inner Sheath: Extruded Polyvinyl Chloride
- Armour: Galvanised steel Round/Flat Wire Armoured
- Outer Sheath: Extruded Polyvinyl Chloride

Colour: Black

Note:

- Inner sheath available with FR/ FRLS
- Outer/ Inner available with FR/FRLS

Bending Radius:

Fixed Installation: 15D
D is overall diameter of cable

Standard and References:

IS 8130:2013
IS 5831:1984
IS 3975:1979
IS 7098-2:2011

Test Voltage

63kV AC 50 Hz

Impulse test Voltage

170 KV

Compliance

- Conductor resistance IS 8130
- Insulation resistance IS 7098-2
- Flammability test IEC 60332-1-2
- Partial Discharge test IS 7098-2

POLYCAB MV MC Al IS 7098-2, 19/33 KV(E)

Medium Voltage Multi Core Aluminium Armoured Cable, 19/33 KV (E) AC

DIMENSIONS AND WEIGHTS:

Product Code	No. of Cores	Core Cross sectional Area	Nominal Diameter			Weight (Approx.)
			Under armour	Over armour	Overall	
A2XWY	No.	mm²	mm	mm	mm	Kg/Km
MVIS13AXSWY2003C035SA001S	3C	35	58.6	64.9	70.0	7129
MVIS13AXSWY2003C050SA001S	3C	50	62.0	68.3	73.6	7769
MVIS13AXSWY2003C070SA001S	3C	70	65.4	71.7	77.4	8518
MVIS13AXSWY2003C095SA001S	3C	95	69.3	75.6	81.6	9363
MVIS13AXSWY2003C120SA001S	3C	120	72.6	80.6	86.6	11306
MVIS13AXSWY2003C150SA001S	3C	150	76.4	84.4	90.4	12093
MVIS13AXSWY2003C185SA001S	3C	185	79.9	87.9	93.9	12990
MVIS13AXSWY2003C240SA001S	3C	240	85.3	93.3	99.3	14336
MVIS13AXSWY2003C300SA001S	3C	300	90.7	98.7	104.7	15862
MVIS13AXSWY2003C400SA001S	3C	400	97.6	105.6	111.6	17789
MVIS13AXSWY2003C500SA001S	3C	500	104.7	112.7	118.7	19981
MVIS13AXSWY2003C630SA001S	3C	630	112.0	120.0	126.0	22236
A2XFY						
MVIS13AXSFY2003C035SA001S	3C	35	58.6	60.2	65.3	4415
MVIS13AXSFY2003C050SA001S	3C	50	62.0	63.6	68.6	4851
MVIS13AXSFY2003C070SA001S	3C	70	65.4	67.0	72.3	5406
MVIS13AXSFY2003C095SA001S	3C	95	69.3	70.9	76.5	6056
MVIS13AXSFY2003C120SA001S	3C	120	72.6	74.2	79.9	6610
MVIS13AXSFY2003C150SA001S	3C	150	76.4	78.0	84.0	7300
MVIS13AXSFY2003C185SA001S	3C	185	79.9	81.5	87.5	7957
MVIS13AXSFY2003C240SA001S	3C	240	85.3	86.9	92.9	8983
MVIS13AXSFY2003C300SA001S	3C	300	90.7	92.3	98.3	10110
MVIS13AXSFY2003C400SA001S	3C	400	97.6	99.2	105.2	11637
MVIS13AXSFY2003C500SA001S	3C	500	104.7	106.3	112.3	13349
MVIS13AXSFY2003C630SA001S	3C	630	112.0	113.6	119.6	15203

The above data is approximate & subject to manufacturing tolerance.

POLYCAB MV MC Al IS 7098-2, 19/33 KV(E)

Medium Voltage Multi Core Aluminium Armoured Cable, 19/33 KV (E) AC

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	
No.	mm²	Ω/km	Ω/km	µF/km	mH/km		Ω/km	
					A2XFY	A2XWY	A2XFY	A2XWY
1	35	0.868	1.113	0.11	0.45	0.45	0.142	0.142
1	50	0.641	0.822	0.13	0.42	0.42	0.131	0.131
1	70	0.443	0.568	0.14	0.40	0.40	0.125	0.125
1	95	0.32	0.410	0.15	0.38	0.38	0.119	0.119
1	120	0.253	0.325	0.17	0.36	0.36	0.114	0.114
1	150	0.206	0.264	0.18	0.35	0.35	0.110	0.110
1	185	0.164	0.211	0.19	0.34	0.34	0.106	0.106
1	240	0.125	0.161	0.21	0.32	0.32	0.102	0.102
1	300	0.1	0.129	0.23	0.31	0.31	0.098	0.098
1	400	0.0778	0.101	0.26	0.30	0.30	0.094	0.094
1	500	0.0605	0.079	0.28	0.29	0.29	0.091	0.091
1	630	0.0469	0.061	0.31	0.28	0.28	0.089	0.089

CURRENT CARRYING CAPACITY:

Nominal area of conductor	Buried direct in ground	In a buried duct	In air
Sqmm	A	A	A
35	111	97	127
50	130	116	152
70	159	142	189
95	189	169	227
120	215	192	262
150	239	214	294
185	270	245	336
240	312	282	393
300	351	317	448
400	400	361	519
500	454	408	598

Air Ambient temperature: 40˚C
Ground ambient temperature: 30˚C
Conductor operating temperature: 90˚C
The above table is in accordance with IS 3961(part 7):2016

De-Rating Factor

Rating factor for variation in ambient air temperature for cable in free air

Ambient air Temperature	25˚C	30˚C	35˚C	40˚C	45˚C	50˚C	55˚C	60˚C
De-Rating Factor	1.14	1.10	1.05	1.00	0.95	0.89	0.84	0.77

Maximum conductor temperature 90˚C

Rating factor for variation in ground temperature for direct buried cables.

Ground Temperature	15˚C	20˚C	25˚C	30˚C	35˚C	40˚C	45˚C	50˚C
De-Rating Factor	1.12	1.08	1.04	1.00	0.96	0.91	0.87	0.82

Maximum conductor temperature 90˚C

Rating factor for variation in ground temperature for cable in duct.

Ground Temperature	15˚C	20˚C	25˚C	30˚C	35˚C	40˚C	45˚C	50˚C
De-Rating Factor	1.12	1.08	1.04	1.00	0.96	0.91	0.87	0.82

Maximum conductor temperature 90˚C