

POLYCAB LOW TENSION POWER CABLE CONFIRMING TO IS 7098-P1



This standard covers the requirements for both armoured and armoured single, twin, three, three and half, four, and multicore cross-linked polyethylene (XLPE) insulated and PVC sheathed cables for electric power supply purposes.

These are low tension cables of voltage grade up to and including 1100V AC. These cables may be used on DC system for rated voltage up to and including 1500V to earth. These are widely used for power distribution in external and direct burial applications in power network system, underground and cable ducting.

Technical advantages:

- 1.Higher Current rating, higher short circuit rating. 1.2 times that of PVC
- 2.Insulation is thermosetting in nature.
- 3.Higher insulation resistance 1000 times more than PVC cables.
- 4.Higher resistance to moisture.
- 5.Better resistance to surge currents.
- 6.Low dielectric losses.
- 7.Better resistance to chemicals.
- 8.Long service life.
- 9.comparatively higher cable operation temperature 90°C and short circuit temperature 250°C.

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

Insulation: In-house developed high insulation resistance cross-linked polyethylene thermoset insulation compound.

Laying Up: In case of multi core, insulated cores are laid up together with in-house developed fillers to maintain circularity of cable, wherever applicable.

Inner Sheath: In-house developed PVC thermoplastic 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/stripe wire Armoured to give mechanical protection and also acts as return path for earth fault current

Outer Sheath: In-house developed PVC thermoplastic compound/ halogen free compound having low emission of smoke and corrosive gases when exposed to fire for outer protection.

[POLYCAB LV BIS-7098-P1 2C 2XFY](#)



[POLYCAB LV BIS-7098-P1 2C 2XWY](#)



[POLYCAB LV BIS-7098-P1 2C A2XFY](#)



[POLYCAB LV BIS-7098-P1 2C A2XWY](#)



[POLYCAB LV BIS-7098-P1 3.5C 2XFY](#)



[POLYCAB LV BIS-7098-P1 3.5C 2XWY](#)



[POLYCAB LV BIS-7098-P1 3.5C A2XFY](#)



[POLYCAB LV BIS-7098-P1 3.5C A2XWY](#)



[POLYCAB LV BIS-7098-P1 3C 2XFY](#)



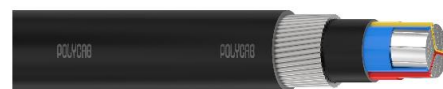
[POLYCAB LV BIS-7098-P1 3C 2XWY](#)



[POLYCAB LV BIS-7098-P1 3C A2XFY](#)



[POLYCAB LV BIS-7098-P1 3C A2XWY](#)



[POLYCAB LV BIS-7098-P1 4C 2XFY](#)



[POLYCAB LV BIS-7098-P1 4C 2XWY](#)



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[POLYCAB LV BIS-7098-P1 4C A2XWY](#)



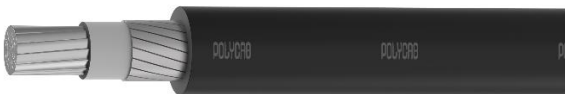
[POLYCAB LV BIS-7098-P1 1C - 2XFaY-2XWaY](#)



[POLYCAB LV BIS-7098-P1 1C - 2XY](#)



[POLYCAB LV BIS-7098-P1 1C - A2XFaY-A2XWaY](#)



[POLYCAB LV BIS-7098-P1 1C - A2XY](#)



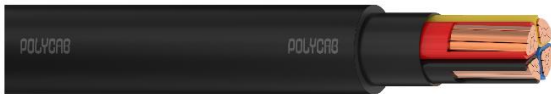
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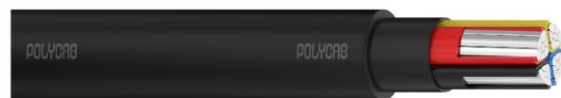
[POLYCAB LV BIS-7098-P1 2C - A2XY](#)



[POLYCAB LV BIS-7098-P1 3.5C - 2XY](#)



[POLYCAB LV BIS-7098-P1 3.5C -A2XY](#)



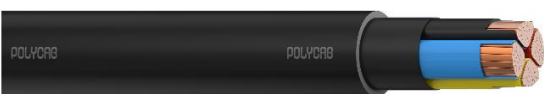
[POLYCAB LV BIS-7098-P1 3C - 2XY](#)



[POLYCAB LV BIS-7098-P1 3C -A2XY](#)



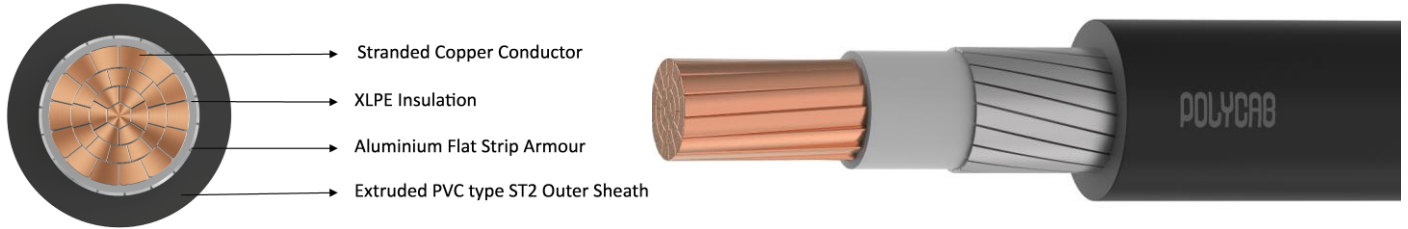
[POLYCAB LV BIS-7098-P1 4C - 2XY](#)



[POLYCAB LV BIS-7098-P1 4C -A2XY](#)



POWER CABLE 650/1100 V AC



Application

POLYCAB 2XWaY/2XFaY SC, stranded compacted copper conductor, XLPE insulated and PVC sheathed armoured cable confirming to IS 7098-1 is suitable for AC single phase or three phase (earthed or unearthed) systems with rated voltage up to and including 1100 V. This cable is also suitable for DC systems with rated voltage up to and including 1500 V to earth.

Voltage Rating

650/1100 V

Operation Temperature

Max.: 90°C

Short circuit temperature 250°C

Construction

- Stranded plain compacted copper conductor as per IS 8130, class 2
- Insulated with Cross Linked Polyethylene (XLPE) to IS 7098-1
- Armoured with Aluminium Round wire/Flat strip armoured
- Sheathed with PVC Type ST2/FRLS /FR/LSZH

Standard and References

IS 8130:2013

IS 5831:1984

IS 7098-1:1988

Compliance

Conductor resistance

- IS 8130:2013

Insulation resistance

- IS 7098-1:1988

Flammability test

- IEC 60332-1-2:2015



Core Identification

Red/Black/Yellow/Blue/Natural

Bending Radius

Fixed installation 12 x Overall diameter

OUR ACCREDITATION



POWER CABLE 650/1100 V AC

Weight & Dimension Data

2XWaY						
Product code	Nominal cross-sectional area n x mm ²	Nominal Thickness of Insulation mm	Nominal dimension of Armour round wire mm	Minimum thickness of outer sheath mm	Overall Diameter mm	Weight (Approx.) kg/km
LVIS09CXAWY2001C010SA001P	1 x 10	1	1.4	1.24	12	219
LVIS09CXAWY2001C016SA002S	1 x 16	1	1.4	1.24	13	281
LVIS09CXAWY2001C025SA002S	1 x 25	1.2	1.4	1.24	14	390
LVIS09CXAWY2001C035SA002S	1 x 35	1.2	1.4	1.24	16	485
LVIS09CXAWY2001C050SA002S	1 x 50	1.3	1.4	1.24	17	608
LVIS09CXAWY2001C070SA002S	1 x 70	1.4	1.4	1.24	19	817
LVIS09CXAWYL001C095SA001S	1 x 95	1.4	1.6	1.4	22	1102
LVIS09CXAWY2001C120SA002S	1 x 120	1.5	1.6	1.4	23.5	1339
LVIS09CXAWY2001C150SA002S	1 x 150	1.7	1.6	1.4	24.5	1615
LVIS09CXAWY2001C185SA002S	1 x 185	1.9	1.6	1.4	26.5	1976
LVIS09CXAWY2001C240SA001S	1 x 240	2	1.6	1.4	29	2508
LVIS09CXAWY2001C300SA002S	1 x 300	2.1	1.6	1.56	31.5	3078
LVIS09CXAWY2001C400SA001S	1 x 400	2.4	2	1.56	36	3962
LVIS09CXAWY2001C500SA001S	1 x 500	2.6	2	1.56	39.5	4969
LVIS09CXAWY2001C630SA001S	1 x 630	2.8	2	1.72	43	6318
LVIS09CXAWY2001C800SA001S	1 x 800	3.1	2	1.88	48.5	7990
LVIS09CXAWY2001C01KSA002S	1 x 1000	3.3	2.5	2.04	54	10051
2XFaY						
Product code	Nominal cross-sectional area n x mm ²	Nominal Thickness of Insulation mm	Nominal dimension of Armour Flat wire mm	Minimum thickness of outersheath mm	Overall Diameter mm	Weight (Approx.) kg/km
LVIS09CXAFY2001C095SA002S	1 x 95	1.4	4x0.8	1.4	18.6	1036
LVIS09CXAFY2001C120SA002S	1 x 120	1.5	4x0.8	1.4	20.4	1264
LVIS09CXAFY2001C150SA002S	1 x 150	1.7	4x0.8	1.4	22.2	1530
LVIS09CXAFY2001C185SA002S	1 x 185	1.9	4x0.8	1.4	24.4	1890
LVIS09CXAFY2001C240SA002S	1 x 240	2	4x0.8	1.4	26.6	2404
LVIS09CXAFY2001C300SA002S	1 x 300	2.1	4x0.8	1.56	29.6	2974
LVIS09CXAFY2001C400SA002S	1 x 400	2.4	4x0.8	1.56	33.2	3726
LVIS09CXAFY2001C500SA002S	1 x 500	2.6	4x0.8	1.56	36.7	4770
LVIS09CXAFY2001C630SA002S	1 x 630	2.8	4x0.8	1.72	41.2	6070
LVIS09CXAFY2001C800SA002S	1 x 800	3.1	4x0.8	1.88	45.1	7676
LVIS09CXAFY2001C01KSA002S	1 x 1000	3.3	4x0.8	2.04	50.6	9567

The above data is approximate & subject to manufacturing tolerance.

OUR ACCREDITATION



POWER CABLE 650/1100 V AC

Electrical characteristics

Current carrying capacity and Max. DC conductor resistance at 20°C (Class 2)

Nominal cross-sectional area mm ²	Buried direct in the ground		In single way Ducts		In air		Max. DC conductor resistance at 20°C Ω/km
	2 single core cables Amp.	3 single core cable Amp.	2 single core cables Amp.	3 single core cable Amp.	2 single core cables Amp.	3 single core cable Amp.	
10	90	77	76	70	83	71	1.83
16	115	98	97	89	108	94	1.15
25	148	126	124	114	144	126	0.727
35	177	150	148	136	176	154	0.524
50	208	177	174	160	212	187	0.387
70	255	216	213	195	269	238	0.268
95	312	260	256	233	340	303	0.193
120	355	295	291	264	396	354	0.153
150	396	329	324	294	450	403	0.124
185	447	371	365	330	519	468	0.0991
240	515	427	420	379	613	553	0.0754
300	576	477	469	422	700	634	0.0601
400	651	537	528	473	813	737	0.047
500	727	598	589	525	930	844	0.0366
630	806	661	651	578	1056	961	0.0283
800	877	721	707	626	1179	1077	0.0221
1000	935	772	751	668	1288	1188	0.0176

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 6):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.

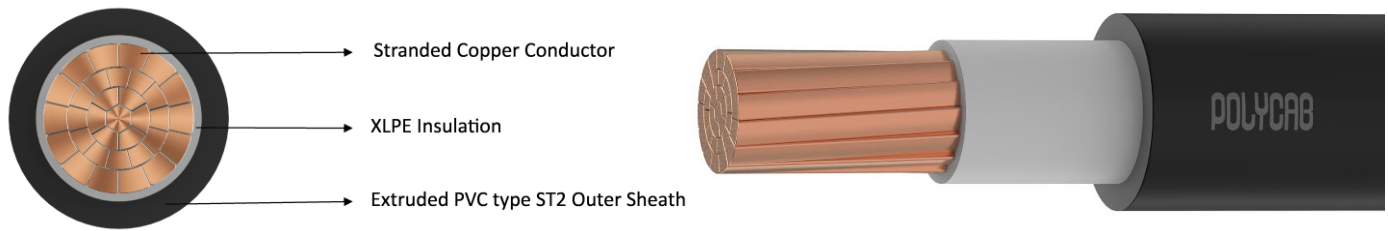
Ground Temperature	15°C	20°C	25°C	30°C	35°C	40°C	45°C	50°C
De-Rating Factor	1.12	1.08	1.04	1.00	0.96	0.91	0.87	0.82

Maximum conductor temperature 90°C

OUR ACCREDITATION

POLYCAB 2XY SC IS 7098-P1

POWER CABLE 650/1100 V AC



Application

POLYCAB 2XY SC, stranded compacted copper conductor, XLPE insulated and PVC sheathed conforming to IS 7098-1 is suitable for AC single phase or three phase (earthed or unearthed) systems with rated voltage up to and including 1100 V. This cable is also suitable for DC systems with rated voltage up to and including 1500 V to earth.

Voltage Rating

650/1100 V

Operation Temperature

Max.: 90°C

Short circuit temperature 250°C

Construction

- Stranded/Solid plain compacted copper conductor as per IS 8130, class 1 or class 2
- Insulated with Cross Linked Polyethylene (XLPE) to IS 7098-1
- Sheathed with PVC Type PVC Type ST2/FRLS/FR/LSZH

Core Identification

Red/Black/Yellow/Blue/Natural

Bending Radius

Fixed installation 12 x Overall diameter

Standard and References

IS 8130:2013

IS 5831:1984

IS 7098-1:1988

Compliance

Conductor resistance

- IS 8130:2013

Insulation resistance

- IS 7098-1:1988

Flammability test

- IEC 60332-1-2:2015



Weight & Dimension Data

Product code	Nominal cross-sectional area n x mm ²	Class of conductor	Nominal Thickness of Insulation mm	Nominal thickness of outer sheath mm	Overall Diameter mm	Weight (Approx.) kg/km
LVIS09CXUAY2001C004SA002P	1 x 4	Class 1	0.7	1.8	7.5	85.5
LVIS09CXUAY2001C006SA001P	1 x 6	Class 1	0.7	1.8	8	109
LVIS09CXUAY2001C004SA002P	1 x 4	Class 2	0.7	1.8	8	88
LVIS09CXUAY2001C006SA001P	1 x 6	Class 2	0.7	1.8	8.5	114
LVIS09CXUAY2001C010SA001P	1 x 10	Class 2	0.7	1.8	9.5	152
LVIS09CXUAY2001C016SA001S	1 x 16	Class 2	0.7	1.8	10	209
LVIS09CXUAY2001C025SA001S	1 x 25	Class 2	0.9	1.8	12	309
LVIS09CXUAY2001C035SA001S	1 x 35	Class 2	0.9	1.8	13	399
LVIS09CXUAY2001C050SA001S	1 x 50	Class 2	1	1.8	14	513
LVIS09CXUAY2001C070SA001S	1 x 70	Class 2	1.1	1.8	16	712
LVIS09CXUAY2001C095SA001S	1 x 95	Class 2	1.1	1.8	17.5	940
LVIS09CXUAY2001C120SA001S	1 x 120	Class 2	1.2	1.8	19	1168
LVIS09CXUAY2001C150SA001S	1 x 150	Class 2	1.4	2	21.5	1444
LVIS09CXUAY2001C185SA001S	1 x 185	Class 2	1.6	2	23.5	1786
LVIS09CXUAY2001C240SA001S	1 x 240	Class 2	1.7	2	26	2299
LVIS09CXUAY2001C300SA001S	1 x 300	Class 2	1.8	2	28.5	2840.5
LVIS09CXUAY2001C400SA001S	1 x 400	Class 2	2	2.2	33	3629
LVIS09CXUAY2001C500SA001S	1 x 500	Class 2	2.2	2.2	36	4598
LVIS09CXUAY2001C630SA001S	1 x 630	Class 2	2.4	2.2	40	5880
LVIS09CXUAY2001C800SA001S	1 x 800	Class 2	2.6	2.4	43.7	7486
LVIS09CXUAY2001C01KSA001S	1 x 1000	Class 2	2.8	2.6	49.2	9358

The above data is approximate & subject to manufacturing tolerance.

OUR ACCREDITATION



Electrical characteristics

Current carrying capacity and Max. DC conductor resistance at 20°C

Nominal cross sectional area mm ²	Buried direct in the ground		In single way Ducts		In air		Max. DC conductor resistance at 20°C Ω/km
	2 single core cables Amp.	3 single core cable Amp.	2 single core cables Amp.	3 single core cable Amp.	2 single core cables Amp.	3 single core cable Amp.	
1.5	32	28	27	26	28	24	12.1
2.5	42	36	36	33	37	31	7.41
4	54	47	46	43	48	41	4.61
6	67	58	57	53	61	52	3.08
10	90	77	76	70	83	71	1.83
16	115	98	97	89	108	94	1.15
25	148	126	124	114	144	126	0.727
35	177	150	148	136	176	154	0.524
50	208	177	174	160	212	187	0.387
70	255	216	213	195	269	238	0.268
95	312	260	256	233	340	303	0.193
120	355	295	291	264	396	354	0.153
150	396	329	324	294	450	403	0.124
185	447	371	365	330	519	468	0.0991
240	515	427	420	379	613	553	0.0754
300	576	477	469	422	700	634	0.0601
400	651	537	528	473	813	737	0.047
500	727	598	589	525	930	844	0.0366
630	806	661	651	578	1056	961	0.0283
800	877	721	707	626	1179	1077	0.0221
1000	935	772	751	668	1288	1188	0.0176

Air Ambient temperature: 40°C,

Ground ambient temperature: 30°C

The above table is in accordance with IS 3961(part 6):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

OUR ACCREDITATION

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

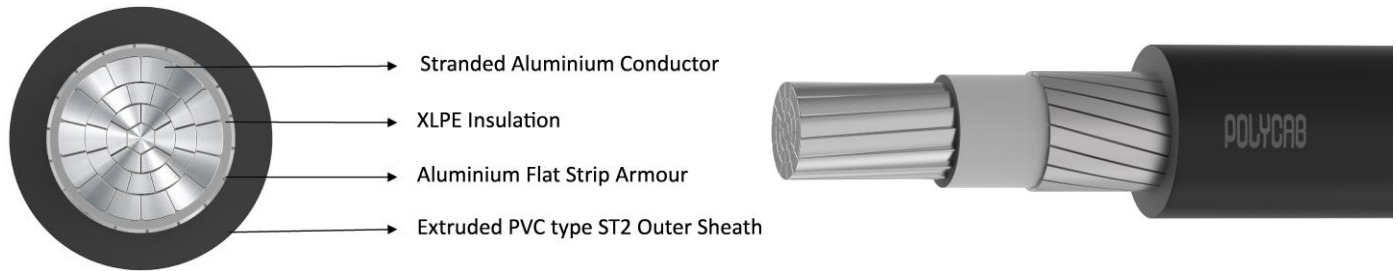
Maximum conductor temperature 90°C

OUR ACCREDITATION



POLYCAB A2XW_aY/A2XF_aY SC IS 7098-P1

POWER CABLE 650/1100 V AC



Application

POLYCAB A2XW_aY/A2XF_aY SC, stranded compacted aluminium conductor, XLPE insulated, and PVC sheathed armoured cable conforming to IS 7098-1 is suitable for AC single phase or three phase (earthed or unearthed) systems with rated voltage up to and including 1100 V. This cable is also suitable for DC systems with rated voltage up to and including 1500 V to earth.

Voltage Rating

650/1100 V

Operation Temperature

Max.: 90°C

Short circuit temperature 250°C

Construction

- Stranded compacted Aluminium conductor as per IS 8130, class 2
- Insulated with Cross Linked Polyethylene (XLPE) to IS 7098-1
- Armoured with Aluminium Round wire/Flat strip armoured.
- Sheathed with PVC Type ST2/FRLS /FR/LSZH

Standard and References

IS 8130:2013

IS 5831:1984

IS 7098-1:1988

Compliance

Conductor resistance

- IS 8130:2013

Insulation resistance

- IS 7098-1:1988

Flammability test

- IEC 60332-1-2:2015



Core Identification

Red/Black/Yellow/Blue/Natural

Bending Radius

Fixed installation 12 x Overall diameter

OUR ACCREDITATION



POWER CABLE 650/1100 V AC

Weight & Dimension Data

A2XWaY						
Product code	Conductor size	Nominal Thickness of Insulation	Nominal dimension of Armour round wire	Minimum thickness of outer sheath	Overall Diameter	Weight (Approx.)
	n x mm ²	mm	mm	mm	mm	kg/km
LVIS09AXAWY2001C010SA001P	1 x 10	1	1.4	1.24	11.35	167
LVIS09AXAWY2001C016SA002S	1 x 16	1	1.4	1.24	12.5	190
LVIS09AXAWY2001C025SA002S	1 x 25	1.2	1.4	1.24	14	247
LVIS09AXAWY2001C035SA002S	1 x 35	1.2	1.4	1.24	15	290
LVIS09AXAWY2001C050SA002S	1 x 50	1.3	1.4	1.24	16.5	342
LVIS09AXAWY2001C070SA002S	1 x 70	1.4	1.4	1.24	18.5	428
LVIS09AXAWY2001C095SA002S	1 x 95	1.4	1.6	1.4	20.2	560
LVIS09AXAWY2001C120SA002S	1 x 120	1.5	1.6	1.4	22.5	665
LVIS09AXAWY2001C150SA002S	1 x 150	1.7	1.6	1.4	24	779
LVIS09AXAWY2001C185SA002S	1 x 185	1.9	1.6	1.4	26.5	921
LVIS09AXAWY2001C240SA002S	1 x 240	2	1.6	1.4	29	1121
LVIS09AXAWY2001C300SA002S	1 x 300	2.1	1.6	1.56	31.5	1349
LVIS09AXAWY2001C400SA002S	1 x 400	2.4	2	1.56	35.5	1739
LVIS09AXAWY2001C500SA002S	1 x 500	2.6	2	1.56	39.5	2128
LVIS09AXAWY2001C630SA002S	1 x 630	2.8	2	1.72	43	2660
LVIS09AXAWY2001C800SA002S	1 x 800	3.1	2	1.88	47.9	3296.5
LVIS09AXAWY2001C01KSA002S	1 x 1000	3.3	2.5	2.04	54.37	4142
A2XFaY						
Product code	Conductor size	Nominal Thickness of Insulation	Nominal dimension of Armour flat wire	Minimum thickness of outer sheath	Overall Diameter	Weight (Approx.)
	n x mm ²	mm	mm	mm	mm	kg/km
LVIS09AXAFY2001C095SA002S	1 x 95	1.4	4x0.8	1.4	18.6	494
LVIS09AXAFY2001C120SA002S	1 x 120	1.5	4x0.8	1.4	20.4	589
LVIS09AXAFY2001C150SA002S	1 x 150	1.7	4x0.8	1.4	22.5	694
LVIS09AXAFY2001C185SA002S	1 x 185	1.9	4x0.8	1.4	24.5	827
LVIS09AXAFY2001C240SA002S	1 x 240	2	4x0.8	1.4	26.6	1026
LVIS09AXAFY2001C300SA002S	1 x 300	2.1	4x0.8	1.56	29.6	1235
LVIS09AXAFY2001C400SA002S	1 x 400	2.4	4x0.8	1.56	33	1548.5
LVIS09AXAFY2001C500SA002S	1 x 500	2.6	4x0.8	1.56	36.7	1909.5
LVIS09AXAFY2001C630SA002S	1 x 630	2.8	4x0.8	1.72	40.5	2413
LVIS09AXAFY2001C800SA002S	1 x 800	3.1	4x0.8	1.72	46	2992.5
LVIS09AXAFY2001C01KSA002S	1 x 1000	3.3	4x0.8	1.88	50	3667

The above data is approximate & subject to manufacturing tolerance.

OUR ACCREDITATION







Electrical characteristics

Current carrying capacity and Max. DC conductor resistance (Class 2)

Nominal cross sectional area mm ²	Buried direct in the ground		In single way Ducts		In air		Max. DC conductor resistance at 20°C Ω/km
	2 single core cables Amp.	3 single core cable Amp.	2 single core cables Amp.	3 single core cable Amp.	2 single core cables Amp.	3 single core cable Amp.	
10	69	59	58	54	64	55	3.08
16	89	76	75	69	84	72	1.91
25	115	98	96	89	112	98	1.2
35	137	116	115	106	137	119	0.868
50	161	137	135	124	165	145	0.641
70	198	168	165	151	209	185	0.443
95	243	202	199	181	264	235	0.32
120	276	230	226	206	308	276	0.253
150	308	256	252	229	350	314	0.206
185	349	290	285	258	406	366	0.164
240	404	335	329	298	480	434	0.125
300	454	376	369	333	551	500	0.1
400	518	429	421	378	647	589	0.0778
500	588	485	476	426	751	685	0.0605
630	663	546	536	477	868	793	0.0469
800	740	608	596	528	992	907	0.0367
1000	812	665	652	575	1117	1022	0.0291

Air Ambient temperature: 40°C

Ground ambient temperature: 30°C

The above table is in accordance with IS 3961(part 6):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

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

OUR ACCREDITATION

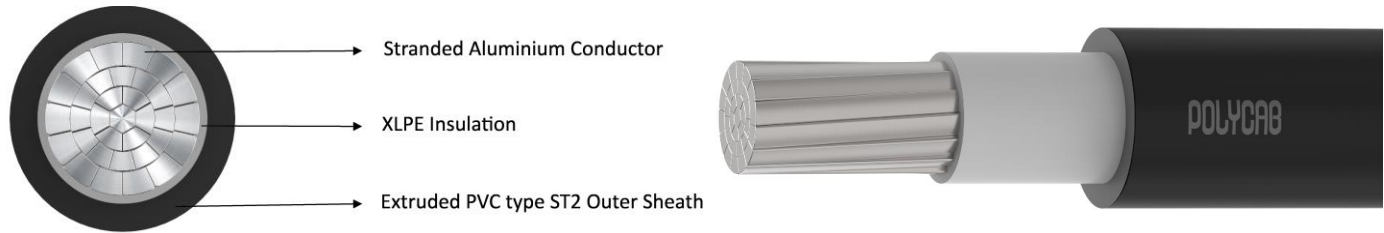






POLYCAB A2XY SC IS 7098-P1

POWER CABLE 650/1100 V AC



Application

POLYCAB A2XY SC, stranded compacted aluminium conductor, XLPE insulated, and PVC sheathed conforming to IS 7098-1 is suitable for AC single phase or three phase (earthed or unearthed) systems with rated voltage up to and including 1100 V. This cable is also suitable for DC systems with rated voltage up to and including 1500 V to earth.

Voltage Rating

650/1100 V

Operation Temperature

Max.: 90°C

Short circuit temperature 250°C

Construction

- Stranded/Solid compacted Aluminium conductor as per IS 8130, class 1 or class 2
- Insulated with Cross Linked Polyethylene (XLPE) to IS 7098-1
- Sheathed with PVC Type ST2/FRLS/FR/LSZH

Standard and References

IS 8130:2013

IS 5831:1984

IS 7098-1:1988

Compliance

Conductor resistance

- IS 8130:2013

Insulation resistance

- IS 7098-1:1988

Flammability test

- IEC 60332-1-2:2015



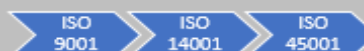
Core Identification

Red/Black/Yellow/Blue/Natural

Bending Radius

Fixed installation 12 x Overall diameter

OUR ACCREDITATION



POLYCAB A2XY SC IS 7098-P1

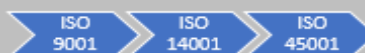
POWER CABLE 650/1100 V AC

Weight & Dimension Data

Product code	Conductor size n x mm ²	Class of conductor	Nominal Thickness of Insulation mm	Nominal thickness of outer sheath mm	Overall Diameter mm	Weight (Approx.) kg/km
LVIS09AXUAY2001C004SA001P	1 x 4	Class1	0.7	1.8	7.5	60
LVIS09AXUAY2001C006SA001S	1 x 6	Class1	0.7	1.8	8	70
LVIS09AXUAY2001C010SA002S	1 x 10	Class1	0.7	1.8	9	80
LVIS09AXUAY2001C004SA001P	1 x 4	Class 2	0.7	1.8	8	65
LVIS09AXUAY2001C006SA001S	1 x 6	Class 2	0.7	1.8	8.5	75
LVIS09AXUAY2001C010SA001S	1 x 10	Class 2	0.7	1.8	9.5	90
LVIS09AXUAY2001C016SA001S	1 x 16	Class 2	0.7	1.8	10	115
LVIS09AXUAY2001C025SA001S	1 x 25	Class 2	0.9	1.8	12	155
LVIS09AXUAY2001C035SA001S	1 x 35	Class 2	0.9	1.8	13	180
LVIS09AXUAY2001C050SA001S	1 x 50	Class 2	1	1.8	14	240
LVIS09AXUAY2001C070SA001S	1 x 70	Class 2	1.1	1.8	15.5	310
LVIS09AXUAY2001C095SA001S	1 x 95	Class 2	1.1	1.8	17.5	385
LVIS09AXUAY2001C120SA001S	1 x 120	Class 2	1.2	1.8	19.5	470
LVIS09AXUAY2001C150SA001S	1 x 150	Class 2	1.4	2	21.5	600
LVIS09AXUAY2001C185SA001S	1 x 185	Class 2	1.6	2	23.5	710
LVIS09AXUAY2001C240SA001S	1 x 240	Class 2	1.7	2	26	900
LVIS09AXUAY2001C300SA001S	1 x 300	Class 2	1.8	2	28.5	1158
LVIS09AXUAY2001C400SA001S	1 x 400	Class 2	2	2.2	31.5	1385
LVIS09AXUAY2001C500SA001S	1 x 500	Class 2	2.2	2.2	35.5	1650
LVIS09AXUAY2001C630SA001S	1 x 630	Class 2	2.4	2.2	39.5	2100
LVIS09AXUAY2001C800SA001S	1 x 800	Class 2	2.6	2.4	44.5	2730
LVIS09AXUAY2001C01KSA001S	1 x 1000	Class 2	2.8	2.6	48.5	3350

The above data is approximate & subject to manufacturing tolerance.

OUR ACCREDITATION



POLYCAB A2XY SC IS 7098-P1

POWER CABLE 650/1100 V AC

Electrical characteristics

Current carrying capacity and Max. DC conductor resistance at 20°C.

Nominal cross sectional area mm ²	Buried direct in the ground		In single way Ducts		In air		Max. DC conductor resistance at 20°C Ω/km
	2 single core cables Amp.	3 single core cable Amp.	2 single core cables Amp.	3 single core cable Amp.	2 single core cables Amp.	3 single core cable Amp.	
4	43	37	36	34	38	33	7.41
6	55	47	47	43	50	43	4.61
10	69	59	58	54	64	55	3.08
16	89	76	75	69	84	72	1.91
25	115	98	96	89	112	98	1.2
35	137	116	115	106	137	119	0.868
50	161	137	135	124	165	145	0.641
70	198	168	165	151	209	185	0.443
95	243	202	199	181	264	235	0.32
120	276	230	226	206	308	276	0.253
150	308	256	252	229	350	314	0.206
185	349	290	285	258	406	366	0.164
240	404	335	329	298	480	434	0.125
300	454	376	369	333	551	500	0.1
400	518	429	421	378	647	589	0.0778
500	588	485	476	426	751	685	0.0605
630	663	546	536	477	868	793	0.0469
800	740	608	596	528	992	907	0.0367
1000	812	665	652	575	1117	1022	0.0291

Air Ambient temperature: 40°C

Ground ambient temperature: 30°C

The above table is in accordance with IS 3961(part 6):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

OUR ACCREDITATION



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

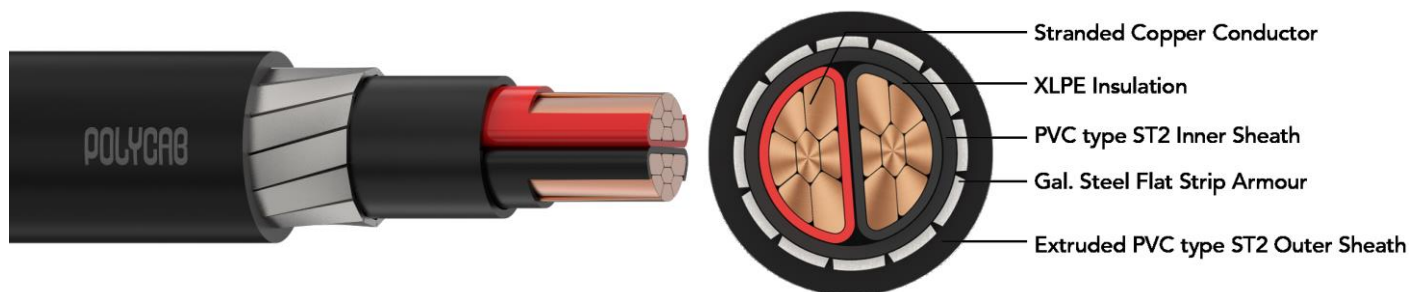
Maximum conductor temperature 90°C

OUR ACCREDITATION



POLYCAB 2XFY MC-2 IS 7098-P1

POWER CABLE 650/1100 V AC



Application

POLYCAB 2XFY MC-2, stranded compacted copper conductor, XLPE insulated, PVC inner sheathed, Galvanised Steel Flat strip armoured, and PVC sheathed conforming to IS 7098-1 is suitable for AC single phase or three phase (earthed or unearthed) systems with rated voltage up to and including 1100 V. This cable is also suitable for DC systems with rated voltage up to and including 1500 V to earth.

Voltage Rating

650/1100 V

Operation Temperature

Max.: 90°C

Short circuit temperature 250°C

Construction

- Stranded plain compacted sector shaped Copper conductor as per IS 8130, class 2
- Insulated with Cross Linked Polyethylene (XLPE) to IS 7098-1
- Extruded inner sheath with PVC Type ST2 to IS 5831
- Armoured with Galvanised Flat Steel Strip to IS 3975
- Sheathed with Extruded PVC Type ST2 to IS 5831

Standard and References

IS 8130:2013

IS 5831:1984

IS 3975:1979

IS 7098-1:1988

Compliance

Conductor resistance	- IS 8130
Insulation resistance	- IS 7098-1:1988
Flammability test	- IEC 60332-1



Core Identification

Red and Black

Bending Radius

Fixed installation 12 x Overall diameter

OUR ACCREDITATION



POWER CABLE 650/1100 V AC

Weight & Dimension Data

Product code	Nominal cross-sectional area	Nominal Thickness of Insulation	Nominal dimension of Armour flat wire	Minimum thickness of outer sheath	Overall Diameter	Weight (Approx.)
	n x mm ²	mm	mm	mm	mm	kg/km
LVIS09CXSFY2002C025SA001S	2 x25	0.9	4x0.8	1.4	18.5	804.4
LVIS09CXSFY2002C035SA001S	2 x35	0.9	4x0.8	1.4	20	1019.7
LVIS09CXSFY2002C050SA001S	2 x50	1	4x0.8	1.4	22.5	1311
LVIS09CXSFY2002C070SA001S	2 x70	1.1	4x0.8	1.56	25.5	1757
LVIS09CXSFY2002C095SA001S	2 x95	1.1	4x0.8	1.56	28	2289
LVIS09CXSFY2002C120SA001S	2 x120	1.2	4x0.8	1.56	30.5	2755
LVIS09CXSFY2002C150SA001S	2 x150	1.4	4x0.8	1.72	31.8	3353
LVIS09CXSFY2002C185SA001S	2 x185	1.6	4x0.8	1.72	37	4094
LVIS09CXSFY2002C240SA001S	2 x240	1.7	4x0.8	1.88	38.7	5225
LVIS09CXSFY2002C300SA001S	2 x300	1.8	4x0.8	2.04	42.5	6412
LVIS09CXSFY2002C400SA001S	2 x400	2	4x0.8	2.36	48.2	8075

The above data is approximate & subject to manufacturing tolerance.

Electrical characteristics

Nominal area of conductor mm ²	Buried direct in the ground Amp.	In single way Ducts Amp.	In air Amp.	Max. DC conductor resistance at 20°C Ω/km
16	115	96	108	1.15
25	147	122	140	0.727
35	176	146	172	0.524
50	208	173	208	0.387
70	253	211	262	0.268
95	302	252	322	0.193
120	340	284	368	0.153
150	379	317	419	0.124
185	425	357	482	0.0991
240	486	409	566	0.0754
300	541	456	644	0.0601
400	602	508	734	0.047

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 6):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

OUR ACCREDITATION

POWER CABLE 650/1100 V AC

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

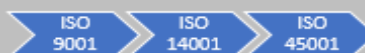
Maximum conductor temperature 90°C

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

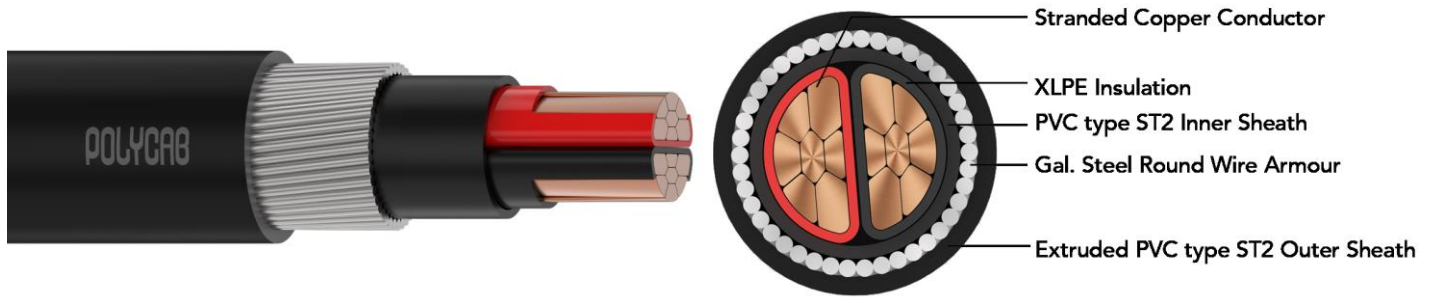
Ground Temperature	15°C	20°C	25°C	30°C	35°C	40°C	45°C	50°C
De-Rating Factor	1.12	1.08	1.04	1.00	0.96	0.91	0.87	0.82

Maximum conductor temperature 90°C

OUR ACCREDITATION



POWER CABLE 650/1100 V AC



Application

POLYCAB 2XWY MC-2, stranded compacted copper conductor XLPE insulated, PVC inner sheathed, Galvanised Steel round wire armour and PVC sheathed conforming to IS 7098-1 is suitable for AC single phase or three phase (earthed or unearthed) systems with rated voltage up to and including 1100 V. This cable is also suitable for DC systems with rated voltage up to and including 1500 V to earth.

Voltage Rating

650/1100 V

Operation Temperature

Max.: 90°C

Short circuit temperature 250°C

Construction

- Stranded plain compacted sector shaped Copper conductor as per IS 8130, class 1&2
- Insulated with Cross Linked Polyethylene (XLPE) to IS 7098-1
- Extruded inner sheath with PVC Type ST2 to IS 5831
- Armoured with Galvanised Steel round wire to IS 3975
- Sheathed with Extruded PVC Type ST2 to IS 5831

Standard and References

IS 8130:2013

IS 5831:1984

IS 3975:1979

IS 7098-1:1988

Compliance

Conductor resistance

- IS 8130

Insulation resistance

- IS 7098-1:1988

Flammability test

- IEC 60332-1



Core Identification

Red and Black

Bending Radius

Fixed installation 12 x Overall diameter

OUR ACCREDITATION



POWER CABLE 650/1100 V AC

Weight & Dimension Data

Product code	Nominal cross-sectional area	Class of conductor	Nominal Thickness of Insulation	Nominal dimension of Armour round wire	Minimum thickness of outer sheath	Overall Diameter	Weight (Approx.)
	n x mm ²		mm	mm	mm		mm
LVIS09CXSWY2002C004SA002S	2 x4	Class 1	0.7	1.4	1.24	14	408
LVIS09CXSWY2002C004SA002P	2 x4	Class 2	0.7	1.4	1.24	14.5	427
LVIS09CXSWY2002C006SA002S	2 x6	Class 1	0.7	1.4	1.24	15	484
LVIS09CXSWY2002C006SA001S	2 x6	Class 2	0.7	1.4	1.24	16	522
LVIS09CXSWY2002C010SA001S	2 x10	Class 2	0.7	1.4	1.24	17.5	665
LVIS09CXSWY2002C016SA001S	2 x16	Class 2	0.7	1.4	1.4	17	696.5
LVIS09CXSWY2002C025SA001S	2 x25	Class 2	0.9	1.6	1.4	20	1001.7
LVIS09CXSWY2002C035SA001S	2 x35	Class 2	0.9	1.6	1.4	22	1224.2
LVIS09CXSWY2002C050SA001S	2 x50	Class 2	1	1.6	1.4	24	1520
LVIS09CXSWY2002C070SA001S	2 x70	Class 2	1.1	1.6	1.56	27	2004
LVIS09CXSWY2002C095SA001S	2 x95	Class 2	1.1	2	1.56	30.5	2736
LVIS09CXSWY2002C120SA001S	2 x120	Class 2	1.2	2	1.56	33	3230
LVIS09CXSWY2002C150SA001S	2 x150	Class 2	1.4	2	1.72	36	3876
LVIS09CXSWY2002C185SA001S	2 x185	Class 2	1.6	2	1.88	40	4731
LVIS09CXSWY2002C240SA001S	2 x240	Class 2	1.7	2.5	2.04	42.4	6203
LVIS09CXSWY2002C300SA001S	2 x300	Class 2	1.8	2.5	2.2	46.2	7514
LVIS09CXSWY2002C400SA001S	2 x400	Class 2	2	2.5	2.36	51.6	9262

The above data is approximate & subject to manufacturing tolerance.

Electrical characteristics

Nominal area of conductor mm ²	Buried direct in the ground Amp.	In single way Ducts Amp.	In air Amp.	Max. DC conductor resistance at 20°C Ω/km
4	54	45	48	4.61
6	67	56	61	3.08
10	89	75	83	1.83
16	115	96	108	1.15
25	147	122	140	0.727
35	176	146	172	0.524
50	208	173	208	0.387
70	253	211	262	0.268
95	302	252	322	0.193
120	340	284	368	0.153
150	379	317	419	0.124
185	425	357	482	0.0991
240	486	409	566	0.0754
300	541	456	644	0.0601
400	602	508	734	0.047

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 6):2016

OUR ACCREDITATION



POWER CABLE 650/1100 V 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

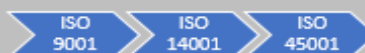
Maximum conductor temperature 90°C

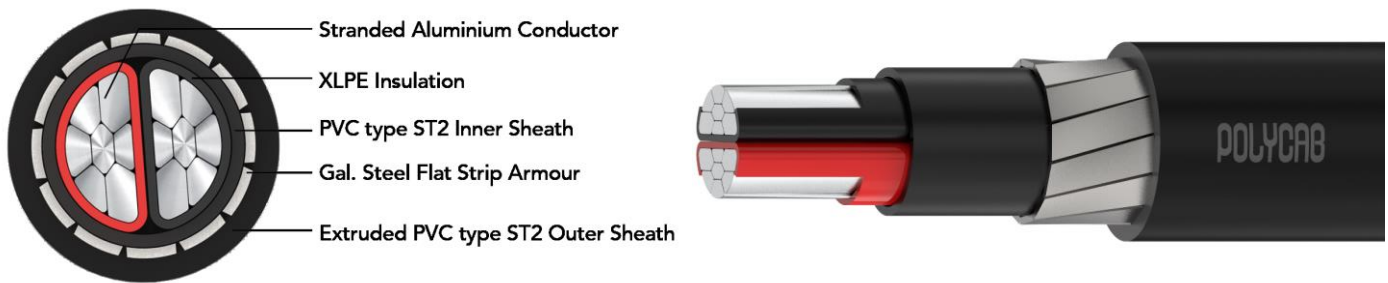
Rating factor for variation in ground temperature for cable in duct.

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

OUR ACCREDITATION





Application

POLYCAB A2XFY MC-2, Stranded compacted aluminium conductor, XLPE insulated, PVC inner sheathed, Galvanised Steel Flat strip armour and PVC sheathed conforming to IS 7098-1 is suitable for AC single phase or three phase (earthed or unearthed) systems with rated voltage up to and including 1100 V. This cable is also suitable for DC systems with rated voltage up to and including 1500 V to earth.

Voltage Rating

650/1100 V

Operation Temperature

Max.: 90°C

Short circuit temperature 250°C

Standard and References

IS 8130:2013

IS 5831:1984

IS 3975:1979

IS 7098-1:1988

Construction

- Stranded compacted sector shaped Aluminium conductor as per IS 8130, class 2
- Insulated with Cross Linked Polyethylene (XLPE) to IS 7098-1
- Extruded inner sheath with PVC Type ST2/FRLS/FR/LSZH
- Armoured with Galvanised Flat Steel Strip to IS 3975
- Sheathed with Extruded PVC Type ST2/FRLS /FR/LSZH

Compliance

Conductor resistance

- IS 8130:2013

Insulation resistance

- IS 7098-1:1988

Flammability test

- IEC 60332-1:2015



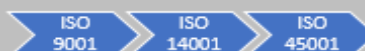
Core Identification

Red and Black

Bending Radius

Fixed installation 12 x Overall diameter

OUR ACCREDITATION



POWER CABLE 650/1100 V AC

Weight & Dimension Data

Product code	Nominal cross-sectional area	Nominal Thickness of Insulation	Nominal dimension of Armour flat wire	Minimum thickness of outer sheath	Overall Diameter	Weight (Approx.)
	n x mm ²	mm	mm	mm	mm	kg/km
LVIS09AXSFY2002C025SA001S	2 x25	0.9	4x0.8	1.4	18.5	509.13
LVIS09AXSFY2002C035SA001S	2 x35	0.9	4x0.8	1.4	20	605.51
LVIS09AXSFY2002C050SA001S	2 x50	1	4x0.8	1.4	22.5	753.28
LVIS09AXSFY2002C070SA001S	2 x70	1.1	4x0.8	1.56	25.5	989
LVIS09AXSFY2002C095SA001S	2 x95	1.1	4x0.8	1.56	28	1204.3
LVIS09AXSFY2002C120SA001S	2 x120	1.2	4x0.8	1.56	30.5	1408.2
LVIS09AXSFY2002C150SA001S	2 x150	1.4	4x0.8	1.72	31.79	1690.2
LVIS09AXSFY2002C185SA001S	2 x185	1.6	4x0.8	1.72	37	2004
LVIS09AXSFY2002C240SA001S	2 x240	1.7	4x0.8	1.88	38.69	2480
LVIS09AXSFY2002C300SA001S	2 x300	1.8	4x0.8	2.04	42.53	2964
LVIS09AXSFY2002C400SA001S	2 x400	2	4x0.8	2.36	48.24	3676
LVIS09AXSFY2002C500SA001S	2 x500	2.2	4x0.8	2.52	56.5	4599
LVIS09AXSFY2002C630SA001S	2 x630	2.4	4x0.8	2.68	62.5	5662

The above data is approximate & subject to manufacturing tolerance.

Electrical characteristics

Nominal area of conductor mm ²	Buried direct in the ground Amp.	In single way Ducts Amp.	In air Amp.	Max. DC conductor resistance at 20°C Ω/km
16	89	74	83	1.91
25	114	95	109	1.2
35	136	113	133	0.868
50	161	134	162	0.641
70	197	164	204	0.443
95	235	196	251	0.320
120	266	222	287	0.253
150	296	248	328	0.206
185	335	281	379	0.164
240	385	324	448	0.125
300	432	364	513	0.100
400	487	412	593	0.0778
500	548	463	683	0.0605
630	612	518	784	0.0469

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 6):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

OUR ACCREDITATION



POWER CABLE 650/1100 V AC

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

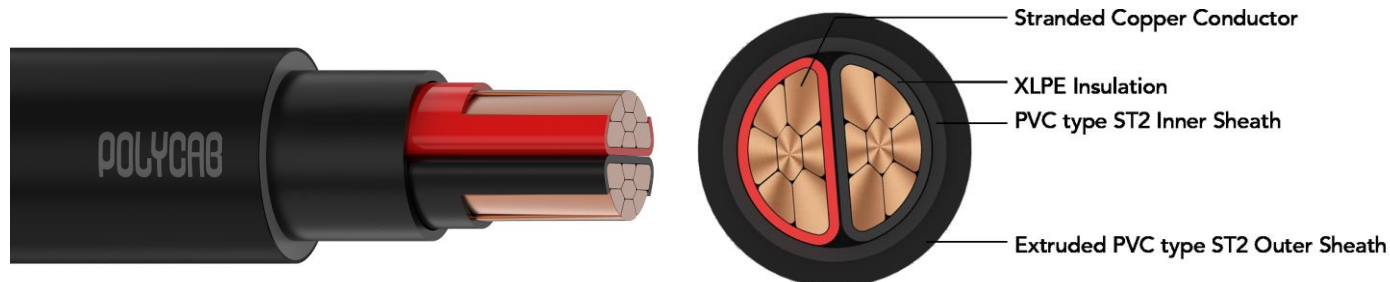
Rating factor for variation in ground temperature for cable in duct.

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

OUR ACCREDITATION





Application

POLYCAB 2XY MC-2, Stranded compacted copper conductor, XLPE insulated, and PVC sheathed conforming to IS 7098-1 is suitable for AC single phase or three phase (earthed or unearthed) systems with rated voltage up to and including 1100 V. This cable is also suitable for DC systems with rated voltage up to and including 1500 V to earth.

Voltage Rating

650/1100 V

Operation Temperature

Max.: 90°C

Short circuit temperature 250°C

Construction

- Stranded plain compacted (≤ 16 sqmm)/Non compacted copper conductor as per IS 8130, class 1 & 2
- Insulated with Cross Linked Polyethylene (XLPE) to IS 7098-1
- Extruded inner sheath with PVC Type ST2/FRLS/FR/LSZH
- Sheathed with Extruded PVC Type ST2/FRLS/FR/LSZH

Standard and References

IS 8130:2013

IS 5831:1984

IS 7098-1:1988

Compliance

- Conductor resistance - IS 8130:2013
- Insulation resistance - IS 7098-1:1988
- Flammability test - IEC 60332-1:2015



Core Identification

Red and Black

Bending Radius

Fixed installation 12 x Overall diameter

OUR ACCREDITATION



POWER CABLE 650/1100 V AC

Weight & Dimension Data

Product code	Nominal cross sectional area n x mm ²	Class of conductor	Nominal Thickness of Insulation mm	Nominal thickness of outer sheath mm	Overall Diameter mm	Weight (Approx.) kg/km
LVIS09CXUAY2002C004SA001P	2 x 4	Class1	0.7	1.8	12.5	165
LVIS09CXUAY2002C006SA001S	2 x 6	Class1	0.7	1.8	13.5	210
LVIS09CXUAY2002C004SA002S	2 x 4	Class 2	0.7	1.8	13	175
LVIS09CXUAY2002C006SA001S	2 x 6	Class 2	0.7	1.8	14	225
LVIS09CXUAY2002C010SA001S	2 x 10	Class 2	0.7	1.8	16	300
LVIS09CXUAY2002C016SA001S	2 x 16	Class 2	0.7	1.8	14	422
LVIS09CXUAY2002C025SA001S	2 x 25	Class 2	0.9	2	17	636
LVIS09CXUAY2002C035SA001S	2 x 35	Class 2	0.9	2	19	817
LVIS09CXUAY2002C050SA001S	2 x 50	Class 2	1	2	21	1054
LVIS09CXUAY2002C070SA001S	2 x 70	Class 2	1.1	2	23	1453
LVIS09CXUAY2002C095SA001S	2 x 95	Class 2	1.1	2.2	26.5	1966
LVIS09CXUAY2002C120SA001S	2 x 120	Class 2	1.2	2.2	28.5	2413
LVIS09CXUAY2002C150SA001S	2 x 150	Class 2	1.4	2.2	32	2935
LVIS09CXUAY2002C185SA001S	2 x 185	Class 2	1.6	2.4	35.5	3676
LVIS09CXUAY2002C240SA001S	2 x 240	Class 2	1.7	2.6	39.5	4750
LVIS09CXUAY2002C300SA001S	2 x 300	Class 2	1.8	2.8	43.5	5918
LVIS09CXUAY2002C400SA001S	2 x 400	Class 2	2	3	49	7495

The above data is approximate & subject to manufacturing tolerance.

Electrical characteristics

Current carrying capacity and Maximum DC conductor resistance.

Nominal area of conductor mm ²	Buried direct in the ground Amp.	In single way Ducts Amp.	In air Amp.	Max. DC conductor resistance at 20°C Ω/km
4	54	45	48	4.61
6	67	56	61	3.08
10	89	75	83	1.83
16	115	96	108	1.15
25	147	122	140	0.727
35	176	146	172	0.524
50	208	173	208	0.387
70	253	211	262	0.268
95	302	252	322	0.193

OUR ACCREDITATION



POWER CABLE 650/1100 V AC

120	340	284	368	0.153
150	379	317	419	0.124
185	425	357	482	0.0991
240	486	409	566	0.0754
300	541	456	644	0.0601
400	602	508	734	0.047
500	665	562	831	0.0366
630	728	616	936	0.0283

Air Ambient temperature: 40°C

Ground ambient temperature: 30°C,

The above table is in accordance with IS 3961(part 6):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

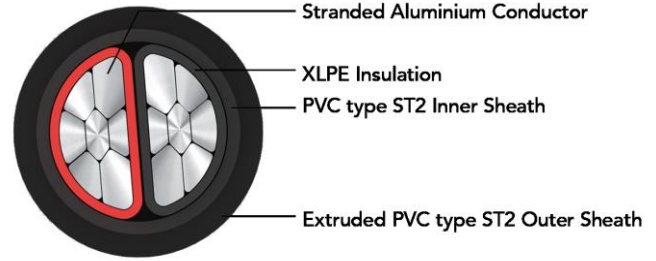
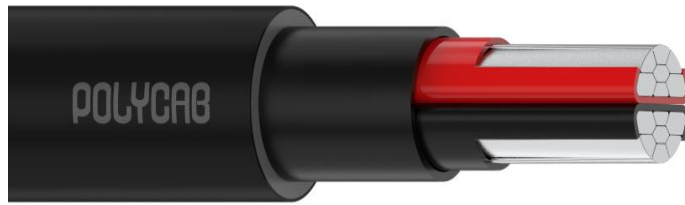
Rating factor for variation in ground temperature for cable in duct.

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

OUR ACCREDITATION





Application

POLYCAB A2XY MC-2, Stranded compacted aluminium conductor, XLPE insulated and PVC sheathed confirming to IS 7098-1 is suitable for AC single phase or three phase (earthed or unearthed) systems with rated voltage up to and including 1100 V. This cable is also suitable for DC systems with rated voltage up to and including 1500 V to earth.

Voltage Rating

650/1100 V

Operation Temperature

Max.: 90°C

Short circuit temperature 250°C

Construction

- Stranded compacted (≤ 16 sqmm)/Non compacted aluminium conductor as per IS 8130, class 1 & 2
- Insulated with Cross Linked Polyethylene (XLPE) to IS 7098-1
- Extruded inner sheath with PVC Type ST2/FRLS/FR/LSZH
- Sheathed with Extruded PVC Type ST2/FRLS/FR/LSZH

Standard and References

IS 8130:2013

IS 5831:1984

IS 7098-1:1988

Compliance

Conductor resistance

- IS 8130:2013

Insulation resistance

- IS 7098-1:1988

Flammability test

- IEC 60332-1:2015



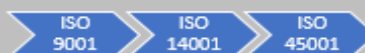
Core Identification

Red and Black

Bending Radius

Fixed installation 12 x Overall diameter

OUR ACCREDITATION



POWER CABLE 650/ 1100 V AC

Weight & Dimension Data

Product code	Nominal cross sectional area n x mm ²	Class of conductor	Nominal Thickness of Insulation mm	Nominal thickness of outer sheath mm	Overall Diameter mm	Weight (Approx.) kg/km
LVIS09AXUAY2002C004SA001S	2 x 4	Class 1	0.7	1.8	12.5	140
LVIS09AXUAY2002C006SA001S	2 x 6	Class 1	0.7	1.8	13.5	170
LVIS09AXUAY2002C010SA001S	2 x 10	Class 1	0.7	1.8	15	205
LVIS09AXUAY2002C004SA002S	2 x 4	Class 2	0.7	1.8	13	150
LVIS09AXUAY2002C006SA002S	2 x 6	Class 2	0.7	1.8	14	180
LVIS09AXUAY2002C010SA002S	2 x 10	Class 2	0.7	1.8	16	225
LVIS09AXUAY2002C016SA001S	2 x 16	Class 2	0.7	1.8	14	225
LVIS09AXUAY2002C025SA001S	2 x 25	Class 2	0.9	2	17	330
LVIS09AXUAY2002C035SA001S	2 x 35	Class 2	0.9	2	19	410
LVIS09AXUAY2002C050SA001S	2 x 50	Class 2	1	2	21	510
LVIS09AXUAY2002C070SA001S	2 x 70	Class 2	1.1	2	23	675
LVIS09AXUAY2002C095SA001S	2 x 95	Class 2	1.1	2.2	26.5	893
LVIS09AXUAY2002C120SA001S	2 x 120	Class 2	1.2	2.2	28.5	1050
LVIS09AXUAY2002C150SA001S	2 x 150	Class 2	1.4	2.2	32	1215
LVIS09AXUAY2002C185SA001S	2 x 185	Class 2	1.6	2.4	35.5	1510
LVIS09AXUAY2002C240SA001S	2 x 240	Class 2	1.7	2.6	39.5	1900
LVIS09AXUAY2002C300SA001S	2 x 300	Class 2	1.8	2.8	43.5	2360
LVIS09AXUAY2002C400SA001S	2 x 400	Class 2	2	3	49	3100
LVIS09AXUAY2002C500SA001S	2 x 500	Class 2	2.2	3.4	55.5	4000
LVIS09AXUAY2002C630SA001S	2 x 630	Class 2	2.4	3.6	61.5	4997

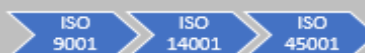
The above data is approximate & subject to manufacturing tolerance.

Electrical characteristics

Current carrying capacity and Maximum DC conductor resistance.

Nominal area of conductor mm ²	Buried direct in the ground Amp.	In single way Ducts Amp.	In air Amp.	Max. DC conductor resistance at 20°C Ω/km
4	42	36	38	7.41
6	55	46	50	4.61
10	68	57	64	3.08
16	89	74	83	1.91
25	114	95	109	1.2

OUR ACCREDITATION



POWER CABLE 650/ 1100 V AC

Nominal area of conductor	Buried direct in the ground	In single way Ducts	In air	Max. DC conductor resistance at 20°C
mm ²	Amp.	Amp.	Amp.	Ω/km
35	136	113	133	0.868
50	161	134	162	0.641
70	197	164	204	0.443
95	235	196	251	0.32
120	266	222	287	0.253
150	296	248	328	0.206
185	335	281	379	0.164
240	385	324	448	0.125
300	432	364	513	0.100
400	487	412	593	0.0778
500	548	463	683	0.0605
630	612	518	784	0.0469

Air Ambient temperature: 40°C

Ground ambient temperature: 30°C,

The above table is in accordance with IS 3961(part 6):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

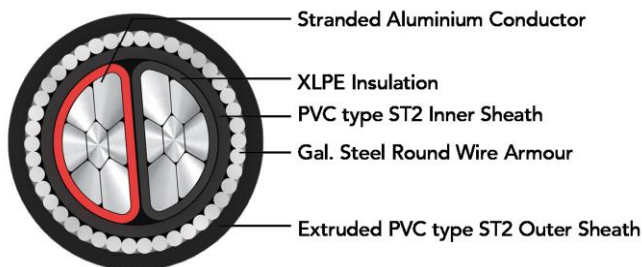
Rating factor for variation in ground temperature for cable in duct.

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

OUR ACCREDITATION

POWER CABLE 650/1100 V AC



Application

POLYCAB A2XWY MC-2, Stranded compacted aluminium conductor, XLPE insulated, PVC inner sheathed, Galvanised Steel round wire armour and PVC sheathed conforming to IS 7098-1 is suitable for AC single phase or three phase (earthed or unearthed) systems with rated voltage up to and including 1100 V. This cable is also suitable for DC systems with rated voltage up to and including 1500 V to earth.

Voltage Rating

650/1100 V

Operation Temperature

Max.: 90°C

Short circuit temperature 250°C

Standard and References

IS 8130:2013

IS 5831:1984

IS 3975:1979

IS 7098-1:1988

Construction

- Stranded compacted sector shaped Aluminium conductor as per IS 8130, class 1&2
- Insulated with Cross Linked Polyethylene (XLPE) to IS 7098-1
- Extruded inner sheath with PVC Type ST2/FRLS/FR/LSZH
- Armoured with Galvanised steel round wire to IS 3975
- Sheathed with Extruded PVC Type ST2/FRLS/FR/LSZH

Compliance

Conductor resistance

- IS 8130:2013

Insulation resistance

- IS 7098-1:1988

Flammability test

- IEC 60332-1:2015



Core Identification

Red and Black

Bending Radius

Fixed installation 12 x Overall diameter

OUR ACCREDITATION



POWER CABLE 650/1100 V AC

Weight & Dimension Data

Product code	Nominal cross-sectional area n x mm ²	Class of conductor	Nominal Thickness of Insulation mm	Nominal dimension of Armour round wire mm	Minimum thickness of outer sheath mm	Overall Diameter mm	Weight (Approx.) kg/km
LVIS09AXSWY2002C004SA002P	2 x4	Class 1	0.7	1.4	1.24	14.5	375
LVIS09AXSWY2002C004SA001S	2 x4	Class 2	0.7	1.4	1.24	15	403
LVIS09AXSWY2002C006SA002S	2 x6	Class 1	0.7	1.4	1.24	15.5	437
LVIS09AXSWY2002C006SA001S	2 x6	Class 2	0.7	1.4	1.24	16.5	465
LVIS09AXSWY2002C010SA001S	2 x10	Class 1	0.7	1.4	1.24	16	503
LVIS09AXSWY2002C010SA002S	2 x10	Class 2	0.7	1.4	1.24	18	551
LVIS09AXSWY2002C016SA001S	2 x16	Class 2	0.7	1.4	1.4	17	480.16
LVIS09AXSWY2002C025SA001S	2 x25	Class 2	0.9	1.6	1.4	20	671.84
LVIS09AXSWY2002C035SA001S	2 x35	Class 2	0.9	1.6	1.4	22	775.55
LVIS09AXSWY2002C050SA001S	2 x50	Class 2	1	1.6	1.4	24	937.97
LVIS09AXSWY2002C070SA001S	2 x70	Class 2	1.1	1.6	1.56	27	1186.85
LVIS09AXSWY2002C095SA001S	2 x95	Class 2	1.1	2	1.56	28.68	1572.78
LVIS09AXSWY2002C120SA001S	2 x120	Class 2	1.2	2	1.56	33	1849.49
LVIS09AXSWY2002C150SA001S	2 x150	Class 2	1.4	2	1.72	36	2182.96
LVIS09AXSWY2002C185SA001S	2 x185	Class 2	1.6	2	1.88	37.7	2597.6
LVIS09AXSWY2002C240SA001S	2 x240	Class 2	1.7	2.5	2.04	45	3418.52
LVIS09AXSWY2002C300SA001S	2 x300	Class 2	1.8	2.5	2.2	46.22	4019.07
LVIS09AXSWY2002C400SA001S	2 x400	Class 2	2	2.5	2.36	51.61	4854
LVIS09AXSFY2002C500SA001S	2 x500	Class 2	2.2	3.15	2.68	61.5	6517
LVIS09AXSFY2002C630SA001S	2 x630	Class 2	2.4	3.15	2.84	67.5	7790

The above data is approximate & subject to manufacturing tolerance.

Electrical characteristics

Nominal area of conductor mm ²	Buried direct in the ground Amp.	In single way Ducts Amp.	In air Amp.	Max. DC conductor resistance at 20°C Ω/km
4	42	36	38	7.41
6	55	46	50	4.61
10	68	57	64	3.08
16	89	74	83	1.91
25	114	95	109	1.20
35	136	113	133	0.868
50	161	134	162	0.641
70	197	164	204	0.443
95	235	196	251	0.32
120	266	222	287	0.253
150	296	248	328	0.206

OUR ACCREDITATION



POWER CABLE 650/1100 V AC

Nominal area of conductor mm ²	Buried direct in the ground Amp.	In single way Ducts Amp.	In air Amp.	Max. DC conductor resistance at 20°C Ω/km
185	335	281	379	0.164
240	385	324	448	0.125
300	432	364	513	0.100
400	487	412	593	0.0778
500	548	463	683	0.0605
630	612	518	784	0.0469

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 6):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

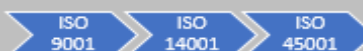
Maximum conductor temperature 90°C

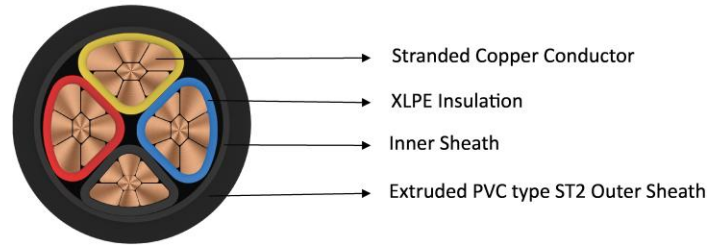
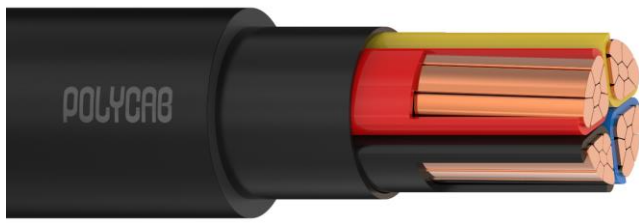
Rating factor for variation in ground temperature for cable in duct.

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

OUR ACCREDITATION





Application

POLYCAB 2XY MC-3.5, Stranded compacted copper conductor, XLPE insulated and PVC sheathed confirming to IS 7098-1 is suitable for AC single phase or three phase (earthed or unearthed) systems with rated voltage up to and including 1100 V. This cable is also suitable for DC systems with rated voltage up to and including 1500 V to earth.

Voltage Rating

650/1100 V

Operation Temperature

Max.: 90°C

Short circuit temperature 250°C

Construction

- Stranded plain compacted copper conductor as per IS 8130, class 2
- Insulated with Cross Linked Polyethylene (XLPE) to IS 7098-1
- Extruded inner sheath with PVC Type ST2/FRLS/FR/LSZH
- Sheathed with Extruded PVC Type ST2/FRLS/FR/LSZH
-

Core Identification

Red, Yellow, Blue & Black

Bending Radius

Fixed installation 12 x Overall diameter

Standard and References

IS 8130:2013

IS 5831:1984

IS 7098-1:1988

Compliance

Conductor resistance

- IS 8130:2013

Insulation resistance

- IS 7098-1:1988

Flammability test

- IEC 60332-1-2:2015



OUR ACCREDITATION



POWER CABLE 650/1100 V AC

Weight & Dimension Data

Product code	Nominal cross-sectional area n x mm ²	Class of conductor	Nominal Thickness of Insulation mm	Nominal thickness of outer sheath mm	Overall Diameter mm	Weight (Approx.) kg/km
LVIS09CXUAY23.5C025SA001S	3.5 x 25	Class 2	0.9/0.7	2	21.3	1035
LVIS09CXUAY23.5C035SA001S	3.5 x 35	Class 2	0.9/0.7	2	23.6	1311
LVIS09CXUAY23.5C050SA001S	3.5 x 50	Class 2	1/0.9	2	26.8	1748
LVIS09CXUAY23.5C070SA001S	3.5 x 70	Class 2	1.1/0.9	2.2	31	2460
LVIS09CXUAY23.5C095SA001S	3.5 x 95	Class 2	1.1/1	2.2	34.3	3287
LVIS09CXUAY23.5C120SA001S	3.5 x 120	Class 2	1.2/1.1	2.2	37.6	4142
LVIS09CXUAY23.5C150SA001S	3.5 x 150	Class 2	1.4/1.1	2.4	42.3	4987
LVIS09CXUAY23.5C185SA001S	3.5 x 185	Class 2	1.6/1.1	2.6	46.8	6279
LVIS09CXUAY23.5C240SA001S	3.5 x 240	Class 2	1.7/1.2	2.8	52.4	8122
LVIS09CXUAY23.5C300SA001S	3.5 x 300	Class 2	1.8/1.4	3	57	10079
LVIS09CXUAY23.5C400SA001S	3.5 x 400	Class 2	2/1.6	3.4	65	12834.5

The above data is approximate & subject to manufacturing tolerance.

Electrical characteristics

Current carrying capacity and maximum DC conductor resistance

Nominal area of conductor mm ²	Buried direct in the ground Amp.	In single way Ducts Amp.	In air Amp.	Max. DC conductor resistance at 20°C Ω/km
25	122	102	119	0.727
35	146	122	147	0.524
50	173	144	179	0.387
70	212	177	226	0.268
95	254	212	279	0.193
120	287	240	320	0.153
150	321	269	365	0.124
185	362	304	422	0.0991
240	418	352	500	0.0754
300	469	396	574	0.0601
400	528	447	662	0.047

Air Ambient temperature: 40°C

Ground ambient temperature: 30°C,

The above table is in accordance with IS 3961(part 6):2016

OUR ACCREDITATION

POWER CABLE 650/1100 V 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

OUR ACCREDITATION

POWER CABLE 650/1100 V AC



Application

POLYCAB A2XY MC-3.5, Stranded compacted aluminium conductor, XLPE insulated, and PVC sheathed conforming to IS 7098-1 is suitable for AC single phase or three phase (earthed or unearthed) systems with rated voltage up to and including 1100 V. This cable is also suitable for DC systems with rated voltage up to and including 1500 V to earth.

Voltage Rating

650/1100 V

Operation Temperature

Max.: 90°C

Short circuit temperature 250°C

Construction

- Stranded compacted aluminium conductor as per IS 8130, class 2
- Insulated with Cross Linked Polyethylene (XLPE) to IS 7098-1
- Extruded inner sheath with PVC Type ST2/FRLS/FR/LSZH
- Sheathed with Extruded PVC Type ST2/FRLS/FR/LSZH

Core Identification

Red, Yellow, Blue and Black

Bending Radius

Fixed installation 12 x Overall diameter

Standard and References

IS 8130:2013

IS 5831:1984

IS 7098-1:1988

Compliance

Conductor resistance

- IS 8130:2013

Insulation resistance

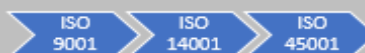
- IS 7098-1:1988

Flammability test

- IEC 60332-1:2015



OUR ACCREDITATION



POWER CABLE 650/1100 V AC

Weight & Dimension Data

Product code	Nominal cross-sectional area n x mm ²	Class of conductor	Nominal Thickness of Insulation mm	Nominal thickness of outer sheath mm	Overall Diameter mm	Weight (Approx.) kg/km
LVIS09AXUAY23.5C025SA001S	3.5 x 25	Class 2	0.9/0.7	2	21.3	525
LVIS09AXUAY23.5C035SA001S	3.5 x 35	Class 2	0.9/0.7	2	23.6	625
LVIS09AXUAY23.5C050SA001S	3.5 x 50	Class 2	1/0.9	2	26.8	800
LVIS09AXUAY23.5C070SA001S	3.5 x 70	Class 2	1.1/0.9	2.2	31	1100
LVIS09AXUAY23.5C095SA001S	3.5 x 95	Class 2	1.1/1	2.2	34.3	1400
LVIS09AXUAY23.5C120SA001S	3.5 x 120	Class 2	1.2/1.1	2.2	37.5	1650
LVIS09AXUAY23.5C150SA001S	3.5 x 150	Class 2	1.4/1.1	2.4	41	2000
LVIS09AXUAY23.5C185SA001S	3.5 x 185	Class 2	1.6/1.1	2.6	46.5	2550
LVIS09AXUAY23.5C240SA001S	3.5 x 240	Class 2	1.7/1.2	2.8	52.5	3200
LVIS09AXUAY23.5C300SA001S	3.5 x 300	Class 2	1.8/1.4	3	56	4000
LVIS09AXUAY23.5C400SA001S	3.5 x 400	Class 2	2/1.6	3.4	64	5177
LVIS09AXUAY23.5C500SA001S	3.5 x 500	Class 2	2.2/1.70	3.6	72.5	6500

The above data is approximate & subject to manufacturing tolerance.

Electrical characteristics

Current carrying capacity and Maximum DC conductor resistance.

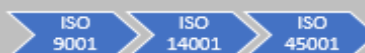
Nominal area of conductor mm ²	Buried direct in the ground Amp.	In single way Ducts Amp.	In air Amp.	Max. DC conductor resistance at 20°C Ω/km
16	74	61	69	1.91
25	95	79	93	1.2
35	114	94	114	0.868
50	134	112	138	0.641
70	164	137	175	0.443
95	197	164	216	0.32
120	223	187	249	0.253
150	249	209	284	0.206
185	282	238	329	0.164
240	327	276	392	0.125
300	369	312	452	0.1
400	420	356	526	0.0778
500	478	412	612	0.0605

Air Ambient temperature: 40°C

Ground ambient temperature: 30°C,

The above table is in accordance with IS 3961(part 6):2016

OUR ACCREDITATION



POWER CABLE 650/1100 V 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

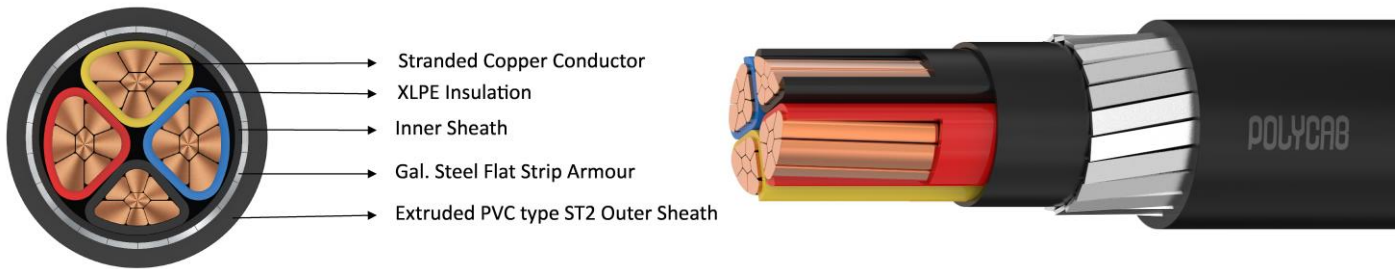
Rating factor for variation in ground temperature for cable in duct.

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

OUR ACCREDITATION





Application

POLYCAB 2XFY MC-3.5, Stranded compacted copper conductor, XLPE insulated, PVC inner sheathed, Galvanised Steel Flat strip armour and PVC sheathed conforming to IS 7098-1 is suitable for AC single phase or three phase (earthed or unearthed) systems with rated voltage up to and including 1100 V. This cable is also suitable for DC systems with rated voltage up to and including 1500 V to earth.

Voltage Rating

650/1100 V

Operation Temperature

Max.: 90°C

Short circuit temperature 250°C

Construction

- Stranded plain compacted sector shaped copper conductor as per IS 8130, class 2
- Insulated with Cross Linked Polyethylene (XLPE) to IS 7098-1
- Extruded inner sheath with PVC Type ST2/FRLS/FR/LSZH
- Armoured with Galvanised Flat Steel Strip to IS 3975
- Sheathed with Extruded PVC Type ST2/FRLS/FR/LSZH

Standard and References

- IS 8130:2013
- IS 5831:1984
- IS 3975:1979
- IS 7098-1:1988

Compliance

- Conductor resistance - IS 8130:2013
- Insulation resistance - IS 7098-1:1988
- Flammability test - IEC 60332-1:2015



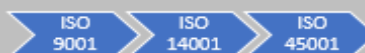
Core Identification

Red, Yellow, Blue and Black

Bending Radius

Fixed installation 12 x Overall diameter

OUR ACCREDITATION



Weight & Dimension Data

Product code	Nominal cross-sectional area n x mm ²	Nominal Thickness of Insulation Main/Neutral mm	Nominal dimension of Armour flat wire mm	Minimum thickness of outer sheath mm	Overall Diameter mm	Weight (Approx.) kg/km
LVIS09CXSFY23.5C025SA001S	3.5 x25	0.9/0.7	4x0.8	1.4	21.9	1272
LVIS09CXSFY23.5C035SA001S	3.5 x35	0.9/0.7	4x0.8	1.4	24.2	1586
LVIS09CXSFY23.5C050SA001S	3.5 x50	1/0.9	4x0.8	1.4	27.4	2061
LVIS09CXSFY23.5C070SA001S	3.5 x70	1.1/0.9	4x0.8	1.56	31.5	2831
LVIS09CXSFY23.5C095SA001S	3.5 x95	1.1/1	4x0.8	1.56	34.8	3686
LVIS09CXSFY23.5C120SA001S	3.5 x120	1.2/1.1	4x0.8	1.72	38.5	4617
LVIS09CXSFY23.5C150SA001S	3.5 x150	1.4/1.1	4x0.8	1.72	42.7	5481
LVIS09CXSFY23.5C185SA001S	3.5 x185	1.6/1.1	4x0.8	1.88	47.2	6830
LVIS09CXSFY23.5C240SA001S	3.5 x240	1.7/1.2	4x0.8	2.04	52.7	8711
LVIS09CXSFY23.5C300SA001S	3.5 x300	1.8/1.4	4x0.8	2.2	57.9	10716
LVIS09CXSFY23.5C400SA001S	3.5 x400	2/1.6	4x0.8	2.52	65.5	13556

The above data is approximate & subject to manufacturing tolerance.

Electrical characteristics

Nominal area of conductor mm ²	Buried direct in the ground Amp.	In single way Ducts Amp.	In air Amp.	Max. DC conductor resistance at 20°C Ω/km
16	95	79	89	1.15
25	122	102	119	0.727
35	146	122	147	0.524
50	173	144	179	0.387
70	212	177	226	0.268
95	254	212	279	0.193
120	287	240	320	0.153
150	321	269	365	0.124
185	362	304	422	0.0991
240	418	352	500	0.0754
300	469	396	574	0.0601
400	528	447	662	0.047

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 6):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

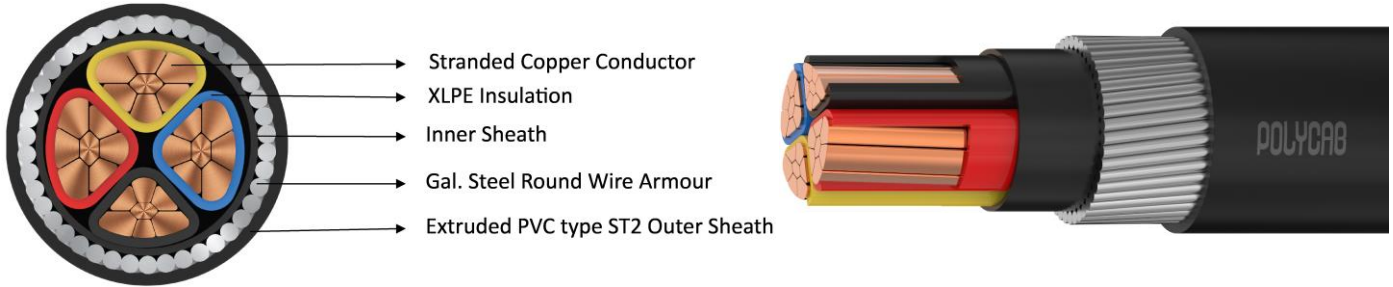
Rating factor for variation in ground temperature for cable in duct.

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

OUR ACCREDITATION

POWER CABLE 650/1100 V AC



Application

POLYCAB 2XWY MC-3.5, Stranded compacted copper conductor ,XLPE insulated, PVC inner sheathed, Galvanised Steel round wire armour and PVC sheathed conforming to IS 7098-1 is suitable for AC single phase or three phase (earthed or unearthed) systems with rated voltage up to and including 1100 V. This cable is also suitable for DC systems with rated voltage up to and including 1500 V to earth.

Voltage Rating

650/1100 V

Operation Temperature

Max.: 90°C

Short circuit temperature 250°C

Construction

- Stranded plain compacted sector shaped copper conductor as per IS 8130, class 2
- Insulated with Cross Linked Polyethylene (XLPE) to IS 7098-1
- Extruded inner sheath with PVC Type ST2/FRLS/FR/LSZH
- Armoured with Galvanised Steel round wire to IS 3975
- Sheathed with Extruded PVC Type ST2/FRLS/FR/LSZH

Standard and References

- IS 8130:2013
- IS 5831:1984
- IS 3975:1979
- IS 7098-1:1988

Compliance

- Conductor resistance - IS 8130:2013
- Insulation resistance - IS 7098-1:1988
- Flammability test - IEC 60332-1:2015



Core Identification

Red, Yellow, Blue and Black

Bending Radius

Fixed installation 12 x Overall diameter

OUR ACCREDITATION

POWER CABLE 650/1100 V AC

Weight & Dimension Data

Product code	Nominal cross-sectional area n x mm ²	Nominal Thickness of Insulation Main/Neutral mm	Nominal dimension of Armour round wire mm	Minimum thickness of outer sheath mm	Overall Diameter mm	Weight (Approx.) kg/km
LVIS09CXSWY23.5C025SA001S	3.5 x25	0.9/0.7	1.6	1.4	23.6	1491
LVIS09CXSWY23.5C035SA001S	3.5 x35	0.9/0.7	1.6	1.4	25.8	1824
LVIS09CXSWY23.5C050SA001S	3.5 x50	1/0.9	1.6	1.56	29	2337
LVIS09CXSWY23.5C070SA001S	3.5 x70	1.1/0.9	2	1.56	33.9	3296
LVIS09CXSWY23.5C095SA001S	3.5 x95	1.1/1	2	1.56	37.2	4237
LVIS09CXSWY23.5C120SA001S	3.5 x120	1.2/1.1	2	1.72	41	5225
LVIS09CXSWY23.5C150SA001S	3.5 x150	1.4/1.1	2	1.88	45	6194
LVIS09CXSWY23.5C185SA001S	3.5 x185	1.6/1.1	2.5	2.04	50	7989
LVIS09CXSWY23.5C240SA001S	3.5 x240	1.7/1.2	2.5	2.2	56	10003
LVIS09CXSWY23.5C300SA001S	3.5 x300	1.8/1.4	2.5	2.36	61	12131
LVIS09CXSWY23.5C400SA001S	3.5 x400	2/1.6	3.15	2.68	70	15817

The above data is approximate & subject to manufacturing tolerance.

Electrical characteristics

Nominal area of conductor mm ²	Buried direct in the ground Amp.	In single way Ducts Amp.	In air Amp.	Max. DC conductor resistance at 20°C Ω/km
16	95	79	89	1.15
25	122	102	119	0.727
35	146	122	147	0.524
50	173	144	179	0.387
70	212	177	226	0.268
95	254	212	279	0.193
120	287	240	320	0.153
150	321	269	365	0.124
185	362	304	422	0.0991
240	418	352	500	0.0754
300	469	396	574	0.0601
400	528	447	662	0.047

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 6):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.

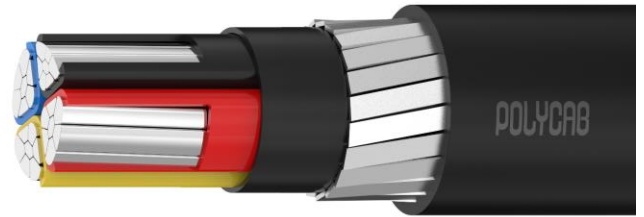
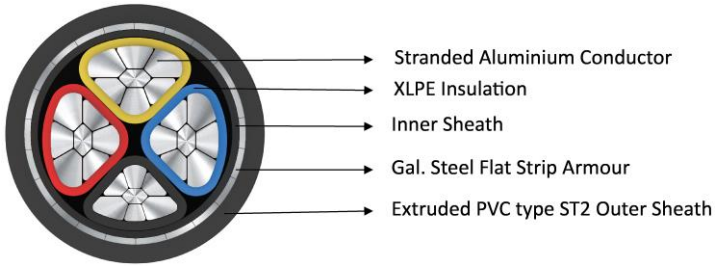
Ground Temperature	15°C	20°C	25°C	30°C	35°C	40°C	45°C	50°C
De-Rating Factor	1.12	1.08	1.04	1.00	0.96	0.91	0.87	0.82

Maximum conductor temperature 90°C

OUR ACCREDITATION



POWER CABLE 650/1100 V AC



Application

POLYCAB A2XFY MC-3.5, Stranded compacted aluminium conductor, XLPE insulated, PVC inner sheathed, Galvanised Steel Flat strip armour and PVC sheathed conforming to IS 7098-1 is suitable for AC single phase or three phase (earthed or unearthed) systems with rated voltage up to and including 1100 V. This cable is also suitable for DC systems with rated voltage up to and including 1500 V to earth.

Voltage Rating

650/1100 V

Operation Temperature

Max.: 90°C

Short circuit temperature 250°C

Construction

- Stranded compacted sector shaped Aluminium conductor as per IS 8130, class 2
- Insulated with Cross Linked Polyethylene (XLPE) to IS 7098-1
- Extruded inner sheath with PVC Type ST2/FRLS/FR/LSZH
- Armoured with Galvanised Flat Steel Strip to IS 3975
- Sheathed with Extruded PVC Type ST2/FRLS/FR/LSZH

Standard and References

- IS 8130:2013
- IS 5831:1984
- IS 3975:1979
- IS 7098-1:1988

Compliance

- Conductor resistance - IS 8130:2013
- Insulation resistance - IS 7098-1:1988
- Flammability test - IEC 60332-1:2015

Core Identification

Red, Yellow, Blue and Black

Bending Radius

Fixed installation 12 x Overall diameter



OUR ACCREDITATION



POWER CABLE 650/1100 V AC

Weight & Dimension Data

Product code	Nominal cross-sectional area n x mm ²	Nominal Thickness of Insulation Main/Neutral mm	Nominal dimension of Armour flat wire mm	Minimum thickness of outer sheath mm	Overall Diameter mm	Weight (Approx.) kg/km
LVIS09AXSFYL3.5C025SA001S	3.5 x25	0.9/0.7	4x0.8	1.4	21.9	733
LVIS09AXSFYL3.5C035SA001S	3.5 x35	0.9/0.7	4x0.8	1.4	24.2	886
LVIS09AXSFYL3.5C050SA001S	3.5 x50	1/0.9	4x0.8	1.4	27.4	1113
LVIS09AXSFYL3.5C070SA001S	3.5 x70	1.1/0.9	4x0.8	1.56	31.5	1451
LVIS09AXSFYL3.5C095SA001S	3.5 x95	1.1/1	4x0.8	1.56	34.8	1796
LVIS09AXSFYL3.5C120SA001S	3.5 x120	1.2/1.1	4x0.8	1.72	38.5	2199
LVIS09AXSFYL3.5C150SA001S	3.5 x150	1.4/1.1	4x0.8	1.72	42	2579
LVIS09AXSFYL3.5C185SA001S	3.5 x185	1.6/1.1	4x0.8	1.88	47.2	3156
LVIS09AXSFYL3.5C240SA001S	3.5 x240	1.7/1.2	4x0.8	2.04	52.7	3913
LVIS09AXSFYL3.5C300SA001S	3.5 x300	1.8/1.4	4x0.8	2.2	57	4693
LVIS09AXSFYL3.5C400SA001S	3.5 x400	2/1.6	4x0.8	2.52	65	5890
LVIS09AXSFYL003C500SA001S	3.5 x500	2.2/1.7	4x0.8	2.68	73.5	7400

The above data is approximate & subject to manufacturing tolerance.

Electrical characteristics

Nominal area of conductor mm ²	Buried direct in the ground Amp.	In single way Ducts Amp.	In air Amp.	Max. DC conductor resistance at 20°C Ω/km
16	74	61	69	1.91
25	95	79	93	1.20
35	114	94	114	0.868
50	134	112	138	0.641
70	164	137	175	0.443
95	197	164	216	0.32
120	223	187	249	0.253
150	249	209	284	0.206
185	282	238	329	0.164
240	327	276	392	0.125
300	369	312	452	0.100
400	420	356	526	0.0778
500	478	412	612	0.0605

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 6):2016

OUR ACCREDITATION



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

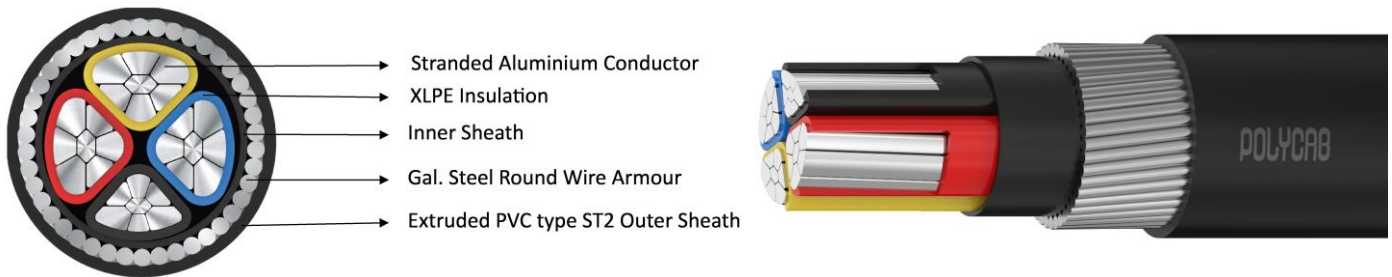
Rating factor for variation in ground temperature for cable in duct.

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

OUR ACCREDITATION





Application

POLYCAB A2XWY MC-3.5, Stranded compacted aluminium conductor, XLPE insulated, PVC inner sheathed Galvanised Steel round wire armour and PVC sheathed conforming to IS 7098-1 is suitable for AC single phase or three phase (earthed or unearthed) systems with rated voltage up to and including 1100 V. This cable is also suitable for DC systems with rated voltage up to and including 1500 V to earth.

Voltage Rating

650/1100 V

Operation Temperature

Max.: 90°C

Short circuit temperature 250°C

Construction

- Stranded compacted sector shaped Aluminium conductor as per IS 8130, class 2
- Insulated with Cross Linked Polyethylene (XLPE) to IS 7098-1
- Extruded inner sheath with PVC Type ST2/FRLS/FR/LSZH
- Armoured with Galvanised Steel round wire to IS 3975
- Sheathed with Extruded PVC Type ST2/FRLS/FR/LSZH

Core Identification

Red, Yellow, Blue and Black

Bending Radius

Fixed installation 12 x Overall diameter

Standard and References

IS 8130:2013

IS 5831:1984

IS 3975:1979

IS 7098-1:1988

Compliance

Conductor resistance

- IS 8130:2013

Insulation resistance

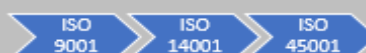
- IS 7098-1:1988

Flammability test

- IEC 60332-1:2015



OUR ACCREDITATION



Weight & Dimension Data

Product code	Nominal cross-sectional area n x mm ²	Nominal Thickness of Insulation Main/Neutral mm	Nominal dimension of Armour round wire mm	Minimum thickness of outer sheath mm	Overall Diameter mm	Weight (Approx.) kg/km
LVIS09AXSWY23.5C025SA001S	3.5 x25	0.9/0.7	1.6	1.4	23.6	969
LVIS09AXSWY23.5C035SA001S	3.5 x35	0.9/0.7	1.6	1.4	25.8	1139
LVIS09AXSWY23.5C050SA001S	3.5 x50	1/0.9	1.6	1.56	29.5	1387
LVIS09AXSWY23.5C070SA001S	3.5 x70	1.1/0.9	2	1.56	34	1938
LVIS09AXSWY23.5C095SA001S	3.5 x95	1.1/1	2	1.56	37.2	2356
LVIS09AXSWY23.5C120SA001S	3.5 x120	1.2/1.1	2	1.72	41	2800
LVIS09AXSWY23.5C150SA001S	3.5 x150	1.4/1.1	2	1.88	45	3296
LVIS09AXSWY23.5C185SA001S	3.5 x185	1.6/1.1	2.5	2.04	50	4313
LVIS09AXSWY23.5C240SA001S	3.5 x240	1.7/1.2	2.5	2.2	56	5156
LVIS09AXSWY23.5C300SA001S	3.5 x300	1.8/1.4	2.5	2.36	61	6108
LVIS09AXSWY23.5C400SA001S	3.5 x400	2/1.6	3.15	2.68	70	8151
LVIS09AXSWY23.5C500SA001S	3.5 x500	2.2/1.7	3.15	2.84	77	9880

The above data is approximate & subject to manufacturing tolerance.

Electrical characteristics

Nominal area of conductor mm ²	Buried direct in the ground Amp.	In single way Ducts Amp.	In air Amp.	Max. DC conductor resistance at 20°C Ω/km
16	74	61	69	1.91
25	95	79	93	1.20
35	114	94	114	0.868
50	134	112	138	0.641
70	164	137	175	0.443
95	197	164	216	0.32
120	223	187	249	0.253
150	249	209	284	0.206
185	282	238	329	0.164
240	327	276	392	0.125
300	369	312	452	0.100
400	420	356	526	0.0778
500	478	412	612	0.0605

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 6):2016

OUR ACCREDITATION

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

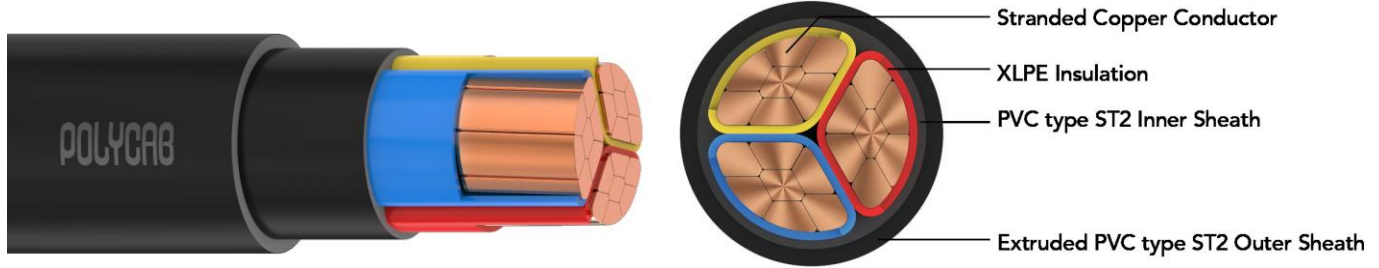
Rating factor for variation in ground temperature for cable in duct.

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

OUR ACCREDITATION





Application

POLYCAB 2XY MC-3, Stranded compacted copper conductor, XLPE insulated and PVC sheathed conforming to IS 7098-1 is suitable for AC single phase or three phase (earthed or unearthed) systems with rated voltage up to and including 1100 V. This cable is also suitable for DC systems with rated voltage up to and including 1500 V to earth.

Voltage Rating

650/1100 V

Operation Temperature

Max.: 90°C

Short circuit temperature 250°C

Construction

- Stranded plain compacted (≤ 16 sqmm)/Non compacted copper conductor as per IS 8130, class 1 & 2
- Insulated with Cross Linked Polyethylene (XLPE) to IS 7098-1
- Extruded inner sheath with PVC Type ST2/FRLS/FR/LSZH
- Sheathed with Extruded PVC Type ST2/FRLS/FR/LSZH

Standard and References

IS 8130:2013

IS 5831:1984

IS 7098-1:1988

Compliance

Conductor resistance

- IS 8130:2013

Insulation resistance

- IS 7098-1:1988

Flammability test

- IEC 60332-1-2:2015



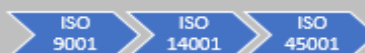
Core Identification

Red, Yellow and Blue

Bending Radius

Fixed installation 12 x Overall diameter

OUR ACCREDITATION



POWER CABLE 650/1100 V AC

Weight & Dimension Data

Product code	Nominal cross-sectional area n x mm ²	Class of conductor	Nominal Thickness of Insulation mm	Nominal thickness of outer sheath mm	Overall Diameter mm	Weight (Approx.) kg/km
LVIS09CXUAY2003C004SA002S	3 x 4	Class 1	0.7	1.8	13	210
LVIS09CXUAY2003C004SA001S	3 x 4	Class 2	0.7	1.8	13.5	232
LVIS09CXUAYL003C006SA002S	3 x 6	Class 1	0.7	1.8	14	280
LVIS09CXUAY2003C006SA002S	3 x 6	Class 2	0.7	1.8	15	299
LVIS09CXUAY2003C010SA001S	3 x 10	Class 2	0.7	1.8	16.5	415
LVIS09CXUAY2003C016SA001S	3 x 16	Class 2	0.7	1.8	16.2	425
LVIS09CXUAY2003C025SA001S	3 x 25	Class 2	0.9	2	19.5	874
LVIS09CXUAY2003C035SA001S	3 x 35	Class 2	0.9	2	21.5	1150
LVIS09CXUAY2003C050SA001S	3 x 50	Class 2	1	2	24.5	1501
LVIS09CXUAY2003C070SA001S	3 x 70	Class 2	1.1	2.2	28	2118
LVIS09CXUAY2003C095SA001S	3 x 95	Class 2	1.1	2.2	30.8	2821
LVIS09CXUAY2003C120SA001S	3 x 120	Class 2	1.2	2.2	33.8	3496
LVIS09CXUAY2003C150SA001S	3 x 150	Class 2	1.4	2.4	37.9	4322
LVIS09CXUAY2003C185SA001S	3 x 185	Class 2	1.6	2.6	42	5377
LVIS09CXUAY2003C240SA001S	3 x 240	Class 2	1.7	2.8	46.9	6992
LVIS09CXUAY2003C300SA001S	3 x 300	Class 2	1.8	3	51.5	8683
LVIS09CXUAY2003C400SA001S	3 x 400	Class 2	2	3.2	58.6	11029

The above data is approximate & subject to manufacturing tolerance.

Electrical characteristics

Current carrying capacity and maximum DC conductor resistance.

Nominal area of conductor mm ²	Buried direct in the ground Amp.	In single way Ducts Amp.	In air Amp.	Max. DC conductor resistance at 20°C Ω/km
4	45	38	41	4.61
6	56	47	52	3.08
10	74	62	70	1.83
16	95	79	89	1.15
25	122	102	119	0.727
35	146	122	147	0.524
50	173	144	179	0.387
70	212	177	226	0.268
95	254	212	279	0.193
120	287	240	320	0.153
150	321	269	365	0.124
185	362	304	422	0.0991
240	418	352	500	0.0754
300	469	396	574	0.0601
400	528	447	662	0.047

Air Ambient temperature: 40°C, Ground ambient temperature: 30°C,

The above table is in accordance with IS 3961(part 6):2016

OUR ACCREDITATION



POWER CABLE 650/1100 V 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.

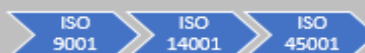
Ground Temperature	15°C	20°C	25°C	30°C	35°C	40°C	45°C	50°C
De-Rating Factor	1.12	1.08	1.04	1.00	0.96	0.91	0.87	0.82

Maximum conductor temperature 90°C

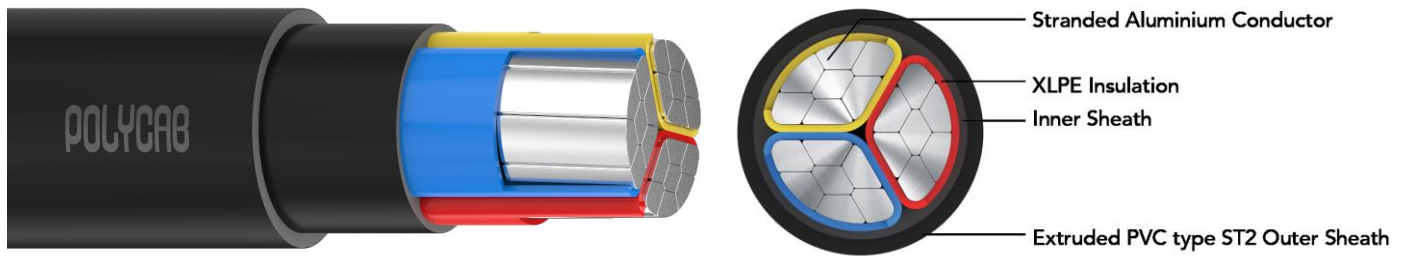
Rating factor for variation in ground temperature for cable in duct.

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

OUR ACCREDITATION

POWER CABLE 650/1100 V AC



Application

POLYCAB A2XY MC-3, Stranded compacted aluminium conductor, XLPE insulated, and PVC sheathed conforming to IS 7098-1 is suitable for AC single phase or three phase (earthed or unearthed) systems with rated voltage up to and including 1100 V. This cable is also suitable for DC systems with rated voltage up to and including 1500 V to earth.

Voltage Rating

650/1100 V

Operation Temperature

Max.: 90°C

Short circuit temperature 250°C

Construction

- Stranded compacted/Non compacted aluminium conductor as per IS 8130, class1&2
- Insulated with Cross Linked Polyethylene (XLPE) to IS 7098-1
- Extruded inner sheath with PVC Type ST2/FRLS/FR/LSZH
- Sheathed with Extruded PVC Type ST2/FRLS/FR/LSZH
-

Core Identification

Red, Yellow and Blue

Bending Radius

Fixed installation 12 x Overall diameter

Standard and References

IS 8130:2013

IS 5831:1984

IS 7098-1:1988

Compliance

Conductor resistance

- IS 8130:2013

Insulation resistance

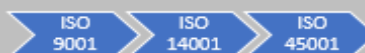
- IS 7098-1:1988

Flammability test

- IEC 60332-1:2015



OUR ACCREDITATION



POWER CABLE 650/1100 V AC

Weight & Dimension Data

Product code	Nominal cross-sectional area n x mm ²	Class of conductor	Nominal Thickness of Insulation mm	Nominal thickness of outer sheath mm	Overall Diameter mm	Weight (Approx.) kg/km
LVIS09AXUAY2003C004SA002S	3 x 4	Class 1	0.7	1.8	13	140
LVIS09AXUAY2003C006SA001S	3 x 6	Class 1	0.7	1.8	14.5	170
LVIS09AXUAY2003C010SA001S	3 x 10	Class 1	0.7	1.8	15.5	220
LVIS09AXUAY2003C004SA001S	3 x 4	Class 2	0.7	1.8	13.5	160
LVIS09AXUAY2003C006SA002S	3 x 6	Class 2	0.7	1.8	15	190
LVIS09AXUAY2003C010SA003S	3 x 10	Class 2	0.7	1.8	17	230
LVIS09AXUAY2003C016SA001S	3 x 16	Class 2	0.7	1.8	16.2	304
LVIS09AXUAY2003C025SA001S	3 x 25	Class 2	0.9	2	19.5	446
LVIS09AXUAY2003C035SA001S	3 x 35	Class 2	0.9	2	21.5	551
LVIS09AXUAY2003C050SA001S	3 x 50	Class 2	1	2	24.5	693
LVIS09AXUAY2003C070SA001S	3 x 70	Class 2	1.1	2.2	28	950
LVIS09AXUAY2003C095SA001S	3 x 95	Class 2	1.1	2.2	30.8	1206
LVIS09AXUAY2003C120SA001S	3 x 120	Class 2	1.2	2.2	33.8	1463
LVIS09AXUAY2003C150SA001S	3 x 150	Class 2	1.4	2.4	37.9	1814
LVIS09AXUAY2003C185SA001S	3 x 185	Class 2	1.6	2.6	42	2242
LVIS09AXUAY2003C240SA001S	3 x 240	Class 2	1.7	2.8	46.9	2869
LVIS09AXUAY2003C300SA001S	3 x 300	Class 2	1.8	3	51.5	3505
LVIS09AXUAY2003C400SA001S	3 x 400	Class 2	2	3.2	58.6	4427
LVIS09AXUAY2003C500SA001S	3 x 500	Class 2	2.2	3.6	66	5681
LVIS09AXUAY2003C630SA001S	3 x 630	Class 2	2.4	3.8	72	7125

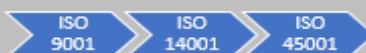
The above data is approximate & subject to manufacturing tolerance.

Electrical characteristics

Current carrying capacity and Maximum DC conductor resistance.

Nominal area of conductor mm ²	Buried direct in the ground Amp.	In single way Ducts Amp.	In air Amp.	Max. DC conductor resistance at 20°C Ω/km
4	35	30	32	7.41
6	46	38	42	4.61
10	57	48	54	3.08
16	74	61	69	1.91
25	95	79	93	1.2
35	114	94	114	0.868

OUR ACCREDITATION



POWER CABLE 650/1100 V AC

Nominal area of conductor	Buried direct in the ground	In single way Ducts	In air	Max. DC conductor resistance at 20°C
mm ²	Amp.	Amp.	Amp.	Ω/km
50	134	112	138	0.641
70	164	137	175	0.443
95	197	164	216	0.32
120	223	187	249	0.253
150	249	209	284	0.206
185	282	238	329	0.164
240	327	276	392	0.125
300	369	312	452	0.1
400	420	356	526	0.0778

Air Ambient temperature: 40°C

Ground ambient temperature: 30°C,

The above table is in accordance with IS 3961(part 6):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

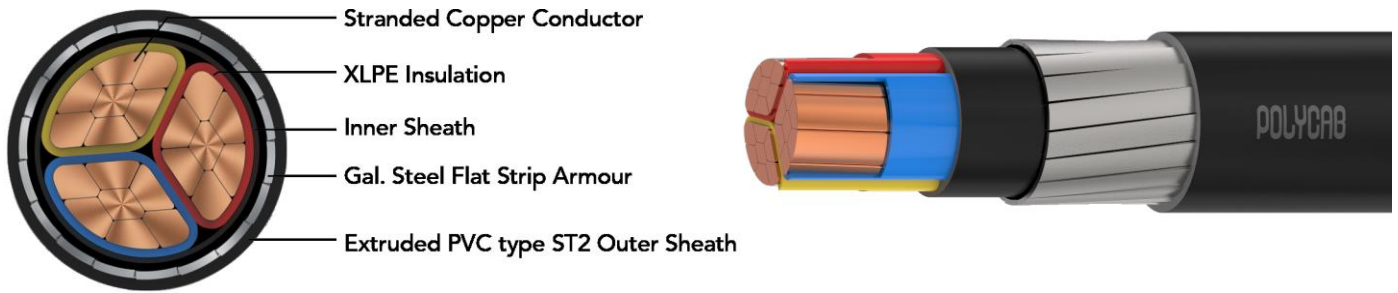
Rating factor for variation in ground temperature for cable in duct.

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

OUR ACCREDITATION

POWER CABLE 650/1100 V AC



Application

POLYCAB 2XFY MC-3, Stranded compacted copper conductor, XLPE insulated, PVC inner sheathed, Galvanised Steel Flat strip armour and PVC sheathed conforming to IS 7098-1 is suitable for AC single phase or three phase (earthed or unearthed) systems with rated voltage up to and including 1100 V. This cable is also suitable for DC systems with rated voltage up to and including 1500 V to earth.

Voltage Rating

650/1100 V

Operation Temperature

Max.: 90°C

Short circuit temperature 250°C

Construction

- Stranded plain compacted sector shaped copper conductor as per IS 8130, class 2
- Insulated with Cross Linked Polyethylene (XLPE) to IS 7098-1
- Extruded inner sheath with PVC Type ST2/FRLS/FR/LSZH
- Armoured with Galvanised Flat Steel Strip to IS 3975
- Sheathed with Extruded PVC Type ST2/FRLS/FR/LSZH

Standard and References

IS 8130:2013

IS 5831:1984

IS 3975:1979

IS 7098-1:1988

Compliance

Conductor resistance

- IS 8130:2013

Insulation resistance

- IS 7098-1:1988

Flammability test

- IEC 60332-1:2015



Core Identification

Red, Yellow, Blue

Bending Radius

Fixed installation 12 x Overall diameter

OUR ACCREDITATION



POWER CABLE 650/1100 V AC

Weight & Dimension Data

Product code	Nominal cross-sectional area n x mm ²	Nominal Thickness of Insulation mm	Nominal dimension of Armour flat wire mm	Minimum thickness of outer sheath mm	Overall Diameter mm	Weight (Approx.) kg/km
LVIS09CXSIFY2003C016SA001S	3 x16	0.7	4x0.8	1.24	16.8	772.3
LVIS09CXSIFY2003C025SA001S	3 x25	0.9	4x0.8	1.4	20.1	1102
LVIS09CXSIFY2003C035SA001S	3 x35	0.9	4x0.8	1.4	22	1396
LVIS09CXSIFY2003C050SA001S	3 x50	1	4x0.8	1.4	24.8	1767
LVIS09CXSIFY2003C070SA001S	3 x70	1.1	4x0.8	1.56	28.5	2441
LVIS09CXSIFY2003C095SA001S	3 x95	1.1	4x0.8	1.56	31.3	3182
LVIS09CXSIFY2003C120SA001S	3 x120	1.2	4x0.8	1.56	34.3	3895
LVIS09CXSIFY2003C150SA001S	3 x150	1.4	4x0.8	1.72	38.3	4759
LVIS09CXSIFY2003C185SA001S	3 x185	1.6	4x0.8	1.88	42.3	5852
LVIS09CXSIFY2003C240SA001S	3 x240	1.7	4x0.8	2.04	47.2	7505
LVIS09CXSIFY2003C300SA001S	3 x300	1.8	4x0.8	2.2	51.8	9243
LVIS09CXSIFY2003C400SA001S	3 x400	2	4x0.8	2.52	58.5	11704

The above data is approximate & subject to manufacturing tolerance.

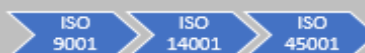
Electrical characteristics

Nominal area of conductor mm ²	Buried direct in the ground Amp.	In single way Ducts Amp.	In air Amp.	Max. DC conductor resistance at 20°C Ω/km
16	95	79	89	1.15
25	122	102	119	0.727
35	146	122	147	0.524
50	173	144	179	0.387
70	212	177	226	0.268
95	254	212	279	0.193
120	287	240	320	0.153
150	321	269	365	0.124
185	362	304	422	0.0991
240	418	352	500	0.0754
300	469	396	574	0.0601
400	528	447	662	0.047

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 6):2016

OUR ACCREDITATION



POWER CABLE 650/1100 V 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

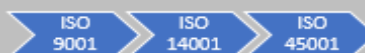
Maximum conductor temperature 90°C

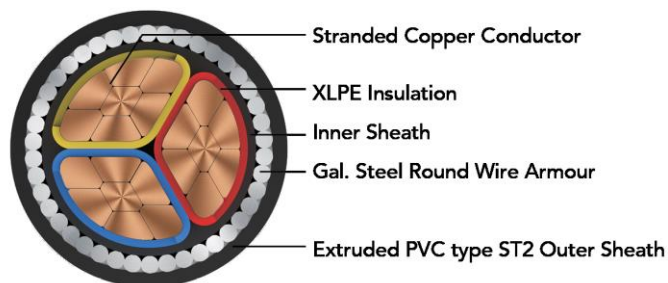
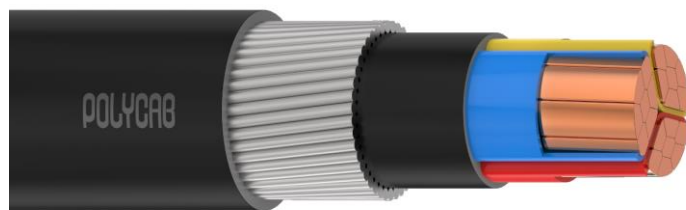
Rating factor for variation in ground temperature for cable in duct.

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

OUR ACCREDITATION





Application

POLYCAB 2XWY MC-3, Stranded compacted copper conductor, XLPE insulated, PVC inner sheathed, Galvanised Steel round wire armour and PVC sheathed conforming to IS 7098-1 is suitable for AC single phase or three phase (earthed or unearthed) systems with rated voltage up to and including 1100 V. This cable is also suitable for DC systems with rated voltage up to and including 1500 V to earth.

Voltage Rating

650/1100 V

Operation Temperature

Max.: 90°C

Short circuit temperature 250°C

Construction

- Stranded plain compacted sector shaped copper conductor as per IS 8130, class 1&2
- Insulated with Cross Linked Polyethylene (XLPE) to IS 7098-1
- Extruded inner sheath with PVC Type ST2/FRLS/FR/LSZH
- Armoured with Galvanised Steel round wire to IS 3975
- Sheathed with Extruded PVC Type ST2/FRLS/FR/LSZH

Core Identification

Red, Yellow, Blue

Bending Radius

Fixed installation 12 x Overall diameter

Standard and References

IS 8130:2013

IS 5831:1984

IS 3975:1979

IS 7098-1:1988

Compliance

- | | |
|-----------------------|--------------------|
| Conductor resistance | - IS 8130:2013 |
| Insulation resistance | - IS 7098-1:1988 |
| Flammability test | - IEC 60332-1:2015 |



OUR ACCREDITATION



Weight & Dimension Data

Product code	Nominal cross-sectional area n x mm ²	Class of Conductor	Nominal Thickness of Insulation mm	Nominal dimension of Armour round wire mm	Minimum thickness of outer sheath mm	Overall Diameter mm	Weight (Approx.) kg/km
LVIS09CXSWY2003C004SA002S	3 x4	Class 1	0.7	1.4	1.24	15	530
LVIS09CXSWY2003C004SA001S	3 x4	Class 2	0.7	1.4	1.24	16	460
LVIS09CXSWY2003C006SA002S	3 x6	Class 1	0.7	1.4	1.24	16	640
LVIS09CXSWY2003C006SA001S	3 x6	Class 2	0.7	1.4	1.24	17	551
LVIS09CXSWY2003C010SA001S	3 x10	Class 2	0.7	1.4	1.24	19	722
LVIS09CXSWY2003C016SA001S	3 x16	Class 2	0.7	1.6	1.4	18.8	921
LVIS09CXSWY2003C025SA001S	3 x25	Class 2	0.9	1.6	1.4	21.7	1282
LVIS09CXSWY2003C035SA001S	3 x35	Class 2	0.9	1.6	1.4	23.6	1596
LVIS09CXSWY2003C050SA001S	3 x50	Class 2	1	1.6	1.56	26.8	2042
LVIS09CXSWY2003C070SA001S	3 x70	Class 2	1.1	2	1.56	30.9	2888
LVIS09CXSWY2003C095SA001S	3 x95	Class 2	1.1	2	1.56	33.7	3686
LVIS09CXSWY2003C120SA001S	3 x120	Class 2	1.2	2	1.72	37	4455
LVIS09CXSWY2003C150SA001S	3 x150	Class 2	1.4	2	1.88	41.1	5396
LVIS09CXSWY2003C185SA001S	3 x185	Class 2	1.6	2.5	2.04	46	6868
LVIS09CXSWY2003C240SA001S	3 x240	Class 2	1.7	2.5	2.2	50.9	8654
LVIS09CXSWY2003C300SA001S	3 x300	Class 2	1.8	2.5	2.36	55.5	10526
LVIS09CXSWY2003C400SA001S	3 x400	Class 2	2	3.15	2.68	64	13718

The above data is approximate & subject to manufacturing tolerance.

Electrical characteristics

Nominal area of conductor mm ²	Buried direct in the ground Amp.	In single way Ducts Amp.	In air Amp.	Max. DC conductor resistance at 20°C Ω/km
4	45	38	41	4.61
6	56	47	52	3.08
10	74	62	70	1.83
16	95	79	89	1.15
25	122	102	119	0.727
35	146	122	147	0.524
50	173	144	179	0.387
70	212	177	226	0.268
95	254	212	279	0.193
120	287	240	320	0.153
150	321	269	365	0.124

OUR ACCREDITATION



Nominal area of conductor	Buried direct in the ground	In single way Ducts	In air	Max. DC conductor resistance at 20°C
mm ²	Amp.	Amp.	Amp.	Ω/km
185	362	304	422	0.0991
240	418	352	500	0.0754
300	469	396	574	0.0601
400	528	447	662	0.047

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 6):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

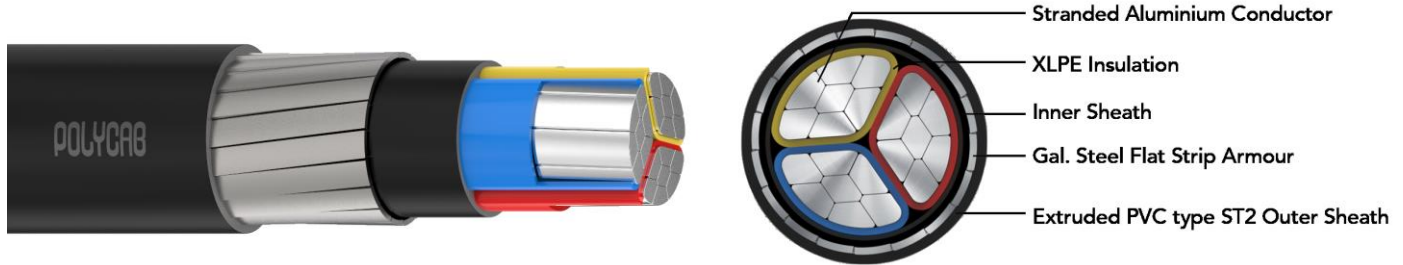
Rating factor for variation in ground temperature for cable in duct.

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

OUR ACCREDITATION





Application

POLYCAB A2XFY MC-3, Stranded compacted aluminium conductor, XLPE insulated, PVC inner sheathed, Galvanised Steel Flat strip armour and PVC sheathed conforming to IS 7098-1 is suitable for AC single phase or three phase (earthed or unearthed) systems with rated voltage up to and including 1100 V. This cable is also suitable for DC systems with rated voltage up to and including 1500 V to earth.

Voltage Rating

650/1100 V

Operation Temperature

Max.: 90°C

Short circuit temperature 250°C

Standard and References

IS 8130:2013

IS 5831:1984

IS 3975:1979

IS 7098-1:1988

Construction

- Stranded compacted sector shaped Aluminium conductor as per IS 8130, class 2
- Insulated with Cross Linked Polyethylene (XLPE) to IS 7098-1
- Extruded inner sheath with PVC Type ST2/FRLS/FR/LSZH
- Armoured with Galvanised Flat Steel Strip to IS 3975
- Sheathed with Extruded PVC Type ST2/FRLS/FR/LSZH

Compliance

Conductor resistance

- IS 8130:2013

Insulation resistance

- IS 7098-1:1988

Flammability test

- IEC 60332-1:2015



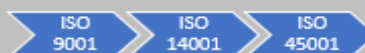
Core Identification

Red, Yellow, Blue

Bending Radius

Fixed installation 12 x Overall diameter

OUR ACCREDITATION



Weight & Dimension Data

Product code	Nominal cross-sectional area n x mm ²	Nominal Thickness of Insulation mm	Nominal dimension of Armour flat wire mm	Minimum thickness of outer sheath mm	Overall Diameter mm	Weight (Approx.) kg/km
LVIS09AXSFY2003C016SA001S	3 x16	0.7	4x0.8	1.24	16.8	487.6
LVIS09AXSFY2003C025SA001S	3 x25	0.9	4x0.8	1.4	20.1	670.7
LVIS09AXSFY2003C035SA001S	3 x35	0.9	4x0.8	1.4	22	798
LVIS09AXSFY2003C050SA001S	3 x50	1	4x0.8	1.4	24.8	960
LVIS09AXSFY2003C070SA001S	3 x70	1.1	4x0.8	1.56	28.5	1282
LVIS09AXSFY2003C095SA001S	3 x95	1.1	4x0.8	1.56	31.3	1577
LVIS09AXSFY2003C120SA001S	3 x120	1.2	4x0.8	1.56	34.3	1871
LVIS09AXSFY2003C150SA001S	3 x150	1.4	4x0.8	1.72	38.3	2100
LVIS09AXSFY2003C185SA001S	3 x185	1.6	4x0.8	1.88	42.3	2500
LVIS09AXSFY2003C240SA001S	3 x240	1.7	4x0.8	2.04	47.2	3382
LVIS09AXSFY2003C300SA001S	3 x300	1.8	4x0.8	2.2	51.8	5101
LVIS09AXSFY2003C400SA001S	3 x400	2	4x0.8	2.52	58.5	5101
LVIS09AXSFY2003C500SA001S	3 x500	2.2	4x0.8	2.68	65	6365
LVIS09AXSFY2003C630SA001S	3 x630	2.4	4x0.8	2.84	73	7894

The above data is approximate & subject to manufacturing tolerance.

Electrical characteristics

Nominal area of conductor mm ²	Buried direct in the ground Amp.	In single way Ducts Amp.	In air Amp.	Max. DC conductor resistance at 20°C Ω/km
16	74	61	69	1.91
25	95	79	93	1.20
35	114	94	114	0.868
50	134	112	138	0.641
70	164	137	175	0.443
95	197	164	216	0.32
120	223	187	249	0.253
150	249	209	284	0.206
185	282	238	329	0.164
240	327	276	392	0.125
300	369	312	452	0.100
400	420	356	526	0.0778
500	478	412	612	0.0605

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 6):2016

OUR ACCREDITATION







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

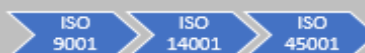
Maximum conductor temperature 90°C

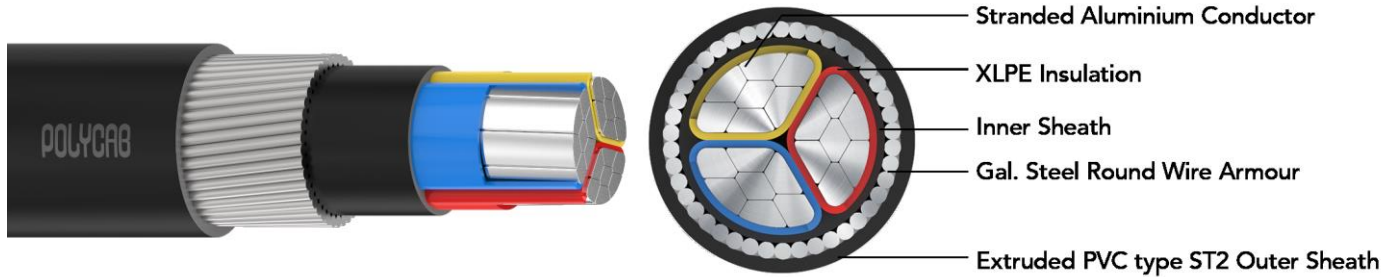
Rating factor for variation in ground temperature for cable in duct.

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

OUR ACCREDITATION





Application

POLYCAB A2XWY MC-3, Stranded compacted aluminium conductor, XLPE insulated, PVC inner sheathed, Galvanised Steel round wire armour and PVC sheathed conforming to IS 7098-1 is suitable for AC single phase or three phase (earthed or unearthed) systems with rated voltage up to and including 1100 V. This cable is also suitable for DC systems with rated voltage up to and including 1500 V to earth.

Voltage Rating

650/1100 V

Operation Temperature

Max.: 90°C

Short circuit temperature 250°C

Standard and References

IS 8130:2013

IS 5831:1984

IS 3975:1979

IS 7098-1:1988

Construction

- Stranded compacted sector shaped Aluminium conductor as per IS 8130, class 1&2
- Insulated with Cross Linked Polyethylene (XLPE) to IS 7098-1
- Extruded inner sheath with PVC Type ST2/FRLS/FR/LSZH
- Armoured with Galvanised Steel round wire to IS 3975
- Sheathed with Extruded PVC Type ST2/FRLS/FR/LSZH

Compliance

Conductor resistance

- IS 8130:2013

Insulation resistance

- IS 7098-1:1988

Flammability test

- IEC 60332-1:2015



Core Identification

Red, Yellow, Blue

Bending Radius

Fixed installation 12 x Overall diameter

OUR ACCREDITATION



Weight & Dimension Data

Product code	Nominal cross-sectional area n x mm ²	Class of conductor	Nominal Thickness of Insulation mm	Nominal dimension of Armour round wire mm	Minimum thickness of outer sheath mm	Overall Diameter mm	Weight (Approx.) kg/km
LVIS09AXSWY2003C004SA002S	3x4	Class 1	0.7	1.4	1.24	15	460
LVIS09AXSWY2003C004SA001S	3x4	Class 2	0.7	1.4	1.24	16	399
LVIS09AXSWY2003C006SA002S	3x6	Class 1	0.7	1.4	1.24	16	530
LVIS09AXSWY2003C006SA001S	3x6	Class 2	0.7	1.4	1.24	17	470
LVIS09AXSWY2003C010SA002S	3x10	Class 1	0.7	1.4	1.24	18	640
LVIS09AXSWY2003C010SA001S	3x10	Class 2	0.7	1.4	1.24	18.5	551
LVIS09AXSWY2003C016SA001S	3x16	Class 2	0.7	1.6	1.4	19	648.4
LVIS09AXSWY2003C025SA001S	3x25	Class 2	0.9	1.6	1.4	21.7	855
LVIS09AXSWY2003C035SA001S	3x35	Class 2	0.9	1.6	1.4	23.6	997
LVIS09AXSWY2003C050SA001S	3x50	Class 2	1	1.6	1.56	26.8	1235
LVIS09AXSWY2003C070SA001S	3x70	Class 2	1.1	2	1.56	30.9	1729
LVIS09AXSWY2003C095SA001S	3x95	Class 2	1.1	2	1.56	33.7	2077
LVIS09AXSWY2003C120SA001S	3x120	Class 2	1.2	2	1.72	37	2422
LVIS09AXSWY2003C150SA001S	3x150	Class 2	1.4	2	1.88	41.1	2888
LVIS09AXSWY2003C185SA001S	3x185	Class 2	1.6	2.5	2.04	46	3733
LVIS09AXSWY2003C240SA001S	3x240	Class 2	1.7	2.5	2.2	50.9	4531
LVIS09AXSWY2003C300SA001S	3x300	Class 2	1.8	2.5	2.36	55.45	5339
LVIS09AXSWY2003C400SA001S	3x400	Class 2	2	3.15	2.68	64	7115
LVIS09AXSWY2003C500SA001S	3x500	Class 2	2.2	3.15	2.84	73	8597
LVIS09AXSWY2003C630SA001S	3x630	Class 2	2.4	4	3	78	11295

The above data is approximate & subject to manufacturing tolerance.

Electrical characteristics

Nominal area of conductor mm ²	Buried direct in the ground Amp.	In single way Ducts Amp.	In air Amp.	Max. DC conductor Resistance at 20°C Ω/km
4	35	30	32	7.41
6	46	38	42	4.61
10	57	48	54	3.08
16	74	61	69	1.91
25	95	79	93	1.2

OUR ACCREDITATION



Nominal area of conductor mm ²	Buried direct in the ground Amp.	In single way Ducts Amp.	In air Amp.	Max. DC conductor Resistance at 20°C Ω/km
35	114	94	114	0.868
50	134	112	138	0.641
70	164	137	175	0.443
95	197	164	216	0.32
120	223	187	249	0.253
150	249	209	284	0.206
185	282	238	329	0.164
240	327	276	392	0.125
300	369	312	452	0.100
400	420	356	526	0.0778
500	478	412	612	0.0605

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 6):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

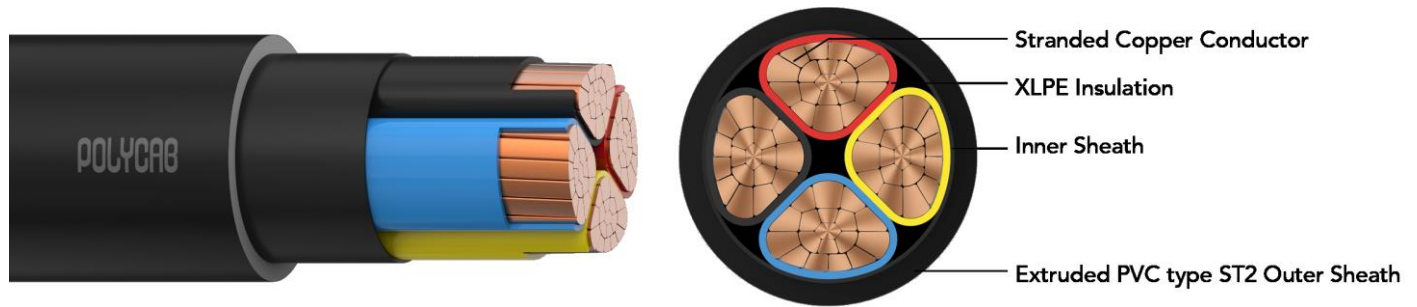
Maximum conductor temperature 90°C

OUR ACCREDITATION



POLYCAB 2XY MC-4 IS 7098-P1

POWER CABLE 650/1100 V AC



Application

POLYCAB 2XY MC-4, Stranded compacted copper conductor, XLPE insulated, and PVC sheathed conforming to IS 7098-1 is suitable for AC single phase or three phase (earthed or unearthed) systems with rated voltage up to and including 1100 V. This cable is also suitable for DC systems with rated voltage up to and including 1500 V to earth.

Voltage Rating

650/1100 V

Operation Temperature

Max.: 90°C

Short circuit temperature 250°C

Construction

- Stranded plain compacted/Non-Compacted copper conductor as per IS 8130, class 1 & 2
- Insulated with Cross Linked Polyethylene (XLPE) to IS 7098-1
- Extruded inner sheath with PVC Type ST2/FRLS/FR/LSZH
- Sheathed with Extruded PVC Type ST2/FRLS/FR/LSZH

Core Identification

Red, Yellow, Blue & Black

Bending Radius

Fixed installation 12 x Overall diameter

Standard and References

IS 8130:2013

IS 5831:1984

IS 7098-1:1988

Compliance

Conductor resistance

- IS 8130:2013

Insulation resistance

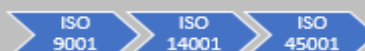
- IS 7098-1:1988

Flammability test

- IEC 60332-1-2:2015



OUR ACCREDITATION



POWER CABLE 650/1100 V AC

Weight & Dimension Data

Product code	Nominal cross sectional area n x mm ²	Class of conductor	Nominal Thickness of Insulation mm	Nominal thickness of outer sheath mm	Overall Diameter mm	Weight (Approx.) kg/km
LVIS09CXUAY2004C004SA001S	4 x 4	Class 1	0.7	1.8	13.5	260
LVIS09CXUAY2004C006SA001S	4 x 6	Class 1	0.7	1.8	14.7	350
LVIS09CXUAY2004C004SA002S	4 x 4	Class 2	0.7	1.8	14.2	280
LVIS09CXUAY2004C006SA004S	4 x 6	Class 2	0.7	1.8	15.5	365
LVIS09CXUAY2004C010SA001S	4 x 10	Class 2	0.7	1.8	17.8	510
LVIS09CXUAY2004C016SA001S	4 x 16	Class 2	0.7	1.8	17.5	741
LVIS09CXUAY2004C025SA001S	4 x 25	Class 2	0.9	2	21	1140
LVIS09CXUAY2004C035SA001S	4 x 35	Class 2	0.9	2	23.5	1491
LVIS09CXUAY2004C050SA001S	4 x 50	Class 2	1	2	26	1957
LVIS09CXUAY2004C070SA001S	4 x 70	Class 2	1.1	2.2	30.5	2774
LVIS09CXUAY2004C095SA001S	4 x 95	Class 2	1.1	2.2	33.5	3714
LVIS09CXUAY2004C120SA001S	4 x 120	Class 2	1.2	2.4	37.5	4645
LVIS09CXUAY2004C150SA001S	4 x 150	Class 2	1.4	2.6	42	5719
LVIS09CXUAY2004C185SA001S	4 x 185	Class 2	1.6	2.8	46.5	7125
LVIS09CXUAY2004C240SA001S	4 x 240	Class 2	1.7	3	52.5	9253
LVIS09CXUAY2004C300SA001S	4 x 300	Class 2	1.8	3.2	58	11524

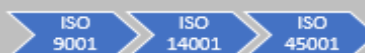
The above data is approximate & subject to manufacturing tolerance.

Electrical characteristics

Current carrying capacity and maximum DC conductor resistance.

Nominal area of conductor mm ²	Buried direct in the ground Amp.	In single way Ducts Amp.	In air Amp.	Max. DC conductor resistance at 20°C Ω/km
4	45	38	41	4.61
6	56	47	52	3.08
10	74	62	70	1.83
16	95	79	89	1.15
25	122	102	119	0.727
35	146	122	147	0.524
50	173	144	179	0.387
70	212	177	226	0.268
95	254	212	279	0.193
120	287	240	320	0.153

OUR ACCREDITATION



POLYCAB 2XY MC-4 IS 7098-P1

POWER CABLE 650/1100 V AC

Nominal area of conductor	Buried direct in the ground	In single way Ducts	In air	Max. DC conductor resistance at 20°C
mm ²	Amp.	Amp.	Amp.	Ω/km
150	321	269	365	0.124
185	362	304	422	0.0991
240	418	352	500	0.0754
300	469	396	574	0.0601
400	528	447	662	0.047

Air Ambient temperature: 40°C

Ground ambient temperature: 30°C,

The above table is in accordance with IS 3961(part 6):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

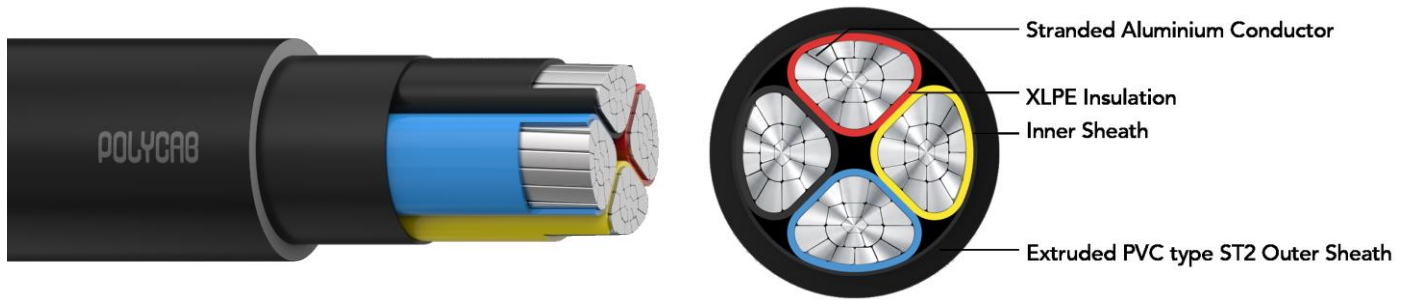
Maximum conductor temperature 90°C

OUR ACCREDITATION



POLYCAB A2XY MC-4 IS 7098-P1

POWER CABLE 650/1100 V AC



Application

POLYCAB A2XY MC-4, Stranded compacted aluminium conductor, XLPE insulated, and PVC sheathed conforming to IS 7098-1 is suitable for AC single phase or three phase (earthed or unearthed) systems with rated voltage up to and including 1100 V. This cable is also suitable for DC systems with rated voltage up to and including 1500 V to earth.

Voltage Rating

650/1100 V

Operation Temperature

Max.: 90°C

Short circuit temperature 250°C

Construction

- Stranded compacted (≤ 16 sqmm)/Non compacted aluminium conductor as per IS 8130, class 1 & 2
- Insulated with Cross Linked Polyethylene (XLPE) to IS 7098-1
- Extruded inner sheath with PVC Type ST2/FRLS/FR/LSZH
- Sheathed with Extruded PVC Type ST2/FRLS/FR/LSZH

Standard and References

IS 8130:2013

IS 5831:1984

IS 7098-1:1988

Compliance

Conductor resistance	- IS 8130:2013
Insulation resistance	- IS 7098-1:1988
Flammability test	- IEC 60332-1:2015



Core Identification

Red, Yellow, Blue and Black

Bending Radius

Fixed installation 12 x Overall diameter

OUR ACCREDITATION







POLYCAB A2XY MC-4 IS 7098-P1

POWER CABLE 650/1100 V AC

Weight & Dimension Data

Product code	Nominal cross-sectional area n x mm ²	Class of conductor	Nominal Thickness of Insulation mm	Nominal thickness of outer sheath mm	Overall Diameter mm	Weight (Approx.) kg/km
LVIS09AXUAY2004C004SA001S	4x4	Class 1	0.7	1.8	13.5	160
LVIS09AXUAY2004C006SA003S	4x6	Class 1	0.7	1.8	14.7	200
LVIS09AXUAY2004C010SA001S	4x10	Class 1	0.7	1.8	16.6	250
LVIS09AXUAY2004C004SA002S	4x4	Class 2	0.7	1.8	14.2	180
LVIS09AXUAY2004C006SA002S	4x6	Class 2	0.7	1.8	15.5	215
LVIS09AXUAY2004C010SA002S	4x10	Class 2	0.7	1.8	17.5	260
LVIS09AXUAY2004C016SA001S	4x16	Class 2	0.7	1.8	17.8	350
LVIS09AXUAY2004C025SA001S	4x25	Class 2	0.9	2	21	550
LVIS09AXUAY2004C035SA001S	4x35	Class 2	0.9	2	23.5	680
LVIS09AXUAY2004C050SA001S	4x50	Class 2	1	2	26	875
LVIS09AXUAY2004C070SA001S	4x70	Class 2	1.1	2.2	30.5	1200
LVIS09AXUAY2004C095SA001S	4x95	Class 2	1.1	2.2	33.5	1530
LVIS09AXUAY2004C120SA001S	4x120	Class 2	1.2	2.4	37.5	1850
LVIS09AXUAY2004C150SA001S	4x150	Class 2	1.4	2.6	42	2280
LVIS09AXUAY2004C185SA001S	4x185	Class 2	1.6	2.8	46.5	2800
LVIS09AXUAY2004C240SA001S	4x240	Class 2	1.7	3	52.5	3700
LVIS09AXUAY2004C300SA001S	4x300	Class 2	1.8	3.2	58	4600
LVIS09AXUAY2004C400SA001S	4x400	Class 2	2	3.6	65.5	6000

The above data is approximate & subject to manufacturing tolerance.

Electrical characteristics

Current carrying capacity and Maximum DC conductor resistance.

Nominal area of conductor mm ²	Buried direct in the ground Amp.	In single way Ducts Amp.	In air Amp.	Max. DC conductor resistance at 20°C Ω/km
4	35	30	32	7.41
6	46	38	42	4.61
10	57	48	54	3.08
16	74	61	69	1.91
25	95	79	93	1.2
35	114	94	114	0.868
50	134	112	138	0.641
70	164	137	175	0.443
95	197	164	216	0.32

OUR ACCREDITATION



POLYCAB A2XY MC-4 IS 7098-P1

POWER CABLE 650/1100 V AC

Nominal area of conductor	Buried direct in the ground	In single way Ducts	In air	Max. DC conductor resistance at 20°C
mm ²	Amp.	Amp.	Amp.	Ω/km
120	223	187	249	0.253
150	249	209	284	0.206
185	282	238	329	0.164
240	327	276	392	0.125
300	369	312	452	0.1
400	420	356	526	0.0778
500	478	412	612	0.0605

Air Ambient temperature: 40°C

Ground ambient temperature: 30°C,

The above table is in accordance with IS 3961(part 6):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

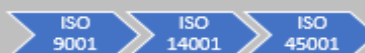
Maximum conductor temperature 90°C

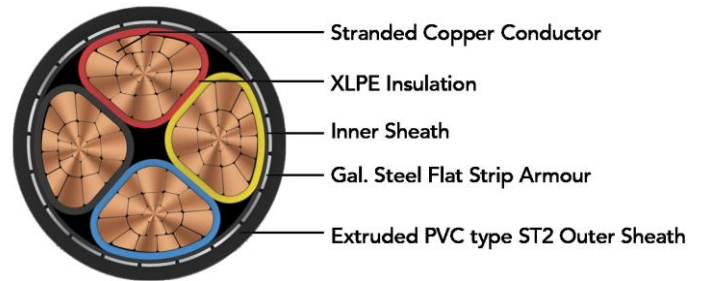
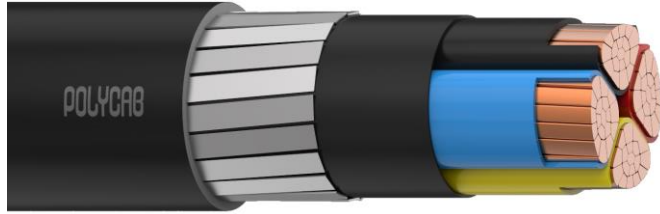
Rating factor for variation in ground temperature for cable in duct.

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

OUR ACCREDITATION





Application

POLYCAB 2XFY MC-4, Stranded compacted copper conductor, XLPE insulated, PVC inner sheathed, Galvanised Steel Flat strip armour and PVC sheathed conforming to IS 7098-1 is suitable for AC single phase or three phase (earthed or unearthed) systems with rated voltage up to and including 1100 V. This cable is also suitable for DC systems with rated voltage up to and including 1500 V to earth.

Voltage Rating

650/1100 V

Operation Temperature

Max.: 90°C

Short circuit temperature 250°C

Construction

- Stranded plain compacted sector shaped Copper conductor as per IS 8130, class 2
- Insulated with Cross Linked Polyethylene (XLPE) to IS 7098-1
- Extruded inner sheath with PVC Type ST2/FRLS/FR/LSZH
- Armoured with Galvanised Flat Steel Strip to IS 3975
- Sheathed with Extruded PVC Type ST2/FRLS/FR/LSZH

Standard and References

IS 8130:2013

IS 5831:1984

IS 3975:1979

IS 7098-1:1988

Compliance

Conductor resistance

- IS 8130:2013

Insulation resistance

- IS 7098-1:1988

Flammability test

- IEC 60332-1:2015



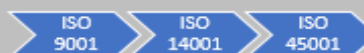
Core Identification

Red, Yellow, Blue and Black

Bending Radius

Fixed installation 12 x Overall diameter

OUR ACCREDITATION



Weight & Dimension Data

Product code	Nominal cross-sectional area	Nominal Thickness of Insulation	Nominal dimension of Armour flat wire	Minimum thickness of outer sheath	Overall Diameter	Weight (Approx.)
	n x mm ²	mm	mm	mm	mm	kg/km
LVIS09CXSFY2004C016SA001S	4 x16	0.7	4x0.8	1.4	20	969
LVIS09CXSFY2004C025SA001S	4 x25	0.9	4x0.8	1.4	23	1406
LVIS09CXSFY2004C035SA001S	4 x35	0.9	4x0.8	1.4	25	1786
LVIS09CXSFY2004C050SA001S	4 x50	1	4x0.8	1.56	28	2308
LVIS09CXSFY2004C070SA001S	4 x70	1.1	4x0.8	1.56	32	3154
LVIS09CXSFY2004C095SA001S	4 x95	1.1	4x0.8	1.56	35	4161
LVIS09CXSFY2004C120SA001S	4 x120	1.2	4x0.8	1.72	39	5101
LVIS09CXSFY2004C150SA001S	4 x150	1.4	4x0.8	1.88	43.5	6232
LVIS09CXSFY2004C185SA001S	4 x185	1.6	4x0.8	2.04	48	7676
LVIS09CXSFY2004C240SA001S	4 x240	1.7	4x0.8	2.2	54	9880
LVIS09CXSFY2004C300SA001S	4 x300	1.8	4x0.8	2.36	59.5	12198

The above data is approximate & subject to manufacturing tolerance.

Electrical characteristics

Nominal area of conductor mm ²	Buried direct in the ground Amp.	In single way Ducts Amp.	In air Amp.	Max. DC conductor resistance at 20°C Ω/km
16	95	79	89	1.91
25	122	102	119	1.2
35	146	122	147	0.868
50	173	144	179	0.641
70	212	177	226	0.443
95	254	212	279	0.32
120	287	240	320	0.253
150	321	269	365	0.206
185	362	304	422	0.164
240	418	352	500	0.125
300	469	396	574	0.100
400	528	447	662	0.0778

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 6):2016

OUR ACCREDITATION



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

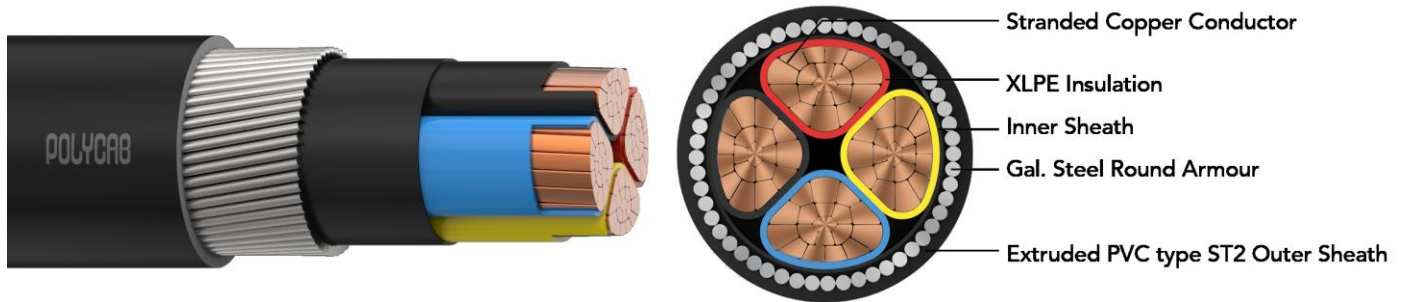
Rating factor for variation in ground temperature for cable in duct.

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

OUR ACCREDITATION





Application

POLYCAB 2XWY MC-4, Stranded compacted copper conductor, XLPE insulated, PVC inner sheathed, Galvanised Steel round wire armour and PVC sheathed conforming to IS 7098-1 is suitable for AC single phase or three phase (earthed or unearthed) systems with rated voltage up to and including 1100 V. This cable is also suitable for DC systems with rated voltage up to and including 1500 V to earth.

Voltage Rating

650/1100 V

Operation Temperature

Max.: 90°C

Short circuit temperature 250°C

Standard and References

IS 8130:2013

IS 5831:1984

IS 3975:1979

IS 7098-1:1988

Construction

- Stranded plain compacted sector shaped Copper conductor as per IS 8130, class 1&2
- Insulated with Cross Linked Polyethylene (XLPE) to IS 7098-1
- Extruded inner sheath with PVC Type ST2/FRLS/FR/LSZH
- Armoured with Galvanised Steel round wire to IS 3975
- Sheathed with Extruded PVC Type ST2/FRLS/FR/LSZH

Compliance

Conductor resistance

- IS 8130:2013

Insulation resistance

- IS 7098-1:1988

Flammability test

- IEC 60332-1:2015



Core Identification

Red, Yellow, Blue and Black

Bending Radius

Fixed installation 12 x Overall diameter

OUR ACCREDITATION



Weight & Dimension Data

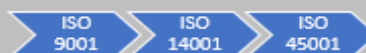
Product code	Nominal cross-sectional area n x mm ²	Class of Conductor	Nominal Thickness of Insulation mm	Nominal dimension of Armour round wire mm	Minimum thickness of outer sheath mm	Overall Diameter mm	Weight (Approx.) kg/km
LVIS09CXSWY2004C004SA002P	4x4	Class 1	0.7	1.4	1.24	15.3	503
LVIS09CXSWY2004C004SA001P	4x4	Class 2	0.7	1.4	1.24	16	533
LVIS09CXSWY2004C006SA002P	4x6	Class 1	0.7	1.4	1.24	16.5	618
LVIS09CXSWY2004C006SA001P	4x6	Class 2	0.7	1.4	1.24	17.3	646
LVIS09CXSWY2004C010SA001S	4x10	Class 2	0.7	1.4	1.4	19.8	870
LVIS09CXSWY2004C016SA001S	4x16	Class 2	0.7	1.6	1.4	21	1159
LVIS09CXSWY2004C025SA001S	4x25	Class 2	0.9	1.6	1.4	25	1615
LVIS09CXSWY2004C035SA001S	4x35	Class 2	0.9	1.6	1.4	26.5	2033
LVIS09CXSWY2004C050SA001S	4x50	Class 2	1	1.6	1.56	29.5	2593
LVIS09CXSWY2004C070SA001S	4x70	Class 2	1.1	2	1.56	34	3686
LVIS09CXSWY2004C095SA001S	4x95	Class 2	1.1	2	1.72	38	4769
LVIS09CXSWY2004C120SA001S	4x120	Class 2	1.2	2	1.88	42	5795
LVIS09CXSWY2004C150SA001S	4x150	Class 2	1.4	2.5	2.04	47	7324
LVIS09CXSWY2004C185SA001S	4x185	Class 2	1.6	2.5	2.2	52	8901
LVIS09CXSWY2004C240SA001S	4x240	Class 2	1.7	2.5	2.36	57.5	11210
LVIS09CXSWY2004C300SA001S	4x300	Class 2	1.8	3.15	2.52	64.5	14279

The above data is approximate & subject to manufacturing tolerance.

Electrical characteristics

Nominal area of conductor mm ²	Buried direct in the ground Amp.	In single way Ducts Amp.	In air Amp.	Max. DC conductor resistance at 20°C Ω/km
4	45	38	41	4.61
6	56	47	52	3.08
10	74	62	70	1.83
16	95	79	89	1.15
25	122	102	119	0.727
35	146	122	147	0.524
50	173	144	179	0.387

OUR ACCREDITATION



Nominal area of conductor mm ²	Buried direct in the ground Amp.	In single way Ducts Amp.	In air Amp.	Max. DC conductor resistance at 20°C Ω/km
70	212	177	226	0.268
95	254	212	279	0.193
120	287	240	320	0.153
150	321	269	365	0.124
185	362	304	422	0.0991
240	418	352	500	0.0754
300	469	396	574	0.0601
400	528	447	662	0.047

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 6):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

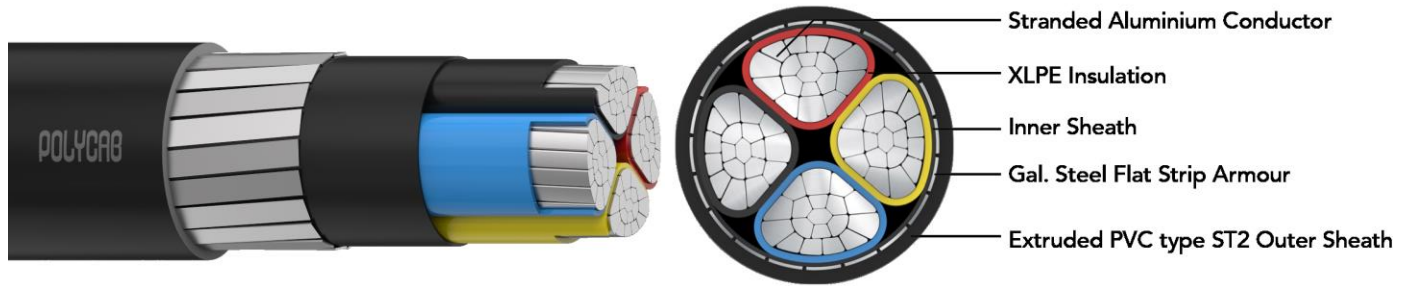
Rating factor for variation in ground temperature for cable in duct.

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

OUR ACCREDITATION





Application

POLYCAB A2XFY MC-4, Stranded compacted aluminium conductor, XLPE insulated, PVC inner sheathed, Galvanised Steel Flat strip armour and PVC sheathed conforming to IS 7098-1 is suitable for AC single phase or three phase (earthed or unearthed) systems with rated voltage up to and including 1100 V. This cable is also suitable for DC systems with rated voltage up to and including 1500 V to earth.

Voltage Rating

650/1100 V

Operation Temperature

Max.: 90°C

Short circuit temperature 250°C

Construction

- Stranded compacted sector shaped Aluminium conductor as per IS 8130, class 2
- Insulated with Cross Linked Polyethylene (XLPE) to IS 7098-1
- Extruded inner sheath with PVC Type ST2/FRLS/FR/LSZH
- Armoured with Galvanised Flat Steel Strip to IS 3975
- Sheathed with Extruded PVC Type ST2/FRLS/FR/LSZH

Standard and References

IS 8130:2013

IS 5831:1984

IS 3975:1979

IS 7098-1:1988

Compliance

Conductor resistance

- IS 8130:2013

Insulation resistance

- IS 7098-1:1988

Flammability test

- IEC 60332-1:2015



Core Identification

Red, Yellow, Blue and Black

Bending Radius

Fixed installation 12 x Overall diameter

OUR ACCREDITATION



Weight & Dimension Data

Product code	Nominal cross-sectional area n x mm ²	Nominal Thickness of Insulation mm	Nominal dimension of Armour flat wire mm	Minimum thickness of outer sheath mm	Overall Diameter mm	Weight (Approx.) kg/km
LVIS09AXSFY2004C016SA001S	4 x16	0.7	4x0.8	1.4	20	608
LVIS09AXSFY2004C025SA001S	4 x25	0.9	4x0.8	1.4	23	828.5
LVIS09AXSFY2004C035SA001S	4 x35	0.9	4x0.8	1.4	25	997
LVIS09AXSFY2004C050SA001S	4 x50	1	4x0.8	1.56	28	1235
LVIS09AXSFY2004C070SA001S	4 x70	1.1	4x0.8	1.56	32	1615
LVIS09AXSFY2004C095SA001S	4 x95	1.1	4x0.8	1.56	35	2014
LVIS09AXSFY2004C120SA001S	4 x120	1.2	4x0.8	1.72	39	2403
LVIS09AXSFY2004C150SA001S	4 x150	1.4	4x0.8	1.88	43	2888
LVIS09AXSFY2004C185SA001S	4 x185	1.6	4x0.8	2.04	48	3505
LVIS09AXSFY2004C240SA001S	4 x240	1.7	4x0.8	2.2	54	4389
LVIS09AXSFY2004C300SA001S	4 x300	1.8	4x0.8	2.36	59.5	5291
LVIS09AXSFY2004C400SA001S	4 x400	2	4x0.8	2.68	66.5	6538

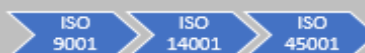
The above data is approximate & subject to manufacturing tolerance.

Electrical characteristics

Nominal area of conductor mm ²	Buried direct in the ground Amp.	In single way Ducts Amp.	In air Amp.	Max. DC conductor resistance at 20°C Ω/km
16	74	61	69	1.91
25	95	79	93	1.20
35	114	94	114	0.868
50	134	112	138	0.641
70	164	137	175	0.443
95	197	164	216	0.32
120	223	187	249	0.253
150	249	209	284	0.206
185	282	238	329	0.164
240	327	276	392	0.125
300	369	312	452	0.100
400	420	356	526	0.0778
500	478	412	612	0.0605

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 6):2016

OUR ACCREDITATION

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.

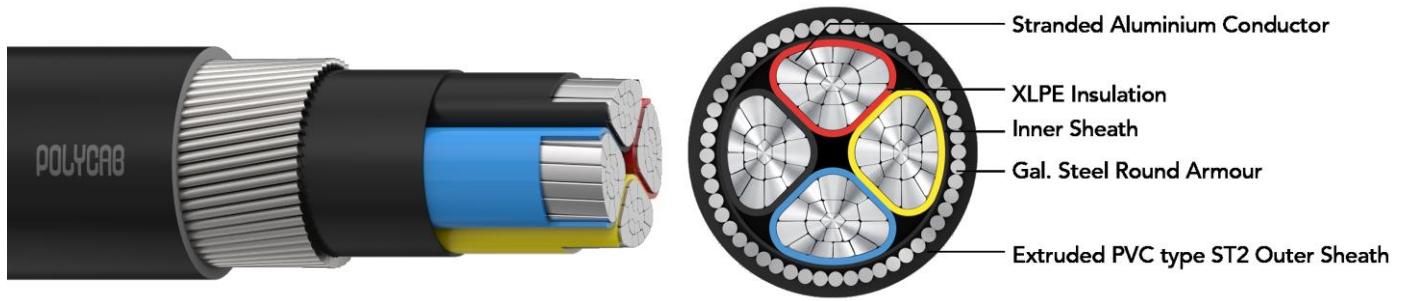
Ground Temperature	15°C	20°C	25°C	30°C	35°C	40°C	45°C	50°C
De-Rating Factor	1.12	1.08	1.04	1.00	0.96	0.91	0.87	0.82

Maximum conductor temperature 90°C

OUR ACCREDITATION



POWER CABLE 650/1100 V AC



Application

POLYCAB A2XWY MC-4, Stranded compacted aluminium conductor, XLPE insulated, PVC inner sheathed, Galvanised Steel round wire armour and PVC sheathed conforming to IS 7098-1 is suitable for AC single phase or three phase (earthed or unearthed) systems with rated voltage up to and including 1100 V. This cable is also suitable for DC systems with rated voltage up to and including 1500 V to earth.

Voltage Rating

650/1100 V

Operation Temperature

Max.: 90°C

Short circuit temperature 250°C

Construction

- Stranded compacted sector shaped Aluminium conductor as per IS 8130, class 1&2
- Insulated with Cross Linked Polyethylene (XLPE) to IS 7098-1
- Extruded inner sheath with PVC Type ST2/FRLS/FR/LSZH
- Armoured with Galvanised Steel round wire to IS 3975
- Sheathed with Extruded PVC Type ST2/FRLS/FR/LSZH

Standard and References

- IS 8130:2013
- IS 5831:1984
- IS 3975:1979
- IS 7098-1:1988

Compliance

- Conductor resistance - IS 8130:2013
- Insulation resistance - IS 7098-1:1988
- Flammability test - IEC 60332-1:2015



Core Identification

Red, Yellow, Blue and Black

Bending Radius

Fixed installation 12 x Overall diameter

OUR ACCREDITATION

POWER CABLE 650/1100 V AC

Weight & Dimension Data

Product code	Nominal cross-sectional area	Class of conductor	Nominal Thickness of Insulation	Nominal dimension of Armour round wire	Minimum thickness of outer sheath	Overall Diameter	Weight (Approx.)
	n x mm ²		mm	mm			
LVIS09AXSWY2004C004SA002S	4 x4	Class 1	0.7	1.4	1.24	15.3	413
LVIS09AXSWY2004C004SA003P	4 x4	Class 2	0.7	1.4	1.24	16	435
LVIS09AXSWY2004C006SA002P	4 x6	Class 1	0.7	1.4	1.24	16.5	473
LVIS09AXSWY2004C006SA001P	4 x6	Class 2	0.7	1.4	1.24	17.3	506
LVIS09AXSWY2004C010SA003P	4 x10	Class 1	0.7	1.4	1.4	18.6	592
LVIS09AXSWY2004C010SA001P	4 x10	Class 2	0.7	1.4	1.4	19.8	633
LVIS09AXSWY2004C016SA003S	4 x16	Class 2	0.7	1.6	1.4	21	795
LVIS09AXSWY2004C025SA001S	4 x25	Class 2	0.9	1.6	1.4	25	1045
LVIS09AXSWY2004C035SA001S	4 x35	Class 2	0.9	1.6	1.4	26.5	1244
LVIS09AXSWY2004C050SA001S	4 x50	Class 2	1	1.6	1.56	29.5	1520
LVIS09AXSWY2004C070SA001S	4 x70	Class 2	1.1	2	1.56	34	2137
LVIS09AXSWY2004C095SA001S	4 x95	Class 2	1.1	2	1.72	38	2622
LVIS09AXSWY2004C120SA001S	4 x120	Class 2	1.2	2	1.88	42	3087
LVIS09AXSWY2004C150SA001S	4 x150	Class 2	1.4	2.5	2.04	47	3980
LVIS09AXSWY2004C185SA001S	4 x185	Class 2	1.6	2.5	2.2	52	4721
LVIS09AXSWY2004C240SA001S	4 x240	Class 2	1.7	2.5	2.36	57.5	5709
LVIS09AXSWY2004C300SA001S	4 x300	Class 2	1.8	3.15	2.52	64.5	7372
LVIS09AXSWY2004C400SA001S	4 x400	Class 2	2	3.15	2.84	71.5	8985

The above data is approximate & subject to manufacturing tolerance.

Electrical characteristics

Nominal area of conductor mm ²	Buried direct in the ground Amp.	In single way Ducts Amp.	In air Amp.	Max. DC conductor resistance at 20°C Ω/km
4	35	30	32	7.41
6	46	38	42	4.61
10	57	48	54	3.08
16	74	61	69	1.91
25	95	79	93	1.20
35	114	94	114	0.868
50	134	112	138	0.641

OUR ACCREDITATION



POWER CABLE 650/1100 V AC

Nominal area of conductor mm ²	Buried direct in the ground Amp.	In single way Ducts Amp.	In air Amp.	Max. DC conductor resistance at 20°C Ω/km
70	164	137	175	0.443
95	197	164	216	0.32
120	223	187	249	0.253
150	249	209	284	0.206
185	282	238	329	0.164
240	327	276	392	0.125
300	369	312	452	0.100
400	420	356	526	0.0778
500	478	412	612	0.0605

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 6):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

OUR ACCREDITATION

