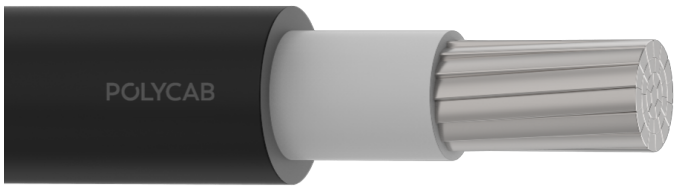
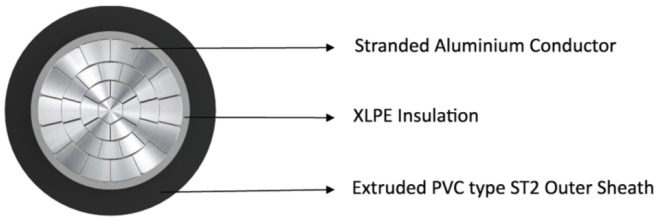
POLYCAB A2XY SC IS 7098-P1
POWER CABLE 650/1100 V AC





Images not to scale. Follow table for dimensions

APPLICATION

POLYCAB A2XY SC, 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.

CHARACTERISTICS

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

Core Identification
Red/Black/Yellow/Blue/Natural

Bending Radius
Fixed installation 12 x Overall diameter

OUTSTANDING FEATURES

- High life
- High Insulation resistance
- Flame retardant
- Low Halogen
- Low smoke
- UV resistant

STANDARD FOLLOWS

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 ACCREDITATIONS

APPROVAL

POLYCAB A2XY SC IS 7098-P1
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POLYCAB
IDEAS. CONNECTED.

Weight & Dimension Data

Product code	Conductor size	Class of conductor	Nominal Thickness of Insulation	Nominal thickness of outer sheath	Overall Diameter	Weight (Approx.)
	n x mm²		mm	mm	mm	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.

Electrical characteristics

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

Nominal cross sectional area	Buried direct in the ground		In single way Ducts		In air		Max. DC conductor resistance at 20°C
	2 single core cables	3 single core cable	2 single core cables	3 single core cable	2 single core cables	3 single core cable	
mm²	Amp.	Amp.	Amp.	Amp.	Amp.	Amp.	Ω/km
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

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	2 single core cables	3 single core cable	2 single core cables	3 single core cable	2 single core cables	3 single core cable	
mm²	Amp.	Amp.	Amp.	Amp.	Amp.	Amp.	Ω/km
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

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