



Images not to scale. Follow table for dimensions

## APPLICATION

POLY CAB 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 unearthing) 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



# POLY CAB A2XY SC IS 7098-P1 POWER CABLE 650/1100 V AC

**POLY CAB**  
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 mm <sup>2</sup>		mm	mm	mm	kg/km
LVIS09AXUAY2001C004SA001P	1 x 4	Class 1	0.7	1.8	7.5	60
LVIS09AXUAY2001C006SA001S	1 x 6	Class 1	0.7	1.8	8	70
LVIS09AXUAY2001C010SA002S	1 x 10	Class 1	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 mm <sup>2</sup>	Buried direct in the ground		In single way Ducts			In air		Max. DC conductor resistance at 20°C Ω/km
	2 single core cables	3 single core cable	2 single core cables	3 single core cable	2 single core cables	3 single core cable	3 single core cable	
Amp.	Amp.	Amp.	Amp.	Amp.	Amp.	Amp.	Amp.	Ω/km
4	43	37	36	34	38	33	33	7.41
6	55	47	47	43	50	43	43	4.61
10	69	59	58	54	64	55	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	3 single core cable	
Amp.	Amp.	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

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