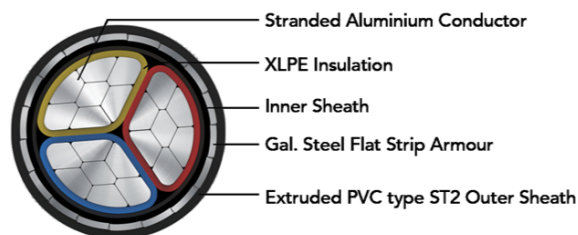
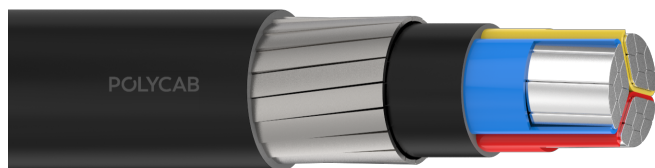


# POLYCAB A2XFY MC-3 IS 7098-P1 POWER CABLE 650/1100 V AC



Images not to scale. Follow table for dimensions

## APPLICATION

POLYCAB A2XFY MC-3, Stranded compacted aluminium conductor, XLPE insulated, PVC inner sheathed, Galvanised Steel Flat strip armour 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 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

**Core Identification**  
Red, Yellow, Blue

**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 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 ACCREDITATIONS



## APPROVAL



**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 <sup>2</sup>	mm	mm	mm	mm	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	Buried direct in the ground	In single way Ducts	In air	Max. DC conductor resistance at 20°C
mm <sup>2</sup>	Amp.	Amp.	Amp.	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

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Nominal area of conductor mm <sup>2</sup>	Buried direct in the ground Amp.	In single way Ducts Amp.	In air Amp.	Max. DC conductor resistance at 20°C Ω/km
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