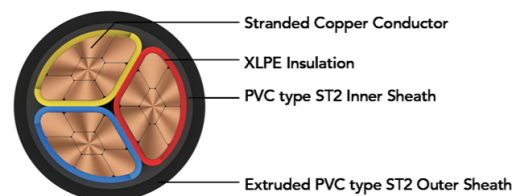


# POLYCAB 2XY MC-3 IS 7098-P1 POWER CABLE 650/1100 V AC



Images not to scale. Follow table for dimensions

## APPLICATION

POLYCAB 2XY MC-3, 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.

## CHARACTERISTICS

**Voltage Rating**  
650/1100 V

**Operation Temperature**  
Max.: 90°C  
Short circuit temperature 250°C

## CONSTRUCTION

- Stranded plain compacted ( $\leq 16 \text{ sqmm}$ )/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

**Core Identification**  
Red, Yellow and Blue

**Bending Radius**  
Fixed installation 12 x Overall diameter

## OUTSTANDING FEATURES

- Flame Retardant
- Low Smoke
- Low Halogen

## 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



**Weight & Dimension Data**

Product code	Nominal cross-sectional area	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
LVIS09CXUAY2003C004SA002S	3 x 4	Class1	0.7	1.8	13	210
LVIS09CXUAY2003C004SA001S	3 x 4	Class 2	0.7	1.8	13.5	232
LVIS09CXUAYL003C006SA002S	3 x 6	Class1	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**

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
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

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# POLYCAB 2XY MC-3 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 <sup>2</sup>	Amp.	Amp.	Amp.	Ω/km
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

Current carrying capacity and maximum DC conductor resistance.

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