INDO CABLES
EVERY CONNECTION MATTERS

PRODUCT DATASHEET
LV Power Cable · IS 7098-1

LV-09
SHEET NO.

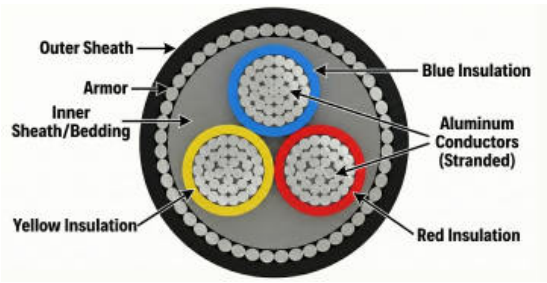
LOW VOLTAGE POWER CABLE · 3-CORE · A2XWY

650/1100 V · 3-CORE ALUMINIUM

XLPE insulated · galvanised round steel wire armoured (A2XWY) · PVC sheathed · manufactured to IS 7098 Part 1

650/1100 V	**+90** °C	**250** °C
Rated voltage	Max. operating temperature	Max. short-circuit temperature

CABLE / SIDE VIEW · INDOCABLES sheath print



CROSS-SECTION · construction callouts

Images not to scale. Follow table for dimensions.

APPLICATION

INDOCABLE A2XWY MC-3, stranded compacted aluminium conductor, XLPE insulated, and PVC sheathed, galvanised steel round wire 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.

CONSTRUCTION

Conductor	Stranded compacted sector shaped aluminium conductor as per IS 8130, class 1 & 2
Insulation	Cross-linked polyethylene (XLPE) to IS 7098-1
Inner sheath	Extruded PVC Type ST2 / FRLS / FR / LSZH
Armouring	Galvanized steel round wire to IS 3975
Outer sheath	Sheathed with extruded PVC Type ST2 / FRLS / FR / LSZH
Core identification	Red, Yellow and Blue
Bending radius	Fixed installation: 12 × overall diameter

Parth Chhaperia +918073533289 **Aryan Chhaperia** +91808810785 **Neelmani Chaudhary** +91 7011005815
cables@micagroup.net

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

Parth Chhaperia +918073533289 **Aryan Chhaperia** +91808810785 **Neelmani Chaudhary** +91 7011005815
cables@micagroup.net

WEIGHT & DIMENSION DATA

Product code	Nominal cross-sectional area n × mm²	Class of conductor	Nominal insulation thickness mm	Nominal dimension of armour round wire mm	Min. outer sheath thickness mm	Overall diameter mm	Weight (approx.) kg/km
IC-PW-03-00400-AL-2XL-A2XWY-1100-IS7098P1-FRLS*	3 × 4	Class 1	0.7	1.4	1.24	15	460
IC-PW-03-00400-AL-2XL-A2XWY-1100-IS7098P1-FRLS*	3 × 4	Class 2	0.7	1.4	1.24	16	399
IC-PW-03-00600-AL-2XL-A2XWY-1100-IS7098P1-FRLS*	3 × 6	Class 1	0.7	1.4	1.24	16	530
IC-PW-03-00600-AL-2XL-A2XWY-1100-IS7098P1-FRLS*	3 × 6	Class 2	0.7	1.4	1.24	17	470
IC-PW-03-01000-AL-2XL-A2XWY-1100-IS7098P1-FRLS	3 × 10	Class 1	0.7	1.4	1.24	18	640
IC-PW-03-01000-AL-2XL-A2XWY-1100-IS7098P1-FRLS	3 × 10	Class 2	0.7	1.4	1.24	18.5	551
IC-PW-03-01600-AL-2XL-A2XWY-1100-IS7098P1-FRLS	3 × 16	Class 2	0.7	1.6	1.4	19	648.4
IC-PW-03-02500-AL-2XL-A2XWY-1100-IS7098P1-FRLS	3 × 25	Class 2	0.9	1.6	1.4	21.7	855
IC-PW-03-03500-AL-2XL-A2XWY-1100-IS7098P1-FRLS	3 × 35	Class 2	0.9	1.6	1.4	23.6	997
IC-PW-03-05000-AL-2XL-A2XWY-1100-IS7098P1-FRLS	3 × 50	Class 2	1	1.6	1.56	26.8	1235
IC-PW-03-07000-AL-2XL-A2XWY-1100-IS7098P1-FRLS	3 × 70	Class 2	1.1	2	1.56	30.9	1729
IC-PW-03-09500-AL-2XL-A2XWY-1100-IS7098P1-FRLS	3 × 95	Class 2	1.1	2	1.56	33.7	2077
IC-PW-03-12000-AL-2XL-A2XWY-1100-IS7098P1-FRLS	3 × 120	Class 2	1.2	2	1.72	37	2422
IC-PW-03-15000-AL-2XL-A2XWY-1100-IS7098P1-FRLS	3 × 150	Class 2	1.4	2	1.88	41.1	2888
IC-PW-03-18500-AL-2XL-A2XWY-1100-IS7098P1-FRLS	3 × 185	Class 2	1.6	2.5	2.04	46	3733
IC-PW-03-24000-AL-2XL-A2XWY-1100-IS7098P1-FRLS	3 × 240	Class 2	1.7	2.5	2.2	50.9	4531
IC-PW-03-30000-AL-2XL-A2XWY-1100-IS7098P1-FRLS	3 × 300	Class 2	1.8	2.5	2.36	55.45	5339
IC-PW-03-40000-AL-2XL-A2XWY-1100-IS7098P1-FRLS	3 × 400	Class 2	2	3.15	2.68	64	7115
IC-PW-03-50000-AL-2XL-A2XWY-1100-IS7098P1-FRLS*	3 × 500	Class 2	2.2	3.15	2.84	73	8597
IC-PW-03-63000-AL-2XL-A2XWY-1100-IS7098P1-FRLS*	3 × 630	Class 2	2.4	4	3	78	11295

The above data is approximate & subject to manufacturing tolerance. Codes marked * are not in the Item Master and are derived from the code structure; the register does not encode conductor class, so Class 1 and Class 2 variants of the same size share one code — see run report.

ELECTRICAL CHARACTERISTICS

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

Parth Chhaperia +918073533289 **Aryan Chhaperia** +91808810785 **Neelmani Chaudhary** +91 7011005815
cables@micagroup.net

Nominal area of conductor mm²	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
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

90°C
Conductor operating temperature

40°C
Air ambient temperature

30°C
Ground ambient temperature

IS 3961 (Part 6):2016
Basis of the above table

Parth Chhaperia +918073533289 **Aryan Chhaperia** +91808810785 **Neelmani Chaudhary** +91 7011005815
cables@micagroup.net

DE-RATING FACTORS

Rating factor for variation in ambient air temperature for cable in free air. Maximum conductor temperature 90°C.

Ambient air temperature °C	25	30	35	40	45	50	55	60
De-rating factor	1.14	1.10	1.05	1.00	0.95	0.89	0.84	0.77

Rating factor for variation in ground temperature for direct buried cables. Maximum conductor temperature 90°C.

Ground temperature °C	15	20	25	30	35	40	45	50
De-rating factor	1.12	1.08	1.04	1.00	0.96	0.91	0.87	0.82

Rating factor for variation in ground temperature for cable in duct. Maximum conductor temperature 90°C.

Ground temperature °C	15	20	25	30	35	40	45	50
De-rating factor	1.12	1.08	1.04	1.00	0.96	0.91	0.87	0.82

OUR ACCREDITATIONS & APPROVAL

ISO 9001
Cert. 99 100 22646 (TÜV SÜD)

ISI
Bureau of Indian Standards · CM/L 6200267409

RoHS
Compliant

REACH
Compliant

Make in India
Manufactured in India

Parth Chhaperia +918073533289 **Aryan Chhaperia** +91808810785 **Neelmani Chaudhary** +91 7011005815
cables@micagroup.net