



SPECIALCAVI BALDASSARI S.r.l.



AZIENDA CERTIFICATA
UNI EN ISO 9001:2015



e-mail: areatecnica@specialcavibaldassari.it

DATA SHEET

Cable type: H1Z2Z2-K IEMMEQU-HAR according to EN 50618 Eca
LSZH unipolar cable for photovoltaic and solar plants with UV resistant sheath

Pag. 1/2

TECHNICAL CHARACTERISTICS:

Operating Voltage A.C. 1,0/1,0KV - D.C. 1,5/1,5KV

Max. operating voltage A.C. 1,2KV - D.C. 1,8KV

Test voltage A.C. 6,5KV or D.C. 15KV for 5 min

Operating temperature Max. 90°C at conductor (lifetime acc. to EN 50618 = 25 years).

The expected period of use at max. conductor temperature of 120°C and at the max. ambient temperature of 90°C is limited to 20000 h

Ambient work temperature -40 / + 90 °C

Max. storage temperature +40°C

Min. temperature for installation and handling -25°C

Max. short circuit temperature +250 °C for 5s

Laying Fixed.

Maximum pulling stress 15 N/mm² in operation, 50 N/mm² during installation

Min. bending radius 4 times the outer Ø

Presence of water Condition AD7

NORMATIVE MAIN REFERENCE:

Electric Cables for photovoltaic systems EN 50618

Conductor EN 60228, EN 50395

Insulation and sheath compound characteristics EN 50618

Cable electrical test EN 50618, EN 50395, EN 62230

Constructional and dimensional test EN 50618, EN 50396, EN 60228

Compatibility test EN 60811-401, EN 50618

Cold test EN 60811-504, EN 60811-505, EN 60811-506, EN 50618

Ozone resistance on complete cable EN 60811-403, EN 50396, EN 50618

Weathering/UV resistance on sheath EN 50618, EN 50289-4-17 method A

Dynamic penetration test EN 50618

Damp heat test EN 60068-2-78

Shrinkage test on sheath EN 60811-503

No flame propagation test EN 60332-1-2

Smoke emission of complete cable EN 61034-2 (LT≥60%)

Assessment of halogen for all non-metallic material EN 50525-1

Insulation and sheath compound thermal endurance EN 50618, EN 60216-1, EN 60216-2

Reaction to fire - Performance: EN 50575:2016 Eca

TECHNICAL DATA:

CONDUCTOR: Tinned copper multi-wires class 5

INSULATION: LSZH reticulated elastomeric compound ; colour neutral

OUTER SHEATH: LSZH reticulated elastomeric compound UV resistant colour BLACK or RED

**PRINTED: <HAR> IEMMEQU CE 0987 H1Z2Z2-K formation mm² SPECIALCAVI BALDASSARI year
Lot ECA**

PRODUZIONE CAVI ELETTRICI SPECIALI

Via Pieraccini n.76 – 55012 CAPANNORI (Lucca) – Tel. (0583) 935741/936362 – Fax ric. aut. 0583 429474



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Section mm ²	Max. conductor resistance at 20° C (Ω/Km)	Approx. outer diameter mm	Approx. cable weight kg/km	Current carrying capacity for (60°C ambient temperature)		
				A		
				Single cable free in air	Single cable on a surface	Two loaded cables touching, on a surface
1,5	13,7	4,7	32	30	29	24
2,5	8,21	5,1	43	41	39	33
4	5,09	5,6	58	55	52	44
6	3,39	6,2	78	70	67	57
10	1,95	7,2	119	98	93	79
16	1,24	8,4	179	132	125	107
25	0,795	10,3	274	176	167	142
35	0,565	11,7	372	218	207	176
50	0,393	13,5	523	276	262	221
70	0,277	15,4	714	347	330	278
95	0,210	17,5	959	416	395	333
120	0,164	19,2	1192	488	464	390

Note = The expected period of use at max. conductor temperature of 120°C and at the max. ambient temperature of 90°C is limited to 20000 h.

Current rating conversion factors for different ambient temperatures

- Conversion factor Ambient temperature up 60°C = 1,00
- Conversion factor Ambient temperature 70°C = 0,92
- Conversion factor Ambient temperature 80°C = 0,84
- Conversion factor Ambient temperature 90°C = 0,75

Capannori, 09/05/2019

Laboratory manager
Giovan Battista Checchi

FOR CUSTOMER ACCEPTANCE
DATE SIGN

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