ttcables
ELECTRIC CABLE WORKS



AXQJ, IFSI Al, AXCMK-HF

XLPE insulated and HFFR sheathed power cable with Cu concentric cond., rated voltage 0,6/1 kV

APPLICATION

Aluminum power cable designed for permanent installation both indoors and outdoors. Suitable for direct burial in the ground. The conductor insulation must be protected against ultraviolet (UV) exposure. All installation work must comply with applicable national standards and regulations. This cable is halogen-free and exhibits flame-retardant properties, classified under CPR as Cca-s1,d1,a1.

CONSTRUCTION

Conductors: Al, class 2 according to EN 60228
Insulation: XLPE compound
Bedding: Extruded elastomere or plastomere compound or plastic tape
Concentric conductor: Cu wires with counter helix of Cu tape
Sheath: HFFR compound, UV resistant

CORE IDENTIFICATION

According to HD 308 S2

Insulation Color:
3-core (b): ● Black ● Brown ● Grey
4-core (b): ● Blue ● Brown ● Black ● Grey

Outer Sheath Colour:
● Black
Other colours available on request

TECHNICAL CHARACTERISTICS

CPR class: Cca – s1,d1,a1
Test voltage: 4 kV AC, 50 Hz, 5 min. per core
Rated voltage: 0,6/1 kV
Min. laying temperature: -15°C
Min. working temperature: -40°C
Max. cond. operating temp.: 90°C
Max. short-circuit temperature: 250°C
Bending radius (min): single-core- 20D; multicore- 16D, D – overall diameter
Min. bending radius during installation: single-core- 10D; multicore- 8D
Fire properties: IEC 60332-1-2; IEC 60332-3-24
IEC 61034-2; IEC 60754-1
IEC 60754-2

STANDARD

SFS 5546; HD 604 S1, P. 5I; SS 424 14 18;
IEC 60502-1

CERTIFICATION

RoHS compliant
International Electrotechnical Commission

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NOMINAL CROSS-SECTION	MAX. RESISTANCE AT 20°c	CURRENT CAPACITY IN AIR		CURRENT CAPACITY IN GROUND	SHORT CIRCUIT CURRENT, 1 S	OUTER DIAM. (APPROX.)	CABLE WEIGHT (APPROX.)
		METHOD A *	METHOD C **				
mm²	Ω/km	A	A	A		mm	kg/km
3x25/16	1,200/1,830	72	102	130	2,34	22,2	677
3x35/16	0,868/1,830	88	126	160	3,27	24,4	802
3x50/16	0,641/1,200	105	153	190	4,67	26,7	933
3x70/21	0,443/0,868	133	195	240	6,54	30,9	1330
3x95/29	0,320/0,641	159	236	285	8,88	33,9	1701
3x120/41	0,253/0,443	185	274	325	11,22	37,4	2145
3x150/41	0,206/0,443	208	317	370	14,02	41,7	2576
3x185/57	0,164/0,320	236	361	420	17,29	45,6	3182
3x240/72	0,125/0,253	278	427	480	22,43	51,2	4043
3x300/88	0,100/0,206	316	492	550	28,04	56,6	4948
4x16/10	1,910/1,830	55	80	100	1,5	22,9	727
4x25/16	1,200/1,830	72	102	130	2,34	24,5	797
4x35/16	0,868/1,830	88	126	160	3,27	26,9	959
4x50/16	0,641/1,200	105	153	190	4,67	29,9	1161
4x70/21	0,443/0,868	133	195	240	6,54	34,5	1636
4x95/29	0,320/0,641	159	236	285	8,88	38,1	2099
4x120/41	0,253/0,443	185	274	325	11,22	42,5	2661
4x150/41	0,206/0,443	208	317	370	14,02	46,7	3183
4x185/57	0,164/0,320	236	361	420	17,29	51,7	3993
4x240/72	0,125/0,253	278	427	480	22,43	57,6	5018
4x300/88	0,100/0,206	316	492	550	28,04	63,2	6110

Basic assumptions in ground installations are:
- temperature of ground: +15°C
- depth of laying: 0,7 m
- thernal resistivity of soil: 0,7 K m/W

In air installations the ambient is +25°C

*Method A of installation: a cable in conduit in a thermally insulated wall (see reference method A2 in IEC 60364-5-52)
**Method C of installation: a cable on a wooden wall (see reference method C in IEC 60364-5-52)