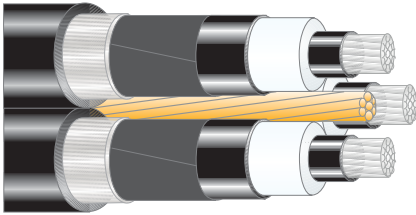


Power cables 24 kV

AHXAMK-W 12/20(24) kV



Application fields

AHXAMK-W (Wiski™) is assembled from 3-single core cables wrapped around a compact copper conductor. Each cable is radial and longitudinal water sealed. For fixed outdoor installation, can be ploughed down.

Alternative designation

FI-N20XA4EC-AR

Standard

CENELEC HD 620 Part 10 Section F

Fire propagation class

No requirement

Temperature range

In continuous operation
max. conductor temp 90 °C.
Lowest cable temperature during
installation: -20 °C below 0 °C
special precaution shall be taken.

Material declaration

AHXAMK-W

Impulse voltage

125 kV

Bending radius

At fixed mounting: 10 x D
At pulling-in: 15 x D
At ploughing-down: 8 x D

Design

Conductor:	Stranded, round and compacted aluminium acc. to IEC 60228 class 2, longitudinal water sealed
Conductor screen:	Extruded
Insulation:	XLPE, min thickness = 4,85 mm
Insulation screen:	Extruded bonded
Longitudinal water sealing:	Semi conducting water blocking tape
Radial water sealing:	Aluminium-PE laminate, bonded to sheath
Sheath:	PE, black
Centre conductor:	Stranded, round and compacted copper acc. to IEC 60228 class 2
Laying up:	Three cores are laid up together around the centre conductor
Marking e.g.:	AHXAMK-W 12/20 kV 3x95Al+35Cu DRAKA "Date and time", 1 core is metre marked

Number of cores x cross-section of conductor mm ²	Diameter over insulation mm	Single cable diameter (approx.) mm	Complete cable diameter (approx.) mm	Weight (approx.) kg/km	Standard delivery length m	Standard drum size	Article-number
3x50AL+35CU	19,5	28,0	62,5	2330	500	K24	20118180
3x70AL+35CU	21,1	29,5	65,5	2655	500	K24	20102203
3x95AL+35CU	22,8	31,5	69,5	3030	500	K24	20102204
3x120AL+35CU	24,1	32,5	72,0	3330	500	K26	20078168
3x150AL+35CU	25,7	34,0	75,0	3725	500	K26	20102205
3x185AL+35CU	27,4	36,0	79,0	4210	500	K26	20102206
3x240AL+35CU	29,6	38,5	83,5	4845	500	K28	20078171
3x300AL+35CU	32,1	41,5	92,0	6115	500	K28	20102207

AHXAMK-W 12/20(24) kV Cont

Electrical data at +20 °C

Number of cores x cross-section of conductor mm ²	Conductor resistance Ω/km	Centre conductor resistance Ω/km	Inductans mH/km	Reactance Ω/km	Capacitans μF/km	Charging current/phase A/km	Earth fault current A/km
3x50AL+35CU	0,641	0,524	0,44	0,14	0,17	0,6	1,9
3x70AL+35CU	0,443	0,524	0,41	0,13	0,19	0,7	2,1
3x95AL+35CU	0,320	0,524	0,39	0,12	0,21	0,8	2,4
3x120AL+35CU	0,253	0,524	0,38	0,12	0,23	0,9	2,6
3x150AL+35CU	0,206	0,524	0,37	0,12	0,25	0,9	2,8
3x185AL+35CU	0,164	0,524	0,35	0,11	0,27	1,0	3,1
3x240AL+35CU	0,125	0,524	0,34	0,11	0,30	1,2	3,7
3x300AL+70CU	0,100	0,268	0,33	0,10	0,33	1,4	4,2

Electrical data

Number of cores x cross-section of conductor mm ²	Current rating at core temp. 65 °C in ground* A	Current rating at core temp. 65 °C in air* A	Current rating at core temp. 90 °C in air* A	Max. short-circuit current on the conductor during 1 s at initial temp. 65 °C kA	Max. short-circuit current on the conductor during 1 s at initial temp. 90 °C kA
3x50AL+35CU	155	160	195	5,2	4,7
3x70AL+35CU	200	190	235	7,2	6,6
3x95AL+35CU	235	230	280	9,9	8,9
3x120AL+35CU	265	265	325	12,4	11,3
3x150AL+35CU	300	300	370	15,6	14,2
3x185AL+35CU	330	345	425	19,2	17,5
3x240AL+35CU	385	400	490	25,0	22,7
3x300AL+70CU	435	460	565	31,2	28,3

*Trefoil with screen grounded in both ends.
Nominal values unless otherwise specified.

Conditions

The ratings are based on the following conditions

- maximum conductor temperature 90 °C
- ground temperature 15 °C
- air temperature 25 °C
- thermal resistivity of soil 1,0 °K m/W
- depth of burial 0,65 m
- frequency 50 Hz