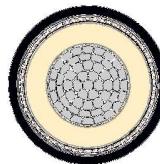


**AXLJ-F TT 24 kV**

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12/20(24) kV  
CENELEC HD 620S2:2010 Part 10  
Section M

**Medium Voltage Aluminium Power Cable**

Conductor: Watertight round stranded and compacted aluminium conductor.(IEC60228 class 2).

Conductor screen: Semi-conducting cross-linked polyethylene (XLPE) with nominal thickness of 0,5 mm.

Insulation: Extruded cross-linked polyethylene having nominal thickness of 5,5 mm.

Insulation screen: Semi-conducting XLPE with nominal thickness of 0,5 mm.

Longitudinal watertightness: Semi-conducting swelling tape over insulation screen and metallic screen area. Swelling waterblocking powder also between the conductor wires.

Metallic screen: Cu-screen made of helically applied copper wires.

Radial watertightness: PE-laminated aluminium foil bonded to the sheath. Nominal thickness of aluminium is 0,2 mm. Aluminium foil acts also as a part of metallic screen.

Sheath: Black weather resistant polyethylene (PE-LLD).

Temperature limits: Max. conductor temperature 90 °C  
Max. short circuit temperature 250 °C (duration not exceeding 5 sec.)

Min. temperature during handling and installation - 20 °C  
Min. temperature during transport - 40 °C

Applications: Cable is intended for fixed installations indoors and outdoors and may also be buried in soil. This longitudinally and radially watertight cable construction is applicable where wet soil and/or existence of water in cable ducts permanently occurs.

**AXLJ-F TT 24 kV**

12/20(24) kV

CENELEC HD 620S2:2010 Part 10 Section M

Technical details	1x50/16	1x95/16	1x150/25	1x240/25	1x240/35	1x300/25	1x300/35	1x400/35	1x500/35	1x630/35	1x800/35	1x1000/35	1x1200/35
<b>Product code</b>	1186382	1186384	1186386	1186388	1186248	1186389	1186259	1186390	1186669	1186670	1186393	1186394	1186415
Conductor diameter (mm)	8,1	11,2	14,1	18,0	18,0	20,3	20,3	23,0	25,7	29,4	33,3	37,8	41,4
Insulation thickness (mm)	5,5	5,5	5,5	5,5	5,5	5,5	5,5	5,5	5,5	5,5	5,5	5,5	5,5
Screen size (mm <sup>2</sup> )	16	16	25	25	35	25	35	35	35	35	35	35	35
Outersheath thickness (mm)	1,8	1,9	2,0	2,2	2,2	2,3	2,3	2,4	2,5	2,6	2,7	2,8	2,9
Outer diameter (mm)	28	32	35	39	39	42	42	46	49	51	57	63	68
Weight (kg)	640	850	1120	1500	1600	1770	1800	2240	2550	3000	4000	4670	5400
<b>Max. pulling force</b>													
- with pulling eye (kN)	2,5	4,8	7,5	12	12	15	15	20	20	20	20	20	20
- with pulling stocking (kN)	0,8	1,4	2,3	3,6	3,6	4,5	4,5	6,0	7,5	8,5	6,0	7,5	8,5
<b>Min. bending radius</b>													
- during installation (m)	0,42	0,48	0,53	0,59	0,59	0,63	0,63	0,69	0,74	0,77	0,86	0,95	1,02
- in final installation, only one pending (m)	0,31	0,35	0,38	0,43	0,43	0,46	0,46	0,48	0,51	0,56	0,60	0,66	0,71
Min. handling temperature (°C)	-20	-20	-20	-20	-20	-20	-20	-20	-20	-20	-20	-20	-20
Min. transporting temperature (°C)	-40	-40	-40	-40	-40	-40	-40	-40	-40	-40	-40	-40	-40
<b>Conductor DC-resistance +20°C</b>													
- phase (Ω/km)	0,641	0,320	0,206	0,125	0,125	0,100	0,100	0,0778	0,0605	0,0469	0,0367	0,0291	0,0247
- screen (Ω/km)	1,2	1,2	0,8	0,8	0,6	0,8	0,6	0,6	0,6	0,6	0,6	0,6	0,6
<b>Induktance (mH/km)<sup>1</sup></b>													
-in plane, conductors together (mH/km) <sup>1</sup>	0,62	0,58	0,56	0,53	0,53	0,52	0,52	0,51	0,50	0,48	0,48	0,48	0,47
-in trefoil, conductors together (mH/km) <sup>1</sup>	0,44	0,40	0,37	0,34	0,34	0,33	0,33	0,33	0,32	0,30	0,30	0,29	0,29
Capacitance (μF/km) <sup>1</sup>	0,17	0,21	0,25	0,30	0,30	0,32	0,32	0,34	0,37	0,45	0,46	0,52	0,58
Charging current (A/km) <sup>2</sup>	0,6	0,8	0,9	1,1	1,1	1,2	1,2	1,2	1,3	1,6	1,7	1,9	2,1
<b>Current carrying capacity (HD 620S2 Part 10F)</b>													
<b>Cable in the air (+25 °C)</b>													
- in trefoil, (conductor temperature +90 °C, open screen) (A)	195	285	380	505	505	580	580	695	800	915	1045	1170	1290
- in trefoil, (conductor temperature +90 °C, closed screen) (A)	195	280	370	490	490	565	565	680	775	880	1010	1130	1230
<b>Cable in the ground (+15 °C ja 1,0 K.m/W), Installation depth 0,7 m</b>													
- in trefoil, (conductor temperature +65 °C, open screen) (A)	155	240	305	395	395	445	445	525	590	665	725	800	860
- in trefoil, (conductor temperature +65 °C, closed screen) (A)	155	235	300	385	385	435	435	510	570	635	695	760	810
<b>Max. thermal short circuit current during 1s</b>													
- phase (initial temperature +90 °C and final temperature +250 °C.) (kA)	4,7	8,9	14,1	22,6	22,6	28,3	28,3	37,8	47,2	59,5	75,6	94,5	113
- screen (initial temperature +80 °C and final temperature +250 °C.) (kA)	2,4	2,4	3,7	3,7	5,2	3,7	5,2	5,2	5,2	5,2	5,2	5,2	5,2

1) Calculated value, for guidance only

2) Calculated value, U = 20 kV