

Calc. based on norm - ---

Const.	---	Date	---
	---	Archive number	---
SO-PS	---	Created by	---
	---	Page	-1

Conductor : 243-AL1/39-ST1A

Diameter d [mm]	Cross section S [mm²]	Weight m [kg/m]	Young module E [MPa]	Spec. gravity γ [N/m.mm²]	Thermal expans. coeff. α [1/°C]	Rated Tens. Stren. F [N]
21.84	282.54	0.988	75900	0.03429238	0.0000189	84120

Reliability level : 1
Return time of the climate load : 50 years
Ice area : I-0 - STN EN 50341-1
Wind area : I-SK, $v = 24 \text{ m/s}$

Agricultural land divided with hedges, distributed small agricultural settlements, houses and trees.

Open flat terrain without obstacles, without snow, for example agricultural land without any obstacles.

Extreme ice overload : 3.97 N/m
Mild ice overload : 1.39 N/m
Extreme wind overload : 9.69 N/m
Mild wind and extreme ice overload : 4.74 N/m
Extreme wind and mild ice overload : 6.08 N/m

Projected lifespan : 50 years
Time from construction : 50 years

30%	40%	50%	70%
76.37	78.18	79.97	83.5

temp. [°C]	-30	-20	-10	-5	-5+N	-5+V	-5+Nv	-5+vN	0	10	20	40	60	80
σ_H [MPa]	85.58	79.07	73.37	70.8	88.65	88.83	92.01	84.23	68.39	64.06	60.28	54.05	49.18	45.29
c [m]	2495.58	2305.75	2139.49	2064.48	1833.9	1831.89	1798.48	1883.64	1994.46	1868.06	1757.72	1576.06	1434.04	1320.6
overloads	1	1	1	1	1.41	1.41	1.49	1.3	1	1	1	1	1	1
F_u [kN]	24.18	22.34	20.73	20	25.05	25.1	26	23.8	19.32	18.1	17.03	15.27	13.89	12.8

[illegible]