Network aerial bundled conductors
3 - phases + neutral messenger 54.6 mm²
with or without public lighting

Description

Messenger

1 **core :** circular stranded in AGS aluminum alloy, cross-section area 54.6 mm²

2 **Insulation :** Black XLPE

Specifications :

- nominal cross section : 54.6 mm²,
- core diameter : 9.2 mm to 9.6 mm,
- insulated core diameter : min. 12.3 mm ; max. 13.0 mm, min. breaking load 1660 daN,
- elasticity modulus: 62000 MPa,
- linear coefficient : 23 x 10⁻⁶°C⁻¹.

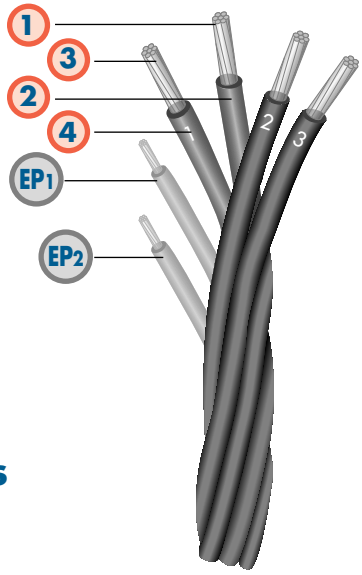
Phase or public lighting conductor

3 **core :** circular stranded (class 2) aluminum.

4 **Insulation :** black extruded XLPE.

Markings

- Neutral : 211 NF C 33-209 211 « manufacturing number », « metric marks » ink printed.
- Phase 1, 2, 3 : the identification number is printed and embossed on insulation.
- public lighting: «EP1», «EP2 » is printed and embossed on each conductor. «EP3» if three conductors are required.



Electrical characteristics

- Rated voltage : 0.6/1 kV
- Test voltage : 4 kV AC
- Resistance to voltage surges : 1.2/50µs with a positive or negative polarity and a peak value of 20 kV.

Correction coefficients

To apply to the intensity in accordance with the air temperature

Ambient. temperature °C	10	15	20	25	30	35	40	45	50	60	70
Coefficient	1.17	1.13	1.09	1.04	1.00	0.95	0.91	0.85	0.80	0.67	0.52

Technical characteristics

Core cross section (mm²)	Diameter in mm					Weight (kg/km)	Maximum linear resistance on the core at 20 °C (Ω/km)		Current through conductors in continuous operation (A)	
	Minimum on core		Minimum insulation		Bundled conductors (approx.)					
	Phase conductor	Public lighting	Phase conductor	Public lighting			Phase conductor	Public lighting	Phase conductor	Public lighting
3 x 35 + 54,6	6.8	-	10.0	-	29.0	622	0.868	-	138	-
3 x 35 + 54.6 + 1 x 16	6.8	4.6	10.0	7.0	29.0	686	0.868	1.91	138	83
3 x 35 + 54.6 + 2 x 16	6.8	4.6	10.0	7.0	29.0	753	0.868	1.91	138	83
3 + 50 + 54.6	7.9	-	11.1	-	30.4	746	0.641	-	168	-
3 x 50 + 54.6 + 1 x 16	7.9	4.6	11.1	7.0	30.4	812	0.641	1.91	168	83
3 x 50 + 54.6 + 2 x 16	7.9	4.6	11.1	7.0	30.4	877	0.641	1.91	168	83
3 x 70 + 54.6	9.7	-	13.3	-	34.0	954	0.443	-	213	-
3 x 70 + 54.6 + 1 x 16	9.7	4.6	13.3	7.0	34.0	1020	0.443	1.91	213	83
3 x 70 + 54.6 + 2 x 16	9.7	4.6	13.3	7.0	34.0	1085	0.443	1.91	213	83