

Service connection single phase and three phase cables

With or without control wires

Description

Neutral conductor

- ① **Core** : aluminum solid circular.
- ② **Protection** : lead sheath.

Phase Conductor

- ③ **Core** : aluminum solid circular.
- ④ **Insulation** : black, brown or cream XPLE for three phase cable, black for single phase.
- ⑤ **Watertight material** : present for single phase, on request for three phase cable.
- ⑥ **Screen armour** : - two unslapped galvanized mild steel tapes.
- ⑦ **Filler** : PVC for single phase cable except 50 mm² and three phase cable 16 mm².
- ⑧ **Sheath** : black PVC, antitermite treatment possible, on demand.

⑨ Control wires

Core : Copper solid circular

Insulation : black XLPE - marking

Wire 1 : continuous ink line

Wire 2 : nothing

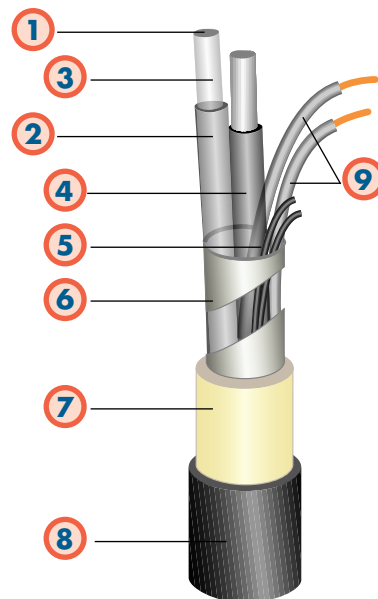
Marking without control wires

H1 XDVAU N x S1 + 1 x S2
 MINIDISTRICABLE® 211 NF C 33-210
 «manufacturing number/manufacturing year»
 «metric marks/manufacturing date».

Marking with control wires

H1 XDVAU N x S1 + 1 x S2 + 2 x 1.5 Cu
 MINIDISTRICABLE® 211 NF C 33-210
 «manufacturing number/manufacturing year»
 «metric marking/manufacturing date».

With
 N : number of phase conductors,
 S1 : cross section of phase conductors,
 S2 : cross section of neutral conductor.



Correction coefficients

To apply to the current in accordance with the ground temperature and its thermal resistivity

Ground temp. (°C)	Ground thermal resistivity (K.m/W)						
	0.7	0.85	1	1.2	1.5	2	2.5
10	1.19	1.12	1.07	1.01	0.93	0.81	0.77
15	1.16	1.09	1.04	0.98	0.90	0.79	0.74
20	1.13	1.05	1.00	0.94	0.86	0.76	0.70
25	1.08	1.01	0.96	0.90	0.83	0.72	0.66
30	1.05	0.98	0.93	0.85	0.78	0.69	0.63
35	1.00	0.93	0.89	0.82	0.75	0.65	0.60

Technical characteristics

Core cross section (mm ²)	Outer diameter (mm)			Weight (kg/km)	Minimum bending radius (mm)	Max. linear resistance of core at 20 °C (Ω/km)	Current (A) in continuous operation		Voltage drop between phases (V/A.km)
	on core	on sheath					buried cables	Open air	
		min.	max.						
3 x 16 + 1 x 16	4.6	18.0	24.3	845	190	1.91	87	79	3.77
3 x 25 + 1 x 25	5.6	21.5	29.0	835	230	1.20	111	98	2.41
3 x 35 + 1 x 35	6.6	23.3	30.0	985	240	0.868	134	122	1.77
1 x 35 + 1 x 35	6.6	20.0	27.0	880	220	0.868	160	135	1.77
1 x 50 + 1 x 50	7.8	23.0	32.0	1105	260	0.641	190	160	1.18
3 x 50 + 1 x 50	7.8	25.5	33.5	1530	270	0.641	160	149	1.18
3 x 25 + 1 x 25 + 2 x 1.5	5.6	21.5	29.0	860	230	1.20	111	98	2.41
3 x 35 + 1 x 35 + 2 x 1.5	6.6	23.3	30.0	1020	240	0.868	134	122	1.77
1 x 35 + 1 x 35 + 2 x 1.5	6.6	20.0	27.0	920	220	0.868	160	135	2.41
1 x 50 + 1 x 50 + 2 x 1.5	7.8	23.0	32.0	1135	260	0.641	190	160	1.18