



CONTACT

Building Products Information
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FR-N20XA8E-AR

The low-carbon power grid cables for distribution public networks, 100% manufactured in France (plant Bourg-en-Bresse 01), guarantee a minimum 35% reduction in greenhouse gas emissions compared to standard cables.

This offer is built on the guaranteed use of low-carbon aluminium and recycled plastic (50% in the sheathing), as well as the use of renewable or decarbonised energies in manufacturing the cables.

Nexans provides all the environmental data for its products (PEP Ecopassport®).

STANDARDS

Product HD 620; NF C33-226

USAGE

NEXANS EDR MAX NF C33-226 Direct Buried cables are the new generation of cables for public power distribution network 12/20 kV. **Re-enforced burying resistance (EDR)** is ensured with an extruded polyethylene protection. They are flame retardant according to NF EN 60332-1-2. They are AD8 (water pressure < 0,2 bar), AF2 and AN3 complying with NF C13-200 standard. Both sheaths are anti-termite resistant.

The cable is made of 1 or 3 bunched cores.

ELECTRICAL SPECIFICATIONS

Calculations carried out in accordance with the IEC 60287 recommendation, given for information purposes, valid for a single joint trefoil connection and earthing of the screen at both ends.

The installation conditions must respect the rules of the art.

For the buried part, the cables are considered to be laid directly in the ground.

For the part in the open air, the cables are assumed to be laid on perforated cable trays, sheltered from the sun, at a distance from the walls equal to at least one cable diameter.

Soil resistivity: 0.85 K.m/W

Floor temperature: 20°C

Installation depth: 800 mm

Cable in the open air

Air temperature: 30°C

Short circuit characteristics according to IEC 60949.

Voltage drop is calculated for $\cos \varphi = 0,9$.



Rated Voltage U_0/U (Um)
12 / 20 (24) kV



Mechanical resistance to impacts
AG4



Ambient installation T°C range
-10 ... 50 °C



Weather resistance
AN3 / AF2

OPTIONS

NF C33-226 cables can be manufactured with the following options:

- Rated voltage 18/30(36)kV
- Copper conductor
- Bunch

CHARACTERISTICS

Construction characteristics

Conductor material	Aluminum
Material of the inner semi-conductor	Extruded semiconducting compound
Insulation	XLPE
Material of the external semi-conductor	Extruded strippable smooth elastomer
Material used for longitudinal water tightness	Swellable tape
Screen	Longitudinal aluminium tape
Sheath colour	Black + 2 Grey Lines
Inner sheath	Polyethylene
Outer sheath	Polyethylene

Dimensional characteristics

Screen thickness	150 µm
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Electrical characteristics

Rated Voltage U _o /U (U _m)	12 / 20 (24) kV
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Mechanical characteristics

Mechanical resistance to impacts	AG4
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Usage characteristics



Ambient installation temperature, range	-10 ... 50 °C
Weather resistance	AN3 / AF2

PRODUCT LIST

Nexans Ref.	Country Ref.	Name	Conductor cross-section [mm²]	Number of cores
 10285122	-	FR-N20XA8E-AR 1X 95 ECA N/G BGN9 EDRMAX	95	1
 10285123	-	FR-N20XA8E-AR 1X150 ECA N/G BGN9 EDRMAX	150	1
 10285134	-	FR-N20XA8E-AR 1X240 ECA N/G BGN9 EDRMAX	240	1
 10285139	-	FR-N20XA8E-AR1x400 EDRMAX Eca 33226RUB	400	1
 10285086	-	FR-N20XA8E-AR3X1X 95 ECA N/G BGN9 EDRMAX	95	3

 = Make to order,  = In stock,

Nexans Ref.	Country Ref.	Name	Conductor cross-section [mm ²]	Number of cores
 10285087	-	FR-N20XA8E-AR3X1X150 ECA N/G BGN9 EDRMAX	150	3
 10285088	-	FR-N20XA8E-AR3X1X240 ECA N/G BGN9 EDRMAX	240	3

 = Make to order,  = In stock,

SELLING AND DELIVERY INFORMATION

Marking

Example NEXANS - plant number- NF C33-226 int. designation- section - AL - 12/20 (24) kV - year - month - installation guide type - G sheath thickness - SC semi-conductor thickness - EC screen thickness - C2 RT installation temperature - EDR

Marking "NEXANS EDR MAX"

Metric marking

Marking "LOW CARBON"

The marking is metric over one core sheath, as well as a tracing mark.

Core identification: 1, 2, 3 helix-wise