



N2XS2Y 18/30 kV

Medium voltage Power cable 18/30 kV (36 kV) with Cu conductor, XLPE insulated with PE sheath

APPLICATION

Single-core medium voltage power cables with copper conductor, XLPE insulation and PE outer sheath, for fixed installation, suitable for installation underground, in ducts, indoors and outdoors.

CONSTRUCTION

ETP copper conductor, class 2 stranded and compacted, in accordance with EN 60228
 Extruded semiconductive cross-linked compound (XLPE-based) conductor screen
 Cross-linked Polyethylene (XLPE) insulation
 Extruded semiconductive cross-linked compound (XLPE-based) insulation screen
 Semiconductive water swelling tape
 Metallic screen of copper wires with counter helix of copper tape
 Polyester separator tape
 Polyethylene (HD PE) outer sheath, black

Outer Sheath Colour:

● Black

Other colours available on request

TECHNICAL CHARACTERISTICS

Voltage rating (U_0/U): 18/30 kV
 Maximum system voltage (U_m): 36 kV
 Impulse test voltage: 170 kV
 Minimum installation temperature: $-20\text{ }^\circ\text{C}$
 Maximum conductor operating temperature: $90\text{ }^\circ\text{C}$
 Maximum short-circuit temperature ($\leq 5\text{ s}$): $250\text{ }^\circ\text{C}$
 Minimum bending radius: $15 \times D$ (D = overall cable diameter)

STANDARD

VDE 0276-620 (HD 620 S3:2023)

CERTIFICATION



| Nominal cross-sectional area Conductor/Screen | Conductor shape | Maximum conductor DC resistance at 20 °C | Nominal conductor diameter | Nominal thickness semi-conductive layer | | Nominal insulation thickness | Minimum sheath thickness |
|--|-----------------|--|----------------------------|---|-------------------|------------------------------|--------------------------|
| | | | | Conductor screen | Insulation screen | | |
| mm ² | | Ω/km | mm | mm | mm | mm | mm |
| 1x400/35 | RM | 0,0470 | 23,6 | 0,5 | 0,45 | 8,0 | 2,1 |

| Nominal cross-sectional area Conductor/Screen | Current-carrying capacity in air | Current-carrying capacity in ground | Approximate overall diameter | Approximate cable weight |
|--|----------------------------------|-------------------------------------|------------------------------|--------------------------|
| mm ² | A | A | mm | kg/km |
| 1x400/35 | 695 | 922 | 49,7 | 5000 |

