ttcables
ELECTRIC CABLE WORKS

N2XS(FL)H 12/20 kV

Medium voltage Power cable 12/20 kV (24 kV) with Cu conductor, XLPE insulated and LSZH outer sheathed

APPLICATION

Single-core medium voltage power cables with copper conductor, XLPE insulation and LSZH outer sheath, featuring radial and longitudinal water barriers for use in distribution networks and power generation units. The LSZH outer sheath makes the cable suitable for indoor installation, as well as for direct burial in the ground, outdoor installation, and installation in cable ducts.

CONSTRUCTION

Conductors: ETP copper, class 2 stranded and compacted, in accordance with EN 60228
Conductor screen: Extruded semiconductive cross-linked compound (XLPE-based)
Insulation: Cross-linked Polyethylene, XLPE type DIX-8
Insulation screen: Extruded semiconductive cross-linked compound (XLPE-based) + semiconductive water swelling tape + copper wires with counter helix of copper tape
Outer sheath: Halogen free compound, LSOH type HM4 with bonded aluminium-polymer water barrier, UV resistant

Outer Sheath Colour:
● Black
Other colours available on request

TECHNICAL CHARACTERISTICS

Voltage rating (U_o/U): 12/20 kV
Maximum system voltage (U_m): 24 kV
Impulse test voltage: 125 kV
Minimum installation temperature: –5 °C
Maximum conductor operating temperature: 90 °C
Maximum short-circuit temperature (≤ 5 s): 250 °C
Minimum bending radius: 15 × D (D = overall cable diameter)
Longitudinally watertight: Yes
Flame retardant: in accordance with IEC 60332-1-2
Halogen acid gas emission: in accordance with IEC 60754-1 and IEC 60754-2
Low smoke emission: in accordance with IEC 61034-2

STANDARD

VDE 0276-620 (HD 620 S3:2023)

CERTIFICATION

REACH COMPLIANT · COMPLIANT
RoHS compliant
CE

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	Nominal sheath thickness
				Conductor screen	Insulation screen		
mm²		Ω/km	mm	mm	mm	mm	mm
1x185/25	RM	0,0991	16,2	0,5	0,45	5,5	2,5
1x300/25	RM	0,0601	19,8	0,5	0,45	5,5	2,7

Nominal cross-sectional area Conductor/Screen	Current-carrying capacity in air	Current-carrying capacity in ground	Approximate overall diameter	Approximate cable weight
mm²	A	A	mm	kg/km
1x185/25	614	498	37,7	2790
1x300/25	813	633	42,3	3985