

ARE4H5EX 18/30kV SK1 (SHOCK PROOF 1)

ARE4H5EX 18/30kV SK1 3x1x240

DESCRIPTION

Three single core cables in triplex formation with aluminium conductor, reduced thickness cross-linked polyethylene (XLPE) insulation, aluminium tape screen, reinforced polyethylene (PE) based outer sheath. Longitudinal and radial watertightness, shock resistant.

Application:

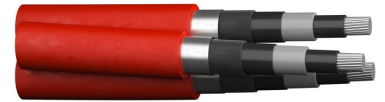
Suitable for fixed installation indoor or outdoor laying in air or directly / indirectly buried, also in wet location. " Shock Proof" SK1 has a very good shock resistance characteristics. The two special outer sheaths provide an excellent protection against impact and mechanical abuse during the lifetime of the cable. "Shock Proof" SK1 cable performances has been evaluated against mechanical protection by the abrasion test and the impact test included in HD 620-10-13 standard. This type of cable can be directly buried without additional protections because it is comparable to an armoured cable.

Construction:

- **Conductor:**stranded, compacted, round **aluminium – Cl. 2** (IEC 60228)
- **Conductor screen:**extruded semiconducting compound
- **Insulation:**extruded cross-linked polyethylene compound (**XLPE**)
- **Insulation screen:**extruded semiconducting compound – **fully bonded**
- **Longitudinal watertightness:**semiconducting **water blocking tape**
- **Screen and radial watertightness:**aluminium tape longitudinally applied (Nominal thickness: 0,2 mm)
- **Sheath:**extruded **Polyethylene** compound - Colour: **red**

Functional characteristics:

- **Rated voltages U_0/U :** 18/30 kV
- **Max. operating temperature of conductor:**90°C
- **Max. short circuit temperature of conductor:**250°C (max 5s)
- **Max. short circuit temperature of screen:**150°C
- **Min. installation temperature:**-25°C
- **Max. tensile strength on the conductor during installation:**50 N/mm²
- **Min. bending radius during installation:** 21D_{phase}



STANDARDS

International HD 620;
IEC 60502-2

National CEI 20-68

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CHARACTERISTICS

Construction characteristics

Conductor material	Aluminum
Conductor shape	Round, stranded and compacted
Conductor flexibility	Class 2 acc. to IEC 60228
Material of the inner semi-conductor	Extruded semiconducting compound
Insulation	Extruded XLPE
Material of the external semi-conductor	Extruded semicond.compound-Fully Bonded
Material used for longitudinal water tightness	Semiconducting Swellable Tape
Screen	Aluminum Tape-Radial water tightness
Outer sheath	Extruded PE compound - Impact resistant
Sheath colour	Red

Dimensional characteristics

Conductor cross-section	240 mm ²
Number of phases	3
Conductor diameter	18.5 mm
Minimum insulation thickness	5.8 mm
Screen thickness	200 µm
Nominal outer sheath thickness	4.0 mm
Nominal overall diameter of each phase cable	45 mm
Nominal overall diameter of triplex	97 mm

Electrical characteristics

Rated Voltage U ₀ /U (U _m)	18 / 30 (36) kV
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