

CU-XLPE-CTS-PVC 12/20 (24)kV

Unarmoured medium voltage cable with compacted copper conductor and XLPE insulation



Application

Single Core Copper Medium Voltage cable especially suitable for distribution of energy.

Construction

Conductor	: Compacted stranded circular copper, IEC60228 class 2
Extruded conductor screen	: Semi conductive material
Insulation	: Cross-linked polyethylene
Extruded insulation screen	: Semi conductive material
Tape screen	: Copper tape
Cable core tape	: Non-woven tape
Outer sheath	: Polyvinylchloride, ST2
Marking text	: E.g. "CU/XLPE/CTS/PVC 1x120 mm ² 12/20kV IEC60502-2 year xxxm"
Rated voltage	: 12/20 kV
Highest system voltage	: 24 kV

Outer Sheath Colours

Available colours : Black*

*other colours available on request

Installation recommendations

Min. Bending Radius during Installation	: 20xD
Min. Bending Radius Fix Installed	: 15xD
Max. Conductor Operating Temperature	: 90°C

Standards applied

IEC60332-1:2004-07	Flame Retardant
IEC60502-2	Cable design

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Range and Dimensions

Article Code	Number of Cores	Size Cross-Section in mm ²	Approx. Diameter over Conductor in mm	Insulation thickness mm	Approx. Overall Diameter in mm	Approx. Total Weight in kg/km
D2901C095BAK BK10	1	95	11.6	5.5	30.0	1657
D2901C120BAK BK10	1	120	13.0	5.5	31.6	1948
D2901C120BAK BK10	1	240	18.4	5.5	37.4	3262

Note: Subject to change without prior notice.

Electrical Characteristics

Number of Cores	Size Cross-Section in mm ²	Conductor DC resist. at 20°C in Ohm/km	M.C.C.R. parallel in air in Amps	M.C.C.R. trefoil in air in Amps	Conductor max. short circuit current 1 sec. in Amps	Voltage Drop single phase system parallel/trefoil in V/A/km
1	95	0.193	431	363	13.6	0.25
1	120	0.153	497	418	17.2	0.2
1	240	0.0754	770	644	34.3	0.1

Laid Parallel in air is calculated with a distance from cable axis to cable axis of $2 \times D$ (D is cable overall diameter)

Note: Above values based on $\cos \phi = 1.0$, $f=50\text{Hz}$ and conform IEC agreed standards or generally accepted in practice, in order to compare and calculate additional local circuit corrections and de-ratings. M.C.C.R. Maximum Continuous Current Rating in air at 30°C.

NOTICE

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