

AL-XLPE-CTS-PVC 18/30 (36)kV

Unarmoured medium voltage cable with compacted aluminium conductor and XLPE insulation



Application

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

Construction

Conductor	: Compacted stranded circular aluminium, 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. "AL/XLPE/CTS/PVC 1x95 mm ² 18/30kV IEC60502-2 year xxxm"
Rated voltage	: 18/30 kV
Highest system voltage	: 36 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
D2801C120BAK BK11	1	120	13.0	8.0	32.6	1519
D2801C150BAK BK11	1	150	14.6	8.0	38.6	1692
D2801C185BAK BK11	1	185	16.2	8.0	40.4	1881
D2801C240BAK BK11	1	240	18.4	8.0	42.6	2133
D2801C300BAK BK11	1	300	20.6	8.0	45.0	2421
D2801C400BAK BK11	1	400	23.8	8.0	48.4	2868
D2801C500BAK BK11	1	500	26.6	8.0	51.8	3344
D2801C630BAK BK11	1	630	30.0	8.0	55.6	3918

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	120	0.253	384	329	11.3	0.33
1	150	0.206	436	374	14.2	0.27
1	185	0.164	501	429	17.5	0.22
1	240	0.125	592	506	22.7	0.17
1	300	0.1	681	580	28.3	0.13
1	400	0.0778	801	681	37.8	0.1
1	500	0.0605	930	789	47.2	0.08
1	630	0.0469	1090	917	59.5	0.07

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

Note: Above values based on Cos Phi = 1.0, f=50Hz 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

Incore Cables has endeavored to ensure the accuracy of the data in this publication, however we cannot be liable for the consequences of errors or omissions. All data is subject to change without notice. The installer and/or user assumes all liability for the consequences of the installation and/or use of any of our products in contravention of any applicable law, regulation or code.

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