Medium CABLES
18/30 (36) kV

Three Cores Copper or Aluminium Conductors, XLPE Insulated, Steel Tape Armoured and PVC Sheathed (CU/XLPE/STA/PVC) (AL/XLPE/STA/PVC)

Description

• Stranded circular compacted Copper or Aluminium conductor, semiconducting layer as conductor screen, XLPE insulated, semiconducting layer as non metallic insulation screen, Copper tape or wire as metallic insulation screen, three cores assembled together with non hygroscopic Polypropylene fillers, wrapped with binder tape, covered with a layer of PVC compound as a bedding, steel Tape armoured and PVC sheathed.
• Cables are produced according to IEC 60502.

Application

• These cables are generally suitable for direct burial or for installation on trays or in ducts.
• Where there is a Risk of mechanical damage , armoured cables should be used.

Nominal Cross Sectional Area	Resistance		Operating Capacitance	Inductance	Currentm Rating		Approx. Overall Diameter	Approx. Weight
	DC at 20 °C	AC at 90 °C			Laid in ground	Laid in free air		
mm^2	Ω/km	Ω/km	µf/km	mh/km	A	A	mm	kg/km
Three Cores, Copper Conductor Cables								
50	0.3870	0.4938	0.138	0.436	185	192	69.4	5730
70	0.2680	0.3423	0.156	0.410	226	237	73.7	6725
95	0.1930	0.2469	0.167	0.395	269	286	76.7	7705
120	0.1530	0.1961	0.180	0.381	306	328	81.3	9720
150	0.1240	0.1595	0.192	0.368	342	371	84.7	10680
185	0.0991	0.1282	0.208	0.353	386	424	88.6	12120
240	0.0754	0.0986	0.229	0.338	446	497	94.4	14310
300	0.0601	0.0799	0.252	0.327	502	566	100.4	16790
400	0.0471	0.0629	0.276	0.310	570	665	109.3	20785
Three Cores, Aluminium Conductor Cables								
50	0.6410	0.8220	0.138	0.436	144	149	69.2	4830
70	0.4430	0.5683	0.156	0.410	176	184	73.0	5395
95	0.3200	0.4107	0.167	0.395	209	222	76.7	5980
120	0.2530	0.3250	0.180	0.381	238	255	81.3	7310
150	0.2060	0.2649	0.192	0.368	266	288	84.7	7995
185	0.1640	0.2114	0.208	0.353	301	331	88.6	8700
240	0.1250	0.1618	0.228	0.338	349	389	94.1	9820
300	0.1000	0.1302	0.252	0.327	394	444	99.7	11000
400	0.0778	0.1023	0.276	0.310	432	488	109.3	13420

- This data is applicable for 6.35 / 11 kV cables.
- The above amapacity are caleulated besed on double end bonding.
- The amapacity for single core sizes 800 & 1000mm2 was based on a single end bonding.
- The above data is approximate and subjected to manufacturing tolerance.