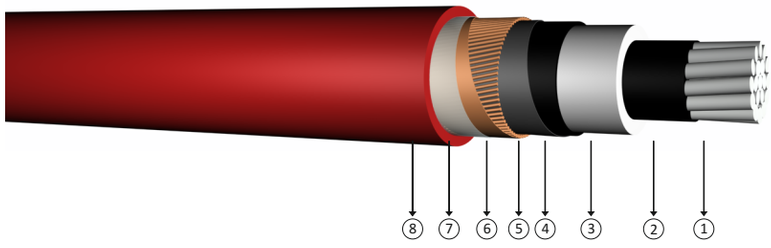
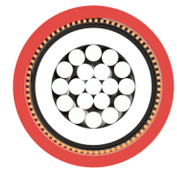
20.3/35 kV or 20.8/36 kV XLPE insulated single core cables with aluminium conductor





Code: YAXC7V-R, NA2XSY, AL/XLPE/CWS/PVC

R: Stranded Conductor Rigid

Standards: HD 620 S2, TSEK

Technical Data

Max. operating temperature	: 90 °C
Max. short circuit temperature	: 250 °C (max. 5 sec.)
Rated voltage	: 20.3/35 kV 20.8/36 kV
Min. bending radius	: 15 x D
D	: Cable outer diameter

Application

These cables have a low dielectric loss, used in indoors and outdoors, in cable ducts, underground, in power or switching stations, local energy distributions, industrial plants, where there is no risk of mechanical damage.

Construction

1. Stranded aluminium conductor
2. Inner semi conductive layer
3. XLPE insulation
4. Outer semi conductive layer
5. Semi conductive tape
6. Copper screen
7. Polyester tape
8. PVC outer jacket

DIMENSION AND WEIGHTS			ELECTRICAL PROPERTIES									
Nominal Cross Section	Overall Diameter (approx)	Net Weight (approx)	Delivery Length	DC Conductor Resistance at 20 °C Max	DC Conductor Resistance at 90 °C Max	Operation Inductance		Operation Capacitance	Current Carrying Capacity (A)			
									In ground at 20 °C		In air at 30 °C	
mm²	mm	kg/km	m	ohm/km	ohm/km	*** mH/km	*** mH/km	µF/km	***	***	***	***
1x35/16	34,5	1100	1000	0,868	1,1110	0,657	0,464	0,115	-	-	-	-
1x50/16	36,0	1200	1000	0,641	0,8205	0,632	0,444	0,125	196	175	217	187
1x70/16	37,5	1350	1000	0,443	0,5670	0,601	0,420	0,140	238	214	270	232
1x95/16	39,5	1500	1000	0,320	0,4096	0,577	0,402	0,153	284	256	328	281
1x120/16	41,5	1650	1000	0,253	0,3238	0,558	0,388	0,165	322	290	378	323
1x150/25	43,0	1900	1000	0,206	0,2637	0,541	0,376	0,178	355	324	425	365
1x185/25	44,5	2050	1000	0,164	0,2099	0,525	0,365	0,191	400	366	485	418
1x240/25	47,5	2350	1000	0,125	0,1600	0,506	0,351	0,209	461	426	572	494
1x300/25	49,5	2600	1000	0,100	0,1280	0,490	0,341	0,226	516	479	649	564
1x400/35	53,0	3150	1000	0,0778	0,1009	0,471	0,328	0,252	572	545	737	654
1x500/35	56,0	3600	1000	0,0605	0,0774	0,456	0,318	0,274	638	614	835	747
1x630/35	60,0	4150	1000	0,0469	0,0600	0,440	0,308	0,300	728	690	950	851

Note : Current carrying capacities are valid under the following conditions;
In ground : 20 °C, 70 cm depth of lay, soil-thermal resistivity 1 K.m/W, load factor 0.7
In air : 30 °C, load factor 1.0
*** : Flat formation, clearance between cables; in air = 1 x Cable outer diameter, in ground = 7 cm
*** : Trefoil formation
Number of system : 1