

Relemac Two Core Aluminium/Copper Conductor XLPE Insulated Unarmoured/ Wire/Strip Armoured Cables A2XY/2XY/A2XWY/A2XFY/2XWY/2XFY

Table 1
Physical Parameters
Relemac Aluminium/ Copper Conductor, XLPE Insulated Unarmoured/ Armoured PVC Sheathed Two Core Cables

Nom Area	No of Wires		Nom. Thick of Insl	Thick of I/Sheath	Dimension of Armour		Thickness of Outer Sheath				Overall Diameter			Approximate Mass of Cable/Km					
							Unarmd		Armd		Unarmd	Armd		Unarmd		Armd			
	Al	Cu	Unarmd	Min	Wire	Strip	Nom	Min	Wire	Strip		Al	Cu	Wire		Strip			
	No	No			mm	mm			mm	mm	mm			mm	mm	mm	Kg/Km	Kg/Km	
4	1/7	1/7	0.70	0.30	1.40	-	1.80	1.24	1.24	-	12	15	-	180	240	370	470	-	-
6	1/7	1/7	0.70	0.30	1.40	-	1.80	1.24	1.24	-	13	16	-	220	300	460	550	-	-
10	1/7	7	0.70	0.30	1.40	-	1.80	1.24	1.24	-	15	18	-	280	420	530	700	-	-
16	7	7	0.70	0.30	1.40	-	1.80	1.24	1.40	-	14	18	17	250	450	550	750	-	-
25	7	7	0.90	0.30	1.60	4 x .8	2.00	1.40	1.40	1.40	18	21	19	400	700	750	1050	550	850
35	7	7	0.90	0.30	1.60	4 x .8	2.00	1.40	1.40	1.40	19	21	21	450	900	850	1250	650	1050
50	7	7	1.00	0.30	1.60	4 x .8	2.00	1.40	1.40	1.40	21	25	23	600	1150	1000	1550	750	1350
70	19	19	1.10	0.30	1.60	4 x .8	2.00	1.40	1.56	1.56	24	27	26	750	1550	1250	2050	1000	1800
95	19	19	1.10	0.40	2.00	4 x .8	2.20	1.56	1.56	1.56	27	32	29	950	2100	1700	2800	1250	2350
120	19	19	1.20	0.40	2.00	4 x .8	2.20	1.56	1.56	1.56	29	34	31	1150	2550	1950	3350	1450	2850
150	19	19	1.40	0.40	2.00	4 x .8	2.20	1.56	1.72	1.72	31	36	34	1350	3100	2250	4000	1700	3450
185	37	37	1.60	0.50	2.00	4 x .8	2.40	1.72	1.88	1.72	35	40	37	1700	3850	2700	4850	2050	4200
240	37	37	1.70	0.50	2.50	4 x .8	2.60	1.88	2.04	1.88	40	46	42	2150	5000	3550	6350	2550	5400
300	37	37	1.80	0.60	2.50	4 x .8	2.80	2.04	2.20	2.04	43	49	46	2650	6200	4100	7650	3000	6550
400	61	61	2.00	0.60	2.50	4 x .8	3.00	2.20	2.36	2.36	48	56	51	3300	7850	4950	9500	4000	8300
500	61	61	2.20	0.70	3.15	4 x .8	3.40	2.52	2.68	2.52	54	62	57	4200	10000	6500	12300	4650	10450
630	91	91	2.40	0.70	3.15	4 x .8	3.80	2.84	2.84	2.68	59	70	64	5200	12750	7800	15350	5700	13200

Table 2
Electrical Parameters for Relemac Two Core XLPE Insulated & PVC Sheathed Cables

Nom Area of Cond	Maximum D. C. Resistance at 20 Deg C		Approx A. C. Resistance at 70 Deg C		Reactance	Capacitance	Nominal Current Rating						Short Circuit Rating for 1 sec	
	Alum	Copper	Alum	Copper			At 50 Hz	of the Cable	Aluminium			Copper		
					Ground	Duct			Air	Ground	Duct	Air		
mm ²	Ohm/Km	Ohm/Km	Ohm/Km	Ohm/Km	Ohm/Km	μF/Km	A	A	A	A	A	A	kA	
4	7.41	4.61	8.89	5.53	0.098	0.11	42	36	38	54	45	48	0.376	0.572
6	4.61	3.08	5.53	3.70	0.090	0.13	55	46	50	67	56	61	0.564	0.858
10	3.08	1.83	3.70	2.20	0.084	0.16	68	57	64	89	75	83	0.940	1.43
16	1.91	1.15	2.29	1.38	0.080	0.18	89	74	83	115	96	108	1.50	2.28
25	1.20	0.727	1.44	0.870	0.080	0.20	114	95	109	147	122	140	2.35	3.57
35	0.868	0.524	1.04	0.630	0.080	0.23	136	113	133	176	146	172	3.29	5.00
50	0.641	0.387	0.769	0.464	0.078	0.24	161	134	162	208	173	208	4.70	7.15
70	0.443	0.268	0.532	0.322	0.077	0.26	197	164	204	253	211	262	6.58	10.01
95	0.320	0.193	0.384	0.232	0.074	0.29	235	196	251	302	252	322	8.93	13.59
120	0.253	0.153	0.304	0.184	0.072	0.29	266	222	287	340	284	368	11.28	17.16
150	0.206	0.124	0.247	0.149	0.072	0.29	296	248	328	379	317	419	14.10	21.45
185	0.164	0.0991	0.197	0.119	0.072	0.29	335	281	379	425	357	482	17.39	26.46
240	0.125	0.0754	0.151	0.0912	0.072	0.31	385	324	448	486	409	566	22.56	34.32
300	0.100	0.0601	0.122	0.0733	0.071	0.33	432	364	513	541	456	644	28.20	42.90
400	0.0778	0.0470	0.0961	0.0580	0.070	0.33	487	412	593	602	508	734	37.60	57.20
500	0.0605	0.0366	0.0759	0.0459	0.070	0.34	548	463	683	665	562	831	47.00	71.50
630	0.0469	0.0283	0.0610	0.0368	0.069	0.36	612	518	784	728	616	936	59.22	90.09