

# Relemac Three 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 Three 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					
	Al	Cu			Nom	Min	Wire	Strip	Unarmd		Armd		Unarmd	Armd		Unarmd		Armd	
Nom			Min	Wire Min					Strip Min	Wire	Strip	Al		Cu	Wire		Strip		
mm <sup>2</sup>	No	No	mm	mm	mm	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	-	13	15	-	200	280	400	490	-	-
6	1/7	1/7	0.70	0.30	1.40	-	1.80	1.24	1.24	-	14	16	-	250	360	460	580	-	-
10	1/7	7	0.70	0.30	1.40	-	1.80	1.24	1.24	-	16	17	-	310	510	540	750	-	-
16	7	7	0.70	0.30	1.60	4 x .8	1.80	1.24	1.40	1.24	17	20	18	350	650	700	1000	550	850
25	7	7	0.90	0.30	1.60	4 x .8	2.00	1.40	1.40	1.40	20	22	20	500	950	900	1350	700	1150
35	7	7	0.90	0.30	1.60	4 x .8	2.00	1.40	1.40	1.40	22	24	22	600	1250	1050	1700	850	1450
50	7	7	1.00	0.30	1.60	4 x .8	2.00	1.40	1.56	1.40	24	27	25	800	1600	1300	2100	1000	1850
70	19	19	1.10	0.40	2.00	4 x .8	2.20	1.56	1.56	1.56	28	31	29	1050	2250	1800	3000	1350	2550
95	19	19	1.10	0.40	2.00	4 x .8	2.20	1.56	1.56	1.56	31	34	31	1300	3000	2150	3800	1600	3300
120	19	19	1.20	0.40	2.00	4 x .8	2.20	1.56	1.72	1.56	34	37	34	1600	3700	2550	4650	1900	4000
150	19	19	1.40	0.50	2.00	4 x .8	2.40	1.72	1.88	1.72	38	41	38	1950	4550	3000	5600	2350	4950
185	37	37	1.60	0.50	2.50	4 x .8	2.60	1.88	2.04	1.88	42	46	42	2450	5650	3950	7150	2850	6050
240	37	37	1.70	0.60	2.50	4 x .8	2.80	2.04	2.20	2.04	47	51	47	3100	7350	4800	9000	3500	7750
300	37	37	1.80	0.60	2.50	4 x .8	3.00	2.20	2.36	2.20	52	56	52	3800	9100	5600	10900	4250	9550
400	61	61	2.00	0.70	3.15	4 x .8	3.20	2.36	2.68	2.52	58	64	59	4750	11550	7450	14200	5350	12250
500	61	61	2.20	0.70	3.15	4 x .8	3.60	2.68	2.84	2.68	65	70	65	6000	14750	8900	17600	6550	15300
630	91	91	2.40	0.70	4.00	4 x .8	3.80	2.84	3.00	2.84	73	79	73	7500	18800	11800	23100	8150	19450

**Table 2**  
Electrical Parameters for Relemac Three 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			Al	Cu
							Ground	Duct	Air	Ground	Duct	Air		
mm <sup>2</sup>	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