

Relemac Four 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 Four 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	Min	Wire	Strip	Nom	Min	Wire Min	Strip Min	Unarmd	Wire	Strip	Al	Cu	Wire		Strip			
	No	No				mm	mm	mm	mm						mm	mm	mm	mm	mm	mm
4	1/7	1/7	0.70	0.30	1.40	-	1.80	1.24	1.24	-	14	16	-	230	340	440	560	-	-	
6	1/7	1/7	0.70	0.30	1.40	-	1.80	1.24	1.24	-	15	17	-	290	430	520	670	-	-	
10	1/7	7	0.70	0.30	1.40	-	1.80	1.24	1.40	-	17	19	-	360	630	620	900	-	-	
16	7	7	0.70	0.30	1.60	4 x .8	1.80	1.24	1.40	1.40	19	21	20	450	800	850	1200	650	100	
25	7	7	0.90	0.30	1.60	4 x .8	2.00	1.40	1.40	1.40	22	24	22	600	1200	1100	1700	850	1450	
35	7	7	0.90	0.30	1.60	4 x .8	2.00	1.40	1.40	1.40	24	26	25	750	1600	1300	2100	1000	1850	
50	7	7	1.00	0.30	1.60	4 x .8	2.00	1.40	1.56	1.56	27	29	28	950	2000	1550	2700	1300	2400	
70	19	19	1.10	0.40	2.00	4 x .8	2.20	1.56	1.56	1.56	31	34	32	1300	2900	2200	3800	1650	3250	
95	19	19	1.10	0.40	2.00	4 x .8	2.20	1.56	1.72	1.56	35	38	35	1700	3900	2700	4900	2000	4250	
120	19	19	1.20	0.50	2.00	4 x .8	2.40	1.72	1.88	1.72	39	42	39	2100	4900	3200	6000	2500	5300	
150	19	19	1.40	0.50	2.50	4 x .8	2.60	1.88	2.04	1.88	43	47	43	2550	6000	4100	7550	2950	6400	
185	37	37	1.60	0.50	2.50	4 x .8	2.80	2.04	2.20	2.04	48	52	48	3150	7450	4850	9150	3600	7950	
240	37	37	1.70	0.60	2.50	4 x .8	3.00	2.20	2.36	2.20	54	58	54	4000	9700	5950	11600	4500	10200	
300	37	37	1.80	0.70	3.15	4 x .8	3.20	2.36	2.52	2.36	61	66	61	4950	12050	7750	14850	5500	12600	
400	61	61	2.00	0.70	3.15	4 x .8	3.60	2.68	2.84	2.68	68	73	68	6250	15350	9350	18400	6850	15900	
500	61	61	2.20	0.70	4.00	4 x .8	3.80	2.84	3.00	2.84	75	82	75	7800	19450	12400	24000	8500	20100	
630	91	91	2.40	0.70	4.00	4 x .8	4.00	3.00	3.00	3.00	84	91	84	9800	24850	14750	30000	10550	25650	

Table 2
Electrical Parameters for Relemac Four 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