

Relemac Three and a half 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 and Half 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			
	Main/Neut	Main/Neut	Min	Wire	Strip	Nom	Min	Wire	Strip		mm	Wire	Strip	Al	Cu	Wire		Strip
mm ²	No/No	mm	mm	mm	mm	mm	mm	mm	mm	mm						mm	mm	mm
25	7/7	0.90/0.70	0.30	1.60	4 x .8	2.00	1.40	1.40	1.40	21	23	22	600	1160	1000	1550	800	1350
35	7/7	0.90/0.70	0.30	1.60	4 x .8	2.00	1.40	1.40	1.40	24	26	24	700	1400	1200	1900	950	1650
50	7/7	1.00/0.90	0.30	1.60	4 x .8	2.00	1.40	1.56	1.40	26	28	27	900	1850	1450	2400	1150	2150
70	19/7	1.10/0.90	0.40	2.00	4 x .8	2.20	1.56	1.56	1.56	30	33	31	1200	2600	2000	3400	1500	2850
95	19/7	1.10/1.00	0.40	2.00	4 x .8	2.20	1.56	1.56	1.56	34	36	34	1500	3450	2400	4350	1850	3800
120	19/19	1.20/1.10	0.40	2.00	4 x .8	2.20	1.56	1.72	1.72	37	40	38	1800	4350	2900	5400	2250	4750
150	19/19	1.40/1.10	0.50	2.00	4 x .8	2.40	1.72	1.88	1.72	41	44	41	2250	5250	3400	6400	2650	5600
185	37/19	1.60/1.10	0.50	2.50	4 x .8	2.60	1.88	2.04	1.88	46	50	46	2800	6600	4450	8200	3200	7000
240	37/19	1.70/1.20	0.60	2.50	4 x .8	2.80	2.04	2.20	2.04	50	54	50	3550	8500	5250	10200	4000	8900
300	37/19	1.80/1.40	0.60	2.50	4 x .8	3.00	2.20	2.36	2.20	55	59	55	4300	10500	6200	12400	4800	11000
400	61/37	2.00/1.60	0.70	3.15	4 x .8	3.40	2.52	2.68	2.52	62	66	62	5450	13350	8200	16050	5950	13850
500	61/37	2.20/1.70	0.70	3.15	4 x .8	3.60	2.68	2.84	2.68	72	77	72	6900	17050	10150	20250	7500	17650
630	91/37	2.40/1.80	0.70	4.00	4 x .8	4.00	3.00	3.00	3.00	80	86	80	8700	21750	13250	26300	9300	22400

Table 2
Electrical Parameters for Relemac Three and Half 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	
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