

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

Nom Area	No of Wires		Nom. Thickness of Insulation		Dimension of Armour		Thickness of Outer Sheath			Overall Diameter			Approximate Mass of Cable/Km						
	Al	Cu	Unarm d	Armd	Wire	Strip	Unarmd		Armd		Unarm d	Armd		Unarmd		Armd			
							Nom	Min	Wire	Strip		Al	Cu	Wire		Strip			
											Min			Min			Al	Cu	Al
mm ²	Nos	Nos	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	Kg/Km		Kg/Km			
4	1/7	1/7	1.00	1.30	1.40	-	1.80	1.24	1.24	-	8.0	11	-	80	100	130	160	-	-
6	1/7	1/7	1.00	1.30	1.40	-	1.80	1.24	1.24	-	9.0	12	-	90	120	150	190	-	-
10	1/7	7	1.00	1.30	1.40	-	1.80	1.24	1.24	-	10	13	-	110	170	170	240	-	-
16	7	7	1.00	1.30	1.40	-	1.80	1.24	1.24	-	10	13	-	150	250	250	300	-	-
25	7	7	1.20	1.50	1.40	-	1.80	1.24	1.24	-	12	15	-	200	350	300	450	-	-
35	7	7	1.20	1.50	1.40	-	1.80	1.24	1.24	-	13	16	-	250	450	350	550	-	-
50	7	7	1.40	1.70	1.40	-	1.80	1.24	1.24	-	15	17	-	300	600	400	700	-	-
70	19	19	1.40	1.70	1.40	-	1.80	1.24	1.40	-	16	19	-	400	800	500	900	-	-
95	19	19	1.60	1.90	1.60	4 x .8	1.80	1.24	1.40	1.40	18	22	20	500	1050	700	1250	600	1150
120	19	19	1.60	1.90	1.60	4 x .8	2.00	1.40	1.40	1.40	20	23	22	600	1300	800	1450	700	1400
150	19	19	1.80	2.10	1.60	4 x .8	2.00	1.40	1.40	1.40	22	25	23	700	1600	900	1750	800	1700
185	37	37	2.00	2.30	1.60	4 x .8	2.00	1.40	1.40	1.40	24	27	25	850	1950	1050	2150	1000	2050
240	37	37	2.20	2.50	1.60	4 x .8	2.00	1.40	1.56	1.40	27	30	28	1100	2500	1350	2750	1200	2600
300	37	37	2.40	2.70	1.60	4 x .8	2.00	1.40	1.56	1.56	30	33	31	1300	3100	1600	3350	1500	3250
400	61	61	2.60	3.00	2.00	4 x .8	2.20	1.56	1.56	1.56	34	38	35	1700	3950	2050	4300	1850	4100
500	61	61	2.80	3.40	2.00	4 x .8	2.20	1.56	1.72	1.56	37	42	39	2100	5000	2550	5400	2300	5150
630	91	91	3.40	3.90	2.00	4 x .8	2.40	1.72	1.88	1.72	42	46	44	2700	6450	3200	6950	2900	6650
800	91	91	3.40	3.90	2.00	4 x .8	2.40	1.72	1.88	1.88	46	51	48	3250	8050	3800	8600	3550	8350
1000	91	91	3.40	3.90	2.50	4 x .8	2.60	1.88	2.04	2.04	50	56	51	3950	9950	4700	10700	4250	10250

Table 2
Electrical Parameters for Relemac Single Core PVC 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 at 50 Hz		Capacitance		Nominal Current Rating						Short Circuit Rating for 1 sec	
	Alum	Copper	Alum	Copper	Unarmd	Armd	Unarmd	Armd	Aluminium			Copper			Al	Cu
									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	0.140	0.157	0.58	0.48	31	30	27	39	38	35	0.304	0.460
6	4.61	3.08	5.53	3.70	0.127	0.148	0.68	0.56	39	37	35	49	48	44	0.456	0.690
10	3.08	1.83	3.70	2.20	0.118	0.138	0.83	0.67	51	51	47	65	64	60	0.760	1.15
16	1.91	1.15	2.29	1.38	0.110	0.128	1.01	0.81	66	65	64	85	83	82	1.22	1.84
25	1.20	0.727	1.44	0.870	0.105	0.120	1.05	0.87	86	84	84	110	110	110	1.90	2.88
35	0.868	0.524	1.04	0.630	0.100	0.114	1.22	1.00	100	100	105	130	125	130	2.66	4.03
50	0.641	0.387	0.769	0.464	0.098	0.110	1.22	1.03	120	115	130	155	150	165	3.80	5.75
70	0.443	0.268	0.532	0.322	0.091	0.103	1.43	1.21	140	135	155	190	175	205	5.32	8.05
95	0.320	0.193	0.384	0.232	0.088	0.101	1.47	1.27	175	155	190	220	200	245	7.22	10.90
120	0.253	0.153	0.304	0.184	0.086	0.096	1.62	1.42	195	170	220	250	220	280	9.12	13.80
150	0.206	0.124	0.247	0.149	0.085	0.094	1.62	1.42	220	190	250	280	245	320	11.40	17.30
185	0.164	0.0991	0.197	0.119	0.084	0.092	1.62	1.44	240	210	290	305	260	370	14.10	21.30
240	0.125	0.0754	0.151	0.0912	0.082	0.090	1.72	1.53	270	225	335	345	285	425	18.20	27.30
300	0.100	0.0601	0.122	0.0733	0.080	0.088	1.74	1.56	295	245	380	375	310	475	22.80	34.50
400	0.0778	0.0470	0.0961	0.0580	0.080	0.088	1.81	1.59	325	275	435	400	335	550	30.40	46.00
500	0.0605	0.0366	0.0759	0.0459	0.079	0.087	1.86	1.67	345	295	480	425	355	590	38.00	57.50
630	0.0469	0.0283	0.0610	0.0368	0.077	0.086	1.87	1.67	390	320	550	470	375	660	47.90	72.50
800	0.0367	0.0221	0.0503	0.0303	0.077	0.083	1.98	1.75	450	380	610	530	425	725	60.80	92.00
1000	0.0291	0.0176	0.0422	0.0255	0.076	0.082	2.20	1.94	500	415	680	590	740	870	76.00	115.00