

**Table 1**  
**Physical Parameters**  
 Relemac Aluminium/ Copper Conductor, PVC 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			Min	Wire	Strip	Unarmd		Armd		Unarmd	Armd		Unarmd		Armd		
mm <sup>2</sup>	No	No	mm	mm				mm	mm	mm	mm		mm	mm	mm	mm	mm	Kg/Km	Kg/Km
					Al	Cu	Al					Cu							
4	1/7	1/7	1.00	0.30	1.40	-	1.80	1.24	1.24	-	14	16	-	250	330	460	540	-	-
6	1/7	1/7	1.00	0.30	1.40	-	1.80	1.24	1.24	-	15	17	-	310	420	530	650	-	-
10	1/7	7	1.00	0.30	1.40	-	1.80	1.24	1.40	-	17	19	-	370	580	620	840	-	-
16	7	7	1.00	0.30	1.60	4 x .8	1.80	1.24	1.40	1.40	18	21	19	450	700	850	1100	600	900
25	7	7	1.20	0.30	1.60	4 x .8	2.00	1.40	1.40	1.40	21	23	22	600	1050	1050	1500	800	1250
35	7	7	1.20	0.30	1.60	4 x .8	2.00	1.40	1.40	1.40	23	25	23	700	1350	1200	1800	950	1550
50	7	7	1.40	0.30	1.60	4 x .8	2.00	1.40	1.56	1.56	26	28	27	900	1750	1500	2300	1200	2050
70	19	19	1.40	0.40	2.00	4 x .8	2.20	1.56	1.56	1.56	29	32	30	1200	2400	2000	3200	1500	2700
95	19	19	1.60	0.40	2.00	4 x .8	2.20	1.56	1.72	1.56	33	36	33	1500	3200	2450	4150	1850	3550
120	19	19	1.60	0.40	2.00	4 x .8	2.20	1.56	1.72	1.72	36	39	36	1800	3900	2800	4900	2200	4300
150	19	19	1.80	0.50	2.00	4 x .8	2.40	1.72	1.88	1.88	40	43	40	2200	4800	3350	5900	2650	5250
185	37	37	2.00	0.50	2.50	4 x .8	2.60	1.88	2.04	1.88	43	48	44	2700	5950	4300	7500	3150	6400
240	37	37	2.20	0.60	2.50	4 x .8	2.80	2.04	2.20	2.20	49	53	50	3550	7750	5250	9450	4000	8250
300	37	37	2.40	0.60	2.50	4 x .8	3.00	2.20	2.36	2.36	54	58	55	4200	9600	6150	11450	4800	10150
400	61	61	2.60	0.70	3.15	4 x .8	3.40	2.52	2.68	2.52	61	66	61	5350	12200	8200	14950	5950	12750
500	61	61	2.80	0.70	3.15	4 x .8	3.60	2.68	3.00	2.84	69	74	69	6750	15500	10000	18700	7450	16200
630	91	91	3.40	0.70	4.00	4 x .8	4.00	3.00	3.00	3.00	77	84	77	8550	19900	13150	24400	9300	20600

**Table 2**  
Electrical Parameters for Relemac Three 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	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	0.23	28	23	23	36	30	30	0.304	0.460
6	4.61	3.08	5.53	3.70	0.096	0.28	35	30	30	45	38	39	0.456	0.690
10	3.08	1.83	3.70	2.20	0.091	0.34	46	39	40	60	50	52	0.760	1.15
16	1.91	1.15	2.29	1.38	0.085	0.40	60	50	51	77	64	66	1.22	1.84
25	1.20	0.727	1.44	0.870	0.083	0.42	76	63	70	99	81	90	1.90	2.88
35	0.868	0.524	1.04	0.630	0.082	0.48	92	77	86	120	99	110	2.66	4.03
50	0.641	0.387	0.769	0.464	0.082	0.49	110	95	105	145	125	135	3.80	5.75
70	0.443	0.268	0.532	0.322	0.076	0.56	135	115	130	175	150	165	5.32	8.05
95	0.320	0.193	0.384	0.232	0.076	0.58	165	140	155	210	175	200	7.22	10.90
120	0.253	0.153	0.304	0.184	0.075	0.63	185	155	180	240	195	230	9.12	13.80
150	0.206	0.124	0.247	0.149	0.074	0.63	210	175	205	270	225	265	11.40	17.30
185	0.164	0.0991	0.197	0.119	0.074	0.64	235	200	240	300	255	305	14.10	21.30
240	0.125	0.0754	0.151	0.0912	0.073	0.67	275	235	280	345	295	355	18.20	27.30
300	0.100	0.0601	0.122	0.0733	0.073	0.68	295	305	260	315	385	335	400	34.50
400	0.0778	0.0470	0.0961	0.0580	0.072	0.70	335	290	375	425	360	435	30.40	46.00
500	0.0605	0.0366	0.0759	0.0459	0.072	0.70	370	320	425	470	390	520	38.00	57.50
630	0.0469	0.0283	0.0610	0.0368	0.072	0.70	405	350	480	555	470	675	47.90	72.50