Relemac Single Core Aluminium/Copper Conductor XLPE Insulated Unarmoured/ Aluminium Wire/Strip Armoured Cables A2XY/2XY/A2XWaY/A2XFaY/2XWaY/2XFaY

Table 1

Physical Parameters

Relemac Aluminium/ Copper Conductor, XLPE 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**	**Unarmd**	**Armd**	**Wire**	**Strip**	**Unarmd**		**Armd**		**Unarmd**	**Armd**		**Unarmd**		**Armd**			
							Nom	**Min**	**Wire**	**Strip**		**Wire**	**Strip**	**Al**	**Cu**	**Wire**		**Strip**	
									Min	**Min**						**Al**	**Cu**	**Al**	**Cu**
mm^2	**Nos**	**Nos**	**mm**	**mm**	**mm**	**mm**	**mm**	**mm**	**mm**	**mm**	**mm**	**mm**	**mm**	**Kg/Km**		**Kg/Km**			
4	1/7	1/7	0.70	1.00	1.40	-	1.80	1.24	1.24	-	7	10	-	70	90	120	150	-	-
6	1/7	1/7	0.70	1.00	1.40	-	1.80	1.24	1.24	-	8	11	-	80	110	130	170	-	-
10	1/7	7	0.70	1.00	1.40	-	1.80	1.24	1.24	-	9	12	-	90	160	150	220	-	-
16	7	7	0.70	1.00	1.40	-	1.80	1.24	1.24	-	10	12	-	130	250	200	300	-	-
25	7	7	0.90	1.20	1.40	-	1.80	1.24	1.24	-	11	14	-	150	350	250	400	-	-
35	7	7	0.90	1.20	1.40	-	1.80	1.24	1.24	-	12	15	-	200	400	300	500	-	-
50	7	7	1.00	1.30	1.40	-	1.80	1.24	1.24	-	14	16	-	250	550	360	650	-	-
70	19	19	1.10	1.40	1.40	-	1.80	1.24	1.24	-	16	18	-	350	750	450	850	-	-
95	19	19	1.10	1.40	1.60	4 x .8	1.80	1.24	1.40	1.40	18	21	19	450	1000	600	1150	500	1100
120	19	19	1.20	1.50	1.60	4 x .8	1.80	1.24	1.40	1.40	19	22	21	500	1250	700	1400	600	1300
150	19	19	1.40	1.70	1.60	4 x .8	2.00	1.40	1.40	1.40	21	24	23	650	1500	800	1650	700	1600
185	37	37	1.60	1.90	1.60	4 x .8	2.00	1.40	1.40	1.40	24	26	25	800	1850	950	2050	900	1950
240	37	37	1.70	2.00	1.60	4 x .8	2.00	1.40	1.40	1.40	26	29	27	950	2400	1150	2600	1050	2500
300	37	37	1.80	2.10	1.60	4 x .8	2.00	1.40	1.56	1.56	29	32	30	1150	2950	1400	3200	1300	3100
400	61	61	2.00	2.40	2.00	4 x .8	2.20	1.56	1.56	1.56	33	36	34	1500	3750	1850	4100	1650	3900
500	61	61	2.20	2.60	2.00	4 x .8	2.20	1.56	1.56	1.56	36	40	37	1850	4750	2200	5100	2000	4900
630	91	91	2.40	2.80	2.00	4 x .8	2.20	1.56	1.72	1.72	40	44	42	2350	6100	2750	6500	2520	6300
800	91	91	2.60	3.10	2.00	4 x .8	2.40	1.72	1.88	1.72	44	49	46	2900	7750	3450	8250	3150	7950
1000	91	91	2.80	3.30	2.50	4 x .8	2.60	1.88	2.04	1.88	48	54	50	3600	9650	4300	10300	3850	9850

Table 2

Electrical Parameters for Relemac Single 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 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	0.136	0.152	0.29	0.22	37	34	33	47	43	41	0.376	0.572
6	4.61	3.08	5.53	3.70	0.128	0.144	0.34	0.26	47	43	43	58	53	52	0.564	0.858
10	3.08	1.83	3.70	2.20	0.118	0.133	0.42	0.31	59	54	55	77	70	71	0.940	1.43
16	1.91	1.15	2.29	1.38	0.108	0.122	0.50	0.40	76	69	72	98	89	94	1.50	2.28
25	1.20	0.727	1.44	0.870	0.102	0.116	0.52	0.40	98	89	98	126	114	126	2.35	3.57
35	0.868	0.524	1.04	0.630	0.097	0.110	0.60	0.47	116	106	119	150	136	154	3.29	5.00
50	0.641	0.387	0.769	0.464	0.092	0.103	0.63	0.50	137	124	145	177	160	187	4.70	7.15
70	0.443	0.268	0.532	0.322	0.088	0.099	0.68	0.55	168	151	185	216	195	238	6.58	10.01
95	0.320	0.193	0.384	0.232	0.085	0.097	0.79	0.64	202	181	235	260	233	303	8.93	13.59
120	0.253	0.153	0.304	0.184	0.082	0.093	0.79	0.67	230	206	276	295	264	354	11.28	17.16
150	0.206	0.124	0.247	0.149	0.082	0.091	0.79	0.67	256	229	314	329	294	403	14.10	21.45
185	0.164	0.0991	0.197	0.119	0.082	0.090	0.79	0.67	290	258	366	371	330	468	17.39	26.46
240	0.125	0.0754	0.151	0.0912	0.079	0.086	0.84	0.72	335	298	434	427	379	553	22.56	34.32
300	0.100	0.0601	0.122	0.0733	0.078	0.085	0.86	0.75	376	333	500	477	422	634	28.20	42.90
400	0.0778	0.0470	0.0961	0.0580	0.077	0.085	0.88	0.75	429	378	589	537	473	737	37.60	57.20
500	0.0605	0.0366	0.0759	0.0459	0.076	0.083	0.90	0.77	485	426	685	598	525	844	47.00	71.50
630	0.0469	0.0283	0.0610	0.0368	0.075	0.082	94	0.81	546	477	793	661	578	961	59.22	90.09
800	0.0367	0.0221	0.0503	0.0303	0.075	0.081	0.97	0.88	608	528	907	721	626	1077	75.2	114.40
1000	0.0291	0.0176	0.0422	0.0255	0.068	0.081	1.01	0.88	665	575	1022	772	668	1188	94.00	143.00