

1.1 KV 1.5 SQMM COPPER CONDUCTOR, PVC INSULATED

1.1 KV 1.5 Sqmm COPPER CONDUCTOR, PVC INSULATED													
ARMOURED / UNARMOURED CONTROL CONFORMING TO IS : 1554 (PART I)													
Number of Cores	Nominal Thickness of Insulation	Minimum Thickness of Inner Sheath	Armoured - YWY & YFY					Unarmoured - YY			Max. D.C Conductor Resistance at 20°C	Current Ratings	
			Nominal Dia. Of Armour Wire	Nominal Dimension Of Armour Strip	Minimum Thickness of Outer Sheath	Approx. Overall Dia. of Cable	Approx. Weight of Cable	Nominal Thickness of Outer Sheath	Approx. Overall Dia. of Cable	Approx. Weight of Cable		Direct in Ground	In air
	mm	mm	mm	mm	mm	mm	kg/km	mm	mm	kg/km	Ohm/Km	Amps	Amps
2	0.8	0.3	1.4	-	1.24	13.5	350	1.8	10.5	130	12.1	23	20
3	0.8	0.3	1.4	-	1.24	14.0	400	1.8	11.0	160	12.1	21	17
4	0.8	0.3	1.4	-	1.24	15.0	450	1.8	11.5	190	12.1	21	17
5	0.8	0.3	1.4	-	1.24	15.5	500	1.8	12.5	225	12.1	21	17
6	0.8	0.3	1.4	-	1.24	16.0	550	1.8	13.0	250	12.1	15	13
7	0.8	0.3	1.4	-	1.24	16.5	565	1.8	13.5	265	12.1	14	13
10	0.8	0.3	1.4	-	1.40	19.0	750	1.8	16.5	350	12.1	13	11
12	0.8	0.3	-	4x0.8	1.40	19.5	650	1.8	17.5	400	12.1	12	10
14	0.8	0.3	-	4x0.8	1.40	20.0	760	1.8	18.0	450	12.1	11	10
16	0.8	0.3	-	4x0.8	1.40	21.0	800	1.8	19.5	500	12.1	11	9
19	0.8	0.3	-	4x0.8	1.40	22.0	850	2.0	20.0	600	12.1	10	9
24	0.8	0.3	-	4x0.8	1.40	25.0	1050	2.0	23.0	725	12.1	9	8
27	0.8	0.3	-	4x0.8	1.40	25.5	1150	2.0	24.0	800	12.1	9	7
30	0.8	0.3	-	4x0.8	1.56	26.5	1200	2.0	24.5	860	12.1	9	7
37	0.8	0.3	-	4x0.8	1.56	28.0	1400	2.0	26.0	1050	12.1	8	7

1.1 KV 2.5 SQMM COPPER CONDUCTOR, PVC INSULATED

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ARMOURED / UNARMOURED CONTROL CONFORMING TO IS : 1554 (PART I)													
Number of Cores	Nominal Thickness of Insulation	Minimum Thickness of Inner Sheath	Armoured - YWY & YFY					Unarmoured - YY			Max. Dc Conductor Resistance at 20°C	Current Ratings	
			Nominal Dia. Of Armour Wire	Nominal Dimension Of Armour Strip	Minimum Thickness of Outer Sheath	Approx. Overall Dia. of Cable	Approx. Weight of Cable	Nominal Thickness of Outer Sheath	Approx. Overall Dia. of Cable	Approx. Weight of Cable		Direct in Ground	In air
	mm	mm	mm	mm	mm	mm	kg/km	mm	mm	kg/km	Ohm/Km	Amps	Amps
2	0.9	0.3	1.4	-	1.24	14.5	425	1.8	12.5	160	7.41	32	27
3	0.9	0.3	1.4	-	1.24	15.5	475	1.8	13.0	225	7.41	27	24
4	0.9	0.3	1.4	-	1.24	16.5	530	1.8	14.0	250	7.41	27	24
5	0.9	0.3	1.4	-	1.24	17.5	600	1.8	15.0	300	7.41	27	24
6	0.9	0.3	1.4	-	1.24	19.0	675	1.8	17.0	340	7.41	20	18
7	0.9	0.3	1.4	-	1.24	19.0	700	1.8	17.0	375	7.41	20	17
10	0.9	0.3	-	4x0.8	1.40	21.0	780	1.8	21.0	500	7.41	18	15
12	0.9	0.3	-	4x0.8	1.40	22.0	850	2.0	22.0	600	7.41	17	14
14	0.9	0.3	-	4x0.8	1.40	24.0	950	2.0	23.0	650	7.41	16	13
16	0.9	0.3	-	4x0.8	1.40	25.0	1050	2.0	24.0	750	7.41	15	13
19	0.9	0.3	-	4x0.8	1.40	26.0	1150	2.0	26.0	850	7.41	14	12
24	0.9	0.3	-	4x0.8	1.56	31.0	1400	2.0	29.0	1050	7.41	13	11
27	0.9	0.3	-	4x0.8	1.56	31.5	1600	2.0	30.0	1150	7.41	12	10
30	0.9	0.3	-	4x0.8	1.56	33.0	1700	2.2	32.0	1250	7.41	12	10
37	0.9	0.4	-	4x0.8	1.56	35.0	2000	2.2	34.0	1550	7.41	11	10

1.1 KV 1.5 SQMM COPPER CONDUCTOR, XLPE INSULATED

1.1 KV 1.5 Sqmm COPPER CONDUCTOR, XLPE INSULATED													
ARMOURED & UNARMOURED CONTROL CABLES CONFORMING TO IS : 7098 (PART I)													
Number of Cores	Nominal Thickness of Insulation	Minimum Thickness of Inner Sheath	Armoured - 2XWY & 2XFY					Unarmoured - 2XY			Max. D.C Conductor Resistance at 20°C	Current Ratings	
			Nominal Dia. Of Armour Wire	Nominal Dimension Of Armour Strip	Minimum Thickness of Outer Sheath	Approx. Overall Dia. of Cable	Approx. Weight of Cable	Nominal Thickness of Outer Sheath	Approx. Overall Dia. of Cable	Approx. Weight of Cable		Direct in Ground	In air
	mm	mm	mm	mm	mm	mm	kg/km	mm	mm	kg/km	Ohm/Km	Amps	Amps
2	0.7	0.3	1.4	-	1.24	12.0	350	1.8	10.0	150	12.1	26	26
3	0.7	0.3	1.4	-	1.24	12.5	380	1.8	10.5	180	12.1	24	24
4	0.7	0.3	1.4	-	1.24	13.5	425	1.8	11.5	210	12.1	24	24
5	0.7	0.3	1.4	-	1.24	14.5	480	1.8	12.1	240	12.1	20	24
6	0.7	0.3	1.4	-	1.24	15.5	520	1.8	14.5	260	12.1	14	16
7	0.7	0.3	1.4	-	1.24	15.5	540	1.8	14.5	270	12.1	14	16
10	0.7	0.3	1.4	-	1.24	18.5	700	1.8	16.5	360	12.1	13	14
12	0.7	0.3	1.4	-	1.24	19.0	750	1.8	17.0	410	12.1	12	13
14	0.7	0.3	1.4	-	1.40	20.5	850	1.8	18.0	460	12.1	11	13
16	0.7	0.3	-	4 X 0.8	1.40	20.5	750	1.8	19.0	510	12.1	11	11
19	0.7	0.3	-	4 X 0.8	1.40	21.5	860	1.8	20.0	600	12.1	10	11
24	0.7	0.3	-	4 X 0.8	1.40	24.5	1050	2.0	23.5	730	12.1	10	10
27	0.7	0.3	-	4 X 0.8	1.40	25.0	1110	2.0	24.0	820	12.1	8	9
30	0.7	0.3	-	4 X 0.8	1.40	26.0	1200	2.0	25.0	910	12.1	8	9
37	0.7	0.3	-	4 X 0.8	1.40	28.0	1400	2.0	27.0	1050	12.1	7	8

1.1 KV 2.5 SQMM COPPER CONDUCTOR, XLPE INSULATED

1.1 KV 2.5 Sq.mm COPPER CONDUCTOR, XLPE INSULATED													
ARMOURED & UNARMOURED CONTROL CABLES CONFORMING TO IS : 7098 (PART I)													
Number of Cores	Nominal Thickness of Insulation	Minimum Thickness of Inner Sheath	Armoured - 2XWY & 2XFY					Unarmoured - 2XY			Max. D.C Conductor Resistance at 20°C	Current Ratings	
			Nominal Dia. Of Armour Wire	Nominal Dimension Of Armour Strip	Minimum Thickness of Outer Sheath	Approx. Overall Dia. of Cable	Approx. Weight of Cable	Nominal Thickness of Outer Sheath	Approx. Overall Dia. of Cable	Approx. Weight of Cable		Direct in Ground	In air
	mm	mm	mm	mm	mm	mm	kg/km	mm	mm	kg/km	Ohm/Km	Amps	Amps
2	0.7	0.3	1.4	-	1.24	13.0	400	1.8	11.0	200	7.41	36	32
3	0.7	0.3	1.4	-	1.24	13.5	440	1.8	11.5	220	7.41	31	29
4	0.7	0.3	1.4	-	1.24	14.5	500	1.8	12.5	265	7.41	31	29
5	0.7	0.3	1.4	-	1.24	15.5	575	1.8	13.5	310	7.41	31	29
6	0.7	0.3	1.4	-	1.24	16.5	600	1.8	15.0	345	7.41	23	20
7	0.7	0.3	1.4	-	1.24	16.5	640	1.8	15.0	370	7.41	23	20
10	0.7	0.3	-	4 X 0.8	1.40	19.5	700	1.8	18.5	500	7.41	19	17
12	0.7	0.3	-	4 X 0.8	1.40	20.0	770	1.8	19.0	560	7.41	18	17
14	0.7	0.3	-	4 X 0.8	1.40	21.0	870	1.8	20.0	650	7.41	17	16
16	0.7	0.3	-	4 X 0.8	1.40	22.0	950	2.0	21.5	730	7.41	17	14
19	0.7	0.3	-	4 X 0.8	1.40	22.8	1080	2.0	23.0	840	7.41	16	13
24	0.7	0.3	-	4 X 0.8	1.40	27.0	1300	2.0	26.5	1025	7.41	14	12
27	0.7	0.3	-	4 X 0.8	1.40	27.0	1400	2.0	27.0	1150	7.41	14	12
30	0.7	0.3	-	4 X 0.8	1.40	28.5	1500	2.0	28.0	1200	7.41	13	11
37	0.7	0.3	-	4 X 0.8	1.56	31.0	1800	2.0	30.0	1500	7.41	11	11

SHORT CIRCUIT RATINGS

MAXIMUM PERMISSIBLE SHORT CIRCUIT RATINGS		
FOR PVC INSULATED CABLES		
Nominal Area of Conductor	Short circuit rating for one second duration	
	Aluminium	Copper
Sq. mm	kA	kA
1.50	0.114	0.172
2.50	0.190	0.287
4.00	0.304	0.460
6.00	0.456	0.690
10.00	0.760	1.150
16.00	1.216	1.840
25.00	1.900	2.875
35.00	2.660	4.020
50.00	3.801	5.750
70.00	5.323	8.050
95.00	7.222	10.920
120.00	9.121	13.800
150.00	11.399	17.251
185.00	14.060	21.272
240.00	18.242	27.599
300.00	22.803	34.501
400.00	30.405	46.000
500.00	38.001	57.502
630.00	47.889	72.453
800.00	60.808	92.000
1000.00	75.999	115.000

Initial Temperature 70°C 70°C
 Final Temperature 160°C 160°C

MAXIMUM PERMISSIBLE SHORT CIRCUIT RATINGS		
FOR XLPE INSULATED CABLES		
Nominal Area of Conductor	Short circuit rating for one second duration	
	Aluminium	Copper
Sq. mm	kA	kA
16.00	1.51	2.28
25.00	2.36	3.57
35.00	3.30	5.00
50.00	4.72	7.15
70.00	6.60	10.00
95.00	8.96	13.58
120.00	11.32	17.16
150.00	14.16	21.45
185.00	17.46	26.45
240.00	22.65	34.32
300.00	28.32	42.90
400.00	37.76	57.20
500.00	47.20	71.50
630.00	59.47	90.00
800.00	75.52	0.00
1000.00	94.40	0.00

Initial Temperature 90°C 90°C
 Final Temperature 250°C 250°C