

# Three Core Triplex Power Cable 6.35/11kV

STANDARD: AS/NZS 4026

RATED VOLTAGE: 6.35/11(12)kV

FAULT LEVEL: Up to 10kA for 1sec or to customer requirements

IMPULSE VOLTAGE: 95kV

TEMPERATURE RANGE:

In continuous operation Max. conductor temp 90°C.

Lowest cable temperature during installation: -10°C and below 0°C special precaution must be taken.

BENDING RADIUS:

During installation: 25 x CD. When installed: 15 x CD (HDPE sheathed cables)

CD = Diameter of phase cable

DESIGN

CONDUCTOR:

Stranded, round and compacted aluminium complying with AS/NZS 1125

SEMI-CONDUCTIVE CONDUCTOR SCREEN: Extruded cross-linked compound

INSULATION:

XLPE complying with AS/NZS 3808

SEMI-CONDUCTIVE INSULATION SCREEN:

Extruded hand strippable cross-linked compound

METALLIC SCREEN: Circular copper wires

BINDER: Water Blocking Taped

OUTER SHEATH: HDPE, Black



## Electrical Data

Conductor size	Maximum conductor DC resistance at 20°C	Cond.AC resistance at 50Hz and 90°C	Inductive reactance at 50Hz and 90°C	Insulation resistance at 20°C	Charging current per phase	Dielectric loss per phase	Zero sequence resistance at 20°C	Zero sequence reactance at 50Hz
mm <sup>2</sup>	Ω/km	Ω/km	Ω/km	MΩ.km	A/km	W/km	Ω/km	Ω/km
50	0.641	0.822	0.130	9500	0.505	12.8	1.19	0.0722
70	0.443	0.568	0.121	8300	0.580	14.7	0.837	0.0636
95	0.32	0.411	0.117	7400	0.646	16.4	0.614	0.0595
120	0.253	0.325	0.113	6800	0.708	18.0	0.516	0.0558
150	0.206	0.265	0.109	6300	0.770	19.6	0.469	0.0528
185	0.164	0.211	0.105	5700	0.844	21.4	0.429	0.0492
240	0.125	0.161	0.101	5200	0.934	23.7	0.340	0.0462
300	0.100	0.130	0.0984	4700	1.02	25.9	0.365	0.0438
400	0.0778	0.102	0.0943	4200	1.14	28.9	0.343	0.0403
500	0.0617	0.0817	0.0926	3700	1.30	32.9	0.327	0.0391

## Current Ratings

Conductor size	Continuous current-carrying capacity, A		Fault current carrying capacity for 1 second	Short circuit current rating of the screen 1sec
	in ground	In air		
mm <sup>2</sup>			Cond. kA	kA
50	132	125	4.7	4.6
70	163	157	6.6	6.5
95	197	194	9.0	8.8
120	223	221	11.3	10.0
150	249	247	14.2	10.0
185	281	279	17.5	10.0
240	323	323	22.7	10.0
300	372	380	28.4	10.0
400	422	434	37.8	10.0
500	474	490	47.3	10.0

## 6.35/11kV Triplex HDPE Sheathed Aluminium Conductor

Product code	Conductor size	Nominal thickness of insulation	Diameter over insulation	Number & Nominal Diameter of Screen Wires	Diameter of phase cable	Overall diameter (approx.)	Mass (approx.)	Maximum pulling tension	Minimum bending radius			
									Phase cable		Cable bundle	
									During Installation	Installed	During Installation	Installed
mm <sup>2</sup>	mm	mm	no./mm	mm	mm	kg/km	kN	mm	mm	mm	mm	
3MV050A11TH	50	3.4	16.1	23/1.35	23.4	50.4	2394	7.5	590	350	760	500
3MV070A11TH	70	3.4	17.9	32/1.35	25.9	55.9	3092	11	650	390	840	560
3MV095A11TH	95	3.4	19.5	43/1.35	28.1	60.5	3887	14	700	420	910	610
3MV120A11TH	120	3.4	21.0	48/1.35	29.7	64.0	4410	18	740	450	960	640
3MV150A11TH	150	3.4	22.5	48/1.35	31.3	67.5	4749	23	780	470	1010	670
3MV185A11TH	185	3.4	24.3	48/1.35	32.8	70.6	5170	25	820	490	1060	710
3MV240A11TH	240	3.4	26.5	48/1.35	35.1	75.7	5810	25	880	530	1140	760
3MV300A11TH	300	3.4	28.6	48/1.35	37.4	80.6	6468	25	930	560	1210	810
3MV400A11TH	400	3.4	31.5	48/1.35	40.5	87.2	7406	25	1010	610	1310	870
3MV500A11TH	500	3.4	35.3	48/1.35	44.6	103.0	9640	25	1120	670	1540	1030