

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 copper 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




6.35/11kV Triplex HDPE Sheathed Copper 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
3MV035C11TH	35	3.4	14.9	24/1.35	22.7	49.0	2915	7.4	570	340	730	490
3MV050C11TH	50	3.4	16.1	34/1.35	24.0	51.7	3740	11	600	360	780	520
3MV070C11TH	70	3.4	17.9	30/1.70	26.8	57.6	5027	15	670	400	860	580
3MV095C11TH	95	3.4	19.5	38/1.52	28.1	60.5	5834	20	700	420	910	610
3MV120C11TH	120	3.4	21.0	48/1.35	29.7	64.0	6606	25	740	450	960	640
3MV150C11TH	150	3.4	22.5	48/1.35	31.3	67.5	7463	25	780	470	1010	670
3MV185C11TH	185	3.4	24.3	48/1.35	32.8	70.6	8559	25	820	490	1060	710
3MV240C11TH	240	3.4	26.5	48/1.35	35.1	75.7	10268	25	880	530	1140	760
3MV300C11TH	300	3.4	28.6	48/1.35	37.4	80.6	12071	25	930	560	1210	810
3MV400C11TH	400	3.4	31.5	48/1.35	40.5	87.2	14554	25	1010	610	1310	870
3MV500C11TH	500	3.4	35.3	48/1.35	44.6	96.0	18813	25	1110	670	1440	960

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 ²	Ω/.km	Ω/.km	Ω/.km	MΩ.km	A/.km	W/.km	Ω/.km	Ω/.km
35	0.524	0.668	0.139	11000	0.455	11.5	1.04	0.0792
50	0.387	0.494	0.132	9500	0.505	12.8	0.756	0.0732
70	0.268	0.342	0.123	8300	0.580	14.7	0.530	0.0648
95	0.193	0.247	0.117	7400	0.646	16.4	0.456	0.0595
120	0.153	0.196	0.113	6800	0.708	18.0	0.417	0.0558
150	0.124	0.159	0.1090	6300	0.770	19.6	0.388	0.0528
185	0.0991	0.128	0.1050	5700	0.844	21.4	0.364	0.0492
240	0.0754	0.098	0.1010	5200	0.934	23.7	0.341	0.0462
300	0.0601	0.0791	0.0984	4700	1.02	25.9	0.326	0.0438
400	0.0470	0.0632	0.0943	4200	1.14	28.9	0.313	0.0403
500	0.0373	0.0516	0.0925	3700	1.30	32.9	0.304	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 ²			Cond. kA	kA
35	145	135	5.0	5.0
50	172	165	7.1	7.1
70	209	202	10.0	10.0
95	252	248	13.6	10.0
120	285	282	17.1	10.0
150	318	315	21.4	10.0
185	357	354	26.4	10.0
240	408	408	34.3	10.0
300	467	478	42.9	10.0
400	524	539	57.2	10.0
500	581	602	71.5	10.0