

Three Core Cu 19/33kV XLPE Insulated HD Cu Screened PVC Sheathed

STANDARD: AS/NZS 1429.1

RATED VOLTAGE: 19/33 (36) kV

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

IMPULSE VOLTAGE: 95kV

TEMPERATURE RANGE:

In continuous operations Max. conductor temp 90°C

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

BENDING RADIUS:

During installation: 18 x D. When installed: 12 x D (PVC sheathed cables)

D = Overall diameter of 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 semi-conductive cross-linked compound

METALLIC SCREEN:

Circular copper wires

OUTER SHEATH:

Black PVC as standard. HDPE, halogen free, flame retardant, termite protection in the form of nylon, double brass tape or chemical additive also available.





Product Code	Conductor size mm ²	Nominal insulation thickness mm	Diameter over insulation mm	Number & diameter of screen wires no./mm	Overall Diameter mm	Mass (approx.) kg/km	Maximum pulling tension kN	Minimum Bending Radius	
								During installation mm	Installed mm
3MV050C33HP	50	8.0	25.3	29/0.85	68.6	4600	11	1230	820
3MV070C33HP	70	8.0	27.1	40/0.85	72.7	5700	15	1310	870
3MV095C33HP	95	8.0	28.7	40/0.85	76.4	6700	20	1380	920
3MV120C33HP	120	8.0	30.2	40/0.85	79.9	7600	25	1440	960
3MV150C33HP	150	8.0	31.7	40/0.85	83.3	8600	25	1500	1000
3MV185C33HP	185	8.0	33.5	40/0.85	87.5	9900	25	1570	1050
3MV240C33HP	240	8.0	35.7	40/0.85	92.5	11900	25	1670	1110
3MV300C33HP	300	8.0	37.8	40/0.85	97.4	14000	25	1750	1170
3MV400C33HP	400	8.0	40.7	40/0.85	104.1	16800	25	1870	1250
3MV500C33HP	500	8.0	44.5	40/0.85	118.1	21200	25	2130	1420

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Electrical Data

Product Code	Conductor size mm ²	Max. conductor DC resistance at 20°C Ω/km	Conductor AC resistance at 50Hz and 90°C Ω/km	Inductive reactance at 50Hz and 90°C Ω/km	Insulation resistance at 20°C MΩ.km	Charging current per phase A/km	Dielectric loss per phase W/km	Zero sequence resistance at 20°C Ω/km	Zero sequence reactance at 50Hz Ω/km
3MV050C33HP	50	0.387	0.494	0.143	17000	0.828	15.7	1.49	0.0976
3MV070C33HP	70	0.268	0.342	0.131	16000	0.929	17.6	1.06	0.0862
3MV095C33HP	95	0.193	0.247	0.125	14000	1.02	19.3	0.990	0.0801
3MV120C33HP	120	0.153	0.196	0.120	13000	1.10	20.9	0.950	0.0753
3MV150C33HP	150	0.124	0.159	0.116	12000	1.18	22.4	0.921	0.0713
3MV185C33HP	185	0.0991	0.128	0.112	11000	1.28	24.3	0.896	0.0671
3MV240C33HP	240	0.0754	0.0978	0.108	10000	1.39	26.5	0.873	0.0629
3MV300C33HP	300	0.0601	0.0788	0.104	9600	1.51	28.6	0.858	0.0595
3MV400C33HP	400	0.0470	0.0629	0.0995	8700	1.66	31.5	0.845	0.0558
3MV500C33HP	500	0.0373	0.0513	0.0969	7700	1.86	35.4	0.836	0.0525

Current Ratings

Conductor Size mm ²	Current rating at core temp. 90°C in ground A 	Current rating at core temp. 90°C in air A 	Max. short-circuit current on the conductor during 1sec at initial temp. 90°C kA	Short circuit current rating of the screen 1 sec. kA
50	204	204	7.1	7.3
70	250	254	10.0	10.1
95	299	307	13.6	10.1
120	339	352	17.1	10.1
150	381	399	21.4	10.1
185	430	456	26.4	10.1
240	497	534	34.3	10.1
300	560	609	42.9	10.1
400	637	702	57.2	10.1
500	703	776	71.5	10.1