

Three Core Cu 3.8/6.6kV XLPE Insulated HD Cu Screened PVC Sheathed

STANDARD: AS/NZS 1429.1

RATED VOLTAGE: 3.8/6.6 (7.2) 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
3MV035C06HP	35	2.5	13.1	20/0.85	40.4	2200	7.4	730	480
3MV050C06HP	50	2.5	14.3	29/0.85	43.2	2800	11	780	520
3MV070C06HP	70	2.5	16.1	40/0.85	47.4	3700	15	850	570
3MV095C06HP	95	2.5	17.7	40/0.85	51.0	4600	20	920	610
3MV120C06HP	120	2.5	19.2	40/0.85	54.5	5400	25	980	650
3MV150C06HP	150	2.5	20.7	40/0.85	58.0	6300	25	1040	700
3MV185C06HP	185	2.5	22.5	40/0.85	62.1	7500	25	1120	750
3MV240C06HP	240	2.6	24.9	40/0.85	67.6	9300	25	1220	810
3MV300C06HP	300	2.8	27.4	40/0.85	73.4	11300	25	1320	880
3MV400C06HP	400	3.0	30.7	40/0.85	81.0	14000	25	1460	970

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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
3MV035C06HP	35	0.524	0.668	0.118	8400	0.345	5.24	2.12	0.0712
3MV050C06HP	50	0.387	0.494	0.112	7500	0.385	5.86	1.49	0.0658
3MV070C06HP	70	0.268	0.342	0.103	6500	0.446	6.78	1.06	0.0569
3MV095C06HP	95	0.193	0.247	0.0987	5800	0.499	7.59	0.990	0.0527
3MV120C06HP	120	0.153	0.196	0.0954	5200	0.550	8.35	0.950	0.0495
3MV150C06HP	150	0.124	0.159	0.0926	4800	0.600	9.12	0.921	0.0468
3MV185C06HP	185	0.0991	0.128	0.0898	4400	0.660	10.0	0.896	0.0442
3MV240C06HP	240	0.0754	0.0986	0.0874	4100	0.708	10.8	0.873	0.0420
3MV300C06HP	300	0.0601	0.0797	0.0860	4000	0.725	11.0	0.858	0.0407
3MV400C06HP	400	0.0470	0.0640	0.0833	3800	0.762	11.6	0.845	0.0382

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
35	173	160	5.0	5.1
50	204	192	7.1	7.3
70	249	240	10.0	10.1
95	298	292	13.6	10.1
120	338	336	17.1	10.1
150	379	382	21.4	10.1
185	428	439	26.4	10.1
240	495	517	34.3	10.1
300	557	591	42.9	10.1
400	631	683	57.2	10.1