

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

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

INNER SHEATH:

Black PVC

AMOUR:

Galvanised steel wires complying with AS/NZS 3863

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 <sup>2</sup>	Nominal insulation thickness mm	Diameter over insulation mm	Number & diameter of screen wires no./mm	Diameter over inner sheath (approx.) mm	Diameter of steel wires mm	Overall diameter (approx.) mm	Mass (approx.) kg/km	Maximum pulling tension kN	Minimum Bending Radius	
										During installation mm	Installed mm
3MV035C06HS	35	2.5	13.1	20/0.85	38.6	2.5	48.6	4500	7.4	880	580
3MV050C06HS	50	2.5	14.3	29/0.85	41.3	2.5	51.5	5300	11	930	620
3MV070C06HS	70	2.5	16.1	40/0.85	45.3	2.5	55.8	6500	15	1000	670
3MV095C06HS	95	2.5	17.7	40/0.85	48.9	2.5	59.6	7600	20	1070	720
3MV120C06HS	120	2.5	19.2	40/0.85	52.2	2.5	63.2	8600	25	1140	760
3MV150C06HS	150	2.5	20.7	40/0.85	55.6	2.5	66.8	9700	25	1200	800
3MV185C06HS	185	2.5	22.5	40/0.85	59.6	2.5	71.1	11200	25	1280	850
3MV240C06HS	240	2.6	24.9	40/0.85	65.0	3.15	78.3	14200	25	1410	940
3MV300C06HS	300	2.8	27.4	40/0.85	70.6	3.15	84.3	16600	25	1520	1010

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## Electrical Data

Product Code	Conductor size mm <sup>2</sup>	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
3MV035C06HS	35	0.524	0.668	0.118	8400	0.345	5.24	1.38	0.0712
3MV050C06HS	50	0.387	0.494	0.112	7500	0.385	5.86	1.06	0.0658
3MV070C06HS	70	0.268	0.342	0.103	6500	0.446	6.78	0.798	0.0569
3MV095C06HS	95	0.193	0.247	0.0987	5800	0.499	7.59	0.710	0.0527
3MV120C06HS	120	0.153	0.196	0.0954	5200	0.550	8.35	0.659	0.0495
3MV150C06HS	150	0.124	0.159	0.0926	4800	0.600	9.12	0.618	0.0468
3MV185C06HS	185	0.0991	0.128	0.0898	4400	0.660	10.0	0.580	0.0442
3MV240C06HS	240	0.0754	0.0986	0.0874	4100	0.708	10.8	0.492	0.0420
3MV300C06HS	300	0.0601	0.0797	0.0860	4000	0.725	11.0	0.462	0.0407

## Current Ratings

Conductor Size mm <sup>2</sup>	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	171	162	5.0	5.1
50	201	194	7.1	7.3
70	245	240	10.0	10.1
95	291	290	13.6	10.1
120	328	331	17.1	10.1
150	366	374	21.4	10.1
185	410	425	26.4	10.1
240	466	493	34.3	10.1
300	517	554	42.9	10.1