

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

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 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 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 ²	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.)	Mass (approx.) kg/km	Maximum pulling tension kN	Minimum Bending Radius	
										During installation mm	Installed mm
3MV050A33HS	50	8.0	25.3	19/0.85	65.9	3.15	79.2	8500	7.5	1430	950
3MV070A33HS	70	8.0	27.1	27/0.85	69.9	3.15	83.6	9400	11	1500	1000
3MV095A33HS	95	8.0	28.7	36/0.85	73.5	3.15	87.4	10400	14	1570	1050
3MV120A33HS	120	8.0	30.2	40/0.85	76.9	3.15	91.0	11200	18	1640	1090
3MV150A33HS	150	8.0	31.7	40/0.85	80.2	3.15	94.6	11900	23	1700	1140
3MV185A33HS	185	8.0	33.5	40/0.85	84.3	3.15	98.9	12900	25	1780	1190
3MV240A33HS	240	8.0	35.7	40/0.85	89.2	3.15	104.2	14200	25	1880	1250
3MV300A33HS	300	8.0	37.8	40/0.85	93.9	3.15	109.2	15500	25	1970	1310

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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
3MV050A33HS	50	0.641	0.822	0.143	17000	0.828	15.7	1.21	0.0976
3MV070A33HS	70	0.443	0.568	0.131	16000	0.929	17.6	0.927	0.0862
3MV095A33HS	95	0.320	0.411	0.125	14000	1.02	19.3	0.733	0.0801
3MV120A33HS	120	0.253	0.325	0.120	13000	1.10	20.9	0.638	0.0753
3MV150A33HS	150	0.206	0.265	0.116	12000	1.18	22.4	0.583	0.0713
3MV185A33HS	185	0.164	0.211	0.112	11000	1.28	24.3	0.531	0.0671
3MV240A33HS	240	0.125	0.161	0.108	10000	1.39	26.5	0.483	0.0629
3MV300A33HS	300	0.100	0.130	0.104	9600	1.51	28.6	0.447	0.0595

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	156	158	4.7	4.8
70	191	195	6.6	6.8
95	227	234	9.0	9.1
120	257	268	11.3	10.1
150	286	301	14.2	10.1
185	322	343	17.5	10.1
240	370	399	22.7	10.1
300	413	450	28.4	10.1