

Three Core Cu 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 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 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.) mm	Mass (approx.) kg/km	Maximum pulling tension kN	Minimum Bending Radius	
										During installation mm	Installed mm
3MV050C33HS	50	8.0	25.3	29/0.85	65.9	3.15	79.2	9600	11	1430	950
3MV070C33HS	70	8.0	27.1	40/0.85	69.9	3.15	83.6	11000	15	1500	1000
3MV095C33HS	95	8.0	28.7	40/0.85	73.5	3.15	87.4	12200	20	1570	1050
3MV120C33HS	120	8.0	30.2	40/0.85	76.9	3.15	91.0	13400	25	1640	1090
3MV150C33HS	150	8.0	31.7	40/0.85	80.2	3.15	94.6	13700	25	1700	1140
3MV185C33HS	185	8.0	33.5	40/0.85	84.3	3.15	98.9	16300	25	1780	1190
3MV240C33HS	240	8.0	35.7	40/0.85	89.2	3.15	104.2	18600	25	1880	1250
3MV300C33HS	300	8.0	37.8	40/0.85	93.9	3.15	109.2	21100	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
3MV050C33HS	50	0.387	0.494	0.143	17000	0.828	15.7	0.873	0.0976
3MV070C33HS	70	0.268	0.342	0.131	16000	0.929	17.6	0.672	0.0862
3MV095C33HS	95	0.193	0.247	0.125	14000	1.02	19.3	0.586	0.0801
3MV120C33HS	120	0.153	0.196	0.120	13000	1.10	20.9	0.538	0.0753
3MV150C33HS	150	0.124	0.159	0.116	12000	1.18	22.4	0.501	0.0713
3MV185C33HS	185	0.0991	0.128	0.112	11000	1.28	24.3	0.466	0.0671
3MV240C33HS	240	0.0754	0.0978	0.108	10000	1.39	26.5	0.434	0.0629
3MV300C33HS	300	0.0601	0.0788	0.104	9600	1.51	28.6	0.407	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	201	203	7.1	7.3
70	244	250	10.0	10.1
95	290	300	13.6	10.1
120	327	342	17.1	10.1
150	364	385	21.4	10.1
185	407	435	26.4	10.1
240	465	503	34.3	10.1
300	515	564	42.9	10.1