

# Three Core Cu 6.35/11kV XLPE Insulated HD Cu Screened PVC Sheathed

STANDARD: AS/NZS 1429.1

RATED VOLTAGE: 6.35/11kV (12) 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 <sup>2</sup>	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
3MV035C11HP	35	3.4	14.9	20/0.85	44.6	2450	7.4	800	540
3MV050C11HP	50	3.4	16.1	29/0.85	47.4	3100	11	850	570
3MV070C11HP	70	3.4	17.9	40/0.85	51.5	4000	15	930	620
3MV095C11HP	95	3.4	19.5	40/0.85	55.2	4900	20	990	660
3MV120C11HP	120	3.4	21.0	40/0.85	58.6	5700	25	1060	700
3MV150C11HP	150	3.4	22.5	40/0.85	62.1	6600	25	1120	750
3MV185C11HP	185	3.4	24.3	40/0.85	66.3	7800	25	1190	800
3MV240C11HP	240	3.4	26.5	40/0.85	71.3	9600	25	1280	860
3MV300C11HP	300	3.4	28.6	40/0.85	76.2	11500	25	1370	910
3MV400C11HP	400	3.4	31.5	40/0.85	82.8	14200	25	1490	990
3MV500C11HP	500	3.4	35.3	40/0.85	97.4	18400	25	1750	1170

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## Electrical Data

Product Code	Conductor size	Max. conductor DC resistance at 20°C	Conductor AC resistance at 50Hz and 90°C	Inductive reactance at 50Hz and 90°C	Insulation resistance at 20°C	Charging current per phase	Dielectric loss per phase	Zero sequence resistance at 20°C	Zero sequence reactance at 50Hz
	mm <sup>2</sup>	Ω/km	Ω/km	Ω/km	MΩ.km	A/km	W/km	Ω/km	Ω/km
3MV035C11HP	35	0.524	0.668	0.125	11000	0.455	11.5	2.12	0.0781
3MV050C11HP	50	0.387	0.494	0.118	9500	0.505	12.8	1.49	0.0722
3MV070C11HP	70	0.268	0.342	0.109	8300	0.580	14.7	1.06	0.0627
3MV095C11HP	95	0.193	0.247	0.104	7400	0.646	16.4	0.990	0.0581
3MV120C11HP	120	0.153	0.196	0.100	6800	0.708	18.0	0.950	0.0545
3MV150C11HP	150	0.124	0.159	0.0971	6300	0.770	19.6	0.921	0.0515
3MV185C11HP	185	0.0991	0.128	0.0940	5700	0.844	21.4	0.896	0.0486
3MV240C11HP	240	0.0754	0.0984	0.0909	5200	0.934	23.7	0.873	0.0456
3MV300C11HP	300	0.0601	0.0796	0.0884	4700	1.02	25.9	0.858	0.0432
3MV400C11HP	400	0.0470	0.0638	0.0848	4200	1.14	28.9	0.845	0.0397
3MV500C11HP	500	0.0373	0.0524	0.0835	3700	1.29	32.9	0.836	0.0386

## Current Ratings

Conductor Size	Current rating at core temp. 90°C in ground	Current rating at core temp. 90°C in air	Max. short-circuit current on the conductor during 1sec at initial temp. 90°C	Short circuit current rating of the screen 1 sec.
mm <sup>2</sup>	A 	A 	kA	kA
35	173	163	5.0	5.1
50	204	195	7.1	7.3
70	250	243	10.0	10.1
95	298	295	13.6	10.1
120	338	340	17.1	10.1
150	380	386	21.4	10.1
185	429	443	26.4	10.1
240	495	520	34.3	10.1
300	557	594	42.9	10.1
400	631	685	57.2	10.1
500	691	754	71.5	10.1