



Cu(Al) 6.35/11 kV – Three Core Heavy Duty Screened Unarmoured MV CABLE

APPLICATION:

Distribution network cables serve as primary power supply for commercial, industrial and urban residential networks, suitable for high fault level systems (up to 10kA/1sec); higher fault current rated versions are available on request.

CABLE STRUCTURE:

Conductor:

Stranded compacted conductor(copper or aluminum)

Semi-conductive conductor screen:

Extruded cross-linked compound

Insulation: XLPE

Semi-conductive insulation screen:

Extruded hand strippable semi-conductive cross-linked compound

Metallic screen:

Copper wire screen

(nominal 10kA for 1 second)

Outer sheath:

PVC. Optional: HDPE, halogen-free, flame-retardant, plus termite protection (nylon, double brass tape or chemical additive).

STANDARDS:

Product:

AS/NZS 1429.1

Electric cables - Polymeric insulated

For working voltages 1.9/3.3 (3.6) kV up to and including 19/33 (36) kV

Conductor:

AS/NZS 1125

Conductors in insulated electric cables and flexible cords

Insulation & Sheath:

AS/NZS 3808

Insulating and sheathing materials for electric cables

TECHNICAL DATA:

Rated volatge:

6.35/11 kV

Temperature range:

Minimum installation temperature: 0°C

Maximum operating temperature: +90°C

Minimum operating temperature: -25°C

Fault level:

Up to 10kA for 1 sec

Bending radius:

Installed cables:

12D (PVC) 15D (HDPE)

During installation:

18D (PVC) 25D (HDPE)

CERTIFICATES:

We hold SAA certifications for our product categories. Additionally, we possess authoritative certifications recognized in other countries and regions.





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Physical Character Sheet (AL Conductor)

Nominal conductor area	Nominal insulation thickness	Diameter over insulation	Number of screen wires and diameter of screen wires	Overall Diameter	Approx. weight	Maximum pulling tension	Minimum Bending Radius During installation	Minimum Bending Radius Installed
mm ²	mm	mm	nb x mm Ø	mm	kg/km	kN	mm	mm
3 × 50	3.4	16.3	19/0.85	49.1	2250	7.5		
3 × 70	3.4	17.8	27/0.85	52.5	2600	11.0		
3 × 95	3.4	19.4	36/0.85	56.2	2900	14.0	1320	840
3 × 120	3.4	21	40/0.85	60.1	3350	18.0		
3 × 150	3.4	22.3	40/0.85	63.1	3750	23.0		
3 × 185	3.4	24.1	40/0.85	67.2	4100	25.0	1630	980
3 × 240	3.4	26.3	40/0.85	72.4	4800	25.0	1750	1060
3 × 300	3.4	28.5	40/0.85	77.5	5600	25.0	1900	1100

Electrical Data Sheet (AL Conductor)

Nominal conductor area	Max. conductor DC resistance at 20°C	Conductor AC resistance at 50Hz and 90°C	Inductive reactance at 50Hz and 90°C	Min insulation resistance at 20°C	Current rating at core temp. 90°C in ground	Current rating at core temp. 90°C in air
mm ²	Ohm/km	Ohm/km	Ohm/km	MOhm/km	A	A
3 × 50	0.641	0.822	0.1190	10000	155	150
3 × 70	0.443	0.568	0.1100	8900	190	190
3 × 95	0.320	0.411	0.1048	7600	230	230
3 × 120	0.253	0.325	0.1010	7200	255	265
3 × 150	0.206	0.265	0.0983	6600	285	300
3 × 185	0.164	0.211	0.0944	5600	336	345
3 × 240	0.126	0.161	0.0909	5300	381	406
3 × 300	0.100	0.130	0.0984	4800	432	467



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Physical Character Sheet (Cu Conductor)

Nominal conductor area	Nominal insulation thickness	Diameter over insulation	Number of screen wires and diameter of screen wires	Overall Diameter	Approx. weight	Maximum pulling tension	Minimum Bending Radius During installation	Minimum Bending Radius Installed
mm ²	mm	mm	nb x mm ∅	mm	kg/km	kN	mm	mm
3 × 35	3.4	15	20/0.85	46.1	2450	7.4	810	540
3 × 50	3.4	16.3	29/0.85	49.1	3000	11	850	570
3 × 70	3.4	17.8	40/0.85	52.5	4000	15	930	620
3 × 95	3.4	19.4	40/0.85	56.2	4850	20	990	660
3 × 120	3.4	21	40/0.85	60.1	5700	25	1060	700
3 × 150	3.4	22.3	40/0.85	63.1	6600	25	1110	740
3 × 185	3.4	24.1	40/0.85	67.2	7700	25	1190	800
3 × 240	3.4	26.3	40/0.85	72.4	9600	25	1280	860
3 × 300	3.4	28.5	40/0.85	77.5	11600	25	1370	920
3 × 400	3.4	31.6	40/0.85	84.7	14200	25	1490	990
3 × 500	3.4	34.8	40/0.85	92.0	18100	25	1750	1170

Electrical Data Sheet (Cu Conductor)

Nominal conductor area	Max. conductor DC resistance at 20°C	Conductor AC resistance at 50Hz and 90°C	Inductive reactance at 50Hz and 90°C	Min insulation resistance at 20°C	Current rating at core temp. 90°C in ground	Current rating at core temp. 90°C in air
mm ²	Ohm/km	Ohm/km	Ohm/km	MOhm/km	A	A
3 × 35	0.524	0.668	0.125	11000	169	163
3 × 50	0.387	0.494	0.119	10000	204	195
3 × 70	0.268	0.342	0.109	8500	250	244
3 × 95	0.193	0.247	0.104	7500	298	295
3 × 120	0.153	0.196	0.102	6900	338	341
3 × 150	0.124	0.159	0.0971	6300	372	386
3 × 185	0.0991	0.128	0.094	5800	429	443
3 × 240	0.0754	0.0984	0.0909	5200	495	520
3 × 300	0.0601	0.0800	0.0884	4700	550	594
3 × 400	0.0470	0.0638	0.0851	4250	631	685
3 × 500	0.0373	0.0524	0.0835	3850	691	754