

# AL Cantols

## AL CANTOL 300

### Contact

Sales and Customer Solutions  
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**Nexans Ref.:** BDBH27AA001CXNA

**Country Ref.:** 8270

Al conductor, XLPE insulated, Black PVC sheath. 0.6/1 kV. Made to AS/NZS 5000.1

## DESCRIPTION

### Application

- Industrial and commercial applications (predominantly)
- Some domestic applications
- For use in various situations to supply the main power from the point of supply (either single or three phase application) to buildings, equipment, eg, switch board to main control cabinet, main between floors and buildings, cable cabinet to motor, etc. Commonly used in Power Authority work.



## STANDARDS

**National AS/NZS 5000.1**

## CHARACTERISTICS

### Construction characteristics

Conductor material	Aluminum
Type of conductor	Circular compacted stranded
Insulation	XLPE
Outer sheath	PVC
Sheath colour	Black
With Green/Yellow core	No
With smaller neutral conductor	No

### Dimensional characteristics

Conductor cross-section	300 mm <sup>2</sup>
Nominal overall diameter	27.9 mm
Gland Size (A2 or A2F)	40
Approximate weight	1.19 kg/m
Neutral conductor section (when smaller)	- mm <sup>2</sup>
Number of cores	1

### Electrical characteristics

Max. DC resistance of the conductor at 20°C (Ohm/km)	0.1
Permissible short circuit current conductor 1s	- kA
Rated Voltage U <sub>o</sub> /U (Um)	0.6/ 1 (1.2) kV

### Mechanical characteristics















Cable flexibility	Rigid
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### Usage characteristics

Max. conductor temperature in service	90 °C
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### CURRENT CARRYING CAPACITIES SINGLE PHASE (IN AMPS) - SINGLE CONDUCTOR XLPE

Copper conductor - Circular compacted stranded - Insulation XLPE Aluminium conductor - Circular compacted stranded - Insulation XLPE Max. Conductor Temperature 90C















Conductor cross-section [mm <sup>2</sup> ]														
	Cu	Al	Cu	Al	Cu	Al	Cu	Al	Cu	Al	Cu	Al	Cu	Al
300	790	618	666	520	-	-	761	761	663	516	601	471	-	-
	Air Spaced from Surface, Unenclosed					Air touching, unenclosed					Air enclosed			
	Buried direct					Buried in single-way duct					Buried in multi-way duct			
	Cable surrounded by thermal insulation, unenclosed													

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- Ambient Air Temperature: 30°C
- Soil Temperature: 15°C
- Soil Thermal Resistivity: 1.2 K.m/W
- Depth of Burial: 0.5 m

### CURRENT CARRYING CAPACITIES THREE PHASE (IN AMPS) - SINGLE CONDUCTOR XLPE

Copper conductor - Circular compacted stranded - Insulation XLPE Aluminum conductor - Circular compacted stranded - Insulation XLPE Max. Conductor Temperature 90C

Conductor cross-section [mm <sup>2</sup> ]														
	Cu	Al	Cu	Al	Cu	Al	Cu	Al	Cu	Al	Cu	Al	Cu	Al
300	713	559	662	519	516	405	630	495	591	460	525	412	-	-
	Air Spaced from Surface, Unenclosed					Air touching, unenclosed					Air enclosed			
	Buried direct					Buried in single-way duct					Buried in multi-way duct			
	Cable surrounded by thermal insulation, unenclosed													

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- Soil Temperature: 15°C
- Soil Thermal Resistivity: 1.2 K.m/W
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