

AL Cantols

AL CANTOL 500

Contact

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Nexans Ref.: BDBH30AA001CXNA

Country Ref.: 4658

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	500 mm ²
Nominal overall diameter	35.0 mm
Gland Size (A2 or A2F)	50S
Approximate weight	1.87 kg/m
Neutral conductor section (when smaller)	- mm ²
Number of cores	1

Electrical characteristics

Max. DC resistance of the conductor at 20°C (Ohm/km)	0.0601
Permissible short circuit current conductor 1s	- kA
Rated Voltage U ₀ /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 ²]														
	Cu	Al	Cu	Al	Cu	Al	Cu	Al	Cu	Al	Cu	Al	Cu	Al
500	1063	849	903	722	-	-	977	977	856	676	791	631	-	-
	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 ²]														
	Cu	Al	Cu	Al	Cu	Al	Cu	Al	Cu	Al	Cu	Al	Cu	Al
500	961	773	893	717	696	560	805	646	756	598	693	556	-	-
	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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