

AL Cantols

AL CANTOL 240

Contact

Sales and Customer Solutions
sales.nz@nexans.com

Nexans Ref.: BDBH26AA001CXNA

Country Ref.: 2974

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	
With Green/Yellow core	No
With smaller neutral conductor	No

Dimensional characteristics

Conductor cross-section	240 mm ²
Nominal overall diameter	25.5 mm
Gland Size (A2 or A2F)	32
Approximate weight	0.97 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)	0.125
Permissible short circuit current conductor 1s	- kA
Rated Voltage U ₀ /U (Um)	0.6/ 1 (1.2) kV

Mechanical characteristics

Cable flexibility	Rigid
-------------------	-------

Usage characteristics

Max. conductor temperature in service	90 °C
---------------------------------------	-------

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						
240	684	534	574	449	507	396	674	674	574	446	532	415	-	-						
	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																			

Note © Copyright Standards New Zealand 2012. Content in this table and the typical New Zealand installation conditions are derived from AS/NZS 3008.1.2:2010 and has been reproduced or adapted with permission from Standards New Zealand under Copyright Licence 000926. Please refer to the complete Standard for full details available for purchase from Standards New Zealand at www.standards.co.nz. The values are for typical New Zealand installation conditions of:

- 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						
240	616	482	573	448	439	343	560	438	510	397	456	356	-	-						
	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																			