

Nexans Ref.: BDBC23AA001CXNA

Country Ref.: 2440

Cu 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	Copper
Type of conductor	Circular compacted stranded
Insulation	XLPE
Outer sheath	PVC
Conductor flexibility	Class 2
Conductor shape	Circular
Sheath colour	Black
With Green/Yellow core	No
With smaller neutral conductor	No

Dimensional characteristics

Conductor cross-section	120 mm ²
Nominal overall diameter	18.6 mm
Gland Size (A2 or A2F)	25
Approximate weight	1.27 kg/m
Neutral conductor section (when smaller)	- mm ²
Number of cores	1

Electrical characteristics

Max. DC resistance of the conductor at 20°C	0.153 Ohm/km
Permissible short circuit current conductor 1s	17.2 kA
Rated Voltage U ₀ /U (U _m)	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																
[mm²]	Cu	Al	Cu	Al	Cu	Al	Cu	Al	Cu	Al	Cu	Al	Cu	Al		
120	432	336	358	278	321	249	457	457	383	297	348	270	-			
	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 [mm²]														
	Cu	Al	Cu	Al	Cu	Al	Cu	Al	Cu	Al	Cu	Al	Cu	Al
120	384	298	358	278	287	223	381	296	342	265	304	236	-	-
	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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