

## FLEXBUS CONDUCTOR, 640 MM<sup>2</sup>, 10,000 MM X 25 MM X 25 MM X 12.5 MM X 29.5 KG

### CATALOG NUMBER

## FLEXCOND640L10



nVent ERIFLEX Flexbus Conductor is ready-to-use from one side with direct connection to busbar or circuit-breaker palm. It is an innovative and patented connection solution between two pieces of electrical equipment (such as a transformer, switchboard or generator). Flexbus Advanced maintains a high level of reliability and creates an easy and customizable connection on-site without additional design study, specific specialized workforce or expensive tools. The Flexbus Conductor is insulated with a low-smoke, halogen-free, flame-retardant (LSHFFR), high-temperature and class II material. Flexbus Conductor is a flexible, copper-plated, aluminum flat braid with insulation available from 2 to 25 meters length and under different cross section for 500A to 6300A applications. It allows for connection from the power supply to switchgear with only one conductor per phase up to 1600kVA and with two conductors per phase up to 3150kVA.

### CERTIFICATIONS



### FEATURES

Flexible insulated copper-plated, aluminum flat braid

Better current/ampacity than cable due to skin effect

Much more flexible than cable

No bending radius to respect

Ready-to-use from one side with direct connection on busbar or circuit breaker palm

Only one conductor per phase from 400kVA (560 A) to 1600kVA (2250 A) and two conductors per phase for 2000kVA (2800 A) to 3150kVA (4435 A)

### PRODUCT ATTRIBUTES

Article Number: 508038

Conductor Material: Copper Clad Aluminum

Connector Finish: Tinned

Connector Material: Copper

Insulation Material: Thermoplastic Elastomer

Insulation Elongation: 500 % min

Insulation Thickness: 2.5 – 3.5 mm

Dielectric Strength: 20 kV/mm

Euroclass CPR: Eca - s2, d2, a3

Flammability Rating: UL® 94V-0

Halogen Free Rating: UL® 2885; IEC® 60754-1; IEC® 62821-2

Low Smoke Rating: IEC® 61034-2; ISO 5659-2; UL® 2885

Mechanical Resistance Rating: IK09

UV Resistance Rating: UL® 2556; UL® 854

Wire Diameter: 0.2 mm

Nominal Voltage, IEC: 1000 V; 1500 V

Working Temperature: -50 to 115 °C

Complies With: IEC® 60695-2-11 (Glow Wire Test 960 °C); IEC® 61439.1; IEC® 61439.1 Class II; IEC® 60364

ΔT 60 K: 1233 A

Cross Section: 640 mm<sup>2</sup>

Length 1: 10000 mm

Length 2: 75 mm

Width 1: 58 mm

Width 2: 50 mm

Height 1: 31.15 mm

Height 2: 21.3 mm

Hole Size: 11 mm

A: 25 mm

B: 25 mm

C: 25 mm

D: 12.5 mm

Unit Weight: 29.5 kg

2 Bar Current Coefficient, Non-Symmetric: 1.51

2 Bar Current Coefficient, Symmetric: 2

Installation Standard: AS 3008; BS 7671; CEI 64-8; CSN; DIN VDE 0100; HD 384; IEC® 60364; NBR 5410; NEN 1010; NFC 15-100; NIBT-NIN; NP (2002); ÔNORM; REBT; RGIE-AREI

## ADDITIONAL PRODUCT DETAILS

Optional extender available for more connection possibilities.

Current Coefficient According to Temperature Rise								
Temperature Rise	$\Delta T\ 30^{\circ}\text{C}$	$\Delta T\ 40^{\circ}\text{C}$	$\Delta T\ 45^{\circ}\text{C}$	$\Delta T\ 50^{\circ}\text{C}$	$\Delta T\ 55^{\circ}\text{C}$	$\Delta T\ 60^{\circ}\text{C}$	$\Delta T\ 65^{\circ}\text{C}$	$\Delta T\ 70^{\circ}\text{C}$
Derating Coefficient	0.71	0.82	0.87	0.91	0.96	1.00	1.04	1.08

## DIAGRAMS



## WARNING

nVent products shall be installed and used only as indicated in nVent's product instruction sheets and training materials. Instruction sheets are available at [www.nvent.com](http://www.nvent.com) and from your nVent customer service representative. Improper installation, misuse, misapplication or other failure to completely follow nVent's instructions and warnings may cause product malfunction, property damage, serious bodily injury and death and/or void your warranty.

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