nVent
DATA-SOLUTIONS

FLEXBUS CONDUCTOR REP, 545 MM², 2000 MM X 25 MM X 12,5 MM X 5,2 KG

CATALOG NUMBER

FLEXCORE545L2

The nVent ERIFLEX FleXbus Conductor with Rodent and Termite Repellent is designed for easy, one-sided use with a direct connection to a busbar or circuit-breaker palm. This innovative and patented solution provides a reliable connection between two pieces of electrical equipment, such as a transformer, switchboard, or generator. The FleXbus Advanced solution ensures high reliability and offers a customizable on-site connection without the need for additional design studies, 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. It is a flexible, copper-plated, aluminum flat braid available in lengths from 2 to 25 meters and in various cross sections for 500A to 6300A applications. This conductor 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

RoHS

FEATURES

- Flexible, insulated, copper-plated aluminum flat braid
- Better current/ampacity compared to cable due to the skin effect
- Significantly more flexible than cable
- No need to adhere to a bending radius
- Ready-to-use from one side with a direct connection to a busbar or circuit breaker palm
- Requires only one conductor per phase for 400kVA (560 A) to 1600kVA (2250 A) and two conductors per phase for 2000kVA (2800 A) to 3150kVA (4435 A)
- Insulation sleeve contains a special additive that makes the FleXbus conductor resistant to rodents and termites

PRODUCT ATTRIBUTES

Article Number: 508448

Cross Section: 545mm²

Length 1 (L1): 2000mm

Length 2 (L2): 50mm

Conductor Material: Copper Clad Aluminum

Insulation Material: Thermoplastic Elastomer

Rodent & Termite Proof: Tested as per GB/T 34016-2017 & DIN EN 117

Connector Finish: Tinned

Connector Material: Copper

Insulation Elongation: 500% min

Insulation Thickness: 2.5 – 3.5mm

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

Mechanical Resistance Rating: IK09

UV Resistance Rating: UL® 2556; UL® 854

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

Dielectric Strength: 20kV/mm

Flammability Rating: UL® 94V-0

Wire Diameter: 0.2mm

Nominal Voltage, IEC: 1000V; 5000V

Max Working Voltage, EN 50264-3-1: 6000V

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: 1127A

Width 1 (W1): 58mm

Width 2 (W2): 50mm

Height 1 (H1): 31.65mm

Height 2 (H2): 18mm

Hole Size (HS): 11mm

Unit Weight: 5.2kg

A: 25mm

C: 25mm

D: 12.5mm

2 Bar Current Coefficient, Non-Symmetric: 1.51

2 Bar Current Coefficient, Symmetric: 2

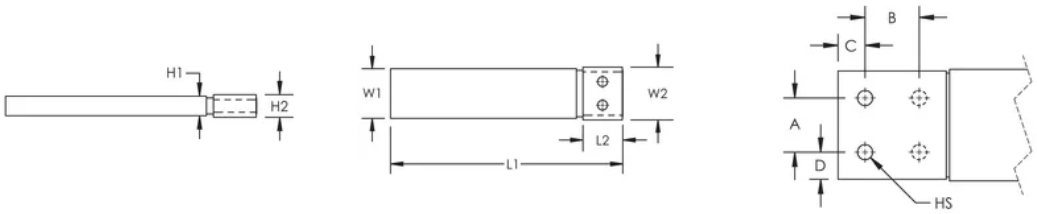
Installation Standard: AS 3008; BS 7671; CEI 64-8; CSN; DIN VDE 0100; HD 384; IEC® 60364; NBR 5410; NEN 1010; NFC 15-100; NIBT-NIN; NP (2002); ÔNORM; REBT; RGIE-AREI

ADDITIONAL PRODUCT DETAILS

Optional extender available for more connection possibilities.

Current Coefficient According to Temperature Rise								
Temperature Rise	ΔT 30°C	ΔT 40°C	ΔT 45°C	ΔT 50°C	ΔT 55°C	ΔT 60°C	ΔT 65°C	ΔT 70°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 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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