

# FLEXBUS CONDUCTOR REP, 545 MM<sup>2</sup>, 4000 MM X 25 MM X 12,5 MM X 10,3 KG

#### CATALOG NUMBER

# FLEXCORE545L4



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



#### **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**

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Article Number: 508450
Cross Section: 545mm <sup>2</sup>
Length 1 (L1): 4000mm
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
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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
ΔΤ 60 Κ: 1127Α
Width 1 (W1): 58mm
Width 2 (W2): 50mm
Height 1 (H1): 31.65mm
Height 2 (H2): 18mm
Hole Size (HS): 11mm
Unit Weight: 10.3kg
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-

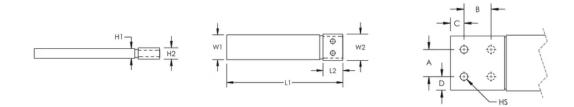
Installation Standard: AS 3008; BS 7671; CEI 64-8; CSN; DIN VDE 0100; HD 384; IEC® 60364; NBR 5410; NEN 1010; NFC 15-100; NIBT-NIN; NP (2002); ÔNORM; REBT; RGIE-AREI

# ADDITIONAL PRODUCT DETAILS

Optional extender available for more connection possibilities.

Current Coefficient According to Temperature Rise									
Temperature Rise	∆T 30°C	∆T 40°C	∆T 45°C	∆T 50°C	∆T 55°C	∆T 60°C	∆T 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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nVent reserves the right to change specifications without notice.