FleXbus Conductor, 545 mm², 3,000 mm x 25 mm x 12.5 mm x 7.8 kg

Data Solutions

CATALOG NUMBER

FLEXCOND545L3

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: 508021

Cross Section: 545mm²

Length 1 (L1): 3000mm

Length 2 (L2): 50mm

Conductor Material: Copper Clad Aluminum

Connector Finish: Tinned

Connector Material: Copper

Insulation Elongation: 500% min

Insulation Thickness: 2.5 – 3.5mm

Dielectric Strength: 20kV/mm

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: 0.2mm

Nominal Voltage, IEC: 1000V; 1500V

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: 7.8kg

A: 25mm

C: 25mm

D: 12.5mm

2 Bar Current Coefficient, Non-Symmetric: 1.51

2 Bar Current Coefficient, Symmetric: 2

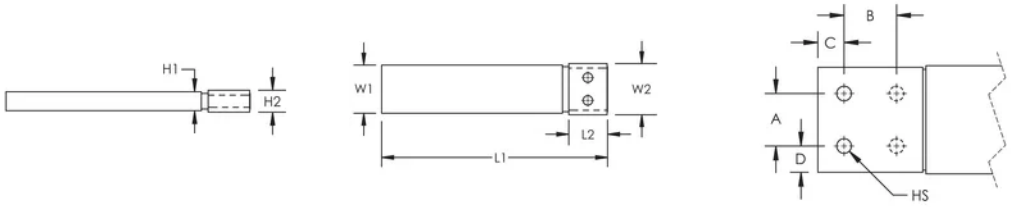
Installation Standard: AS 3008; BS 7671; CEI 64-8; CSN; DIN VDE 0100; HD 384; IEC® 60364; NBR 5410; NEN 1010; NFC 15-100; NIBT-NIN; NP (2002); ÖNORM; REBT; RGIE-AREI

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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