

# IBSB Advanced Insulated Braided Conductor, 250 A, 50 mm<sup>2</sup>, 430 mm

## Data Solutions

### NÚMERO DE CATÁLOGO

### IBSBADV50-430

IBS/IBSB Advanced Insulated Braided Conductor, Halogen Free is the ideal ready-to-install flexible wire replacement solution that is specifically designed for connections to all molded case circuit breakers, including the most compact breakers on the market. IBS/IBSB Advanced connects to the front access terminals of the breakers without any additional accessories, such as angular connectors, spreaders, ring terminal connectors or extenders. IBS/IBSB Advanced is available in cross sections of 25 to 240 mm<sup>2</sup> (49.34 to 273.65 kcmil), lengths from 230 to 1,030 mm (9.06" to 40.55"), and 80 to 700 A.

Manufactured in an ISO 9001 2015 certified automated facility, IBS/IBSB Advanced is formed by weaving high-quality electrolytic copper wire to form a durable low voltage connector with maximum flexibility which allows for more compact power connections to circuit breakers. The IBS/IBSB Advanced allows users to reduce the total size and weight of the installation, improving both design flexibility and assembly aesthetics.

The unique manufacturing process of integral pre-punched palms make IBS/IBSB Advanced ready to connect out of the box. There are no lugs to purchase or install, making connections simpler and faster and eliminates faulty connections due to vibration or fatigue.

IBS/IBSB Advanced is compatible with all major brand molded case circuit breakers.

The advanced technology insulation is a high-resistance low smoke, halogen-free and flame retardant thermoplastic.

IBS/IBSB Advanced does not generate corrosive gases and produces a relatively low smoke opacity in accordance with IEC 61034-2 and UL 2885. The low smoke characteristic improves visibility conditions for people to be able to easily locate the emergency exit and also allows rescue workers to better assess an emergency situation. IBS/IBSB



Advanced means greater safety for individuals, less damage for your electrical equipment and less environmental impact.

The halogen-free feature enables a reduction in the quantity of toxic smoke. IBS/IBSB Advanced does not contain any halogens, according to IEC 60754-1 and UL 2885, minimizing toxicity and making it the ideal product for use in enclosed spaces such as data centers, rail, and public facilities such as hospitals and schools. This also facilitates the use of IBS/IBSB Advanced in specific applications such as submarines, switchboards and other enclosed environments that require a low emissions solution.

In addition to the above features, IBS/IBSB Advanced is compliant with the UL 94-V0 testing standard and glow wire test 960 °C. The flame retardant portion of the test illustrates the self-extinguish feature. This superior feature of IBS/IBSB Advanced is also shown by the Limiting Oxygen Index (LOI) at 30%. In case of fire, IBS/IBSB Advanced generates a limited quantity of smoke that is less damaging to your electrical equipment.

## CERTIFICATIONS



## CARACTERISTICAS

Suitable for all main molded case circuit breakers

Resistant to vibration, improving reliability and performance

Insulated by high-resistance, halogen free, flame retardant and low smoke material

Tinned copper provides superior corrosion resistance

Improves assembly flexibility and aesthetics

Quick and easy installation

No additional cutting, stripping, crimping and punching needed

Integral palm without lugs or terminals reduces material and assembly weight

Conforms to NF EN 45545 obtaining an HL3 classification for chapters R22 and R23

DNV GL® and Bureau Veritas certified for marine and offshore applications

Small wire diameter provides maximum flexibility

Dramatically smaller and more flexible than comparable cable based on ampacity

Better power density than cable with lower skin effect ratio

Reduces total installation cost

RoHS compliant

Tinned copper allows for copper or aluminum conductor connections

On request, can be manufactured with other colors (typically with Orange sleeve for battery connection)

## CARACTERÍSTICAS DO PRODUTO

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Número do artigo: 534409

Typical Application Current Rating: 250A

Peak Short Circuit Current (I<sub>pk</sub>): 30kA

Acabamento: Tinned

Material: Copper; Elastômero Termoplástico

Rigidez dielétrica: 20

Flammability Rating: UL® 94V-0

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

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

UV Resistance Rating: UL® 2556; UL® 854

Insulation Elongation: 500%

Espessura do isolamento: 1.8mm

Max Working Voltage, UL 67: 600

Temperatura de trabalho: -50 to 115°C

Max Working Voltage, IEC/UL 758: 1000; 1500

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

Diâmetro do fio: 0.15mm

Certification Details: UL® 67; UL® 758

Em conformidade com: IEC® 60439.1; IEC® 60695-2-11 (Glow Wire Test 960 °C); IEC® 61439.1; IEC® 61439.1 Class II

Corte transversal: 50mm<sup>2</sup>

Largura do condutor: 20mm

Espessura do condutor: 2.8mm

Length (L): 430mm

A: 9mm

B: 11mm

C: 27mm

D: 8mm

Tamanho do orifício 1 (HS1): 8.5mm

Tamanho do orifício 2 (HS2): 10.5mm

Peso unitário: 0.27kg

## DETALHES ADICIONAIS DO PRODUTO

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$\Delta T$  = Temperature of conductors – Internal temperature of panel.

This table indicates the temperature rise produced by chosen current in the given section. This calculation does not take into account the heat dissipation from the switch gear.

IBSB Advanced Insulated Braided Conductor with a cross section of 240 mm<sup>2</sup> (473.65 kcmil) is constructed of red copper strands with tinned palms.

Distance between supports must not exceed 630 mm (17.8") according to IEC 61439-1.

## DIAGRAMAS

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## AVISO

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Os produtos nVent devem ser instalados e utilizados apenas conforme indicado nas fichas de instrução do produto e materiais de treinamento da nVent. As fichas de instrução estão disponíveis em [www.nVent.com](http://www.nVent.com) e com nossos representantes de atendimento ao cliente nVent. A instalação inadequada, uso incorreto, aplicação incorreta ou outra falha qualquer em seguir completamente as instruções e avisos da nVent podem levar ao mau funcionamento do produto, danos à propriedade, lesões corporais graves e morte, e/ou anular sua garantia.



O nosso forte portfólio de marcas:

**CADDY ERICO HOFFMAN ILSCO SCHROFF TRACHTE**