

IBS/IBSB Advanced Insulated Braided Conductor, Halogen Free

Data Solutions

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 mm² (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)

ESPECIFICAÇÕES

Diâmetro do fio:	0.15mm
Espessura do isolamento:	1.8mm
Rigidez dielétrica:	20
Insulation Elongation:	500%
Max Working Voltage, UL 67:	600
Max Working Voltage, IEC/UL 758 :	1000; 1500
Max Working Voltage, EN 50264-3-1:	6000V
Material:	Copper; Elastômero Termoplástico
Em conformidade com:	IEC® 60439.1; IEC® 60695-2-11 (Glow Wire Test 960 °C); IEC® 61439.1; IEC® 61439.1 Class II
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
Certification Details:	UL® 67; UL® 758
Flammability Rating:	UL® 94V-0
Temperatura de trabalho:	-50 to 115°C

Table 1/3

Número de catálogo	Número do artigo	Typical Application Current Rating	Peak Short Circuit Current (Ipk)	Acabamento	Corte transversal	Largura do condutor
IBSADV25-1030	534506	160A	14kA	Tinned	25mm ²	20mm
IBSADV25-230	534500	160A	14kA	Tinned	25mm ²	20mm
IBSADV25-330	534501	160A	14kA	Tinned	25mm ²	20mm
IBSADV25-430	534502	160A	14kA	Tinned	25mm ²	20mm
IBSADV25-530	534503	160A	14kA	Tinned	25mm ²	20mm
IBSADV25-630	534504	160A	14kA	Tinned	25mm ²	20mm
IBSADV25-830	534505	160A	14kA	Tinned	25mm ²	20mm

Número de catálogo	Número do artigo	Typical Application Current Rating	Peak Short Circuit Current (I _{pk})	Acabamento	Corte transversal	Largura do condutor
IBSADV50-1030	534513	250A	30kA	Tinned	50mm ²	20mm
IBSADV50-230	534507	250A	30kA	Tinned	50mm ²	20mm
IBSADV50-330	534508	250A	30kA	Tinned	50mm ²	20mm
IBSADV50-430	534509	250A	30kA	Tinned	50mm ²	20mm
IBSADV50-530	534510	250A	30kA	Tinned	50mm ²	20mm
IBSADV50-630	534511	250A	30kA	Tinned	50mm ²	20mm
IBSADV50-830	534512	250A	30kA	Tinned	50mm ²	20mm
IBSBADV100-1030	534427	350A	70kA	Tinned	100mm ²	24mm
IBSBADV100-230	534421	350A	70kA	Tinned	100mm ²	24mm
IBSBADV100-330	534422	350A	70kA	Tinned	100mm ²	24mm
IBSBADV100-430	534423	350A	70kA	Tinned	100mm ²	24mm
IBSBADV100-530	534424	350A	70kA	Tinned	100mm ²	24mm
IBSBADV100-630	534425	350A	70kA	Tinned	100mm ²	24mm
IBSBADV100-830	534426	350A	70kA	Tinned	100mm ²	24mm
IBSBADV120-1030	534434	400A	70kA	Tinned	120mm ²	32mm

Número de catálogo	Número do artigo	Typical Application Current Rating	Peak Short Circuit Current (I _{pk})	Acabamento	Corte transversal	Largura do condutor
IBSBADV120-230	534428	400A	70kA	Tinned	120mm ²	32mm
IBSBADV120-330	534429	400A	70kA	Tinned	120mm ²	32mm
IBSBADV120-430	534430	400A	70kA	Tinned	120mm ²	32mm
IBSBADV120-530	534431	400A	70kA	Tinned	120mm ²	32mm
IBSBADV120-630	534432	400A	70kA	Tinned	120mm ²	32mm
IBSBADV120-830	534433	400A	70kA	Tinned	120mm ²	32mm
IBSBADV185-1030	534440	500A	70kA	Tinned	185mm ²	32mm
IBSBADV185-330	534435	500A	70kA	Tinned	185mm ²	32mm
IBSBADV185-430	534436	500A	70kA	Tinned	185mm ²	32mm
IBSBADV185-530	534437	500A	70kA	Tinned	185mm ²	32mm
IBSBADV185-630	534438	500A	70kA	Tinned	185mm ²	32mm
IBSBADV185-830	534439	500A	70kA	Tinned	185mm ²	32mm
IBSBADV240-1030	534446	630A	80kA	Bare, Tinned	240mm ²	32mm

Número de catálogo	Número do artigo	Typical Application Current Rating	Peak Short Circuit Current (I _{pk})	Acabamento	Corte transversal	Largura do condutor
IBSBADV240-330	534441	630A	80kA	Bare, Tinned	240mm ²	32mm
IBSBADV240-430	534442	630A	80kA	Bare, Tinned	240mm ²	32mm
IBSBADV240-530	534443	630A	80kA	Bare, Tinned	240mm ²	32mm
IBSBADV240-630	534444	630A	80kA	Bare, Tinned	240mm ²	32mm
IBSBADV240-830	534445	630A	80kA	Bare, Tinned	240mm ²	32mm
IBSBADV25-1030	534406	160A	14kA	Tinned	25mm ²	12mm
IBSBADV25-230	534400	160A	14kA	Tinned	25mm ²	12mm
IBSBADV25-330	534401	160A	14kA	Tinned	25mm ²	12mm
IBSBADV25-430	534402	160A	14kA	Tinned	25mm ²	12mm
IBSBADV25-530	534403	160A	14kA	Tinned	25mm ²	12mm
IBSBADV25-630	534404	160A	14kA	Tinned	25mm ²	12mm
IBSBADV25-830	534405	160A	14kA	Tinned	25mm ²	12mm
IBSBADV50-1030	534413	250A	30kA	Tinned	50mm ²	20mm
IBSBADV50-230	534407	250A	30kA	Tinned	50mm ²	20mm
IBSBADV50-330	534408	250A	30kA	Tinned	50mm ²	20mm

Número de catálogo	Número do artigo	Typical Application Current Rating	Peak Short Circuit Current (Ipk)	Acabamento	Corte transversal	Largura do condutor
IBSBADV50-430	534409	250A	30kA	Tinned	50mm ²	20mm
IBSBADV50-530	534410	250A	30kA	Tinned	50mm ²	20mm
IBSBADV50-630	534411	250A	30kA	Tinned	50mm ²	20mm
IBSBADV50-830	534412	250A	30kA	Tinned	50mm ²	20mm
IBSBADV70-1030	534420	300A	30kA	Tinned	70mm ²	20mm
IBSBADV70-230	534414	300A	30kA	Tinned	70mm ²	20mm
IBSBADV70-330	534415	300A	30kA	Tinned	70mm ²	20mm
IBSBADV70-430	534416	300A	30kA	Tinned	70mm ²	20mm
IBSBADV70-530	534417	300A	30kA	Tinned	70mm ²	20mm
IBSBADV70-630	534418	300A	30kA	Tinned	70mm ²	20mm
IBSBADV70-830	534419	300A	30kA	Tinned	70mm ²	20mm

Table 2/3						
Número de catálogo	Número do artigo	Espessura do condutor	Length (L)	A	B	C
IBSADV25-1030	534506	1.9mm	1030mm	10mm	12mm	25mm
IBSADV25-230	534500	1.9mm	230mm	10mm	12mm	25mm
IBSADV25-330	534501	1.9mm	330mm	10mm	12mm	25mm
IBSADV25-430	534502	1.9mm	430mm	10mm	12mm	25mm
IBSADV25-530	534503	1.9mm	530mm	10mm	12mm	25mm

Número de catálogo	Número do artigo	Espessura do condutor	Length (L)	A	B	C
IBSADV25-630	534504	1.9mm	630mm	10mm	12mm	25mm
IBSADV25-830	534505	1.9mm	830mm	10mm	12mm	25mm
IBSADV50-1030	534513	2.8mm	1030mm	12mm	12mm	27mm
IBSADV50-230	534507	2.8mm	230mm	12mm	12mm	27mm
IBSADV50-330	534508	2.8mm	330mm	12mm	12mm	27mm
IBSADV50-430	534509	2.8mm	430mm	12mm	12mm	27mm
IBSADV50-530	534510	2.8mm	530mm	12mm	12mm	27mm
IBSADV50-630	534511	2.8mm	630mm	12mm	12mm	27mm
IBSADV50-830	534512	2.8mm	830mm	12mm	12mm	27mm
IBSBADV100-1030	534427	5mm	1030mm	9mm	11mm	31mm
IBSBADV100-230	534421	5mm	230mm	9mm	11mm	31mm
IBSBADV100-330	534422	5mm	330mm	9mm	11mm	31mm
IBSBADV100-430	534423	5mm	430mm	9mm	11mm	31mm
IBSBADV100-530	534424	5mm	530mm	9mm	11mm	31mm
IBSBADV100-630	534425	5mm	630mm	9mm	11mm	31mm
IBSBADV100-830	534426	5mm	830mm	9mm	11mm	31mm

Número de catálogo	Número do artigo	Espessura do condutor	Length (L)	A	B	C
IBSBADV120-1030	534434	4.4mm	1030mm	11mm	11mm	39mm
IBSBADV120-230	534428	4.4mm	230mm	11mm	11mm	39mm
IBSBADV120-330	534429	4.4mm	330mm	11mm	11mm	39mm
IBSBADV120-430	534430	4.4mm	430mm	11mm	11mm	39mm
IBSBADV120-530	534431	4.4mm	530mm	11mm	11mm	39mm
IBSBADV120-630	534432	4.4mm	630mm	11mm	11mm	39mm
IBSBADV120-830	534433	4.4mm	830mm	11mm	11mm	39mm
IBSBADV185-1030	534440	7.1mm	1030mm	12mm	14mm	39mm
IBSBADV185-330	534435	7.1mm	330mm	12mm	14mm	39mm
IBSBADV185-430	534436	7.1mm	430mm	12mm	14mm	39mm
IBSBADV185-530	534437	7.1mm	530mm	12mm	14mm	39mm
IBSBADV185-630	534438	7.1mm	630mm	12mm	14mm	39mm
IBSBADV185-830	534439	7.1mm	830mm	12mm	14mm	39mm

Número de catálogo	Número do artigo	Espessura do condutor	Length (L)	A	B	C
IBSBADV240-1030	534446	9.2mm	1030mm	12mm	14mm	39mm
IBSBADV240-330	534441	9.2mm	330mm	12mm	14mm	39mm
IBSBADV240-430	534442	9.2mm	430mm	12mm	14mm	39mm
IBSBADV240-530	534443	9.2mm	530mm	12mm	14mm	39mm
IBSBADV240-630	534444	9.2mm	630mm	12mm	14mm	39mm
IBSBADV240-830	534445	9.2mm	830mm	12mm	14mm	39mm
IBSBADV25-1030	534406	2.8mm	1030mm	6.5mm	6.5mm	18mm
IBSBADV25-230	534400	2.8mm	230mm	6.5mm	6.5mm	18mm
IBSBADV25-330	534401	2.8mm	330mm	6.5mm	6.5mm	18mm
IBSBADV25-430	534402	2.8mm	430mm	6.5mm	6.5mm	18mm
IBSBADV25-530	534403	2.8mm	530mm	6.5mm	6.5mm	18mm
IBSBADV25-630	534404	2.8mm	630mm	6.5mm	6.5mm	18mm
IBSBADV25-830	534405	2.8mm	830mm	6.5mm	6.5mm	18mm
IBSBADV50-1030	534413	2.8mm	1030mm	9mm	11mm	27mm
IBSBADV50-230	534407	2.8mm	230mm	9mm	11mm	27mm

Número de catálogo	Número do artigo	Espessura do condutor	Length (L)	A	B	C
IBSBADV50-330	534408	2.8mm	330mm	9mm	11mm	27mm
IBSBADV50-430	534409	2.8mm	430mm	9mm	11mm	27mm
IBSBADV50-530	534410	2.8mm	530mm	9mm	11mm	27mm
IBSBADV50-630	534411	2.8mm	630mm	9mm	11mm	27mm
IBSBADV50-830	534412	2.8mm	830mm	9mm	11mm	27mm
IBSBADV70-1030	534420	4.3mm	1030mm	9mm	11mm	27mm
IBSBADV70-230	534414	4.3mm	230mm	9mm	11mm	27mm
IBSBADV70-330	534415	4.3mm	330mm	9mm	11mm	27mm
IBSBADV70-430	534416	4.3mm	430mm	9mm	11mm	27mm
IBSBADV70-530	534417	4.3mm	530mm	9mm	11mm	27mm
IBSBADV70-630	534418	4.3mm	630mm	9mm	11mm	27mm
IBSBADV70-830	534419	4.3mm	830mm	9mm	11mm	27mm

Table 3/3

Número de catálogo	Número do artigo	D	Tamanho do orifício 1 (HS1)	Tamanho do orifício 2 (HS2)	Peso unitário
IBSADV25-1030	534506	6mm	8.5mm	10.5mm	0.41kg
IBSADV25-230	534500	6mm	8.5mm	10.5mm	0.95kg
IBSADV25-330	534501	6mm	8.5mm	10.5mm	0.14kg
IBSADV25-430	534502	6mm	8.5mm	10.5mm	0.17kg

Número de catálogo	Número do artigo	D	Tamanho do orifício 1 (HS1)	Tamanho do orifício 2 (HS2)	Peso unitário
IBSADV25-530	534503	6mm	8.5mm	10.5mm	0.21kg
IBSADV25-630	534504	6mm	8.5mm	10.5mm	0.25kg
IBSADV25-830	534505	6mm	8.5mm	10.5mm	0.33kg
IBSADV50-1030	534513	8mm	10.5mm	10.5mm	0.65kg
IBSADV50-230	534507	8mm	10.5mm	10.5mm	0.16kg
IBSADV50-330	534508	8mm	10.5mm	10.5mm	0.22kg
IBSADV50-430	534509	8mm	10.5mm	10.5mm	0.29kg
IBSADV50-530	534510	8mm	10.5mm	10.5mm	0.35kg
IBSADV50-630	534511	8mm	10.5mm	10.5mm	0.41kg
IBSADV50-830	534512	8mm	10.5mm	10.5mm	0.53kg
IBSBADV100-1030	534427	13mm	8.5mm	10.5mm	1.19kg
IBSBADV100-230	534421	13mm	8.5mm	10.5mm	0.27kg
IBSBADV100-330	534422	13mm	8.5mm	10.5mm	0.39kg
IBSBADV100-430	534423	13mm	8.5mm	10.5mm	0.5kg
IBSBADV100-530	534424	13mm	8.5mm	10.5mm	0.62kg
IBSBADV100-630	534425	13mm	8.5mm	10.5mm	0.73kg
IBSBADV100-830	534426	13mm	8.5mm	10.5mm	0.96kg
IBSBADV120-1030	534434	12mm	10.5mm	10.5mm	1.43kg

Número de catálogo	Número do artigo	D	Tamanho do orifício 1 (HS1)	Tamanho do orifício 2 (HS2)	Peso unitário
IBSBADV120-230	534428	12mm	10.5mm	10.5mm	0.33kg
IBSBADV120-330	534429	12mm	10.5mm	10.5mm	0.47kg
IBSBADV120-430	534430	12mm	10.5mm	10.5mm	0.6kg
IBSBADV120-530	534431	12mm	10.5mm	10.5mm	0.74kg
IBSBADV120-630	534432	12mm	10.5mm	10.5mm	0.88kg
IBSBADV120-830	534433	12mm	10.5mm	10.5mm	1.15kg
IBSBADV185-1030	534440	16mm	10.5mm	12.5mm	2.1kg
IBSBADV185-330	534435	16mm	10.5mm	12.5mm	0.7kg
IBSBADV185-430	534436	16mm	10.5mm	12.5mm	0.9kg
IBSBADV185-530	534437	16mm	10.5mm	12.5mm	1.1kg
IBSBADV185-630	534438	16mm	10.5mm	12.5mm	1.3kg
IBSBADV185-830	534439	16mm	10.5mm	12.5mm	1.7kg
IBSBADV240-1030	534446	18.5mm	10.5mm	12.5mm	2.67kg
IBSBADV240-330	534441	18.5mm	10.5mm	12.5mm	0.89kg
IBSBADV240-430	534442	18.5mm	10.5mm	12.5mm	1.14kg
IBSBADV240-530	534443	18.5mm	10.5mm	12.5mm	1.4kg
IBSBADV240-630	534444	18.5mm	10.5mm	12.5mm	1.65kg
IBSBADV240-830	534445	18.5mm	10.5mm	12.5mm	2.16kg

Número de catálogo	Número do artigo	D	Tamanho do orifício 1 (HS1)	Tamanho do orifício 2 (HS2)	Peso unitário
IBSBADV25-1030	534406	9mm	6.5mm	6.5mm	0.35kg
IBSBADV25-230	534400	9mm	6.5mm	6.5mm	0.08kg
IBSBADV25-330	534401	9mm	6.5mm	6.5mm	0.11kg
IBSBADV25-430	534402	9mm	6.5mm	6.5mm	0.15kg
IBSBADV25-530	534403	9mm	6.5mm	6.5mm	0.18kg
IBSBADV25-630	534404	9mm	6.5mm	6.5mm	0.22kg
IBSBADV25-830	534405	9mm	6.5mm	6.5mm	0.28kg
IBSBADV50-1030	534413	8mm	8.5mm	10.5mm	0.64kg
IBSBADV50-230	534407	8mm	8.5mm	10.5mm	0.15kg
IBSBADV50-330	534408	8mm	8.5mm	10.5mm	0.21kg
IBSBADV50-430	534409	8mm	8.5mm	10.5mm	0.27kg
IBSBADV50-530	534410	8mm	8.5mm	10.5mm	0.33kg
IBSBADV50-630	534411	8mm	8.5mm	10.5mm	0.39kg
IBSBADV50-830	534412	8mm	8.5mm	10.5mm	0.52kg
IBSBADV70-1030	534420	11mm	8.5mm	10.5mm	0.86kg
IBSBADV70-230	534414	11mm	8.5mm	10.5mm	0.2kg
IBSBADV70-330	534415	11mm	8.5mm	10.5mm	0.28kg
IBSBADV70-430	534416	11mm	8.5mm	10.5mm	0.36kg

Número de catálogo	Número do artigo	D	Tamanho do orifício 1 (HS1)	Tamanho do orifício 2 (HS2)	Peso unitário
IBSBADV70-530	534417	11mm	8.5mm	10.5mm	0.44kg
IBSBADV70-630	534418	11mm	8.5mm	10.5mm	0.53kg
IBSBADV70-830	534419	11mm	8.5mm	10.5mm	0.7kg

DETALHES ADICIONAIS DO PRODUTO

ΔT = Temperature of conductors – Internal temperature of panel.

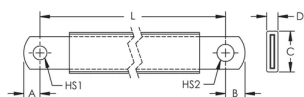
This table indicates the temperature rise produced by chosen current in the given section. This calculation does not take into account the heat dissipation from the switch gear.

IBSB Advanced Insulated Braided Conductor with a cross section of 240 mm² (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.

Maximum Ampacity Ratings									
Cross Section (mm ² /kcmil)	ΔT 30° C (A)	ΔT 40° C (A)	ΔT 45° C (A)	ΔT 50° C (A)	ΔT 55° C (A)	ΔT 60° C (A)	ΔT 70° C (A)	2 Bar Current Coefficient	3 Bar Current Coefficient
25/49.34	116	134	142	150	157	164	177	1.6	2
50/98.68	213	246	260	274	288	301	325	1.6	2
70/138.15	226	261	277	291	306	319	345	1.6	2
100/197.35	298	344	365	385	404	422	456	1.6	2
120/236.82	363	419	444	468	491	513	554	1.6	2
185/365.1	416	480	509	537	563	588	635	1.6	2
240/473.65	556	642	681	718	753	786	849	1.6	2

DIAGRAMAS



AVISO

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 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