

ARC & ENERGY

YOU DON'T FOLLOW A HERD, YOU LEAD IT

With our extensive Arc & Energy range,
we offer the right clothing for many highly specialised work areas
and fields of application. It reliably protects against arc flash
and the risk of flammability, while impressing with a level of wearing comfort
that feels completely natural, and not just in the workplace.










HB-SecureAllround®

The proven multifunctional blended fabric covers a wide range of standards and convinces with its pleasant wearing comfort.

The versatile products can also be designed according to your own ideas:

Simply choose your desired combination from 6 different colours.

ITEM	COLOUR	COLOUR NO.	COLOUR NAME						REGULAR SIZES
1 , 2 , 3 , 4		3026	dark blue/ medium grey/red	IEC 61482-2 APC 1	EN ISO 11612 A1+A2/B1/C1/ E2/F1	EN ISO 11611 Class 1 A1+A2	EN 1149-5	EN 13034 Type 6	46-58 & 94-110



JACKET 4kA

Arc flash class 1

Part number: **01128 10134 020 3026**

Garment weight: approx. 1,240 g

Three-coloured • stand-up collar • front with zip fastener with attached closure band and covered snap fasteners • 2 attached breast pockets with flap and covered snap fasteners • 1 inner pocket • side pockets with zip and with flap and covered snap fasteners • snap fasteners for adjusting sleeve width • leasing label • FR standard pictograms on the front.



TROUSERS 4kA

Arc flash class 1

Part number: **01128 20081 050 3026**

Garment weight: approx. 1,060 g

Three-coloured • waistband elasticated at the side • waistband fastening with covered patented buttons on both sides • front zip • 2 wingpockets • 1 back pocket with flap and covered snap fasteners • 1 thigh pocket with 1 interior mobile phone/pen pocket and flap with covered snap fasteners.



1 collection – more than 1,000 possibilities

The product images show one of many versions. Find detailed information in this catalogue (page 224) and at www.hb-ready-to-wear.com

These colours are available:





The equipment with different pockets and reflective stripes is freely selectable. With HB-SecureAllround® and our **READY TO WEAR** system, you can configure your PPE completely individually. And all delivered within 21* days.



COVERALL 4kA

Arc flash class 1
Part number: **01128 30014 050 3026**
Garment weight: approx. 1,590 g

Three-coloured • turndown collar • front with snap fastening covered on both sides • 2 patched breast pockets with flap and covered snap fasteners • 1 inside breast pocket with hook&loop fastening • 2 side pockets with flaps • sleeve width adjustable with snap fasteners • neck label • 1 back pocket • 1 thigh pocket with 1 interior mobile phone/pen pocket – each with flap and covered snap fasteners • FR standard pictograms on the arms.

BIB AND BRACE TROUSERS 4kA

Arc flash class 1
Part number: **01128 50061 050 3026**
Garment weight: approx. 1,340 g

Three-coloured • stretch braces • front zip fastener • interior bib pocket with flap • 2 wing pockets • 2 side accesses with button fastening • 1 back pocket, 1 thigh pocket with 1 interior mobile phone/pen pocket – each with flap and covered snap fasteners • elasticated kidney protection.







* Outside Germany, delivery will take a few days longer. We accept no liability for delivery delays due to force majeure beyond the control of the seller.

MATERIAL: 75 % COTTON, 24 % POLYESTER, 1 % CARBON // FC-Equipment: fluorocarbon finish ·
ATPV VALUE: 17.3 cal/cm² · 724.3 kJ/m² · **HAF VALUE:** 84.1 % · **FABRIC WEIGHT:** approx. 350 g/m² ·
FIELDS OF APPLICATION: Plant engineering and construction, energy suppliers, electric industry and installation, public services, electricians



HB-ArcSelect®

Our HB-ArcSelect® shirt and the completely double-layered coat made of the popular cotton-polyamide blend increase safety at workplaces exposed to arc hazards as an additional layer of clothing. This makes them the perfect addition to many heat, flame and arc flash protection collections. The jacket also covers large areas of the body and provides the best possible 7kA all-round protection.

ITEM	PLY	COLOUR	COLOUR NO.	COLOUR NAME					REGULAR SIZES
1	-		41	royal	IEC 61482-2 APC 1	EN ISO 11612 A1+A2/B1/C1/ E1/F1	EN ISO 11611 Class 1 A1+A2	EN 1149-5	37/38 – 47/48
			45	navy					
			52	medium grey					
			22	orange					
2	7kA (2-PLY)		45	navy	IEC 61482-2 APC 2	EN ISO 11612 A1+A2/B1/ C1/F1			46/48 – 58/60



SHIRT 4kA

Arc flash class 1

Part number: **01227 60026 001 + COLOUR NO.**

Garment weight: approx. 560g

Single-coloured • Comfort Fit • regular turn down collar • front closure with snap fasteners covered on both sides • 1 attached pocket with flap and covered snap fasteners • ergonomic sleeves with protective sleeve vent and adjustable snap fasteners • FR leasing label • standard pictograms as flame retardant direct embroidery on the right cuff.



2 |

Moving pleat on the back



7kA all-round protection:
Material is completely doubled

MEN'S COAT 7kA

Arc flash class 2

Part number: **01004 40030 001 45**

Garment weight: approx. 1,650g

Single-coloured • completely double-layered • high band collar • front with covered 2-way zipper plus hook&loop fastener • 2 vertical side pockets with covered zipper • moving pleat for easy walking on the back • sleeve hem with adjustable hook&loop fastener • FR leasing label • standard pictograms on the left sleeve.

MATERIAL: 87% COTTON, 12% POLYAMIDE, 1% CARBON















1 | ATPV VALUE: 12.3 cal/cm² · 514.63 kJ/m² · **HAF VALUE:** 82.3% · **FABRIC WEIGHT:** approx. 280 g/m²

2 | ATPV VALUE: 40.0 cal/cm² · 1.674.4 kJ/m² · **HAF VALUE:** 91.0% · **FABRIC WEIGHT:** approx. 340 g/m² + approx. 265 g/m²

FIELDS OF APPLICATION: Plant construction, pipeline and line construction, electricians, public services, steel works, switch gear construction, communication, gas and water networks

HB-ArcSelect®

HB-ArcSelect® is precisely tailored to the needs of arc fault protection in all classes. Due to the high cotton content, the soft fabric is as comfortable as high-quality leisure wear and is up to the demands of PPE in terms of wearing comfort and care: Multifunctional and high-quality protective clothing, suited for several application areas.

ITEM	PLY	COLOUR	COLOUR NO.	COLOUR NAME					REGULAR SIZES
1	4kA (1-PLY)		2027	royal/navy	IEC 61482-2 APC 1	EN ISO 11612 A1/A2/B1/C1/ E2/F1	EN ISO 11611 Class 1 A1+A2	EN 1149-5	46-58 & 94-110
1 , 2 , 3			2381	medium grey/dark grey					
2 , 3			2071	medium grey/red					
			2041	navy/royal					
	7kA/4kA (2-PLY)		2382	dark grey/medium grey	IEC 61482-2 APC 2*				
1			2027	royal/navy					
1 , 2 , 3			2381	medium grey/dark grey					
2 , 3			2071	medium grey/red					
			2041	navy/royal	*Front part and sleeves/ front trousers				
			2382	dark grey/medium grey					



Front part and sleeve available as 1-ply or 2-ply version
Electric Arc Flash protection
 4kA or 7kA/4 kA

BLOUSON 4kA

Arc flash class 1
 Part number 4kA: **01004 10000 001 + COLOUR NO.**
 Garment weight: approx. 950g

BLOUSON 7kA/4kA

Arc flash class 2
 Part number 7kA/4kA: **01004 10000 002 + COLOUR NO.**
 Garment weight: approx. 1,100g

Two-coloured • stand-up collar • covered front zip with covered snap fastener • 2 attached breast pockets with flaps and covered snap fasteners • side pockets with flaps and covered snap fastener • 1 inner pocket with snap fastener • sleeve width adjustable via snap fasteners • leasing neck label • embroidered FR standard pictograms on the front • reflective elements suitable for industrial laundry on front, back and sleeves • no Hi-Vis protective clothing acc. to EN ISO 20471 and EN 17353.



Standard pictograms as flame-retardant direct embroidery



Further colour combinations are available through our high-speed delivery service. See page 221.



2 and 3 | Reflective elements suitable for industrial laundry



2 and 3 | Front trousers available as 1-ply or 2-ply version
Electric Arc Flash protection 4kA or 7kA/4 kA

TROUSERS 4kA

Arc flash class 1
 Part number 4kA: **01004 20000 001 + COLOUR NO.**
 Garment weight: approx. 760g

TROUSERS 7kA/4kA

Arc flash class 2
 Part number 7kA/4kA: **01004 20000 002 + COLOUR NO.**
 Garment weight: approx. 870g

Two-coloured • waistband with button and zip-fly • 2 slant pockets • 1 hip pocket with flap and covered snap fastener • 1 ruler pocket on the right with flap and snap fastener • 1 bellow pocket on the right with flap and snap fastener • knee pockets with hook&loop fastener • reflective elements suited for industrial laundry on side pocket, knee pocket and back of knees • no Hi-Vis protective clothing acc. to EN ISO 20471 and EN 17353.

BIB AND BRACE TROUSERS 4kA

Arc flash class 1
 Part number 4kA: **01004 50100 001 + COLOUR NO.**
 Garment weight: approx. 960g

BIB AND BRACE TROUSERS 7kA/4kA







Arc flash class 2
 Part number 7kA/4kA: **01004 50100 002 + COLOUR NO.**
 Garment weight: approx. 1,050g

Two-coloured • stretch braces with fixlock buckle • front with zip-fly • bib with outer pocket with flap and covered snap fastener • 2 slant pockets • 1 hip pocket with flap and covered snap fastener • 1 ruler pocket on the right with flap and snap fastener • 1 bellow pocket on the right with flap and snap fastener • knee pockets with hook&loop fastener • reflective elements suited for industrial laundry on bib, side pockets, knee pockets and back of knees • no Hi-Vis protective clothing acc. to EN ISO 20471 and EN 17353.

MATERIAL: 87% COTTON, 12% POLYAMIDE, 1% CARBON ·
4kA: ATPV VALUE: 15.0 cal/cm² · 627.6 kJ/m² · **ELIM:** 13.0 cal/cm² · **FABRIC WEIGHT:** approx. 340g/m² ·
7kA/4kA: FABRIC WEIGHT: approx. 340g/m² + approx. 280g/m² ·
FIELDS OF APPLICATION: Electricians and electric industries, public services, plant engineering, pipeline and line construction, steel works, gas and water networks, metal industry, switch gear construction

HB-4arc®

Our high-end electric arc protection HB-4arc® is suitable for extreme load thanks to its particular high ATPV. It meets the requirements of IEC 61482-2 class 2 (7kA) and additionally offers heat, flame and welder's protection as well as antistatic properties. The material is partly doubled, very stable and tear-resistant. Wearing HB-4arc® provides you with much comfort and safety.

ITEM	COLOUR	COLOUR NO.	COLOUR NAME					REGULAR SIZES
1		2205	navy/medium grey	IEC 61482-2 APC 2*	EN ISO 11612 A1+A2/B1/C1/ E3/F1	EN ISO 11611 Class 2 A1+A2		46-58 & 94-110
2 , 3		458	navy	* Front part and sleeves/ front trousers				
		52	medium grey					



1 |

Easy fit:
Shaped elbow with dart



High-band
collar with
covered snap
fastener

Front parts
and sleeves
2-ply

Covered zip

**Electric Arc Flash protection
7kA/4kA**

1, 2 and 3 |
Ergonomic cut for more
freedom of movement

BLOUSON 7kA/4kA

Arc flash class 2
Part number: **01237 10125 002 2205**
Garment weight: approx. 1,291g

Two-coloured • front parts and sleeves 2-ply • high-band collar with covered snap fastener • stitching in contrast colour offwhite • 2 side pockets with zip • 2 front pockets (as mobile phone pocket on the right) with flap and covered snap fastener • waistband and adjustable sleeve hems with covered snap fasteners • FR piping suitable for industrial laundry • leasing label • standard pictograms on the front as FR direct embroidery.



2 and 3 |
Ruler pocket with
additional pen pocket



2 |



3 |

Flame-retardant
stretch braces with
useful fixlock buckle

Side entries with
elastic knitted wedge

2 and 3 |
Cargo pocket with
additional mobile
phone pocket inside

2 and 3 |
Front trousers
2-ply

TROUSERS 7ka/4ka

Arc flash class 2

Part number: **01237 20060 037 + COLOUR NO.**

Garment weight: approx. 1,152g

Single-coloured • front trousers 2-ply • stitching in contrast colour off-white • added waistband with covered buttoning • zip fly • 2 slant pockets • 1 hip pocket on the right, 1 ruler pocket on the right leg (+ pen pocket) and 1 cargo pocket on the left (+ mobile phone pocket) – each with flap and covered snap fastener • shaped knees • knee pockets with adjustable covered hook&loop fastener.

BIB AND BRACE TROUSERS 7ka/4ka

Arc flash class 2

Part number: **01237 50041 068 + COLOUR NO.**

Garment weight: approx. 1,361g

Single-coloured • front trousers 2-ply • contrast stitching in off-White • fix lock stretch braces • bib with outer pocket and flap • zip-fly • two-side entries with elastic knitted wedge • 2 slant pockets • 1 hip pocket on the right, 1 ruler pocket on the right leg (+ pen pocket) and 1 cargo pocket on left leg – each with flap and covered snap fastener • shaped knees • knee pockets with adjustable covered hook&loop fastener.

MATERIAL: 89% COTTON, 10% POLYAMIDE, 1% CARBON

ATPV VALUE: 20.0 cal/cm² · 836.8 kJ/m² · **ELIM:** 16.0 cal/cm²


FABRIC WEIGHT: approx. 390 g/m² + approx. 250 g/m²

FIELDS OF APPLICATION: Electrical installation, public services, energy suppliers, plant construction, electricians



HB-PROtection®

Modern and comfortable arc fault protection: that is HB-PROtection®. The lightweight material mix convinces in arc flash performance. The extremely soft fabric ensures a good fit and plenty of freedom of movement. The processed cotton creates a pleasant wearing sensation. The 2-layer 7kA/4kA models are double-worked at the front and sleeves.

ITEM	PLY	COLOUR	COLOUR NO.	COLOUR NAME						REGULAR SIZES
1	4kA (1-PLY)		2177	navy/dark grey	IEC 61482-2 APC 1					
2 , 3			2175	dark grey/navy						
1	7kA/4kA (2-PLY)		2177	navy/dark grey	IEC 61482-2 APC 2* *Front part and sleeves/ front trousers	EN ISO 11612 A1+A2/B1/ C1/F1	EN ISO 11611 Class 1 A1+A2	EN 1149-5	EN 13034 Type 6	46-58 & 94-110
2 , 3			2175	dark grey/navy						
1	7kA (2-PLY)		2177	navy/dark grey	IEC 61482-2 APC 2					
2			2175	dark grey/navy						

1 |



Sleeve hem with gusset and covered hook&loop fastener

JACKET 4kA

Arc flash class 1
Part number 4kA: **01072 10112 020 2177**
Garment weight: approx. 835 g

JACKET 7kA/4kA

Arc flash class 2
Part number 7kA/4kA: **01072 10112 018 2177**
Garment weight: approx. 910 g

JACKET 7kA

Arc flash class 2
Part number 7kA: **01072 10112 019 2177**
Garment weight: approx. 945 g

Two-coloured • stand-up collar with covered snap fastener • covered zip • 2 breast pockets with covered zip fastener, left pocket with tap to open • 1 inner breast pocket with additional pen pocket and hook&loop fastener • 2 side pockets with zip fastener • sleeve hem with reflective pipes • no Hi-Vis protective clothing acc. to EN ISO 2047 and EN 17353 • back with 2 movement pleats • elongated back as kidney protection • sleeve opening with gusset • sleeve hem with gusset and covered hook&loop fastener • added waistband • FR standard pictograms on the front.



The 7kA version is completely doubled



2 |



21TO WEAR
 Jackets and trousers for Ladies available through our high-speed delivery service. See page 220.

www.21towear.de

Knee pockets with reflective pipes

3 |



TROUSERS 4kA

Arc flash class 1
Part number 4kA: **01072 20074 017 2175**
Garment weight: approx. 730 g

TROUSERS 7kA/4kA

Arc flash class 2
Part number partially 7kA/4kA: **01072 20074 018 2175**
Garment weight: approx. 795 g

TROUSERS 7kA

Arc flash class 2
Part number 7kA: **01072 20074 035 2175**
Garment weight: approx. 860 g

Two-coloured • waistband with covered button closure • zip fly • ergonomic knees • 2 slant pockets • 2 hip pockets and 2 bellow pockets – each with flap and covered snap fasteners • knee pockets with reflective pipes • no Hi-Vis protective clothing acc. to EN ISO 20471 and EN 17353.

BIB AND BRACE TROUSERS 4kA

Arc flash class 1
Part number 4kA: **01072 50055 015 2175**
Garment weight: approx. 855 g

BIB AND BRACE TROUSERS 7kA/4kA

Arc flash class 2
Part number partially 7kA/4kA: **01072 50055 016 2175**
Garment weight: approx. 970 g

Two-coloured • stretch braces with fixlock buckle • straight kidney protection • elastic waistband all around • 2 side access with gusset • slit with zip • ergonomic knees • 2 slant pockets • bib pocket with covered snap fastener • 2 hip pockets • 2 bellow pockets – each with flap and covered snap fastener • knee pockets with reflective pipes • no Hi-Vis protective clothing acc. to EN ISO 20471 and EN 17353.

MATERIAL: 55 % MODACRYLIC, 43 % COTTON, 2 % CARBON

4kA: ATPV VALUE: 10.4 cal/cm² · 435 kJ/m² · **HAF VALUE:** 80.2% · **FABRIC WEIGHT:** approx. 275 g/m²







7kA/4kA: EBT50 VALUE: 20.0 cal/cm² · 837.3 kJ/m² · **HAF VALUE:** 88.9% · **FABRIC WEIGHT:** + approx. 175 g/m²

FIELDS OF APPLICATION: Metal industry, public services, electricians, pipeline and line construction, communication, gas and water networks



HB-PROtection® Green Turtle

Our HB-PROtection® Green Turtle shirt is made with organic cotton. It offers modern design as well as a comfortable, ergonomically improved "Comfort Fit". The fabric has a very low weight and provides most high wearing comfort – and inherent flame retardancy. Additionally it offers reliable protection against Arc Flash and antistatic properties. Therefore, it is suited for many working areas and the perfect complement for many HB product lines.

ITEM	COLOUR	COLOUR NO.	COLOUR NAME					REGULAR SIZES
1		45	navy	IEC 61482-2 APC 1	EN ISO 11612 A1+A2/B1/ C1/F1	EN 1149-5	EN 13758-2	39/40–47/48
		52	medium grey					



SHIRT 4kA

Heat protection

Part number: **01251 60026 000 + COLOUR-NO.**

Garment weight: approx. 440g

Single-coloured • Comfort Fit • turn-down collar with snap fastener • front zipper with covered snap fastener on both sides • preformed sleeves • chest pocket with flap and sleeve cuff with gusset – each with covered snap fastener • FR Leasing label • standard pictograms as FR embroidery on right sleeve cuff.



Embroidered standard pictograms



1 | On request the shirt is also available in tight fitting "Body Fit".

Part number: **01251 60025 000 + COLOUR-NO.**

■ 45 navy ■ 52 middle grey

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Jackets and trousers for Ladies available through our high-speed delivery service. See page 220.



www.21towear.de

1 |



What is the Organic Content Standard?



Organically grown cotton according to OCS 100 has been used in this shirt. Organic Content Standard 100 enables independent assessment, verification and traceability of the exact organic fiber content in the product. The OCS 100 certificate confirms that the organic content of the cotton used is at least 95%.

MATERIAL: 54% MODACRYLIC, 44% COTTON (organic), 2% CARBON ·











ATPV VALUE: 6.9 cal/cm² · 288.7 kJ/m² · **EBT50 VALUE:** 7.1 cal/cm² · **ELIM:** 6.4 cal/cm² ·

FABRIC WEIGHT: approx. 195 g/m² ·

FIELDS OF APPLICATION: Heat and flame exposed workplaces, energy suppliers, public services, plant engineering and construction, electricians

HB-PROtection

Combined with the jackets of the HB-MODarc® collection, the shirts increase the protective function as an additional clothing layer and thus expand the application possibilities of the PPE. With the intelligent clothing combinations of the comprehensive HB-MODarc® product range, the arc fault protection class 2 can also be fulfilled.

ITEM	COLOUR	COLOUR NO.	COLOUR NAME						REGULAR SIZES
1 ,2	 	45 521	navy cement grey	-	IEC 61482-2 APC 1	EN ISO 11612 A1+A2/B1/ C1/F1	EN 1149-5	EN 13750-2	Unisex S-2XL
2	 	228 50	orange light grey	-	-	-	-	-	
3		2193	black/anthracite reflective	EN 14058 Class 1	-	EN ISO 11612 A1/B1/C2/F1	-	-	

1|



POLO-SHIRT 4ka LONG SLEEVE

Arc flash class 1

Part number: **01244 80011 011 + COLOUR NO.**

Garment weight: approx. 300g

Single coloured • piqué polo-shirt • collar with board and covered snap fasteners • sleeve cuff with modern covering seam • leasing label • seams in contrast colour • standard pictograms as flame retardant direct embroidery on the right sleeve cuff.



1 and 2|

Standards pictograms as flame retardant embroidery

2|



T-SHIRT 4ka LONG SLEEVE

Arc flash class 1

Part number: **01244 80010 007 + COLOUR NO.**

Garment weight: approx. 295g

Single coloured • piqué T-shirt • round neck • sleeve cuff with modern covering seam • leasing label • seams in contrast colour • standard pictograms as flame retardant direct embroidery on the right sleeve cuff.



Reinforced with HI-VISION®-sparks material

3 |



FLEECE JACKET 4kA

Arc flash class 1

Part number: **07015 19082 005 2193**

Garment weight: approx. 975g

Two-coloured • design with round shapes • high band collar with hook&loop fastener and standard pictograms as direct embroidery • closure bands with covered zip fastener and added buttoning band • 2 side pockets with zip fastener • sleeve with additional inner knitted wristband and windblocker • elongated back • side pockets, elbow and shoulders reinforced with special strong HI-VISION® sparks material with reflective threads.



Elongated back

1 |, 2 | MATERIAL: 54% MODACRYLIC, 44% COTTON, 2% CARBON ·

ATPV VALUE: 6.4 cal/cm² · **HAF VALUE:** 70.1% · **FABRIC WEIGHT:** approx. 215g/m² ·

3 | MATERIAL: 48% MODACRYL, 32% COTTON, 18% POLYESTER, 2% CARBON ·










FABRIC WEIGHT: approx. 360g/m² ·

FIELDS OF APPLICATION: Plant construction, pipeline and line construction, electricians, public services, steel works, switch gear construction, communication, gas and water networks, network engineers



HB-MODarc®

HB-MODarc® is high-quality arc flash PPE in an outdoor design that can be perfectly combined and adapted to different purposes. The soft and lightweight fabric offers a good fit with plenty of freedom of movement and, thanks to the cotton, a high level of wearer comfort. The 2-layer models are double-worked at crucial points.

ITEM	PLY	COLOUR	COLOUR NO.	COLOUR NAME						REGULAR SIZES
1	4kA (1-PLY)		2251	grey/black	IEC 61482-2 APC 1	EN ISO 11612 A1+A2/B1/ C1/F1	EN ISO 11611 Class 1 A1+A2	EN 1149-5	EN 13034 Type 6	46-58 & 94-110
2 ,3			2188	black/grey						
1	7kA/4kA (2-PLY)		2251	grey/black	IEC 61482-2 APC 2*	EN ISO 11612 A1+A2/B1/ C1/F1	EN ISO 11611 Class 1 A1+A2	EN 1149-5	EN 13034 Type 6	
2 ,3			2188	black/grey						



1|

Formed elbows for more movement freedom

Band collar with covered snap fastener

Completely manufactured in roof-tile design

Pockets with handy tab to open



Front part and sleeve available as 1-ply or 2-ply version. **Electric Arc Flash protection 4 kA or 7kA/4kA**

BLOUSON 4kA

Arc flash class 1

Part number 4kA: **01072 10107 034 2251**

Garment weight: approx. 835g

BLOUSON 7kA/4kA

Arc flash class 2

Part number 7kA/4kA: **01072 10107 035 2251**

Garment weight: approx. 910g

Two-coloured • raw white contrast stitching • stand-up collar with covered snap fastener • covered zip • 2 front pockets (one as an attached pocket) with flap, covered snap fastener and tab to open • 1 inner pocket left with snap fastener • 2 side pockets with zip • sleeve hem adjustable with snap fastener covered on inside • attached waistband with covered snap fastener • leasing label • standard pictograms on front as FR direct stitching.

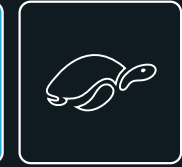
21 TO WEAR

Further models also for Ladies' available through our high-speed delivery service. See page 220.



ALSO FOR LADIES

www.21towear.de



TROUSERS 4kA

Arc flash class 1

Part number 4kA: **01072 20074 002 + COLOUR NO.**

Garment weight: approx. 730g

TROUSERS 7kA/4kA

Arc flash class 2

Part number 7kA/4kA: **01072 20074 003 + COLOUR NO.**

Garment weight: approx. 845g

Two-coloured • raw white contrast stitching • waistband with covered button closure • zip fly • 2 slant pockets • 1 hip pocket on the right and 1 bellows pocket on the left with additional, attached pocket - each with flap, covered snap fastener and tab to open • 1 ruler pocket on the right (+ pen pocket) • 2 knee pockets outside with hook&loop fastener.

BIB AND BRACE TROUSERS 4kA

Arc flash class 1

Part number 4kA: **01072 50055 002 + COLOUR NO.**

Garment weight: approx. 855g

BIB AND BRACE TROUSERS 7kA/4kA

Arc flash class 2

Part number 7kA/4kA: **01072 50055 003 + COLOUR NO.**

Garment weight: approx. 970g

Two-coloured • raw white contrast stitching • stretch braces with fixlock buckle • bib with outer pocket with flap and covered snap fastener • straight kidney protection • 2 side accesses with stretch gusset • zip fly • 2 slant pockets • hip pocket on the right and bellows pocket on the left with additional, attached pocket, each with flap and covered snap fastener • ruler pocket on the right (+pen pocket) • knee pockets.

2 |



2 and 3 |
Bellows pocket with additional attached pocket

2 and 3 |
Knee pockets with hook&loop fastener

3 |



2 and 3 |
Front trousers available as 1-ply or 2-ply version.
**Electric Arc
Flash protection
4 kA or 7 kA/4 kA**

MATERIAL: 55 % MODACRYLIC, 43 % COTTON, 2 % CARBON

4kA: ATPV VALUE: 10.4 cal/cm² · 468.9 kJ/m² · **HAF VALUE:** 80.2% · **FABRIC WEIGHT:** approx. 275g/m²
















7kA/4kA: EBT50 VALUE: 20.0 cal/cm² · 837.3 kJ/m²

HAF VALUE: 88.9% · **FABRIC WEIGHT:** approx. 275g/m² + approx. 175g/m²

FIELDS OF APPLICATION: Public services, energy suppliers, plant construction, electrical installation



Due to strong demand, we also offer our popular HB-MODarc® collection with reflective stripes. Again, the 2-layer models of this high-performance and modern arc-fault protective clothing are double-worked at the front, sleeves and front trousers and thus protect against electric arcs up to 7kA.

ITEM	PLY	COLOUR	COLOUR NO.	COLOUR NAME						REGULAR SIZES
1	4kA (1-PLY)		2251	grey/black	IEC 61482-2 APC 1	EN ISO 11612 A1+A2/B1/ C1/F1	EN ISO 11611 Class 1 A1+A2	EN 1149-5	EN 13034 Type 6	46-58 & 94-110
			2041	navy/royal						
2 ,3			2251	grey/black						
			2188	black/grey						
			45	navy						
1	7kA/4kA (2-PLY)		2251	grey/black	IEC 61482-2 APC 2*					
			2041	navy/royal						
2 ,3			2251	grey/black						
			2188	black/grey						
2			45	navy						



Completely manufactured in roof-tile design

Reflective stripes, suited for industrial laundry

BLOUSON 4kA REFLECTIVE STRIPES

Arc flash class 1
Part number 4kA: **01072 10107 039 + COLOUR NO.**
Garment weight: approx. 895 g

BLOUSON 7kA/4kA REFLECTIVE STRIPES

Arc flash class 2
Part number 7kA/4kA: **01072 10107 038 + COLOUR NO.**
Garment weight: approx. 970 g

Two-coloured • raw white contrast stitching • stand-up collar with covered snap fastener • covered zip • 2 front pockets (1 as an attached pocket) with flap, covered snap fastener and tab to open • 1 inner pocket left with snap fastener • 2 side pockets with zip • sleeve hem adjustable with snap fastener covered on inside • attached waistband with covered snap fastener • leasing label • standard pictograms on front as FR direct stitching • flame-retardant reflective stripes suitable for industrial laundry • no Hi-Vis protective clothing acc. to EN ISO 20471 and EN 17353.

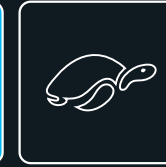
Front part and sleeve available as 1-ply or 2-ply version
Electric Arc Flash protection 4kA or 7kA/4kA



Band collar with covered snap fastener

21TO WEAR

Further colour combinations plus Ladies' versions are available through our high-speed delivery service. See page 220.
www.21towear.de



2 and 3 |
Bellows pocket
with additional
attached pocket

2 and 3 |
Reflective stripes,
suited for industrial
laundry



2 and 3 | Front trousers available
as 1-ply or 2-ply version
Electric Arc Flash protection
4kA or 7kA/4kA

TROUSERS 4kA REFLECTIVE STRIPES

Arc flash class 1
Part number 4kA: **01072 20074 009 + COLOUR NO.**
01072 20074 016 45

Garment weight: approx. 765 g

TROUSERS 7kA/4kA REFLECTIVE STRIPES

Arc flash class 2
Part number 7kA/4kA: **01072 20074 008 + COLOUR NO.**
01072 20074 015 45

Garment weight: approx. 880 g

Two-coloured • raw white contrast stitching • waistband with covered button closure • zip fly • 2 slant pockets • 1 hip pocket on the right and 1 bellows pocket on the left with additional attached pocket – each with flap, covered snap fastener and tab to open • 1 ruler pocket on the right (+ pen pocket) • knee pockets with hook&loop fastener • flame-retardant reflective stripes suitable for industrial laundry • no Hi-Vis protective clothing acc. to EN ISO 20471 and EN 17353.

BIB AND BRACE TROUSERS 4kA REFLECTIVE STRIPES

Arc flash class 1
Part number 4kA: **01072 50055 009 + COLOUR NO.**
01072 50055 014 45

Garment weight: approx. 890 g

BIB AND BRACE TROUSERS 7kA/4kA REFLECTIVE STRIPES

Arc flash class 2
Part number 7kA/4kA: **01072 50055 008 + COLOUR NO.**
Garment weight: approx. 1,005 g

Two-coloured • raw white contrast stitching • stretch braces with fixlock buckle • bib with outer pocket with flap and covered snap fastener • straight kidney protection • 2 side accesses with stretch gusset • zip fly • 2 slant pockets • hip pocket on the right and bellows pocket on the left with additional attached pocket – each with flap and covered snap fastener • ruler pocket on the right (+ pen pocket) • knee pockets • flame-retardant reflective stripes suitable for industrial laundry • no Hi-Vis protective clothing acc. to EN ISO 20471 and EN 17353.

MATERIAL: 55 % MODARCRYLIC, 43 % COTTON, 2 % CARBON

4kA: ATPV VALUE: 10.4 cal/cm² · 468.9 kJ/m² · **HAF VALUE:** 80.2 %

FABRIC WEIGHT: approx. 275 g/m²

7kA/4kA: EBT50 VALUE: 20.0 cal/cm² · 837.3 kJ/m² · **HAF VALUE:** 88.9 %

FABRIC WEIGHT: approx. 275 g/m² + approx. 175 g/m²

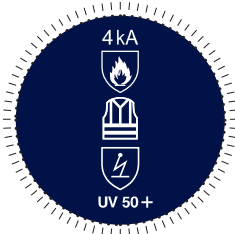
FIELDS OF APPLICATION: Public services, energy suppliers, plant construction, electrical installation

HABETEX

Our most comprehensive product line HB-MODarc&vis®, which we present on the following pages, is a universal talent. The shirts offer multi-risk protection for underneath – and in summer also for outside! They are suitable for work areas that require multiple standards in combination with UV and high visibility. The FR vest with hi-vis protection is the ideal complement for many applications.

ITEM	COLOUR	COLOUR NO.	COLOUR NAME						REGULAR SIZES
1		2397	fluorescent orange/navy	EN ISO 20471 Class 2	IEC 61482-2 APC 1	EN ISO 11612 A1/B1/C1/F1	EN 1149-5	EN 13750-2	Unisex S-2XL
2		2112	fluorescent yellow/navy						
3		2112	fluorescent yellow/navy	-	-	-	-	-	1-4

Flexible segmented and flame-retardant reflective stripes



Standards pictograms on the sleeve as FR direct embroidery

1



POLO-SHIRT 4kA LONG SLEEVE

Arc flash class 1
Part number: **01270 80012 003 2397**
Garment weight: approx. 350 g
With reflective stripes circumferentially.

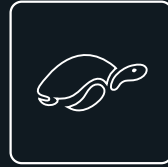
POLO-SHIRT 4kA LONG SLEEVE

Arc flash class 1
Part number: **01270 80012 006 2397**
Garment weight: approx. 350 g
With reflective stripes like braces.

Two-coloured • long sleeves • collar with polo placket • closure band with flame-retardant snap fasteners • contrast stitching in raw white • flexible segmented and flame-retardant reflective stripes • standard pictograms as direct stitching on the bottom of the right sleeve • leasing label inside on the back.

2





3 |



POLO-SHIRT 4KA LONG SLEEVE

Arc flash class 1

Part number: **01244 80012 003 2112**

Garment weight: approx. 300g

Two-coloured • long sleeves • collar with polo placket • closure band with flame-retardant snap fasteners • contrast stitching in raw white • flexible segmented and flame-retardant reflective stripes • standard pictograms as direct stitching on the bottom of the right sleeve • leasing label inside on the back.

Reflective stripes, suitable for industrial laundry

4 |



VEST HIGH VIS FR

High-Visibility FR

Part number: **01072 10129 001 2112**

Garment weight: approx. 435g

Two-coloured • round design, contrast stitchings in off-white • front closure via hook&loop fastener • HB logo as direct embroidery on back • flame-retardant reflective stripes attached in body language.

Hook & loop fastener

1 |, 2 | MATERIAL: 49% POLYESTER, 30% MODACRYLIC, 20% COTTON, 1% CARBON

FABRIC WEIGHT: approx. 245 g/m²

3 | MATERIAL: 54% MODACRYLIC, 44% COTTON, 2% CARBON








ATPV VALUE: 6.4 cal/cm² · 267.78 kJ/m² · **HAF VALUE:** 70.1% · **FABRIC WEIGHT:** approx. 225 g/m²

4 | MATERIAL: 55% MODACRYLIC, 43% COTTON, 2% CARBON · **FABRIC WEIGHT:** approx. 275 g/m²

FIELDS OF APPLICATION: Plant construction, pipeline and line construction, electricians, public services, steel works, switch gear construction, communication, gas and water networks



HB-MODarc&vis® stands for modern multifunctional PPE and is suitable for work applications that require several standards in combination with warning and arc flash protection. The combination of blouson and trousers or bib and brace trousers achieves high visibility protection class 3. The two-layer models are doubled at the front, sleeves and front trousers and offer protection against electric arcs up to 7kA/class 2.

ITEM	PLY	COLOUR	COLOUR NO.	COLOUR NAME							REGULAR SIZES
1	4kA (1-PLY)		2112	fluorescent yellow/navy	EN ISO 20471 Class 2	IEC 61482-2 APC 1					46-58 & 94-110
2 , 3	7kA/4kA (2-PLY)				EN ISO 20471 Class 1	IEC 61482-2 APC 2*	EN ISO 11612 A1+A2/B1/ C1/F1	EN ISO 11611 Class 1 A1+A2	EN 1149-5	EN 13034 Type 6	
1	7kA/4kA (2-PLY)				EN ISO 20471 Class 2	IEC 61482-2 APC 2*					
2 , 3					EN ISO 20471 Class 1	* Front part and sleeves/ front trousers					



1 |

21TO WEAR

Jackets and trousers for Ladies available through our high-speed delivery service. See page 220.



www.21towear.de



1, 2 and 3 | Achieves as suit (blouson combined with trousers or bib and brace trousers) **EN ISO 20471 Class 3**



Pockets with handy tab to open

Reflective stripes, suitable for industrial laundry

BLOUSON 4kA

Arc flash class 1

Part number 4kA: **01072 10107 028 2112**

Garment weight: approx. 940g

BLOUSON 7kA/4kA

Arc flash class 2

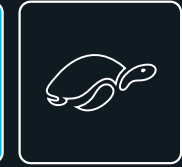
Part number 7kA/4kA: **01072 10107 033 2112**

Garment weight: approx. 1,055g

Two-coloured • parts subject to heavy soiling in blue • raw white contrast stitching • stand-up collar with covered snap fastener • covered 2-way zip • 2 front pockets with flaps, covered snap fasteners and tab to open • 1 inner pocket left with snap fastener • 2 side pockets with zip • sleeve hem adjustable with snap fastener covered on inside • attached waistband with covered snap fastener • standard pictograms on front as FR direct stitching • flame-retardant reflective stripes suitable for industrial laundry.

Front part and sleeve available as 1-ply or 2-ply version

Electric Arc Flash protection 4kA or 7kA/4kA



TROUSERS 4kA

Arc flash class 1

Part number 4kA: **01072 20074 000 2112**

Garment weight: approx. 815g

TROUSERS 7kA/4kA

Arc flash class 2

Part number 7kA/4kA: **01072 20074 001 2112**

Garment weight: approx. 915g

Two-coloured • parts subject to heavy soiling in blue • raw white contrast stitching • attached waistband with covered button closure • slit with zip-fly • 2 slant pockets • 1 hip pocket on the right and 1 bellows pocket on the left with additional attached pocket- each with flap, covered snap fastener and tab to open • 1 pocket for folding rule on the right (+ pen pocket) with flap • knee pockets with hook&loop fastener • flame-retardant reflective stripes suitable for industrial laundry .

2 |



2 and 3 | Front trousers available as 1-ply or 2-ply version
Electric Arc Flash protection 4kA or 7kA/4kA

BIB AND BRACE TROUSERS 4kA

Arc flash class 1

Part number 4kA: **01072 50055 000 2112**

Garment weight: approx. 910g

BIB AND BRACE TROUSERS 7kA/4kA

Arc flash class 2

Part number 7kA/4kA: **01072 50055 001 2112**

Garment weight: approx. 1,040g

Two-coloured • parts subject to heavy soiling in blue • stretch braces with fixlock buckle • straight kidney protection • 2x side access with stretch gusset • slit with zip • 2 slant pockets • bib pocket, hip pocket on the right and bellows pocket on the left with additional attached pocket - each with flap and covered snap fastener • folding rule pocket on the right (+ pen pocket) with flap • knee pockets • flame-retardant reflective stripes suitable for industrial laundry.

3 |



2 and 3 | Cargo pocket + attached pocket

2 and 3 | Flame-retardant reflective stripes

MATERIAL: 55% MODACRYLIC, 43% COTTON, 2% CARBON .

4kA: ATPV VALUE: 10.4 cal/cm² · 435.4 kJ/m² · **HAF VALUE:** 80.2% · **FABRIC WEIGHT:** approx. 275g/m² .













7kA/4kA: EBT50 VALUE: 20.0 cal/cm² · 837.3 kJ/m² · **HAF VALUE:** 88.9% .

FABRIC WEIGHT: approx. 275g/m² + approx. 175g/m² .

FIELDS OF APPLICATION: Public services, public transport and construction, electricians, energy suppliers

HABETEX[®]
HI-VISION[®]

Breathable, windproof and highly functional – these are the softshell and fleece jackets in our versatile HB-MODarc&vis® range. Whether multi-risk protection plus welding protection or flame protection plus protection for cooler days: both jackets can be used flexibly and are thus the ideal clothing for every season, suitable for many different work applications. NEW: our sweatshirt as modern alternative for inside and outside works.

ITEM	COLOUR	COLOUR NO.	COLOUR NAME									REGULAR SIZES
1		2007	fluorescent yellow/dark blue		EN 14058 Class 1	IEC 61482-2 APC 1	EN ISO 11612 A1/B1/C2/F1	-				
2	 	2228 2143	fluorescent orange-red/black blue fluorescent yellow/black blue	EN ISO 20471 Class 2	-	IEC 61482-2 APC 2	EN ISO 11612 A1/B1/C2/F2	EN ISO 11611 Class 2 A1	EN 1149-5			Unisex S-2XL
3		2112	fluorescent yellow/navy			IEC 61482-2 APC 1	EN ISO 11612 A1/B1/C1	-			EN 13758-2	XS-4XL

FLEECE JACKET 4ka

Arc flash class 1
Part number: **07015 19080 001 2007**
Garment weight: approx. 1,090 g

Two-coloured • standard pictograms on the stand-up collar as flame-retardant direct embroidery • covered two-way zip below snap-fastener closure band • 2 side pockets with zip • sleeves with additional inner knitted wristband and wind-blocker • extended back with drawstring • flame-retardant reflective stripes in body-language for perfect all-around visibility.



SOFTSHELL JACKET 7ka

Arc flash class 2
Part number: **10003 19072 012 + COLOUR NO.**
Garment weight: approx. 1,375 g

Two-coloured • raw white contrast stitching • high stand-up collar with hook&loop fastener and standard pictograms as FR direct stitching • covered zip fastener • Napoleon pocket on the left and 2 side pockets – each with zip • sleeves with additional inner knit cuffs • FR reflective stripes in body language.





3 |

Comfortable knitted cuffs



SWEATSHIRT 4kA

Arc flash class 1

Part number: **01279 80023 001 2112**

Garment weight: approx. 670g

3-coloured • round neck • sleeve cuff with knitted cuffs • knitted waistband • stretchable and segmented flame retardant reflective stripes • standard pictograms as FR direct embroidery on the lower left sleeve • leasing label.

1 | MATERIAL: 48 % MODACRYLIC, 32 % COTTON, 18 % POLYESTER, 2 % CARBON · **FABRIC WT.:** approx. 360g/m² ·

2 | MATERIAL: OUTSIDE: 31 % POLYESTER, 28 % MODACRYLIC, 20 % ARAMIDE, 20 % VISCOSE FR, 1 % CARBON;

INSIDE: 60 % MODACRYLIC, 38 % COTTON, 2 % CARBON, PU-coated · **ATPV VALUE:** 44.8 cal/cm² ·

1,874.4 kJ/m² · **HAF VALUE:** 92.3 % · **FABRIC WEIGHT:** approx. 540g/m² ·

3 | MATERIAL: 54 % MODACRYLIC, 44 % COTTON, 2 % CARBON · **FABRIC WEIGHT:** approx. 405g/m² ·

ATPV VALUE: 19.0 cal/cm² · 794.96 kJ/m² ·

FIELDS OF APPLICATION: For electricians, mains technicians and plant engineers, network engineers, in particular with public utility companies/energy suppliers

HI-VISION®

HB-MODarc&vis®

The HB-MODarc&vis® parka with liner is suitable for a wide range of applications and thanks to the elaborate roof tile processing also for handling liquid metals. With the zip-in inner fleece made of flame-retardant material, it is unbeatable in cold weather. For optimum protection, the collar is reinforced with aramid fabric on the inside.

ITEM	COLOUR	COLOUR NO.	COLOUR NAME									REGULAR SIZES
1		2047	black/navy	-	EN 14058 Class 1	-	-	-	-	-	-	Unisex S-2XL
2		2112	fluorescent yellow/navy	EN ISO 20471 Class 2	-	EN 343 Class 3/3	IEC 61482-2 APC 2	EN ISO 11612 A1+A2/B1/C1/E1/F1	EN ISO 11611 Class 1 A1-A2	EN 1149-5	EN 13034 Type PB [6]	
3		45	navy	Certification only in combination with parka								

Optimised fit



FLEECE JACKET FR

Outdoor

Part number: **07015 19095 000 2047**

Garment weight: approx. 700 g

Two-coloured • high band collar • closure band with zip fastener for closing or zipping into our HB-MODarc&vis® parkas • various buttons for fixation in parka • elastic wrist-band • material certified acc. to EN ISO 11612 A1/B1/C1/F1.



1 | Effective protection against the cold: combine the fleece jacket with our HB-MODarc&vis® parkas page 49 and 50.



2 | Combinable with zippable Inner fleece FR on left page.



FR standard pictograms embroidered on the collar

2 |



Patchable reflective stripes

Optimised Fit

PARKA 7ka

Arc flash class 2

Part number: **01072 19098 000 2112**

Garment weight: approx. 1,630 g

Two-coloured • flame-retardant upper material with liner • sealed seams • high band collar with covered buttons for hood attachment • hood suitable for wearing with or without helmet • covered 2-way zip fastener plus drip moulding with snap fasteners • 1 front pocket on the left, 1 mobile phone pocket (bellows) on the right, covered with laminated weather protection, and 2 side pockets (bellows) – each with flap and covered snap fastener • flame-retardant reflective stripes, suitable for industrial laundry • wristbands with strap and hook&loop fastener • FR standard pictograms on the collar.

HOOD

Arc flash class 2

Part number: **01072 79004 000 45**

Garment weight: approx. 140 g

Single-coloured • flame-retardant upper material with liner • sealed seams • to be attached via buttons, and suitable to be worn with or without helmet • attached visor • field of vision adjustable via cord • height adjustable via cord at back of head • certification only in combination with parka.

3 |



For buttoning to band collar



1 | **MAT.:** 48 % MODACRYLIC, 32 % COTTON, 18 % POLYESTER, 2 % CARBON • **FABRIC WT.:** approx. 360g/m² •

2 | **MATERIAL:** 55 % MODACRYLIC, 43 % COTTON, 2 % CARBON // With liner •









OUTER PLY: **ATPV VALUE:** 10.4 cal/cm² • 435.4 kJ/m² • **HAF VALUE:** 80.2% • **FABRIC WT.:** approx. 275g/m² •

FIELDS OF APPLICATION: Energy suppliers, public services, plant responsible, liquid metal works, steel works, metal construction, electricians, public transport areas



HB-MODarc&vis®

Safety even in problematic weather plus antistatic as well as additional protection against chemicals, heat, flames, welding spatter and electric arcs. This high-visibility and weather protection outfit with direct laminate is lightweight, windproof and 100 % water repellent. It can be perfectly combined with many other models of the HB-MODarc&vis® series.

ITEM	COLOUR	COLOUR-NO.	COLOUR NAME								REGULAR SIZES	
1		2112	fluorescent yellow/navy	EN ISO 20471 Class 3	EN 343 Class 3/4	IEC 61482-2 APC 2	EN ISO 11612 A1/B1/C1/F1	EN ISO 11611 Class 1 A1	EN 1149-5	EN 13034 Type 6	Unisex S-2XL	
2				EN ISO 20471 Class 1	Certification only in combination with parka							One size
3												



PARKA 7kA
Arc flash class 2
Part number: **05019 19071 008 2112**
Garment weight: approx. 1,665 g

Two-coloured • flame-retardant upper material as direct laminate • sealed seams • design with round shapes • contrast stitching in off-white • high band collar with zip fastener for hood attachment • covered 2-way zip fastener plus drip moulding • elongated back • 1 inner Napoleon pocket on the left and 2 side pockets and 1 inner pocket on the left – each with zip fastener • waist adjustment via drawstring • wristbands adjustable via hook&loop fastener • flame-retardant reflective stripes • standard pictograms as direct embroidery on the collar • worn together with our inner fleece Jacket it achieves EN ISO 11612 B2 and C2.





BIB TROUSERS 4kA

Arc flash class 1

Part number: **05019 29000 006 2112**

Garment weight: approx. 1,060g

Two-coloured • flame-retardant upper material as direct laminate • sealed seams • parts subject to heavy soiling in navy blue • adjustable elastic braces • high kidney protection with elastic • elasticated side access • 2 slant pockets • 1 hip and 1 bellows leg pocket – each with flap, covered hook&loop fastening and tab to open • adjustable foot width thanks to additional material and zip.

Comfortable elastic band

Reflective stripes, suitable for industrial laundry

Foot width adjustable with PCV-Zip thanks to additional material



HOOD

Arc flash class 2

Part number: **05019 79006 001 2112**

Garment weight: approx. 200g

Two-coloured • flame-retardant upper material as direct laminate • sealed seams • design with round shapes • separate hood, attachable via zip fastener and suited for wearing with/without helmet, with added peak • hood's field of vision adjustable via cord • hood height adjustable via hook&loop fastener at back of head.



MATERIAL: 55 % MODACRYLIC, 43 % COTTON, 2 % CARBON, POLYURETHAN-MEMBRANE

OUTER PLY: **ATPV VALUE:** 22.2 cal/cm² · 929.3 kJ/m² · **HAF VALUE:** 87.8 %













FABRIC WEIGHT: approx. 300 g/m²

FIELDS OF APPLICATION: Work in public places with additional hazards by arcs and flames, energy providers (also Off-shore industry), alternative energie providers, petrol chemistry, steelworks, electricians



HB-4Energy

Great look, pleasant material and highly functional: HB-4Energy combines lightweight rip-stop fabric with stretchy and abrasion-resistant elements to protect in all the right places. Elastic parts provide exceptionally high wearing comfort with plenty of freedom of movement. This modern multi-risk collection meets the current zeitgeist as it covers many work areas and is a real eye-catcher because of the different material structures.

ITEM	PLY	COLOUR	COLOUR-NO.	COLOUR NAME							REGULAR SIZES
1	4kA (1-PLY)		4027	fluorescent yellow/ dark blue/navy	IEC 61482-2 APC 1	EN ISO 11612 A1/B1/ C1/F1	EN ISO 11611 Class 1 A1	EN 1149-5	EN 13034 Type 6	EN ISO 20471 Class 2	46-58 & 94-110
2 , 3			4027	fluorescent yellow/ dark blue/navy						EN ISO 20471 Class 1	
			4028	dark blue/fluorescent yellow/navy							
1	7kA/4kA (2-PLY)		4027	fluorescent yellow/ dark blue/navy	IEC 61482-2 APC 2*	*Front part and sleeves/ front trousers				EN ISO 20471 Class 2	
2 , 3			4027	fluorescent yellow/ dark blue/navy						EN ISO 20471 Class 1	
			4028	dark blue/fluorescent yellow/navy							



Elastic elements
in the shoulder blade

JACKET 4kA

Arc flash class 1
Part number: **01288 10219 000 4027**
Garment weight: approx. 950 g

JACKET 7kA/4kA

Arc flash class 2
Part number: **01288 10219 001 4027**
Garment weight: approx. 1,170 g

2-coloured • stand-up collar • covered zip with covered snap fasteners • 2 breast pockets with covered snap fasteners and flap • 2 breast pockets with covered snap fasteners and flap • 1 inner breast pocket with snap fastener • 2 side pockets with zip • reflective elements on breast pockets • back extension as additional kidney protection • sleeves with knitted cuffs as wind guard inside and outside with adjustable hook & loop fastener • segmented reflective stripes • standard pictograms as FR direct embroidery on front left.

Elastic elements in the chest-axmpit
area and in the shoulder blade

Resistant and dirt-
repellent material on
shoulders, upper arms,
elbows and cuffs



1, 2 and 3 |

In the models with arc fault protection class 2, the material is doubled at the front sides and on the sleeves as well as on the front legs, and offers 7kA protection there



2 and 3 |

Elastic elements at the sides of the waistband, in the pocket opening, at the back of the trousers and in the crotch provide relief during kneeling activities

2 |



Side entry with elastic wedge

TROUSERS 4kA

Arc flash class 1

Part number: **01288 20156 002 4027**

Part number: **01288 20156 000 4028**

Garment weight: approx. 770g

TROUSERS 7kA/4kA

Arc flash class 2

Part number: **01288 20156 003 4027**

Part number: **01288 20156 001 4028**

Garment weight: approx. 950g

2-coloured • waistband raised at the back • reinforced belt loops • slit with zip • 2 wing pockets with trim and reflective elements • 2 back pockets with flap and press studs • 1 ergonomic ruler pocket on the right, 1 leg pocket on the left - both free-hanging and with flap, the leg pocket as bellows pocket with inside mobile phone pocket • knee pocket with Velcro fastening • segmented reflective stripes.

3 |



2 and 3 |

Resistant and dirt-repellent material on knee pockets and at the bottom of the inner leg

BIB AND BRACE TROUSERS 4kA

Arc flash class 1

Part number: **01288 50106 002 4027**

Part number: **01288 50106 000 4028**

Garment weight: approx. 920g

BIB AND BRACE TROUSERS 7kA/4kA

Arc flash class 2

Part number: **01288 50106 003 4027**

Part number: **01288 50106 001 4028**

Garment weight: approx. 1,050g

2-coloured • stretch straps with fixlock buckles • bib with bib pocket and flap with snap fastener • high kidney protection • slit with zip • 2 wing pockets with trimming and reflective elements • 2 hip pockets with flap and snap fasteners • 1 ergonomic ruler pocket on the right, 1 leg pocket on the left - both free-hanging and with flap, the leg pocket as bellow pocket with inside mobile phone pocket • knee pocket with hook&loop fastener • segmented reflective stripes.

MATERIAL: 44 % MODACRYLIC, 30 % COTTON, 20 % POLYAMIDE, 5 % ARAMIDE, 1 % CARBON

4kA: ATPV VALUE: 11.0 cal/cm² · 460.24 kJ/m² · **ELIM:** 10.0 cal/cm² · **FABRIC WT.:** approx. 260g/m²

7kA/4kA: ATPV VALUE: 31.0 cal/cm² · 1297.04 kJ/m² · **ELIM:** 18.0 cal/cm²

FABRIC WEIGHT: approx. 260g/m² + approx. 180g/m²

FIELDS OF APPLICATION: Plant construction, electric installation, public services, electricians, pipeline construction, switch gear construction, networks (communication, gas, water), renewable energies

HB-4Energy

HB-MultiPro FR®

Windproof, water-repellent and breathable: MultiPro FR® is the perfect all-round protection for autumn and winter: We have given our all-rounder a new look and an even more durable fabric. Eight certified standards provide an exceptionally high level of protection for many different work areas and uses. Very well equipped with many comfortable features such as chin protection and moisture barrier.

ITEM	PLY	COLOUR	COLOUR-NO.	COLOUR NAME									REGULAR SIZES
1	4kA (1-PLY)		48	dark blue	-	-	IEC 61482-2 APC 1	EN ISO 11612 A1/B1/ C2/F1	-	-	-	EN 14058 Class 1	Unisex S-2XL
1	7kA (2-PLY)		528	dark grey	-	-	IEC 61482-2 APC 2	EN ISO 11612 A1/B2/ C2/F1	-	-	-	-	
2	7kA (2-PLY)		2408	fluoresc. orange/ stone grey	EN ISO 20471 Class 3* *from size S	EN 343 Class 3/3	IEC 61482-2 APC 2	EN ISO 11612 A1/B1/C1/ E1/F1	EN ISO 11611 Class 2 A1	EN 1149-5	EN 13034 Type PB [6]	-	One size
3			2425	fluoresc. yellow/ stone grey	EN ISO 20471 Class 1	-	-	-	-	-	-	-	
4	-		17	fluoresc. yellow	-	-	-	-	-	-	-	-	One size
			18	fluoresc. orange	-	-	-	-	-	-	-	-	

Certification only in combination with parka

Combinable with Parka HB-MultiPro FR®, for better protection plus protection against the cold



FLEECE JACKET 4kA

Arc flash class 1
07015 19019 000 + COLOUR NO.
 Garment weight: approx. 845g

FLEECE JACKET 7kA

Arc flash class 2
07015 19019 001 + COLOUR NO.
 Garment weight: approx. 1,020g

Single coloured • stand-up collar with fastening loop for hooking into the outer jacket, to wear high necked or open • covered front zipper • 2 side pockets with covered zipper • hem adjustable with drawstring • sleeves bottom with knitted cuffs and 2 fastening loops each for hooking into the outer jacket • standards pictograms as direct embroidery on the front above the waistband.

PARKA 7kA

Arc flash class 2
 Part number: **01121 19018 000 + COLOUR NO.**
 Garment weight: approx. 1,625g

2-coloured • flame retardant outer fabric with liner, welded seams • stand-up collar with concealed push buttons, chin guard and zipper for hood • covered 2-way zip plus drip moulding • 2 chest pockets with flap and covered snap fastener • 2 side pockets with zipper • 1 inside pocket on the left with Velcro closure • extended back • waist and hem width adjustable via cord • inside zipper to hook the fleece jacket • sleeves bottom width adjustable with hook & loop closure • flame retardant, segmented FR reflective stripes • standard pictograms as FR embroidery at the front.



BIB AND BRACE TROUSERS 7ka

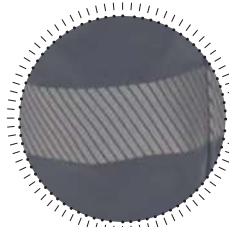
Arc flash class 2

Part number: **01121 59006 000 + COLOUR NO.**

Garment weight: approx. 1,311g

2-coloured • flame retardant outer fabric with liner, welded seams • adjustable length straps • diamond shaped kidney protection • 1 bib pocket with inside pen pocket with flap and covered snap fasteners • 2 wing pockets • inside back pockets with flap and concealed push buttons • 1 free-hanging folding rule pocket on the right and 1 bellows pocket on the left with inside cell phone pocket – each with flap and covered snap fasteners • entry on both sides with knitted wedge • slit with zipper • hook&loop fastener at the bottom of the trouser leg for easier entry • leg cuff with wetness barrier • flame retardant, segmented FR reflective stripes.

Comfortable knitted wedges at the waistband



Segmented reflective stripes, flame retardant

Hook&loop fastening at the leg hem for easy entry



HOOD

Arc flash class 2

Part number: **01121 79006 004 + COLOUR NO.**

Garment weight: approx. 182g

Single-coloured • flame-retardant upper material with liner • sealed seams • separate hood, attachable via zipper • field of vision adjustable via cord • hood height adjustable via hook&loop fastener at the back of the head • certification only in combination with parka.



1 | MATERIAL: 48% MODACRYLIC, 32% COTTON, 18% POLYESTER, 2% CARBON • **FABRIC WT.:** approx. 360g/m² •

2 |, 3 |, 4 | MATERIAL: 31% POLYESTER, 28% MODACRYLIC, 20% ARAMIDE, 20% VISCOSE, 1% CARBON // With liner •






ATPV VALUE: 8.8 cal/cm² • 368.19 kJ/m² • **ELIM:** 8.0 cal/cm² • **FABRIC WEIGHT:** approx. 320g/m² •

FIELDS OF APPLICATION: Petrochemistry, catenary construction, energy suppliers



NOMEX® Viskose

NOMEX® Viskose combines pleasant wearing comfort with reliable protection. Despite its light weight, the fabric offers high durability and good moisture absorption. Suitable for those who frequently change their posture when working. Finished with generous pockets. The outside knee pockets are made of particularly abrasion-resistant aramid.

ITEM	COLOUR	COLOUR NO.	COLOUR NAME					REGULAR SIZES
1 ,2 ,3		2030	royal/navy	IEC 61482-2 APC 1	EN ISO 11612 A1/B1/C1/F1	EN ISO 11611 Class 1 A1	EN 1149-5	46-58 & 94-110

1|



Many reflective pipings

Inner mobile phone pocket with hook&loop fastener

Closure band with covered zip fastener and covered hook&loop fasteners

Standards pictograms on the front as FR direct embroidery

BLOUSON 4ka

Arc flash class 1

Part number: **01031 10036 005 2030**

Garment weight: approx. 770g

Two-coloured • front part partially with 2 layers • front, back, sleeve and pocket flaps with FR reflective piping, suitable for industrial laundry • high band collar with strap and hook & loop fastener • 2 front and 2 side pockets – each with flap and covered hook&loop fastener • 1 inner mobile phone pocket on the right and 1 inner pocket on the left, each with hook&loop fastener • waistband with elastic band in side parts • wristband with covered snap fasteners • no Hi-Vis protective clothing acc. to EN ISO 20471 and EN 17353.



TROUSERS 4ka

Arc flash class 1

Part number: **01031 20022 013 2030**

Garment weight: approx. 700g

Two-coloured • waistband with covered button and lateral elastic bands • zip fly • 2 slant pockets • 1 hip pocket and 1 ruler pocket on the right – each with flap • 1 bellow pocket on left leg with flap and hook&loop fastener • knee pockets with hook&loop fastener • FR reflective stripes at legs, suitable for industrial laundry • reflective piping on flaps • no Hi-Vis protective clothing acc. to EN ISO 20471 and EN 17353.

BIB AND BRACE TROUSERS 4ka

Arc flash class 1

Part number: **01031 50026 014 2030**

Garment weight: approx. 840g

Two-coloured • stretch braces with fixlock buckle • high-cut kidney protection • bib with outer pocket, ball-pen compartment and flap • zip fly • 2 slant pockets • 1 hip pocket and 1 ruler pocket on the right, 1 bellow pocket on left leg – each with flap and covered hook&loop fastener • side access on the left, adjustable via buttons • knee pockets with hook&loop fastener • FR reflective stripes at legs, and reflective piping on bib and flaps, suitable for industrial laundry • no Hi-Vis protective clothing acc. to EN ISO 20471 and EN 17353.

MATERIAL: 50 % VISCOSE, 50 % ARAMIDE

ATPV VALUE: 9.9 cal/cm² · 414.4 kJ/m² · **HAF VALUE:** 79.0 % · **FABRIC WEIGHT:** approx. 260 g/m²

FIELDS OF APPLICATION: Energy suppliers, public services, plant engineering and construction, electricians



NOMEX® Comfort

The NOMEX® Comfort fabric is fibre-inherently flame retardant and thus offers exceptionally high flame protection. With proper care, the protective function is maintained even after many washes. Due to the low material weight, NOMEX® Comfort offers protection and freedom of movement even in very uncomfortable workplaces with a particularly high risk potential.

ITEM	COLOUR	COLOUR NO.	COLOUR NAME				REGULAR SIZES
1		41	royal	IEC 61482-2 APC 1	EN ISO 11612 A1/B1/C1/F1	EN 1149-5	46-58 & 94-110
2 3							



1 |



Inner front pocket with flap and snap fasteners

Front pocket with flap and covered snap fastener

BLOUSON 4kA

Arc flash class 1

Part number: **01042 10011 001 41**

Garment weight: approx. 545g

Single-coloured • turn-down collar • closure band with covered snap fasteners on both sides • 1 front pocket on the left with flap and covered snap fastener • 1 inner front pocket on the right with flap and snap fasteners • sleeve hem width adjustable via snap fasteners, covered inwards • added waistband • standard pictograms as FR direct embroidery on front • FR leasing label.



2 |

**JACKET 4kA**

Arc flash class 1

Part number: **01042 10003 001 41**

Garment weight: approx. 580 g

Single-coloured • turn-down collar • closure band with snap fasteners covered on both sides • 1 front pocket on the left with flap and 2 piped pockets with covered pocket mouths, all with covered snap fasteners • 1 inner front pocket on the right with flap and snap fasteners • sleeve hem width adjustable via snap fasteners, covered inwards • standard pictograms as flame retardant embroidery • FR leasing label.

3 |

**COAT 4kA**

Arc flash class 1

Part number: **01042 40002 002 41**

Garment weight: approx. 720 g

Single-coloured • lapel collar • closure band with snap fasteners covered on both sides • 1 front pocket on the left and 2 side pockets, each with flap and covered snap fastener • 1 inner front pocket on the right • sleeve hem width adjustable via covered snap fasteners • FR leasing label.

MATERIAL: 98 % ARAMIDE, 2 % CARBON**ATPV VALUE:** 9.0 cal/cm² · 376.8 kJ/m² · **HAF VALUE:** 71.6 % · **FABRIC WEIGHT:** approx. 260 g/m²**FIELDS OF APPLICATION:** Plant engineering and construction, energy suppliers, electric installation, public services, electriciansDuPont™
NOMEX

NOMEX® Comfort

The NOMEX® Comfort fabric is fibre-inherently flame retardant and thus offers exceptionally high flame protection. With proper care, the protective function is maintained even after many washes. Due to the low material weight, NOMEX® Comfort offers protection and freedom of movement even in very uncomfortable workplaces with a particularly high risk potential.

ITEM	COLOUR	COLOUR NO.	COLOUR NAME				REGULAR SIZES
1 ,2		41	royal	IEC 61482-2 APC 1	EN ISO 11612 A1/B1/C1/F1	EN 1149-5	46-58 & 94-110
3							



Outer bib pocket with covered snap fastener

TROUSERS 4kA

Arc flash class 1
Part number: **01042 20003 006 41**
Garment weight: approx. 510 g

Single-coloured • added waistband with 7 belt loops • 2 side seam pockets • 1 hip pocket on the right with flap and snap fasteners • button fly • 1 ruler pocket on the right.

BIB AND BRACE TROUSERS 4kA

Arc flash class 1
Part number: **01042 50002 012 41**
Garment weight: approx. 655 g

Single-coloured • stretch braces with clamp-on clips • straightcut kidney protection • 1 outer bib pocket with covered snap fastener • side access on the left with buttoning • button fly • 2 side seam pockets with covered snap fastener • 1 hip pocket on the right with flap and covered snap fastener • 1 ruler pocket on the right.



COVERALL 4KA

Arc flash class 1

Part number: **01042 30017 001 41**

Garment weight: approx. 990 g

Single-coloured • turn-down collar, closure band with snap fasteners covered on both sides • 1 front pocket on the left, 1 side pocket on the left and 1 pocket pass-through on the left – each with covered snap fastener • 1 ruler pocket on the right • elastic waistband all round • sleeve hem width adjustable via snap fastener, covered inwards.

MATERIAL: 98 % ARAMIDE, 2 % CARBON

ATPV VALUE: 9.0 cal/cm² · 376.8 kJ/m² · **HAF VALUE:** 71.6 % · **FABRIC WEIGHT:** approx. 260 g/m²

FIELDS OF APPLICATION: Plant engineering and construction, energy suppliers, electric installation, public services, electricians

DuPont™
NOMEX®

INOTEC® Arc & Energy

Extraordinary protection and comfort, combined with low weight: INOTEC® Arc & Energy offers fibre-inherent flame protection, excellent arc flash protection, antistatic properties plus retro-reflective stripes. The lightweight material and the clever cut provide wearers with an easy freedom of movement. Available as 1-ply or 2-ply version.

ITEM	PLY	COLOUR	COLOUR NO.	COLOUR NAME					REGULAR SIZES
1 ,2 ,3	4kA (1-PLY)		2027	royal/navy	IEC 61482-2 APC 1	EN ISO 11612 A1/B1/C1/F1	EN 1149-5	EN 13034 Type 6	46-58 & 94-110
1 ,2 ,3	4kA/7kA (2-PLY)		2027	royal/navy	IEC 61482-2 APC 2* * Front part and sleeves/ front trousers	EN ISO 11612 A1/B1/C1/F1	EN 1149-5	EN 13034 Type 6	46-58 & 94-110

1|



Sleeve cuffs adjustable with snap fasteners



Design and cut relaunched:
Now even more comfortable thanks to optimised fit.

JACKET 4kA

Arc flash class 1
Part number 4kA: **01043 10000 009 2027**
Garment weight: approx. 780 g

JACKET 7kA/4kA

Arc flash class 2
Part number 7kA/4kA: **01043 10000 010 2027**
Garment weight: approx. 940 g

Two-coloured • stand-up collar • fastening strip with covered zip • 2 breast and 2 side pockets with flap and snap fasteners • mobile phone pocket with zip on the front • FR reflective piping on front, back and sleeves, suited for industrial laundry • back with FR reflective stripes, suited for industrial laundry - sleeve cuffs adjustable with snap fasteners • standard pictograms on the front as FR direct embroidery • no high-visibility clothing according to EN ISO 20471 and EN 17353.



Mobile phone pocket on the front

Front part and sleeve available as 1-ply or 2-ply version **Electric Arc Flash protection 4kA or 7kA/4kA**



Matching bib and brace trousers:

Zip-in membrane as liner trousers for additional moisture protection made of 190 g/m² light-weight material double-layer laminate FR
Part number: **05065 29004 000 519**

2 |



2 and 3 | Flame-retardant reflective stripes, suitable for industrial laundry

2 and 3 | Front trousers available as 1-ply or 2-ply version
Electric Arc Flash protection 4kA or 7kA/4kA

3 |



TROUSERS 4kA

Arc flash class 1
Part number 4kA: **01043 20000 004 2027**
Garment weight: approx. 650g

TROUSERS 7kA/4kA

Arc flash class 2
Part number 7kA/4kA: **01043 20000 005 2027**
Garment weight: approx. 765g

Two-coloured • attached waistband • 2 slant pockets • fly with covered zip • 2 back pockets with flap and snap fasteners • 1 folding rule pocket on the right • 1 leg pocket on the left with bellows pleat at the back, flap and snap fastener • reflective piping on saddle seam of back trousers • 2 reflective stripes at the bottom of the legs • no high-visibility clothing according to EN ISO 20471 and EN 17353.

BIB AND BRACE TROUSERS 4kA

Arc flash class 1
Part number 4kA: **01043 50100 004 2027**
Garment weight: approx. 800g

BIB AND BRACE TROUSERS 7kA/4kA

Arc flash class 2
Part number 7kA/4kA: **01043 50103 000 2027**
Garment weight: approx. 920g

Two-coloured • stretch straps with fixlock buckles • high-cut kidney protection • outside bib pocket with flap, reflective piping and covered snap fasteners • 1 side entry on the left, adjustable with buttons • fly with zip • 2 wing pockets • 2 seat pockets and 1 bellows leg pocket on the left, each with flap and snap fasteners • 1 reinforced folding rule pocket on the right with flap and snap fasteners • no high-visibility clothing according to EN ISO 20471 and EN 17353.

MATERIAL: 98 % ARAMIDE, 2 % CARBON // FC-Equipment: fluorocarbon finish

4kA: ATPV VALUE: 9.0 cal/cm² • 376.8 kJ/m² • **HAF VALUE:** 71.6 % • **FABRIC WEIGHT:** approx. 260g/m²

7kA/4kA: FABRIC WEIGHT: approx. 260g/m² + approx. 180g/m²

FIELDS OF APPLICATION: Plant engineering and construction, energy suppliers, electric installation, public services, electricians

