



PERSONAL PROTECTIVE EQUIPMENT



- UNI EN 340:2004
- UNI EN 11612/09 A1B1C1
- UNI EN 1149-5:2008
- IEC 61482-2/09
- IEC 61482-1-2/08

Electric arc flame and heat protection clothing 7kA

The electric arc protection clothing are usable in low voltage areas in order to protect people against the danger of an electric arc.

Description	Order No.	Size	Weight
Electric arc flame and heat protection safety jacket	AI0301	44	690 g
	AI0302	46	750 g
	AI0303	48	950 g
	AI0304	50	980 g
	AI0305	52	860 g
	AI0306	54	900 g
	AI0307	56	930 g
	AI0308	58	1130 g
	AI0309	60	1150 g
	AI0310	62	990 g
Electric arc flame and heat protection safety trousers	AI0401	44	560 g
	AI0402	46	600 g
	AI0403	48	670 g
	AI0404	50	870 g
	AI0405	52	710 g
	AI0406	54	720 g
	AI0407	56	750 g
	AI0408	58	940 g
	AI0409	60	970 g
	AI0410	62	800 g

Other sizes available on request

Tested and produced according following norms:

- UNI EN 340:2004
- UNI EN 11612/09 A1B1C1
- UNI EN 1149-5:2008
- IEC 61482-2/09
- IEC 61482-1-2/08
- Material: 87% cotton, 12% nylon, 1% antistatic fiber
- Colour: blue royal



- UNI EN ISO 13688:2013
- UNI EN ISO 1149-5:2008
- UNI EN ISO 20471:2013 (cl. 2)
- UNI EN ISO 11612 A1A2B1C1E1
- UNI EN ISO 13034 tipo 6
- IEC 61482-2/09 4kA (cl. 1)

Safety vest 4kA

Appropriate for wearing over electric arc flame and heat protection clothing.

Description	Order No.	Size	Weight
Safety vest	AI0701	M	xx g
	AI0702	L	xx g
	AI0703	XL	xx g
	AI0704	XXL	xx g

- High visibility
- Covered zipper closure
- Left breast pocket with Velcro® closure and flap
- Two side pockets with covered zipper closure
- Encircling, reflective stripes, height 7 cm

Tested and produced according to the following norms:

- UNI EN ISO 13688:2013
- UNI EN ISO 1149-5:2008
- UNI EN ISO 20471:2013 (cl. 2)
- UNI EN ISO 11612 A1A2B1C1E1
- UNI EN ISO 13034 tipo 6
- IEC 61482-2/09 4kA (cl. 1)
- Materials: 87% cotton, 12% nylon, 1% conductive fiber
- Color: bright yellow



EN 345
EN 50321
VDE 0680 part 1



Insulated electrical safety boots

Description	Order No.	Size	Weight
Electrical safety boots	661341	41	2,2 kg
	661342	42	2,3 kg
	661343	43	2,4 kg
	661344	44 / 45	2,5 kg
	661346	46	2,7 kg
	661347	47	2,8 kg

- Tested and produced according to EN 345 / EN 50321
- Safety Boots with steel toe cap
- Legs and soles are resistant to oil, petrol, grease, alkaline solution and acid complying with VDE 0680 Part 1
- Colour: Shaft white, sole: blue



EN 60903 / IEC 903
VDE 0682 part 311

Insulated electrical safety gloves

Description	Order No.	Operating Voltage	Test Voltage	Thickness	Size
Safety gloves class 00	AV4711	500 V	2.500 V	0,5 mm	8
	AV4712	500 V	2.500 V	0,5 mm	9
	AV4713	500 V	2.500 V	0,5 mm	10
Safety gloves class 0	AV4720	1.000 V	5.000 V	1 mm	8
	AV4721	1.000 V	5.000 V	1 mm	9
	AV4722	1.000 V	5.000 V	1 mm	10
Safety gloves class 1	AV4731	7.500 V	10.000 V	1,35 mm	9
	AV4732	7.500 V	10.000 V	1,35 mm	10
Safety gloves class 2	AV4741	17.000 V	20.000 V	2 mm	9
	AV4742	17.000 V	20.000 V	2 mm	10
Safety gloves class 3	AV4750	26.500 V	30.000 V	2,6 mm	9
	AV4751	26.500 V	30.000 V	2,6 mm	10

- Tested and produced according to EN 60903 / IEC 903, VDE 0682 part 311
- For work on live MV/LV parts
- Material: natural latex
- Length: 360mm
- Smooth inside/outside
- Color: beige



EN 60903 / IEC 903
EN 61482-1-2
VDE 0682 part 311

Insulated electrical arc 7kA protection gloves

Description	Order No.	Operating Voltage	Test Voltage	Size
Gloves class 0	AV4701	1000V - 7kA	5.000 V	8
Gloves class 0	AV4702	1000V - 7kA	5.000 V	9
Gloves class 0	AV4703	1000V - 7kA	5.000 V	10

- Tested and produced according to norm EN 61482-1-2 / class II (resistant to electric arc 7kA/0,5 seconds) norm EN 60903 / class 0 (suitable to work under voltage 1000 V) VDE 0682 part 31
- Mechanical protection
- Material: natural latex
- Length: 360 mm
- Color: red



Safety fuse (NH fuse) withdrawal glove

Description	Order No.	Dimensions	Weight
Withdrawal glove	659001	385x220 mm	460 g
Withdrawal glove long	659004	445x220 mm	460 g
↳ Leather cover	659302	360x220 mm	210 g
↳ Safety fuse hold.	659500	40x125 mm	250 g

The fuse withdrawal glove is suitable for removing or fitting fuses or other pieces of equipment such as earthing and short circuit protection devices, dummy fuse components etc. to protect the operator's hand and lower part of the arm. The operators limbs are under severe risk from the effects of power arcing.

- For removal of NH fuses sizes 00 - 3



Shockproof resin container

Description	Order No.	Dimensions	Weight
Resin container	AB4700	420x170x50 mm	350 g

- To contain and protect insulated gloves



Nylon case

Description	Order No.	Dimensions	Weight
Nylon case	AB4710	380x170x40 mm	170 g

- To carry insulated gloves at the belt



Pump for testing insulated gloves

Description	Order No.	Dimensions	Weight
Pump	631800	140 x Ø -130 mm	800 g

- To inflate insulating gloves and check for any leaks.
- Material: thermoplastic resin, light alloy, anti-oxidation metal and other equivalent material.



Anti-perspiration gloves

Description	Order No.	Size	Weight
Gloves	631000	Single	30 g

- Inner glove for insulating gloves to absorb skin perspiration
- Material: highly elastic interlock cotton
- Color: white

CE



Protective gloves

Description	Order No.	Size	Weight
Protective gloves	AV4771	9	200 g
Protective gloves	AV4772	10	200 g
Protective gloves	AV4773	11	200 g

- Tested and produced according to EN 420 / EN 388
- Overglove to protect the insulating glove.
- Material: water-repellent silicone-treated grain leather



CE

EN 420
EN 388



400V AC

EN 50362
EN 397

CE



Safety helmet for electricians

Description	Order No.	Color	Weight
Helmet	AV9305	white	305 g

- Tested and produced according to EN 50362 / EN 397
- Adjustable headband
- Material: polyethylene
- Color: white



Visor for safety helmet

Description	Order No.	Dimensions	Weight
Visor	AV9306	395 x 240 mm	300 g

- Face screen to protect against electric arcs
- Shell: polycarbonate
- Protection against UV rays and short circuit

CE

CE
EN 166



Safety goggles

Description	Order No.	Weight
Safety goggles	666000	27 g

- Tested and produced according to EN 166 3-1.21F
- Light weight and comfortable
- Clear scratch-resistant spectacle glass
- Modern design

Safety helmet with built-in visor for electricians

Description	Order No.	Color	Weight
Safety helmet	AV9303W	white	740 g
Safety helmet	AV9303R	red	740 g

- Tested and produced according to EN 397, VDE 0680 part 1
- Protective helmet with built-in visor for working under live LV electrical systems
- Suitable for work on live parts
- Protection against electric arc
- Built-in visor: 1.2mm thick
- Adjustable headband from size 52 to 66 (rack-adjustment), neck strap with Velcro® closure
- Helmet material: polyethylene
- Visor material: scratchproof polycarbonate
- Color: white, red

CE



400V AC

EN 397
VDE 0680 part 1

Safety helmet with built-in visor for electricians 7kA

Description	Order No.	Color	Weight
Safety helmet	662555	white	740 g

- The safety helmet for electricians is a helmet constructed according the current insights of head protection development, which was designed especially for professional use in live electrical systems.
- The helmet has a visor that completely covers the face and can be retracted completely into the double-wall helmet as needed.
- The helmet has a single-handed screw cap that allows the modification of the headband without requiring the wearer to remove the helmet.
- With built-in, retractable visor that provides complete protection for the entire face area
- For protection against electric arcs up to 7 kA when working on live electrical systems
- Helmet material: HD polypropylene, UV stabilized, white
- Double wall helmet for increased protection and for storing the built-in visor and its safety cloth
- Interior helmet equipment: Adjustable 6-point textile band for all head sizes, sweatband, adjustable 4-point chin strap
- Visor made of high-impact, tinted polycarbonate with infrared filter and special surface treatment against fogging
- Aramid-base safety cloth, orange
- Minimum durability: 5 years
- Norms:
- Visor: EN 166, 170, ASTM F2178, GS-ET-29/ IEC 61482-1-2
- Class 2: 7kA electric arcs / 0.5 sec. light transition, 75% (Class 0 in accordance with GS-ET-29)
- Helmet: EN 397, EN 50365, ANSI Z89.1
- Safety cloth: IEC 61482-1-2 Class 2, ASTM F1959, 1506 NFPA 70E
- Identification, Visor: 2C-1,2 XXX 1 B 8-2-0 3 CE 0497



1000V



Rubber insulating matting

Description	Order No.	Dimensions	Weight
Insulating matting	AV4301	1 x 1 m	ca. 4,6 kg
Insulating matting	AV4303	3 x 1 m	ca. 12,0 kg
Insulating matting	AV4310	10 x 1 m	ca. 43,8 kg

Other dimensions available on request

- To insulate high-risk zones when making joints on LV-MV cables in trenches
- Non-slip surface
- Thickness: 4mm – 1.20g/cm² (53 Shore)
- Material: natural rubber or vulcanized synthesis rubber
- Color: gray

Rubber insulating matting

Description	Order No.	Dimensions	Weight
Insulating matting	642415	1,5 x 1 m	5,0 kg
Insulating matting	642410	10 x 1 m	33,5 kg

Other dimensions available on request

- Tested and produced according to VDE 0680 part 1
- To insulate high-risk zones when making joints on LV-MV cables in trenches
- Non-slip surface
- Thickness: 3mm – 166g/cm² (56 Shore)
- Material: Chloroprene mixture
- Resistance: Mechanical Puncture, Oil, Acid, Slip and Ageing
- Flame Retardancy
- Color: gray

Rubber cover material

Description	Order No.	Dimensions	Weight
Rubber cover material	AV4102	0,60 x 0,60 m	ca. 0,7 kg
Rubber cover material	AV4104	1 x 1 m	ca. 2,1 kg
Rubber cover material	AV4110	10 x 1 m	ca. 20,6 kg
Rubber cover material	AV4111	1 x 1,20 m	ca. 2,3 kg
Rubber cover material	AV4120	10 x 1,20 m	ca. 25,1 kg

Other dimensions available on request

- Tested and produced according to VDE 0680 part 1
- For temporary protection of live uninsulated components of LV systems
- Resistant to oils and acids
- Self-extinguishing
- Thickness: 1.6mm - 1.21g/cm² (44 Shore)
- Material: high quality neoprene
- Color: orange

Cover transparent

Description	Order No.	Dimensions	Weight
Cover	641960	10000 x 1400 mm	8000 g
Cover	641952	2000 x 1400 mm	1600 g
Cover	641951	1000 x 1400 mm	800 g
Cover	641949	600 x 600 mm	220 g
Cover	641948	250 x 350 mm	50 g
Cover	641947	130 x 230 mm	20 g
Cover	641946	120 x 120 mm	10 g

- In accordance with DIN EN 61112 (VDE 0682-511) : 2010-03
- EN/IEC 61112 : 2009
- Highly flexible, cold resistant
- Materials: UV-stabilized film
- Thickness: 0.5 mm



⚡ 1000V

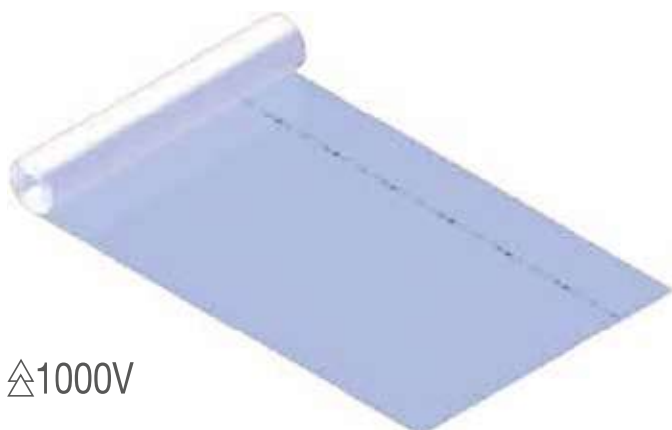


IEC 61111:2009
VDE 0680 part 1

⚡ 1000V



⚡ 1000V



⚡ 1000V



CE

30.000V

IEC 61111:2009
VDE 0680 part 1



CE

50.000V

VDE 0303



30.000V / 45.000V



Tappeto isolante 30.000V

Description	Order No.	Dimensions	Weight
Safety carpet	AV4331	1 x 1 m	ca. 4,0 kg
Safety carpet	AV4335	5 x 1 m	ca. 11,0 kg
Safety carpet	AV4330	10 x 1 m	ca. 40,0 kg

Other dimensions available on request

- Tested and produced according to VDE 0303
- For permanent insulation in cabins or rooms that require a high degree of Insulation
- Non-slip pavement side / ribbed non-slip support side (top)
- Thickness: 4,5mm
- Material: natural rubber or vulcanized synthesis rubber
- Color: gray

Safety rubber carpet 50.000V

Description	Order No.	Dimensions	Weight
Safety carpet	AV4341	1 x 1m	5,6 kg
Safety carpet	AV4350	10 x 1m	57 kg
Safety carpet	AV4351	1 x 1.20m	6,8 kg
Safety carpet	AV4360	10 x 1.20m	69 kg

Other dimensions available on request

- Tested and produced according to VDE 0303
- For permanent insulation in cabins or rooms that require a high degree of Insulation
- Non-slip pavement side / ribbed non-slip support side (top)
- Thickness: 4,5mm - 1.65g/cm² (77 Shore)
- Material: natural rubber or vulcanized synthesis rubber
- Color: gray

30kV/45kV insulating platform

Description	Order No.	Dimensions	Weight
Platform 30.000V	AV5000	500 x 500 x 260 mm	3,2 kg
Platform 45.000V	AV5001	500 x 500 x 310 mm	4,2 kg

- To insulate workers from the pavement when working
- Material: glass-fiber reinforced plastic resin
- Non-slip surface
- 30.000V/45.000V operating insulating level

Thermal blanket

Description	Order No.	Dimensions	Weight
Thermal blanket	HSD1	1800 x 1800 mm	3,8 kg
Thermal blanket	HSD2	1200 x 900 mm	1,3 kg
Thermal blanket	HSD3	450 x 600 mm	0,3 kg

- Free of asbestos and other dangerous ingredients
- Composed 98% of silicone oxide (amorphous SiO₂)
- Usable for temperatures up to 1260°C
- Melting temperature above 1600°C
- Non-toxic product



1000V
IEC 60900

Sheath spreader

Description	Order No.	Height	Dimensions	Weight
Sheath spreader	652002	30 to 0mm	165 x 20 mm	43 g

- Reinforced polyamide material
- Lightweight model



1000V
IEC 60900

Sheath spreader

Description	Order No.	Height	Dimensions	Weight
Sheath spreader	652003	10 to 0mm	170 x 20 mm	100 g

- Reinforced polyamide material
- Designed for assembly of branch terminals



1000V
IEC 60900

Bordering chisel

Description	Order No.	Diameter	Length	Weight
Bordering chisel	654000	Ø 25 mm	140 mm	63 g

- For NKBA-Cable
- Tape 70 mm with 30 mm radius
- Non brittle red plastic


1000V
 IEC 60900
 VDE 0680



Insulating safety clamp short

Description	Order No.	Dimensions	Weight
Insulating clamp	651409	140 x 85 mm	52 g

- Tested and produced according to VDE 0680
- For fastening insulating sheets in cramped quarters
- Rubber inserts inside the jaws
- Material: shockproof thermoplastic resin
- Opening: 45 mm


1000V
 IEC 60900
 VDE 0680



Insulating safety clamp small

Description	Order No.	Dimensions	Weight
Insulating clamp	651406	80 x 40 mm	40 g

- Tested and produced according to VDE 0680
- For fastening insulating sheets in cramped quarters
- Rubber inserts inside the beaks
- Material: shockproof thermoplastic resin
- Opening: 25 mm


1000V
 IEC 60900
 VDE 0680



Insulating safety clamp with hook

Description	Order No.	Dimensions	Weight
Insulating clamp	651402	165 x 130 mm	60 g

- Tested and produced according to VDE 0680
- For fastening insulating sheets in cramped quarters
- Rubber inserts inside the beaks
- Material: shockproof thermoplastic resin
- Opening: 45 mm


1000V
 IEC 60900
 VDE 0680



Insulating safety clamp without hook

Description	Order No.	Dimensions	Weight
Insulating clamp	651407	175 x 110 mm	76 g

- Tested and produced according to VDE 0680
- For fastening insulating sheets in cramped quarters
- Rubber inserts inside the beaks
- Material: shockproof thermoplastic resin
- Opening: 40 mm


1000V
 IEC 60900
 VDE 0680



Insulating safety clamp large opening

Description	Order No.	Dimensions	Weight
Insulating clamp	651412	160 x 115 mm	70 g

- Tested and produced according to VDE 0680
- For fastening insulation sheets in cramped quarters
- Rubber inserts inside the beaks
- Material: shockproof thermoplastic resin
- Opening: 65 mm

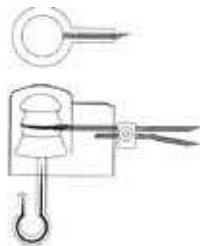




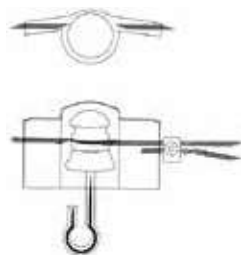

1000V
 IEC 60900
 EN 60529




1000V
 IEC 60900




1000V
 IEC 60900




1000V
 IEC 60900
 VDE 0680

Protecting tube

Description	Order No.	Length	Ø Conductor
Protective shaped profiles up to 10mm	AV4410	1m	up to 10mm
	AV4413	3m	up to 10mm
	AV4418	18m roll	up to 10mm
Protective shaped profiles up to 14mm	AV4510	1m	up to 14mm
	AV4513	3m	up to 14mm
	AV4518	18m roll	up to 14mm

Other lengths available on request

- Tested and produced according to EN 60529
- For temporary insulation of bare aerial LV lines carrying up to 1000V of live voltage
- Material: natural rubber or synthetic vulcanized elastomer
- Weight per meter: approx. 350g
- Color: red
- Other lengths on request

Insulator cap with single outlet

Description	Order No.	Version	Weight
Insulator cap	AV4401	1 Outlet	350g

Other insulator caps available on request

- Suitable for long-term operations
- Simple and robust design to slide over
- Material: flexible plastic resin
- Color: red

Insulator cap with double outlet

Description	Order No.	Version	Weight
Insulator cap	AV4402	2 Outlets	450g

Other insulator caps available on request

- Suitable for long-term operations
- Simple and robust design to slide over
- Material: flexible plastic resin
- Color: red

Insulating safety caps

Description	Order No.	Ø	Length
Insulating caps	AV4094	8 - 13 mm	60mm
	AV4095	13 - 20 mm	80mm

- Tested and produced according to VDE 0680
- To protect rigid cables
- Material: rigid thermoplastic resin
- Color: red

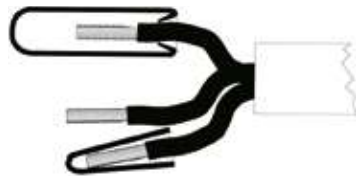
CABLE INSULATION



- Slip over side
- with grip



VDE 0680



Push on cover with grip

Description	Order No.	Length	Opening	Suitable for	Weight
Push on cover with grip	646004	40 mm	10 mm	1 - 25 mm ²	4 g
	646006	60 mm	10 mm	6 - 35 mm ²	14 g
	646010	100 mm	10 mm	6 - 35 mm ²	21 g
	646015	100 mm	15 mm	10 - 50 mm ²	31 g
	646020	110 mm	20 mm	35 - 95 mm ²	40 g
	646030	130 mm	30 mm	95 - 185 mm ²	70 g
	646040	150 mm	40 mm	185 - 240 mm ²	135 g
	646050	185 mm	50 mm	240 - 400 mm ²	140 g
	646060	185 mm	60 mm	240 - 500 mm ²	220 g
	646070	210 mm	70 mm	300 - 500 mm ²	300 g
	646090	255 mm	90 mm	- 630 mm ²	550 g
646120	240 mm	120 mm	- 800 mm ²	700 g	

- Tested and produced according to VDE 0680
- For temporary insulation of the ends of live LV single-pole cables
- Also suitable for protecting cables with cable terminals
- Material: flexible thermoplastic resin
- Color: red



- Slip over side
- without grip



VDE 0680



Push on cover conical

Description	Order No.	Length	Opening	Suitable for	Weight
Push on cover conical	647030	30 mm	10 mm	10 - 25 mm ²	10 g
	645006	50 mm	10 mm	10 - 25 mm ²	10 g
	647010	60 mm	10 mm	6 - 25 mm ²	15 g
	645000	100 mm	10 mm	10 - 35 mm ²	7 g
	645001	100 mm	20 mm	120 - 150 mm ²	19 g

Transparent conical push on covers available on request

- Tested and produced according to VDE 0680
- For temporary insulation of the ends of live LV single-pole cables
- Also suitable for protecting cables with cable terminals
- Material: flexible thermoplastic resin
- Color: red



EN 57680
VDE 0680

Insulating safety sleeve

Description	Order No.	Ø	Length
Insulating sleeve	AV4082	5 - 12 mm	117 mm
Insulating sleeve	AV4083	12 - 21 mm	159 mm
Insulating sleeve	AV4084	21 - 30 mm	190 mm

- Tested and produced according to EN 57680, VDE 0680
- To protect ends of electric conductors
- Optimized holding force with the screw joint
- Material: Safety sleeve made out of flexible shock-resistant plastics
- Screw joint made out of a red transparent prim plastics
- Color: red



Safety bag with tools

Description	Order No.	Dimensions	Weight
Safety bag with tools	AB7712	560x360x320mm	ca. 7,7 kg
Safety bag without tools	AB7710	560x360x320mm	ca. 1,7 kg

Equipment:

- 1 pair of insulated electrical safety gloves – size 10 AV4722
- 1 pair of safety goggles 6660 00
- 1 safety helmet with build in visor AV9303W
- 1 rubber insulating matting 1000 x 1000 x 4 mm AV4301
- 1 pair of anti-perspiration gloves 6130 00
- 1 shockproof resin container AB4700

Optionals:

- 7 kA protection clothing (see page 42)
- 7 kA protection gloves (see page 43)



Bag with tools to work on LV

Description	Order No.	Dimensions	Weight
Bag with tools	AB7721	560x360x320 mm	ca. 6,1 kg
Bag without tools	AB7720E	560x360x320 mm	ca. 1,7 kg

Equipment:

- 1 transparent cover material 560 x 560 mm AV4102E
- 1 transparent cover material 910 x 910 mm AV4104E
- 8 insulating safety clamps 6514 09
- 8 push on covers with grip, opening 15 mm 6460 15
- 8 push on covers with grip, opening 20 mm 6460 20
- 8 push on covers with grip, opening 30 mm 6460 30
- 1 insulating mastic 1033 74

Protective cover for distribution cabinets

Description	Order No.	Dimensions	Weight
Prot. cover DIN Gr.00, F3, F3/1	06614710	1100x550x440 mm	3,3 kg
Prot. cover DIN Gr.0, F4	06614810	1100x700x440 mm	3,8 kg
Prot. cover DIN Gr.1, F5	06614510	1100x900x440 mm	4,5 kg
Prot. cover DIN Gr.2, F6	06614610	1100x1300x440 mm	5,8 kg
Prot. cover DIN Gr.3	06614910	1100x1600x440 mm	7,0 kg

- The protective cover serves to cover damaged distribution cabinets temporarily.
- Increased 1,100 mm height, suitable for also covering the base
- A belt has been inserted under the lower edge of the cover for securing the cover, when drawn tight.
- The protective cover has two layers, which have been permanently welded together.
- The internal layer consists of a 0.5 mm thick, highly flexible and transparent cloth
- The external layer is made of a PVC-coated, UV and weather resistant polyester fabric.
- Both layers are highly flexible and cold-resistant.
- Color: signal yellow and printed with the "Caution: Dangerous Electrical Voltage"



1000V
IEC 60900

WE

LOVE

TOOLS