

** The future is electric! **

EDITORIAL

Across the planet, the number of electric vehicles on the road has exceeded 8 million! Add to that new generation of trucks, buses and other electric equipment, and you will see why batteries are being charged.

Energy that needs to be tamed

But some precautions are indispensable: electricity is invisible, silent and odourless, yet leads to accidents every day!

That is where our expertise comes in.

Why you can trust ESP

- We design and manufacture products, and have mastery over our technology since the 1950s
- We are pioneers of electrical safety, who know the market and operate all over the world

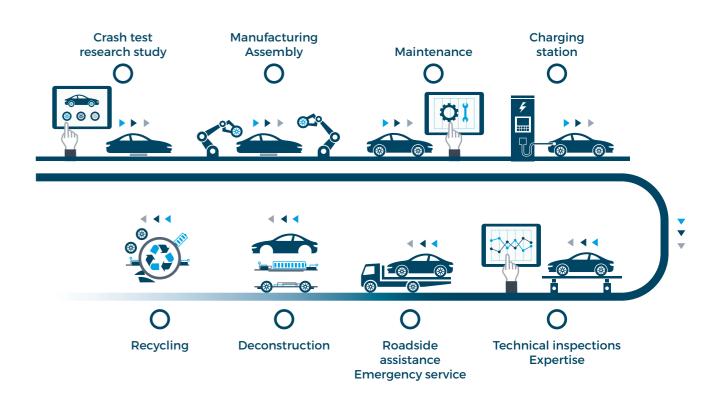
- We have design departments in each plant, to create, develop and research new products
- We draw on a responsive sales team, which is close to customers
- Our vision of after-sales service encompasses delivery, advice and training in our products
- We can offer you regular monitoring and periodic inspections of your products on test benches

Products that have been developed carefully to combine safety and efficiency.

We build solutions for safety and performance



OUR RANGE COVERS THE WHOLE LIFE CYCLE OF A VEHICLE



LIMITS FROM WHICH APPROVAL IS REQUIRED:



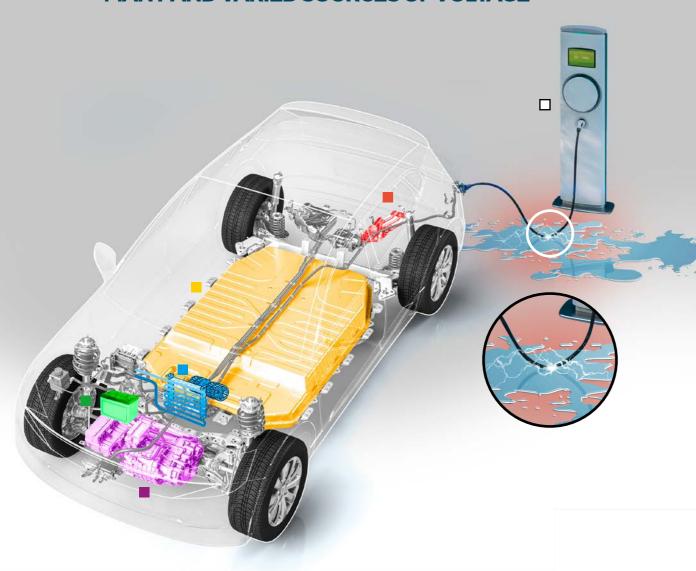
Risk of electric shocks



Approval required: If battery capacity above 180Ah



THE NEED FOR PROTECTION MANY AND VARIED SOURCES OF VOLTAGE



Drive motor Voltages above 300VAC

Drive battery

Voltages generally ranging from 300V to 800VDC

Support battery Voltage 12VDC

Systems for heating and air-conditioning Voltages above 300VAC

On-board charger (or OBC)

240VDC direct current

Charging stationTwo types of charge may be supplied by charging stations: It converts the alternating current supplied by a household socket into

The vehicle is supplied with AC voltage (In that case, the OBC of the vehicle converts AC voltage into DC voltage).

The vehicle is directly supplied with DC voltage.

The power supplied by the station may be high, significantly reducing the charging time (these may for instance be useful on motorway stations) 240V/400V voltages

OUR VALUES AND COMMITMENTS









KEEP SAFE

CONTENTS











Protective helmet with integrated face shield TC42ES

HELMET: EN 397 / EN 50365 1000 V SHIELD: EN 166 / EN 167 / EN 168 / EN 170 HELMET AND SHIELD: GS-ET-29

INTEGRATED SHIELD THAT OFFERS PROTECTION FROM **SHORT-CIRCUIT ARC FLASHES**

EASY USE WITH GLOVES

AUTOMATIC SHIELD RAISING BY LATERAL PRESSURE

CRASH BOX (UPPER PART OF HELMET) AVAILABLE IN FIVE

LIFE 5 YEARS.

| Part no | Description | Weight (g) |
|-----------|--|------------|
| TC42ESBB | White E Shark helmet with white crash box | |
| TC42ESBBL | White E Shark helmet with blue crash box | |
| TC42ESBJ | White E Shark helmet with yellow crash box | 728 |
| TC42ESBR | White E Shark helmet with red crash box | |
| TC42ESBV | White E Shark helmet with green crash box | |



| Accessories | Description |
|-------------|---------------------------|
| HOUTC42 | Carry bag for helmet |
| S570SAFE | Head lamp with three LEDs |



Face shield with head band and brow guard **E24**

EN 166 (SYMBOL 8 ELECTRIC ARC RESISTANCE), EN 167, EN 168,

PROTECTION FOR THE EYES, FACE AND TOP OF THE HEAD FROM SHORT-CIRCUIT ARC FLASHES.

Caution! Eyeglasses do not protect from short-circuit arc



Insulating latex gloves

GLE

EN 60903 / CEI 60903



Use with leather over gloves for mechanical protection

| Part no | Class | Max usage voltage | Length (cm) | Available sizes | Categories |
|----------|-------|----------------------|-------------|-----------------|------------|
| GLE36 00 | 00 | 500 V AC | 36 | 6 to 12 | AZC |
| GLE36 0 | 0 | 1 000 V AC | 36 | 6 to 12 | AZC |

Complete the part number with the required size



Insulating COMPOSITE gloves GICN

EN 60903 AND CEI 60903



Two in one: insulation + mechanical protection

| Part no | Class | Max usage voltage | Length (cm) | Available sizes | Categories |
|-----------|-------|----------------------|-------------|-----------------|------------|
| GICN36 00 | 00 | 500 V AC | 36 | 7-12 | RC |
| GICN-BT/* | 0 | 1 000 V AC | 41 | 7-12 | RC |

Complete the part number with the required size



ARC-FLASH insulating COMPOSITE gloves AFG

EN 60903 AND CEI 60903

Three in one: insulation + mechanical protection + arc flash

| Part no | Class | Max usage voltage | Length (cm) | Available sizes | Categories | IEC 61482- 1-2 | ARC 4>40 (cal/cm²) ASTM F2675 |
|----------|-------|----------------------|----------------|--------------------|------------|-------------------|----------------------------------|
| AFG36-00 | 00 | 500 V AC | 36 | 6-12 | RC | Class 2 | 26.3 cal/cm ² |
| AFG41-0 | 0 | 1 000 V AC | 41 | 6-12 | RC | (0.5s-7kA) | 71.6 cal/cm ² |

Complete the part number with the required size



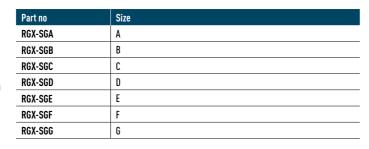




Leather outer glove for latex gloves **RGX-SG**

EN 420/EN 388 (WITH MECHANICAL RESISTANCE: ABRASION 2 -CUTTING 1 - TEARING 2 - PIERCING 2)

THESE OFFER MECHANICAL PROTECTION.



| | | Class of la | itex gloves |
|----------------------|----|-------------|-------------|
| | | 00 | 0 |
| | 7 | A | A |
| | 8 | В | В |
| Size of latex gloves | 9 | В | В |
| (GLE) | 10 | С | С |
| | 11 | D | D |
| | 12 | E | E |



Glove box

RGX-BGT

ACCOMMODATES INSULATING GLOVES, LEATHER OUTER GLOVES AND A BOTTLE OF TALC.

MAY BE USED MOUNTED ON A WALL OR AS A CARRY BOX (WITH ITS FOLDING HANDLE).

SPECIFICATIONS

• Dimensions : 50 x 25 x 10 cm





Protective case for insulating gloves

TS10

SPECIFICATIONS

• Dimensions: 450 x 180 x 70 mm



Cleaner for insulating gloves RGX-1704

DEVELOPED SPECIFICALLY FOR CLEANING RUBBER THOROUGHLY AND REMOVING DIRT AND DUST. WIPING WITH MICROFIBRE CLOTH OR SINGLE-USE CLOTH IS RECOMMENDED.

SPECIFICATIONS

• 750 ml spray can



Pneumatic tester for insulating gloves TV10

IT IS USED FOR CHECKING THE INTEGRITY OF INSULATING **GLOVES BEFORE USE.**

SPECIFICATIONS

• Visual inspection by inflation, according to the recommendations of standard 60903 (EN and IEC).









SIZE CORRESPONDENCE

FOR EACH GARMENT, USERS ARE ADVISED TO TAKE APPROPRIATE MEASUREMENTS AND REFER TO THE TABLES TO SELECT THE CORRECT

Daily Wear range

TROUSERS

| Size to order | Х | (S | | S | ı | М | ا | L |) | (L | Х | XL | 3 | XL |
|-----------------------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|--------------|---------------|---------------|---------------|---------------|---------------|---------------|
| EU sizes | 36 | 38 | 40 | 42 | 44 | 46 | 48 | 50 | 52 | 54 | 56 | 58 | 60 | 62 |
| Belt measurement (cm) | 68 to 72 | 73 to 76 | 77 to 80 | 81 to 84 | 85 to 88 | 89 to 92 | 93 to 96 | 97 to 100 | 101 to 104 | 105 to 108 | 109 to 112 | 113 to 116 | 117 to 120 | 121 to 124 |

JACKETS/SUITS

| Size to order | Х | (S | : | S | I | М | ا | L |) | (L | X | XL | 3 | XL |
|-----------------------------|-------------|-------------|-------------|-------------|-------------|--------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|
| Neck measurement (cm) | 35 t | o 36 | 37 t | o 38 | 39 t | o 40 | 41 t | o 42 | 43 t | to 44 | 45 t | to 46 | 47 t | o 48 |
| EU sizes | 36 | 38 | 40 | 42 | 44 | 46 | 48 | 50 | 52 | 54 | 56 | 58 | 60 | 62 |
| Belt measurement (cm) | 78 to 80 | 81 to 84 | 85 to 88 | 89 to 92 | 93 to 96 | 97 to 100 | 101 to 104 | 105 to 108 | 109 to 112 | 113 to 116 | 117 to 120 | 121 to 124 | 125 to 128 | 129 to 132 |

Personalisation

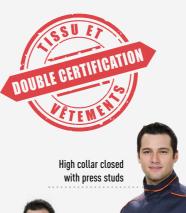


CLOTHING PERSONALISED FOR YOUR IMAGE

In order to reinforce the brand image of your company, we offer several persona-

- Addition of the logo of your company by fire-resistant transfer or embroidery
- Choice of the fabric colour, number of pockets, addition or removal of reflective

PLEASE ENQUIRE FOR MORE INFORMATION ABOUT PERSONALISATION OPTIONS.



High collar closed with press studs











Dipped hem and raised back for optimum protection

Adjustable cuffss

Standard and ATPV pictograms visible on the clothing

reinforcements

Dipped hem

for optimum

protection

and raised back

Orange patches to differentiate class 1

from class 2

Knee reinforcements

Arc flash jacket and trousers or suit, class 1, ATPV 12 cal/cm²

AFSIB-12

EN 13034: 2005/EN 1149-5: 2008/EN ISO 11611: 2007/ EN ISO 11612: 2008/IEC 61482-2: 2009 (CLASS 1 AND ATPV 12 CAL/CM²)

ATEX ZONE

• Fabric composition: 79% cotton, 20% polyester, 1% antistatic fibre, 300 gr/m²

| Part no | Description | Available sizes |
|-------------|---|--------------------|
| AFSIB-VES12 | Sibille Safe arc flash jacket, class 1, ATPV 12 cal/cm ² | XS to 3XL |
| AFSIB-PAN12 | Sibille Safe arc flash trousers, class 1, ATPV 12 cal/cm ² | XS to 3XL |
| AFSIB-COM12 | Sibille Safe arc flash suit, class 1, ATPV 12 cal/cm ² | XS to 3XL |

Complete the selected part number with the required size.

Textile belt in fire-retardant strapping, 40mm **CTI-25**

CLOSURE/ADJUSTMENT WITH AUTOMATIC PLASTIC LOOP.

SPECIFICATIONS

• Min/max waist size: (79/125) cm

Arc flash jacket and trousers or suit, class 2, APTV 25 cal/cm²

AFSIB-25

EN 13034: 2005, EN 1149-5: 2008, EN ISO 11611: 2007, EN ISO 11612: 2008 IEC 61482-2: 2009 (CLASS 2 AND ATPV 25 CAL/CM²)

ATEX ZONE

• Fabric composition: Two layers: 35% modacrylic, 30% cotton, 14% para-aramid, 20% viscose, 1% antistatic

| Part no | Description | Available sizes |
|-------------|--|-----------------|
| AFSIB-VES25 | Arc flash jacket, 25 cal/cm², class 2 | XS to 3XL |
| AFSIB-PAN25 | Arc flash trousers, 25 cal/cm ² , class 2 | XS to 3XL |
| AFSIB-COM25 | Arc flash suit, 25 cal/cm², class 2 | XS to 3XL |

Complete the selected part number with the required size.





PPE





Arc flash protection parkas, class 2 AFHV-PARKA AFPRO-PARKA

EN 343 2003+A1 2007/EN 14058 2004 CLASS 2.3/EN ISO 14116 2008 REVISION 3/EN 11612 2009/EN1149-5: 2008/EN13034 2005+A1 2009/EN 11611 2007: CLASS 2/EN 61482-1-2:2007 CLASS 2

Ideal for roadside assistance workers

| Part no | Description | Colour | Available sizes |
|-------------|---|-----------------------------------|-----------------|
| AFPRO-PARKA | Arc flash parka, class 2, bad weather and cold | Blue | S to 3XL |
| AFHV-PARKA | Arc flash parka, class 2, high visibility model | Fluorescent yellow and blue | S to 3XL |

Complete the selected part number with the required size.



EN 13034: 2005, EN 1149-5: 2008, EN ISO 11611: 2007, EN ISO 11612: 2008 IEC 61482-2: 2009 (CLASS 2 AND ATPV 25 CAL/CM²) ATEX ZONE

SPECIFICATIONS

- Fabric: Cotton Modacrylic Viscose Antistatic
- Available sizes: S to 3XL (complete the selected part number with the required size).



Safety shoes with insulating soles, up to 20 KV ${f C99\text{-}ISOL}$

EN ISO 20345:2011

FULLY NON-METALLIC

ULTRA-FLEXIBLE ANTI-PERFORATION SOLE.

| Part no | Description | Sizes |
|-----------|---|----------|
| C99B-ISOL | Low safety shoes with insulating soles, up to 20KV | 38 to 47 |
| C99H-ISOL | High safety shoes with insulating soles, up to 20KV | 38 to 47 |

Complete the part number with the required size.







TEMPORARY PROTECTION



Insulating mat, class 0 **TTCLO**

IEC 61111: 2009

INSULATES OPERATORS FROM THE FLOOR SO THAT NO **ELECTRIC CURRENT FLOWS THROUGH THEM IN** CASE OF DIRECT CONTACT OR PACE VOLTAGE.

••••••

SPECIFICATIONS

- Maximum usage voltage: 1000 VACMaterial: Elastomer
- Nominal thickness: 1.5 mm
- Grey colour
- Instructions for use printed on the mat

| Part no | Dimensions | Weight |
|---------------|-------------|--------|
| TTCL0 0,6X0,6 | 0.6 x 0.6 m | 0.9 kg |
| TTCLO 0,6X1 | 0.6 x 1 m | 1.4 kg |
| TTCL0 1X1 | 1x1m | 2.4 kg |
| TTCL0 1X10 | 1 x 10 m | 24 kg |



Transport case for insulating mats HTISAFE



Transport strap for insulating mats STISAFE

ADJUSTABLE, ULTRA LIGHTWEIGHT



TEMPORARY PROTECTION

Insulating blanket TN05-TN10

IEC 61112 CLASS 0 (1000V)

TEMPORARY INSULATION FOR COVERING INADEQUATELY **INSULATED PARTS.**

SPECIFICATIONS

Max. usage voltage: 1000 VAC

| Part no | Description | Thickness | Length (m) | Width (m) | Weight (kg) |
|---------|-------------------------------|-----------|---------------|--------------|----------------|
| TN05 | Insulating blanket, 12.5 m | 3/10e | 12.5 | 1.3 | 0.70 |
| TN10 | Insulating blanket, 25 m | 3/10e | 25 | 1.3 | 1.39 |



Insulating Velcro blanket TN17

ST TST BT 410

INSULATION FOR COVERING CONDUCTIVE PARTS. SEVERAL BLANKETS CAN BE ASSEMBLED TO EACH OTHER.

| Part no | Length (m) | Width (m) | Weight (g) |
|----------|------------|-----------|------------|
| TN17066M | 0.66 | 0.36 | 60 |
| TN17090M | 0.9 | 0.5 | 120 |
| TN17120M | 1.7 | 0.8 | 250 |



Plastic fastening clip TP60P-TP60PS

PLASTIC FASTENING CLIP FOR FIXING TEMPORARY PROTECTIVE BLANKETS ETC.

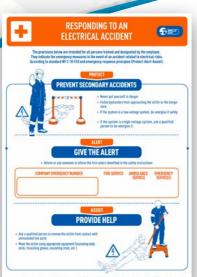
| Part no | Clipping capacity (mm) | Dimensions (mm) |
|---------|------------------------|-----------------|
| TP60P | 25 | 165 x 18 |
| TP60PS | 10 | 67 x 22 |











Electric shock first aid poster

S80ALPAS-GB

POSTER DEPICTING THE PROCEDURE TO APPLY IN RESPONSE TO AN ELECTRICAL INJURY.

PROTECT

ALERT

ASSIST

SPECIFICATIONS

- Poster in screen-printed aluminium, 350 x 500 mm



Magic Grip electrostatic poster

REPOSITIONABLE (ON SMOOTH AND CLEAN SURFACES)

SPECIFICATIONS

• Each model is sold in sets of 5 in a zipped bag

| Part no | Colour | Information | Dimensions (mm) |
|------------------|--------|---|-----------------|
| POSTER - SECURED | Green | System disconnected and locked, secured | 300 x 200 |
| POSTER - ACTIVE | Orange | Operating, live, active and electrical hazard | 300 x 200 |
| POSTER - DANGER | Red | Live system with fault, danger and electrical | 300 x 200 |









Rectangular electrical no-admission order flag **S120E**

SPECIFICATIONS

- . In fabric with red vinyl coating
- Dimensions: 500 x 350 mm





Banner "Working area boundary - No entry" **S85GBC1**

SPECIFICATIONS

- Coated fabric banner with two cords in cotton and four eyelets
- Dimensions: 1 x 0.2 m



Triangles warning of electrical hazards - lightning T10 **S81A**

SPECIFICATIONS

3x Ø 4.5 mm holes with 80 mm centre distance for 100 mm triangles and 180 mm for 200 mm triangles.

| Part no | Symbol | Material | Diamètre (mm) |
|---------------|---------------|-----------|---------------|
| S81AL T10 100 | Lightning T10 | Aluminium | 100 |
| S81 T10 100 | Lightning T10 | Plastic | 100 |
| S81AL T10 200 | Lightning T10 | Aluminium | 200 |
| S81 T10 200 | Lightning T10 | Plastic | 200 |





SIGNAGE & MARKING

The work area must be marked out at least one metre away from the perimeter of the vehicle/equipment or the removed battery.



High-density polyethylene chain **S115**

SPECIFICATIONS

• Supplied in a 25 m bag

| Part no | Diameter (mm) | Weight (g) | Colour |
|---------|---------------|------------|---------------|
| S115C8 | 8 | 2650 | Red and white |

| Accessories | Description |
|-------------|--|
| S115A8 | Ø 8 mm split ring, white or red (please specify), which is indispensable |
| | for hanging or repairing chains |



CLEVER FOLDING SYSTEM FOR FUNCTIONAL STORAGE AND

SPECIFICATIONS

- Post diameter: 50 mm.
- Height: 900 mm.
- Base: 280 x 280 x 70 mm
- Weight of base: 4 kg
- Supply includes the weighted base and the post ready for use



LOCKING OUT











LOW VOLTAGE

LOCKING OUT

WHAT IS LOCKING OUT?

Locking out consists in making part of the electrical equipment safe beyond doubt, in four steps:

- · Identifying the vehicle/equipment
- Separating voltage sources
- Locking open separating components
- Making sure that there is no voltage (voltage detector)

END OF SAFETY MEASURES



80 mm plastic locking out sticker **S350 GBC11**

Ø 10 MM HOLE ON UPPER PART FOR A PADLOCK.



Locking out bag SFES453L

USED FOR LOCKING OUT LARGE ELECTRICAL CONNECTORS. **LOCKABLE BY PADLOCK**

SPECIFICATIONS

- Nylon bag
- Dimensions 482 x 165 mm



ULTRA-STRONG COMPOSITE BODY

Non-conductive, resistant to UV rays, hydrocarbons and extreme environments.

Height: 54 mm Width: 46 mm Thickness: 21 mm Weight: 80 g

LOCKING OUT LABEL

- Locking out warning
- Identification of individual responsible
- Rugged label resistant to abrasion and UV rays
- Set of 6 languages



AREA

SECURE KEY

- Over 1 million key profiles possible
- Captive key system and cylinder with automatic key return
- Colour insert identical to that of the padlock





Locking out padlock, keyed different CS-KD-1

EACH PADLOCK HAS ITS OWN UNIQUE KEY. THAT KEY CAN OPEN ONLY ONE PADLOCK AND NO OTHERS. SUPPLIED WITH A SET OF LOCKING OUT LABELS IN SIX LANGUAGES

| Part no | Colour | Shackle material | Inside height of shackle | Shackle diameter |
|--------------|--------|------------------|--------------------------|---------------------|
| CS-KD-1-M438 | Orange | Metal | 38 mm | 4.5 mm |
| CS-KD-1-M476 | | Metal | 76 mm | |
| CS-KD-P438 | | Composite | 38 mm | |
| CS-KD-1-P476 | | Composite | 76 mm | |





Set of extension poles ANT780RS

LIGHTWEIGHT AND RIGID, FOR USING TAG780 IN HARD-TO-REACH PLACES

SPECIFICATIONS

- Double vee contact electrodes.
- Storage case.
- 780 mm long



Infrared thermometer **IRTHERM-A**

USED FOR CHECKING BATTERY TEMPERATURE

SPECIFICATIONS

- Wide temperature range (-50°C to 450°C).
- Short response time (0.15 sec).
- Automatic stopping.
- Trigger lock for continuous operation.
 Dimensions: 146 x 104 x 43 mm
- Weight: 163 g
- Accessories: 9V battery, transport case



1000V insulation tester **SPSFE1377**

THIS IS A SINGLE DEVICE THAT INCLUDES A MULTIMETER WITH A RANGE OF FUNCTIONS AND AN INSULATION MEASURING DEVICE.

SPECIFICATIONS

- 1x insulation multimeter
- 1x set of test cables
- 1x crocodile clamp with cable
- 1x adapter for thermocouple
- 1x type K thermocouple
- 6x cells
- 1x wireless USB adapter
- 1x operating manual

FRONT LIGHTING

Voltage detector with IP2X touch tips

AS PART OF LOCKING OUT, THE TAG780V HELPS MAKE SURE

• Double-insulation silicone cord: rugged and ultra flexible (with no memory effect)

• The sleeve is retracted by a trigger on the back of the device (IP2X versions): this exclusive solution provides control over sleeve retraction and makes the contact area

TAG780VIFE

THAT THERE IS NO VOLTAGE.

• Powered by two AAA alkaline cells (1.5 V), included

CEI 61243-3

visible.

• CAT IV, 1000 V

 Weight: 290 g Supplied with carry case

SPECIFICATIONS

LOCKING OUT

SELF-TEST

LOCKING OUT





ERGONOMIC TRIGGER FOR SLEEVE





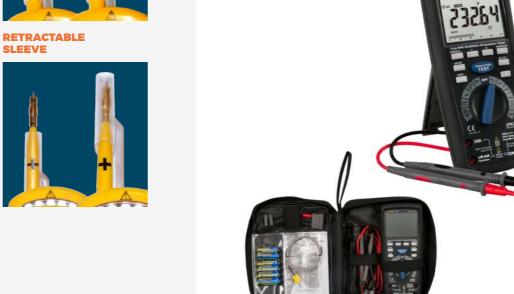
REMOVABLE ELASTIC

CAGES

A measuring instrument

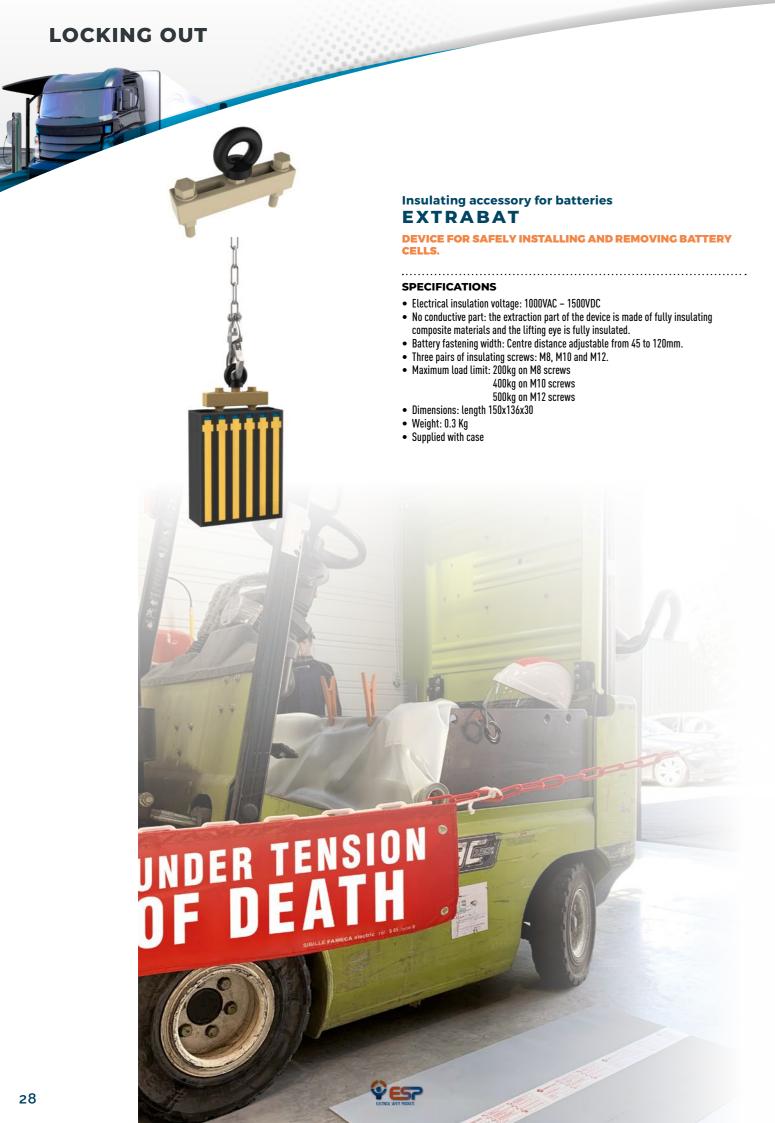
may not be used to make

sure that there is no













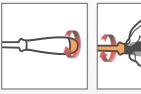




- No metal part accessible
- No risk of short circuit
- No risk of damage to the body in the event of a fall
- XL handle (+20mm): force transmission saving ~
- +10%/ suitable for female workers



ROTOLINE Turn



SMART DIAMETER

SHANK



The rotating ball of the handle is held in the palm and the fingers control screwdriver rotation.

INSULATED

IDENTIFICATION

SHANK

NB: schematic diagram of screwdriver operation. Depending on the regulations, the use of insulating gloves is mandatory.



Rotoline Turn insulated slotted-tip screwdriver RL2

NF EN 60900/IEC 60900/NF ISO 2380-1/NF ISO 8764-1

| Part no | Type of shank | Ø of shank (mm) | Length of shank (mm) |
|--------------|---------------|-----------------|----------------------|
| RL2-PH-4X75 | Phillips | 4 | 75 |
| RL2-PH-5X100 | Phillips | 5 | 100 |
| RL2-PH-6X125 | Phillips | 6 | 125 |
| RL2-PL-3X100 | Slotted | 3 | 100 |
| RL2-PL-4X120 | Slotted | 4 | 120 |
| RL2-PL-8X150 | Slotted | 8 | 150 |
| RL2-TX-T27 | Torx | T27 | - |
| RL2-TX-T30 | Torx | T30 | - |

Other models available.



Insulating pliers with long bent nose MC13CE - L / XL

Insulating pliers with long straight nose

Cu multi-conductor

MC11CE - L / XL

16 mm²

NF EN 60900/IEC 60900

Part no

MC11CE-L

MC11CE-XL

NF EN 60900/IEC 60900

| Part no | Cutting capacity | Length (mm) | Weight (g) |
|-----------|--------------------|-------------|------------|
| MC13CE-L | 16 mm ² | 215 | 170 |
| MC13CE-XL | Cu multi-conductor | 235 | 180 |



Set of six insulated 1000V Rotoline Turn screwdrivers C6RL2

NF EN 60900/ CEI60900



Hybrid cable cutting pliers MC451

NF EN 60900/IEC 60900

| Part no | Cutting Ø | Cutting capacity | Length (mm) | Weight (g) |
|----------|-----------|-----------------------|-------------|------------|
| MC45I XL | 16 mm | 25 mm² Cu 70 mm Al | 200 | 165 |

200

220

165

175

SPECIFICATIONS

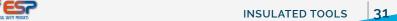
For slotted-head screws:

- RL2-PL-3X100
- RL2-PL-4X120 • RL2-PL-6,5X150
- RL2-PL-8X150

For Philips head screws:

- RL2-PH-5X100
- RL2-PH-6X125





| | • | KLZ-P |
|-----------------|---------|-------|
| ELECTINCAL SAFE | TY PROD | |



Our hardened tools are integral, unlike sleeved tools that can come apart



Insulated all-angle pliers MS4-185

NF EN 60900/IEC 60900/NF ISO 5743/NF ISO 5744/NF ISO 5746

SPECIFICATIONS

- Length: 185 mm
- Weight: 320g



Insulated 45° bent snipe nose pliers MS13-185

NF EN 60900/IEC 60900/NF ISO 5743/NF ISO 5744/NF ISO 5745

THEY MAKE IT EASY TO BEND ELECTRICAL WIRE

SPECIFICATIONS

- Length: 185 mm
- Weight: 190 g



Insulated straight snipe nose pliers MS10-170

NF EN 60900/IEC 60900/NF ISO 5743/NF ISO 5744/NF ISO 5745

THEY MAKE IT EASY TO BEND ELECTRICAL WIRE

SPECIFICATIONS

- Length: 170 mm
- Weight: 175 g





Insulated side cutting pliers MS5-175

EN 60900/IEC 60900/ISO 5743/ISO 5744/ISO 5749

SPECIFICATIONS

- Length: 175 mm
- Weight: 280 g



Insulated double slip joint adjustable pliers MS27-250

NF EN 60900/IEC 60900/NF ISO 8976/NF ISO 5744

SPECIFICATIONS

- Max opening: 28 mm
- Length: 250 mm
- Weight: 440 g



Insulated cable cutting pliers for remote energy meter MS30S-165

NF EN 60900/IEC 60900

FOR CUTTING COPPER AND ALUMINIUM WIRE

MAY ALSO BE USED FOR STRIPPING CABLES WITH A SMALL

| Part no | Opening | Length (mm) | Steel | Almelec | Aluminium | Copper | Weight (g) |
|-----------|---------|-------------|-------|---------|--------------------|--------------------|------------|
| MS30S 165 | 12 mm | 165 | NO | NO | 35 mm ² | 16 mm ² | 200 |





Insulated adjustable spanner

MS7

NF EN 60900/IEC 60900/NF ISO 1711-1/NF ISO 6787

SPECIFICATIONS

- Optimal guaranteed capacity: 24 mm
- Length: 210 mm
- Weight: 300 g

| Part no | Optimal guaranteed capacity | Length (mm) | Weight (g) | Length (in) | Toleration |
|---------|-----------------------------------|-------------|------------|-------------|------------|
| MS7 210 | 24 mm | 210 | 300 | 8 | ± 15 mm |
| MS7 260 | 28 mm | 260 | 510 | 10 | ± 15 mm |



Insulated 6 point ratchet ring spanner **MS41**

NF EN 60900/IEC 60900

| Part no | mm) | Weight (g) |
|---------|-----|------------|
| MS41 10 | 10 | 150 |
| MS41 13 | 13 | 190 |
| MS41 16 | 16 | 370 |
| MS41 17 | 17 | 380 |
| MS41 18 | 18 | 400 |
| MS41 19 | 19 | 410 |
| MS41 22 | 22 | 420 |



Insulating knife with ceramic blade IS80C

NF EN 60900/IEC 60900

KNIFE FOR STRIPPING PLASTIC SLEEVES OF ELECTRICAL

SPECIFICATIONS

- Length: 200 mm
- Weight: 60 g





Insulated single open-end spanner **MS16**

NF EN 60900/IEC 60900/NF ISO 691/NF ISO 1711-1/NF ISO 3318/NF ISO 10102

15° ANGLED HEAD

COMPACT HANDLE THAT

| Part no | ADAPTED | Weight (g) |
|---------|---------|------------|
| MS16 08 | 8 mm | 20 |
| MS16 09 | 9 mm | 40 |
| MS16 10 | 10 mm | 40 |
| MS16 11 | 11 mm | 40 |
| MS16 12 | 12 mm | 40 |
| MS16 13 | 13 mm | 50 |
| MS16 14 | 14 mm | 70 |

Other dimensions available;



Insulated 12 point cranked single ring spanner MS21

NF EN 60900/IEC 60900/NF ISO 691/NF ISO 1711-1/NF ISO 3318/NF

THE TOOL IS PROFILED FOR AN EASY GRIP AND OPTIMISED

COMPACT HANDLE THAT IS ADAPTED TO TIGHTENING

| Part no | ADAPTED | Weight (g) |
|---------|---------|------------|
| MS21 08 | 8 mm | 60 |
| MS21 09 | 9 mm | 80 |
| MS21 10 | 10 mm | 80 |
| MS21 11 | 11 mm | 95 |
| MS21 12 | 12 mm | 100 |
| MS21 13 | 13 mm | 110 |
| MS21 14 | 14 mm | 130 |



Insulated 12 point single socket spanner **MS20**

NF EN 60900/IEC 60900

COMPACT HANDLE THAT IS ADAPTED TO TIGHTENING

| Part no | ADAPTED | Weight (g) |
|---------|---------|------------|
| MS20 08 | 8 mm | 50 |
| MS20 09 | 9 mm | 60 |
| MS20 10 | 10 mm | 90 |
| MS20 11 | 11 mm | 95 |
| MS20 12 | 12 mm | 130 |
| MS20 13 | 13 mm | 160 |
| MS20 14 | 14 mm | 170 |





Insulated 3/8" reversible ratchet handle with mechanical locking

MS85P

NF EN 60900/IEC 60900/NF ISO 1174-1/NF ISO 3315

SPECIAL MODEL DESIGNED SO THAT SOCKETS AND **EXTENSIONS REMAIN IN THE HANDLE DURING USE. SOCKET** RELEASED BY DELIBERATELY PUSHING THE PUSH BUTTON.

SPECIFICATIONS

- Length: 215 mm
- Weight: 300 g



3/8" extension with mechanical locking MS84P - MS84LP

NF EN 60900/IEC 60900/NF ISO 1174-1/NF ISO 1711-1/NF ISO 3316

THE SOCKET IS RELEASED WHEN THE GREY RING IS PULLED.

| Part no | Туре | Length (mm) | Weight (g) |
|-----------|-----------------|-------------|------------|
| MS84P-165 | Short extension | 165 | 150 |
| MS84LP | Long extension | 265 | 300 |



Insulated 3/8" 12 point female socket **MS86**

EN 60900/IEC 60900/ISO 691/ISO 1174-1/ISO 1711-1/ISO 2725-1

| Part no | Diameter | Weight (g) |
|---------|----------|------------|
| MS86 08 | 8 mm | 35 |
| MS86 09 | 9 mm | 35 |
| MS86 10 | 10 mm | 40 |
| MS86 11 | 11 mm | 40 |
| MS86 12 | 12 mm | 40 |
| MS86 13 | 13 mm | 45 |
| MS86 14 | 14 mm | 45 |

Other dimensions available; please enquire.



All of our sockets have a small outer diameter to give the best possible reach



Insulated 3/8" 12 point female socket, long series MS86L

EN 60900/IEC 60900/ISO 691/ISO 1174-1/ISO 1711-1/ISO 2725-1

MANUAL-USE SOCKETS SUITABLE FOR USE WITH STANDARD OR MECHANICAL LOCKING RATCHET HANDLES.

| Part no | Diameter | Weight (g) |
|----------|----------|------------|
| MS86L 08 | 8 mm | 50 |
| MS86L 09 | 9 mm | 55 |
| MS86L 10 | 10 mm | 60 |
| MS86L 11 | 11 mm | 70 |
| MS86L 12 | 12 mm | 70 |
| MS86L 13 | 13 mm | 80 |
| MS86L 14 | 14 mm | 90 |

Other dimensions available; please enquire.



Insulated 3/8" male Torx socket **MS87T**

EN 60900/IEC 60900

| Part no | Size | Weight (g) |
|----------|------|------------|
| MS87 T20 | T20 | 55 |
| MS87 T30 | T30 | 65 |

Other dimensions available; please enquire.



3/8" enlarger for 1/2" sockets **MS91**

EN 60900/IEC 60900/ISO 1174-1/ISO 3316

FOR USING 1/2" SOCKETS WITH A 3/8" SQUARE RATCHET HANDLE

SPECIFICATIONS

- Length: 75 mm
- Weight: 40 g











Composition of Junior 3/8" socket sets

| Part no | Description | MS89 | MS89V01 | MS89V02 | MS89V04 | MS89V05 | MS89V06 | MS89V07 | MS89V08 |
|----------|--|------|---------|---------|---------|---------|---------|---------|---------|
| MS84 | 3/8" Junior extension, 140 mm | • | | | | | | | |
| MS85 | Insulated 3/8" Junior ratchet handle, 185 mm | • | • | | | | | | |
| MS85P | Insulated 3/8" reversible ratchet handle with mechanical locking | | | • | • | • | • | • | • |
| MS85PC | Insulated 3/8" compact reversible ratchet handle with mechanical locking | | • | | | • | | • | |
| MS84P | 3/8" short extension with mechanical locking | | • | • | • | • | • | | • |
| MS77 08 | Insulated 3/8" 8 mm 6 point female socket | • | • | • | | • | • | • | • |
| MS77 10 | Insulated 3/8" 10 mm 6 point female socket | • | • | • | • | • | • | • | • |
| MS77 12 | Insulated 3/8" 12 mm 6 point female socket | | | | | • | • | | |
| MS77 13 | Insulated 3/8" 13 mm 6 point female socket | • | • | • | | • | • | • | • |
| MS77 14 | Insulated 3/8" 14 mm 6 point female socket | | • | • | • | • | • | • | • |
| MS77 16 | Insulated 3/8" 16 mm 6 point female socket | | • | • | • | • | • | • | • |
| MS77 17 | Insulated 3/8" 17 mm 6 point female socket | | • | • | • | • | • | • | • |
| MS77 18 | Insulated 3/8" 18 mm 6 point female socket | | • | • | • | • | • | • | • |
| MS77 19 | Insulated 3/8" 19 mm 6 point female socket | | • | • | • | • | • | • | • |
| MS77 21 | Insulated 3/8" 21 mm 6 point female socket | | • | • | | • | • | | |
| MS77 22 | Insulated 3/8" 22 mm 6 point female socket | | • | • | | • | • | | |
| MS77 23 | Insulated 3/8" 23 mm 6 point female socket | | • | • | | | | | |
| MS77L 16 | Insulated 3/8" 16 mm long 6 point female socket | | | | | • | • | • | • |
| MS77L 17 | Insulated 3/8" 17 mm long 6 point female socket | | | | | • | • | • | • |
| MS77L 18 | Insulated 3/8" 18 mm long 6 point female socket | | | | | • | • | • | • |
| MS77L 19 | Insulated 3/8" 19 mm long 6 point female socket | | | | | • | • | • | • |
| MS77L 21 | Insulated 3/8" 21 mm long 6 point female socket | | | | | • | • | • | |
| MS77L 22 | Insulated 3/8" 22 mm long 6 point female socket | | | | | • | • | | |
| MS87 04 | Insulated 3/8" 4 mm 6 point male socket | | • | • | • | • | • | • | • |
| MS87 05 | Insulated 3/8" 5 mm 6 point male socket | • | • | • | • | • | • | • | • |
| MS87 06 | Insulated 3/8" 6 mm 6 point male socket | | • | • | • | • | • | • | • |
| MS87 08 | Insulated 3/8" 8 mm 6 point male socket | | • | • | • | • | • | • | • |





Set of 1/4" radio sockets; 5 tools with handle MS59S

NF EN 60900/IEC 60900

| This product contains | Description |
|-----------------------|--|
| MS55 | Insulated 1/4" reversible ratchet handle |
| MS56 | Insulated 1/4" 08/10/12 mm 6 point female socket |
| MS57 05 | Insulated 1/4" 5 mm 6 point male socket |
| MS59SV | Plastic case, 135 x 95 x 32 mm |



Insulated 3/8" square torque wrench with mechanical locking - 1000V M S 1 0 0 N 0 V M

NF EN 60900/IEC 60900 - NF EN ISO 6789-1-2017

TOOL FOR PRECISION TIGHTENING RIGHT-HAND THREADS WITH TRIPPING AND AUTOMATIC RESET

| | Part no | Length (mm) | Torque (Nm) | Weight (g) |
|--|-----------|-------------|-------------|------------|
| | MS100N0VM | 230 | 4-20 | 530 |



Insulated handle with flexible rod and magnet end ${\bf TFA}$

CONSISTS OF A FLEXIBLE ROD WITH A MAGNET END.

USED FOR PICKING UP SMALL METAL PARTS (SCREWS, NUTS, WASHERS ETC.) FALLEN IN HARD-TO-REACH PLACES.

SPECIFICATIONS

- Total length: 560 mm +/-5
- Weight: 130 g



Insulating lever

TL05

SPECIFICATIONS

- Length: 190 mm
- Weight: 41 g











EMERGENCY EQUIPMENT



PROCEDURE FOR RESPONDING TO AN ELECTRICAL INJURY

PROTECT







ALERT

ASSIST

EMERGENCY EQUIPMENT



Wall-mounted rescue kit **PS2-PM-KITVE**

KIT RAPIDLY ACCESSIBLE FOR RESCUE OPERATIONS IN THE EVENT OF AN INCIDENT WITH OR NEAR ELECTRICAL **EQUIPMENT.**

INDOOR OR OUTDOOR USE.

SPECIFICATIONS

- May be fitted with a shelf.
- Dimensions: 790 x 400 x 291 mm
- Boxes with transparent sealed cover (IP54),
- Handle that can be closed with seals or even padlocked with a shackle diameter up to 4.8 mm
- Door sticker with safety instructions

| Part no | Description | | | |
|----------------|---|--|--|--|
| PS2-PM-KITVE | Wall-mounted rescue kit in sealed box, with equipment and PPE for EV environments | | | |
| Contains | | | | |
| E24 | Face shield with head band and brow guard for electricians | | | |
| TTCLO 0,6X1 | Insulating mat, class 0, 0.6 X 1 m | | | |
| TP12EC | Insulating rescue stick | | | |
| GLE36-0 10 | Latex insulating gloves, class 0 size 10 | | | |
| PS2-PM-VE-VIDE | Sealed storage box - small model, alone, with no components, and 1 shelf | | | |

Insulating rescue stick TP12EC

NF EN 60900/IEC 60900/NF EN 6789

USED FOR RESCUING AN INJURED WORKER (ELECTRIC SHOCK, ARC FLASH ETC.)

IT IS USED TO PULL THE VICTIM INTO A SAFE AREA



| Part no | Description | Usage voltage | Total length without hook (m) | Length of protected part (shaft) (mm) | Weight (kg) |
|---------|---|---------------|----------------------------------|--|-------------|
| TP12EC | 45 kV body stick with hook and no handguard | 45 kV | 1,47 | 600 | 1,35 |





EMERGENCY EQUIPMENT



Insulating mat, class 0 **TTCLO**

IEC 61111: 2009

INSULATES OPERATORS FROM THE FLOOR SO THAT NO **ELECTRIC CURRENT FLOWS THROUGH THEM IN**

CASE OF DIRECT CONTACT OR PACE VOLTAGE.

SPECIFICATIONS

- Maximum usage voltage: 1000 VAC
- Material: Elastomer
- Nominal thickness: 1.5 mm
- Grey colour
- Instructions for use printed on the mat

| Part no | Dimensions | Weight |
|---------------|-------------|--------|
| TTCL0 0,6X0,6 | 0.6 x 0.6 m | 0.9 kg |
| TTCLO 0,6X1 | 0.6 x 1 m | 1.4 kg |
| TTCL0 1X1 | 1x1m | 2.4 kg |
| TTCL0 1X10 | 1 x 10 m | 24 kg |





Glove box

RGX-BGT

ACCOMMODATES INSULATING GLOVES, LEATHER OUTER GLOVES AND A BOTTLE OF TALC.

MAY BE USED MOUNTED ON A WALL OR AS A CARRY BOX (WITH ITS FOLDING HANDLE).

SPECIFICATIONS

• Dimensions: 50 x 25 x 10 cm



Carbon dioxide (CO2) fire extinguisher, capacity 2 kg **E07 2KGS**

CERTIFIED UNDER THE EUROPEAN PED PRESSURE EQUIPMENT DIRECTIVE 97/23/EC, THE EUROPEAN MARINE EQUIPMENT DIRECTIVE 96/98/EC AND NF EN3

BECAUSE OF ITS DIELECTRIC PROPERTIES, THIS FIRE EXTINGUISHER IS THE IDEAL EMERGENCY EQUIPMENT FOR **ELECTRICAL SYSTEMS IN GENERAL.**

SPECIFICATIONS

- Fire classes: 34B
- Carbon dioxide (CO²) fire extinguisher with diffuser
 Usage temperature: -30°C/+60°C.





















Bags for PPE carried by roadside

PPE carry bag, 80L

ST-80

SPECIFICATIONS

- Strong fabric structure
- Inner volume 80L
- Dimensions: 750 x 350 x 330 mm
- Weight: 2 kg



Rolling backpack

SADT-25

IDEAL FOR STORING AND CARRYING PPE (PERSONAL PROTECTIVE EQUIPMENT) AND TOOLS

SPECIFICATIONS

- Inner volume: 25L
- Storage provided for gloves, mat, helmet and voltage detector
 Dimensions: 560 x 440 x 270 mm



Backpack **SAD-25**

IDEAL FOR CARRYING AND STORING PPE AND SMALL TOOLS.

SPECIFICATIONS

- Inner volume 25L
- Dimensions: 460 x 230 x 410 mm



Tool box ART162

PADLOCKABLE

SPECIFICATIONS

- Dimensions: 515 x 287 x 275 mm
- Supplied empty



Rolling tool box C252NM

SPECIFICATIONS

- Retractable transport handle and castors
- Integrated accessories compartment and handles
 Dimensions: 635 x 450 x 420 mm
- Supplied empty



Plastic box C272

SPECIFICATIONS

- Dimensions: 512 x 308 x 212 mm
- Weight: 1.8 kg







This cabinet may be supplemented with any equipment that complies with all the requirements of standard NF C18-550





SERVANTE-C

NF C 18-550

EQUIPPED WITH ALL THE EQUIPMENT FOR SAFE WORKING.

.....

SPECIFICATIONS

- Five sliding drawers on high-quality runners. Each of them is designed for storing particular equipment: Insulated tools, locking out, voltage detector, temporary protection, PPE, marking and signage.
 Preformed foam in the first drawer for proper tool storage.
- May be locked (lock).
- Side handle for movement.
- Lateral space for posts (bases can be stowed in the last drawer).
- Available in empty version, part no SERVANTE-V
- Dimensions: 800 x 450 x 950 mm
- Weight: 60 kg

Composition

| Part no | Description | Quantity | |
|-----------------|---|----------|--|
| SERVANTE-V | Empty cabinet | 1 | |
| INSULATED TOOLS | | | |
| MS85P | Insulated 3/8" reversible ratchet handle with mechanical locking | 1 | |
| MS84P | 3/8" short extension with mechanical locking | 1 | |
| MS86-08 | Insulated 3/8" 8 mm 12 point female socket | 1 | |
| MS86-10 | Insulated 3/8" 10 mm 12 point female socket | 1 | |
| MS86-12 | Insulated 3/8" 12 mm 12 point female socket | 1 | |
| MS86-13 | Insulated 3/8" 13 mm 12 point female socket | 1 | |
| MS86-14 | Insulated 3/8" 14 mm 12 point female socket | 1 | |
| MS100N0VM | Insulated 3/8" square 4-20 Nm torque wrench with mechanical locking - 1000V | 1 | |
| RL2-PL-3X100 | Rotoline Turn 3 x 100 mm insulated slotted-tip screwdr | 1 | |
| RL2-PL-4X120 | Rotoline Turn 4 x 100 mm insulated slotted-tip screwdr | 1 | |
| RL2-PL-65X150 | Rotoline Turn 6.5 x 100 mm insulated slotted-tip screwdr | 1 | |
| RL2-PL-8X150 | Rotoline Turn 8 x 100 mm insulated slotted-tip screwdr | 1 | |
| RL2-PH-5X100 | Rotoline Turn 5 x 100 mm insulated Philips-tip screwdriver, no 1 | 1 | |
| RL2-PH-6X125 | Rotoline Turn 6 x 125 mm insulated Philips-tip screwdriver, no 2 | 1 | |
| MC11CE | Insulating composite flat-nose pliers with ceramic blades | 1 | |
| MC13CE | Insulating composite bent snipe nose pliers with ceramic blades | 1 | |
| MC45I | Composite cable cutting pliers, 190 mm | 1 | |
| MS16-08 | Insulated 8 mm single open-end spanner | 1 | |
| MS16-10 | Insulated 10 mm single open-end spanner | 1 | |
| MS16-12 | Insulated 12 mm single open-end spanner | 1 | |
| MS16-13 | Insulated 13 mm single open-end spanner | 1 | |
| MS16-14 | Insulated 14 mm single open-end spanner | 1 | |
| MS87T30 | 3/8" male socket, Torx T30 | 1 | |
| MS87T20 | 3/8" male socket, Torx T20 | 1 | |
| MS7-210 | Insulated adjustable spanner, 210 mm | 1 | |
| MS27-250 | Insulated double slip joint adjustable pliers | 1 | |



LOCKING OUT AND TEMPORARY PROTECTION

| TAG780VIFE | LT simple voltage detector, IP2X | 1 |
|--------------|--|---|
| TL05 | Insulating lever | 1 |
| CS-KD-1-M438 | Orange keyed different padlock, metal shackle, height 38 mm | 1 |
| CS-KD-1-M476 | Orange keyed different padlock, metal shackle, height 76 mm | 1 |
| SFES453L | Locking out bag L | 1 |
| S350 GBC11 | Plastic tag, marked "Locked out. Do not operate" with lightning symbol | 2 |
| TC41 | LV insulating cap for conductor ends, 240 mm ² | 2 |
| TP60P | Plastic fastening clip | 4 |
| TN17066M | Insulating Velcro blanket, 0.66 x 0.36 m | 1 |



PPE

| GICN-BT/10 | Composite insulating gloves, class 0 size 10 | 1 |
|------------|--|---|
| RGX-BGT | Glove box | 1 |
| E24 | Face shield with head band and brow guard for electricians | 1 |
| HOUTC42 | Cover for shield | 1 |









| S115C6 | High-density polyethylene chain, 25 m Ø 6 mm | 1 |
|----------|---|---|
| S115SPPR | Red and white post with base for plastic chain | 4 |
| S120E | Vertical flag with shaft | 2 |
| S85GBC1 | Banner, "Limit of work area - Do not cross", coated fabric, 1 x 0.2 m | 2 |







NOTES NOTES





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