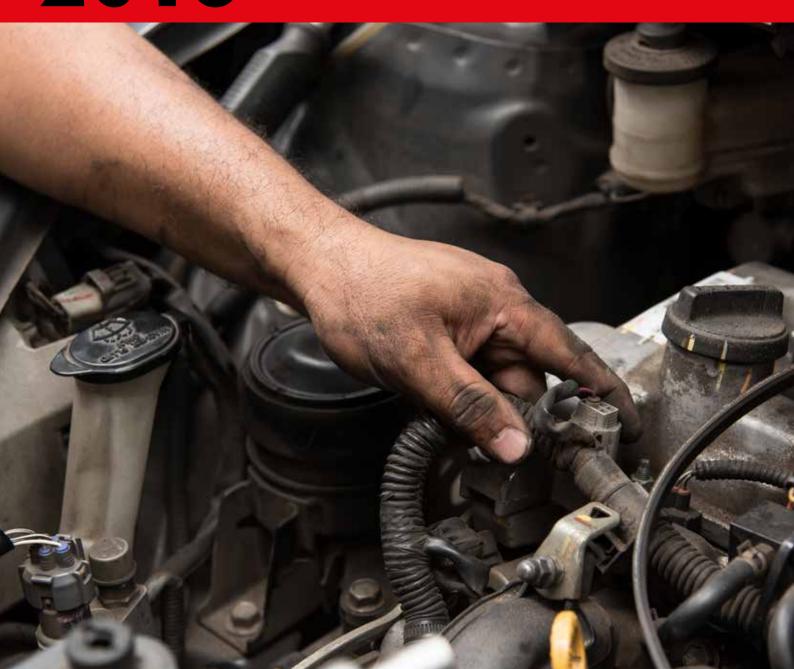


# ELECTRIC VEHICLES TOOLS 2018



#### **Contents**

#### 4 - 5 Kits

EV Tool Kit 16pcs EV Tool Kit 32pcs

#### 6-7 Ratchet, Sockets & Spanners

3/8" Ratchet 3/8" Extension 3/8" Socket wrench Ring Spanner

#### 8 - 10 Pliers

Combination Plier Long Nose Pliers Snipe Nosed Angled Pliers Side Cutters Wire Strippers Cable Shears Plier Set 4pcs Plier and Screwdriver Set 8pcs

#### 11 - 16 Screwdrivers

Screwdriver Flat Blade Screwdriver Set 5pcs Screwdriver Cross Blade Ultra Slim Screwdrivers TX Screwdriver Set 6pcs Screwdriver TC Blade Precision Screwdrivers

#### 17 Test Meters

Multi Tester Pro II LED Multi Tester Pro II LCD Mini Multi Tester

#### 18 Insulating Tapes

10 Insulating Tapes

#### 19 Health and Safety

Safety Glasses Full vision Goggles Protection Gloves







# **KITS**

#### **EV Tool Kit 16pcs**

5964 502 001







Product	Art. No.
1 x VDE screwdriver flat slotted	0613 631 055
1 x VDE screwdriver PH recessed head	0613 632 2
1 x VDE snipe nose pliers DIN ISO 5745, IEC 60900	0714 01 577
1 x VDE 3/8 inch extension	0715 003 01
1 x VDE-3/8 inch socket nut	0715 003 08
1 x VDE-3/8 inch socket nut	0715 003 10
1 x VDE-3/8 inch socket nut	0715 003 12
1 x VDE 3/8 inch ratchet	0715 003 038
3 x Insulating caps 3.5 kV	0771 200 100
1 x Safety glasses CEPHEUS ®	0899 102 250
1 x Voltage protective glove	0899 400 930
2 x Electrical insulating tape	0985 103
1 x Two-pin voltage tester Multi-Tester Pro II LED	0715 53 165

**≙1000 V △** 













#### **EV Tool Kit 32pcs**

#### 5964 502 002



#### For voltages up to 1000v (AC) and 1500 (DC)

Product	Art. No.
1 x VDE screwdriver flat slotted	0613 631 055
1 x VDE screwdriver PH recessed head	0613 632 2
1 x VDE snipe nose pliers DIN ISO 5745, IEC 60900	0714 01 577
1 x VDE 3/8 inch extension	0715 003 01
1 x VDE-3/8 inch socket nut	0715 003 08
1 x VDE-3/8 inch socket nut	0715 003 10
1 x VDE-3/8 inch socket nut	0715 003 12
1 x VDE 3/8 inch ratchet	0715 003 038
3 x Insulating caps 3.5 kV	0771 200 100
1 x Safety glasses CEPHEUS ®	0899 102 250
1 x Voltage protective glove	0899 400 930
2 x Electrical insulating tape	0985 103
1 x Two-pin voltage tester Multi-Tester Pro II LED	0715 53 165
Ring spanner VDE 8mm	0715 002 308
Ring spanner VDE 8mm	0715 002 308
Ring spanner VDE 10mm	0715 002 310
Ring spanner VDE 12mm	0715 002 312
Ring spanner VDE 13mm	0715 002 313
Ring spanner VDE 14mm	0715 002 314
3/8" socket wrench hexagon VDE 12mm 45mm	0715 003 112
3/8" socket wrench hexagon VDE 13mm 45mm	0715 003 113
3/8" socket wrench hexagon VDE 14mm 45mm	0715 003 114
3/8" socket wrench hexagon VDE 17mm 45mm	0715 003 117
Ring spanner VDE 17mm	0715 002 317
3/8" socket wrench hexagon 4mm	0715 004 04
3/8" socket wrench hexagon VDE 8mm 45mm	0715 003 108
3/8" socket wrench hexagon VDE 10mm 45mm	0715 003 110













NEW
NEW
NEW
NEW
NEW

NEW

NEW

NEW NEW NEW

NEW

# RATCHET, SOCKETS & SPANNERS



3/8" Ratchet 200mm

0715 003 038

NEW

For working on live parts up to 1000 volts (AC) and up to 1500 volts (DC), observing all prescribed safety precautions

EN 60900



3/8" Extension 150mm

0715 003 01





For working on live parts up to 1000 volts (AC) and up to 1500 volts (DC), observing all prescribed safety precautions





#### 3/8" Sockets



Description	Size	Art. No.	P. Qty.
3/8" Socket wrench long	8mm	0715 003 08	1
3/8" Socket wrench long	10mm	0715 003 10	1
3/8" Socket wrench long	12mm	0715 003 12	1

NEW
NEW
NEW

Description	Size	Art. No.	P. Qty.
3/8" Socket wrench hexagon	4mm	0715 004 04	1

NEW

Description	Size	Art. No.	P. Qty.
3/8" Socket wrench	8mm	0715 003 108	1
3/8" Socket wrench	10mm	0715 003 110	1
3/8" Socket wrench	12mm	0715 003 112	1
3/8" Socket wrench	13mm	0715 003 113	1
3/8" Socket wrench	14mm	0715 003 114	1
3/8" Socket wrench	1 <i>7</i> mm	0715 003 117	1



#### **Fully insulated**

#### **Ring Spanners**



For working on live parts up to 1000 volts (AC) and up to 1500 volts (DC), observing all prescribed safety precautions

Description	Art. No.	P. Qty.
Ring spanner 8mm	0715 002 308	1
Ring spanner 10mm	0715 002 310	1
Ring spanner 12mm	0715 002 312	1
Ring spanner 13mm	0715 002 313	1
Ring spanner 14mm	0715 002 314	1
Ring spanner 17mm	0715 002 317	1

NEW NEW NEW NEW

## **PLIERS**



#### **Combination Plier**

Description	Size	Art. No.	P. Qty.
Combination plier	160mm	0714 01 574	1
Combination plier	180mm	0714 01 575	1
Combination plier	200mm	0714 01 576	1

- For gripping, holding and cutting hard and soft wires
- For voltages up to 1000v (AC)and 1500 (DC)
- Extra long cutting edge for thicker cables
- Non slip fully insulated handle
- Wide VDE collar to stop hang slipping

**DIN ISO 5746, IEC 60900** 



#### **Long Nose Pliers**

L in mm	L in inches	Tip geometry	Jaw shape	L3 in mm	W3 mm	T1 in mm	W4 in mm	T2 in mm	Art. No.	P. Qty.
210	8 1/4			74	1 <i>7</i> .5	9.5			0714 01 577	
210	8 1/4		₹40°	74	1 <i>7</i> .5	9.5	3	2.5	0714 01 578	1
160	6 1/2			50	16.5	9			0714 01 579	

- For gripping, holding and cutting hard and soft wires
- For voltages up to 1000v (AC)and 1500 (DC)
- Non slip fully insulated handle
- Wide VDE collar to stop hang slipping

DIN ISO 5745, EN 60900



#### **Snipe Nosed Angled Pliers**

Description	Size	Art. No.	P. Qty.
Snipe nosed angled pliers	210mm	0714 01 594	1

- For gripping, holding and cutting hard and soft wires
- For voltages up to 1000v (AC) and 1500 (DC)
- Pressing of wire end ferrules (low-voltage range)
- Precise and powerful cutting acction
- Stripping of 1.5 and 2.5mm² wires
- Non slip fully insulated handle
- Wide VDE collar to stop hang slipping









#### **Side Cutters**

Description	Size	Art. No.	P. Qty.
Side cutters	140mm	0714 01 571	1
Side cutters	160mm	0714 01 572	1
Side cutters	180mm	0714 01 573	1

- For cutting hard and soft wires and cables
- For voltages up to 1000v (AC) and 1500 (DC)
- Milled and inductively hardened precision cuting edge
- Non slip fully insulated hadle
- Wide VDE collar to stop hand slipping

#### DIN ISO 5749, EN 60900



#### **Wire Strippers**

Description	Size Art. No.		P. Qty.
Wire strippers	160mm	0714 01 570	1

- Precisde stripping of cables and leads with plastic or rubber insulation
- For voltages up to 1000v (AC) and 1500 (DC)
- Automatic opening and adjustable stripping depth.
- Non slip fully insulated hadle
- Wide VDE collar to stop hand slipping

#### EN 60900



#### **Cable Shears**

Description	Size	Art. No.	P. Qty.
Cable shears	160mm	0714 01 585	1
Cable shears	210mm	0714 01 586	1

- For cutting copper and aluminium cable
- For voltages up to 1000v (AC) and 1500 (DC)
- Special shear geometry ensures easy cutting without deforming the cables
- Non slip fully insulated handle
- Wide VDE collar to stop hand slipping



#### **Plier and Screwdriver Sets**

Description	Art. No.	P. Qty.
Plier set 4pcs	0714 01 580	1

- For voltages up to 1000v (AC) and 1500 (DC)
- Non slip fully insulated handle
- Wide VDE collar to stop hand slipping

#### EN 60900



Description	Art. No.	P. Qty.
Plier set 4pcs	0714 01 581	1

- For voltages up to 1000v (AC) and 1500 (DC)
- Non slip fully insulated handle
- Wide VDE collar to stop hand slipping

#### EN 60900



Description	Art. No.	P. Qty.
Plier and Screwdriver set 8 pcs	0714 01 582	1

- For voltages up to 1000v (AC) and 1500 (DC)
- Non slip fully insulated handle
- Wide VDE collar to stop hand slipping







# **SCREWDRIVERS**

**≙1000 V** 







#### Flat Blade





Thickness of cutting edge x Width of cutting edge	Blade Length	Handle L / W	Art. No.	P. Qty.
0,4 x 2,5 mm	80 mm	83 / 27 mm	0613 631 025	1
0,5 x 3,0 mm	100 mm	83 / 27 mm	0613 631 03	1
0,6 x 3,5 mm	100 mm	83 / 27 mm	0613 631 035	1
0,8 x 4,0 mm	100 mm	83 / 27 mm	0613 631 04	1
1,0 x 5,5 mm	125 mm	96/31 mm	0613 631 055	1
1,2 x 6,5 mm	150 mm	106 / 35 mm	0613 631 065	1
1,2 x 8,0 mm	175 mm	114 / 38 mm	0613 631 08	1

For voltages up to 1000v (AC) and 1500 (DC)

DIN 7437, IEC 900, EN 60900

**≙1000 V** 







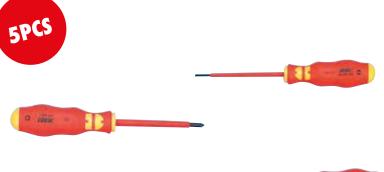
#### **Screwdriver Set**

Blade burnished, reduced blade insulation diameter in critical working area

- Effortless access to low-lying screw and spring elements
- Prevents insuation from fraying

DIN 7437, IEC 900, EN 60900

Art. No. 0613 963 25















#### **Cross Head**





Tip Size	Blade Length	Handle L / W	Art. No.	P. Qty.
PHO	80 mm	83 / 27 mm	0613 632 0	1
PH1	80 mm	96 / 31 mm	0613 632 1	1
PH2	100 mm	106 / 35 mm	0613 632 2	1
PH3	150 mm	114 / 38 mm	0613 632 3	1

For voltages up to 1000v (AC) and 1500 (DC)

DIN 7438, IEC 900, EN 60900

**≙1000 V** 







#### **Ultra Slim Screwdriver Set 5pcs**

Ultra slim design to fit in to tight spaces where other VDE screwdrivers can not reach.

Blade burnished, reduced blade insulation diameter in critical working

Effortless access to low-lying screw and spring elements

Art. No. 0613 963 250





**№ 1000 V** 







#### **Ultra Slim Screwdriver Flat Blade**





Thickness of cutting edge x Width of cutting edge	Blade Length	Handle L / W	Art. No.	P. Qty.
0,4 x 2,5 mm	80 mm	83 / 27 mm	0613 631 25	1
0,6 x 3,5 mm	100 mm	83 / 27 mm	0613 631 35	1
0,8 x 4,0 mm	100 mm	83 / 27 mm	0613 631 40	1
1,0 x 5,5 mm	125 mm	96/31 mm	0613 631 55	1

Ultra slim design to fit in to tight spaces where other VDE screwdrivers can not reach.

**№ 1000 V** 







#### **Ultra Slim Screwdriver Cross Head**





Tip Size	Blade Length	Handle L / W	Art. No.	P. Qty.
PH1	80 mm	96/31 mm	0613 632 10	1
PH2	100 mm	106 / 35 mm	0613 632 20	1

Ultra slim design to fit in to tight spaces where other VDE screwdrivers can not reach.







#### **TX Screwdriver Set 6pcs**

- Blade: Burnished, insulated
- Tip: TX socket, Black Point
- Screw symbol and handle size on end of handle for quick identification
- Standard: IEC 60900:2012
- Contents: TX 8, 9, 10, 15, 20, 25

EN 60900

Art. No. 0613 962 35













#### **Screwdriver TX Blade**





Tip Size	Blade Length	Handle L / W	Art. No.	P. Qty.
TX8	100 mm	83 / 27 mm	0613 623 08	1
TX9	100 mm	83 / 27 mm	0613 623 09	1
TX10	100 mm	83 / 27 mm	0613 623 10	1
TX15	100 mm	96 / 31 mm	0613 623 15	1
TX20	125 mm	96 / 31 mm	0613 623 20	1
TX25	120 mm	106 / 35 mm	0613 623 25	1
TX30	150 mm	106 / 35 mm	0613 623 30	1

- Blade: burnished, insulated
- Tip: TX socket, Black Point
- Screw symbol and handle size on end of handle for quick identification

Standard: IEC 60900:2012



**№ 1000 V** 







#### **Precision Screwdrivers 7pcs**



- For voltages up to 1000v (AC) and 1500
- Cold impact tested at -40 degrees centigrade

#### EN60900

Art. No. 0613 489 4













#### **Precision Screwdriver Flat Blade**





Thickness of cutting edge x Width of cutting edge	Blade Length	Blade Length in inches	Art. No.	P. Qty.
0,3 x 1,5 mm	40 mm	1 9/16 in	0613 486 015	1
0,3 x 1,8 mm	60 mm	2 3/8 in	0613 486 018	1
0,4 x 2 mm	60 mm	2 3/8 in	0613 486 020	1
0,4 x 2,5 mm	75 mm	3 in	0613 486 025	1
0,5 x 3 mm	75 mm	3 in	0613 486 030	1

- For voltages up to 1000v (AC) and 1500
- Cold impact tested at -40 degrees centigrade







#### **Precision Screwdrivers Cross Blade**







Tip Size	Blade Length	Handle L / W	Art. No.	P. Qty.
PHOO	40 mm	100 / 20 mm	0613 487 00	1
PHO	60 mm	100 / 20 mm	0613 487 0	1

- Individually tested in water bath with 10 kV test voltage
- Marked with year of manufacture
- Cold impact test at -40°C (marking C)
- Blade: Round blade insulated, burnished

Tip: ISO 8764-PH

**≙1000 V** 





#### **Precision Screwdriver Set 14pcs**

#### Art. No. 0613 900 14

#### **Contents:**

- 1 screwdriver handle
- 1 precision engineering rotating cap
- 1 blade. slot 0.4 x 2.5 x 150
- 1 blade. slot 0.5 x 3.0 x 175
- 1 blade. slot 0.6 x 3.5 x 175
- 1 blade. slot 0.8 x 4.0 x 175
- 1 blade. slot 1.0 x 5.5 x 175 1 blade. slot 1.2 x 6.5 x 175
- 1 blade. PH 1, 155
- 1 blade. PH 2, 175
- 1 blade. PZ 2, 175
- 1 blade. TX 10, 175
- 1 blade. TX 10, 175
- 1 blade. TX 20, 175





# **TEST METERS**

#### **Multi Tester Pro II LED**



#### Multi tester with visual LED display

#### CAT IV -1000 V Multi tester for hybrid and electric vehicles and photovoltaic systems.

- **CAT IV 1000 V**
- No pre-setting, intuitive operation
- Automatic testing range selection
- Voltages can also be displayed without battery
- Visual and vibratory warning from 35 V AD/DC when operating with batteries.
- FI/RCD test using two buttons
- Push-button actication of the load allows the FI switch to be triggered intentionally, so that the protective conductor can also be tested.
- Screwable 4-mm test probe adapter
- Enhanced hold in safety socket and CEE socket
- Suitable for narrow test openings
- Automatic shut-off device.

0715 53 165

#### **Multi Tester Pro II LCD**



#### Multi tester with visual LCD digital display

#### CAT IV -1000 V Multi tester for hybrid and electric vehicles and photovoltaic systems.

- **CAT IV 1000 V**
- No pre-setting, intuitive operation
- Automatic testing range selection
- Voltages can also be displayed without battery
- Visual and vibratory warning from 35 V AD/DC when operating with batteries.
- FI/RCD test using two buttons
- Push-button actication of the load allows the FI switch to be triggered intentionally, so that the protective conductor can also be tested.
- Screwable 4-mm test probe adapter
- Enhanced hold in safety socket and CEE socket
- Suitable for narrow test openings
- Automatic shut-off device.

0715 53 175

#### Mini Multi Meter



#### Our "small meter for measuring direct and alternating current, resistance testing, continuity testing, diode tests and contactless voltage testing.

- Robust, splash-proof rubber housing and membrane keyboard.
- The test leads can be fastened to the rear of the device; this protects them from damage and prevents injury from the measuring tips.
- Measurement capabilities include V/AC, V/DC and A/AC, A/DC, resistance ( $\Omega$ ), contactless voltage testing; includes permanently attached measurement lines, data hold, diode and throughput resting, inegrated LED flashlight and automatic range aquisition.

0715 53 390



# INSULATING TAPES

#### **Electrical Insulating Tapes**

#### VDE-tested according to DIN EN 60454-3-1 Type 5.

- Up to 9kV disruptive strength.
- Tear-proof and resistant to ageing.
- High flexibility and adhesive strength

#### Technical data:

Chemical basis	Acrylate, soft PVC foil
Thermal stability	+ 0°C to +90°C
Disruptive strength	9kV
Minimum shelf life	24 months

Colour	Width in mm	Thicn. in mm	Roll in m	Art. No.	P. Qty.
Black				0985 101	
White	15	0,15	10	0985 102	10
Red				0985 103	
Brown				0985 104	
Blue				0985 105	
Yellow				0985 107	
Green / Yellow				0985 109	
Grey				0985 109 1	
Green				0985 109 2	
Black	30	0,15	25	0985 101 1	5



# **HEALTH AND SAFETY**

#### **Cepheus Safety Glasses Clear**

#### **Andromeda Full Vision Glasses**



- Sporty slip-in bracket for pressure-free fit
- Unrestricted side view
- High impact-resistant polycarbonate lens
- Scratch-resistant coating on both sides
- 100% UC protection (up to 400 nm)
- EN 166 and EN 170

0899 102 250

P. Qty. 1



- Ideal for users who wear glasses
- Panoramic field of vision
- Optimum ventilation for ideal eye comfort
- High impact-resistant polycarbonate lens
- Unique coating (Scratch-resistant lens surface and permanent anti-fog coating on the inside)
- Lens can be replaced quickly and easily
- 100% UV protection up to 400nm
- EN 166 and EN 170

0899 102 110 **P. Qty.** 1

#### **Voltage Protection Gloves**



#### Areas of use:

- Installation, maintenance and reair work under electrical voltage
- Power supply and installation companies
- Electrical workshops
- Maintenance and repair of electric and hybrid vehicles
- Fire departments and paramedics
- For working voltages up to 1000 V/AC
- Good flexibility
- Good tactile sensitivity
- Supplied in a UV-resistant PE storage pouch
- Layer thickness Max. 1 + 0.6 mm in line with standard

EN 61482-1-2, EN60903 CAT III

Size	Art. No.	P. Pair.
9	0899 400 929	
10	0899 400 930	1
11	0899 400 931	

#### **Technical data:**

Layer Thickness as per standard	Max 1 + 06 mm	
Class	0	
Category	RC R: Acid-, oil- and ozone-resistant C: Cold-resistant	
EN 61482-1+2	Level 1: 4 kA/0.5 sec/300 mm Level 2: 7 kA/0.5 sec/300 mm	
Test voltage  Max. operating voltage:	5,000 V/AC, 10,000 V/DC	
AC voltage DC voltage	1,000V 1,500V	



### **ELECTRIC VEHICLES TOOLS 2018**

