Product Overview eMobility

e-MOBILE VON BALS

Type 2 for fixed installation, 1-phase, **20A**

Order number:

Cable type: flat

- EV side: 20A 1-phase type 2 charging connector
- EVCS side: cut off clean
- Resistor: 680 Ω in charging connector
- Cable variant: 3x2.5+1x0.5 mm²
- Cable length: 5.0 m
- Cable colour: black
- Cable ø: approx. 11 mm

Connector colour blue	E-309-6
Connector colour white	E-3094-6

Cable type: spiral

- EV side: 20A 1-phase type 2 charging connector
- EVCS side: cut off clean
- Resistor: 680 Ω in charging connector
- Cable variant: 3x2.5+1x0.5 mm²
- Cable length: 5.0 m working length
- Cable colour: black
- Cable ø: approx. 11 mm

Connector colour blue	E-309-51
Connector colour white	E-3094-51

Type 2 for fixed installation, 1-phase, **32A**

Order number:

Cable type: flat

- EV side: 32A 1-phase type 2 charging connector
- EVCS side: cut off clean
- Resistor: 220 Ω in charging connector
- Cable variant: 3x6+1x0.5 mm²
- Cable length: 5.0 m
- Cable colour: black
- Cable ø: approx. 14 mm

Connector colour blue	E-310-6
Connector colour white	E-3104-6

Cable type: spiral

- EV side: 32A 1-phase type 2 charging connector
- EVCS side: cut off clean
- Resistor: 220 Ω in charging connector
- Cable variant: 3x6+1x0.5 mm²
- Cable length: 5.0 m working length
- Cable colour: black
- Cable ø: approx. 14 mm

Connector colour blue	E-310-51
Connector colour white	E-3104-51

Other lengths and colour variations on request.

Type 2 for fixed installation, 3-phase, **20A**

Order number:

Cable type: flat

- EV side: 20A 3-phase type 2 charging connector
- EVCS side: cut off clean
- Resistor: 680 Ω in charging connector
- Cable variant: 5x2.5+1x0.5 mm²
- Cable length: 5.0 m
- Cable colour: black
- Cable ø: approx. 14 mm

Connector colour blue	**E-311-6**
Connector colour white	**E-3114-6**

Cable type: spiral

- EV side: 20A 3-phase type 2 charging connector
- EVCS side: cut off clean
- Resistor: 680 Ω in charging connector
- Cable variant: 5x2.5+1x0.5 mm²
- Cable length: 5.0 m working length
- Cable colour: black
- Cable ø: approx. 14 mm

Connector colour blue	**E-311-51**
Connector colour white	**E-3114-51**

Type 2 for fixed installation, 3-phase, **32A**

Order number:

Cable type: flat

- EV side: 32A 3-phase type 2 charging connector
- EVCS side: cut off clean
- Resistor: 220 Ω in charging connector
- Cable variant: 5x6+1x0.5 mm²
- Cable length: 5.0 m
- Cable colour: black
- Cable ø: approx. 17 mm

Connector colour blue	**E-312-6**
Connector colour white	**E-3124-6**

Cable type: spiral

- EV side: 32A 3-phase type 2 charging connector
- EVCS side: cut off clean
- Resistor: 220 Ω in charging connector
- Cable variant: 5x6+1x0.5 mm²
- Cable length: 5.0 m working length
- Cable colour: black
- Cable ø: approx. 17 mm

Connector colour blue	**E-312-51**
Connector colour white	**E-3124-51**

Type 2 for fixed installation, 3-phase, **63A**

Order number:

Cable type: flat

- EV side: 63A 3-phase type 2 charging connector
- EVCS side: cut off clean
- Resistor: 100 Ω in charging connector
- Cable variant: 5x16+1x0.5 mm²
- Cable length: 5.0 m
- Cable colour: black or orange
- Cable ø: approx. 26 mm

Connector colour blue	**E-313-6**
Connector colour white	**E-3134-6**

Other lengths and colour variations on request.

Type 2, 1-phase, **20A**

Order number:

Cable type: flat

- EV side: 20A 1-phase type 2 charging connector
- EVCS side: 20A 1-phase type 2 charging plug
- Resistor: 680 Ω in charging plug and connector
- Cable variant: 3x2.5+1x0.5 mm²
- Cable length: 5.0 m
- Cable colour: black
- Cable ø: approx. 11 mm

Connector colour blue	E-309-16
Connector colour white	E-3094-16

Cable type: spiral

- EV side: 20A 1-phase type 2 charging connector
- EVCS side: 20A 1-phase type 2 charging plug
- Resistor: 680 Ω in charging plug and connector
- Cable variant: 3x2.5+1x0.5 mm²
- Cable length: 5.0 m working length
- Cable colour: black
- Cable ø: approx. 11 mm

Connector colour blue	E-309-52
Connector colour white	E-3094-52

Type 2, 1-phase, **32A**

Order number:

Cable type: flat

- EV side: 32A 1-phase type 2 charging connector
- EVCS side: 32A 1-phase type 2 charging plug
- Resistor: 220 Ω in charging plug and connector
- Cable variant: 3x6+1x0.5 mm²
- Cable length: 5.0 m
- Cable colour: black
- Cable ø: approx. 14 mm

Connector colour blue	E-310-16
Connector colour white	E-3104-16

Cable type: spiral

- EV side: 32A 1-phase type 2 charging connector
- EVCS side: 32A 1-phase type 2 charging plug
- Resistor: 220 Ω in charging plug and connector
- Cable variant: 3x6+1x0.5 mm²
- Cable length: 5.0 m working length
- Cable colour: black
- Cable ø: approx. 14 mm

Connector colour blue	E-310-52
Connector colour white	E-3104-52

Other lengths and colour variations on request.

Type 2, 3-phase, **20A**

Order number:

Cable type: flat

- EV side: 20A 3-phase type 2 charging connector
- EVCS side: 20A 3-phase type 2 charging plug
- Resistor: 680 Ω in charging plug and connector
- Cable variant: 5x2.5+1x0.5 mm²
- Cable length: 5.0 m
- Cable colour: black
- Cable ø: approx. 14 mm

Connector colour blue	**E-311-16**
Connector colour white	**E-3114-16**

Cable type: spiral

- EV side: 20A 3-phase type 2 charging connector
- EVCS side: 20A 3-phase type 2 charging plug
- Resistor: 680 Ω in charging plug and connector
- Cable variant: 5x2.5+1x0.5 mm²
- Cable length: 5.0 m working length
- Cable colour: black
- Cable ø: approx. 14 mm

Connector colour blue	**E-311-52**
Connector colour white	**E-3114-52**

Type 2, 3 phase, **32A**

Order number:

Cable type: flat

- EV side: 32A 3-phase type 2 charging connector
- EVCS side: 32A 3-phase type 2 charging plug
- Resistor: 220 Ω in charging plug and connector
- Cable variant: 5x6+1x0.5 mm²
- Cable length: 5.0 m
- Cable colour: black
- Cable ø: approx. 17 mm

Connector colour blue	**E-312-16**
Connector colour white	**E-3124-16**

Cable type: spiral

- EV side: 32A 3-phase type 2 charging connector
- EVCS side: 32A 3-phase type 2 charging plug
- Resistor: 220 Ω in charging plug and connector
- Cable variant: 5x6+1x0.5 mm²
- Cable length: 5.0 m working length
- Cable colour: black
- Cable ø: approx. 17 mm

Connector colour blue	**E-312-52**
Connector colour white	**E-3124-52**

Type 2, 3 phase, **63A**

Order number:

Cable type: flat

- EV side: 63A 3-phase type 2 charging connector
- EVCS side: 63A 3-phase type 2 charging plug
- Resistor: 100 Ω in charging plug and connector
- Cable variant: 5x16+1x0.5 mm²
- Cable length: 5.0 m
- Cable colour: black or orange
- Cable ø: approx. 26 mm

Connector colour blue	**E-313-16**
Connector colour white	**E-3134-16**

Other lengths and colour variations on request.

Type 1 for fixed installation, 1-phase, **16A**

Order number:

Cable type: flat

- EV side: 16A 1-phase type 1 charging connector
- EVCS side: cut off clean
- Resistor: integrated circuit of the switched equivalent resistance between CS and PE
- Cable variant: 3x2.5+1x0.5 mm²
- Cable length: 5.0 m
- Cable colour: black
- Cable ø: approx. 11 mm

Connector colour blue	E-318010-6
Connector colour white	E-318414-6

Cable type: spiral

- EV side: 16A 1-phase type 1 vehicle connector
- EVCS side: cut off clean
- Resistor: integrated circuit of the switched equivalent resistance between CS and PE
- Cable variant: 3x2.5+1x0.5 mm²
- Cable length: 5.0 m working length
- Cable colour: black
- Cable ø: approx. 11 mm

Connector colour blue	E-318010-51
Connector colour white	E-318414-51

Type 1 for fixed installation, 1-phase, **32A**

Order number:

Cable type: flat

- EV side: 32A 1-phase type 1 charging connector
- EVCS side: cut off clean
- Resistor: integrated circuit of the switched equivalent resistance between CS and PE
- Cable variant: 3x6+1x0.5 mm²
- Cable length: 5.0 m
- Cable colour: black
- Cable ø: approx. 14 mm

Connector colour blue	E-319010-6
Connector colour white	E-319414-6

Cable type: spiral

- EV side: 32A 1-phase type 1 charging connector
- EVCS side: cut off clean
- Resistor: integrated circuit of the switched equivalent resistance between CS and PE
- Cable variant: 3x6+1x0.5 mm²
- Cable length: 5.0 m working length
- Cable colour: black
- Cable ø: approx. 14 mm

Connector colour blue	E-319010-51
Connector colour white	E-319414-51

Other lengths and colour variations on request.

Type 2 to type 1, 1-phase, **16A**

Order number:

Cable type: flat

- EV side: 16A 1-phase type 1 charging connector
- EVCS side: 16A 1-phase type 2 charging plug
- Resistor: 680 Ω in type 2 charging plug, integrated circuit of the switched equivalent resistance between CS and PE in type 1 charging connector
- Cable variant: 3x2.5+1x0.5 mm²
- Cable length: 5.0 m
- Cable colour: black
- Cable ø: approx. 11 mm

Connector colour blue	E-318010-16
Connector colour white	E-318414-16

Cable type: spiral

- EV side: 16A 1-phase type 1 charging connector
- EVCS side: 16A 1-phase type 2 charging plug
- Resistor: 680 Ω in type 2 charging plug, integrated circuit of the switched equivalent resistance between CS and PE in type 1 charging connector
- Cable variant: 3x2.5+1x0.5 mm²
- Cable length: 5.0 m working length
- Cable colour: black
- Cable ø: approx. 11 mm

Connector colour blue	E-318010-52
Connector colour white	E-318414-52

Type 2 to type 1, 1-phase, **32A**

Order number:

Cable type: flat

- EV side: 32A 1-phase type 1 charging connector
- EVCS side: 32A 1-phase type 2 charging plug
- Resistor: 220 Ω in type 2 charging plug, integrated circuit of the switched equivalent resistance between CS and PE in type 1 charging connector
- Cable variant: 3x6+1x0.5 mm²
- Cable length: 5.0 m
- Cable colour: black
- Cable ø: approx. 14 mm

Connector colour blue	E-319010-16
Connector colour white	E-319414-16

Cable type: spiral

- EV side: 32A 1-phase type 1 charging connector
- EVCS side: 32A 1-phase type 2 charging plug
- Resistor: 220 Ω in type 2 charging plug, integrated circuit of the switched equivalent resistance between CS and PE in type 1 charging connector
- Cable variant: 3x6+1x0.5 mm²
- Cable length: 5.0 m working length
- Cable colour: black
- Cable ø: approx. 14 mm

Connector colour blue	E-319010-52
Connector colour white	E-319414-52

Other lengths and colour variations on request.

EVCS 2 tester type E-994

The EVCS 2 tester is an easy-to-handle device that can simulate the basic charging states at a charging station with a type 2 charging socket.

With the compact tester, you can ensure that the charging station is always functional – and continues to be so. You can easily simulate various coding resistors of the charging cable, changes in charge status or errors. The integrated BNC measuring output allows you to easily visualise the CP PWM signal, e.g., on an oscilloscope.

The EVCS 2 tester includes the following functions

- Specification of the charging cable coding for simulating the maximum charging current
- Test of the PE installation
- Simulation of an interruption of the PE protective conductor
- Simulation of the vehicle states
- Display of the PWM signal (CP measurement output)
- Phase sequence indicator L1, L2, L3
- Rotating field indicator
- Test outputs (simulation of external leakage currents)

Equipment

- Dimensions H x W x D: 205 x 105 x 40 mm
- Plastic housing with rubber-coated sides
- Plug: type 2 charging plug with 1 m installation cable
- Colour: blue black

Optional:

- with Type 3 Version **Part no. E-996**

Part no. E-994

EVCS 2 diagnostic device type E-995

The EVCS 2 diagnostic device offers expanded options for performing a complete check of your charging station. This compact device is equally suited for both an initial inspection as well as for inspecting charging stations that are already in operation.

- Diagnostic information:
  Phases as well as rotation field direction | Charging current resulting from the PWM signal | Automatic determination of the turn-off time | Frequency, duty cycle as well as upper and lower voltage of the PWM signal
- Simulatable vehicle states (CP):
  Vehicle not connected | Vehicle connected | Vehicle connected, ready to accept energy with ventilation | Vehicle connected, ready to accept energy without ventilation
- Simulatable cable states (PP):
  No cable, 13A cable, 20A cable, 32A cable and 63A cable
- Simulatable errors:
  Short-circuit of diode | Short circuit between CP and PE | Triggering of the RCD by a current of 30mA between L1 and PE
- Installation option for test loads via a schuko-type socket
- Lightweight and robust case design ideal for external service work
- Integrated energy-saving functions as well as indicator for battery undervoltage

Part no. E-995

CHARGING SYSTEM COMPONENTS FOR OEM CUSTOMERS

The new Type 1 connector

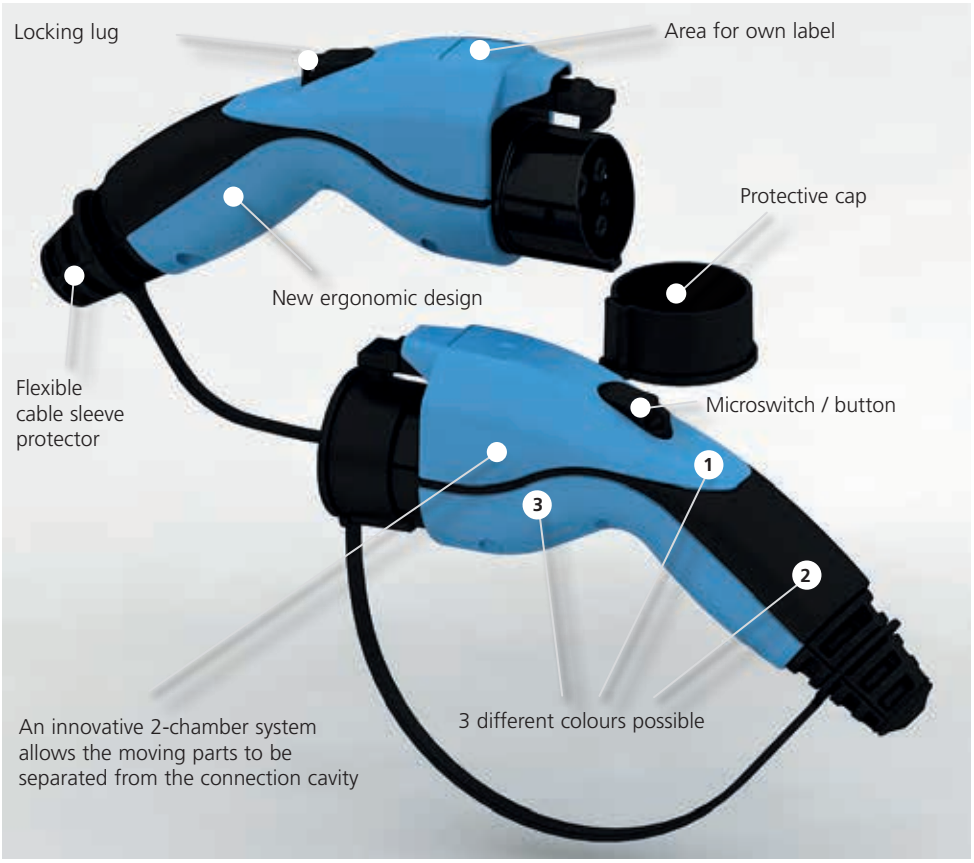
Consistent further development in design and function

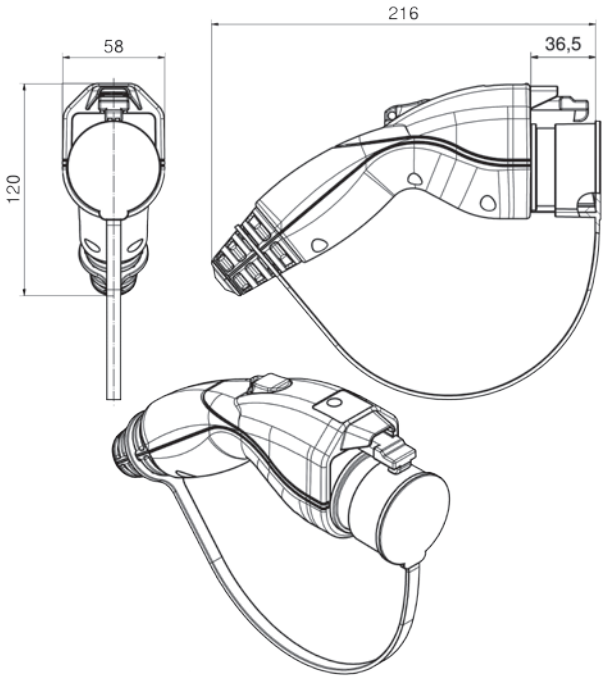
- The 2-chamber system allows separation of the individual areas and therefore a protection degree of min. IP44
- New ergonomic design
- Flexible cable sleeve protector
- With locking lug for padlock
- Available in various colours
- Can be freely assembled
- 16A (20A) - 32A (30A)
- VDE-tested


Own branding possible


Other colours on request


Can be freely assembled





Type 1 blue [1] / black [2] / blue [3]

up to 20A	**318010**
up to 32A	**319010**

Type 1 white [1] / black [2] / white [3]

up to 20A	**318414**
up to 32A	**319414**

Type 1 black [1] / white [2] / black [3]

up to 20A	**318141**
up to 32A	**319141**

Order number:

Type 2 charging socket, IP54, up to 63A and plug interlock

- screw terminals for 3P+N+PE and PP+CP
- easy CONTACT technology and silver plated contacts
- plug interlock with actuator
- we recommend control via EVCP2-Controller E-920000 or E-920300

up to 20A	E-80191-16
up to 32A	E-80191-32
up to 63A	E-80191-63

Type 2 charging socket, IP54, up to 63A with lid interlock and plug interlock

- screw terminals for 3P+N+PE and PP+CP
- easy CONTACT technology and silver plated contacts
- hinged lid interlock with actuator
- plug interlock with actuator
- we recommend control via EVCP2-Controller E-920200 or E-920500

up to 20A	E-80192-16
up to 32A	E-80192-32
up to 63A	E-80192-63

Type 2 charging socket, IP54, up to 63A with RGB LED as well as lid interlock and plug interlock

- screw terminals for 3P+N+PE and PP+CP
- easy CONTACT technology and silver plated contacts
- plug interlock with actuator
- hinged lid interlock with actuator
- two-side RGB LED lighting
- we recommend control via EVCP2-Controller E-920200 or E-920500

up to 20A	E-80193-16
up to 32A	E-80193-32
up to 63A	E-80193-63

Type 2 charging socket, IP54, up to 63A and plug interlock

- screw terminals for 3P+N+PE and PP+CP
- easy CONTACT technology and silver plated contacts
- plug interlock and suitable actuator
- we recommend control via EVCP2-Controller E-920000 or E-920300

up to 20A	E-80194-16
up to 32A	E-80194-32
up to 63A	E-80194-63

Type 2 charging socket, IP54, up to 63A with RGB LED and plug interlock

- screw terminals for 3P+N+PE and PP+CP
- easy CONTACT technology and silver plated contacts
- plug interlock and suitable actuator
- two-side RGB LED lighting
- we recommend control via EVCP2-Controller E-920000 or E-920300

up to 20A	E-80195-16
up to 32A	E-80195-32
up to 63A	E-80195-63

EVCP2 Controller - mode 3/ type 2

Standard functions:
Basic function:

- electric power supply storage in case of a power failure
- integrated current converter from 230V a.c. to 12V d.c.
- additional 12V output for peripheral devices
- charging current selection switch 6A - 80A
- LED RGB control
- control option for contactor and plug interlock
- charge control according to IEC 61851-1

Standard, feedback signals via RS485	E-920000
Vehicle connector permanently connected to EVSE type 1 and type 2, and feedback signals via RS485	E-920100
Standard, plus hinged lid interlock and limit switch, and feedback signals via RS485	E-920200
Standard plus analogue input and feedback signals via RS485	E-920300
Vehicle connector permanently connected to EVSE type 1 and type 2 plus analogue input, and feedback signals via RS485	E-920400
Standard, plus hinged lid interlock and limit switch and analogue input and feedback signals via RS485	E-920500
Software and extended manual for setting and feedback signals via RS232/RS485	E-921000

Actuator connecting cable

- actuator junction with 3 x 1000 mm single 0,5 mm² conductors
- connection cable for interlocking systems
- for plug and hinged lid interlocking systems

E-314-1000

Type 1 charging connector up to 32A, blue

- screw terminals - ready for wiring
- integrated circuit of the switched equivalent resistance between CS and PE
- configuration L1+L2/N+PE and CP+CS
- protection degree IP44

	Order number:
up to 20A	E-318010
up to 32A	E-319010

Type 1 charging connector up to 32A, white

- screw terminals - ready for wiring
- integrated circuit of the switched equivalent resistance between CS and PE
- configuration L1+L2/N+PE and CP+CS
- protection degree IP44

up to 20A	E-318414
up to 32A	E-319414

Type 2 charging plug up to 63A, blue

- screw terminals - ready for wiring
- with integrated resistor coding
- configuration 3(1)P+N+PE and CP+PP
- protection degree IP44

up to 20A, 1-phase	E-209
up to 32A, 1-phase	E-210
up to 20A, 3-phase	E-211
up to 32A, 3-phase	E-212
up to 63A, 3-phase	E-213

Type 2 charging plug up to 63A, white

- screw terminals - ready for wiring
- with integrated resistor coding
- configuration 3(1)P+N+PE and CP+PP
- protection degree IP44

up to 20A, 1-phase	E-2094
up to 32A, 1-phase	E-2104
up to 20A, 3-phase	E-2114
up to 32A, 3-phase	E-2124
up to 63A, 3-phase	E-2134

Type 2 charging connector up to 63A, blue

- screw terminals - ready for wiring
- with integrated resistor coding
- configuration 3(1)P+N+PE and CP+PP
- protection degree IP44

up to 20A, 1-phase	E-309
up to 32A, 1-phase	E-310
up to 20A, 3-phase	E-311
up to 32A, 3-phase	E-312
up to 63A, 3-phase	E-313

Type 2 charging connector up to 63A, white

- screw terminals - ready for wiring
- with integrated resistor coding
- configuration 3(1)P+N+PE and CP+PP
- protection degree IP44

up to 20A, 1-phase	E-3094
up to 32A, 1-phase	E-3104
up to 20A, 3-phase	E-3114
up to 32A, 3-phase	E-3124
up to 63A, 3-phase	E-3134

Plug holder for charging connector

for type 2 charging connector	E-992
for type 1 charging connector	E-991

Order number:

Domestic-type charging socket with flat stand out

- nickel plated contacts
- for continuous current up to 16A
- with „normally open" NO auxiliary contact

German system	E-801911
Belgian/French system	E-801912
Swiss system	E-801913

Domestic-type charging socket with hinged lid interlock

- nickel plated contacts
- for continuous current up to 16A
- „normally open" NO auxiliary contact
- hinged lid interlock with actuator

German system	E-801921
Belgian/French system	E-801922
Swiss system	E-801923

Domestic-typec charging socket with hinged lid interlock and LED RGB lighting

- nickel plated contacts
- for continuous current up to 16A
- „normally open" NO auxiliary contact
- hinged lid interlock with actuator
- two-side LED RGB lighting

German system	E-801931
Belgian/French system	E-801932
Swiss system	E-801933

Domestic-type charging socket

- nickel plated contacts
- for continuous current up to 16A
- „normally open" NO auxiliary contact

German system	E-801941
Belgian/French system	E-801942
Swiss system	E-801943

Domestic-type charging socket with LED RGB lighting

- nickel plated contacts
- for continuous current up to 16A
- „normally open" NO auxiliary contact
- two-side LED RGB lighting

German system	E-801951
Belgian/French system	E-801952
Swiss system	E-801953

CHARGING SYSTEM COMPONENTS IN ACCORDANCE WITH IEC 60884-1, VDE 0620, SEV1011 AND IEC 61851-1

Order number:

16A 230V domestic-type charging socket, German schuko system

- protection degree IP54
- flange 50 x 50 mm
- nickel plated contacts
- „normally open" NO auxiliary contact
- for continuous current up to 16A

Colour: blue	E-7184
Colour: black	E-71073

16A 230V domestic-type charging socket

- protection degree IP20
- without hinged lid
- flange 50 x 50 mm
- nickel plated contacts
- „normally open" NO auxiliary contact
- for continuous current up to 16A

German system	Colour: blue	E-71070
	Colour: black	E-71075
Belg./French system	Colour: blue	E-71117
	Colour: black	E-71089

16A 230V domestic-type charging socket, Belgian/French system

- protection degree IP54
- flange 50 x 50 mm
- nickel plated contacts
- „normally open" NO auxiliary contact
- for continuous current up to 16A

Colour: blue	E-71067
Colour: black	E-71074

Type 23 domestic-type charging socket, Swiss system

- protection degree IP54
- flange 50 x 50 mm
- nickel plated contacts
- „normally open" NO auxiliary contact
- for continuous current up to 16A

Colour: blue	E-7707
Colour: black	E-7708

CHARGING SYSTEM COMPONENTS IN ACCORDANCE WITH IEC 60309-1,2 AND IEC 61851-1

CEE-standard charging socket 1P+N+PE 230V 6h IP 44

- angled 20°
- flange 85 x 85 mm
- 70 x 70 mm mounting holes
- nickel plated contacts
- double auxiliary contact „normally open" NO ˆ and „normally closed" NC

up to 16A	E-120412
up to 32A	E-120416

CEE-standard charging socket 3P+N+PE 400V 6h IP 44

- angled 20°
- flange 85 x 85 mm
- 70 x 70 mm mounting holes
- nickel plated contacts
- double auxiliary contact „normally open" NO and „normally closed" NC

up to 16A	E-120414
up to 32A	E-120413

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