

# EV-GBG3K-3AC16A-5,0M2,5ESBK01 - AC charging cable



1623512

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CHARX connect comfort, GB/T, AC charging cable, 16 A permanent, 440 V AC, with vehicle charging connector and open cable end, cable: 5 m, black, straight, with protective cap, with locking option for padlock, housing: black, gray, PHOENIX CONTACT logo, GB/T 20234.2-2015, GB/T 18487.1-2015, for charging electric vehicles (EV) with alternating current (AC) via GB/T vehicle charging inlets

## Product description

AC charging cable with vehicle charging connector and free cable end for charging electric vehicles (EV) with alternating current (AC) via GB/T vehicle charging inlets, for installation at charging stations for e-mobility (EVSE)

## Your advantages

- Complete product range
- Convenient handling due to the ergonomic, triple award-winning design
- Available with your logo on request - for consistent branding of your charging station
- Longitudinal water tightness reliably prevents water ingress
- Developed and produced in accordance with the IATF 16949 automotive standard and ISO 9001
- Tested in accordance with automotive standards LV124, LV214, and LV215-2
- Tested in accordance with EV Ready 37 requirements

## Commercial data

Item number	1623512
Packing unit	1 pc
Note	Made to order (non-returnable)
Sales key	EM01
Product key	XWBAAF
GTIN	4055626177939
Weight per piece (including packing)	1,874 g
Weight per piece (excluding packing)	1,870 g
Customs tariff number	85444290
Country of origin	PL

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## Technical data

### Product properties

Product type	AC charging cable
Product family	CHARX connect comfort
Application	for charging electric vehicles (EV) with alternating current (AC) via GB/T vehicle charging inlets for installation at charging stations for electromobility (EVSE)
Design	with protective cap with locking option for padlock
Charging standard	GB/T
Charging mode	Mode 3, Case C
Affixed logo	PHOENIX CONTACT logo

### Electrical properties

Type of signal transmission	Pulse width modulation
Note on the connection method	Crimp connection, cannot be disconnected
Coding	680 $\Omega$ (between PE and CC)

#### Charging power and current (AC charging (3-phase))

Type of charging current	AC 3-phase
Charging current	16 A AC (3-phase)
Charging power	12.39 kW (3-phase)
Rated voltage	440 V

#### Pin assignment (Leistungskontakte)

Number	5 (L1, L2, L3, N, PE)
Rated voltage	440 V
Rated current	16 A

#### Pin assignment (Signalkontakte)

Number	2 (CP, CC)
Rated voltage	30 V AC
Rated current	2 A

## Dimensions

#### Vehicle charging connector

Width	55.9 mm
Height	85.4 mm
Depth	207.6 mm

## Material specifications

Color (Housing)	black (9005)
Color (Handle area)	black (9005)
Color (Mating face)	black (9005)

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Color (Protective cap)	black (9005)
Color (Cable)	black (9005)
Material (Vehicle charging connector)	Plastic
Material (Cable outer sheath)	TPE-U
Material (Contact surface)	Silver

## Cable/line

Cable length	5 m
Wiring standards/regulations	prEN 50620/DIN EN 50620
Wiring certifications	VDE
Cable weight	max. 250.00 kg/km
Cable type	Class 5
Cable type	straight
Cable structure	5 x 2.5 mm <sup>2</sup> + 1 x 0.5 mm <sup>2</sup>
External cable diameter	12.80 mm ±0.4 mm
Outer sheath, material	TPE-U
Stripping length of the sheath	70 mm ±5 mm
Stripping length	70 mm ±5 mm
Cable resistance	≤ 0.00798 Ω/m (based on a power core, at an ambient temperature of 20°C)
Bending radius	min. 192 mm (15x diameter)
Cable length	5 m
Stripping length	70 mm ±5 mm
External cable diameter	12.80 mm ±0.4 mm
Cable type	Class 5
Wiring certifications	VDE
Wiring standards/regulations	prEN 50620/DIN EN 50620
Cable resistance	≤ 0.00798 Ω/m (based on a power core, at an ambient temperature of 20°C)

## Mechanical properties

### Mechanical data

Insertion/withdrawal cycles	> 10000
Insertion force	< 100 N

## Environmental and real-life conditions

### Ambient conditions

Degree of protection (Vehicle charging connector)	IP55 (plugged in; when plugged in and ready to operate, the degree of protection is only ensued if both plug-in components are original products from Phoenix Contact or suitable standard-compliant products)
Degree of protection (Protective cap)	IP54
Ambient temperature (operation)	-30 °C ... 50 °C
Ambient temperature (storage/transport)	-40 °C ... 80 °C
Altitude	5000 m (above sea level)

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## Standards and regulations

Standards	
Standards/regulations	GB/T 20234.2-2015
	GB/T 18487.1-2015

# EV-GBG3K-3AC16A-5,0M2,5ESBK01 - AC charging cable

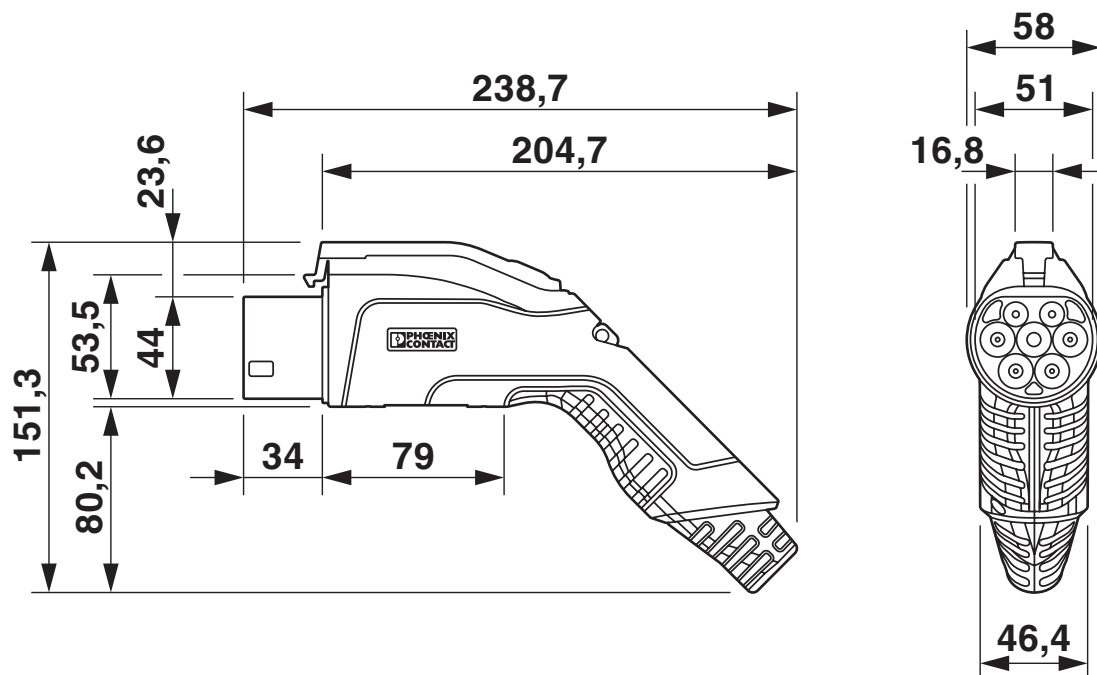


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## Drawings

Dimensional drawing



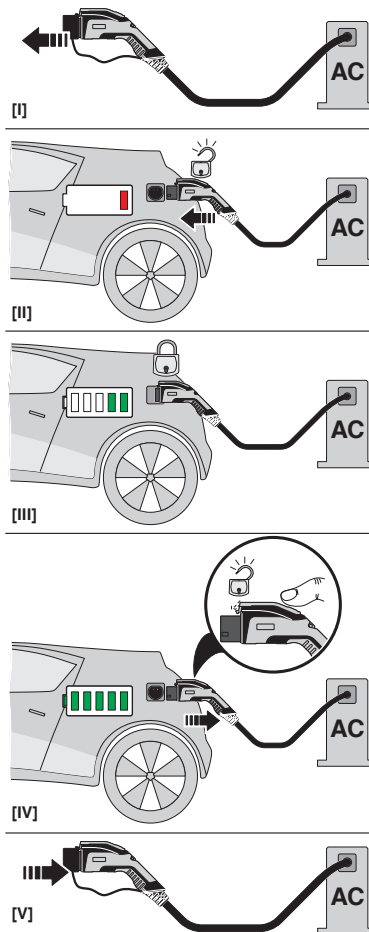
Make sure that the vehicle charging connector is placed in an appropriate charging connector holder, which ensures a minimum protection rating of IP24 in accordance with IEC 61851-1, for the entire time between charging. To create this charging connector holder, use the dimensions of the vehicle charging connector. Detailed dimensions can also be found in the Download area.

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## Schematic diagram



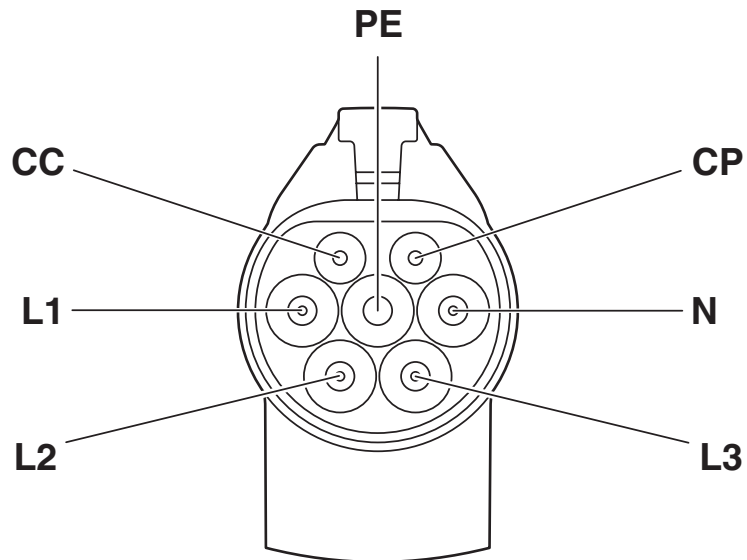
## Operating instructions

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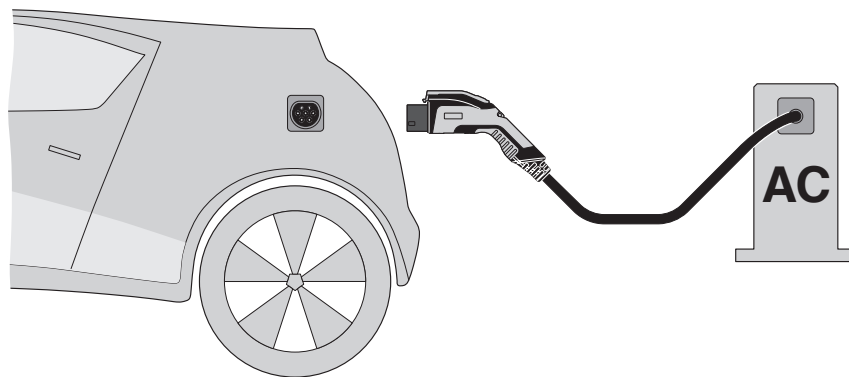
<https://www.phoenixcontact.com/us/products/1623512>

Schematic diagram



Pin assignment of the Vehicle Connector

Schematic diagram



Terminology definition

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## Classifications

### ETIM

ETIM 8.0	EC002897
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### UNSPSC

UNSPSC 21.0	39121500
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## Environmental product compliance

### EU RoHS

Fulfills EU RoHS substance requirements	Yes
Exemption	6(c)

### China RoHS

Environment friendly use period (EFUP)	EFUP-10
	An article-related China RoHS declaration table can be found in the download area for the respective article under "Manufacturer declaration". For all articles with EFUP-E, no China RoHS declaration table issued and required.

### EU REACH SVHC

REACH candidate substance (CAS No.)	Lead(CAS: 7439-92-1)
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