

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



1623512

<https://www.phoenixcontact.com/us/products/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
Type	AC charging cable with vehicle charging connector and open cable end
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 (Power contacts)

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

### Pin assignment (Signal contacts)

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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1623512

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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



1623512

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## Drawings

Dimensional drawing



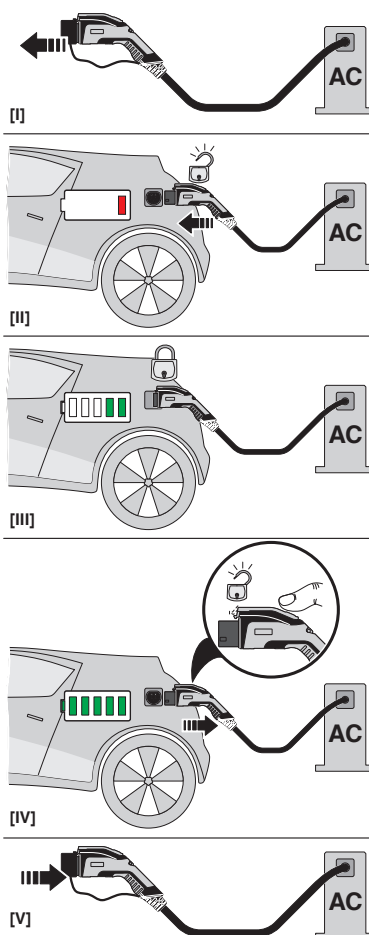
Make sure that the vehicle charging connector is placed in an appropriate charging connector holder, which ensures a minimum protection rating of IP24 in accordance with IEC 61851-1, for the entire time between charging. To create this charging connector holder, use the dimensions of the vehicle charging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

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1623512

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## Schematic diagram



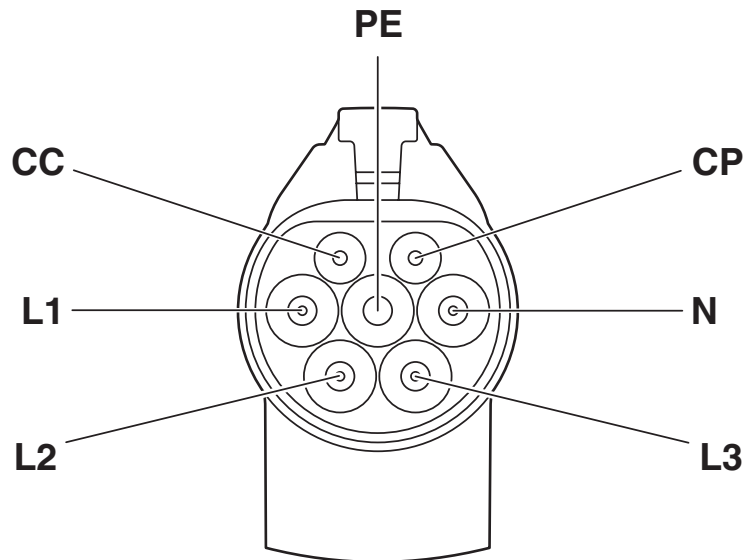
Operating instructions

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Schematic diagram



Pin assignment of the Vehicle Connector

Schematic diagram



Terminology definition

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## Classifications

### 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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