

# EV-GBM3C-1AC16A-5,0M2,5ESOG00 - AC charging cable



1408166

<https://www.phoenixcontact.com/us/products/1408166>

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CHARX connect, GB/T, AC charging cable, 16 A permanent, 250 V AC, with vehicle charging connector and open cable end, cable: 5 m, black, straight, with protective cap, housing: black, gray, PHOENIX CONTACT logo, GB/T 20234.2, 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	1408166
Packing unit	1 pc
Minimum order quantity	1 pc
Product key	XWBAAF
GTIN	4046356856058
Weight per piece (including packing)	2.35 kg
Weight per piece (excluding packing)	1.73 kg
Country of origin	CN

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## Technical data

### Product properties

Product type	AC charging cable
Product family	CHARX connect
Type	AC charging cable with vehicle charging connector and open cable end
Design	with protective cap
Charging standard	GB/T
Charging mode	Mode 3, Case C
Affixed logo	PHOENIX CONTACT logo
Label	14.1 mm x 44.8 mm (customer logo on request)
Customer variations	On request

### 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, 1-phase)

Type of charging current	AC single-phase
Charging current	16 A AC (1-phase)
Charging power	4 kW (1-phase)
Rated voltage	250 V

### Pin assignment (Power contacts)

Number	3 (L, N, PE)
Rated voltage	250 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	58 mm
Height	151.3 mm
Depth	238.7 mm

## Material specifications

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

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Color (Actuating element)	black (9005)
Color (Mating face)	black (9005)
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
Cable weight	max. 163.00 kg/km
Cable type	Class 6
Cable type	straight
Cable structure	3 x 2.5 mm <sup>2</sup> + 1 x 0.5 mm <sup>2</sup>
External cable diameter	10.50 mm ±0.4 mm
Outer sheath, material	TPE
Stripping length of the sheath	45 mm ±10 mm
Stripping length	45 mm ±10 mm
Cable resistance	≤ 0.0076 Ω/m (based on a power core, at an ambient temperature of 20°C)
Bending radius	min. 157.5 mm (15x diameter)
Cable length	5 m
Stripping length	45 mm ±10 mm
External cable diameter	10.50 mm ±0.4 mm
Cable type	Class 6
Cable resistance	≤ 0.0076 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
Withdrawal 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

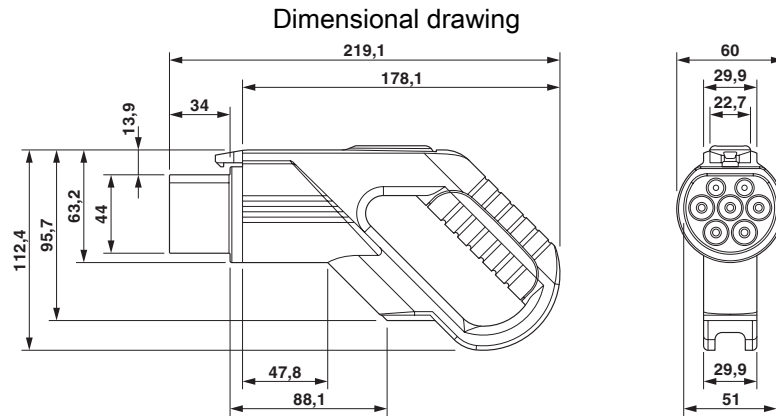
GB/T 20234.2

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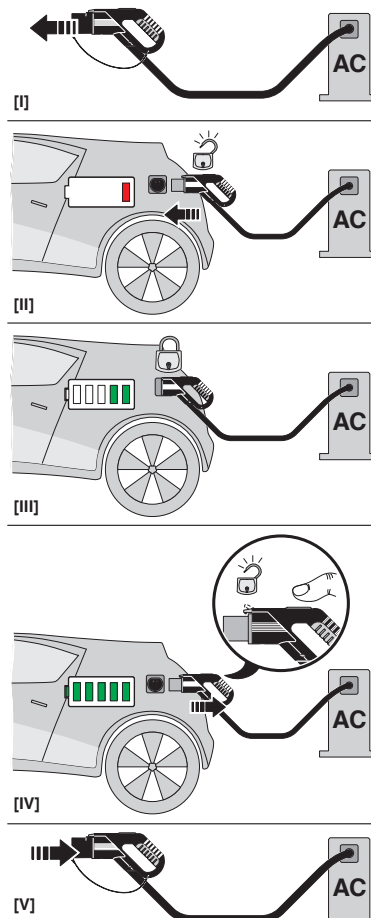
<https://www.phoenixcontact.com/us/products/1408166>

## Drawings



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.

## Schematic diagram



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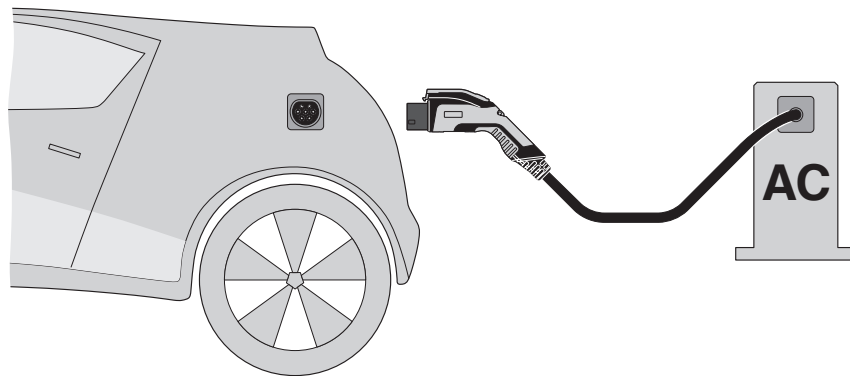
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Schematic diagram



Pin assignment of the Vehicle Connector

Schematic diagram



Terminology definition

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## Classifications

### ECLASS

ECLASS-15.0	27144705
ECLASS-13.0	27144705

### ETIM

ETIM 10.0	EC002897
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### UNSPSC

UNSPSC 21.0	39121500
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## Environmental product compliance

### 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.
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### EU REACH SVHC

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