

EV-T1G2C-1AC80A-25FT6ASBK11T - AC charging cable



1277166

<https://www.phoenixcontact.com/us/products/1277166>

Please be informed that the data shown in this PDF document is generated from our online catalog. Please find the complete data in the user documentation. Our general terms of use for downloads are valid.



CHARX connect comfort, Type 1, AC charging cable, 80 A permanent, 250 V AC, with vehicle charging connector and open cable end, cable: 25 ft, black, straight, with protective cap, with temperature sensors, PHOENIX CONTACT logo, NOTE: Cable management may be required., SAE J1772, for charging electric vehicles (EV) with alternating current (AC) via type 1 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 type 1 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
- Laser-marked mating face in accordance with DIN EN 17186

Commercial data

| | |
|--------------------------------------|---------------|
| Item number | 1277166 |
| Packing unit | 1 pc |
| Minimum order quantity | 1 pc |
| Sales key | EM01 |
| Product key | XWBDAF |
| GTIN | 4063151471019 |
| Weight per piece (including packing) | 3,210 g |
| Weight per piece (excluding packing) | 2,874 g |
| Customs tariff number | 85444290 |
| Country of origin | PL |

EV-T1G2C-1AC80A-25FT6ASBK11T - AC charging cable



1277166

<https://www.phoenixcontact.com/us/products/1277166>

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 type 1 vehicle charging inlets |
| | for installation at charging stations for electromobility (EVSE) |
| Design | with protective cap with temperature sensors |
| Charging standard | Type 1 |
| Charging mode | AC level 2 |
| Affixed logo | PHOENIX CONTACT logo |
| Customer variations | On request |

Electrical properties

Charging power and current (AC charging (1-phase))

| | |
|--------------------------|-------------------|
| Type of charging current | AC single-phase |
| Charging current | 80 A AC (1-phase) |
| Charging power | 20 kW (1-phase) |
| Rated voltage | 250 V |

Pin assignment (Leistungskontakte)

| | |
|-------------------------------|------------------------------------------|
| Note on the connection method | Crimp connection, cannot be disconnected |
| Number | 3 (L1, N, PE) |
| Rated voltage | 250 V AC |
| Rated current | 80 A |

Pin assignment (Signalkontakte)

| | |
|-------------------------------|------------------------------------------------------|
| Note on the connection method | Crimp connection, cannot be disconnected |
| Type of signal transmission | Pulse width modulation |
| Number | 2 (CP, CS) |
| Rated voltage | 30 V AC |
| Rated current | 2 A |
| Coding | 480 Ω (Lever actuated) 150 Ω (Lever not actuated) |

Temperature sensors (Pt 1000)

| | |
|------------------------|-------------------|
| Sensor type | Pt 1000 |
| Switch-off temperature | 90 °C |
| Ambient temperature | -40 °C ... 165 °C |

Dimensions

Vehicle charging connector

EV-T1G2C-1AC80A-25FT6ASBK11T - AC charging cable



1277166

<https://www.phoenixcontact.com/us/products/1277166>

| | |
|--------|----------|
| Width | 58 mm |
| Height | 151.1 mm |
| Depth | 236.1 mm |

Material specifications

| | |
|---------------------------------------|----------------------------------------------------------------------|
| Color (Housing) | black (9005) |
| Color (Handle area) | black (9005) |
| Color (Actuating element) | silver grey (7001) |
| 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 |
| Note | The color appearance and gloss level of the charging cable may vary. |

Cable/line

| | |
|--------------------------------|-------------------------------------------------------------------------|
| Cable length | 25 ft |
| Wiring standards/regulations | UL 62 |
| Cable weight | max. 636.00 kg/km |
| Cable type | straight |
| Cable structure | 2 x 6 AWG + 1 x 8 AWG + 6 x 22 AWG |
| External cable diameter | 19.40 mm ±0.4 mm |
| Outer sheath, material | TPE |
| Stripping length of the sheath | 70 mm ±5 mm |
| Stripping length | 70 mm ±5 mm |
| Cable resistance | ≤ 0.0014 Ω/m (based on a power core, at an ambient temperature of 20°C) |
| Bending radius | min. 194 mm (10x) |

Mechanical properties

| | |
|-----------------------------|---------|
| Mechanical data | |
| Insertion/withdrawal cycles | > 10000 |
| Insertion force | < 75 N |
| Withdrawal force | < 75 N |

Environmental and real-life conditions

| | |
|-----------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Ambient conditions | |
| Degree of protection (Vehicle charging inlet) | IP44 (plugged in; when plugged in and ready to operate, the degree of protection is only ensured 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 |

EV-T1G2C-1AC80A-25FT6ASBK11T - AC charging cable



1277166

<https://www.phoenixcontact.com/us/products/1277166>

| | |
|-----------------------------------------|--------------------------|
| Ambient temperature (storage/transport) | -40 °C ... 80 °C |
| Altitude | 5000 m (above sea level) |

Standards and regulations

Connection in accordance with standard

| | |
|-------------------------------------|------------------------------------------------------------------------------------------------------------------------------------|
| Normative cable length restrictions | NOTE: Cable management may be required. Cable management is required in the US if the cable length exceeds 7.5 m (IEC 61851-1). |
|-------------------------------------|------------------------------------------------------------------------------------------------------------------------------------|

Standards

| | |
|-----------------------|-----------|
| Standards/regulations | SAE J1772 |
|-----------------------|-----------|

EV-T1G2C-1AC80A-25FT6ASBK11T - AC charging cable

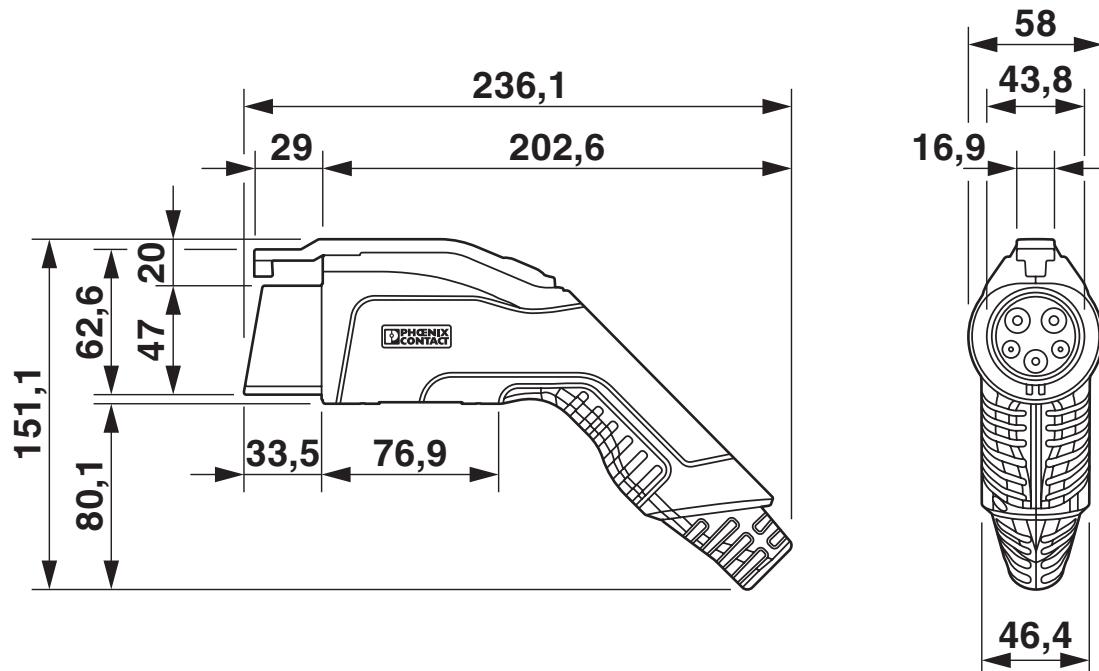


1277166

<https://www.phoenixcontact.com/us/products/1277166>

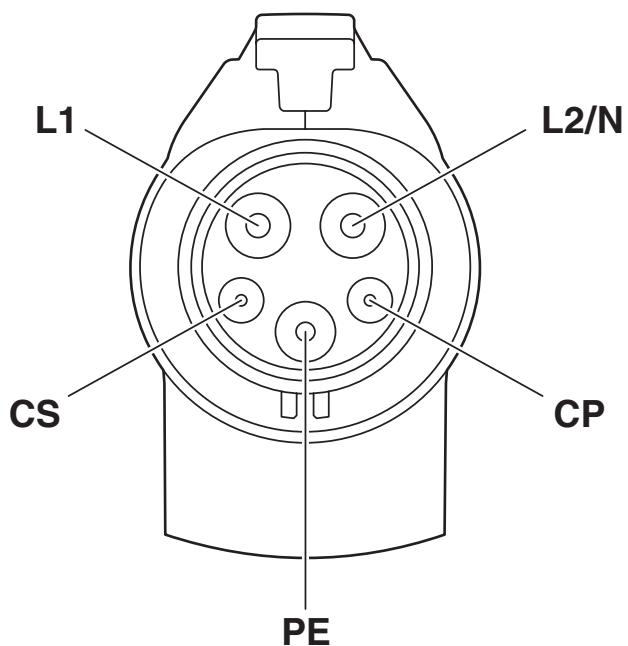
Drawings

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.

Connection diagram



Pin assignment of the Vehicle Connector

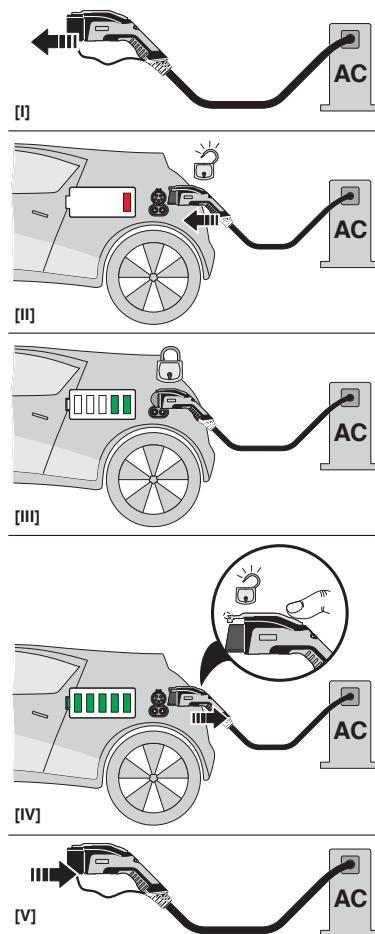
EV-T1G2C-1AC80A-25FT6ASBK11T - AC charging cable



1277166

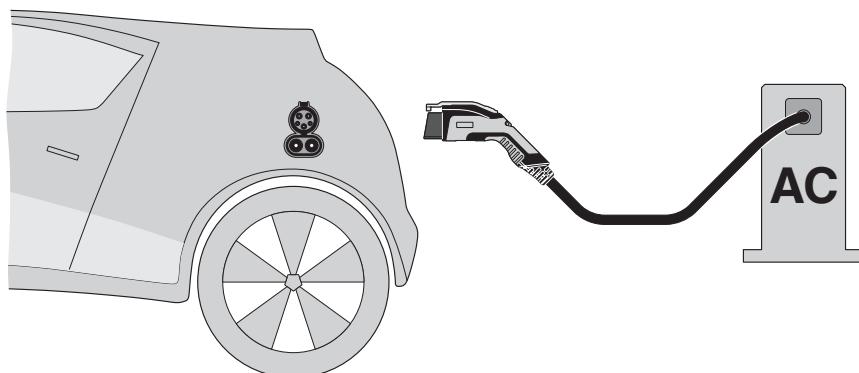
<https://www.phoenixcontact.com/us/products/1277166>

Schematic diagram



Operating instructions

Schematic diagram



Terminology definition

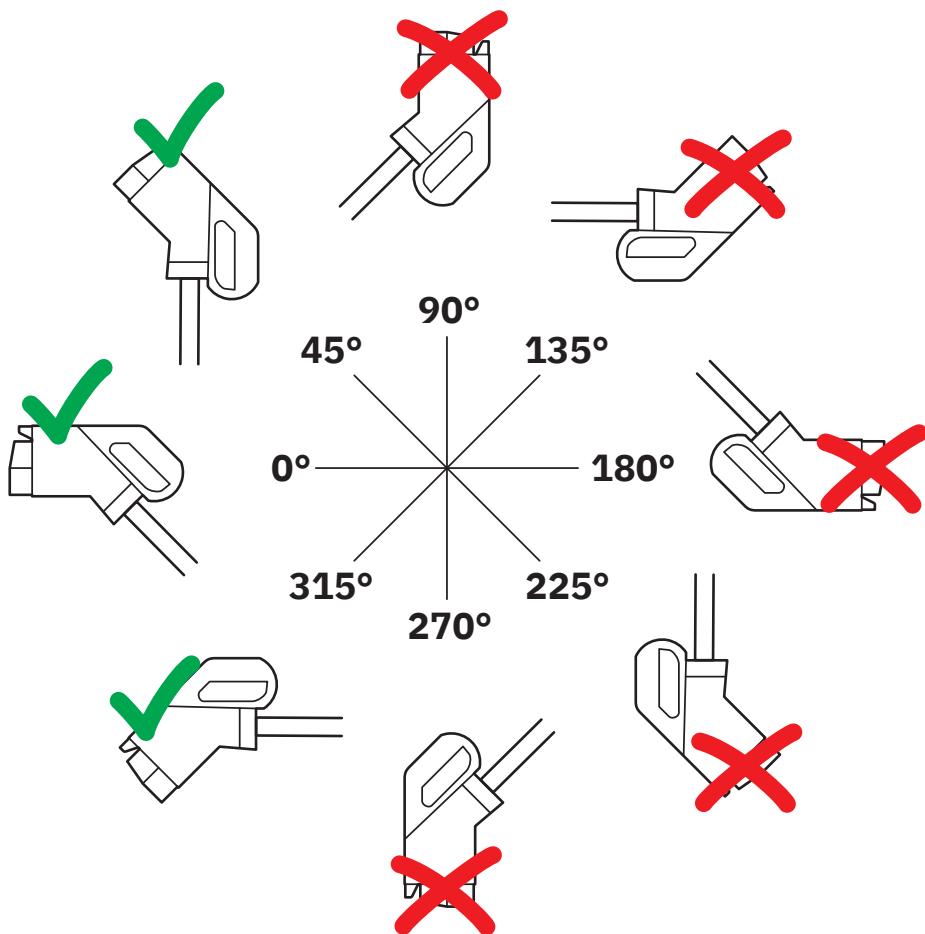
EV-T1G2C-1AC80A-25FT6ASBK11T - AC charging cable



1277166

<https://www.phoenixcontact.com/us/products/1277166>

Schematic diagram



Installation positions

EV-T1G2C-1AC80A-25FT6ASBK11T - AC charging cable



1277166

<https://www.phoenixcontact.com/us/products/1277166>

Approvals

ⓘ To download certificates, visit the product detail page: <https://www.phoenixcontact.com/us/products/1277166>

| cULus Recognized | | Approval ID: E473195-20160303 | | |
|------------------|--|-------------------------------|-----------------------|-------------------|
| | | Nominal voltage U_N | Nominal current I_N | Cross section AWG |
| keine | | 250 V | 80 A | - |
| | | | | - |

EV-T1G2C-1AC80A-25FT6ASBK11T - AC charging cable



1277166

<https://www.phoenixcontact.com/us/products/1277166>

Classifications

ECLASS

| | |
|-------------|----------|
| ECLASS-13.0 | 27144705 |
| ECLASS-15.0 | 27144705 |

ETIM

| | |
|----------|----------|
| ETIM 9.0 | EC002897 |
|----------|----------|

UNSPSC

| | |
|-------------|----------|
| UNSPSC 21.0 | 39121500 |
|-------------|----------|

EV-T1G2C-1AC80A-25FT6ASBK11T - AC charging cable



1277166

<https://www.phoenixcontact.com/us/products/1277166>

Environmental product compliance

EU RoHS

| | |
|-----------------------------------------|--------------------|
| Fulfills EU RoHS substance requirements | Yes, No exemptions |
|-----------------------------------------|--------------------|

China RoHS

| | |
|----------------------------------------|------------------------------------------|
| Environment friendly use period (EFUP) | EFUP-E |
| | No hazardous substances above the limits |

EU REACH SVHC

| | |
|-------------------------------------|-------------------------------------------------------------|
| REACH candidate substance (CAS No.) | 6,6'-di-tert-butyl-2,2'-methylenedi-p-cresol(CAS: 119-47-1) |
|-------------------------------------|-------------------------------------------------------------|

Phoenix Contact 2025 © - all rights reserved
<https://www.phoenixcontact.com>

Phoenix Contact USA
586 Fulling Mill Road
Middletown, PA 17057, United States
(+717) 944-1300
info@phoenixcon.com