

DC charging cable - EV-T2M4CC-DC80A-6,0M16ESBK11 - 1106945

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's documentation. Our General Terms of Use for Downloads are valid
(<http://phoenixcontact.com/download>)



CHARX connect, DC charging cable with vehicle charging connector and open cable end, Housing color black-black, with replaceable mating face frame, with connected PP contact, For charging electric vehicles (EV) with direct current (DC), for installation at charging stations for electromobility (EVSE), CCS type 2, Combined Charging System, IEC 62196-3, 80 A / 1000 V (DC), D-Line 1.1, "PHOENIX CONTACT" logo, cable: 6 m, black, straight, NOTE: Cable management may be required.

Product Description

DC charging cable with Vehicle Connector and open cable end for fast charging of electric vehicles (EV) with direct current (DC) via CCS type 2 Vehicle Inlets, for installation at charging stations for E-Mobility (EVSE)

Your advantages

- ✓ Consistent design of all Phoenix Contact Vehicle Connectors and Infrastructure Plugs
- ✓ Silver-plated surface of the power and signal contacts
- ✓ Developed and produced in accordance with the IATF 16949 automotive standard and ISO 9001
- ✓ Convenient handling, thanks to the ergonomic handle
- ✓ Maintenance-friendly replacement of the mating face frame
- ✓ Integrated temperature sensors for monitoring the temperature at the power contacts

RoHS

Key Commercial Data

Packing unit	1
GTIN	 4 063151 005115
GTIN	4063151005115
Custom tariff number	85444290

Technical data

Product definition

Type	DC charging cable
	with vehicle charging connector and open cable end
	Housing color black-black

DC charging cable - EV-T2M4CC-DC80A-6,0M16ESBK11 - 1106945

Technical data

Product definition

	with replaceable mating face frame
	with connected PP contact
Application	For charging electric vehicles (EV) with direct current (DC)
	for installation at charging stations for electromobility (EVSE)
Affixed logo	"PHOENIX CONTACT" logo
Design	D-Line 1.1
Standards/regulations	IEC 62196-3
Charging standard	CCS type 2
	Combined Charging System
Charging mode	Mode 4
Normative cable length restrictions	NOTE: Cable management may be required.
	Cable management is required in certain regions if the cable length exceeds 5.0 m (Switzerland) or 7.5 m (USA) (IEC 61851-1).

Dimensions

Height	139 mm (Vehicle charging connector)
Width	75 mm (Vehicle charging connector)
Depth	267 mm (Vehicle charging connector)
Conductor length	6 m
Stripping length	140 mm ±10 mm

Ambient conditions

Ambient temperature (operation)	-30 °C ... 50 °C
Ambient temperature (storage/transport)	-40 °C ... 80 °C
Max. altitude	5000 m (above sea level)
Degree of protection	IP44 (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)

Electrical properties

Charging power (nominal operation)	80 kW
Number of power contacts	3 (PE, DC+, DC-)
Rated current of power contacts	80 A (up to 40 °C)
Rated voltage for power contacts	1000 V DC
Number of signal contacts	2 (CP, PP)
Rated current for signal contacts	2 A
Rated voltage for signal contacts	30 V AC
Type of signal transmission	Pulse width modulation with modulated Powerline communication according to ISO/IEC 15118 / DIN SPEC 70121
Note on the connection method	Crimp connection, cannot be disconnected

DC charging cable - EV-T2M4CC-DC80A-6,0M16ESBK11 - 1106945

Technical data

Electrical properties

Resistor coding	1500 Ω (between PE and PP)
	PP signal contact connected to cable
Temperature monitoring	2x Pt 1000

Mechanical properties

Insertion/withdrawal cycles	> 10000
Insertion force	< 100 N
Withdrawal force	< 100 N

Design

Design line	Standard
Housing color	black
Mating face color	black
Color handle area	black
Label	14.1 mm x 44.8 mm (customer logo on request)

Material

Housing material	Plastic
Material handle area	Plastic
Material mating face	Plastic
Flammability rating	V0

Cable

Cable structure	3 x 16 mm ² + 3 x 2 x 0.75 mm ²
Wiring standards/regulations	prEN 50620 / DIN EN 50620
Wiring class	Class 6
External cable diameter	21.2 mm $\pm$ 0.4 mm
Type of conductor	straight
Cable resistance	$\leq$ 0.00121 Ω /m (based on a power core, at an ambient temperature of 20°C)
Outer sheath, material	TPE-U
External sheath, color	black
Minimum bending radius	212 mm (10 x diameter)
Cable weight	max. 820 kg/km

Temperature sensors

Type of sensor	Pt 1000
Standards/regulations	DIN EN 60751
Recommended measured current	1 mA (1 V at 0°C)
Tolerance at the sensor with the recommended measured current	$\pm$ 1K

DC charging cable - EV-T2M4CC-DC80A-6,0M16ESBK11 - 1106945

Technical data

Temperature sensors

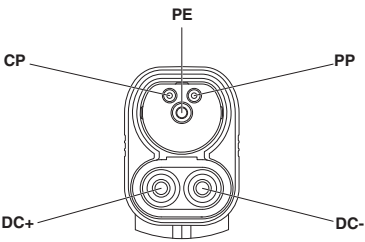
Temperature range	-50 °C ... 130 °C
Temperature coefficient (TCR)	3850 ppm/K
Long-term stability (max. R0-Drift)	0.06 % (After 1000 hours at 130°C)
Shutdown temperature	90 °C equivalent to a Pt 1000 value of 1346.5 Ω

Environmental Product Compliance

REACH SVHC	Lead 7439-92-1
China RoHS	Environmentally Friendly Use Period = 10;
	For details about hazardous substances go to tab "Downloads", Category "Manufacturer's declaration"

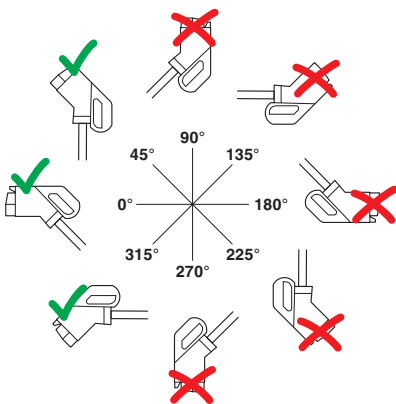
Drawings

Schematic diagram



Pin assignment of the Vehicle Connector

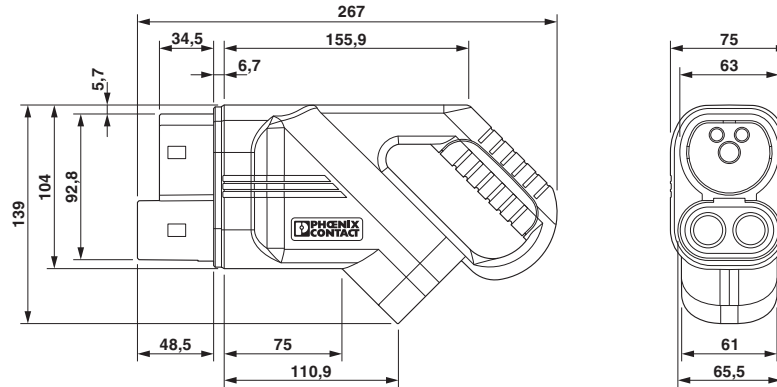
Schematic diagram



The resting position must be installed in the charging station such that the user cannot hang up the vehicle connector upside down (90° to 270°). However, positions rotated upward (45°) or downward (315°) are options for a resting position.

DC charging cable - EV-T2M4CC-DC80A-6,0M16ESBK11 - 1106945

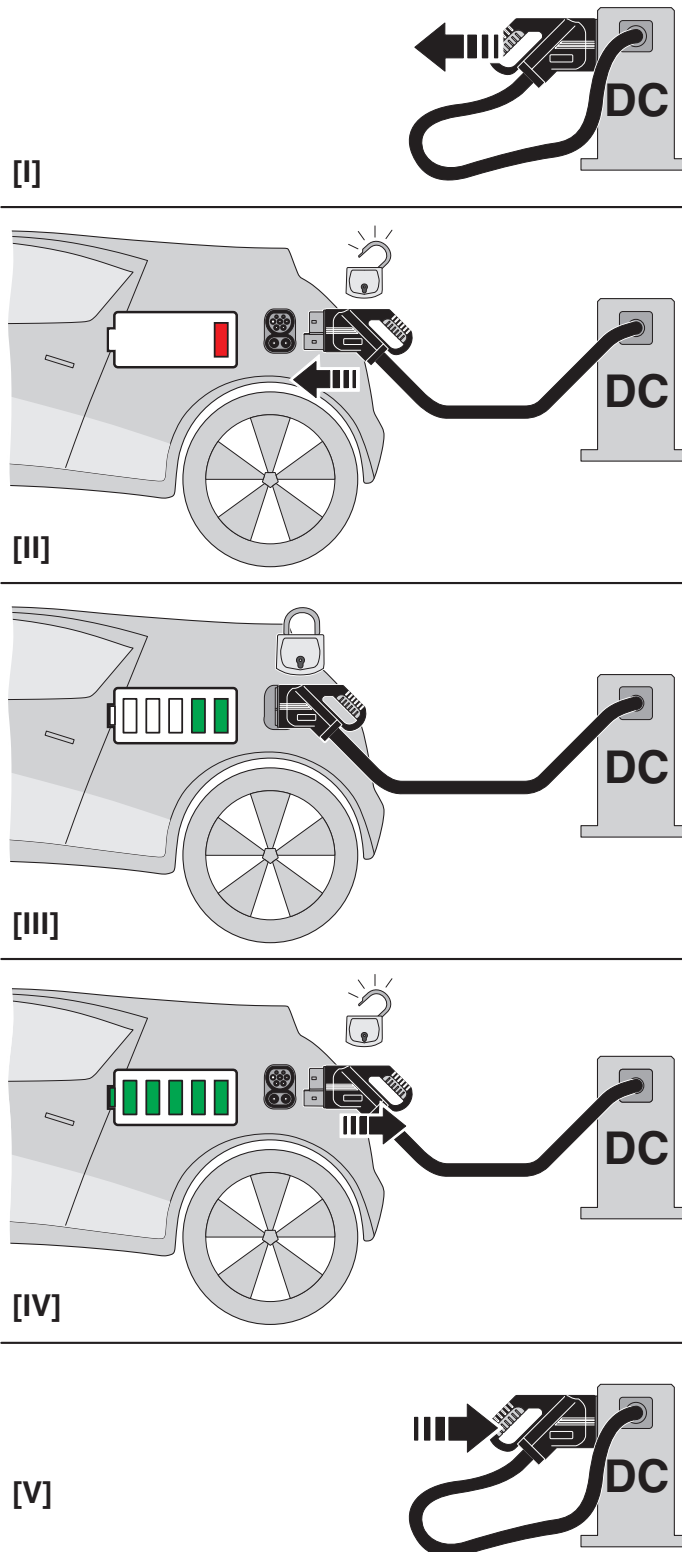
Dimensional drawing



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.

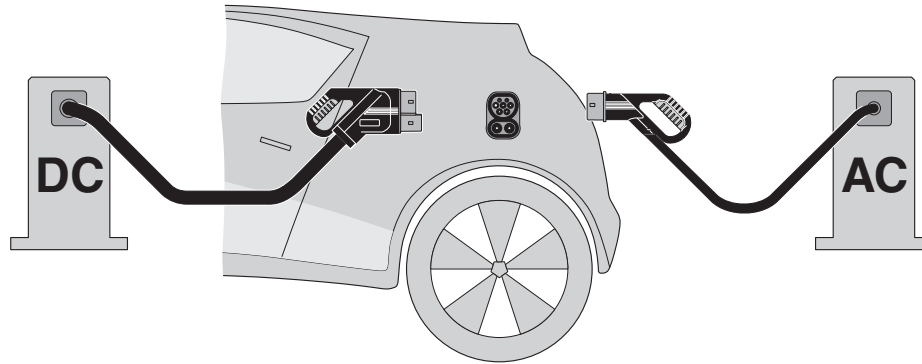
DC charging cable - EV-T2M4CC-DC80A-6,0M16ESBK11 - 1106945

Schematic diagram



DC charging cable - EV-T2M4CC-DC80A-6,0M16ESBK11 - 1106945

Schematic diagram



The Combined Charging System (CCS) principle - standard-compliant charging system for electric vehicles, which supports both conventional AC charging and fast DC charging. Both Vehicle Connectors fit into the CCS Vehicle Inlet.

Schematic diagram

DC charging cable - EV-T2M4CC-DC80A-6,0M16ESBK11 - 1106945

Classifications

eCl@ss

eCl@ss 10.0.1	27144705
eCl@ss 11.0	27144705
eCl@ss 9.0	27144705

ETIM

ETIM 7.0	EC002897
----------	----------

UNSPSC

UNSPSC 18.0	39121522
UNSPSC 19.0	39121522
UNSPSC 20.0	39121522
UNSPSC 21.0	39121522

Accessories

Accessories

Adhesive label

Label - EV-LABEL-K - 1309761



CHARX connect, Label, accordance to DIN EN 17186, for DC charging cables, for voltage range from 50 V to 500 V, Marking K for CCS type 2 vehicle charging connectors and type 2 vehicle charging inlets

Label - EV-LABEL-L - 1309765



CHARX connect, Label, accordance to DIN EN 17186, for DC charging cables, for voltage range from 200 V to 920 V, Marking L for CCS type 2 vehicle charging connectors and type 2 vehicle charging inlets

Charging connector holder

DC charging cable - EV-T2M4CC-DC80A-6,0M16ESBK11 - 1106945

Accessories

Charging connector holder - EV-T2CCS-PARK - 1624153



CHARX connect, Charging connector holder, for vehicle charging connectors on charging stations (EVSE), CCS type 2, IEC 62196-3, Front mounting, Item is not compatible with the HPC CCS type 2 charging cable from Phoenix Contact.

DC charging controller

DC charging controller - EV-PLCC-AC1-DC1 - 1624130



Programmable charging controller for DC and AC charging of electric vehicles in accordance with IEC 61851-1,-23, DIN SPEC 70121 with integrated 3G mobile network modem

DC power module

DC power module - CHARX PS/3AC/920DC/87.5KW - 1162690



CHARX power, Fast charging module for setting up DC charging stations, Rack mounting, input: 3-phase, output: 200 V DC...920 V DC / 125 A. The corresponding system control cabinet CHARX PS-CAB/4x87.5KW (Order No. 1165442) is necessary for operating the DC power module

DC power module - CHARX PS-M2/3AC/1000DC/30KW - 1232243



CHARX power, Fast charging module for setting up DC charging stations, 19" rack mounting, CAN bus, input: 3-phase, output: 150 V DC...1000 V DC / 0 A...100 A

DC power module - CHARX PS-M2/825DC/1000DC/30KW - 1296467



CHARX power, Fast charging module for setting up DC charging stations, 19" rack mounting, CAN bus, output: 150 V DC...1000 V DC / 0 A...100 A

DC charging cable - EV-T2M4CC-DC80A-6,0M16ESBK11 - 1106945

Accessories

Full screw connection

Cable gland - G-INS-M32-L68N-PNES-BK - 1424483



Cable gland, cable gland material: PA, external cable diameter 18 mm ... 25 mm, shielding: no, connecting thread: M32 x 1.5, color: jet black RAL 9005

Repair kit

Repair kit - EV-T2CCS-MF-M4X45-BIT - 1085796



CHARX connect, Repair kit, with replaceable mating face frame, with 5x M4X45 rounded head screws with Torx safety drive, with special bit for safety screwdriver, For replacement of the mating face frame of vehicle charging connectors, CCS type 2, Combined Charging System, IEC 62196-3, The vehicle connector housing does not have to be opened in order to replace the mating face frame.

Repair kit - EV-T2CCS-MF-M4X45 - 1081734



CHARX connect, Repair kit, with replaceable mating face frame, with 5x M4X45 rounded head screws with Torx safety drive, For replacement of the mating face frame of vehicle charging connectors, CCS type 2, Combined Charging System, IEC 62196-3, The vehicle connector housing does not have to be opened in order to replace the mating face frame.
