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# DC charging cable - EV-T2M4CC-DC125A-4,0M50ESBK00 - 1621650

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DC charging cable with vehicle connector, open cable end, CCS type 2, Combined Charging System, IEC 62196-3, 125 A / 1000 V (DC), design line Standard, cable: 4 m, black, straight, mating face: black, handle area: gray

## 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)

## Why buy this product

- Consistent design of all Phoenix Contact Vehicle Connectors and Infrastructure Plugs
- Silver-plated surface of the power and signal contacts
- Certified in accordance with IATF 16949:2016 and ISO 9001:2015
- Convenient handling, thanks to the ergonomic handle and additional, rubber grip components
- Integrated temperature sensors for monitoring the temperature at the power contacts



## Key Commercial Data

Packing unit	1 STK
GTIN	
GTIN	4046356950527

## Technical data

### Product definition

Product type	DC charging cable with vehicle connector, open cable end
Standards/regulations	IEC 62196-3
Charging standard	CCS type 2
	Combined Charging System
Charging mode	Mode 4

### Dimensions

Vehicle connector width	75.00 mm
Vehicle connector height	139.00 mm

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## Technical data

### Dimensions

Vehicle connector depth	267.00 mm
Conductor length	4 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)
	IP20 (when not plugged in, the required IP24 degree of protection must be ensured by other means, e.g., by a holder, see accessories)

### Electrical properties

Maximum charging power	125 kW
Number of power contacts	3 (PE, DC+, DC-)
Rated current of power contacts	125 A
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
Resistor coding	1500 Ω (between PE and PP)
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	gray
Label	14.1 mm x 44.8 mm (customer logo on request)

### Material

Housing material	Plastic
Material handle area	Soft plastic
Material mating face	Plastic
Flammability rating	V0
Material surface of contacts	Ag

### Cable



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## Technical data

### Cable

Cable structure	2 x 50 mm <sup>2</sup> + 1 x 25 mm <sup>2</sup> + 3 x 2 x 0.75 mm <sup>2</sup>
Wiring standards/regulations	prEN 50620 / DIN EN 50620
Wiring class	Class 6
Wiring certifications	VDE-Reg. 8798
External cable diameter	28.2 mm ±0.2 mm
Type of conductor	straight
Outer sheath, material	HFFR
External sheath, color	black
Minimum bending radius	423 mm (15 x diameter)

### Temperature sensors

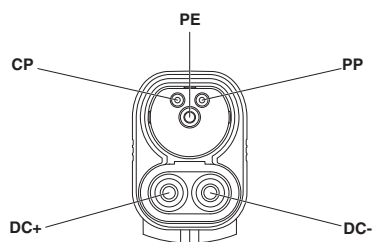
Type of sensor	Pt 1000
Standards/regulations	DIN EN 60751
Recommended measured current	1 mA (1 V at 0°C)
Tolerance at the sensor with the recommended measured current	±1K
Temperature range	-50 °C ... 130 °C
Temperature coefficient (TCR)	3850 ppm/K
Long-term stability (max. R0-Drift)	0.06 % (After 1000 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"

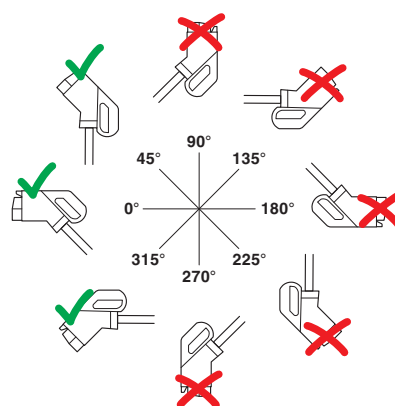
## Drawings

Schematic diagram



Pin assignment of the Vehicle Connector

Schematic diagram

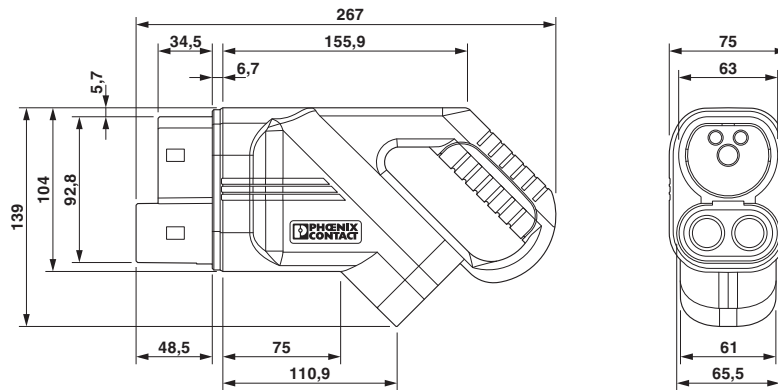


The resting position must be installed in the charging station such that the user cannot hang up the vehicle connector upside down (90° to 270°).

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However, positions rotated upward (45°) or downward (315°) are options for a resting position.

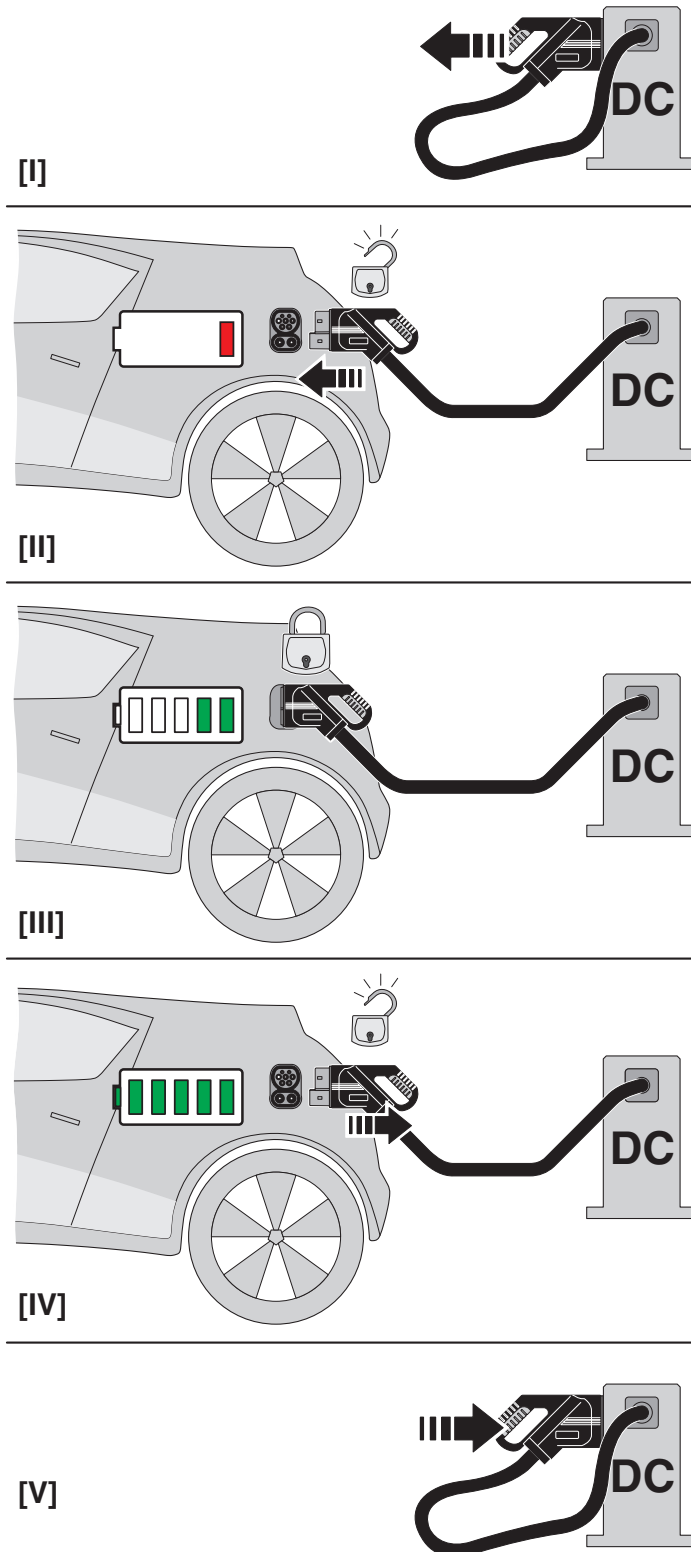
Dimensional drawing



Ensure that the vehicle connector is placed in an appropriate resting position that ensures a minimum protection rating of IP24 in accordance with IEC 61851-1 for the entire time between charging. Use the dimensions of the vehicle connector to create this type of resting position. Detailed specifications can also be found in the download area.

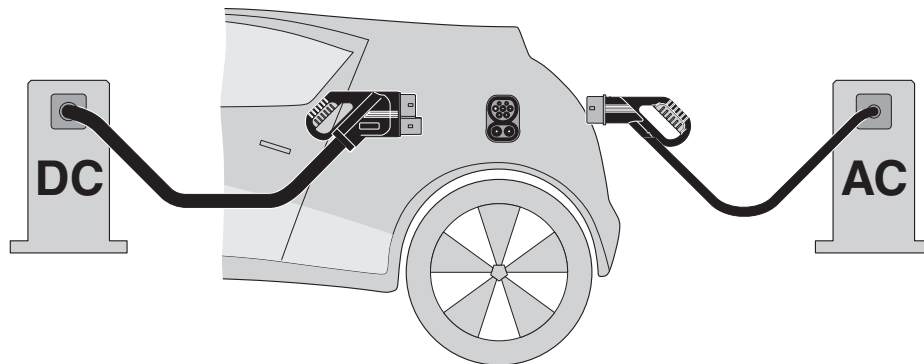
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Schematic diagram



## DC charging cable - EV-T2M4CC-DC125A-4,0M50ESBK00 - 1621650

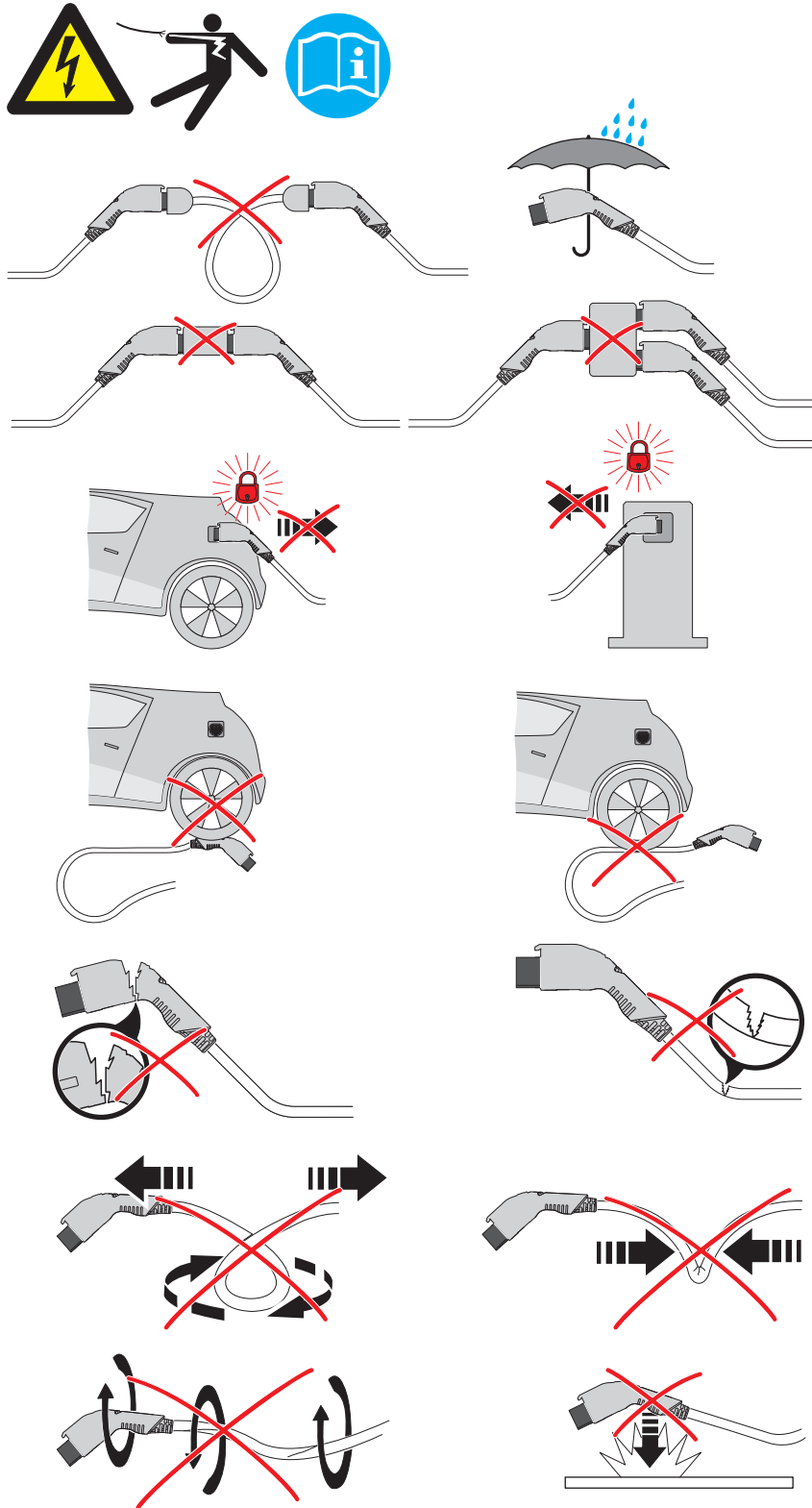
Schematic diagram



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.

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Schematic diagram





# DC charging cable - EV-T2M4CC-DC125A-4,0M50ESBK00 - 1621650

## Approvals

### Approvals

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#### Approvals


VDE approval of drawings / IECCE CB Scheme


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#### Ex Approvals

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### Approval details

VDE approval of drawings		<a href="http://www2.vde.com/de/Institut/Online-Service/VDE-gepruefteProdukte/Seiten/Online-Suche.aspx">http://www2.vde.com/de/Institut/Online-Service/VDE-gepruefteProdukte/Seiten/Online-Suche.aspx</a>	40040872
Nominal voltage UN		1000 V	
Nominal current IN		125 A	

IECEE CB Scheme		<a href="http://www.iecee.org/">http://www.iecee.org/</a>	DE1-59626
Nominal voltage UN		1000 V	
Nominal current IN		125 A	

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