

## DC charging cable - EV-GBM4C-DC125A-6,5M50ESBK00 - 1627546

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DC charging cable with Vehicle Connector, open cable end, with protective cap, GB/T, GB/T 20234.3-2015, 125 A / 750 V (DC), design line Standard, cable: 6.5 m, black, straight, NOTE: Cable management may be required., mating face: gray, 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 GB/T 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
- ✓ Material data available in the IMDS (International Material Data System of the automotive industry)
- ✓ Convenient handling, thanks to the ergonomic handle and additional, rubber grip components
- ✓ Integrated temperature sensors for monitoring the temperature at the power contacts
- ✓ Integrated interlock during charging



### Key Commercial Data

|              |   |
|--------------|---|
| Packing unit | 1 STK   |
| GTIN         | <br>4 055626 323206 |
| GTIN         | 4055626323206   |

### Technical data

#### Product definition

|                       |   |
|-----------------------|---|
| Product type          | DC charging cable with Vehicle Connector, open cable end, with protective cap |
| Standards/regulations | GB/T 20234.3-2015   |
| Charging standard     | GB/T  |
| Charging mode         | Mode 4  |
| Note                  | NOTE: Cable management may be required.                                       |

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## Technical data

### Product definition

|  |   |
|--|---|
|  | 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

|                          |               |
|--------------------------|---------------|
| Vehicle connector width  | 77.00 mm      |
| Vehicle connector height | 129.10 mm     |
| Vehicle connector depth  | 260.40 mm     |
| Conductor length         | 6.5 m         |
| Stripping length         | 500 mm ±20 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                    | IP55 (plugged in)        |
|   | IP54 (Protective cap)    |

### Electrical properties

|                                  |  |
|----------------------------------|--|
| Maximum charging power           | 93.75 kW                                 |
| Number of power contacts         | 3 (PE, DC+, DC-)                         |
| Rated current of power contacts  | 125 A                                    |
| Rated voltage for power contacts | 750 V DC                                 |
| Number of signal contacts        | 6 (S+, S-, A+, A-, CC1, CC2)             |
| Type of signal transmission      | CAN according to IEC 61851-24 Annex B    |
| Resistor coding                  | 1000 Ω (between PE and CC1 / PE and CC2) |
| 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       | gray   |
| Color handle area       | gray   |
| Actuating element color | gray   |
| Color protective cap    | black  |
| Label                   | 14.1 mm x 44.8 mm (customer logo on request) |

### Material

|                      |              |
|----------------------|--------------|
| Housing material     | Plastic      |
| Material handle area | Soft plastic |

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### Technical data

#### Material

|                              |         |
|------------------------------|---------|
| Actuating lever material     | Metal   |
| Material protective cap      | Plastic |
| Material mating face         | Plastic |
| Flammability rating          | V0      |
| Material surface of contacts | Ag      |

#### Cable

|                         |   |
|-------------------------|---|
| Cable structure         | 2 x 50 mm <sup>2</sup> + 1 x 16 mm <sup>2</sup> + 2 x 2.5 mm <sup>2</sup> + 9 x 0.5 mm <sup>2</sup> |
| Wiring class            | Class 6   |
| External cable diameter | 28 mm ±0.2 mm   |
| Type of conductor       | straight  |
| Outer sheath, material  | PUR   |
| External sheath, color  | black   |
| Minimum bending radius  | 420 mm (15 x diameter)  |

#### Locking

|                 |   |
|-----------------|---|
| Locking type    | Locking option for actuating lever with actuators integrated in the Vehicle Connector |
| Locking voltage | 13.2 V  |

#### 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 |

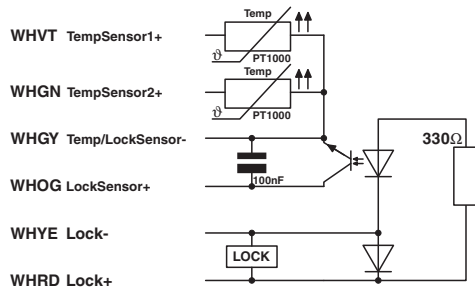
#### Environmental Product Compliance

|            |   |
|------------|---|
| China RoHS | Environmentally Friendly Use Period = 10;   |
|            | For details about hazardous substances go to tab "Downloads", Category "Manufacturer's declaration" |

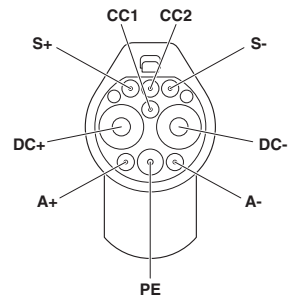
### Drawings

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Block diagram



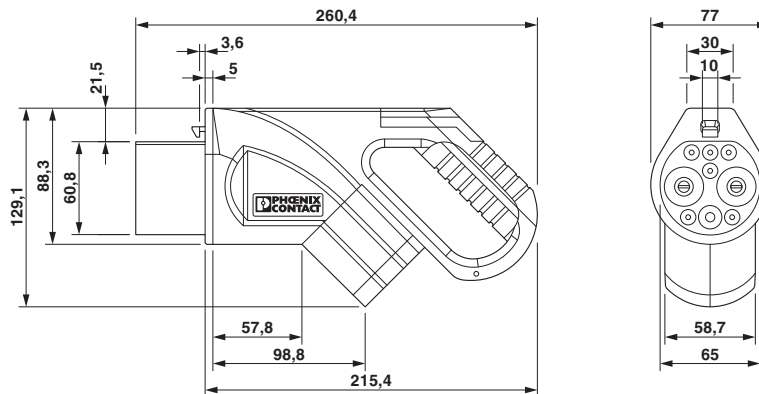
Schematic diagram



Pin assignment of the Vehicle Connector

Block diagram GB/T DC

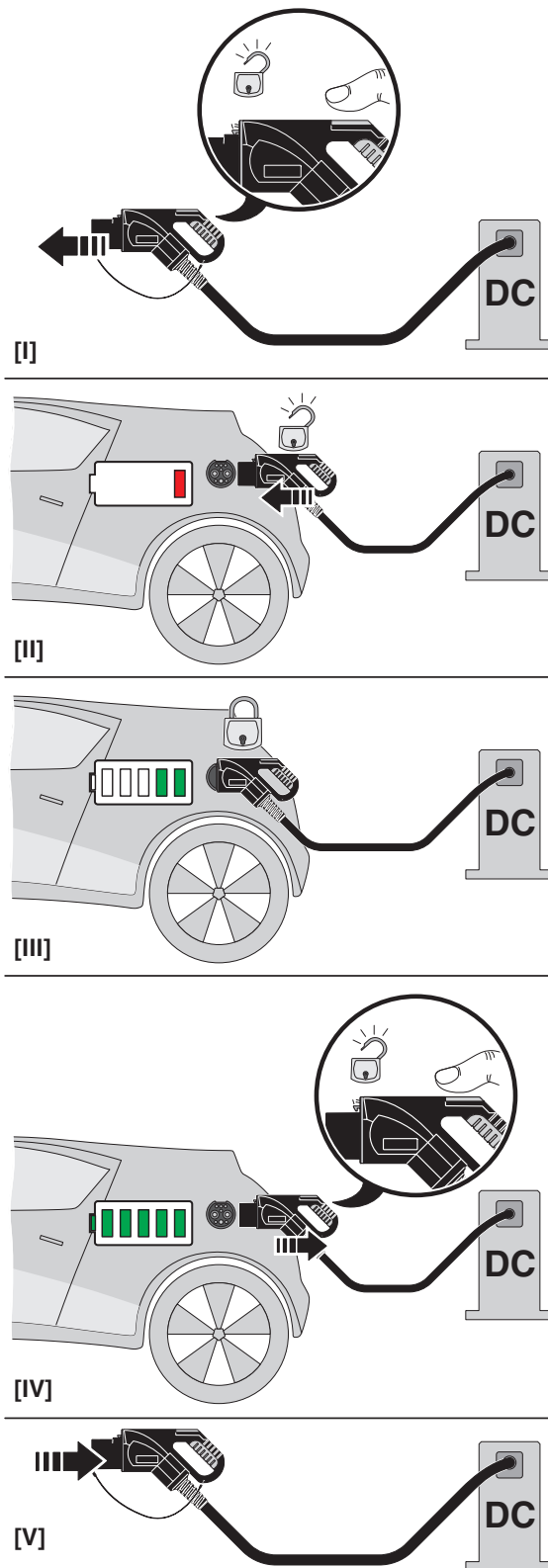
Dimensional drawing



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



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