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, DC charging cable with Vehicle Connector, open cable end, with protective cap, GB/T, GB/T 20234.3-2015, 60 A / 750 V (DC), 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 GB/T Vehicle Inlets, for installation at charging stations for E-Mobility (EVSE)

#### Your advantages

- 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 pc
GTIN	4 055626 312040
GTIN	4055626312040

#### Technical data

#### Product definition

Application	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.



Cable management is required in certain regions if the cable length exceeds 5.0~m (Switzerland) or 7.5~m (USA) (IEC 61851-1).

# DC charging cable - EV-GBM4C-DC60A-6,0M16ESBK00 - 1627460

# Technical data

# Product definition

Dimensions	
Vehicle connector width 77.00 mm	
Vehicle connector height	129.10 mm
Vehicle connector depth	260.40 mm
Conductor length	6 m
Stripping length	130 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; 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)
	IP54 (Protective cap)

#### **Electrical properties**

Maximum charging power	45 kW
Number of power contacts	3 (PE, DC+, DC-)
Rated current of power contacts	60 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
Note on the connection method	Crimp connection, cannot be disconnected
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



# Technical data

# Material

Housing material	Plastic
Material handle area	Soft plastic
Actuating lever material	Metal
Material protective cap	Plastic
Material mating face	Plastic
Flammability rating	V0
Material surface of contacts	Ag

## Cable

Cable structure	3 x 16 mm² + 2 x 2.5 mm² + 9 x 0.5 mm²
Wiring class	Class 5
External cable diameter	20.2 mm ±0.2 mm
Type of conductor	straight
Outer sheath, material	PUR
External sheath, color	black
Minimum bending radius	202 mm (10x 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

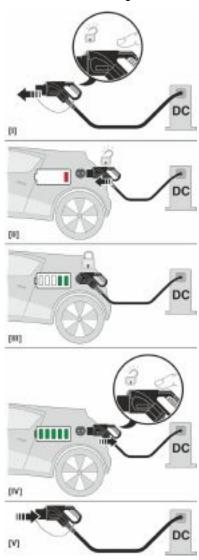
# **Environmental Product Compliance**

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

# Drawings



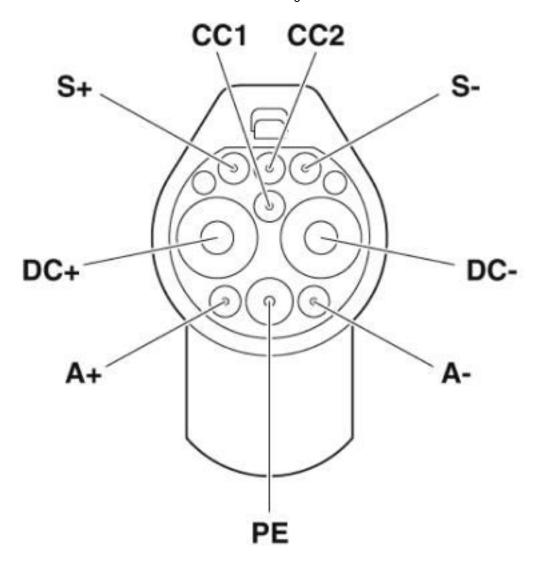
Schematic diagram



Operating instructions



Schematic diagram



Pin assignment of the Vehicle Connector



WHVT TempSensor1+

WHGN TempSensor2+

WHGY Temp/LockSensorWHOG LockSensor+

WHYE Lock
WHRD Lock+

Block diagram GB/T DC

# Dimensional drawing 260,4 77 30 10 10 57,8 98,8 215,4

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.



# Classifications

## eCl@ss

eCl@ss 4.0	272607xx
eCl@ss 4.1	27260701
eCl@ss 5.0	27260701
eCl@ss 5.1	27143400
eCl@ss 6.0	27143400
eCl@ss 7.0	27449001
eCl@ss 8.0	27449001

#### **ETIM**

ETIM 3.0	EC002061
ETIM 4.0	EC002061
ETIM 5.0	EC002839
ETIM 6.0	EC002897

## **UNSPSC**

UNSPSC 6.01	30211923
UNSPSC 7.0901	39121522
UNSPSC 11	39121522
UNSPSC 12.01	39121522
UNSPSC 13.2	39121522
UNSPSC 19.0	39121522

#### Accessories

Accessories

Park position

Park position - EV-GBDC-PARK-R - 1623496



Park position, Retainer for Vehicle Connector as parking position at charging stations (EVSE), GB/T, GB/T 20234.3, Front mounting

Park position - EV-GBDC-PARK-SW - 1623497



Park position, Retainer for Vehicle Connector as parking position at charging stations (EVSE), GB/T, GB/T 20234.3, Front mounting



# Accessories

Park position - EV-GBDC-PARK - 1623770



Park position, Retainer for Vehicle Connector as parking position at charging stations (EVSE), GB/T, GB/T 20234.3, Front mounting

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