

Charging connection systems

Our charging connection systems set the standard when it comes to supplying energy to electric vehicles.

Thanks to silver-plated power and signal contacts, high-precision temperature monitoring, and the integrated locking system, our charging cables, socket outlets, and vehicle inlets are safe and reliable in operation. Thanks to their attractive, ergonomic design, they are easy and comfortable to use.

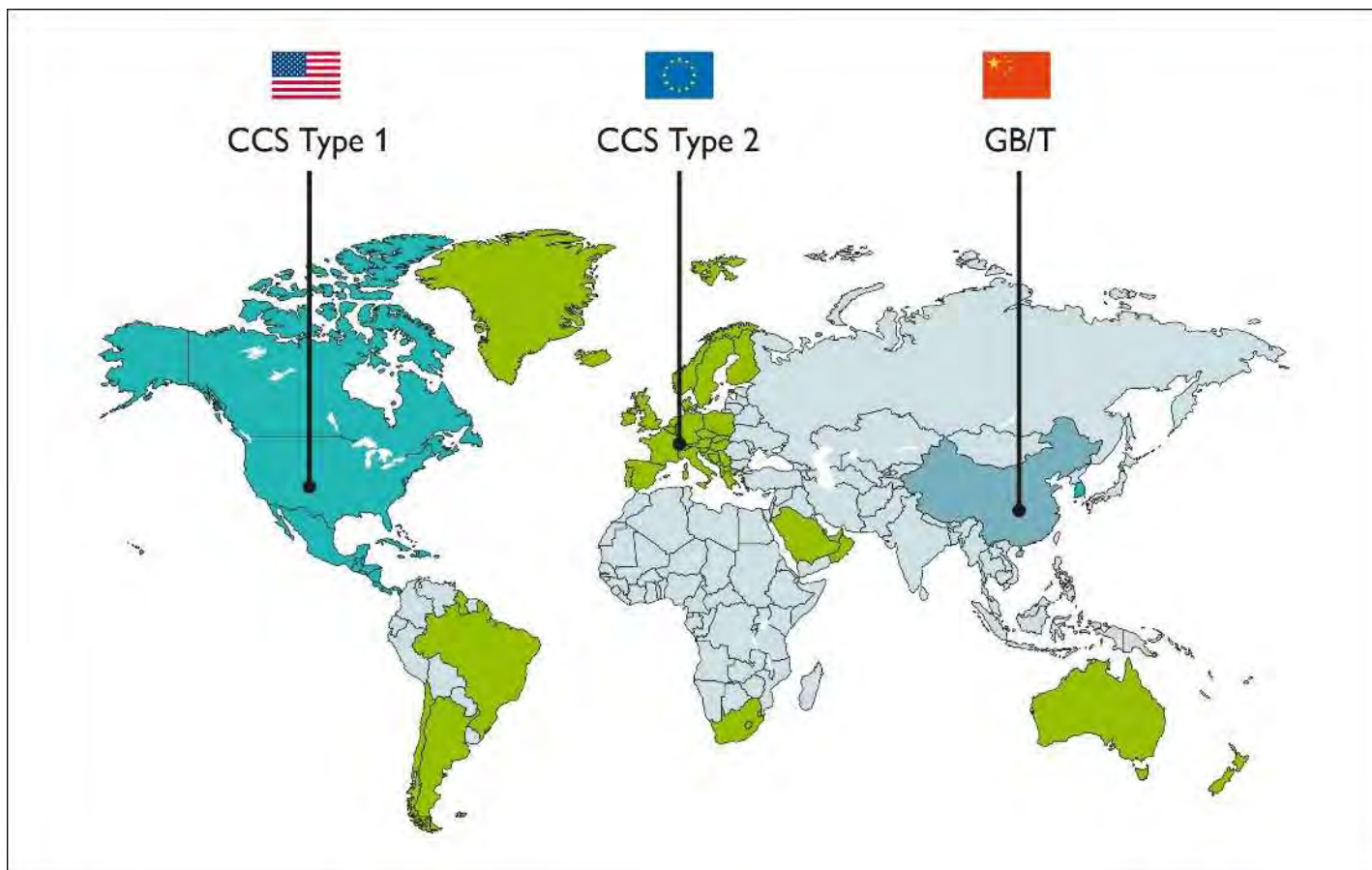
With our High Power Charging technology, we are setting yet another milestone in the history of electromobility by reducing charging time to just a few minutes.

The broad product range takes the three most important charging standards into consideration for all applications worldwide:

- Type 1 for North America and Japan
- Type 2 for Europe and other countries
- GB/T for China

i Your web code: **#2073**

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Various charging standards, which originated in North America, Europe, and China and have their own specific connector geometries, have become established throughout the world.

We can provide you with the complete range of charging cables and vehicle inlets for any region from a single source – both for conventional charging on the alternating current (AC) power grid and for fast charging with direct current (DC).

Thanks to our involvement in developing the Combined Charging System (CCS), AC and DC charging with just one vehicle inlet is now possible throughout most of the world.

Thanks to the common geometry of their mating faces, both AC and DC charging connectors fit into the same vehicle inlet. Therefore, automobile manufacturers only have to design one inlet for their vehicles. Furthermore, the charging process itself is easier for the driver to handle.

The system is also incredibly safe, thanks to the electromechanical locking system on the charging connector and the integrated, high-precision temperature monitoring function.

Along with the charging standards, the IEC 61851 standard also defines four different charging modes. Here, charging modes 1 to 3 only apply to AC charging, with charging mode 3 being further subdivided into charging cases A, B, and C. Charging mode 4 describes DC charging.

The charging modes covered by the Phoenix Contact product portfolio are illustrated to the right.

i Your web code: **#2110**



CCS type 1

The type 1 version of the Combined Charging System in accordance with SAE J1772 and IEC 62196-3 is used in North America, and is also becoming popular in South Korea. The mating faces of the AC and DC charging connectors are identical on the AC side and therefore fit into the same CCS vehicle inlet.



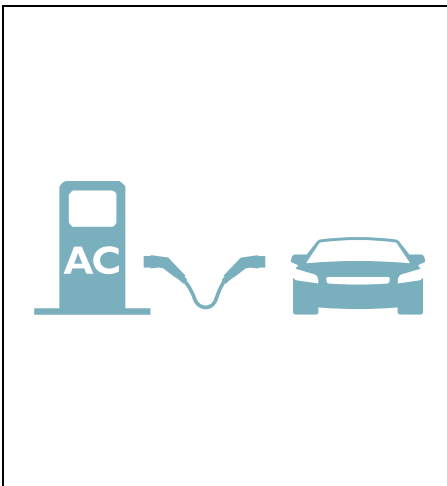
CCS type 2

The type 2 version of the Combined Charging System in accordance with IEC 62196-3 was specified by the European Commission as a uniform standard throughout Europe in 2013. In the meantime, this standard has also become established in Greenland, South America, South Africa, Saudi Arabia, and Australia. The mating faces of the AC and DC charging connectors are identical on the AC side and therefore fit into the same CCS vehicle inlet.



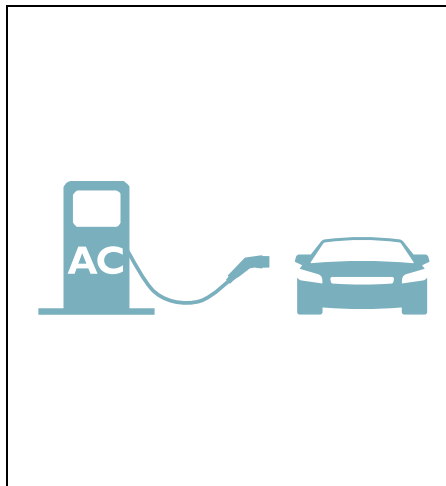
GB/T

The GB/T 20234 charging standard is only used in China. AC and DC charging connectors have different mating faces, meaning that separate AC and DC inlets are required in the vehicle.



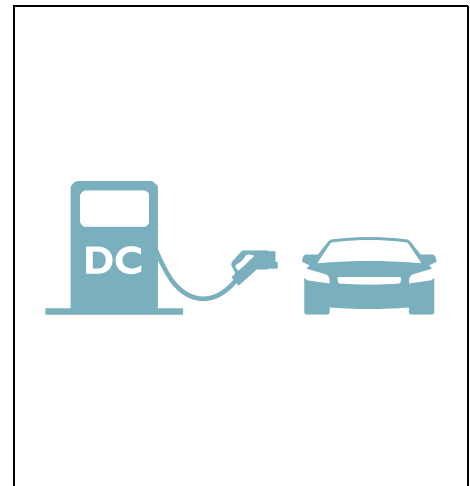
Charging mode 3, case B

In charging mode 3, the vehicle is charged with AC at a charging station or wall box. Charging case B requires a mobile AC charging cable that has a connector at both ends: one end is equipped with vehicle charging connector that plugs into the vehicle inlet. The other end is equipped with infrastructure charging plug and plugs into the charging outlet on the charging station.



Charging mode 3, case C

In charging mode C, a charging cable that is permanently connected to the charging station is used. The charging cable therefore only has a connector at one end – the vehicle charging connector that plugs into the vehicle inlet.



Charging mode 4

This charging mode describes direct current (DC) charging. Increased safety requirements apply due to the particularly high charging power involved. Therefore, with this mode, only a charging cable that is permanently connected to the charging station is used – a plug-in connection is only equipped on the vehicle side.



Short charging stops, thanks to high power transmission

The development of a widespread charging infrastructure for electric vehicles in conjunction with renewable energy is an important step toward a mobile future. The focus here is on integrating the charging process into everyday life. Situations involving short stops to charge, for example at rest stops en route, require a charging infrastructure with high power transmission and reliable safety mechanisms. In comparison with AC charging, DC charging enables a significantly higher power transmission, and is therefore the ideal solution for short charging stops during long journeys.

Powerful charging cables

We provide a comprehensive range of powerful and standard-compliant charging cables for global fast DC charging. The DC charging cables have a free cable end so that they can be connected permanently to the charging station in accordance with charging mode 4. Depending on the charging standard, powers of up to 250 kW are supported. The integrated sensors enable precise temperature monitoring, thereby guaranteeing a safe charging process.

Your advantages

- Comprehensive product range for CCS type 1, CCS type 2, and GB/T
- Efficient power transmission and long-term stability, thanks to silver-plated power and signal contacts
- Integrated sensor technology for monitoring the temperature at the power contacts
- Convenient handling, thanks to the ergonomic handle and additional rubber grip components
- Developed and produced in accordance with the IATF 16949 automotive standard and ISO 9001

i Your web code: **#2099**

**CCS type 1**

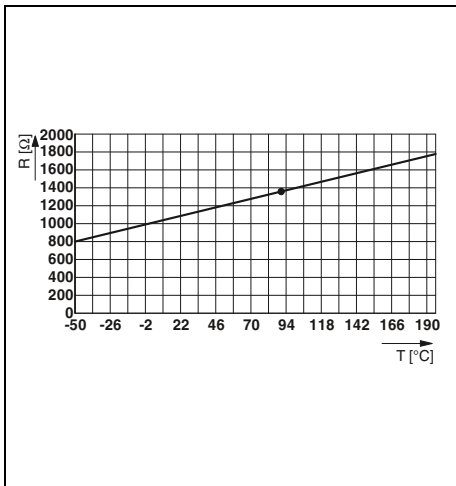
CCS type 1 charging cables in accordance with SAE J1772 and IEC 62196-3 allow for fast DC charging in North American and other AWG charging infrastructures. They are equipped with UL-certified AWG cables and a lever locking mechanism for locking. If the lever is actuated during the charging process, communication takes place to interrupt the power between the vehicle and charging station.

**CCS type 2**

In 2013, CCS type 2 charging cables in accordance with IEC 62196-3 marked an important milestone in European fast-charging technology. During the charging process, the charging cables lock electromechanically with a bolt that can withstand high pull-out forces by means of a locking actuator integrated into the vehicle inlet. The cables are metric and VDE-certified.

**GB/T**

DC charging cables in accordance with GB/T 20234.3-2015 are used for fast charging in the Chinese charging infrastructure. In addition to metric cables, they include a unique locking mechanism developed by Phoenix Contact that is integrated into the vehicle charging connector. The locking mechanism, which is controlled by the charging station, prevents the lever on the vehicle charging connector from being actuated during the charging process.

**High-precision temperature measuring**

The integrated temperature sensors in the vehicle charging connector send a pulse to the charging station to switch off the charging current in the event of a fault (e.g. in the event of soiling) in good time.

**Secure locking during charging**

Fast charging technology involves the transmission of high charging currents. It is therefore essential to safeguard against disconnection under load during the charging process. The vehicle charging connectors are protected with highly efficient locking mechanisms.

**Secure hold between charging processes**

Matching holders for DC charging cables are mounted on the outside of the charging station or wall box. They ensure the vehicle charging connector is held securely in place and protected from the elements whenever charging is not taking place. The holders are listed in the "Accessories" section.

Charging connection systems

DC charging cables

CCS type 2

- Charging in just a few minutes
- Charging cables for European charging infrastructure

Notes:

Upon request, we can also supply charging connectors with your company logo, as well as further cable types and lengths.

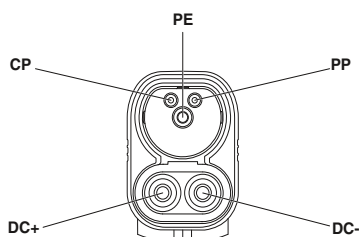


With a metric cable



With a metric cable

	Technical data		Technical data			
	80 A	150 A	200 A			
Rated voltage	1000 V DC	1000 V DC	1000 V DC			
Rated current	80 A	150 A	200 A			
Standards	IEC 62196-3	IEC 62196-3	IEC 62196-3			
Charging mode	Mode 4	Mode 4	Mode 4			
Resistor coding	1500 Ω (between PE and PP)	1500 Ω (between PE and PP)	1500 Ω (between PE and PP)			
Ambient temperature (operation)	-30°C ... 50°C	-30°C ... 50°C	-30°C ... 50°C			
Number of power contacts	3 (PE, DC+, DC-)	3 (PE, DC+, DC-)	3 (PE, DC+, DC-)			
Insertion/withdrawal cycles	> 10,000	> 10,000	> 10,000			
Insertion/withdrawal force	< 100 N	< 100 N	< 100 N			
Temperature sensor	Pt 1000	Pt 1000	Pt 1000			
Degree of protection (when plugged in)	IP44	IP44	IP44			
Cable data						
Cable type	straight	straight	straight			
Cable length	5 m	5 m	5 m			
Cable diameter	18.4 mm ±0,3 mm	28 mm ±0.4 mm	32.4 mm ±0.2 mm			
Cable structure	3 x 16 mm ² + 3 x 2 x 0.75 mm ²	2 x 50 mm ² + 1 x 25 mm ² + 3 x 2 x 0.75 mm ²	2 x 70 mm ² + 1 x 35 mm ² + 3 x 2 x 0.75 mm ²			
Sheath color	black	black	black			
	Ordering data		Ordering data			
Description	Order No.	Pcs./Pkt.	Order No.	Pcs./Pkt.		
DC charging cable with open cable end, Combined Charging System (CCS)	80 A		150 A			
	1095764	1	1095767	1		
	Accessories		Accessories			
Description	Type	Order No.	Pcs./Pkt.	Type	Order No.	Pcs./Pkt.
Holder Without vehicle charging connector recognition	EV-T2CCS-PARK	1624153	1	EV-T2CCS-PARK	1624153	1



Vehicle charging connector pin assignment

GB/T

- Charging in just a few minutes
- Charging cables for the Chinese charging infrastructure
- Vehicle charging connectors with integrated locking and a protective cap

Notes:

Upon request, we can also supply charging connectors with your company logo, as well as further cable types and lengths.

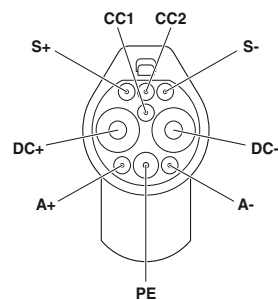


GB/T DC vehicle charging connector,
with a metric cable



GB/T DC vehicle charging connector,
with a metric cable

	Technical data		Technical data			
	80 A	125 A	180 A	250 A		
Rated voltage	1000 V DC	1000 V DC	1000 V DC	1000 V DC		
Rated current	80 A	125 A	180 A	250 A		
Standards	GB/T 20234.1-2015, GB/T 20234.3-2015	GB/T 20234.1-2015, GB/T 20234.3-2015	GB/T 20234.1-2015, GB/T 20234.3-2015	GB/T 20234.1-2015, GB/T 20234.3-2015		
Charging mode	Mode 4	Mode 4	Mode 4	Mode 4		
Resistor coding	1000 Ω (between PE and CC1 / PE and CC2)	1000 Ω (between PE and CC1 / PE and CC2)	1000 Ω (between PE and CC1 / PE and CC2)	1000 Ω (between PE and CC1 / PE and CC2)		
Ambient temperature (operation)	-30°C ... 50°C	-30°C ... 50°C	-30°C ... 50°C	-30°C ... 50°C		
Number of power contacts	3 (PE, DC+, DC-)	3 (PE, DC+, DC-)	3 (PE, DC+, DC-)	3 (PE, DC+, DC-)		
Insertion/withdrawal cycles	> 10,000	> 10,000	> 10,000	> 10,000		
Insertion/withdrawal force	< 100 N	< 100 N	< 100 N	< 100 N		
Temperature sensor	Pt 1000	Pt 1000	Pt 1000	Pt 1000		
Degree of protection (when plugged in)	IP55	IP55	IP55	IP55		
Degree of protection (with protective cap)	IP54	IP54	IP54	IP54		
Cable data						
Cable type	straight	straight	straight	straight		
Cable length	5 m	5 m	5 m	5 m		
Cable diameter	27 mm ±0.4 mm	31.6 mm ±0.4 mm	33.1 mm ±0.4 mm	34.9 mm ±0.4 mm		
Cable structure	3 x 16 mm² + 2 x 4 mm² + (2 x 0.75 mm²) P + 10 x 0.75 mm²	2 x 35 mm² + 1 x 25 mm² + 2 x 4 mm² + (2 x 0.75 mm²) P + 10 x 0.75 mm²	2 x 50 mm² + 1 x 25 mm² + 2 x 4 mm² + (2 x 0.75 mm²) P + 10 x 0.75 mm²	2 x 70 mm² + 1 x 25 mm² + 2 x 4 mm² + (2 x 0.75 mm²) P + 10 x 0.75 mm²		
Sheath color	black	black	black	black		
	Ordering data		Ordering data			
Description	Order No.	Pcs./Pkt.	Order No.	Pcs./Pkt.		
	80 A	125 A	180 A	250 A		
GB/T DC charging cable	1031383	1	1031381	1		
	Accessories		Accessories			
Description	Type	Order No.	Pcs./ Pkt.	Type	Order No.	Pcs./ Pkt.
	Holder					
Without vehicle charging connector recognition	EV-GBDC-PARK	1623770	1	EV-GBDC-PARK	1623770	1
With vehicle charging connector recognition	EV-GBDC-PARK-SW	1623497	1	EV-GBDC-PARK-SW	1623497	1
Fixing with hexagonal head screws	EV-GBDC-PARK-R	1623496	1	EV-GBDC-PARK-R	1623496	1



Vehicle charging connector pin assignment



Extremely short charging times

With the High Power Charging (HPC) system, Phoenix Contact has developed a charging technology that can charge the battery of an electric vehicle for a distance of 100 km in just three to five minutes. The centerpiece of this technology is a high-performance charging connector with intelligent cooling that allows for a charging current of up to 500 A. At a system voltage of 1000 V, this corresponds to a charging power of 500,000 W.

Until now, charging currents of up to 200 A were technically feasible with the Combined Charging System (CCS). Significantly higher currents are necessary, however, to achieve very short charging times. With conventional charging technology, this would result in dangerous overheating or would require larger, cumbersome cable diameters.

Our intelligent HPC technology is therefore based on a coolant system that enables charging currents of up to 500 A without compromising safety or manageability. We use an environmentally-sound, maintenance-friendly water-glycol mixture as the coolant. This cools both the charging cable and the DC power contacts in the charging connector. The contact carrier in the charging connector also acts as a heatsink, thanks to its outstanding thermal conductivity.

How does the cooling system work?

In accordance with the VDE-AR-E 2623-5-3 directive and the IEC TS 62196-3-1 standard, charging connectors and charging cables may not exceed a temperature that is 50 K higher than the ambient air temperature during the charging process ($\Delta T_{\max} = 50 \text{ K}$).

In order to comply with these regulations, multiple temperature sensors integrated into the Phoenix Contact HPC system measure the heat produced directly at the charging connector power contacts and also in the charging cable in real time.

A controller evaluates the data collected and regulates the cooling output accordingly. This reliably prevents overheating in compliance with standards and, at the same time, increases the energy efficiency of the cooling system.

Easy maintenance of the cooling circuit

Thanks to the use of an environmentally friendly mixture of water and glycol as the coolant, the cooling circuit is relatively easy to maintain. In contrast to maintenance-intensive closed systems with oil cooling, the semi-open system necessary for our charging connectors is easy to maintain, e.g. when refilling the coolant.

Your advantages

- Fast charging in just a few minutes, thanks to extremely high charging powers of up to 500 kW
- Efficient cooling enables cables of smaller diameters to be used, which improves handling
- Extremely safe, thanks to continuous temperature and leak monitoring along with a wear indicator in the cable sheathing
- Maintenance-friendly, thanks to the easily replaceable mating face and semi-open cooling system with environmentally friendly coolant
- Fully compatible with the established Combined Charging System (CCS)

i Your web code: #1631



CCS type 1 and CCS type 2

The cooled HPC system DC charging cables from Phoenix Contact are fully compatible and compliant with the established Combined Charging System for North America (CCS type 1) and Europe (CCS type 2). Furthermore, we can provide you with suitable control technology for the charging process and cooling, as well as a broad range of further products for your HPC fast charging stations.



Optional panel feed-through

The optional panel feed-through makes installing the HPC charging cable on the charging station quick, safe, and easy. It is equipped with defined interfaces for power, communication, and cooling. The panel feed-through is supplied pre-mounted on the charging cable. We offer all HPC charging cables with straight or angled panel feed-through, or without panel feed-through.



Replaceable mating face

Charging cables at public charging stations, and mating faces in particular, are subject to high levels of mechanical strain. Therefore, the mating face frames and power contacts of our HPC charging connectors can be replaced quickly, minimizing downtime and ensuring that the costly replacement of the entire HPC charging cable is not necessary. The repair kits are listed in the “Accessories” section.



Use in charging facilities and charging parks

In these applications, the cooling system and controller are mainly housed centrally – in a separate building, for example. The decentral charging stations are supplied with coolant from there, and are only fitted with individual heat exchangers. Therefore all charging stations use a common cooling circuit.



Use in stand-alone charging stations

A complete HPC system can also be installed in a single charging column. This means that the cooling unit and controller are integrated into the charging column to create an independent cooling circuit together with the charging connector and charging cable.



Configuring your cooled HPC solution

Based on the installation space available for your charging columns, the climatic conditions at the installation location, and additional factors, we will configure the ideal combination of HPC charging cables, panel feed-throughs, controllers, and other components. We are also happy to recommend appropriate cooling units and heat exchangers from one of our technology partners.

Charging connection systems

Cooled DC charging cables – High Power Charging

CCS type 2

- Ultra-fast charging
- Charging cables for European charging infrastructure
- Cooled vehicle charging connector
- Cooled charging cables

Notes:

Upon request, we can also supply charging connectors with your company logo, as well as further cable types and lengths.

High Power Charging Technology[®]
Engineering a sustainable connection



With a metric cable and angled panel feed-through, left-hand side

High Power Charging Technology[®]
Engineering a sustainable connection



With a metric cable and angled panel feed-through, right-hand side

Technical data

	500 A	400 A
Rated voltage	1000 V DC	1000 V DC
Rated current	500 A	400 A
Standards	IEC 62196-3-1	IEC 62196-3-1
Charging mode	Mode 4	Mode 4
Resistor coding	1500 Ω (between PE and PP)	1500 Ω (between PE and PP)
Ambient temperature (operation)	-30°C ... 40°C	-30°C ... 40°C
Number of power contacts	3 (PE, DC+, DC-)	3 (PE, DC+, DC-)
Insertion/withdrawal cycles	> 10,000	> 10,000
Insertion/withdrawal force	< 100 N	< 100 N
Temperature monitoring	2x NTC (replaceable, front DC contacts) 2x NTC (DC power wires inside)	2x NTC (replaceable, front DC contacts) 2x NTC (DC power wires inside)
Degree of protection (when plugged in)	IP54	IP54
Cable data		
Cable type	straight	straight
Cable length	5 m	5 m
Cable diameter	35.7 mm ±0.4 mm	35.7 mm ±0.4 mm
Cable structure	5 x 25 mm ² + 7 x 0.75 mm ²	5 x 25 mm ² + 7 x 0.75 mm ²
Sheath color	black	black
Panel feed-through		
Type	Left-hand angled panel feed-through	Left-hand angled panel feed-through
Panel thickness	max. 5 mm	max. 5 mm
Required mounting screws	M5x16	M5x16
Dimensions (H x W x D)	80 mm x 82 mm x 215.5 mm	80 mm x 82 mm x 215.5 mm
Fan for panel feed-through		
Ambient temperature (operation)	-20°C ... 40°C	-
Mechanical service life	70.000 h (at 40°C)	-
Connection type	2 x AWG 26	-
Nominal voltage U _N	24 V DC	-
Nominal voltage range	18 V DC ... 24 V DC	-
Fan volumetric flow	28 m ³ /h	-
Fan speed indication	4400 min ⁻¹	-
Requirements on a cooling unit		
Cooling capacity	600 W	600 W
Flow rate	2 l/min	2 l/min
Operating pressure	1.00 bar ... 2.00 bar	1.00 bar ... 2.00 bar
Flow temperature	10°C	20°C

Ordering data

Description	Order No.	Pcs./Pkt.	Order No.	Pcs./Pkt.
	500 A		400 A	
CCS type 2 DC charging cable, cooled	1085637	1	1052443	1

Accessories

Type	Order No.	Pcs./Pkt.
EV-T2CCS-PARK	1624153	1
EV-T2CCS-MF-M4X10-BIT-CTS	1085799	1
EV-T2CCS-MF-M4X10-BIT	1085798	1
EV-T2CCS-MF-M4X10	1085797	1

Technical data

	500 A	400 A
Rated voltage	1000 V DC	1000 V DC
Rated current	500 A	400 A
Standards	IEC 62196-3-1	IEC 62196-3-1
Charging mode	Mode 4	Mode 4
Resistor coding	1500 Ω (between PE and PP)	1500 Ω (between PE and PP)
Ambient temperature (operation)	-30°C ... 40°C	-30°C ... 40°C
Number of power contacts	3 (PE, DC+, DC-)	3 (PE, DC+, DC-)
Insertion/withdrawal cycles	> 10,000	> 10,000
Insertion/withdrawal force	< 100 N	< 100 N
Temperature monitoring	2x NTC (replaceable, front DC contacts) 2x NTC (DC power wires inside)	2x NTC (replaceable, front DC contacts) 2x NTC (DC power wires inside)
Degree of protection (when plugged in)	IP54	IP54
Cable data		
Cable type	straight	straight
Cable length	5 m	5 m
Cable diameter	35.7 mm ±0.4 mm	35.7 mm ±0.4 mm
Cable structure	5 x 25 mm ² + 7 x 0.75 mm ²	5 x 25 mm ² + 7 x 0.75 mm ²
Sheath color	black	black
Panel feed-through		
Type	Right-hand angled panel feed-through	Right-hand angled panel feed-through
Panel thickness	max. 5 mm	max. 5 mm
Required mounting screws	M5x16	M5x16
Dimensions (H x W x D)	80 mm x 82 mm x 215.5 mm	80 mm x 82 mm x 215.5 mm
Fan for panel feed-through		
Ambient temperature (operation)	-20°C ... 40°C	-
Mechanical service life	70.000 h (at 40°C)	-
Connection type	2 x AWG 26	-
Nominal voltage U _N	24 V DC	-
Nominal voltage range	18 V DC ... 24 V DC	-
Fan volumetric flow	28 m ³ /h	-
Fan speed indication	4400 min ⁻¹	-
Requirements on a cooling unit		
Cooling capacity	600 W	600 W
Flow rate	2 l/min	2 l/min
Operating pressure	1.00 bar ... 2.00 bar	1.00 bar ... 2.00 bar
Flow temperature	10°C	20°C

Ordering data

Description	Order No.	Pcs./Pkt.	Order No.	Pcs./Pkt.
	500 A		400 A	
CCS type 2 DC charging cable, cooled	1089665	1	1089664	1

Accessories

Type	Order No.	Pcs./Pkt.
EV-T2CCS-PARK	1624153	1
EV-T2CCS-MF-M4X10-BIT-CTS	1085799	1
EV-T2CCS-MF-M4X10-BIT	1085798	1
EV-T2CCS-MF-M4X10	1085797	1

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With a metric cable and
straight panel feed-through

High Power Charging Technology[®]
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With metric cable,
without panel feed-through

Technical data		Technical data	
500 A	400 A	500 A	
1000 V DC	1000 V DC	1000 V DC	
500 A	400 A	500 A	
IEC 62196-3-1	IEC 62196-3-1	IEC 62196-3-1	
Mode 4	Mode 4	Mode 4	
1500 Ω (between PE and PP)	1500 Ω (between PE and PP)	1500 Ω (between PE and PP)	
-30°C ... 40°C	-30°C ... 40°C	-30°C ... 40°C	
3 (PE, DC+, DC-)	3 (PE, DC+, DC-)	3 (PE, DC+, DC-)	
> 10,000	> 10,000	> 10,000	
< 100 N	< 100 N	< 100 N	
2x NTC (replaceable, front DC contacts)	2x NTC (replaceable, front DC contacts)	2x NTC (replaceable, front DC contacts)	
2x NTC (DC power wires inside)	2x NTC (DC power wires inside)	2x NTC (DC power wires inside)	
IP54	IP54	IP54	
straight	straight	straight	
5 m	5 m	5 m	
35.7 mm ±0.4 mm	35.7 mm ±0.4 mm	35.7 mm ±0.4 mm	
5 x 25 mm ² + 7 x 0.75 mm ²	5 x 25 mm ² + 7 x 0.75 mm ²	5 x 25 mm ² + 7 x 0.75 mm ²	
black	black	black	
Straight panel feed-through	Straight panel feed-through	-	
max. 5 mm	max. 5 mm	-	
M5x16	M5x16	-	
80 mm x 82 mm x 227.69 mm	80 mm x 82 mm x 227.69 mm	-	
-20°C ... 40°C	-	-	
70,000 h (at 40°C)	-	-	
2 x AWG 26	-	-	
24 V DC	-	-	
18 V DC ... 24 V DC	-	-	
28 m ³ /h	-	-	
4400 min-1	-	-	
600 W	600 W	600 W	
2 l/min	2 l/min	2 l/min	
1.00 bar ... 2.00 bar	1.00 bar ... 2.00 bar	1.00 bar ... 2.00 bar	
10°C	20°C	10°C	
Ordering data		Ordering data	
Order No.	Pcs./Pkt.	Order No.	Pcs./Pkt.
500 A		500 A	
1085631	1	1085638	1
1052444	1		
Accessories		Accessories	
Type	Order No.	Type	Order No.
EV-T2CCS-PARK	1624153	EV-T2CCS-PARK	1624153
EV-T2CCS-MF-M4X10-BIT-CTS	1085799	EV-T2CCS-MF-M4X10-BIT-CTS	1085799
EV-T2CCS-MF-M4X10-BIT	1085798	EV-T2CCS-MF-M4X10-BIT	1085798
EV-T2CCS-MF-M4X10	1085797	EV-T2CCS-MF-M4X10	1085797



A wide range of products for every application

Conventional charging with alternating current (AC) in private and commercial applications in accordance with charging mode 3 is also playing an important role in establishing electromobility.

For this charging mode, we provide a complete range of VDE-, UL-, and PSE-certified AC charging cables for charging powers of up to 26 kW – standard-compliant and for all country-specific standards. This means we can offer you the right charging cable for every application:

- You need a charging cable with a free cable end for charging case C. In this case, the charging cable is permanently connected to the charging station.
- Mobile charging cables are used in charging case B and are, for example, carried in the trunk of the vehicle. The cable is equipped with a connecting element at both ends.
- Mobile adapter charging cables are the ideal solution for charging case B if, for example, a vehicle with an American type 1 inlet needs to be charged at a European type 2 charging station.

Winner of the German Design Award

Our type 2 AC charging cables have received the German Design Award 2019 in the “Special Mention” category.

During development of the product family, we focused on ensuring that the design was both ergonomic and stylish, as well as using robust and top-quality materials in order to satisfy the stringent requirements of the automotive industry.

The German Design Award jury was impressed with the nominated charging cable: “Thanks to the ergonomic design, the cable is pleasant to hold, which makes it easier to use. A functionally sophisticated design that is also aesthetically impressive, thanks to its modern shape and two-tone look.” This was the feedback from the jury, which was comprised of design experts from the fields of business, academia, and science, as well as the design industry.

Your advantages

- Comprehensive product range for type 1, type 2, and GB/T
- Ergonomic design means that the cables are easy to use – winner of the German Design Award 2019
- Upon request, we can also include your company logo to ensure consistent branding of your charging station or wall box
- Efficient power transmission and long-term stability, thanks to silver-plated power and signal contacts
- Longitudinal water tightness reliably prevents water from permeating the cable
- Developed and produced in accordance with the IATF 16949 automotive standard and ISO 9001
- Tested in accordance with selected tests of automotive standards LV124, LV214, and LV215-2

i Your web code: **#1022**

**Type 1**

Type 1 AC charging cables in accordance with SAE J1772 and IEC 62196-2 are primarily used in the USA and Japan. The cables are locked by means of a lever locking mechanism that interrupts the power when actuated. Versions are available with metric, AWG, and PSE cables for charging currents of up to 32 A and voltages of up to 250 V.

**Type 2**

Type 2 AC charging cables in accordance with IEC 62196-2 support single- and three-phase charging in Europe. An electro-mechanical actuator locking mechanism safeguards the charging process. Versions are available with metric cables for charging currents of up to 32 A and voltages of up to 480 V.

**GB/T**

The standard GB/T 20234.2 describes single- and three-phase charging in China. A special lever system ensures that the vehicle inlet and vehicle charging connector latch together securely. Versions are available with metric cables for charging currents of up to 32 A and voltages of up to 480 V.

**Additional locking option**

Our type 1 and GB/T AC charging cables can also be locked with a padlock (shackle diameter: 4 mm) as an option. The locking lever can no longer be actuated when plugged in.

**Charging connectors with your logo**

We can also integrate your company logo into our AC charging connectors upon request. This will make your charging station or wall box an integral part of your uniform branding concept and outward appearance. We can either emboss your logo into the soft components of the charging connector or, if you would like, we can print UV- and weather-resistant adhesive labels either in black and white or in color.

**Tailored charging cables**

Our broad product range allows you to choose from a variety of lengths and cross sections, metric or AWG cables, and spiraled or straight cables. If you are unable to find your preferred combination within our range, we can also design and manufacture customer-specific items. We can also supply the cable end preassembled, compacted, or with a step cut upon request.

Charging connection systems

AC charging cables

Type 2 with one free cable end

- Charging cables for European charging infrastructure
- Vehicle-side locking with electro-mechanical locking actuator
- Vehicle charging connector with a protective cap

Notes:

Upon request, we can also supply charging connectors with your company logo, further cable types and lengths, as well as cable ends that are preassembled or compacted, or with a step cut.



1-phase, black,
with a spiraled metric cable



1-phase, black,
with a straight metric cable



Technical data

	20 A	32 A
Number of phases	1	1
Rated voltage	250 V AC	250 V AC
Rated current	20 A	32 A
Standards	IEC 62196-2	IEC 62196-2
Charging mode	Mode 3, Case C	Mode 3, Case C
Resistor coding	680 Ω (between PE and PP)	220 Ω (between PE and PP)
Ambient temperature (operation)	-30°C ... 50°C	-30°C ... 50°C
Number of power contacts	3 (L1, N, PE)	3 (L1, N, PE)
Insertion/withdrawal cycles	> 10,000	> 10,000
Insertion/withdrawal force	< 100 N	< 100 N
Degree of protection (when plugged in)	IP44	IP44
Degree of protection (with protective cap)	IP54	IP54
Cable data		
Cable type	spiraled	spiraled
Cable length	4 m	4 m
Cable diameter	10.2 mm ±0.3 mm	12.8 mm ±0.4 mm
Cable structure	3 x 2.5 mm ² + 1 x 0.5 mm ²	3 x 6.0 mm ² + 1 x 0.5 mm ²
Sheath color	black	black

Ordering data

Description	Order No.	Pcs./Pkt.	Order No.	Pcs./Pkt.
	20 A		32 A	
AC charging cable with a type 2 AC vehicle charging connector and a free cable end	1056548	1	1056575	1

Accessories

Description	Type	Order No.	Pcs./Pkt.
Holder			
Without vehicle charging connector recognition	EV-T2AC-PARK	1624148	1



Technical data

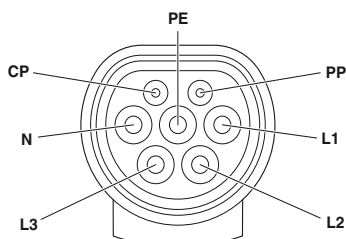
	20 A	32 A
Number of phases	1	1
Rated voltage	250 V AC	250 V AC
Rated current	20 A	32 A
Standards	IEC 62196-2	IEC 62196-2
Charging mode	Mode 3, Case C	Mode 3, Case C
Resistor coding	680 Ω (between PE and PP)	220 Ω (between PE and PP)
Ambient temperature (operation)	-30°C ... 50°C	-30°C ... 50°C
Number of power contacts	3 (L1, N, PE)	3 (L1, N, PE)
Insertion/withdrawal cycles	> 10,000	> 10,000
Insertion/withdrawal force	< 100 N	< 100 N
Degree of protection (when plugged in)	IP44	IP44
Degree of protection (with protective cap)	IP54	IP54
Cable data		
Cable type	straight	straight
Cable length	5 m	5 m
Cable diameter	10.2 mm ±0.3 mm	12.8 mm ±0.4 mm
Cable structure	3 x 2.5 mm ² + 1 x 0.5 mm ²	3 x 6.0 mm ² + 1 x 0.5 mm ²
Sheath color	black	black

Ordering data

Description	Order No.	Pcs./Pkt.	Order No.	Pcs./Pkt.
	20 A		32 A	
AC charging cable with a type 2 AC vehicle charging connector and a free cable end	1056696	1	1097298	1

Accessories

Description	Type	Order No.	Pcs./Pkt.
Holder			
Without vehicle charging connector recognition	EV-T2AC-PARK	1624148	1



Vehicle charging connector pin assignment



3-phase, black,
with a spiraled metric cable



3-phase, black,
with a straight metric cable



Technical data

20 A	32 A
3	3
480 V AC	480 V AC
20 A	32 A
IEC 62196-2	IEC 62196-2
Mode 3, Case C	Mode 3, Case C
680 Ω (between PE and PP)	220 Ω (between PE and PP)
-30°C ... 50°C	-30°C ... 50°C
5 (L1, L2, L3, N, PE)	5 (L1, L2, L3, N, PE)
> 10,000	> 10,000
< 100 N	< 100 N
IP44	IP44
IP54	IP54
spiraled	spiraled
4 m	4 m
12.8 mm ±0.4 mm	17 mm ±0.4 mm
5 x 2.5 mm ² + 1 x 0.5 mm ²	5 x 6.0 mm ² + 1 x 0.5 mm ²
black	black

Ordering data

Order No.	Pcs./Pkt.	Order No.	Pcs./Pkt.
20 A		32 A	

1097295 1 1056698 1

Accessories

Type	Order No.	Pcs./Pkt.
EV-T2AC-PARK	1624148	1

Technical data

20 A	32 A
3	3
480 V AC	480 V AC
20 A	32 A
IEC 62196-2	IEC 62196-2
Mode 3, Case C	Mode 3, Case C
680 Ω (between PE and PP)	220 Ω (between PE and PP)
-30°C ... 50°C	-30°C ... 50°C
5 (L1, L2, L3, N, PE)	5 (L1, L2, L3, N, PE)
> 10,000	> 10,000
< 100 N	< 100 N
IP44	IP44
IP54	IP54
straight	straight
5 m	5 m
12.8 mm ±0.4 mm	17 mm ±0.4 mm
5 x 2.5 mm ² + 1 x 0.5 mm ²	5 x 6.0 mm ² + 1 x 0.5 mm ²
black	black

Ordering data

Order No.	Pcs./Pkt.	Order No.	Pcs./Pkt.
20 A		32 A	

1056697 1 1056700 1

Accessories

Type	Order No.	Pcs./Pkt.
EV-T2AC-PARK	1624148	1

Charging connection systems

AC charging cables

Type 2 with one free cable end

- Charging cables for European charging infrastructure
- Vehicle-side locking with electro-mechanical locking actuator
- Vehicle charging connector with a protective cap

Notes:

Upon request, we can also supply charging connectors with your company logo, further cable types and lengths, as well as cable ends that are preassembled or compacted, or with a step cut.



1-phase, gray-black,
with a spiraled metric cable



1-phase, gray-black,
with a straight metric cable



Technical data

	20 A	32 A
Number of phases	1	1
Rated voltage	250 V AC	250 V AC
Rated current	20 A	32 A
Standards	IEC 62196-2	IEC 62196-2
Charging mode	Mode 3, Case C	Mode 3, Case C
Resistor coding	680 Ω (between PE and PP)	220 Ω (between PE and PP)
Ambient temperature (operation)	-30°C ... 50°C	-30°C ... 50°C
Number of power contacts	3 (L1, N, PE)	3 (L1, N, PE)
Insertion/withdrawal cycles	> 10,000	> 10,000
Insertion/withdrawal force	< 100 N	< 100 N
Degree of protection (when plugged in)	IP44	IP44
Degree of protection (with protective cap)	IP54	IP54
Cable data		
Cable type	spiraled	spiraled
Cable length	4 m	4 m
Cable diameter	10.2 mm ±0.3 mm	12.8 mm ±0.4 mm
Cable structure	3 x 2.5 mm ² + 1 x 0.5 mm ²	3 x 6.0 mm ² + 1 x 0.5 mm ²
Sheath color	black	black

Ordering data

Description	20 A		32 A	
	Order No.	Pcs./Pkt.	Order No.	Pcs./Pkt.
AC charging cable with a type 2 AC vehicle charging connector and a free cable end without locking	1627126	1	1627127	1

Accessories

Description	Type	Order No.	Pcs./Pkt.
Holder Without vehicle charging connector recognition	EV-T2AC-PARK	1624148	1



Technical data

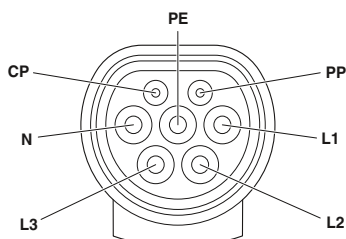
	20 A	32 A
Number of phases	1	1
Rated voltage	250 V AC	250 V AC
Rated current	20 A	32 A
Standards	IEC 62196-2	IEC 62196-2
Charging mode	Mode 3, Case C	Mode 3, Case C
Resistor coding	680 Ω (between PE and PP)	220 Ω (between PE and PP)
Ambient temperature (operation)	-30°C ... 50°C	-30°C ... 50°C
Number of power contacts	3 (L1, N, PE)	3 (L1, N, PE)
Insertion/withdrawal cycles	> 10,000	> 10,000
Insertion/withdrawal force	< 100 N	< 100 N
Degree of protection (when plugged in)	IP44	IP44
Degree of protection (with protective cap)	IP54	IP54
Cable data		
Cable type	straight	straight
Cable length	5 m	5 m
Cable diameter	10.2 mm ±0.3 mm	12.8 mm ±0.4 mm
Cable structure	3 x 2.5 mm ² + 1 x 0.5 mm ²	3 x 6.0 mm ² + 1 x 0.5 mm ²
Sheath color	black	black

Ordering data

Description	20 A		32 A	
	Order No.	Pcs./Pkt.	Order No.	Pcs./Pkt.
AC charging cable with a type 2 AC vehicle charging connector and a free cable end without locking	1627354	1	1627366	1

Accessories

Description	Type	Order No.	Pcs./Pkt.
Holder Without vehicle charging connector recognition	EV-T2AC-PARK	1624148	1



Vehicle charging connector pin assignment



3-phase, gray-black,
with a spiraled metric cable



3-phase, gray-black,
with a straight metric cable



Technical data

20 A	32 A
3	3
480 V AC	480 V AC
20 A	32 A
IEC 62196-2	IEC 62196-2
Mode 3, Case C	Mode 3, Case C
680 Ω (between PE and PP)	220 Ω (between PE and PP)
-30°C ... 50°C	-30°C ... 50°C
5 (L1, L2, L3, N, PE)	5 (L1, L2, L3, N, PE)
> 10,000	> 10,000
< 100 N	< 100 N
IP44	IP44
IP54	IP54
spiraled	spiraled
4 m	4 m
12.8 mm ±0.4 mm	17 mm ±0.4 mm
5 x 2.5 mm ² + 1 x 0.5 mm ²	5 x 6.0 mm ² + 1 x 0.5 mm ²
black	black

Ordering data

Order No.	Pcs./Pkt.	Order No.	Pcs./Pkt.
20 A		32 A	

1627128 1 1627130 1

Accessories

Type	Order No.	Pcs./Pkt.
EV-T2AC-PARK	1624148	1

Technical data

20 A	32 A
3	3
480 V AC	480 V AC
20 A	32 A
IEC 62196-2	IEC 62196-2
Mode 3, Case C	Mode 3, Case C
680 Ω (between PE and PP)	220 Ω (between PE and PP)
-30°C ... 50°C	-30°C ... 50°C
5 (L1, L2, L3, N, PE)	5 (L1, L2, L3, N, PE)
> 10,000	> 10,000
< 100 N	< 100 N
IP44	IP44
IP54	IP54
straight	straight
5 m	5 m
12.8 mm ±0.4 mm	17 mm ±0.4 mm
5 x 2.5 mm ² + 1 x 0.5 mm ²	5 x 6.0 mm ² + 1 x 0.5 mm ²
black	black

Ordering data

Order No.	Pcs./Pkt.	Order No.	Pcs./Pkt.
20 A		32 A	

1627365 1 1627355 1

Accessories

Type	Order No.	Pcs./Pkt.
EV-T2AC-PARK	1624148	1

Charging connection systems

AC charging cables

Type 1 with one free cable end

- Charging cables for North American, Japanese, and European charging infrastructure
- Locking on the vehicle side with lever mechanism
- Additional locking option with padlock
- Vehicle charging connector with a protective cap

Notes:

Upon request, we can also supply charging connectors with your company logo, further cable types and lengths, as well as cable ends that are preassembled or compacted, or with a step cut.



Gray-black,
with a spiraled metric cable



Gray-black,
with a straight metric cable



Technical data			
	20 A	32 A	
Number of phases	1	1	
Rated voltage	250 V AC	250 V AC	
Rated current	20 A	32 A	
Standards	IEC 62196-2	IEC 62196-2	
Charging mode	Mode 3, Case C	Mode 3, Case C	
Resistor coding	480 Ω (Lever actuated) 150 Ω (Lever not actuated)	480 Ω (Lever actuated) 150 Ω (Lever not actuated)	
Ambient temperature (operation)	-30°C ... 50°C	-30°C ... 50°C	
Number of power contacts	3 (L1, N, PE)	3 (L1, N, PE)	
Insertion/withdrawal cycles	> 10,000	> 10,000	
Insertion/withdrawal force	< 75 N	< 75 N	
Degree of protection (when plugged in)	IP44	IP44	
Degree of protection (with protective cap)	IP54	IP54	
Cable data			
Cable type	spiraled	spiraled	
Cable length	4 m	4 m	
Cable diameter	10.2 mm ±0.3 mm	12.8 mm ±0.4 mm	
Cable structure	3 x 2.5 mm ² + 1 x 0.5 mm ²	3 x 6.0 mm ² + 1 x 0.5 mm ²	
Sheath color	black	black	



Technical data			
	20 A	32 A	
Number of phases	1	1	
Rated voltage	250 V AC	250 V AC	
Rated current	20 A	32 A	
Standards	IEC 62196-2	IEC 62196-2	
Charging mode	Mode 3, Case C	Mode 3, Case C	
Resistor coding	480 Ω (Lever actuated) 150 Ω (Lever not actuated)	480 Ω (Lever actuated) 150 Ω (Lever not actuated)	
Ambient temperature (operation)	-30°C ... 50°C	-30°C ... 50°C	
Number of power contacts	3 (L1, N, PE)	3 (L1, N, PE)	
Insertion/withdrawal cycles	> 10,000	> 10,000	
Insertion/withdrawal force	< 75 N	< 75 N	
Degree of protection (when plugged in)	IP44	IP44	
Degree of protection (with protective cap)	IP54	IP54	
Cable data			
Cable type	straight	straight	
Cable length	5 m	5 m	
Cable diameter	10.2 mm ±0.3 mm	12.8 mm ±0.4 mm	
Cable structure	3 x 2.5 mm ² + 1 x 0.5 mm ²	3 x 6.0 mm ² + 1 x 0.5 mm ²	
Sheath color	black	black	

Ordering data

Order No.	Pcs./Pkt.	Order No.	Pcs./Pkt.
20 A		32 A	

Description

AC charging cable with a type 1 AC vehicle charging connector and a free cable end

without additional locking option with padlock

with additional locking option with padlock

1627345 1

1627344 1

1623238 1

1623239 1

Accessories

Type	Order No.	Pcs./Pkt.
EV-T1AC-PARK	1624139	1

Description

Holder

Without vehicle charging connector recognition

Ordering data

Order No.	Pcs./Pkt.	Order No.	Pcs./Pkt.
20 A		32 A	

1628013 1

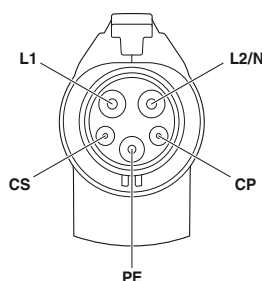
1628096 1

1627362 1

1627356 1

Accessories

Type	Order No.	Pcs./Pkt.
EV-T1AC-PARK	1624139	1



Vehicle charging connector pin assignment



**Black,
with a straight metric cable**



**Black,
with a straight PSE cable**



Technical data

20 A	32 A
1	1
250 V AC	250 V AC
20 A	32 A
IEC 62196-2	IEC 62196-2
Mode 3, Case C	Mode 3, Case C
480 Ω (Lever actuated)	480 Ω (Lever actuated)
150 Ω (Lever not actuated)	150 Ω (Lever not actuated)
-30°C ... 50°C	-30°C ... 50°C
3 (L1, N, PE)	3 (L1, N, PE)
> 10,000	> 10,000
< 75 N	< 75 N
IP44	IP44
IP54	IP54
straight	straight
5 m	5 m
10.2 mm ±0.3 mm	12.8 mm ±0.4 mm
3 x 2.5 mm ² + 1 x 0.5 mm ²	3 x 6.0 mm ² + 1 x 0.5 mm ²
black	black

Ordering data

Order No.	Pcs./Pkt.	Order No.	Pcs./Pkt.
20 A		32 A	

1060405 1 **1628126** 1

Accessories

Type	Order No.	Pcs./Pkt.
EV-T1AC-PARK	1624139	1

Technical data

30 A
1
250 V AC
30 A
IEC 62196-2
Mode 3, Case C
480 Ω (Lever actuated)
150 Ω (Lever not actuated)
-30°C ... 50°C
3 (L1, N, PE)
> 10,000
< 75 N
IP44
IP54
straight
5 m
16.3 mm
3 x 6.0 mm ² + 1 x 0.75 mm ²
black

Ordering data

Order No.	Pcs./Pkt.	Order No.	Pcs./Pkt.
30 A			

1033865 1

1033864 1

Accessories

Type	Order No.	Pcs./Pkt.
EV-T1AC-PARK	1624139	1

Charging connection systems

AC charging cables

Type 1 with one free cable end

- Charging cables for North American, Japanese, and European charging infrastructure
- Locking on the vehicle side with lever mechanism
- Additional locking option with padlock
- Vehicle charging connector with a protective cap

Notes:

Upon request, we can also supply charging connectors with your company logo, further cable types and lengths, as well as cable ends that are preassembled or compacted, or with a step cut.



Gray-black,
with a straight AWG cable



Black,
with a straight AWG cable



Technical data

	15 A	32 A
Number of phases	1	1
Rated voltage	250 V AC	250 V AC
Rated current	15 A	32 A
Standards	SAE J1772	SAE J1772
Charging mode	Level 2	Level 2
Resistor coding	480 Ω (Lever actuated) 150 Ω (Lever not actuated)	480 Ω (Lever actuated) 150 Ω (Lever not actuated)
Ambient temperature (operation)	-30°C ... 50°C	-30°C ... 50°C
Number of power contacts	3 (L1, N, PE)	3 (L1, N, PE)
Insertion/withdrawal cycles	> 10,000	> 10,000
Insertion/withdrawal force	< 75 N	< 75 N
Degree of protection (NEMA)	3R	3R
Cable data		
Cable type	straight	straight
Cable length	5 m	5 m
Cable diameter	10.5 mm ±0.3 mm	17 mm ±0.4 mm
Cable structure	3 x 14 AWG + 1 x 20 AWG	3 x 10 AWG + 1 x 18 AWG
Sheath color	black	black

Ordering data

Description	Order No.	Pcs./Pkt.	Order No.	Pcs./Pkt.
	15 A		32 A	
AC charging cable with a type 1 AC vehicle charging connector and a free cable end	1628014	1	1628422	1
without additional locking option with padlock				
with additional locking option with padlock	1627757	1	1628419	1

Accessories

Description	Type	Order No.	Pcs./Pkt.
Holder			
Without vehicle charging connector recognition	EV-T1AC-PARK	1624139	1



Technical data

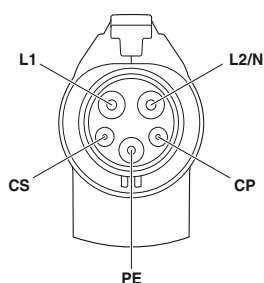
	15 A	32 A
Number of phases	1	1
Rated voltage	250 V AC	250 V AC
Rated current	15 A	32 A
Standards	SAE J1772	SAE J1772
Charging mode	Level 2	Level 2
Resistor coding	480 Ω (Lever actuated) 150 Ω (Lever not actuated)	480 Ω (Lever actuated) 150 Ω (Lever not actuated)
Ambient temperature (operation)	-30°C ... 50°C	-30°C ... 50°C
Number of power contacts	3 (L1, N, PE)	3 (L1, N, PE)
Insertion/withdrawal cycles	> 10,000	> 10,000
Insertion/withdrawal force	< 75 N	< 75 N
Degree of protection (NEMA)	3R	3R
Cable data		
Cable type	straight	straight
Cable length	5 m	5 m
Cable diameter	10.5 mm ±0.3 mm	17 mm ±0.4 mm
Cable structure	3 x 14 AWG + 1 x 20 AWG	3 x 10 AWG + 1 x 18 AWG
Sheath color	black	black

Ordering data

Description	Order No.	Pcs./Pkt.	Order No.	Pcs./Pkt.
	15 A		32 A	
AC charging cable with a type 1 AC vehicle charging connector and a free cable end	1064753	1	1064755	1
without additional locking option with padlock				
with additional locking option with padlock				

Accessories

Description	Type	Order No.	Pcs./Pkt.
Holder			
Without vehicle charging connector recognition	EV-T1AC-PARK	1624139	1



Vehicle charging connector pin assignment

GB/T with one free cable end

- Charging cables for the Chinese charging infrastructure
- Locking on the vehicle side with lever mechanism
- Additional locking option with padlock
- Vehicle charging connector with a protective cap

Notes:

Upon request, we can also supply charging connectors with your company logo, further cable types and lengths, as well as cable ends that are preassembled or compacted, or with a step cut.

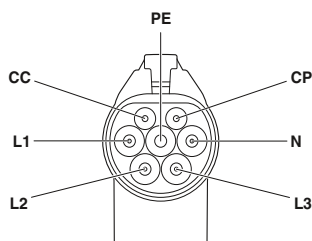


1-phase, gray-black,
with a straight metric cable



3-phase, gray-black,
with a straight metric cable

	Technical data		Technical data	
	16 A	32 A	16 A	32 A
Number of phases	1	1	3	3
Rated voltage	250 V	250 V	440 V	440 V
Rated current	16 A	32 A	16 A	32 A
Standards	GB/T 20234.2-2015	GB/T 20234.2-2015	GB/T 20234.2-2015	GB/T 20234.2-2015
Charging mode	Mode 3, Case C	Mode 3, Case C	Mode 3, Case C	Mode 3, Case C
Resistor coding	680 Ω + 2.7 kΩ (Lever actuated) 680 Ω (Lever not actuated)	220 Ω + 3...3 kΩ (Lever actuated) 220 Ω (Lever not actuated)	680 Ω + 2.7 kΩ (Lever actuated) 680 Ω (Lever not actuated)	220 Ω + 3...3 kΩ (Lever actuated) 220 Ω (Lever not actuated)
Ambient temperature (operation)	-30°C ... 50°C	-30°C ... 50°C	-30°C ... 50°C	-30°C ... 50°C
Number of power contacts	3 (L, N, PE)	3 (L, N, PE)	5 (L1, L2, L3, N, PE)	5 (L1, L2, L3, N, PE)
Insertion/withdrawal cycles	> 10,000	> 10,000	> 10,000	> 10,000
Insertion/withdrawal force	< 100 N	< 100 N	< 100 N	< 100 N
Degree of protection (when plugged in)	IP55	IP55	IP55	IP55
Degree of protection (with protective cap)	IP54	IP54	IP54	IP54
Cable data				
Cable type	straight	straight	straight	straight
Cable length	5 m	5 m	5 m	5 m
Cable diameter	10.2 mm ±0.3 mm	12.8 mm ±0.4 mm	12.8 mm ±0.4 mm	17 mm ±0.4 mm
Cable structure	3 x 2.5 mm ² + 1 x 0.5 mm ²	3 x 6.0 mm ² + 1 x 0.5 mm ²	5 x 2.5 mm ² + 1 x 0.5 mm ²	5 x 6.0 mm ² + 1 x 0.5 mm ²
Sheath color	black	black	black	black
	Ordering data		Ordering data	
	Order No.	Pcs./Pkt.	Order No.	Pcs./Pkt.
AC charging cable with a GB/T AC vehicle charging connector and a free cable end				
	16 A	32 A	16 A	32 A
without additional locking option with padlock	1627599	1	1627601	1
with additional locking option with padlock	1623510	1	1623511	1
	Accessories		Accessories	
	Type	Order No.	Type	Order No.
Holder				
	Without vehicle charging connector recognition	EV-GBAC-PARK	1624142	1



GB/T vehicle charging connector pin assignment

Charging connection systems

AC charging cables

Mobile type 2 design

- Mobile charging cables for European charging infrastructure
- Vehicle- and infrastructure-side locking mechanism with electromechanical locking actuator
- Vehicle charging connector and infrastructure charging plug with protective cap

Notes:

Upon request, we can also supply charging connectors with your company logo, as well as further cable types and lengths.



1-phase, gray-black,
with a spiraled metric cable



1-phase, gray-black,
with a straight metric cable



Technical data

	20 A	32 A
Number of phases	1	1
Rated voltage	250 V AC	250 V AC
Rated current	20 A	32 A
Standards	IEC 62196-2	IEC 62196-2
Charging mode	Mode 3, Case B	Mode 3, Case B
Ambient temperature (operation)	-30°C ... 50°C	-30°C ... 50°C
Number of power contacts	3 (L1, N, PE)	3 (L1, N, PE)
Insertion/withdrawal cycles	> 10,000	> 10,000
Insertion/withdrawal force	< 100 N	< 100 N
Degree of protection (when plugged in)	IP44	IP44
Degree of protection (with protective cap)	IP54	IP54
Cable data		
Cable type	spiraled	spiraled
Cable length	4 m	4 m
Cable diameter	10.2 mm ±0.3 mm	12.8 mm ±0.4 mm
Cable structure	3 x 2.5 mm ² + 1 x 0.5 mm ²	3 x 6.0 mm ² + 1 x 0.5 mm ²
Sheath color	black	black

Ordering data

Description	Order No.	Pcs./Pkt.	Order No.	Pcs./Pkt.
	20 A		32 A	
Mobile AC charging cable with type 2 AC vehicle charging connector and type 2 infrastructure charging plug without additional locking option with padlock	1627131	1	1627133	1

Accessories

Type	Order No.	Pcs./Pkt.
EV-T2AC-PARK	1624148	1
EV-T2M3SE12-1AC32A-0,7M6,0E10	1628124	1

Holder
Without vehicle charging connector recognition
AC infrastructure charging outlet with locking actuator (12 V operating voltage)
1-phase



Technical data

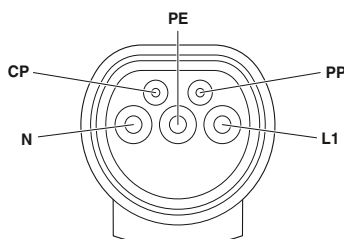
	20 A	32 A
Number of phases	1	1
Rated voltage	250 V AC	250 V AC
Rated current	20 A	32 A
Standards	IEC 62196-2	IEC 62196-2
Charging mode	Mode 3, Case B	Mode 3, Case B
Ambient temperature (operation)	-30°C ... 50°C	-30°C ... 50°C
Number of power contacts	3 (L1, N, PE)	3 (L1, N, PE)
Insertion/withdrawal cycles	> 10,000	> 10,000
Insertion/withdrawal force	< 100 N	< 100 N
Degree of protection (when plugged in)	IP44	IP44
Degree of protection (with protective cap)	IP54	IP54
Cable data		
Cable type	straight	straight
Cable length	5 m	5 m
Cable diameter	10.2 mm ±0.3 mm	12.8 mm ±0.4 mm
Cable structure	3 x 2.5 mm ² + 1 x 0.5 mm ²	3 x 6.0 mm ² + 1 x 0.5 mm ²
Sheath color	black	black

Ordering data

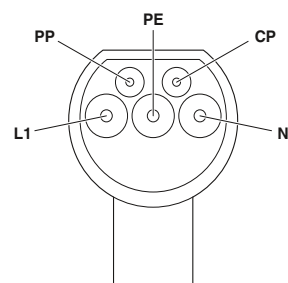
Order No.	Pcs./Pkt.	Order No.	Pcs./Pkt.
20 A		32 A	
1627982	1	1627801	1

Accessories

Type	Order No.	Pcs./Pkt.
EV-T2AC-PARK	1624148	1
EV-T2M3SE12-1AC32A-0,7M6,0E10	1628124	1



Vehicle charging connector pin assignment



Infrastructure charging plug pin assignment



3-phase, gray-black,
with a spiraled metric cable



3-phase, gray-black,
with a straight metric cable



Technical data

20 A	32 A
3	3
480 V AC	480 V AC
20 A	32 A
IEC 62196-2	IEC 62196-2
Mode 3, Case B	Mode 3, Case B
-30°C ... 50°C	-30°C ... 50°C
5 (L1, L2, L3, N, PE)	5 (L1, L2, L3, N, PE)
> 10,000	> 10,000
< 100 N	< 100 N
IP44	IP44
IP54	IP54
spiraled	spiraled
4 m	4 m
12.8 mm ±0.4 mm	17 mm ±0.4 mm
5 x 2.5 mm ² + 1 x 0.5 mm ²	5 x 6.0 mm ² + 1 x 0.5 mm ²
black	black

Ordering data

Order No.	Pcs./Pkt.	Order No.	Pcs./Pkt.
20 A		32 A	

1627135 1 1627136 1



Technical data

20 A	32 A
3	3
480 V AC	480 V AC
20 A	32 A
IEC 62196-2	IEC 62196-2
Mode 3, Case B	Mode 3, Case B
-30°C ... 50°C	-30°C ... 50°C
5 (L1, L2, L3, N, PE)	5 (L1, L2, L3, N, PE)
> 10,000	> 10,000
< 100 N	< 100 N
IP44	IP44
IP54	IP54
straight	straight
5 m	5 m
12.8 mm ±0.4 mm	17 mm ±0.4 mm
5 x 2.5 mm ² + 1 x 0.5 mm ²	5 x 6.0 mm ² + 1 x 0.5 mm ²
black	black

Ordering data

Order No.	Pcs./Pkt.	Order No.	Pcs./Pkt.
20 A		32 A	

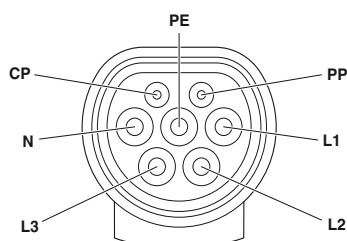
1628348 1 1627692 1

Accessories

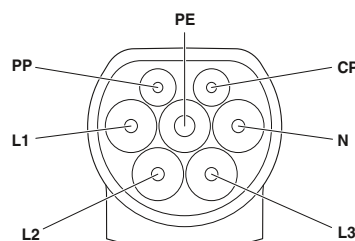
Type	Order No.	Pcs./Pkt.
EV-T2AC-PARK	1624148	1
EV-T2M3SE12-1AC32A-0,7M6,0E10	1628124	1

Accessories

Type	Order No.	Pcs./Pkt.
EV-T2AC-PARK	1624148	1
EV-T2M3SE12-1AC32A-0,7M6,0E10	1628124	1



Vehicle charging connector pin assignment



Infrastructure charging plug pin assignment

Charging connection systems

AC charging cables

Mobile type 2 design

- Mobile charging cables for European charging infrastructure
- Vehicle- and infrastructure-side locking mechanism with electromechanical locking actuator
- Vehicle charging connector and infrastructure charging plug with protective cap

Notes:

Upon request, we can also supply charging connectors with your company logo, as well as further cable types and lengths.



1-phase, black,
with a straight metric cable



3-phase, black,
with a straight metric cable



Technical data

	20 A	32 A
Number of phases	1	1
Rated voltage	250 V AC	250 V AC
Rated current	20 A	32 A
Standards	IEC 62196-2	IEC 62196-2
Charging mode	Mode 3, Case B	Mode 3, Case B
Ambient temperature (operation)	-30°C ... 50°C	-30°C ... 50°C
Number of power contacts	3 (L1, N, PE)	3 (L1, N, PE)
Insertion/withdrawal cycles	> 10,000	> 10,000
Insertion/withdrawal force	< 100 N	< 100 N
Degree of protection (when plugged in)	IP44	IP44
Degree of protection (with protective cap)	IP54	IP54
Cable data		
Cable type	straight	straight
Cable length	5 m	5 m
Cable diameter	10.2 mm ±0.3 mm	12.8 mm ±0.4 mm
Cable structure	3 x 2.5 mm ² + 1 x 0.5 mm ²	3 x 6.0 mm ² + 1 x 0.5 mm ²
Sheath color	black	black

Ordering data

Description	Order No.	Pcs./Pkt.	Order No.	Pcs./Pkt.
		20 A		32 A

Mobile AC charging cable with type 2 AC vehicle charging connector and type 2 infrastructure charging plug

1097301 1 1097306 1

Accessories

Type	Order No.	Pcs./Pkt.
EV-T2AC-PARK	1624148	1
EV-T2M3SE12-1AC32A-0,7M6,0E10	1628124	1

Description

Holder
Without vehicle charging connector recognition

AC infrastructure charging outlet with locking actuator (12 V operating voltage)

1-phase
3-phase



Technical data

	20 A	32 A
Number of phases	3	3
Rated voltage	480 V AC	480 V AC
Rated current	20 A	32 A
Standards	IEC 62196-2	IEC 62196-2
Charging mode	Mode 3, Case B	Mode 3, Case B
Ambient temperature (operation)	-30°C ... 50°C	-30°C ... 50°C
Number of power contacts	5 (L1, L2, L3, N, PE)	5 (L1, L2, L3, N, PE)
Insertion/withdrawal cycles	> 10,000	> 10,000
Insertion/withdrawal force	< 100 N	< 100 N
Degree of protection (when plugged in)	IP44	IP44
Degree of protection (with protective cap)	IP54	IP54
Cable data		
Cable type	straight	straight
Cable length	5 m	5 m
Cable diameter	12.8 mm ±0.4 mm	17 mm ±0.4 mm
Cable structure	5 x 2.5 mm ² + 1 x 0.5 mm ²	5 x 6.0 mm ² + 1 x 0.5 mm ²
Sheath color	black	black

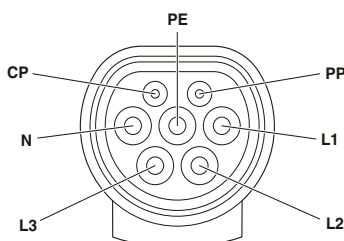
Ordering data

Order No.	Pcs./Pkt.	Order No.	Pcs./Pkt.
	20 A		32 A

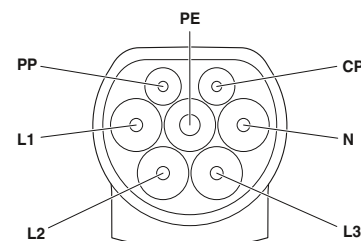
1097299 1 1628125 1

Accessories

Type	Order No.	Pcs./Pkt.
EV-T2AC-PARK	1624148	1
EV-T2M3SE12-3AC32A-0,7M6,0E10	1405214	1



Vehicle charging connector pin assignment



Infrastructure charging plug pin assignment

Mobile GB/T design

- Mobile charging cables for the Chinese charging infrastructure
- Vehicle- and infrastructure-side locking mechanism with lever locking
- Additional locking option with padlock
- Vehicle charging connector and infrastructure charging plug with protective cap

Notes:

Upon request, we can also supply charging connectors with your company logo, as well as further cable types and lengths.



1-phase, gray-black,
with a straight metric cable



3-phase, gray-black,
with a straight metric cable

Technical data

	16 A	32 A
Number of phases	1	1
Rated voltage	250 V	250 V
Rated current	16 A	32 A
Standards	GB/T 20234.2-2015	GB/T 20234.2-2015
Charging mode	Mode 3, Case B	Mode 3, Case B
Ambient temperature (operation)	-30°C ... 50°C	-30°C ... 50°C
Number of power contacts	3 (L, N, PE)	3 (L, N, PE)
Insertion/withdrawal cycles	> 10,000	> 10,000
Insertion/withdrawal force	< 100 N	< 100 N
Degree of protection (when plugged in)	IP55	IP55
Degree of protection (with protective cap)	IP54	IP54
Cable data		
Cable type	straight	straight
Cable length	5 m	5 m
Cable diameter	10.2 mm ±0.3 mm	12.8 mm ±0.4 mm
Cable structure	3 x 2.5 mm ² + 1 x 0.5 mm ²	3 x 6.0 mm ² + 1 x 0.5 mm ²
Sheath color	black	black

Ordering data

Description	Order No.	Pcs./Pkt.	Order No.	Pcs./Pkt.
	16 A		32 A	
Mobile AC charging cable with a GB/T AC vehicle charging connector and a GB/T infrastructure charging plug without additional locking option with padlock	1627603	1	1627605	1
with additional locking option with padlock	1623515	1	1623516	1

Accessories

Description	Type	Order No.	Pcs./Pkt.
Holder			
Without vehicle charging connector recognition			
AC infrastructure charging outlet with locking actuator (12 V operating voltage)	EV-GBAC-PARK	1624142	1
1-phase			
3-phase	EV-GBM3SL12-1AC32A-0,7M6,0E10T	1039245	1

Technical data

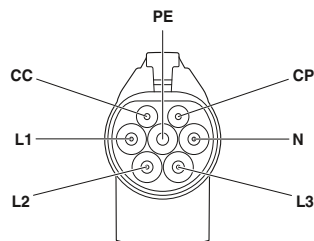
	16 A	32 A
Number of phases	3	3
Rated voltage	440 V	440 V
Rated current	16 A	32 A
Standards	GB/T 20234.2-2015	GB/T 20234.2-2015
Charging mode	Mode 3, Case B	Mode 3, Case B
Ambient temperature (operation)	-30°C ... 50°C	-30°C ... 50°C
Number of power contacts	5 (L1, L2, L3, N, PE)	5 (L1, L2, L3, N, PE)
Insertion/withdrawal cycles	> 10,000	> 10,000
Insertion/withdrawal force	< 100 N	< 100 N
Degree of protection (when plugged in)	IP55	IP55
Degree of protection (with protective cap)	IP54	IP54
Cable data		
Cable type	straight	straight
Cable length	5 m	5 m
Cable diameter	12.8 mm ±0.4 mm	17 mm ±0.4 mm
Cable structure	5 x 2.5 mm ² + 1 x 0.5 mm ²	5 x 6.0 mm ² + 1 x 0.5 mm ²
Sheath color	black	black

Ordering data

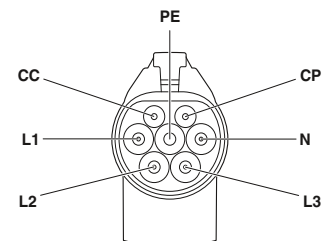
Order No.	Pcs./Pkt.	Order No.	Pcs./Pkt.
16 A		32 A	
1627604	1	1627606	1
1623517	1	1624138	1

Accessories

Type	Order No.	Pcs./Pkt.
EV-GBAC-PARK	1624142	1
EV-GBM3SL12-3AC32A-0,7M6,0E10T	1050941	1



Vehicle charging connector pin assignment



Infrastructure charging plug pin assignment

Charging connection systems

AC charging cables

Adapter charging cables

- For charging at European type 2 and Chinese GB/T charging stations
- Locking mechanism with lever locking for type 1 and GB/T
- Locking mechanism with electromechanical locking actuator for type 2
- Additional locking option with padlock for type 1 and GB/T
- Vehicle charging connector and infrastructure charging plug with protective cap

Notes:

Upon request, we can also supply charging connectors with your company logo, as well as further cable types and lengths.



Type 1 (vehicle) to type 2 (infrastructure),
1-phase, gray-black,
with a spiraled metric cable



Type 1 (vehicle) to type 2 (infrastructure),
1-phase, gray-black,
with a straight metric cable



Technical data

	20 A	32 A
Number of phases	1	1
Rated voltage	250 V AC	250 V AC
Rated current	20 A	32 A
Standards	IEC 62196-2	IEC 62196-2
Charging mode	Mode 3, Case B	Mode 3, Case B
Resistor coding	480 Ω (Lever actuated) 150 Ω (Lever not actuated)	480 Ω (Lever actuated) 150 Ω (Lever not actuated)
Ambient temperature (operation)	-30°C ... 50°C	-30°C ... 50°C
Number of power contacts	3 (L1, N, PE)	3 (L1, N, PE)
Insertion/withdrawal cycles	> 10,000	> 10,000
Insertion/withdrawal force	< 75 N	< 75 N
Degree of protection (when plugged in)	IP44	IP44
Degree of protection (with protective cap)	IP54	IP54
Cable data		
Cable type	spiraled	spiraled
Cable length	4 m	4 m
Cable diameter	10.2 mm ±0.3 mm	12.8 mm ±0.4 mm
Cable structure	3 x 2.5 mm ² + 1 x 0.5 mm ²	3 x 6.0 mm ² + 1 x 0.5 mm ²
Sheath color	black	black

Ordering data

Description	Order No.	Pcs./Pkt.	Order No.	Pcs./Pkt.
	20 A		32 A	
Mobile AC adapter cable with a vehicle charging connector and an infrastructure charging plug				
without additional locking option with padlock	1628025	1	1628026	1
with additional locking option with padlock	1628020	1	1628021	1

Accessories

Description	Type	Order No.	Pcs./Pkt.
Holder			
Without vehicle charging connector recognition	EV-T1AC-PARK	1624139	1
AC infrastructure charging outlet with locking actuator (12 V operating voltage)			
1-phase	EV-T2M3SE12-1AC32A-0,7M6,0E10	1628124	1
3-phase			

Technical data

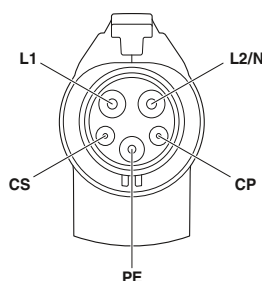
	20 A	32 A
Number of phases	1	1
Rated voltage	250 V AC	250 V AC
Rated current	20 A	32 A
Standards	IEC 62196-2	IEC 62196-2
Charging mode	Mode 3, Case B	Mode 3, Case B
Resistor coding	480 Ω (Lever actuated) 150 Ω (Lever not actuated)	480 Ω (Lever actuated) 150 Ω (Lever not actuated)
Ambient temperature (operation)	-30°C ... 50°C	-30°C ... 50°C
Number of power contacts	3 (L1, N, PE)	3 (L1, N, PE)
Insertion/withdrawal cycles	> 10,000	> 10,000
Insertion/withdrawal force	< 75 N	< 75 N
Degree of protection (when plugged in)	IP44	IP44
Degree of protection (with protective cap)	IP54	IP54
Cable data		
Cable type	straight	straight
Cable length	5 m	5 m
Cable diameter	10.2 mm ±0.3 mm	12.8 mm ±0.4 mm
Cable structure	3 x 2.5 mm ² + 1 x 0.5 mm ²	3 x 6.0 mm ² + 1 x 0.5 mm ²
Sheath color	black	black

Ordering data

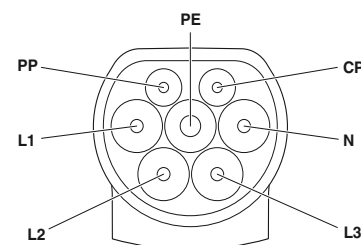
Description	Order No.	Pcs./Pkt.	Order No.	Pcs./Pkt.
	20 A		32 A	
Mobile AC adapter cable with a vehicle charging connector and an infrastructure charging plug				
without additional locking option with padlock	1628027	1	1628028	1
with additional locking option with padlock	1628022	1	1628023	1

Accessories

Description	Type	Order No.	Pcs./Pkt.
Holder			
Without vehicle charging connector recognition	EV-T1AC-PARK	1624139	1
AC infrastructure charging outlet with locking actuator (12 V operating voltage)			
1-phase	EV-T2M3SE12-1AC32A-0,7M6,0E10	1628124	1
3-phase			



Type 1 vehicle charging connector pin assignment



Type 2 infrastructure charging plug pin assignment



**Type 1 (vehicle) to GB/T (infrastructure),
1-phase, gray-black,
with a straight metric cable**



**Type 2 (vehicle) to GB/T (infrastructure),
1-phase, gray-black,
with a straight metric cable**



**GB/T (vehicle) to type 2 (infrastructure),
gray-black,
with a straight metric cable**

Technical data	
16 A	32 A
1	1
250 V	250 V AC
16 A	32 A
GB/T 20234.2-2015	GB/T 20234.2-2015
Mode 3, Case B	Mode 3, Case B
680 Ω + 2.7 kΩ (Lever actuated)	480 Ω (Lever actuated)
680 Ω (Lever not actuated)	150 Ω (Lever not actuated)
-30°C ... 50°C	-30°C ... 50°C
3 (L1, N, PE)	3 (L1, N, PE)
> 10,000	> 10,000
< 75 N	< 75 N
IP44	IP44
IP54	IP54
straight	straight
5 m	5 m
10.2 mm ±0.3 mm	12.8 mm ±0.4 mm
3 x 2.5 mm² + 1 x 0.5 mm²	3 x 6.0 mm² + 1 x 0.5 mm²
black	black

Ordering data			
Order No.	Pcs./Pkt.	Order No.	Pcs./Pkt.
16 A		32 A	

1627756 1 1022285 1

Accessories		
Type	Order No.	Pcs./Pkt.
EV-T1AC-PARK	1624139	1
EV-GBM3SL12-1AC32A-0,7M6,0E10T	1039245	1

Technical data	
32 A	
1	
250 V	
32 A	
IEC 62196-2	
Mode 3, Case B	
220 Ω + 3...3 kΩ (Lever actuated)	
220 Ω (Lever not actuated)	
-30°C ... 50°C	
3 (L, N, PE)	
> 10,000	
< 100 N	
IP55	
IP54	
straight	
5 m	
12.8 mm ±0.4 mm	
3 x 6.0 mm² + 1 x 0.5 mm²	
black	

Ordering data			
Order No.	Pcs./Pkt.	Order No.	Pcs./Pkt.
32 A			

1627688 1

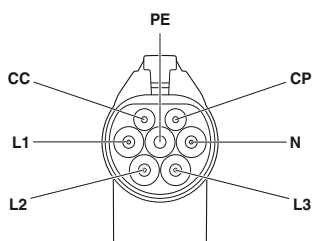
Accessories		
Type	Order No.	Pcs./Pkt.
EV-T2AC-PARK	1624148	1
EV-GBM3SL12-1AC32A-0,7M6,0E10T	1039245	1

Technical data	
32 A, 1-phase	32 A, 3-phase
1	3
250 V	440 V
32 A	32 A
IEC 62196-2	IEC 62196-2
Mode 3, Case B	Mode 3, Case B
220 Ω + 3...3 kΩ (Lever actuated)	220 Ω + 3...3 kΩ (Lever actuated)
220 Ω (Lever not actuated)	220 Ω (Lever not actuated)
-30°C ... 50°C	-30°C ... 50°C
3 (L, N, PE)	5 (L1, L2, L3, N, PE)
> 10,000	> 10,000
< 100 N	< 100 N
IP55	IP55
IP54	IP54
straight	straight
5 m	5 m
12.8 mm ±0.4 mm	17 mm ±0.4 mm
3 x 6.0 mm² + 1 x 0.5 mm²	5 x 6.0 mm² + 1 x 0.5 mm²
black	black

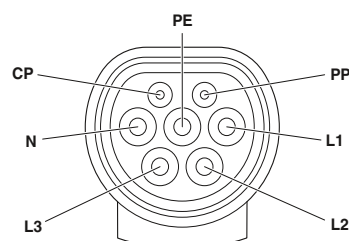
Ordering data			
Order No.	Pcs./Pkt.	Order No.	Pcs./Pkt.
32 A, 1-phase		32 A, 3-phase	

1050702 1 1628001 1

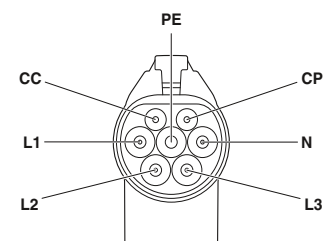
Accessories		
Type	Order No.	Pcs./Pkt.
EV-GBAC-PARK	1624142	1
EV-T2M3SE12-1AC32A-0,7M6,0E10	1628124	1
EV-T2M3SE12-3AC32A-0,7M6,0E10	1405214	1



GB/T infrastructure charging plug pin assignment



Type 2 vehicle charging connector pin assignment



GB/T vehicle charging connector pin assignment



The ideal interface for mobile charging cables

Our standardized AC infrastructure socket outlets can be used, for example, in public AC charging stations or compact wall boxes, and allow vehicles to be charged via a mobile AC charging cable in accordance with charging mode 3, case B. This means that you achieve a significantly higher power transmission than with charging via standard household outlets.

The charging outlets are pre-assembled, compact, highly flexible, and suitable for both indoor and outdoor use. Versions are available for the European type 2 standard and for the Chinese GB/T standard. The type 1 standard for North America and Japan does not stipulate an infrastructure socket outlet.

Fast, flexible mounting

The modular, space-saving design of the infrastructure socket outlets allows for flexible front and rear mounting, even on compact wall boxes. A drainage tube and different types of protective covers can be installed as an option. We can also supply the cable end preassembled, compacted, or with a step cut upon request.

Safe charging process

Thanks to a locking actuator, the infrastructure charging plug is reliably prevented from being pulled out during the charging process. The lock is controlled via electronics integrated into the actuator, and the current status can be queried. In the event of an emergency, e.g. a power outage, the locking actuator can also be unlocked manually by opening the charging station.

Your advantages

- Comprehensive product range for type 2 and GB/T
- Also suitable for compact wall boxes, thanks to the space-saving design
- Highly flexible, thanks to the modular design for front and rear mounting
- High level of safety during the charging process, thanks to the integrated locking actuator including position recognition and manual emergency unlocking
- Efficient power transmission and long-term stability, thanks to silver-plated power and signal contacts
- No condensation issues, thanks to the integrated drainage system with discharge nozzle
- Developed and produced in accordance with the IATF 16949 automotive standard and ISO 9001

i Your web code: **#2100**



Type 2 charging outlets

The type 2 charging outlet in accordance with IEC 62196 is designed for single- and three-phase charging within Europe. It is available both in a modular design for front and rear mounting with rear-side protective-cover screw connections, and as an easy-mount version for rear mounting with front-side protective-cover screw connections. The advantage of the easy-mount version is that the protective cover can be replaced conveniently without having to open the wall box or charging station.



GB/T charging outlets

The charging outlet in accordance with GB/T 20234 is designed for charging in line with Chinese infrastructure. It is very similar to the type 2 charging outlet. In addition to the locking actuator, a notch is provided for the lever of the infrastructure charging plug in accordance with standards. Moreover, every power contact is equipped with integrated temperature sensors in accordance with the new GB/T standard.



Front and rear mounting

The GB/T and type 2 infrastructure socket outlets (with the exception of the easy-mount versions) can be mounted onto the housing wall of the charging station or wall box from the front and from the back. This enables flexible use.



Matching protective cover type 2

We provide covers for protecting type 2 infrastructure socket outlets against environmental influences in accordance with IP54 and against vandalism. To ensure the consistent branding of your charging stations and wall boxes, we can provide a tailored design with your company logo upon request. The protective covers are listed in the "Accessories" section.



Matching GB/T protective covers

GB/T protective covers provide the same advantages as the type 2 protective covers, but they also vary in respect to the type of cover mechanism – self-closing or self-opening. All installation positions are possible. The protective cover can therefore be attached from the left, right, top, or bottom. The protective covers are listed in the "Accessories" section.

Charging connection systems

AC infrastructure socket outlets

Type 2

- For installation in European charging stations
- Locking by means of electromechanical locking actuator

Notes:

Further cable lengths available on request.



For protective covers
screwed on from the back



For protective covers
screwed on from the front (easy-mount)



	Technical data				Technical data		
	20 A, 3-phase	32 A, 1-phase	32 A, 3-phase		20 A, 3-phase	32 A, 1-phase	32 A, 3-phase
Number of phases	3	1	3		3	1	3
Rated voltage	480 V AC	250 V AC	480 V AC		480 V AC	250 V AC	480 V AC
Rated current	20 A	32 A	32 A		20 A	32 A	32 A
Standards	IEC 62196-2	IEC 62196-2	IEC 62196-2		IEC 62196-2	IEC 62196-2	IEC 62196-2
Charging mode	Mode 3, Case B	Mode 3, Case B	Mode 3, Case B		Mode 3, Case B	Mode 3, Case B	Mode 3, Case B
Dimensions (H x W x D)	75 mm x 96 mm x 76.2 mm	75 mm x 96 mm x 76.2 mm	75 mm x 96 mm x 76.2 mm		75 mm x 96 mm x 76.2 mm	75 mm x 96 mm x 76.2 mm	75 mm x 96 mm x 76.2 mm
Ambient temperature (operation)	-30°C ... 50°C	-30°C ... 50°C	-30°C ... 50°C		-30°C ... 50°C	-30°C ... 50°C	-30°C ... 50°C
Number of power contacts	5 (L1, L2, L3, N, PE)	3 (L1, N, PE)	5 (L1, L2, L3, N, PE)		5 (L1, L2, L3, N, PE)	3 (L1, N, PE)	5 (L1, L2, L3, N, PE)
Insertion/withdrawal cycles	> 10,000	> 10,000	> 10,000		> 10,000	> 10,000	> 10,000
Degree of protection (when plugged in)	IP44	IP44	IP44		IP44	IP44	IP44
Degree of protection (with protective cover)	IP54	IP54	IP54		IP54	IP54	IP54
Cable data							
Cable type	Single wires	Single wires	Single wires		Single wires	Single wires	Single wires
Cable length	0.7 m	0.7 m	0.7 m		0.7 m	0.7 m	0.7 m
Cable structure	5x 2.5 mm ² + 2x 0.5 mm ²	3x 6.0 mm ² + 2x 0.5 mm ²	5x 6.0 mm ² + 2x 0.5 mm ²		5x 2.5 mm ² + 2x 0.5 mm ²	3x 6.0 mm ² + 2x 0.5 mm ²	5x 6.0 mm ² + 2x 0.5 mm ²
Locking actuator data							
Mechanical emergency release	available	available	available		available	available	available
Lock recognition	available	available	available		available	available	available

	Ordering data						Ordering data					
Description	Order No.	Pcs./Pkt.	Order No.	Pcs./Pkt.	Order No.	Pcs./Pkt.	Order No.	Pcs./Pkt.	Order No.	Pcs./Pkt.	Order No.	Pcs./Pkt.
	20 A, 3-phase		32 A, 1-phase		32 A, 3-phase		20 A, 3-phase		32 A, 1-phase		32 A, 3-phase	
Type 2 AC infrastructure socket outlet with locking actuator (12 V operating voltage)	1405213	1	1628124	1	1405214	1	1627985	1	1628147	1	1627693	1
Type 2 AC infrastructure socket outlet with locking actuator (24 V operating voltage)	1405215	1			1405216	1	1627986	1			1627987	1

	Accessories				Accessories		
	Type	Order No.	Pcs./Pkt.		Type	Order No.	Pcs./Pkt.
Protective cover, can be fastened with screws from the back Self-closing	EV-T2SC	1405217	1				
Panel mounting frame, can be screwed on the back As an alternative to the protective cover	EV-T2SF	1405218	1				
Protective cover, can be fastened with screws horizontally from the front Self-closing				EV-T2SC-EMF	1069199	1	
Protective cover, can be fastened with screws vertically from the front Self-closing				EV-T2SC-EM	1627635	1	
Fixing frame, can be screwed on the front Required for protective covers with front vertical screw connection				EV-T2SF-EM	1627637	1	

GB/T

- For installation in Chinese charging stations
- Locking by means of electromechanical locking actuator

Notes:
Further cable lengths available on request.



For protective covers
screwed on from the back

Number of phases	1
Rated voltage	250 V AC
Rated current	32 A
Standards	GB/T 20234.2-2015
Charging mode	Mode 3, Case B
Dimensions (H x W x D)	75 mm x 96 mm x 76.2 mm
Ambient temperature (operation)	-30°C ... 50°C
Number of power contacts	3 (L1, N, PE)
Insertion/withdrawal cycles	> 10,000
Degree of protection (when plugged in)	IP55
Degree of protection (with protective cover)	IP55
Cable data	
Cable type	Single wires
Cable length	0.7 m
Cable structure	3x 6.0 mm ² + 2x 0.5 mm ²
Locking actuator data	
Mechanical emergency release	available
Lock recognition	available

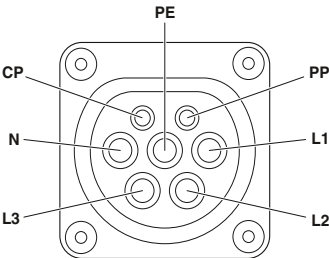
Technical data	
32 A, 1-phase	32 A, 3-phase
1	3
250 V AC	440 V AC
32 A	32 A
GB/T 20234.2-2015	GB/T 20234.2-2015
Mode 3, Case B	Mode 3, Case B
75 mm x 96 mm x 76.2 mm	75 mm x 96 mm x 76.2 mm
-30°C ... 50°C	-30°C ... 50°C
3 (L1, N, PE)	5 (L1, L2, L3, N, PE)
> 10,000	> 10,000
IP55	IP55
IP55	IP55
Single wires	Single wires
0.7 m	0.7 m
3x 6.0 mm ² + 2x 0.5 mm ²	5x 6.0 mm ² + 2x 0.5 mm ²
available	available
available	available

Description
AC infrastructure charging outlet with locking actuator (12 V operating voltage) 1-phase

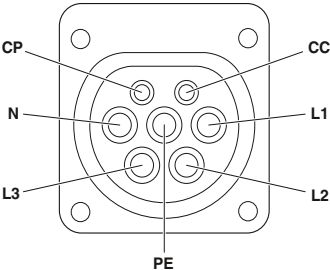
Ordering data			
Order No.	Pcs./Pkt.	Order No.	Pcs./Pkt.
32 A, 1-phase		32 A, 3-phase	
1039245	1	1050941	1

Description
Protective cover Self-opening Self-closing

Accessories		
Type	Order No.	Pcs./Pkt.
EV-GBSCO	1623415	1
EV-GBSC	1623416	1



Type 2 infrastructure socket outlet pin assignment



GB/T infrastructure socket outlet pin assignment



Options to benefit you

A selection of various accessories suitable for our charging cables and charging outlets is also available. You can use these to add useful functions such as advanced protection against environmental factors, or for enabling the fast and cost-effective repair of a damaged charging cable.

Your advantages

- Reliable protection for charging interfaces against environmental influences and vandalism
- Secure hold for charging connectors when vehicles are not being charged
- Consistent branding of your charging station or wall box with your company logo
- Quick and cost-effective repair of charging connectors in the event of damage
- Developed and produced in accordance with the IATF 16949 automotive standard and ISO 9001

i Your web code: **#2101**



Repair kits for cooled DC charging cables

Charging cables at public charging stations, and the mating face in particular, are subject to high levels of mechanical strain. Our repair kits can be used to quickly replace the mating face frames and power contacts on a damaged HPC charging connector, thereby minimizing downtime and ensuring that the costly replacement of the entire HPC charging cable is not necessary.



Holders for DC charging cables

Matching holders for DC charging cables are mounted on the outside of the charging station or wall box. They ensure the vehicle charging connector is held securely in place and protected against the elements whenever charging is not taking place.



Protective covers for AC infrastructure socket outlets

We provide covers for protecting infrastructure socket outlets against environmental influences in accordance with IP54 as well as against vandalism. To ensure the consistent branding of your charging stations and wall boxes, we can provide a tailored design with your company logo upon request.



Holders for AC charging cables

Matching holders for AC charging cables are mounted on the outside of the charging station or wall box. They ensure the vehicle charging connector is held securely in place and protected against the elements whenever charging is not taking place.

Accessories

Repair kits for cooled
HPC DC charging cables

- Kits for the cost-effective repair of damaged CCS type 2 HPC charging connectors
- Allows for the replacement of the mating face frame and, optionally, DC contacts
- It is not necessary to open the housing or to drain off the coolant



Mating face frame, bit, and DC contacts,
for CCS type 2

Technical data		
General data		
Type	With 5x M4X10 rounded head screws with Torx safety drive With special bit for safety screwdriver With DC contact maintained with integrated front part of DC contacts and their temperature sensors	
Standards	IEC 62196-3-1	
Charging standard	CCS type 2 Combined Charging System High Power Charging	
Charging mode	Mode 4	
Color	black	
Ambient temperature (operation)	-30°C ... 50°C	
Ambient temperature (storage/transport)	-40°C ... 80°C	
Ordering data		
Type	Order No.	Pcs./Pkt.
Repair kit	EV-T2CCS-MF-M4X10-BIT-CTS	10857991



Mating face frame and bit,
for CCS type 2



Mating face frame,
for CCS type 2

Technical data		
With 5x M4X10 rounded head screws with Torx safety drive With special bit for safety screwdriver		
IEC 62196-3-1 CCS type 2 Combined Charging System High Power Charging Mode 4 black -30°C ... 50°C -40°C ... 80°C		
Ordering data		
Type	Order No.	Pcs./Pkt.
EV-T2CCS-MF-M4X10-BIT	1085798	1

Technical data		
With 5x M4X10 rounded head screws with Torx safety drive		
IEC 62196-3-1 CCS type 2 Combined Charging System High Power Charging Mode 4 black -30°C ... 50°C -40°C ... 80°C		
Ordering data		
Type	Order No.	Pcs./Pkt.
EV-T2CCS-MF-M4X10	1085797	1

Holders for DC charging cables

- Park position for vehicle charging connector
- For mounting on charging stations
- Stable vehicle charging connector parking

Notes:
The screw connection positions on all holders listed here are identical



CCS type 1

Standards
Charging standard
Charging mode
Color
Dimensions (H x W x D)
Mounting
Fixing of vehicle charging connector
Removal of vehicle charging connector
Ambient temperature (operation)
Ambient temperature (storage/transport)
Degree of protection (when plugged in)

Technical data	
SAE J1772	
CCS type 1	
Mode 4	
black	
75 mm x 118 mm x 37.5 mm	
Front mounting	
With actuation lever	
Lever actuation and removal	
-30°C ... 50°C	
-40°C ... 80°C	
IP54	

Description
Holder
Without vehicle charging connector recognition
With vehicle charging connector recognition
Fixing with hexagonal head screws

Ordering data		
Type	Order No.	Pcs./Pkt.
EV-T1CCS-PARK	1624143	1



CCS type 2



GB/T

Technical data		
IEC 62196-3		
CCS type 2		
Mode 4		
black		
75 mm x 118 mm x 54 mm		
Front mounting		
With locking clips for locking contour		
Lifting and removal		
-30°C ... 50°C		
-40°C ... 80°C		
IP54		

Ordering data		
Type	Order No.	Pcs./Pkt.
EV-T2CCS-PARK	1624153	1

Technical data		
GB/T 20234.3		
GB/T		
Mode 4		
black		
91 mm x 91 mm x 51 mm		
Front mounting		
With actuation lever		
Lever actuation and removal		
-30°C ... 50°C		
-40°C ... 80°C		
IP54		

Ordering data		
Type	Order No.	Pcs./Pkt.
EV-GBDC-PARK	1623770	1
EV-GBDC-PARK-SW	1623497	1
EV-GBDC-PARK-R	1623496	1

Holders for AC charging cables

- Park position for vehicle charging connector
- For mounting on charging stations
- Stable vehicle charging connector parking

Notes:
The screw connection positions on all holders listed here are identical
The screw connection positions correspond to the AC infrastructure socket outlets



Type 1

Standards
Charging standard
Charging mode
Color
Dimensions (H x W x D)
Mounting
Fixing of vehicle charging connector
Removal of vehicle charging connector
Ambient temperature (operation)
Ambient temperature (storage/transport)
Degree of protection (when plugged in)

Technical data		
SAE J1772		
Type 1		
Mode 3		
black		
75 mm x 75 mm x 37.5 mm		
Front mounting		
With actuation lever		
Lever actuation and removal		
-30°C ... 50°C		
-40°C ... 80°C		
IP54		
Ordering data		
Type	Order No.	Pcs./Pkt.
EV-T1AC-PARK	1624139	1

Description
Holder
Without vehicle charging connector recognition



Type 2



GB/T

Technical data		
IEC 62196-2		
Type 2		
Mode 3		
black		
75 mm x 75 mm x 44.7 mm		
Front mounting		
With locking clips for locking contour		
Lifting and removal		
-30°C ... 50°C		
-40°C ... 80°C		
IP54		
Ordering data		
Type	Order No.	Pcs./Pkt.
EV-T2AC-PARK	1624148	1

Technical data		
GB/T 20234.2		
GB/T		
Mode 3		
black		
76.6 mm x 76.6 mm x 40 mm		
Front mounting		
With actuation lever		
Lever actuation and removal		
-30°C ... 50°C		
-40°C ... 80°C		
IP54		
Ordering data		
Type	Order No.	Pcs./Pkt.
EV-GBAC-PARK	1624142	1

Protective covers for type 2
AC infrastructure socket outlets

- Two versions are available for increasing the degree of protection of type 2 AC infrastructure socket outlets to IP54:
- Protective cover with rear screw connection
 - Protective cover with front screw connection, easy to replace



Protective cover that can be screwed on the back, with alternative panel mounting frame

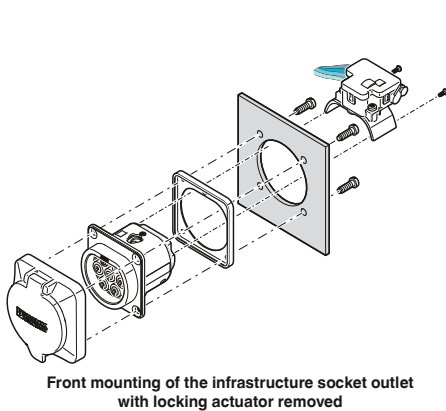


Protective cover that can be screwed on the front, with fixing frame

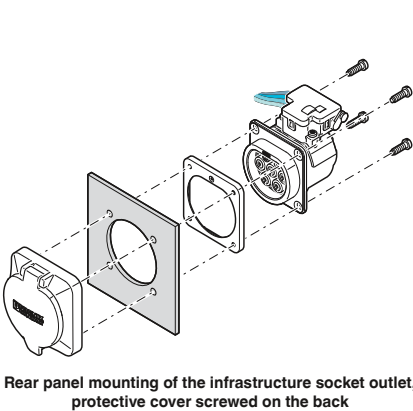
Standards	
Charging standard	
Charging mode	
Color	
Dimensions (H x W x D)	
Ambient temperature (operation)	
Description	
Protective cover , can be fastened with screws from the back	
Self-closing	
Panel mounting frame , can be screwed on the back	
As an alternative to the protective cover	
Protective cover , can be fastened with screws horizontally from the front	
Self-closing	
Protective cover , can be fastened with screws vertically from the front	
Self-closing	
Fixing frame , can be screwed on the front	
Required for protective covers with front vertical screw connection	

Technical data		
IEC 62196-2		
Type 2		
Mode 3, Case B		
black		
85 mm x 93.7 mm x 32.5 mm		
-30°C ... 50°C		
Ordering data		
Type	Order No.	Pcs./Pkt.
EV-T2SC	1405217	1
EV-T2SF	1405218	1

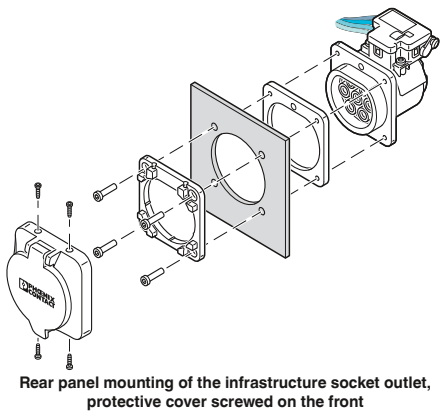
Technical data		
IEC 62196-2		
Type 2		
Mode 3, Case B		
black		
85 mm x 93.7 mm x 32.5 mm		
-30°C ... 50°C		
Ordering data		
Type	Order No.	Pcs./Pkt.
EV-T2SC-EMF	1069199	1
EV-T2SC-EM	1627635	1
EV-T2SF-EM	1627637	1



Front mounting of the infrastructure socket outlet with locking actuator removed



Rear panel mounting of the infrastructure socket outlet, protective cover screwed on the back



Rear panel mounting of the infrastructure socket outlet, protective cover screwed on the front

Protective covers for GB/T
AC infrastructure socket outlets

Two versions are available for increasing the degree of protection of GB/T AC infrastructure socket outlets to IP54:

- Protective cover, self-opening
- Protective cover, self-closing



Protective cover that can be screwed on the back, self-opening



Protective cover that can be screwed on the back, self-closing

Standards
Charging standard

Charging mode
Color
Dimensions (H x W x D)
Ambient temperature (operation)

Technical data
GB/T 20234.2
GB/T
Type 2
Mode 3, Case B
black
76.6 mm x 90.5 mm x 24.7 mm
-30°C ... 50°C

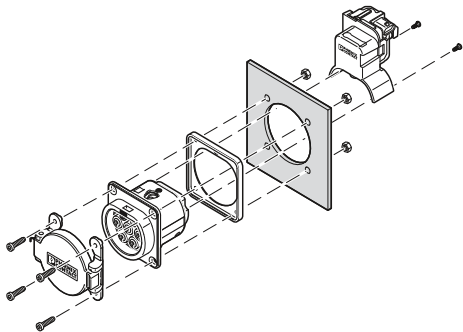
Ordering data		
Type	Order No.	Pcs./Pkt.
EV-GBSCO	1623415	1

Description

Protective cover
Self-opening
Self-closing

Technical data
GB/T 20234.2
GB/T
Type 2
Mode 3, Case B
black
76.6 mm x 76.6 mm x 24.7 mm
-30°C ... 50°C

Ordering data		
Type	Order No.	Pcs./Pkt.
EV-GBSC	1623416	1



Front mounting of the infrastructure socket outlet
with locking actuator removed



The ideal charging interface

The universal CCS vehicle inlets allow for fast DC and conventional AC charging with just one mating face. This covers all charging situations. The inlets can accommodate both AC and DC vehicle charging connectors, making them the ideal interface for charging all types of electric vehicles. Various power versions with 12 V or 24 V locking actuators are available, which makes it possible to use them with a variety of applications.

Along with the CCS vehicle inlets, we also provide DC inlets in accordance with the Chinese GB/T standard.

Uniform dimensions

The CCS vehicle inlets feature uniform outer contour dimensions. This allows electric vehicle manufacturers to provide for the same installation space in the car body. A vehicle inlet for the North American market (CCS type 1) fits just as well as an inlet for the European market (CCS type 2).

Important note

These products are exclusively developed, manufactured, and distributed by PHOENIX CONTACT electromobility GmbH.

Interested? Do you have any questions? Please contact our Sales Team at emobility@phoenixcontact.com or by phone on +49 5235 3-43890.

Your advantages

- Quick-response sensor technology provides fast and accurate temperature measurement at all contacts
- Efficient power transmission and long-term stability, thanks to silver-plated contact surfaces
- Uniform dimensions in terms of installation space, screw-connection points, and outer contour (CCS inlets only)
- With protective caps for the AC and DC contacts (CCS inlets only)
- Developed and produced in accordance with the IATF 16949 automotive standard and ISO 9001
- Tested in accordance with selected tests from automotive standards LV124, LV214, LV215-2, GB/T

i Your web code: **#2090**

**CCS type 1**

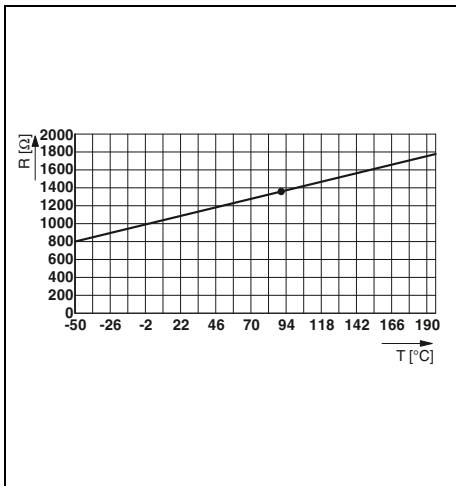
These vehicle inlets are suitable for charging electric vehicles with alternating current (AC) and direct current (DC) in accordance with the American standard CCS type 1. The charging connector is locked in place during charging via an electromechanical actuator.

**CCS type 2**

These vehicle inlets are suitable for charging electric vehicles with alternating current (AC) and direct current (DC) in accordance with the European standard CCS type 2. The charging connector is locked in place during charging via an electromechanical actuator.

**GB/T**

These vehicle inlets are suitable for charging electric vehicles with direct current (DC) in accordance with the Chinese standard GB/T.

**High-precision temperature measuring**

The temperature at the power contacts must also be monitored to ensure a safe charging process. If the system overheats, for example in the event of high outside temperatures or an overload, this is detected by the PT1000 resistance sensors. In the event of overheating, the charging controller is then able to stop the charging process or reduce the charging power.

**Secure locking during charging**

The CCS vehicle inlets are equipped with an electromechanical locking actuator in accordance with standards. It locks the vehicle charging connector on the side of or directly on the locking clip in the mating face during the charging process. The actuator bolt is designed to withstand high pull-out forces. It is therefore not possible to pull out the charging connector during the charging process.

**Developing customer-specific inlets**

We develop inlets for your series vehicle production in accordance with your requirements. We can integrate functions such as LED displays, lighting, operating elements, and locking mechanisms. Thanks to our intelligent cooling concepts and a high-precision temperature measurement system, we are able to reduce the conductor cross sections, thus reducing the costs of the overall charging connection system.

Charging connection systems

Vehicle inlets

CCS type 2

- Vehicle inlets for charging with alternating current (AC) and direct current (DC)
- European standard (CCS type 2)
- For installation in electric vehicles
- Locking by means of electromechanical locking actuator
- Additional cable lengths available on request

Notes:

These products are exclusively developed, manufactured, and distributed by PHOENIX CONTACT electromobility GmbH. Interested? Do you have any questions? Please contact our Sales Team at emobility@phoenixcontact.com or by phone on +49 5235 3-43890.



125 A DC, 20 A AC



125 A DC, 32 A AC

Technical data

	1-phase	3-phase
Number of phases	1	3
Rated voltage	250 V AC 850 V DC	480 V AC 850 V DC
Rated current	20 A AC 125 A DC	20 A AC 125 A DC
Standards	IEC 62196-3	IEC 62196-3
Charging mode	Mode 2, 3, 4	Mode 2, 3, 4
Dimensions (H x W x D)	111 mm x 130.4 mm x 107.4 mm	111 mm x 130.4 mm x 107.4 mm
Ambient temperature (operation)	-30°C ... 50°C	-30°C ... 50°C
Number of power contacts	5 (L1, N, PE, DC+, DC-)	7 (L1, L2, L3, N, PE, DC+, DC-)
Insertion/withdrawal cycles	> 10,000	> 10,000
Degree of protection (when plugged in)	IP55	IP55
Degree of protection (with protective cover)	IP55	IP55
Cable data		
Cable length	2 m	2 m
Cable structure	2 x 35 mm ² + 1 x 25 mm ² + 2 x 2.5 mm ² + 3 x 2 x 0.5 mm ²	2 x 35 mm ² + 1 x 25 mm ² + 4 x 2.5 mm ² + 3 x 2 x 0.5 mm ²
Locking actuator data		
Mechanical emergency release	included	included
Lock recognition	included	included

Ordering data

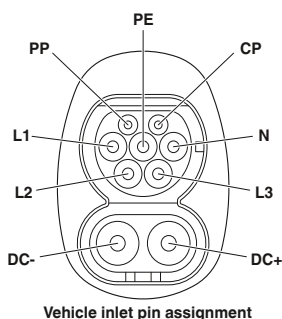
Description	Order No.	Pcs./Pkt.	Order No.	Pcs./Pkt.
	1-phase		3-phase	
Vehicle inlet for charging with alternating current (AC) and direct current (DC), for installation in electric vehicles (EV)				
With locking actuator (12 V operating voltage)	1624131	1	1628386	1
With locking actuator (24 V operating voltage)	1004840	1	1018763	1

Technical data

	1-phase	3-phase
Number of phases	1	3
Rated voltage	250 V AC 850 V DC	480 V AC 850 V DC
Rated current	32 A AC 125 A DC	32 A AC 125 A DC
Standards	IEC 62196-3	IEC 62196-3
Charging mode	Mode 2, 3, 4	Mode 2, 3, 4
Dimensions (H x W x D)	111 mm x 130.4 mm x 107.4 mm	111 mm x 130.4 mm x 107.4 mm
Ambient temperature (operation)	-30°C ... 50°C	-30°C ... 50°C
Number of power contacts	5 (L1, N, PE, DC+, DC-)	7 (L1, L2, L3, N, PE, DC+, DC-)
Insertion/withdrawal cycles	> 10,000	> 10,000
Degree of protection (when plugged in)	IP55	IP55
Degree of protection (with protective cover)	IP55	IP55
Cable data		
Cable length	2 m	2 m
Cable structure	2 x 35 mm ² + 1 x 25 mm ² + 2 x 6 mm ² + 3 x 2 x 0.5 mm ²	2 x 35 mm ² + 1 x 25 mm ² + 4 x 6 mm ² + 2 x 0.5 mm ² + 4 x 0.5 mm ²
Locking actuator data		
Mechanical emergency release	included	included
Lock recognition	included	included

Ordering data

Description	Order No.	Pcs./Pkt.	Order No.	Pcs./Pkt.
	1-phase		3-phase	
Vehicle inlet for charging with alternating current (AC) and direct current (DC), for installation in electric vehicles (EV)				
With locking actuator (12 V operating voltage)	1628385	1	1627096	1
With locking actuator (24 V operating voltage)	1018767	1	1004844	1





200 A DC, 20 A AC



200 A DC, 32 A AC

Technical data				Technical data			
1-phase		3-phase		1-phase		3-phase	
1		3		1		3	
250 V AC		480 V AC		250 V AC		480 V AC	
850 V DC		850 V DC		850 V DC		850 V DC	
20 A AC		200 A DC		200 A DC		200 A DC	
200 A DC		32 A AC		32 A AC		32 A AC	
IEC 62196-3		IEC 62196-3		IEC 62196-3		IEC 62196-3	
Mode 2, 3, 4		Mode 2, 3, 4		Mode 2, 3, 4		Mode 2, 3, 4	
111 mm x 130.4 mm x 107.4 mm		111 mm x 130.4 mm x 107.4 mm		111 mm x 130.4 mm x 107.4 mm		111 mm x 130.4 mm x 107.4 mm	
-30°C ... 50°C		-30°C ... 50°C		-30°C ... 50°C		-30°C ... 50°C	
5 (L1, N, PE, DC+, DC-)		7 (L1, L2, L3, N, PE, DC+, DC-)		5 (L1, N, PE, DC+, DC-)		7 (L1, L2, L3, N, PE, DC+, DC-)	
> 10,000		> 10,000		> 10,000		> 10,000	
IP55		IP55		IP55		IP55	
IP55		IP55		IP55		IP55	
2 m		2 m		2 m		2 m	
2 x 70 mm ² + 1 x 25 mm ² + 2 x 2.5 mm ² + 2 x 0.5 mm ² + 4 x 0.5 mm ²		2 x 70 mm ² + 1 x 25 mm ² + 4 x 2.5 mm ² + 2 x 0.5 mm ² + 4 x 0.5 mm ²		2 x 70 mm ² + 1 x 25 mm ² + 2 x 6 mm ² + 2 x 0.5 mm ² + 4 x 0.5 mm ²		2 x 70 mm ² + 1 x 25 mm ² + 4 x 6 mm ² + 2 x 0.5 mm ² + 4 x 0.5 mm ²	
included		included		included		included	
included		included		included		included	
Ordering data				Ordering data			
Order No.	Pcs./Pkt.	Order No.	Pcs./Pkt.	Order No.	Pcs./Pkt.	Order No.	Pcs./Pkt.
1-phase		3-phase		1-phase		3-phase	
1628340	1	1628387	1	1018771	1	1627097	1
1004802	1	1004842	1	1018762	1	1004841	1

Charging connection systems

Vehicle inlets

CCS type 1

- Vehicle inlets for charging with alternating current (AC) and direct current (DC)
- North American standard (CCS type 1)
- For installation in electric vehicles
- Locking by means of electromechanical locking actuator
- Additional cable lengths available on request

Notes:

These products are exclusively developed, manufactured, and distributed by PHOENIX CONTACT electromobility GmbH. Interested? Do you have any questions? Please contact our Sales Team at emobility@phoenixcontact.com or by phone on +49 5235 3-43890.

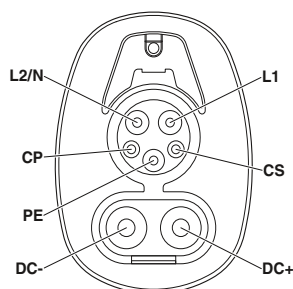


125 A DC



200 A DC

	Technical data		Technical data	
	20 A AC	32 A AC	20 A AC	32 A AC
Number of phases	1	1	1	1
Rated voltage	250 V AC 850 V DC	250 V AC 850 V DC	250 V AC 850 V DC	250 V AC 850 V DC
Rated current	20 A AC 125 A DC	32 A AC 125 A DC	20 A AC 200 A DC	32 A AC 200 A DC
Standards	SAE J1772	SAE J1772	SAE J1772	SAE J1772
Charging mode	Mode 2, 3, 4	Mode 2, 3, 4	Mode 2, 3, 4	Mode 2, 3, 4
Dimensions (H x W x D)	111 mm x 130.6 mm x 107.4 mm	111 mm x 130.6 mm x 107.4 mm	111 mm x 130.6 mm x 107.4 mm	111 mm x 130.6 mm x 107.4 mm
Ambient temperature (operation)	-30°C ... 50°C	-30°C ... 50°C	-30°C ... 50°C	-30°C ... 50°C
Number of power contacts	5 (L1, N, PE, DC+, DC-)	5 (L1, N, PE, DC+, DC-)	5 (L1, N, PE, DC+, DC-)	5 (L1, N, PE, DC+, DC-)
Insertion/withdrawal cycles	> 10,000	> 10,000	> 10,000	> 10,000
Degree of protection (when plugged in)	IP55	IP55	IP55	IP55
Degree of protection (with protective cover)	IP55	IP55	IP55	IP55
Cable data				
Cable length	2 m	2 m	2 m	2 m
Cable structure	2 x 35 mm ² + 1 x 25 mm ² + 2 x 2.5 mm ² + 2 x 0.5 mm ² + 4 x 0.5 mm ²	2 x 35 mm ² + 1 x 25 mm ² + 2 x 6 mm ² + 2 x 0.5 mm ² + 4 x 0.5 mm ²	2 x 70 mm ² + 1 x 25 mm ² + 2 x 2.5 mm ² + 2 x 0.5 mm ² + 4 x 0.5 mm ²	2 x 70 mm ² + 1 x 25 mm ² + 2 x 6 mm ² + 2 x 0.5 mm ² + 4 x 0.5 mm ²
Locking actuator data				
Mechanical emergency release	included	included	included	included
Lock recognition	included	included	included	included
	Ordering data		Ordering data	
	Order No.	Pcs./Pkt.	Order No.	Pcs./Pkt.
Description	20 A AC		32 A AC	
Vehicle inlet for charging with alternating current (AC) and direct current (DC), for installation in electric vehicles (EV)	1624154	1	1627896	1
	1018770	1	1627098	1



Vehicle inlet pin assignment

GB/T

- Vehicle inlets for charging with direct current (DC)
- Chinese standard (GB/T)
- For installation in electric vehicles
- Additional cable lengths available on request

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125 A DC



250 A DC

Rated voltage	1000 V
Rated current	125 A DC
Standards	GB/T 20234.1-2015, GB/T 20234.3-2015
Charging mode	Mode 4
Dimensions (H x W x D)	90 mm x 90 mm x 114.1 mm
Ambient temperature (operation)	-30°C ... 50°C
Number of power contacts	3 (DC+, DC-, PE)
Insertion/withdrawal cycles	> 10,000
Degree of protection (when plugged in)	IP55
Degree of protection (with protective cover)	IP55
Cable data	
Cable length	2 m
Cable structure	2 x 35 mm ² + 1 x 25 mm ² + 2 x 2.5 mm ² + 2 x 0.5 mm ² + 4 x 0.5 mm ²

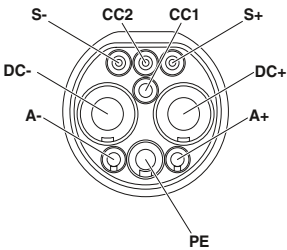
Description
Vehicle inlet for charging with direct current (DC), for installation in electric vehicles (EV)

Technical data	
Rated voltage	1000 V
Rated current	125 A DC
Standards	GB/T 20234.1-2015, GB/T 20234.3-2015
Charging mode	Mode 4
Dimensions (H x W x D)	90 mm x 90 mm x 114.1 mm
Ambient temperature (operation)	-30°C ... 50°C
Number of power contacts	3 (DC+, DC-, PE)
Insertion/withdrawal cycles	> 10,000
Degree of protection (when plugged in)	IP55
Degree of protection (with protective cover)	IP55
Cable data	
Cable length	2 m
Cable structure	2 x 35 mm ² + 1 x 25 mm ² + 2 x 2.5 mm ² + 2 x 0.5 mm ² + 4 x 0.5 mm ²

Ordering data	
Order No.	Pcs./Pkt.
1627493	1

Technical data	
Rated voltage	1000 V
Rated current	250 A DC
Standards	GB/T 20234.1-2015, GB/T 20234.3-2015
Charging mode	Mode 4
Dimensions (H x W x D)	90 mm x 90 mm x 114.1 mm
Ambient temperature (operation)	-30°C ... 50°C
Number of power contacts	3 (DC+, DC-, PE)
Insertion/withdrawal cycles	> 10,000
Degree of protection (when plugged in)	IP55
Degree of protection (with protective cover)	IP55
Cable data	
Cable length	2 m
Cable structure	2 x 70 mm ² + 1 x 25 mm ² + 2 x 2.5 mm ² + 2 x 0.5 mm ² + 4 x 0.5 mm ²

Ordering data	
Order No.	Pcs./Pkt.
1039550	1



Vehicle inlet pin assignment