

There are different types of connectors to plug the charging cable to the vehicle inlet:

AC (Alternative current) connectors are defined by IEC 62196-2

DC (Direct current) connectors are defined by IEC 62196-3

Type 1 connector (SAE J1772)

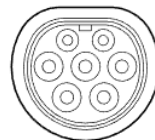
Type 1 connector is used with **AC charging station**.



The J1772 connector is easily identifiable by three large pins – similar to the power outlet layout at home – and two smaller pins for the car connection. The three broad pins are for Phase, Neutral and Ground while the two small pins are used for communication between the charger and the electric car (Pilot Interface). It can deliver between 3 and 7.4 kW and supports only single phase with a maximum current of 32 A. It includes an extra protection to lock the connector while charging, in order to avoid disconnection by a third party. It's mainly used in USA and Japan, but is also accepted in Europe.

Type 2 connector (IEC 62196-2)

Type 2 connector is used with **AC charging station**.



This type of connector is approved as the European standard. The connector stands out with a unique design, rounded but with a flat edge on the top. Its pins distribution is similar to type 1, but includes two more pins, corresponding to the two extra phases needed for three-phase charging. It allows a recharge between 3 and 43 kW and can support single phase up to 16 A and three phases up to 63 A. An evolution of this connector is the T2-S which includes additional lock to the connector. In France, connector version T2-S is mandatory.

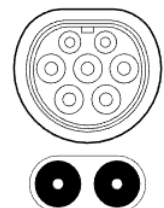
Combined Charging System (CCS) Combo 1

CCS Combo 1 is based on the J1772 Type 1 connector by adding two additional pins. **The Combined Charging System is made for DC Fast Charging**. The connector can do both AC and DC charging up to 350 kW.



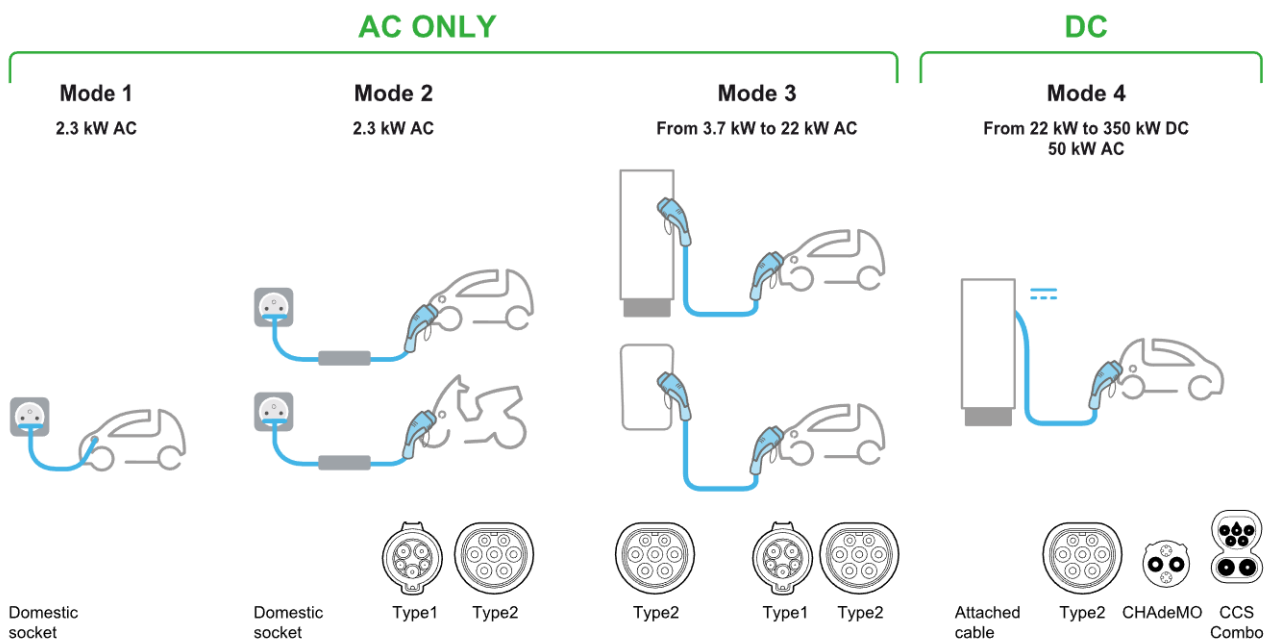
Combined Charging System (CCS) Combo 2 (IEC 62196-3)

CCS Combo 2 is based on Type 2 connector by adding two additional pins. **The Combined Charging System is made for DC Fast Charging**. The connector can do both AC and DC charging up to 350 kW.



The international standard IEC 61851-1 « Electric vehicle conductive charging system» defines four modes of charging:

- **Mode 1** – Standard socket outlet - domestic installation
- **Mode 2** - Standard socket outlet with an AC EV supply equipment– domestic
- **Mode 3** - AC EV equipment permanently connected to an AC supply network
- **Mode 4** - DC EV Supply equipment



Assemblies List

Part number	Product Description	No. of Phases	No. of Power Contacts	No. of Signal Contacts
DSI-DSIEC-EV-32P-3C	EV Charging Cable, IEC 62196-2 Type 2 (SAE J1772) to IEC 62196-2 Type 2, 3 m, 240 VAC/32 A, Orange	Single Phase	3 (L, N, PE)	2 (CP, PP)
MP006848	EV Charging Cable, IEC 62196-2 Type 2 to Free End, 5 m (16.4 ft), 250 VAC/32 A, Black	Single Phase	5 (L1, L2, L3, N, PE)	2 (CP, PP)
MP006849	EV Charging Cable, IEC 62196-2 Type 2 to Free End, 7 m (23 ft), 250 VAC/32 A, Black	Single Phase	5 (L1, L2, L3, N, PE)	2 (CP, PP)
MP006850	EV Charging Cable, IEC 62196-2 Type 2 to Free End, 5 m (16.4 ft), 450 VAC/32 A, Black	Three Phase	5 (L1, L2, L3, N, PE)	2 (CP, PP)
MP006851	EV Charging Cable, IEC 62196-2 Type 2 to Free End, 7 m (23 ft), 450 VAC/32 A, Black	Three Phase	5 (L1, L2, L3, N, PE)	2 (CP, PP)
MP006852	EV Charging Cable, IEC 62196-2 Type 2 to IEC 62196-2 Type 2, 5 m (16.4 ft), 250 VAC/32 A, Black	Single Phase	5 (L1, L2, L3, N, PE)	2 (CP, PP)
MP006853	EV Charging Cable, IEC 62196-2 Type 2 to IEC 62196-2 Type 2, 7 m (23 ft), 250 VAC/32 A, Black	Single Phase	5 (L1, L2, L3, N, PE)	2 (CP, PP)
MP006854	EV Charging Cable, IEC 62196-2 Type 2 to IEC 62196-2 Type 2, 5 m (16.4 ft), 450 VAC/32 A, Black	Three Phase	5 (L1, L2, L3, N, PE)	2 (CP, PP)
MP006855	EV Charging Cable, IEC 62196-2 Type 2 to IEC 62196-2 Type 2, 7 m (23 ft), 450 VAC/32 A, Black	Three Phase	5 (L1, L2, L3, N, PE)	2 (CP, PP)
MP009038	EV Charging Cable, IEC 62196-2 Type 1 (SAE J1772) to Free End, 5 m (16.4 ft), 240 VAC/32 A, Black	Single Phase	3 (L1, N, PE)	2 (CP, PP)
MP009039	EV Charging Cable, IEC 62196-2 Type 1 (SAE J1772) to Free End, 7 m (23 ft), 240 VAC/32 A, Black	Single Phase	3 (L1, N, PE)	2 (CP, PP)

Connectors List

Part number	Product Description
DSI-EV32S-NC	Charging Socket for Electric Vehicle, 5 Contacts, 240 VAC/32 A, IP44, Type 1, Charging Level 2
DSI-EV16S-NC	Charging Socket for Electric Vehicle, 5 Contacts, 240 VAC/16 A, IP44, Type 1, Charging Level 2
DSIEC2F-EV32S-NC	Charging Receptacle for Electric Vehicle, 7 Contacts, 240 VAC/32 A, IP54, Type 2, Charging Level 2
MP009735	EV Charging Connector, 7 Contacts, 480 VAC/32 A, IP54, Type 2, Charging Level 2
MP009736	EV Charging Connector, Receptacle, 7 Contacts, 480 VAC/32 A, IP54, Type 2, Charging Level 2
MP009737	EV Charging Connector, Receptacle, 5 Contacts, 240 VAC/80 A, Type 1, Charging Level 1