



E-MOBILITY

**Training EVSE
Level A**

E-MOBILITY

EVSE

electric vehicle supply equipment

“EV charging station” or “charging point.”



E-MOBILITY

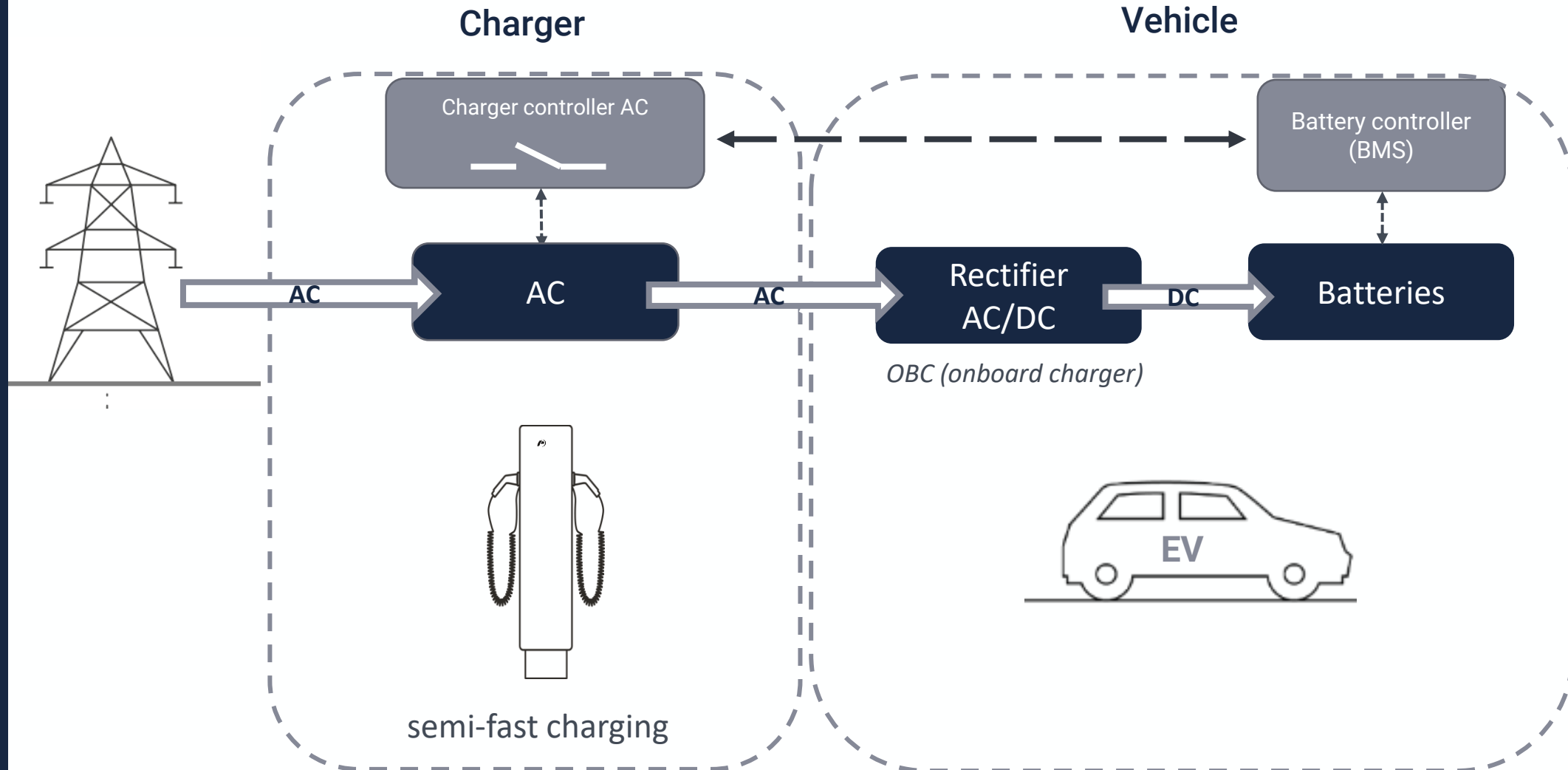
Module 1: Introduction to the basic concepts of charging
Module 2: Operation
Module 3: Equipment functionalities and configuration
Module 4: Basic equipment reset

E-MOBILITY

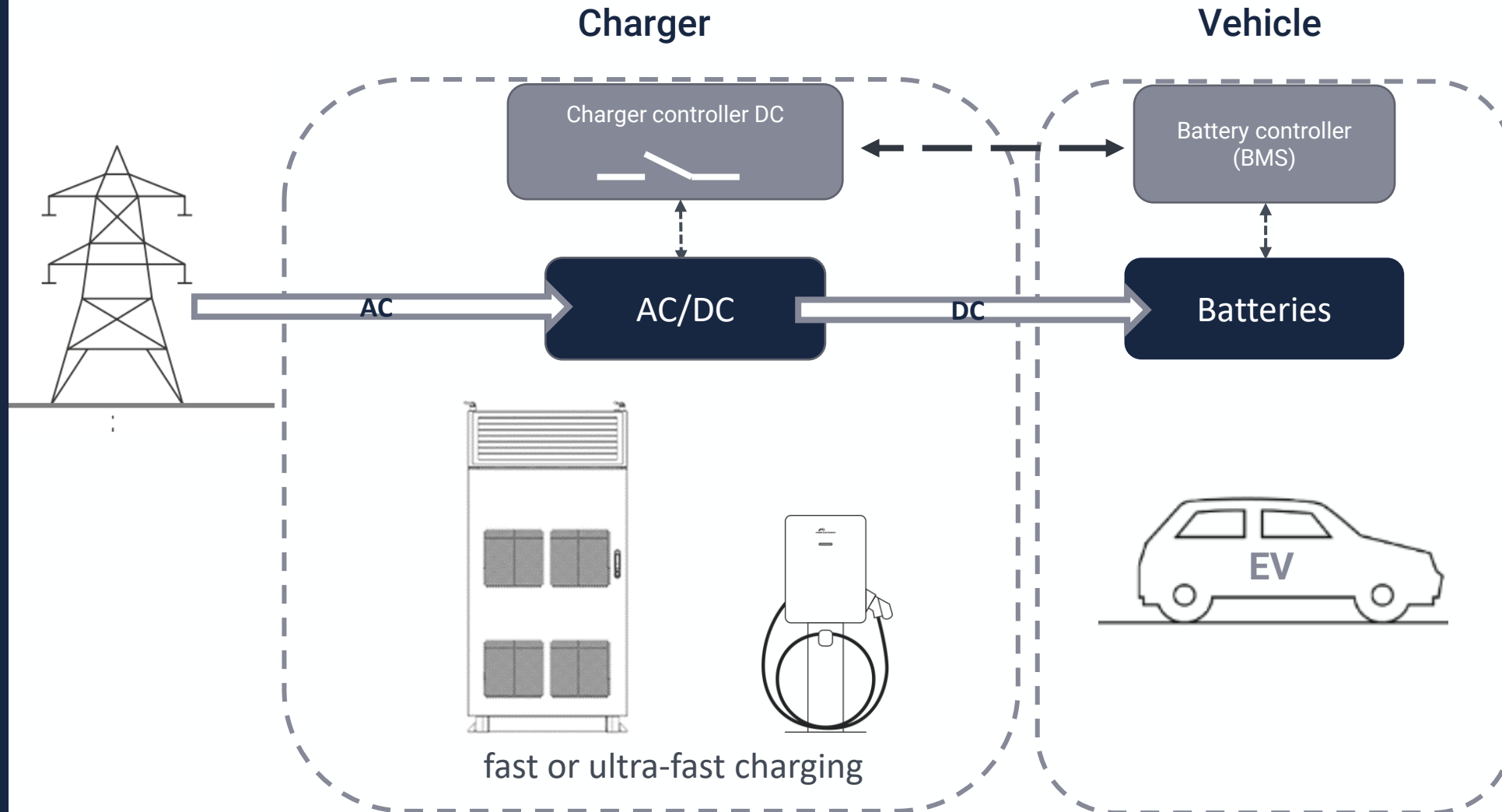
Introduction to the basic concepts of charging

01

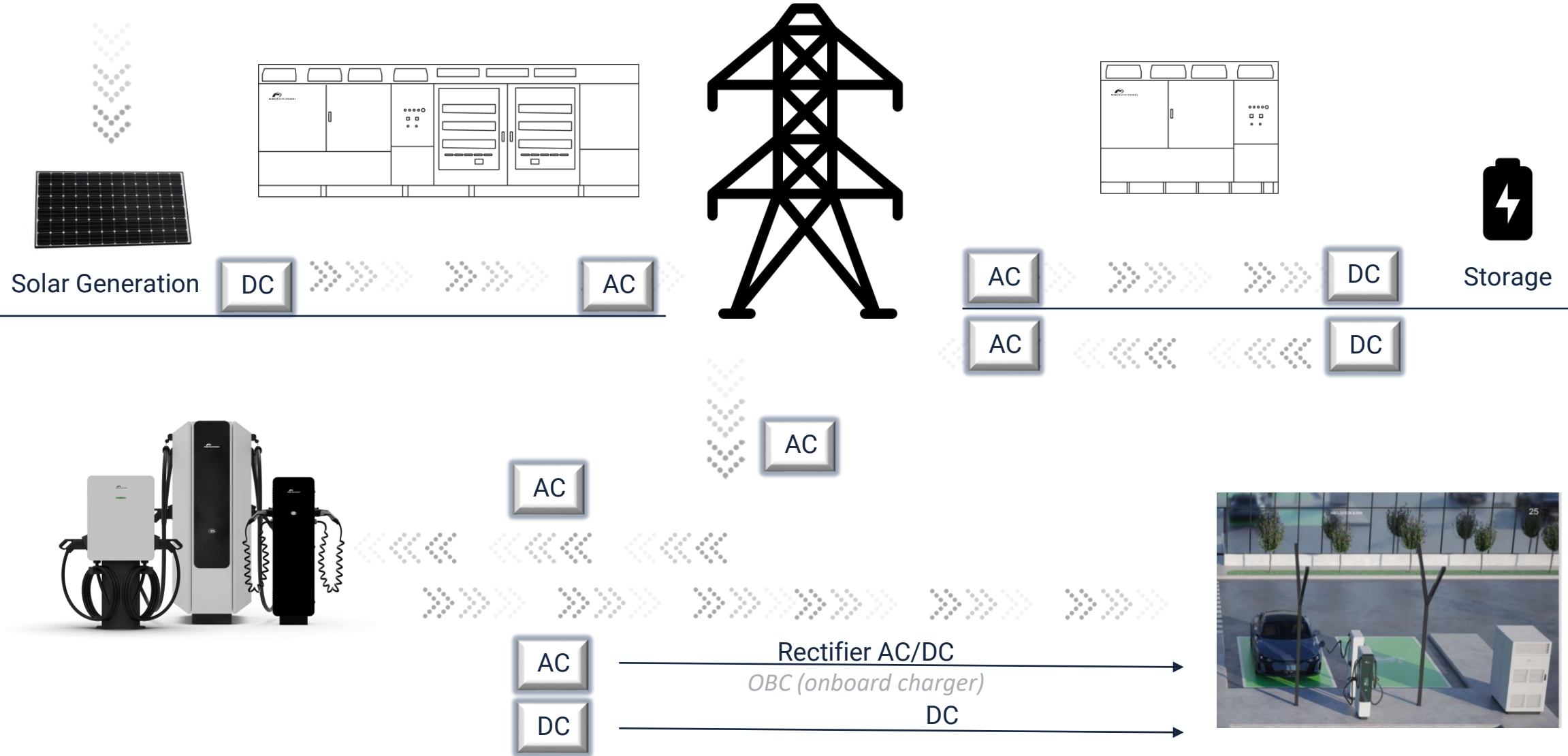
Charge in AC (alternating current)



Charge in DC (direct current)



Examples



Capacity and Power

kWh/100km

Amount of energy used by a vehicle over a 100 km distance

Example:

- *tesla with 100 kWh battery*
- *Consumption of 25 kWh/100 km*

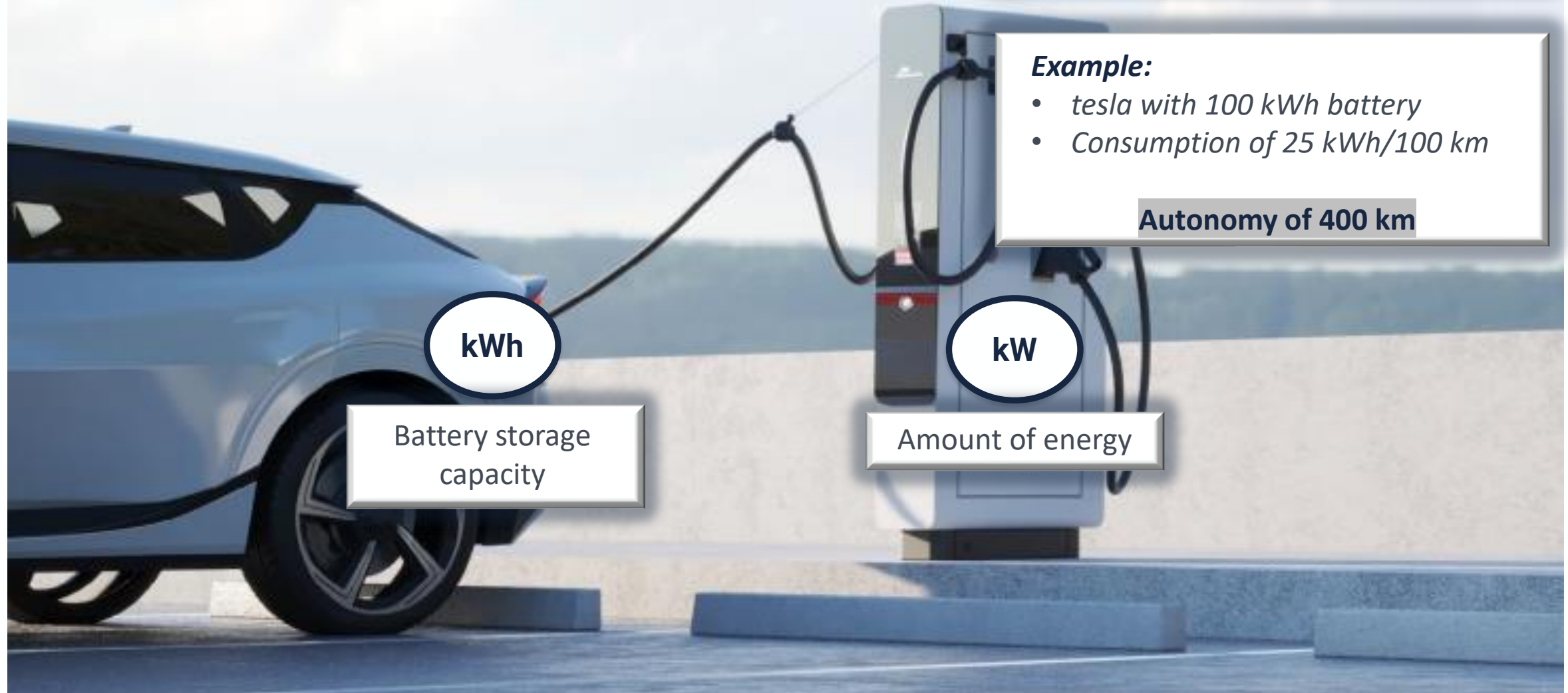
Autonomy of 400 km

kWh

Battery storage capacity

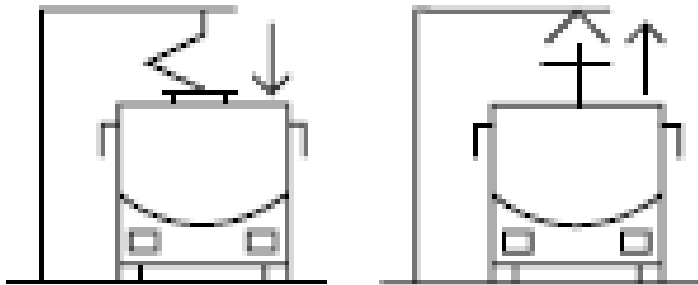
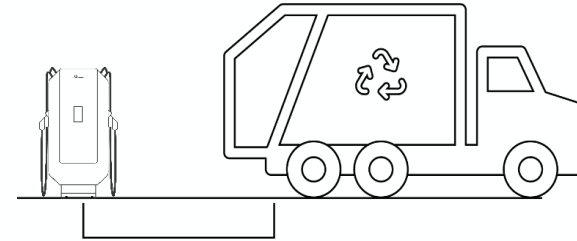
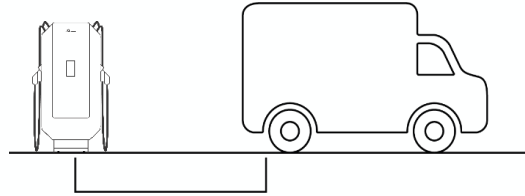
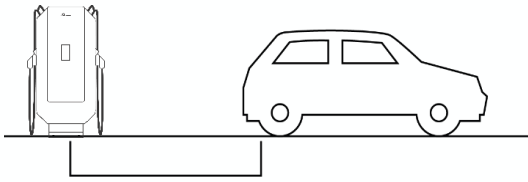
kW

Amount of energy



Vehicles

Power Electronics chargers are adapted according to the vehicle's battery configuration.



Charging modes



Mode 1

Super-slow



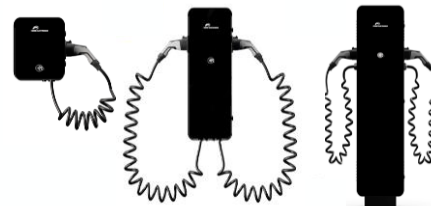
Mode 2

Slow



Mode 3

Semi-fast



Mode 4

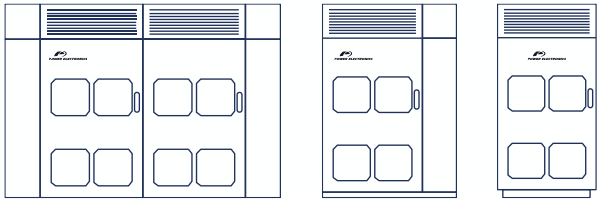
Fast and
Ultra-fast



DC charging connectors

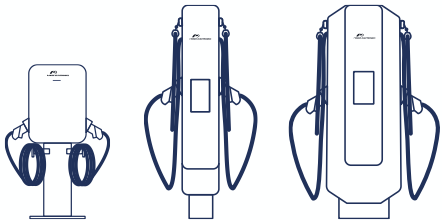


DC charging equipment



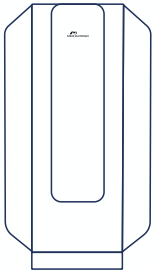
NB STATION NBi360 NBi180

Dispensers

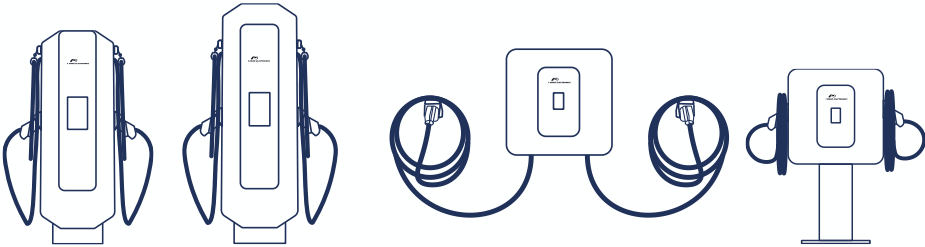


Depot Slim Cooled

Standalone



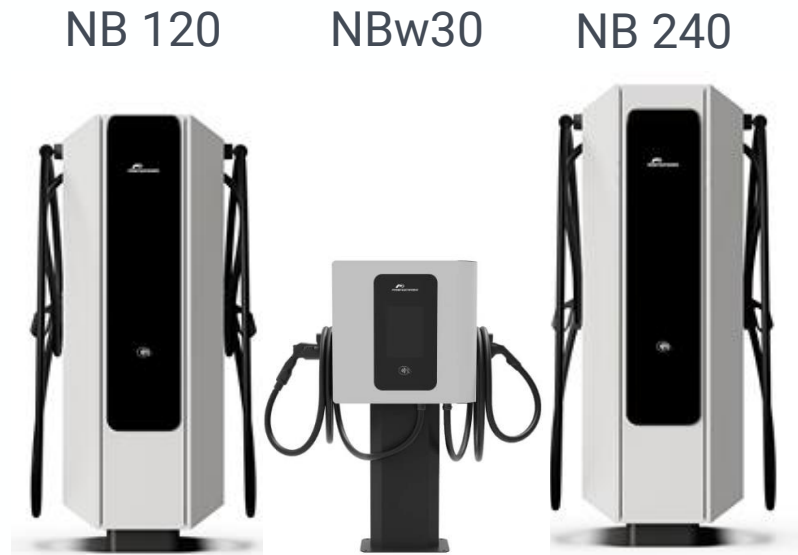
NB POD



NB120 NB240 NBw30

All-in-one solution

Integrated all electronics into **a single enclosure**



Chargers – Central Station

Distributed electronics :

A Central Station enclosure for power management.



Slim
Dispenser

Cooled
Dispenser

Depot
Dispenser

Pantograph



NB Station



NBi 360



NBi 180

Power Electronics – NB POD

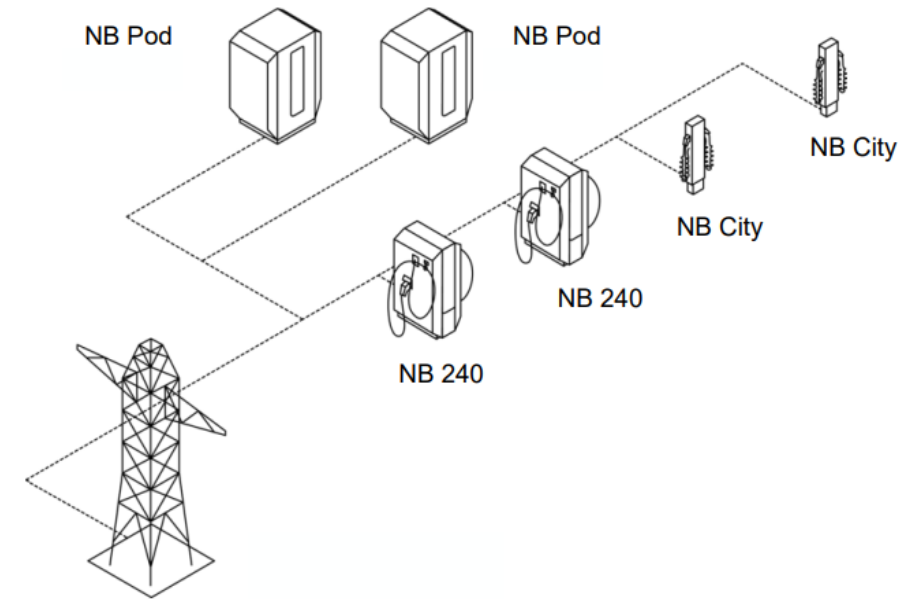


DC charge storage

Lithium Ion Battery

Solution Plug&Play

- Easily integrates with new and existing installations



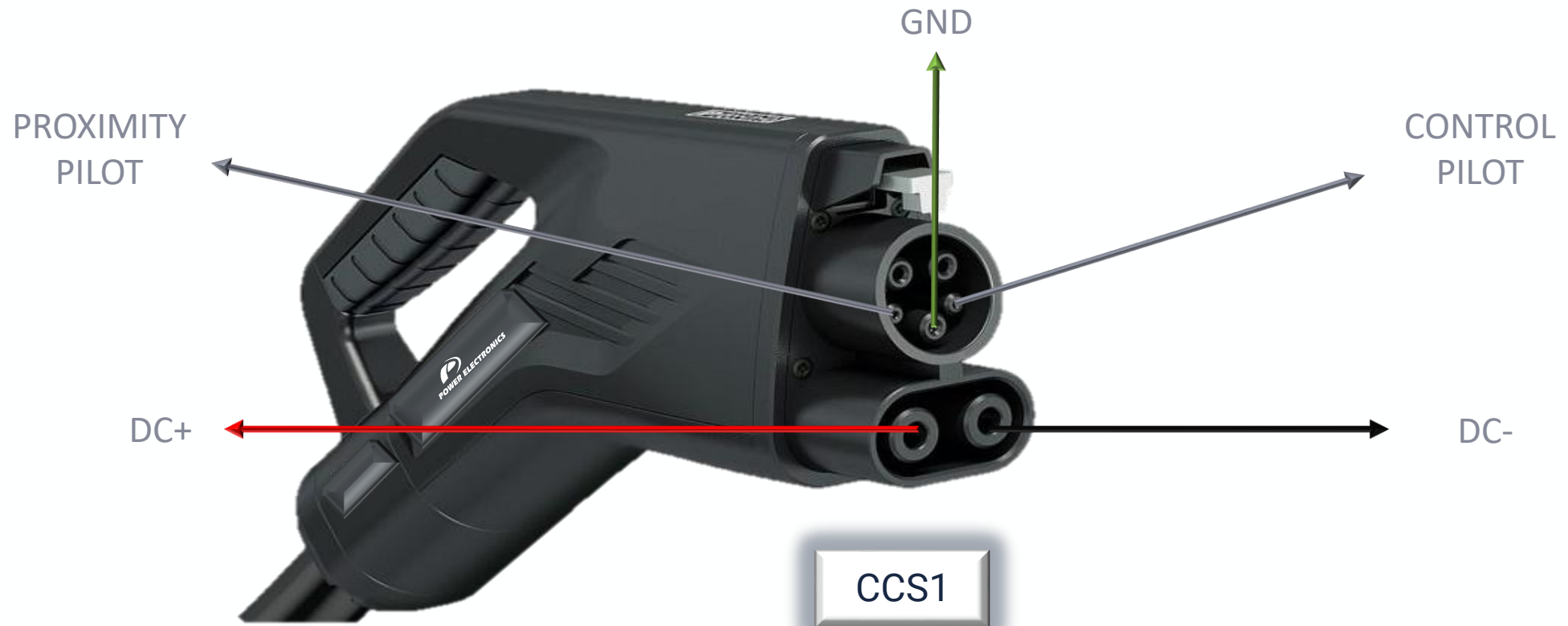
E-MOBILITY

Operation

Basic operation of the charger and
interpretation of the user interface (Display)

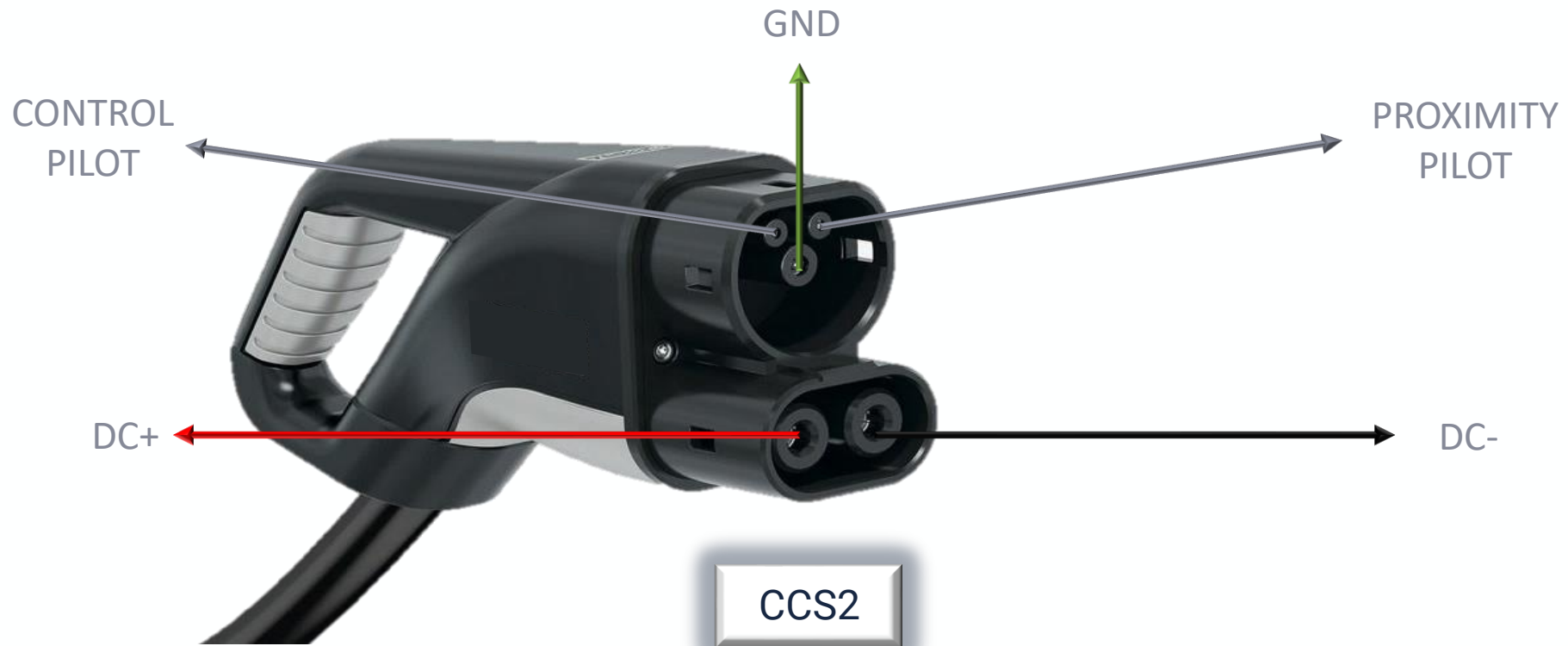
Operation

Basic operation of the charger and
interpretation of the user interface (Display)



Operation

Basic operation of the charger and
interpretation of the user interface (Display)



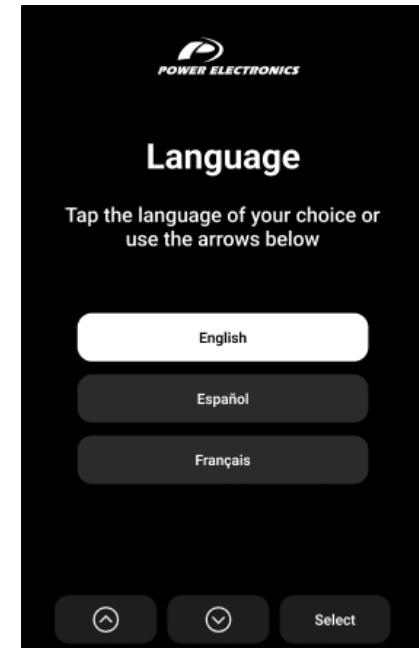
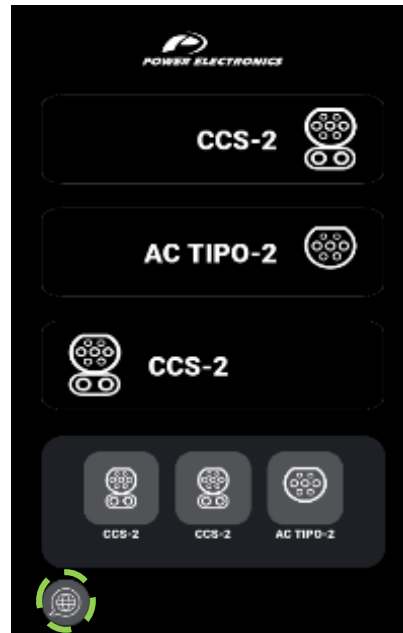
Operation

Basic operation of the charger and interpretation of the user interface (Display)



Operation

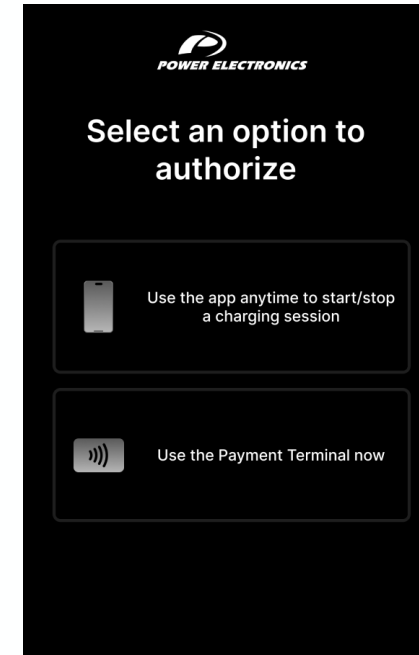
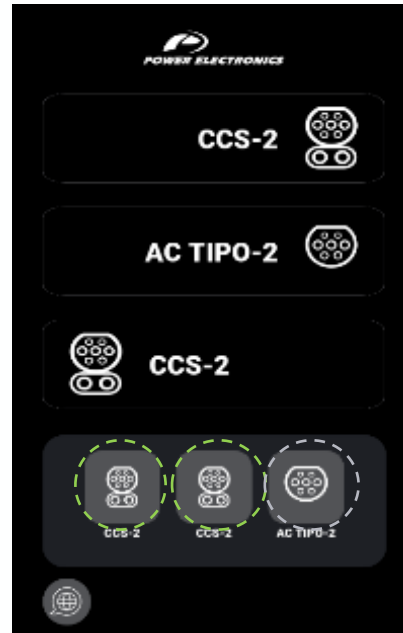
Basic operation of the charger and
interpretation of the user interface (Display)



Choose language

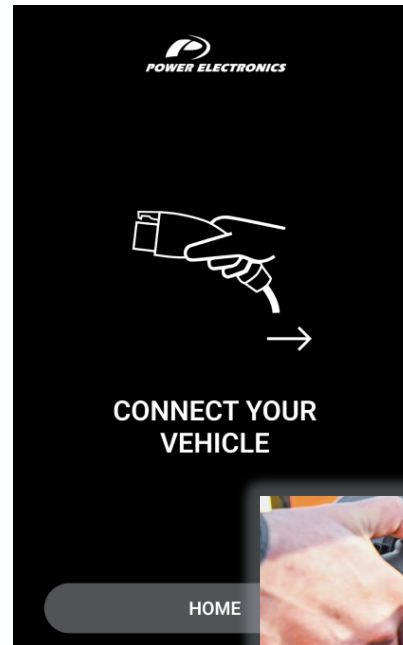
Operation

Basic operation of the charger and
interpretation of the user interface (Display)

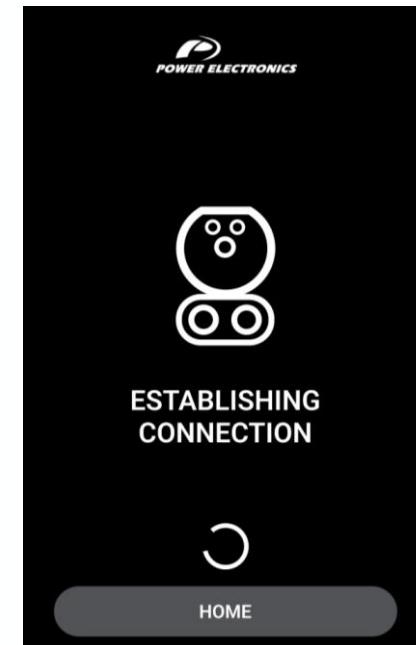


Operation

Basic operation of the charger and interpretation of the user interface (Display)

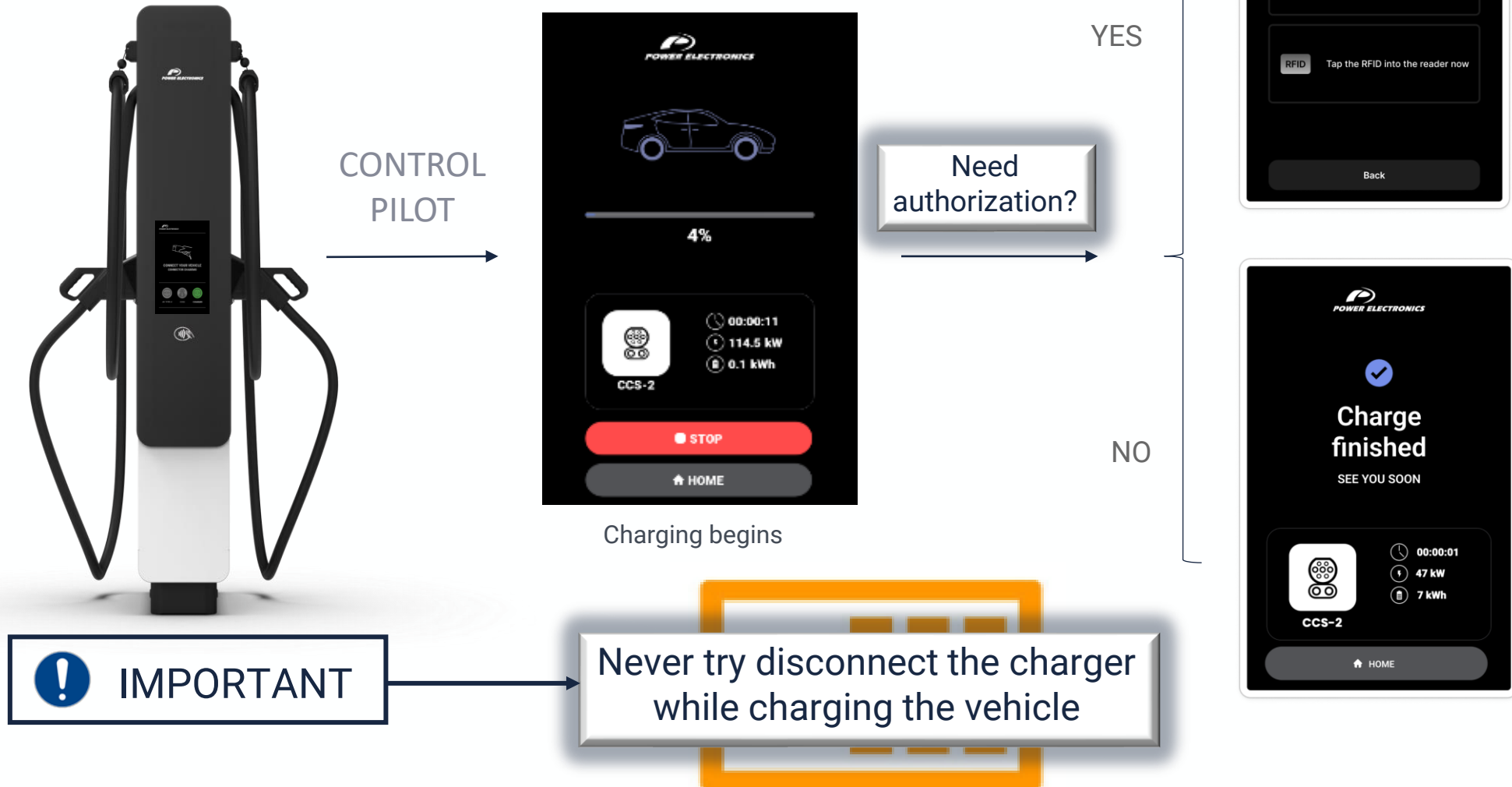


PROXIMITY
PILOT



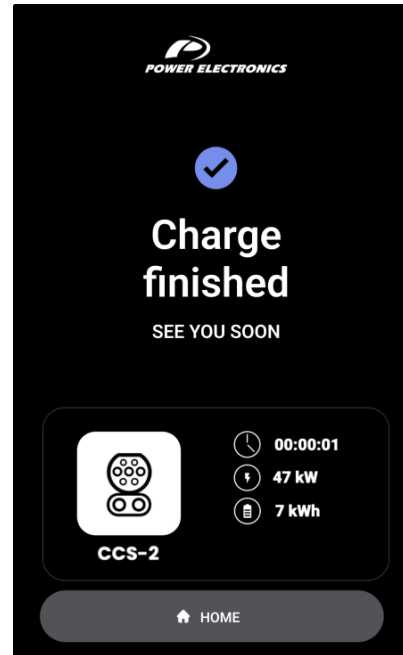
Operation

Basic operation of the charger and interpretation of the user interface (Display)



Operation

Basic operation of the charger and interpretation of the user interface (Display)



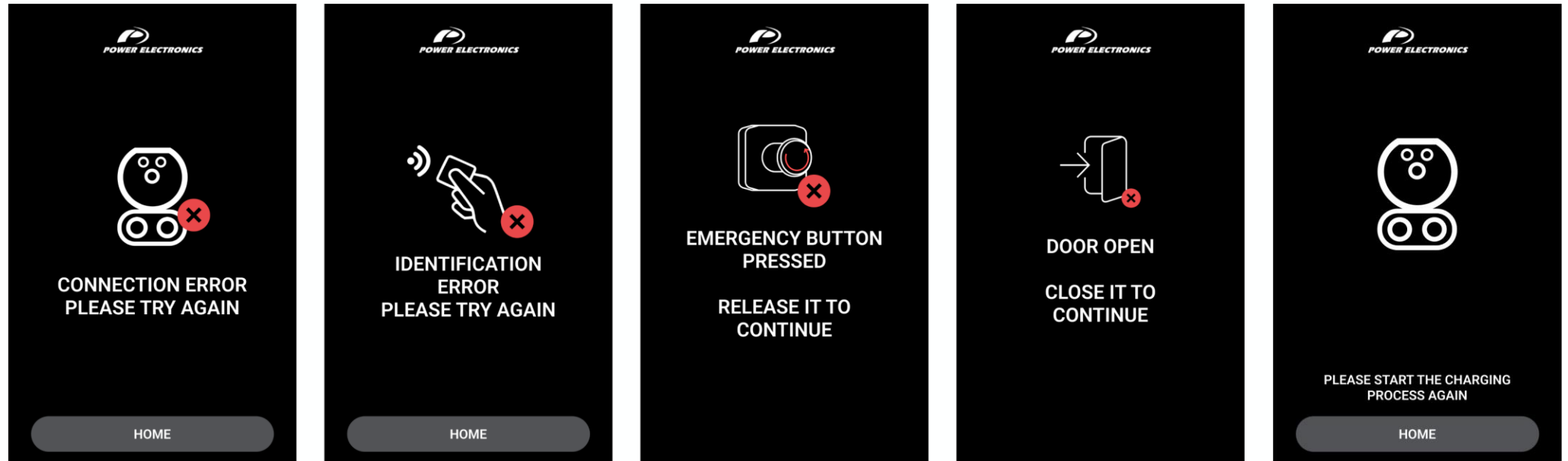
After charging the vehicle battery



Disconnect the charger

Operation error

Basic operation of the charger and
interpretation of the user interface (Display)



E-MOBILITY

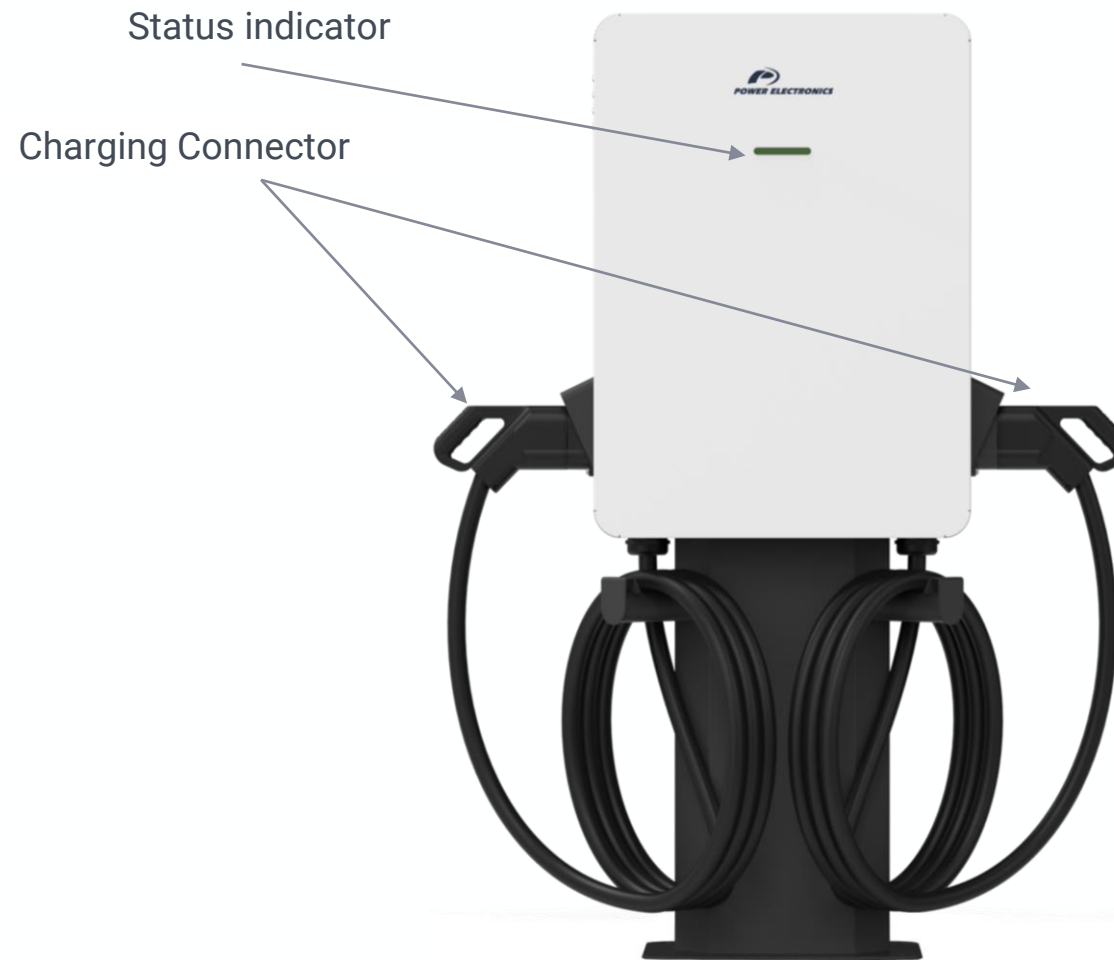
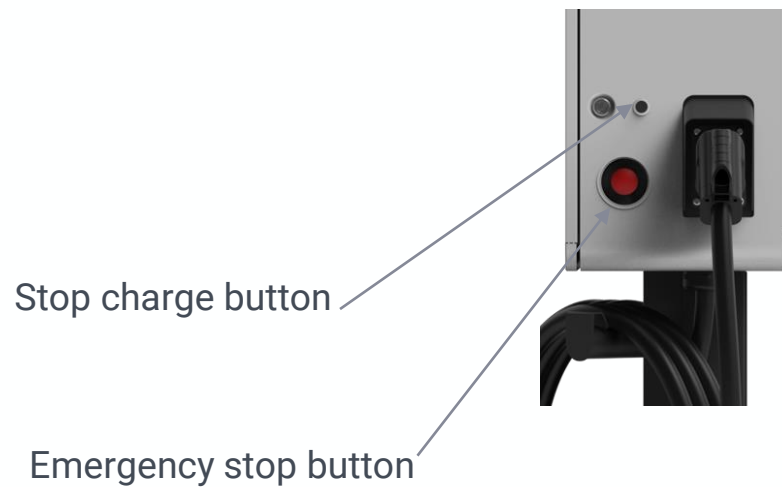
Operation

Understanding basic status indicators

02

Operation

Understanding basic status indicators



Operation

Understanding basic status indicators



STATUS	LED	DESCRIPTION
Charging	White (blinking)	The charger is being used by a user in a charging session.
Reserved	Blue	The charger has been reserved by a user through a mobile application. The charger in this status can only be used by the user who has made the reservation.
Available	Green	The charger is available to carry out a charging session.
Failure	Red	There is some failure activated.
Not Available	Off	The charger is not available to carry out a charging session.

E-MOBILITY

Operation

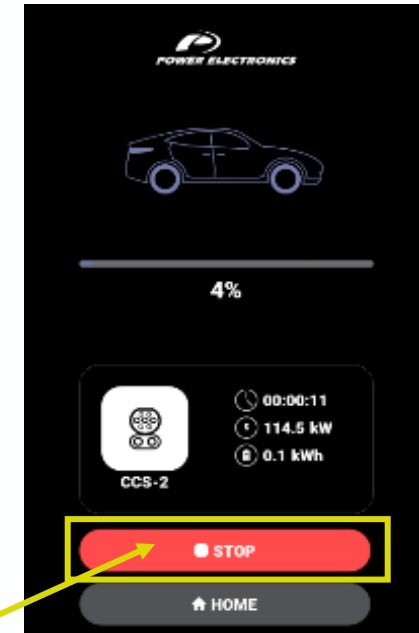
Safely disconnecting the charger from the vehicle

Operation

Safely disconnecting the charger from the vehicle



STOP CHARGE BUTTON



E-MOBILITY

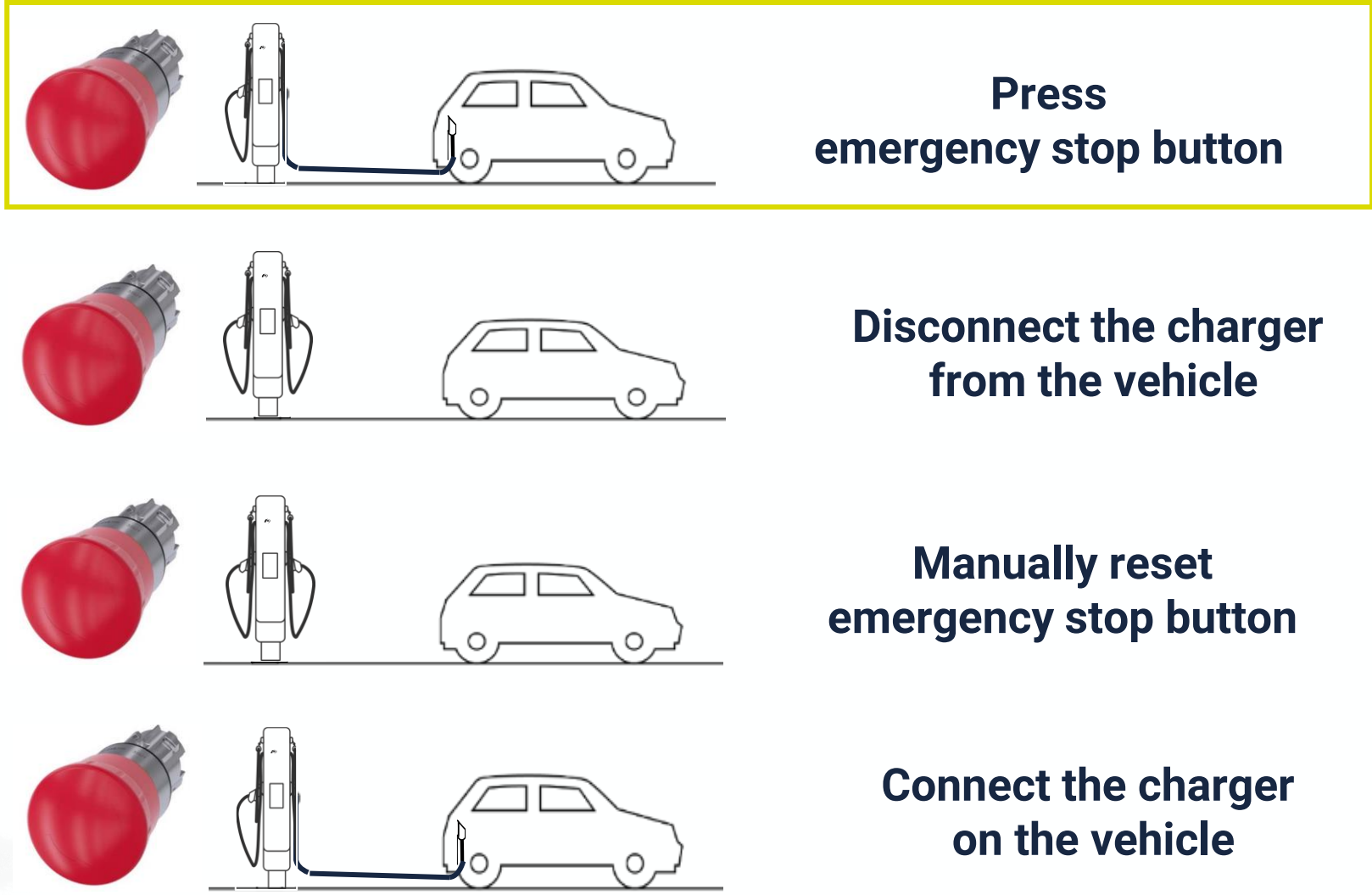
Operation

Emergency stop

02

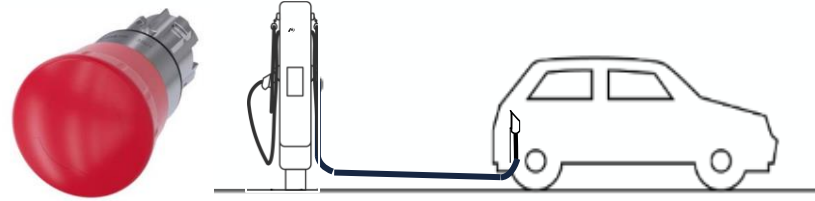
Operation

Emergency stop

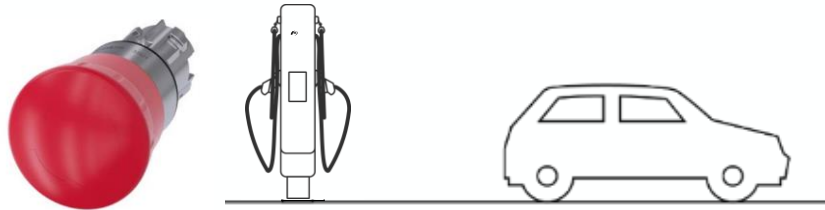


Operation

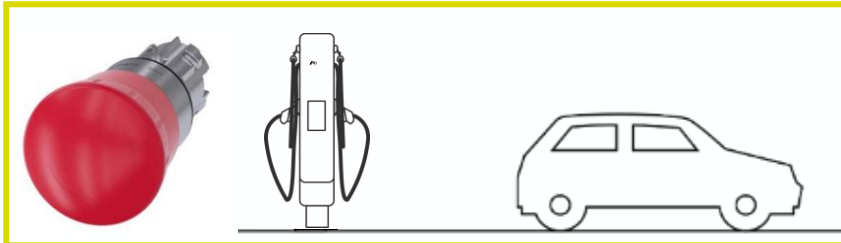
Emergency stop



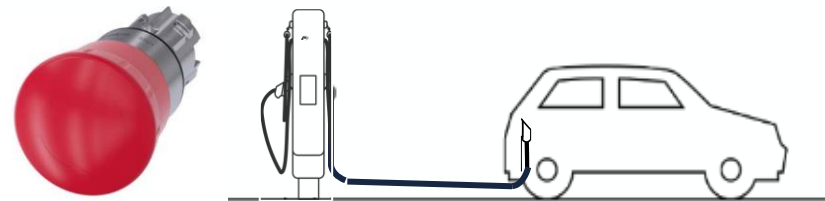
**Press
emergency stop button**



**Disconnect the charger
from the vehicle**



**Manually reset
emergency stop button**



**Connect the charger
on the vehicle**

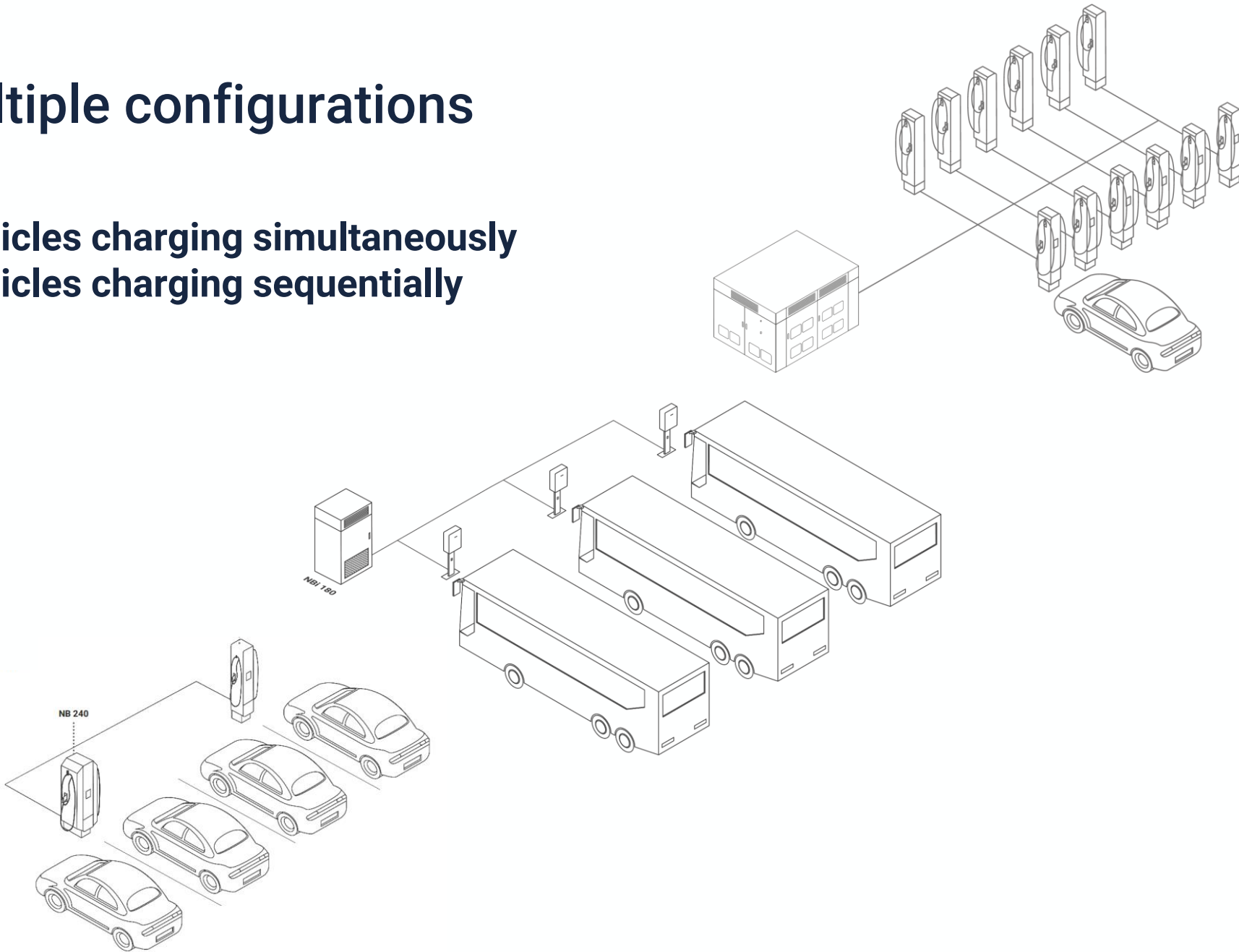
E-MOBILITY

Equipment functionalities and configuration

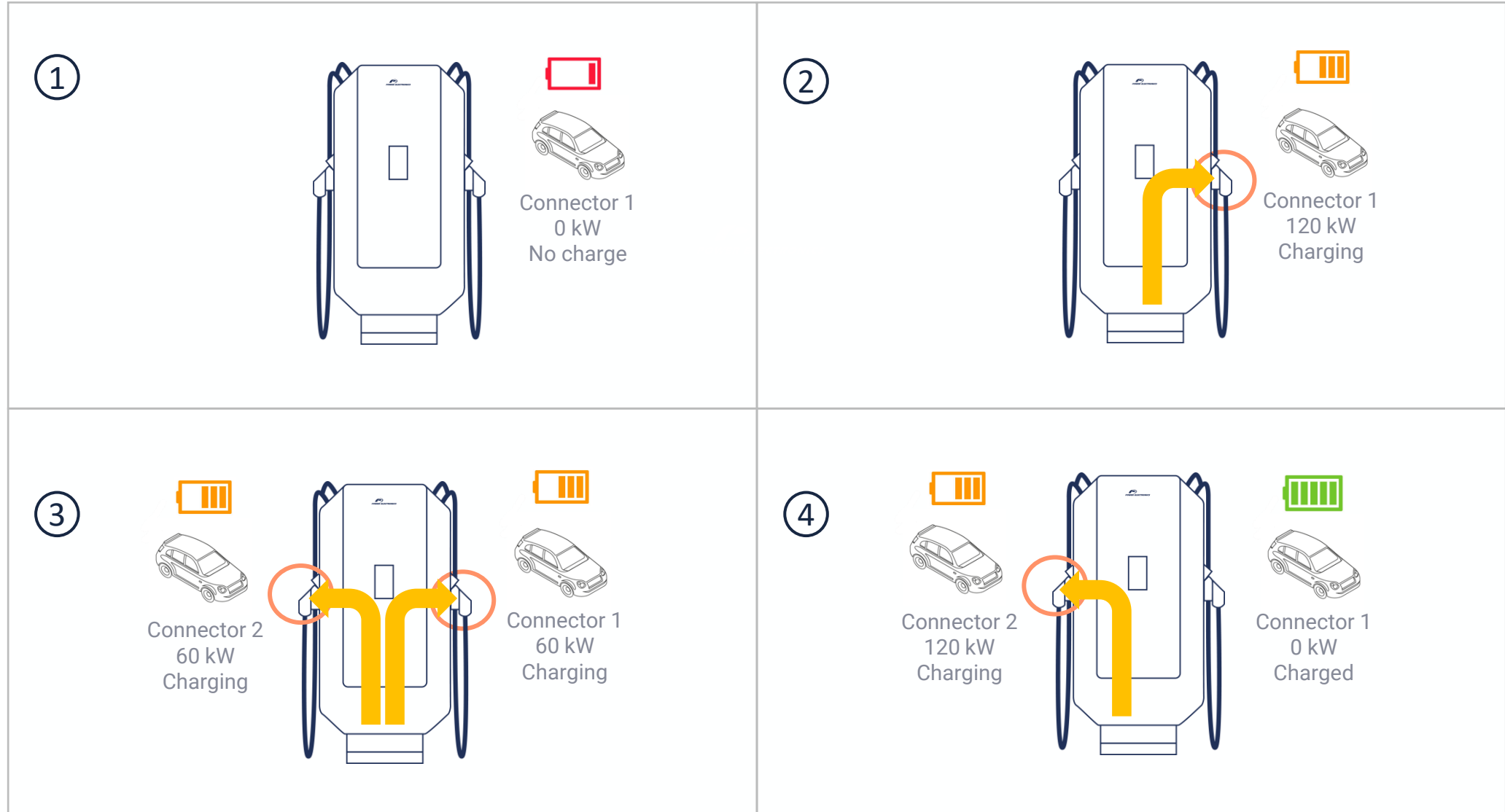
03

Multiple configurations

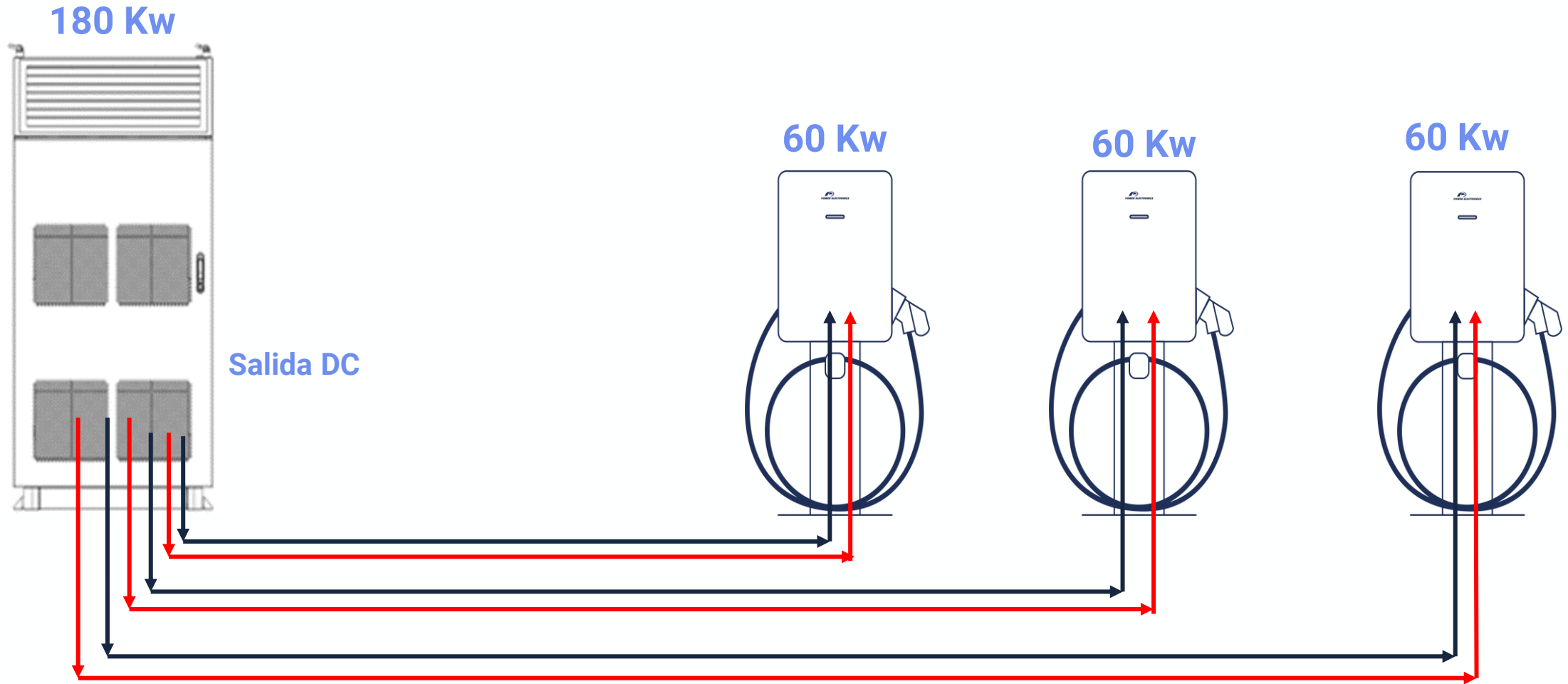
vehicles charging simultaneously
vehicles charging sequentially



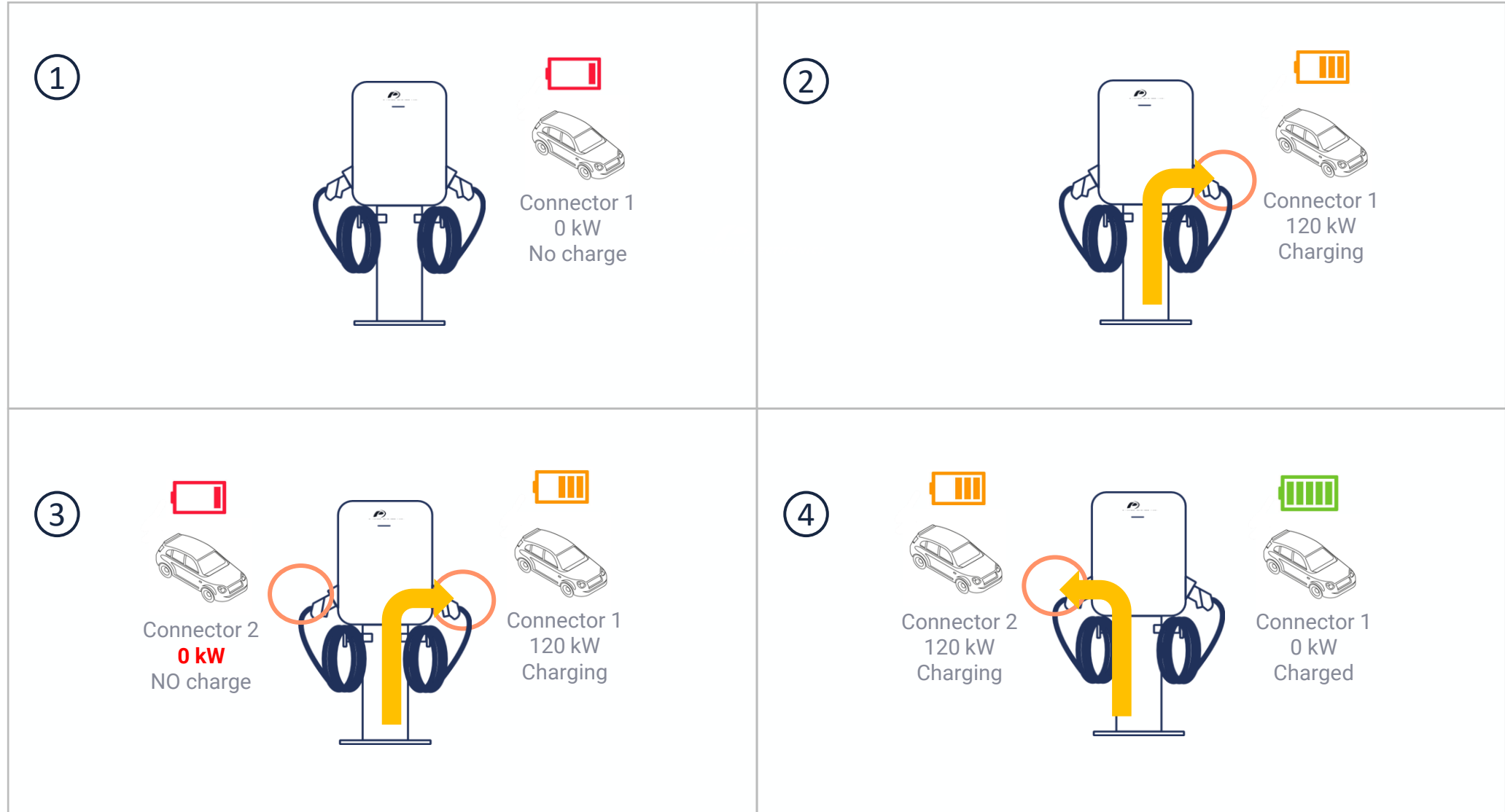
Simultaneous configuration



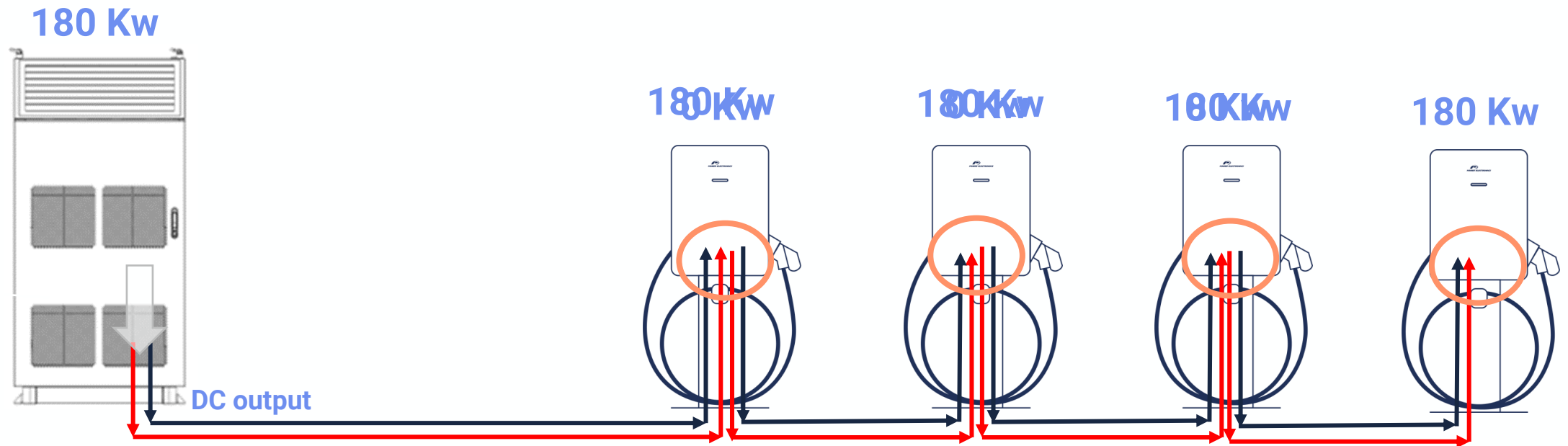
Simultaneous configuration



Sequential configuration



Sequential configuration



E-MOBILITY

Basic equipment reset

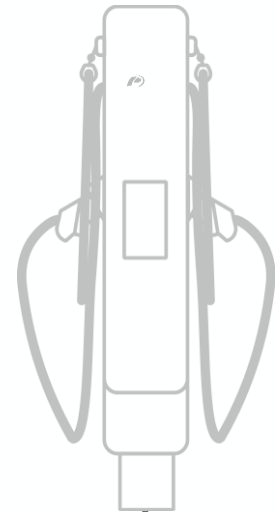
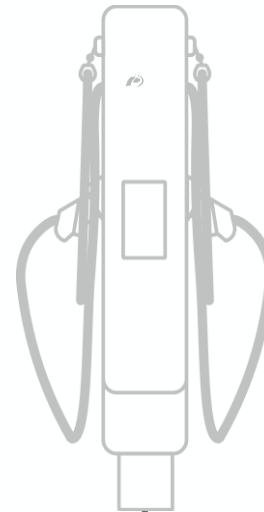
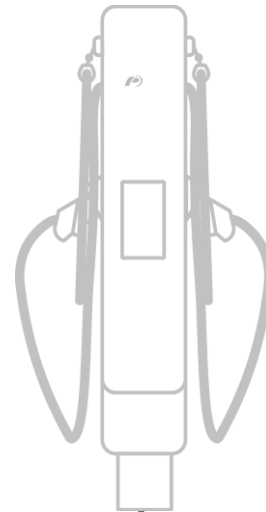
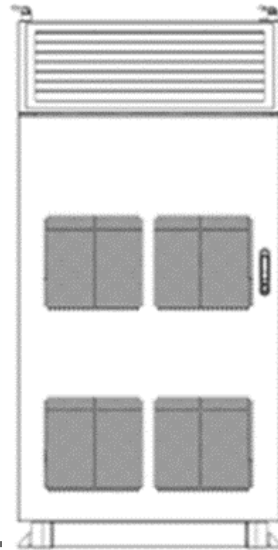
04

Basic equipment reset



IMPORTANT

Before resetting the equipment,
make sure that no vehicle is charging





Thank you for your attention



Contact

Pla de Carrases B, CV-35, Salida 30,
46160 Lliria, Valencia, Spain.

Tel. (+34) 961 366 557 / Fax (+34) 961 318 201

24/7 Technical assistance service.

Tel. 902 402 070

POWER-ELECTRONICS.COM