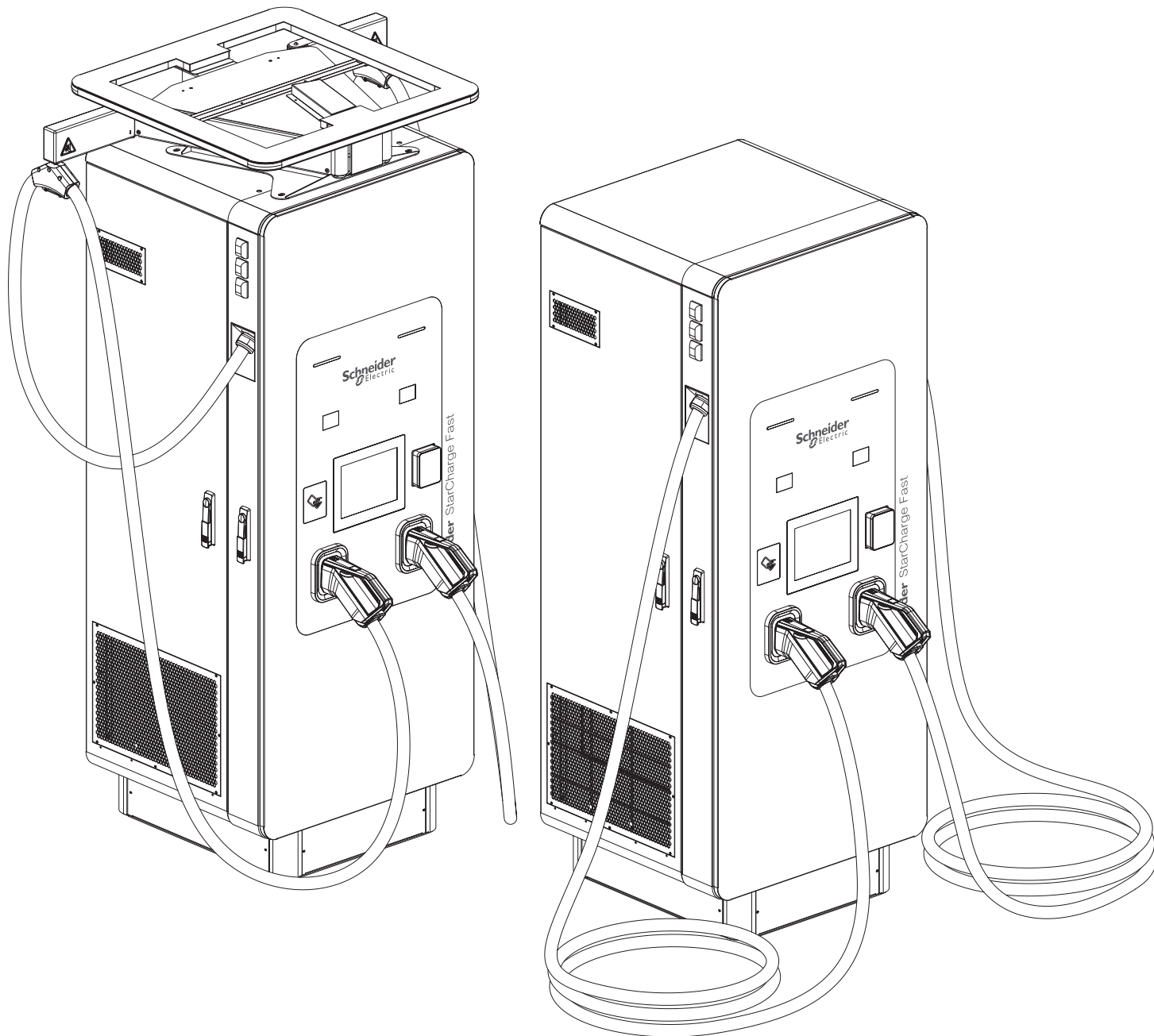
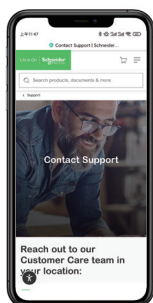


**en Owners Guide**

Schneider StarCharge Fast 320 Charging Station  
Schneider StarCharge Fast 180 Charging Station



**Customer Care Center**



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## Legal Information



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Electrical equipment should be installed, operated, serviced, and maintained only by qualified personnel. No responsibility is assumed by Schneider Electric for any consequences arising out of the use of this material.

# General

## Warning Symbols Definitions

The following safety messages may appear throughout this manual or on the equipment to warn of potential hazards or to call attention to information that clarifies or simplifies a procedure.



The addition of this symbol to a "Danger" or "Warning" safety message indicates that an electrical hazard exists which will result in personal injury if the instructions are not followed.



This is the safety alert symbol. It is used to alert you to potential personal injury hazards. Obey all safety messages with this symbol to avoid possible injury or death.

### ▲ DANGER

**DANGER** indicates a hazardous situation which, if not avoided, **will result in death or serious injury**.

### ▲ WARNING

**WARNING** indicates a hazardous situation which, if not avoided, **could result in death or serious injury**.

### ▲ CAUTION

**CAUTION** indicates a hazardous situation which, if not avoided, **could result in minor or moderate injury**.

### NOTICE

**NOTICE** is used to address practices not related to physical injury. The safety alert symbol shall not be used with this signal word.

## Safety Instructions

### ▲ ▲ DANGER

#### HAZARD OF ELECTRICAL SHOCK, EXPLOSION OR ARC FLASH

- Read and follow all warnings and instructions before installing and operating the Schneider StarCharge Fast Charging Station. Install and operate only as instructed. Failure to do so may lead to death, injury, or property damage, and will void the Limited Warranty.
- The product must be installed according to the specifications and requirements as defined by Schneider Electric. No responsibility is assumed by Schneider Electric if these requirements are not respected.
- Always inspect the Charging Station for proper installation before use.
- Always ground the Schneider StarCharge Fast Charging Station. Failure to ground the Charging Station can lead to risk of electrocution or fire. The Charging Station must be connected to a grounded, metal, permanent wiring system, or an equipment grounding conductor shall be run with circuit conductors and connected to the equipment grounding terminal.
- Install the Schneider StarCharge Fast Charging Station on a concrete pad according to the Schneider Electric approved method. Failure to install on a surface that can support the full weight of the Charging Station can result in death, personal injury, or property damage.
- This Charging Station is not suitable for use in or around hazardous locations, such as near flammable, explosive, or combustible materials.
- Do not install the Schneider StarCharge Fast Charging Station until all construction work has been completed and the installation area has been cleared & cleaned.
- Do not use this product if the enclosure, Electric vehicle cable, or the Electric vehicle connector is broken, cracked, open, or shows any other indication of damage.
- Do not put fingers into the electric vehicle connector.

**Failure to follow these instructions will result in death or serious injury.**

### ▲ CAUTION

#### HAZARD OF DEGRADATION OF EQUIPMENT PERFORMANCE

- Under no circumstances will compliance with the information in this manual relieve the user of his/her responsibility to comply with all applicable codes or safety standards.
- Schneider Electric is not responsible for any damages that may result from custom installations that are not described in this document or for any failure to adhere to installation recommendations.

**Failure to follow these instructions can result in injury or equipment damage.**

### NOTICE

#### RISK OF DAMAGING

- Before installing the Schneider StarCharge Fast Charging Station, consult with a licensed contractor, such as a licensed electrician, and use a trained installation expert to ensure compliance with local building and electrical codes and standards, climate conditions, safety standards, and all applicable codes and ordinances.
- A qualified person is one who has the skills and knowledge related to the construction, installation and operation of electrical equipment and has received safety training to recognize and avoid the hazards involved.

**Failure to follow these instructions can result in equipment damage.**

## Preface

This guide describes the operation and maintenance of the Schneider StarCharge Fast 120 or 180 or 240 or 320 Charging Stations. The Schneider StarCharge Fast Charging Stations are easy to install for electric vehicles. Fast Charging Stations are electrical installations with high electric currents. Therefore, any maintenance must be planned carefully, and must be done by certified personnel only (according to local standards).

The Schneider StarCharge Fast 120 is physically the same Charging Station as a Schneider StarCharge Fast 180. The Schneider StarCharge Fast 240 is physically the same Charging Station as a Schneider StarCharge Fast 320. The main difference is the output power it can deliver and therefore also the input power needed. The differences of the DC120/180 and 240/320, and any difference on the operation and/or maintenance shall be highlighted.

As the physical features of all types are equal, they will be referred to hereafter as Schneider StarCharge Fast 320/180 only and this will account for all types, unless specifically stated otherwise. All types come in different versions. The different versions are described in Charging Stations configurations section.

## Document Application

This document serves:

Site operators responsible for the charger's operation on site, performing regular inspection and maintenance activities and who are able to perform simple maintenance activities.

The Electric Vehicle drivers who will mainly use the icons and texts on the HMI display of the charger.

However, the user interface design facilitates the user experience & it is easy to use the Charging Station by following the instructions on the HMI screen.

## Available Documentation

Schneider StarCharge Fast 320/180 available documents for each phase of the project:

Document	Reference	Content	Audiences
Schneider StarCharge Fast 320/180 Datasheet	998-23818000	Full Charging Station specifications	Site designer, installer, and station operator
Schneider StarCharge Fast 320/180 Installation Guide	NAT2513801	Civil, mechanical, and electrical installation guidelines	Site engineer or installer/contractor
Schneider StarCharge Fast 320/180 Commissioning guide	NAT2514000	Electrical and Communication guidelines	Site engineer or installer/contractor/station operator
Schneider StarCharge Fast 320/180 Owners Guide	NAT2513900	Operation and maintenance guidelines	Site operator and end user
Schneider StarCharge Fast 320/180 OCPP guide	DOCA0311	Integration rule of charger for Charge Point Operator	Charge Point Operator/Contractor
Schneider StarCharge Fast 320/180 Modbus Connectivity Guide	D3973814	Modbus connectivity guidelines for energy management system intergration	Charge Point Operator / Contractor
Schneider StarCharge Fast 320/180 Cybersecurity Guide	BRU5102501	Cybersecurity rules and guidelines	Charge Point Operator / Contractor
Schneider StarCharge Fast 320/180 OCMF Guide	DOCA0310	Eichricht version connectivity guide for Charge Point Operator	Charge Point Operator / Contractor

## Owner Responsibilities

The owner and/or site operator are required:

- To ensure the site where the Charging Station will be installed, is in accordance with the requirements described in the Installation guide.
- To ensure enough space around the Charging Station to carry out maintenance work.
- To ensure all protection devices are correctly installed after carrying out installation or maintenance.
- To operate the Charging Station with the protection devices installed.
- To write an emergency plan that instructs users what to do in case of emergency.
- To appoint a person responsible for the safe operation of the charge station and for the coordination of all work. This person should be properly trained by Schneider Electric.
- To contact Schneider Electric Services for the periodic maintenance of the Charging Station at least once a year if not subscribed to a service plan.

## Charge Point Operator Responsibilities

- A temporary buffer storage is available in the Charging Station, e.g. to temporarily store data package during a connection break. In general, the backend is responsible for the permanent storage of the data package in accordance with the Charge Point Operator, and the end customers will be able to access the charging data stored from the backend. The different operators with their owned backend will be informed of these requirements for complying.
- To start using Schneider StarCharge Fast payment terminal, Charge Point Operator must proceed with the registration and activation of the payment terminal on the payment cloud platform. The commissioning of the Schneider StarCharge Fast payment terminal in Charge Point Operator's environment including the registration and activation of the payment terminal is required to enable Charge Point Operator to process payment transactions of EV drivers at the Charging Stations operated by the Charge Point Operator.

Payment cloud platform interfaces the payment terminals with each of the CSMS software operated by the Charge Point Operator, and the payment service providers' respective payment processing platforms.

Schneider Electric does not intervene and does not bear any responsibility in the registration and activation of the payment terminals, nor in the interfacing of the payment terminals with any third-party solution.

Charge Point Operator shall have to enter into its own and separate agreements under its own responsibility with Payter to define the terms and conditions under which:

- The payment terminal will be enrolled and activated on the Payter cloud platform accessed by the Charge Point Operator.
- In case of failure in the payment terminals, Payter shall provide directly to the Charge Point Operator the support and maintenance of the payment terminals, including the direct supply by Payter to the Charge Point Operator of the payment terminals and their spare parts that the Charge Point Operator will assemble (or have their subcontractors assemble) into the Schneider StarCharge Fast to replace the failure parts of the payment terminals.

Please find below link for Payter payment terminal:

Registration of Payter Payment terminal:

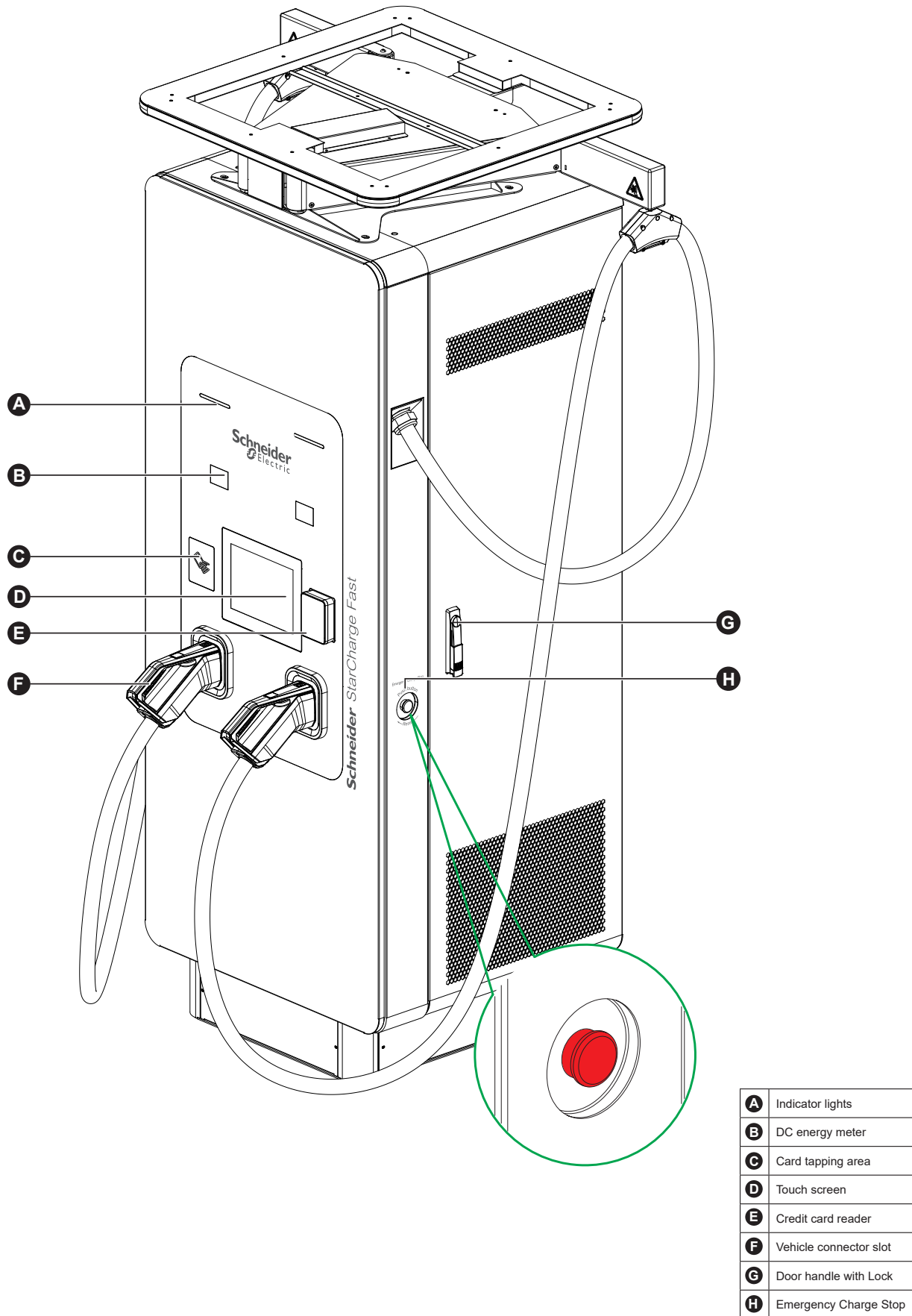
<https://www.payter.com/registration>

Technical documentation related the Payter Payment terminal:

<https://www.payter.com/downloads>

## Technical Compatibility Information – Third-party Payment Terminal

- Schneider eStar has tested and confirmed the electrical connection compatibility of the PAX IM30 V1& V2 terminal model of the third-party company PAX with the DC Charger 320 when such terminal is mounted on the DC 320 charger.



## 1.1 Charging Stations Configurations


Type of equipment applicable to this manual: Schneider StarCharge Fast 120 - 180; Schneider StarCharge Fast 240 - 320

Commercial Reference	Nominal Power	Vehicle Connector	Cable Management	Cable Range (m)	Payment Terminal	Eichrecht Version
EVD2S320TBB	320kW DC	2 x CCS2	Yes	3.8	No	No
EVD2S240TBB	240kW DC	2 x CCS2	Yes	3.8	No	No
EVD2S180TBB	180kW DC	2 x CCS2	Yes	3.8	No	No
EVD2S120TBB	120kW DC	2 x CCS2	Yes	3.8	No	No
EVD2S320TBBCC	320kW DC	2 x CCS2	Yes	3.8	Payter Apollo	No
EVD2S180TBBCC	180kW DC	2 x CCS2	Yes	3.8	Payter Apollo	No
EVD2S320TBBCC7	320kW DC	2 x CCS2	No	7.5	No	No
EVD2S180TBBCC7	180kW DC	2 x CCS2	No	7.5	No	No
EVD2S320TBB-G	320kW DC	2 x CCS2	Yes	3.8	No	Yes
EVD2S240TBB-G	240kW DC	2 x CCS2	Yes	3.8	No	Yes
EVD2S180TBB-G	180kW DC	2 x CCS2	Yes	3.8	No	Yes
EVD2S120TBB-G	120kW DC	2 x CCS2	Yes	3.8	No	Yes
EVD2S320TBBCC-G	320kW DC	2 x CCS2	Yes	3.8	Payter Apollo	Yes
EVD2S180TBBCC-G	180kW DC	2 x CCS2	Yes	3.8	Payter Apollo	Yes
EVD2S320TBBCC7-G	320kW DC	2 x CCS2	No	7.5	No	Yes
EVD2S180TBBCC7-G	180kW DC	2 x CCS2	No	7.5	No	Yes

\* For more customized commercial reference, please contact Schneider Electric.


### DC Electric Vehicle Charging Station

**Commercial ref:** EVD2S320TBB DC3200EN146012  
**Serial Number:** 8A012345678 SN1234567890

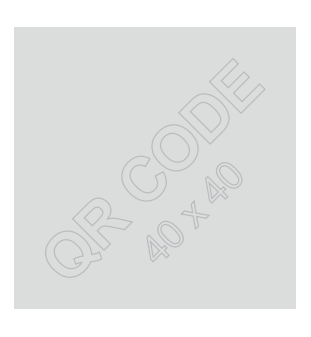


Rated Input Voltage: 380-415V AC 3P+N+PE	Rated Frequency: 50/60 Hz Rated Input Current: 507A
Operating Temp.: -30°C~50°C (up to 55°C with derating)	
For industrial areas	Protection: IP55 IK10 (IK08 screen)/Class I
Connector Type (Max Output Current): A/CCS2 (380A DC) B/CCS2 (380A DC) Boost current: 500A DC	Output Voltage: A/150-1000V DC B/150-1000V DC
Rated Output Power: 320 kW	EN IEC 61851-1 EN 61851-23 IEC 61439-7

Manufactured by:  
**Schneider eStar**  
35 rue Joseph Monier  
92500 Rueil-Malmaison France




MFD: 8A-22-02    Made in China



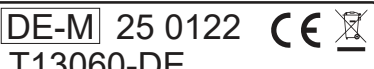
### DC Ladestation

**Artikelnummer:** EVD2S320TBBCC-G DC3200EN146011  
**Seriennummer:** 8A012345678 SN1234567890 MFD: 8A-25-02

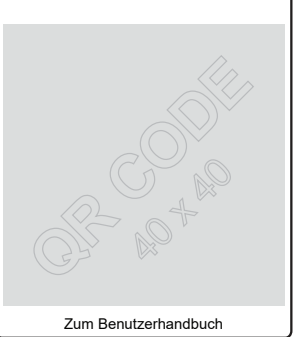


Eingangsleistung: 380-415V AC 3P+N+PE	Klasse A (EN50470)/MMQ(kWh) : 1
Nenneingangsstrom: 507A	Nennfrequenz: 50/60 Hz
Betriebstemperatur: -30°C~50°C (bis zu 55°C mit Leistungsreduzierung)	
Für den industriellen Bereich	Schutzart: IP55 IK10 (Bildschirm IK08)/Klasse I
Stecker Typ (Max Ausgangsstrom): A/CCS2 (6.5-500A DC) B/CCS2 (6.5-500A DC)	Ausgangsspannung: A/150-1000V DC B/150-1000V DC
Nennleistung: 320 kW	Umweltbedingungen: M1/E2 EN IEC 61851-1 EN 61851-23 IEC 61439-7

Einführer: Schneider eStar  
Anschrift: 35 rue Joseph Monier  
92500 Rueil-Malmaison France  
Wanbang Digital Energy Co., Ltd.  
Fenglin-Südstraße Nr. 186, Wujin  
Nationales High-Tech-Industrieentwicklungsgebiet, Changzhou, Jiangsu, China

**DE-M 25 0122** 

**T13060-DE**  
Hergestellt in China



Zum Benutzerhandbuch

Here is an example of a Charging Station nameplate.

## 1.2 Authentication Modes

According to the Commissioning parameters, the Schneider StarCharge Fast 320/180 operation is possible with or without authentication. Operation with authentication requires a Charging Station connected to an OCPP backend platform.

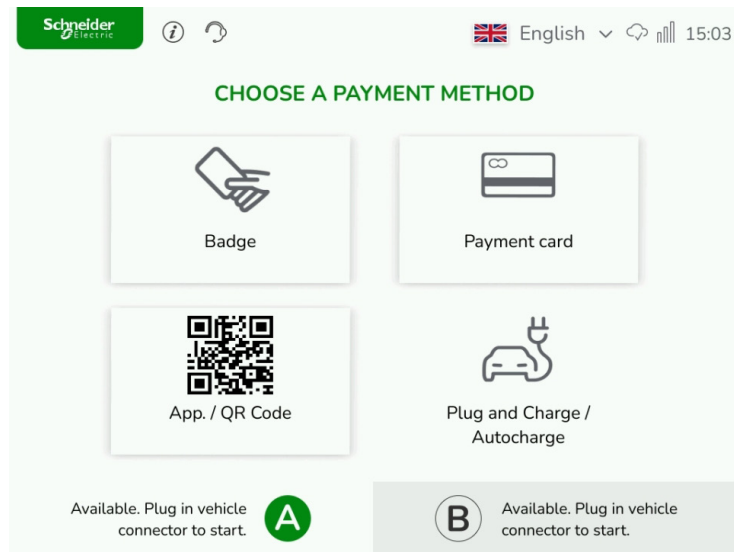
### Authentication modes available:

- Authentication Required, with option:
  - RFID/NFC
  - QR code with Mobile APP
  - Payment terminal
  - EV MAC address
  - ISO 15118 Plug n Charge
- Free charging mode without authentication

## 1.3 Payment Methods

Depending on Charging Station reference and on the commissioning parameters required, Charging Stations may have several payment options:

- Mobile App
- RFID Card
- Payment Card
- Auto Charge (Mac address)
- ISO 15118 Plug and Charge




### 1.4 LED Status Indicator


The status of the Schneider StarCharge Fast 320/180 Charging Station is indicated via colored LED indicator lights.

Below you will find the definition of each Indicator Light and its corresponding charger status and the basic user guidance: (Sticker provided with the unit)


**Start**




1




2




3




4




Authentication In progress  
Authentification en cours  
Authentifizierung läuft  
Autenticación en progreso  
Autentisering pågår



The vehicle is charging  
Le véhicule électrique charge  
Fahrzeug lädt  
Vehículo eléctrico cargando  
Lading av elektriske kjøretøy




Charging point reserved or unavailable  
Point de recharge réservé ou non disponible  
Ladepunkt reserviert oder nicht verfügbar  
Punto de recarga reservado o no disponible  
Ladepunkt reservert eller utilgjengelig




Charging point maintenance needed  
Entretien du point de charge nécessaire  
Wartung der Ladestation erforderlich  
Necesidad de mantenimiento del punto de recarga  
Vedlikehold av ladepunkt er nødvendig


**Stop**




1



2




3




4

Version without cable management system


**Start**




1




2




3




4




Authentication in progress  
Authentification en cours  
Authentifizierung läuft  
Autenticación en progreso  
Autentisering pågår



The vehicle is charging  
Le véhicule charge  
Fahrzeug lädt  
Vehículo eléctrico cargando  
Lading av elektriske kjøretøy




Charging point reserved or unavailable  
Point de recharge réservé ou non disponible  
Ladepunkt reserviert oder nicht verfügbar  
Punto de recarga reservado o no disponible  
Ladepunkt reservert eller utilgjengelig




Charging point maintenance needed  
Entretien du point de charge nécessaire  
Wartung der Ladestation erforderlich  
Necesidad de mantenimiento del punto de recarga  
Vedlikehold av ladepunkt er nødvendig


**Stop**




1




2




3



4



x1 charging point available  
x1 point de recharge disponible  
x1 ladepunkt verfügbar  
x1 punto de recarga disponible  
x1 ladepunkt tilgjengelig



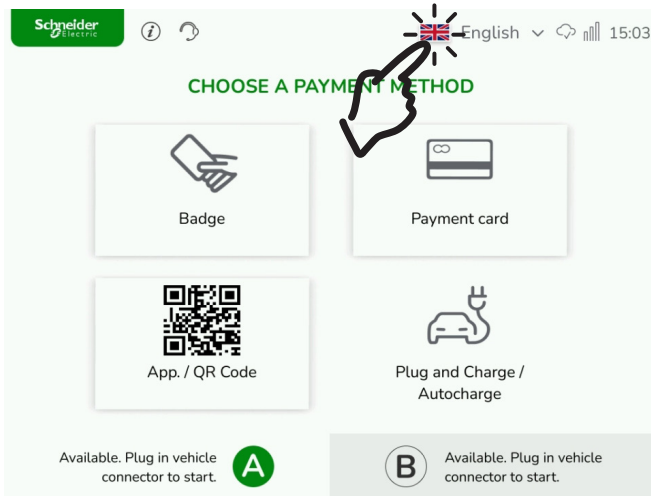
No charging point available  
Points de recharge non disponibles  
Ladepunkt nicht verfügbar  
Puntos de recarga no disponibles  
Ladepunkt utilgjengelig

Version equipped with cable management system

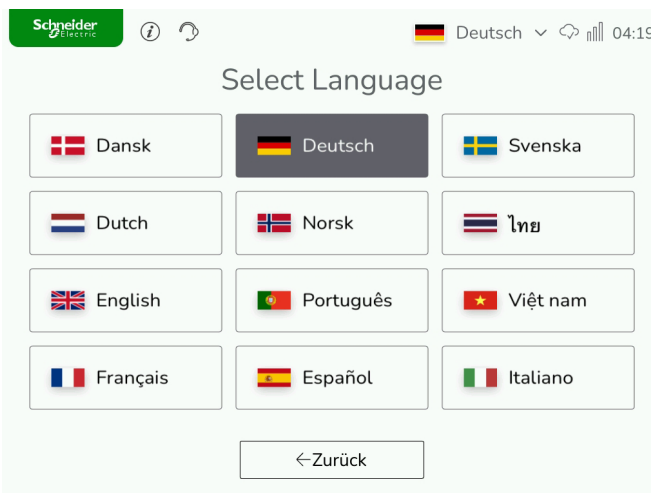
### 1.5 Languages

The Schneider StarCharge Fast User interface is integrated in several languages to facilitate the use according to regional requirements and enable different users. In the top of the HMI screen you can press on the Flag icon which will take you to a menu to select your preferred language.

**Note:** The list of available languages are defined at the commissioning stage.



#### Available Languages:

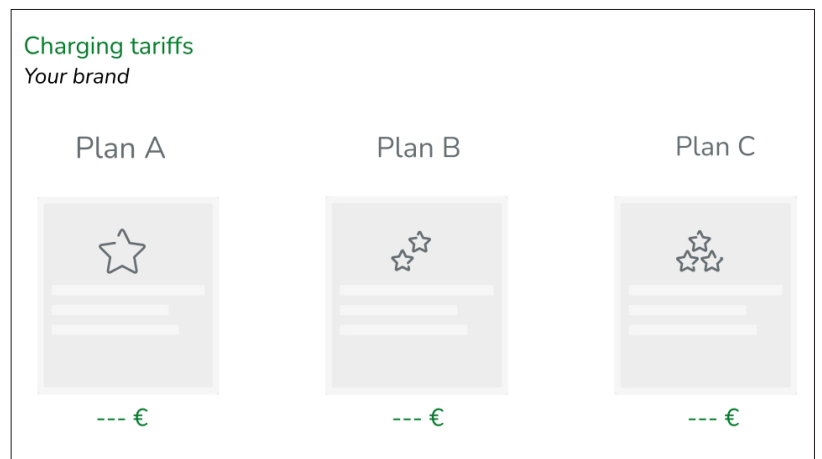
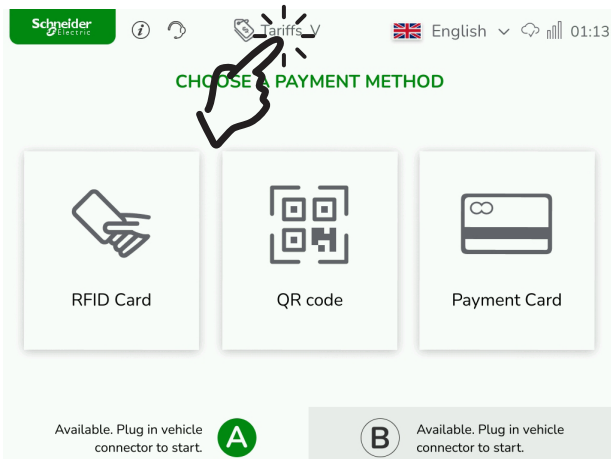


NAT2513900-04\_EN

8/20

## 1.6 Tariff

If the backend platform issues a tariff to the Charging Station as a payment reference, an icon will appear at the top of HMI screen. Click the "Tariff" icon and the further information of charging tariffs will pop up.



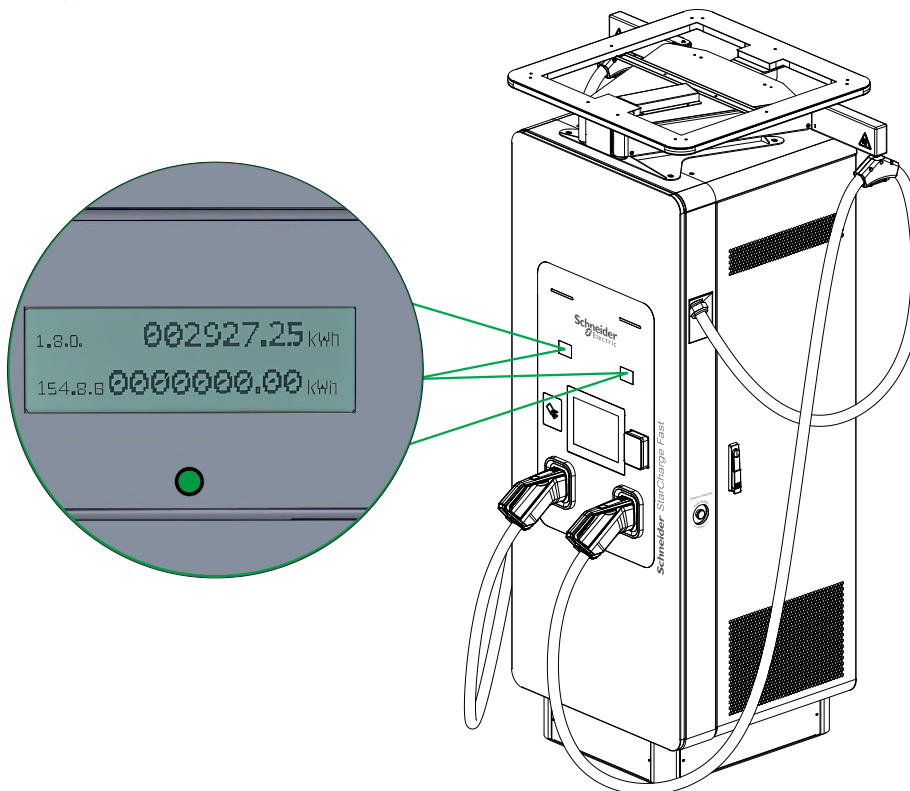
## 1.7 Charge Session DC Meter Reading

The Schneider StarCharge Fast Charging Station is equipped with a visible DC meter on each outlet. It provides the measurement data records with timestamp, loading process data and digital signature, thereby enabling charging processes to be billed in accordance with the legal requirements. Furthermore, all charging processes are persistently stored in the internal data storage of the meter.

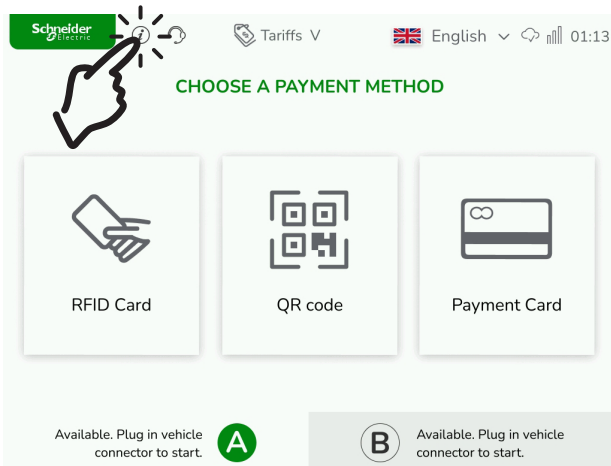
The rotation interval on the display screen is 5 seconds.

**Displayed Information:**

- Total import mains energy
- Total transaction import device energy

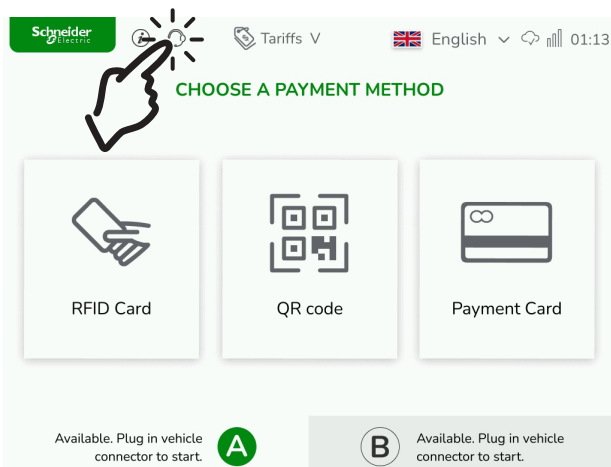


### 1.8 Information



CPID (Charge Point Identifier) and FW version will be showed by touch information icon.

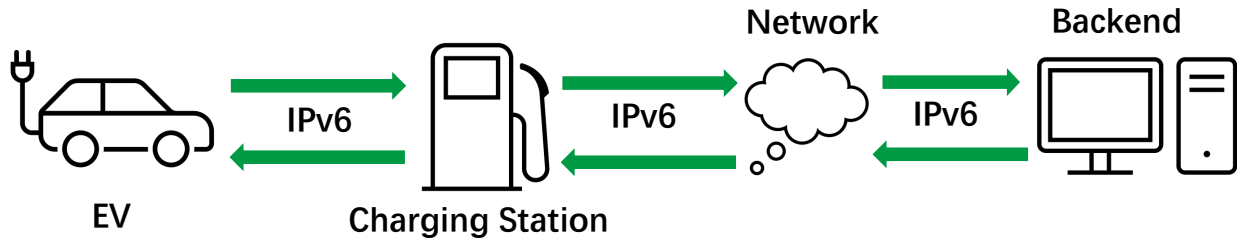
### 1.9 Services



The telephone number and on call time of service center could be configured through WebUI and be showed by touch the headphone icon on HMI.

## 2.1 VDV 261

- VDV 261 is a technical document published by the Association of German Transport Companies that describes how to ensure the data exchange necessary for the preconditioning of vehicles. This means, for example, that the temperature on the bus can be adjusted for passengers even before the bus departs from the charging station. And not just for one bus, but automatically for all buses.
- VDV 261 describes how the value-added services (VAS) of ISO 15118 must be used to automatically precondition vehicles during a charging process. Intelligent charging management enables so-called preconditioning, basically a "preparation" of the buses, via the existing charging infrastructure. There are various options for this, e.g. heating, cooling, ventilating. As soon as the electric bus is connected to a charging station, the data sent can be used to determine precisely whether preconditioning is required and, if so, in what form, so that the vehicle is ideally prepared at departure time. The challenge here lies in smooth communication from the vehicle via the charging station to the charging management, as this communication chain must be encrypted and coordinated with all parties involved.
- The preparation for using VAS is encrypted communication between the vehicle and the charging stations using Transport Layer Security (TLS). This communication must be enabled via an IPv6 network.



The precondition requirements of VDV 261 are as below.

Requirements	Vehicle	Charging Station	Backend
ISO 15118	√	√	
IPv6	√	√	√
Certificate handling	√	√	√
TLS on PLC	√	√	
VAS 443	√		√
Https	√	√	√

- Our DC charging station provides this IPv6 bridge for EV communication with backend by ISO15118 VAS service.
- The VDV261 could be enabled through web commissioning tool according to commissioning guide.

**NOTE:** Please check the readiness of Vehicle, Charging station and backend for VDV261.

## 2.2 Wake-up

- Sleep mode and standby mode are operating modes of the charging station or vehicle designed for reducing energy consumption when a communication session is not occurring.
- The charging station enters a "standby mode" if the vehicle proactive pause the charge session. Before pulling out the connector from vehicle, the vehicle may restart digital communication with Charging Station and restore the charge session by using a B1-C1-B1 toggle according to IEC 61851-1 and ISO 15118-3.
- The support of standard BCB wake-up toggle, as per IEC 61851-1 and ISO15118-3, is default enabled. Meanwhile, there is a parameter in web page for enable/disable a non-standard (Not triggered by EV pause.) BCB wakeup for specific vehicles (Renault / Volvo / Scania truck are part of these specific vehicles).

**NOTE:** Please check the readiness of Vehicle and Charging station for wake-up.

## 2.3 Boost Charging

- Boost is a feature that enables the charging station to deliver a higher current to the vehicle than the rated current normally permitted by its output cable
- The boost function can only be guaranteed for a limited period of time at maximum charging current, depending on the ambient temperature. There is only one opportunity entering boost charging for each charging session, at the beginning of the charging session.
  - Here are the values indicating the capability the charging station can sustain during the boost period:
    - Boost current: 500A
    - Boost time: 10min
    - Maximum ambient temperature: 50°C
- Boost charging function is enabled by default, could be disabled through web commissioning tool.

## 2.4 ISO15118 Plug and Charge

- ISO15118 is an international standard and that facilitates communication between charging stations and electrical vehicles. It aims to improve interoperability, enhance user experience, and enable smart charging solutions. The standard includes various functionalities, including the Plug and Charge (PnC feature), which simplifies the charging process for users.
- PnC allows EVs to connect to charging stations and automatically handle the authentication, authorization and billing processes without requiring the user to swipe a card or use a mobile app. This is achieved through secure communication protocols that exchange identity and certificates between the vehicle and the platform via charging station.
- The PnC authentication support of this charging station is implemented following "Using ISO 15118 Plug & Charge with OCPP 1.6" and ISO15118-2. The requirements to have the ISO15118 to work effectively with the charging station it requires:
  - Configure the ISO15118 Plug & charge authorize mode within the charging station.
  - PnC been supported EV.
  - PnC has been supported by CSMS.
  - certificates ready at both CSMS and EV sides
- The PnC charge attempt will be performed when the connector is plugged into EV.

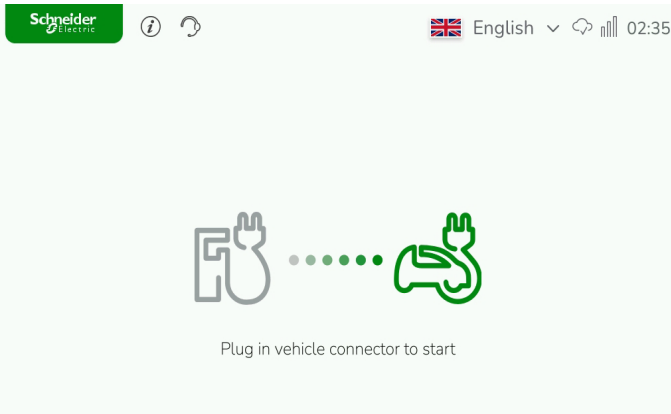
### NOTE:

The product is qualified by Hubject.

Please check the readiness of Vehicle, Charging station and backend for ISO15118 PnC.

## 2.5 Basic Charging Steps

To charge an Electric Vehicle(EV):



- A • Park the Electric Vehicle with the charge inlet within reach of the vehicle connector suitable for your Electric Vehicle.
- B • Confirm the Charging Station status is normal and the status indicator is steady green.
- C • Select your preferred language.
- D • Follow the instructions on the screen.

### ⚠ CAUTION

#### HAZARD OF DAMAGING A LOCKED VEHICLE CONNECTOR

- In CCS charging the Electric Vehicle locks the vehicle connector.
- If the user wants to unplug the vehicle connector from the car, it may be necessary to unlock all doors of the Electric Vehicle or use the "unlock charge connector button" on the car key, if present.
- Do not apply force to a locked vehicle connector during charging. This might damage the inlet and locking mechanism in the car or damage the Charging Station.
- Always handle cables and connectors with care & always place them back in their respective holders.
- Only insert a vehicle connector into a suitable car inlet.

**Failure to follow these instructions can result in injury or equipment damage.**

#### PLEASE NOTE

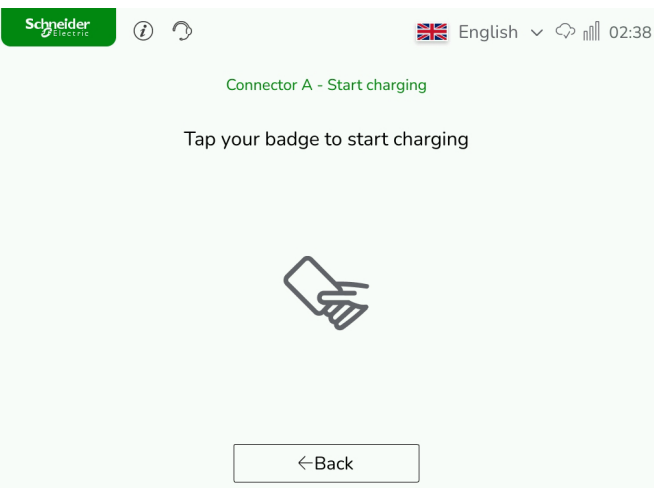
- Always ensure that the vehicle connector is properly plugged in the Electric Vehicle.
- Always ensure that the vehicle connector openings are clean and clear of any foreign bodies, dust, sand, leaves, etc.

## 2.6 Charging Authentication Modes

Depending on the configured authentication modes below, the user instructions for the charger may vary depending on the customer requirements.

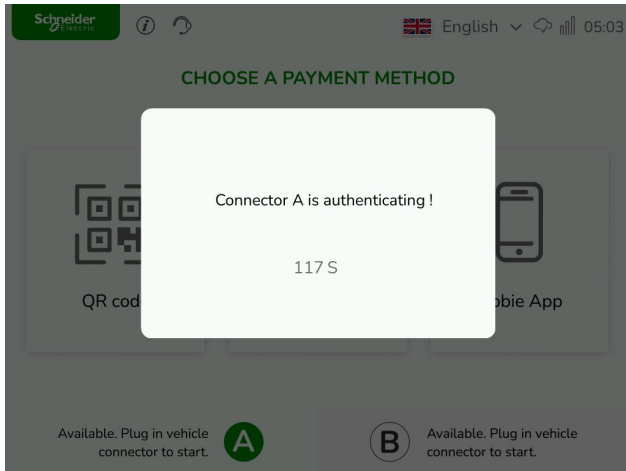
For each authentication mode, EV drivers need to select the authentication mode when it's not free or using ISO15118 Plug and Charge or Mac address Authentication.

### 1. RFID/NFC Authentication Required

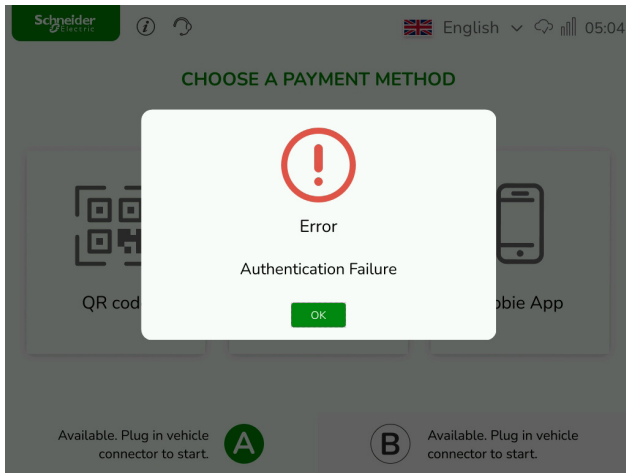


- A • All the following scenarios are available.
  - Scenario 1:
    - Step 1: Remove the vehicle connector A or B from the connector slot and insert firmly it into the corresponding charging part of the vehicle.
    - Step 2: Select the plugged connector A or B on the screen.
    - Step 3: Select RFID authentication, and follow on screen guide.
    - Step 4: Wait for charging start.
  - Scenario 2:
    - Step 1: Select the connector A or B on the screen.
    - Step 2: Select RFID authentication and follow on screen guide.
    - Step 3: Remove the vehicle connector A or B, selected in step 1, from the connector slot and insert firmly it into the corresponding charging port of the vehicle.
    - Step 4: Wait for charging start.
  - Scenario 3:
    - If one of the vehicle connectors is already charging or unavailable. Select the other unoccupied vehicle connector on the HMI screen. And then follow from Step2 in Scenario1 or Scenario2.

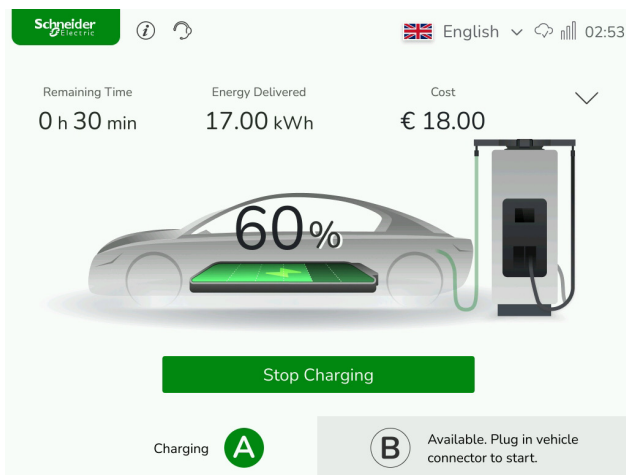
## 2.6 Charging Authentication Modes



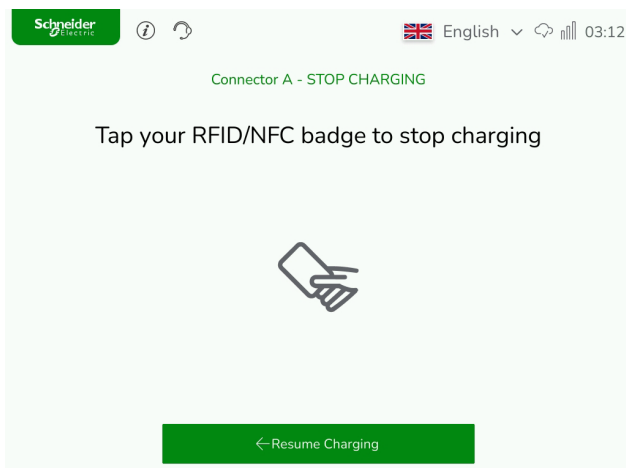
- B** • Once the RFID card is tapped the interface will show the authenticating message. Once authenticated the session will start.



- C** • If authentication fails, a message will appear.



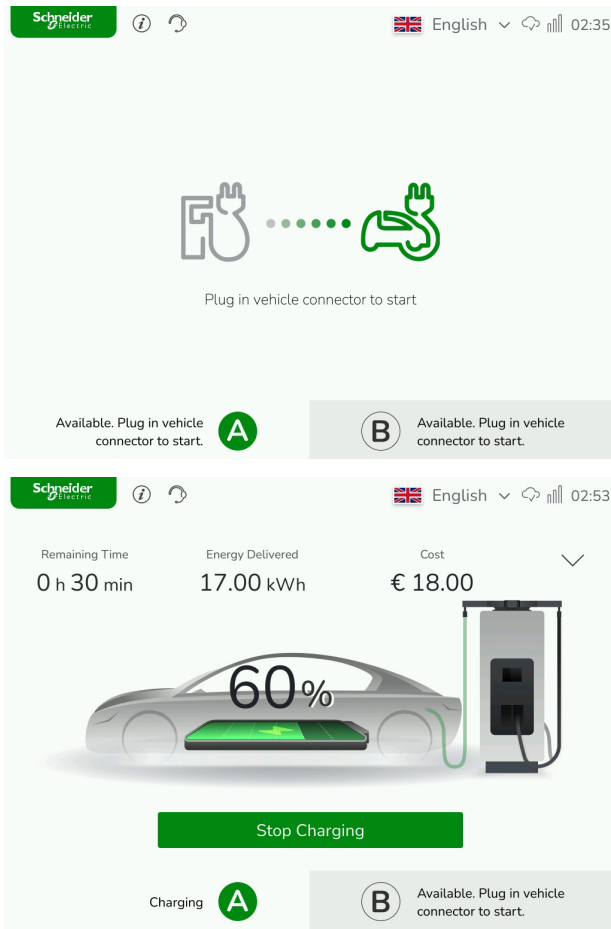
- D** • During charging, touch A and B buttons on the bottom of the screen to switch to the status interface of each vehicle connector.
- E** • Stop charging: Press "Stop Charging" to enter the stop charging interface and tap the card again to stop charging.



- F** • Unplug the vehicle connector from the vehicle, reposition it in the connector slot.

## 2.6 Charging Authentication Modes

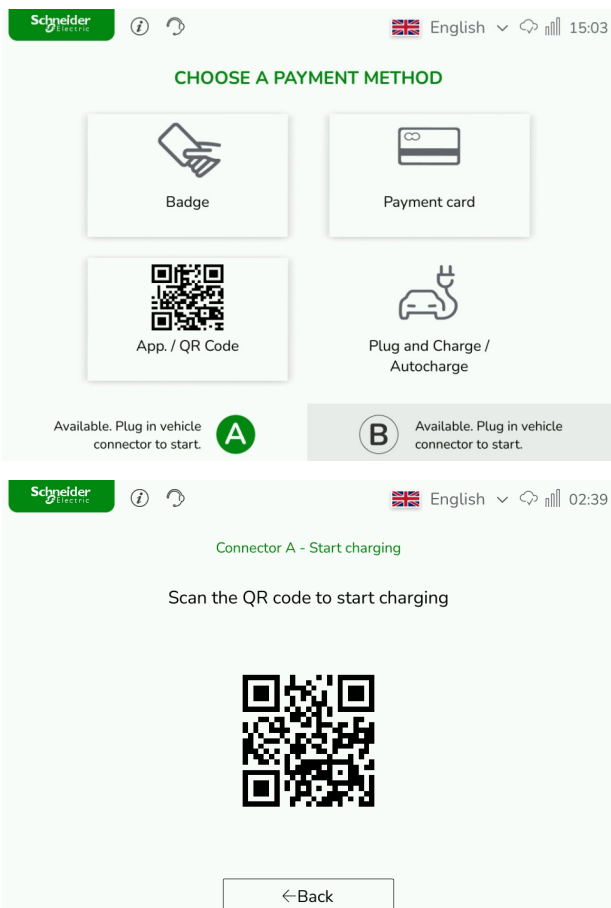
## 2. Free charging mode without authentication



- A • On the user interface of the Charging Station, select the suitable vehicle connector A or B and follow the instructions on the screen.
- B • Remove the vehicle connector from the connector slot and insert firmly it into the corresponding charging port of the vehicle, charging session will start automatically.

- C • To stop the charging session, either of the following methods can be used:
  - Use the connector unlock feature on the electric vehicle.
  - Press "Stop Charging" button on the HMI screen (Only when the button is enabled in commissioning stage. Please refer to Commissioning Guide.).
- D • Replace the connector in the holder.

## 3. QR code with Mobile APP



- A • All the following scenarios are available.

Scenario 1:

- Step 1: Remove the vehicle connector A or B from the connector slot and insert firmly it into the corresponding charging port of the vehicle.
- Step 2: Select the plugged connector A or B on the screen.
- Step 3: Scan the pop-up QR code to start the charging session and follow the instruction given by the Charge Point Operator to start and stop charging session.

Scenario 2 :

- Step 1: Select the connector A or B on the screen.
- Step 2: Scan the pop-up QR code to start the charging session and follow the instruction given by the Charge Point Operator to start and stop charging session.
- Step 3: Remove the vehicle connector A or B, selected in step 1, from the connector slot and insert firmly it into the corresponding charging port of the vehicle.

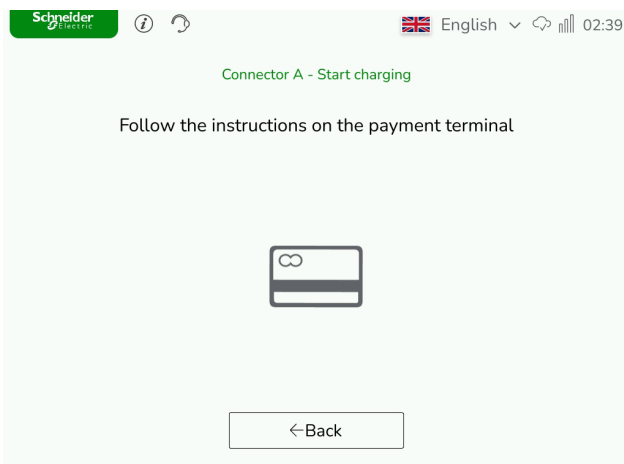
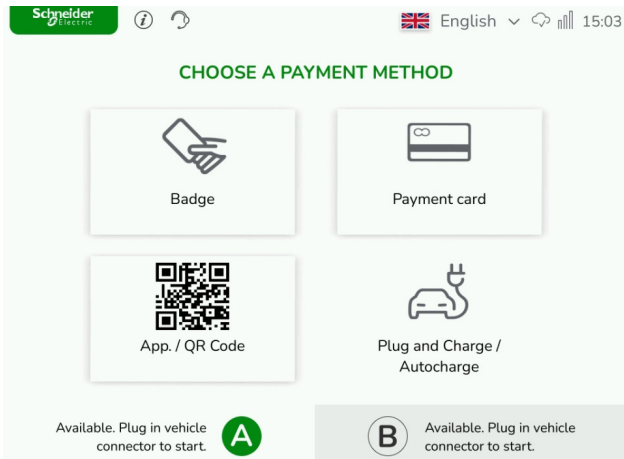
Scenario 3:

If one of the vehicle connectors is already charging or unavailable. Select the other unoccupied vehicle connector. And then follow from Step2 in Scenario 2.

- B • To stop the charging session, either of the following methods can be used:
  - Use the connector unlock feature on the electric vehicle.
  - Press "Stop Charging" button on the HMI screen (Only when the button is enabled in commissioning stage. Please refer to Commissioning Guide.).
  - Follow the instructions given by the charge Point Operator.
- C • After the charging session stops, replace the connector in the holder.

## 2.6 Charging Authentication Modes

## 4. Payment terminal



- A • All the following scenarios are available.

Scenario1:

Step1: Select the connector A or B on the screen.

Step2: Click the Payment terminal icon on screen HMI.

Step3: Follow the instruction on the screen of the payment terminal including selection of connector A or B.

Step4: Then tap the credit card. Remove the vehicle connector A or B from the connector slot and insert firmly it into the corresponding charging port of the vehicle.

Step5: Wait for charging start.

Scenario2:

Step1: Remove the vehicle connector A or B from the connector slot and insert firmly it into the corresponding charging port of the vehicle.

Step2: Select the plugged connector A or B on the screen.

Step3: Click the Payment terminal icon on screen HMI.

Step4: Follow the instruction on the screen of the payment terminal including selection of connector A or B, then tap the credit card.

Step5: Wait for charging start.

Scenario3:

If one of the vehicle connectors is already charging or unavailable.

Select the other unoccupied vehicle connector.

And then follow from Step2 in Scenario1.

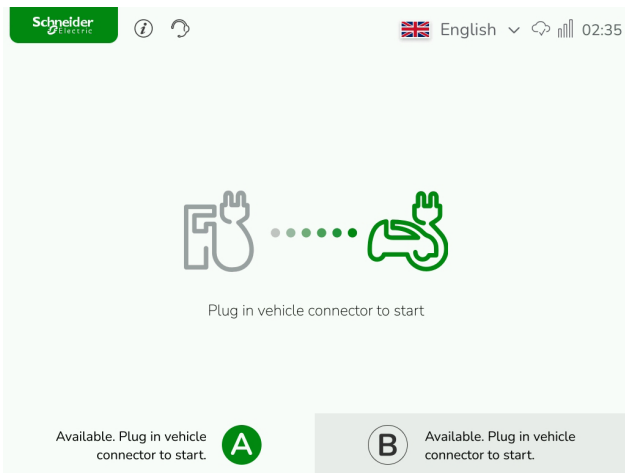
**NOTE:** If CSMS already has integrated with Payment backend, the payment terminal will indicate connector selection option on the screen.

The user shall check the payment 4G connectivity strength before using.

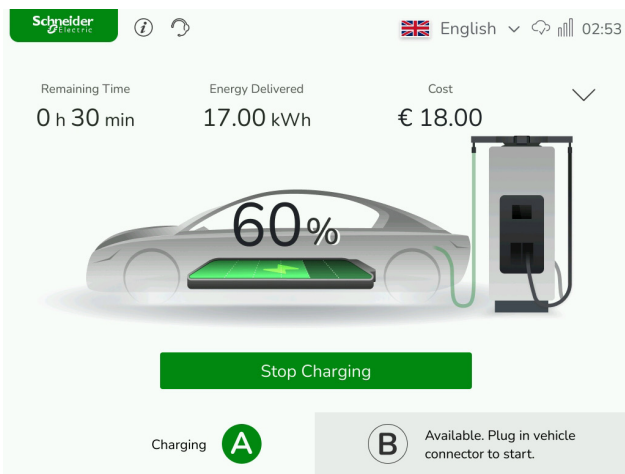
- B • Stop charging: Press "Stop Charging" to enter the stop charging interface and follow the instructions on the payment terminal again to stop charging.
- C • Replace the connector in the holder.

## 2.6 Charging Authentication Modes

## 5. Authentication with EV MAC address



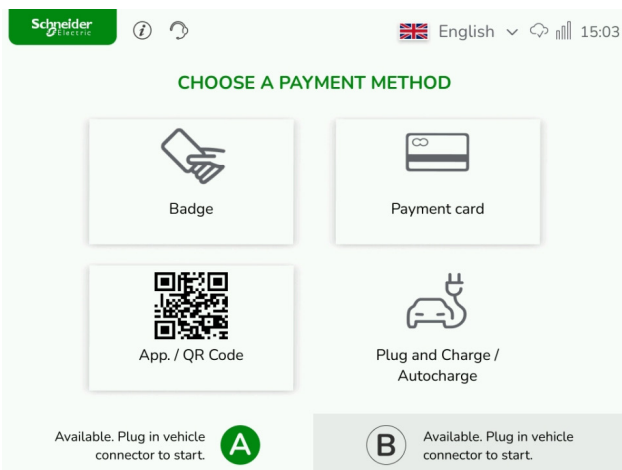
- A • Remove the vehicle connector from the connector slot and insert firmly it into the corresponding charging port of the authorized vehicle to authenticate.



- B • Stop charging: Press "Stop Charging" to enter the stop charging interface or stop the charge from the vehicle.
- C • Replace the connector in the holder.

**NOTE:** The "Stop Charging" button needs special commissioning in web page (please refer to Commissioning Guide).

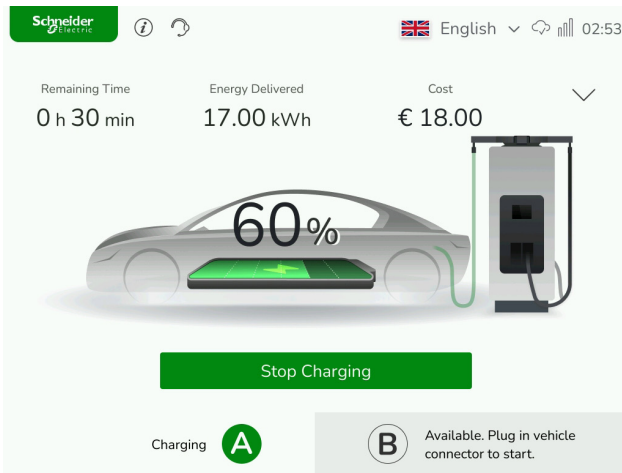
## 6. Plug and Charge



- A • On the user interface of the Charging Station, select the suitable vehicle connector A or B and follow the instructions on the screen.
- B • Remove the vehicle connector from the connector slot and insert firmly it into the corresponding charging port of the vehicle, charging session will start automatically.
- C • To stop the charging session, either of the following methods can be used:
  - Use the connector unlock feature on the electric vehicle.
  - Press "Stop Charging" button on the HMI screen (Only when the button is enabled in commissioning stage. Please refer to Commissioning Guide.).
- D • Replace the connector in the holder.

### 3.1 Charging Session Statistics

During the charging sessions the Schneider StarCharge Fast can provide different readings and statistics about the ongoing session(s)  
To pick the charging session during charging, touch A and B buttons on the bottom of the screen to switch to the status interface of each vehicle connector.



On the main screen of the Charging Station will appear the general status of the charging session such as:

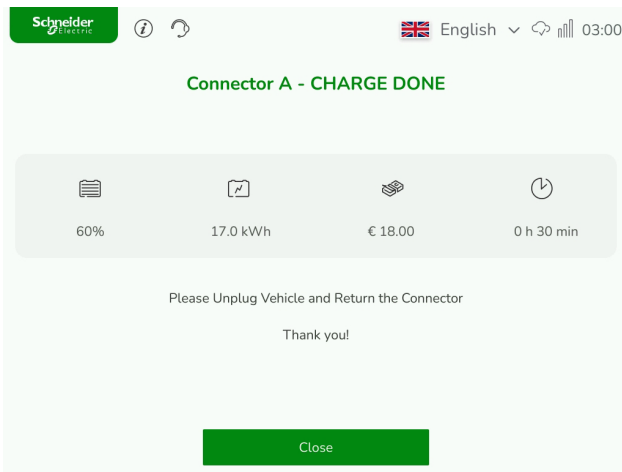
- Session start time
- Elapsed time
- Estimated end time
- Energy delivered in kWh
- Cost/billing amount (if information is provided by CSMS back-end)
- Charging Power, Output Current and Output Voltage (need to expand the arrow on the left side of the screen)

### 3.2 Charge Session Report

At the end of a charge session, the Charging Station will display on the user interface a report of the statistics of the charging session.

#### Session end

- Charging will stop without user interaction when the Electric Vehicle indicates to the charger that charging is completed.
- Charge session can also be ended from the Electric Vehicle side, refer to the Electric Vehicle owners manual.



#### Available Information:

- Electric Vehicle battery Level in %
- Energy delivered in kWh
- Cost/billing information (if information is provided by CSMS backend)
- Duration of charging session

### 3.3 Screen saver and logo change

The logo picture showing on the upper left corner of the HMI screen can be changed (in commissioning stage) according to the requirement from Charge Point Operator/Contractor.

Once the HMI screen is not operated within 2 minutes, the screen saver will start (Only when the screen saver feature is enabled in commissioning stage). The screen saver pictures will be changed at regular intervals (10s) if there are more than one screen saver picture. The maximum screen save pic number is 2.

#### NOTE:

- If the logo is not defined by user, the Schneider Electric logo will be displayed.
- If the screen saver image is not provided by user, the screen saver function will be disabled.

**⚠ ⚠ DANGER****HAZARD OF ELECTRIC SHOCK**

- Any inspection or maintenance activity that requires the Charging Station doors to be opened must only be performed by trained and authorized personnel.
  - Contact Schneider Electric services to provide the recommended service plan for your product.
- Failure to follow these instructions will result in death, serious injury.**

**NOTICE****HAZARD OF EQUIPMENT DAMAGE**

- Do not apply high-pressure water jets when cleaning the Charging Station as water may leak inside.
- Only use cleaning agents with a pH value between 6 and 8.
- Do not use cleaning agents with abrasive components.
- Do not use abrasive tools.

**Failure to follow these instructions can result in equipment damage.**

























To achieve the best performance out of your Schneider StarCharge Fast Charging Station preventive maintenance plan is required. The preventive maintenance plan consists of regular maintenance and periodic maintenance.

**Regular maintenance** aims to offer a regular check for the status of the Charging Station under the condition when shut down is not possible.

**Periodic maintenance** is to be carried out at least once a year by Schneider Electric services personnel or trained and certified Schneider Electric's eMobility EcoXpert.

**Regular Maintenance**

Regular maintenance checklist as follow:

Regular Maintenance				
Check	Tool	Frequency	Shutdown Required	Status/Action
Visually check whether there are missing parts such as connector holder, Emergency charge stop, handles, etc.		Weekly	No	
Visually check whether there are deformed or damaged parts on enclosure.		Weekly	No	
Ensure cleanliness of enclosure for stains, stickers, graffiti, grease, signs of rust, signs of burn or water penetration.		Weekly	No	
Check the HMI screen for damages and ensure proper visibility and touch response.		Weekly	No	
Test the QR code to ensure it is clear and leads to the correct App/Interface.		Weekly	No	
Check the HMI screen for any error messages.		Weekly	No	
Check the LED indicator lights.		Weekly	No	
Visually inspect the condition of the connectors pins and cables for any foreign objects, damages, or broken insulation.		Weekly	No	
Visually inspect the cable at the connector flange for any pull marks.		Weekly	No	
Manually test the proper operation of the cable management system and ensure that it can withdraw back a loose cable.		Weekly	No	
Inspect and verify the correct operation of the Emergency charge stop.		Weekly	No	
Check the car stopping bollards are present and not damaged.		Weekly	No	
Visually inspect the concrete foundation for water collected or damages and ensure all bolts are secured in place.		Weekly	No	
Visually inspect the canopy/shed for any damages. (if applicable).		Weekly	No	
Ensure the installation area is clear of weeds, sand, excessive dust, etc.		Weekly	No	
Visually inspect all safety warning signs visible and clear.		Weekly	No	
Manually inspect the doors and locks for proper operation and keys are secured.		Weekly	No	
Listen whether there is abnormal noise from inside of the charger.	 	Weekly	No	
Check for abnormal (burning, rodent) smell coming from the charger.	 	Weekly	No	
Inspect the DC meter through the window and ensure clear reading visibility.		Weekly	No	
Inspect and clean the intake ventilation louvers for damages or any foreign objects blocking.		Weekly	No	
Inspect and clean the outlet ventilation grid for damages or any foreign objects blocking.		Weekly	No	

**Product Disposal**

To comply with Directive 2012/19/EU of the European Parliament and of the Council of 4 July 2012 on waste electrical and electronic equipment (WEEE), devices marked with this symbol may not be disposed of as part of unsorted domestic waste inside the European Union. Enquire with local authorities regarding proper disposal.

Product materials are recyclable as marked.

Please find below link and enter the product reference number for files: Product Environmental Profile and Product End of Life Instructions

[checkaproduct.se.com](http://checkaproduct.se.com)

## Radio Equipment Conformity

**EU Declaration of Conformity**

Schneider StarCharge Fast 320/180 is in compliance with the essential requirements and other relevant provisions of Radio Equipment Directive: 2014/53/EU. The EU declaration of conformity for Schneider StarCharge Fast 320/180 offer (EU1006137-4) can be downloaded on: [www.se.com/docs](http://www.se.com/docs).

**UK Declaration of Conformity**

Schneider StarCharge Fast 320/180 is in compliance with the essential requirements and other relevant provisions. of Radio Equipment Regulations 2017-UK SI 2017 No.1206.

The UK declaration of conformity for Schneider StarCharge Fast 320/180 offer (UK1007288-1) can be downloaded on: [www.se.com/uk/docs](http://www.se.com/uk/docs).

## Communication Frequencies

	Operation Frequency	Output Power
<b>RFID:</b>	13.56 MHz	5.42dBuA/m
<b>GSM900:</b>	TX: 880 MHz to 915 MHz RX: 925 MHz to 960 MHz	27.92dBm
<b>GSM1800:</b>	TX: 1710 MHz to 1785 MHz RX: 1805 MHz to 1880 MHz	24.92dBm
<b>WCDMA</b>		
<b>Band1:</b>	TX:1920-1980 MHz RX:2110-2170 MHz	27.11dBm
<b>Band8:</b>	TX:880-915 MHz RX: 925-960 MHz	27.11dBm
<b>LTE</b>		
<b>Band1:</b>	TX:1920-1980 MHz RX: 2110-2170 MHz	27.11 dBm
<b>Band3:</b>	TX:1710-1785 MHz RX:1805-1880 MHz	27.11 dBm
<b>Band7:</b>	TX: 2500-2570 MHz RX: 2620-2690 MHz	27.11 dBm
<b>Band8:</b>	TX: 880-915 MHz RX: 925-960 MHz	27.11 dBm
<b>Band20:</b>	TX:832-862 MHz RX: 791-821 MHz	27.11 dBm
<b>Band28:</b>	TX: 703-748 MHz RX: 758-803 MHz	27.11 dBm
<b>Band38:</b>	2570-2620 MHz(TDD)	27.11 dBm
<b>Band40:</b>	2300-2400 MHz(TDD)	27.11 dBm
<b>Band41:</b>	2496-2690 MHz(TDD)	27.11 dBm

## Wireless Frequencies

Operate Freq. Band	Frequency Range (MHz)	Modulation	Channel Bandwidth	Data Rate
<b>IEEE 802.11b</b>	2412~2472	DSSS	20MHz	Up to 11Mbps
<b>IEEE 802.11g</b>	2412~2472	OFDM	20MHz	Up to 54Mbps
<b>IEEE 802.11n 2.4GHz 20MHz</b>	2412~2472	OFDM	20MHz	Up to 72.2Mbps
<b>Channel Number</b>	IEEE 802.11b/g, IEEE 802.11n HT20: 13 Channels			
<b>Channel Step</b>	WiFi: Channels with 5MHz step			

## Standards and Compliance

<b>Directive RE: 2014/53/EU</b>	<b>RE Directive: 2014/53/EU</b>
<b>Directive RoHS: 2011/65/EU, 2015/863/EU</b>	<b>RoHS Directive: 2011/65/EU: 2015/863/EU</b>

**Based on following standards:**

EN IEC 61851-1:2019+AC:2023-12, EN 61851-23:2014+AC:2016-06, EN 61851-24:2014 + AC:2015, EN 61000-6-2:2005 + AC 2005,

EN IEC 61000-6-2:2019\*, EN 61000-6-4:2007 + A1:2011, EN IEC 61000-6-4:2019\*\*, EN IEC 61851-21-2:2021\*\*\*

EN 301 489-1 V1.9.2(2011-09), EN 301 489-1 V2.2.3(2019-11)\*\*\*\*, EN 301 489-3 V2.3.2(2023-01), EN 301 489-17 V3.2.4(2020-09),

EN 301 489-17 V3.3.1(2024-09), EN 301 489-52 V1.2.1(2021-11), EN 301 489-52 V1.3.1(2024-11)

EN 300 330 V2.1.1(2017-02), EN 301 511 V12.5.1(2017-03), EN 301 908-1 V15.2.1(2023-01), EN 301 908-2 V13.1.1(2020-06),

EN 301 908-13 V13.2.1(2022-02), EN 301 908-13 V13.3.1(2024-10)\*\*\*\*\*, EN 300 328 V2.2.2(2019-07)

EN 62311:2008, EN IEC 62311:2020, EN 62479:2010

IEC 61439-7:2018

EN ISO 15118-1:2019, EN ISO 15118-2:2016, EN ISO 15118-3:2016, EN ISO 15118-4:2019, EN ISO 15118-5:2019

EN IEC 63000:2018

EN 18031-1:2024, EN 18031-2:2024, EN 18031-3:2024

\* The EN IEC 61000-6-2:2019 is not an harmonized standard but the Schneider StarCharge Fast 320/180 is already compliant with EN IEC 61000-6-2:2019.

\*\* The EN IEC 61000-6-4:2019 is not an harmonized standard but the Schneider StarCharge Fast 320/180 is already compliant with EN IEC 61000-6-4:2019.

\*\*\* The EN IEC 61851-21-2:2021 is not an harmonized standard but the Schneider StarCharge Fast 320/180 is already compliant with EN IEC 61851-21-2:2021.

\*\*\*\* The EN 301 489-1 V2.2.3(2019-11) is not an harmonized standard but the Schneider StarCharge Fast 320/180 is already compliant with EN 301 489-1 V2.2.3(2019-11).

\*\*\*\*\* The EN 301 908-13 V13.3.1(2024-10) is not an harmonized standard but the Schneider StarCharge Fast 320/180 is already compliant with EN 301 908-13 V13.3.1(2024-10).

### **WARNING**

#### **RISK OF FIRE AND/OR EQUIPMENT DAMAGE**

- Ensure that upgrading the Charging Station with the unappropriate upstream protection breaker or undersized cable could cause a fire.  
**Failure to follow these instructions can result in death, serious injury, or equipment damage.**

The power of Schneider StarCharge Fast charger can be upgraded by adding one or two power modules depending on the required power after first sale.  
**NOTE:** All Schneider StarCharge Fast 120kW can be upgraded to 150kW or 180kW. All Schneider StarCharge Fast 240 kW can be upgraded to 320kW.

#### **STEPS:**

- Step1: Ensure the capacity of upstream protection breaker and the cross-section of cables will be enough for the upgraded power to avoid unwanted tripping.**  
**Step2: Contact Schneider Electric Service organization to perform the necessary activities to perform the upgrade.**

