EcoStruxure™ for eMobility

Build your eMobility solutions

Electric vehicle charging solutions

Catalog 2022

se.com/emobility

Life Is On Schneider Electric

Green Premium™

Schneider Electric's commitment to deliver products with best-in-class environmental performance.

Green Premium™

More than 75% of our product sales offer superior transparency on the material content, regulatory information and environmental impact of our products:

- RoHS compliance
- REACh substance information
- Industry leading # of PEP's*
- Circularity instructions

Learn more about Green Premium

Green Premium promises compliance with the latest regulations, transparency on environmental impacts as well as circular and low-CO_2 products.

CO_2 and P&L impact through… Resource Performance

Green Premium brings improved resource efficiency throughout an asset's lifecycle. This includes efficient use of energy and natural resources, along with the minimization of CO_2 emissions.

Cost of ownership optimization through… Circular Performance

We're helping our customers optimize the total cost of ownership of their assets. To do this, we provide IoT-enabled solutions, as well as upgrade, repair, retrofit, and remanufacture services.

Peace of mind through… Well-being Performance

Green Premium products are RoHS and REACh compliant. We're going beyond regulatory compliance with step-by-step substitution of certain materials and substances from our products.

Improved sales through… Differentiation

Green Premium delivers strong value propositions through third-party labels and services. By collaborating with third-party organizations we can support our customers in meeting their sustainability goals such as green building certifications.

*PEP: Product Environmental Profile (i.e. Environmental Product Declaration)

Contents

EcoStruxure™ for eMobility

Extensive network of certified partners

Global and local industry standards compliance

Worldwide customer support

End-to-end solutions provider

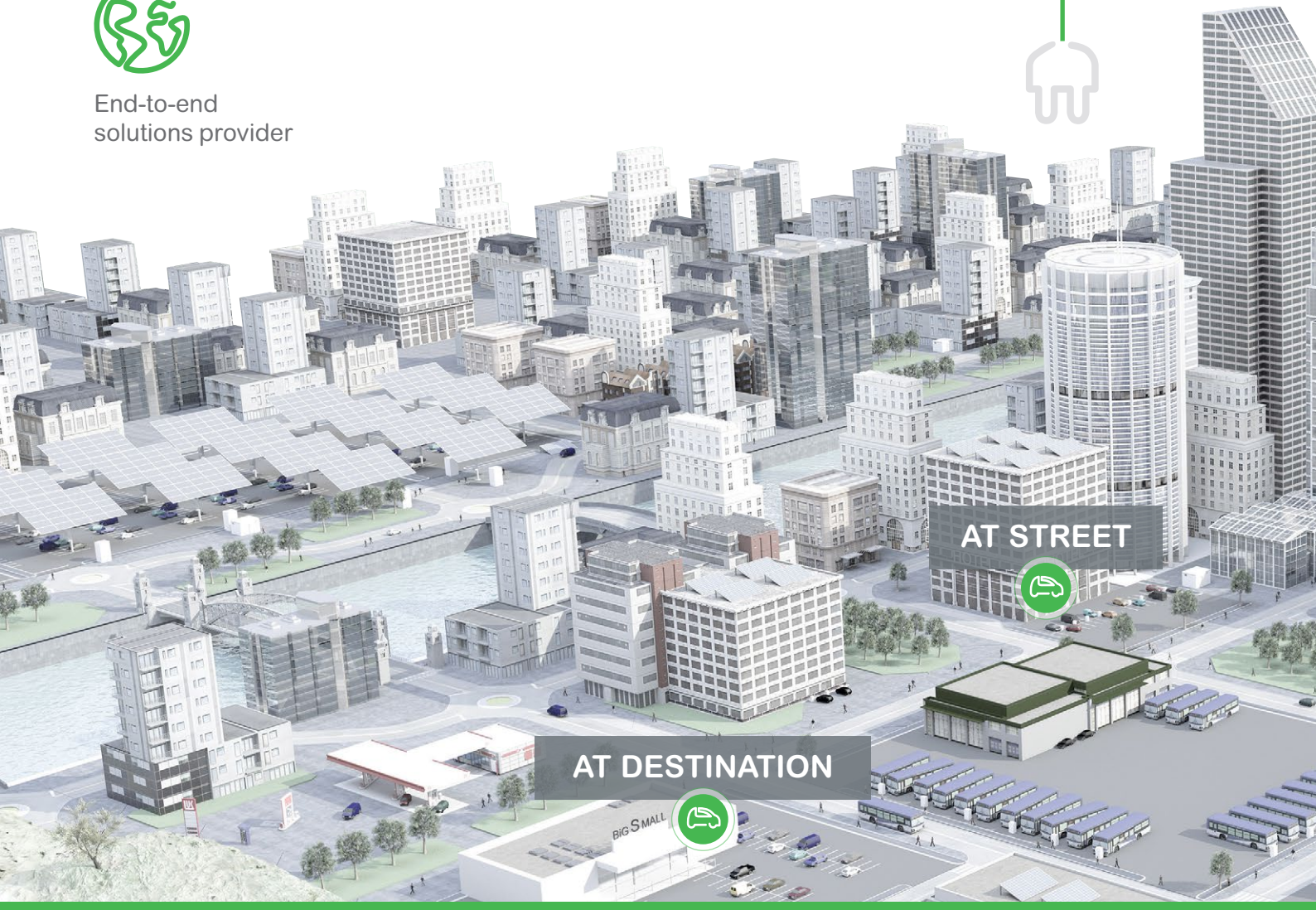
Building the mobility of the future

SCALABILITY & RESILIENCY

EFFICIENCY & SUSTAINABILITY

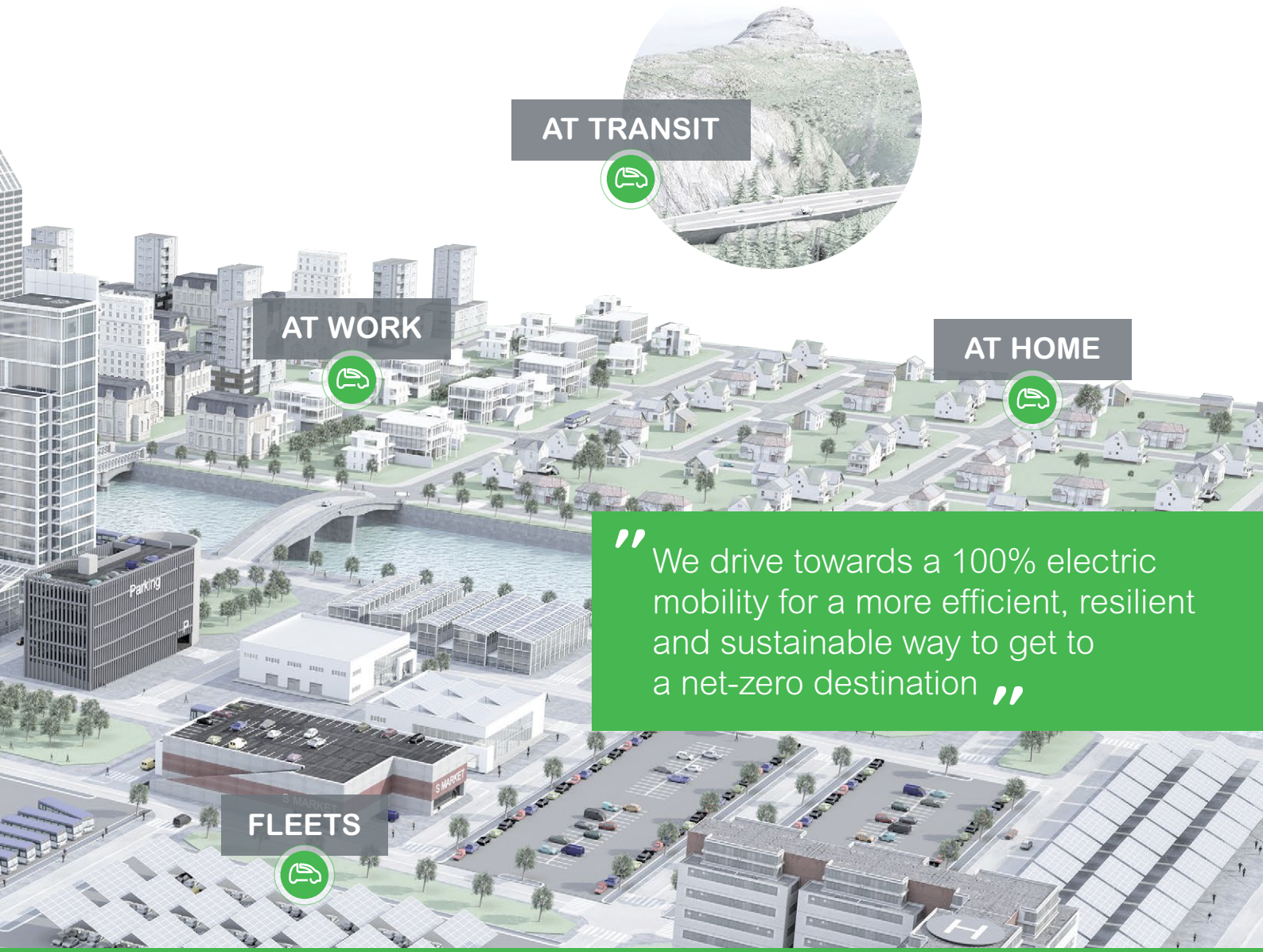
CONNECTIVITY & INTEROPERABILITY

CYBERSECURITY



EcoStruxure™ for eMobility is a holistic solution, beyond the charging infrastructure, where the whole electric mobility ecosystem is connected to provide optimized and cleanest energy management strategy for homes, buildings, fleets, and other charging stations, minimizing downtime and maximizing added value and customer experience.

- Homes
- Buildings
- Fleets



"We drive towards a 100% electric mobility for a more efficient, resilient and sustainable way to get to a net-zero destination"

eMobility for Single Family Home

Charge your car with
a smart end-to-end solution

> "I want to charge my car without tripping my house, while optimizing my comfort and keeping my energy consumption under control."

EVlink Home Smart provides homeowners with an easy and smart charging experience.
Charge at the right time, with the option to prioritize renewable power charging to optimize consumption, limit power overruns and reduce your carbon footprint.

› EVlink Home Smart

Wall-mounted charging station

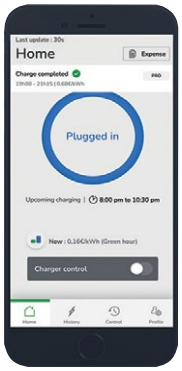
Convenient, compliant and appealing design:

- A full range of products: T2/T2S socket, with or without attached cable, 3 power ranges available
- Built-in internal protection: RDC-DD 6 mA filter
- Communication protocol OCPP1.6J
- User-friendly LED status indicator

› Anti-Tripping System

Power load management

- Continuously adapt the power supplied to charge the car taking home consumption into account
- No need for additional communication cable (Power Line Communication)



› Wiser

Connected technology

- Remote control and scheduling
- Reimbursement capability
- Energy budget follow-up/control

Peace of mind

No disruption of your lifestyle and keep your installation running

Fast

Speed-up your charging duration

Sustainable

Manage your energy consumption with ease and switch to renewable sources

Cost efficient

Choose the right time to charge avoiding peak tariffs and selecting cheaper energy

Customer benefits

For the homeowner:

- Appealing offer
- Energy consumption and carbon footprint reduction
- Company car reimbursement management

For home builders:

- Competitive and certified offer
- Benefit of Schneider Electric's reputation network of certified partners

For electricians:

- Reduced installation time
- Products available from Distributors

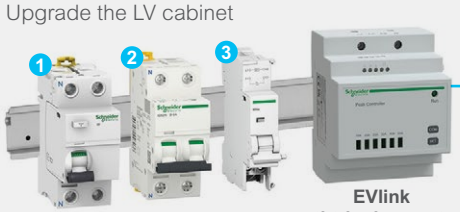
For distributors:

- Competitive offer to become the One-Stop Shop for EVs.
- Entire application sales with strong market demand

A smart charging end-to-end solution

Protect the **charger** and the electrical installation

Upgrade the LV cabinet



PLC

EVlink anti-tripping system
Peak Controller with automatic restart function

1. **RCD** Detect pulsating DC residual current
2. **MCB** Provide short-circuit and cable overload protection
3. **MNx** Undervoltage release for protection

Commission easily with **eSetup**

Charge your **EV**

EVlink Home Smart
Certification: CE 61851-1 ed 3.0

Make the most of your **charger**

Home Internet network

Wiser

An App designed for residents to schedule, monitor and control their EV energy consumption

Power: from 3.7 to 11 kW

T2/T2S socket, or 5 m attached cable

eMobility for Buildings

Design a scalable and service-ready infrastructure for Electric Vehicles

> "I want to provide an EV charging infrastructure which is compliant with local regulations, scalable, and service-ready for new residential buildings."

EcoStruxure for eMobility is a solution ready for the sustainable and efficient buildings of the future.
It offers multi-dwelling owners and tenants a user-friendly charging experience with optimized power supply and accurate consumption metering per user for allocation of costs.
It is an open, standards-compliant, and service-ready solution.

Watch the video

EVlink Pro AC

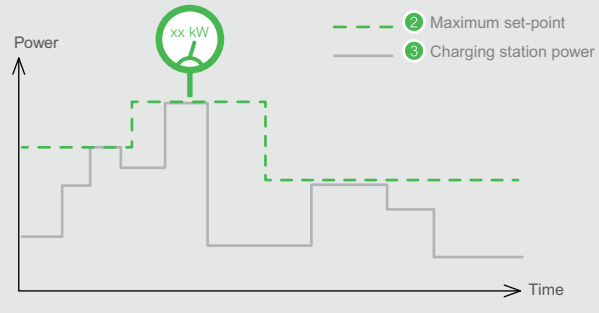
Connected EV charging station

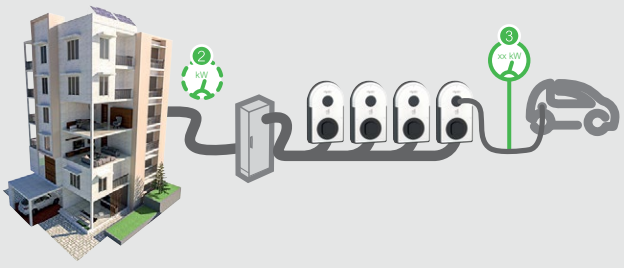
- Robust design that is rated IP55/IK10, for outdoor or indoor installations
- Embedded protection for power distribution (RCD ; iMNx)
- RFID/NFC reader for user authentication
- Standards-compliant:
  - Precision metering (MID meters)
  - Interoperability with supervisions (OCPP 1.6-J)
  - Extended EV compatibility (IEC 61851 Ed.3, ISO 15118 ready)

EcoStruxure EV Charging Expert

Load Management System

- Distribution of available power for all charging stations
- Peak/off-peak hours EV charging management
- Monitoring and control of any EV charging stations based on open protocol (OCPP 1.6-J)





Customer benefits

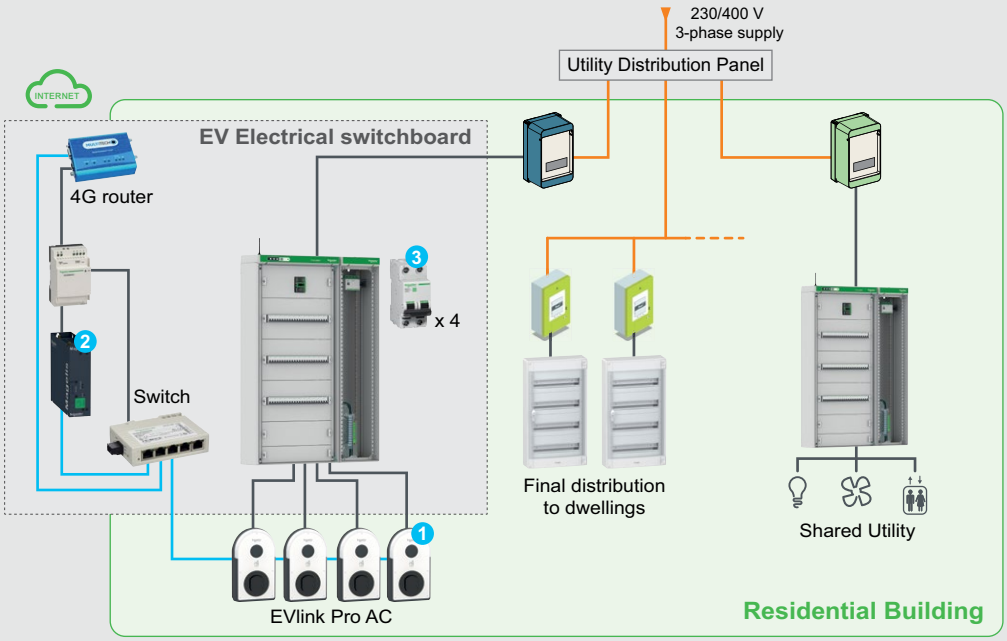
For home builders designing the EV infrastructure:

- Compliant with local regulations
- Scalable and flexible design
- Open and ready for operations
- Minimized property development costs

For the electrical contractor installing and commissioning the EV infrastructure:

- Reduced installation time
- Guided commissioning for basic or larger infrastructure
- Schneider Electric Partner certification and training program

New residential building solution ready for operations



eMobility solution is open to Schneider Electric or third-party supervision.

- Private network
- Utility supply network
- Ethernet network
- 1 Charging stations: EVlink Pro AC
- 2 Load Management System: EcoStruxure EV Charging Expert
- 3 Short-circuit protections: Acti9 MCB 40 A (one per charging station)

eMobility for Buildings

Get started with a scalable charging solution that will boost your brand image

> "I want to offer my employees the opportunity to charge at work while leveraging new charging services proposed to my customers."

EcoStruxure for eMobility provides a first easy step for business owners to start up electric mobility in their companies while keeping investment, utility costs and power supply fully optimized. Improving the customer experience and satisfying employees driving an electric vehicle, all at the same time.

EVlink Pro AC

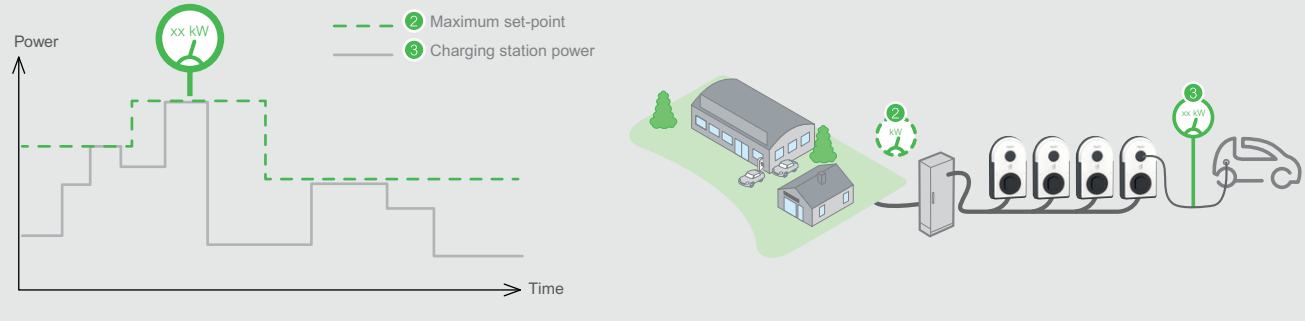
Connected EV charging stations

- Optimized usage and usability:
  - Reduced maintenance time
  - Robust design (IP55/IK10 rated) for indoors/outdoors installations
  - Customizable charging stations
- Embedded protection for power distribution (RCD; iMNx)
- RFID/NFC reader for user authentication
- Standards-compliant: precision metering (MID meters)
- Flexible and modular:
  - Interoperability with supervision (OCPP 1.6-J)
  - Extended EV compatibility (IEC 61851 Ed.3, ISO 15118 upgradable)

EcoStruxure EV Charging Expert

Load Management System

- Dynamic distribution of available power among charging stations
- Peak/off-peak hours EV charging management
- Monitoring and control of EV charging stations based on open protocol (OCPP 1.6-J)



Customer benefits

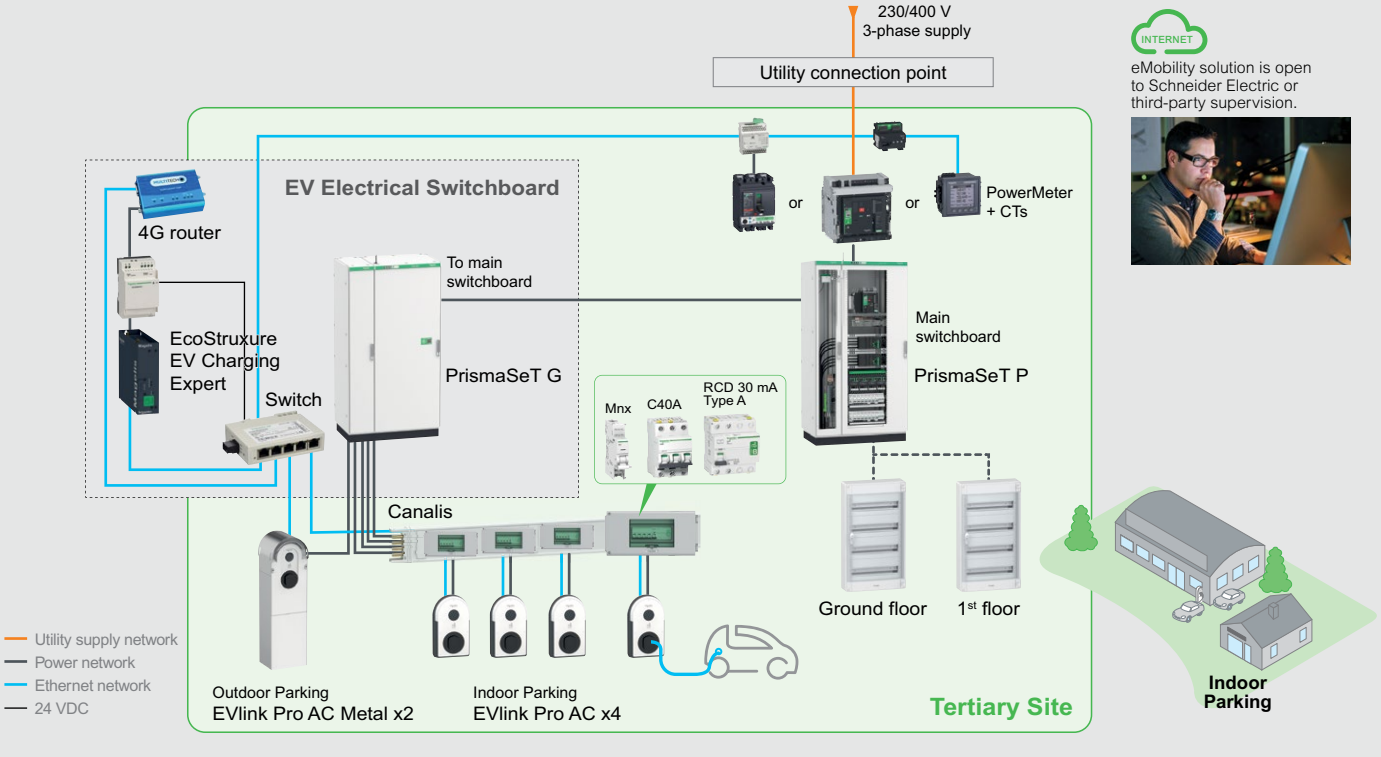
For building owners:

- Demonstration of sustainability commitments
- Improved employee satisfaction and customer loyalty
- Optimized power availability
- Scalable infrastructure
- In-house operations or delegated to external charge point operator

For electrical contractors:

- Reduced installation time
- Guided commissioning
- Schneider Electric Partner certification and training programme

Charging infrastructure for employees or customers driving EVs



eMobility for Buildings

Integrate a complete smart EV charging solution and optimize power availability at your sites

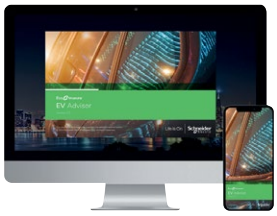
> "Installing an EV charging solution will boost my employee loyalty and help me meet sustainability targets while increasing the value of my property."

EcoStruxure for eMobility lets building and business owners seamlessly integrate electric mobility at their sites without compromising their power supply. They comply with local regulations while offering a futureproof and convenient solution to electric vehicle drivers at their sites.

EVlink Pro AC

Connected EV charging station

- Robust IP55/IK10 rated design for outdoor or indoor installations
- Embedded protection for power distribution (RCD; iMNx)
- RFID/NFC reader for user authentication
- Standards-compliant:
  - Precision metering (MID meters)
  - Interoperability with supervision (OCPP 1.6-J)
  - Extended EV compatibility (IEC 61851 Ed.3, ISO 15118 ready)



EcoStruxure™ EV Advisor

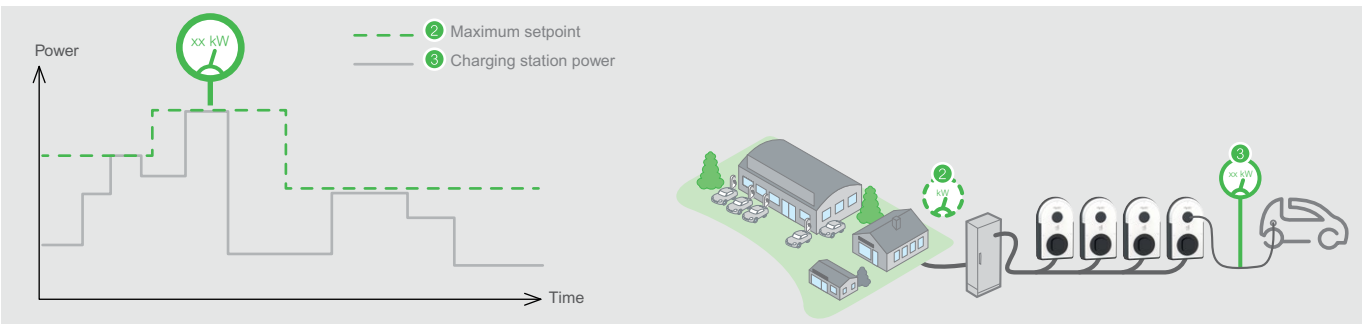
Multi-site remote supervision for EV charging infrastructures

- EV driver profile management
- Remote monitoring, control and troubleshooting
- Smart charging capability
- Custom tariff setting (per site, user, schedule)
- Automatic billing and payment
- Analytics and API capability

EcoStruxure™ EV Charging Expert

Load Management System

- Dynamic distribution of available power among charging stations
- Peak/off-peak hours EV charging management
- Monitoring and control of EV charging stations based on open protocol (OCPP 1.6-J)



Customer benefits

For building owners:

- Demonstration of sustainability commitments
- Improved employee loyalty
- Minimized upfront costs
- Optimized power availability and reduced energy costs
- Easy user billing management
- Flexible remote operation by multiple service providers

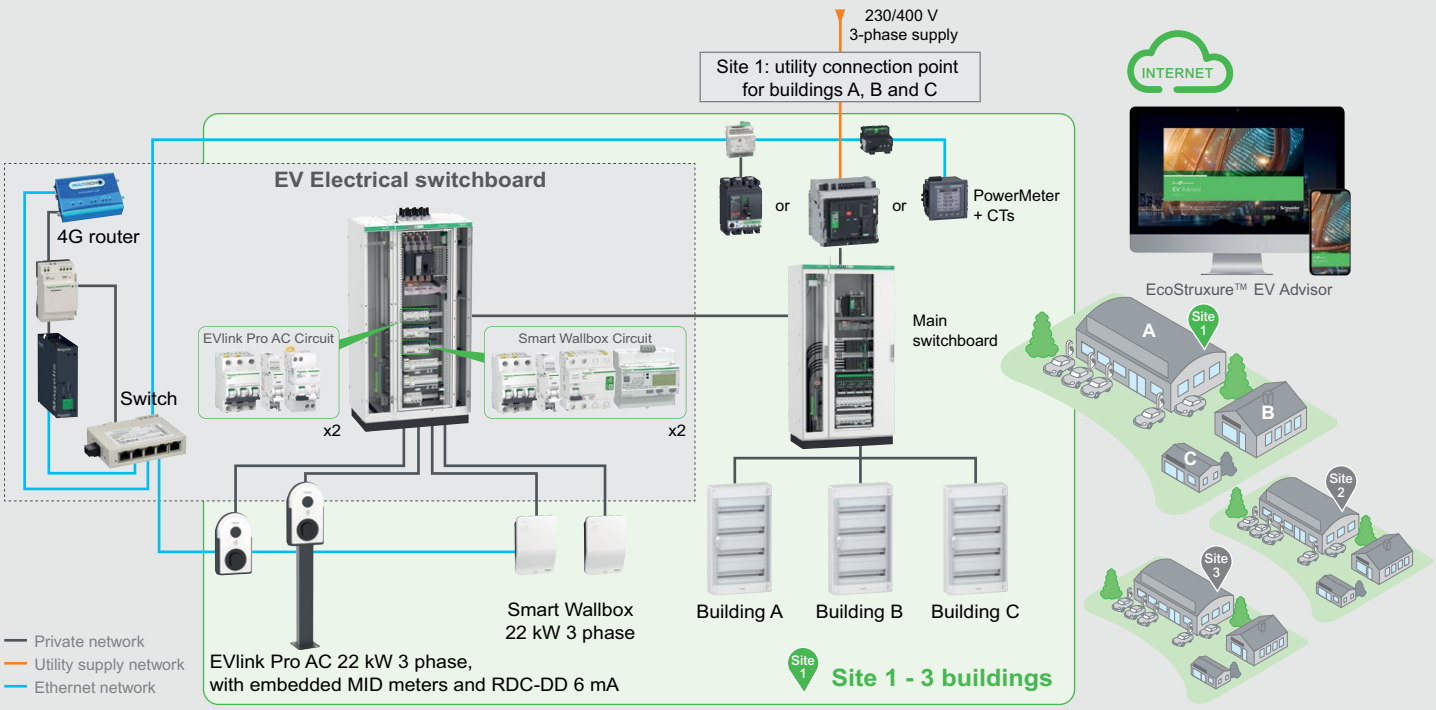
For operators:

- Service offer:
  charge point availability, issue identification, billing and reimbursement
- Optimized operations thanks to remote diagnosis features and shorter interventions

For electrical contractors:

- Reduced installation time
- Guided commissioning for basic or large scale infrastructure
- Schneider Electric Partner certification and training programme

New Building Solution for Charging at Work



eMobility for Fleets

Transition smoothly to an EV fleet and take the road to a more sustainable future

> "I want to electrify my fleet with minimal impact on my operations while investing wisely in a scalable EV charging infrastructure."

EcoStruxure™ for Fleet application enables seamless integration of electric vehicle charging infrastructure at home, at work and in transit. The solution enables Fleet Managers to optimize their total cost of ownership while increasing employee satisfaction.

1• Design the electrification journey

Consulting services

- Digital diagnostic or in-person analysis
- TCO, ROI, CO_2 emission impact evaluation
- Rollout plan for fleet electrification

2• Implement EV infrastructure

Project management through to commissioning

- Technical definition and infrastructure design
- Electrical distribution and charging station commissioning
- Test reports

Connected EVlink Pro AC charging station

- User interfaces easy to take-on
- RFID/NFC reader
- Robust design for outdoor or indoor installations
- Wall-mounted or floor-standing
- Interoperability with supervision systems (OCPP 1.6-J)
- IEC 61851 Ed.3, ISO 15118 ready

EVlink Pro AC
7.4-22 kW

3• Operate easily with comprehensive services

EcoStruxure™ EV Advisor

Remote supervision

- Remote monitoring, control, and trouble-shooting
- EV drivers' profile management
- Smart charging capabilities
- Custom tariff's setting (per site, user, schedule)
- Analytics and API capabilities

Fleet driver app

- Start/Stop charging sessions
- Search for and book a charger
- Personal data management
- Charge at home kWh-price setting
- Help and hotline services

Services

- Ad-hoc support and maintenance
- Continuous optimization (renewable energy, microgrid solution, cybersecurity enhancement)
- Access to public charge-points

Customer benefits

For building owners and facility managers:

- Reduced development and installation costs
- Scalable and flexible design
- Open and ready for operation services
- Optimized power availability and reduced energy costs
- Compliant with local regulations

EcoStruxure™ EV Advisor

For fleet managers wanting to electrify their company fleet:

- Optimized CAPEX and ROI
- Lower Total Cost of Ownership
- Supported decision making and change-management processes
- Tracked usage for cost and CO_2 emission reduction
- Scale the EV fleet to your business needs

For EV fleet drivers:

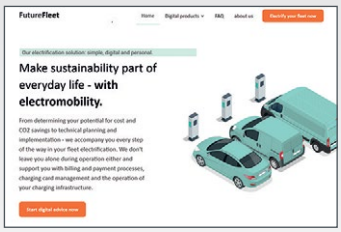
- Friendly user experience thanks to RFID card, dedicated driver's App, online and hotline support
- Automated reimbursement and billing management
- Quick and easy installation at home

End-to-end solution for fleets meeting sustainability and budget requirements

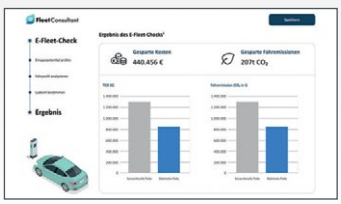
STEP 1: CONSULTANCY SERVICES
Analyze, plan, design and quote

Scalable and tailored support from small to large fleets

- Public information platform



- Online consulting tools



- Expert consultants

STEP 2: INFRASTRUCTURE IMPLEMENTATION
Build and install

Project and processes management

- Follow-up and coordination of project implementation through to commissioning
- Coordination of deliveries and suppliers
- Onboarding of chargers
- Test reports

Technical and infrastructure design

- Remote or on-site analysis
- Design of the infrastructure and architecture of the solution
- BOM and supplier definition

EcoStruxure™ for eMobility

- APPS, ANALYTICS AND SERVICES
- EDGE-CONTROL OFFERS
- CONNECTED PRODUCTS

Schneider Electric digital innovation, at every level

STEP 3: OPERATION & SERVICES
Operate and optimize investments

Efficient charge-point operation

- Charge-point operation and monitoring
- RFID/NFC reader and user management
- Customer services: support, trouble-shooting, maintenance and infrastructure enhancements
- Comprehensive charging experience

- AT HOME
- AT WORK
- IN TRANSIT

Smart Charging solution

> "Smart Charging refers to a system which is able to monitor, manage and eventually control the use of EV charging devices with the aim of optimizing energy consumption."

As the adoption of EVs grow worldwide at a phenomenal rate, the estimates from BloombergNEF(1) are that 30% of the vehicles are expected to be electric by 2030.

The exponential rise in the charging infrastructure will add complexity to the grids and will push the existing power distribution networks beyond their capacity, thus requiring expensive infrastructure upgrades.

To understand the need of **Smart Charging**, let's first look at some of the existing scenarios of EV charging setups:

In a scenario without any energy / load management setup, all plugged in EVs start to charge simultaneously and at max power. The additional energy of EV charging on top of the normal building loads will result in overload and possibly for exceeding the Maximum Import Capacity (MIC). This could be subject to high fines or penalty from the grid operator.

To avoid the above scenario, standard load management practices are already adopted in most of the setups.

(1) BloombergNEF - Electric Vehicle Outlook 2022

Load management can be static or dynamic in which a defined threshold (power limit) is set and only the remaining available power for EV charging is distributed among the connected EVs. Also, EVs can be charged at pre-defined times to optimize off peak electricity tariffs. These standard load management practices are sometimes effective but the growing adoption of EVs, which has increased the impact on the existing power distribution systems, provides a lot of scope to further optimize the EV charging infrastructure.

Smart Charging goes further than a standard load management setup.

It is an intelligent system with proactive logic to schedule and forecast and therefore provides an optimal charging solution.

In a nutshell, each EV plugged into the charging station charges with a specific charging profile.

It not only takes into the account the needs of the EV driver (ex. Departure time etc.) but also respects the power limits of the entire installation.

On top of this, a smart charging system gives significant OPEX savings to the infrastructure owner by optimizing the locally generated renewable energy (ex. PV installation on the building) and using the dynamic electricity tariffs for cost efficient charging.

Benefits of Smart Charging

User requirement	Accommodate individual needs of EV driver. Ex. Time of departure, tariff preferences.
Infrastructure Reliability	Integrate EV Charging while keeping the MV/LV installations intact.
Dynamic Energy Tariffs	Savings in OPEX through price negotiation from multiple energy markets to balance supply and demand.
Renewable energy self consumption	Optimize self consumption of locally generated power. Ex. PV installation on the building.

Learn more on Smart charging solution

A smart charging solution is able to adapt, in an intelligent and flexible way, the charging strategy to both the needs of the user of the EV and the power grid. Thus a smart charging system will allow flexibility, optimized energy consumption, infrastructure scalability and cost efficiency.

eMobility solutions
Panorama per Application

HOMES
Single Family Home

BUILDINGS
Multifamily Home

APPS, ANALYTICS AND SERVICES

Wiser

eMobility Services

EcoStruxure™ EV Advisor

EDGE CONTROL

EVlink Home anti-tripping system

EcoStruxure™ EV Charging Expert

CONNECTED PRODUCT

EVlink Home
EVlink Home Smart

Coming soon

EVlink Pro AC
EVlink Pro AC Metal

Electrical distribution for eMobility
From grid to EV

iMnx
Undervoltage release tripping unit

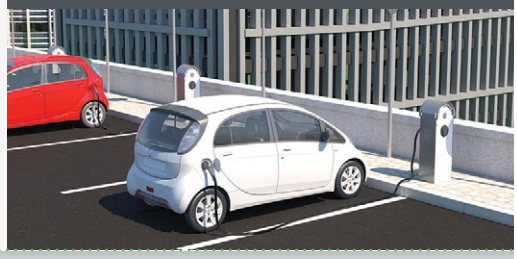
Acti9 A-Si type
Earth leakage protection

Canalis busbar trunking system
EVlink terminal distriution kit

FLEETS

At work

At destination



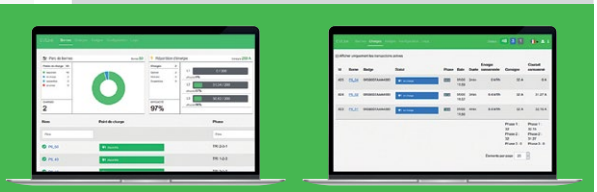
Everywhere

Maximize the performance of your EV infrastructure and keep your assets running in optimum conditions throughout the whole lifecycle, from consulting up to modernization.

Remote supervision for installers, fleet operators, and charge point operators, to easily commission, monitor, and control the EV charging infrastructure.

A charging load management system that helps you to efficiently control your EV infrastructure and smartly distribute available power to your charging stations.

Load Management System



User interface

EVlink Pro AC
EVlink Pro AC Metal

EVlink Pro AC
EVlink Pro AC Metal

iMnx
Undervoltage release tripping unit

iEM
Energy Meters

Acti9 B type
Earth leakage protection

Acti9 A-Si type
Earth leakage protection

Images of the offers are not contractual.

EVlink™ Home and Home Smart

Electric Vehicle charging stations and accessories

EVlink™ Home

Characteristics

CE

Certification

EVlink Home has obtained the test certificate, establishing compliance with the IEC 61851-1 standard.

Standards

EN 61851-1 Ed3.0 (2019)

Charging station offer

- Charging power: 3.7 kW - 7.4 kW single-phase and 11 kW three-phase power supply
- Maximum charging current can be adjusted from 6 A to 32 A
- T2 socket outlet with or without shutter
- Attached cable with T2 connector

Power supply network

- 230V +/- 10% single-phase – 50 Hz +/- 10% for 3.7 and 7.4 kW charging stations
- 400V +/- 10% three-phase – 50 Hz +/- 10% for 11 kW charging station
- Internal protection: 6 mA DC filter
- Suitable earthing systems: TT, TN-S, TN-C-S

Mechanical and environmental characteristics

- Ingress protection code: IP54 attached cable version; IP55 socket version
- Impact protection code: IK10
- Operating temperature: -30°C to +50°C
- Storage temperature: -40°C to +85°C
- Relative humidity 5% to 95%
- Altitude < 2000 m
- Attached cable length: 5 m for versions supporting it
- Dimension 282*409*148 mm / *11*16*6 in.* (without cable)
- Weight: 3.7 – 7.4 kW approx. 4.5 kg / 11 kW approx. 5.6 kg

Easy to install and commission

- Wall mounting

Energy Management

- Energy management exclusive options: real time maximum charging current control (with the addition of an external anti-tripping system)
- Communication Power Line Carrier with Home Anti-tripping system

Access control modes

- Free access

Warranty

- 24 months for the entire EVlink range
- Additional: 1 or 3 years Warranty Extension

Services offer

- Worldwide network of installers providing on-site installation, and commissioning
- Worldwide customer care center

Charging station references

EVlink Home

EVH4S03N2

EVlink Home					
References	Number of phases	Type of socket	Power kW	Output current	Embedded protection
With socket outlet					
EVH4S03N2	1PH	T2	3.7	16 A	with 6 mA DC filter
EVH4S07N2	1PH	T2	7.4	32 A	with 6 mA DC filter
EVH4S11N2	3PH	T2	11	16 A	with 6 mA DC filter
T2 with shutters					
EVH4S03N4	1PH	T2S	3.7	16 A	with 6 mA DC filter
EVH4S07N4	1PH	T2S	7.4	32 A	with 6 mA DC filter
EVH4S11N4	3PH	T2S	11	16 A	with 6 mA DC filter
With attached cable 5 m(1) T2 connector					
EVH4S03NC	1PH	-	3.7	16 A	with 6 mA DC filter
EVH4S07NC	1PH	-	7.4	32 A	with 6 mA DC filter
EVH4S11NC	3PH	-	11	16 A	with 6 mA DC filter

EVlink Home with TIC*					
References	Number of phases	Type of socket	Power kW	Output current	Embedded protection
T2 with shutters					
EVH4S03N400F	1PH	T2S	3.7	16 A	with RDC-DD Filter - TIC
EVH4S07N400F	1PH	T2S	7.4	32 A	with RDC-DD Filter - TIC
EVH4S11N400F	3PH	T2S	11	16 A	with RDC-DD Filter - TIC

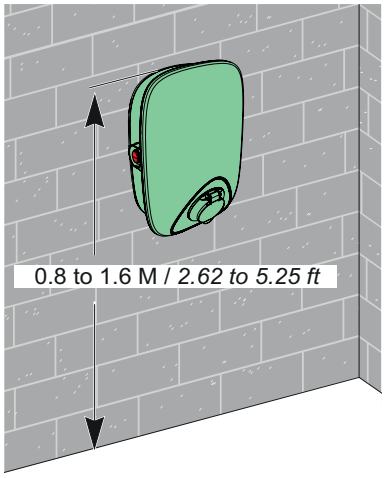
(*) TIC- Anti-tripping and peak hour module connected to energy meter (Linky), only for France.

Protections and options with EVlink Home

Description			
Charging	Single-phase		Three-phase
Rated Power - Current	3.7 kW - 16 A	7.4 kW - 32 A	11 kW - 16 A
Protection			
Circuit breaker (overcurrent) (1)	20 A Curve C	40 A Curve C	20 A Curve C
RCD (residual current) (1)	30 mA A-SI Type (2)	30 mA A-SI Type (2)	30 mA A-SI Type (2)
Under voltage tripping auxiliary (3)(4)	iMNX	iMNX	iMNX

(1) References to be defined and local availability to be checked by Schneider Electric front offices.
(2) In accordance with the electrical installation standard HD 60364-7-722:2016. Refer to local regulation.
(3)(4) iMNX is mandatory in case of charging station damage further to downstream short-circuit.

Practical information



The charging station operates autonomously.
It has a dedicated protective devices.

- Installation: by an electrician
- Location: residential, private usage

Watch the video

EVlink™ Home Smart

Coming soon

Characteristics

CE

Certification

EVlink Home has obtained the test certificate, establishing compliance with the IEC 61851-1 standard.

Standards

EN 61851-1 Ed3.0 (2019)

Charging station offer

- Charging power: 3.7 kW - 7.4 kW single-phase and 11 kW three-phase power supply
- Maximum charging current can be adjusted from 6 A to 32 A
- T2 socket outlet with shutter
- Attached cable with T2 connector

Power supply network

- 230V +/- 10% single-phase – 50 Hz +/- 10% for 3.7 and 7.4 kW charging stations
- 400V +/- 10% three-phase – 50 Hz +/- 10% for 11 kW charging station
- Internal protection: 6 mA DC filter
- Suitable earthing systems: TT, TN-S, TN-C-S

Mechanical and environmental characteristics

- Ingress protection code: IP54 attached cable version; IP55 socket version
- Impact protection code: IK10
- Operating temperature: -30°C to +50°C
- Storage temperature: -40°C to +85°C
- Relative humidity 5% to 95%
- Altitude < 2000 m
- Attached cable length: 5 m for versions supporting it
- Dimension 282*409*148 mm / *11*16*6 in.* (without cable)
- Weight: 3.7 – 7.4 kW approx. 4.5 kg / 11 kW approx. 5.6 kg

Easy to install and commission

- Wall mounting
- eSetup Smart phone commissioning application (to pair with Home network)

Energy Management

- Energy management exclusive options: real time maximum charging current control (with the addition of an external anti-tripping system)
- Delayed charging and current limitation can also be controlled by supervision or by the home management system (over OCPP)
- Interface with an external MID energy meter for consumption billing

Versatile Connection

- Communication Power Line Carrier with Home Anti tripping system
- OCCP 1.6J
- Wi-Fi & Ethernet RJ45

Smart Phone application

- Phone application to perform charge scheduling, monitor charge consumption and carbon footprint
- Interoperable with Schneider Electric Home Energy Management system to optimize house consumption.

Access control modes

- Free access

Warranty

- 24 months for the entire EVlink range
- Additional: 1 or 3 years Warranty Extension

Services offer

- Worldwide network of installers providing on-site and commissioning
- Worldwide customer care center

Charging station references

EVlink Home Smart

EVH4A03N2

EVlink Home Smart					
References	Number of phases	Type of socket	Power kW	Output current	Embedded protection
With socket outlet					
EVH4A03N2	1PH	T2	3.7	16 A	with 6 mA DC filter
EVH4A07N2	1PH	T2	7.4	32 A	with 6 mA DC filter
EVH4A11N2	3PH	T2	11	16 A	with 6 mA DC filter
T2 with shutters					
EVH4A03N4	1PH	T2S	3.7	16 A	with 6 mA DC filter
EVH4A07N4	1PH	T2S	7.4	32 A	with 6 mA DC filter
EVH4A11N4	3PH	T2S	11	16 A	with 6 mA DC filter
With attached cable 5 m(1) T2 connector					
EVH4A03NC	1PH	-	3.7	16 A	with 6 mA DC filter
EVH4A07NC	1PH	-	7.4	32 A	with 6 mA DC filter
EVH4A11NC	3PH	-	11	16 A	with 6 mA DC filter

EVlink Home Smart with TIC*					
References	Number of phases	Type of socket	Power kW	Output current	Embedded protection
T2 with shutters					
EVH4A03N400F	1PH	T2S	3.7	16 A	with RDC-DD Filter - TIC
EVH4A07N400F	1PH	T2S	7.4	32 A	with RDC-DD Filter - TIC
EVH4A11N400F	3PH	T2S	11	16 A	with RDC-DD Filter - TIC

(*) TIC- Anti-tripping module connected to energy meter (Linky), only for France.

Protections and options with EVlink Home Smart

Description			
Charging	Single-phase		Three-phase
Rated Power - Current	3.7 kW - 16 A	7.4 kW - 32 A	11 kW - 16 A
Protection			
Circuit breaker (overcurrent) (1)	20 A Curve C	40 A Curve C	20 A Curve C
RCD (residual current) (1)	30 mA A-SI Type (2)	30 mA A-SI Type (2)	30 mA A-SI Type (2)
Under voltage tripping auxiliary (3)(4)	iMNX	iMNX	iMNX

(1) References to be defined and local availability to be checked by Schneider Electric front offices.
(2) In accordance with the electrical installation standard HD 60364-7-722:2016. Refer to local regulation.
(3)(4) iMNX is mandatory in case of charging station damage further to downstream short-circuit.

Wiser

Zoom on Wiser application for EV owners

Create your own charging experience

Easy to enroll:

- Download Wiser on Appstore and Google Store
- Scan your charger QR code to pair your charger
- Select your car and your DSO

Power Management:

- Adapt charge to available power

Schedule and adapt:

- Plan your charging time
- Adjust your energy mix
- Start the charge, and travel

Reimbursement:

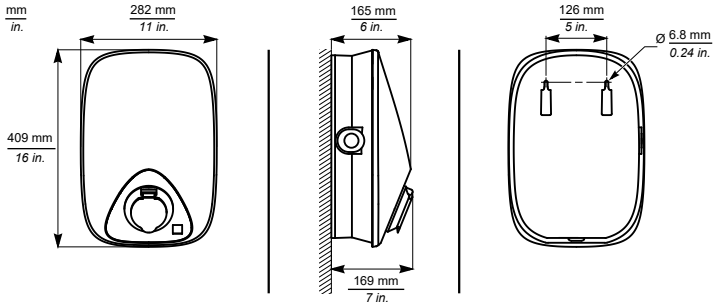
- Monitor* your energy cost.

*Your charging costs get refund by your employer (direct or via CPO)

Range accessories

Practical information

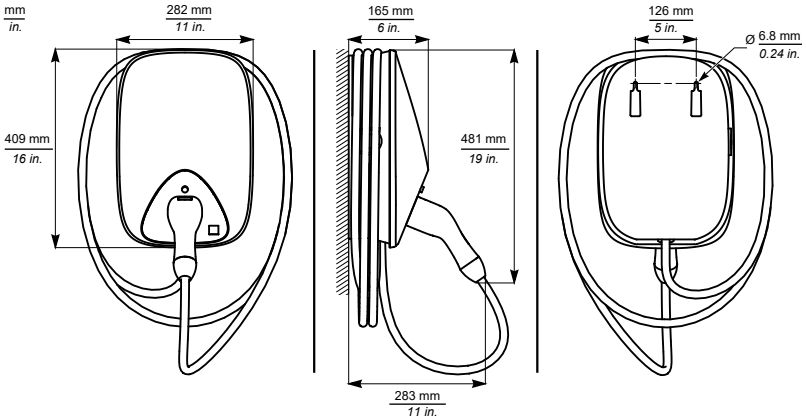
Dimensions



With socket outlets

≈ 4.5 kg (9.92 lb) - T2/T2S – 3.7 / 7.4 kW

≈ 5.6 kg (12.34 lb) - T2/T2S – 11 kW



With attached cable

≈ 8.8 kg (15.43 lb) – 3.7 / 7.4 kW

≈ 9.9 kg (17.63 lb) – 11 kW

Accessories references

EVlink Cable

To connect the car to the charging station. Available in different lengths with a T2 connector.

Please refer to page 40

Additional information

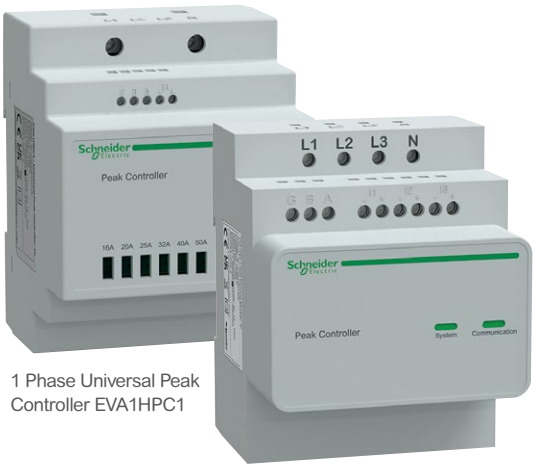
Charging station technical document	Language	References
EVlink Home Installation Guide (1)	EN / FR / ES / DE	**JYT6393700-00**
EVlink Home Smart Installation Guide (1)	EN / FR / ES / DE	**Available September 2022**
EVlink Home anti-tripping system 1P User Manual (1)	EN / FR / ES / DE	**JYT9298700**
EVlink Home anti-tripping system 3P User Manual (1)	EN / FR / DE	**JYT4921902**

(1) Delivered with the product.

To download the above documents, do a search by reference on www.se.com

EVlink™ Home anti-tripping system

Characteristics



1 Phase Universal Peak Controller EVA1HPC1

3 Phases Universal Peak Controller EVA1HPC3

Main function

- Home Anti-tripping is a power load management system that adapts continuously the power supplied to charge the car taking home consumption into account.
- The power availability is calculated by the Home Anti-tripping System by comparing the utility power limit and the home consumption gathered by a current transformer positioned on the bottom of the main circuit breaker.

Power supply network and Electrical Characteristics

- 220/230 V (+/- 10%) 50/60 Hz
- Rated power 4W
- Overvoltage category: III, Pollution degree: 2
- Insulation degree: reinforced insulation
- Sampling current range: AC 1 to 100 A / period is 1 second

Settings

- Possible max current value settings: 16 A, 20 A, 25 A, 32 A, 40 A, 50 A

Communication

- Communication Power Line Carrier with EVlink Home charger
- Sampling current range: AC 1 to 100 A / period is 1 second

Mechanical and environmental

- Dimension 70.4 x 93.2 x 68.8 mm
- Weight 196 g
- Mounting type: Top-hat rail mounting
- Nominal temperature -30°C to +50°C

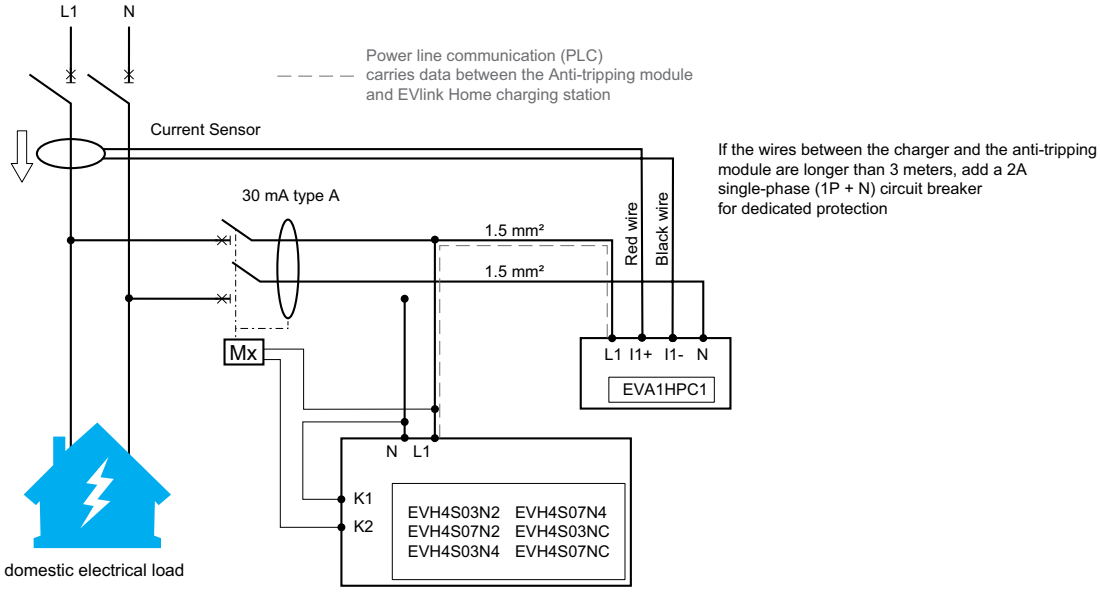
Standards

- EN 61010-1-2010, EN 61326-1-2013

Warranty

- 24 months for the entire EVlink Home range

Practical information



If the wires between the charger and the anti-tripping module are longer than 3 meters, add a 2A single-phase (1P + N) circuit breaker for dedicated protection


EcoStruxure EV Advisor
Marketing Lab - EVlink Pro AC
START CHARGI

EVlink™ Pro AC and Pro AC Metal

Electric Vehicle charging stations and accessories

EVlink™ Pro AC

Characteristics

Power supply network
- 220 - 240 V AC single-phase – 50/60 Hz for 7.4 kW charging stations
- 380 - 415 V AC three-phase – 50/60 Hz for 11 and 22 kW charging stations

Diagram of the earthing system
- TT, TN-S, TN-C-S
- IT (Compatible IT on 1-phase - some single phase vehicles may require the addition of an isolation transformer ; Compatible IT with additional isolating transformer on the 3-phase power supply)

Rated charging current
- T2S socket-outlet with shutters and silver-plated contacts: 8 A to 32 A (factory setting: 32 A)
- TE or TF domestic socket-outlet: 10 A
- T2 attached cable, length 5 meters: 8 A to 32 A
- Socket-outlet on the front

Mechanical and environmental characteristics
- Ingress protection code: suitable for indoor and outdoor use
  - IP55 with T2S socket-outlet
  - IP55 with attached cable
  - IP54 with domestic socket
- Impact protection code: IK10
- Ambient air temperature for operation: -30°C to +50°C (+40°C for EVlink Pro AC with embedded RCD type Asi)
- Ambient air temperature for storage: -40°C to +80°C (+70°C for EVlink Pro AC with embedded RCD type Asi)
- Energy management options:
  - via digital inputs: limited current, postponed/suspended charge,
  - dynamic energy management combined with TIC interface of French utility meter or universal energy meter
- EV presence detection via digital input

Access control modes
- Free access
- User authentication through RFID or NFC badge
  - NFC 13,56 MHz reader compatible with type 1, 2, 4 and 5 badges
  - RFID reader:
    - conforming to ISO/CEI 14443 A & B and ISO/CEI 15693 protocols,
    - compatible with Mifare Ultralight, Mifare Classic, Mifare Plus

Embedded protections and metering
(depending on commercial references)
- Earth leakage protection: RDC-DD 6 mA + RCD type Asi 30 mA or RCD type B-EV
- Under voltage tripping auxiliary MNx
- MID energy meter
- Metering board and CTs 1% accuracy

Easy to install and commission
- Wall mounting or floor standing
- 1 or 2 charging stations on the same pedestal
- Parameter setting through eSetup app via Bluetooth or EcoStruxure EV Charging Expert

Versatile connection to a supervision
- Wired Ethernet: 2 ports (1 for daisy chain)
- 3G/4G modem as an accessory
- OCPP 1.6 Json Smart Charging interface (OCA certified)

Warranty
- 24 months for the entire EVlink range

Services
- Worldwide customer care center
- Additional 1 or 3 years Warranty Extension
- OnSite or remote commissioning support
- Services Plan
- Schneider Electric manufactured Spare parts
- Advanced onsite training
- Worldwide network of partners providing on-site installation, commissioning and maintenance services

> ROHS compliant
> Reach compliant
> EoLi: End Of Life Process
> Product Environmental Profile compliant

Certification
EVlink Pro AC has been certified according the IEC 61851-1 ed3.0 standard by DEKRA certification body

Standards
IEC/EN 61851-1 Ed 3.0
IEC/EN 62196-1 Ed 2.0 - IEC/EN 62196-2 Ed 1.0
IEC 60364-7-722 Ed.2
IEC 62955
EMC IEC 61851-21-2
EMC EN 301 489-1 V2.1.1 - EN 301 489-17 V3.1.1
Upgradable to ISO 15118
EV Ready / ZE Ready (in progress)

Charging station commercial references

EVlink Pro AC

Commercial References [1] [2]	Type of socket	Domestic Socket	Output current	Power kW	Number of Phase	Embedded Protection	Embedded Protection [4]	Protection supplied	Embedded MID meter [6]
EVB3S07N4A	T2S	-	32 A	7.4	1PH	RDC-DD 6 mA + RCD Asi 30 mA	MNx	-	-
EVB3S07N4AM	T2S	-	32 A	7.4	1PH	RDC-DD 6 mA + RCD Asi 30 mA	MNx	-	Yes
EVB3S07N4EAM	T2S	TE	32 A	7.4	1PH	RDC-DD 6 mA + RCD Asi 30 mA	MNx	-	Yes
EVB3S07N4EA	T2S	TE	32 A	7.4	1PH	RDC-DD 6 mA + RCD Asi 30 mA	MNx	-	-
EVB3S07N40M	T2S	-	32 A	7.4	1PH	RDC-DD 6 mA	MNx	-	Yes
EVB3S07N40EM	T2S	TE	32 A	7.4	1PH	RDC-DD 6 mA	MNx	-	Yes
EVB3S07NCA	Att T2 [5]	-	32 A	7.4	1PH	RDC-DD 6 mA + RCD Asi 30 mA	MNx	-	-
EVB3S07NCAM	Att T2 [5]	-	32 A	7.4	1PH	RDC-DD 6 mA + RCD Asi 30 mA	MNx	-	Yes
EVB3S11N4A	T2S	-	16 A	11	3PH	RDC-DD 6 mA + RCD Asi 30 mA	MNx	-	-
EVB3S11NCA	Att T2 [5]	-	16 A	11	3PH	RDC-DD 6 mA + RCD Asi 30 mA	MNx	-	-
EVB3S11N4FB	T2S	TF	16 A	11	3PH	RCD B EV	MNx	-	-
EVB3S22N4B	T2S	-	32 A	22	3PH	RCD B EV	MNx	-	-
EVB3S22N4A	T2S	-	32 A	22	3PH	RDC-DD 6 mA + RCD Asi 30 mA	MNx	-	-
EVB3S22NCA	Att T2 [5]	-	32 A	22	3PH	RDC-DD 6 mA + RCD Asi 30 mA	MNx	-	-
EVB3S22NCB	Att T2 [5]	-	32 A	22	3PH	RCD B EV	MNx	-	-
EVB3S22N4EA	T2S	TE	32 A	22	3PH	RDC-DD 6 mA+ RCD Asi 30 mA	MNx	-	-
EVB3S22N4EB	T2S	TE	32 A	22	3PH	RCD B EV	MNx	-	-
EVB3S22N4FB	T2S	TF	32 A	22	3PH	RCD B EV	MNx	-	-
EVB3S22N40M	T2S	-	32 A	22	3PH	RDC-DD 6 mA	-	-	Yes
EVB3S22N40EM	T2S	TE	32 A	22	3PH	RDC-DD 6 mA	-	-	Yes
EVB3S22N40FM	T2S	TF	32 A	22	3PH	RDC-DD 6 mA	-	-	Yes
EVB3S22NC0M	Att T2 [5]	-	32 A	22	3PH	RDC-DD 6 mA	-	-	Yes
EVB3S22N4	T2S	-	32 A	22	3PH	RDC-DD 6 mA	MNx	-	-
EVB3S22N4E	T2S	TE	32 A	22	3PH	RDC-DD 6 mA	MNx	-	-
EVB3S22N40MR [3]	T2S	-	32 A	22	3PH	-	-	RCD B EV+MNx	Yes

(1) Cable for T2S charger available as an accessory
(2) Includes 5 RFID badges
(3) For metallic charger only, this specific charging station only measures the power consumption of the electric vehicle
(4) MNx Under voltage tripping auxiliary is mandatory in case of charging station damage further to downstream short-circuit
(5) Attached cable with T2 connector
(6) MID / NMI certified energy meter, IEC accuracy class 1, B (active)

Protections with EVlink Pro AC

Description			
Charging	Single-phase	Three-phase	
Rated Power - Current	7.4 kW - 32 A [2]	11 kW - 16 A [2]	22 kW - 32 A [2]
Protection			
Circuit breaker (overcurrent) [1]	40 A Curve C	20 A Curve C	40 A Curve C
Delayed start			
Relay	With normally open contact [3]		
Temporary current limitation			
Relay	With normally open contact [3]		

(1) References to be defined and local availability to be checked by Schneider Electric front offices.
(2) With or without domestic socket.
(3) EVlink Pro AC setting can be changed to "normally closed" if necessary, with eSetup commissioning app.

EVlink™ Pro AC Metal

Characteristics

> ROHS compliant
> Reach compliant
> EoLi: End Of Life Process
> Product Environmental Profile compliant

Standards

IEC/EN 61851-1 ed 3.0
EMC IEC 61851-21-2
IEC/EN 62196-1 ed 2.0
IEC/EN 62196-2 ed 1.0
Enclosures IEC/EN 60529

Extensive choice

Features

EVlink Pro AC Metal charger is sold as a kit and it is available as:
- Wall mounted 1 charge point
- Floor standing 1 or 2 charge points

Design

EVlink Pro AC Metal design enables any configuration and can be installed by a single person.
The necessary components for assembling the EVlink Pro AC Metal are the following:

1. A metallic kit enclosure:
   - wall mounted for 1 charge point or
   - floor standing for 1 charge point or
   - floor standing for 2 charge points
2. EVlink Pro AC charger to be installed inside the metal enclosure
3. Optional: Kaedra enclosure and / or Thalassa enclosure(s) to be mounted inside the metal enclosure for hosting the electrical protections

Power supply network

- Same as EVlink Pro AC

Mechanical and environmental characteristics

- Same as EVlink Pro AC
- IP3X Metal enclosure
- IP65 Kaedra enclosure
- IP66 Thalassa enclosure

Access control modes

- Same as EVlink Pro AC

Warranty

- 24 months for the entire EVlink range

Services

- Worldwide customer care center
- Additional 1 or 3 years Warranty Extension
- OnSite or remote commissioning support
- Services Plan
- Schneider Electric manufactured Spare parts
- Advanced onsite training
- Worldwide network of partners providing on-site installation, commissioning and maintenance services

EVlink Pro AC + Metallic Kits + enclosures (optional)

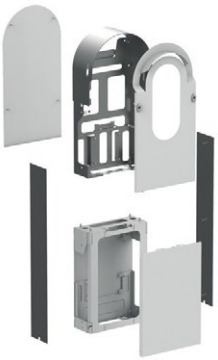
EVlink Pro AC

All EVlink Pro AC charging stations can be assembled in any metallic kit.
A specific EVlink Pro AC commercial reference is available when measuring the power consumption of the electric vehicle only is requested:

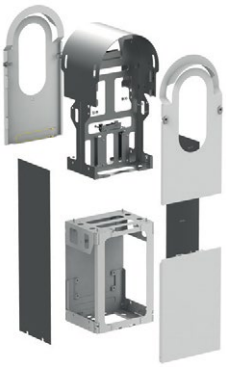
Commercial References	Type of socket	Domestic Socket	Current output	Power kW	Number of Phase	Embedded Protection	Protection supplied	MID inside
EVB3S22N40MR	T2S	-	32A	22	3PH	-	RCD B EV+MNx	Yes

Metallic kits

EVA1RWKS1C



EVA1RFKS1



EVA1RFKS2

Part number	Description
EVA1RWKS1	EVlink metallic kit for AC wall mount charger 1 charge point
EVA1RFKS1	EVlink metallic kit for AC floor standing charger 1 charge point
EVA1RFKS2	EVlink metallic kit for AC floor standing charger 2 charge points

Enclosures

Depending on the protection chosen to be embedded into the EVlink Pro AC Metal charger, the installation of an enclosure (Kaedra or Thalassa) may be necessary.
The configuration tables in the next pages give the possible choices.

Kaedra 13960

Thalassa EVA1RFKES

Part number	Description
Kaedra IP65 1 x 12 modules of 18 mm - 267 x 200 x 112 mm to install in the EVlink Pro AC metal WM 1CP or FS 1CP and 2 CP	
13979	No terminals
13960	T terminals
13444	T/N terminals
Thalassa to install in the EVlink Pro AC FS2CP base for one cable entrance up to 35 mm²	
EVA1RFKES	• 25 and 35 mm²- IP66 270x360x180mm • 1 Telequick plate • 2 Din rail 240 mm max • 4 fixing brackets • Cable glands: 2xM32, 1xM12, 1x5G25/5G36

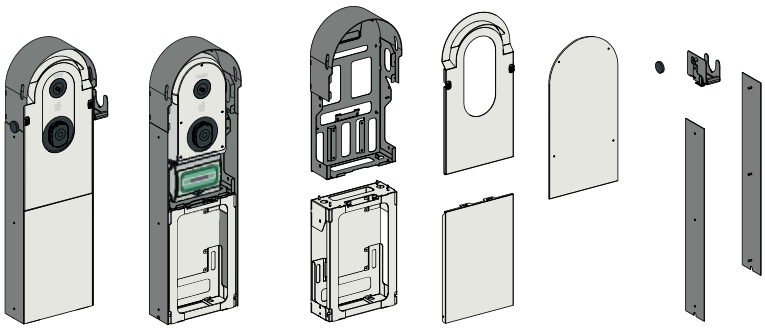
EVlink™ Pro AC Metal

Practical information

Electrical protection configuration

Floor standing 1 charge point Or Wall mount 1 charge point

Designed to be handled, assembled and installed by only one person.



The necessary components for assembling the EVlink Pro AC Metal are the following:

- A metallic kit enclosure: wall mounted for 1 charge point or floor standing for 1 charge point
- EVlink Pro AC charger to be installed inside the metal enclosure
- Optional: Kaedra enclosure to be mounted inside the metal enclosure for hosting the electrical protections

EVlink Pro AC reference	Embedded in the EVlink Pro AC			To be installed in 1 Kaedra (optional)						To be installed in the Distribution board		
	MID meter	MNx	RCD (7) per charge point	MNx	RCD (7) per charge point	SPD (1)	MCB control circuit (3)	RCD control circuit (8)	Terminal connector 25 mm²	MCB per charge point	RCD per charge point	SPD (1)
EVB3S22N40MR	1	-	-	1 Supplied (2)	1 B-EV Type Supplied (2)	-	1	1	-	1 (4)	-	1
EVB3S22N4A or EVB3S22N4B or EVB3S22NCA or EVB3S22NCB or EVB3S22N4EB or EVB3S22N4FB	-	1	1 B EV or Asi Type	-	-	1	-	-	5 only if SPD	1 (4)	-	-
EVB3S22N40M or EVB3S22NC0M or EVB3S22N40EM or EVB3S22N40FM	1	-	-	1 Supplied (2)	1 Asi Type	1	-	-	-	1 (4)	-	-
EVB3S22N4 or EVB3S22N4E	-	1	-	-	1 Asi Type	1	-	-	-	1 (4)	-	-
EVB3S11N4A or EVB3S11NCA	-	1	1 Asi Type	-	-	1	-	-	5 only if SPD	1 (5)	-	-
EVB3S11N4FB	-	1	1 B-EV Type	-	-	1	-	-	5 only if SPD	1 (5)	-	-
EVB3S07N4A or EVB3S07NCA or EVB3S07N4EA	-	1	1 Asi Type	-	-	1	-	-	3 only if SPD	1 (6)	-	-
EVB3S07N4AM or EVB3S07NCAM or EVB3S07N4EAM	1	1	1 Asi Type	-	-	1	-	-	3 only if SPD	1 (6)	-	-

(1) Optional. Surge Protection Device (SPD): a lightning strike near a building or overhead supply lines suddenly increases the voltage from 230 V to 3 or 6 kV which might destroy electronic components. Our surge protection devices can damp the spike down to approximately 15 kV which is the value most connected appliances can withstand. Reduce or even prevent damage to your valuable possessions by installing surge protection devices. One surge arrester per socket is recommended for high keraunic levels, or mandatory if required by local regulations
(2) Supplied with EVlink Pro AC
(3) MCB (miniature circuit breaker) for control circuit protection: 1P+N 10 A C 6 kA/10 kA
(4) MCB per charge point: 3P+N 40 A C 6 kA/10 kA
(5) MCB per charge point: 3P+N 20 A C 6 kA/10 kA
(6) MCB per charge point: 1P+N 40 A C 6 kA/10 kA
(7) RCD residual current device 30 mA type Asi or type B EV
(8) RCD control circuit: 1P+N 25 A 30 mA type AC; mandatory for TT network; strongly recommended for TNC / TNS network

Electrical protection configuration

Floor standing 2 charge points 1 cable entrance

Designed to be handled, assembled and installed by only one person.

The necessary components for assembling the EVlink Pro AC Metal are the following:

- A metallic kit enclosure: floor standing for 2 charge points
- EVlink Pro AC charger to be installed inside the metal enclosure
- Optional: Kaedra enclosure and/or Thalassa enclosure(s) to be mounted inside the metal enclosure for hosting the electrical protections

EVlink Pro AC reference	Embedded in the EVlink Pro AC			To be installed in 2 Kaedra (optional)							To be installed in Thalassa		To be installed in the Distribution board
	MID meter	MNx	RCD (12) per charge point	MNx	RCD (12) per charge point	SPD (1)	MCB per charge point	MCB control circuit (7)	RCD control circuit (8)	Terminal connector 25 mm²	SPD (1)	Terminal connector 35 mm²	MCB per charge point
2 x EVB3S22N40MR	2	-	-	2 Supplied (2)	2 Supplied (2)	-	2 (4)	2	2	2	1	5	1 (9)
2 x EVB3S22N40M or EVB3S22NC0M or EVB3S22N40EM or EVB3S22N40FM	2	-	-	2 Supplied (2)	2 Asi Type	-	2 (4)	-	-	2	1	5	1 (9)
2 x EVB3S22N4A or EVB3S22N4B or EVB3S22NCA or EVB3S22NCB or EVB3S22N4EB or EVB3S22N4FB	-	2	2	-	-	-	2 (4)	-	-	-	1	5	1 (9)
2 x EVB3S11N4A or EVB3S11NCA or EVB3S11N4FB	-	2	2	-	-	-	2 (5)	-	-	-	1	5	1 (10)
2 x EVB3S07N4A or EVB3S07NCA or EVB3S07N4EA	-	2	2	-	-	1	2 (6)	-		3	-	-	1 (11)
2 x EVB3S07N4AM or EVB3S07NCAM or EVB3S07N4EAM	2	2	2	-	-	1	2 (6)	-	-	3	-	-	1 (11)

(1) Optional. Surge Protection Device (SPD): a lightning strike near a building or overhead supply lines suddenly increases the voltage from 230 V to 3 or 6 kV which might destroy electronic components. Our surge protection devices can damp the spike down to approximately 15 kV which is the value most connected appliances can withstand. Reduce or even prevent damage to your valuable possessions by installing surge protection devices. One surge arrester per socket is recommended for high keraunic levels, or mandatory if required by local regulations.
(2) Supplied with EVlink Pro AC
(3) To ease the cabling, 1 Kaedra enclosure per charger is preferred
(4) MCB (miniature circuit breaker) per charge point: 3P+N 40 A C 6 kA/10 kA
(5) MCB per charge point: 3P+N 20 A C 6 kA/10 kA
(6) MCB per charge point: 1P+N 40 A C 6 kA/10 kA
(7) MCB control circuit: 1P+N C 10 A 6 kA/10 kA
(8) RCD control circuit: 1P+N 25 A 30 mA type AC; mandatory for TT network; strongly recommended for TNC / TNS network
(9) MCB charger: 4P 80 A C 10kA
(10) MCB charger: 3P+N 40 A C 6 kA/10 kA
(11) MCB charger: 2P 80 A C 15 kA
(12) RCD residual current device 30 mA type Asi or type B EV

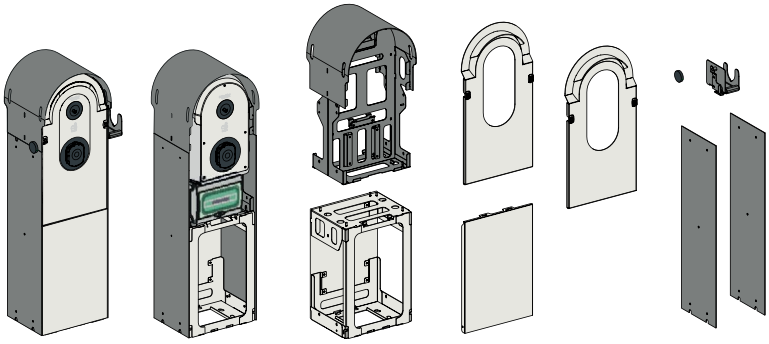
EVlink™ Pro AC Metal

Practical information

Electrical protection configuration

Floor standing 2 charge points dual cable entrance

Designed to be handled, assembled and installed by only one person.



The necessary components for assembling the EVlink Pro AC Metal are the following:

- A metallic kit enclosure: floor standing for 2 charge points
- EVlink Pro AC charger to be installed inside the metal enclosure
- Optional: Kaedra enclosure and/or Thalassa enclosure(s) to be mounted inside the metal enclosure for hosting the electrical protections

EVlink Pro AC reference	Embedded in the EVlink Pro AC			To be installed in 2 Kaedra (optional)						To be installed in the Distribution board		
	MID meter	MNx	RCD (7) per charge point	MNx	RCD per charge point	SPD (1)	MCB control circuit (4)	RCD control circuit (5)	Terminal connector 25 mm²	MCB per charge point	RCD per charge point	SPD (1)
2 x EVB3S22N40MR	2	-	-	2 Supplied (2)	2 Supplied (2)	-	2	2	2	2 (6)	-	2
2 x EVB3S22N40M or EVB3S22NC0M or EVB3S22N40EM or EVB3S22N40FM	2	-	-	2 Supplied (2)	2 Asi Type	2	-	-	2	2 (6)	-	-
2 x EVB3S22N4 or EVB3S22N4E	-	2	-	-	-	-	-	-	-	2 (6)	2 Asi Type	2
2 x EVB3S22N4A or EVB3S22N4B or EVB3S22NCA or EVB3S22NCB or EVB3S22N4EB or EVB3S22N4FB	-	2	2	-	-	2	-	-	10	2 (6)	-	-
2 x EVB3S11N4A or EVB3S11NCA or EVB3S11N4FB	-	2	2	-	-	2	-	-	10	2 (7)	-	-
2 x EVB3S07N4A or EVB3S07NCA or EVB3S07N4EA	-	2	2	-	-	2	-	-	5	2 (8)	-	-
2 x EVB3S07N4AM or EVB3S07NCAM or EVB3S07N4EAM	2	2	2	-	-	2	-	-	5	2 (8)	-	-

(1) Optional. Surge Protection Device (SPD): a lightning strike near a building or overhead supply lines suddenly increases the voltage from 230 V to 3 or 6 kV which might destroy electronic components. Our surge protection devices can damp the spike down to approximately 15 kV which is the value most connected appliances can withstand. Reduce or even prevent damage to your valuable possessions by installing surge protection devices. One surge arrester per socket is recommended for high keraunic levels, or mandatory if required by local regulations.
(2) Supplied with EVlink Pro AC
(3) To ease the cabling, 1 Kaedra enclosure per charger is preferred
(4) MCB (miniature circuit breaker) for control circuit protection: 1P+N 10 A C 6 kA/10 kA
(5) RCD control circuit: 1P+N 25 A 30 mA type AC mandatory for TT network; strongly recommended for TNC / TNS network
(6) MCB per charge point: 3P+N 40 A C 6 kA/10 kA
(7) MCB per charge point: 3P+N 20 A C 6 kA/10 kA
(8) MCB per charge point: 1P+N 40 A C 6 kA/10 kA
(9) RCD residual current device 30 mA type Asi or type B EV

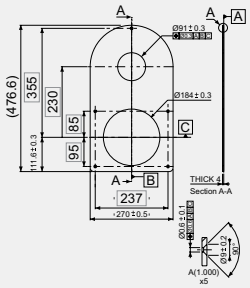
Customization

EVlink Pro AC

- The front plate can be customised.
- The material is PC BAYLOY 10 UV white 3.

EVlink Pro AC metal

- The metallic enclosure can be customised.
- The material is Electrogalvanized steel class C4M.

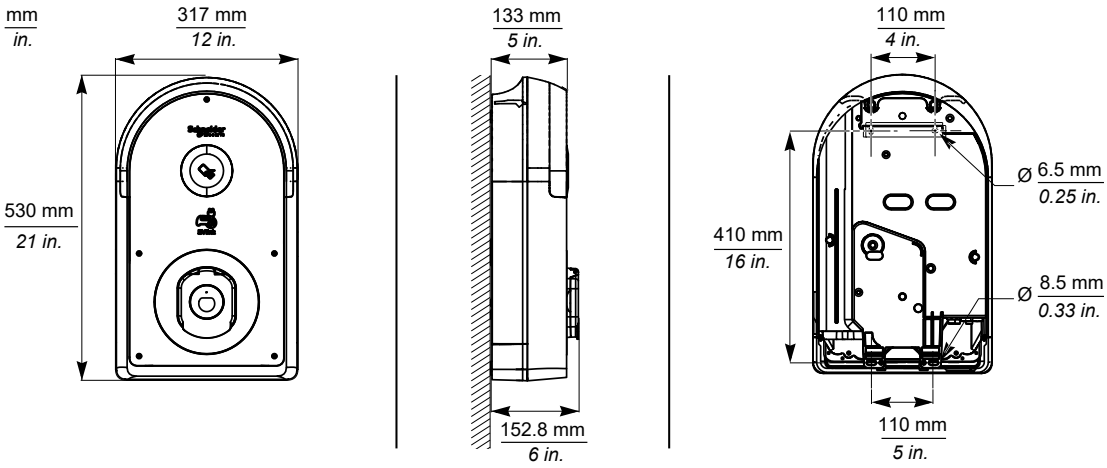


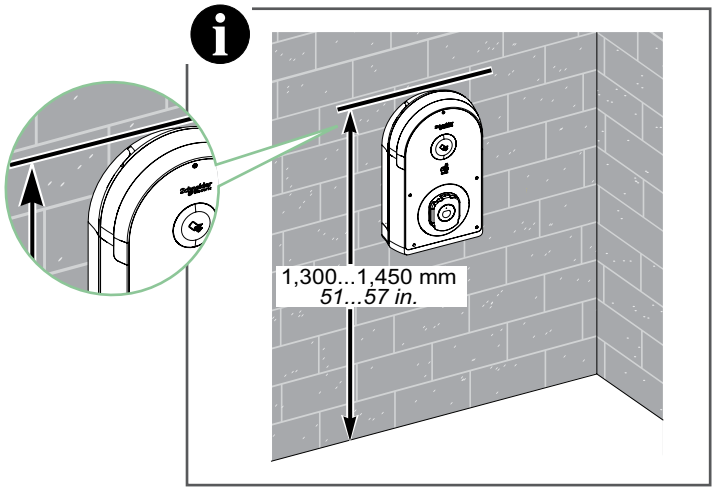
We provide the 2D plan for the dimension to produce the customised sticker on se.com/EVlink.

Practical information

Practical information

EVlink Pro AC dimensions (mm)





Cable entry from above, below or through the wall

With T2S socket outlet	With T2 attached cable
≈ 7.2 kg (15.43 lb)	≈ 10 kg (22.05 lb)

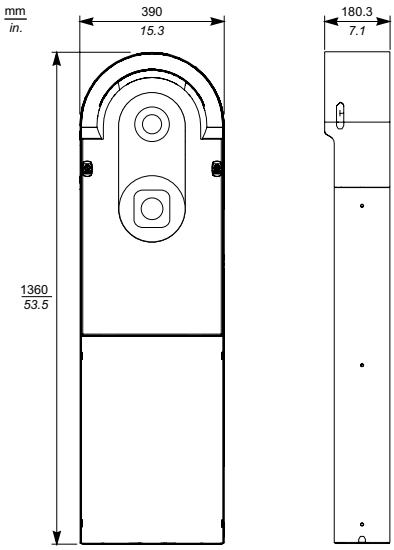
Additional information

Charging station technical document	Language	References
Installation Guide (1)	EN / FR	**NNZ1940301-00**
EVlink Pro AC trouble shooting guide (2)	EN	**JYT6692101**
Technical specifications OCPP connectivity Guide	EN	**GEX1969200**
EVlink Pro AC spare parts replacement	EN	**GEX227351**
Technical specifications MODBUS connectivity Guide	EN	**GEX1969300**
eSetup commissioning app eSetup for Electricians is a dedicated app for installers and electricians for EVlink Pro AC, Wiser and Facility Expert SB products from Schneider Electric. Save time on installation & commissioning: everything can be done with an app & simple interface. Get charge details report and maintenance report from the app.		

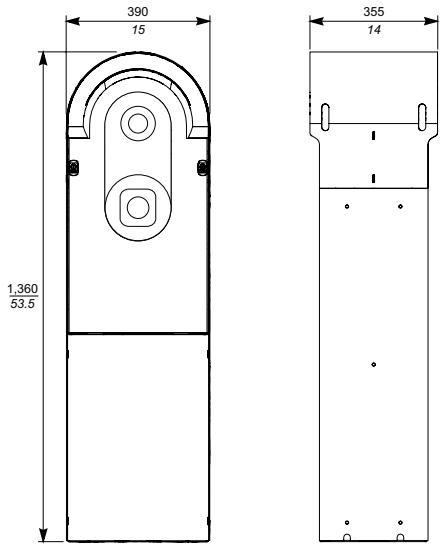
(1) Delivered with the product.
(2) To be downloaded.

To download the above documents, do a search by reference on www.se.com

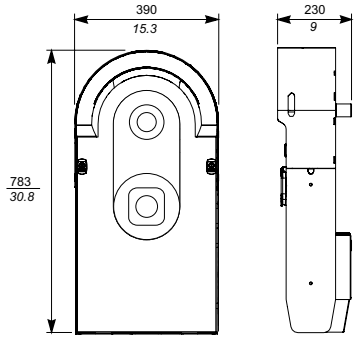
EVlink Pro AC Metal dimensions (mm)



FS1CP: floor standing 1 charge point



FS2CP : Floor standing 2 charge points



WM1CP: wall mount 1 charge point

EVlink Pro AC	Metallic kit
≈ 7.2 kg (15.43 lb)	WM1 CP ~ 26 kg (79.36 lb)
	FS 1CP ~ 40 kg (134.48 lb)
	FS 2CP ~ 61 kg (176.37 lb)

EVlink Pro AC Metal assembly time

EVlink Pro AC Metal	Average assembly time
Floor standing 2 charge points	90 to 110 min
Floor standing 1 charge point	50 to 70 min
Wall mount 1 charge point	50 to 70 min

Additional information

Charging station technical document	Language	References
Installation Guides (1)	EN / FR	Instruction Guide EVlink Pro AC FS2CP: **JYT24397** Instruction Guide EVlink Pro AC FS1CP: **JYT24398** Instruction Guide EVlink Pro AC WM1CP: **JYT24399**
EVlink Pro AC trouble shooting guide (2)	EN	**JYT6692101**
Electrical diagram Guide	EN	**GEX2008002**
eSetup commissioning app		

(1) Delivered with the product.
(2) To be downloaded.

To download the above documents, do a search by reference on www.se.com

Range accessories and spare parts

Accessories references

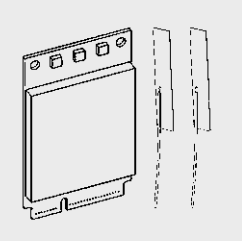
EVlink Pro AC and Pro AC Metal

EVlink Cable

To connect the car to the charging station. Available in different lengths with a T2 connector.

Please refer to page 40

4G Kits

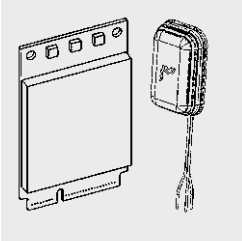


Embedded 4G modem with 2 internal antennas for EVlink Pro AC.
Reference: **EVA1MS**

Available 4th quarter of 2022.

Optional exterior modem.
Reference: **EVP3MM**

Optional antenna.
Reference: **EVP2MX**



Embedded 4G modem with an external antenna for EVlink Pro AC Metal
Reference: **EVA1MM**

Available 4th quarter of 2022.

Optional exterior modem.
Reference: **EVP3MM**

Optional antenna.
Reference: **EVP2MX**

Pack of 10 RFID badges

For charging stations equipped with an RFID reader. The badges are supplied blank, ready to be programmed to identify an administrator or user. Sheet of adhesive labels for badges:
1 administrator + 9 users.
Reference: **EVP1BNS**

TIC interface

Energy management: Smart meter connection to Historical & Standard TIC Tele Information Client card EVlink interface of French utility meters.
Reference: **EVA1MTH**

EVlink Pro AC specific

Pedestal mounting pole

Floor standing:

- for 1 EVlink Pro AC,
  Reference: **EVA1PBS1**
  H 1300 x W 285 x D 229 mm
- for 2 EVlink Pro AC,
  Reference: **EVA1PBS2**
  H 1300 x W 285 x D 384 mm
- Plate to convert the pedestal for 1 charger to a pedestal for 2 chargers.
  Reference: **EVA1PCS2**

Permanent cable holder

To leave the cable connected to the charging station
Reference: **EVA1PLS1**

Accessories references

EVlink Pro AC Metal specific

Cable holder

Allows to leave the cable connected on the side charging station.
The cable holder is mandatory for charging stations with attached cable.
Reference: **EVA1FWHS12**

Locking accessory for the metal kit

Polyamid handle lock, mainly for cybersecurity purpose, direct mounting on front plate.
1 cylindrical barrel, 2 keys Nr 610,
1 handle with key lock.
Reference: **NSYCL610CSX**
Quantity:
2 for WM1CP, or 2 for FS1CP,
or 4 for FS2CP

Spare part references

EVlink Pro AC front plate	Reference
	**EVP1SS**

EVlink Pro AC and Pro AC Metal - Socket outlets		References
	1PH socket outlet T2S	**EVP1SSS41**
	3PH socket outlet T2S	**EVP1SSS43**
	1PH socket outlet T2S - Domestic Tx (not supplied)	**EVP1SSS51**
	3PH socket outlet T2S - Domestic Tx (not supplied)	**EVP1SSS53**
	TE domestic socket	**EVP1SSSE**
	TF domestic socket	**EVP1SSSF**

EVlink Pro AC and Pro AC Metal - Attached cables		References
T2 charging connector		
	32 A single-phase 5 m length	**EVP1CSS321C**
	32 A single-phase 7 m length	**EVP1CSL321C***
	32 A three-phase 5 m length	**EVP1CSS323C**
	32 A three-phase 7 m length	**EVP1CSL323C***

* Confirm availability with your local Schneider Electric sales.

Cables for EVlink™ Home and Pro AC ranges

Characteristics

Type 2 (T2)

- Tested and certified product: Third-party laboratory CB certification (LCIE) complies with applicable standard IEC 62196
- Fast charging (Mode 3)
- High-strength cable

Characteristics

- Length: available in 5, 7 and 10 m
- Max. current: 32 A
- Operating temperature: -30°C to +50°C
- Degree of protection: IP44.

Two good reasons to have a second EVlink cable in your electric vehicle

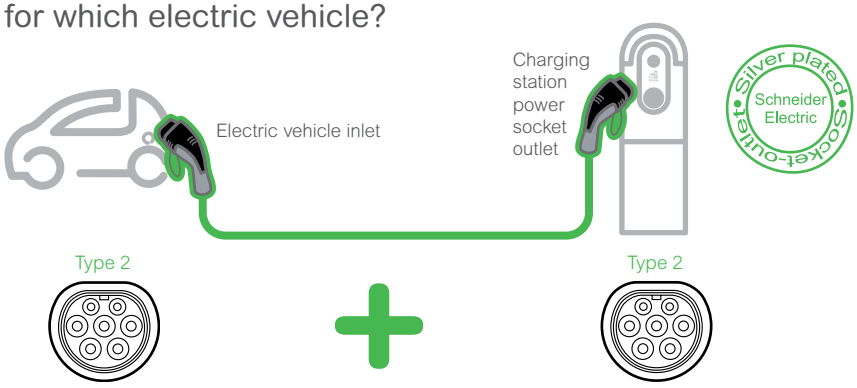
1. To take advantage of the charging capacity of public charging stations: by having an appropriate EVlink cable for the charging stations used, you obtain fast charging with integrated protection(1).

2. To have a fallback solution.

E.g.: charging cable damaged or misplaced, help out another electric vehicle user.

Which EVlink cable

for which electric vehicle?



References	No. of phases		Charging power accepted (kW)				Cable length
	1	3	3.7	7.4	11	22	(m)
EVP1CNS32122	●		●	●			5
EVP1CNL32122	●		●	●			7
EVP1CNX32122	●		●	●			10
EVP1CNS32322		●	●	●	●	●	5
EVP1CNL32322		●	●	●	●	●	7
EVP1CNX32322		●	●	●	●	●	10

T2 + T2

(1) Learn more on Wiki guide for Electric Vehicle charging


Schneider Electric

EVlink™ DC Product Range

Electric vehicle charging stations

EVlink™ DC Fast Charge

In short

DC 24 kW - 1 connector / single standard

DC 24 kW - 2 or 3 connectors / multiple standards

DC 24 kW stations are able to charge an electric vehicle in less than 1 hour. The range covers a large variety of needs with a choice of either, per station:

- 1 connector, CHAdeMO or CCS Combo 2
- 2 connectors, CHAdeMO + CCS Combo 2
- 3 connectors, CHAdeMO + CCS Combo 2 + AC Type 2S (front socket outlet with shutter, for AC current)

Communication with dual modem for separate operation & maintenance supervision.

Installation

- Indoor or outdoor
- Wall mounted, floor mounted with additional pedestal
- Installation in less than 2 hours (when supply cable is already installed)

Maintenance

- Reduced maintenance as there is no air filter to replace and a robust design (IP55, IK10) for uptime optimization.

Application

EVlink Fast Charge stations are designed to charge a vehicle rapidly: **80% of capacity charged in less than 1 hour.**

DC 24 kW - 1 connector / single standard

Communication with dual modem for separate operation & maintenance supervision.

DC 24 kW - 2 or 3 connectors / multiple standards

Charging stations are ideal solutions for shopping centers, restaurants, parking areas or for any work place or shared buildings.

Characteristics

EVD1S24T0H

+ Piedestal EVP1DB1LG

EVD1S24THB

+ Piedestal EVP1DB2LG

EVD1S24THB2

+ Piedestal EVP1DB2LG

Mechanical and environmental features

- Degree of protection: IP55 (except cordsets)
- Degree of mechanical protection: IK10
- Operating temperature: -25°C / +50°C (with derating above 35°C)
- Storage temperature: -20°C to 45°C
- Operating altitude: 2000 m max.
- Relative humidity: 10% to 95%

Power supply network and charging mode

- Power supply: 380 - 480 V, 3P + N + Earth, 50 Hz
- Nominal supply current: 32 - 40 A (version with 1 or 2 connectors)
- Nominal supply current: 70 A (version with 3 connectors)

Direct current charging (all charging stations)

- Charging in Mode 4 (IEC 61851-23)
- Charging power: 24 kW
- Charging voltage/current: 200 to 530 VDC CCS Combo 2 / 150 to 500 VDC CHAdeMO, 1.5 to 65 A
- Protections: short circuit, overload; Residual Current Device on DC output; overheating, temperature regulated
- Cable length: 3.25 m

Alternating current charging (3-socket charging station only)

- Charging in Mode 3 (IEC 61851-22)
- Charging power: 22 kW
- Charging voltage/current: 400 VAC / 32 A
- Protections: short circuit, overload; overheating, temperature regulated
- Charging voltage/current: 400 V ± 10% AC, 3P + N + Earth, 32 A max., with the front AC Type 2S socket outlet

Communication

- Wireless 3G modem
- OCPP 1.6Json
- LAN/TCP IP protocol

User interfaces

- 7-inch touch screen
- RFID card reader

Dimensions (cabinet without socket / cable)

- Wall mounted (mm): H 860 x L 507 x W 250
- Mono-standard on pedestal (mm): H 1533 x L 536 x W 336
- Multi-standard on pedestal (mm): H 1835 x L 536 x W 336

Charging station references

Standards

- EV international standard: EN 61851 Ed. 2
- Immunity for industrial environment: EN 61000-6-2 - sept. 2015
- Emission for industrial environment: EN 61000-6-4 - 2017 + A1: 2011
- EMC for industrial environment: Class A

EVlink DC Fast Chargers			
Power	Connector(s)	References	Weight (kg)
24 kW DC	CHAdeMO	**EVD1S24T0H**	**66**
	CCS Combo 2	**EVD1S24T0B**	**66**
	CHAdeMO + CCS Combo 2	**EVD1S24THB**	**85**
24 kW DC/22 kW AC	CHAdeMO + CCS Combo 2 + AC Type 2S	**EVD1S24THB2**	**85**
Pedestals			
For EVlink DC fast chargers		References	Weight (kg)
For EVD1S24T0H, EVD1S24T0B		**EVP1DB1LG**	**51**
For EVD1S24THB, EVD1S24THB2		**EVP1DB2LG**	**53**

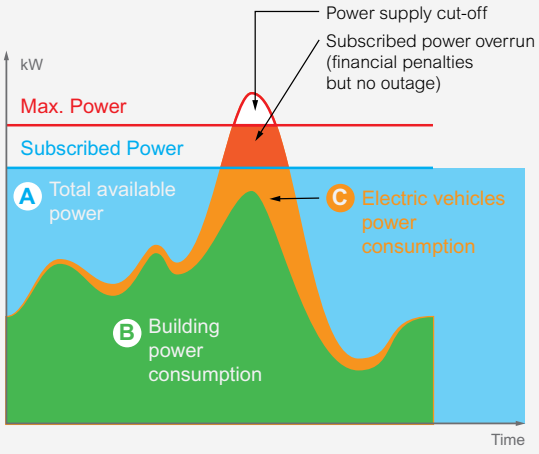
Energy management, software and digital services

Energy management

How to optimize the impact of consumption of a charging solution on an electrical installation

The problem

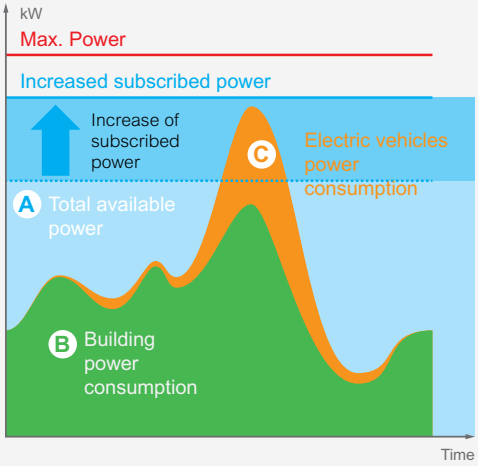
Initial situation



The installation of charging stations in an existing electrical installation can have a significant impact due to the power level required by electric vehicles to charge.

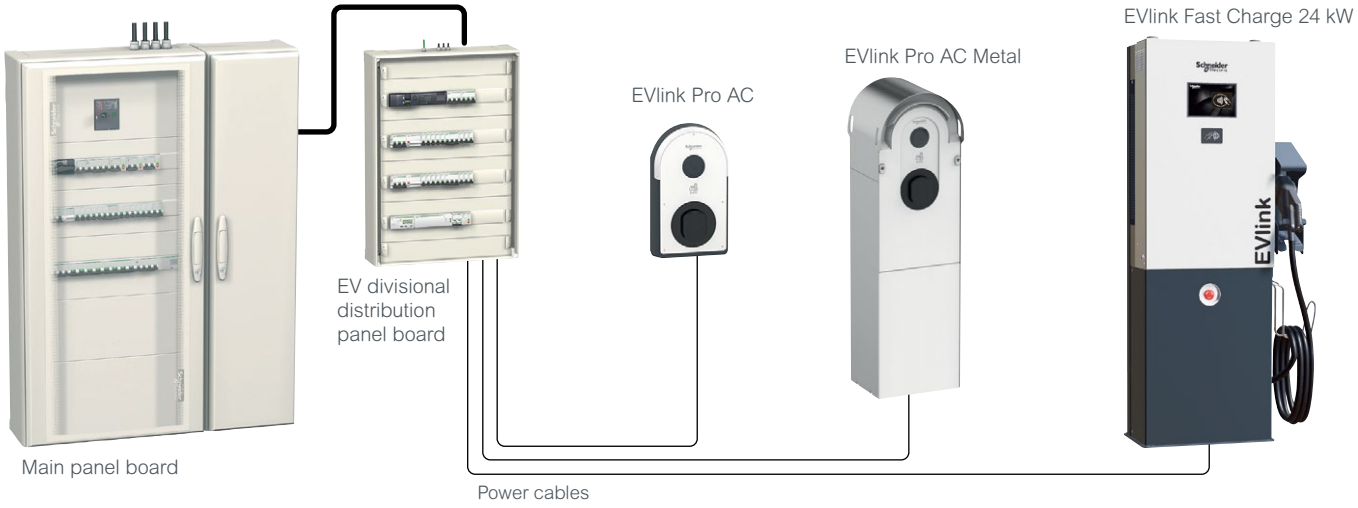
Solution without energy management

Increase of subscribed power



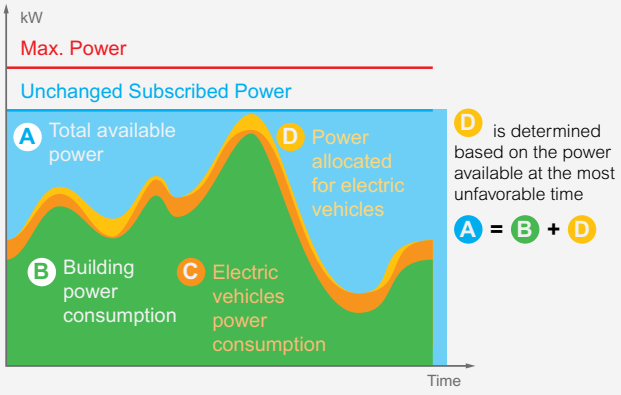
This solution consists of increasing the power subscribed to the energy supplier to maintain the same consumption model. It implies an increase in the cost of the subscription and does not guarantee that the trigger threshold will never be exceeded. Thus the continuity of service of the building is not guaranteed.

Electrical installation without energy management



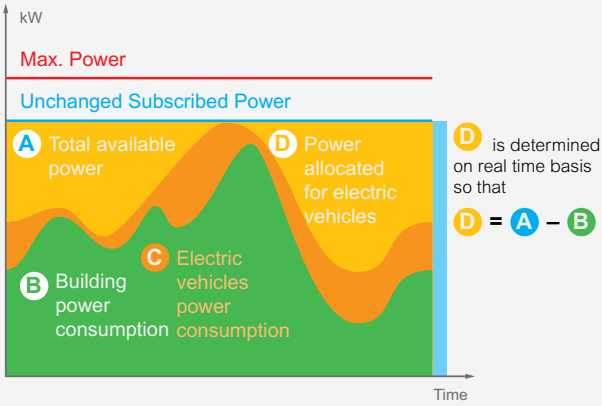
Schneider Electric solutions

Static energy management



Setpoint "D" is fixed. The power is distributed between all connected vehicles.

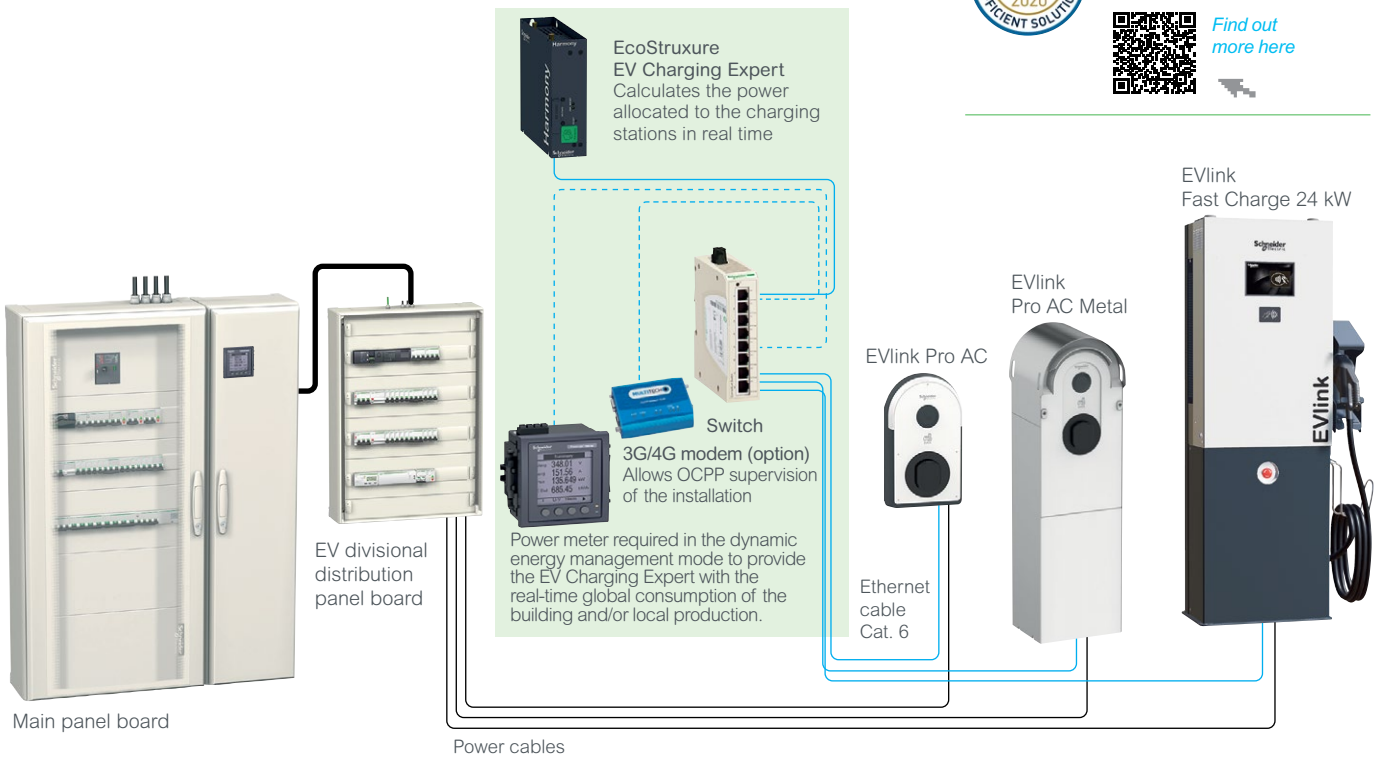
Dynamic energy management



Setpoint "D" is adjusted in real time according to the consumption of the rest of loads in the building, to maximize the power allocated to charging electric vehicles.

Electrical installation with energy management

From 1 to 1000 charging stations depending on the EV Charging Expert model selected.



EcoStruxure EV Charging Expert has been awarded with the prestigious "Solar impulse Efficient Solution" label.

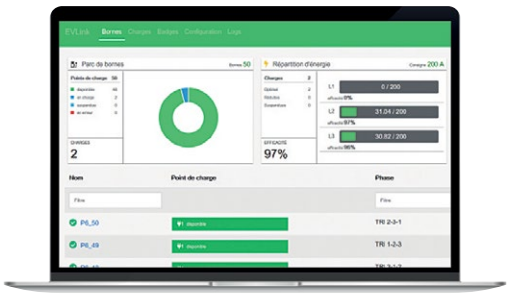
Find out more here

EcoStruxure™ EV Charging Expert

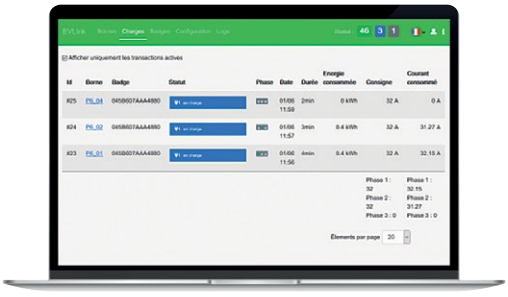
EcoStruxure EV Charging Expert

EV Charging Expert has been awarded with the prestigious "Solar impulse Efficient Solution" label.

Find out more here



Current charging sessions



Charging history of electric vehicles

EcoStruxure EV Charging Expert allows to monitor, control and maximize EV charging based on the real-time available power in the building.

It helps to ensure the respect of cost and energy efficiency constraints of a set of charging stations by controlling their operation. The controller runs its management program according to the selected parameters and data received from the charging stations.

Characteristics

- PLC type: Harmony iPC IIoT Edge Box Core
- Operating system: Linux Yocto
- Supply voltage: 12...24 V DC
- Inrush current: 0.43 A
- Consumption: 16 W
- Dimensions: 150 x 46 x 157 mm
- Protection class: IP40
- Compliance with directives:
  - 2014/30/EU (electromagnetic compatibility)
  - 2014/35/EU (Low Voltage Directive)
  - Class A EN 55022 (electromagnetic compatibility, conducted and radiated emissions)
- Connections: 2 x USB 2.0, 1 x HDMI, 2 x Ethernet (10/100/1000 Mb/s), 1 x COM RS-232 (default), RS-232/422/485 (non-isolated), 1 ground connection, 1 x GPIO, 1 power supply connector 24 V DC

Functions

- Calculates the power allocated to the charging stations
- Centralization and availability of data for each station

Connection to the charging stations

- Directly to the Ethernet LAN via a switch

External network connection

- Directly to the Ethernet LAN or remotely via a 3G or 4G modem
- Communication under OCPP 1.6 JSON (possible upgrade to OCPP 2.0)

User interface

EcoStruxure EV Charging Expert provides access to an ergonomic and intuitive user interface (web server) allowing to:

- remote start / stop of a charging session
- reset or reboot a charging station
- visualize a dashboard indicating in real time the status of each charging station
- manage badges (local addition, import or export badges list) and user rights
- access and download the history of charging data by station, by badge or aggregated for the infrastructure
- consult and download maintenance data.

To download the latest release of EcoStruxure EV Charging Expert software, please scan or click on the following QR code:

EcoStruxure EV Charging Expert CORE references

		EcoStruxure EV Charging Expert with Static mode (dynamic load management with STATIC current setpoint)		EcoStruxure EV Charging Expert with Dynamic & Static modes (dynamic load management with DYNAMIC current setpoint, or STATIC current setpoint)				
References [2]		**HMIBSCEA53D1ESS**	**HMIBSCEA53D1ESM**	**HMIBSCEA53D1EDB**	**HMIBSCEA53D1EDS**	**HMIBSCEA53D1EDM**	**HMIBSCEA53D1EDL**	**HMIBSCEA53D1EML** [1]
Features								
Capacity	Number of EVlink charging stations	15	50	5	15	50	100	1000 [1]
Power management	Dynamic, with a STATIC current setpoint	●	●	●	●	●	●	●
	Time of use / DI		●		●	●	●	●
Multi zone	Maximun number of zones	1	10	2	2	10	20	200
	Maximun number of zones levels	1	3	2	2	3	3	4
Other loads	Power consumption reporting on other feeders		●			●	●	●
Badge management	VIP privilege user badge		●			●	●	●
Stations management	VIP privilege charging station		●			●	●	●

(1) Via the management of up to 9 secondary EV Charging Expert, (coming soon)
(2) To upgrade from a current CORE reference to an upper-level one, consult the UPGRADES Software references.

EcoStruxure EV Charging Expert UPGRADES Software references

Upgrade from a current CORE to an upper-level one

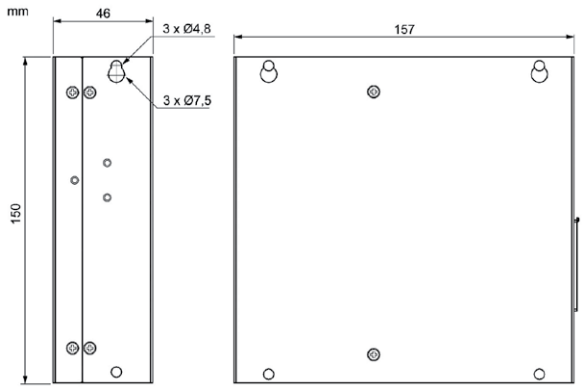
Reference	Description
EVLMSEDB2EDS	Upgrade EV Charging Expert dynamic 5 CS to 15 CS
EVLMSEDB2EDM	Upgrade EV Charging Expert dynamic 5 CS to 50 CS
EVLMSEDB2EDL	Upgrade EV Charging Expert dynamic 5 CS to 100 CS
EVLMSESS2EDS	Upgrade EV Charging Expert 15 CS from static to dynamic
EVLMSESS2ESM	Upgrade EV Charging Expert static from 15 CS to 50 CS
EVLMSESS2EDM	Upgrade EV Charging Expert from 15 CS static to 50 CS dynamic
EVLMSEDS2EDM	Upgrade EV Charging Expert dynamic from 15 CS to 50 CS
EVLMSESS2EDL	Upgrade EV Charging Expert from 15 CS static to 100 CS dynamic
EVLMSEDS2EDL	Upgrade EV Charging Expert dynamic from 15 CS to 100 CS
EVLMSESM2EDM	Upgrade EV Charging Expert from 50 CS static to 50 CS dynamic
EVLMSESM2EDL	Upgrade EV Charging Expert static 50 CS to dynamic 100 CS
EVLMSEDM2EDL	Upgrade EV Charging Expert dynamic from 50 CS to 100 CS

Additional information

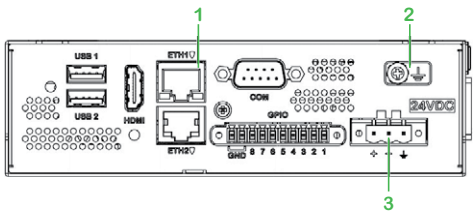
Range compatibility:
EVlink Pro AC
EVlink Pro DC
EVlink Smart Wallbox
EVlink Parking

EcoStruxure EV Charging Expert dimensions (mm)

Dimensions



Rear view



1- ETH1 (10/100/1000 Mbits/s)
2- Ground
3- DC supply

EcoStruxure™ EV Charging Expert

Features and benefits

Simplified, decentralized, flexible installation architecture

- EcoStruxure EV Charging Expert manages and controls up to 100 charging stations from one same controller and user interface dashboard
- With a decentralized and flexible architecture to optimize service continuity, offers the possibility to manage up to 1000 charging stations with a primary/secondary architecture, with supervision and control in one only user interface dashboard for the entire system
- Is available in different versions to adapt to the specific customer needs, whether it is less than 5 charging stations, to up to 1000
- Allows to manage several parking zones, each one with its own power metering for dynamic load management, and all of it from a single controller
- It is scalable, and allows the installation to be upgraded easily from a current model to a more sophisticated one if the customer EV charging needs evolve
- Operates with open protocols (OCPP 1.6Json) facilitating integration to other systems
- Allows the execution of installations according to "EV/ZE Ready" standards
- Is available at most distributors.

Designed to be easily installed and commissioned by an installer

- Protection and control components to be installed in a Prisma panel or equivalent
- The webserver includes a configuration assistant that walks the installer through the different steps to configure the system
- Automatic scan and configuration of charging stations, all in parallel to save time
- Easy firmware updates, with most recent firmware release available on se.com.

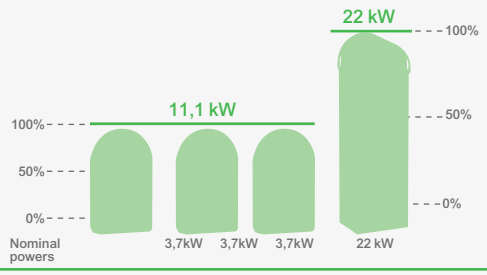
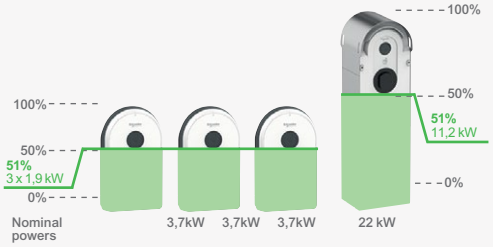
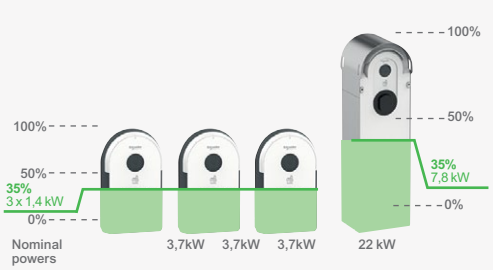
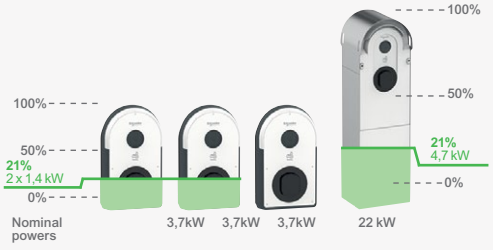
Multiple functionalities for efficient operation and maintenance

- Integrates in a single product the local supervision of charging stations and their power management
- Includes an intuitive dashboard interface to manage and control the installation
- Optimizes building continuity of service all while providing the highest possible EV charging capabilities in real-time
- Distributes energy equitably among all electric vehicles while maximizing the power delivered to the charging stations and the number of vehicles that charge simultaneously
- Provides time-of-use electricity tariff scheduling to limit EV charging when electricity price is high, and to maximize it when it is low (depending on the selected model)
- The electric vehicle driver can see that the charging of his car is active before leaving it (a new vehicle is always actively charging when just connected) and prioritize, even when all the available power is already distributed to other vehicles being there for a longer time
- Allows the management of user badges without having to subscribe to a complementary supervision system
- Allows to define priority (VIP) user badges or charging stations, that will not be load-shed, or just when strictly necessary to match with the building power continuity (depending on the selected model)
- Registers all historic data related to the
- EV charging transactions for analytics, cost allocation or invoicing
- Does not generate any subscription cost
- (if the services of a Charge Point Operator are needed, EVlink LMS is compatible with a CPO backend (OCPP 1.6J protocol)
- Offers integration capabilities as it communicates with the Building Management System (BMS) via a webservice (may require specific development)
- Major international manufacturer and world leader in eMobility.

Operation

- EcoStruxure EV Charging Expert controls the EV charging infrastructure
- It allows to limit the instantaneous power drawn by the entire set of connected electric vehicles, and manages the energy allocated to each one of them
- In real time, it transmits a setpoint to each charging station, which transfers it to the vehicles
- If the setpoint is exceeded, a decrease in energy is applied in the same way to all charge points (51% in the example with 17 kW of available power)
- Output reduction is done only on electrical phases in need of it.

Description example to illustrate load reduction and load-shedding operation

Available power in the building allocated to EV charging	Delivered charging power	Description
33,1 kW		The full available energy is delivered.
17 kW		The energy will be delivered according to an equal percentage, in this example: 51%. **Details** 17 kW / 33.1 kW = 51%.
12 kW		When reaching the minimum current setpoint of a charge point, its current level will be maintained so that the EV keeps charging. **Details** Min. current for an EV to charge (according to IEC 61851) = 6 A, representing 1.4 kW of a 3.7 kW charging station. 12 - (3 x 1.4 kW) = 7.8 kW, that are provided by the 22 kW charging station.
7,5 kW		If there is not enough power to feed all the charging stations, charge point load shedding will be triggered, following the load shedding rules. **Details** With 6 A (1.4 kW) per active charging station (IEC 61851 minimum current), the 7.5 kW of charging power are respected by switching off 1 charging station. 7.5 - (2 x 1.4 kW) = 4.7 kW, that are provided by the 22 kW charging station.

EcoStruxure™ EV Charging Expert

Principle of load balancing between vehicules

When the load shedding is triggered, the algorithm allows to distribute the available energy according to 2 strategies (depending on the settings):

- Based on the energy already consumed: the system interrupts the charging of the vehicules that have obtained the highest amount of kWh since the start of their charging,
- favoring new vehicles.
- Based on the connection time: the system interrupts the charging of the vehicles with the longest charging time favoring those last arrived.

In both cases, the system rechecks and updates the situation every 15 minutes.

Functions performed by all commercial references of EV Charging Expert

Access Management	Commissioning	Operation	Connectivity
Add, modify, delete, supervise badges	Commissioning all charging stations directly from EVlink LMS	Supervision through real time dashboard and remote actions on charging stations	Connection with CPO supervision (OCPP 1.6 Json)
	Save & restore commissioned configuration	Charge data report export	Connection with EcoStruxure supervision (web services) (1)
		Maintenance report export	Optional: 3G/4G modem
			Commissioning by Ethernet cable

(1) May require specific development

Additional information

Charging station technical document	Language	References
Installation Guides (1)	EN	EcoStruxure™ EV Charging Expert Installation Guide: **DOCA0164**
User Guides (1)	EN	EcoStruxure™ EV Charging Expert User Guide: **DOCA0163**

(1) To be downloaded.

To download the above documents, do a search by reference on www.se.com

Refer to Appendix for detailed
> IT network possible topologies ..... p. 96
> Typical load management architectures ..... p. 97

EcoStruxure™ EV Advisor

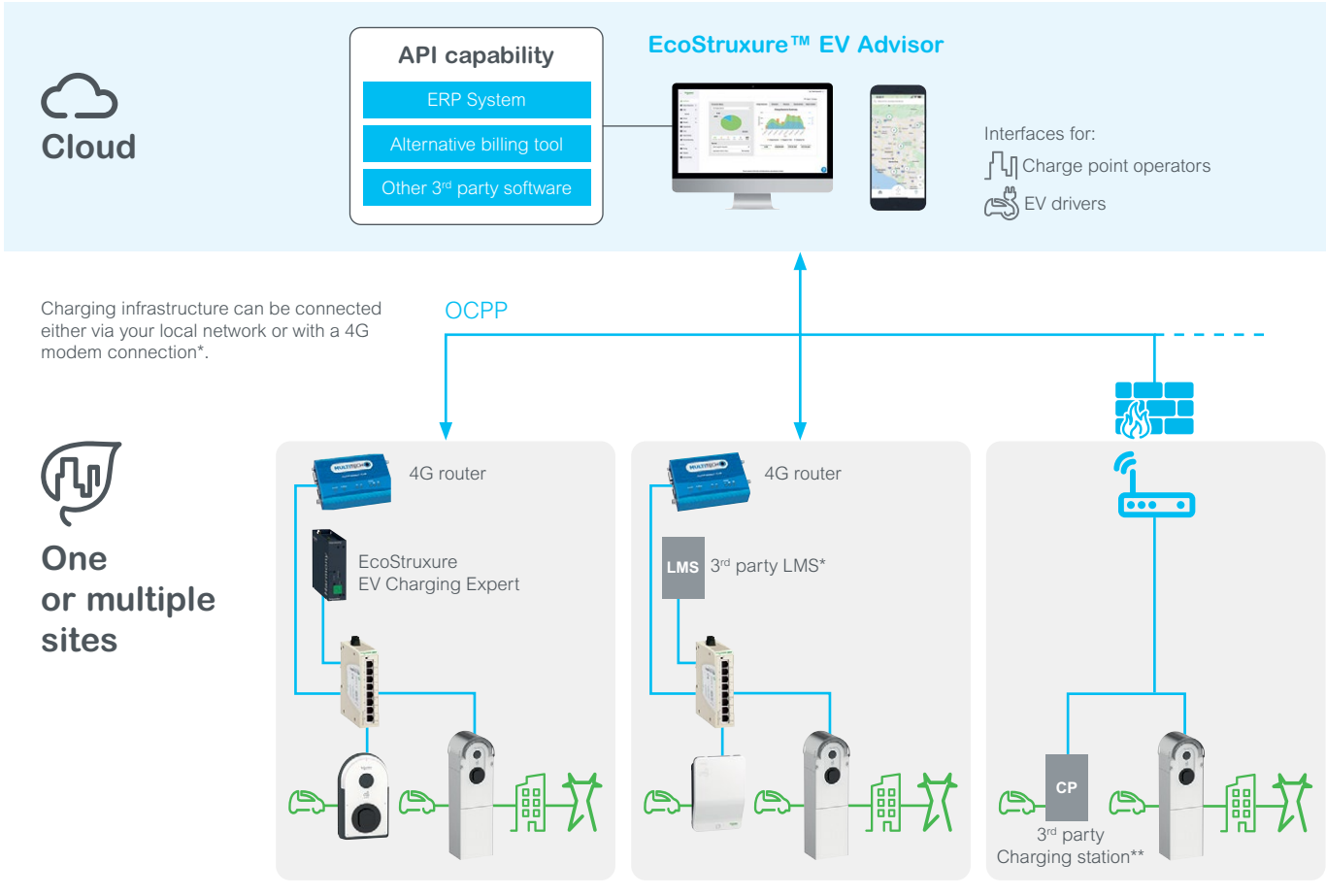
EcoStruxure EV Advisor is an eMobility management platform that enables seamless EV charging for fleets, buildings and destinations.
This SaaS offer is built to supply charge point operators, installers, building operators and fleet operators with everything they need to make their operation a successful venture.
Users benefit from remote supervision and operation functions including features such as asset monitoring and asset control, cloud based static load levelling, EV driver access management and pricing.
This digital solution complements the eMobility portfolio and completes the EcoStruxure for eMobility offer.
As an open cloud based platform, EcoStruxure EV Advisor will help our customers make the most of their EV charging infraststructure and will support them to implement their individual business case.

Architecture

Whether you want to monitor a single site or manage an international network, with EcoStruxure EV Advisor you have flexibility to implement your individual business case.

With EcoStruxure EV Advisor you can allocate access to the platform according to roles or responsibilities.

Next to whitelabelling the EV driver application, you can also promote your brand inside the platform and give access to your customers or other stakeholders.



* 4G data subscription is provided as option.
** Consult us to get the list of approved 3rd party charging stations' manufacturers.

EcoStruxure™ EV Advisor

EcoStruxure EV Advisor meets your challenges

Optimize uptime

Monitor the charging stations' performance remotely and reduce downtime with the help of alerts and remote-control functions to minimize the time you have to spent on site.

Monitor your key performance indicators

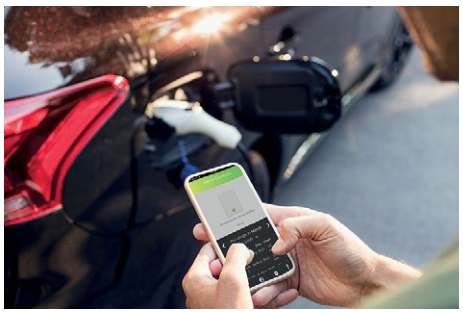
Generate dashboards with specific insights into utilization, revenue, station health and data related to sustainability such as prevented greenhouse gas.

Avoid energy consumption peaks

Smartly manage the energy consumption of your EV infrastructure with our eMobility management platform.

Profit from the integrated Billing Solution

Enroll RFID cards and give granular access.
Set a pricing scheme for your chargers.



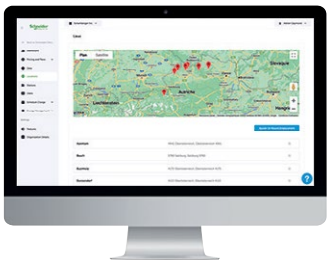
User-friendly charging experience

"My Charger" application helps you to start a charging session from your phone and to see what chargers you have access to.

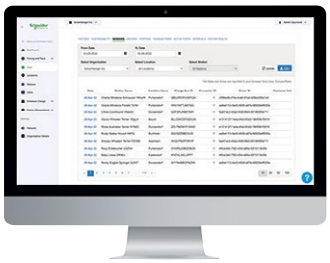
Control your EV charging history

Track your usage in real-time and get detailed reports about your usage.

Features and benefits of EcoStruxure EV Advisor software



Site Map



Detailed reports

Performance dashboard

Manage your EV charging infrastructure	• Monitor your charging infrastructure remotely and carry out remote maintenance and troubleshooting activities. • Manage access and permissions by specifying the rights of individual or groups of EV Drivers.
Generate revenues	• Set tariffs for charging events based on location, weekdays, time of day, parking time, consumption and number of charging events.
Customize and implement your business case	• Develop your specific business case as per your business activity. Manage a small number of locations or create your own network. • Manage user rights: grant view-only or editor rights to different users of the EV Advisor platform in your organization.
Optimize cost and grid usage	• Optimize EV infrastructure energy consumption with the static cloud energy management feature. • Monitor usage of the EV infrastructure to size and anticipate future needs through stats and dashboards.
Take advantage of an Open Platform	• Integrate using the entire library of APIs to create a seamless customer experience. • Connect and integrate third party OCPP compliant hardware to leverage EV Advisor as a truly open platform.
Optimize EV drivers' user experience	• Provide our app to your EV drivers that enables them to find and unlock your charging stations, monitor their usage and review invoices. • Support awareness for your brand by whitelabelling the EV Driver application.
Choose to become a network operator	• Set up multiple organizations and locations that can be monitored simultaniously. • Whitelabel the platform dashboard with your brand and allow your customers and partners to access certain areas of the platform. • Customized APIs supporting app development and other use cases including identity management, payment and CRM system integration.


Kl. 2
31,8 kJ
Bolesta
Schneider
Electric
BSD
BSD
Kl. 2
31,8 kJ

eMobility Services

eMobility Services

Services over the entire life cycle

Wherever you are in your eMobility adoption, we got you covered!

Design your infrastructure

Let's partner up to design a sustainable and efficient eMobility charging solution for your electric fleet that suits your business needs, either for new projects or for upgrading your infrastructure, optimizing your installation with renewable energies, digital software, and management services.

Make your operation smarter

Efficiently manage your charging stations for optimized energy consumption and minimized carbon footprint while seamlessly monetizing your EV charging assets, which can be easily monitored and controlled through energy management capabilities.

Take the most of your new installation

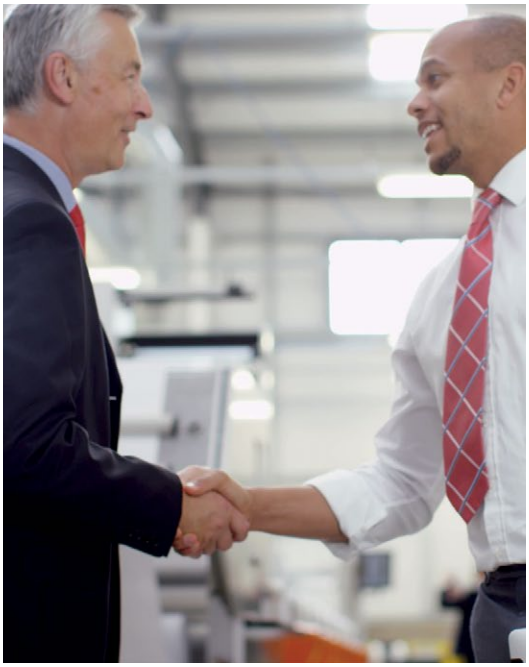
Take advantage of our experts to optimize the performance of your EV infrastructure and keep your assets running in optimum conditions throughout the whole lifecycle, from installation and commissioning, up to maintenance and modernization.

A professional network

Optimize uptime with the support of a network of certified experts for consulting, field, and remote services, trained and equipped with tools to execute on-site interventions, remotely diagnose, and manage your eMobility assets.

Get in touch for Support

As part of our partners and customers, you have access to our customer technical support!



We are here for you

Schneider Electric offers bespoke remote supports to help you improve your productivity by quickly resolving any technical issues related to your eMobility products, both for the hardware and software.

We speak your language

Your dedicated product specialists are just one phone call away to respond to all of your questions and help you with installation, configuration, troubleshooting, and diagnostics of your eMobility products.

Privileged access

Skip the line and solve the issue with a wider range for professional remote supports by subscribing to our service contract.

Download MySchneiderApp and Manage your eMobility Asset seamlessly!

Manage the performance of your asset

- Access to obsolescence reports and associated service recommendations.
- Access to the manufacturer's product documentation linked to your asset and store your own documents.

Anticipate any issues

- Be notified about recommended actions on your installed products: address your concerns on the right products and at the right time.

Technical Support

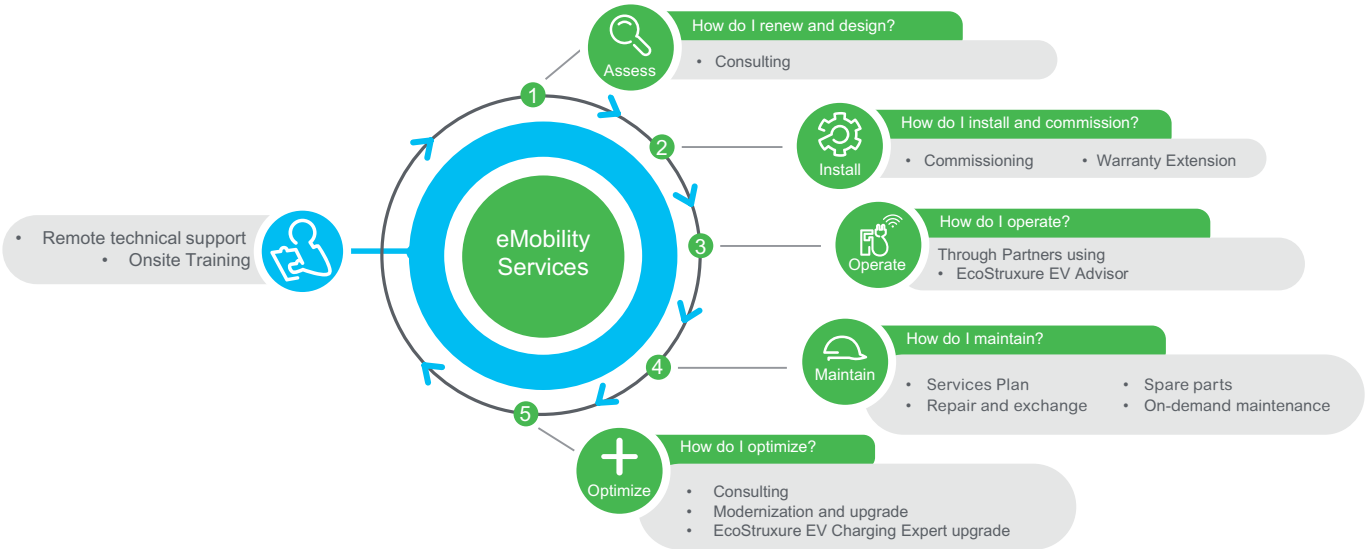
- Our FAQs and contact to Customer Care Center are available and customized to each of your registered asset.
- One click access to your dedicated technical support team.

Download the Application

REGISTER YOUR ASSET NOW

eMobility Services

Our comprehensive services cover the entire asset lifecycle of your charging station infrastructure, helping you improve productivity while reducing downtime and costs.



Our 4 service values

Service-level agreement

By ordering a service contract, get advantage of SLA providing peace of mind thanks to a better care of your EV Charging Infrastructure.

Personalized deal

Leverage a contract individually tailored to your requirements and conditions.

Increased lifespan of your equipment

Extend the life-span of your products and systems with preventive maintenance and services.

Schneider Electric expertise

Schneider Field Services representatives provide nationwide services with spare parts readily available for you.

Consulting

New to eMobility? We got you.

Whether for a new project or for upgrading your current infrastructure, our consultants will be there with you from the beginning to cover a complete eMobility integration fully tailored your fleet or building needs.

Consulting
Assessment
Support
and more...

Contact your local eMobility sales representative for further information

eMobility Services for infrastructure owners

Schneider Electric helps you to optimize the cost of your eMobility infrastructure and extend the life span of your assets.

We provide a wide range of services adapted to your charging infrastructure and on the type of your ecosystem.

Warranty Extension

Long-term protection of your asset with warranty extension

Enjoy peace of mind long after your standard warranty expires. Schneider Electric factory warranty covers your AC charging station for 18 months and your DC charging station for 24 months, from the delivery date.

Our warranty extension allows you to expand your factory warranty for an additional one or three years, giving you more flexibility, peace of mind, and improved control of your maintenance budget.

Benefits

- Keep repair costs under control
- Reduce maintenance cost of new products installed
- Benefit from Schneider Electric experts to perform repair
- All repairs use Schneider Electric manufactured spare parts and components
- Coverage flexibility to choose between one or three years

The warranty extension can only be ordered at the time of purchasing your EVlink charging station.
To register your warranty extension upon purchasing, please contact our Customer Care center.

Service Plan

Extend life and performance of your equipment with our Services Plan

At Schneider Electric, we believe that the time and cost associated with EV charging infrastructure should never be constraints to achieving your sustainable goals.

With a fixed yearly plan, you can expect top-of-the-line quality services from Schneider electric for your eMobility infrastructure. All that in addition to a priority access to on-site and remote support and preferential price on our spare parts ecosystem.

Benefits

Total control of your budget

- One fix yearly plan for all your maintenance needs.
- Help to reduce downtime thanks to regular preventive maintenance.

Greater availability and peace of mind

- All the intervention are done by Schneider Electric certified experts.
- Scheduling a maintenance have never been so easy with our phone and app support, hence expanding the life span of your products to the maximum.

Continuous support

- 24/7 phone support.
- On-site intervention and priority access to spare parts.

eMobility Services for Partners

Are you responsible for the installation, operation and maintenance of an eMobility infrastructure? Schneider Electric helps you develop new competencies and get support from our high-qualified experts to make your business more efficient.

Commissioning

For complex architectures with EVlink Pro AC or and Pro DC charging stations

Reliable and time-efficient support are as crucial as the quality of the product themselves. At Schneider Electric, we take technical supports very seriously.

Our technical experts provide on-site and remote assistance in commissioning new charging stations translated into a seamless adaption of our EcoStruxure EV charging expert for your clients.

Our certified technicians will help the equipment to be properly commissioned and programmed. In addition, you will receive a detailed commissioning report, signed off by a Schneider Electric engineer, certifying the equipment is set up correctly and covered by our warranty.

Benefits

- Thanks to our worldwide network of Schneider Electric technical specialists, the eMobility infrastructure's start-up time is reduced
- Take the advantage of on site training by Schneider Electric technical experts
- Leverage installation that complies with Schneider Electric standard of practices and therefore optimizes equipment uptime and costs

Mobile Apps

Easy commissioning with eSetup

eSetup for Electricians is a dedicated app for EVlink Pro AC, Wiser and Facility Expert SB products from Schneider Electric.

- Save time on installation & commissioning since everything can be done within the app.
- Access to charge details report and maintenance report from the app.

Download the Application

EcoStruxure Facility Expert

A free application to improve your operational efficiency and develop your services business

- Accurate planning of preventive maintenance tasks and interventions which leads to reducing working time
- Greater visibility of your work by easily generated reports that will allow you to create bills faster
- Details of activities undertaken during a given period that will demonstrate the impact of your company's services
- A way to share information securely internally or externally, as your customers will easily have access to the digital copies of your transactions.

Download the Application

eMobility Training

Schneider Electric offers a wide selection of training solutions to enhance your competencies in the right area of expertise.
In addition, you could maximize your workforce effectiveness through our comprehensive eMobility training and increase the knowledge of functionality and practices in commissioning, operating and maintaining your EV infrastructure.

eMobility Certified Expert Program

Schneider Electric eMobility certified experts lead the way to adopt new technology and processes to deliver high-quality interventions and solutions that provide valuable business values to our customers.

By becoming part of our certified expert network, you will be able to enter the growing eMobility business and unlock new business opportunities while at the same time have access to several benefits provided by Schneider Electric exclusively for our certified experts.

Join our professional network of certified eMobility partners to follow a continuous specialization path designed to deliver best in class services. Benefit from of our smart charging technology to expand and differentiate your business.

Benefits

- Access to innovative digital tools and technical data on-demand
- Gain in-depth knowledge and expertise from exclusive partner training
- Schneider Electric certified expert status

Approved Installer
for EVlink™
Schneider Electric™

Find your
tailored partner
program here

eMobility Services

Commercial references

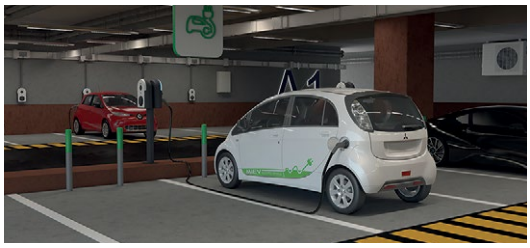
Warranty Extension		
Description	Product	Commercial reference
Additional 1-year Warranty Extension	EVlink Pro AC	**EVS2W1B**
Additional 3-year Warranty Extension	EVlink Pro AC	**EVS2W3B**

Commissioning		
Description	Product	Commercial reference
Remote assistance	Max. 5 EVlink Pro AC charging stations with EcoStruxture EV Charging Expert	**EVS1CR0L**
	5 to 15 EVlink Pro AC charging stations with EcoStruxture EV Charging Expert	**EVS1CRSL**
	Max. 5 EVlink Pro AC charging stations	**EVS1CR0**
	5 to 15 EVlink Pro AC charging stations	**EVS1CRS**
	Option: connection to a supervision	**EVS1CRCPO**
OnSite	Max. 5 EVlink Pro AC charging stations with EcoStruxture EV Charging Expert	**EVS1CF0L**
	5 to 15 EVlink Pro AC charging stations with EcoStruxture EV Charging Expert	**EVS1CFSL**
	15 to 50 EVlink Pro AC charging stations with EcoStruxture EV Charging Expert	**EVS1CFML**
	50 to 100 EVlink Pro AC charging stations with EcoStruxure EV Charging Expert	**EVS1CFLL**
	Max. 5 EVlink Pro AC charging stations	**EVS1CF0**
	5 to 15 EVlink Pro AC charging stations	**EVS1CFS**
	15 to 50 EVlink Pro AC charging stations	**EVS1CFM**
	Option: connection to a supervision	**EVS1CFCPO**


MiEV
ELECTRIC VEHICLE

Electrical Distribution for eMobility

EVlink™ terminal distribution kit



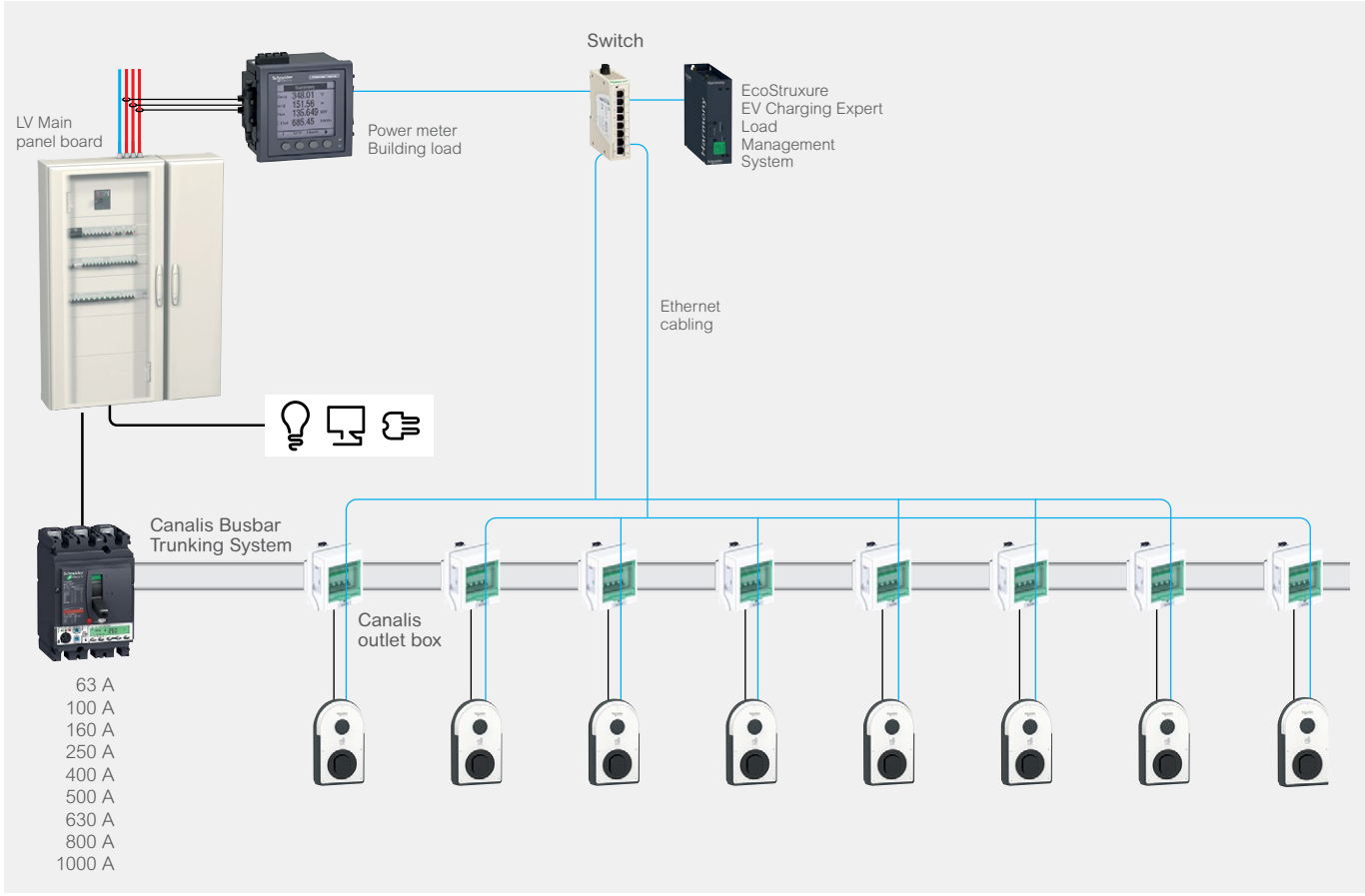
Canalis busbar trunking system

Decentralized EV chargers electrical distribution with Canalis™ busbar trunking system allows you to save time and cost on installation, and to be ready for future extensions.

Save space and cost in your LV Switchboard:

- Installation in half the time in comparison with cables
- Future readiness

Decentralized distribution with Canalis is an optimized solution for indoor car parks / garages, bringing easy servicing and scalability. EVlink terminal distribution kits enable direct connection to the busbar.



Canalis KN, Canalis KS preassembled protection kits for EV chargers*

Technical specification

Canalis KS tap-off unit
KSB63SM48

MCB
A9F07440

RCD
A9Z51440

2-pole and 4-pole pre-assembled and pre-cabled kits for 1 x 8-module tap-off unit

- 1 x circuit breaker
- 1 x RCD B-type for electric vehicle applications

Offer presentation

Canalis KN,
distribution from 40 to 160 A

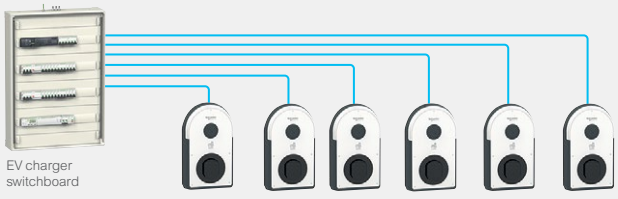
Charging station power	Description of the kit	Included	References		
kW		Tap-off unit	MCB	RCD	Kit
3.7	Protection kit Canalis KN 8 mod. 2P MCB 25 A RCD B EV	KNB63SM48	A9F07220	**A9Z51225**	EVK8KN2PB25
7.4	Protection kit Canalis KN 8 mod. 2P MCB 40 A RCD B EV		A9F07240	**A9Z51240**	EVK8KN2PB40
11	Protection kit Canalis KN 8 mod. 4P MCB 25 A RCD B EV		A9F07420	**A9Z51425**	EVK8KN4PB25
22	Protection kit Canalis KN 8 mod. 4P MCB 40 A RCD B EV		A9F07440	**A9Z51440**	EVK8KN4PB40

Canalis KS,
distribution from 100 to 1000 A

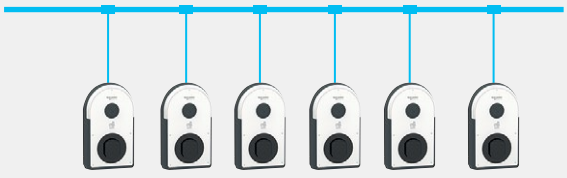
Charging station power	Description of the kit	Included	References		
kW		Tap-off unit	MCB	RCD	Kit
3.7	Protection kit Canalis KS 8 mod. 2P MCB 25 A RCD B EV	KSB63SM48	A9F07220	**A9Z51225**	EVK8KS2PB25
7.4	Protection kit Canalis KS 8 mod. 2P MCB 40 A RCD B EV		A9F07240	**A9Z51240**	EVK8KS2PB40
11	Protection kit Canalis KS 8 mod. 4P MCB 25 A RCD B EV		A9F07420	**A9Z51425**	EVK8KS4PB25
22	Protection kit Canalis KS 8 mod. 4P MCB 40 A RCD B EV		A9F07440	**A9Z51440**	EVK8KS4PB40

Electrical distribution architectures

Centralized distribution



Canalis distribution (decentralized)



* Check availability in your country.

A-SI Type earth leakage protection

"I want to get the best from my electric car by installing an EV charging station at home"

Acti9 iCV40N Type A-SI

"High-end protection solution"

Customer story

Mr and Mrs Smith own an electric car, but there are not many charging points close to work or home. They always have to check around to charge the car. They don't want to waste more time, so they decided to install an EV charging station at home. They will enjoy full availability at the end of the day, and they can save money by charging at home.

This is a small investment that will bring value to their house and that simplify their daily habits.

Of course, they want the solution to be efficient and compliant with standards.

Acti9 iCV40N RCBO Type A-SI is certified (IEC/EN 61008-2-1) and is fully compatible with EV charging station for residential application.

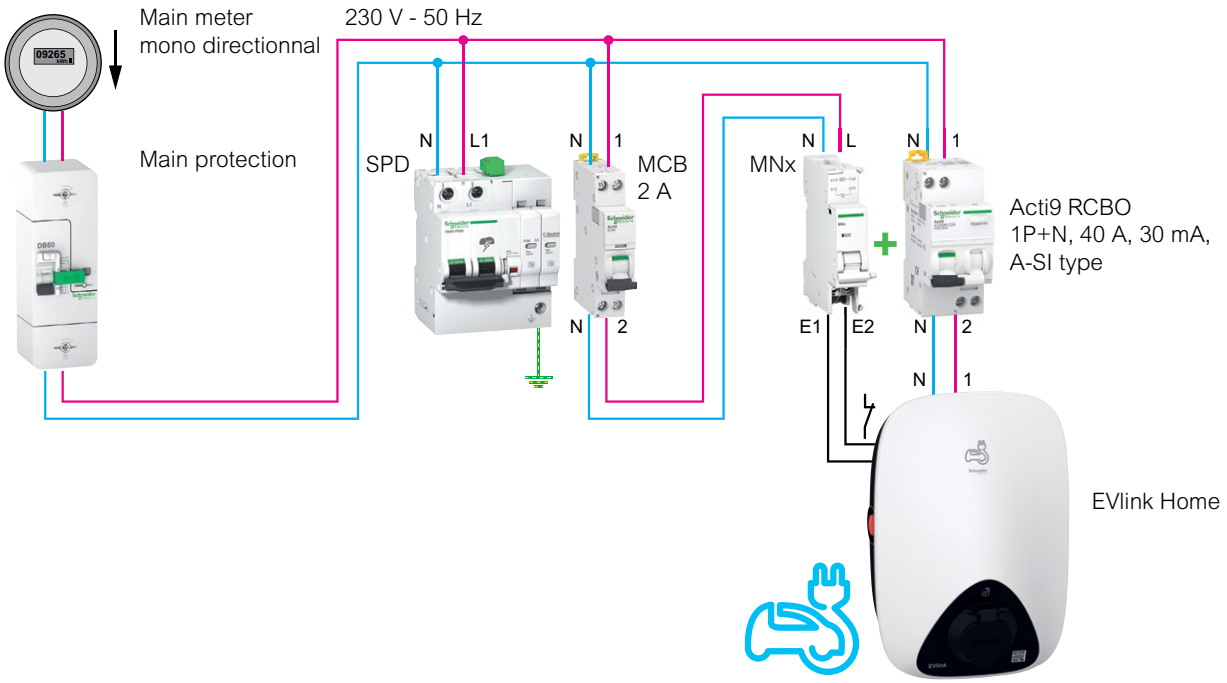
Proposed solution

The EV charging station plug is manipulated daily by Mr and Mrs Smith. It is usually installed outside the home, being exposed to rain, snow, dust and humidity. That is why IEC 60364-7-722 standard require a 30 mA residual current protection for direct contact.

Acti9 iCV40N RCBO Type A-SI is designed to:

- **Helps to protect people** against multifrequency components earth leakage current, generated by charging station technology that can cause fibrillation and electrocution.
- **Simplify operation** thanks to VisiSafe™ and VisiTrip™.
- **Monitor and control the electrical panel** with PowerTag and Smartlink auxiliaries.

Solution diagram



Note: defining protections during design phase helps to avoid upstream and parallel protection disablement (blinding of upstream and parallel protection due to direct current signal presence).

For more information about selectivity and coordination of protections, refer to earth leakage protection guide reference CA908066E and associated coordination tables.

Products used

Product	Description	Quantity	Reference
EVlink Home	EV Charging Station	1	Refer to EVlink Home (p. 8)
Acti9 iCV40N 1P+N	Residual current breaker with overcurrent protection Type A-SI	1	Specific to country
Acti9 iMNx	Undervoltage release tripping unit	1	A9A26476

B EV Type earth leakage protection

> "I want to provide to my customers the appropriate electrical protection for their EV charging solution"

Acti9 iID B type for EV

An optimum solution covering people and the EV supply equipment

Customer story

More and more customers are driving electric cars, this is a real trend today. They are looking for a car park where they can rest, have fun or go shopping, but where they can also recharge their cars.

Improving my company's image by going green is good. Moreover i can benefit from the government's help and attract new customers.

Acti9 iID B type RCCB for EV is certified (IEC/EN 62423) and is fully compatible with EV charging station for residential and tertiary application.

Proposed solution

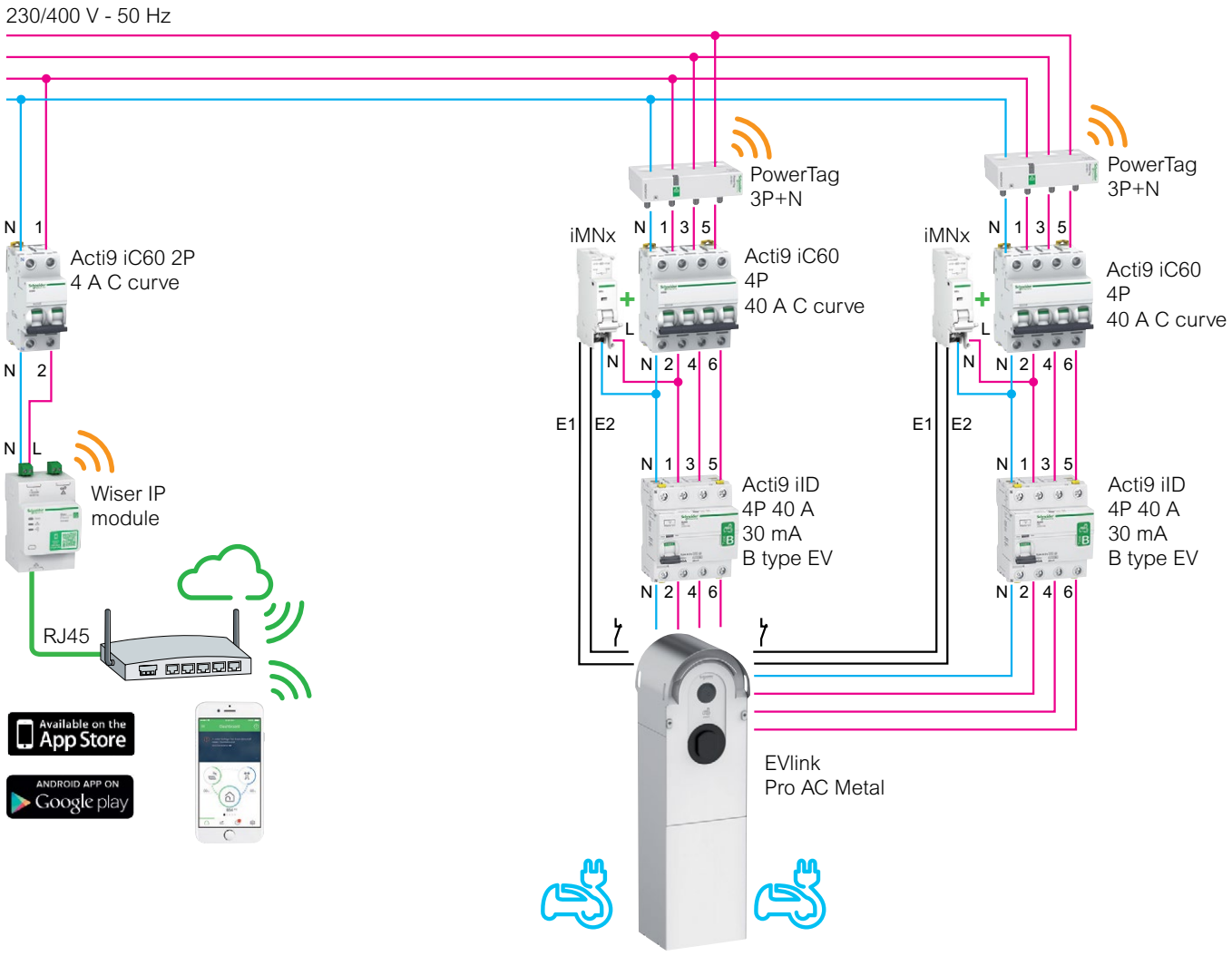
The EV charging station socket outlet is manipulated daily by the customers, and it is usually installed outdoor, being exposed to rain, snow, dust, humidity and temperature variation.

That is why IEC 60364-7-722 standard require a 30 mA residual current protection for direct contact.

Acti9 RCCB iID B type EV is designed to:

- **Helps to protect people** against multifrequency earth leakage current, generated by charging station technology that can cause fibrillation and electrocution.
- **Monitor and control the electrical panel** with PowerTag and Smartlink auxiliaries.
- **Be installed in coordination** with other upstream and parallel RCD (refer to Schneider Electric Residual Protection Device guide for coordination tables).

Solution diagram



Products used

Product	Description	Quantity	Reference
EVlink Pro AC	EVlink Pro AC 22kw 32A 3PH T2S SOCKET MID embedded - MNX supplied	2	EVB3S22N40M
EVlink Pro AC Metal kit	EVlink metallic kit for AC floor standing charger 2 charge points	1	EVA1RFKS2
Kaedra enclosure	IP65 1 x 12 modules of 18mm - 267 x 200 x 112 mm	2	Specific to country
Acti9 iMNx supplied with EVlink Pro AC	Undervoltage release tripping unit	-	A9A26969
Acti9 iID 2P 40 A 30 mA B type EV	RCCB for EV charging station	2	A9Z51240
MCB 3P+N 40A C curve 6kA/10kA	MCB per charge point	2	Specific to country
MCB 4P 80A C curve 10kA	MCB protection for EVlink Pro AC Metal in the switchboard	1	Specific to country
Wiser IP Module	IP communication module	1	EER31800
3P+N PowerTag energy sensor	Add-on energy sensor	2	A9MEM1541

iMNx: undervoltage release tripping unit

iMNx is an undervoltage release, independent from supply voltage function. A drop in the supply voltage does not trip the associated device. Stoppage utilization with fail-safe principle and insensitive helps to control circuit voltage variation and to increase service continuity.

Charging an electric vehicle means connection to a powerful electricity supply, which implies some benefits but also some risks that can be reduced with properly designed, and installed electrical architectures. In addition to the RCD and MCB device most of EVlink Pro AC embeds the iMNx release. If not embedded, iMNx is supplied with the charging station.

This helps to avoid risk during intervention on electrical equipment.

Regardless of the RDC-DD 6 mA, the MNx is mandatory for the compliance with EV Ready requirements as from 7.4 kW and in accordance with IEC60364-5-53 requirements.

Why?

Further to a downstream short circuit, the contactor may no longer open the charging circuit if contacts are welded.

As a result, any DC fault current cannot be removed and the permanent voltage presence on the socket outlet is risky for people on overall when no shutter in it. IEC61851 ed3.0 §8.1 does also recommend a monitoring to provide isolating function.

Schneider Electric Power distribution

Reliability

Protection against:

- Overload and Short circuit
- Direct contacts
- Over and Under voltage
- Lightening
- Electrical Arc


MCCB


MCB


RCD

Energy Management

Business Efficiency


OF, MX


Metering solutions


EcoStruxure Panel Server

Distribution systems


Canalis


Kaedra


Pragma


PrismaSeT range

Metering solutions

Metering solutions to display the active energy consumed.

- Maximize charging power in residential and small tertiary application
- Provide a MID certified meter so that the payment and billing is linked to the amount of the energy consumption
- Send active energy consumed information in OCPP to a supervision with communicating meters.

Standalone meters with external current transformers

METSEPM5320

PowerLogic Power meter

Commercial reference	METSEPM5320
Communication	1 Ethernet port
Accuracy class	0.5 S
Dimensions	96 x 96 x 72 mm (H x W x D)
Consumption	130 mA / 24 V DC - 65 mA / PoE 48 V DC
To be completed with (not provided) • a closed Current Transformer • a cut-off device • a short-circuiting block	

PowerLogic PM5000 series power meters offer high-end cost management capabilities in a straightforward metering platform.

A9MEM2155

A9MEM3155

iEM Energy meters - MID

Commercial reference	A9MEM2155	A9MEM3155
Communication	Modbus	Modbus
Class of accuracy	Class 1 active energy conforming to IEC 62053-21 Class 2 reactive energy conforming to IEC 62053-23 Class B active energy conforming to EN 50470-3	Class 1 active energy conforming to IEC 62053-21 Class 1 active energy conforming to IEC 61557-12 Class B active energy conforming to EN 50470-3
Width	36 mm	90 mm

Acti 9 iEM3000 series energy meters are a cost-attractive, feature-rich energy meter for DIN rail, modular enclosures.

More than just kWh meters, the Acti 9 iEM3000 series meters provide a full view of both energy consumption and on-site generation with full four-quadrant measurement of active and reactive energy delivered and received.

Metering solutions

EcoStruxure Panel Server
PAS600

EcoStruxure Panel Server

Commercial reference	PAS600 / PAS600L / PAS600T
Ethernet communication	2 Ethernet ports type 10/100 Base: HTTPS, Modbus TCP/IP, SFTP, SNMP, ARP
Serial communication	1 serial port (RS485, 2 wires) – RS232 not supported
	Modbus serial protocol
Power supply	24VDC, POE, 100-240VACDC, 100-277VACDC (different Panel Server references)
Consumption	3W max for 24 V DC – 5W max for 100-240VACDC, 100-277VACDC
Width	72 mm
Operating temperature	-25°C to +70°C

Next-generation IoT gateway for an intelligent power network.

EcoStruxure Panel Server is a modular gateway with enhanced cybersecurity that provides easy and fast connections to multiple concurrent edge control or cloud applications.

Circuit breakers with embedded metering

Enerlin'X communication system provides access to status, electrical values and devices control using Ethernet and Modbus SL communication protocols.

Enerlin'X IFE
LV434002

ComPact NSX

Enerlin'X IFE switchboard server, ComPact NSX circuit breaker

Commercial reference	LV434002
Enerlin'X IFE provides an Ethernet interface to a ComPact NSX circuit breaker when it embeds a metering module	
Electrical distribution	3-P, 4-P
Communication	Modbus TCP with circuit breaker
Metering	charging stations energy consumption

MasterPact MTZ with Micrologic Control unit and Enerlin'X EIFE
LV851001

Enerlin'X EIFE Embedded Ethernet interface for draw out Masterpact MTZ

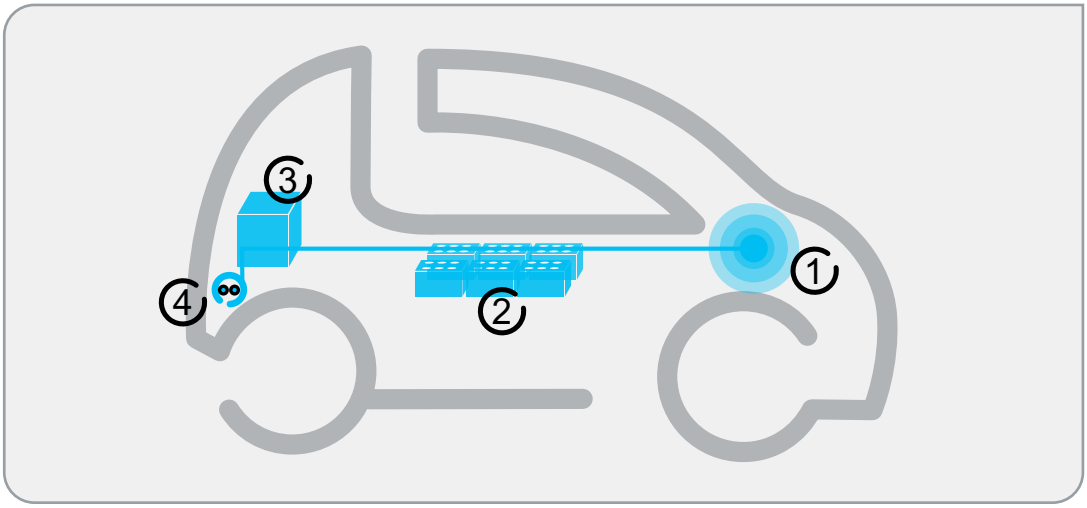
Commercial reference	LV851001
Enerlin'X EIFE provides an embedded Ethernet interface to a MasterPact circuit breaker whose Micrologic Control unit can perform the charging stations metering	
Electrical distribution	3-P, 4-P
Communication	Modbus TCP with circuit breaker
Metering	charging stations energy consumption


Schneider Electric
Learn more
Mobility

Appendix

Electrical Vehicle additional information

How does it work?



4 major items:

1 Motor

The vehicle has one or more motors. Depending on size and performance, the total power ranges between 15 and 200 kW.

Example: 48 kW (65 hp) for a small 4-seater sedan.

2 Batteries

Battery technology has made very significant progress in recent years. Lead has gradually been replaced by other, more efficient compounds. Research continues with a view to improving capacity and reducing weight.

The most common technology at present is lithium-ion.

These new batteries have no memory effect and can therefore be charged without having to be completely empty beforehand. They are present in telephones, laptop computers, and some aircraft, as well as in electric vehicles.

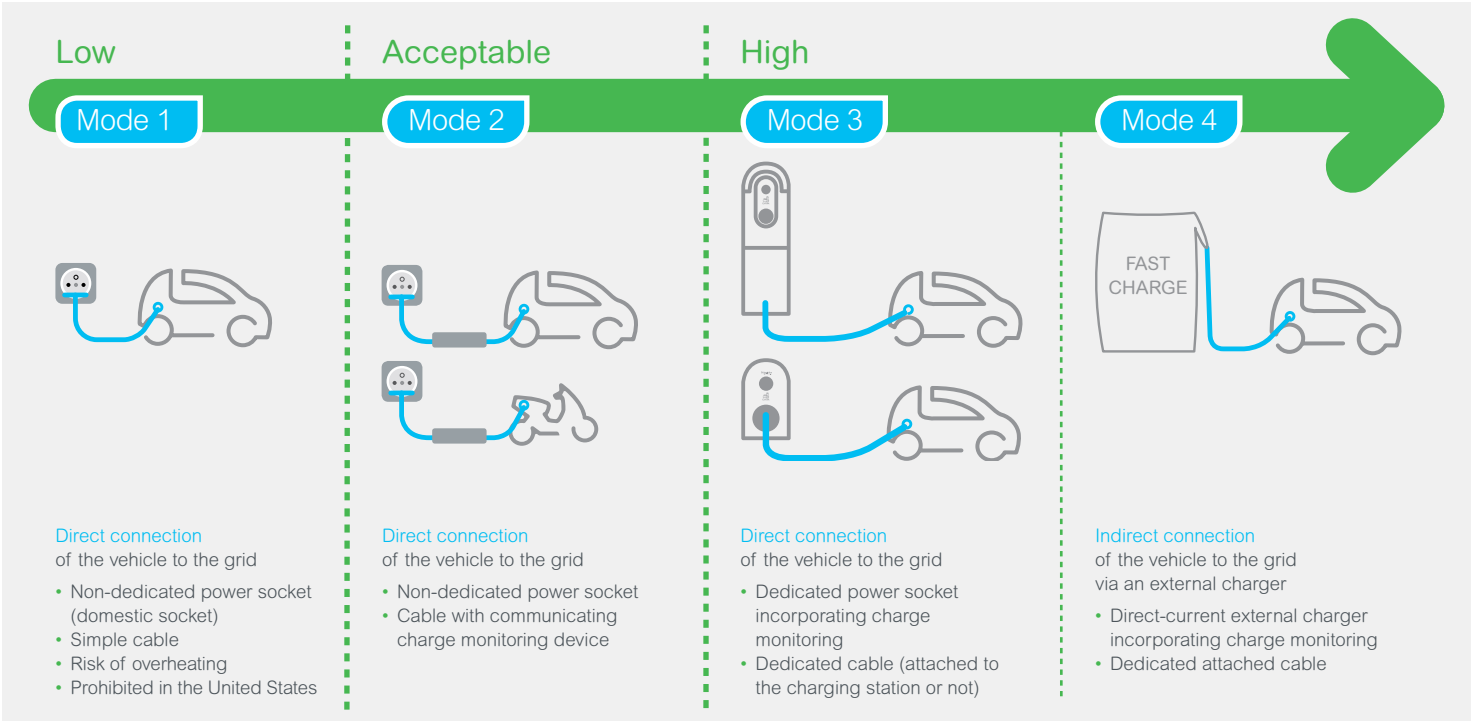
3 On-board charger

The vehicle is fitted with one battery charger supplied in AC by the charging station that defines the maximum charging current available. In some vehicles the battery charger may also be supplied in DC by the charging station.

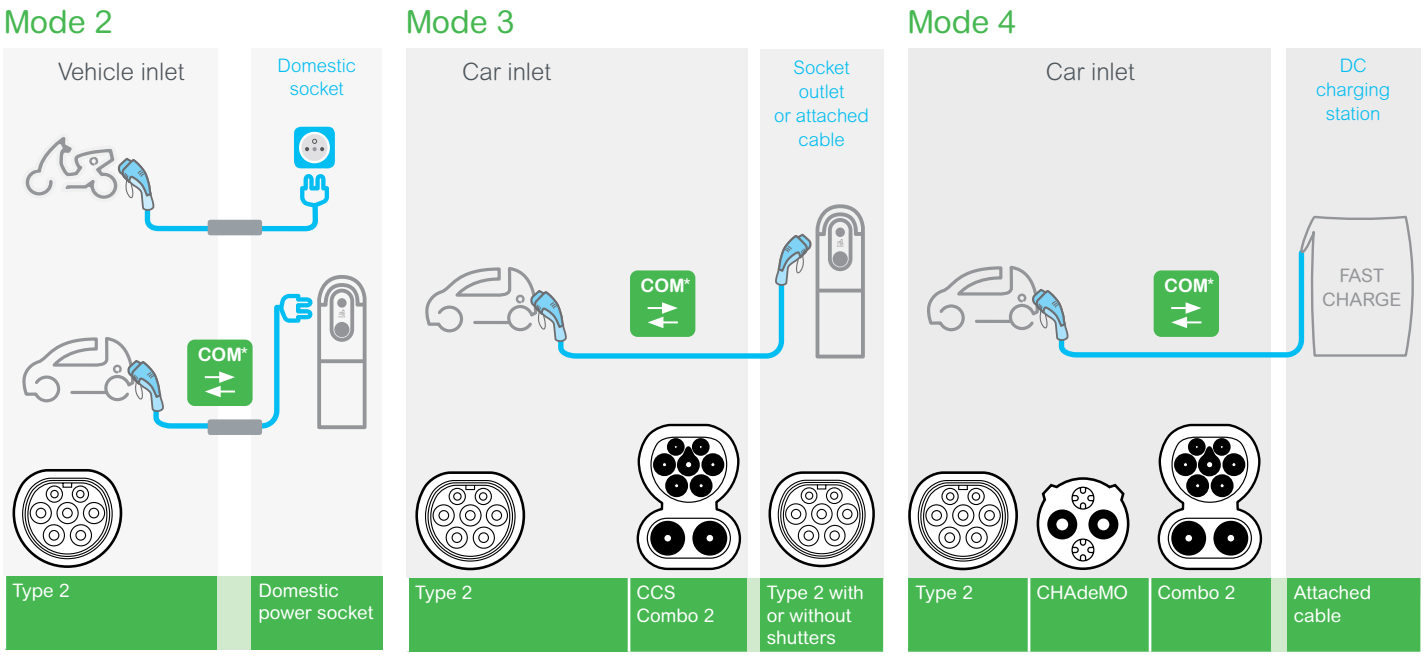
4 Charging inlet

The vehicle is fitted with at least one inlet for AC charging. In some vehicles the inlet can also be used for DC fast charging or is completed by a second inlet for DC fast charging.

The charging mode determines the protection level



Mode 2, Mode 3 or Mode 4 determines the type of charging connectors



*Focus on technology

Charging cable

A "COM" wire allows data communication between the vehicle and the charging station. The charging process starts only if the following information is OK:
- Vehicle earthing
- Indication of the charging cable rating.

Electrical Vehicle additional information

The effective charging capacity is that of the weakest "link", for example:

Vehicle charger	Cable/charging mode	Charging point	Effective charging capacity
 7 kW	2.3 kW (Mode 2)	 Domestic power socket 2.3 kW (Mode 2)	2.3 kW
 7 kW	7.4 kW (Mode 3)	 Charging station 22 kW	7.4 kW

The power of the source determines the charging speed*

Example: for a vehicle with a 40 kWh battery:

Source used	Domestic power socket	Dedicated AC power socket		Dedicated DC power socket
Power	Single-phase: 2.3 kW	Single-phase: 7.4 kW	Three-phase: 22 kW	Three-phase: 24 kW
Time to "fill up"	 18 h	 7 h	 2h30 min	 2h
% of charge reached in 30 min	3%	7%	 20%	 25%

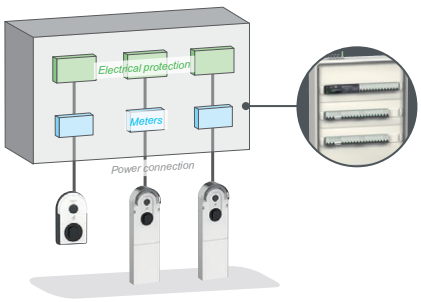
* Subject to the use of a suitable cable.

Focus on technology

Electrical distribution architecture

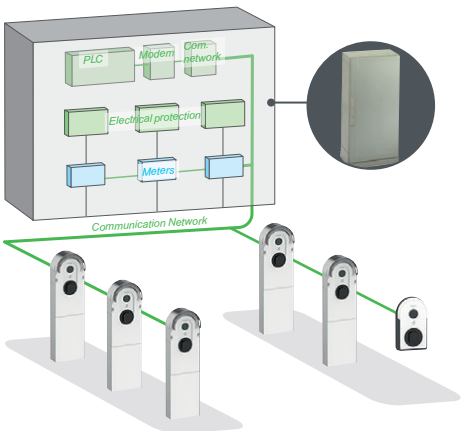
Standalone

One or several charging stations can be connected to the same protection panel.
Each charging station operates independently.
They are protected upstream and their consumption can be measured. The charging stations can be connected to a supervision.



Clustered

An alternative way is to manage energy availability: EcoStruxure EV Charging Expert.
It makes it possible to consider various needs related to the use of the vehicles that will be charged. A cluster consists of charging stations, from 3 to 1000 charging stations, controlled by EcoStruxure EV Charging Expert, power meter, 3G/4G modem, etc., that can be connected to a supervision.



Electrical Vehicle standards

Charging an electric vehicle means connection to a powerful electricity supply.
All electrical installations should be properly designed, constructed, and treated with caution according to the IEC standards for EV installations. Learn more:

The International Electrotechnical Committee (IEC) defined a set of standards, covering devices, protection and electrical installation.

IEC 61851 standard for EV supply equipment

This standard defines the fundamental aspects of EV charging and contains all the requirements covering the EVSE, as an equipment. Therefore, the EVSE must comply to IEC 61851 series and shall be supplied according to IEC 60364-7-722 Requirements.

Electric Vehicle Supply Equipment complying to IEC 61851-1 edition 3

IEC 60364 -part 7-722 for Low Voltage installations

International series of standard for Low Voltage Electrical Installations (IEC 60364 series) contains a new part dedicated to supply of electric vehicle.

IEC 60364 part 7-722 requires electrical protective measures:

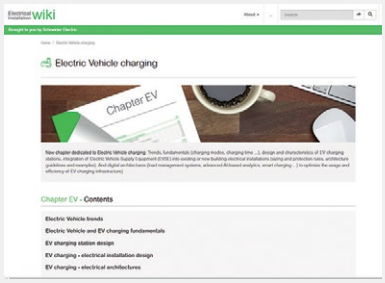
- **Protection against short-circuits and overloads with circuit-breakers**
- **Protection against electric shocks and risks of electrocution with 30 mA RCD.**
  RCD shall preferably be of type B, or possibly of type A in case the EVSE contains a 6 mA DC detection
- **Protection against overvoltage with surge protective device (SPD)**

Acti9 iC60 circuit breaker

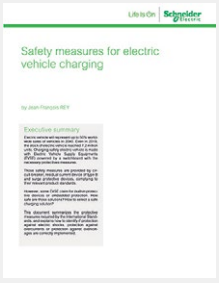
Acti9 B type
Earth leakage protection

Acti9 Surge Protection Device

Learn more



Wiki Guide
for electric vehicle charging

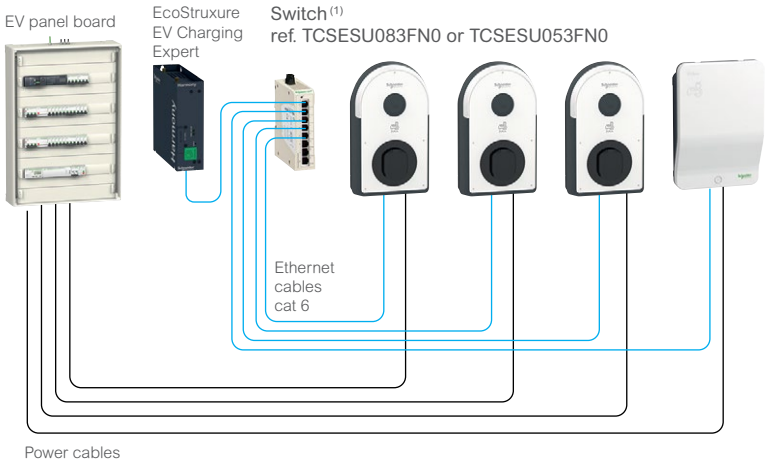


White Paper
Safety measures for electric vehicle charging

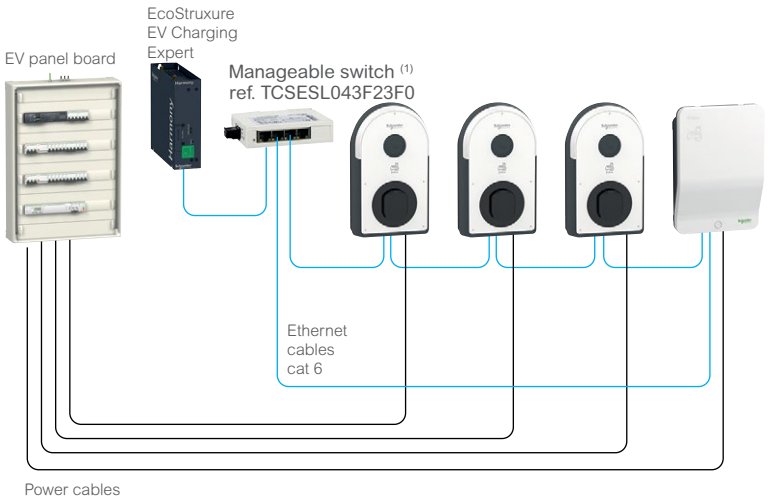
EcoStruxure™ EV Charging Expert

IT network possible topologies

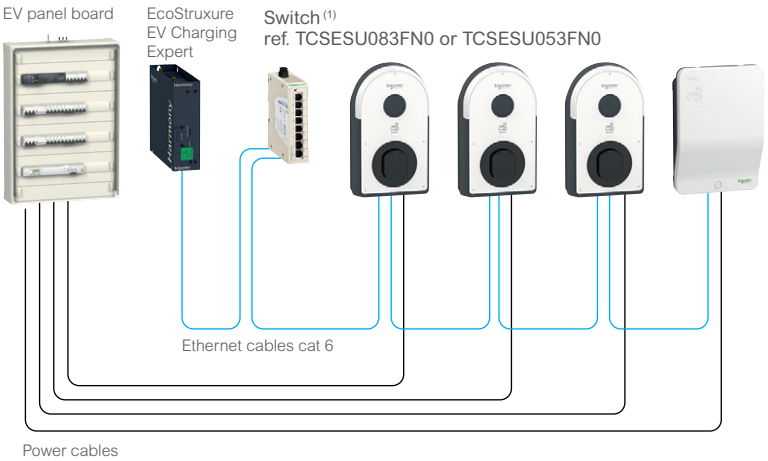
Star topology



Ring topology



Daisy chain topology (2)



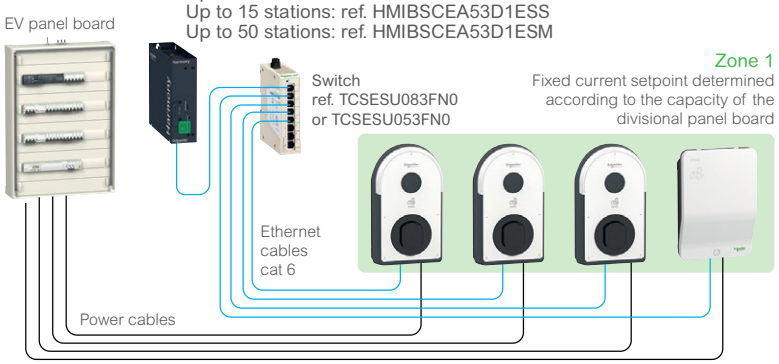
(1) Provide 3 available ports on the switch for a computer (settings and maintenance), a modem, the customer network, etc.
(2) This topology does not ensure optimum continuity of service.

Typical load management architectures

Static enegy management: Dynamic load management below a fixed current setpoint

Single-zone

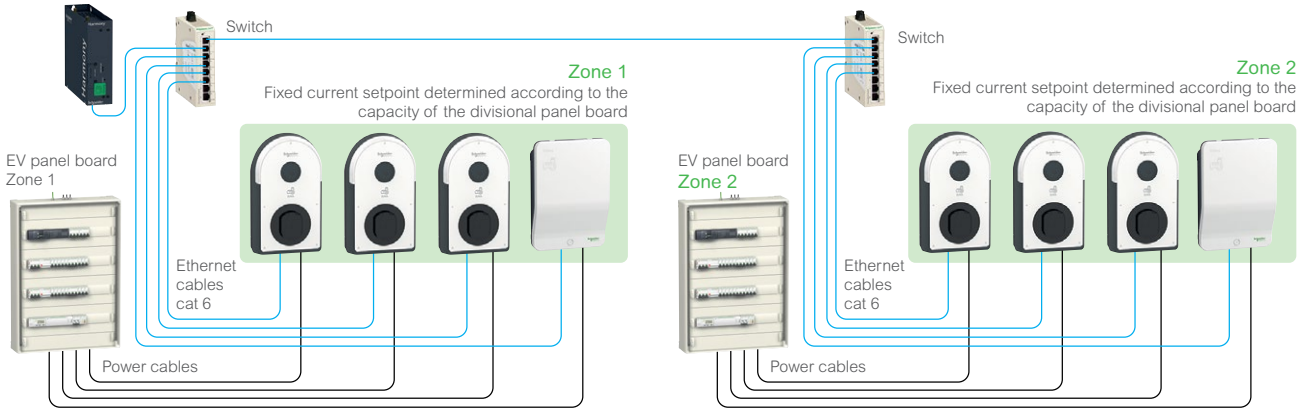
EcoStruxure EV Charging Expert
Up to 5 stations: ref. HMIBSCEA53EDB
Up to 15 stations: ref. HMIBSCEA53D1ESS
Up to 50 stations: ref. HMIBSCEA53D1ESM



To select the right EcoStruxure EcoStruxure EV Charging Expert commercial reference based on all available features, please check the selection table on page 53.

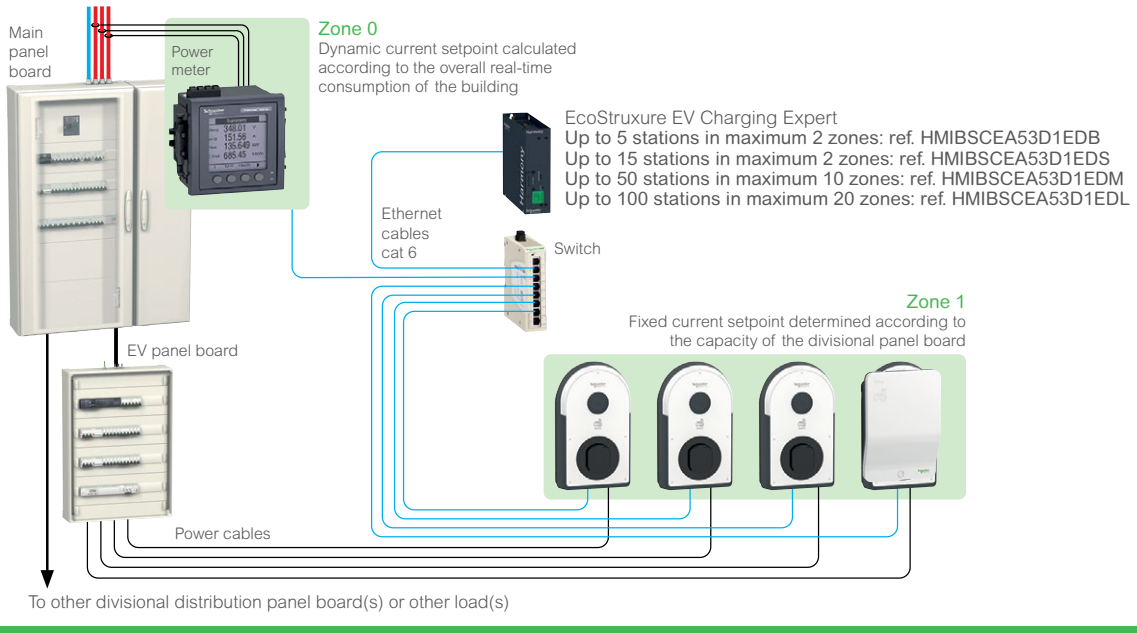
Multi-zone (multiple switchboards)

EcoStruxure EV Charging Expert
From 1 to 5 stations in total, in maximum 2 zones: ref. HMIBSCEA53D1EDB
From 1 to 15 stations in total in 1 same zone: ref. HMIBSCEA53D1ESS
From 1 to 15 stations in total, in maximum 2 zones: ref. HMIBSCEA53D1EDS
From 1 to 50 stations in total, in maximum 10 zones: ref. HMIBSCEA53D1ESM



Dynamic load management from a dynamic current setpoint

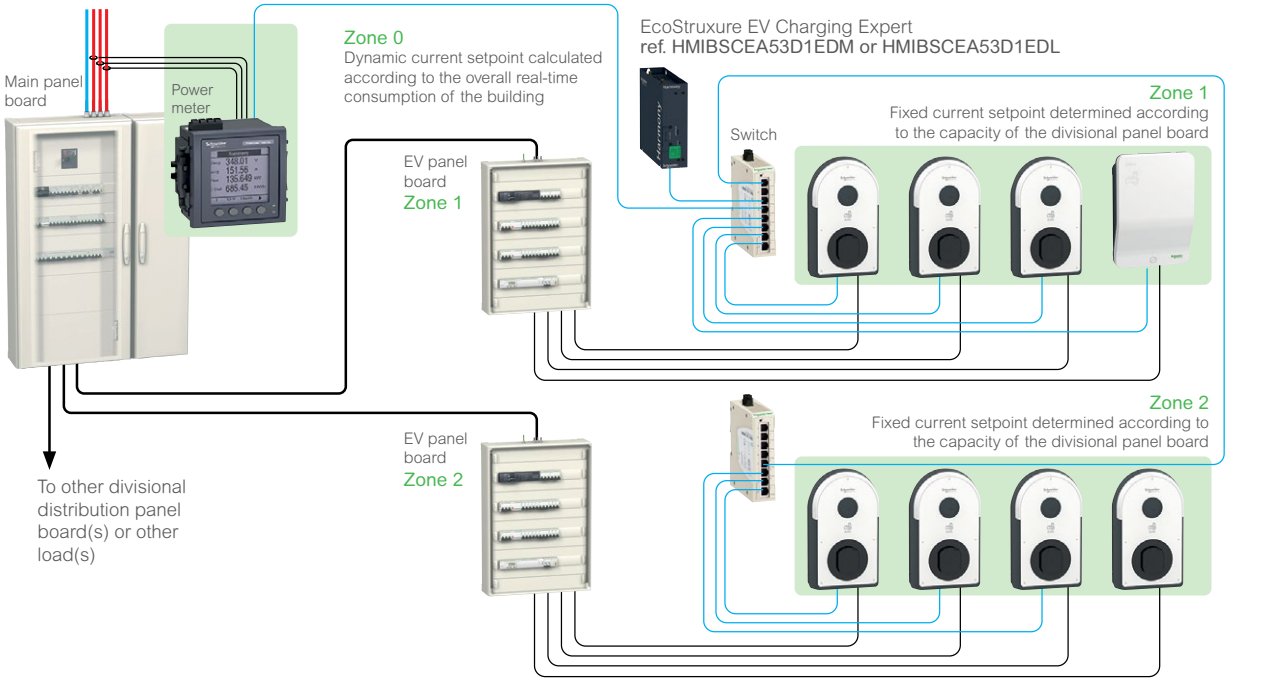
Multi zone[1]

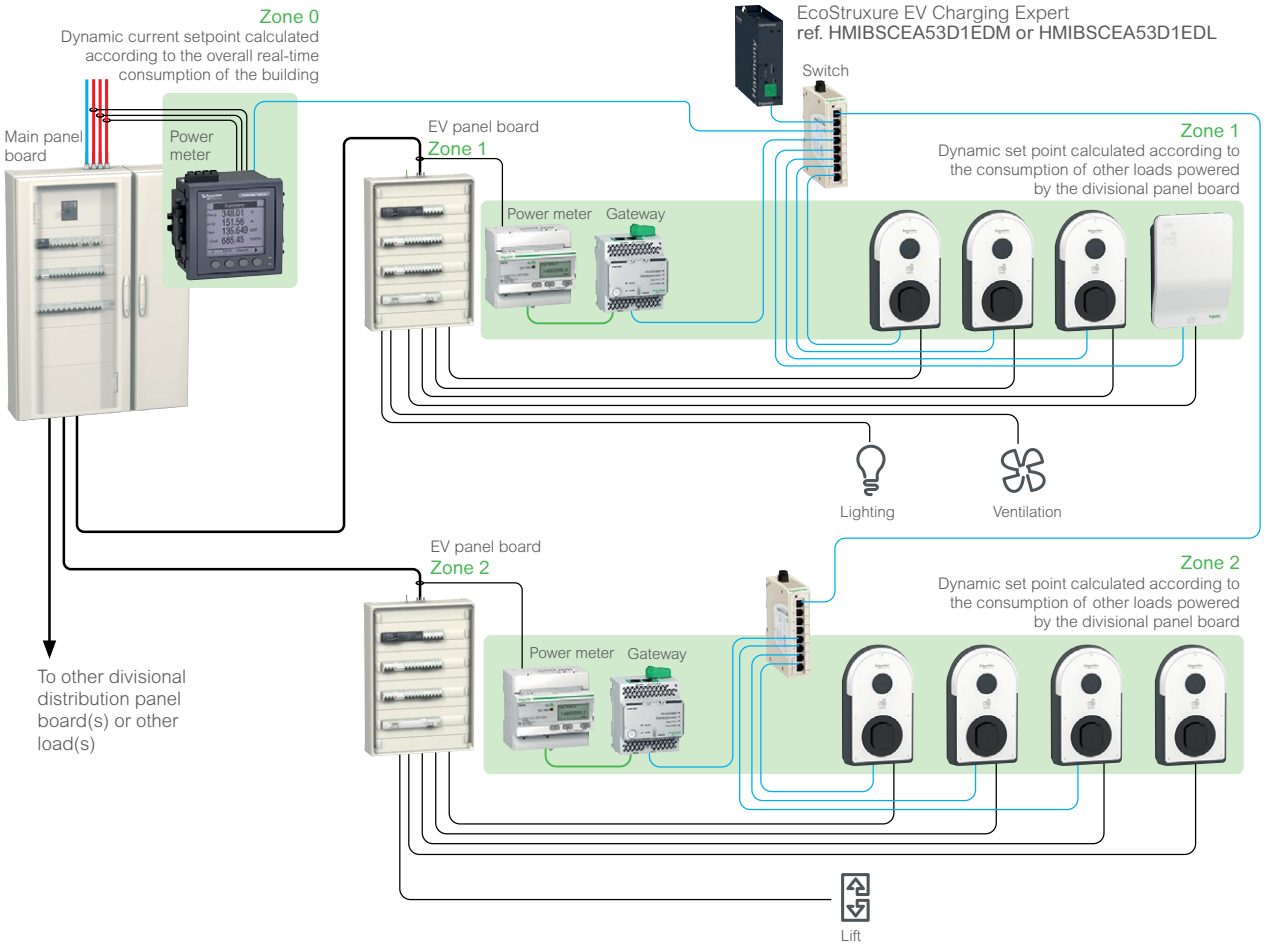


EcoStruxure™ EV Charging Expert

Typical load management architectures

Multi zone(1)





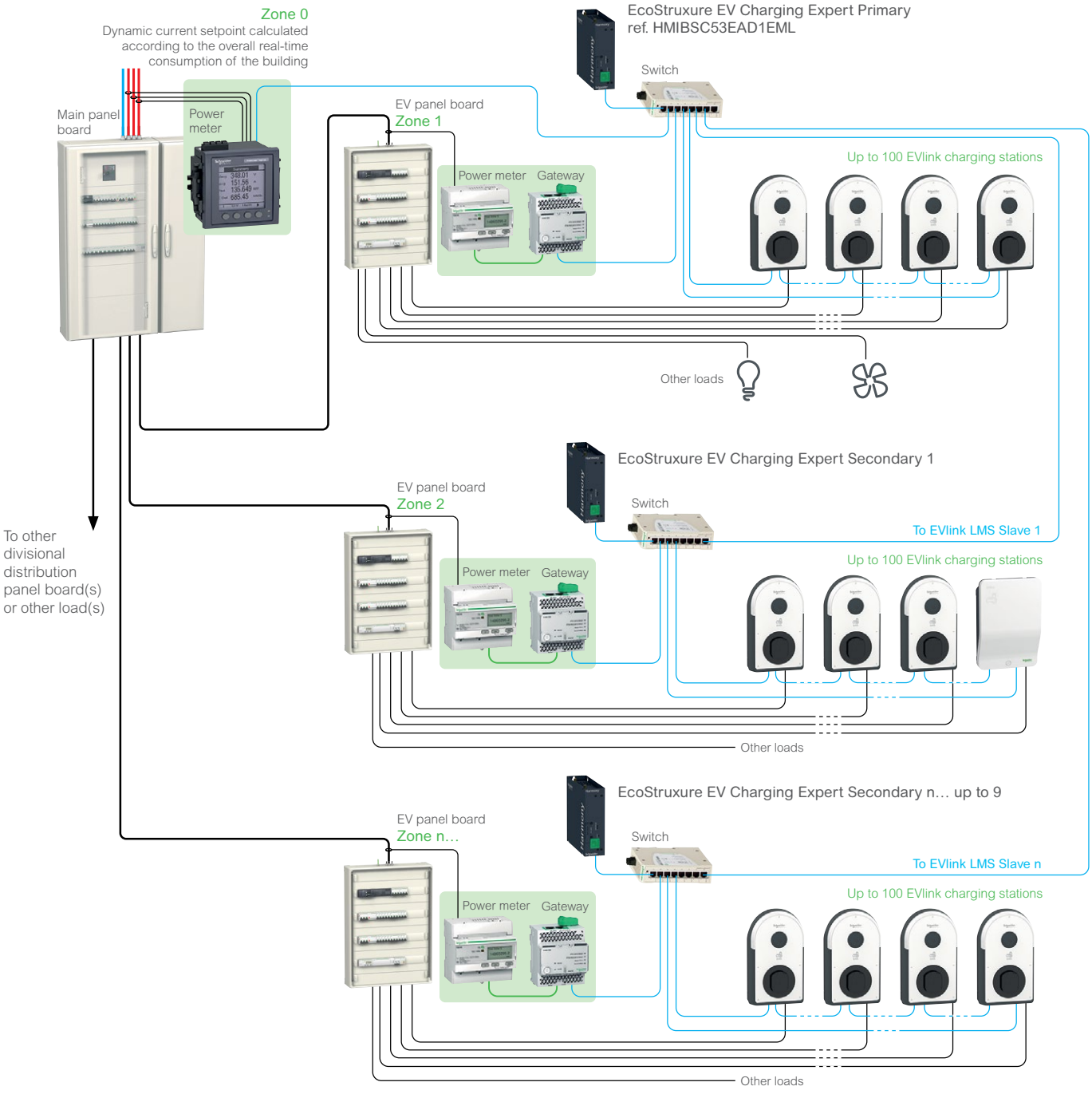
(1) No more than 3 cascaded zones. Otherwise, a EV Charging Expert Primary/Secondary architecture is required (see next page)

Coming soon

EcoStruxure™ EV Charging Expert Primary/Secondary architecture

For more than 100 charging stations with dynamic or static load management

- An EV Charging Expert Primary can manage up to 9 EV Charging Expert Secondary and up to 100 charging stations by itself. The total number of charging stations managed can therefore be up to 1000, distributed in up to 200 electrical zones
- Load management is implemented for the full scope of the system, and the supervision and control of it is aggregated in one only user interface dashboard for the entire system
- An EV Charging Expert Primary can manage any commercial reference as a slave. Those shall be selected based on the number of stations to be managed by slave
- The EV Charging Expert Primary includes a specific configuration assistant to ease the entire system configuration.



List of commercial references

EVlink™ Home and Home Smart

Characteristics		References[1]	
		EVlink Home	**EVlink Home Smart**
Charging stations with socket outlet			
T2	3.7 kW (1P - 16 A)	**EVH4S03N2**	**EVH4A03N2**
	7.4 kW (1P - 32 A)	**EVH4S07N2**	**EVH4A07N2**
	11 kW (3P - 16 A)	**EVH4S11N2**	**EVH4A11N2**
T2 with shutter	3.7 kW (1P - 16 A)	**EVH4S03N4**	**EVH4A03N4**
	7.4 kW (1P - 32 A)	**EVH4S07N4**	**EVH4A07N4**
	11 kW (3P - 16 A)	**EVH4S11N4**	**EVH4A11N4**
Charging stations with attached cable			
	3.7 kW (1P - 16 A)	**EVH4S03NC**	**EVH4A03NC**
	7.4 kW (1P - 32 A)	**EVH4S07NC**	**EVH4A07NC**
	11 kW (3P - 16 A)	**EVH4S11NC**	**EVH4A11NC**

Characteristics	References	
	EVlink Home	**EVlink Home Smart**
Charging stations with TIC*		
Evlink Home 1P T2S 3.7 kW 16 A - with RDC-DD Filter - TIC	**EVH4S03N400F**	-
EVlink Home 1P T2S 7.4 kW 32 A - with RDC-DD Filter - TIC	**EVH4S07N400F**	-
EVlink Home 3P T2S 11 kW 16 A - with RDC-DD Filter - TIC	**EVH4S11N400F**	-
EVlink Home Smart 1P T2S 3.7 kW 16 A - with RDC-DD Filter - TIC	-	**EVH4A03N400F**
EVlink Home Smart 1P T2S 7.4 kW 32 A - with RDC-DD Filter - TIC	-	**EVH4A07N400F**
EVlink Home Smart 3P T2S 11 kW 16 A - with RDC-DD Filter - TIC	-	**EVH4A11N400F**

*Only for France

Accessories	References[1]
Peak controller	
1 Phase Universal Peak Controller	**EVA1HPC1**
3 Phases Universal Peak Controller	**EVA1HPC3**

EVlink™ Pro AC and Pro AC Metal

Characteristics	References
Charging stations with socket outlet	
EVlink Pro AC 7.4 kW 32 A 1PH T2S SOCKET 6 mA RCD Type Asi MNX	**EVB3S07N4A**
EVlink Pro AC 7.4 kW 32 A 1PH T2S SOCKET 6 mA RCD Type Asi MNX MID	**EVB3S07N4AM**
EVlink Pro AC 7.4 kW 32 A 1PH T2S TE SOCKET 6 mA RCD Type Asi MNX MID	**EVB3S07N4EAM**
EVlink Pro AC 7.4 kW 32 A 1PH T2S TE SOCKET 6 mA RCD Type Asi MNX	**EVB3S07N4EA**
EVlink Pro AC 7.4 kW 32 A 1PH T2S SOCKET 6 mA MNX MID	**EVB3S07N40M**
EVlink Pro AC 7.4 kW 32 A 1PH T2S TE SOCKET 6 mA MNX MID	**EVB3S07N40EM**
EVlink Pro AC 11 kW 16 A 3PH T2S SOCKET 6 mA RCD Type Asi MNX	**EVB3S11N4A**
EVlink Pro AC 11 kW 16 A 3PH T2S TF SOCKET RCD Type B EV MNX	**EVB3S11N4FB**
EVlink Pro AC 22 kW 32 A 3PH T2S SOCKET RCD Type B EV MNX	**EVB3S22N4B**
EVlink Pro AC 22 kW 32 A 3PH T2S SOCKET 6 mA RCD Type Asi MNX	**EVB3S22N4A**
EVlink Pro AC 22 kW 32 A 3PH T2S TE SOCKET 6 mA RCD Type Asi 30 mA MNX	**EVB3S22N4EA**
EVlink Pro AC 22 kW 32 A 3PH T2S TE SOCKET RCD Type B EV MNX	**EVB3S22N4EB**
EVlink Pro AC 22 kW 32 A 3PH T2S TF SOCKET RCD Type B EV MNX	**EVB3S22N4FB**
EVlink Pro AC 22 kW 32 A 3PH T2S SOCKET MID 6 mA and MNX supplied	**EVB3S22N40M**
EVlink Pro AC 22 kW 32 A 3PH T2S TE SOCKET MID 6 mA and MNX supplied	**EVB3S22N40EM**
EVlink Pro AC 22 kW 32 A 3PH T2S TF SOCKET MID 6 mA and MNX supplied	**EVB3S22N40FM**
EVlink Pro AC 22 kW 32 A 3PH T2S SOCKET 6 mA MNX	**EVB3S22N4**
EVlink Pro AC 22 kW 32 A 3PH T2S TE SOCKET 6 mA MNX	**EVB3S22N4E**
EVlink Pro AC Metal 22 kW 32 A 3PH T2S SOCKET MID and RCD B EV MNX supplied	**EVB3S22N40MR**
Charging stations with attached cable	
EVlink Pro AC 7.4 kW 32 A 1PH Attached Cable 6 mA RCD Type Asi MNX	**EVB3S07NCA**
EVlink Pro AC 7.4 kW 32 A 1PH Attached Cable 6 mA RCD Type Asi MNX MID	**EVB3S07NCAM**
EVlink Pro AC 11 kW 16 A 3PH Attached Cable 6 mA RCD Type Asi MNX	**EVB3S11NCA**
EVlink Pro AC 22 kW 32 A 3PH Attached Cable 6 mA RCD Type Asi MNX	**EVB3S22NCA**
EVlink Pro AC 22 kW 32 A 3PH Attached Cable RCD Type B EV MNX	**EVB3S22NCB**
EVlink Pro AC 22 kW 32 A 3PH Attached Cable MID 6 mA and MNX supplied	**EVB3S22NC0M**

(1) References to be defined and local availability to be checked by Schneider Electric front offices.

Accessories	References[1]
Pack of 10 RFID Badges	**EVP1BNS**
Cable holder for EVlink Pro AC Metal charger	**EVA1FWHS12**
Permanent T2S socket cable holder EVlink Pro AC	**EVA1PLS1**
Pedestal	
Pedestal for 1 EVlink Pro AC Charger	**EVA1PBS1**
Pedestal for 2 EVlink Pro AC Chargers	**EVA1PBS2**
Plate to convert Pedestal for 1 charger to Pedestal for 2 EVlink Pro AC	**EVA1PCS2**
Metallic kits	
EVlink Pro AC Metal wall mount 1 charge point kit	**EVA1RWKS1**
EVlink Pro AC Metal floor standing 1 charge point kit	**EVA1RFKS1**
EVlink Pro AC Metal floor standing 2 charge points kit	**EVA1RFKS2**
Enclosures	
Thalassa PLS box kit IP66 power cable 25 35²	**EVA1RFKES**
Communication interface	
4G kit - embedded modem with 2 internal antennas for EVlink Pro AC	**EVA1MS**
4G kit - embedded 4G modem with an external antenna for EVlink Pro AC Metal	**EVA1MM**
Smart meter connection Historical Standard TIC tele information client card EVlink Pro AC	**EVA1MTH**

Charging cables	References
EVlink charging cables	
T2-T2 plug connector 32 A 1 Phase 5 m length	**EVP1CNS32122**
T2-T2 plug connector 32 A 1 Phase 7 m length	**EVP1CNL32122**
T2-T2 plug connector 32 A 1 Phase 10 m length	**EVP1CNX32122**
T2-T2 plug connector 32 A 3 Phase 5 m length	**EVP1CNS32322**
T2-T2 plug connector 32 A 3 Phase 7 m length	**EVP1CNL32322**
T2-T2 plug connector 32 A 3 Phase 10 m length	**EVP1CNX32322**

Spare parts	References
Front panel	
SE white front plate EVlink Pro AC	**EVP1SS**
Socket outlet	
1PH socket outlet T2S EVlink Pro AC	**EVP1SSS41**
3PH socket outlet T2S EVlink Pro AC	**EVP1SSS43**
1PH socket outlet T2S and domestic Tx (not supplied) EVlink Pro AC	**EVP1SSS51**
3PH socket outlet T2S and domestic Tx (not supplied) EVlink Pro AC	**EVP1SSS53**
TE domestic socket EVlink Pro AC	**EVP1SSSE**
TF domestic socket EVlink Pro AC	**EVP1SSSF**
Attached cable	
T2 attached cable 3PH 32 A 5 meter length EVlink Pro AC	**EVP1CSS323C**
T2 attached cable 1PH 32 A 5 meter length EVlink Pro AC	**EVP1CSS321C**
T2 attached cable 3PH 32 A 7 meter length EVlink Pro AC	**EVP1CSL323C**
T2 attached cable 1PH 32 A 7 meter length EVlink Pro AC	**EVP1CSL321C**

(1) References to be defined and local availability to be checked by Schneider Electric front offices.

List of commercial references

EVlink™ Pro AC and Pro AC Metal Services

Services	References[1]
EVlink Pro AC - Warranty extension	
Additional 1-year Warranty Extension for EVlink Pro AC	**EVS2W1B**
Additional 3-year Warranty Extension for EVlink Pro AC	**EVS2W3B**
OnSite Commissioning	
OnSite Commissioning for max. 5 AC charging stations with EcoStruxture EV Charging Expert	**EVS1CF0L**
OnSite Commissioning for 5 to 15 AC charging stations with EcoStruxture EV Charging Expert	**EVS1CFSL**
OnSite Commissioning for 15 to 50 AC charging stations with EcoStruxture EV Charging Expert	**EVS1CFML**
OnSite Commissioning for 50 to 100 AC charging stations with EcoStruxture EV Charging Expert	**EVS1CFLL**
OnSite Commissioning for max. 5 AC charging stations	**EVS1CF0**
Onsite Commissioning for 5 to 15 AC charging stations	**EVS1CFS**
Onsite Commissioning for 15 to 50 AC charging stations	**EVS1CFM**
Option OnSite Commissioning connection with a supervision	**EVS1CFCPO**
Remote Commissioning	
Remote Commissioning for max. 5 AC charging stations with EcoStruxture EV Charging Expert	**EVS1CR0L**
Remote Commissioning for 5 to 15 AC charging stations with EcoStruxture EV Charging Expert	**EVS1CRSL**
Remote Commissioning for max. 5 AC charging stations	**EVS1CR0**
Remote Commissioning for 5 to 15 AC charging stations	**EVS1CRS**
Option Remote Commissioning connection with a supervision	**EVS1CRCPO**

EVlink™ DC Fast Chargers

Characteristics	References
Charging Stations	
EVlink DC 24 kW CHAdeMO	**EVD1S24T0H**
EVlink DC 24 kW CCS2	**EVD1S24T0B**
EVlink DC 24 kW CCS2 + CHAdeMO	**EVD1S24THB**
EVlink DC 24 kW CCS2 + CHAdeMO + AC Type 2S	**EVD1S24THB2**
Accessories	
Pedestals for EVD1S24T0H, EVD1S24T0B	**EVP1DB1LG**
Pedestals for EVD1S24THB, EVD1S24THB2	**EVP1DB2LG**

(1) References to be defined and local availability to be checked by Schneider Electric front offices.

EcoStruxure™ EV Charging Expert

Characteristics	References[1]
Core	
EV Charging Expert Core 5 CS dynamic	**HMIBSCEA53D1EDB**
EV Charging Expert Core 15 CS dynamic	**HMIBSCEA53D1EDS**
EV Charging Expert Core 50 CS dynamic	**HMIBSCEA53D1EDM**
EV Charging Expert Core 15 CS static	**HMIBSCEA53D1ESS**
EV Charging Expert Core 50 CS static	**HMIBSCEA53D1ESM**
EV Charging Expert Core 100 CS dynamic	**HMIBSCEA53D1EDL**
EV Charging Expert Core primary 100 CS dynamic (coming soon)	**HMIBSCEA53D1EML**
Upgrade	
EV Charging Expert Upgrade dynamic 5 CS to 15 CS	**EVLMSEDB2EDS**
EV Charging Expert Upgrade dynamic 5 CS to 50 CS	**EVLMSEDB2EDM**
EV Charging Expert Upgrade dynamic 5 CS to 100 CS	**EVLMSEDB2EDL**
EV Charging Expert Upgrade 15 CS from static to dynamic	**EVLMSESS2EDS**
EV Charging Expert Upgrade static from 15 CS to 50 CS	**EVLMSESS2ESM**
EV Charging Expert Upgrade from 15 CS static to 50 CS dynamic	**EVLMSESS2EDM**
EV Charging Expert Upgrade dynamic from 15 CS to 50 CS	**EVLMSEDS2EDM**
EV Charging Expert Upgrade from 15 CS static to 100 CS dynamic	**EVLMSESS2EDL**
EV Charging Expert Upgrade dynamic from 15 CS to 100 CS	**EVLMSEDS2EDL**
EV Charging Expert Upgrade from 50 CS static to 50 CS dynamic	**EVLMSESM2EDM**
EV Charging Expert Upgrade static 50 CS to dynamic 100 CS	**EVLMSESM2EDL**
EV Charging Expert Upgrade dynamic from 50 CS to 100 CS	**EVLMSEDM2EDL**

(1) References to be defined and local availability to be checked by Schneider Electric front offices.

Notes

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