

Solution for electric car

# Take the road with new energies



**:hager**



:hager



# As easy, as witty

**The ultimate advantages in the technical and aesthetic range.**

Quick and easy commissioning for installers, reliable and performing charge for users, witty range is the perfect combination for residential and commercial premises.

# Technology serving the distance

Charging time will vary according to both power and charging mode.

Charging a car requires a dedicated solution adapted to the car and the capacity of electrical supply.



## Private car

Mode 3 (1-phase)  
7.4 kW  
with access control and  
billing services  
**witty premium or park**



## What is impacting the distance capacity ?

The capacity of electric cars does not only depend on the battery, but also on :

- type of journey (Flat, varied, urban,...),
- driving mode,
- used accessories (headlights, heating, air conditioning, wipers and on other accessories).



## Company car

Mode 3  
1 or 3 phase  
7.4 to 22 kW  
With access control  
**witty premium or park**

## Customers

Mode 3  
1 or 3 phase  
7.4 to 22 kW  
With or without access control and  
billing services  
**witty premium or park**

## Carpark private/public

Mode 3  
1 or 3 phase  
7.4 to 22 kW  
With access control and  
billing services  
**witty premium or park**

## How many kilometers with 1h charging ?

	Slow charging		Accelerated charging			Fast charging	
	Mode 2	Mode 3	Mode 3		Mode 3	Mode 4	
	8A 1-phase	16A 1-phase	32A 1-phase	16A 3-phase	32A 3-phase	63A 3-phase	120A CC
	2 kW	4 kW	7 kW	11 kW	22 kW	43 kW	50 kW
Zoé 400	12 km	20 km	45 km	90 km	150 km	240 km	-
e-Golf	12 km	18 km	45 km	-	-	-	-
Tesla model S P100D	-	-	35 km	54 km	81 km	400 km	500 km

# For every car its solution

## Z.E. Ready

It is a mark which purpose to ensure the compatibility between the charging station and Renault Z.E cars.



All our witty offer premium version are labeled Z.E. Ready 1.2

## Charging time to 100 %

	Slow charging		Accelerated charging			Fast charging	
	Mode 2	Mode 3	Mode 3			Mode 3	Mode 4
	8A 1-phase	16A 1-phase	32A 1-phase	16A 3-phase	32A 3-phase	63A 3-phase	120A CC
	2 kW	4 kW	7 kW	11 kW	22 kW	43 kW	50 kW
Zoé 400	25h*	16h*	7h30*	4h30*	2h40*	2h40*	-
e-Golf	17h*	10h50*	5h20*	-	-	-	1h20*
Tesla model S P100D	-	-	17h30**	11h20**	7h30**	2h20**	2h**

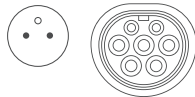
\* According to the manufacturer

\*\* Given estimation for 100 % charge



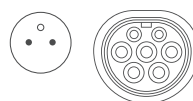
# witty premium

Application: **indoor and outdoor**  
Installation: **wall-mounted or with pedestal**  
Charging mode: **accelerated charge**  
Type of chargeable vehicle:  
**cars and utilities**  
Advantages: **compact**  
Type of socket outlet:



# witty park

Application: **indoor and outdoor**  
Installation: **wall-mounted or with pedestal**  
Charging mode : **accelerated charge**  
Type of chargeable vehicle:  
**cars and utilities**  
Advantages: **compact**  
Type of socket outlet:





### witty premium

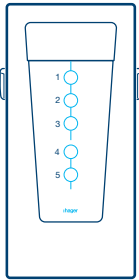
	Power	Type of socket outlet	1-phase connection	3-phase connection	Access control	Communication	Installation
<b>XEV101</b>	4–7 kW	1 x T2S	•		Without access control		Indoor and outdoor
<b>XEV100</b>	9–22 kW	1 x T2S		•	Without access control		Indoor and outdoor
<b>XEV102</b>	4–7 kW	1 x T2S 1 x type E	•		Without access control		Indoor and outdoor
<b>XEV103</b>	9–22 kW	1 x T2S 1 x type E		•	Without access control		Indoor and outdoor
<b>XEV200</b>	22 kW	1 x T2S		•	With RFID badge		Indoor and outdoor
<b>XEV201</b>	7 kW	1 x T2S 1 x type E	•		With RFID badge		Indoor and outdoor
<b>XEV202</b>	22 kW	1 x T2S 1 x type E		•	With RFID badge		Indoor and outdoor
<b>XEV205</b>	4 kW	2 x T2S	•		With RFID badge		Indoor and outdoor
<b>XEV200C</b>	22 kW	1 x T2S		•	With RFID badge	•	Indoor and outdoor
<b>XEV201C</b>	7 kW	1 x T2S 1 x type E	•		With RFID badge	•	Indoor and outdoor
<b>XEV202C</b>	22 kW	1 x T2S 1 x type E		•	With RFID badge	•	Indoor and outdoor
<b>XEV205C</b>	4 kW	2 x T2S ou 2 x type E	•		With RFID badge	•	Indoor and outdoor

### witty park

	Power	Type of socket outlet	1-phase connection	3-phase connection	Access control	Communication	Installation
<b>XEV600</b>	4–7 kW	2 x T2S 2 x type E	•		With RFID badge		Indoor and outdoor
<b>XEV601</b>	9–22 kW	2 x T2S 2 x type E		•	With RFID badge		Indoor and outdoor
<b>XEV600C</b>	4–7 kW	2 x T2S 2 x type E	•		With RFID badge	•	Indoor and outdoor
<b>XEV601C</b>	9–22 kW	2 x T2S 2 x type E		•	With RFID badge	•	Indoor and outdoor

# Technical data sheet

## witty park

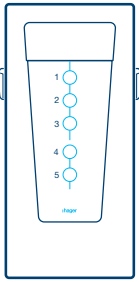


Technical characteristics	XEV600	XEV600C
Application	Garage, covered parking space or outdoor parking space in multi-purpose residential buildings or in offices buildings, parkings.	
Installation	Wall or on the floor with pedestal	
Charging mode	Mode 3 and Mode 2	
Charging points	2	
Access control	Charge authorization by RFID (series), station delivered without badge	
Socket outlet type	T2S (Mode 3) and TE (Mode 2)	
Certification	Z.E. READY	
Voltage and current	230 V AC - 32A	
Power supply	Ph + N	
Charging power capacity	2.3 kW fixed socket Mode 2 or 2.3 to 7kW socket mode 3, adjustable intensity by selector	
Communication	-	OCPP over IP (TCP/IP RJ45 embeded board)
Metering	-	Integrated energy meter visible on the side
Protection devices	Not delivered - 2 rcbo 30 mA type A/Hi 40 A curve C	
Charging signal	Charging status LED strip (3 colors)	
Material	Metalic bi-color White RAL9010 and Grey RAL7011	
IP and IK resistance	IP54/IK10	
Connection terminal	10 mm <sup>2</sup> . Electrochemical compatibility only with copper cables. Do not connect copper-aluminium cables.	
Operating temperature range	-25 °C to +40 °C	
Weight	30 kg	
Dimensions	l. 355 x h. 765 x p. 202 mm	
Standards and certifications	Station : IEC 61851 and IEC 62196-2	
Others	Immediate or delayed with by-pass possibility charge input + 24 V for control : Stop / limitation mini ZE / full load, charging current limitation, does not work with NFC technology, fullfills the requirement of the charge point operators and the e-mobility providers.	

Option / extras / variants	XEV600	XEV600C
Wall support XEV427	Allows fixing and raising the station on a wall.	
Pedestal mounting support XEV426	Possible installation of the station at the edge of the parking space. Possible integration of a waterproof cabinet for the protection devices.	
Concret anchorage XEV428	Compatible with XEV426 stand.	
User badges RFID XEV308	Lot of 20 badges user, giving access only to the charging station.	
Administrator badges RFID XEV309	Lot of 3 badges administrators, giving access to the charging station and user badge settings.	
Cabinet for pedestal VE312F	IP55/IK10 cabinet with 3x12 din rail fixation allowing to install all the protection devices on the XEV426 pedestal	
Installation information	<p>Delivered with wall mount not enhanced, assembly instructions and user manual.</p> <p>The kit does not include :</p> <ul style="list-style-type: none"> <li>- wall support,</li> <li>- pedestal mounting support,</li> <li>- protection.</li> </ul>	<p>Delivered with wall mount not enhanced, assembly instructions and user manual.</p> <p>The kit does not include :</p> <ul style="list-style-type: none"> <li>- pedestal mounting support,</li> <li>- protection.</li> </ul>
Guaranty	2 years (from the date of manufacture)	

# Technical data sheet

## witty park



Technical characteristics	XEV601	XEV601C
Application	Garage, covered parking space or outdoor parking space in multi-purpose residential buildings or in offices buildings, parkings.	
Installation	Wall or on the floor with pedestal	
Charging mode	Mode 3 and Mode 2	
Charging points	2	
Access control	Charge authorization by RFID (series), delivered without badge	
Socket outlet type	T2S (Mode 3) and TE (Mode 2)	
Certification	Z.E. READY	
Voltage and current	230 V AC - 32A	
Power supply	Ph + N	
Charging power capacity	2.3 kW fixed socket Mode 2 or from 9 to 22 kW socket Mode 3, adjustable intensity by selector	
Communication	-	OCPP over IP (TCP/IP RJ45 embedded board)
Metering	-	Integrated energy meter visible on the side
Protection devices	Not delivered - 2 rcbo 30 mA type A/HI 40 A curve C	
Charging signal	Charging status LED strip (3 colors)	
Material	Metalic bi-color White RAL9010 and Grey RAL7011	
IP and IK resistance	IP54/IK10	
Connection terminal	10 mm <sup>2</sup> . Electrochemical compatibility only with copper cables. Do not connect copper-aluminium cables.	
Operating temperature range	-25 °C to +40 °C	
Weight	30 kg	
Dimensions	l. 355 x h. 765 x p. 202 mm	
Standards and certifications	Station : IEC 61851 - Socket type : NF EN 62196-2	
Others	Immediate or delayed with by-pass possibility charge input + 24 V for control : Stop / limitation mini ZE / full load, charging current limitation, does not work with NFC technology, fullfills the requirement of the charge point operators and the e-mobility providers.	

Option / extras / variants	XEV601	XEV601C
Wall support XEV427	Allows fixing and raising the station on a wall.	
Pedestal mounting support XEV426	Possible installation of the station at the edge of the parking space. Possible integration of a waterproof cabinet for the protection devices.	
Concret anchorage XEV428	Compatible with XEV426 stand.	
User badges RFID XEV308	Lot of 20 badges user, giving access only to the charging station.	
Administrator badges RFID XEV309	Lot of 3 badges administrators, giving access to the charging station and user badge settings.	
Cabinet for pedestal VE312F	IP55/IK10 cabinet with 3x12 din rail fixation allowing to install all the protection devices on the XEV426 pedestal	
Installation information	<p>Delivered with wall mount not enhanced, assembly instructions and user manual.</p> <p>The kit does not include :</p> <ul style="list-style-type: none"> <li>- wall support,</li> <li>- pedestal mounting support,</li> <li>- protection.</li> </ul>	<p>Delivered with wall mount not enhanced, assembly instructions and user manual.</p> <p>The kit does not include :</p> <ul style="list-style-type: none"> <li>- pedestal mounting support,</li> <li>- protection.</li> </ul>
Guaranty	2 years (from the date of manufacture)	

# Technical data sheet

## witty premium



Technical characteristics	XEV100	XEV101
Application	Garage, covered parking space or outdoor parking space in multi-purpose residential buildings or in offices buildings, parkings.	
Installation	Wall or on the floor with pedestal	
Charging mode	Accelerated - from 9 to 22 kW	Normal - from 2.3 to 7 kW
Charging points	1	
Access control	Free	
Socket type	T2S (Mode 3)	
Certification	Z.E. READY	
Voltage and current	400 V AC - 32 A	230 V AC - 32 A
Power supply	3 Ph + N	Ph + N
Charging power capacity	22 kW, socket Mode 3 adjustable intensity by selector	2.3 kW to 7 kW socket Mode 3, adjustable intensity by selector
Protection devices	Not delivered -circuit breaker 4x40A + rcd 30 mA type B + shunt trip coil	Delivered with 1 rcbo 30 mA type A/HI 40 A curve C PdC 6000 A - 10 kA and 1 shunt trip coil
Charging signal	Charging status LED strip (3 colors)	
Material	Metalic box + envelope PVC + BMC + SMC	
IP and IK resistance	IP54/IK10	
Operating temperature range	-30°C to +50°C	
Weight	15.8 kg	
Connection terminal	10 mm <sup>2</sup> . Electrochemical compatibility only with copper cables. Do not connect copper-aluminium cables.	
Dimensions	l.480 x h.346 x p.233 mm	
Standards and certifications	Station : IEC 61851 - Socket type : NF EN 62196-2	
Others	Immediate or delayed with by-pass possibility charge, dynamic load shedding through TIC from electrical counter of the TIC simulator input + 24 V for control: Stop / limitation mini ZE / full load, charging current limitation, does not work with NFC technology	
Installation information	Delivered with assembly instructions and user manual. and user manual	
Guaranty	2 years (from the date of manufacture)	

# Technical data sheet

## witty premium



Technical characteristics	XEV102	XEV103
Application	Garage, covered parking space or outdoor parking space in multi-purpose residential buildings or in offices buildings, parkings.	
Installation	Wall or on the floor with pedestal	
Charging mode	Normal - from 2.3 to 7 kW or slow - 2.3 kW	Accelerated - from 9 to 22 kW
Charging points	1	
Access control	Free	
Socket type	T2S (Mode 3) and TE (Mode 2)	
Certification	Z.E. READY	
Voltage and current	230 V AC - 32 A	400 V AC - 32A
Power supply	Ph + N	3 Ph + N
Charging power capacity	From 2.3 kW to 7 kW (type T2S) or 2.3 kW (type E) Adjustable intensity by selector	From 9 kW to 7 kW (type T2S) or 2.3 kW (type E) Adjustable intensity by selector
Protection devices	Delivered with 1 rcbo 30 mA type A/Hi 40 A curve C PdC 6000 A - 10 kA and 1 shunt trip coil	Not delivered - circuit breaker 4x40 A + rcd 30 mA type B + shunt trip coil
Charging signal	Charging status LED strip (3 colors)	
Material	Metalic box + envelope PVC + BMC + SMC	
IP and IK resistance	IP54/IK10	
Operating temperature range	-30°C to +50°C	
Weight	15.8 kg	
Connection terminal	10 mm <sup>2</sup> . Electrochemical compatibility only with copper cables. Do not connect copper-aluminium cables.	
Dimensions	l.480 x h.346 x p.233 mm	
Standards and certifications	Station : IEC 61851 - Socket type : NF EN 62196-2	
Others	Immediate or delayed charging with by-pass possibility charge, dynamic load-shedding using the XEV304 or XEV305 simulator +24Vdc input for control : stop / mini load authorized by ZEready / max load, charging current limitation, does not work with NFC technology, configurable current limitation.	
Installation information	Delivered with assembly instructions and user manual.	
Guaranty	2 years (from the date of manufacture)	

# Technical data sheet

## witty premium



Technical characteristics	XEV200	XEV200C	XEV201	XEV201C
Application	Garage, covered parking space or outdoor parking space in multi-purpose residential buildings or in offices buildings, parkings.			
Installation	Wall or on the floor with pedestal			
Charging mode	Mode 3 - from 9 to 22 kW		Mode 2 - 2.3 kW or Mode 3 - from 2.3 to 7 kW	
Charging points	1			
Access control	Charge authorization by RFID (series), delivered without badge			
Socket type	Socket type 2S		Socket type 2S + type E	
Certification	Z.E. READY			
Voltage and current	400 V AC - 32A		230 V AC - 32 A	
Power supply	3 Ph + N		Ph + N	
Charging power capacity	9 to 22 kW, adjustable intensity by selector		2.3 kW fixed or from 2.3 to 7 kW, adjustable intensity by selector	
Communication	-	OCPP over IP (TCP/IP RJ45 embeded board)	-	OCPP over IP (TCP/IP RJ45 embeded board)
Metering	-	Integrated energy meter visible on the side	-	Integrated energy meter visible on the side
Protection devices	Not delivered - circuit breaker 4x40 A + rcd 30 mA type B + 1 shunt trip coil		Delivered with 1 rcbo 30 mA type A/HI 40 A curve C PdC 6000A - 10 kA and 1 shunt trip coil	
Charging signal	Charging status LED strip (3 colors)			
Material	Metalic box + envelope PVC + BMC + SMC			
IP and IK resistance	IP55/IK10		IP54/IK10	
Connection terminal	10 mm <sup>2</sup> . Electrochemical compatibility only with copper cables. Do not connect copper-aluminium cables.			
Operating temperature range	-30°C to +55°C			
Weight	15.8 kg			
Dimensions	l.480 x h.346 x p.233 mm			
Standards and certifications	Stations : IEC 61851 - Socket type : NF EN 62196-2			



Option / extras / variants	XEV200	XEV200C	XEV201	XEV201C
Others	Immediate or delayed with by-pass possibility charge input + 24 V for control : Stop / limitation mini ZE / full load, charging current limitation, does not work with NFC technology, fullfills the requirement of the charge point operators and the e-mobility providers.			
Users badges RFID XEV308	Lot of 20 badges user, giving access only to the charging station.			
Administrator badges RFID XEV309	Lot of 3 badges administrators, giving access to the charging station and user badge settings.			
Installation information	Delivered with wall mount not enhanced, assembly instructions and user manual. The kit does not include : - wall support, - pedestal mounting support, - protection.		Delivered with wall mount not enhanced, assembly instructions and user manual. The kit does not include : - pedestal mounting support, - protection.	
Guaranty	2 years (from the date of manufacture)			

# Technical data sheet

## witty premium

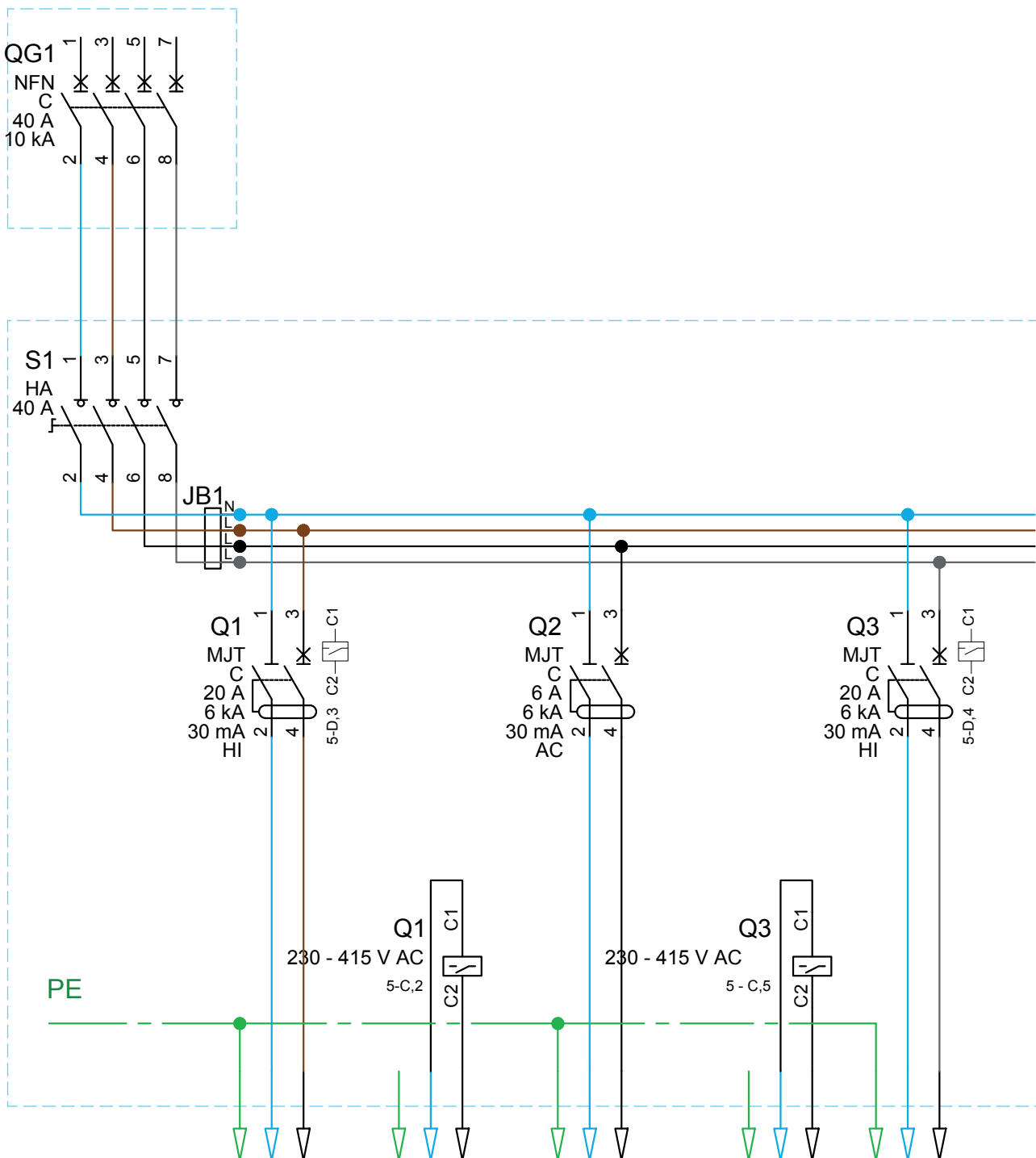


Technical characteristics	XEV202	XEV202C	XEV205	XEV205C
Application	Garage, covered parking space or outdoor parking space in multi-purpose residential buildings or in offices buildings, parkings.			
Installation	Wall or on the floor with pedestal			
Charging mode	Mode 3 - from 9 to 22 kW or 2.3 kW (type E)		Mode 3 - from 2.3 kW to 4 kW	
Charging points	1		2	
Access control	Charge authorization by RFID (series), delivered without badge			
Socket type	Socket type 2S		Socket type 2S + type E	
Certification	Z.E. READY			
Voltage and current	400 V AC - 32 A		230 V AC - 32 A	
Power supply	3 Ph + N		Ph + N	
Charging power capacity	9 to 22 kW, adjustable intensity by selector		4 kW	
Charging mode	Mode 3		Mode 2 or Mode 3 depending on the selected socket type	
Communication	-	OCPP over IP (TCP/IP RJ45 embeded board)	-	OCPP over IP (TCP/IP RJ45 embeded board)
Metering	-	Integrated energy meter visible on the side	-	Integrated energy meter visible on the side
Protection devices	Not delivered - Circuit breaker 4x40 A + rcd 30 mA type B + 1 shunt trip coil		Delivered with 1 rcbo 30 mA type A/HI 40 A curve C PdC 6000A - 10 kA and 1 shunt trip coil	
Charging signal	Charging status LED strip (3 colors)			
Material	Metalic + Flexible and resistant coating material RAL7035			
IP and IK resistance	IP55/IK10		IP54/IK10	
Connection terminal	10 mm <sup>2</sup> . Electrochemical compatibility only with copper cables. Do not connect copper-aluminium cables.			
Operating temperature range	-30°C to +55°C			
Weight	15.8 kg			
Dimensions	l.480 x h.346 x p.233 mm			
Standards and certifications	Stations : IEC 61851 - Socket type : NF EN 62196-2			

Option / extras / variants	XEV202	XEV202C	XEV205	XEV205C
Others	Immediate or delayed with by-pass possibility charge input + 24 V for control : Stop / limitation mini ZE / full load, charging current limitation, does not work with NFC technology, fullfills the requirement of the charge point operators and the e-mobility providers.			
Users badges RFID XEV308	Lot of 20 badges user, giving access only to the charging station.			
Administrator badges RFID XEV309	Lot of 3 badges administrators, giving access to the charging station and user badge settings.			
Installation Information	Delivered with wall mount not enhanced, assembly instructions and user manual. The kit does not include : - wall support, - pedestal mounting support, - protection.		Delivered with wall mount not enhanced, assembly instructions and user manual. The kit does not include : - pedestal mounting support, - protection.	
Guaranty	2 years (from the date of manufacture)			

# Application case

Example of wiring diagram for XEV205C.  
Charging station for 2 vehicles, 1-phase power supply with communication





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