

witty share and witty park

The power in your hands

Safe witty vehicle
charging by Hager



:hager

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Making the world to a cleaner place.

The major benefit of electric cars is the contribution that they can make towards improving air quality in towns and cities. With no tailpipe, pure electric cars produce no carbon dioxide emissions when driving. This reduces air pollution considerably.

Put simply, electric cars give us cleaner streets making our towns and cities a better place to be for pedestrians and cyclists. In over a year, just one electric car on the roads can save an average 1.5 million grams of CO₂. That's the equivalent of four return flights from London to Barcelona.

Electric vehicles are cleaner, safer and more cost-effective than any other alternative. We believe the future is where electrical power and mobility converge.

Driving on electricity

As the partner at your side, Hager offers you professional assistance with planning and implementing your EV charging infrastructure project. We combine smart and elegant hardware that's compliant with key protocols and legislation and an intelligent control system ideal for charging procedures covering open, closed and interchangeable/roaming capable networks.

Functioning seamlessly with RFID cards, operators can 'see' who is using the system. They can also measure thanks to the local load manager (LLM), how much power is being used in the building for the EVs and react accordingly to variations in power at any moment for its safe distribution. Quick and easy to install and configure for some, efficient, economical and reliable to use for others, the witty range has been designed for both installers and CPOs.



Safe witty vehicle charging



Whatever the witty charger, it's the same, you have the power in your hands. Reliable, safe and simple electric vehicle charging solutions, that operate for many years and seamlessly scale and integrate with energy management and electrical distribution systems from Hager.

Future-proof

- Transmission standards of tomorrow already integrated today
- Communication to the controller: Modbus TCP, OCPP or ISO 15-118

Reliable supply

- Charging power 1.4-22 kW
- Integrated DC fault current detection and thus FI type A sufficient
- With LLM blackout protection (prevents overloading of the building connection)

Anti-theft

- Charging cable one-sided lockable
- Authentication via RFID

Introducing the Local Load Manager (LLM) for witty share

- Dynamic regulation of energy levels supplied to the EVCS based on available grid power
- Avoidance of blackouts caused by electrical overloads
- Easy installation and auto configuration
- Increased levels of data



witty share.



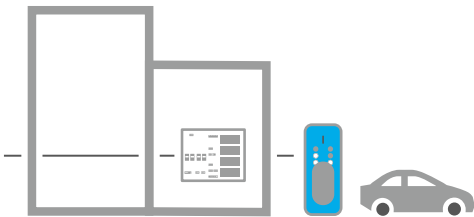
witty park.

Making the right choice

Selecting the most suitable charging station depends on your customers' needs. The witty range offers a suitable solution for every environment - from single homes to multi-flat residences and commercial parking areas.

witty share

witty share offers a safe solution for commercial parking spaces and multi-flat residences, featuring the latest standard compliancy for B2B (B2B2C).



witty share



witty park

	witty share	witty park
References	XEV1R	XEV6xx
Connection	Charging socket type 2s	Charging socket type 2s
Access control	Local RFID and OCPP Remote RFID/ NFC/QRCode/Web/Plug'nCharge	Local RFID and OCPP Remote RFID/ NFC/QRCode/Web/Plug'nCharge
Network	WLAN or LAN	LAN
Communication to the vehicle	PWM or ISO 15-118	PWM
Communication to 3rd party	WLAN or LAN OCPP/IP to EMSP and/or CPO and/or LLM	LAN OCPP/IP to EMSP and/or CPO and/or LLM
LED status display	✓	✓
Max. Charging power	22 kW	2 x 22 kW
Casing and Power	1 charging point casing	2 charging points casing
Environment	IP55 / IK10 / UV / -25°C/+50°C	IP54 / IK10 / UV / 5°C/+40°C
Mounting	Wall Strong quality pedestal hager designed Tubular pole Street pole mounting accessory	Wall Wall with backside access point Pedestal with integrated cabinet Pedestal with backside delivery point
Basic load Management (load shedding)	230V inputs for load shedding and/or delay.	230V inputs for load shedding and/or delay. Wired TIC input for historic TIC or with TIC simulator (for XEV304/XEV305 + XEvA205)
Protection	Integrated 6mAdc detection and Welded contact detection (Type A compatible)	/
Certification	IEC 61851, ISO15118 and EV/ZE 1.4	IEC 61851 and EV/ZE 1.2



witty park

Featuring 2 charging points, witty park enables outstandingly fast and safe simultaneous dual-vehicle charging in commercial parking areas.



hager.xx/witty



Print



Schulung



Video



Software



Increased flexibility witty share

witty share is the e-charging station designed specifically for supervised charging in semi-public spaces, such as residential multi-flat buildings and commercial parking areas and buildings.

This wallbox is very easy to install, robust, extremely user-friendly, and meets all safety standards and norms.



witty share with charging socket type 2s.

Flexible e-charging

witty share enables fast charging of electric vehicles in semi-public and commercial places including hotels, car parks, and large residential buildings, allowing drivers to charge their vehicles efficiently and flexibly in different locations throughout the day.

Compatible for all types of electric vehicles

witty share can be used universally to charge any type of electric vehicle including bicycles, scooters, motorcycles, electric cars, and rechargeable hybrids.



Adaptable installation

- Can be installed indoors and outdoors
- Wall-mounted or floor-standing
- Light-weight
- Extremely user-friendly with intuitive configuration
- Embedded diagnostic and Igos for easy debugging

Future-proof

- Integrated with standard ISO15118
- Using OCPP 1.6j (upgradable 2.0)
- Components can be replaced easily
- MID and GSM accessories

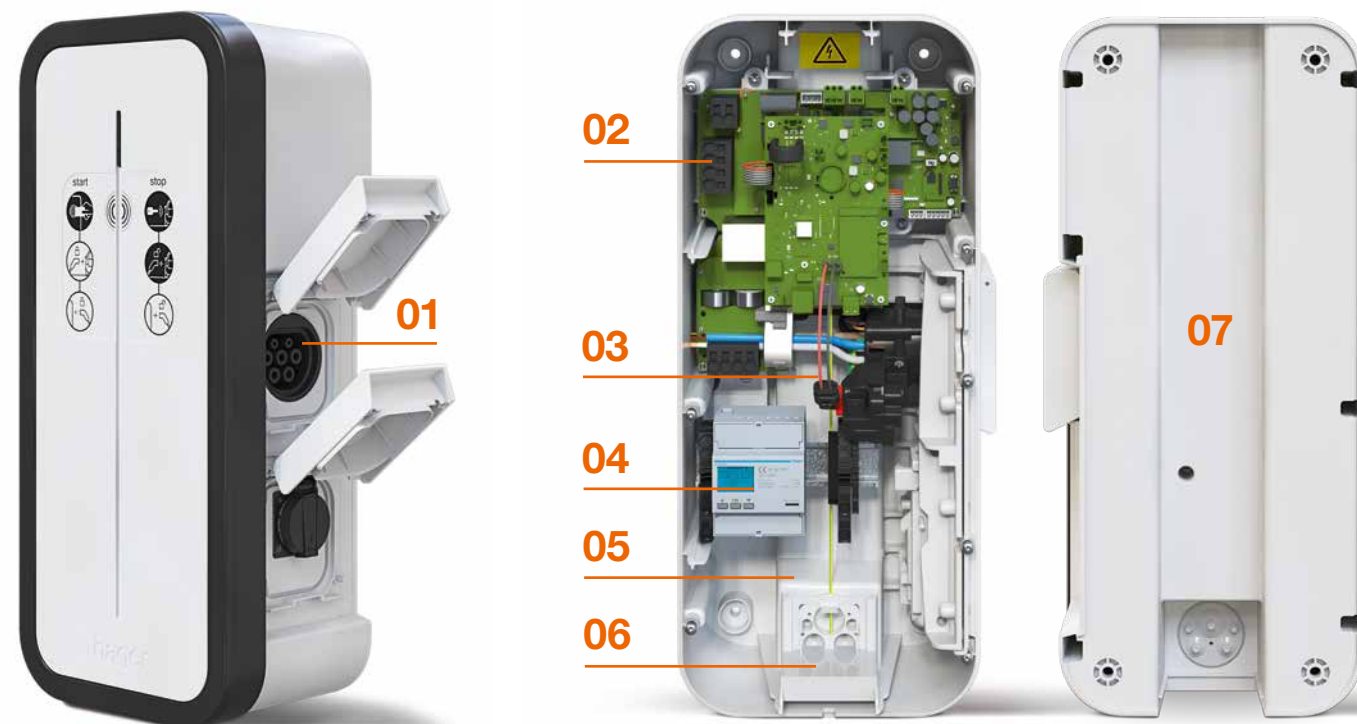
Maximum quality

- Very resistant and long lasting
- Can withstand extreme temperatures (-25°C/+50°C)
- Access control via RFID
- High protection classes: IP55 and IK10

Sharing made simple

witty share is a clever and simple solution to shared e-charging in semi-public spaces: it is extremely easy to install, resistant and long-lasting, and very user-friendly. This pre-configured and pre-wired wallbox offers different mounting options (wall-mounted or floor-standing) and adheres to all safety norms and standards.

Complementing features can be added to amplify this enticing package.



01

Charging socket Type 2

The Type 2 charging socket can be used to charge all electric vehicles with a charging power of between 3.7 kW (1-phase) and 22 kW (3-phase).

02

Plug-in terminals

Thanks to plug-in terminals, connecting the supply cable is even faster and safer.

03

Integrated DC fault current protection

The built-in DC fault current detection triggers at max. 6 mA DC. A simple RCD type A is sufficient for fuse protection, no RCD type B is necessary. With a compact FI/LS switch saves additional space.

04

MID Kit

Accessory composed of an energy meter and an appropriate cable, in order to plug in the charging station. It is used to collect MID values for billing.

05

Large connection space

The compact but spacious housing offers plenty of room for wiring. A simple screwdriver is all that is needed to connect all components.

06

Cable entry flange with strain relief

The large cable entry flange makes installation even easier. The strain relief on the inside ensures a secure connection. The DIN rail inside offers the possibility to install the electric protection directly inside the station.

07

Rear cable duct

The rear cable duct allows flexible cable entry from above, below or behind. In this way, the Wallbox witty adapts perfectly to the conditions on site.



Important accessories: Charging cable and stand

To get started with witty share, you will need the charging cable, which is available as an accessory. With the attractive stands in standard or round design, you can transform your customers' charging station into a high-quality charging point. The feet fit witty share and are available for one or two charging stations.

Introducing the Local Load Manager

This load management module allows for constant monitoring of the power supply and dynamically regulates the energy supplied to your witty share charging stations, depending on the available grid power.

Optimising power flow for the charging stations according to the consumption of the building, avoids the MCB to trip due to electrical overloads, and thus combats costly blackouts.



Powerful

- Can cover up to 20 witty share charging points simultaneously
- Services up to 2 clusters on the same ethernet in e.g., on 2 floors of a multi-level car park

Comprehensive

- Compliant with Hager witty share: XEV1R22T2, XEV1R22T2TE, XEV1R22T2ER
- Compatible with RFID cards

Easy operation

- Plug and Play - auto configuration of the EVCS allows for a fast, easy and safe discovery process
- Extensive support is available by Hager

Flexible

- The LLM will dynamically adjust the power supply in both dynamic and static mode
- Depending on the layout of the building, the LLM can be installed using different solutions

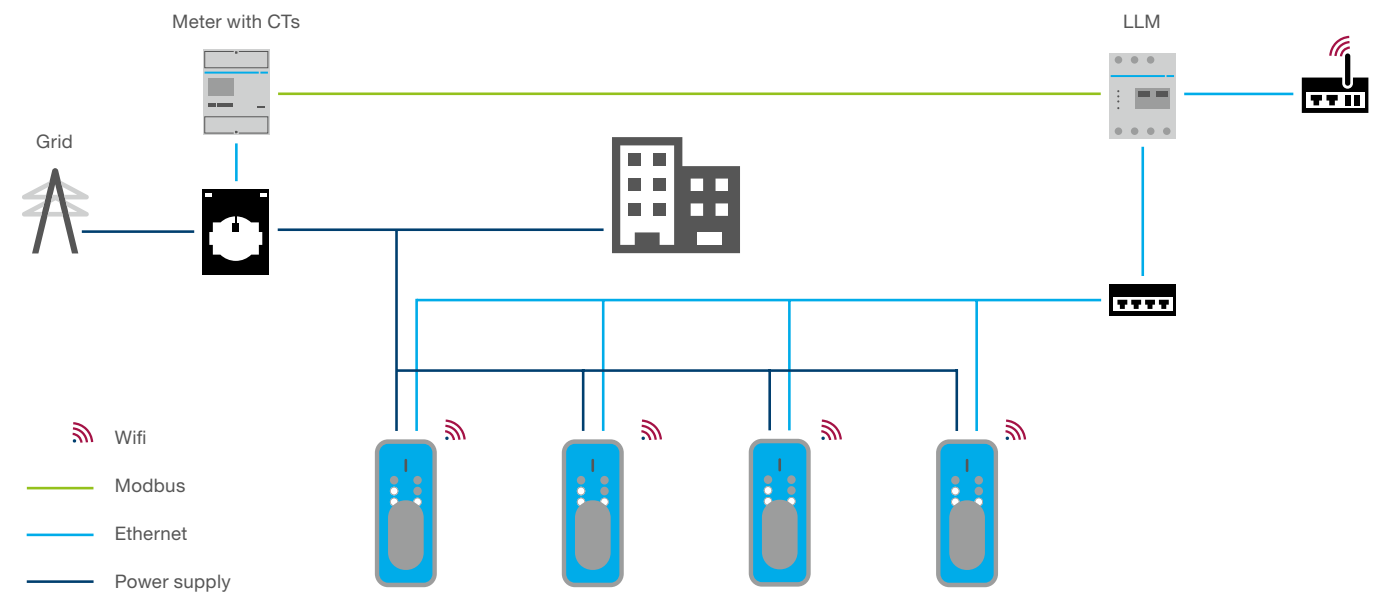


The LLM dynamically regulates energy levels to optimise the power of witty share.

Wiring

Depending on the layout of the building and the electrical installation available, there are two options to installing the Local Load Manager. Firstly, the Hager Current Transformer measures

the grid power while being directly attached to the LLM, or, alternatively, the grid power is measured by the External Hager Meter which is linked to the LLM through Modbus.



Easy installation through thought-out solutions

As a meter is already integrated into this regulator, the electrical installer can simply install the charging station on the wall, place the LLM in the enclosure, and attach Hager's Current Transformer to the LLM - this will allow the transformer to measure the grid power and the LLM to actively regulate the power supply accordingly.

Alternatively, the LLM can also be connected to an external meter through Modbus.

The installer will then customise the settings of the load management module according to the location in terms of maximum available power and the configuration of the charging station.

Finally, the installer will also set up your link, so that you have access to a whole host of data related to the power station available in the backend cloud.

Be in full control

With minimal interference, you will still be able to control the charging points remotely, just as before.

In addition, the LLM offers a large amount of data through detailed tracking of the power supply that is sent directly to you - for example, you can find out how long cars are charging for, what the peak times for charging are, or if the stations are offline.

Avoidance of blackouts


As this load management module continuously monitors and adjusts power levels, it can avert power cuts from electrical overloads - avoiding blackouts ensures the smooth and uninterrupted use of commercial buildings, saving businesses a lot of money in the long run.

Double the power witty park

witty park elevates e-charging stations to the next level: its user-friendliness, highly aesthetic design and above all its ability to charge two electric vehicles simultaneously with a max. 44 kW AC output, make witty park the ideal charging station for public access areas such as petrol stations, parking areas, and shopping centres.

This dual station not only saves vital space in crowded environments, but also increases the usage rate and saves on installation costs.



 witty park with charge socket type 2s.

Simultaneous charging

witty park features two opposite charging points, each with 22 kW output, allowing for outstandingly fast and efficient dual charging. Two shuttered Mode 3 sockets can supply all common models of electric vehicle with three-phase charge currents of up to 32 A. Two further Mode 2 SCHUKO® sockets supply vehicles with smaller batteries, such as electric bikes, with single-phase currents of up to 10A. This means that either two electric cars or two electric bikes can be charged simultaneously.

Wall or pedestal mounting

witty park can either be installed on the wall or, alternatively, a floor anchor with optional stand can be supplied. This option can incorporate the advantage of running supply to the charging station via one large cable, rather than two fused lines.



Security

- RFID (radio-frequency identification) technology prevents unauthorised charging and allows activation only by authorised users
- RFID also makes it possible to define the individual charging time per user

OCPP-ready

- Ability to communicate with charging management providers via the OCPP protocol
- Remote station control, continuous communication and update of charging status

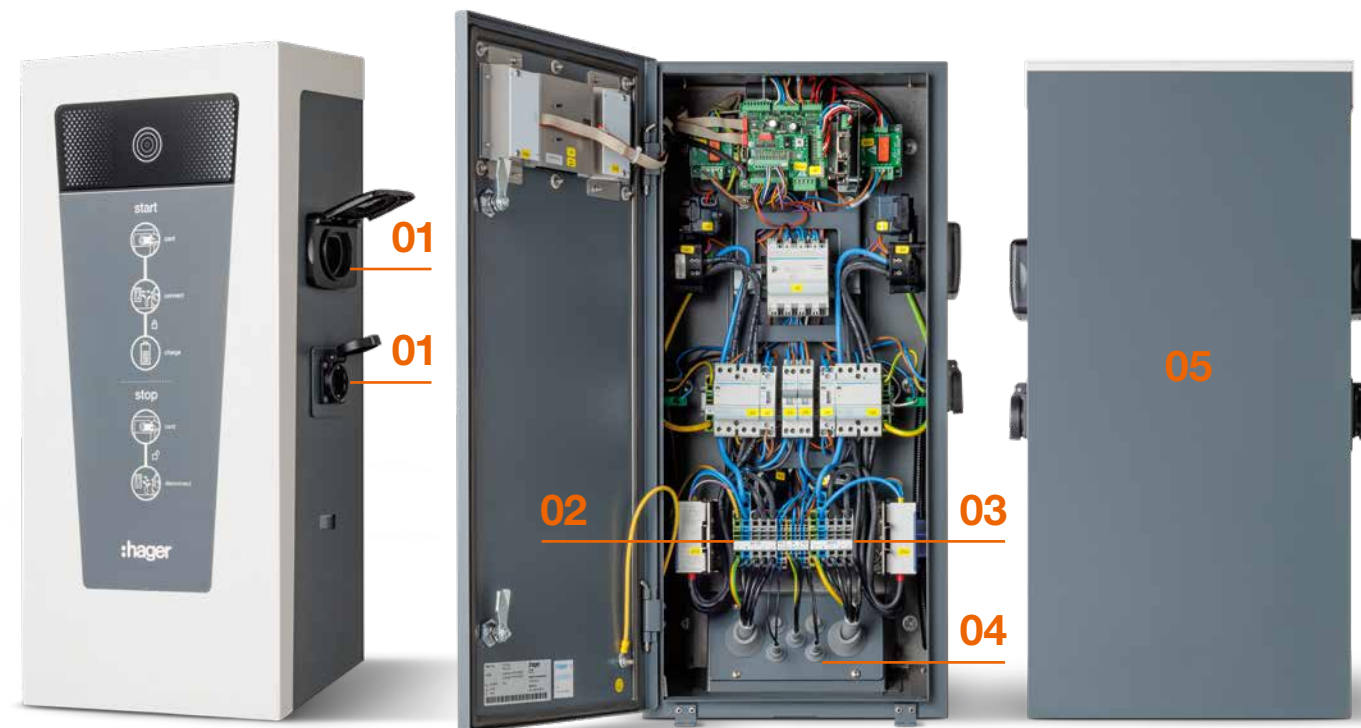
User-friendly

- Instructions for use with symbols on the front of the charging station
- Multiple visual indicators via separate LED bar for each vehicle
- Consumption display per charging socket
- Plug and start to charge automatically

Easy installation for shared use

witty park offers an IP54-rated housing made from robust sheet steel, specifically created with maximum outdoor durability in mind.

Quick and easy to install and connect, witty park is available with a comprehensive range of accessories.



01

Charging socket Type 2 and Type E

The Type 2 charging socket can be used to charge all electric vehicles with a charging power of between 3.7 kW (1-phase) and 11 kW (3-phase). The Type E charging socket can be used to charge all electric vehicles with a charging power of 2.3 kW.

02

Plug-in terminals

Thanks to plug-in terminals, connecting the supply cable is even faster and safer.

03

Large connection space

The compact but spacious housing offers plenty of room for wiring. A simple screwdriver is all that is needed to connect all components.

04

Cable entry flange with strain relief

The large cable entry flange makes installation even easier. The strain relief on the inside ensures a secure connection.

05

Rear cable passage accessory

Thanks to the rear cable passage accessory, you can lower your cables behind the witty park to ensure optimal safety. In this way, the Wallbox witty adapts perfectly to the conditions on site.



Important accessories:

Charging cable and stand

To get started with witty park, you will need the charging cable, which is available as an accessory. With the attractive stands in perfect design, you can transform your customers' charging station into a high-quality charging point.

Embracing responsibility

In times of advancing globalisation and dwindling natural resources, corporate responsibility is becoming increasingly important. No matter what we do, we must consider the consequences of our actions.

The issue of sustainability is deeply anchored in our DNA: we want to develop in such a way that we leave a healthy earth for our descendants. That is why, back in 2007, we committed ourselves to the United Nations Global Compact, the world's largest voluntary initiative to promote corporate responsibility.

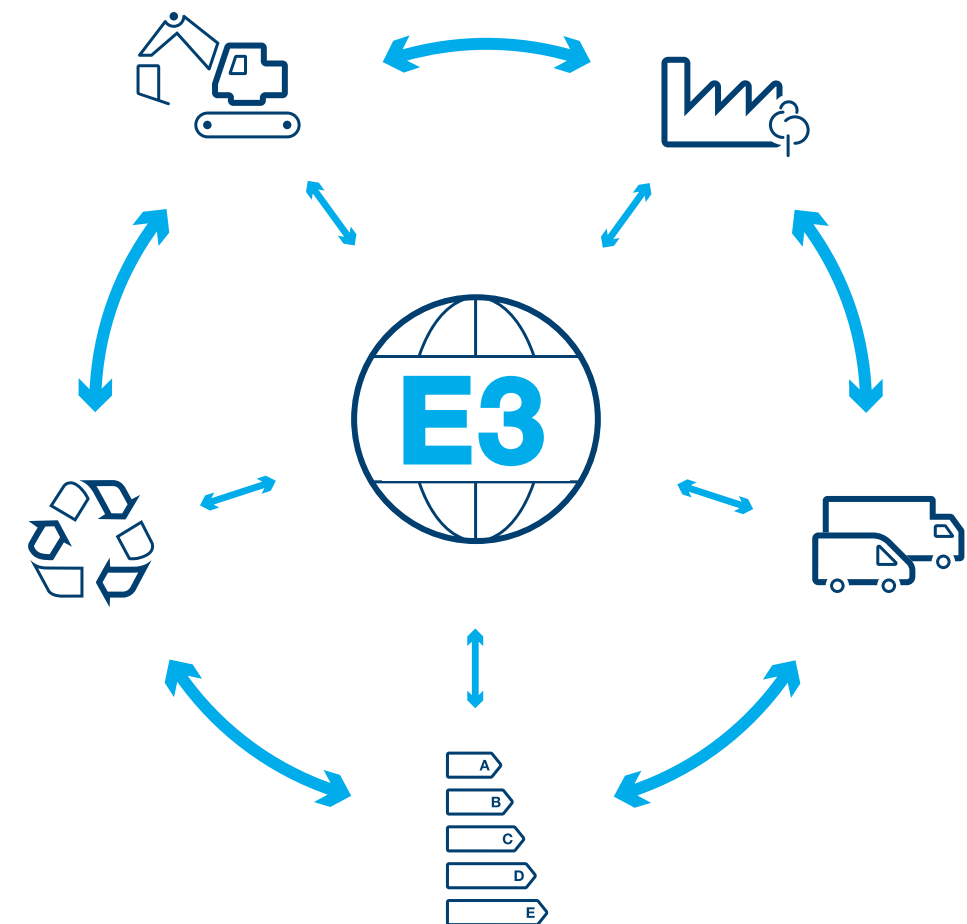
In our annual progress report, we record the measures that we have implemented in accordance with the Global Compact.



United Nations
Global Compact

Acting sustainably

As an owner-managed company with clear values, we are already thinking about the next generation. We invest in the education and training of our employees, produce in the most resource-efficient way possible, pack predominantly with recycled materials, continuously optimise our logistical processes, and use energy absolutely effectively. We measure our direct and indirect greenhouse gas emissions in accordance with international standards and take numerous initiatives to reduce them. E3 is the name of this maxim of our actions. Three times E for ethics, environment and energy.



Creating transparency

In order to make the life cycle assessment of our products comprehensible, we will in future provide them with a document containing all the information on their ecological impact: PEP (Profil Environmental Produit). This environmental profile documents the complete product life cycle.



XEV1S22T2TF

Charging station witty flow - 1x charging point Type2 + 1x plug socket (no cable)

Max power per charging point:	11 kW
Number of household sockets:	1
Number of load points:	1
Number of phases for infeed:	3-phase
Number of charging sockets type 2:	1
Frequency:	50/60 Hz
Degree of protection:	IP55
Width Installed Product:	250.5 mm
Length:	553.5 mm
Total depth:	173 mm
RAL Colour:	RAL 7035 – Light grey

Designation	PU	Order no.
Charging station witty flow EEBus 22kW RFID	1	XEV1S22T2TF



XEM600

Energy management controller for controlling 3 charging stations witty flow + PV and memory

Input voltage	24 V
Primary energy types:	Current

Designation	PU	Order no.
Energy management controller flow	1	XEM600



XEV1K11T2

Charging station witty start - 1x charging point type 2 (incl. key switch)

Max power per charging point:	11 kW
Number of charging points:	1
Number of phases for infeed:	3-phase
frequency:	50/60 Hz
Degree of protection:	IP55
Width Installed Product:	250.5 mm
Length:	553.5 mm
Total depth:	173 mm

Designation	PU	Order no.
Charging station witty start 11kW key	1	XEV1K11T2

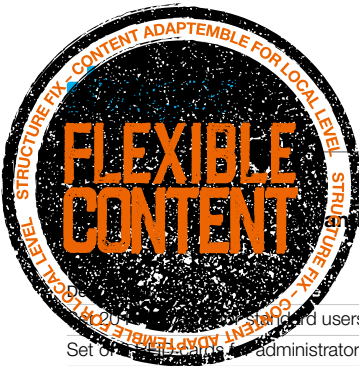


XEV42151611

Portable charging cable

Rated voltage:	400 V
rated current:	20 A, 32 A
Vehicle side version:	Type 2, type 1
version Infrastructure side:	Type 2
Charging mode:	Mode 3
Cable length:	5 m

Designation	PU	Order no.
LDST accessory cable M3T2/T1 20A 1P 5m	1	XEV42151611
LDST accessory cable M3T2/T2 20A 1P 5m	1	XEV42251611
LDST accessory cable M3T2/T2 20A 3P 5m	1	XEV42251631
LDST accessory cable M3T2/T2 32A 3P 5m	1	XEV42253231



Charging station witty start

	PU	Order no.
Set of 20 RFID cards for witty start	1	XEVA400
Set of 20 RFID cards for witty start and users	1	XEVA410
Set of 20 RFID cards for witty start and administrator	1	XEVA420
Set 20 RFID cards for witty flow	1	XEVA420



XEVA400

Sticker witty key switch

Designation	PU	Order no.
Sticker witty key switch	1	XEVA300
Sticker witty RFID, APP, QR code	1	XEVA310



XEVA300

Cable carrier for charging station witty

Designation	PU	Order no.
Cable carrier for charging station witty	1	XEVA100



XEVA100

Stand feet rectangular without base for charging station witty

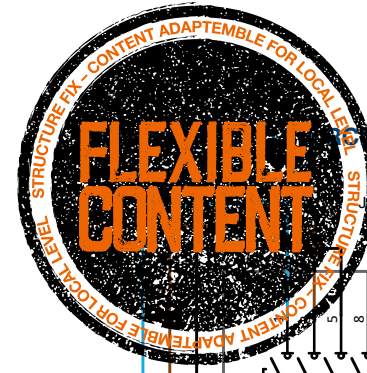
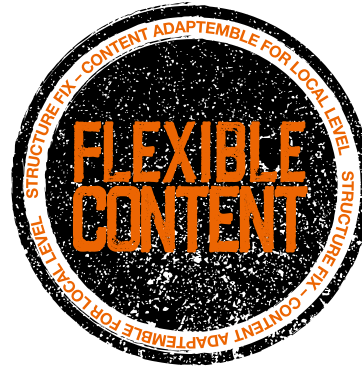
Material:	Stainless steel
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Designation	Width	Height	Depth	PU	Order no.
Stand for charging station witty simple	321 mm	1270 mm	91 mm	1	XEVA110
Stand for charging station witty double	321 mm	1270 mm	91 mm	1	XEVA115

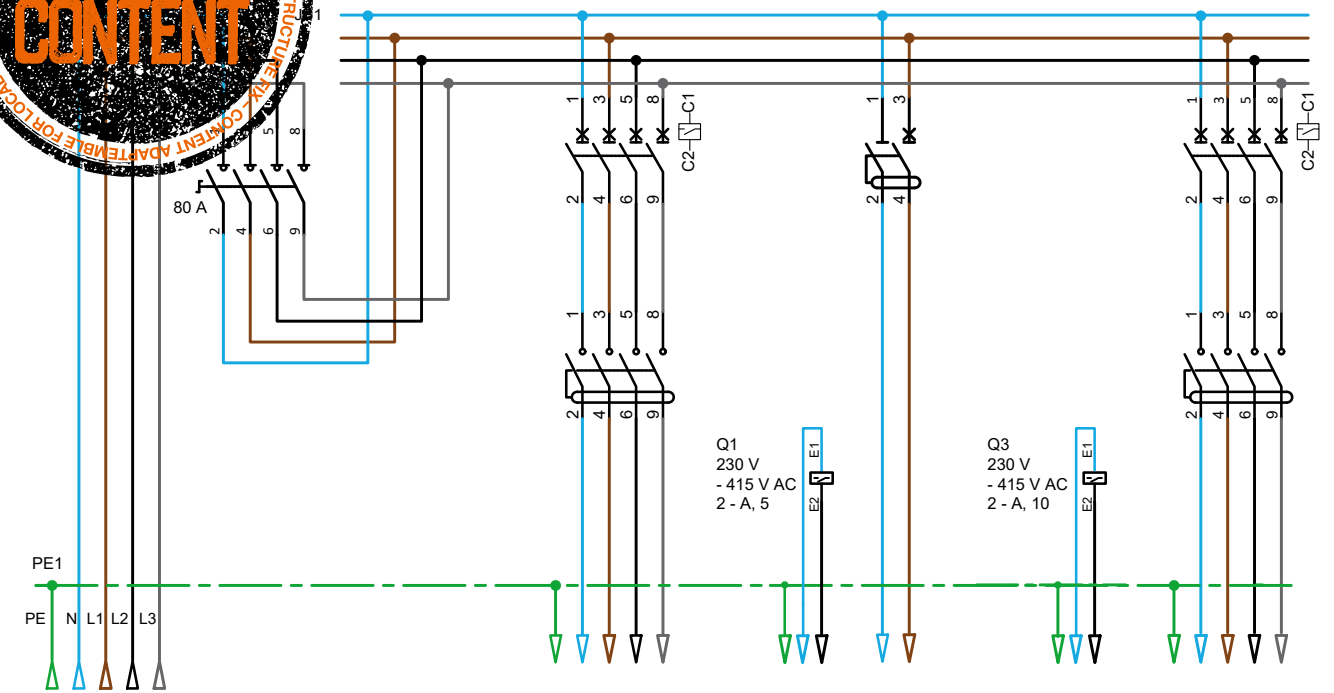


XEVA110

Typical power supply diagram three-phase witty park XEV601 and XEV601C



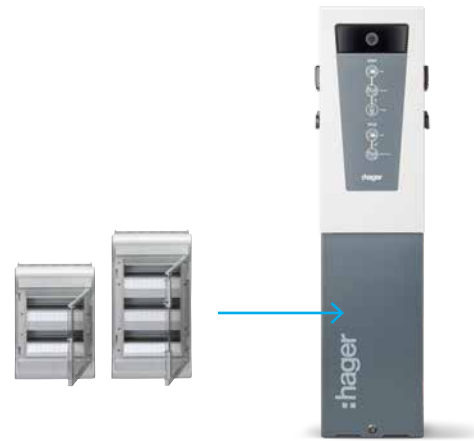
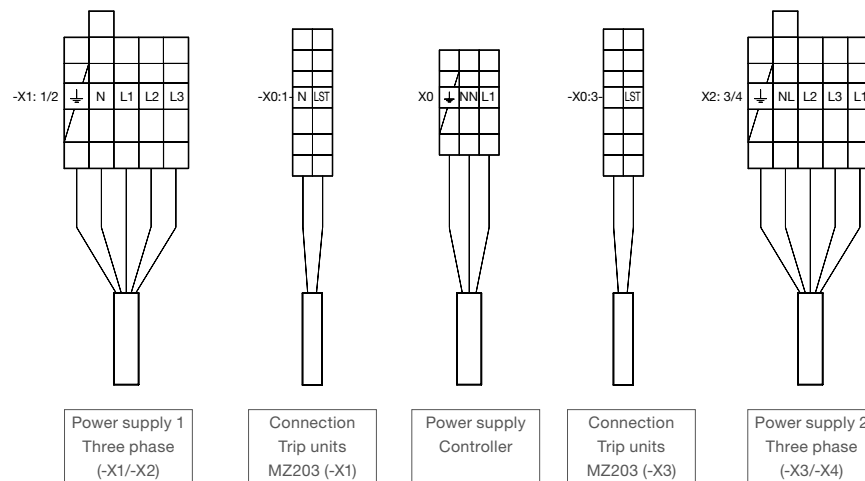
Options in a case or box mounted in the base of the witty park terminal*



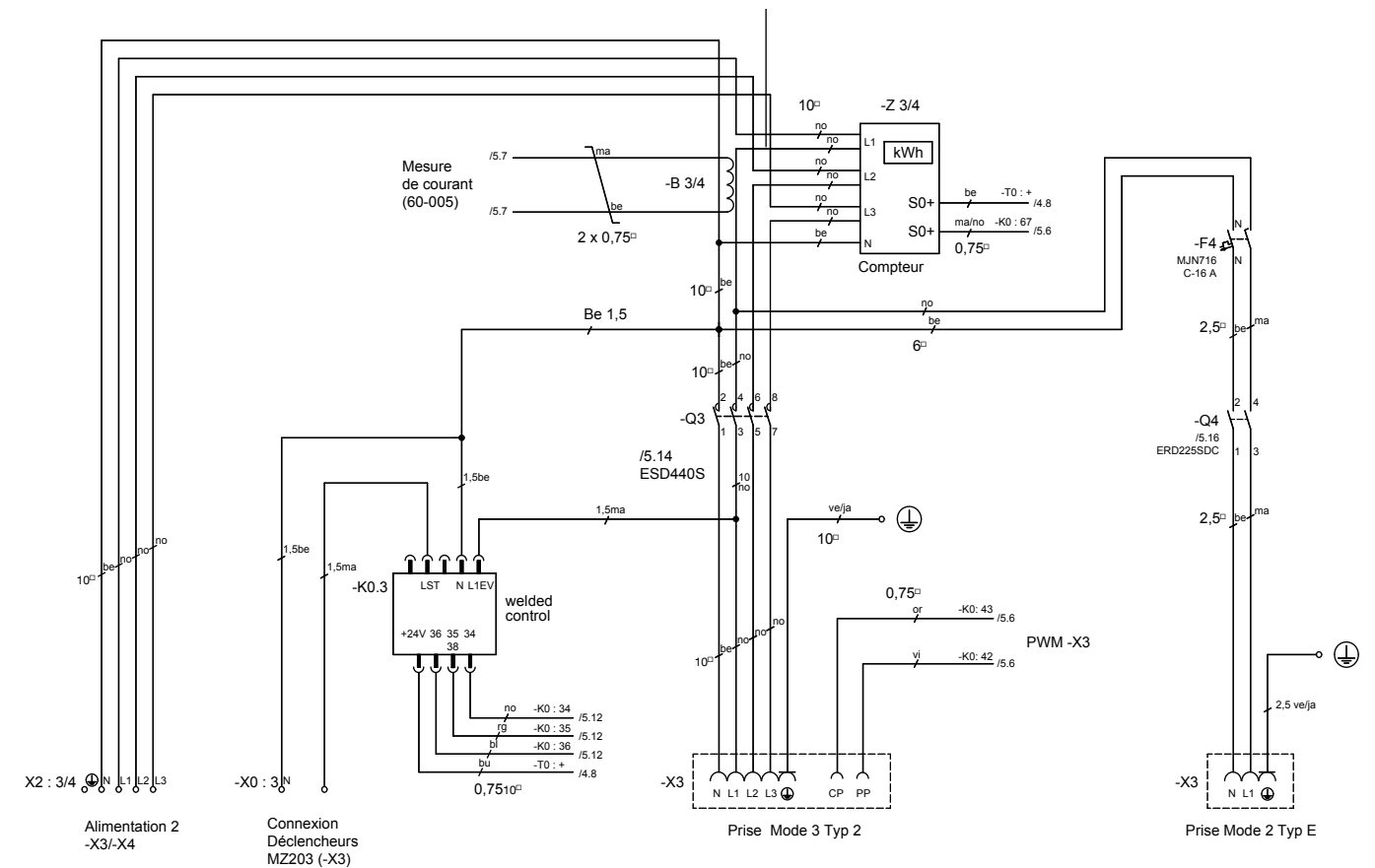
*RCDs must be adapted depending on the short-circuit current at the terminal base.

Option of placing the RCDs in a VE212F or VE312F splash-protected box in the witty park terminal stand

Connection blueprint



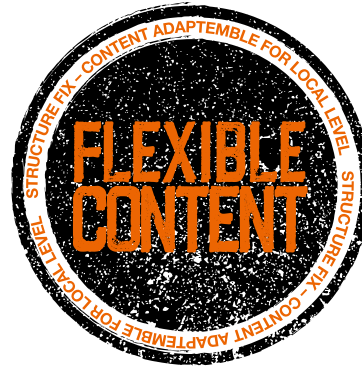
Example internal diagram of an XEV601C terminal



How to purchase the Hager witty range

Getting connected

At Hager we are here to make the purchasing process of our witty range as easy as possible for you. Simply follow these steps - we are here for you all the way to ensure that you receive exactly the service and products you want.



03

Install your product

You have your product, all you have to do is install it with all the hager services to support you, once the installation is complete, it's time to start using your spirited product and enjoy the ride.



01

Get in touch

Contact our friendly and professional sales representative who will be happy to take the time to really understand your needs. You can reach us online or through our hotline.

04

Get your servicing

We are there for you for any post-delivery servicing needs.



02

Get a proposition

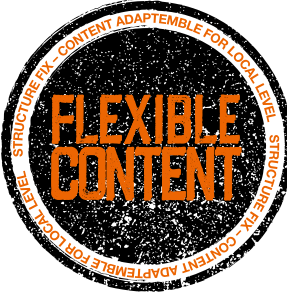
Based on your needs, our sales representative will put together a tailor-made offer for you. Everything you need will be included. If you have any questions, don't hesitate to ask. Once you are happy with our proposition, all you have to do is buy the equipment from your usual wholesaler.



05

Optional: Connect to a CPO

Once you have your witty connected to the internet, you can request a meeting with a CPO, who will check the eligibility of your EVCS. The CPO will provide you with the connection parameters – all you need to do is feed this information into the charging station. To finalise the hooking up process, the communication with the operator is checked and confirmed.



Frequently asked questions to chargings stations.

FAQs

Q: How many parking spaces should be pre-equipped in existing commercial buildings?

A:

capacity no. of parking spaces	industrial or tertiary building
	– main use offices without accommodation
	– closed and covered car park for employees
	– sole owner and sole occupant of the building
> 20 places or urban area > 50,000 inhabitants	10% of places
> 40 places ou zone urbaine < 50,000 inhabitants	5% of places

Q: Is there a standard for the cable and for the terminals?

A: The standard in Europe is a type 2 socket on the terminal side (T2S: Type 2 with plugs to comply with NF-C15 100). On the other side, it depends on the vehicle T1 or T2 . You can buy the cable from the car manufacturer or from Hager.
Important:
The plugs are mandatory. This is an opportunity to remind you that some industrial plugs (such as P17 for example) are not authorised in the home sector by NF-C15 100 because they are not equipped with blanking plugs. The electrician is the guarantor of the safety of the installation.

Q: Do I need special authorisation to implement a charging solution?

A: Yes, you need at least the IRVE label to install any type of charging solution for a vehicle. Whether it is a dedicated charging point or a 22kw terminal. You have to follow a training course and then ask for the mention from one of the two organisations: AFNOR and Qualifelec.

Q: Are there several training mentions?

A: Yes, there are three:
– Mention IRVE level P1: installation of terminals without supervision
– IRVE level P2 : installation of communicating bollards with supervision up to 22kw
– Mention IRVE level P3: installation of fast direct current bollards of more than 22kw
For a company to be qualified, one of its employees must have taken the training. The qualification is lost if the trained person leaves the company.

Q: What is the E.V. Ready label?

A: It is a non-mandatory label that certifies the whole system but may be required in some SCCs
It certifies:
– The training received by the installer
– The product installed
– The environment of the installation (residential / commercial)
– Complexity of the installation, (presentation of calculation notes)
This results in three levels:
– Q1 the installer has followed the VE035 training
– Q2 and Q3 : the installer has followed the VE036 training

Q: Are there any socket type "converters"? What to do with the old T3 sockets?

A: No: Some have tried to make T3 T2 adapters but without a permanent solution.



Q: At what power can I charge on a 2P+T socket?

A: There are two types of sockets:
– The "standard" sockets, according to the NF-C 61-314 standard, which are not able to support the charging of an electric vehicle at an intensity of 16A for hours.
If the intensity required by the vehicle is higher than 8A, some sockets could be subject to significant heating which could lead to a thermal runaway and a risk of fire.
– The witty sockets have reinforced contacts that can handle this type of load and a patented GreenUp type identification that with magnets identifies this socket as a reinforced socket accepting up to 16A.

Q: How fast will the car charge?

A: Finally, to answer the question of charging speed: it is the weakest link in the chain (plug/gate + cable + charger under the bonnet of the car) that will dictate the charging speed.
Thus, some car manufacturers only sell an Occasional Charging Cable (OCC) limited to 8A even with a reinforced socket.
Note: It is possible to buy a CRO with 8/14A or even 16A technology from another manufacturer.

Q: What is the difference between a 2P+T reinforced 16A socket and a terminal?

A: The power output is different:
– On a reinforced charging socket, the vehicle can charge at a maximum of 3.2 kW. Or even 1.8 kW for certain vehicles, depending on the cable.
– On a charging point, the power delivered will be between 3.7 and 22 kW.
Off-peak management:
– There is no off-peak management on a 2P+T socket.
– On a charging point, it is possible to charge during off-peak hours and also to delay the moment when the charge starts to give the hot water tank time to heat up.
Dynamic charge management :
– A 2P+T socket will deliver 10 to 16A without worrying about whether this current is available in the installation.
– A terminal, if connected to the TIC, will modulate its load current without ever exceeding the subscribed power.
– Safety features.
– A 2P+T socket has no other protection than its circuit breaker.
– A terminal monitors whether the current drawn by the vehicle exceeds the given set point.
– Checks if the vehicle respects the protocol between the bollard and the vehicle (in case of non-conformity the current will be limited to 8A).
– Monitors the internal temperature rise in the terminal.
– Checks if the contactor is not stuck.

Q: Are there different charging cables?

A: Yes, but this word has a broad meaning: CRO / mode 3 cable between the terminal and the vehicle.
– The CRO is provided by the car manufacturer. Their charging current depends on the manufacturer, those that do not manage the patented GreenUp technology (on reinforced plug) are limited to 8A, some go up to 16A.
– It is possible to use the CRO of another brand to charge at 14/16A vehicles whose CRO is limited to 8A (without responsibility of Hager).
– Charging cables are generally 5m long: therefore, be careful about the location of the charging station in relation to the type of vehicle.
Reminder: the charging current is determined by the weakest link in the chain
Caution:
– There are 20A and 32A cables.
– Single-phase and three-phase.
– To simplify: Hager only sells 32A three-phase cables (who can do more can do less).

Q: Is a charging point compatible with solar generation?

A: Yes, it is possible to install grid-connected solar generation and a charging point on the same installation.

Q: Are all terminals available with a mode 3 socket and a type E socket?

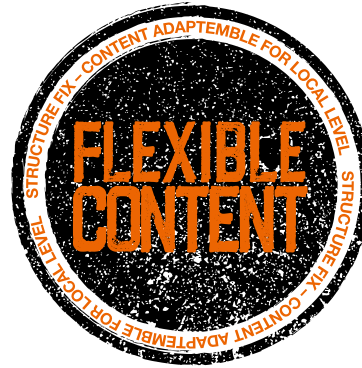
A: No, the XEV091, XEV092, XEV100 and XEV101 are only equipped with a mode 3 socket.
An important note:
Mode 3 and type E sockets can never be active at the same time.

For you, with you.

Customer proximity is one of our core values. Indeed, our solutions are always one step ahead because we know that our clients need tomorrow's solutions today. You can rely on Hager to be by your side with help and advice, whatever the project. With Hager, it's that easy to do business!



Build your training pathway according to your needs



Label Z.E Ready 1.4 certification will be awarded to you at the end of the training course, providing a basis for your application files towards an EVCI qualification

Pick your starting point!

Choose the package best suited to your needs and get the EVCI qualification P1 EV Ready Q1

Install and commission a charging terminal

Objectives

- Understand the challenges of this buoyant market promising growth and development.
- Identify requirements related to customers' electrical installations, types of vehicle and their operation.
- Identify the standards and types of architecture and become familiar with the main characteristics of charging terminals and sockets.
- Determine the infrastructure necessary to adapt the electrical installation.
- Implement and commission charging terminals.

A certificate will be awarded to you to provide the basis for a Level P1 EVCI qualification with an approved body.

On-site format
1 day (7 hours)
Reference VE035

Obtain the EVCI qualification P1 EV Ready Q1

Aims of the training course

- Understand the challenges of this buoyant market promising growth and development.
- Identify requirements related to customers' electrical installations, types of vehicle and their operation.
- Identify the standards and types of architecture and become familiar with the main characteristics of charging terminals and sockets.
- Become familiar with the regulations in force.
- Become familiar with the safety requirements specific to EV charging facilities.
- Determine the components needed to adapt the electrical installation.
- Implement and commission charging terminals.
- Start on the path to an EVCI qualification and obtain EV Ready level Q1 certification.

Remote format
4 virtual classes of 2 hours each
Reference VED35

...and become an expert

Develop your business by strengthening your skills so you can offer your customers high value-added services

Implement connected charging terminals and remote services

Aims of the training course

- Determine the necessary infrastructure and changes to be made to the electrical installation.
- Become familiar with the regulations specific to ERP and car parks.
- Choose the appropriate terminal and related accessories.
- Implement and set up the connected charging terminals.
- Design and set up a cluster of terminals with integrated communication.

On-site format
2 days (14 hours)
Reference VE036

Perform maintenance of charging terminals

Aims of the training course

- Identify the electrical architecture of the installation (high current and low current).
- Prepare a diagnosis of operation and faults.
- Take action and replace faulty parts.
- Reconfigure and/or reset the charging terminals after repair.
- Carry out the tests and checks before the charging terminals are put back into service.

On-site format
1 day (7 hours)
Reference VE037



To find out more and register
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