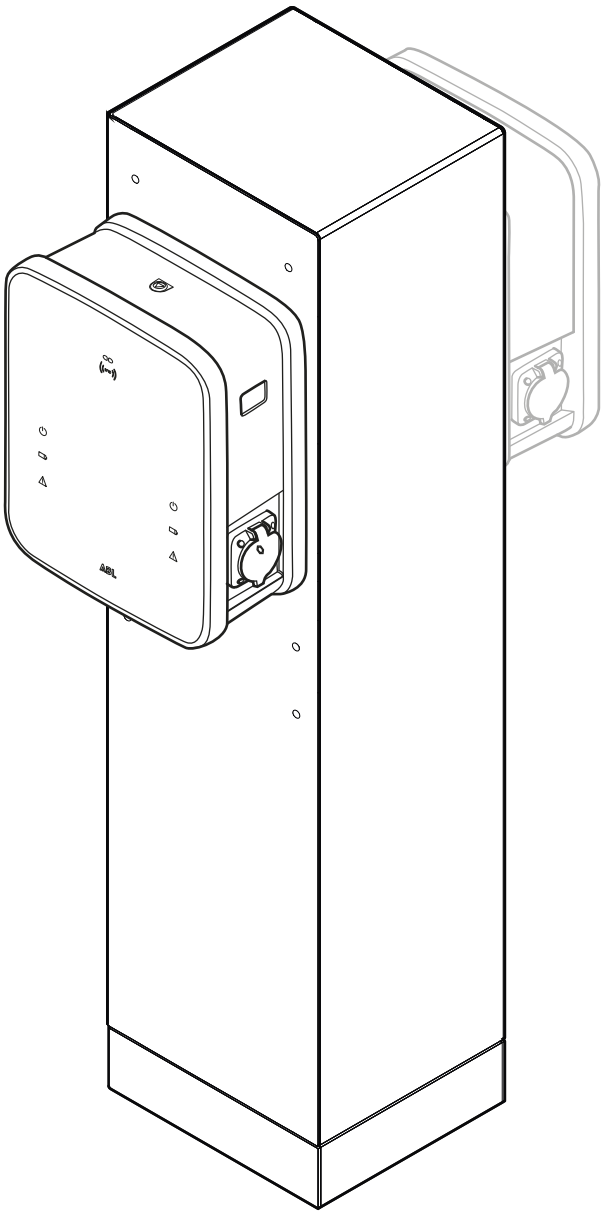

EN

POLEMH6

Installation manual

Article No.: 0301697_EN_a

Contact

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NOTE

Please note that the wallboxes shown on the cover sheet are not included with the POLEMH6, but can be ordered separately for a fee.

Revision:0301697_EN_a,version:10/12/2021

Contents

Additional technical information

Additional technical information is required to install an eMH3 Wallbox on the POLEMH6 mounting pole, as well as regarding further accessories. It is contained in separate documents.

In addition, the technical data for your mounting pole and the accessories are collated in product-specific data sheets. You can download these documents from the ABL website using the following link:

https://www.ablmobility.de/en/service/downloads.php

NOTE

Displaying the additional information on a computer, tablet or smartphone

Additional technical information is made available in the Portable Document Format (PDF).

- To display PDF files, you need the free Adobe Acrobat Reader or comparable software.

You can find further information about our product range, as well as about separately available accessory components on our website at **www.ablmobility.de/en**. Please visit:

https://www.ablmobility.de/en

Intended use

The POLEMH6 mounting pole is designed for the outdoor installation of one or two eMH3 Wallboxes. In order to ensure the necessary stability, the POLEMH6 can be installed on the optionally available EMH9996 concrete foundation or on a self-constructed concrete foundation. To protect the installed wallbox from the weather, ABL offers the compatible WPR36 weather shield. For cable management at the charging point, the CABHOLD cable holder with charging plug receptacle can be installed on the POLEMH6 mounting pole.

Information in this document

This document describes the installation of the POLEMH6 on the EMH9996 foundation as well as the subsequent mechanical installation and electrical connection of an eMH3 Wallbox to the mounting pole: It is recommended that all working steps described in this document are carried out by qualified specialist electrical contractors only.

	User	Specialist electrical contractor
Installation manual (this document)	✗	✓
Additional technical information		
■ Data sheets	✓	✓
■ Installation instructions WPR12/36	✓	✓
■ Installation instructions CABHOLD	✓	✓

Important information

General

This manual describes all working steps required to install and/or operate the product it concerns.

Certain sections of this manual are specially formatted for quick and easy reference.

- Descriptions listing equally valid options are indicated by bullet points.

1 Descriptions listing operating steps are numbered in chronological order.

DANGER!

Indicates life-threatening electrical voltages

Sections marked with this symbol indicate electrical voltages that present a danger of loss of life or grievous bodily injury.

- Actions marked with this symbol must not be carried out under any circumstances.

WARNING!

Indicates important actions and further hazards

Sections marked with this symbol indicate further hazards that may result in damage to the product or to other connected components.

- Actions marked with this symbol must be carried out with special care.

NOTE

Indicates important information for operation or installation

Sections marked with this symbol indicate further important information and features necessary for successful operation.

- Actions marked with this symbol should be carried out as required.
- Passages marked with this symbol contain valuable additional information.

Safety instructions

The safety notices serve to ensure the proper and safe installation, as well as subsequent safe operation of the device.

DANGER!

Violation of the safety information

Disregard of or actions contrary to the safety information and instructions contained in this manual may lead to electric shock, fire, severe injury and/or death.

Please pay attention to the following points:

- Please read this manual carefully.
- Heed all warnings and follow all instructions.
- Only use accessories intended and sold for the product by ABL.
- Do not install this device in close vicinity to running water, water jets or areas subject to flooding.
- The product must not be installed in explosive atmosphere areas (EX areas).
- Mechanical installation should be carried out by qualified specialist personnel.

- Electrical installation and testing must be carried out with reference to local rules by a qualified specialist electrical contractor, who, on the basis of their specialist training and experience, as well as their knowledge of the relevant standards, is able to assess and carry out the working steps described in this manual and recognise potential hazards.

WARNING!

Notification or approval requirement for charging stations

Please note that electrical grid operators, energy suppliers or national regulations may require notification of or approval for the installation or operation of a charging station.

- A Duty to Notify applies in Germany according to §19 NAV.

- In case of installation faults, or malfunctions that can be traced back to faulty installation, always contact the contractor who carried out the installation first.
- The product must not be covered with other objects or materials.
- No liquids or receptacles containing liquids must be placed on the product.
- Please note that the POLEMH6 mounting pole must never be installed directly on asphalt! To ensure safe and proper mechanical installation, the optionally available EMH9996 concrete foundation or a functionally equivalent alternative must always be provided.
- Do not under any circumstances make alterations to the product. Any disregard of this instruction represents a safety risk, fundamentally breaches the guarantee provisions and may void the warranty with immediate effect.
- Malfunctions affecting the safety of persons, connected electric devices or the device itself must be resolved by a qualified specialist electrical contractor.
- Should one of the following malfunctions occur, please contact the specialist electrical contractor who has carried out the installation of your wallbox and accessories:
  - The product housing has been damaged mechanically, or the housing cover has been removed or can no longer be closed.
  - Sufficient protection of the small distribution board against splashing water and/or foreign objects is no longer provided.
  - The product does not function properly or has been otherwise damaged.

WARNING!

Observation of further safety instructions

Please always observe all further safety instructions in the manuals for the optionally available eMH3 Wallbox and other accessories for the POLEMH6.

User information

- Ensure that rated voltage and rated current of the supply cable at the installation location comply with the parameters of your local electricity grid and that the rated output of the wallbox(es) installed on the POLEMH6 is not exceeded during operation.
- Local safety regulations regarding the operation of electrical devices for the country in which you operate the wallbox(es) installed on the POLEMH6 always apply.
- Never install or operate the POLEMH6 in confined spaces. In particular, it must be ensured that vehicles can be parked at a suitable distance from the POLEMH6 for charging and can be connected to the charging cable without tension.
- Make sure that the POLEMH6 is always closed and locked when in use. All authorised users must be aware of the 'unlock' position of the key.
- No user-maintainable parts are located inside the device.
- Only have the POLEMH6 repaired by a qualified specialist electrical company.

- An eMH3 Wallbox installed on the POLEMH6 may only be operated after it has been installed without any technical faults and subsequently approved by a qualified specialist electrical company.

NOTE

Changes to functions and design features

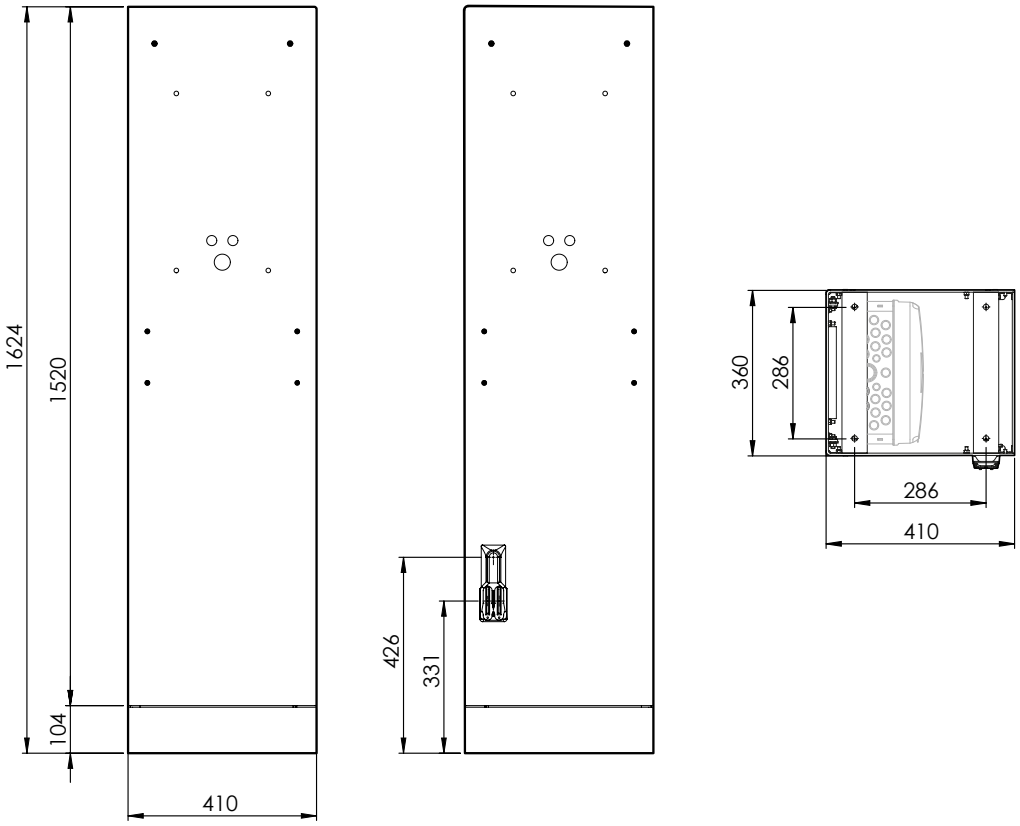
Please note that all technical details, specifications and design characteristics of the product may be changed without prior notice.

Dimensional drawings and dimensions

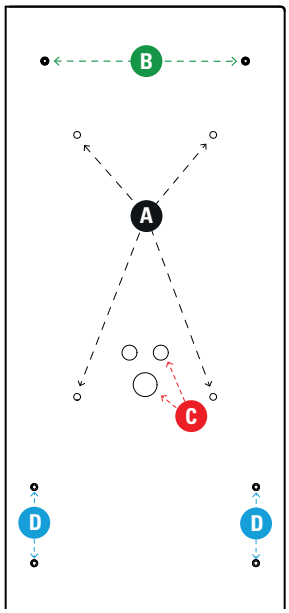
The dimensions and mounting points of the POLEMH6 as well as the optional EMH9996 foundation are shown in the following dimensional drawings.

POLEMH6

Mounting pole for installing up to two eMH3 Wallboxes, front and rear view as well as view from below (all dimensions in mm)



Detailed view of the front and back



A These four thread points are used to attach the mounting plate of the eMH3 Wallbox. The required M8×25 rounded-head screws are included with the POLEMH6.

B These two thread points are used for directly mounting the WPR36 weather shield on the POLEMH6 (see “Accessories” on page 12).

C The supply cable is inserted into the eMH3 Wallbox via the large opening, while the two small openings are for data cables.

D These two thread points are each used for directly mounting one CABHOLD cable holder on the POLEMH6 (see “Accessories” on page 12).

EMH9996

ABL offers the EMH9996 foundation as an optional accessory for installing the POLEMH6: The foundation block is made from grade C20/25 concrete and complies with exposure classes XC4 and XF1 for outdoor use. Integrated threaded anchors ensure stable and secure installation of the POLEMH6. The supply cable and data cables can be fed into the mounting pole from below via two recessed empty conduits (DN 100).

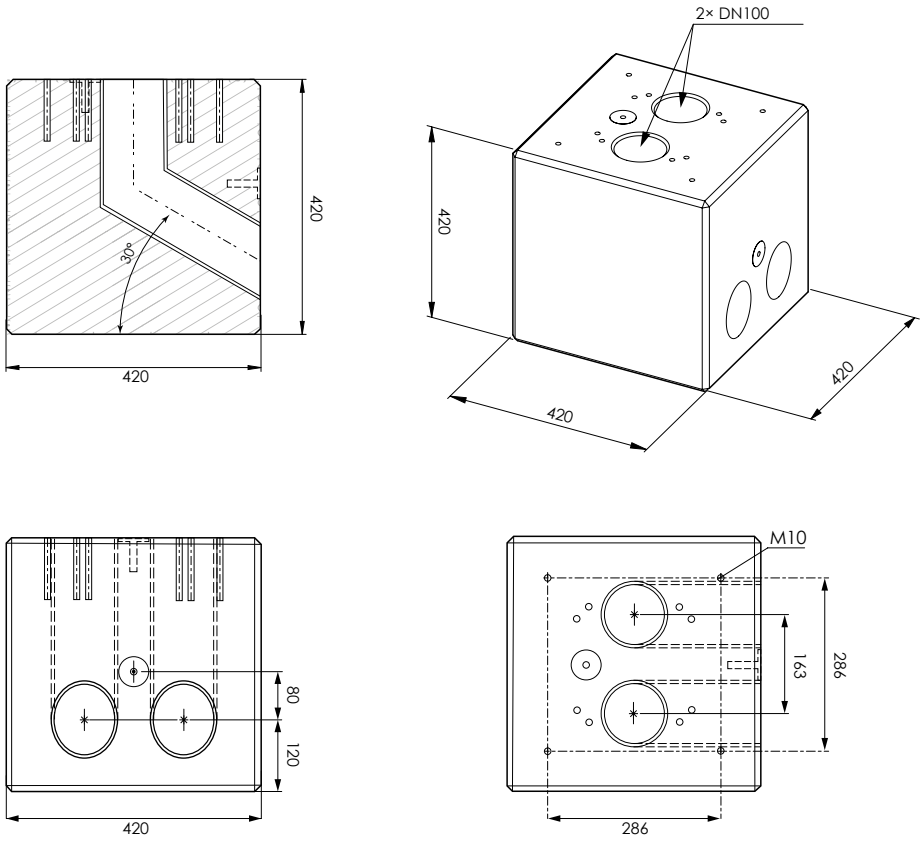
NOTE

Using a custom foundation

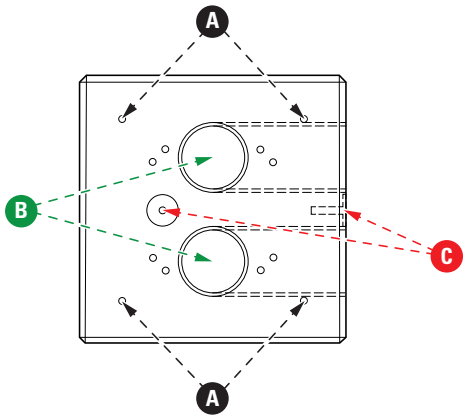
These instructions describe how to install the POLEMH6 on the EMH9996 concrete foundation. In principle, it is possible to make a custom foundation, but this must be based on the specifications of the EMH9996.

- If you wish to install and operate the POLEMH6 on a self-made foundation, a stable base and fault-free operation outdoors cannot be guaranteed.

Concrete foundation for installing a POLEMH6 mounting pole, section as well as isometric, top and front view (all dimensions in mm)



Detailed view of the top side



A These four threaded anchors are used to mount the base of the POLEMH6 mounting pole using the washers and M10×35 hexagon socket screws supplied.

B The two empty conduits are used to feed the supply and data cables through the foundation into the POLEMH6.

C If the POLEMH6 is installed outside the rolling sphere, grounding anchors can be attached here with M12 threads.

Introduction to the POLEMH6

Thank you very much for choosing the POLEMH6 mounting pole from ABL!

The POLEMH6 is designed for the outdoor installation of up to two ABL eMH3 Wallboxes. The internal small distribution box with terminal block provides protection against contact and weather and allows virtually maintenance-free wiring of the wallbox(es) to the electricity grid. Thanks to additional top-hat rails, further modules (such as lightning protection) can be installed as required. Access is via a housing cover that protects the interior of the mounting pole from unauthorised access by means of an integrated lock.

Thanks to the powder-coated metal housing, the POLEMH6 is optimally protected against corrosion and, with housing impermeability in accordance with IP44, it is ideal for outdoor installation. To ensure a stable and secure position outdoors, ABL recommends installing on the optionally available EMH9996 concrete foundation. Alternatively, a self-constructed foundation can be used, but it must meet the same specifications.

Further information on technical data is available in the appendix from page 28.

Identification of the POLEMH6

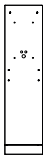
There is a rating plate on the inside right of the rear panel to identify the POLEMH6. Before installation, open the housing cover and check the rating plate to make sure that the model you have is the mounting pole intended for your eMH3 Wallbox.

You can find further information on the POLEMH6 in section “Technical specifications” on page 28.

Items supplied

The product is delivered including the following components:

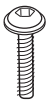
- POLEMH6 mounting pole, 1 piece



- Key for unlocking the housing cover, 3 pieces

- Download note (multilingual), 1 piece

- M8×25 rounded-head screw, hexagon socket with flange, 8 pieces



When delivered, the inlets for the supply and data cables as well as the thread points for fastening the wallbox, the weather shield and the cable holders are also fitted with suitable blind plugs.

NOTE

Checking the components included

Check immediately after unpacking whether all components are included: should any components be missing, please contact the dealer from whom you purchased the POLEMH6.

WARNING!

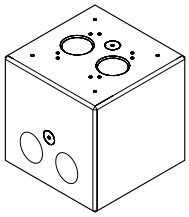
Storing the original packaging

Keep the original packaging in a safe place. In the event of damage that cannot be repaired on site, the mounting pole may have to be dismantled and sent in for repair. The following requirements must be met for proper shipping:

- The mounting pole must be protected from mechanical damage during transport by means of the original packaging or other equivalent packaging.
- To ensure safe shipping, fixed transport on a pallet is recommended.

Accessories

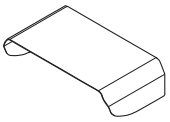
The following accessories for the POLEMH6 mounting poles are available separately:



- EMH9996

Precast concrete foundation for installing the mounting pole POLEMH6

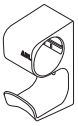
h = 420 mm, w = 420 mm, d = 420 mm



- WPR36

Weather shield for installation on an exterior wall or the mounting pole POLEMH6

h = 142 mm, w = 515 mm, d = 285 mm



- CABHOLD

Cable holder with charging plug receptacle for installation on an exterior wall or an ABL mounting pole

h = 187 mm, w = 76 mm, d = 105 mm

You can find further information on ABL charging stations and accessories at www.ablmobility.de/en.

Installation

When installing the POLEMH6, various specifications regarding the location and the connection technology must be met in order to ensure safe operation.

Requirements for the installation site

The POLEMH6 was developed for outdoor use. To ensure proper installation, you as the operator must adhere to the following specifications regarding the location and positioning.

- Be sure to observe all local regulations for electrical installations, fire prevention and accident prevention.
- All guidelines for the installation of low-voltage systems in accordance with IEC 60364-1 and IEC 60364-5-52 apply.
- The installation surface must have sufficient strength to withstand the mechanical loads. It is therefore strongly recommended not to install the POLEMH6 directly on asphalt or a concrete floor, but to use a concrete foundation such as the ABL EMH9996 with suitable specifications (concrete C20/25 in accordance with EN 206-1:2013).
- A sufficiently dimensioned supply cable for the power supply of the respective wallbox must be provided at the installation location. The supply cable must be laid so that it lines up with the pipe opening in the concrete foundation and in the ground. If necessary, the supply cable must be protected against mechanical influences (by a suitable hose or pipe) in the area in front of the foundation.
- To integrate the wallbox(es) installed on the POLEMH6 in a group installation, suitable data cables must also be laid to the installation location.
- Suitable collision protection must be provided on site to provide the POLEMH6 with mechanical protection from collision with a vehicle.
- The minimum distance between the vehicle and the POLEMH6 should be no less than 50 cm and no more than 150 cm.
- Select the installation location so that the charging cable from the wallbox easily reaches the charging socket on the vehicle: the cable must not under any circumstances be strained when connected to the vehicle.
- For the safe operation of your mounting pole, minimum distances to other technical installations must be observed: you can obtain further information from your electrical contractor or distributor.
- The POLEMH6 should not be installed in high-traffic areas or along thoroughfares.
- The POLEMH6 is designed for operation at high ambient temperatures. However, it is important to ensure that the maximum permissible operating temperature is not exceeded due to external influences such as direct sunlight or similar.

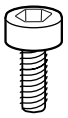
Specifications for the mechanical installation of the POLEMH6

The entire installation of the POLEMH6 should always be carried out by qualified personnel: at least two people are required for the mechanical installation.

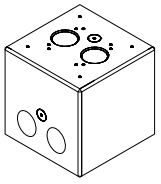
For mechanical installation of the POLEMH6, you will need the following components:

- Key for unlocking the housing cover (included with the POLEMH6)

- DIN 912 A2 M10×35 hexagon socket screw, 4 pieces (included with the EMH9996)



- EMH9996 concrete foundation for installing the mounting pole (available as accessory)



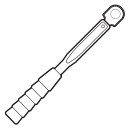
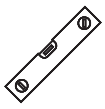
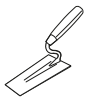
WARNING!

Using a custom foundation

As an alternative to the EMH9996 concrete foundation, which is available as an accessory, you can also create your own foundation and use it for installing the POLEMH6.

- The calculation, design and manufacture of the self-made concrete foundation are the sole responsibility of the operator or the company carrying out the installation on behalf of the operator.

In addition, you will need the following tools:

- Torque spanner with Allen key, 6 mm 
- Spirit level 
- Phillips screwdriver 
- Slotted screwdriver 
- Torx screwdriver 
- Hexagon screwdriver 
- Tape measure 
- Bricklaying tools 
- Concrete screed (mixed) 
- Vacuum lifting tool (optional) 

Laying the EMH9996 foundation

The optional EMH9996 concrete foundation from ABL provides a level installation surface for the POLEMH6 mounting pole and ensures the necessary stability and support via factory-inserted screw anchors.

Please note: these installation instructions only describe how to install the POLEMH6 on the EMH9996 concrete foundation, which is available as an accessory.

DANGER!

Dangerous electrical currents

Always observe the 5 safety rules:

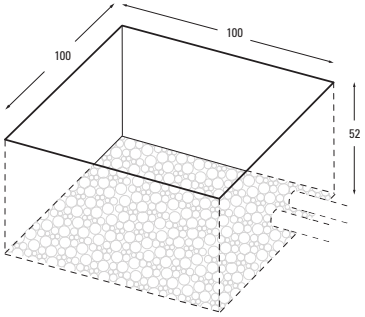
1 Cut power source
2 Secure all cut-off devices
3 Verify absence of voltage
4 Ground and short-circuit
5 Cover or bar access to adjacent components under voltage

The supply cable must not be reconnected to the electricity grid until **Step 4** in the section “Electrical connection of the POLEMH6” on page 23!

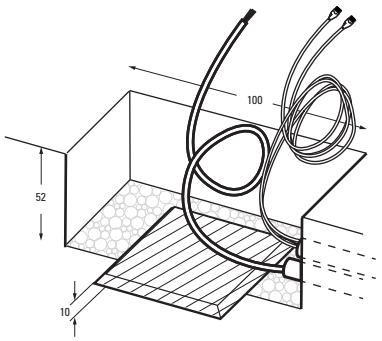
Proceed as follows:

1 Dig a ditch suitable for the EMH9996 foundation (recommended: 100 × 100 cm).

- Take into account the dimensions of the foundation (H × W × D: 420 × 420 × 420 mm) as well as a levelling layer (crushed rock/gravel) and a cement mortar layer of about 10 cm under the foundation.



2 Apply a first layer of cement mortar with a height of approx. 10 cm at the positioning location of the foundation.



NOTE

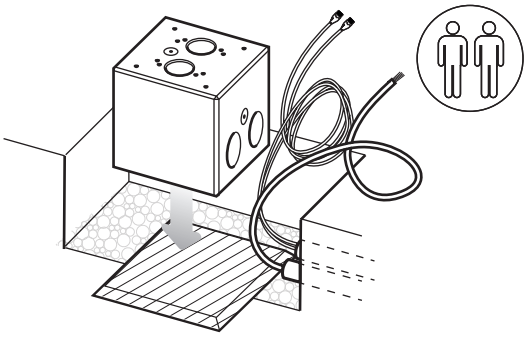
Alignment of the foundation

Please note the following instructions for aligning the EMH9996:

- The top of the EMH9996 can be identified by the recessed threaded anchors for screwing the POLEMH6 in place.
- As the POLEMH6 can be mounted on the foundation in any direction (0°/90°/180°/270°), the empty conduits on the side of the EMH9996 can be aligned with the supply and data cables in the ditch as required.

3 Place the foundation centrally on the cement mortar layer.

- This step must be performed by two people.



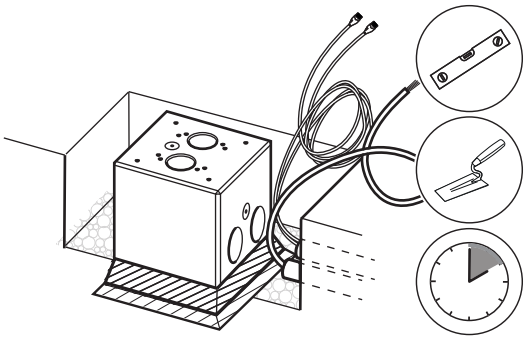
NOTE

Wiring of the empty conduits

The two empty conduits on the EMH9996 ensure a high degree of flexibility when laying the cabling for group installations.

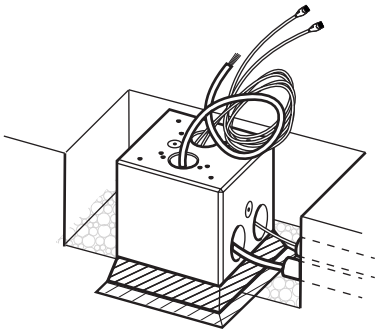
- For a series connection in a group installation, you can run the power cable along with shielded data cables through one empty conduit or distribute them between the two empty conduits.
- For unshielded data cables, it is recommended to use one empty conduit exclusively for the power cable and the other for the data cables.

4 Make sure the foundation is level in all planes on the cement mortar layer and then create a supporting structure all the way around the foundation with concrete screed (45° smooth line to around the lower edge of the conduit openings).



5 Allow the concrete to set completely over a reasonable period of time so that the foundation is protected from slipping when the ditch is eventually filled and compacted with compactable soil.

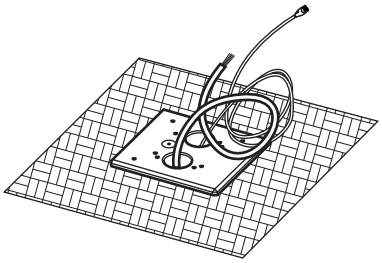
6 Run a supply cable with sufficient length (approx. 0.8 m) through an empty conduit of the foundation for connection to the high-current terminals in the small distribution board of the POLEMH6.



7 Run data cables with sufficient length (approx. 2.0 m) through the same or the second empty conduit for the subsequent installation of the wallbox on the mounting pole.

8 Fill the entire ditch around the foundation to ground level with compactable soil.

- The soil must be filled and compacted in layers and evenly on all sides.



9 Smooth out the surface.

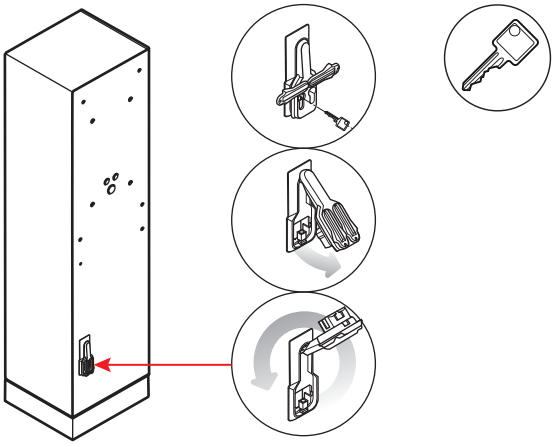
Installing the POLEMH6 on the EMH9996 foundation

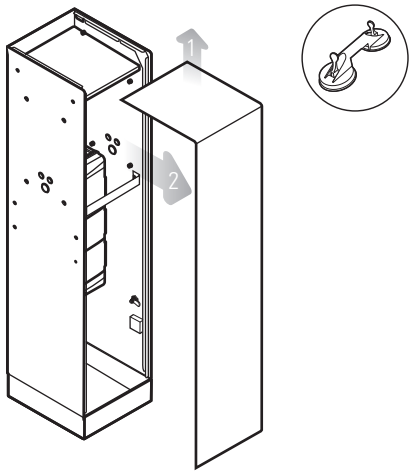
After placing the foundation, you can install the POLEMH6 on the EMH9996.

Proceed as follows:

1 Unlock the double cylinder pivot lever of the POLEMH6.

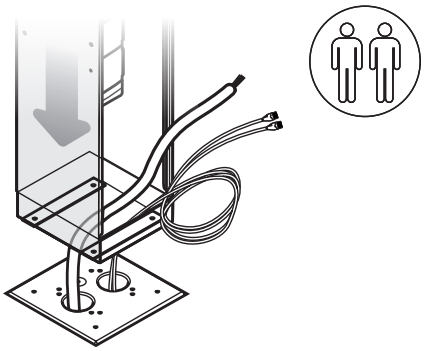
- Slide the cover of the left-hand locking cylinder to the side.
- Unlock the locking cylinder with the key supplied.
- Flip the control lever outwards and turn it upwards 180°.





2 Lift the unlocked housing cover upwards, pull it off the housing and set it aside.

- Using a vacuum lifting tool or similar tool will make it easier to lift off the housing cover.



3 Place the POLEMH6 on the foundation and run the power and data cables through the base.

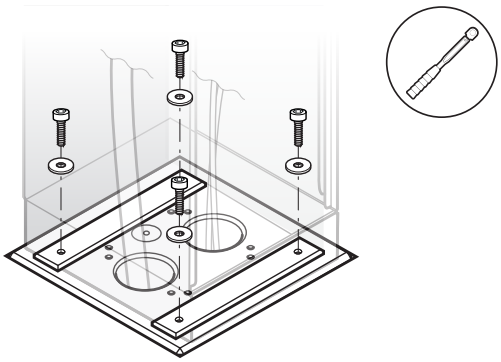
- This step must be performed by two people.

NOTE

Cable lengths for connection

Please note the following recommendations when connecting the power and data cables:

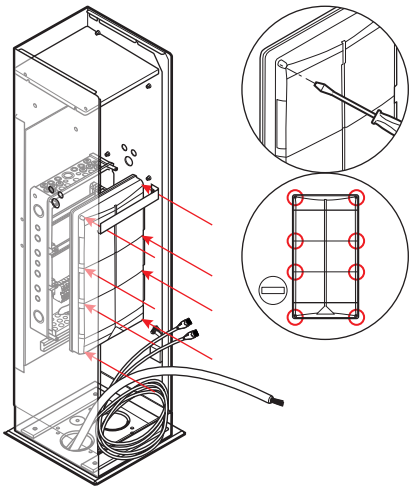
- **Power line:** To connect to the terminal block on the lowest standard rail of the small distribution board, a cable length of approx. 0.8 m from the foundation is recommended.
- **Data cables:** To connect to the bus interfaces of the eMH3 Wallbox, a cable length of approx. 2 m from the foundation is recommended



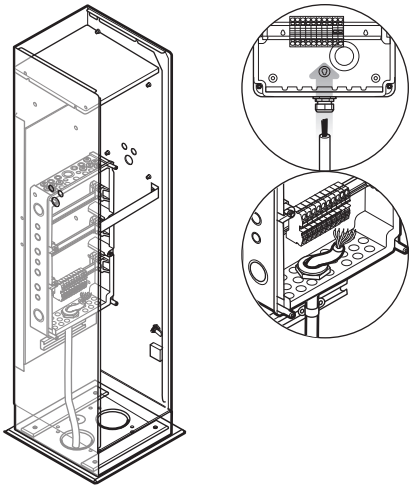
4 Align the POLEMH6 over the holes on the foundation and use the torque spanner to screw the M10×35 hexagon socket screws over washers into the threaded anchors of the foundation.

- The allocation scheme for the thread anchor is illustrated in section “Detailed view of the top side” on page 10.

5 Use the slotted screwdriver to loosen the eight screws in the upper part of the small distribution board and pull off the upper part.



6 Run the power line through the lower PG cable gland into the case of the small distribution board and secure the cable gland.

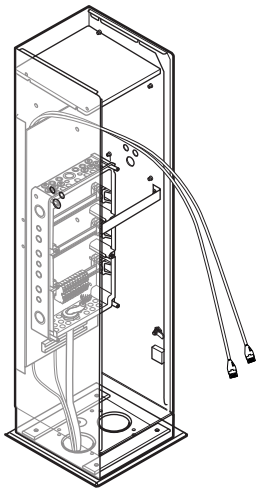


NOTE

Strain relief for the power line

A cable clamp is recommended to secure the supply cable in the profile rail under the small distribution board. This then serves as strain relief for the electrical connection.

7 Lay the data cables behind the sheet metal cover of the small distribution board.



Specifications for the mechanical and electrical installation of the wallboxes

The mechanical and electrical installation of the wallbox on the POLEMH6 must be carried out by qualified electricians: It is recommended that the installation be carried out by two persons.

DANGER!

Dangerous electrical currents

Always observe the 5 safety rules:

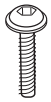
1 Cut power source
2 Secure all cut-off devices
3 Verify absence of voltage
4 Ground and short-circuit
5 Cover or bar access to adjacent components under voltage

The supply cable must not be reconnected to the electricity grid until **Step 4** in the section "Electrical connection of the POLEMH6" on page 23!

For mechanical and electrical installation, you will need the following components included with the POLEMH6:

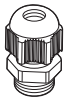
- Key for unlocking the housing cover

- M8×25 rounded-head screw for fastening the mounting plate (4 pieces per wallbox)



In addition, you will need the following components and tools:

- PG 13.5 cable gland (for each M20 cable entry)



- Triangular key (included with the wallbox)

- Torx screwdriver

- Slotted screwdriver

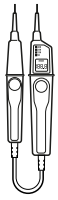
- Phillips screwdriver

- Hexagon screwdriver

- Stripping tool

- Hammer

- Voltage tester



NOTE

Additional tools for installing the wallbox

Additional accessories and tools are required for the installation and start-up of the eMH3 Wallbox. For more information, see the associated installation instructions, which can be downloaded here:

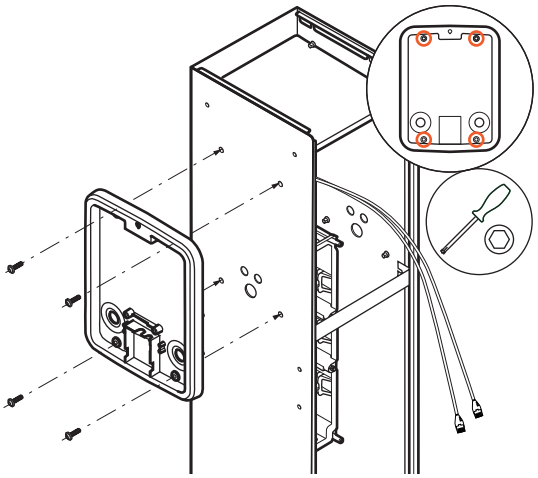
→ Installation instructions eMH3

Installing the eMH3 Wallbox on the POLEMH6

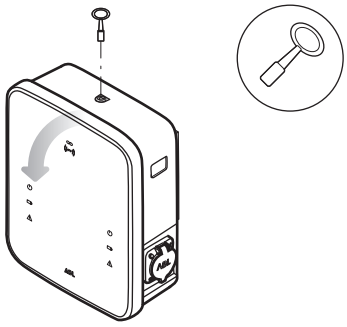
This section describes how to install an eMH3 wallbox on the POLEMH6.

Proceed as follows:

1 Screw the mounting plate of the eMH3 Wallbox to one side of the mounting pole using the hexagon screwdriver and four M8×25 rounded-head screws.

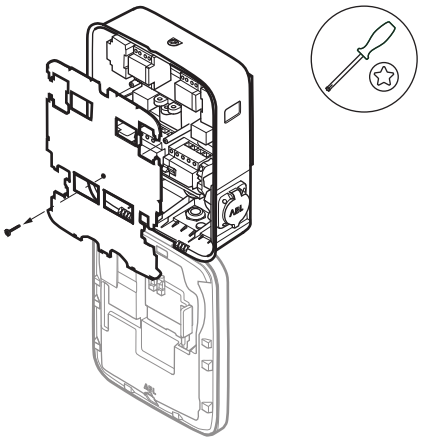


2 Open the housing cover of the eMH3 Wallbox using the corresponding triangular key and flip it forwards.

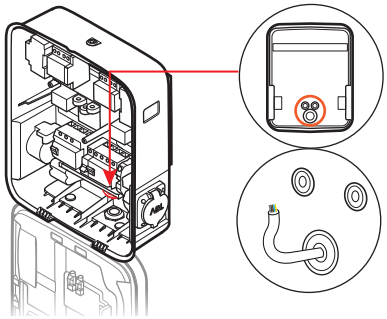


3 Loosen the screw holding the internal electronic components cover in place using the Torx screwdriver and put it aside.

- Keep the screw in a safe place.

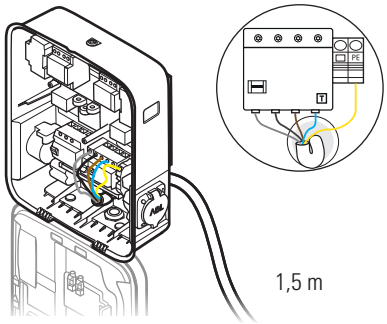


4 Insert a suitable supply cable with a length of about 1.8 m through the large grommet in the lower area of the rear shell into the housing.



5 Insert the individual conductors into the terminals of the RCCB and tighten them using the Phillips-head screwdriver (torque: 2.5 to 3 Nm).

- End ferrules must be fitted on flexible conductors.
- Operate the spring-loaded mechanism of the PE terminal and attach the protective earth conductor.
- Use the connection pattern for TN systems on page 24 to allocate the wires.

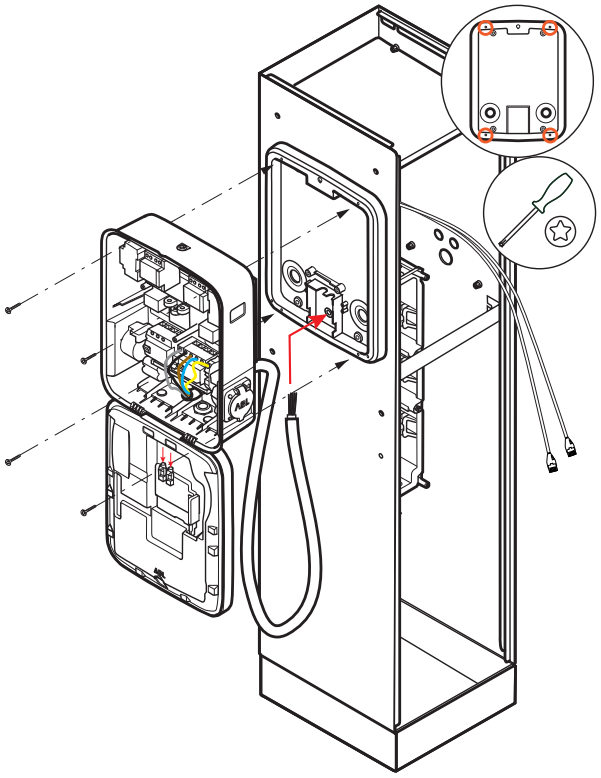


NOTE

Detailed information in the installation instructions

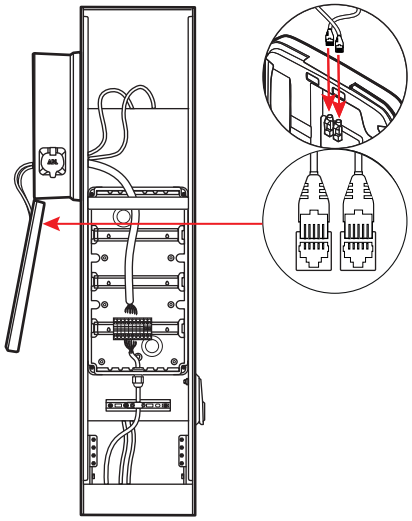
The installation instructions for the eMH3 Wallbox contain further detailed information on preparing for the electrical connection.

6 Run the supply cable pre-installed in the wallbox through the large cable inlet and into the housing of the mounting pole.



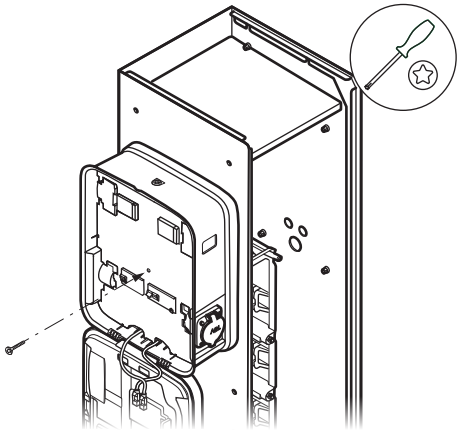
7 Screw the wallbox into the mounting plate using the Torx screwdriver and the screws supplied with the wallbox.

8 Run the data cables through the small cable outlets of the mounting pole and into the housing of the wallbox.



9 Connect the data cables to the Modbus interfaces on the inside of the wallbox housing cover.

10 Replace the electronic components cover onto the wallbox housing and fix it into place with the screw you removed in Step 3.



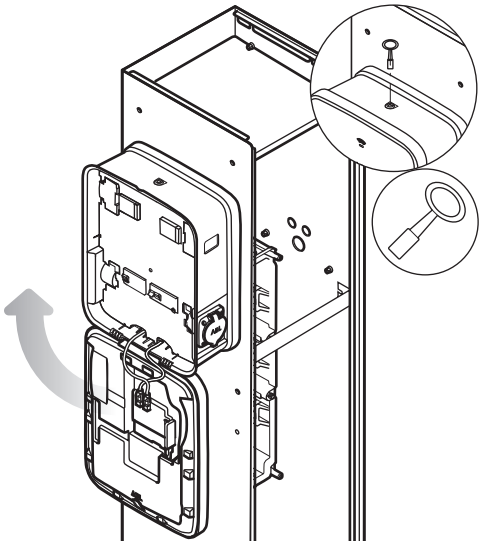
WARNING!

Proper routing of the data cables

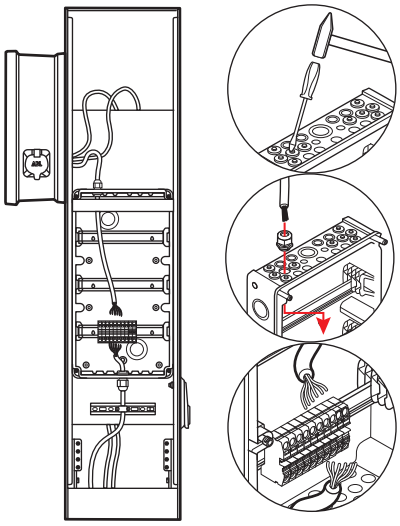
Run the data cables through the two openings at the bottom edge of the electronic components cover.

- Make sure the data cables are not squeezed through the electronic components cover or under tension when the housing cover is opened or closed.

11 Flip the housing cover up so that it clicks into the housing and lock it with the triangular key.



12 Using the slotted screwdriver and a hammer, knock out one of the pre-stamped M20 cable entries on the top of the small distribution board.



13 Run the wallbox supply cable through the PG 13.5 cable gland to the terminal block in the small distribution board and secure the cable gland in the cable entry.

This completes the installation of the wallbox on the mounting pole.

Electrical connection of the POLEMH6

The following section describes how to connect to the terminal block in the POLEMH6.

DANGER!

Dangerous electrical currents

Always observe the 5 safety rules:

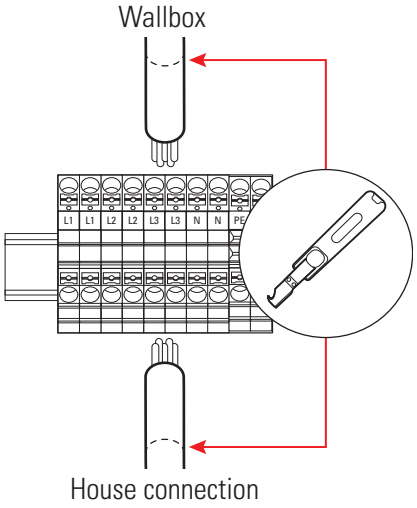
1 Cut power source
2 Secure all cut-off devices
3 Verify absence of voltage
4 Ground and short-circuit
5 Cover or bar access to adjacent components under voltage

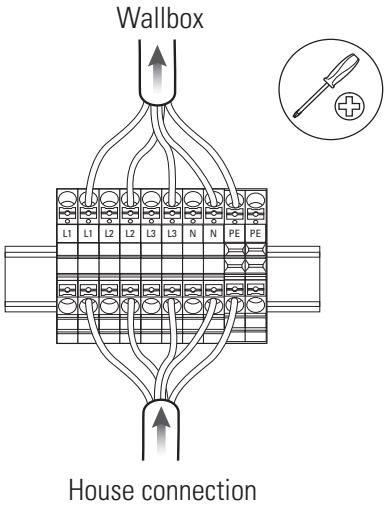
The supply cable must not be reconnected to the electricity grid until **Step 4** in this section!

Proceed as follows to connect the wallbox supply cable and the power supply cable to the terminal block of the POLEMH6:

1 Shorten the wallbox supply cable to the required length for connection to the terminal block in the small distribution board.

2 Shorten the power supply cable to the required length for connection to the terminal block in the small distribution board.



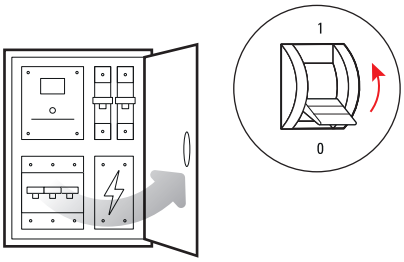


3 Insert the individual conductors of the two cables into the respective terminals and tighten them using the Phillips-head screwdriver.

- End ferrules must be fitted on flexible conductors.
- Operate the spring-loaded mechanism of the PE terminal and attach the protective earth conductor.
- Use the connection pattern below to allocate the wires.

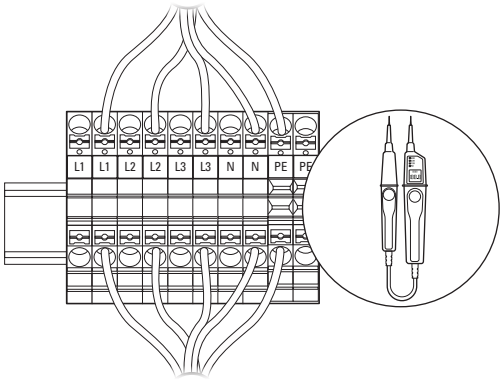
Connection pattern for 3-phase TN system

Designation	Wire strand colour (recommended)	Labelling
Phase 1 current-carrying conductor	Brown	L1
Phase 2 current-carrying conductor	Black	L2
Phase 3 current-carrying conductor	Grey	L3
Neutral	Blue	N
Protective earth	Green-Yellow	PE



4 Connect the supply cable to the mains.

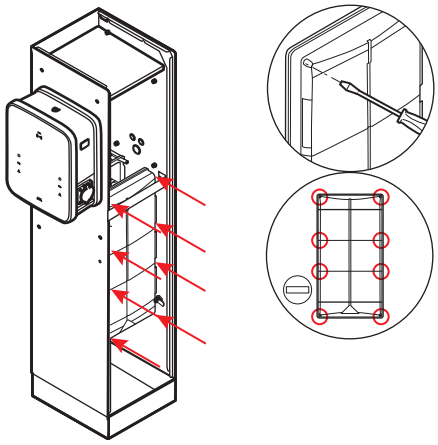
- As soon as the wallbox is connected to the electricity grid, it will initiate the start-up procedure.



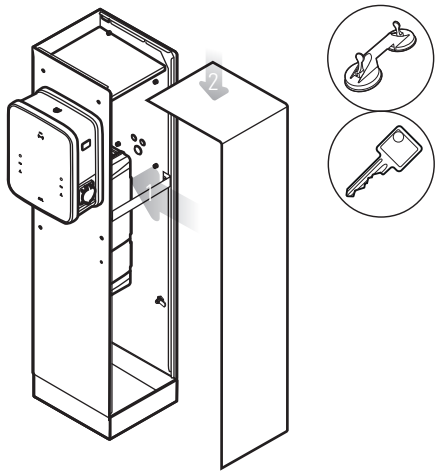
5 Measure the voltage at the individual terminals using the voltage tester.

- In 3-phase systems, all phases are measured against each other (400 V) and all phases are measured against the neutral conductor (230 V).

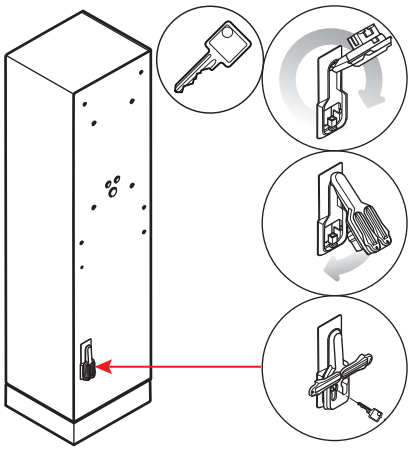
6 Place the top part on the small distribution board and tighten the eight screws with the slotted screwdriver.



7 Reinsert the housing cover in the POLEMH6.



8 Lock the housing cover of the POLEMH6 with the double cylinder pivot lever.



Note on the installation of a second eMH3 Wallbox

The POLEMH6 is designed for the installation and operation of two eMH3 Wallboxes. Please observe the following instructions when installing a second wallbox:

- Make sure the supply cable at the installation site is sufficiently dimensioned and fused for operating two eMH3 Wallboxes simultaneously.
- Install the second eMH3 Wallbox on the other side of the mounting pole as described in steps **1** to **7** and **10** to **13** in the section “Installing the eMH3 Wallbox on the POLEMH6” from page 20 onwards.

- For operation in a group installation, you will need to wire a Modbus interface of the first wallbox via an additional data cable through the housing of the POLEMH6 to one of the Modbus interfaces of the second wallbox.
- The other Modbus interface of the second wallbox then serves as a tap for the data cable to the following wallbox in the group installation.
- Connect the supply cable of the second eMH3 Wallbox to the free terminals of the terminal block in the small distribution board in accordance with the connection pattern for 3-phase TN systems.

Safety instructions for start-up and operation

Before initial operation of the wallbox installed on the POLEMH6, you must observe the following safety notices:

- Ensure that the POLEMH6 is installed according to the instructions in this document.
- Make sure the wallbox has been installed on the POLEMH6 and connected in accordance with the relevant installation instructions and the information in this document.
- Ensure that the POLEMH6 is freely accessible and that an electric vehicle can be connected to the charging cable without tension.
- Ensure that the POLEMH6 is properly connected to the power supply cable and to the protective conductor.
- Ensure that the POLEMH6 housing cover is always locked during normal operation.

Troubleshooting and maintenance

If a malfunction should occur during operation, first check the points mentioned below. If the error cannot be rectified, contact your local sales partner and jointly determine how to proceed.

The following malfunctions may occur:

Malfunction	Possible cause and suggested solution
An installed wallbox is not functioning.	The power cable to the wallbox and/or the supply cable has not been correctly connected to the terminal block in the small distribution board of the POLEMH6. ■ Check all connections.
	The RCCB/MCB for the house connection are not switched on. ■ Check the upstream RCCB/MCB.
	The internal RCCB/MCB of the wallbox are not switched on. ■ Check the RCCB/MCB on the wallbox.

NOTE

Detailed information on other causes of errors

The installation instructions for the eMH3 Wallbox contain further detailed information on possible faults and causes of faults during start-up and operation of the wallbox.

→ Installation instructions eMH3

Maintenance

The POLEMH6 is essentially maintenance-free. However, we still recommend the mounting pole is regularly cleaned and its function checked:

- Use a dry or slightly damp, well-wrung cloth to clean the POLEMH6.
- Do not use aggressive cleaning agents, waxes or solvents (such as cleaning fluid or paint thinner) as they may dull the paintwork.
- Check the housing of the POLEMH6 regularly for signs of damage.
- Check the locks on the housing side and ensure that they move freely if necessary.

Appendix

Technical specifications

Model code	POLEMH6
Compatibility (wallbox)	eMH3 (1 or 2 units)
External power supply	for supply cable sizes up to 35 mm²
Rated voltage (power supply)	230/400 V
Rated current (power supply)	up to 125 A, 3-phase
Rated frequency	50 Hz
Ambient temperature	-30 to 40°C
Storage temperature	-30 to 85°C
Max. internal temperature	-30 to 55°C
Relative humidity	5 to 95%, no condensation
IP rating	IP44 (junction box: IP65)
Maximum elevation	≤ 2,000 m above mean sea level
Material (mounting pole)	Sheet steel (DC01)
Mounting pole finish	Fine-textured, base coated, satin powdercoated
Material (base plate)	Hot-dip galvanised steel
Housing colour	RAL 9011
Housing cover	Makrolon, laminated with translucent colour film
Integrated components	Small distribution board with three top-hat rails (200 × 35 mm) and high-current terminals 35 mm², 5-pin, two bridged terminals per pin; C-profile rail
Locking mechanism	Cam lock with cylinder
Dimensions (H × W × D)	1,623 × 410 × 360 mm
Weight per unit (net)	approx. 72 kg
Weight per unit (gross)	approx. 76 kg

Protection classes & degrees of protection

Protection class / Degree of protection	**Explanation**
	Protection class I: All electrically conducting parts of the device are connected at low resistance with the protective earth system of the fixed installation.
IP44	Protection class of the unit (protection against penetration of solid foreign bodies with a diameter greater than 1 mm and against splashing water)
IP65	Protection class of the small distribution board (complete protection against contact, protection against dust in harmful quantities as well as protection against jets of water from any direction)

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Version 0301697_a, Last updated 10 December 2021

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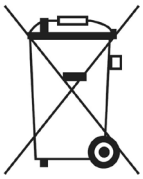

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The materials are recyclable as marked. The reuse or recycling of materials, or other forms of repurposing of old devices make an important contribution towards protecting the environment.

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