



Dock installation instructions





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In case of questions or problems with this product please contact Electrify America Customer Assistance: 1-833-532-2778.

IMPORTANT SAFETY INSTRUCTIONS



WARNING

When using electric products, always follow basic precautions, including the following:

SAVE THESE INSTRUCTIONS. THEY MUST BE PROVIDED TO EACH NEW OWNER.

DANGER

Risk of fatal injury



This symbol in conjunction with the key word DANGER indicates an imminent danger. It will cause death or severe injuries if not avoided.

WARNING

Personal injury



This symbol in conjunction with the key word WARNING indicates a possibly hazardous situation. It might cause death or severe injuries if not avoided.

CAUTION

Slight injury and / or material damage



This symbol in conjunction with the key word CAUTION indicates a possibly hazardous situation. It might cause slight or minor injuries or damage to the product or objects in its vicinity if not avoided.

NOTE

Improvement of the application



This symbol in conjunction with the key word NOTE indicates hints for the user or very useful information. This information helps with installation, set-up and operation of the product to promote normal operation.

These installation instructions are intended for specialized electricians. Only qualified, specialized electricians should hardwire the Dock. In addition to the Dock installation Instructions, follow all federal, provincial and local laws, regulations, ordinances, codes and safety standards.

These Dock Installation Instructions describe how to store, install, use, service, and, if necessary, dismount and dispose of the charger and Dock properly. For your personal safety, follow these Dock Installation Instructions exactly.

These Dock Installation Instructions constitute an integral part of the product and must be available to the installers even

after the installation. So keep this document in a safe place after installation and for the life of the product. Provide these Dock installation Instructions to any future owner of the charger.

Note: For your safety, these devices must be stored, installed, used, serviced, and, if necessary, dismantled and disposed of properly.

- Read all the instructions before installing, operating, maintaining, or using this product.
- Supervise children when device is in use. Children under 16 should not operate this device.
- Do not put fingers into the electric vehicle connector.
- Do not use this product if the power cord or the electric vehicle cable is frayed, has broken insulation, or any other signs of damage.
- Do not use this product if the enclosure or the electric vehicle connector is broken, cracked, open, or shows any other indication of damage.
- The maximum ambient temperature rating for this device is +122°F (+50°C).
- Use only copper wire rated minimum 194°F (90°C), maximum 7 AWG for connecting to main power supply.
- Do not use extension cord to increase the length of the charging cable.
- Installation must be performed only by a qualified, specialized electrician. Dock must be inspected by a qualified electrician prior to initial use.
- Follow all federal, provincial and local laws, regulations, ordinances, building codes and safety standards when installing or using this device.
- If an applicable law, regulation, ordinance, building code or safety standard would not permit you to complete a step as described in these Dock Installation Instructions, contact Electrify America Customer Assistance at 1-833-532-2778.
- Electrify America is not responsible for physical injury, damage to property or equipment caused by the installation of this product.
- This document provides instructions for the Dock and must not be used for any other product. Before installation or use of this product, the user must read and review this manual carefully and consult with a licensed contractor, licensed electrician, or trained installation expert to make sure of compliance with local and national building

codes and safety standards, climate conditions, and all applicable codes and ordinances.

- These Dock Installation Instructions describe the most commonly used installation and mounting scenarios. If it is not possible to perform an installation following the procedures provided in this document, contact Electrify America. Electrify America is not responsible for any damages that may occur from custom installations that are not described in these Dock Installation Instructions.
- Personal protection equipment: Use proper personal protection equipment, including, but not limited to eye protection, shock protection, gloves, and other appropriate protection when installing or servicing any electrical equipment.
- Arcing component in contactor: The Dock includes contactors that, when opened or closed, will cause a short duration arc. The contactor is enclosed in an appropriate electrical enclosure, but caution is required if this arc occurs in the presence of flammable vapors, as the vapors could ignite, creating an explosion. **Store hazardous and flammable vapors and materials away from all electrical equipment. If hazardous or flammable sources are present, allow sufficient time for ventilation before operating the Dock.**

Do not open the charger at any time during installation or operation! Only trained personnel should open the Dock.

Product subject to modification without prior notice. This document might not contain the latest changes to the product's specifications or processes described herein.

Visit www.electrifyamerica.com/ charging-at-home for the most up to date information.



DANGER

Handling live electrical components incorrectly may cause grievous injuries or death.



DANGER

Choking hazard. Small parts are dangerous for children. Do not install in the presence of children.



WARNING

If the electricity service to the Dock or charger is damaged, immediately shut down the power to the Dock / charger by switching off the circuit breaker and contact a licensed electrician.



WARNING

The product must not be installed in ex-zones (potentially explosive atmospheres)



CAUTION

Ensure that all components are dry throughout the installation.



CAUTION

To reduce the risk of fire, connect only to a circuit provided with 1 x 40 A maximum branch circuit overcurrent protection in accordance with the National Electrical Code and local standards regulations and codes.

Qualifications for electrical work

The qualified electrician performing the electrical installation, maintenance, and/or dismounting of the device must have read and must follow these Dock Installation Instructions.

EMC compliance statement

Note: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and the receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

This device complies with part 15 of the FCC rules. Operation is subject to the following two conditions:

1. This device may not cause harmful interference, and
2. This device must accept any interference received, including interference that may cause undesired operation.

innogy eBox professional with Wi-Fi
innogy SE
Model: innogy eBox professional
Contains FCC ID: QIPEHS8
FCC ID: 2AKBXIEKA 160



Electric vehicle charger characteristics

1. The product must be connected to AC supply power.
2. The product can be installed and used in indoor and outdoor areas.
3. The product can be installed on walls.
4. The Dock and charger together are rated electrical protection class IP I. The open dock (i.e., without the charger) is rated electrical protection class IP I.

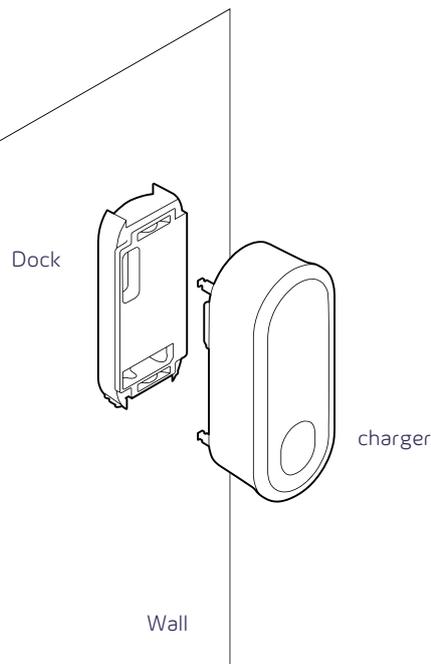
General and electrical specifications

	Dock
Charging power	up to 7.6 kW (up to 32 A)
Mains input power	Dock: 240 Volt AC split phase, 40 A, 7.6 kW
Output power to charger	Dock: 240 Volt AC split phase, 32 A, 7.6 kW maximum output depends on local distribution grid
Operating temperature	-22 °F to 122 °F (-30 °C to +50 °C) full load
Electrical Protection Class	I
Max. line cross-section	Max. supply line (top or bottom): 7 AWG (10 mm ²)
Certifications	UL and FCC certificate (tested and confirmed by a certified body)

Do not provide external GFCI on the supply power circuit as it may conflict with the internal GFCI of the charger.

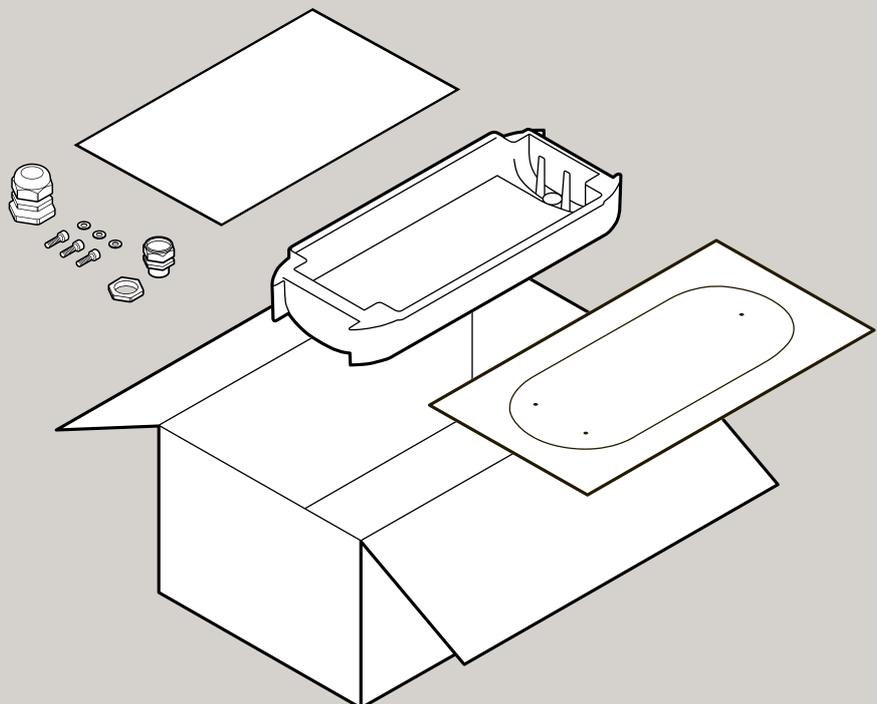
Product overview

Together, the Dock and charger unit form the home charging solution for electric vehicles. Thanks to its modular design, the Dock can also be installed without the charger, which is then fitted at a later time. The Dock can be mounted on a suitable wall.



Included in delivery

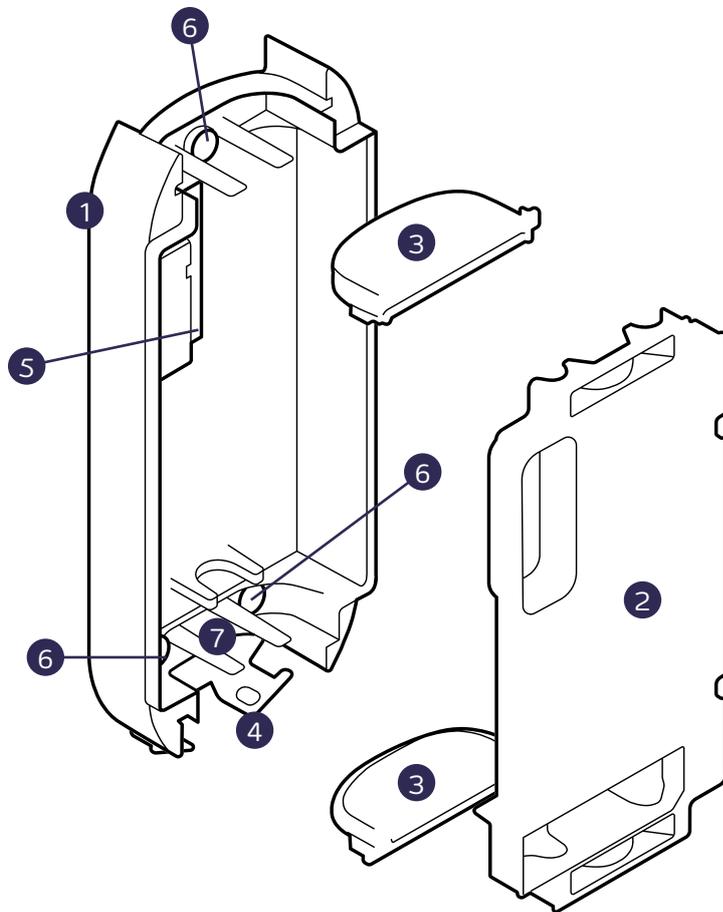
- 1 Dock with 3 sealing plugs
- 1 installation instructions in English
- 3 round head screws
1/4" x 2 1/3" (6 x 59 mm)
- 3 universal dowels
- 1 M32 cable gland
(fitted in routing plate)
- 1 M20 cable gland
- 1 M20 x 1.5 lock nut
- 1 cable clip (galvanized steel)
- 1 drilling template



WARNING

Check the contents of the delivery for completeness and intactness.

Dock – product details



- 1 Dock
- 2 Contact guard
- 3 Cable routing plates
- 4 Locking bracket
- 5 Mains board
- 6 Sealing plug
- 7 Interface board

Specifications

Measurements H x W x D	1'-4" (399 mm) x 6" (155 mm) x 2 ½" (62 mm)
Installation type	Wall
Weight	Approx. 1 kg (2.2 lb)
Enclosure rating	Type 3S (with charger)
Operating temperature	-22 °F to 122 °F (-30 °C to +50 °C) full load
Voltage supply	240 Volt AC split phase, 32 A at 7.6 kW
Power supply	Max. 40 A (configurable)
Connected load	Up to 7.6 kW; maximum load

INSTALLATION INSTRUCTIONS

IMPORTANT SAFETY INSTRUCTIONS. SAVE THESE INSTRUCTIONS. THEY SHOULD BE PROVIDED TO EACH NEW OWNER.

Installation summary

- 1. Checks:** Make sure that the circuit breaker has been installed in the sub-panel on the power supply circuit to this device.
- 2. Power supply line:** The cable routing plates may have to be switched over, depending on whether the supply line is routed from the top or bottom.
- 3.** Make sure that the **contact guard** is snapped into place. Use the provided seal to secure the contact guard on the Dock so that it is not possible to remove the contact guard without breaking the seal.



DANGER

Danger of electrical shock or injury. Before installing, familiarize yourself with the safety instructions. Follow all federal, provincial and local laws, regulations, ordinances, codes and safety standards.

Before installing

Check and ensure that the electrical installation intended for connection can supply the required electrical power.

Each Dock must be protected with its own circuit breaker in the pre-installation. No additional electrical devices may be integrated in any of these circuits.

Circuit breaker required for installation, and must conform to all national and local laws, regulations, ordinances, codes and safety standards. Licensed electrician performing installation should choose correct circuit breaker depending on grid type and power.

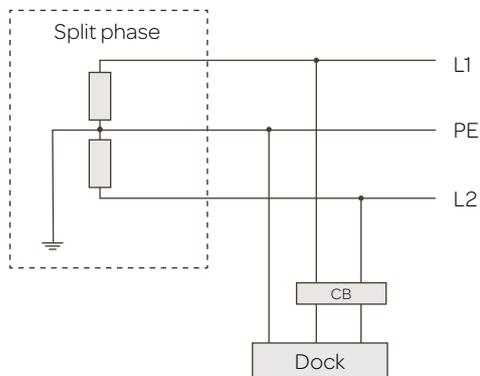
**CAUTION**

For space reasons, the supply line chosen must have, whenever possible, a cable size no greater than 10 AWG (6 mm²).

**CAUTION**

When multiple charging points are to be installed, every tenth must be provided with additional earthing.

Compatible electrical network type



Connection: L1, L2, PE

Maximum charging capacity:
240 V, max. 40 A, max. 7.6 kW

The neutral wire is not required to be installed between the service panel and the charger, however the installer may choose to run a neutral wire from the service panel to the NEMA 14-50 outlet for future use if desired.

Choosing the site

Consult the customer concerning the choice of a suitable site. The optimal site for the charging station depends on the owner's needs and the parking and wiring environment.

For masonry walls such as cinder block walls, for example, use $\frac{1}{4}$ " (6.35 mm) screw anchors. Ensure that the screws used fit properly into the screw anchors and are at least $2\frac{1}{2}$ " (63.5 mm) in length.

For wooden walls, use at least $\frac{1}{4}$ " (6.35 mm) screws. Ensure that the screws have a length of at least $2\frac{1}{2}$ " (63.5 mm) and that the screws penetrate the wood at least 2" (50.8 mm).

For hollow walls, connect at least two studs using a channel stud for each height – top and bottom – of the

holes of the Dock, connect the studs using the associated brackets. Ensure that the correct channel strut nuts are used and use $\frac{5}{16}$ " (7.93 mm) screws with a length of at least 2" (50.8 mm) so that the screws fully enter the channel strut nuts.

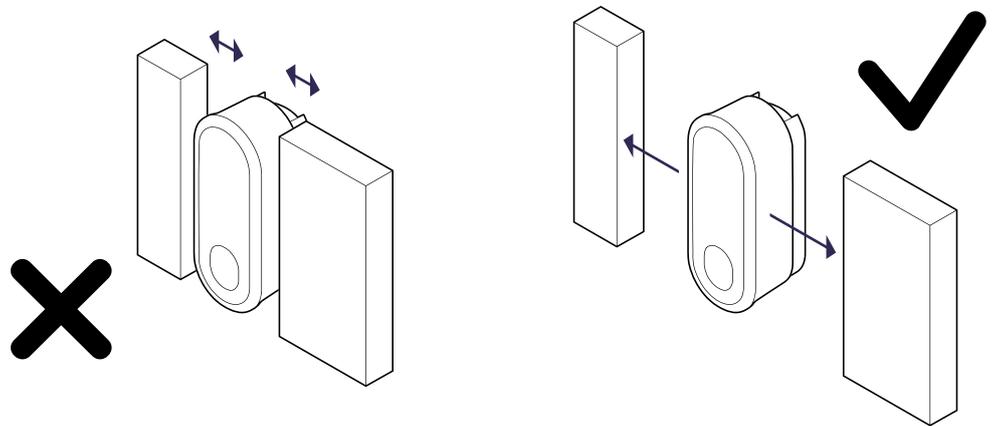
When fastening the Dock with the screws, please make sure that the screws are fastened tightly into the bolt anchor / wall.

To ensure adequate heat dissipation and proper functioning of the device, place the dock at a generous distance from surrounding objects. We recommend 20", depending on ambient temperature.



DANGER

Do not install or use this product in an area with hazardous or flammable materials or vapors.

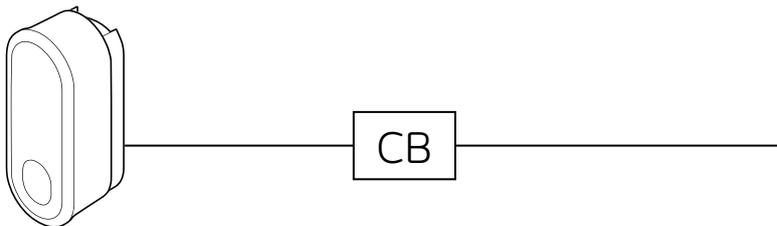


Line selection

When selecting the cable for connection to a compatible electrical AC power circuit, follow all national and local laws, regulations, ordinances, codes and safety standards.

Routing the connecting cable

Route the cable of adequate conductor area to the site chosen. Note that only cables not exceeding 7 AWG (10 mm²) in size may be introduced into the Dock (maximum bending radii). The routed cables may therefore have to be rewired before they are inserted into the Dock.

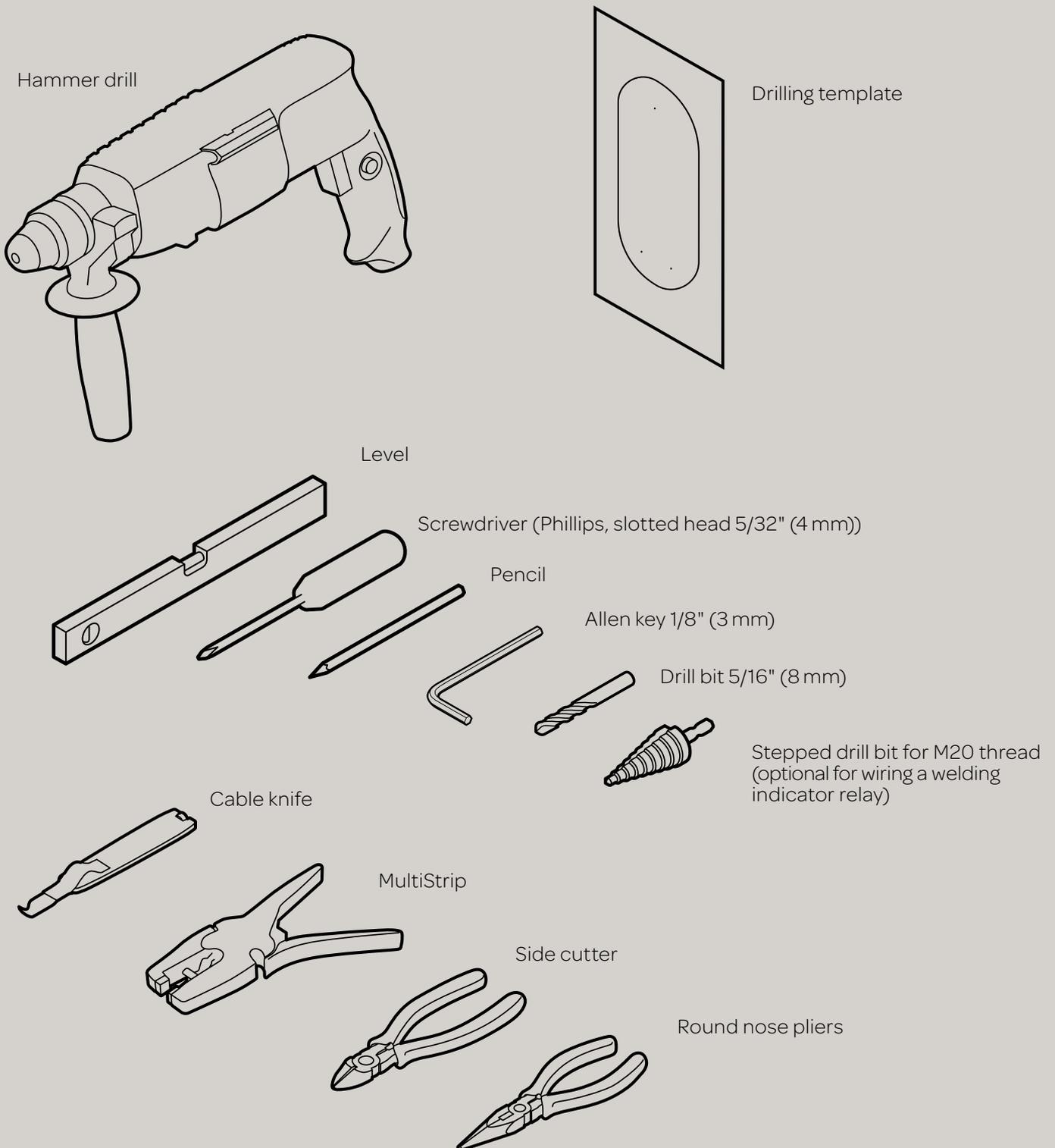


Once the required cables have been routed, the pre-installation is complete.

Tools needed

To mount the Dock on a wall, you will need a spirit level, the drilling template provided in the packaging, a pencil or other marker, an 0.315" (8 mm) drill bit, a screwdriver, an electric drill with step bit, and a cordless screwdriver

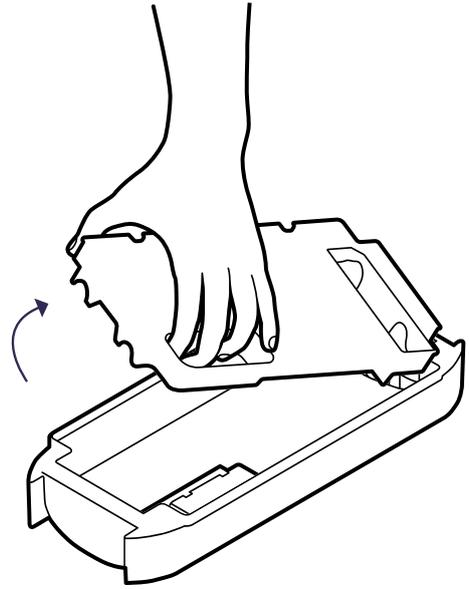
with torque display. You will also need a side cutter, a pair of round nose pliers, and, for cable assembly, a cable knife and a MultiStrip.



Information on mounting

The Dock is secured through three screw holes to the wall. To start, place the rear side of the Dock on a flat surface, and remove the contact guard. The contact guard is clipped without screws to the Dock. It is replaced after the connection to the main power supply.

Use a screwdriver to remove the contact guard. To do this, insert the screwdriver into the slots on the side of the contact guard and carefully lift it.



Mounting the Dock on a wall

After choosing a suitable site and making all of the preparations, you can now mount the Dock.



WARNING

The Dock must be mounted on a flat surface so that the Dock does not deform.

01

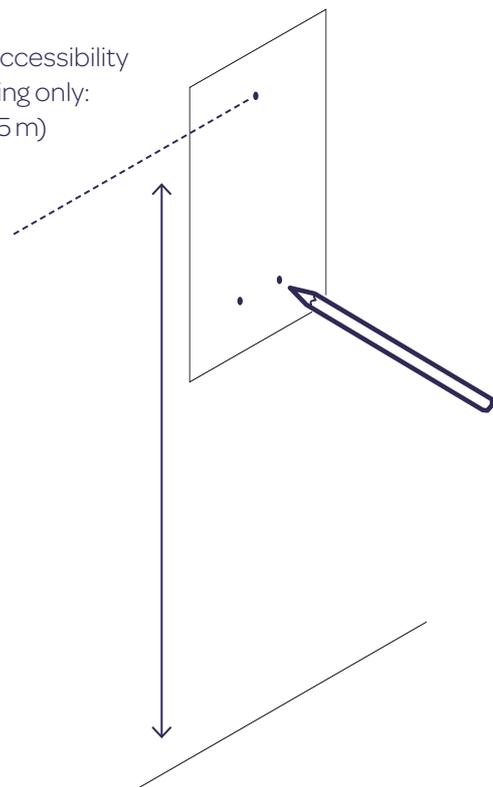
The Dock packaging contains a drilling template that simplifies the mounting work. Use this if necessary.

Use the template and a level to mark the three holes on the wall, or drill directly through the positioned template.

For full accessibility to the charger, the upper hole should be 3'-9" (1.15 m) above the floor.

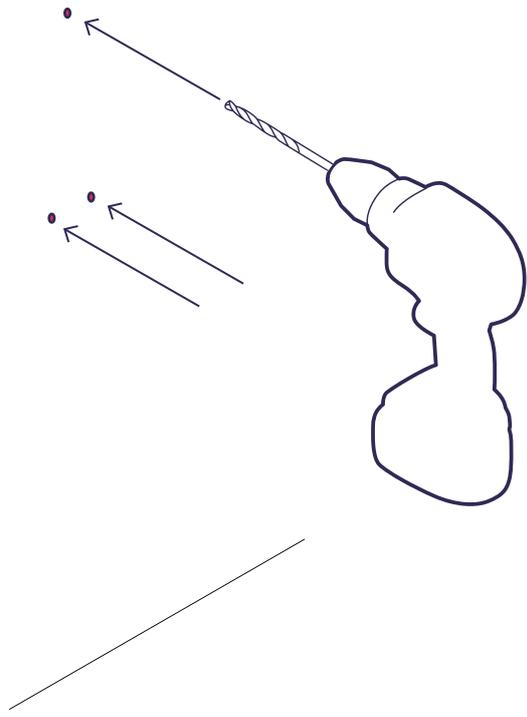
Standard height:
5' (1.5 m)

For full accessibility
of charging only:
3'-9" (1.15 m)



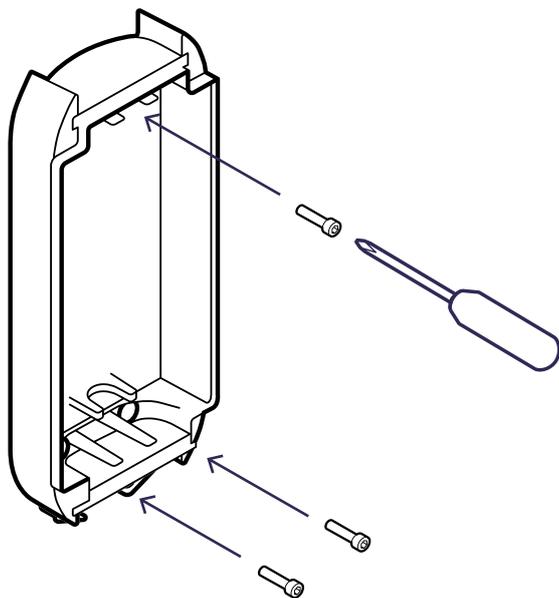
02

Drill the holes with an 5/16" (8 mm) bit, and insert the provided wall plugs. If the provided screws are unsuitable for the wall type at the chosen location, use another type of suitable fastener.



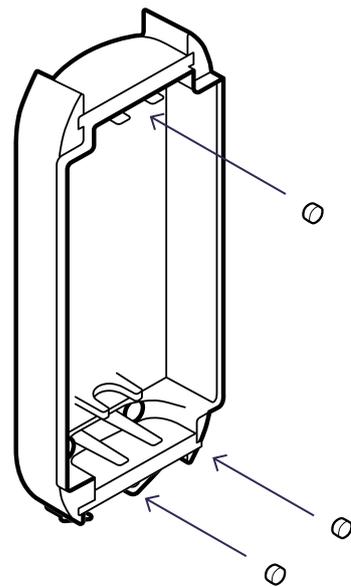
03

Screw the Dock to the wall using the screws provided.



04

Insert the provided sealing plugs.



CAUTION

You must insert the provided sealing plugs, otherwise water or other substances may penetrate and damage the product.

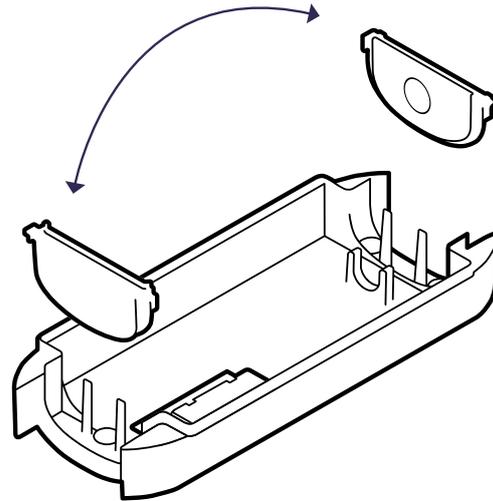
Preparing the electrical connection

Make sure that the hole in the cable routing plate is facing the side where you want to insert the supply cable. If not, pull out and change over the plates.



CAUTION

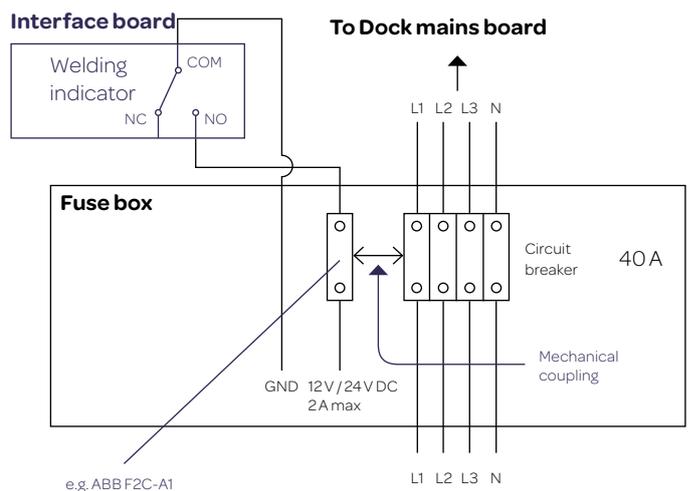
When inserting the cable routing plates, make sure that they are flush.



Welding detection

The signal for welded power contacts is connected to the "Welding Indicator" connector on the Interface Board at the bottom right of the Dock. A change-over contact (max. 230 V, 1 A) is available, which can be used according to the installer's requirements.

12V / 24V variant



Electrical connection

Installation is made much easier by using the pre-wired NEMA 14-50 power plug and inserting it into a standard NEMA 14-50 outlet that is installed on a dedicated branch circuit with a 40 A circuit breaker in the feed panel. If you choose to hard-wire the unit to supply power follow the instructions below. See wiring diagram on page 11.



DANGER

HAZARD OF ELECTRIC SHOCK, EXPLOSION, OR ARC FLASH. ENSURE THAT POWER IS OFF!



WARNING

The conductor size may not exceed 7 AWG (10 mm²) (bending radii of the cables).

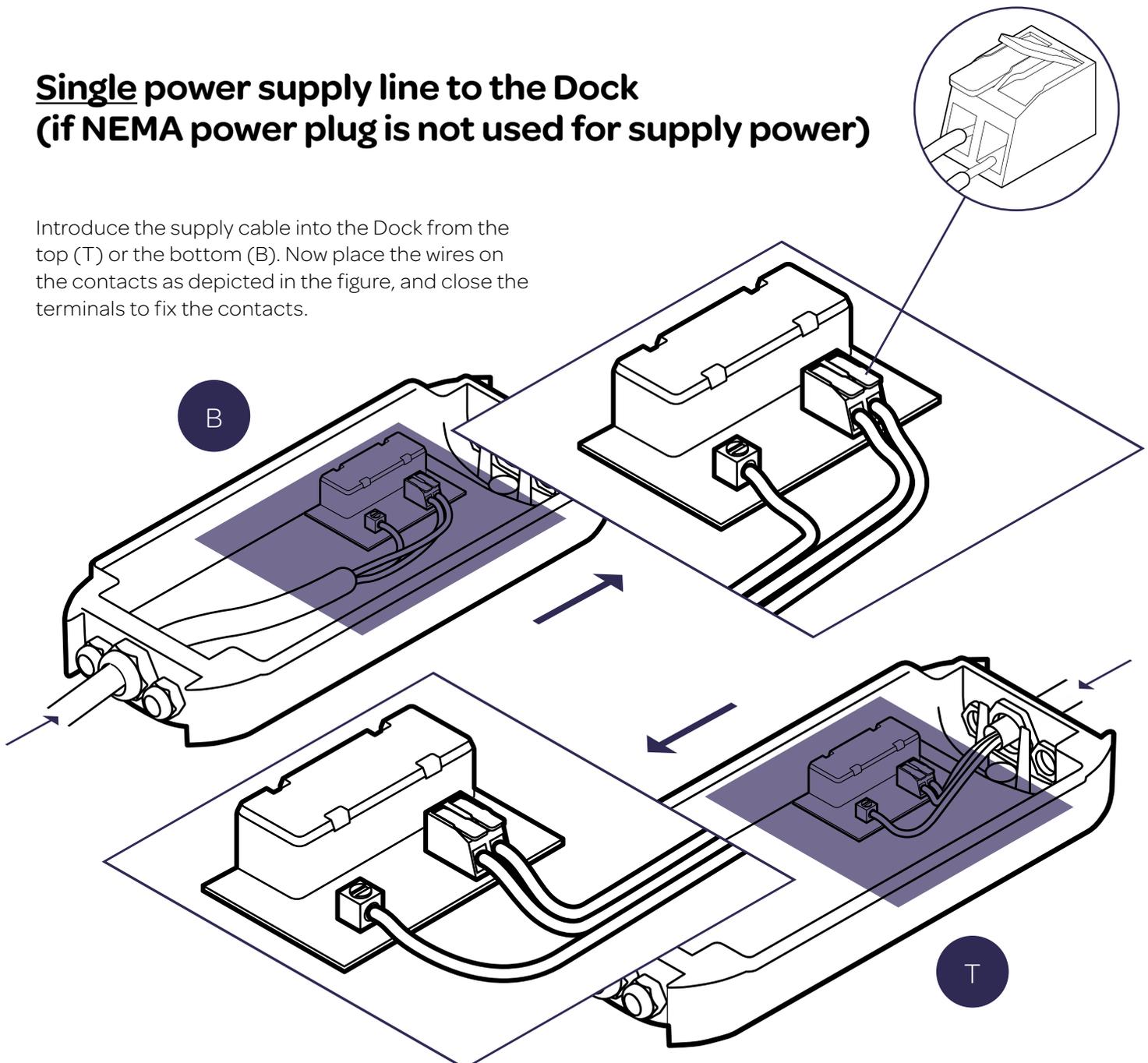


CAUTION

The complete product – consisting of Dock and charger – has no facilities for the attachment of additional ventilation components.

Single power supply line to the Dock (if NEMA power plug is not used for supply power)

Introduce the supply cable into the Dock from the top (T) or the bottom (B). Now place the wires on the contacts as depicted in the figure, and close the terminals to fix the contacts.



Almost done: electrical tests and sealing

Once all cables have been configured and secured as depicted in the respective figure, tighten the screws (if necessary). You may now switch on the voltage and conduct the electrical tests.



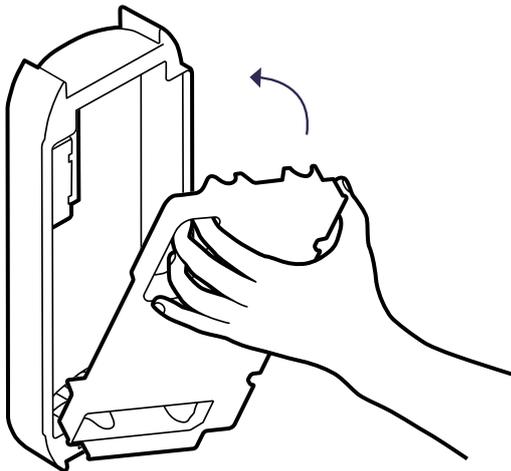
DANGER

There is a risk of electric shock and danger to life and limb.



CAUTION

1. After the electrical tests, switch OFF the circuit breaker.
2. Put the contact guard back onto the Dock.

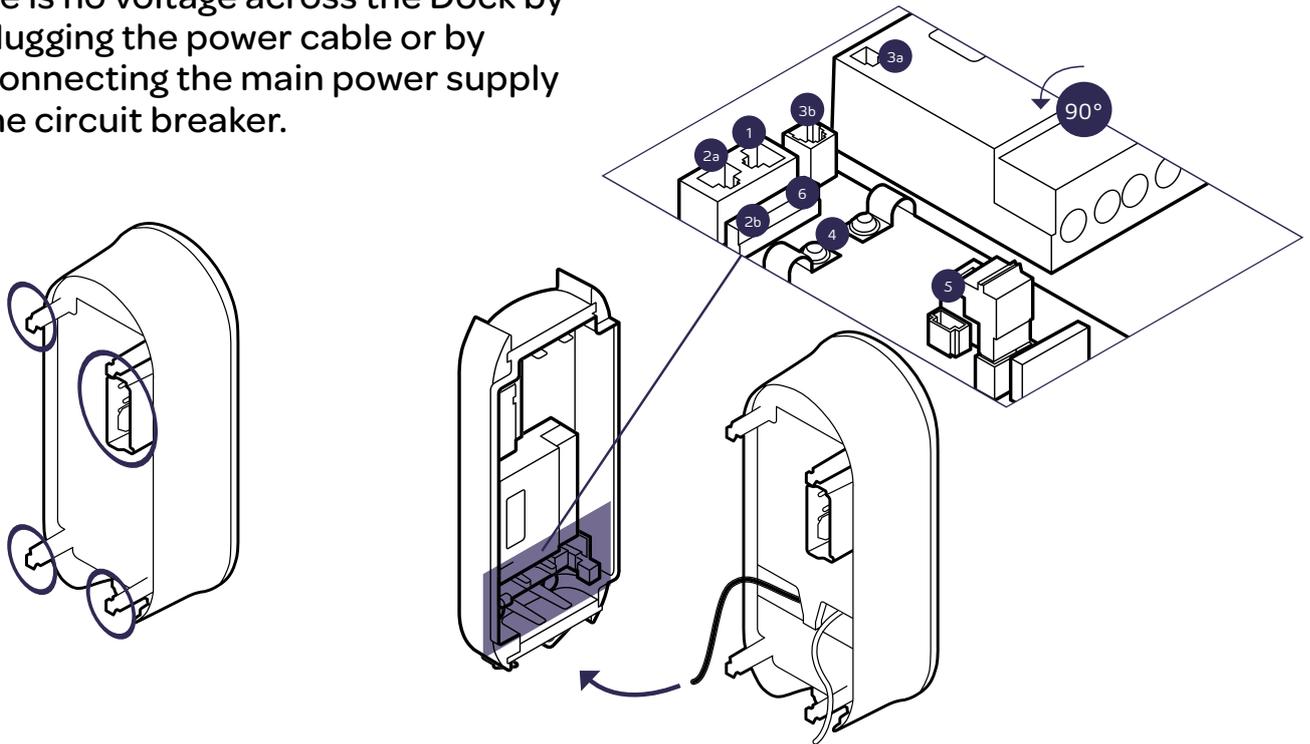


WARNING

If the charger is to be installed at a later time, disconnect the Dock from the main power supply by unplugging the dock and/or switching off the circuit breaker and cover the Dock to prevent electric shock or accidents and to keep the Dock dry and free from dust and particles.

Clicking the charger into the Dock

After the electrical installation, the charger can be clicked into the Dock. **Before mounting the charger, make sure there is no voltage across the Dock by unplugging the power cable or by disconnecting the main power supply at the circuit breaker.**



01

Take the charger and identify the connecting points (Shown here circled in blue) on its rear side.

02

Connect the black ribbon data cable of the charger to the port "5 Expansion Terminal" at the bottom right of the Dock.

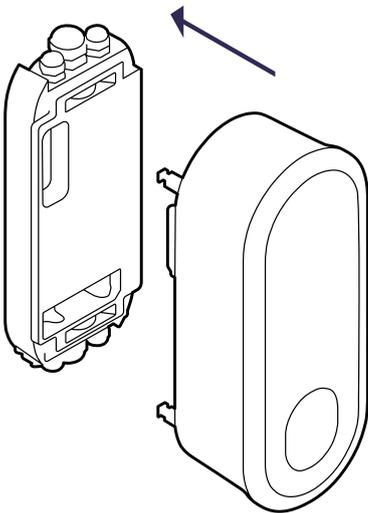
03

Place the white ribbon data cable of the charger on port 1 on the left of the Dock.

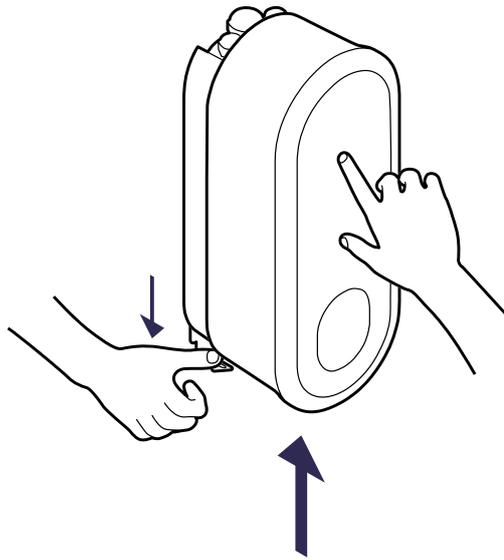
- 1** LAN 1 RJ45 (charger communication)
- 2a** LAN 2 RJ45 (deactivated)
- 2b** LAN 2 LSA-Plus (deactivated)
- 3a** eSmartMeter output (optional)
- 3b** eSmartMeter input (optional)
- 4** Cable clips for S/FTP cable
- 5** Expansion terminal (charger communication)
- 6** LAN 1 LSA-Plus to internet router

**WARNING**

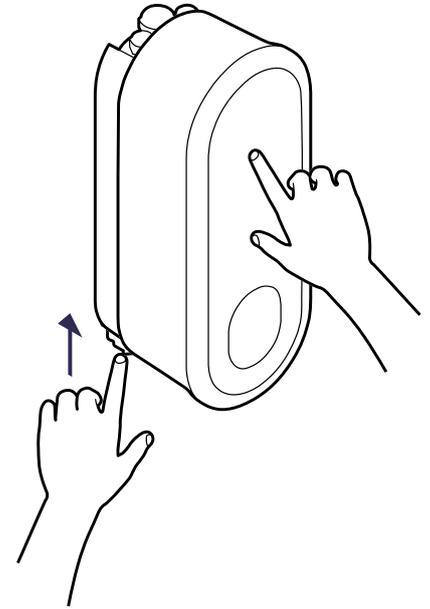
Make sure that the flat ribbon data cables are not trapped between the Dock and charger when mounting the charger.

**04**

Place the charger carefully on the Dock, and push in the charger until it is fully inserted.

**05**

Keep a firm hold on the charger while pulling down the spring-loaded locking clip on the Dock. Now release the locking clip. As soon as the locking clip is in place and properly aligned, strongly press the charger onto the Dock.

**06**

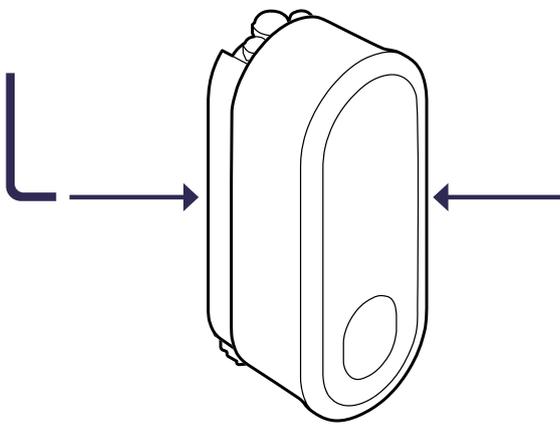
If necessary, readjust the locking bracket until it is properly aligned. Alignment marks (triangular recesses) are visible on the locking clip of the Dock. Check that the locking bracket is fully inserted. The triangular alignment marks to the left and right of the locking bracket must be flush with the Dock-housing.

**WARNING**

Make sure that the charger clicks correctly into the Dock. Marking of the locking clip is in end position. Set screws are fully screwed in. Check box for tight fit.

**NOTE**

The set screws should only be fully inserted when the locking clip is fully inserted and properly aligned.

**07**

Tighten the two set screws using the allen wrench at the rear left and rear right of the Dock to secure the locking mechanism in place and the charger on the Dock.

08

Power on the Dock circuit.

Assembly is done!

Un-Installation

Only a qualified electrician should dismount the Dock.

You must disconnect the main power supply before dismounting the charger. After power has been disconnected, loosen the two set screws on the side. Take the charger out of the Dock by pulling down the

locking bracket, taking out the charging unit, and, if fitted, detaching the Ethernet cables connecting the charger and the Dock. Now remove the contact guard from the dock. Unscrew the cable gland(s), and remove the supply cable. In the next step, unscrew and remove the Dock. Finally, you may replace the contact guard.

**DANGER**

The Dock must be disconnected from the power supply before dismounting the charger and/or Dock.

**CAUTION**

Make sure that all components are dry during dismounting of the charger or Dock.

**CAUTION**

When dismounting the charger, remove the charger from the Dock carefully to avoid damaging the flat ribbon data cables, Dock and charger.

Disposal

The Dock and the charger are electrical equipment. Follow all national and local laws, regulations, ordinances and codes regarding disposal.

Legal notice

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In case of questions or problems with this product please contact Electrify America Customer Assistance: 1-833-532-2778.

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