

Stilo

Full Guide for Stilo

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Congratulations on your purchase of Enelion Stilo charger and thank you for trusting us. Prior to installing the device make sure the box includes a full set of elements. The current version of the user's instruction and installation is available at: www.enelion.com/manuals

Before taking any actions related to installing or starting the charger you must read the instruction.

1. Important information

1.1. General provisions

The Enelion charger (further called the device, the charger or the charging terminal) is a charging station dedicated for charging electric cars as defined in the Act of 11 January 2018 on Electromobility and Alternative Fuels, in Art. 2, subsections 5, 12, 13 and 27 of the above mentioned Act.

Before installing and using the device read this instruction.

Installing and servicing the device must be done by qualified individuals with proper certification, and repair works may only be carried by the manufacturer or by entities authorized by the manufacturer.

Tampering with the mechanical, electrical and electronic elements as well as the software of the device is forbidden under the pain of forfeiting the guarantee. The actions defined in this instruction and the actions which were agreed upon with the manufacturer in writing are an exception.

The manufacturer shall not be liable for property damage resulting from the above mentioned incidents of tampering with the product.

The electric wiring system which will be used by the device when in operation must meet the requirements described in the fitting manual. The manufacturer is not responsible for the improper installation and/or inadequate security of the wiring system used by the device.

The manufacturer is not responsible for the improper operation of the wiring system used by the device.

The electric wiring system which will be used by the device when in operation must be in compliance with the legal norms binding for the place where the wiring system is installed and the device is used. The manufacturer is not responsible for any damage caused by

the wiring system which does not meet the legal norms.

The device is not equipped with an inbuilt switch. It starts operating once power supply is accessed. Isolation from power supply must be done through proper instruments described in the fitting manual. Except for emergency situations the device may not be switched off while charging.

It is forbidden to provide power supply when the device casing remains open.

It is forbidden to use a charger which has mechanical damages or which signals critical error.

It is forbidden to place in the charger socket any objects which are not intended for this purpose. The only object intended to be placed in the charger socket is a working wire which has the right section for the capacity of the device and the type of vehicle, with a working type 2 plug according to EC 62196-2.

The cord extension sets are not allowed to be used.

The manufacturer is not responsible for health or life loss resulting from not following the above mentioned recommendations.

The nameplate on the device is its integral part and cannot be removed or damaged under the pain of forfeiting the manufacturer's guarantee.

1.2. Protection guidelines

The outdoor installation should not be carried in the rain, snow or strong wind, if there is any risk that water or dirt could get inside the device. All actions described in this instruction should be carried after you make sure there is no voltage on the charging cable.

2. General information

Stilo is a charging station for electric cars, consisting of a detachable aluminium casing and main frame with charging controller and charging cable with Type 2 plug responsible for the charging process and optional additional elements and accessories. Functionalities of the device can be changed by adding or removing accessories like Enelion Bridge or RCD-B. Some functionalities can be changed by re-programming configuration card supplied with every Enelion device. Enelion Stilo comes in two colours: black and silver. It has no screen. All the information needed to operate the charging station are displayed on LED strip.



2.1. Additional functionalities

All Enelion charging stations are compatible with our own, independent protocol, which enables the device to work in a local network of chargers. This allows for the number of devices which require connection to the Internet to be reduced and the charging power to be increased. All Enelion devices may be equipped

with Enelion Bridge (additional element purchased separately), which makes it possible to connect the device to the Internet, adding the OCPP 1.6. protocol functionalities to the device. Enelion Bridge allows for the connection with the Internet to be established in three ways:

- WiFi,
- GSM,
- Ethernet.

INFO

To learn more read the “OCPP, DLB and devices network” instruction.

INFO

To learn more read the “User Manual”. It contains detailed information on the device’s functionality and use.

2.2. Opening and closing Enelion Stilo

INFO

Closing the device is done analogically in the reverse order.

1. Place Stilo on flat surface and using provided torx bit unscrew the safety screw placed in lower-left side of the casing.



2. Carefully start removing the casing. Proceed with extra caution after revealing white ribbon.



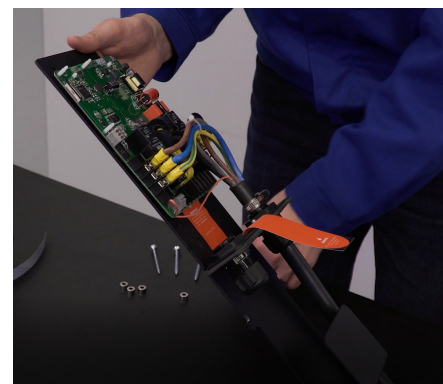
3. It is advised to remove the white ribbon from the socket on charging controller before mounting the charger on the wall. It will allow to remove the casing completely. Thanks to this it can be protected from being damaged during installation.

INFO

To remove the ribbon you must first carefully move the black part of ZIF connector upwards, as seen in the photo. It must remain in "open" position both during removing and inserting the white ribbon (FFC cable). Please proceed with caution - losing or destroying the black part of ZIF connector will render both RFID and LED display in your Stilo useless.



4. The charger is now opened and ready for installation of accessories, maintenance or hanging on the wall.



3. Recommendations for installation

3.1. Recommendation for the power connection

Each Enelion Stilo should be powered by a separate power cable. Depending on the distance between the charging station and the switch box, the cable should be of an appropriate cross-section, no less than 6 mm². In the standard configuration the charging stations are prepared for being supplied in the TN-S type of network (five-line). Each Stilo must be secured by an overcurrent circuit breaker in the distribution box. It is allowed to have a self-activating type B circuit breaker or a fuse with a 32 A or lower rated current, depending on the programmed configuration of the device.

The cables which run in the ground must be installed in accordance with the existing construction regulations. For a convenient installation stranded wires with terminals at their ends are recommended. Recommended installation height for Enelion Stilo is 160 cm above ground level. Charger installed on this height will be comfortable to operate by most users.

3.2. Criteria for choosing the location

Enelion Stilo may be installed both externally and internally. The device is dedicated for installation near parking space for vehicles with electrically powered engines. When used in areas with risk of collision with a vehicle, the structure should be protected with proper fenders painted in yellow and black strips (to warn of a gauge).

You should remember that national regulations may define the area for mounting the device.

The device should not be installed in high sunlight which may cause it to overheat.

You should not install the device near sources of heat or in small, closed areas (e.g. in a box).

It is forbidden to install the power supply cable that does not fall within the range defined in the recommendations for installation.

It is forbidden to install the device in a potentially explosive atmosphere.

Local regulations regarding electrical installations, fire prevention measures and accident prevention measures should be considered, and evacuation routes at the place of installation should also be ensured.

It is forbidden to install the device in a location where there is risk of objects falling and damaging the charger.

Before installation please make sure there are at least 50 centimeters of space above the device. This space should remain unoccupied after the device is installed, as it may be required for maintenance.

WARNING

The manufacturer is not liable for damages resulting from not following the above mentioned recommendations.

4. Mounting the Enelion Stilo

⚠ WARNING

All the actions described in the following steps must be performed by a qualified specialist with permissions required by your country.

⚠ WARNING

Before starting the mounting process you should disconnect the power supply in the supply cables.

⚠ WARNING

Before starting the mounting process you should prepare the products according to the instructions related to additional elements.

⚠ WARNING

All 4 mounting holes must be used in mounting process. Failing to do so may result in losing IP characteristics of the device and in result in damaging or destroying the charger. Manufacturer does not hold responsibility for damages and injuries caused by improper mounting of the device.

4.1. Preparing for installation

Enelion Stilo is designed to be hanged on flat, vertical surfaces. Due to the weight of the device and its value we do not recommend placing it on surfaces that would make it easy to remove or steal the device (eg. wood, easy to cut thin metal poles etc.).

4.1.1. Choosing the screws

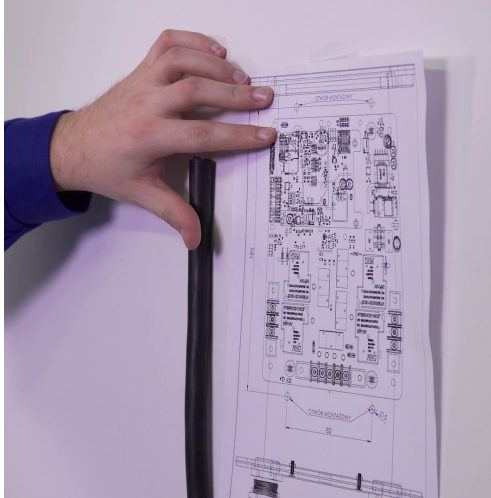
The unit is not provided with screws or sleeves due to variety of possible surfaces. Screws and sleeves should be picked based upon following requirements:

1. The head of the screw must be wider than the mounting hole. It must be at least 6 mm wide.
2. The screws and sleeves combo must support the weight of the charger, which is 5kg. That means that every screw should be able to withstand at least 1,25kg of weight.
3. The screws and sleeves must ensure safe and permanent contact with the surface upon which unit is mounted.

4.1.2. Installing the power cord

Enelion Stilo is powered by a cord with at least 3 veins 2,5 mm² each (for 3,7kW setting). However, we recommend cord with 5 veins 6 mm² each for 3 phase configuration. The cord's diameter must be between 9 mm and 17 mm. Only cord with this diameter will fit into power cord gland on the left side of the device. Using a cord with different dimensions may damage the gland or make the device water untight. In process Enelion Stilo will lose its IP rating.

1. The cord must be supplied so that it will access the unit from the bottom. If the cord is being supplied from the ceiling it must be bent 180 degrees. If the cord is supplied horizontally it must be bent 90 degrees. When bending the cord mind the bending radius of said cord, as bending it too much may damage it.
2. The cord must be at least 15 cm over the gland after the charger will be mounted on the wall. Please keep that in mind when mounting the power cord.

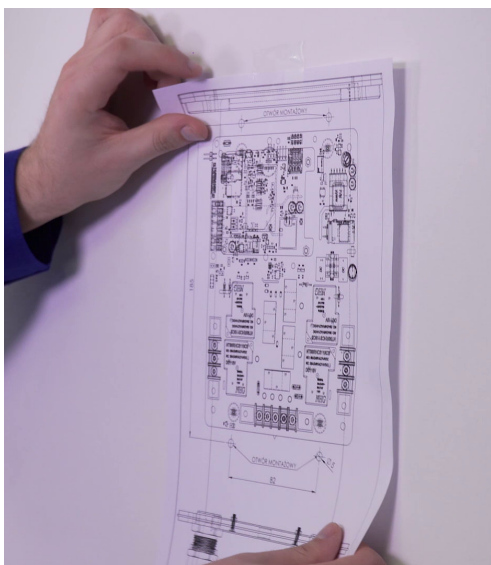


3. The cord will be completed with the fork terminals supplied with the device during the installation process. Having that in mind please leave the cord unfinished (open ended) for the time of installation.

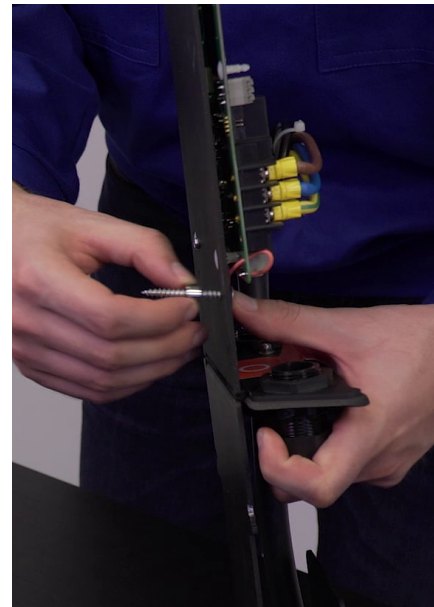
4.2. Preparing the surface

After choosing the proper screws and sleeves and choosing the surface Stilo will be mounted to the device is ready to be installed.

1. Using template provided with the device mark the mounting holes using a masonry punch and a hammer. Remember to level the template before making the punching marks.



2. Using properly sized masonry/steel drill drill the holes deep enough to fit chosen sleeves inside. Clean the holes and fit the sleeves.
3. Thread chosen screws through mounting openings in Enelion Stilo backplate. Put one distance ring (supplied with the device) on each screw.



💡 HINT

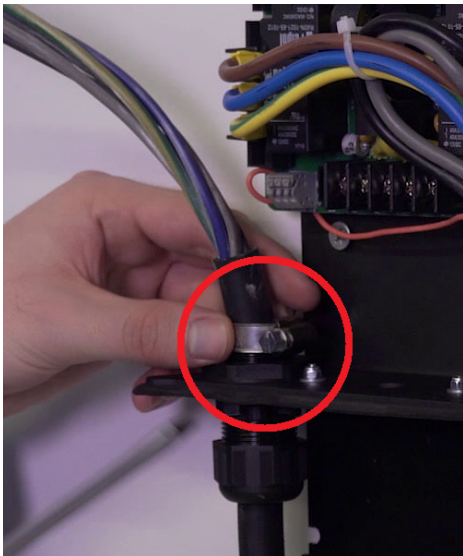
If the template was not supplied with the device download one from the www.enelion.com/manuals and print it. Do not use the template if the dimensions are off — use caliper or ruler to compare the real dimensions with those printed on the template. The real dimensions must match the printed ones, NOT the other way.

4.3. Mounting the device

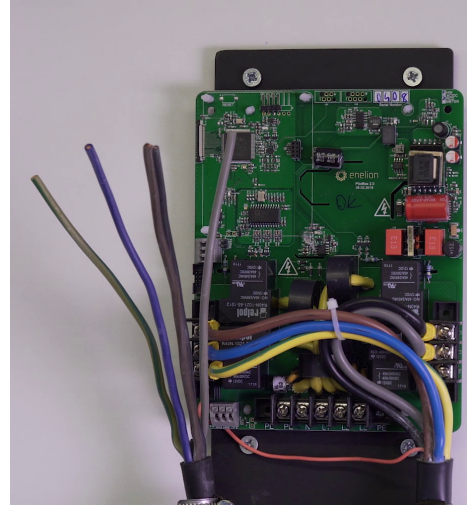
1. Place the back of the device with screws threaded through the holes over holes in the wall. Gently push all the screws inside to guide them. Using a manual or electric screwdriver with appropriate screwing bit start screwing the screws in. Continue until all of them are firmly tightened.



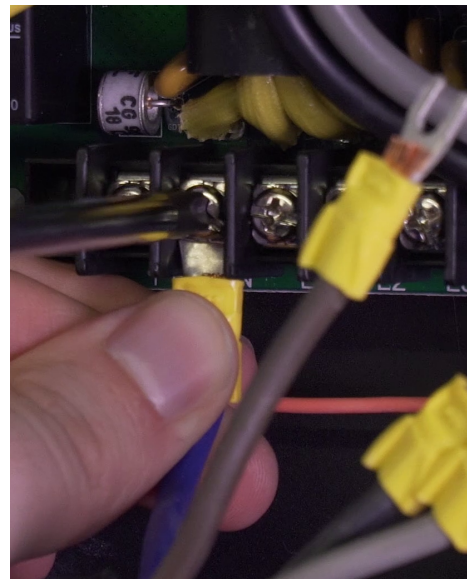
2. Thread the power cord through the left gland. Do not tighten the gland yet. Place hose clamp (supplied with the device) on the cord and tighten it just enough to eliminate movement.



3. Remove isolation from the power cord. Remove enough of it to free around 15cm of smaller cords. Remove isolation from them as well and using proper tools finish them with fork terminals (supplied with the device). Remember to adjust the length of the cords so that there will be only required minimum of them inside the device. Leaving the cords too long will cause problems with closing the device as the cords will interfere with casing.



4. Start screwing the fork terminals into right poles in the terminal barrier block. This operation must be performed with extreme caution. Always make sure the cords are being placed in right poles.



5. Make sure the cords are mounted properly. Tighten the hose clamp and the gland, in that order. The gland must be tightened with enough force to create a waterproof connection with the power cord.
6. Following the instructions from 2.2 *Opening and closing Enelion Stilo*
7. The device is ready to be powered up.

5. Usage

5.1. First steps

5.1.1. Configuration

Configuration is a key moment in process of installing Enelion Stilo. Configuration lets you choose charging power and allows additional accessories to be supported by the charger. Configuration is usually written onto the card by a dealer who sold you the device. Writing the configuration requires NFC card reader (to be bought separately, available in Enelion Store) and access to the Dealer Toolbox. All our dealers have both NFC readers and access to Dealer Toolbox and are able to write new configuration on your RFID cards. The device is configured after being powered up for the first time. To configure the charger please place the white RFID card supplied with the device near the RFID reader.



⚠ WARNING

The configuration is always written on the RFID card, not the RFID token - one of each is supplied with the device, but only the card carries the configuration.

After the configuration is written to the device, the RFID module will erase the configuration from the card. From now on your card can be used only to begin (or end) charging and cannot be used to configure this (or any

other charger) again until new configuration is written on the card using Dealer Toolbox and NFC reader.

💡 HINT

Full information about initializing and using the device can be found in the "User's Manual".

5.1.2. The Enelion MID addon

Enelion MID, which is an additional, certified electrical energy meter, cannot be installed inside Enelion Stilo.

5.2. Installing the addons

⚠ WARNING

Electricity should be turned off during any operations performed on opened charger. Alternatively the device can be completely disconnected from the grid.

💡 HINT

Part of the steps for installing the additional elements is the same as in case of mounting Enelion Stilo. In case of installing many addons consult the instructions for installing them before starting the installation process.

5.2.1. Enelion Bridge

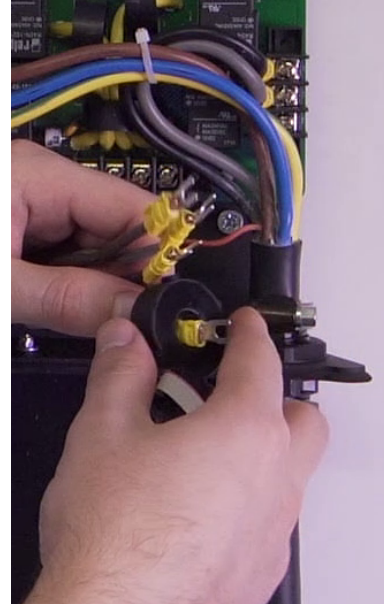
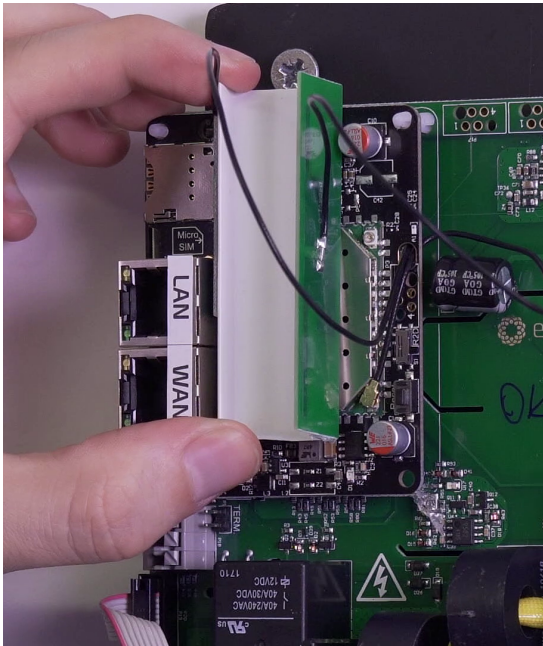
Enelion Bridge is installed inside Enelion Stilo.

1. Open the Enelion Stilo by removing the aluminium casing as seen earlier in manual.
2. Enelion Bridge should be mounted according to the symbols on the charging controller, securing it with 3 provided clips.

⚠ WARNING

If the intention is to use an Internet connection with the use of GSM you should place a MicroSIM card in the device at this moment.

3. Install the set of antennas with the use of the provided tape.



💡 HINT

If you have to thread 4 cords through the RCD-B don't thread them all at once. Instead put them one after another. It will be easier that way.

5.2.2. Enelion RCDB

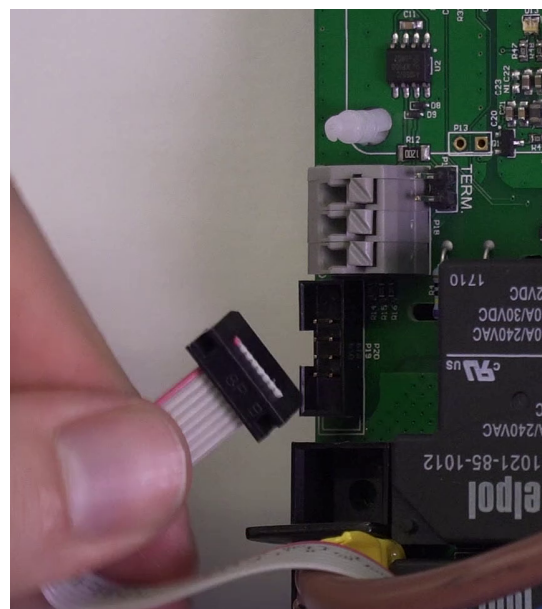
Enelion RCDB is installed in Enelion Stilo where additional protection against electrocution is to be provided. It should be installed inside a charger that is already mounted on a wall/pole.

📘 INFO

Before installing Enelion RCDB make sure that the label on the packing contains information about the configuration settings for initializing the installed addon. Otherwise the charger will not use the Enelion RCDB element even if it is installed, which will result in no additional protection.

1. Remove the casing.
2. Disconnect 4 lines marked N, L1, L2, L3 from the power supply. Use a PZ2 screwdriver. This step can be omitted if cords were not yet screwed in.
3. The disconnected lines should be lead through the sensor ring.

4. Screw the lines back to according to their previous position.
5. Connect the sensor connector to the socket on the charging controller marked with the "P19 P20" symbol located on the left hand side of the charging controller.



Once the device is initiated, the Enelion RCDB will function when the device is in use.

The charging station prepared in this way is ready for use.

6. Maintenance

The device is designed to work in temperature ranging from -40°C to 80°C . The manufacturer does not guarantee a proper operation of a charging station which happened to be located in temperatures outside this range. Chargers which were damaged as a result of being exposed to temperatures below -40°C or over 80°C are not covered by the warranty.

In case it is necessary to open the device you must make sure that it is disconnected from power supply. If the device is located outside you must make sure there is no rain, snow or any strong wind.

WARNING

The device may only be opened by a qualified and authorized individual.

6.1. Cleaning

The proper way to clean the charger is to wipe the casing with a microfiber cloth, using a detergent dedicated to anodized aluminum. The Plexiglas elements (front panel) and plastic elements (socket) should be cleaned with a microfiber cloth with a detergent dedicated to cleaning windows. Other methods of cleaning (e.g. with a wire brush) may cause damages in the device casing. Damages resulting from improper cleaning are no basis for warranty claims.

WARNING

The device meets the IP 54 requirements for sealing. Therefore, cleaning the charger with pressure washers, garden hoses, showers or streams of water from any other source is forbidden.

7. Technical specification

7.1. Enelion Stilo

Mechanic specifications	
Dimensions (height x width x depth)	430 mm x 190 mm x 65 mm
Weight	4,9 kg \pm 5%
Sealing class	IP54
Impact strength	IK10

Interfaces	
Creating a charging network	Enelion charger network
Additional elements	RCD-B, Enelion Bridge
Addons	<ul style="list-style-type: none"> • none
RFID	MIFARE cards complying with ISO 14443

Environment	
Operating temperature	from -20°C to 55°C
Storing temperature range	from -40°C to 80°C
Acceptable relative air humidity	from 5% to 95%
Altitude	maximum 2000 m

Electrical specifications	
Supply voltage (Europe)	3 x 230 V / 400 V _{AC}
Voltage frequency	50 Hz / 60 Hz
Type of network	TN, TT (IT on special request)
Overvoltage	Category III according to EN 60664-1
Short-time withstand current	Effective value < 6 kA according to EN 61439-1
Overcurrent protection	Not part of the device. The protection must be made in compliance with the local regulations and with the device version.
Residual current device	Integrated in product RCD A device \leq 30 mA AC
Protection class	Class I
Cable type	Charging cable with Type 2 plug 32 A / 400 V _{AC} according to EN 62196-1

