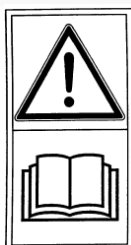


USER MANUAL

LinQ
Europe

Prepare your
car park
for the **future**

Provide charging stations
for the increasing number
of electric vehicles



LinQ Europe Sp. z o.o.
Ul. Wyzwolenia 10, 78-520 Złocieniec, Poland
ORIGINAL MANUAL

PLEASE READ THE USER MANUAL BEFORE YOU START WORKING!

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NOTE!

Please read this user manual before starting to use it and follow the safety rules.

The user manual is the basic equipment of the device !

The manual should be kept in a safe place and should be available to the user and operator throughout the life of the device .

If the device is sold or made available to another user, the user manual must be included.

DEVICE IDENTIFICATION

Product name	FAST DC CHARGER
Models	LQ40 / LQ80 / LQ 120 / LQ 160 / LQ 180 / LQ 240
Detailed data identifying the charger can be found on the rating plate located on the device.	

1. PRELIMINARY INFORMATION

1.1. Content and addressees of the manual

This technical publication is an user manual for the DC fast charger developed by the company LinQ Europe Sp. z o.o.



The user manual applies to the device and the charger, along with operational and technical information regarding the operation, installation and maintenance of the device. This manual is addressed to:

- 👤 Supervisors at the point of use of the charger;
- 👤 Personnel responsible for transport and installation of the device .

The manual must be kept by the responsible person/supervisor of the persons performing the duties described above, in such a way as to be always available in case of a need for consultation and should be kept in the best possible condition. If these materials are lost or are in a condition that prevents their use, the documentation should be replaced by contacting the manufacturer directly.

This publication applies to 6 models of the device :

- 👤 LQ40 / LQ80 / LQ 120 /LQ 160 / LQ 180 / LQ 240






The manufacturer reserves the right to these materials and intellectual property rights and prohibits, to copy and/or disclose even part of the content of the documentation without obtaining manufacturer's prior permission.

1.2. Symbols

In order to avoid hazards to the health and life of operating and maintenance personnel as well as to avoid disruptions to work and damage to property, the safety instructions must be observed. The following symbols are helpful:

SYMBOL	MEANING	EXPLANATION OF ADVICE NOTES
	Danger	The symbol indicates serious hazardous situations which, if ignored, may seriously endanger the health and safety of persons.

	Danger	The symbol indicates a serious electrical hazard which, if not avoided, could result in personal injury or death.
	Warning/Note	This symbol indicates that you should be aware of the warning, or pay attention to key features/important information.
	Duty to read	Please read and follow the user manual before use .

1.3. Cooperation with the device user

The manual reflects the equipment and technical condition of the device at the time of putting it on the market. Any change in the provisions of this manual will result in the manufacturer sending a copy of the new manual to each customer and such a document should be kept with this manual .

1.4. Compliance with safety requirements

The charger complies with the requirements of the following directives providing for CE marking:

- ❶ Directive 2014/53/EU on the harmonization of the laws of the Member States relating to the making available on the market of radio equipment and repealing Directive 1999/5/EC ;
- ❷ Directive 2011/65/EU of the European Parliament and of the Council of June 8, 2011 on the restriction of the use of certain hazardous substances in electrical and electronic equipment.

The charger has been marked with the CE mark and a declaration of conformity has been issued for it - due to the requirements set out in the above directives. The model rating plate on the device is shown below .

Table 1 Label key

Ad	Description:
A	Manufacturer:
B	Product name:
C	Serial number
D	Product number\
E	Date of production
F	Production batch number
G	EVSE charger number
H	SECC number

I	APBO number
J	EVSE parameters
F	CE marking
L	Barcode of the serial number
M	EVSE charger barcode number
N	CPPP number
O	Manufacturer's address
P	Certified energy meter identifier
R	Additional EVSE markings
S	IP Value
U	Weight



Figure 1 Label template on the device



Any modifications to any element of the charger without the prior written consent of LinQ Europe Sp. z o. o invalidate the declaration of conformity.

2. GENERAL DESCRIPTION OF THE CHARGER

2.1. Manufacturer's contact details

LinQ Europe Sp. z o.o.

Ul. Wyzwolenia 10, 78-520 Złocieniec, Poland

tel. 943 673 079

e-mail: sales@linqeuropa.pl

2.2. Service contact

Phone:00 48 453 019 572

e-me-mail. support@lingeurope.pl

2.3. General description

Advanced DC fast charger for electric vehicles, compatible with the CCS2 socket, designed for fast and effective charging. It has an intuitive and easy-to-use user interface that increases user comfort. The charger was constructed using the highest quality components, which guarantees its reliability and efficiency. The exceptional charging speed is the result of carefully crafted technology, enabling users to get the most out of their vehicles with minimal downtime.

The charging process starts only after connecting the electric car to the charger using a charging cable and authorizing the charging process with an RFID card. Charger statuses:

- GREEN: ready to start the charging process,
- BLUE: charging,

The charging cable ends with a CCS2 socket, which should be connected to the car with an appropriate plug compatible with the CCS2 socket. After connecting the charger to the car, authorize the charging process using the RFID card by touching it to the reader located on the front of the charger. After correct user verification, the charger will start the process of charging the electric car, informing the user about it by changing the lighting colour from green to blue. In the touchscreen variant, the user is guided through the loading process using on-screen messages.

Individual charger models differ in the charging power offered.

Model	LQ40	LQ80	LQ120	LQ160	LQ200	LQ240
Input	400V/65A	400V/130A	400V/195A	400V/260A	400V/325A	400V/390A
Output	40kW	80kW	120kW	160kW	200kW	240kW

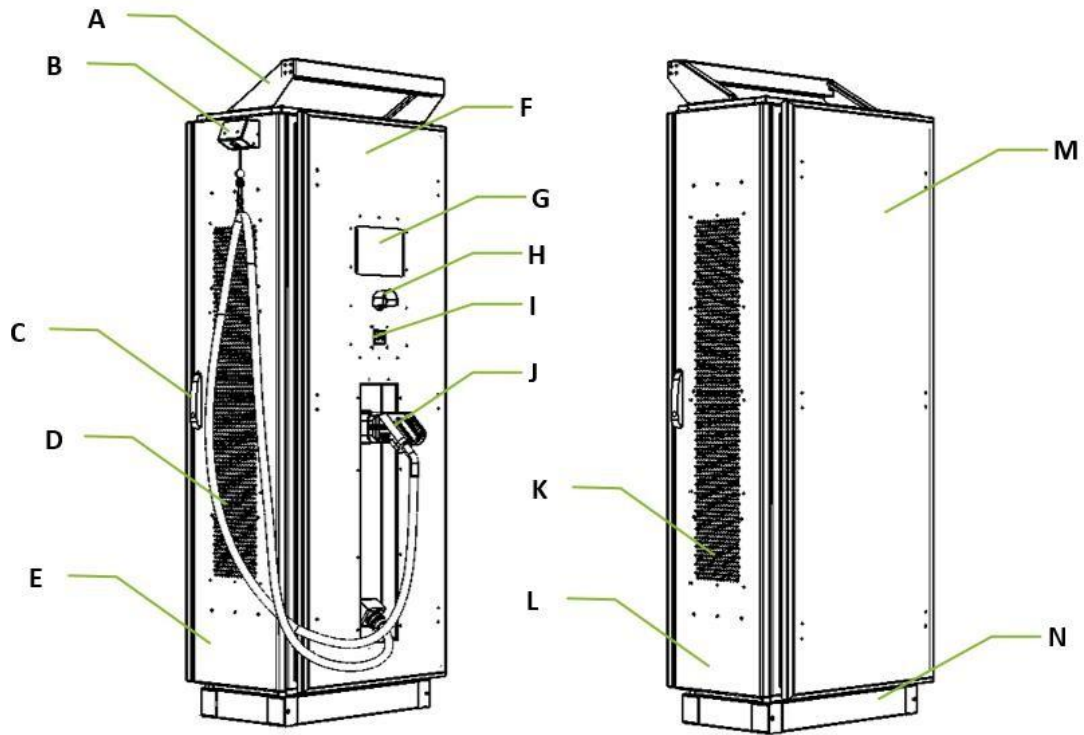


Figure 2 Outer structure of the charger

Table 2 Outer structure of the charger - key

Ad	Description:
A	HALO lighting
B	Cable management system
C	Lock with handle
D	Left side ventilation
E	Charger left side
F	Charger front
G	Touch display
H	Safety switch
I	RFID reader
J	DC charging cable
F	Right side ventilation
L	Charger right side
M	Rear of the loader
N	Pedestal

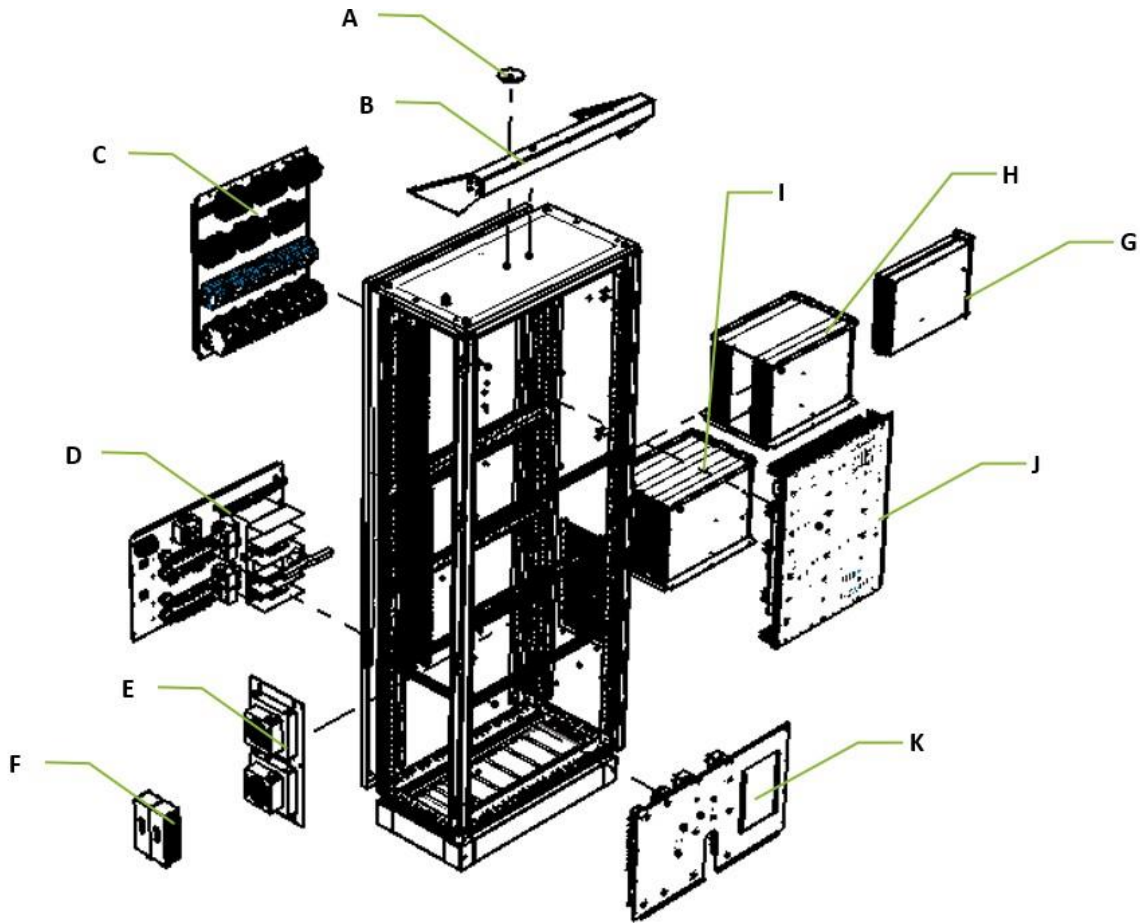


Figure 3 Inner structure of the charger

Table 3 Inner structure of the charger - key

Ad	Description:
A	LTE antenna
B	Halo lighting
C	Main AC protection
D	AC main switch
E	Ventilation
F	Heating
G	Single power module
H	Second package of power modules
I	First package of power modules
J	Control
F	Main DC protection

3. USE OF THE CHARGER COMPLIANT WITH THE INTENDED USE



Fast charging charger designed for efficient charging of electric cars using the CCS2 connector. Charger compatible with electric cars equipped with a socket of CCS2 type charging.

Product for external use. The device operates with an input voltage of 400V AC, output voltage of 500-1000V DC. Intended for use by adults. Not intended for use in explosive atmospheres.



NOTE! It is prohibited to use the charger contrary to its intended use.

Using the device for other purposes should be considered inconsistent with its intended use. Intended use also includes all activities related to the correct and safe operation and maintenance of the device. Due to the above, the user is obliged to:

- ❶ Read the OPERATING MANUAL and follow its recommendations;
- ❷ Understand the principle of operation of the charger and safe and correct operation;
- ❸ Comply with general safety regulations while operation;
- ❹ Accident prevention.

4. INFORMATION ON SAFE USE

Unauthorized uses may pose a threat to the health and safety of the user and people in a given area, as well as a risk of damage to the workplace.



NOTE! The manufacturer is not responsible for any consequences resulting from improper use of the device.

- ❶ It is unacceptable to install without the manufacturer's consent any additional elements on the device that are not included in its composition or accessories.
- ❷ Unauthorized processing and modification of the device without the manufacturer's consent is prohibited;
- ❸ For safe operation of the device, the operator must have received appropriate training and be in a suitable condition;
- ❹ Do not disturb or remove the safety devices installed in the charger;
- ❺ Do not use or allow the use of the device with damaged, inactive and/or inappropriately installed safety devices;
- ❻ Do not continue to use the device if any abnormality is detected. Stop the device immediately and start it only when normal conditions of use are restored;
- ❼ Do not perform any interventions on the working charger, only after disconnection in safety condition;
- ❽ Do not allow the device to be used by persons who have not been trained in the use of the charger ;

- ❗ Do not use the device for activities other than those for which it was designed;
- ❗ Do not open the electrical box without appropriate SEP authorizations;
- ❗ Never use the device with a large voltage drop;
- ❗ Do not carry out repairs that do not comply with the user manual;
- ❗ Do not leave covers open ;
- ❗ Do not use the charger if the power cord is damaged. Protect the power cord against damage;
- ❗ No part of the charger may be machined using electric arc welding without the authorization of LinQ Europe Sp. z o. o.;
- ❗ Do not clean the device with pressurized water;
- ❗ Do not interfere with the settings of the safety mechanisms;
- ❗ Do not use the device under the influence of drugs or alcohol. Carelessness or lack of attention when using the device may result in injury or damage to the equipment.
- ❗ Do not use non-original consumables or those that are not recommended by the manufacturer:
- ❗ Do not entrust maintenance or repair works to persons who have not been trained by the manufacturer;
- ❗ Do not step on the device;
- ❗ Never touch the power or charging cable with a wet hand;
- ❗ Do not use the device in an explosive atmosphere.

5. RESIDUAL RISK

Residual risk is such that still exists despite the introduction of safeguards. In situation of

- ❗ Failure to use covers by the operator;
- ❗ Failure to use personal protective equipment;
- ❗ Failure to follow the operating instructions;
- ❗ Leaving the electrical box unlocked;
- ❗ Transport of the device without appropriate protection;

there is a risk of health loss or death.

By following recommendations such as:

- ❗ Read the user manual carefully;
- ❗ Do not insert body parts into dangerous places;
- ❗ Do not make any unauthorized modifications or repairs to the electrical installation;
- ❗ Carry out all the repairs to the electrical installation only by a licensed electrician;
- ❗ The device should be operated by persons who have read the user manual,

- Use of personal protective equipment during maintenance and transport.

residual risks when using the charger can be minimized. There is a residual risk in the form of:

- Electrical hazard. An unauthorized person cannot remove the covers . Electric shock.
- Transport of the charger Crushing/smashing.

in the event of failure to comply with the detailed recommendations and following the user manual.

The safety warnings that apply when using the charger are summarized below . It is the responsibility of all personnel who are or will be in charge of the installation, maintenance or operation of the device to read and understand these warnings and the user manual.

Technicians installing and servicing the charger may be exposed to a variety of hazards and are therefore advised to be particularly vigilant and take into account the potential hazards listed here.



FATAL HAZARD – ELECTRICAL POWER. A current of 100 milliampere flowing through the human body for 1 second can cause death. This threat applies to alternating current voltages from 50 V or direct current from 75 V. Unless absolutely necessary, cleaning, inspection and maintenance activities should be carried out after disconnecting the device from all sources of electrical power.



NON-IONIZING RADIATION. Chargers produce a low-intensity electromagnetic field in accordance with current legal regulations. Pacemakers, defibrillators and other life-saving or life-sustaining devices may be disturbed in the vicinity of electromagnetic fields. People using such devices should consult a doctor for advice on how to avoid the risk.



PERFORMING WORK IN THE VICINITY OF THE DEVICE. If it is necessary to perform work on the device with the power supply switched on, it is important that all activities are performed only by qualified personnel who are fully aware of the risks associated with performing these activities and who have taken appropriate precautions to avoid contact with dangerous voltage. Be careful not to pinch the ground wire .



HEAVY DEVICE. The devices are heavy and special care must be taken when moving them. To transport the unit safely, adequate staffing and a suitable forklift or pallet jack must be provided. You should also use protective gloves, safety shoes and a protective helmet.



WARNING LABELS. The device is equipped with a number of warning labels attached to mark potentially dangerous places. You should pay special attention

to the location of these labels and their importance for the safe operation of the loader . Where necessary, labels are written in the local language to comply with legal requirements.



LIABILITY. This charger contains deadly high voltage. LinQ Europe Sp. z o.o. assumes no liability for death or injury resulting from improper work performed by unqualified persons or from work carried out in a manner different from the instructions contained in this user manual.

6. TECHNICAL DATA

Input data	
Power connection <i>(AC Connection)</i>	3P + N + PE
AC Voltage <i>(AC Voltage)</i>	400V AC +/- 10%
Frequency <i>(Frequency)</i>	50-60Hz
Nominal supply current <i>(Nominal Current)</i>	390A max
Power factor <i>(Power Factor)</i>	0.99

Input data	
Rated output voltage <i>(DC Output Voltage Range)</i>	150V (1000V)
Maximum charging current <i>(Maximum Charging Current)</i>	250A
Maximum Charging Power <i>Maximum charging current</i>	240kW
Cable type and ratings <i>(Type cable and Connector Rating)</i>	CSS2 / 250A
CSS2 compliance <i>(CCS2 Compliance)</i>	IEC 61851-23 /-24, IEC 62196-3, DIN 70121
Cable length <i>(Cable Length)</i>	5m (standard)

Protection	
Overcurrent protection <i>(Overcurrent protection)</i>	✓
Overvoltage protection <i>(Overvoltage protection)</i>	✓
Short Circuit protection <i>(Short Circuit protection)</i>	✓
Residual current protection <i>(Residual current protection)</i>	✓

Undervoltage protection (Undervoltage protection)	✓
Insulation monitoring (Isolation monitoring)	✓
Overvoltage protection (Ground fault protection)	✓

General – environmental	
Efficiency (Efficiency)	96%
Operating temperature (Operating Temperature)	-25°C to +50°C
Storage temperature (Storage Temperature)	-40°C to +80°C
Humidity (Humidity)	< 95% relative humidity, no condensation
IP class (Ingress Protection)	IP55
IK class (Mechanical Impact Protection)	IK10
Cooling (Cooling)	Forced air circulation
Compliance (Compliance)	CE
Mobile parameters / frequency (Mobile parameters)	800 - 2100MHz 4G/LTE (Cat 4), 3G, 2G
Maximum radio transmission power (dBm)	23.8 dBm for the LTE B7 band

7. ENTRY INTO SERVICE AND OPERATION

The purpose of this manual is to provide useful tips for the company that installs the charger.

Please be advised about the obligation to ensure the safety of all persons in the workplace in accordance with legal provisions and amendments thereof, and in particular of the obligation to use personal protective equipment (safety helmet, safety footwear, protective gloves, appropriate clothing, etc.) suitable to individual job posts.

Compliance with the following recommendations is the basis for ensuring the safety of the installed device.



NOTE! Full and exclusive responsibility for the installation lies with the installer in the aspect of any risk undertaken, whether tangible, intangible or otherwise, direct or indirect.

7.1. Necessary personnel and equipment

The installation and commissioning of the device may only be carried out by specialists who have read this User Manual, are authorized to work with power equipment and have undergone occupational health and safety training.

All works should be carried out in accordance with occupational health and safety regulations and general technical requirements. When lifting up the charger using lifting mechanisms and devices, their capacity should correspond with the size of the load being carried.

7.2. Assembly station

The installation site of the charger should guarantee intact condition and ensure comfortable work during operation and maintenance, and should also meet fire safety and occupational health and safety requirements. The workplace must meet the following conditions:

- ❶ The place should provide free access to the charger, which will enable safe use.
- ❷ The substrate should be flat, horizontal and sufficiently durable. In the case of installation on existing substrates, it is recommended to install it on a concrete slab made of reinforced concrete of at least B20/C15, minimum thickness of 100 cm and dimensions not smaller than 120x100 cm. When pouring the foundation for a loader, a minimum plan size of 120x120cm and a minimum depth of 100cm is recommended.
- ❸ There should be sufficient free space around the charger for its daily operation, parking of the loaded car, as well as possible service and cleaning.
- ❹ The permanent location of the charger should not be close to machines that generate vibrations or devices that produce heavy dust.
- ❺ The workplace must be sufficiently lit.
- ❻ The charger cannot be mounted near an explosive zone.
- ❼ The charger cannot be operated within the range of static discharges or strong magnetic fields. This may lead to errors in its control system.

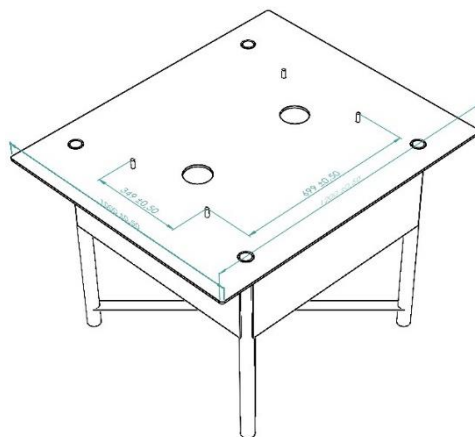


Figure 4 Location of screws on the mounting pedestal

7.3. Installing the charger



If not transported properly, the charger may tip over, fall or change position without control.

A necessary condition for proper operation of the loader is its proper positioning on the ground . The device should be placed on a stable surface that guarantees vibration-free and shock-free operation.

When selecting a place to install the device, pay attention to the site plan for the arrangement of the device's elements and the space necessary for proper operation and maintenance of the charger . There should be space on each side allowing free access .

Unloading, assembly and first start-up can only be performed by trained employees with the required SEP qualifications. After positioning the charger, level it and check whether it is stable.

Fasten with the included 4 M12 screws, or choose others that suit the surface.

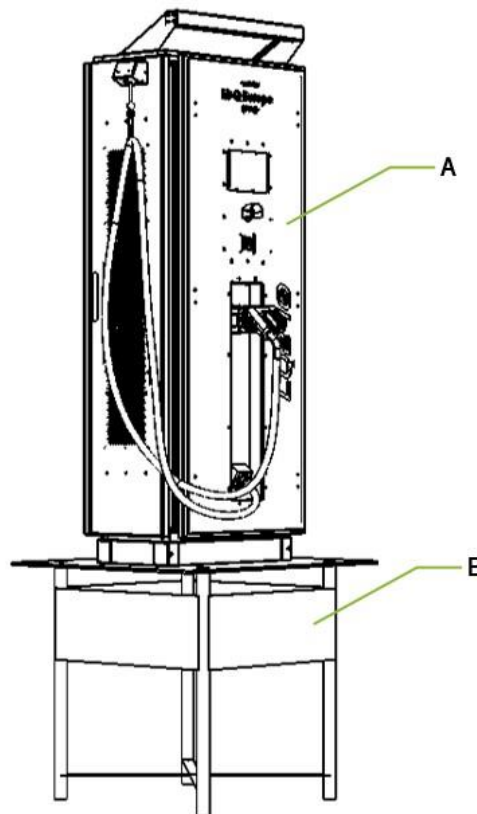


Figure 5 General view of the assembled set

Table 4 Key of the assembled set

Ad	Description:
A	DC charger
B	Mounting pedestal

7.4. Connecting the charger to the electrical grid



The electrical connection to the device must be made by properly trained and authorized personnel.



The power cable is individually selected to suit the charger's power. The cable should be attached to the disconnect switch using ring terminals made from the power cable. Type of ring terminals for M10 screw.

- ❶ Before turning on the device, check whether the power supply is correct.
- ❷ The charger's supply voltage is indicated on the device's identification/rating plate .
- ❸ The grounding should be durable, low impedance and free from interference in accordance with local requirements.



Electrical installations and devices should be designed and operated in such a way that they do not expose employees to electric shock, atmospheric overvoltages, harmful effects of electromagnetic fields and do not constitute a fire or explosion hazard or cause any other harmful effects.

The safety rules for operating electrical devices and installations must be followed, which include:

- ❶ Meeting occupational health and safety requirements specified in the standards applicable in the country where the loader is used and the relevant regulations regarding design, construction and operation throughout the entire period of use.
- ❷ Correct location of the device and electrical installation led in accordance with the relevant requirements of building regulations, water supply regulations, etc.
- ❸ Acceptance of the electrical device in accordance with the regulations applicable in a given country .
- ❹ Operation of electrical installations should only be carried out by properly trained persons with periodically verified qualifications.
- ❺ Maintaining special safety conditions against electric shock.
- ❻ Maintaining special fire safety conditions in the design and selection of machines and electrical installations depending on fire and explosion hazards.
- ❼ Maintaining the safety of operators and the surroundings, environmental protection requirements and electromagnetic field impact.
- ❽ Protection against switching and atmospheric overvoltage.
- ❾ Protection against the possibility of fire and other mechanical or technical damage.
- ❿ The use of fuses that meet the requirements of standards for a given type of device and electrical installation, as well as disconnection switches, off switches and protections.
- ⓫ Protection against access by unauthorized persons, devices and electrical installations.

- ❶ Marking with appropriate pictograms machines and electrical installations where voltage may appear within human reach.
- ❷ Trouble-free and continuous supply of electricity in accordance with the required technical parameters.
- ❸ Determining the technical condition of machines and electrical installations, carrying out measurements of the insulation condition, zeroing effectiveness or the effectiveness of other anti-shock and fire protection measures.
- ❹ Checking the technical condition of short-circuit, overload, overvoltage and other protections. The inspection must be carried out by persons with appropriate authorizations.
- ❺ The use separated and individually protected circuits for individual electrical installations (lighting, power connections, etc.).
- ❻ The use of zeroing or grounding for electrical devices.
- ❼ Maintaining a book of operation of machines or electrical installations in accordance with local regulations.

When operating electrical devices and installations, it is prohibited to:

- ❶ Working on the device by unauthorized persons.
- ❷ Leave unrestricted access to electrical devices and installations to unauthorized persons.
- ❸ Use electrical devices and installations contrary to the requirements for shock, fire and explosion safety.
- ❹ Carry out temporary repairs when servicing the electrical installation.
- ❺ Failure to comply with specific operating parameters of devices or electrical installations specified in the documentation in the user manual
- ❻ Use of faulty electrical devices and installations.

7.5. Minimum operating conditions of the charger

The device is designed to work both indoors and outdoors :

- ❶ Operating temperature: From -25°C to +50°C
- ❷ Humidity while in operation: <95% without condensation.
- ❸ Storage temperature: -40°C to +80°C
- ❹ Storage humidity: <70% without condensation, covered place.
- ❺ Maximum height above sea level: 200 m above sea level

7.6. First start-up



Be especially careful when starting the charger for the first time ; check all safeguards and correct operation of safety functions. Please remember to read this user manual carefully before using it for the first time and first observe the safety regulations.

Read before starting the charger

- ❶ *The charger should only be operated by competent personnel. Untrained personnel pose a risk to themselves and to the device.*
- ❷ *Before starting the operation, check the charger for damaged components. Any damaged part should be properly repaired or replaced by competent personnel. Do not operate the device if any component appears to be malfunctioning. Do not modify or alter this device in any way. Any modifications*
- ❸ *or changes to the device may result in injury and/or mechanical damage.*
- ❹ *It is the responsibility of the person responsible for the device to ensure that all persons involved in*
- ❺ *the operation of the device read carefully the operating instructions attached to the charger BEFORE starting any work. The ultimate responsibility for safety rests with the person responsible for the device and those who operate the charger.*

8. USER REQUIREMENTS

The person selected and authorized to operate and maintain the device must have the appropriate authorizations and knowledge. Service and renovation works may only be performed by specially trained personnel after securing the device. To properly operate the device, the user must:

- ❶ Be able to use and search for information in this document;
- ❷ Know the operation of the charger ;
- ❸ Have a health condition appropriate to the work performed, confirmed by a certificate issued by a licensed doctor,
- ❹ Be at least of 18 years of age or supervised by an adult;
- ❺ Be in full mental and physical health;
- ❻ Be trained by responsible personnel;
- ❼ Recognize malfunctions and, if necessary, take necessary measures to eliminate them in accordance with this user manual.







The following persons should be prevented from access to the device:

- ❶ Children;
- ❷ Persons who are only able to operate the device to a limited extent due to mental or physical impairment;
- ❸ People without qualifications;
- ❹ People who have very poor vision or hearing;
- ❺ People who have not read the user manual.

The user must meet the conditions specified in chapter "8" and should have predispositions to work in relation to specific characteristics of work activities. The device may only be operated by a previously trained person. Only specialists are required to start-up and repair the device.

9. USE OF PERSONAL PROTECTIVE EQUIPMENT

During **assembly, maintenance, repair, adjustment, transportation and disassembly** wear protective equipment in accordance with the table below. The table shows what personal protective equipment should be used during a given activity.

No.	The action being performed	Individual protection measure,	Pictogram
1.	Assembly/transport/disassembly	Safety shoes	 STOSUJ OBUWIE OCHRONNE
2.	Assembly/transport/disassembly	Protective helmet	
3.	Assembly/transport/disassembly	Protective gloves	 STOSUJ RĘKAWICE OCHRONNE
4.	Assembly/transport/disassembly	Protective clothing	 STOSUJ ODDZIEŻ OCHRONNĄ
5.	Maintenance/repair/adjustment	Protective clothing	 STOSUJ ODDZIEŻ OCHRONNĄ
6.	Maintenance/repair/adjustment	Protective gloves	 STOSUJ RĘKAWICE OCHRONNE

10. USE



The following instructions must be strictly followed:

- 🕒 Always follow the instructions in the user manual;
- 🕒 Always follow the warnings on the charger; warning signs placed on the charger and in the work area are signs to prevent accidents and must be followed at all times;
- 🕒 Do not allow the device to be used in an explosive atmosphere ;

- ❗ Do not allow people under the influence of alcohol and/or drugs to use the charger;
- ❗ Always ensure that the device is used in appropriate conditions;
- ❗ Always keep the workstation clean - the workstation is located next to the HMI panel;
- ❗ Always turn off the device's power supply when replacing parts of the charger and protect against unauthorized switching on;
- ❗ Always check that the power supply is properly connected and the device is operating properly .
- ❗ Always check that all doors are closed.
- ❗ Always check that the area around the charger is clean and free of obstacles that could cause tripping or slipping.
- ❗ Always check the controls to make sure the device is working properly .
- ❗ The installation, acceptance, operation and maintenance of the device should always be performed only by trained personnel, observing the applicable safety measures.
- ❗ Always exercise caution when working in potentially hazardous areas of the device marked with an appropriate warning label.
- ❗ Removal of any guard, cover or other protective devices must always be done only by qualified personnel, after turning off and disconnecting the power supply to the device .
- ❗ **All safety devices must be operational at all times. Damaged safety devices or covers must be repaired or replaced immediately.**



WARNING: RISK OF ELECTRIC SHOCK. Failure to follow these instructions could result in death, serious injury or damage to the equipment.

10.1. Panel and indicator lights

Charger startup screen.



Depending on the type of charger, different touch screen configurations are possible. The user can choose a different type of connector type depending on the selected connector on the charger.

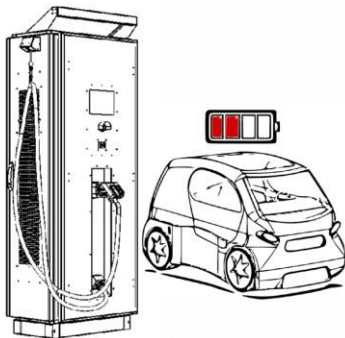
- 1) CCS2 socket – DC fast charging socket ,
- 2) AC socket type 2 - charging socket with alternating current,



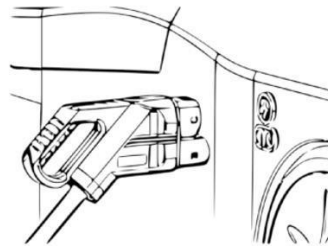
After selecting the connector and correct user authorization, the charging process starts.

10.2. Essential activities during the client's work

1. Find a free charging station.



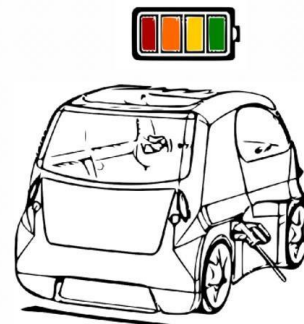
2. Connect the charging cable to the car



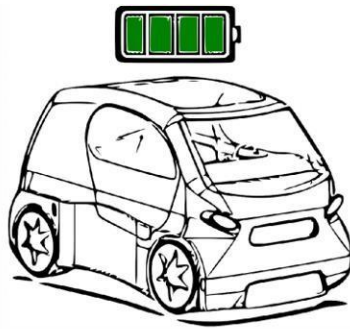
3. Place the RFID card on the reader



4. Charging process



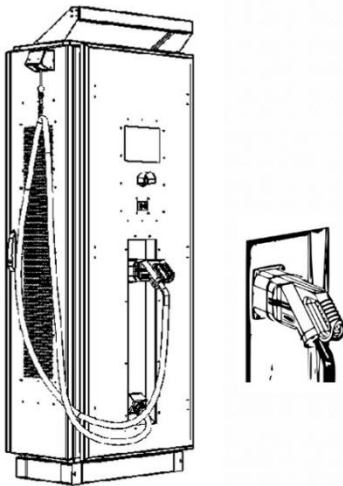
5. The car is 100% charged



6. Place the RFID card on the reader



7. Unplug the cable from the car and put it back



11. ADJUSTMENT, CALIBRATION AND MAINTENANCE

Before carrying out any activities, authorized personnel are obliged to check and understand the information provided in the "User Manual". Use all provided safety devices, stop the device and assess whether residual energies are present before proceeding with treatments. Appropriate safety conditions must be ensured in accordance with workplace regulations to prevent hazards and reduce risks. Pay attention to safety warnings, avoid misuse and assess any residual risks that may arise. Adjustment and maintenance activities are described below.

Please follow the maintenance recommendations below:

- 🔊 The maintenance and service intervals given in this manual must be strictly observed.

- ❶ All power sources must be disconnected before maintenance and repair work.
- ❷ Unauthorized modifications to the charger are not allowed and may result in disabling the safety devices.
- ❸ Changes can only be made in consultation with the manufacturer.
- ❹ To prevent premature wear of your device, clean and maintain it diligently at regular intervals.
- ❺ Correctly carried out maintenance allows to extend the service life and maintain a constant level of safety.
- ❻ Perform maintenance procedures using personal protective equipment.
- ❼ Do not throw waste resulting from maintenance procedures into the environment. Dispose of them in accordance with applicable regulations.
- ❽ Always follow the provided maintenance procedures .
- ❾ Only replace fuses or cables of the same type and electrical rating. Fuses and cables may only be replaced by authorized persons.
- ❿ Important ! Follow all country-specific safety regulations that apply to the installation, use and maintenance of the equipment.



Only trained personnel may clean and service the device. WARNING: HAZARD OF ELECTRIC SHOCK AND FIRE RISK. Failure to follow these instructions may result in equipment damage and/or fire, death or serious injuries.

11.1. Maintenance frequency

Maintenance is divided into types depending on how often it is carried out. The frequency depends on the nature of the safety of sensitive parts installed on the device, as well as their degree of exposure to wear, cracking/fracture and any damage.

11.2. Maintenance schedule

To ensure safe and effective use of the charger, it is recommended to regularly clean and inspect the charging cable. Proper maintenance affects the longer life of the device.

Cleaning the charger:

- ❶ Use a dry, soft cloth to remove dust from the surface of the device.
- ❷ If stains or other dirt appear, it is recommended to use a cloth slightly moistened with water. Avoid aggressive chemicals that may damage the casing.
- ❸ After cleaning, make sure the charger is completely dry.

Replacing dust filters

- ❗ When replacing the filters, turn off the Q17 fuse.
- ❗ Dust filters should be replaced with the new ones at least once every 6 months. Set of 2 filters screwed on with 2 M6 nuts and 5 M5 screws. Each fan has a 230 V power supply terminal - disconnect the terminal before unscrewing it. After installing and screwing the fans, install the connector in its place. **Fan model:** FAN ATV3200V 230VAC 204X204MM.

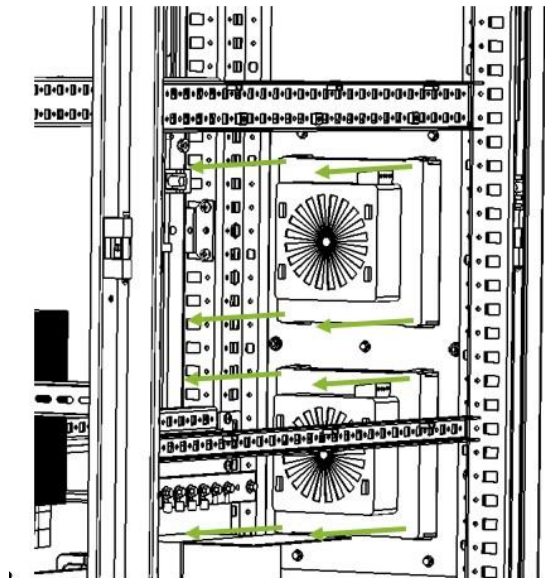


Figure 6 Fans with dust filters

Charging cable overview :

- ❗ It is recommended before each use to check the charging cable for visible damage such as cracks, cuts or burn marks.
- ❗ Pay attention to the connectors - they should not show any deformations, traces of corrosion or other visible damage.
- ❗ It is crucial to check that all insulation and coverings are intact.



Note! If any damage is noticed during the inspection, especially damage to the connectors and cables, use of the charger should be stopped immediately and an authorized service centre should be called. Using a damaged charger or power cord may pose a risk of fire, electric shock or other hazards.

- ❗ The charger should be cleaned at least once every two weeks. Regular inspections and attention to its technical condition guarantee safe and long-term use of the device.
- ❗ The device should be serviced by an authorized service centre at least once every 12 months.

Note! The frequency of maintenance operations listed above is assumed to be consistent with normal use. If the device is installed in a place with unusual conditions, additional checks should be carried out. If the maintenance cycle given above is too long or too short, the maintenance schedule needs to be changed to suit the actual conditions of use.

11.3. Electrical measurements

Measurements are performed only by an authorized service centre that has the appropriate tools to perform measurements and inspections. Perform measurements every 12 months.

12. REPAIR

Repair of a damaged device may only be carried out by specially trained manufacturer's personnel or persons designated/trained by the charger manufacturer . Persons repairing the charger must follow the guidelines applicable in the workplace. Failure to follow the recommendations may result in health loss. The table below shows the activities that the user can perform on their own. Any other actions not included in the table require the intervention of a specialist.



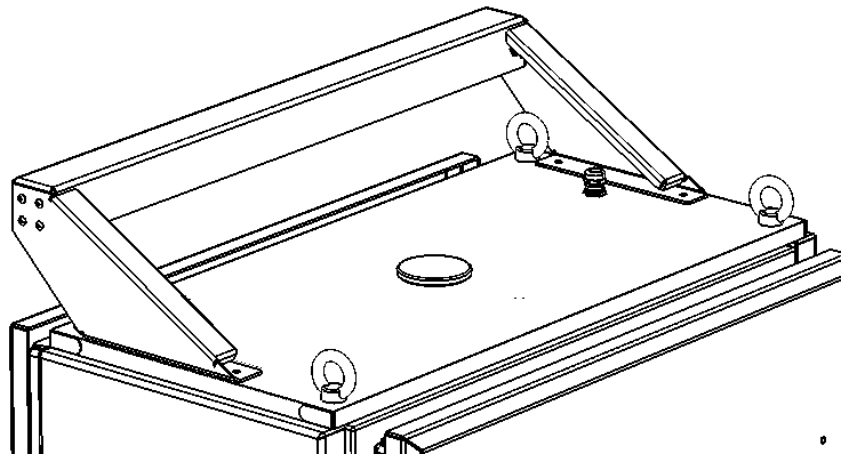
NOTE! Appropriate technical qualifications or special skills are required to carry out such operations, so they can only be performed by qualified personnel with experience gained and recognized in the scope of the activities performed.

12.1. Repairing faults

Fault	Cause	Ways to remove
1	2	3
No power in the charger	Power cable disconnected	Check the power cable connection and reconnect if necessary
The charger does not start charging	No contact in the connector	Visually check and make sure there are no foreign objects in the connection. In case of dirt, report to the service centre.
All types of mechanical / thermal damage	Impact / misuse	Report to the service centre.

* Remember to always unplug the device before attempting to troubleshoot the problem. In case of doubt or if the problem is not solved, contact the authorized service centre of LinQ Europe Sp. z o. o.

13. TRANSPORT



Chargers are delivered to the customer:

- on a EURO pallet , secured with stretch foil, with installed eye bolts enabling the charger to be lifted with a crane - moved with a forklift or pallet truck,
- or in a dedicated wooden box at the customer's request

If improperly transported, the device may become unstable and tip over or fall or change position in uncontrolled way. Please follow the maintenance recommendations below:

- Be sure to check the weight and centre of gravity of the device;
- Place the charger on a suitable foundation/ground;
- Use only the places and attachment points provided for this purpose to assemble or lift the device;
- The devices cannot be attached or lifted by attached parts (wires, power cables, etc.);
- Observe the maximum load capacity of the conveyor;
- Make sure there are no unauthorized persons in the hazardous area;



Transport of the device with a lift truck may only be carried out by personnel, who have occupational health and safety qualifications and training for a given device.

- It must be ensured that components mounted on the device do not come into contact with the lifting device during transport;
- Be careful that the edges of the charger do not damage the transport belts.
- Use edge protectors if necessary.



Lift and lower the device slowly and carefully. Lift above the ground only to the necessary height.

13.1. Loading and transport



Before commencing transport, the party responsible for transport should read the following guidelines:

- ❶ The transport company is responsible for properly securing the device during loading;
- ❷ The device on the transport platform should be secured in a way that prevents any movement during transport;
- ❸ The party organizing the transport should ensure that the charger is transported by a vehicle adapted to its size.



The carrier is responsible for any damage occurring during transport.

13.2. Unloading

- ❶ The transport company is obliged to carry out unloading with particular care so as not to cause mechanical damage;
- ❷ It is not allowed to throw or pull the device from the box body of a delivery vehicle.

14. DISASSEMBLY AND STORAGE*

If it is necessary to dismantle the device for scrapping, reassembly or for repairs, proceed as follows:

- ❶ Disassembly operations must be performed by qualified personnel and equipped with personal protective equipment presented in Chapter 9 and working tools as in the case of device assembly.

The charger must be stored in a closed room that does not expose the device to moisture and prevents access by unauthorized persons. When the device is left idle for a long time, disconnect it from all power sources.

15. DISPOSAL OF USED ELECTRICAL AND ELECTRONIC EQUIPMENT



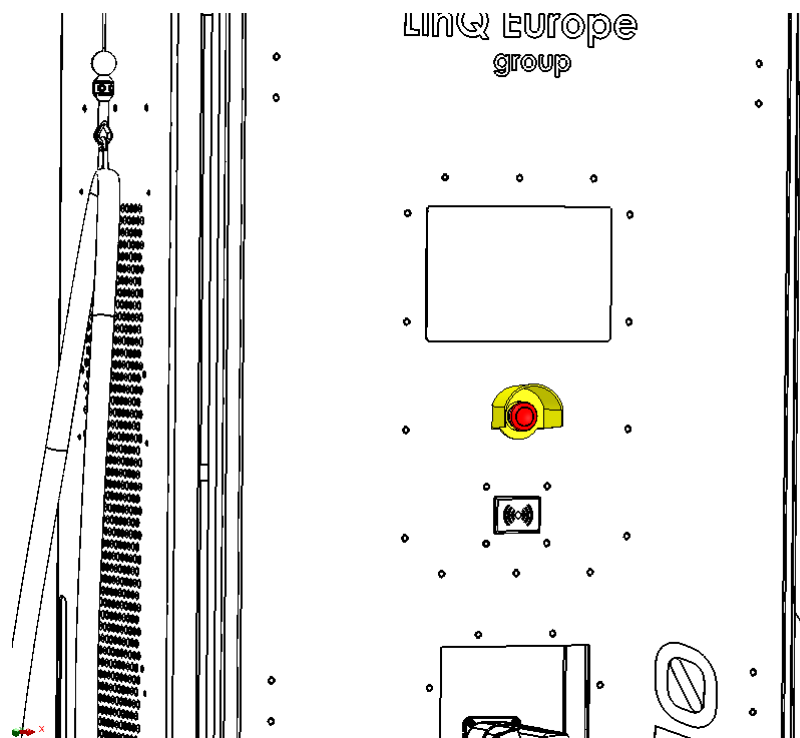
The user is obliged to hand over electrical parts removed from the device to a person collecting waste of electrical and electronic equipment. Those conducting the collection, including local collection points, shops and municipal units, create an appropriate system enabling the return of this equipment. Proper handling of electrical and electronic equipment waste helps to avoid consequences harmful to human health and the natural environment resulting from the presence of hazardous components and improper storage and processing of such equipment.

16. FAULTS



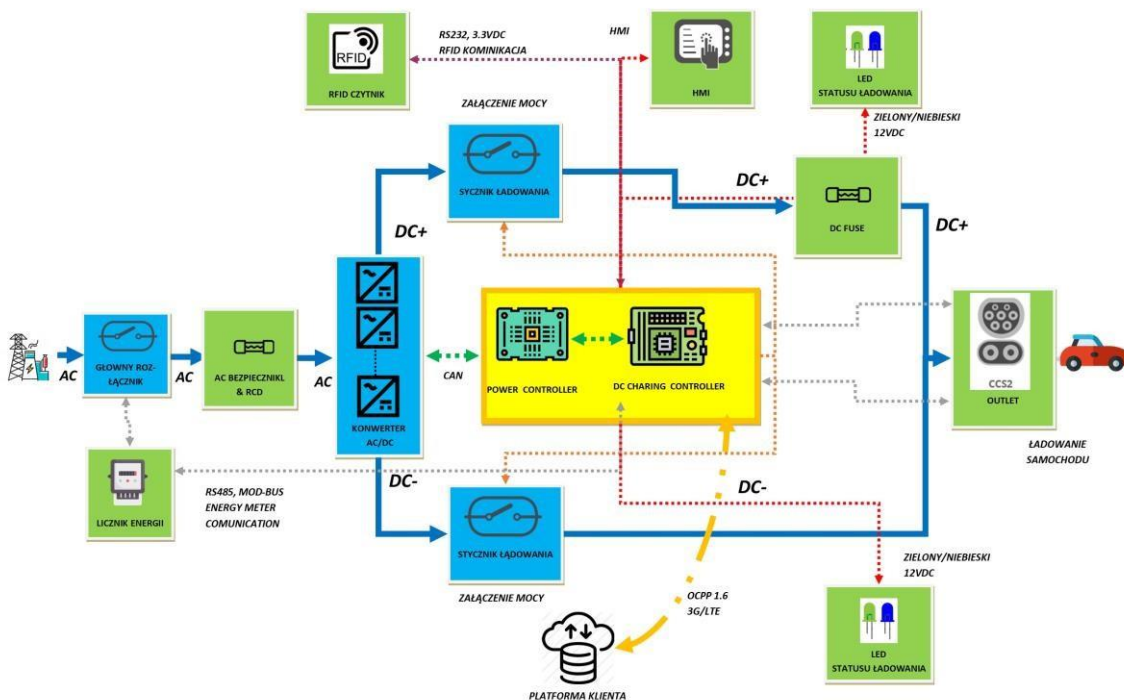
In the event of a failure, occupational health and safety regulations must be strictly followed during the repair. Each occurrence and removal of a fault should be recorded. In the event of extreme conditions, emergencies and fire situations, the actions of the operating personnel are determined by the company's instructions and evacuation plans.

In an emergency situation, immediately press the emergency switch (red button on a yellow background) and notify the manufacturer of the situation .



PROCEEDINGS IN THE EVENT OF FIRE In the unlikely event of a fire occurring in a component of a device manufactured by LinQ Europe Sp. z o. o., it is important to use a fire extinguisher containing an appropriate type of extinguishing agent. Fires in electrical equipment should be extinguished using powder fire extinguishers.

17. WIRING DIAGRAMS



* - OPTIONAL FUNCTION

18. DECLARATION OF CONFORMITY

LinQ Europe sp. z o. o. hereby declares that the radio equipment **FAST DC CHARGER** models **LQ40 / LQ80 / LQ 120 / LQ 160 / LQ 200 / LQ 240** meet the requirements of Directive 2014/53/EU of the European Parliament and of the Council of 16 April 2014 on the harmonization of the laws of the Member States relating to the making available on the market of radio equipment and repealing Directive 1999/5/EC. The full text of the declaration of conformity is available at www.linqueurope.pl/download



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