ETKEL

ELECTRIC VEHICLE CHARGING STATION

ETREL INCH LITE

USER MANUAL

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1 FOREWORD

Etrel INCH LITE charging station has been designed and tested in accordance with current and past versions of international standards. The charging station is compliant with IEC 61851 (Part 1, Part 21-2, Part 22) international standard which defines conductive AC electric vehicle charging and supports Mode 3 charging for safe recharging of standard electric vehicle.



Figure 1: Etrel INCH LITE charging station (with socket, with cable)

The system enables safe and simple EV charging for the user and gives a comprehensive oversight and control of the charging.

The manual contains the latest information at the time of purchase. Any unauthorized modification or tampering with the product may void the product warranty.

Etrel d.o.o. reserves the right to make changes to the product without further notice. Customer support department will assist with any further inquiries about the product.

Notes to the installer:

- Carefully read the installation instructions before installing the station. Follow all the instructions and recommendations.
- After the installation is completed, make sure to leave these instructions with the customer.

Notes to the customer:

- Use the charging station only in accordance with instructions for use. Carefully read these instructions and make sure to keep them for further reference. Ensure that the charging station is installed by a licensed electrician.
- Preparation of charging station installation site and installation are described in separate documents. In this document it is predisposed that charging station is installed properly and already working.

GENERAL INFORMATION

INTENDED USE

Etrel INCH LITE charging station is intended only for charging of electric vehicles and should not be used to charge other appliances or for any other purpose.

- No flammable materials or liquids should be used or stored in the direct vicinity of the charging station.
- The manufacturer accepts no responsibility for damage or injuries resulting from incorrect installation or inappropriate use of the product.
- Different types of charging connectors and converters are available as a part of optional equipment to allow safe charging of any standard electric vehicle.

OPERATION

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The device must be used in accordance with the instructions contained in this manual.

- Do not operate charging station if there is visible damage to the unit or charging cable. Call manufacturer's or reseller's support department for advice how to proceed.
- Do not put fingers into the charging connector.
- Do not operate the charging station with wet hands.
- The charging station manufacturer cannot be made liable for damage or injury caused by improper handling, installation, or use of the product.
- Any usage of the product not covered in this document is not allowed and could cause injury or even death.

MAINTENANCE

- Charging station can be maintained and repaired by qualified personnel only.
- Charging station's power supply should always be switched off during the maintenance and repair.
- Avoid hazardous risks. Only the manufacturer, an authorized service technician, or technically qualified personnel may replace damaged charging station or its components.

PROCEDURE IN CASE OF IRREGULARITY OR INTERFERENCE AT OPERATION

In the event of irregularities or interference in the operation of the device, immediately stop using the charging station and inform the charging station operator of the situation by phone number located on the housing or other place.

DESIGN CONSIDERATIONS

Special care has been put into selection of components and materials and their compliance to requirements set in standards, technical directives and rules of good practice.

The internal wiring was carefully designed, and the propriety of whole assembly thoroughly evaluated. Basic design considerations include voltage, insulating materials, time under voltage stress and degree of pollution at the location. Creepage distances, clearance between circuits and spacing to metal enclosures are important requirements for insulation coordination. Thus, calculation and measurement of clearance and creepage distances, in accordance with requirements, are one of the significant parts in design of our products.

They are dimensioned to withstand the required impulse withstand voltage and to withstand the long-term continuous operation. A charging station operates with an RCD device, which is designed to protect against the risks of electrocution and in addition offers protection against fire caused by earth faults. It is a sensitive safety device that switches off electricity automatically if there is a fault.

The ingress protection class of IP54 proves, that the enclosure of the charging station is protecting the internals against ingress of solid objects, permits only limited ingress of dust and is protected against water splashes from all directions. Impact protection, of at least IK10 states, that the charging station can withstand impacts, equivalent to 5 kg dropped from height of 40 cm. As required, tests for the IK class were performed before testing of IP class.

FIRE SAFETY MEASURES

At the location of car charging, the fire hazards and thus the threats are increased during the process of charging. The overall design of our products is made on the basis assumption that the fault could occur on any element of the system. Either in the electrical wiring of power supply, in wiring or inside of the charging station, or in the car.

The enclosure and the assembly design are made in such a way that the contact of the user to hazardous parts is not possible. In the event of fire, metal enclosure would constrain a fire and would not allow the propagation outside of the enclosure. Regarding the fire safety in all possible cases of installation, that are out of control of our company, several recommendations are listed:

- The charger must be installed outside the hazardous area.
- The installation of the charging station can be performed only by professional electrician and must comply with the installation manual and local installation rules.
- Ensure that there is enough space to manoeuvre vehicles into their designated charging areas and that in event of fire the escape and rescue routes are not obstructed.
- No flammable or combustible material should be stored within the charging area.
- Provision of suitable portable fire extinguisher at the location of the charging station is proposed.
- When the charging station without integral RCD device is installed, the proper RCD device should be installed in the main electrical cabinet.

FIREFIGHTING MEASURES

In case of fire please follow these steps:

- In the event of a fire, immediately stop using the charging station and call the appropriate services (fire brigade).
- If possible, disconnect the station from the power supply by pressing the fire protection switch (if present) or another switch responsible for cutting off the power supply to the station.
- Retreat from fire area.
- Extinguishing should be carried out with extinguishers intended for extinguishing electrical devices up to 1000 V.

Do not extinguish live electrical installations and devices with water!

ENVIRONMENTAL SAFETY MEASURES

When implementing protection measures, environmental protection must also be observed. For this reason, special care has been put into selection of the components and their compliance with the Directive on the restriction of the use of certain hazardous substances in electrical and electronic equipment (RoHS). This directive restricts use of hazardous materials in the manufacture of various types of electronic and electrical equipment.

The substances banned under RoHS are heavy metals, lead (Pb), mercury (Hg), cadmium (Cd), hexavalent chromium (CrVI), polybrominated biphenyls (PBB), polybrominated diphenyl ethers (PBDE), and four different phthalates (DEHP, BBP, DBP, DIBP). The restricted materials are hazardous to the environment and pollute landfills and are dangerous in terms of occupational exposure during manufacturing and recycling.

Another example of use of environmentally friendly materials in our products is compliance to REACH, which is a regulation of the European Union, adopted to improve the protection of human health and the environment from the risks that can be posed by chemicals. REACH regulation also promotes alternative methods for the hazard assessment of substances in order to reduce the number of tests on animals. Packaging of our products is environmentally friendly and materials degradable.



CORRECT DISPOSAL OF THIS PRODUCT (INFORMATION ABOUT WEEE DIRECTIVE)

Of major importance is the compliancy with the Waste Electrical and Electronic Equipment Directive (WEEE) as well. The scope of this

Directive is the reuse, recycling and disposal of electrical equipment during complete lifecycle and after their end of life.

The product and its electronic accessories should not be disposed of with other household waste at the end of their working life. To prevent possible harm to the environment or human health from uncontrolled waste disposal, please separate these items from other types of waste and recycle them responsibly to promote the sustainable reuse of material resources.

Household users should contact either the retailer where they purchased this product, or their local government office, for details of where and how they can take these items for environmentally safe recycling.

Business users should contact their supplier and check the terms and conditions of the purchase contract. This product and its electronic accessories should not be mixed with other commercial wastes for disposal.

COMPLIANCY

SIMPLIFIED EU DECLARATION OF CONFORMITY

Hereby, Etrel d.o.o. declares that the radio equipment type INCH is in compliance with Radio Equipment Directive 2014/53/EU. The full text of the EU Declaration of Conformity is available at the following internet address:

https://etrel.com/charging-solutions/inch-lite/

Select "Access documentation" and then "Certificates".

TESTED COMPLIANCY WITH STANDARDS

Etrel INCH charging station was tested at accredited third-party laboratory SIQ - Slovenian Institute of Quality and Metrology. Performed tests cover all the requirements of RED, LVD and EMC directives of the European Union, according to the specifications of the following standards:

- IEC 61851-1:2017 (EN IEC 61851-1:2019)
- IEC 61851-21-2:2018
- ETSI EN 301 489-1 V2.2.3
- ETSI EN 301 489-17 V2.2.1
- ETSI EN 301 489-52 V1.1.0
- ETSI EN 301 489-3 V2.1.1
- EN 60529:1991 + A1:2000 + A2:2013
- EN 62262:2002

SAFETY RISK ANALYSIS

DANGER OR RISK	RELEVANT	PROTECTIVE MEASURES	IN ACCORDANCE WITH
Preliminary observations	YES	Application of Annex A of CENELEC Guide 32, Safety aspects relating to low voltage equipment.	CENELEC Guide 32
Safety integration	YES	Application of Annex A of CENELEC Guide 32, Safety aspects relating to low voltage equipment, in particular the "3-step-	CENELEC Guide 32
		method": 1) Inherent design measures, 2) Techical safety measures, 3) Information for use.	
General	YES	Charging station complies to all requirements of the standards of the EN 61851 family, to all parts relevant to AC	EN 61851-1:2001, EN 61851-1:2011,
		conductive charging and is compliant to all versions, current and old. This family of standards covers requirements for	EN 61851-1:2019, EN 61851-21:2002, EN
		charging stations from all aspects, however some details are covered in other standards, as listed in this table.	61851-22:2002
Protection against electrical haza	rds]	
Leakage current	YES	To prevent leakage currents, the suitable RCD protection device is used either in charging station, or in an installation.	Directive LVD 2006/95/ED (through
-		Each socket must be protected by individual RCD. The power supply was selected to have a negligible leakage current.	April 19, 2016) and Directive 2015/30/EU (from April 20, 2016),
Energy supply	YES	Overload and short-circuit protection is ensured with use of suitable MCB. Additional surge protective device could be	EN 60947-1:2007, EN 60947-2:2006,
		required by national legislation. Protective devices can be installed either in charger, or in an installation upstream.	EN 60947-3:2009, EN 60947-4-1:2010, EN
		Coordination and selectivity of protection devices with upstream devices should be ensured, so that only the protection	61008-1:2004, EN 61008-1:2012,
		device, the closest to the fault, operates.	EN 61009-1:2004, EN 61009-1:2012,
Stored charges	YES	The components are dimensioned in such a way that they cannot cause a charge that would be hazardous to human	EN 60309-1:1999, EN 60309-2:1999,
_		health. In case of vehicle malfunction, the possible hazard of stored charge is mitigated by the use of RCD.	EN 60947-1:2007, EN 60947-2:2006,
Arcs	YES	The use of suitable switching and protective devices ensures that possible arcs are extinguished quickly and without	EN 60947-2:2017, EN 60947-3:2009,
		causing damage.	EN 60947-4-1:2010, EN 62196-1:2012, EN
Electric shock	YES	Basic protection is provided with selection of appropriate insulation of all components and in addition live parts are not	62196-1:2014, EN 62196-2:2012,
		accessible during charging. Fault protection is achieved with earthing of all exposed conductive parts and with automatic	EN 62196-3:2014, EN 50065-1:2011,
		disconnection of the supply in case of a fault. Additional protection is also provided, with use of high sensitivity RCD's.	EN 50065-4-2:2001, EN 60950-1:2006, EN 50065-4-7:2005, IEC TS 61439-7:2018,
Burns	YES	Electrical burns and other injuries are prevented with use of appropriate protective devices, properly designed insulation	IEC Guide 116:2018, ISO/IEC Guide
Bullis	1123	and prevention of arcs.	51:2014
Protection against mechanical ha	zards	and prevention of arcs.	31.2014
Instability	YES	The use of quality housing with use of additional structural supports ensures high resistance on mechanical stress. The	EN 62262:2002, EN 60529:1991
mscasincy	1.23	proper installation of mounting anchor ensures that the charger is rigidly supported and can not turn over. Our charging	Liv 02202.2002, Liv 00323.1331
		stations are tested to determine the IK code (degree of protection provided by enclosure) in combination with tests to	
		determine IP code (ingress protection).	
Break-down during operation	YES	Charger construction ensures that break-down during operation is not possible in normal conditions. This would be	1
break-down during operation	123	possible only with high enough external force, e.g. vehicle collision. For this reason the recommendation for public	
		charging stations is to use protective bollards.	
Ingress	YES	The use of quality housing with use of sealing foam and filters ensures high resistance to ingress of particles. Our charging	1
iligiess	1 123	stations are tested to determine the IP code (ingress protection) in combination with tests to determine IK code (degree	
		of protection provided by enclosure).	
Falling or ejected objects	NO	/	/
Sharp edges or corners and	YES	There is a possibility that sharp edges occur during the production process during the cutting and assembly of the	Directive LVD 2006/95/ED (through
inadequate surfaces	1 123	housing. For this reason, possible sharp edges that could harm a person, were identified and are grinded away after the	April 19, 2016) and Directive 2015/30/EU
madequate surfaces		assembly. The wires are also protected so that they do not come into contact with the remaining sharp edges. Proper	(from April 20, 2016)
		processing, finishing and coloring procedures of the surfaces ensure high quality product.	(110111 April 20, 2010)
Moving parts, especially where	YES	The only moving part representing the hazard is the opening and closing of the doors. The doors should be closed only if	IEC 60335
there may be variations in the	''	there is nothing blocking them (either mechanical object, or human hand). This risk is also mitigated with the explanation	
rotational speed of parts		in the user and installation manual.	
Vibration	YES	The major concern with vibrations is the loosening of electrical connections. For this reason, special care is made during	IEC 60335
VIDIAUON	1 153		100000
		the production process to use the optimum torque and tightening sequence for fasteners with use of tools with settable	
Improper fitting of parts	YES	screwing torque. The tolerances of parts are high enough to not represent a problem during the manufacturing process. In addition, the	IEC 60335
improper fitting of parts	163	manufacturing instructions are covering all possible improper fittings of connectors and other components. All charging	120 00555
		stations are put on the testing line after assembly where possible improper fittings or connectors and other components. All charging	
		istations are put on the testing line after assembly where possible improper fitting would be identified.	1

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Explosion	DANGER OR RISK	RELEVANT	PROTECTIVE MEASURES	IN ACCORDANCE WITH
Miscards an improve extrust, magester, and externormagents from externormagents from a few companies from a few companies from the few and externomagents from	Protection against other hazards			
comparating (SAC) and electromageset interference (18M). The complanee with 18M child insits sensure that the sharing state in some certainties decleromageset fields that could affect on the close and complanee with 18M child limits sensure that the sharing attention and are constraint on the charging station and art constraint when subjected to electromagestic fields that could actuar in the United Sensure of the Children of	Explosion	NO	//	/
station is not emmitting effectionages from facts that could direct other decice and compliance with 34M limits example of 1200, 420, 420, 420, 420, 420, 420, 420,	Hazards arising from electric,	YES	Our charging stations are subjected to tests and certification to ensure safe operation from the view of electromagnetic	EMC Directive 2004/108/EC (through
monitoring relatation Foreign participation (1997) Foreign participation of the charging station and and experience with reduce discount in the confidence with reduce the control of sequence with reduced to the control of the charging station in section of the protection report of the charging station in section of the protection related to the control of the co	magnetic, and electromagnetic		compatibility (EMC) and electromagnetic interference (EMI). The compliance with EMC limits ensures that the charging	April 19, 2016) and EMC Directive
monitoring relatation Foreign participation (1997) Foreign participation of the charging station and and experience with reduce discount in the confidence with reduce the control of sequence with reduced to the control of the charging station in section of the protection report of the charging station in section of the protection related to the control of the co	fields, other ionizing and		station is not emmiting electromagnetic fields that could affect other devices and compliance with EMI limits ensures	2014/30/EU (from April 20, 2016).
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Electric magnetic of dutubances	· · · · · · · · · · · · · · · · · · ·			EN 61000-6-3:2007. EN 61000-6-4:2007
selectromagnetic disturbances Objects related to Fire TS Objects related to TS Object and selection TS Object the equipment selection to (pilling and provide) the environmental perfection compared performance and selection of the general and producting perfection TS Object the equipment selection of the selection of compared to avoid the risk, during the installation, the selection object to select and selection of the good performance and selection objects to select the selection objects to select	Electric, magnetic or	YES		
Special content of the company of	electromagnetic disturbances			
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Used materials are resistant to logition and spread of fire. External parts of insulating material and involuting parts are registrant to observed heat and five five. Intallal RED device protects against fire asswell. 145 Using the equipment beyond its environmental specifications may give rise to temperature hazard. This is well mitigated with selection of appropriate materials. 140 With selection of appropriate materials. 140 With selection of appropriate materials. 140 Allowed of charging sations can durage the electronic components from the propriate material. 140 Allowed or charging sations can durage the electronic components may be read to the extended in the complete of the propriate material. 140 Allowed or complete the components and the addition of silica get or similar they provided. 140 Allowed or complete the components and their completes and provided and prevents the corrosion and rurs. Additional measures can be the addition of silica get or similar thypocropic material. 140 Allowed or complete the components and their completes the provided or silica get or similar thypocropic material. 141 Allowed or complete the components and their completes and the complete the provided or silica get or similar thypocropic material. 142 Allowed or complete the components and their completes extended to the component sent to the components and their completes or the component sent to the component sent the complete or component sent to the component sent the complete or component sent to the component	<u>'</u>		/	/
resistant to abnormal heat and to The. Installant RD Gover's protects against fire avoid. Using the equipment beyond its environmental specifications may give these to temperature heatrard. This is well mitigated with electrical components. To avoid the risk, during the installation, of the protection of appropriate materials. Humidity Vis. Ship humidity inside of charging station can diamage the electrical components. To avoid the risk, during the installation, the base of charging station than do not consider the station of charging station than measure can be the addition of stating of a vinifiar hyproscopic material. Accounts noise No. No significant noise levels are being produced. Noise that the electronic components ent it negligate in comparison with noise of vehicles in themsel charges. Vis. Special care has been put into electronic entire compliance with the Directive on the reads and provided to components. The provided of charging process no additional insulation and the environment from the risks that can be proved by chemicals. Vispour! Unattended operation Vis. After the starting of charging process no additional insulation and interruption from provers supply Vis. Provided to an interruption of charging station stated one provided in improve the protection of human health and the environment from the risks that can be proved by chemicals. Vispour seems of the fall level of the state interruption the charging station state does not represent a "pilet" in consumed provided to admit the provided in th	Fire	YES		EN 61439-1:2011, HD 60364-4-42:2011
Temperature VFS Wheelection of agreements as peculiarities many give rise to temperature hazard. This is well mitigated With selection of agreements. WFS With selection of agreements as precipitations many give rise to temperature hazard. This is well mitigated. WFS With selection of agreements. WFS With selection of agreements. WFS With selection of agreements. WFS WFS With selection of agreements. WFS WFS WFS WFS WFS WFS WFS WF				
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^{*} Although standards listed in the table are referenced only as CENELEC versions (EN - European Standard, or HD - Harmonization Document), compliancy applies to their international counterpart versions as well (IEC prefix). However, the designation of the year of the standard can be different for IEC versions.

All our charging stations are tested and proved compliant with EN 61851 Part 1, Part 21-2 and requirements of harmonized standards to fulfil LVD and EMC directive. These tests and judgement of compliancy was performed by external accredited organization, SIQ - Slovenian Institute of Quality and Metrology, Mašera - Spasićeva ulica 10, 1000 Ljubljana, Slovenia, www.siq.si.

2 PRODUCT DESCRIPTION

BASIC FUNCTIONALITIES

Etrel INCH LITE is a smart charging station that can predict EV charging habits and help charge the car by the time it is needed, at the lowest possible cost.

To connect Etrel INCH LITE charging station, it either comes with the socket or cable. Depending on the type of charging station.



- 1. Status light
- 2. Socket
- 3. Maintenance doors
- 4. Charging cable



Figure 2: Etrel INCH LITE with socket

Figure 3: Etrel INCH LITE with cable

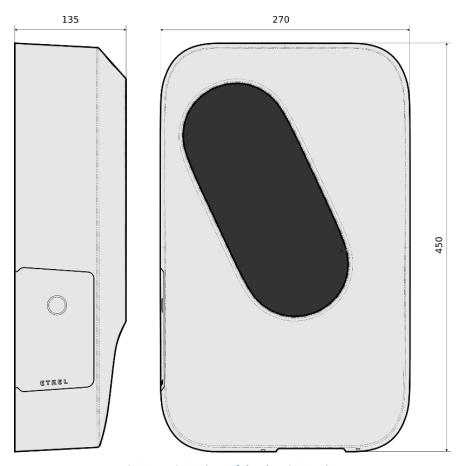


Figure 4: Dimensions of the charging station

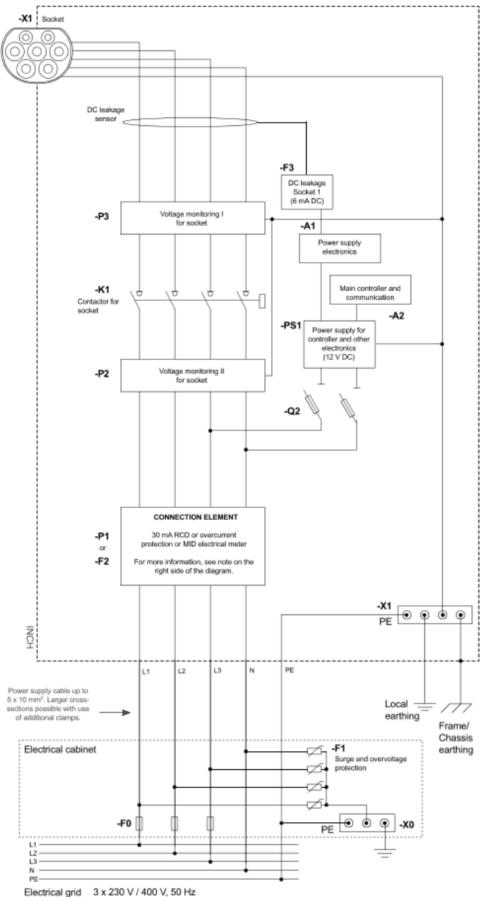
OPTIONAL AND EXTRA EQUIPMENT

CONTENT AND ACCESSORIES

- Charging station (with Type 2 cable or Type 2 socket),
- Wall mounting bracket,
- 9 × wall plugs for securing the mounting bracket using screws to the wall,
- 9 × screws to mount the bracket to the wall,
 - o Screws dimensions: 4.5 x 40 and 4.5 x 60 [mm],
- Cable gland rubber seal for smaller cable dimensions
- *9 × wall spacers
- *2 × keys to open charging station service doors,
- *Hex key to open charging station maintenance doors,
 - o Hex key dimensions: 2.5
- *Load Guard device,
- *Magnetic cable holder (different version for longer cables > 3 m).

^{*}Optional depending on the purchased model.

CIRCUIT DIAGRAM



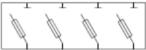
NOTE:

CONNECTION ELEMENT

Connection element is used to connect supply cables to the charging station. It can be either of the three components specified below (A, B or C), depending on the version of the product.

(A) Overcurrent protection

-F2 Miniature circuit breaker, MCB 40 A



B Measurement of the consumed energy

-P1 MID electrical meter



C Residual current device

-F2 Residual current device, RCD Type A or Type B, 30 mA

Δ| 30 mARCD

Actual wiring of a product can be different across different versions of the product.

3 OPERATION AND CHARGING PROCEDURE

FIRST POWER UP

Before starting the station, it is absolutely necessary to read this manual and the technical specification of the device.

When the charging station is power up for the first time it can take several minutes for station to get ready to start using it to charge EV. Charging station is powered up automatically when it is connected to the electricity. In the table below, all possible events that can occur at the power up of the station are listed with the procedure what to do in case something is wrong.

STATUS LIGHT	NORMAL OPERATION	PROBLEM	SOLUTION
Fast blinking green light	Charging station's backup batteries are charging. At the first power, up it can take up to 10 min. If backup battery is full green light will blink slowly.	If the light is blinking fast more than 10 min there might be a problem with the backup battery.	Inform the support about the status of the charging station.
Slowly blinking green light	Heating system is trying to heat the electronics before it is turned ON.	If the green light is blinking slowly for more than 10 minutes, there might be a problem with the hardware.	Support should be called.
Steady glowing green light	Charging station is ready to be used.	/	/
No lights	/	If charging station is not responding after it is powered up, something might be wrong with connection.	Check the protection elements if either RCD or overcurrent protection has been tripped. Activate the protection.

			If nothing helps call the support or installer.
Green light is blinking	Charging station is ready to be used.	Charging station is unresponsive.	Try resetting the charging station. If the problem repeats there might be a problem with the software. Support should be called.

FIRST CHARGING SESSION

CHECK WHETHER THE CHARGING STATION IS WORKING PROPERLY AND SETTING OF MAXIMAL CHARGING CURRENT

- When the charging station has either overcurrent or RCD protection installed, check whether the protection element is in ON position.
- Connect charging station to the power supply in the electrical cabinet. Installation feeder should be turned on.
- The default value is 16 A and it can be set in range of 6 A to 32 A. Information of the current value is obtained with short press on the key. Number of short beeps represents information of set maximal charging current (number of beeps x 2 A).
- Settings can be accessed with key press for more than 5 s. After that, a long beep is a notification that the settings can be changed. Each short press on the key increments the maximal charging current by 2 A, from minimal value of 6 A. E.g., to set 24 A, the key should be pressed 9 times.
- To save the settings, press the key for more than 5 s. Long beep is a confirmation that settings were saved, two short beeps are a warning that settings were not saved.

4 REGULAR MAINTENANCE

Etrel charging station does not require any periodic maintenance. However, it is recommended to perform a visual check and test of the protection elements once per year.

Detailed descriptions of security checks and their intervals are included in the service manual.

RESET AND TEST THE PROTECTION ELEMENTS

OVERCURRENT PROTECTION

Check the overcurrent protection (if installed) once a year for any visible damages on the surface. If the overcurrent protection is tripped and the switches cannot return to the active position something is wrong with the protection and needs to be changed by maintenance crew.

SURGE AND OVERVOLTAGE PROTECTION

Check the surge and overvoltage protection (if installed) once a year for any visible damages on the surface. If the surge and overvoltage protection is tripped it needs to be changed by maintenance crew.

RCD

The regulations require that residual current protective device (RCD) is tested regularly, and an audit log should also be kept. The test button on the RCD unit allows user to verify the correct operation of the device by passing a small current through the RCD unit. This simulates a fault by creating an imbalance in the sense coil. If the RCD does not trip when this button is pressed, then the device must be replaced by licensed electrician. The device must be changed also when the RCD was tripped but the switch cannot be moved back into active position. RCD testing must be completed every three months and documented.



Figure 5: RCD test button

5 TROUBLESHOOTING

Errors dangerous to device users:

Dangerous voltage present on enclosure or device under fire. In this case the device should be turned off immediately. Switch off device power supply of device in the distribution board from where device is supplied and not on device itself. Do not touch device. If vehicle is connected at that moment, disconnect plug from the vehicle and not from the charging station, but only after the power supply was switched off. In the case of fire use fire extinguisher appropriate for electrical fire.

Faults occurred because of external conditions:

Undervoltage, overvoltage, short and long power supply outages or wrong vehicle behaviour. In these cases, no action is needed to reestablish normal operating conditions. Once fault is gone, normal operation conditions will be established automatically. If temporary fault was caused by vehicle, user will have to reinitiate charging session.

Device hardware failure preventing normal operation:

Example: Broken socket, electronics failure. If after restart device does not start normally, contact supplier support.

Charging station software failure:

Check that latest version of firmware is running on the charging station. If the latest version is installed and problem persist, then check if problem is caused by the charged vehicle. To check this, the charging could be tried on another charging station. If problem is not in the vehicle send diagnostic logs to the supplier.

ACCESS TO THE MAINTENANCE AREA

Etrel INCH LITE charging station provides quick access to the side maintenance area to execute basic troubleshooting and to reset the charging station in case there are some problems.

Side maintenance area is protected by the side maintenance doors. Depending on the type of Etrel INCH LITE charging station, two different doors are available. One with the regular key lock and one with hex screw (2.5 mm). To access the area, either key or a hex screwdriver is needed.





Figure 6: Doors with keylock

Figure 7: Doors with hex screw

There is a sticker on the inside of maintenance doors, with technical information including basic charging station information, model type and serial number. When support is contacted it is important that the charging station model type is known so the support can quickly help solve the issue.

RESETING THE CHARGING STATION

Charging station can be reset by opening the side maintenance doors and pressing the button inside the maintenance opening.

After holding the button for 4 s, the charging station will respond with the beep after which the options on the screen to check the IP address of the station or to reset the station will be presented. Basic reset and factory reset, which will restore charging station's factory settings (username, password, default IP and other settings) can be made.



Figure 8: Reset button inside the maintenance opening

CONTACT INFORMATION

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TECHNICAL SUPPORT DEPARTMENT

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CUSTOMER SUPPORT DEPARTMENT

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