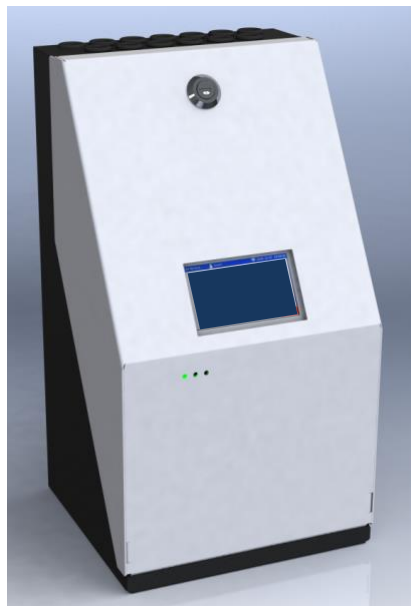


Low voltage emergency lighting system CoreCompact24

Software version V1.1

User manual



Customer order number: _____

Production No.: _____

Commission/Object: _____

Device number: _____

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Contents

1	General.....	7
1.1	Co-Applicable Documents.....	7
1.2	Liability and warranty.....	7
1.3	Copyright protection.....	7
1.4	Spare parts.....	7
1.5	Disposal.....	7
2	Security.....	8
2.1	Contents of the user manual.....	8
2.2	Changes and modifications to the system.....	8
2.3	Responsibility of the operator.....	8
2.4	Requirements for staff.....	8
2.5	Occupational safety.....	9
2.6	Personal protective equipment.....	9
3	Introduction.....	10
3.1	Installation location and environmental conditions.....	10
3.2	Cable lengths of the circuits.....	11
3.3	Compatibility with third-party products and higher voltages.....	11
4	Danger and information signs.....	12
5	Scope of delivery.....	12
6	System overview.....	13
7	Functional description.....	14
7.1	Control concept.....	14
7.2	Luminaires.....	15
7.3	Status display for luminaires and modules.....	15
7.4	Circuits.....	15
7.5	Groups and grouping by operating mode.....	15
7.6	Scenes and dimming.....	16
7.7	Schedules.....	16
7.8	Testing.....	16
7.9	Control inputs.....	17
7.10	Outputs.....	17
7.11	Critical circuit.....	17
8	Installation and commissioning.....	18
8.1	Setup and installation.....	18
8.1.1	Choose a location.....	18
8.1.2	Installing luminaire circuits.....	18
8.1.3	Connecting circuits to the system.....	18
8.1.4	Connecting switching inputs.....	19

8.1.5	Connecting switching outputs	19
8.1.6	Connect critical circuit	20
8.1.7	Connection to a local area network (LAN)	20
8.1.8	Insert battery (do not connect cable yet)	21
8.1.9	Connection to the mains supply (do not switch on the system yet)	21
8.1.10	Insert fuses	21
8.2	Network setup	21
8.2.1	Switch on	23
8.2.2	Log in to the local touch screen (GUI).....	24
8.2.3	Make local network settings (LAN).....	26
8.2.4	Make local network settings (WLAN)	27
8.3	System setup via touch screen (GUI)	28
8.3.1	Run the automatic setup wizard.....	28
8.4	System setup using web user interface (WebUI).....	32
8.4.1	Log in to the WebUI.....	32
8.4.2	Run the automatic setup wizard.....	34
8.5	Final steps (WebUI required).....	39
8.5.1	Setting up automatic tests	40
8.5.2	Optional: Configure switched luminaires.....	44
8.5.3	Carry out and document endurance tests	47
9	Operating your system.....	48
9.1	Touch screen (GUI) and web user interface (WebUI)	48
9.1.1	Login	48
9.2	Main switch	48
9.2.1	Switch on the system	49
9.2.2	Switch off the system	49
9.3	Operating mode switch (BAS)	49
9.3.1	Operating the BAS via the touch screen.....	49
9.3.2	Operating the BAS via the web user interface	50
9.3.3	Manual reset.....	50
9.4	Reset errors	50
10	Menu Reference I: Web User Interface (WebUI).....	51
10.1	Tabular views.....	51
10.2	Responsive design and multilingualism	51
10.3	Navigation area: "Overview"	52
10.3.1	System overview.....	52
10.3.2	System log	53
10.3.3	Function test.....	56
10.3.4	Capacity test	57
10.3.5	Station and hardware information	59

10.4	“System” navigation area.....	60
10.4.1	Luminaires: Overview + Details	60
10.4.2	Groups: Overview + Details.....	63
10.4.3	Circuits: Overview + Details.....	64
10.4.4	Entrances: Overview + Details	66
10.4.5	Outputs: Overview + Details	67
10.4.6	Modules: Overview + Details.....	68
10.5	Reports page.....	69
10.5.1	Function and capacity test procedure	71
10.6	Configuration navigation area	71
10.6.1	Schedules: Details + Overview	71
10.6.2	Scenes: Overview + Details	72
10.6.3	network.....	74
10.6.4	Setup Assistant.....	75
10.6.5	Auxiliary power supplies (VAUX).....	75
10.6.6	System changes.....	76
10.7	Help.....	77
11	Menu Reference II: Touch Screen (GUI)	78
11.1	System overview.....	78
11.2	menu.....	78
11.3	Registration.....	79
11.4	Network settings.....	79
11.4.1	LAN – Settings for wired network	79
11.4.2	WLAN (Wi-Fi) – Settings	80
11.5	Language and time.....	80
11.5.1	Language	80
11.5.2	Date and time	81
11.6	information.....	82
11.7	System diagnostics	82
11.7.1	System log	82
11.7.2	Module overview	83
11.7.3	Luminaire overview.....	84
11.8	configuration	84
11.8.1	menu.....	84
11.8.2	Software update.....	85
11.8.3	Setup Assistant.....	86
11.8.4	Restart.....	86
11.8.5	Factory settings	86
11.8.6	Download database	87
12	Working on the system	88

12.1	Check battery voltage	88
12.2	Shut down system	88
12.3	Add luminaires and/or modules	88
12.4	Remove luminaires and/or modules	89
12.5	Switch on system	91
13	Complete shutdown (disconnection) of the power supply system	92
14	Operation, maintenance and care of batteries	92
14.1	Batteries with battery management system	92
14.2	Care and inspection.....	92
14.3	Initial inspection	92
14.4	Recurring testing	93
14.5	Testing before commissioning.....	93
14.6	Procedure in case of faults.....	94
14.7	Decommissioning, storage and transport.....	94
14.7.1	Transport of lithium-ion batteries	94
14.7.2	Transport of defective lithium-ion batteries	95
15	Users in the system and their rights.....	96
16	FAQs and Troubleshooting	97
16.1	Frequently Asked Questions (FAQ)	97
16.1.1	Is a short circuit in the circuit harmful to the system?.....	97
16.1.2	Will the system start if I connect the batteries?	97
16.1.3	Why is my fan running?.....	97
16.1.4	Why do I still see a luminaire that has already been removed?	97
16.1.5	What do I do if communication to modules or luminaires is interrupted? Or if this is displayed in the function test?.....	97
16.1.6	Why are my modules and luminaires still showing as faulty?	98
16.1.7	How can I move luminaires between circuits?	98
16.1.8	My system is not behaving as configured	98
16.1.9	Why do I see system status messages in the system log after configuration?	98
16.2	System messages	99
17	Technical data.....	101
17.1	Available battery types	102
18	Revision history.....	102
19	Appendix: Plant specification, commissioning, notes	103
19.1.1	Documentation luminaire addresses.....	104

1 General

This operating manual is aimed at the following target group: qualified electricians in accordance with DIN VDE 0105 and authorized technical personnel. It explains how to use the power supply system safely and correctly. The general safety regulations and the local accident prevention regulations applicable to the area of use as well as instructions and safety notices must be observed. The operating manual, particularly the chapter on safety, must be read in full before starting any work on the system.

1.1 Co-Applicable Documents

Purchased parts from other manufacturers are installed in the systems. These parts have been subjected to a risk assessment by the manufacturer. A declaration of conformity in accordance with applicable European and national regulations has been confirmed.

1.2 Liability and warranty

This operating manual has been compiled taking into account the applicable regulations. This operating manual must be kept nearby at all times and must be freely accessible to all persons working on or with the system.

In addition, all laws, standards and guidelines of the country in which the system is installed and operated must be observed. The manufacturer assumes no liability or warranty for damages or consequential damages resulting from:

- improper use
- Unauthorized or unprofessional changes to the connections, settings or programming of the system
- Failure to comply with regulations and codes of conduct for safe operation
- Operation of non-approved or unsuitable devices or groups of devices on the Low Power System

1.3 Copyright protection

All content, drawings, images and other representations are protected under copyright law.

1.4 Spare parts

Only original spare parts from the manufacturer may be used. Incorrect or faulty spare parts can lead to damage, malfunctions or total failure of the device. Furthermore, the use of unauthorized spare parts will void all guarantee, warranty, service, compensation and liability claims.

1.5 Disposal

Packaging materials are not waste, but valuable materials that can be reused or recycled.

Batteries and electronic components contain substances that can cause health and environmental damage if not disposed of properly. National guidelines and regulations for the proper disposal of used batteries and electronic components must be observed!

2 Security

This power supply system was built in accordance with the recognized rules of technology applicable at the time of its development and production and is considered to be safe to operate. However, this device may be dangerous if it is used improperly or not as intended by untrained personnel.

The system and the connected system components may only be operated when in perfect condition. The following must also be observed:

- Safety and hazard information in the operating instructions
- Specified work and safety instructions of the operator

Malfunctions that affect the function or safety of the system must be reported immediately to a responsible party and eliminated.

2.1 Contents of the user manual

Any person who is responsible for working on or with the system must have read and understood the operating instructions completely before starting any work on the system or battery. This also applies if the person has already worked with this or a similar system in the past or has been trained by the manufacturer.

2.2 Changes and modifications to the system

In order to avoid hazards and to ensure the optimum performance of the system, it is prohibited to make any changes or extensions to the system that have not been expressly approved by the manufacturer. Extensions, modifications or repairs that are not described in the operating instructions are reserved exclusively for trained specialist and service personnel.

2.3 Responsibility of the operator

As described in point 1.2, this operating manual must be freely accessible to all persons working on or with the system at all times and in the immediate vicinity of the system.

The system may only be operated if it is in a technically perfect and safe condition. In addition, the system must be checked for damage before each use.

2.4 Requirements for staff

Work on and with the system is reserved exclusively for trained electricians or authorized specialists who must have received instruction on the dangers that may arise.

Specialist personnel are those who, on the basis of their professional training, knowledge and experience as well as knowledge of the relevant regulations, can assess the work assigned to them and recognise possible hazards.

If the staff do not have the necessary knowledge, they must be given professional instruction. It must also be ensured that tasks and activities are precisely defined and understood. These activities may only be carried out under the supervision and control of specialist staff.

2.5 Occupational safety

Following safety instructions and warnings is the basis for working safely. This is the only way to avoid personal injury and damage to property when working on or with the system.

The following organisational measures must be laid down in writing and adhered to:

- Safety measures during work, e.g. disconnecting the power supply and securing it against being switched on again, providing backup lighting, etc.
- Protect protective and safety devices against hazards emanating from adjacent parts of the system
- Protection and safety equipment for the personnel carrying out the work
- Obligation to provide information and report on the start, duration and end of the work

ESD protection must be observed when working on the system!

2.6 Personal protective equipment

When working on or with the system, protective clothing must always be worn, in the form of:

- Protective work clothing (tight-fitting, sufficient tear resistance, no wide sleeves)
- Safety shoes (ESD protective shoes according to EN 345)

Wearing rings or other jewelry is prohibited.

3 Introduction

Thank you for purchasing a CoreCompact24 power supply system. This system complies with the requirements of national and international standards in the version valid at the time of delivery and ensures the perfect functioning of your emergency lighting system with a modern, microprocessor-controlled control and monitoring system:

- EN 50171:2022-10
- EN60146-1-1
- EN62485-2
- EN 1838
- DIN EN 62477-1; VDE 0558-477-1:2017-10
- DIN EN 50172:2005-01 (DIN V VDE V 0108-100)
- Draft prEN 50172:2022-05 & E DIN EN 50172 VDE 0108-100:2023-06
- DIN VDE V 0108-100-1 VDE V 0108-100-1:2018-12
- DIN VDE V 0108-200 - VDE V 0108-200:2018-12
- IEC 60364-5-56:2018 (HD 60364-5-56:2018)
- DIN VDE 0100-560 VDE 0100-560:2022-10 & DIN VDE 0100-560 VDE 0100-560 Corrigendum 1:2023-10
- IEC 60364-7-718:2011 (HD 60364-7-718:2013)
- DIN VDE 0100-718 VDE 0100-718:2014-06
- DIN EN 62034 VDE 0711-400:2013-02 & IEC 62034:2012

This documentation will help you to quickly commission and operate the system easily. We recommend the following procedure:

1. Observe the relevant hazard signs and safety instructions (Chapter 4)
2. Familiarize yourself with the scope of delivery and the structure of the system (chapters 5 and 6)
3. Set up and connect the system and the batteries (Chapter 8.1)
4. Put the system into operation (Chapter 8.2)

A description of the central control unit with menu reference can be found in chapters 10 and 11.

For maintenance and system modifications, please consult Chapter 12.

Information on the operation and maintenance of the batteries as well as the technical data of the system can be found in Chapters 14 and 15.

Note: The system must be properly disconnected **from the power supply** for **maintenance and conversion work**. The steps required for this are described in Chapter 9.2.2 compiled.

Note: To **prepare for installation**, it may be helpful to refer to Chapter 19 enter the addresses of the luminaires into Table 19.1.1

3.1 Installation location and environmental conditions

The system and the battery system can be operated at an altitude of up to 2000m above sea level without any reduction in performance and must be installed in a suitable room with the following environmental conditions:

- Ambient temperature: +10°C to +35 °C
- Humidity: up to 85% (non-condensing, according to DIN EN 50171)

Note: Make sure that the operating room ensures the environmental conditions corresponding to the IP20 protection class of the system.

Note: The performance or capacity of the battery system depends on the temperature: higher temperatures shorten the service life, while lower temperatures reduce the available capacity. The technical data given in this document apply to 20°C (nominal temperature).

Note: The system must be positioned in the building in such a way that the permissible cable lengths for emergency luminaire circuits are observed.

3.2 Cable lengths of the circuits

This emergency lighting system works with a rated voltage of 24V for all emergency luminaires. Due to the low voltage, currents flow that are around ten times higher than in a conventional system with a rated voltage of 230V, which leads to a correspondingly greater voltage drop over the length of the cable.

However, if the remaining voltage on a luminaire is below a limit of 13.6V, this luminaire will not function properly. For this reason, the installation location of the system and the resulting cable lengths of the circuits to the luminaires must be chosen carefully; depending on the situation, more than one cable harness may be required for one circuit (star wiring).

Your manufacturer will provide you with a calculation tool that you can use to check your intended luminaire configuration and identify the need for additional wiring harnesses.

All information can be found at:



Or <https://www.rp-group.com/de/item/CC24-20>

Attention: In order to be able to monitor the significantly higher currents effectively and switch them off in an emergency, the first luminaire of each circuit should have a cable length of at least 10 m to the system.










3.3 Compatibility with third-party products and higher voltages

The luminaires in this emergency lighting system were specially developed for use with a CoreCompact24 control unit with a rated voltage of 24V. Please note the following points:

- Under no circumstances may the luminaires of this emergency lighting system be connected to circuits with voltages higher than 24V.
- Luminaires of this emergency lighting system are not intended for use with any other control panel (third-party manufacturers); however, when connected to 24V DC, these luminaires function as maintained luminaires.
- The CoreCompact24 control unit is not designed to operate third-party luminaires. Connecting luminaires from other manufacturers, even if they are designed for a rated voltage of 24V, is not permitted.

4 Danger and information signs

Please be sure to observe the following safety instructions when installing and using your system.

	<ul style="list-style-type: none"> • Observe the instructions for use and attach them visibly near the battery system! • Work on the battery system only after instruction by qualified personnel! • If the instructions for use are not followed, if repairs are carried out using non-original spare parts or if unauthorized interventions are made, the warranty claim will be void!
	<ul style="list-style-type: none"> • Dangerous voltage
	<ul style="list-style-type: none"> • Smoking prohibited! No open flames, embers or sparks near the battery system as there is a risk of explosion and fire!
	<ul style="list-style-type: none"> • Wear safety goggles and protective clothing when working on batteries! • The accident prevention regulations and EN 50272-2 Section 8 (in the version valid at the time of delivery) observe!
	<ul style="list-style-type: none"> • If acid splashes into the eyes or on the skin, rinse with plenty of clean water. Then seek medical attention immediately. Wash clothing contaminated with acid with water!
	<ul style="list-style-type: none"> • Danger of explosion and fire, avoid short circuits! Warning! Metal parts of the batteries are always live, so do not place any foreign objects or tools on the battery!
	<ul style="list-style-type: none"> • Electrolyte is highly corrosive! During normal operation, contact with the electrolyte is practically impossible. The electrolyte can only leak out due to improper handling, e.g. overcharging, mechanical damage to the valves or the casing. If you come into contact with the electrolyte, please rinse thoroughly with water and consult a doctor!
	<ul style="list-style-type: none"> • Block batteries/cells have a high deadweight! Ensure safe installation! Only use suitable transport equipment.
	<ul style="list-style-type: none"> • Back to the manufacturer! Used batteries with this symbol are recyclable goods and must be recycled. Used batteries that are not recycled must be disposed of as hazardous waste in accordance with all regulations.

5 Scope of delivery

The delivery includes:

- 1x CoreCompact24 system
- 1x battery
- 1x operating tool angled, partially insulated
- 1x this manual

Tools and materials also required for installation (to be brought by the installer):

- Calibrated measuring device for voltage measurements in the range up to 500VAC or 300VDC

6 System overview



Figure 1: Assembly of a CoreCompact24 emergency lighting system

- | | |
|---|--|
| 1. Suspension (long holes) | 10. Touch screen |
| 2. Mains connection (230V AC) | 11. Battery connection |
| 3. Main fuse F1 | 12. USB port (host for storage medium) |
| 4. Control inputs DIN 1-4 | 13. Status LEDs |
| 5. Signal outputs (relays) DOUT 1-4 | 14. Battery (battery fuse built into the cable) |
| 6. 3x service voltage VAUX and 1x critical circuit interface (CCIF) | 15. Ethernet (RJ45) (front) + Core-BUS(rear) connections |
| 7. Luminaire circuits LINE 1-4 | 16. SD card slot |
| 8. Power switch | 17. Contact points for battery voltage measurement |
| 9. Circuit fuses for LINE 1-4 | |

7 Functional description

The CoreCompact24 is a completely redesigned emergency lighting system that was designed with modern requirements such as flexibility, expandability, updateability and internet capability in mind. Basic features:

- All luminaires can be individually identified and controlled.
- Thanks to the newly developed bus system, a system can be expanded with additional modules as required.
- All system components, including luminaires, can be updated to a new software version centrally from the control center.
- Operation via a modern web user interface (WebUI) from any device.
- CoreCompact24 control panels can be networked with and monitored by a MultiControl system via Ethernet (LAN).

7.1 Control concept

An emergency lighting system of the type CoreCompact24 basically consists of

- a central supply unit with control computer and built-in battery (short: "central unit"),
- one or more connected circuits and
- the luminaires connected to the circuits.

Optionally, the following can be connected to the control unit:

- A critical circuit
- One to four mains voltages to be monitored (mains monitoring function)
- One to four switching voltages (e.g. tapped behind a luminaire switch for general lighting)
- Furthermore, four potential-free relay contacts are available with which the system signals its status to the outside world.

The critical circuit is used as standard to switch the entire system to emergency mode in the event of a line break or short circuit in a monitored conductor loop. The mains monitoring and switching inputs are implemented using so-called "digital" switching inputs ("DIN"), which can detect a wide range of AC and DC voltages. These inputs can be individually configured to trigger a switching event when a voltage is present or absent. Switching events can be used to switch individual luminaires or groups of luminaires. Groups can be defined across circuits, i.e. a group can consist of any luminaires in one or more circuits.

The complete configuration of the control center is carried out via a web user interface (WebUI), which can be displayed and operated on any PC, laptop, tablet or smartphone connected to the control center.

The connection can be established via cable (Ethernet/LAN) or via a WLAN hotspot that is installed in the control panel. The required network and WLAN settings can be made directly on the control panel using the touch screen on the front.

The touch screen on the control panel itself is multilingual (German/English/others) and offers a wide range of functions, see Chapter 11. These include:

- Display of system status
- Setup wizard for basic configuration
- Operating mode selector switch: Switches the control unit between "Charging" and "Operational"
- Configuring the LAN adapter and the WLAN hotspot provided by the control center
- Display and acknowledge system messages
- Setting up and resetting the system configuration
- Update all system components

7.2 Luminaires

luminaire modules specially developed for the CoreCompact24 system are all identical in terms of construction, i.e. apart from the performance data that depends on the luminaire source, all luminaires have identical features and functions:

- Each luminaire can be uniquely identified by a six-digit alphanumeric code (device number). This non-changeable number is assigned at the factory and is visibly attached to each light. It is also automatically recognized by the control center and displayed in the user interface so that each luminaire can be specifically assigned and configured.
- Each lamp can also be assigned a number (e.g. number of the lamp in the circuit) and a name (plain text).
- Luminaires are arranged in groups.
- Each luminaire can be operated in standby or maintained mode. The operating mode is determined by the group it belongs to.
- Each luminaire can be dimmed. The dimming level is determined by the group membership and a currently active scene.

7.3 Status display for luminaires and modules

The status of the luminaires and modules is displayed with OK = green circle, warning = yellow circle or error = white cross on a red circle. The luminaires also show whether a luminaire update is necessary = blue circle. See also the legend on the respective overview pages:

Status:

- OK
- Warnung
- ⊗ Fehler
- Leuchten-Update notwendig

How it works:

1. If a module or luminaire message (error or warning) is issued during operation, the status of the luminaires/modules on the luminaires /module overview page does not change. The system overview page in the WebUI and GUI does not change either.
Only a properly performed function test changes this status.
→ After a faulty function test, it can take a few seconds until all system parts have been informed of the number of faulty luminaires/modules and the status in the WebUI and GUI adjusts accordingly.
2. If the messages in the system log are acknowledged, the status of the modules/luminaires are also reset.
→ It can take a few seconds until all system components have been informed of the number of luminaires/modules that are no longer faulty and the status in the WebUI and GUI adjusts accordingly.

7.4 Circuits

Circuits represent the physical connection between the control center and the luminaires. In addition to the normative restriction of a maximum of 20 permissible luminaires per circuit, it must be taken into account during installation that, due to the voltage drop that is 10 times greater than in a 230V system, several cable strands may have to be laid from the control center to the luminaires for a single circuit, depending on the cable length. Up to four circuits can be connected to a control center, and even up to eight circuits with a splitter box.

The luminaires receive their energy from the electrical circuit; at the same time, the circuit cable is used for communication between the control center and each light. Each circuit can be individually switched on and off, i.e. made voltage-free; in normal operation, however, each circuit to which the luminaires are connected carries voltage.

To switch and dim the luminaire source, each lamp receives control commands via the circuit.

7.5 Groups and grouping by operating mode

Luminaires are always controlled in groups. Each luminaire is assigned to exactly one group; each group can contain any number of luminaires. In particular, a group can also contain luminaires from several different circuits. Any number of groups can be created. Each group has the following properties, see also Chapter:

- A group can be given a name.
- A group determines the operating mode (maintained or non-maintained) for all luminaires contained in it.
- A group defines the switch-off time for all luminaires contained in it.
- A group (and therefore every luminaire contained in it) is switched by scenes.
 - Luminaires in maintained groups are switched on in normal operation and their brightness can be modified by scenes; however, they always switch to 100% brightness in emergency operation.
 - Luminaires in non-maintained groups are switched off in normal operation, but can be switched on- and their brightness can be modified by scenes; however, they always switch to 100% brightness in emergency operation.

To simplify group assignment and thus the setup of the system, a setup wizard is available that automatically assigns luminaires recognized by the control center into predefined groups according to their type.

7.6 Scenes and dimming

A "scene" is a definition of the set brightness for one or more groups of luminaires, see also chapter 10.6.2. If a scene is "active", all luminaires in the group(s) assigned to this scene are switched on and brought to the brightness set in the scene. The following rules apply:

- Each scene can contain (i.e. control) one or any number of groups.
- The groups included can only be maintained or standby groups, but they can also be mixed.
- If a scene is active, the luminaires of all contained groups are switched on and brought to the brightness set in the scene.
- If a scene is inactive, the brightness set in it has no effect.
- If several scenes are active that contain the same group, this group will be set to the brightness of the scene with the highest priority.
- If all scenes that affect a certain permanent switching group are inactive, the brightness set on the group applies to the luminaires in this group.
- The prioritization of the scenes among each other can be changed.
- Each scene can be switched by one or more inputs (eg DIN 1-4). These digital wide-range inputs (DIN) must in turn be configured via the Input Overview page.

7.7 Schedules

A schedule defines a point in time that is determined by a date and a time, see also chapter 10.6.1. Like calendar entries in Office applications or on a smartphone, a recurrence can optionally be set for each schedule (recurring appointment), as well as a higher-level period within which the schedule should be active. Schedules can be used to run tests automatically.

If the system is switched off while time-controlled functions should be carried out (functional tests, capacity tests), these will be carried out automatically as soon as the system is switched on again.

If you do not want this, you must abort the tests during execution or deactivate automatic test execution before switching off the system, see chapter 10.3.3 on page 56 and chapter 10.3.4 on page 57.

7.8 Testing

Functional and endurance tests can be triggered manually or automatically, see also chapters 10.3.3 and 10.3.4. Each associated report is saved permanently, see also chapter 10.5.

There is also the option to automatically repeat interrupted tests.

7.9 Control inputs

Control inputs detect an AC or DC voltage over a wide voltage range and react to the appearance/presence or failure/no longer presence of voltage. They can be used for network monitoring and as a switching input to activate/deactivate scenes.

If only one switch or button is to be connected, the 24V auxiliary voltage VAUX can be used to create a circuit for monitoring it.

Note: The standard version has four inputs.

7.10 Outputs

Outputs (potential-free relay contacts) are used to signal certain system states to the outside. The following are specified as standard:

- The message whether the system is Operational (DOUT1)
- The message whether the system is in emergency mode/battery mode (DOUT2)
- The message whether a collective fault has occurred (DOUT3)

Additional outputs can be freely configured

Note: The standard version has four outputs.

7.11 Critical circuit

The control panel has the option of connecting a closed-circuit loop / critical circuit (Critical Circuit Interface, CCIF). This detects a line break and a short circuit if the connected conductor loop is damaged.

Note: In the standard version there is exactly one such a critical circuit

8 Installation and commissioning

Please note the following when installing and commissioning the system:

- The system may only be set up and installed by qualified personnel.
- Before installation, make sure that all fuses are removed (main fuse F1, battery fuse, circuit fuses LINE 1-4).

Please note:

- Even if the system's electrical circuits operate at 24V, which is safe for humans, they must **be disconnected from the power supply and the system shut down before any installation or connection work** is carried out. Failure to do so can lead to malfunction and damage to the system.
- **ONLY** connect luminaires to the circuits that have been developed for this system. **NEVER connect luminaires from other series, especially luminaires from third-party manufacturers**, even if they are 24V luminaires! Not only will such third-party luminaires not work on the Core Compact 24 system, they will also disrupt the function of the other luminaires and all communication between the system and the luminaires.
- The manufacturer assumes **no liability** for damage resulting from **non-observance of these points**.

8.1 Setup and installation

8.1.1 Choose a location

Important:

- Select the installation location so that the ambient conditions are met (see technical data, Chapter 15)
- Choose the installation location in accordance with the pre-calculated cable lengths for the circuits, as cable lengths can become critical due to voltage drop (use calculation tool).

8.1.2 Installing luminaire circuits

1. Lay the circuit cables.
2. Hang the luminaires and connect them to the circuit cables.
3. can be glued 19.1.1

Important:

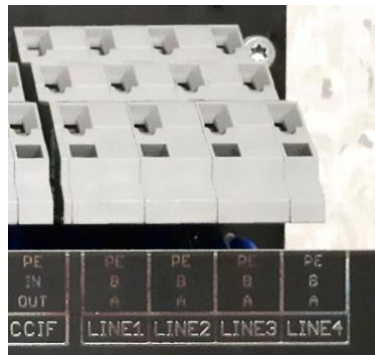
- Please note that the luminaires must **never be connected to a voltage of 230V**. Therefore, be careful if there are other cables nearby that are not part of the emergency light.

8.1.3 Connecting circuits to the system

Connect the circuit cables to the system. The terminals to be used are marked "LINE1", "LINE2", "LINE3", "LINE4". Use terminals "A" and "B" respectively

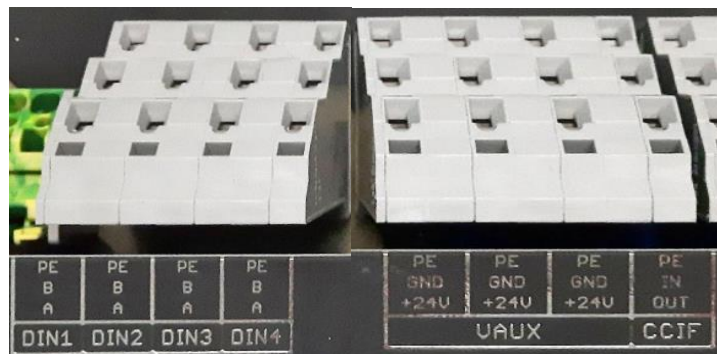
Note: Terminals A and B carry a 1kHz AC voltage of +/-24V.

Important: The PE terminals may be used to earth luminaires. At no time may there be a connection from PE to A or B.



8.1.4 Connecting switching inputs

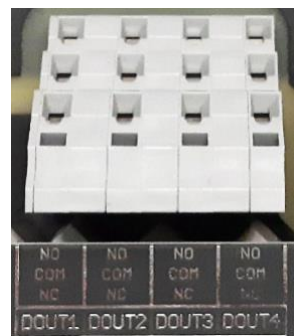
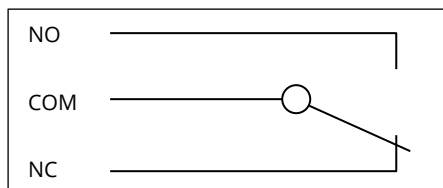
1. The four switching inputs of the system are marked DIN1-4 (left picture below).
2. Connect monitored mains voltages and general luminaire circuits to the desired inputs DIN 1-4 (note the specification of the inputs, see technical data, Chapter 15).
3. For simple switches, use the 24V auxiliary voltage VAUX if necessary (right picture below).
4. Make a note of names/designations that are to be entered later in the system software; together with the functionality (BAS, mains monitor or switching input)



8.1.5 Connecting switching outputs

- Connect the switching outputs DOUT 1-4 to the desired peripherals/BMS/etc. (note the specification of the outputs/potential-free relay contacts, see technical data, chapter 15).
- Make a note of the names/designations of the outputs that will later be entered into the system software.

Note: The terminals of each output are marked with "COM" (Common), "NO" (Normally Open) and "NC" (Normally Closed). If the corresponding relay is de-energized, COM and NC are connected to each other ("COM---NC") and NO is open. If the relay is energized, COM and NO are connected to each other ("COM---NO") and NC is open. The states of the relays are described using this notation in the table below.



Note: The functions of the outputs are preconfigured as follows:

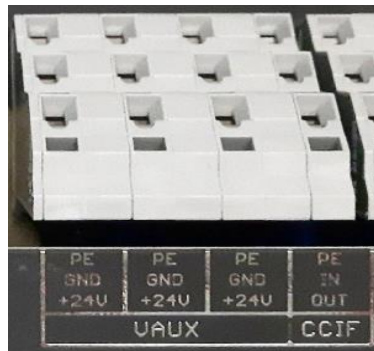
Exit	function	COM---NC closed (relay de-energized, NO open/NC closed*)	COM---NO (relay energized, NO closed/NC open*)
DOUT1	Operating mode (BAS status)	Charging mode	Operational mode
DOUT2	Supply type	Battery operation	Mains operation
DOUT3	Combined fault	Combined fault active	Combined fault inactive
DOUT4	inactive	-	-

*These designations are used in the system's WebUI to display the current relay status.

8.1.6 Connect critical circuit

1. Connect the critical circuit to the designated terminals (CCIF: IN, OUT) (observe the cable specifications and requirements, see technical data, Chapter 15).
2. Make a note of the name/designation that will later be entered into the system software.

Note: The system is supplied with a terminating resistor for the critical circuit



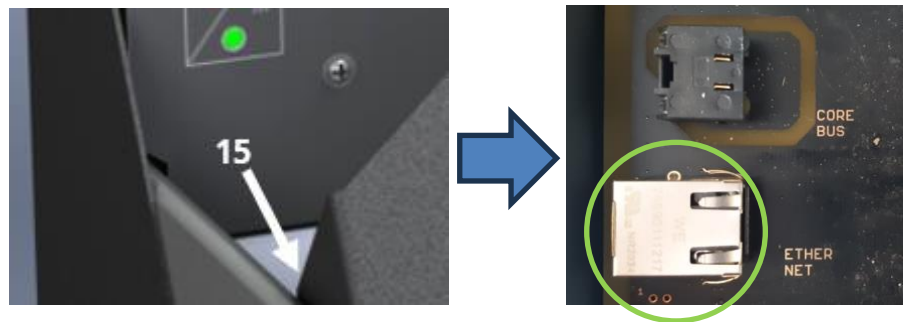
8.1.7 Connection to a local area network (LAN)

- Use the silver Ethernet port (RJ45) on the mainboard (horizontally aligned board behind and below the touch screen) to connect the system to a local LAN network (see picture below).

Attention: In addition to the metal Ethernet connection, the mainboard also contains the black (plastic) socket for the Core-BUS. This is not Ethernet compatible and must under no circumstances be accidentally connected to a LAN network or Power-Over-Ethernet (POE).

Incorrect connection can lead to damage to the device and/or the connected network components, for which the manufacturer accepts no liability.

- Determine the IP address that the system should receive and write it down so that you can enter it into the system later.



8.1.8 Insert battery (do not connect cable yet)

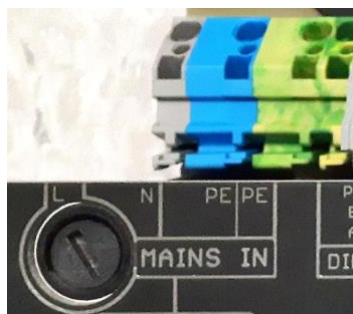
Place the battery in the battery compartment. Do **not connect the battery cable yet**.

Note: A socket on the underside of the mainboard is provided for connecting the battery. The battery is only connected later, after the system has been switched on!



8.1.9 Connection to the mains supply (do not switch on the system yet)

Connect the mains supply to the terminals marked PE, N and L. **Do not switch on the mains switch yet**.



8.1.10 Insert fuses

Insert the fuses in this order:

1. Circuit fuses LINE 1-4
2. Main fuse F1

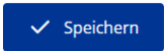
8.2 Network setup


BEFORE YOU START: AN IMPORTANT NOTE ON THE SYSTEM CONFIGURATION

Part of the commissioning is done via the touch screen built into the system, called general user interface (GUI). Further details of the setup, such as grouping luminaires and setting up scenes, as well as programming times for automatic tests, are only possible with access to the graphical web user interface (WebUI).

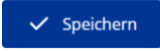
All details of your system's configuration can be changed via the WebUI. There are roughly two types of settings:

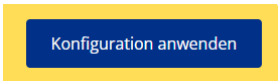
1. Functional settings: Settings that affect the following:
 - All functions of each luminaire (operating mode, brightness, group assignment)
 - All functions of groups and scenes
 - Functional and capacity tests
 - Test schedules
 - Configuration of inputs and outputs, etc.
2. Display settings such as luminaire, scene, group and circuit *names*, master data (e.g. service address), building plans, etc.

All changes to all settings can be saved on the respective screen page by clicking on the button  at the bottom right.

If you would like to reset the changes to the currently saved state, click on .

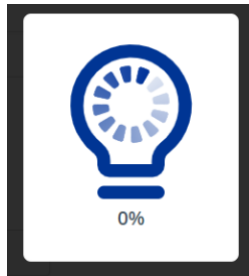
Important: The functional settings described under point 1 must be programmed into the various modules of the system after they have been saved.

This process does NOT run automatically every time you click on , as it takes a few seconds and during this time the operation of the system would be blocked. It must be started manually after you have made all the desired functional settings. Therefore, scroll to the top of the current screen and click on the button within the yellow banner.



Only then will the new functional settings take effect.

When you click the button, the interface will lock and a progress bar will be displayed, which will disappear once the configuration is successfully applied or an error occurs that prevents the configuration from completing. In both cases, the banner will change its color and message accordingly.



Attention: The "Apply configuration" button is normally invisible. It appears together with the yellow bar in the header area of the display when a change has been made to the functional settings that requires its operation.

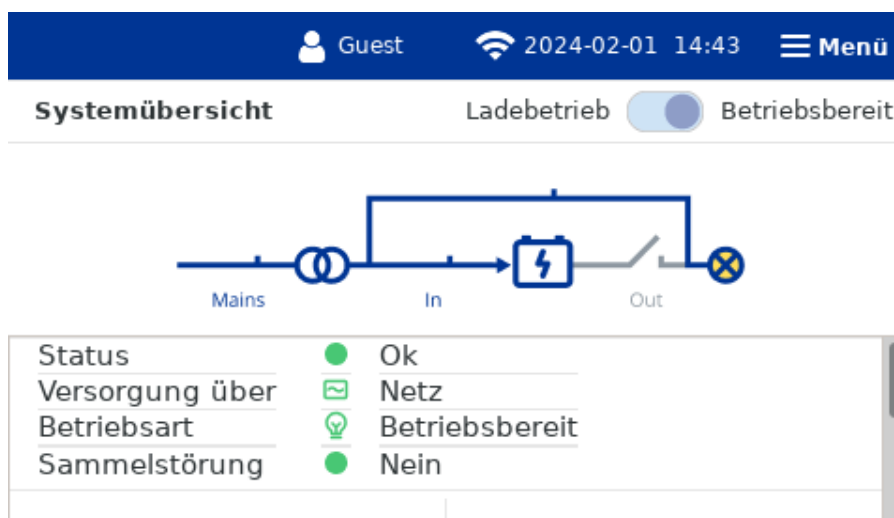
Applying the configuration resets all luminaires and possible follow-up times and should not be carried out during emergency operation.

8.2.1 Switch on

1. Establish the power supply on the building side.
2. Switch on the system using the power switch.
3. The control unit contains a control computer that is now booting up. Wait for the boot process to complete.
4. **Meanwhile, you can connect the battery cable** (socket on the bottom of the mainboard).
5. Continue to wait for the boot process.

Attention: When the control unit is started up, the final circuits are also energized. To avoid damage, it is therefore essential to check all circuits for short circuits before commissioning.

The touch screen should now look something like this:



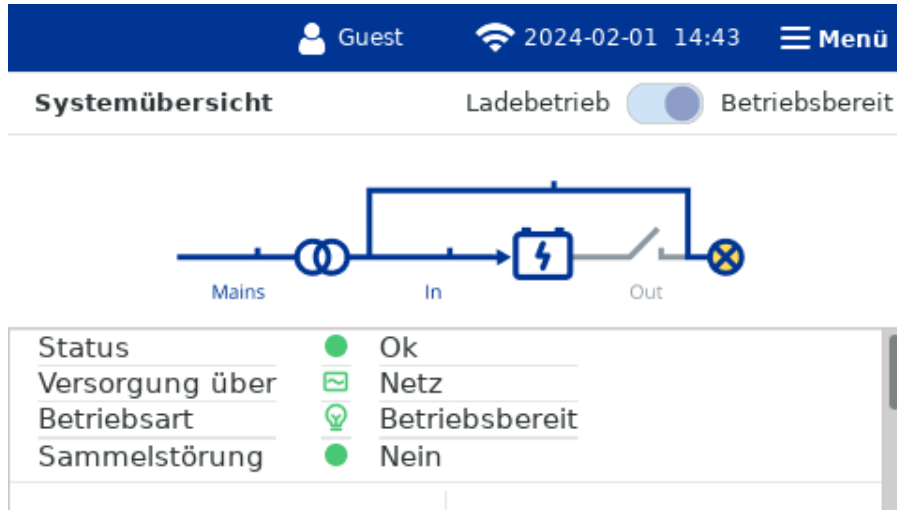
Note: The graphic on this page (called "system overview") visualizes the current switching status of the entire system in a simplified form. Coming from the left, the energy flow is shown through the mains supply and the transformer and then into the battery (charge). Depending on whether the system is running on mains or battery, the graphic shows the energy flow to the luminaires from the transformer or from the battery.

8.2.2 Log in to the local touch screen (GUI)

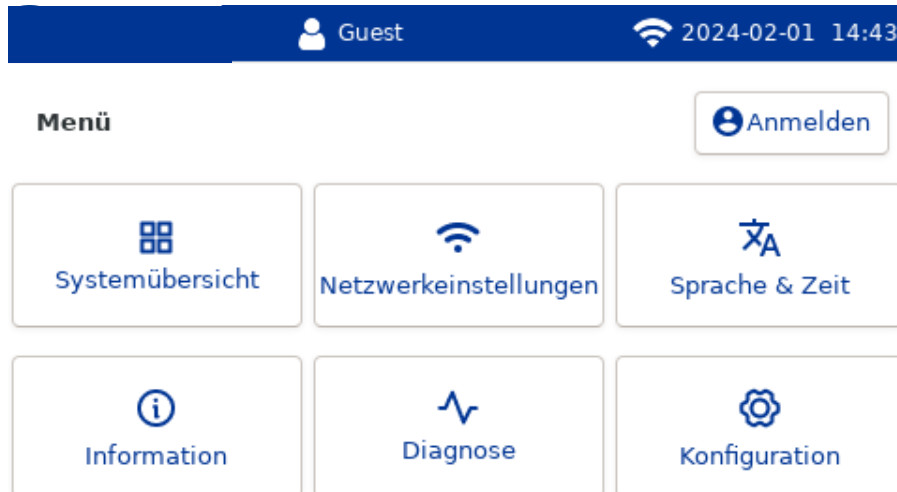
“GUI” refers to the system’s touch screen or the entirety of the controls and functions accessible via it. Settings can only be made on the GUI after logging in with the required rights.

To log in to the GUI, proceed as follows:

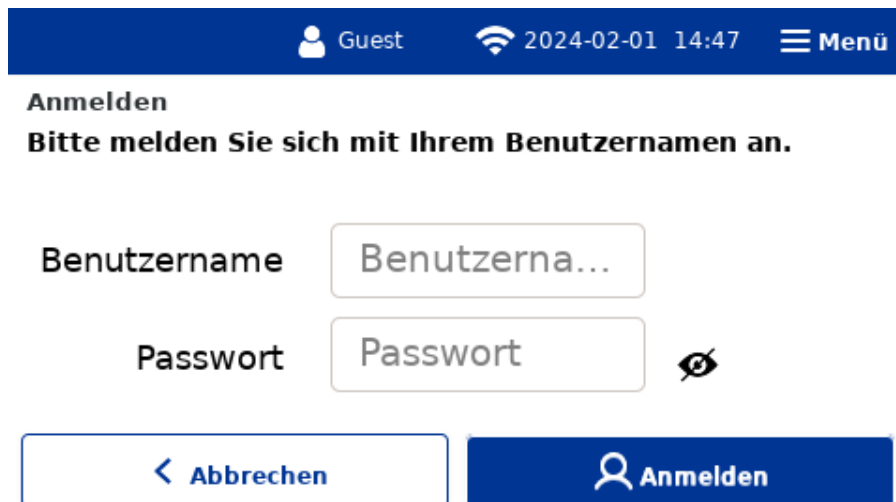
1. Tap the “Menu” text in the banner area at the top right



2. The “Menu” page opens. Tap the “Login” button here:



3. The login screen opens.



The login screen features a dark blue header with a user icon, the text 'Guest', a Wi-Fi icon, the date and time '2024-02-01 14:47', and a 'Menü' button with a hamburger icon. Below the header, the text 'Anmelden' is followed by the instruction 'Bitte melden Sie sich mit Ihrem Benutzernamen an.' The form contains two input fields: 'Benutzername' with the placeholder 'Benutzerna...' and 'Passwort' with the placeholder 'Passwort' and a visibility toggle icon. At the bottom, there are two buttons: a white button with a blue arrow and the text 'Abbrechen', and a dark blue button with a white user icon and the text 'Anmelden'.

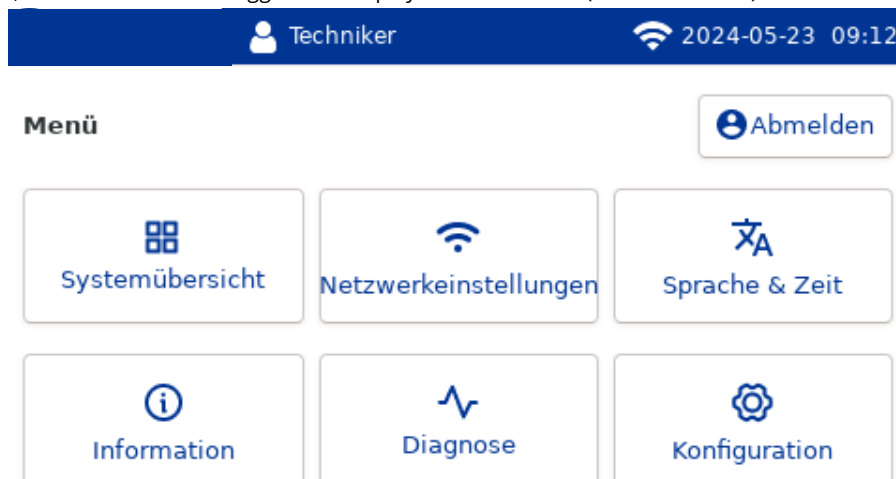
The user name and password are entered by tapping the relevant input fields, which will make an on-screen keyboard appear.

Confirm the entry by tapping the white check mark; cancel by tapping the blue cross in the blue circle.



Note: A number of logins with different rights are preconfigured and are included on a separate sheet. Please keep this sheet carefully and out of the sight of strangers.

4. After logging in, the user who is now logged in is displayed in the header (here: technician)



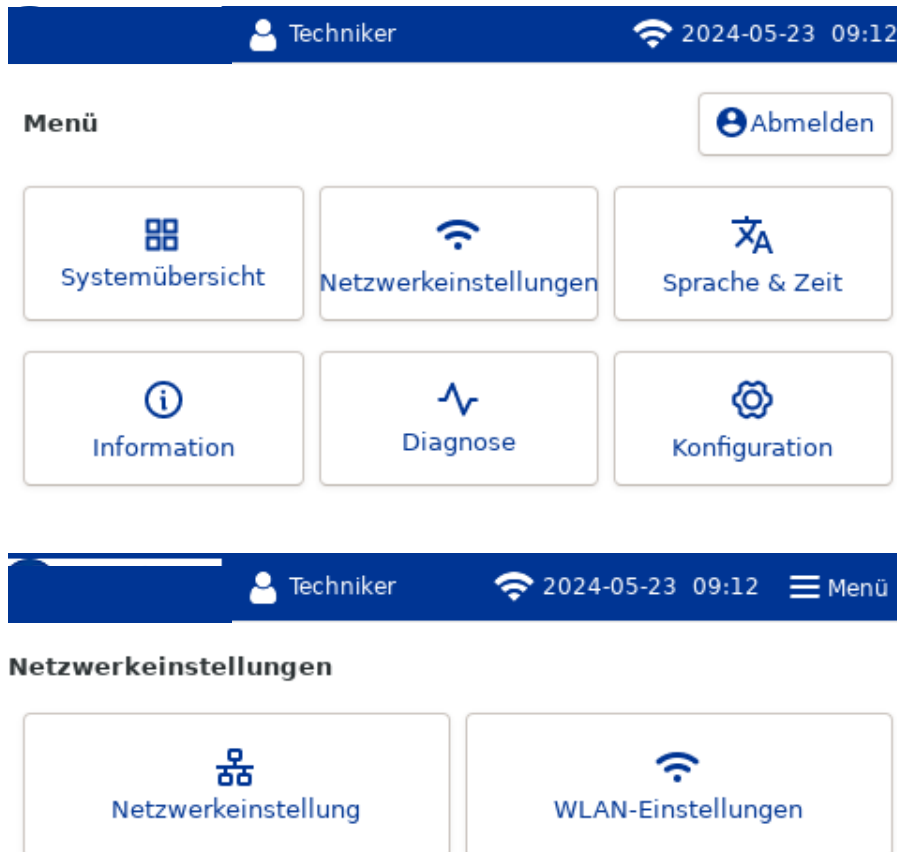
The post-login screen features a dark blue header with a user icon, the text 'Techniker', a Wi-Fi icon, and the date and time '2024-05-23 09:12'. Below the header, the text 'Menü' is followed by an 'Abmelden' button with a user icon. The main area contains six menu items in a 2x3 grid: 'Systemübersicht' (grid icon), 'Netzwerkeinstellungen' (Wi-Fi icon), 'Sprache & Zeit' (language and clock icon), 'Information' (info icon), 'Diagnose' (heart rate icon), and 'Konfiguration' (gear icon).

To operate and set up the system via the graphical web user interface, you need a device (PC, laptop, tablet, smartphone) with an Internet browser that must be connected to the control center. This can be done via a wired LAN or wirelessly via WLAN; in the latter case, the control center provides a WLAN hotspot to which you can connect your device.

8.2.3 Make local network settings (LAN)

If you want a wired connection via LAN, proceed as follows:

1. Tap "Network Settings" in the menu and select the LAN network settings in the following screen:



2. In the input form, tap the four input fields one after the other and use the on-screen keyboard to set the desired values for the LAN to be used. Finally, save the new settings by tapping "Apply".

Techniker 2024-05-23 09:13 Menü

Netzwerkeinstellungen

Ip Address (IPv4)	Gateway
192.168.10.66	192.168.10.1
Subnet Mask	DNS Server
255.255.255.0	9.9.9.9

[← Zurück](#) [✓ Anwenden](#)

3. Connect the terminal device to be used to operate the system to the LAN.

Note: The MAC address of the control panel can be found on the information page, see chapter 11.6on page 82.

8.2.4 Make local network settings (WLAN)

If you want to connect wirelessly to the control center's Wi-Fi hotspot, proceed as follows:

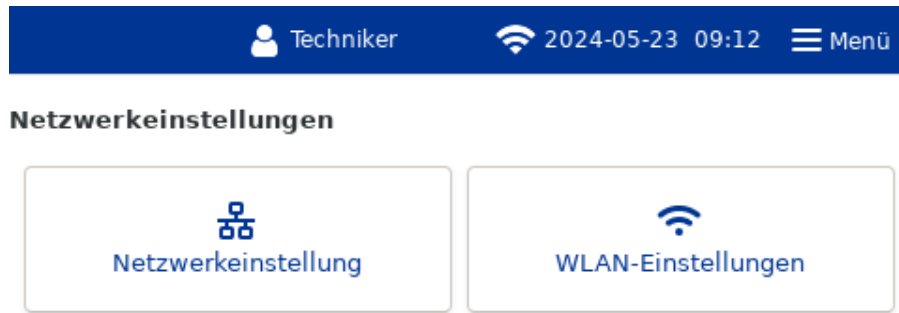
1. In the menu, tap "Network Settings" and select "WLAN Settings" in the following screen:

Techniker 2024-05-23 09:12

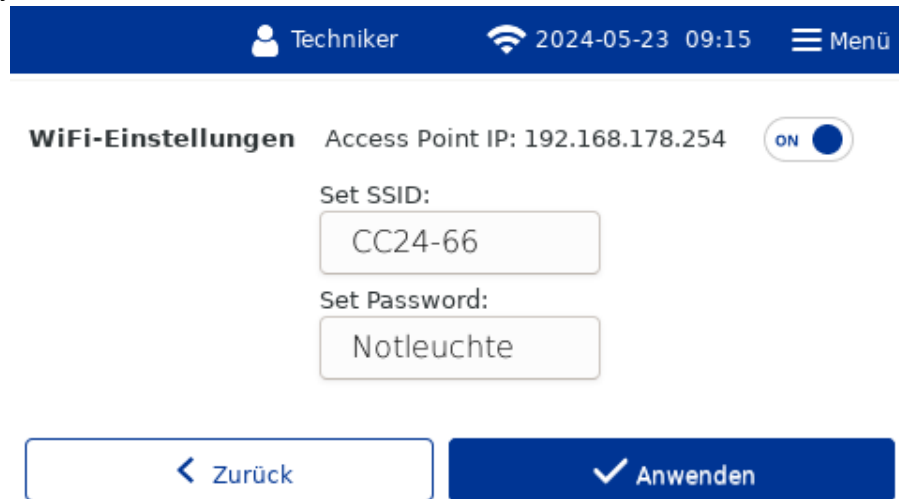
Menü

[Abmelden](#)

Systemübersicht	Netzwerkeinstellungen	Sprache & Zeit
Information	Diagnose	Konfiguration



2. If necessary, enter the desired SSID and a password for the WLAN network in the form that appears. Save changes by tapping "Apply".



3. To connect to the system, open the WLAN connection settings on your access device and search for the set SSID or enter the SSID and password manually. Your browser should automatically connect to the CC24's WebUI . If this is not the case, you may need to enter the displayed WLAN access point IP (here: 192.168.178.254) in your browser window.

Note: The MAC address of the control panel can be found on the information page, see chapter 11.6on page 82.

The following commissioning steps can be carried out either via the touch screen (GUI) or via the browser-based graphical user interface (called WebUI).

For further commissioning via GUI, proceed to section 8.3.

If you prefer the WebUI , skip this section and go to section 8.4on page 32.

8.3 System setup via touch screen (GUI)

This section describes further commissioning using the GUI. If you want to work with the WebUI instead , skip this section and continue with section 8.4on page 32.

8.3.1 Run the automatic setup wizard

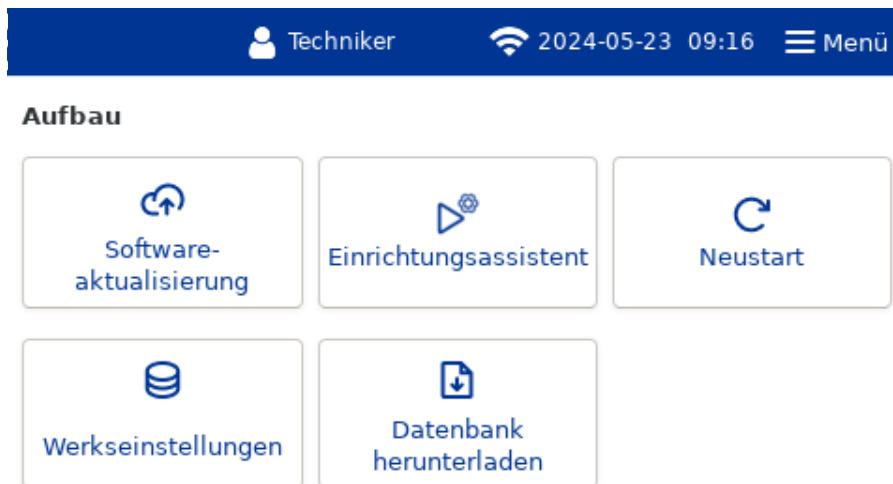
Important: Please read this section carefully . The setup wizard must be run first to put the system into a defined state!

This assistant will support the installer in configuring the control panel by automatically switching the detected luminaires to the correct operating mode and carrying out the appropriate automatic grouping. For this purpose, a group for non-maintained luminaires and one for permanent luminaires is automatically created for each circuit, and escape sign luminaires of each circuit are assigned to the relevant group for permanent luminaires and emergency luminaires to the relevant group for non-maintained luminaires.

This function corresponds to the setup wizard, which you can also run on your mobile device using the web browser (see chapter 8.4.2).

This should be executed during the initial installation, as it could overwrite configurations that have already been executed later.

1. Go to the Configuration submenu



Attention: As soon as you click on the “Setup Wizard” button, a warning appears that this process cannot be undone.

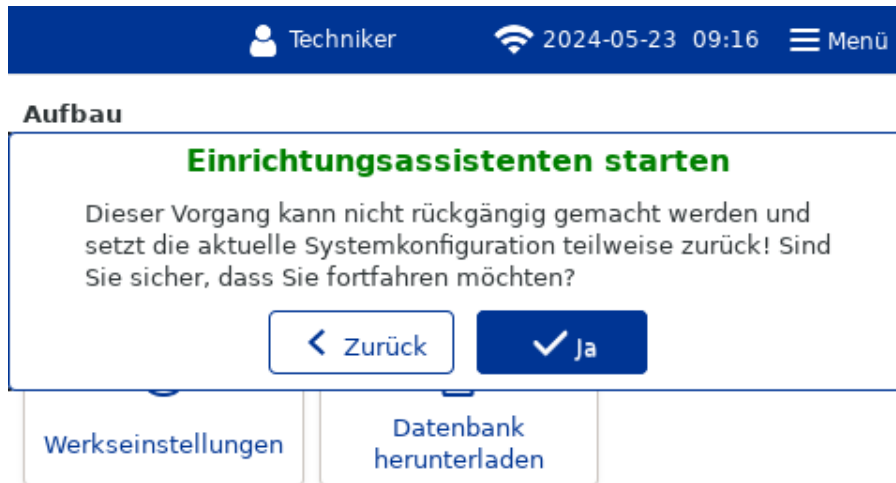
This may reset your system completely to the default settings. All changes and configurations relating to the luminaires and luminaire groups will be lost. This means newly assigned names, circuit numbers, etc. and the sorting into different luminaire groups with different brightness levels, etc.

The remaining configurations such as tests, schedules, scenes, etc. remain intact, although changes in the luminaire groups may also change the behavior of the scenes.

Under all circumstances, first save the support package from the help page so that your service provider can reconfigure any configurations you may have forgotten later!

Attention: If you run the setup wizard, the luminaire circuits will be supplied with voltage.

2. Click on the “Setup Wizard” button, then click “Yes”



Click "Yes" to start the setup wizard process. This will automatically start a scan for modules and luminaires, which may take a few minutes.

You will then be shown an overview of all detected modules and luminaires.

3. Check that all connected modules and luminaires in your system have been detected. If not, you should shut down the system and check the wiring.



To check your system structure, you can look at the detected "modules" and "luminaires" separately.

Modul Name	Adresse	Stationsnummer
Core Management Module (CMM)	00-0001	1
Core Power Supply (CPS)	00-00V4	1
Core Critical Circuit/CCIF (CCC)	00-00FL	1
Core Emergency Supply (CES)	00-009C	1
Core Mainboard (CMB)	00-00CG	1
Core Auxiliary Supply/VAUX (CAS)	00-00R0	1

✓ System konfigurieren

Leuchten Name	Adresse
WER529CC-E	00-01CN
KWIW519CC	00-029A
ILD529CC	00-02U9
KMB519CC	00-01V4

✓ System konfigurieren

All connected modules and luminaires should be displayed correctly. If this is not the case, first shut down the system and then check the wiring.

Then restart the system and the setup wizard.

4. If everything is to your satisfaction, click on "Configure system" to configure your system. This may take a few minutes.

A DS and a BS group are created for each circuit. DS luminaires of each circuit are sorted into the DS group belonging to the circuit, BS luminaires are sorted into the BS group of their circuit.

After successfully configuring your system, you will be shown the following page, from which you can access the system log by tapping "View details" or the system status overview by tapping "System overview".



Glückwunsch!

Sie haben die Einrichtung abgeschlossen.
Bitte überprüfen sie die Details weiter unten.

 Details anzeigen

 Systemübersicht

This completes the commissioning steps that can be carried out in the GUI. Continue with section **Error! Reference source not found.** on page **Error! Bookmark not defined.** where the final steps are described.

8.4 System setup using web user interface (WebUI)

This section describes the further commissioning using the WebUI. If you have already completed the steps in section 8.3, skip this section and continue with section **Error! Reference source not found.** on page **Error! Bookmark not defined.** continued.

8.4.1 Log in to the WebUI

After connecting your device (mobile phone/tablet/PC) to the system:

1. Open a web browser on the device to be connected (mobile phone/tablet/PC)
2. Enter the IP address of the control center in the address line of the Internet browser.
 - o When connected via LAN, this is the address entered in the system (see section 8.2.3).
 - o When connecting via WLAN, this is also the IP address entered in the system (see section 8.2.3). Alternatively, depending on your browser, you can simply enter any address and you will be redirected to the WebUI.

Note: The following Internet browsers are supported: Edge, Firefox, Chrome, Safari

Registration with login


- For registration there are personalized logins with username and password
- The exact appearance of the user interface depends on the resolution of the screen/display on your device, as the size and arrangement of individual elements are dynamically adapted to this (so-called "responsive design").
- More information on this and basics of user interface design can be found in Section 10.



Melde dich in deinem Konto an

Benutzername

Passwort

8.4.2 Run the automatic setup wizard

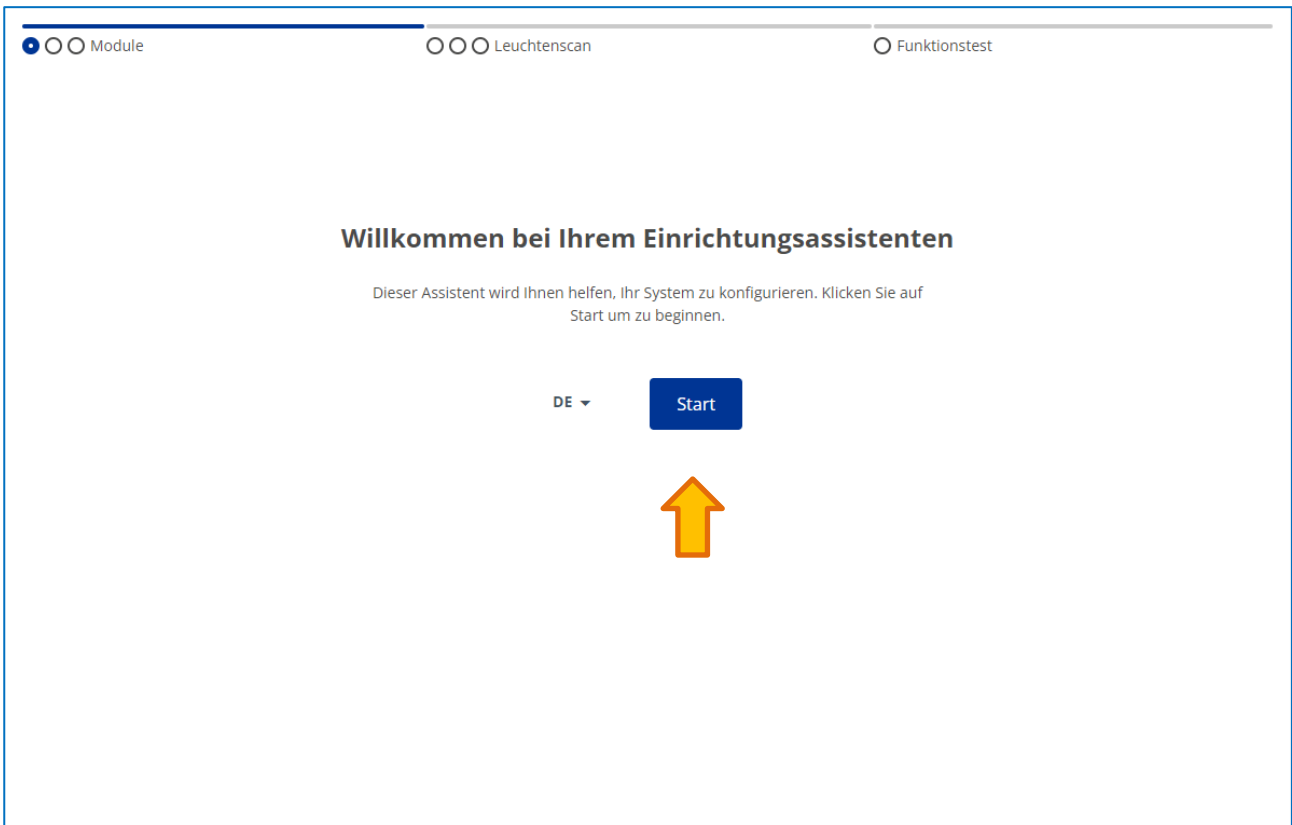
Important: Please read this section carefully . The setup wizard must be run first to put the system into a defined state!

It should be run **once** during the initial installation, as it may overwrite previously executed configurations later.

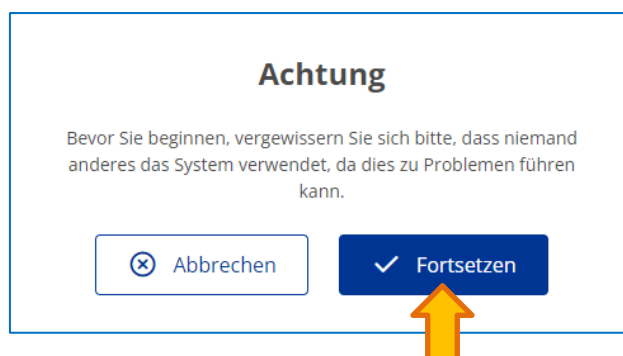
If no mobile device is available for configuration, the setup wizard can alternatively be run via the GUI, see chapter 8.3.1 on page 28.

This assistant will support the installer in configuring the control panel by automatically switching the detected luminaires to the correct operating mode and carrying out the appropriate automatic grouping. For this purpose, a group for non-maintained luminaires and one for permanent luminaires is automatically created for each circuit, and escape sign luminaires of each circuit are assigned to the relevant group for permanent luminaires and emergency luminaires to the relevant group for non-maintained luminaires.

Attention: If you run the setup wizard, the luminaire circuits will be supplied with voltage.

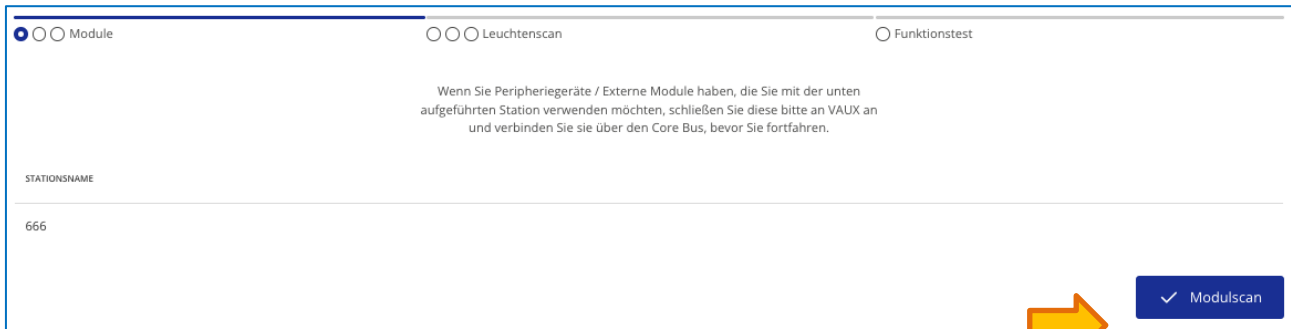


Click on "Start". The following dialog appears:

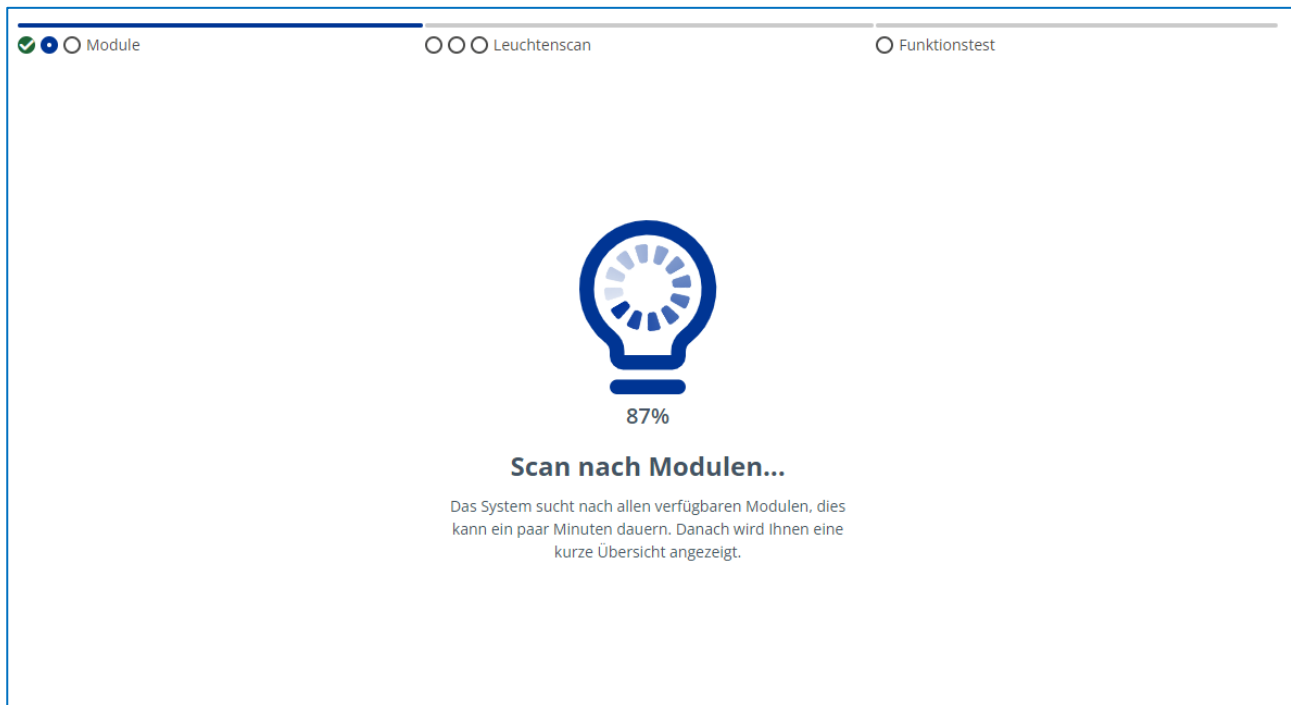


If other people are currently accessing the interface, do not click on "Continue" until they have disconnected their device from the system.

In the first step, the system detects connected and internal modules. To do this, click on "Module scan".



The system is now scanning for modules.



After the scan is complete, an overview of the modules found is displayed. The modules with a station number shown in the image below are so-called "internal modules" which are integrated into the control center itself. Modules without a station number are external modules, also known as peripheral devices.

The names of the modules are determined from the plant's internal product database.

In the next step, the system will search for connected luminaires. To do this, click on "Luminaire scan".

Module Leuchtenscan Funktionstest

Scan-Ergebnisse: **10 module**

Interne Module ausblenden

MODULTYP	ADRESSE	STATION	MODULNAME
147	00-0006	666	Core Management Module (CMM)
154	00-00V4	666	Core Power Supply (CPS)
149	00-00FL	666	Core Critical Circuit/CCIF (CCC)
155	00-009C	666	Core Emergency Supply (CES)
151	00-00CG	666	Core Mainboard (CMB)
153	00-00R0	666	Core Auxiliary Supply/VAUX (CAS)
148	00-00JQ	666	Core Input Module (CIM)
150	00-00MV	666	Core Output Module (COM)
152	00-0068	666	Core Circuit Module (CCM)
157	00-000K	-	Core Message Advisor (CMA)

Wenn Sie alle von Ihnen installierten Module gefunden haben, können Sie nun nach Leuchten suchen. Andernfalls gehen Sie bitte zurück und schalten Sie VAUX ein oder fahren Sie das System herunter, um zu überprüfen, ob alle Module richtig angeschlossen sind.

[< Zurück](#) [Leuchtenscan](#)

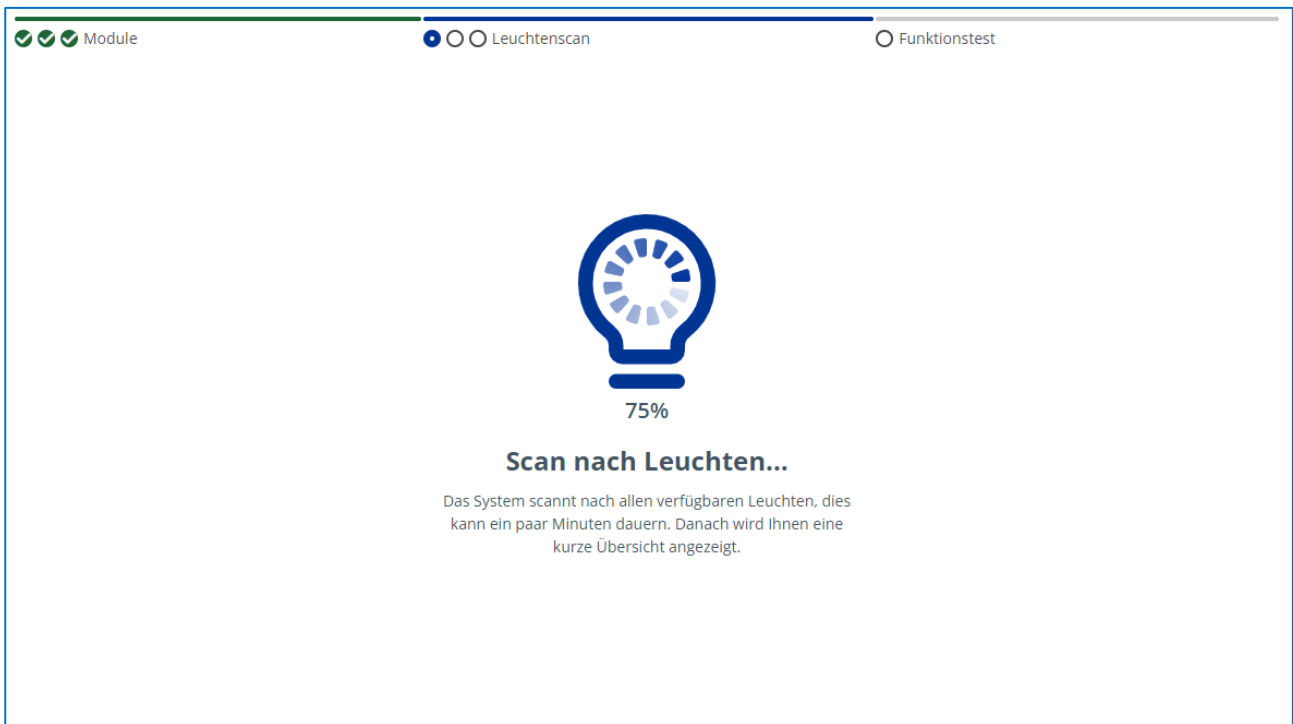
The luminaire scan requires that the luminaire circuits are supplied with voltage.

Achtung

Spannung an den Stromkreisen der Leuchten!

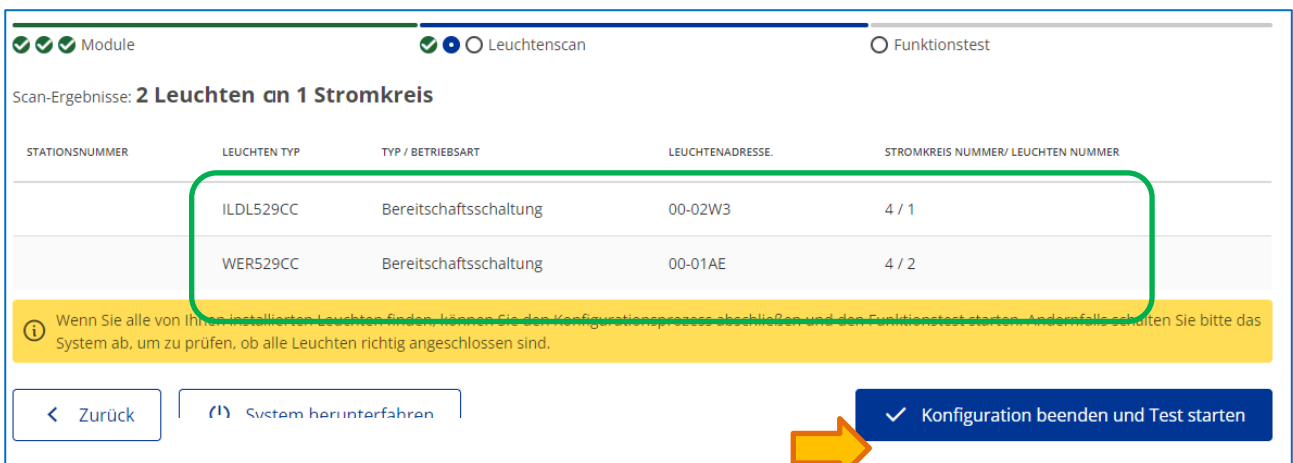
Click Continue if you want to switch on the power to the circuits and start searching for the luminaires.

The system now searches for connected luminaires.



The luminaires found are then displayed. For each light, you can see the article number, the operating mode that is automatically assigned to the light, its luminaire address (XX-XXXX) as well as the circuit and the number of the luminaire in this circuit. The names of the luminaires are determined from the plant's internal product database.

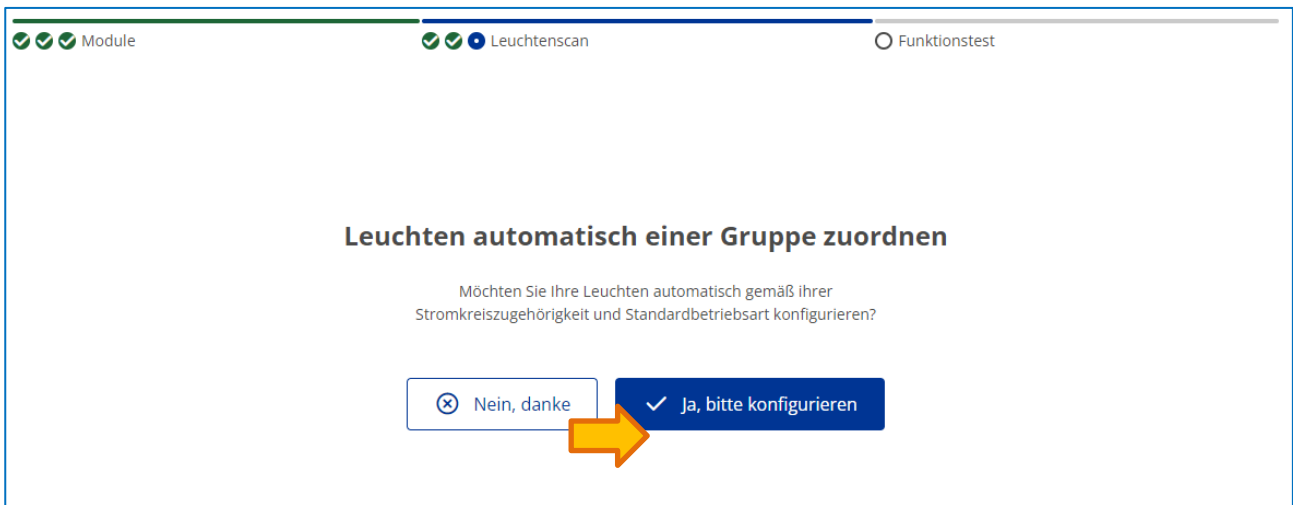
Note: Luminaires that are not in the product database are given a default name and are assigned to one of the default luminaire groups for continuous operation.



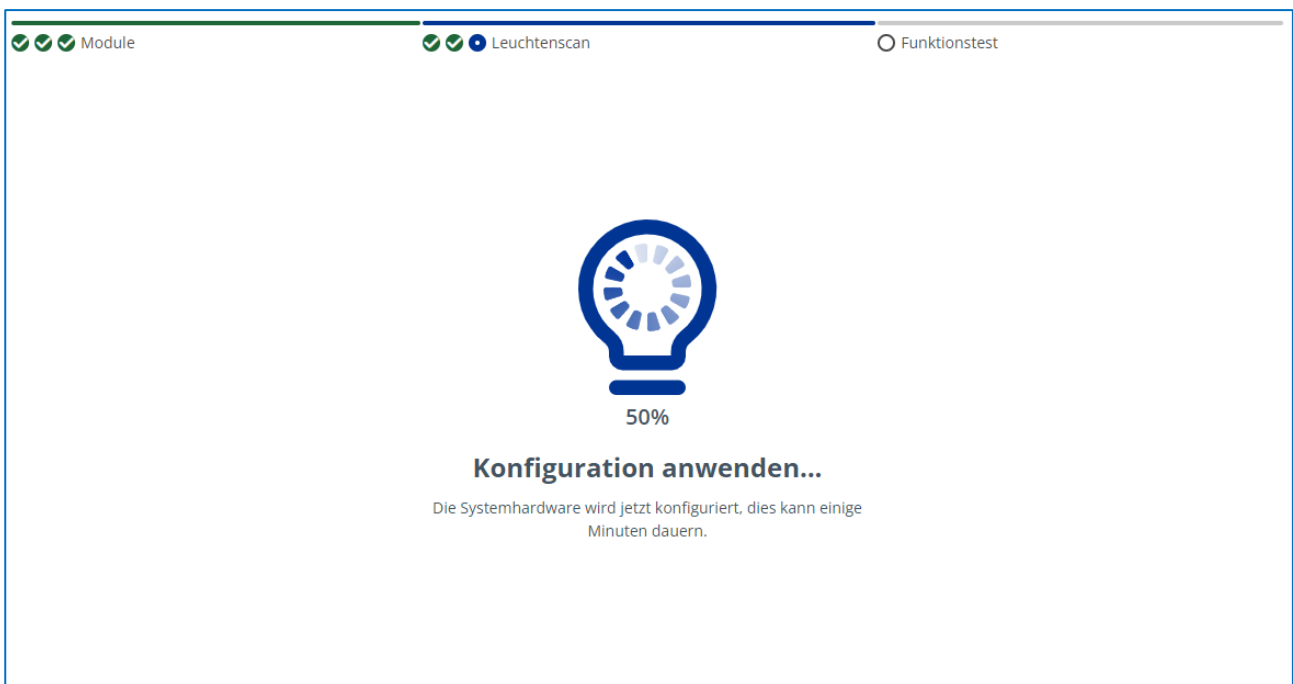
All connected luminaires should be displayed correctly. If not, you can press "Back" to return to the previous page and scan again; to make corrections to the wiring and connect any missing luminaires, first shut down the system.

If all luminaires are in the overview, click on "Finish configuration and start test".

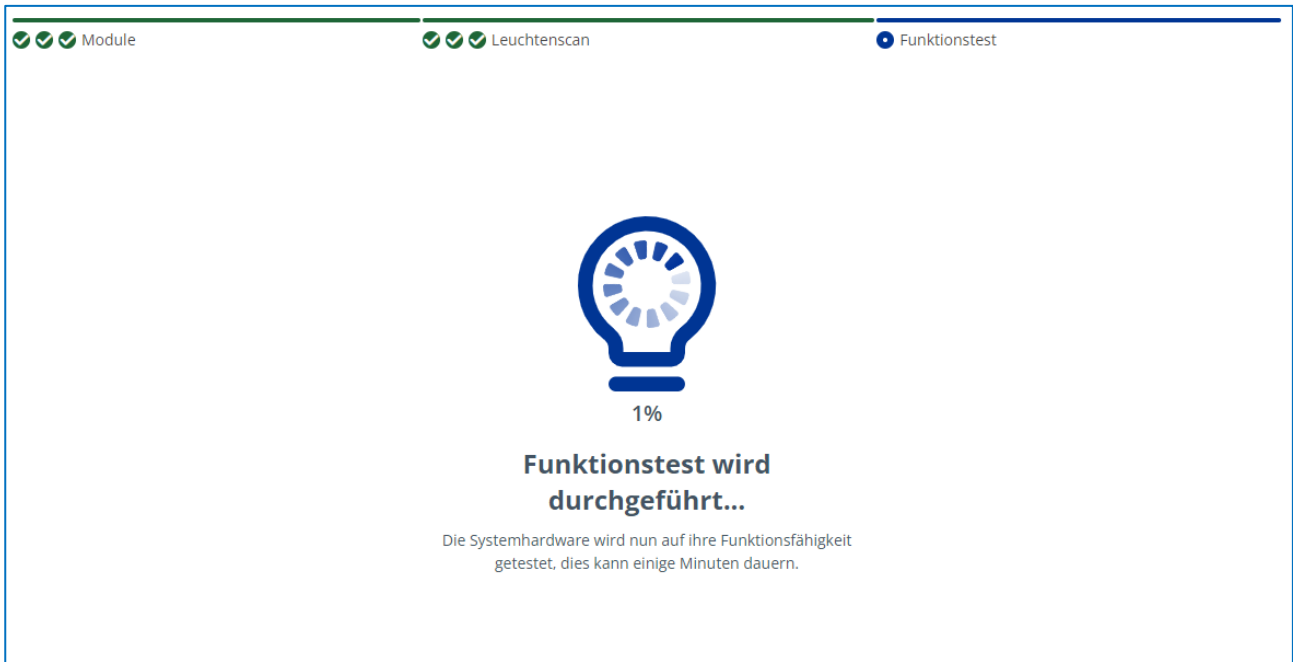
Completing the configuration means that the system includes all the luminaires found in its configuration. Optionally, the wizard can automatically configure each luminaire based on the operating mode displayed and assign it to a suitable group. This happens when you now click on "Yes, please configure".



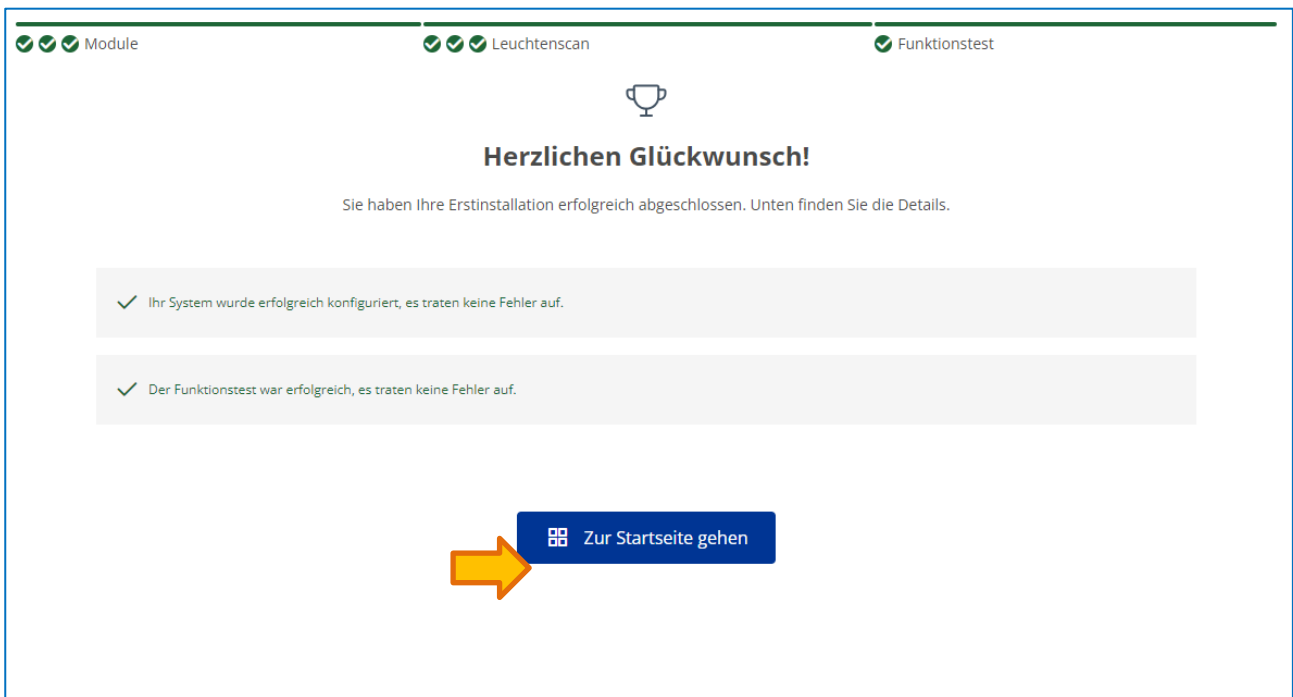
A DS and a BS group are created for each circuit. DS luminaires of each circuit are sorted into the DS group belonging to the circuit, BS luminaires into the BS group accordingly ihres Stromkreises. This may take a moment.



After grouping, the system automatically carries out a function test of the whole system.



After completing the functional test, the wizard is complete.



Click "Go to Home" to exit the wizard. This will take you to the "System Overview" page, which shows you the status of the system at a glance.

Note: After completing the wizard, the system automatically switches to the "Operational" state if no errors have occurred. Otherwise, the system remains in the "Charging" state.

8.5 Final steps (WebUI required)

The final steps described here require the use of the WebUI . If you have not yet logged in to the WebUI , do so now as 8.4.1 on page 32

8.5.1 Setting up automatic tests

Setting up automatic tests is done in two steps: 1. Define a schedule, 2. Link the schedule to test execution. First we define a schedule. To do this, scroll down the navigation tree on the left side of the browser window, expand the "Configuration" area and select the "Schedule overview" menu item.

The screenshot displays the CoreCompact24 WebUI interface. On the left is a navigation tree with categories: Überblick, System, Berichte, Konfiguration, Hilfe, and Techniker. The 'Konfiguration' menu item is highlighted with a yellow arrow. The main content area is titled 'Systemübersicht' and includes several data cards: Systemstatus (0 errors, 1 warning), Leuchten (5 total, 0 errors), Module (9 total, 0 errors), Test Historie (last test: Funktionstest at 15.07.2024 12:30), and Systemprotokoll (last entry: Benutzer Techniker hat sich erfolgreich angemeldet at 15.07.2024 16:49). Below this is the 'Stationen' section, which shows '90000' and three status cards: Stationsstatus (Netz supply, Batterie voll), Stationsbatterie (21.8 V, 0.0 A), and Netzversorgung (228.4 V, 50.0 Hz).

The schedule overview is initially empty. Click on "Create new schedule".

Konfiguration / Zeitplanübersicht

Zeitplanübersicht

+ Neuen Zeitplan erstellen

NAME	NÄCHSTE AKTIVE PERIODE	ERNEUTES AUFTRETEN	AKTIVIERT	AKTIONEN
Keine Daten verfügbar.				

Objekte pro Seite: 10

Example: The functional test should be carried out every Friday at 11:00 p.m. The schedule for this could look like this:

- Name: e.g. "Weekly functional test freitags11:00 p.m."
- Start date: Date and time of the first Friday on which a test is to take place

Konfiguration / Zeitplanübersicht / Neuer Zeitplan

Neuer Zeitplan

Name

Wöchentlicher Funktionstest Freitags 23:00 Uhr

Startdatum

25.08.2023, 23:00

← August 2023 →

Sun	Mon	Tue	Wed	Thu	Fri	Sat
		1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30	31		

23 00

Verwerfen Speichern

- "Recurrence": Here we choose "weekly on Friday"
- Schedule active from: the start date is automatically adopted here
- Since the functional tests should run until further notice, check the box "Unlimited".

The result should look something like this:

Konfiguration / Zeitplanübersicht / Neuer Zeitplan

Neuer Zeitplan

Name

Startdatum

Erneutes Auftreten ⓘ

Zeitplan aktiv ab

 Unbegrenzt



Click Save to create the schedule.

The new schedule will now appear in the schedule overview.

Konfiguration / Zeitplanübersicht

Zeitplanübersicht

NAME	NÄCHSTE AKTIVE PERIODE	ERNEUTES AUFTRETEN	AKTIVIERT	AKTIONEN
Wöchentlicher Funktionstest Freitags 23:00 Uhr	25.08.2023 23:00	Wöchentlich	-	

Objekte pro Seite: 10 ▼

Now select "Functional test" in the tree on the left.

The screenshot shows the 'Systemübersicht' (System Overview) page. The left sidebar contains a navigation tree with the following items: Überblick (expanded), Systemübersicht, Systemprotokoll, Funktionstest (highlighted with a yellow arrow), Kapazitätstest, Stationsinformationen, System, Berichte, Konfiguration (expanded), Zeitplanübersicht, Szenenübersicht, Netzwerk, Einrichtungsassistent, Hilfsstromversorgung, Systemveränderungen, Hilfe, Techniker, Abmelden, and DE. The main content area is divided into several sections: 'Systemstatus' (0 errors, 1 warning, 1 collector error, system test inactive, operating mode: Ladebetrieb), 'Leuchten' (5 total, 0 errors), 'Module' (9 total, 0 errors), 'Test Historie' (last test: Funktionstest, 15.07.2024 12:30), 'Systemprotokoll' (last entry: Benutzer Techniker hat sich erfolgreich angemeldet, 15.07.2024 16:49), 'Stationen' (ID: 90000), 'Stationsstatus' (power: Netz, battery: voll, no errors, emergency stop: nein, emergency lighting: ja), 'Stationsbatterie' (voltage: 21.8 V, discharge current: 0.0 A, no deep discharge, charge current: 0.0 A, temperature: 36.3 °C), and 'Netzversorgung' (voltage: 228.4 V, frequency: 50.0 Hz).

You will be taken to the functional test configuration page.

Here, set the "Active" setting to "Yes":

The screenshot shows the 'Konfiguration / Funktionstest' page. The 'Funktionstest' section has two dropdown menus: 'Aktiv' (set to 'ja') and 'Aufwärmen der Leuchten' (set to '0 min'). Below these is the 'Zeitplan' section with a 'Zeitplan hinzufügen' button. At the bottom, there are three buttons: 'Verwerfen', 'Speichern', and 'Manuellen Funktionstest starten'. Two yellow arrows point to the 'Aktiv' dropdown and the 'Zeitplan hinzufügen' button.

Click on "Add schedule". An overview of all schedules that define a point in time or a series of points in time is displayed. The newly defined schedule should also be among them. Select the desired schedule by setting it eines Häkchens and click on "Save":

The functional test page now looks like this: The assigned schedule and the next time the test will be executed are displayed. Set the "Active" field to "Yes". Finally, click "Save" to save the functional test settings.

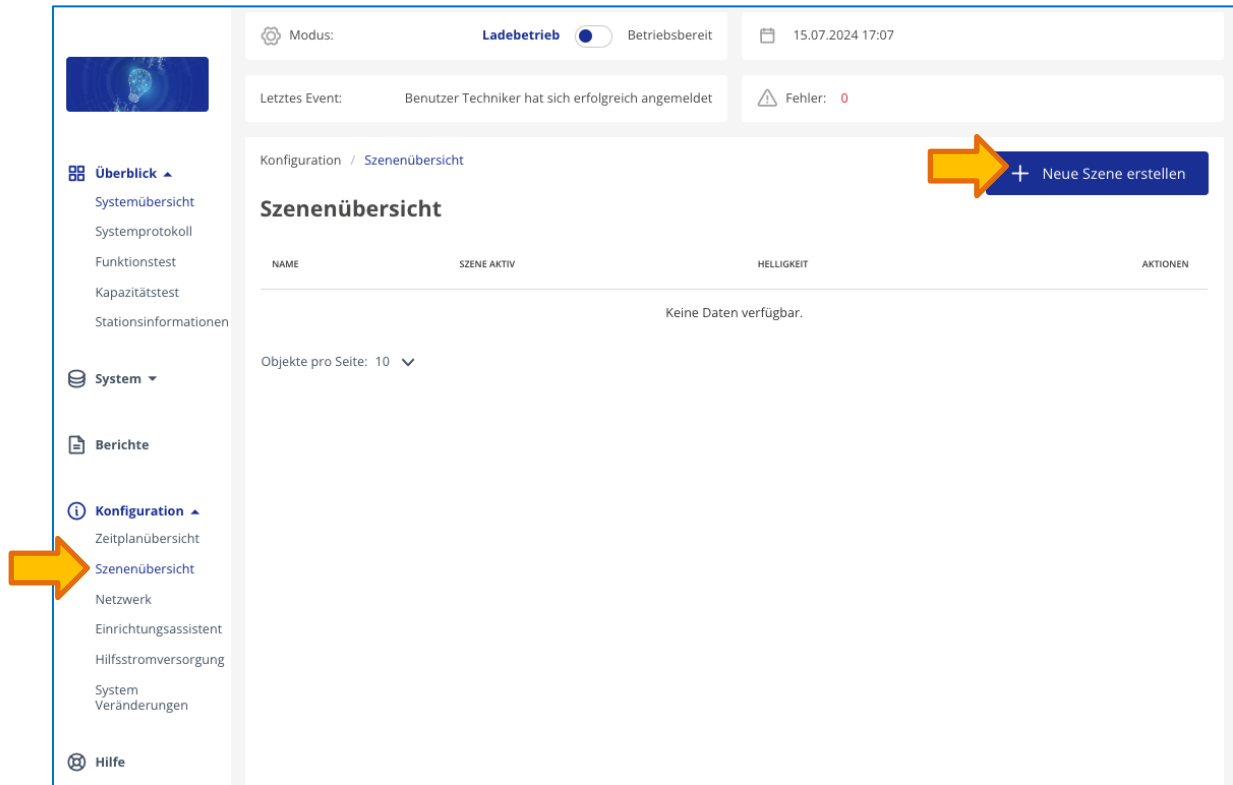
8.5.2 Optional: Configure switched luminaires

Any voltage-detecting input of the system can be used as a switching input. A switching input can switch individual luminaires or groups of luminaires. The following steps are required:

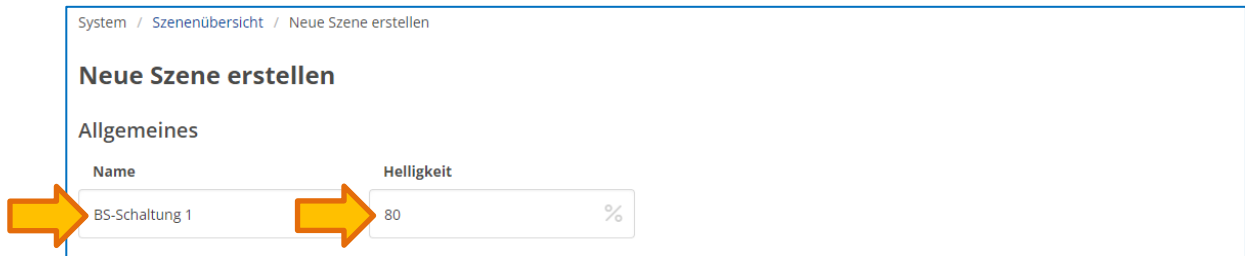
1. **Check/set up groups:** The luminaires to be switched must be grouped together in one or more groups. Groups may have already been created by the setup wizard. Check whether the group assignment allows the intended switching and adjust it if necessary (see chapter 10.4.2on page 63).
2. **Create scenes:** To switch one or more groups of luminaires to a certain brightness, at least one scene is required in which this brightness is set. Create such a scene and assign the groups of luminaires to be switched to it (see chapter 10.6.2on page 72).
3. **Assign input:** Assign an input to each scene to be switched that switches this scene on or off (for details, see chapter 10.4.4on page 66).

As an example, we show the switching of a predefined group of BS luminaires. This group was created by the setup wizard and is used unchanged. This still needs to be done:

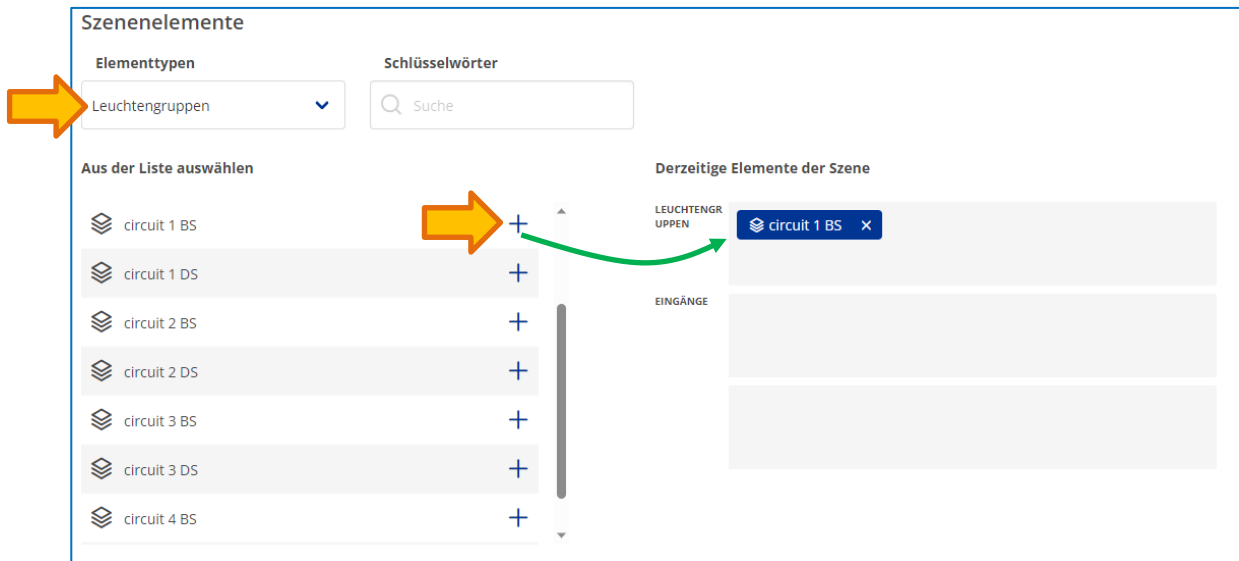
1. Create a scene. To do this, select "Scene overview" in the navigation tree on the left. Then click on "Create new scene" on the right:



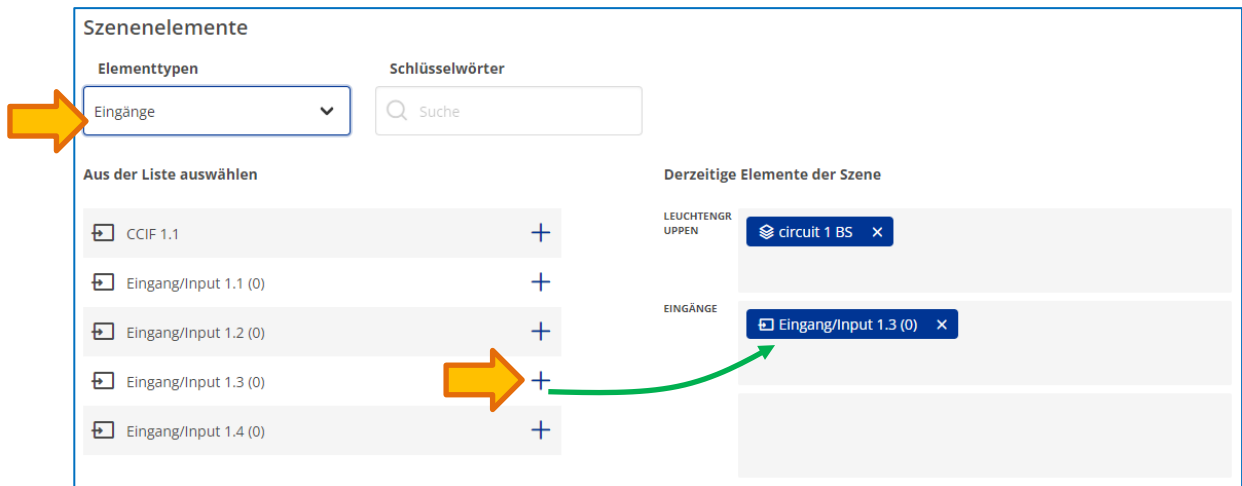
2. Give the new scene a name and set how bright the luminaires should be when the scene is activated:



3. Scroll down a bit and select "Luminaire groups" under "Element types". The list below shows all the luminaire groups that exist in the system.
4. For each group that should be switched by the new scene, click on the large "+" to the right of the group name. The group name disappears from the list and is displayed in the "Luminaire groups" field on the right:



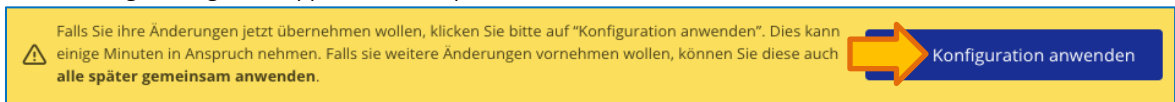
- Now select "Inputs" under "Element types".
- Click on the large "+" next to the input that should switch the scene. The name of the input will immediately be displayed in the "Inputs" field on the right:



- Now click on "Save" at the bottom right to save the scene.



- The following message now appears at the top of the screen:



- Click on "Apply configuration" and confirm the message that this may take a few minutes by clicking "Yes". The configuration of the scene and the BS circuit is now transferred to the system and is effective after the yellow bar with the message has disappeared.

8.5.3 Carry out and document endurance tests

1. In the navigation tree on the left, select "Capacity Test".

Modus: **Ladebetrieb** Betriebsbereit 15.07.2024 17:11

Letztes Event: Benutzer Techniker hat sich erfolgreich angemeldet Fehler: 0

Überblick / Kapazitätstest

Kapazitätstest

Aktiv **Aufwärmen der Leuchten**

Zeitplan **Nächste Ausführung**

2. Click "Start manual capacity test". The test will be executed.
Note: It may take a few seconds for the luminaires to switch on.
Note: You can cancel the test by clicking the "Stop" button on this page or in the header.
3. Clicking on "Reports" takes you to an overview of the test reports saved in the system. Here you can view the results of the capacity test after the test has ended. Clicking on the link in the "Report type" column displays the details of the respective test.

Modus: **Ladebetrieb** Betriebsbereit 15.07.2024 17:14

Letztes Event: Ausrollen der Konfiguration abgeschlossen Fehler: 0

Berichte

Status **Typ**

ID	DATUM / ZEIT	STATUS	BERICHTTYP
11	15.07.2024 12:30	OK	Funktionstest
10	15.07.2024 11:32	OK	Funktionstest

This completes the basic configuration of your system!

9 Operating your system

9.1 Touch screen (GUI) and web user interface (WebUI)

The functions of your system are controlled by two different user interfaces:

- a) The GUI on the front of the case
- b) A so-called WebUI , which can be operated via a device with an Internet browser

The range of functions accessible through each of these two user interfaces varies.

The GUI primarily serves the user for basic configuration, acknowledging errors and providing information about the current system status. Information is only accessible up to a certain level of detail; the rest must be viewed via the WebUI .

9.1.1 Login

Logins with different rights are available for accessing both user interfaces. These can see and execute different pages and functions. The following users are predefined by default:

- “Technician” and “ Technician ”: These users can change the configuration of the system, perform functional and endurance tests and view and adjust all system information.
- “Maintenance” : These users can change the configuration of the system, perform functional and endurance tests, and view and adjust certain system information.
- “Caretaker” and “ Caretakers ”: These users cannot change the configuration of the system, only perform functional tests and view some information about the system.

Note: The passwords associated with the logins are included on a separate sheet of paper with your system. Please keep this information safe and protected from unauthorized access.

9.2 Main switch

The main switch is used to switch the entire system on and off. If the switch is off, the control unit is single-pole disconnected from the power supply.

Note: To switch off the system completely, the connection to the battery must also be disconnected by pulling out the battery cable. The battery must be disconnected before the mains supply is disconnected.



9.2.1 Switch on the system

See chapter 8.2.1.

9.2.2 Switch off the system

To shut down the system, proceed as follows:

1. Switch the system to "Charging" (see section 9.3).
2. Disconnect the battery cable from the mainboard (see section 8.1.8).
3. Switch off the system using the main switch (see picture above).

9.3 Operating mode switch (BAS)

The operating mode switch (BAS) is integrated into the touch screen and the web user interface and can be operated via both. The BAS allows switching between the operating modes:

- **Charging:** The charging unit and all modules are in operation, the battery is being charged, but all circuits are de-energized and the luminaires are not functioning. There is no communication with the luminaires.
- **Operational:** Like Charging, but with the circuits switched on. The luminaires of the switched-on circuits are supplied with voltage and can be recognized and addressed by the control center.

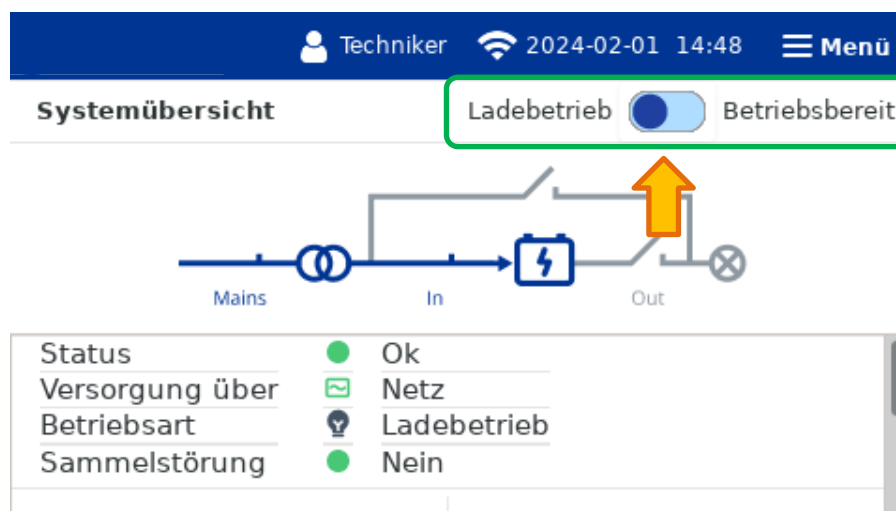
Note: The operating mode switch can also be controlled via one of the voltage-detecting inputs. The switchover is triggered by edges in the applied voltage.

Note: If the BAS is operated simultaneously via the touch screen, the web user interface and/or a control input, the last switching action recognized by the system (tap/click or voltage edge) always applies.

Note: It may take a few seconds until the displayed status of the BAS is synchronized on all control units.

9.3.1 Operating the BAS via the touch screen

On the overview page of the touch screen (GUI) you will find the BAS in the form of a slider at the top right:

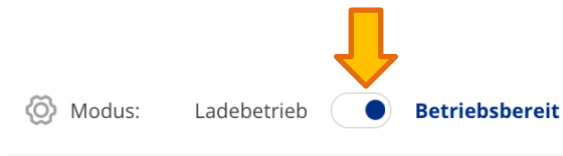


By tapping the slider, the slider can be moved back and forth between the labels "Charging" and "Operational". The position of the dark blue circle shows the currently selected operating mode.



9.3.2 Operating the BAS via the web user interface

In the banner area at the top of the web user interface, there is a similar slider that can be moved to the desired position by clicking/tapping:



9.3.3 Manual reset

To manually reset the run-on times in your system or to switch groups of luminaires that are configured with the "manual reset" configuration, you must switch the system into charging mode and back into operational mode.

This can be done via the BAS in the header in the WebUI or GUI. See the previous chapters 9.3.1 and 9.3.2

9.4 Reset errors

To reset an existing collective fault in the system, you must navigate to the "System log" page in the WebUI or the GUI and click the "Acknowledge entries" button. The respective procedure is described in chapters 10.3.2 and 11.7.1.

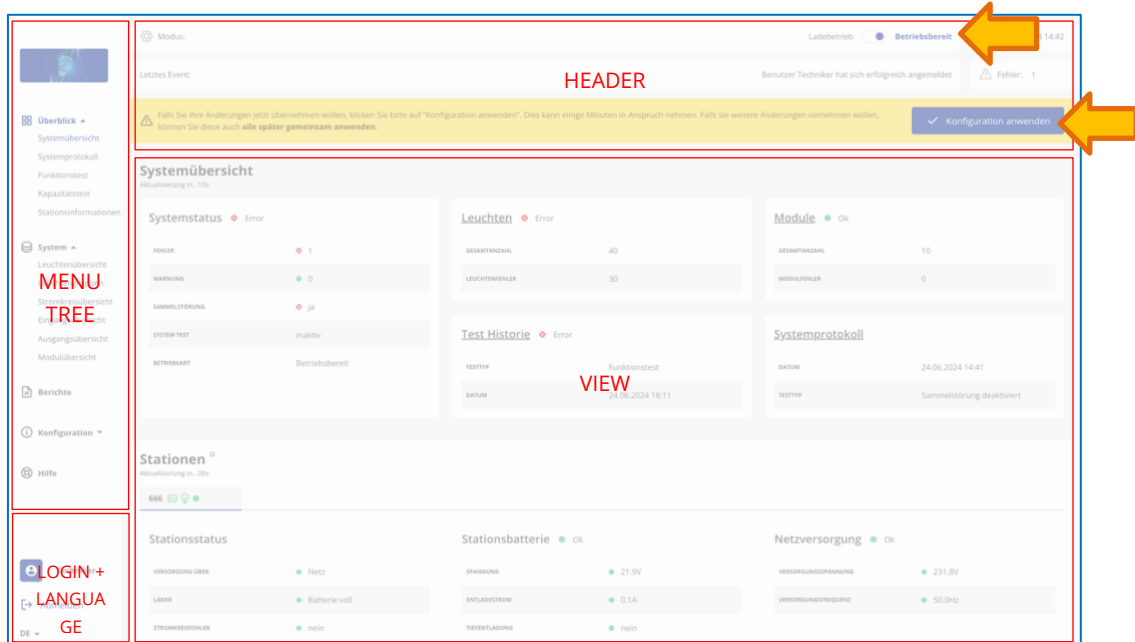
When you log in, you can click the "Acknowledge Entries" button in the WebUI and GUI to reset the collective fault status in the system. If you are not logged in, the button is inactive/grayed out.

10 Menu Reference I: Web User Interface (WebUI)

The web user interface (WebUI) can be accessed via Ethernet/LAN and alternatively via the device's WLAN access point. All you need is a smartphone, tablet or PC with sufficient screen resolution and an Internet browser.

The WebUI is structured as follows:

- Above, across the entire screen width: BANNER with system status, latest messages, system time and BAS.
 - be aborted from here using the " Stop " button displayed here.
 - The operating mode selector switch is located in the banner (see chapter 9.3).
 - A yellow bar (see arrow) appears in the banner when a functional setting has been changed. To take effect, you must click on the "Apply configuration" button (see note at the beginning of section 8.2).
- Left, across the entire screen height: Navigation area (MENU TREE) with partially expandable areas.
- These include the LOGIN/Logout functions and the LANGUAGE selection.
- Rest of screen: The current VIEW, according to the function selected in the navigation area.



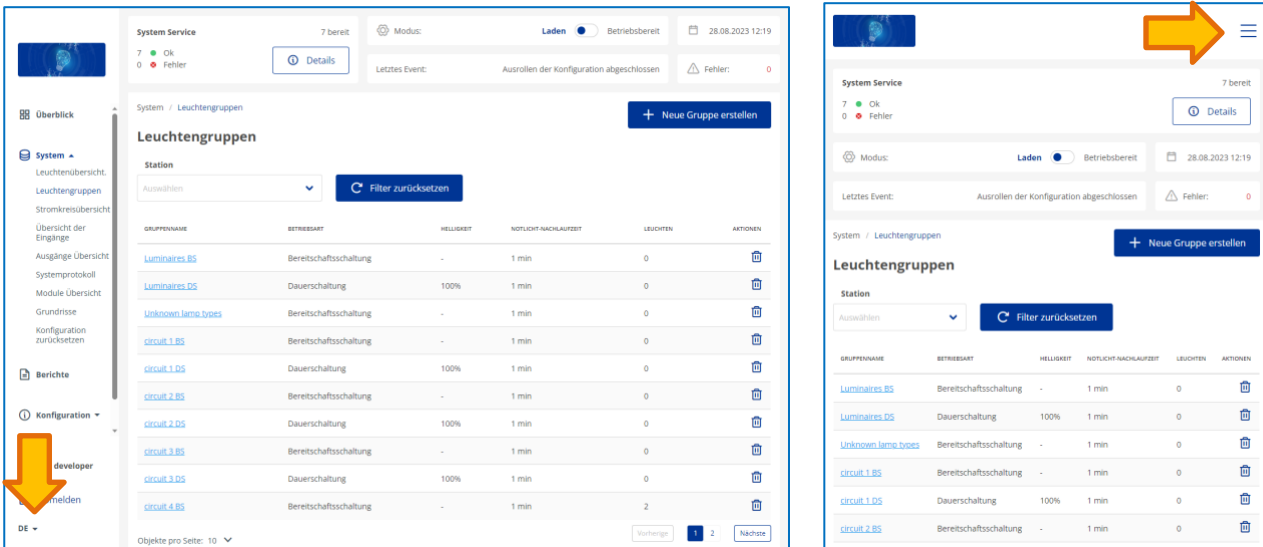
10.1 Tabular views

A large number of views work with tables. If there are a large number of rows, only a (selectable) number of entries (rows) are displayed (so-called pagination). To see the other rows, you either have to increase the number using a drop-down list at the bottom left or go to the next page. To make it easier to find certain entries, many tables can be restricted using filter functions. Some views also offer the option of downloading the displayed content as a CSV file.

10.2 Responsive design and multilingualism

- Depending on the screen size (resolution) of the device on which the user interface is displayed, some parts of the display change their appearance and behavior:
 - On small screens, the banner area is displayed more compactly and smaller
 - On larger screens, the navigation area is always visible on the left edge of the screen, while on smaller screens it is hidden and can be made visible by tapping/clicking the "burger menu" at the top right (arrow in the image below right).
 - Elements of the currently active view are scaled to fit the screen width and displayed/regrouped in one or more columns.

- To switch to another display language, there is a selection field (drop-down list) at the bottom left (arrow in the bottom left image).



10.3 Navigation area: "Overview"

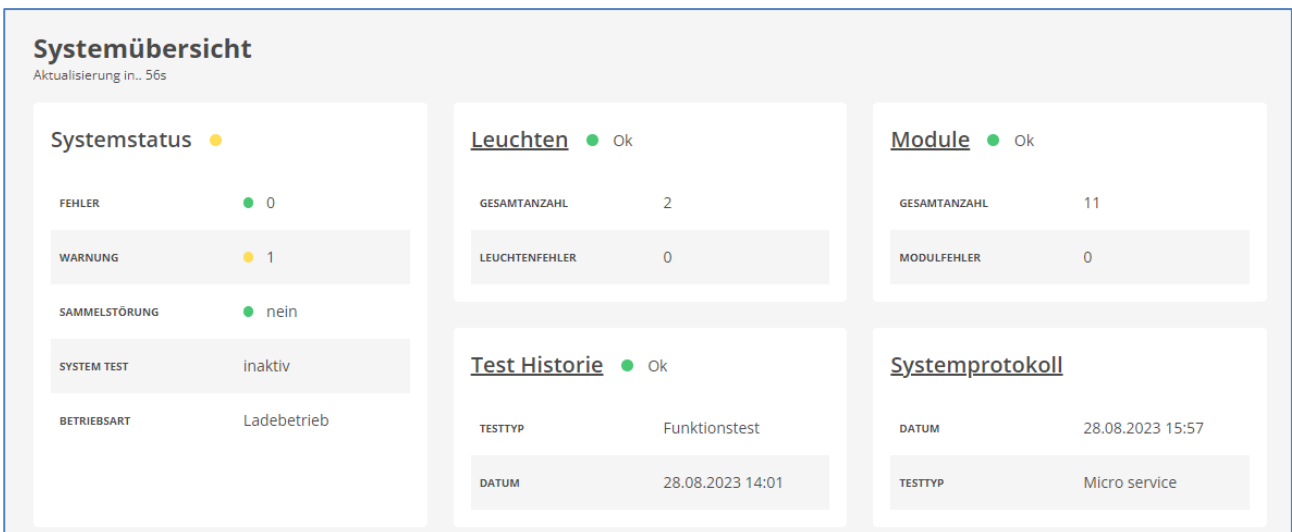
The "System Overview" area in the menu tree can be expanded or collapsed by clicking/tapping. It contains the pages described below with information and settings for system components.

10.3.1 System overview

The main page, which can be accessed in the menu tree on the left via "System Overview", is divided into two areas: "System Overview" and "Stations".

The system overview provides an overview of the overall status of your emergency lighting installation.

The status of the luminaires and modules changes as described in chapter 7.3 on page 15.



The individual fields are self-explanatory:

- System status - shows the number of errors and warnings that have occurred in the entire system and have not yet been acknowledged, and the information whether a collective fault has occurred or not.

- System test: Shows whether a test is currently running or whether the test execution is blocked
- Operating mode: Charging / Operational (normal operation)
- Luminaires - shows the total number of luminaires in the system and the number of faulty luminaires
- Modules - shows the total number of modules in the system and the number of faulty modules
- Test History - shows type and date of the last test performed
- System Log - shows the last message that appeared in the system log, as well as den entsprechenden Zeitpunkt

The heading of most fields is designed as a link that takes you to pages with further information.

The Stations area can consist of one or more tabs. Each tab displays information about the status of an individual station: overall status, battery and charger information, and mains supply information.

The screenshot shows a dashboard titled 'Stationen' with a sub-header 'Aktualisierung in... 19s'. A tab labeled 'Station 1' is selected. The dashboard is divided into three main sections:

- Stationsstatus** (Overall Status):
 - VERSORGUNG ÜBER: Netz (Green dot)
 - LADER BETRIEBSBEREIT: ja (Green dot)
 - STROMKREISFEHLER: nein (Green dot)
 - NETZNOTBETRIEB: nein (Green dot)
 - NOTBELEUCHTUNG BLOCKIERT: nein (Green dot)
 - WARTUNG NOTWENDIG: ja (Yellow dot)
- Stationsbatterie** (Station Battery):
 - SPANNUNG: 21.9V (Green dot)
 - ENTLADESTROM: 0.1A (Green dot)
 - TIEFENTLADUNG: nein (Green dot)
 - LADESTROM: 0.1A (Green dot)
 - TEMPERATUR: 31.5°C (Green dot)
 - KAPAZITÄT: 20.0Ah (Green dot)
 - AUTONOMIEZEIT: 1.0 h (Green dot)
- Netzversorgung** (Mains Supply):
 - VERSORGUNGSSPANNUNG: 229.2V (Green dot)
 - VERSORUNGSFREQUENZ: 50.1Hz (Green dot)

10.3.2 System log

The System Log page displays system events that have occurred in chronological order, with the most recent events first.

Filter function: The displayed events can be restricted to a single station using the filter drop-down list "Station" above the table. The "Status" filter allows only errors and warnings to be displayed.

Überblick / Systemprotokoll

Systemprotokoll

Station Status [Filter zurücksetzen](#)

ZEITPUNKT DES LETZTEN ERGEBNISSES	STATUS	QUELLE	NACHRICHT (NACHRICHTEN CODE)	BESTÄTIGT
26.06.2024 12:49	●	manager-service	Funktionstest abgeschlossen (6013) [Show report]	-
26.06.2024 12:49	●	CMM	Tiefentladung Stufe 2 deaktiviert (40019)	-
26.06.2024 12:49	●	CMM	Tiefentladung Stufe 1 deaktiviert (40008)	-
26.06.2024 12:47	●	manager-service	Funktionstest gestartet (6012) [Show report]	-
26.06.2024 12:47	●	manager-service	Installationsassistent abgeschlossen (6004)	-
26.06.2024 12:46	●	CMM	Kritischer Kreis OK (40004)	-
26.06.2024 12:46	●	CMM	Netzausfall deaktiviert (40002)	-
26.06.2024 12:46	●	CMM	Normalbetrieb (40006)	-
26.06.2024 12:45	●	COAL	Anlagen-Konfiguration erfolgreich erstellt (2001)	-
26.06.2024 12:45	●	COAL	Anlagen-Konfiguration wird erstellt (2000)	-

Objekte pro Seite: 10

[als CSV-Datei herunterladen.](#) [✓ Einträge quittieren](#)

Each entry contains:

- **Time of last event:** Date and time when the event occurred
- **Status/Severity:** Error, Warning, Information
- **Source:** Name of the module from which the entry originates
- **Message (Message Code):** Description of the event, including the message code for service inquiries
- **Confirmed:** Errors and warnings must be confirmed/acknowledged. The time of confirmation is displayed, or "no" if confirmation is still pending.

Possible actions:

- **Acknowledge entries:** Click on the "Acknowledge entries" button at the bottom right to acknowledge all open error and warning messages. Executing this function via the GUI is described in chapter 9.4.

Detailed view of system log entries: View with details on the occurrence of the entry (first and last occurrence of this event type, number, etc.). This is occasionally relevant for service queries.

System / Systemprotokoll

Details zu den Nachrichten

Nachrichten Code

6013

Quelle

manager-service

Schweregrad

Informationen

Nachrichten-Typ

Micro-Service Nachricht

Nachricht

Function test finished

Erstes Auftreten

24.08.2023 13:43

Ereigniszähler

3


Letztes Auftreten

29.08.2023 12:01

Kommentar

Schreibe etwas...

 Verwerfen

 Speichern

10.3.3 Function test

Functional tests can be performed manually or on a schedule. The Function Test page allows both.

Überblick / Funktionstest

Funktionstest

<p>Aktiv</p> <div style="border: 1px solid #ccc; padding: 2px; display: flex; justify-content: space-between; align-items: center;"> ja ▼ </div>	<p>Aufwärmen der Leuchten</p> <div style="border: 1px solid #ccc; padding: 2px; display: flex; justify-content: space-between; align-items: center;"> 1 min ▼ </div>
<p>Zeitplan</p> <div style="border: 1px solid #ccc; padding: 2px; display: flex; justify-content: space-between; align-items: center;"> 7 Uhr ▼ </div>	<p>Nächste Ausführung</p> <div style="border: 1px solid #ccc; padding: 2px; display: flex; justify-content: space-between; align-items: center;"> 23.07.2024 07:00 🗑️ </div>
<p>Zeitplan</p> <div style="border: 1px solid #ccc; padding: 2px; display: flex; justify-content: space-between; align-items: center;"> 19 Uhr ▼ </div>	<p>Nächste Ausführung</p> <div style="border: 1px solid #ccc; padding: 2px; display: flex; justify-content: space-between; align-items: center;"> 22.07.2024 19:00 🗑️ </div>

[Zeitplan ändern](#)

Unterbrochener Test [Ⓞ]

Automatisch neu starten

Neustart nach

0h
▼

✖ Verwerfen

✓ Speichern

▶ Manuellen Funktionstest starten

Settings:

- **Active:** Must be set to Yes for test execution to be scheduled.
- **Warm-up of the luminaires:** Time for which the luminaires are switched on before the actual test begins.
- **Schedule:** Schedule according to which an automatic test is executed. The date and time of the next test are displayed under "**Next execution**". For how schedules work, see also chapter 7.7 on page 16.
- **Automatically restart interrupted test:** Must be set to "yes" for automatic repetition of interrupted tests. You can also select the time in hours after the interruption at which the test should be repeated.

Possible actions:

- **Set warm-up time:** Select the appropriate time in the "Warm up the luminaires" field and click "Save".
- **Manual test execution:** To start a function test, click on "Start manual function test"
- **Configure automatic test execution.** Set "Active" to "Yes" and click on "Add schedule" or "Change schedule" and select the desired schedule in the dialog that appears and accept it by clicking on "Save". More on this in chapter 8.5. Finally, accept the settings on the functional test page **again** by clicking on "Save" at the bottom right.
Note: It is possible to assign multiple schedules for test execution at the same time. To avoid error messages, don't assign the same schedule/execution time to function- and capacity tests.
- **Deactivate/reactivate automatic test execution:** Set the "Active" setting to "No" or "Yes".
- **Delete automatic test execution:** Click the trash can icon to the right of the schedule you want to remove. This will delete the triggering of a test by that schedule, but not the schedule itself: it will still exist on the Schedules page.
- **Automatically repeat interrupted tests:** Select "Yes" and the desired time.
- **Cancel test:** While a test is running, a notice about the running test and a "Stop" button are displayed in the banner area. Clicking this button can be used to cancel the running test.

Funktionstest

Start: 13:25

End: 13:29



Note: The functional test is carried out in several phases, not all of which are directly visible to the user. At the beginning of the test, an internal check of various values in the system (e.g. battery charge level) is carried out before the first luminaires are switched on. The luminaires are tested circuit by circuit, whereby the circuits are often not switched on at the same time. The test is finished when all luminaires have returned to their previous operating state and the " Stop " button is no longer displayed.

10.3.4 Capacity test

Capacity tests can be run manually or on a schedule. The Capacity Test page allows both.

Note: According to your country's standards, a technician may always have to be present to perform a capacity test. However, if the technician is working alone on the system, it may be useful to configure capacity tests to run automatically to investigate the behavior of other parts of the system when switching between mains and battery operation.

Konfiguration / Kapazitätstest

Kapazitätstest

Aktiv **Aufwärmen der Leuchten**

Zeitplan

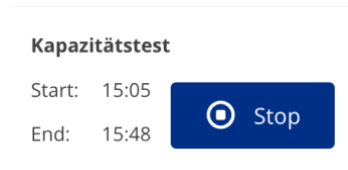
Settings:

- **Active:** Must be set to Yes for test execution to be scheduled.
- **Warm-up of the luminaires:** Time for which the luminaires are switched on before the actual test begins.
- **Schedule:** Schedule according to which an automatic test is executed. The date and time of the next test are displayed under " **Next execution** ". For how schedules work, see also chapter 7.7 on page 16.

Possible actions:

- **Set warm-up time:** Select the appropriate time in the "Warm up the luminaires" field and click "Save".
- **Manual test execution:** To start a capacity test, click on "Start manual capacity test"
- **Configure automatic test execution.** Set "Active" to "Yes" and click on "Add schedule" or "Change schedule" and select the desired schedule in the dialog that appears and accept it by clicking on "Save". More on this in chapter 8.5. Finally, accept the settings on the functional test page **again** by clicking on "Save" at the bottom right.

Note: It is possible to assign multiple schedules for test execution at the same time. To avoid error messages, don't assign the same schedule/execution time to function- and capacity tests.
- **Deactivate/reactivate automatic test execution:** Set the "Active" setting to "No" or "Yes".
- **Delete automatic test execution:** Click the trash can icon to the right of the removed schedule. This will delete the triggering of a test by that schedule, but not the schedule itself: it will still be present on the Schedules page.
- **Cancel test:** While a test is running, the banner area displays a notice about the running test and a "Stop" button. Clicking this button will cancel the running test.



Note: The capacity test is carried out in several phases, not all of which are directly visible to the user. At the beginning of the test, an internal check of various values in the system (e.g. battery charge level) is carried out before the first luminaires are switched on. The luminaires are switched on one circuit at a time. To verify a fully operational system before and after the battery autonomy time, the capacity test includes a function test in the beginning and end. The capacity test is finished when all luminaires have returned to their previous operating state and the "Stop" button is no longer displayed.

10.3.5 Station and hardware information

This page contains master data of the system. Some fields can be changed. There are the following tabs:

- Station information
- System hardware parameters

Stationsinformationen	Parameter zur Systemhardware	
Stationsnummer 1	RP serial number value201	MAC address value100
Datum 29.08.2023	Zeit 15:43	Zeitzone UTC
Stationsname Station 1	Typ 42	
Station location Ort		
Adresse Containermodul ABC123	Produktionsnummer value202	
Auftragsnummer value203	Herstellungsdatum 10.08.2023	
Hersteller value300		
Hardware-/Software-Version (Revision) (Veröffentlichungsdatum) HW v1 (v30) (1.1.2021) / SW v1 (v3.47) (5.6.2027)		
Datum der Inbetriebnahme 29.08.2023		
Service-Dienstleister value 400		
Servicetelefon value 402	Service-E-Mail service@rp-group.com	
Service E-Mail-Adresse value 401		

Stationsinformationen	Parameter zur Systemhardware
Nächste Wartung	
<input type="text" value="10.08.2023"/>	
Nennleistung ⓘ	
<input type="text" value="255 W"/>	
Batteriekapazität	Bemessungsbetriebsdauer
<input type="text" value="20 Ah"/>	<input type="text" value="1 h"/>
	<input type="checkbox"/> Test mit nur 2/3 Batterieversorgungszeit
Eingangsspannung	Eingangsfrequenz
<input type="text" value="230 V"/>	<input type="text" value="50 Hz"/>
<input type="button" value="⊗ Verwerfen"/> <input type="button" value="✓ Speichern"/>	

Note: The maintenance date, the rated operating time, etc. can only be adjusted with the appropriate rights.

10.4 "System" navigation area

The "System" area in the menu tree can be expanded or collapsed by clicking/tapping. It contains the pages described below with information and settings for system components.

10.4.1 Luminaires: Overview + Details

This page provides an overview of all the luminaires in the system. Each line in the table shown represents a light. Each luminaire is uniquely identified by its luminaire address. The group it belongs to determines its operating mode; luminaires are switched and dimmed using scenes that act on and control groups.

The status of the luminaires changes as described in chapter 7.3 on page 15.

System / Leuchtenübersicht

Leuchtenübersicht

Station
 Stromkreis
 Gruppe
 Status

<input type="checkbox"/>	STATUS	NAME	STATION	TYP / BETRIEBSART	LEUCHTENADRESSE	STROMKREIS/NUMMER		GRUPPE	SPANNUNG
<input type="checkbox"/>		EAQL529CC 1/1	666	EAQL529CC / Bereitschaftsschaltung	00-02QK	1 / 11112		circuit 1 BS	24.5 V
<input type="checkbox"/>		ILDLS29CC 2/1	666	ILDLS29CC / Bereitschaftsschaltung	00-02UK	2 / 1112		circuit 2 BS	23.7 V
<input type="checkbox"/>		ILDLS29CC 2/2	666	ILDLS29CC / Bereitschaftsschaltung	00-02RU	2 / 22		circuit 2 BS	23.8 V
<input type="checkbox"/>		AIE509CC 2/3	666	AIE509CC / Dauerschaltung	00-02R5	2 / 33		circuit 2 DS	23.8 V
<input type="checkbox"/>		AIE509CC 2/4	666	AIE509CC / Dauerschaltung	00-02QV	2 / 411		circuit 2 DS	24.0 V
<input type="checkbox"/>		AIE509CC 2/5	666	AIE509CC / Dauerschaltung	00-02ML	2 / 51		circuit 2 DS	23.7 V
<input type="checkbox"/>		AIE509CC 2/6	666	AIE509CC / Dauerschaltung	00-02MF	2 / 61		circuit 2 DS	23.4 V
<input type="checkbox"/>		KSU519CC 2/7	666	KSU519CC / Dauerschaltung	00-01L8	2 / 71		circuit 2 DS	24.1 V
<input type="checkbox"/>		ASMU519CC 2/8	666	ASMU519CC / Dauerschaltung	00-01G0	2 / 8		circuit 2 DS	23.9 V
<input type="checkbox"/>		AIE509CC 3/1	666	AIE509CC / Dauerschaltung	00-02QA	3 / 1		circuit 3 DS	24.3 V

Objekte pro Seite: 10

The columns provide the following information:

- **Status:** Status of the lamp (OK/faulty + lamp update required)
- **Name:** By default, the type of luminaire + circuit to which the luminaire is connected/number of the luminaire in the circuit. The name is designed as a hyperlink that calls up the detailed view of the luminaire. The name can be changed here.
- **Station number:** Indicates the number of the station at which this luminaire is operated.
- **Type/operating mode:** Manufacturer's luminaire type designation/operating mode of the luminaire. The latter is maintained mode (DS)/standby mode (BS). The operating mode can be changed by assigning the luminaire to another group that is set to the desired operating mode.
- **Luminaire address:** Six-digit number of the luminaire (format XX-XXXX), which can also be found on the luminaire.
- **Circuit/number:** Circuit to which the luminaire is connected/number of the luminaire in the circuit.
- **Group:** Name of the group to which the luminaire has been assigned. Clicking on the group name opens the corresponding detailed view of the group.
- **Voltage:** Voltage currently measured by the luminaire.

The displayed luminaires can be filtered as required by station affiliation, circuit, group and status using the drop-down lists above the table.

Note: If the system update also includes a luminaire update, or if not all of your luminaires are up to date, an additional icon "Luminaire update required" appears in blue.

Possible actions:

- **Assign one or more luminaires to a group:** Select the luminaires you want to assign to a group by checking the box in the column with boxes on the far left. Then click the "Assign group" button at the bottom right. In the dialog that opens, select the group you want to add the selected luminaires to. Then click "Save".
Note: This action requires applying the new configuration by clicking the Apply Configuration button in the banner area.
- **Adjust the luminaire number:** Click on the pencil in the column to the right of the luminaire number to adjust it directly on the overview page. Click on the check mark to save your entry.

Luminaire detail view: Here the luminaire information from the overview table is displayed in more detail. You can also see the version of the luminaire here (HW=hardware, FW=firmware).

System / Leuchtenübersicht. / Details der Leuchte.

Details der Leuchte. - ILDL529CC 4/1

Name	Gruppe
<input type="text" value="ILD529CC 4/1"/>	<input type="text" value="circuit 4 BS"/>
Nummer	Stromkreis
<input type="text" value="1"/>	<input type="text" value="Kreis/Circuit 4"/>
Leuchtenadresse.	Betriebsart
<input type="text" value="00-02W3"/>	<input type="text" value="Bereitschaftsschaltung"/>
Typ	Version
<input type="text" value="type for 1"/>	<input type="text" value="HW: V29, FW: V3.34"/>

Possible actions:

- **Lamp names Change:** Change the name by entering it in the white input field. Save the entry permanently by clicking on "Save" at the bottom right.
- **Luminaire number Change:** Change the number by entering it in the white input field. Save the entry permanently by clicking on "Save" at the bottom right.

10.4.2 Groups: Overview + Details

This page provides an overview of all luminaire groups available in the system.

Each row in the table shown represents a group. A group can contain any selection of luminaires in the system, including luminaires from different circuits and even different stations.

System / Leuchtengruppen + Neue Gruppe erstellen

Leuchtengruppen

Station
 ↻ Filter zurücksetzen

GRUPPENNAME	BETRIEBSART	HELLIGKEIT	NOTLICHT-NACHLAUFZEIT	LEUCHTEN	AKTIONEN
circuit 1 BS	Bereitschaftsschaltung	-	1 min	0	
circuit 1 DS	Dauerschaltung	100%	1 min	0	
circuit 2 BS	Bereitschaftsschaltung	-	1 min	0	
circuit 2 DS	Dauerschaltung	100%	1 min	0	
circuit 3 BS	Bereitschaftsschaltung	-	1 min	0	
circuit 3 DS	Dauerschaltung	100%	1 min	0	
circuit 4 BS	Bereitschaftsschaltung	-	1 min	2	
circuit 4 DS	Dauerschaltung	100%	1 min	0	

Objekte pro Seite: 10 📄 als CSV-Datei herunterladen.

The columns provide the following information:

- **Group name:** Name of the group. The name is designed as a hyperlink that takes you to a detailed view of the group.
- **Operating mode:** Maintained mode (DS) or non-maintained mode (BS). All luminaires assigned to this group are automatically operated in this operating mode.
- **Brightness (DS groups only):** Brightness at which DS luminaires operate during normal operation.
- **Emergency delay / Emergency luminaires run-on time:** Time for which the luminaires of the group continue to operate at full brightness after the end of emergency operation before returning to normal operation.
- **Luminaires:** Number of luminaires in this group.

Filter function: The displayed groups can be restricted to groups of a station as required using the drop-down list above.

Possible actions:

- **Create a group:** To do this, click on the "Create new group" button at the top right. The group detail view shown below will appear, in which you can enter the properties of the new group. After clicking on "Save", the group will be created and then displayed in the group overview list.
- **Delete a group:** To do this, click on the trash can icon on the far right of the row of the group you want to delete. You will be asked for confirmation before the group is deleted.

Attention: Please note that luminaires from a deleted group are no longer assigned to ANY group and are therefore not operated in DS or BS and are therefore permanently switched off. Therefore, be sure to assign these luminaires to another group afterwards, or do this before deleting the previous group.

Group details view: The following information is displayed here and can be edited:

- **Name:** Name of the group.
- **Operating mode:** Maintained mode (DS) or non-maintained mode (BS). This applies to all luminaires in the group.
- **Emergency delay / Emergency luminaires run-on time:** Time for which the luminaires of the group continue to operate at full brightness after the end of emergency operation before returning to normal operation.
- **Comment:** Free text that may also be left empty.
- **Part of Scene:** Displays all scenes this group belongs to.
- **Included luminaires:** Shows all luminaires that belong to this group.

System / Leuchtengruppen / Gruppendetails

Gruppendetails - circuit 1 BS

Allgemeines

Name

Betriebsart

Notlicht-Nachlaufzeit ⓘ

Kommentar

Teil der Szene.

BS-Schaltung 1
🗑️

[Zur nächsten Szene hinzufügen](#)

[🗑️ Gruppe löschen](#)

Beinhaltete Leuchten

NAME	GESAMTANZAHL: 0
Keine Daten verfügbar.	

[Mehr Leuchten zuordnen](#)

[🗑️ Verwerfen](#)

[✓ Speichern](#)

Possible actions:

- **Edit group properties:** Change the above settings and save the changes by using the "Save" button at the bottom right.
- **Add Scenes:** Click Add to Next Scene or Add Scene and in the dialog box that opens, select the scene(s) you want to add this group to, then click Save.
- **Remove Scenes:** Click the trash can icon to the right of a scene name to remove the group from that scene.
- **Add luminaires:** Click on "Assign more luminaires". In the dialog that opens, select the luminaires you want and click on "Save".
- **Remove luminaires:** Click the trash can icon to the right of the name of the luminaire (s) you want to remove.

Note: These actions require applying the new configuration by clicking the "Apply Configuration" button in the banner area.

10.4.3 Circuits: Overview + Details

This page provides an overview of the circuits in the system. Each line represents a circuit. A circuit is the physical or electrical connection of luminaires to supply them with energy. However, the operating mode, programming and control of the luminaires are logically independent of the circuits.

System / Stromkreisübersicht

Stromkreisübersicht

Station

Auswählen ▼ ↻ Filter zurücksetzen

STATUS	STATIONSNUMMER/TERMINAL	NAME	ANZAHL DER LEUCHTEN (DAUERSCHALTUNG/BEREITSCHAFTSSCHALTUNG)	SPANNUNG	STROM	LEISTUNG
●	1 / 1	Kreis/Circuit 1	0 / 0	24.4 V	0.0 A	0.0 W
●	1 / 2	Kreis/Circuit 2	0 / 0	24.4 V	0.0 A	0.0 W
●	1 / 3	Kreis/Circuit 3	0 / 0	24.4 V	0.0 A	0.0 W
●	1 / 4	Kreis/Circuit 4	0 / 2	24.4 V	0.0 A	0.0 W

Objekte pro Seite: 10 ▼

📄 als CSV-Datei herunterladen.

Displayed:

- **Status:** OK (green) or faulty (red)
- **Station number / terminal:** Name of the station and the number of the circuit. The name of the station indicates in which system the circuit or the associated circuit module is installed.
- **Name:** Name of the circuit. The circuits are named "Circuit" + circuit number by default. The name can be changed as required. It is designed as a hyperlink that allows you to access the detailed view of the circuit.
- **Number of luminaires (DS/BS):** Indicates the number of luminaires in this circuit that operate in DS and BS.
- **Voltage, Current, Power:** Terminal voltage, total current and power of the circuit measured by the system.

Filter function: The displayed circuits can be restricted to the circuits of a single station as required using the filter drop-down list above the table.

Circuit Detail View: Displays the following information about a single circuit:

- **Name:** Name of the circuit. The circuits are named "Circuit" + circuit number by default. The name can be changed as required. It is designed as a hyperlink that allows you to access the detailed view of the circuit.
- **Circuit number:** Number of the circuit in the associated station.
- **Station number:** Indicates in which system the circuit or the associated circuit module is installed.
- **Number of luminaires (DS/BS):** Indicates the number of luminaires in this circuit that operate in DS and BS.
- **Voltage, Current, Power:** Terminal voltage, total current and power of the circuit measured by the system.

Possible actions:

- **Change the name of the circuit:** Change the name in the white input field. Then click "Save" at the bottom right.

System / Stromkreisübersicht / Stromkreisdaten

Stromkreisdaten - Kreis/Circuit 1

Name

Stromkreisnummer **Stationsnummer**

Anzahl der Leuchten **Energieverbrauch**

Dauerschaltung **Bereitschaftsschaltung** **Spannung** **Strom** **Leistung**

Note: Since measured values have to be rounded in order to be displayed here, minor deviations may occur.

10.4.4 Entrances: Overview + Details

The system has four voltage-detecting inputs as standard, which make the presence or absence of a voltage usable as a control signal for the station. In addition, a closed-circuit loop (called CCIF) is available, which detects both short circuits and conductor breaks.

All these inputs are shown in the input overview in a table, one input per line:

System / Eingangsübersicht

Eingangsübersicht

Station

Auswählen

NAME	STATION/MODUL/TERMINAL	FUNKTION	AKTUELLER FUNKTIONSZUSTAND
CCIF 1.1	666 / 00-00FL / CCIF 1.1	Kritischer Kreis	OK
Eingang/Input 1.1 (0)	666 / 00-00JQ / DIN 1.1	Schalter	Inaktiv
Eingang/Input 1.2 (0)	666 / 00-00JQ / DIN 1.2	Schalter	Aktiv
Eingang/Input 1.3 (0)	666 / 00-00JQ / DIN 1.3	Schalter	Inaktiv
Eingang/Input 1.4 (0)	666 / 00-00JQ / DIN 1.4	Schalter	Inaktiv

Objekte pro Seite: 10

Information displayed:

- **Name:** Name of the input, which can be customized. The name is designed as a hyperlink that allows you to access a detailed view for each input.
- **Station/Module/Terminal:** Specifies the station number, module number and terminal number of the input.

- **Function:** Indicates the function for which the input is programmed. This can be selected in the detailed view, which is accessible by clicking on the name:
 - **Switch:** Voltage-detecting input. The presence of a voltage is referred to as the "active" state of the input, while the absence of a voltage is referred to as the "inactive" state.
 - **CCIF:** Closed-circuit loop with short-circuit and wire break detection. States: "OK", "Error"
 - **Mains monitor:** Detects the *failure* of an applied voltage. "Active" here means failure, "inactive" means presence or return of the applied mains voltage.
 - **BAS (Operational):** Allows the operating mode to be switched between Operational "Active" and "Inactive" (=Charging).
- **Current functional state:** Current state of the input (active (high, 1), inactive (low , 0), ...), according to the functional logic described above.

Filter function: The displayed inputs can be restricted to inputs of a specific station using the filter drop-down list above the table.

Entrance detail view: View with all information about a single entrance.

Possible actions:

- **Change name:** Change the name in the white input field. Save by clicking on "Save" at the bottom right.
 - **Set function:** Change the function using the drop-down list. Save by clicking on "Save" at the bottom right.
- Note:** Changing the function of an input requires applying the new configuration by clicking the "Apply Configuration" button in the banner area.

System / Übersicht der Eingänge / Details zum Eingang

Details zum Eingang - Eingang/Input 1.1 (0)

Name / Nachricht ⓘ

Funktion ⓘ

Schalter ▼

Aktuelle Eingangsspannung	Aktueller Funktionszustand
Inaktiv (low, 0)	Aktiv

⊗ Verwerfen

✓ Speichern

10.4.5 Outputs: Overview + Details

The system has four outputs as standard, which are designed as simple relay contacts (changeover contacts). The control of the relays is configured by default to operating mode, supply via mains/battery and collective fault, which are referred to here as "function". The output overview shows a table with all outputs, one output per line:

System / Ausgangsübersicht

Ausgangsübersicht

Station

Auswählen ▼

NAME	STATION/MODUL/KLEMME	FUNKTION	GEGENWÄRTIGER RELAISZUSTAND
Betriebsart/Operation mode	666/00-00MV/DOUT 1.1	Betriebsart (normal)	NO geschlossen/NC offen: Betriebsbereit
Notbetrieb/Emergency operation	666/00-00MV/DOUT 1.2	Versorgung über (normal)	NO geschlossen/NC offen: Netzbetrieb
Sammelstörung/Combined fault	666/00-00MV/DOUT 1.3	Sammelstörung (normal)	NO geschlossen/NC offen: Nein
Ausgang/Output 1.4	666/00-00MV/DOUT 1.4	N/A	N/A

Objekte pro Seite: 10 ▼

Information displayed:

- **Name:** Name for the respective output.
- **Station/Module/Terminal:** Station name, module name and terminal name that physically belong to the input.
- **Function:** Information that controls the output relay.
 - **Operating mode:** Charging (relay de-energized) / Operational (relay energized)
 - **Supply type:** Battery operation (relay de-energized) / Mains operation (relay energized)
 - **Collective fault:** Collective fault active (relay de-energized) / Collective fault inactive (relay energized)
- **Current relay state:** State of the relay (energized (NO closed/NC open)/ deenergized (NO open/NC closed) and the information displayed

Filter function: The displayed outputs can be restricted to outputs of a specific station using the filter drop-down list above the table.

10.4.6 Modules: Overview + Details

The module overview shows you the status of all modules in the system with module type, address, station affiliation, module name and version number (firmware, hardware).

The status of the modules changes as described in chapter 7.3 on page 15.

Filter function: The modules displayed can be restricted to modules of a specific station using the filter drop-down list above the table.

System / Modulübersicht

Modulübersicht

Station

Auswählen Filter zurücksetzen

STATUS	MODULTYP	ADRESSE	STATION	MODULNAME	FIRMWARE	HARDWARE
●	147	00-0006	666	Core Management Module (CMM)	V0.1.74	V0.1.0
●	154	00-00V4	666	Core Power Supply (CPS)	V4.72.00	V0.0
●	149	00-00FL	666	Core Critical Circuit/CCIF (CCC)	V4.72.00	V0.0
●	155	00-009C	666	Core Emergency Supply (CES)	V4.72.00	V0.0
●	151	00-00CG	666	Core Mainboard (CMB)	V4.72.00	V0.0
●	153	00-00R0	666	Core Auxiliary Supply/VAUX (CAS)	V4.72.00	V0.0
●	148	00-00JQ	666	Core Input Module (CIM)	V4.72.00	V0.0
●	150	00-00MV	666	Core Output Module (COM)	V4.72.00	V0.0
●	152	00-0068	666	Core Circuit Module (CCM)	V4.72.00	V0.0
●	157	00-000K	-	Core Message Advisor (CMA)	V0.1.47	V1.01

Objekte pro Seite: 10

10.5 "Reports" page

Under "Reports" you will find the logs of all tests carried out. The drop-down lists above the table allow you to narrow down the tests displayed by status (OK, error) and type (functional test, capacity test). Details of each test or test result can be accessed by clicking on the link in the Report Type column.

Berichte

Status Typ

Auswählen Auswählen

ID	DATUM / ZEIT	STATUS	BERICHTTYP
4	29.08.2023 12:01	● OK	Funktionstest
3	28.08.2023 12:01	● OK	Funktionstest
2	25.08.2023 14:52	✘ Fehler	Kapazitätstest
1	24.08.2023 13:43	● OK	Funktionstest

Objekte pro Seite: 10

The **detailed view** (see next page) shows the time of the test execution (start, end), duration, preheating time, and the number of modules and luminaires tested with the result "OK" and "error", each separately. Further down, details of the test results are shown, related to the modules of the station. Some of these are collapsed and can be made visible by double-clicking or by clicking on "Show all details".

Detailed view: Function or capacity test

Berichte / Funktionstest Bericht

Funktionstest Bericht

STARTDATUM	ENDDATUM	DAUER	VORWÄRMZEIG
29.08.2023 12:00	29.08.2023 12:01	110 sekunden	0 sekunden

✓ Function test finished successfully

✓ System operational, no errors detected

i Als Ergebnis des Tests gaben die Module folgende Informationen über ihren Zustand zurück:

9 Module	● OK	2 Leuchten	● OK
0 Module	✘ Fehler	0 Leuchten	✘ Fehler

Liste aller Fehlermeldungen während des Tests

FEHLERCODE	QUELLE	STATIONSNUMMER / ADRESSE	NACHRICHT
Keine Daten verfügbar.			

Stationsdetails

1 ●

SERIENNUMMER	N/A	NOMINALE BATTERIEKAPAZITÄT	N/A
BEMESSUNGSBETRIEBSDAUER	N/A	PLATZHALTER	N/A
MODULE (9) ⓘ	9 ● OK 0 ✘ Fehler	LEUCHTEN (2) ⓘ	2 ● OK 0 ✘ Fehler

Module (9) Alle Details anzeigen

STANDARDBEZEICHNUNG	VOM BENUTZER GEWÄHLTER BENUTZERNAME	ADRESSE	STATUS
▼ CMM	CMM	1	● OK
▼ Core Power Supply (CPS)	Core Power Supply (CPS)	900	● OK
▼ Core Critical Circuit/CCIF (CCC)	Core Critical Circuit/CCIF (CCC)	500	● OK
▼ Core Emergency Supply (CES)	Core Emergency Supply (CES)	300	● OK
▼ Core Mainboard (CMB)	Core Mainboard (CMB)	400	● OK
▼ Core Auxiliary Supply/VAUX (CAS)	Core Auxiliary Supply/VAUX (CAS)	800	● OK
▼ Core Input Module (CIM)	Core Input Module (CIM)	600	● OK
▼ Core Output Module (COM)	Core Output Module (COM)	700	● OK
▼ Core Circuit Module (CCM)	Core Circuit Module (CCM)	200	● OK

Drucken

10.5.1 Function and capacity test procedure

In order to better interpret the results of the functional and capacity tests in the report, we will briefly look at the test procedure here.

1. Before the actual test, the system checks several system-relevant parameters, such as the battery voltage, in a so-called pre-test to determine whether a functional test can be carried out safely.
2. If this is the case, all modules of the system carry out self-tests independently at the request of the central office. The respective results are collected by this central office after the end of the self-tests.
3. The line module also carries out a check of the luminaires. This includes an initial and a final check to test whether errors occur when switching the power source and the operating mode. The following values are displayed in the protocol:
 - a. Initial functional test: The luminaires are supplied with mains voltage, with each luminaire in the brightness and operating mode specified by its respective group.
 - b. Final functional test: Here, the luminaires are again supplied with mains voltage, with each luminaire in continuous operation at 100% brightness.

In order to be able to assess the system status before and after the capacity test, a functional test is also carried out at the beginning and end of a capacity test. During the capacity test itself, the battery voltage, current, temperature and power drawn are also continuously documented.

10.6 "Configuration" navigation area

The "Configuration" area in the menu tree can be expanded or collapsed by clicking/tapping. It contains the pages described below with logical settings for system behavior, as well as detailed information about the system and the setup and system change wizards.

10.6.1 Schedules: Details + Overview

Schedules allow time-dependent control of the system. These schedules define a point in time, e.g. for initiating a test. All schedules are displayed in the schedules overview:

NAME	NÄCHSTE AKTIVE PERIODE	ERNEUTES AUFTRETEN	AKTIVIERT	AKTIONEN
Täglich mittags	30.08.2023 12:00	Täglich	-	
Wöchentlicher Funktionstest Freitags 23:00 Uhr	01.09.2023 23:00	Wöchentlich	-	

Objekte pro Seite: 10 ▼

The following is displayed for each schedule:

- **Name:** Name of the schedule (can be freely assigned). Clicking on the name takes you to the detailed view of the schedule, which also allows you to edit it.
- **Next active period:** Time at which the schedule will next become active (e.g. will trigger a test).
- **Recurrence:** Interval at which the schedule repeats.

Possible actions:

- **Create new schedule:** Clicking the "Create new schedule" button will display the detail view shown below, which you can fill in with the details for the new schedule. Click "Save" to add the defined schedule to the system.

- **Edit schedule:** Clicking on the name takes you to the detailed view where you can edit all aspects of the schedule.
- **Delete schedule:** To do this, click the trash can icon on the far right of the row containing the schedule you want to delete.

Schedule detail view (see next page)

- **Name:** Freely assignable name for the schedule
- **Start date/time:** The time at which the schedule "triggers".
- **Recurrence:** Specifies whether and how often the schedule defined by the above time specifications should be repeated (e.g. daily, weekly, monthly, yearly). If "None" is selected, the schedule will only be executed once.
- **Schedule active from/to:** Period within which the schedule should be applied. For example, weekly schedule can be limited to a certain part of the year, eg summer.
- **Indefinite:** If this box is checked, the schedule will repeat indefinitely from the start date.

Schedule details: Example of a time

Konfiguration / Zeitplanübersicht / Details zum Zeitplan

Details zum Zeitplan - 19 Uhr

Name

Startdatum

Erneutes Auftreten ⓘ

Zeitplan aktiv ab

 Unbegrenzt

Zeitplan löschen

Verwerfen

Speichern

Possible actions:

- **Edit schedule:** Make changes and save by clicking "Save".
- **Delete schedule:** To do so, click on the trash can icon at the bottom left.

10.6.2 Scenes: Overview + Details

Scenes control the brightness of the luminaires in one or more groups. A scene contains a brightness setting and can be "active" or "inactive". If the scene is active, all luminaires in the groups affected by the scene are switched to the brightness of the scene. The scenes can in turn be set to active or inactive using switching inputs. This allows any standby luminaires to be switched on using a switching input.

All of the system's scenes are shown in the scene overview. Clicking on the scene name opens the detailed view of the respective scene.

Konfiguration / Szenenübersicht + Neue Szene erstellen

Szenenübersicht

NAME	SZENE AKTIV	HELLIGKEIT	AKTIONEN
BS-Schaltung_1	Nein	80%	

Objekte pro Seite: 10 ▼

Possible actions:

- **Create scene:** After clicking on “Create new scene” in the scene overview, make settings and save by clicking on “Save” at the bottom right.
- **Edit scene:** Click on the name of the scene, make the desired changes in the detailed view and save them by clicking on “Save”.
- **Delete scene:** Click the trash can icon to the right of the scene name line.

Scene detail view

The following properties of a scene are displayed or set here:

- **Name:** Name of the scene
- **Brightness:** Brightness to which all luminaires in the groups assigned to the scene will be switched when the scene is active.
- **Scene elements:** There are the element types “luminaire groups” and “inputs”. Depending on the selection, elements of the relevant type appear under “Select from list”.
 - Add an element by clicking on the “+” to the right of the element name in the left column (see arrow)
 - Remove an element by clicking on the “x” next to the element name in the right column (see arrow)
 - The elements change from left to right and vice versa

System / Szenenübersicht / Szenendetails

Szenendetails - BS-Schaltung 1

Allgemeines

Name: BS-Schaltung 1
Helligkeit: 80 %

Szenenaktivierungslogik

Szene aktiv, wenn Zeitplan: INAKTIV
Szene aktiv, wenn Eingang: INAKTIV
Ausgang aktiv, wenn Szene: INAKTIV

Szenenelemente

Elementtypen: Leuchtengruppen
Schlüsselwörter: Suche

Aus der Liste auswählen

- circuit 1 DS
- circuit 2 DS
- circuit 3 DS
- circuit 4 DS

Derzeitige Elemente der Szene

LEUCHTENGROU-
UPPEN

- circuit 1 BS
- circuit 2 BS
- circuit 3 BS
- circuit 4 BS

EINGÄNGE

- Eingang/Input 1.3 (0)

Szene löschen Verwerfen Speichern

10.6.3 network

The current network settings can be viewed on the "Network" page. The settings are edited using the touch screen on the front of the system (see chapter 11.4 on page 79).

Konfiguration / Netzwerk

Netzwerk

LAN-Einstellungen (Ethernet)

Interface
Aktiv

Methode
Benutzerhandbuch

IP-Adresse
192.168.10.40

Netzwerkmaske
/24 (255.255.255.0) Class C

Standard-Gateway
192.168.5.1

DNS
192.168.5.1

WiFi-Einstellungen (WLAN)

Accesspoint
Aktiviert

SSID
CC24-B115

Passwort
.....

Accesspoint-IP
192.168.178.254

Netzwerkmaske
/24 (255.255.255.0) Class C

Standard-Gateway
0.0.0.0

DNS
192.168.178.254

Aktive WLAN-Geräte

INDEX	HOSTNAME	IPV4	MAC	ZEITSTEMPEL
-------	----------	------	-----	-------------

10.6.4 Setup Assistant

The setup wizard is described in detail in chapter 8.4.2.

10.6.5 Auxiliary power supplies (VAUX)

This page shows the auxiliary power supply (VAUX) available in the system. By default, with the CoreCompact 24, this is exactly one power supply with several terminals, with 24V. These are active by default.

Hilfsstromversorgungen

Station

Auswählen ▼ ↻ Filter zurücksetzen

NAME	STATION	SPANNUNG	STROM	AKTIV
Station 1	Station 1	24.5 V	0.0 A	<input type="checkbox"/>

10.6.6 System changes

Similar to the setup wizard, this page is the entry point to a wizard that detects changes to the installation and helps configure added or removed modules and luminaires. In Chapter 12 you will find more detailed descriptions of how to add and remove modules and luminaires (see sections 12.3 and 12.4 on page 88ff). Changes here can only be made with sufficient rights.

System / System Veränderungen

System Veränderungen

Station: Auswählen ▼ Typ: Auswählen ▼ Status: Auswählen ▼

STATUS	TYP	NAME	ADRESSE	STATION	KONFIGURATION
Getrennt	Luminaire	ILDLS29CC	00-02RB	666	Nicht verändern ▼

↻ Systemveränderungen ermitteln ✓ Konfiguration anwenden

Information displayed:

- **Status:** Status of the luminaire/module. Indicates whether the luminaire/module has been newly added to the system or disconnected from it.
- **Type:** Luminaire or Module
- **Name:** Name of the module, determined from the plant's internal product database.
- **Address:** Unique address in the format XX-XXXX
- **Station:** Indicates the station at which the change was detected.
- **Configuration:** This drop-down list allows you to remove separated objects from the configuration, or to leave the configuration unchanged despite the separation. The latter is useful if luminaires have just been removed due to renovation work.
New objects can be added to the system configuration.

Possible actions:

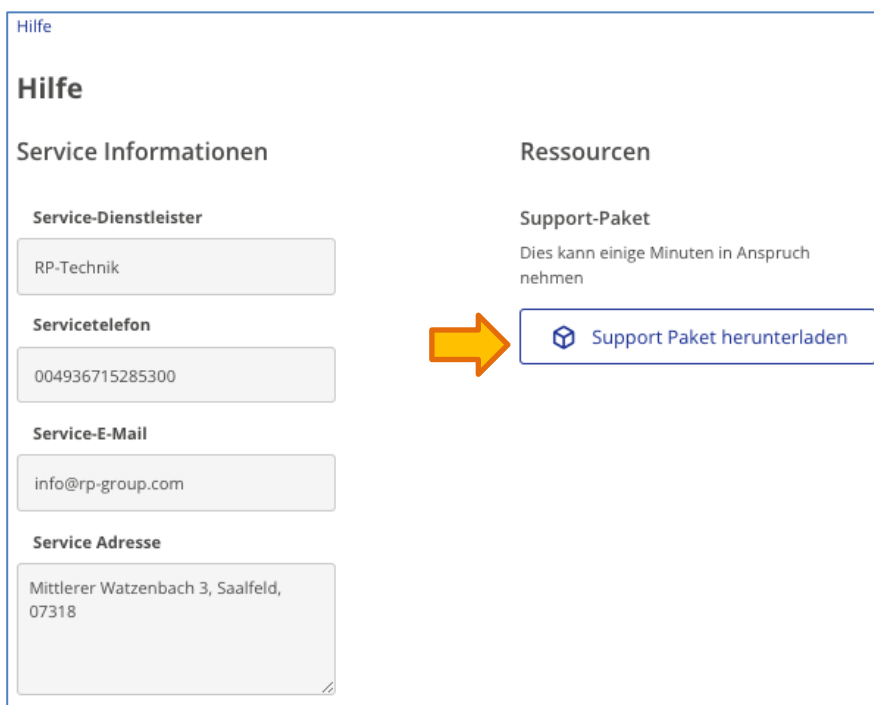
- **Determine system changes:** This button must be pressed first in order to be able to determine all changes in the system.
Attention: Press this button even if changes are already displayed.

- **Do not change:** This option does not change the configuration of the system even if the lamp/module has been disconnected.
- **New Configuration:** This option adds the respective luminaire/module to the system configuration.
- **Remove:** This option removes the respective lamp/module from the system configuration.
- **Apply configuration:** Once you have configured all the necessary changes to the system to your satisfaction, this configuration must now be applied to the hardware.

Note: Luminaires that are not in the product database are given a default name and are assigned to one of the default luminaire groups for continuous operation.

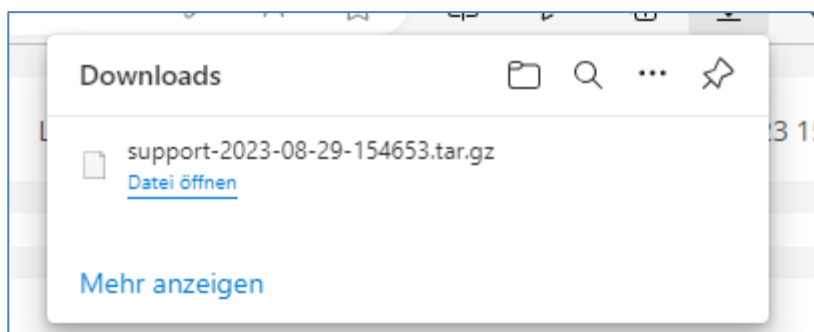
10.7 Help

The Help page displays service information and allows you to download the system database for service and diagnostic purposes.



Possible actions:

- **Download support package:** Click on "Download support package". Your browser will then download a ".tar.gz" file and save it on your device:



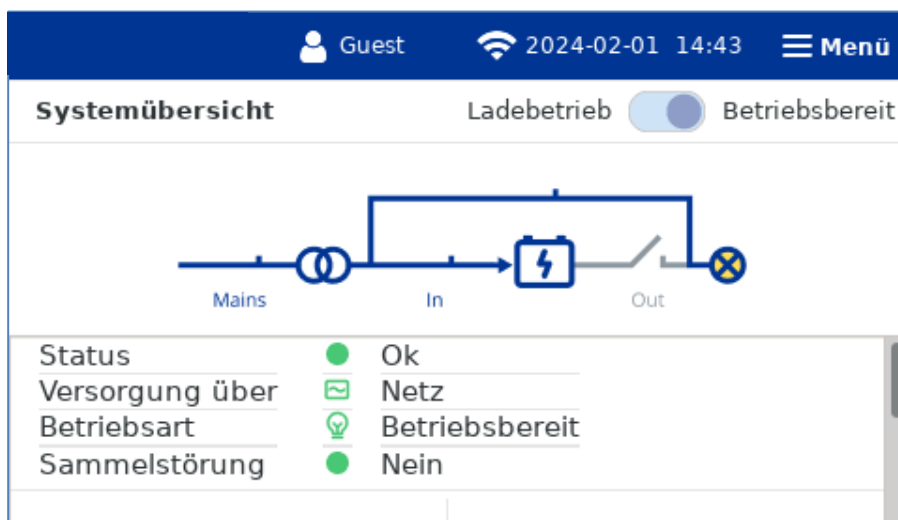
If necessary, send this file to your service provider for assistance.

11 Menu Reference II: Touch Screen (GUI)

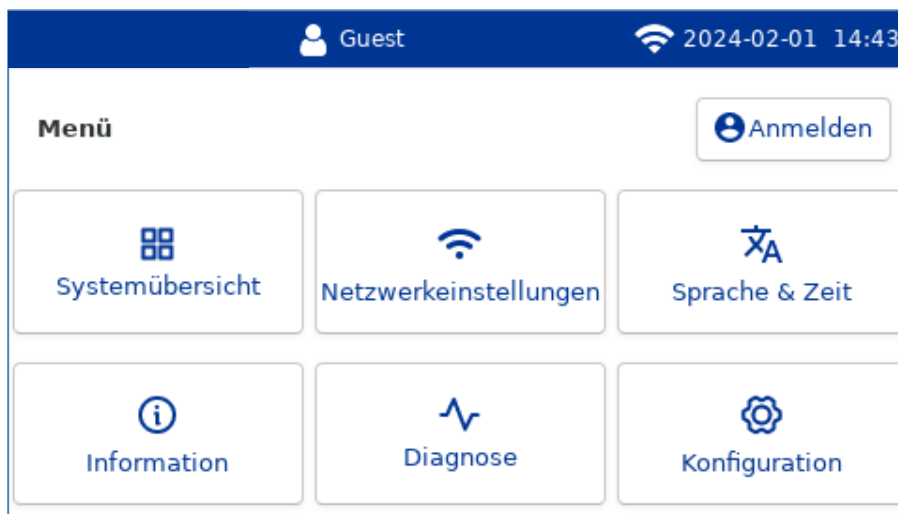
11.1 System overview

The System Overview page contains

- The **operating mode switch** (BAS, blue slider top right): Switch between “Charging” and “Operational”.
- Schematic **representation of the operating state** and the energy flow from the mains and battery to the luminaires, or from the mains to the battery (charging).
- In the lower area: Further **information on the operating status**. Four lines are displayed, the others can be made visible by scrolling/swiping upwards.
- In the upper right corner there is a “**Menu**” button to access further functions.



11.2 menu



The menu allows access to the functions shown here, which are described in the following sections. Most of them require you to log in with a user name and password in order to use them. To do this, use the "Log in" button before you continue (see also chapter 8.2.2 on page 24). Then select the desired function by tapping the relevant button. If the menu page is not displayed in

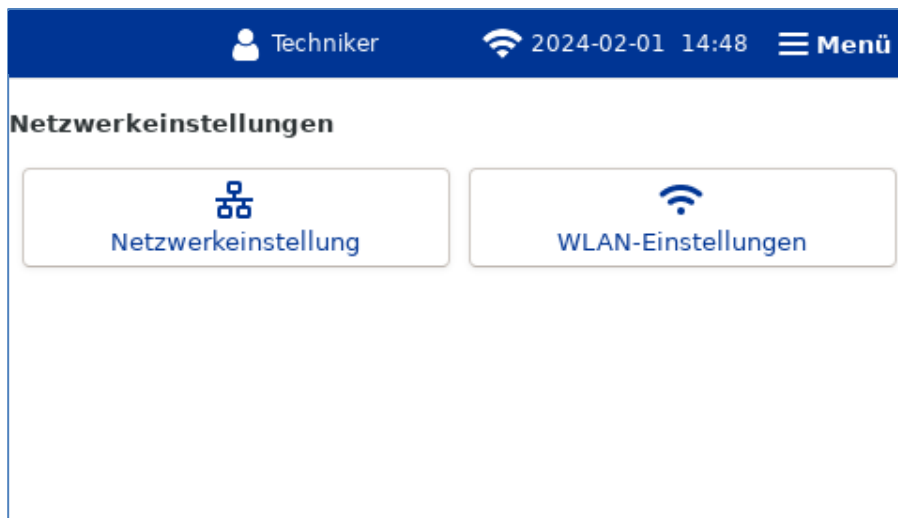
German, first select German as the language using the language selection ("Language & Time"/"Date & Time" button, see also chapter 11.5.1 on page 80).

11.3 Registration

Registration is described in detail in chapter 8.2.2 on page 24.

11.4 Network settings

The Network Settings area allows you to configure the settings for wired network (LAN) and WLAN. Select the desired area by tapping.



11.4.1 LAN – Settings for wired network



Possible actions:

- **Change LAN network settings:** Make the desired changes and tap Apply.

11.4.2 WLAN (Wi-Fi) – Settings



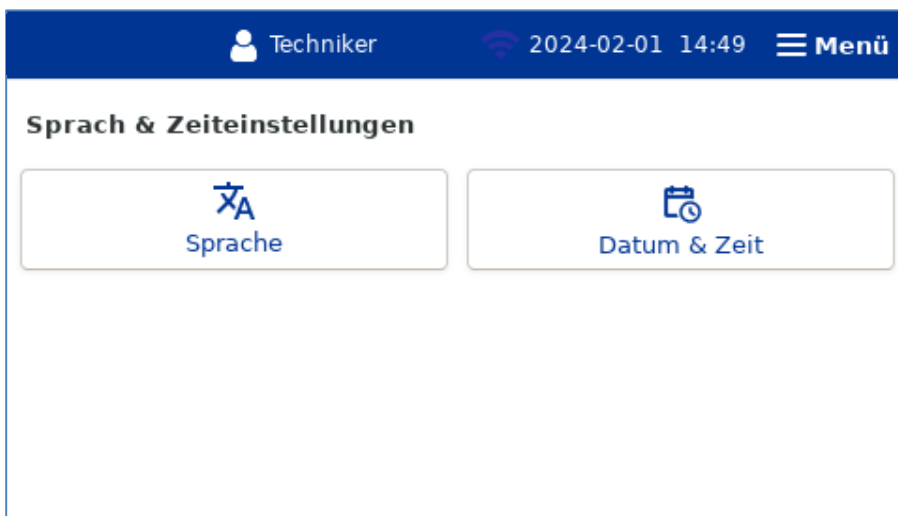
Possible actions:

- **Change Wi-Fi network settings:** Make the desired changes and tap "Apply". It may take a moment for the changes to take effect.
- **Activate/deactivate WLAN interface:** Tap the "ON" or "OFF" button. The text on the button shows the current switch-on state of the WLAN interface.

Note: If you connect to the station via WLAN, your browser (depending on the version) may not automatically find the station's WebUI . In this case, enter the displayed "Access Point IP" into the browser.

11.5 Language and time

In this area you will find settings for language and time/date. Tap the relevant button to open the desired settings.



11.5.1 Language

Several languages are available to choose from using the "Select language" drop-down list.

Possible actions:

- Select the desired display language by tapping the arrowhead and tap Apply .

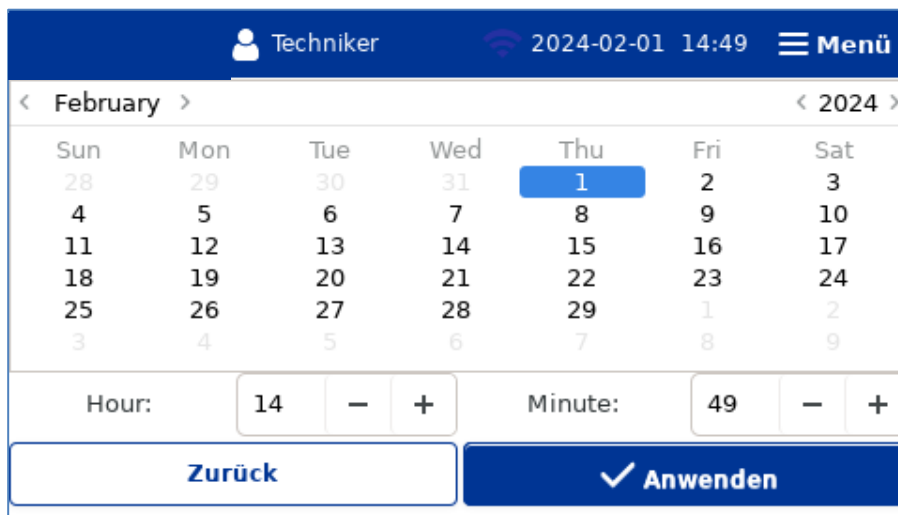


11.5.2 Date and time

This page allows you to set the date and time in the system.

Possible actions:

- Adjust the month and year by tapping the arrow buttons on the top left and right and select the corresponding day. You can adjust the hours and minutes by tapping + and -. Tap " Apply " to save the changes you have made and apply them to the system.



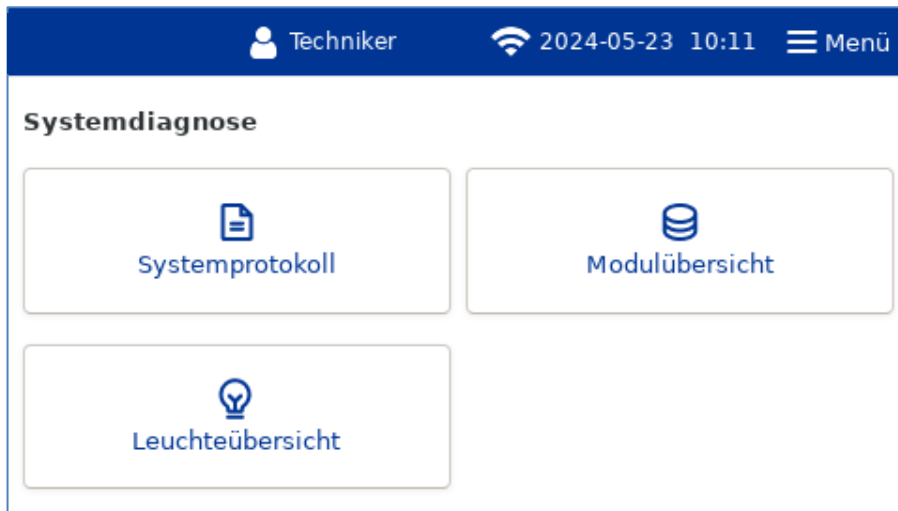
11.6 information

This page shows the current firmware version and master data of the system. Swipe/scroll on the page to make additional rows visible.

Stationsinformationen	
Version 1.1.1 (277)	
Stationsnummer	80000
MAC-Adresse	00:0c:c6:05:29:a6
Produktionsnummer	ANrRP
Bestellnummer	ANRKunde
Homepage des Servicepartners	www.rptechnik.de
Nächste Wartung	2025-02-06
Produktionsdatum	2024-02-06

11.7 System diagnostics

This area is divided into three parts: system protocol, module overview and luminaire overview .



11.7.1 System log

The system log shows the most recent events that have occurred, such as test executions, operating mode changes, etc., in chronological order, with the most recent entries first. Swipe/scroll to access older entries. A complete overview of the system log is available via the WebUI .

Possible actions:

- **Acknowledge entries:** If there are error states in the system that need to be reset, click on "Acknowledge entries". See also chapter 9.4 on page 50.

Techniker 2024-05-23 10:12 Menü		
Letztes auftreten	Code	Nachricht
2024-05-24 01:16	20008	Batterie getrennt
2024-05-24 01:16	40013	Sammelstörung aktiviert
2024-05-23 14:43	6004	Installationsassistent abgeschlossen
2024-05-23 14:43	40010	Tiefentladung Stufe 2 deaktiviert
2024-05-23 14:43	40008	Tiefentladung Stufe 1 deaktiviert
2024-05-23 14:43	40004	Kritischer Kreis OK
2024-05-23 14:43	40002	Netzausfall deaktiviert

← Zurück
✓ Einträge quittieren

Attention: "Acknowledge entries" acknowledges all errors and warnings present in the system, not just those currently displayed on the page. Since not all existing errors in the system can be displayed on the GUI, we recommend using the system log in the WebUI with the corresponding filter function "Errors and warnings".

11.7.2 Module overview

This page displays the modules detected by the hardware and connected to the Core-BUS. The status of the modules changes as described in chapter 7.3 on page 15.

Techniker 2024-05-23 10:13 Menü			
Status	Station	Modulname	Adresse
OK ●	80000	Core Management Module (CMM)	00-00Y9
OK ●	80000	Core Power Supply (CPS)	00-00V4
OK ●	80000	Core Critical Circuit/CCIF (CCC)	00-00FL
OK ●	80000	Core Emergency Supply (CES)	00-009C
OK ●	80000	Core Mainboard (CMB)	00-00CG
OK ●	80000	Core Auxiliary Supply/VAUX (CAS)	00-00R0
OK ●	80000	Core Input Module (CIM)	00-00JQ

← Zurück

The columns provide the following information:

- **Status:** Status of the modules (OK/faulty)
- **Station:** Indicates the number of the station to which this module belongs.
- **Module name:** Module name according to the station's product database.
- **Address:** Six-digit number of the module (format XX-XXXX), which can also be found on the module.

11.7.3 Luminaire overview

This page displays the luminaires connected to the circuits and detected. The status of the luminaires changes as described in chapter 7.3 on page 15.

Techniker 2024-05-23 10:14 Menü			
Status	Station	NAME	Adresse
OK ●	80000	default BS lamp 4/1	00-05E1
OK ●	80000	default BS lamp 4/2	00-021A
OK ●	80000	default BS lamp 4/3	00-01YG
OK ●	80000	KBU529CC 2/1	00-0205
OK ●	80000	KBU529CC 4/4	00-021J

← Zurück

The columns provide the following information:

- **Status:** Status of the lamp (OK/faulty)
- **Station:** Indicates the number of the station at which this luminaire is operated.
- **Name:** By default, the luminaire type + circuit to which the luminaire is connected/number of the luminaire in the circuit. This name can be changed in the WebUI .
- **Address:** Six-digit number of the luminaire (format XX-XXXX), which can also be found on the luminaire.

11.8 configuration


11.8.1 menu


The Configuration page brings together some important functions for maintaining the system.


Far-reaching and security-critical changes can be made. Therefore, always proceed with caution, use common sense and, ideally, secure the system configuration beforehand by downloading the databases.


Techniker
2024-05-23 10:16
Menü


Aufbau


 Software-aktualisierung


 Einrichtungsassistent


 Neustart


 Werkseinstellungen

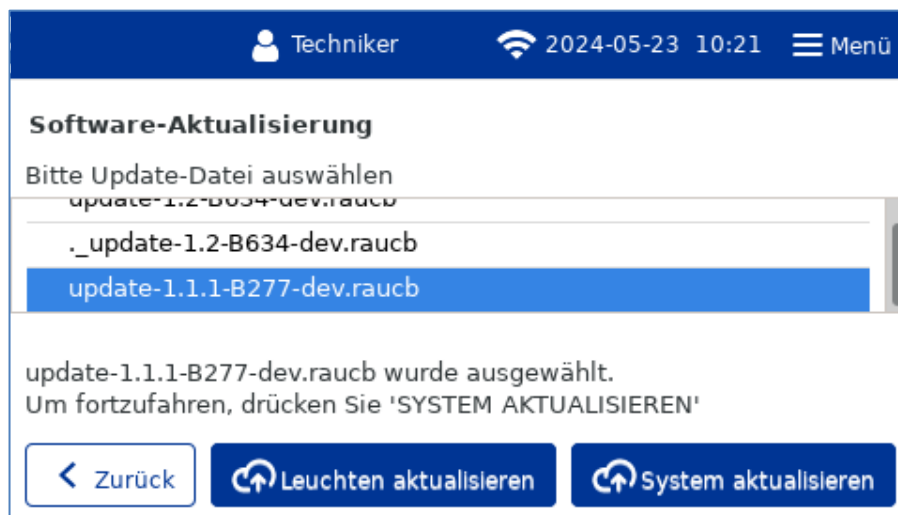

 Datenbank herunterladen

11.8.2 Software update

This page can be used to conveniently update the central battery system, called "System", as well as the luminaires . To install a new software version, proceed as follows:

1. First open the front of the system and insert a USB stick with the software update to be installed in the main directory into the USB slot of the system.
2. Open the "Software Update" page. The device will now search the USB stick for software updates.
3. Select the file containing the desired software update from the drop-down list.
4. Tap Update System.
5. The orange LED on the front of the system luminaires up and the update is being carried out. It is finished when the orange LED goes out again and the GUI displays a corresponding message.
6. The system will inform you that the USB stick can now be removed. Tap "Remove USB stick" and pull out the stick.
7. Tap "System Restart". The restart completes the system software installation.

Attention: Make sure that the system is not in test/emergency mode before performing an update.



A notice: Sometimes it can take a few seconds until the USB stick and the file names it contains have been read and can be displayed. To do this, briefly exit the "Software Update" submenu and open it again.

Note: The software update may also include a luminaire software, described in the next section.

Note: If you save the ". raucb " update file to your computer using a MAC USB-Stick, a ghost file will also be created whose name begins with "._ ". This is shown in our example image. DO NOT select this for the update, otherwise it will fail.

If the system update also includes a luminaire update, you can also find this in the update's release notes.

To install a new luminaire firmware version, proceed as follows:

1. Tap Update Luminaires.
2. The GUI now shows when the update was started, which can take about 30 minutes.
3. In exceptional cases, the system reports if luminaires could not be updated and lists them. This allows you to identify them and check the wiring if necessary. If this is faulty, the system's communication with this luminaire and thus the update may be interrupted. If in doubt, it may help to repeat the update.

Attention: If the luminaire status is changed during the luminaire -update , this can interrupt the update or lead to an incorrect update. Therefore, make sure that no automatic functions are carried out during the update and that no one changes the system configuration.

Attention: To perform the luminaire update, the system must be in Operational mode.

11.8.3 Setup

Assistant

The setup wizard is described in detail in chapter 8.4.2 on page 28.

11.8.4 Restart

This page allows you to restart the system without disconnecting the battery and the power supply.

Possible actions:

- To restart the system, tap Restart and follow the on-screen instructions.



11.8.5 Factory settings

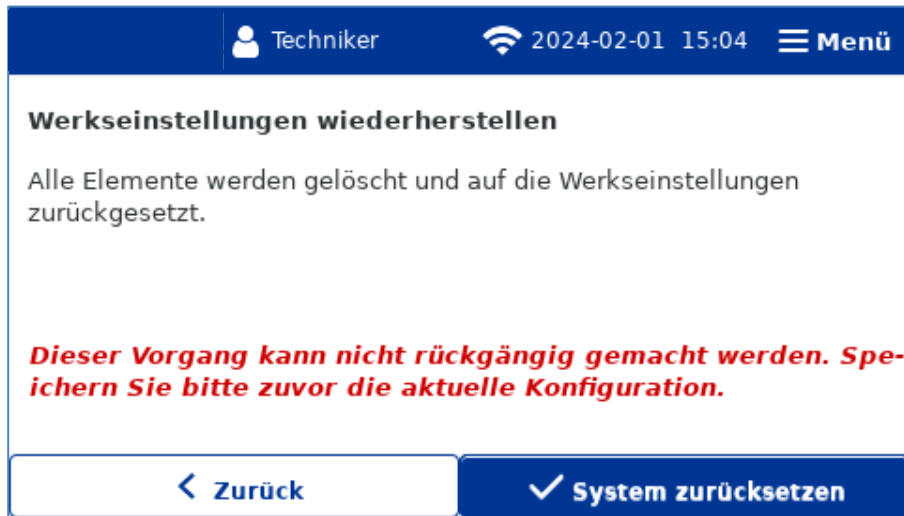
Attention: In order not to permanently impair emergency operation, this function may only be carried out by trained specialist personnel who can then properly configure and accept the system again!

To restore factory settings, tap "Reset system" and follow the on-screen instructions.

Attention: This will reset your entire system to factory settings and all changes and configurations will be lost.

Please be careful, as this will delete everything and you will also lose all reports and documentation of tests and maintenance that are required by law! You may then be vulnerable to legal action.

Under all circumstances, first save the support package from the WebUI help page or use the "Download databases" function in chapter 11.8.6 on page 87 before resetting the system to the factory settings!



Note: After resetting, it may be necessary to completely power down the hardware (switch off power) to completely remove the configurations from all modules.

11.8.6 Download database

This function corresponds to downloading the system databases to your device from the web browser (see Chapter 10.7 on page 77).

Attention: Before you access the page, insert a USB stick with at least 8GB capacity (older models may not be supported by the system) with at least 500MB of free memory into the USB slot of the system.

Possible actions:

- Go to this page and follow the on-screen instructions.



12 Working on the system

12.1 Check battery voltage

To check the battery voltage, you will find measuring contacts on the front of the system. See Chapter 6 on page 13.

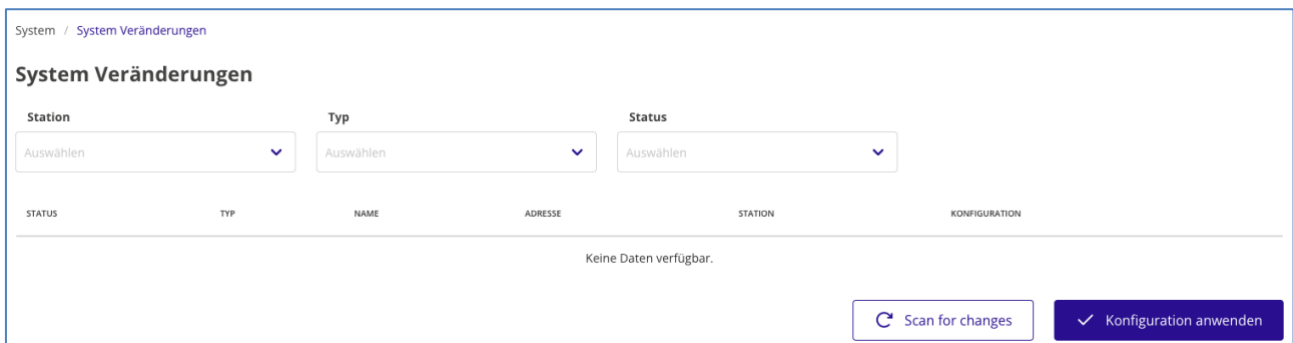
12.2 Shut down system

This process is described in chapter 9.2.2 on page 49.

12.3 Add luminaires and/or modules

To add luminaires or modules to your system, proceed as follows:

1. Switch off the system (see chapter 9.2.1).
2. Connect the additional luminaires or modules electrically.
3. Put the system back into operation (see chapter 8.2.1).
4. Wait for the boot process and close and restart the web browser on your device.
5. Log in to the web interface as a technician (Chapter 8.3).
6. In the menu, navigate to the "System Changes" page (chapter 10.6.6).



7. Click "Detect system changes" to search for changes in the system.



8. The "System Changes" page shows you a table with all newly detected luminaires and modules.

System / System Veränderungen

System Veränderungen

Station Typ Status

STATUS	TYP	NAME	ADRESSE	STATION	KONFIGURATION
Neu	Luminaire	KMU519CC	00-01PK	666	Neue Konfiguration ▾

- In the "Configuration" column, select "New Configuration".
- Click on "Apply configuration" and follow the instructions on the screen. The new luminaires and modules will be added to the system and configured, then a functional test will be carried out to guarantee functionality.

Konfiguration

Sind sie sicher, dass sie diese Konfiguration für alle Module anwenden möchten?

- After successful configuration and testing, exit the wizard and make any adjustments (group assignment, scene assignment, etc.) for the new luminaires manually.

Herzlichen Glückwunsch!

Sie haben Ihre Erstinstallation erfolgreich abgeschlossen. Unten finden Sie die Details.

✓ Ihr System wurde erfolgreich konfiguriert, es traten keine Fehler auf.

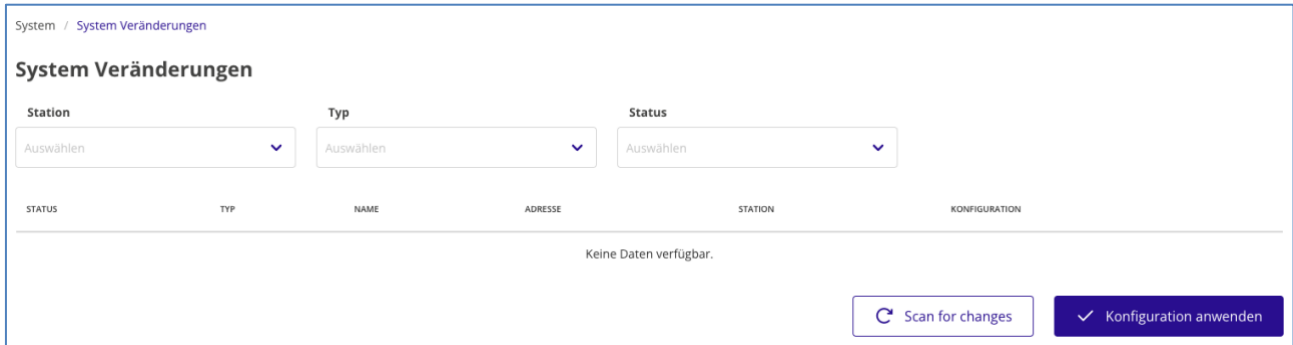
✓ Der Funktionstest war erfolgreich, es traten keine Fehler auf.

12.4 Remove luminaires and/or modules

To remove luminaires or modules from your system, proceed as follows:

- Switch off the system (see chapter 9.2.1).
- Remove the additional luminaires or modules from the installation.

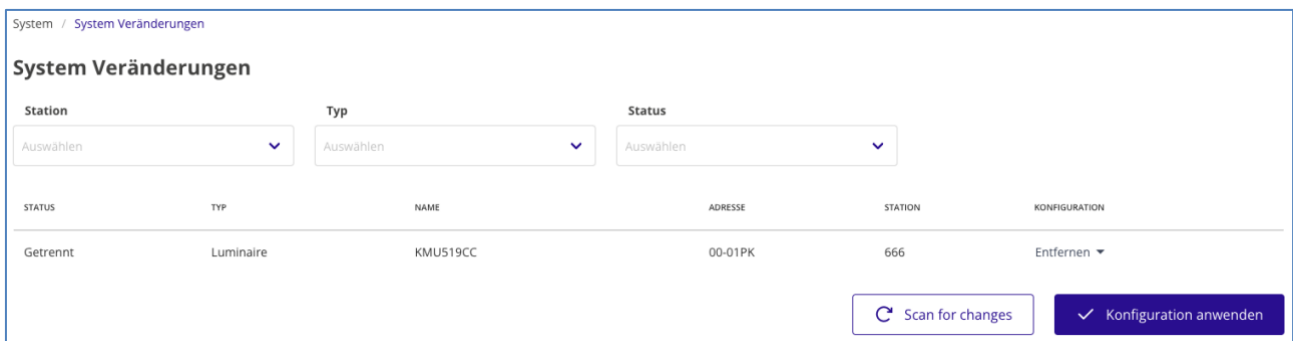
- Put the system back into operation (see chapter 8.2.1).
- Wait for the boot process and close and restart the web browser on your device.
- Log in to the web interface as a technician (Chapter 8.3).
- In the menu, navigate to the "System Changes" page (chapter 10.6.6).



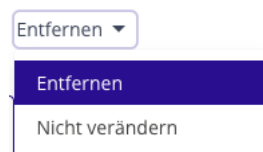
- Click "Detect system changes" to search for changes in the system.



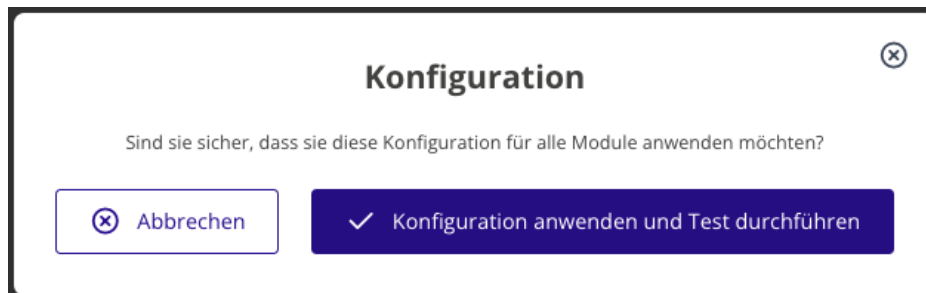
- The "System Changes" page shows you a table with all the luminaires and modules that are no longer found in the system.



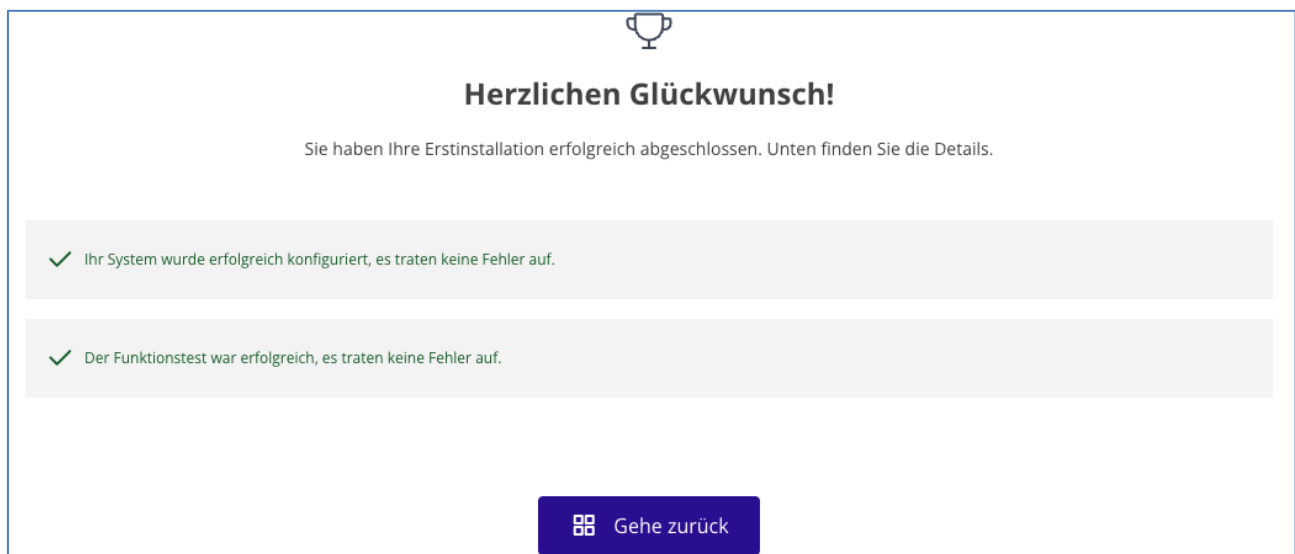
- In the "Configuration" column, select "Remove" if you want to remove the light/module. If the light/module has only been removed temporarily, select "Do not change" to keep it unchanged in the system configuration.



10. Click on "Apply configuration" and follow the instructions on the screen. The corresponding luminaires and modules will be removed from the configuration and a functional test will then be carried out to guarantee functionality.



11. After successful configuration and testing, exit the wizard.



12.5 Switch on system

This process is described in chapter 8.2.1 on page 23 and 9.2.1 on page 49.

13 Complete shutdown (disconnection) of the power supply system

See procedure in section 9.2.2 on page 49.

14 Operation, maintenance and care of batteries

The system must be subjected to an annual inspection in accordance with the applicable national and international standards ÖVE/ÖNORM E 8002 and ÖVE/ÖNORM EN 50272-2. The batteries used in this system are so-called maintenance-free, chemically inert lithium iron phosphate (LiFePO₄) batteries.

Note: Opening the battery will destroy it and thus the battery itself.

14.1 Batteries with battery management system

final discharge voltage of the battery associated with the discharge current must not be undercut. For this purpose, the system's battery is equipped with a battery management system that ensures deep discharge protection. After discharges, including partial discharges, normal mains voltage operation must be restored as quickly as possible, which leads to the batteries being recharged.

14.2 Care and inspection

The battery must always be kept clean and dry to avoid leakage currents. All foil coverings on the outer surfaces of the batteries should only be cleaned with a damp cloth with distilled water without additives; the use of cleaning agents should be avoided. In addition to the automatic recording of battery voltage and ambient temperature, which the system automatically carries out, the following values should be checked/measured and recorded regularly:

- Battery voltage between plus (red) and minus (black) at each of the four contacts of the battery connector,
- Surface temperature of the battery block,
- Ambient temperature at the battery installation location,
- Condition of the fuse including plug connection in the battery cable (should be free of corrosion and defects).

Furthermore, the following visual inspections must be carried out once a year:

- Check that all plug contacts of the wiring between the batteries and between the batteries and the system are firmly seated.

For further information on the care and maintenance of your batteries, please refer to the relevant documentation.

14.3 Initial inspection

The initial test must be carried out by the installer when the system is put into operation in accordance with DIN EN 50171:2022-10 (VDE 0558-508:2022-10:2022-10). Initial tests must be carried out in accordance with local, national regulations and include the following points:

- Checking the correct selection of equipment. Compliance with the selectivity of the emergency power supply distribution network.
- Checking the correct selection and design of the automatic transfer device (ATSD)
- Checking the setting values of the protective devices by visual inspection
- Testing the battery for sufficient capacity. When discharging the battery, the system must be operated with the actual load for the specified time. The results must be recorded. Equipment that does not pass these tests must be tested again. If the repeat test is not sufficient, the system must not be put into operation. (**see battery measurement report**)
- Testing the function by interrupting the power supply

- Testing of battery-related system components according to EN IEC 62485-2
- Inspection of the installation rooms with regard to fire protection , equipment and facilities.

Tests may only be carried out by qualified electricians who are qualified and trained to carry out tests.

14.4 Recurring testing

Periodic inspection must be carried out in accordance with local/national regulations. If there are no local/national regulations, the following intervals are recommended:

Automatic Transfer Device (ATSD):

- Functional test with load transfer: **weekly**
- An automatic function test must be programmed by the installer/operator during installation/commissioning
- Testing by simulating a power failure: **every six months**
- Disconnect the mains voltage supply by disconnecting the system's fuse or operating the mains switch. The switch must be switched on again after checking its function.

Protective devices:

- Visual inspection of setting values: **annually**
- Check the battery voltage with a suitable measuring device according to Chapter 5 on page 12
- Check the battery current (am status screen m) by simulating a power failure (see "Testing by simulating a power failure") with a measuring device as per Chapter 5 on page 12 or a suitable & calibrated clamp ammeter

Batteries:

- Functional test for a sufficient time with the full consumer load: **monthly**
- This point is fulfilled by weekly functional tests.
- Capacity test for the rated operating time with the full consumer load: **annually**
- See maintenance schedule

Protection against electric shock:

- at the mains input by measurement: every 3 years

In addition to the requirements of EN IEC 62485-2, Section 13, the battery must be charged according to the manufacturer's instructions and then subjected to a discharge test after 24 hours of trickle charging. During discharge, the central emergency power supply system must be loaded with the full consumer load and the rated operating time must be achieved.

14.5 Testing before commissioning

After completion and installation of the central emergency power supply system, the installer must carry out the tests in accordance with E IEC 60364-6:2016 (VDE 0100-600:2017-06) in accordance with Section 6.4. This includes inspecting the fixed electrical system before the central emergency power supply system is put into operation and also testing and measuring, preferably in the following order:

- Continuity of the ladder
- Insulation resistance of the electrical system
- Insulation resistance to confirm the effectiveness of protection by SELV, PELV or by protective separation
- Resistance Impedance of insulating floors and insulating walls
- Checking the voltage polarity
- Test to confirm the effectiveness of protection by automatic power cut-off
- Testing to confirm the effectiveness of the additional protection
- Testing the phase sequence of the outer conductors
- Functional test
- Voltage drop

If a fault is discovered during testing and measuring, this test and any previous test that may have been influenced by the fault shall be repeated after the fault has been rectified.

If the installer of the central emergency power supply system is not the installer of the fixed electrical installation, he must have the test report on the initial test of the parts of the fixed electrical installation for which the system is intended for the initial test of the emergency power supply system.

Compliance with the requirements of the manufacturer's operating instructions must be determined and confirmed by inspection before testing and measuring. These include in particular:

- The nature of the installation site, standard-compliant labelling and equipment (operating devices, personal protective equipment, tools, aids)
- Protection against penetration of solid foreign bodies and liquids
- Protection against external mechanical influences
- Compliance with the ambient temperature (lower and upper limit)
- Compliance with the maximum humidity
- Ensuring the necessary ventilation (for gassing batteries)
- The EMC environment (A or B)
- Determining whether special operating conditions may affect the operational safety and functionality of the central safety power supply system, e.g. vibrations, unusual shocks and impacts, corrosive atmospheres, strong electrical or magnetic fields, risk of explosion
- The availability of the necessary operating and maintenance areas for the central safety power supply system
- The correct selection of the equipment of the safety power supply system and checking whether the user's requirements have been met by the manufacturer
- Checking the setting values of the protective devices

A system which does not pass the test according to DIN EN 50171 (VDE 0558-508):2022-10 Section 8.2.5 Subsection g)* must **not** be put into operation!

*Checking the battery for sufficient capacity. When discharging the battery, the system must be operated with the actual load for the specified time. The results must be recorded. Equipment that does not pass this test must be tested again. If the repeat test is also not passed, the system must not be put into operation.

14.6 Procedure in case of faults

If there are any faults in the battery pack or the charging device, customer service must be called immediately. A service contract with your dealer makes it easier to identify errors in good time.

Further errors, their causes and possible solutions can be found in Chapter 15 on page 96.

14.7 Decommissioning, storage and transport

If batteries are stored for a longer period of time (more than 3 months) or taken out of service, they should be stored at approximately 70% of their capacity in a dry and cool room (-20 to +35°C). In order not to negatively affect battery performance, the batteries must be recharged after 3 months; after more than 6 months, the batteries must be discharged and recharged.

An overview of the applicable transport regulations for lithium-ion -batteries can be found in ZVEI leaflet No. 36, December 2020 edition, "Shipping of lithium-ion batteries and lithium-ion batteries in/with devices: Implementation of dangerous goods regulations".

Attention: The cells or batteries must be protected against short circuits during storage.

14.7.1 Transport of lithium-ion batteries

For batteries with a nominal energy of up to 100 Wh, simplified requirements apply due to an exception in the dangerous goods law. Batteries with a nominal energy of more than 100 Wh, on the other hand, must always be treated as dangerous goods of class 9. Since the RP lithium-ion batteries supplied for this system meet UN standard 38.8, the simplified regulations apply to them.

It is also important to note whether the batteries are packaged without equipment (UN 3480), in equipment (UN 3481) or with equipment (UN 3481). Air transport, regulated by the IATA DGR, is carried out in accordance with VA 965 Part IA, VA 966 Part I, VA

967 Part I. Road/rail transport, regulated by the ADR/RID, is carried out as "fully regulated" dangerous goods in accordance with VA P903.

14.7.2 Transport of defective lithium-ion batteries

SV 376 and VA P908 apply to defective batteries. SV 376 and VA 911 apply to "critically" defective batteries (foreseeable danger during transport).

The following are considered defective:

- Cells or batteries that have been identified as defective for safety reasons,
- leaking or degassed cells or batteries,
- Cells or batteries that can no longer be diagnosed before transport and
- Cells or batteries that have suffered external or mechanical damage.

15 Users in the system and their rights

There are different users in the system with different rights for displaying and changing data.

These include users, **technicians**, **maintenance** and **caretakers**.

The user technician can make all configurations for setting up the system.

The maintenance user can perform tests and, in case of defects, replace and reconfigure the hardware.

The caretaker user can view all data in the system, but cannot make any changes to it.

If you are not logged in, you can only view the system overview page and download the support data from the system.

16 FAQs and Troubleshooting

16.1 Frequently Asked Questions (FAQ)

16.1.1 Is a short circuit in the circuit harmful to the system?

No. The station detects a short circuit in the circuit and switches the circuit off immediately. The system is not damaged. To return the system to a proper state, proceed as follows:

1. Put the system into charging mode, shut it down and remove the fuses.
2. Eliminate the cause of the short circuit.
3. Boot up the system and reset the error message (see section 9.4 on page 50).
4. Return the system to the "Operational" state.

The system will switch the circuit back on when the BAS is set to "Operational".

Note: Switching to charging mode is necessary to restart the circuit. Resetting the error message alone is not sufficient. This is a safety measure.

16.1.2 Will the system start if I connect the batteries?

No. The system only starts up completely when the mains power is present. This measure prevents the system from deeply discharging the battery if there is no mains power (eg at the time of installation). This is easily visible when the green LED on the front of the module flashes.

Once the hardware has fully booted, the green LED on the front of the slot will luminaire up continuously.

16.1.3 Why is my fan running?

When switching on the system with many luminaires, high peak currents can flow, which cause the power supply fan to switch on. Because the temperature sensor rises/falls with a delay, the power supply has a fan run-on time of 10 minutes for safety reasons.

This means that even if the power is removed, the fan continues to run for 10 minutes to prevent overheating.

If a certain temperature limit in the system, e.g. in the battery compartment, on the power supply, etc. is exceeded, the fan also runs.

In addition, the fan generally runs periodically for short periods to ensure air exchange and prevent dust deposits.

16.1.4 Why do I still see a luminaire that has already been removed?

If the system change process was interrupted, it is possible that luminaires that were removed, still appear in the function test. To fix this, simply restart the system and the tables will be cleaned up.

16.1.5 What do I do if communication to modules or luminaires is interrupted? Or if this is displayed in the function test?

If the connection to modules or luminaires has been interrupted temporarily or permanently, e.g. due to renovation work, they will be displayed as "missing/communication interrupted" in the function test. In the case of short-term interruptions, it may be sufficient to carry out another function test to correct the "error".

To reactivate or replace faulty modules or luminaires in general, use the System Change Wizard, see chapter 10.6.6 on page 76, to remove them from the system or add them again.

16.1.6 Why are my modules and luminaires still showing as faulty?

The status of the modules and luminaires changes as described in chapter 7.3 on page 15.

If the errors are acknowledged in the system log, for example, but not resolved, they will reappear immediately or during the next function test. Even if the next function test was error-free but the errors were not acknowledged, they will still be displayed accordingly on the system, module and luminaire overview page.

16.1.7 How can I move luminaires between circuits?

If you want to move a light(s) from one circuit to another, use the system change assistant, see chapter 10.6.6 on page 76. Proceed as follows:

1. Disconnect the luminaire(s) from the current circuit and remove them from the system using the system change assistant
2. Connect the luminaire(s) to the new circuit and reconfigure using the System Change Wizard.
3. Then assign the luminaire(s) in the system to the desired group(s)

Note: If a luminaire is disconnected during operation, the system will issue an error message.

16.1.8 My system is not behaving as configured

If there was an error when applying the configuration, or if the system does not behave as expected for unknown reasons, you can run the System Change Wizard without changing anything on the hardware.

Scan for changes as usual and apply them, even if no changes were detected. This will roll out the previously existing configuration again and perform a test.

If the system still does not behave as expected, it may be worth checking the assignment of the luminaires to the luminaire groups and the scene configuration.

16.1.9 Why do I see system status messages in the system log after configuration?

Since the modules operate decentralized, the system log only displays system status messages sent by the modules.

If these are reprogrammed, the old configuration is deleted, and the new one is installed.

To take changes such as additional modules etc. into account, the modules then determine the system states again and report the results to the system log. Accordingly, entries such as the following are to be expected:

Überblick / Systemprotokoll

Systemprotokoll

Station

Status

Filter zurücksetzen

ZEITPUNKT DES LETZTEN ERGEBNISSES	STATUS	QUELLE	NACHRICHT (NACHRICHTEN CODE)	BESTÄTIGT
26.06.2024 12:49	●	manager-service	Funktionstest abgeschlossen (6013) [Show report]	-
26.06.2024 12:49	●	CMM	Tiefentladung Stufe 2 deaktiviert (40010)	-
26.06.2024 12:49	●	CMM	Tiefentladung Stufe 1 deaktiviert (40008)	-
26.06.2024 12:47	●	manager-service	Funktionstest gestartet (6012) [Show report]	-
26.06.2024 12:47	●	manager-service	Installationsassistent abgeschlossen (6004)	-
26.06.2024 12:46	●	CMM	Kritischer Kreis OK (40004)	-
26.06.2024 12:46	●	CMM	Netzausfall deaktiviert (40002)	-
26.06.2024 12:46	●	CMM	Normalbetrieb (40006)	-
26.06.2024 12:45	●	COAL	Anlagen-Konfiguration erfolgreich erstellt (2001)	-
26.06.2024 12:45	●	COAL	Anlagen-Konfiguration wird erstellt (2000)	-

Objekte pro Seite: 10

Vorherige
1 2 ... 19
Nächste

als CSV-Datei herunterladen

Einträge quittieren

In order not to negatively affect the charging performance, the battery voltage is determined at longer time intervals. The entries "deep discharge 1/2 deactivated" may therefore only appear after one or two minutes or during a function test shortly after the configuration change.

16.2 System messages

Here is an overview of the most important system messages.

In the event of an error, it is always helpful to download the support package to resolve the error so that you can provide it to support if there are any unclear points.

code	Message text	Cause/Remedy
50	Functional test detected error	Check test protocol
52	Function test error: System in emergency mode	System was in emergency mode at start-up/during the function test. Check whether emergency mode has ended and repeat the test.
53	Function test error: System in deep discharge	The system was in deep discharge at start-up/during the function test. Check whether deep discharge has ended and repeat the test.
55	Function test error: Battery voltage too low	Battery voltage was too low when starting the function test. Check whether the battery is sufficiently charged and repeat the test.
57	Function test error: System critical circuit activated	Critical circuit was active at start/during the functional test. Check whether critical circuit is OK and repeat test.
63	Function test error: System has not switched to battery operation. Check backplane relay K1.	The backplane relay K1 has been damaged. In this case, the function test is aborted halfway through because battery operation cannot be checked.
71	Communication lost to all luminaires on circuit X. Check fuses, luminaires and wiring.	Check fuses, luminaires and wiring on circuit X.
72	Short circuit in circuit X	Check wiring and luminaires on circuit X.
6008	System update faulty	Update file faulty. Re-download file and repeat update.
6019	System update not successful, please try again	Error during system update. Repeat update or contact system administrator.
20002	Fan speed too low (X rpm)	Please perform functional test.
20003	Input fuse circuit X defective	Check fuses. Then perform functional test.
20004	Earth fault circuit X	Please perform functional test.
20005	External voltage on circuit X	Check the wiring. Then perform a functional test.
20006	Circuit X Output fuse defective or short circuit	Check wiring and fuses. Then perform a functional test.
20007	No communication with neighboring module X	Please perform functional test.
20008	Battery disconnected	Check battery wiring. Then perform function test.

20009	No communication to all luminaires on circuit X	Please perform functional test.
30000	Battery temperature too high (X °C)	Ambient temperature too high, fan defective or dirty, overload: check temperature, fan, luminaires and wiring.
30001	Circuit power too high (XW)	Overload: Check luminaires and wiring.
30002	Circuit X current too high (YA)	Overload or short circuit: Check luminaires and wiring.
30003	Circuit driver temperature too high (X °C)	Overload: Check luminaires and wiring.
30004	Current of auxiliary voltage source Vaux too high (XA)	Overload: Check connected loads and wiring.
30005	Power supply temperature too high (X °C)	Fan defective or dirty, room temperature too high, system overload: check fan, luminaires and wiring.

17 Technical data

Performance data

System type / serial number CoreCompact24

Network input data

Rated voltage U_{Nominal} 110V AC or 230V AC +/- 10%
 Rated current (consumer including charger) max. 3.7A (at 110V) or max. 1.8A (at 230V)
 Rated frequency 50/60Hz +/- 6%
 Number of phases 1

Rating data of the mains fuse

Mains fuse (F1) 5AT

Initial values

Rated voltage (AC operation) 24V
 Rated power (AC operation) 400VA
 Rated voltage (battery AC operation) 24V (mains operation) 19.2V (battery operation)
 Max. connection current at }
 Max. connected load at 1h / 3h / 8h DC operating time See technical data sheet and type plate
 Minimum voltage after }
 Operating time for above rated data 1h / 3h / 8h
 Rated battery temperature 20°C

Battery type and number of cells

Battery type Lithium iron phosphate (LiFePO₄)
 Number of cells 6
 Make 1x LFP26650G2-6S6P
 Charging current max.3.0A

Other system properties

Number of circuits 4 – max. 8
 Operating mode Permanent or standby mode in parallel operation
 Number of inputs 4 internal,
 Number of outputs 4 internal, each 6A / 250V AC or 6A / 30V DC
 Network monitoring Phase against N
 Initiation of network monitoring U_{falls} below 85% nominal
 Functional test programmable or manual
 Capacity test programmable or manual
 Radio interference suppression according to VDE 0875, Class N
 Ambient temperature 0 - 35°C (10 - 35°C with battery inserted)
 Housing dimensions HxWxD 660mm x 350mm x 230mm
 Protection class IP20
 Protection class I
 Cable entry from above

Recommended connection cross-sections

Power cables 1.5 – 4mm² rigid
 potential-free signal lines 0.5 – 2.5mm² rigid
 Final circuits 1.5 – 2.5mm² rigid

Relevant fuses/connection cross-sections

Mains fuse (F1) 5A
 Fuses for luminaire circuits (Line 1...4, 2 each) 6.3A fast

19 Appendix: Plant specification, commissioning, notes

General information about your system	
Device type, Article number	CoreCompact24, CC24-20
Device number	
Production number	
Customer order number	
Object (Commission)	

Plant specification	
Number of circuits used	
Housing protection class	IP20
Battery type	LiFePO4
Housing dimensions (WxHxD) in mm	250x455x230

Battery type used	
Battery manufacturer	RP-Technik GmbH
Battery type	LiFePO4
Nominal voltage U_N	19.2V
Number of blocks (12V)	1
Nominal capacity C_{20}	20 Ah (nominal)
Nominal temperature T_N	20°C
Nominal discharge current I_N	1.5A – 2.0A

Commissioning	
Assembly by:	Date:
Commissioning by:	Date:
Safety signs affixed by:	Date:

19.1.1 Documentation luminaire addresses

Use the following table to document the assignment of circuit, luminaire number and the luminaire address statically assigned by the system. The real luminaire number is assigned to the static luminaire address via the CoreCompact24 webUI.

number Circuit	number luminaire	address luminaire	Name / Position luminaire
1	1		
1	2		
1	3		
1	4		
1	5		
1	6		
1	7		
1	8		
1	9		
1	10		
1	11		
1	12		
1	13		
1	14		
1	15		
1	16		
1	17		
1	18		
1	19		
1	20		

Use the following table to document the assignment of circuit, luminaire number and the luminaire address statically assigned by the system. The real luminaire number is assigned to the static luminaire address via the CoreCompact24 webUI.

number Circuit	number luminaire	address luminaire	Name / Position luminaire
2	1		
2	2		
2	3		
2	4		
2	5		
2	6		
2	7		
2	8		
2	9		
2	10		
2	11		
2	12		
2	13		
2	14		
2	15		
2	16		
2	17		
2	18		
2	19		
2	20		

Use the following table to document the assignment of circuit, luminaire number and the luminaire address statically assigned by the system. The real luminaire number is assigned to the static luminaire address via the CoreCompact24 webUI.

number Circuit	number luminaire	address luminaire	Name / Position luminaire
3	1		
3	2		
3	3		
3	4		
3	5		
3	6		
3	7		
3	8		
3	9		
3	10		
3	11		
3	12		
3	13		
3	14		
3	15		
3	16		
3	17		
3	18		
3	19		
3	20		

Use the following table to document the assignment of circuit, luminaire number and the luminaire address statically assigned by the system. The real luminaire number is assigned to the static luminaire address via the CoreCompact24 webUI.

number Circuit	number luminaire	address luminaire	Name / Position luminaire
4	1		
4	2		
4	3		
4	4		
4	5		
4	6		
4	7		
4	8		
4	9		
4	10		
4	11		
4	12		
4	13		
4	14		
4	15		
4	16		
4	17		
4	18		
4	19		
4	20		

