



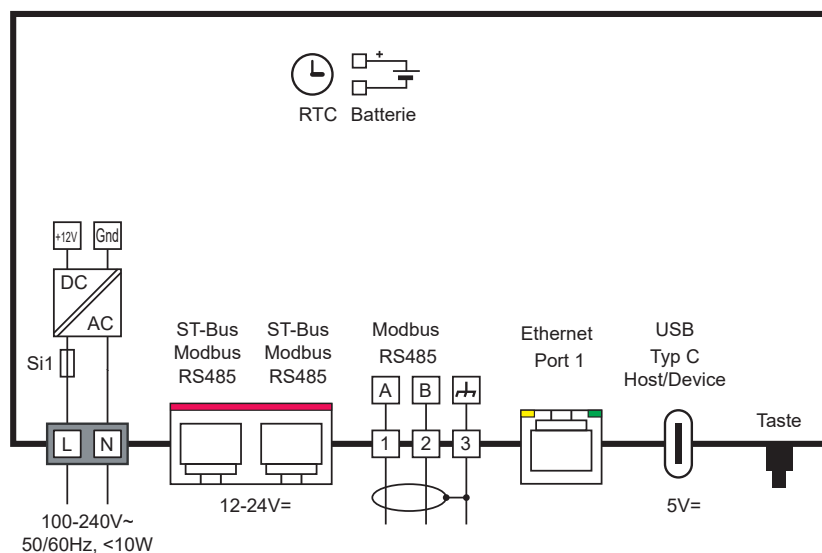
Commander Mini

Order number: 900337.002

As of: 15.10.2026



Wiring diagram



Product description

The Commander Mini is a small and easy to install unit that gives you the possibility of remote maintenance of your products. It can also manage up to 5 controllers. The Commander Mini provides you data communication between controllers in an ST-Bus or Modbus network and provides you with a Cloud Connect connection.

The Commander Mini can be connected to the internet via the RJ45 Ethernet port.

Specifications:

- Integrated web server
- Ethernet port (RJ45)
- USB C Port
- ST-Bus (RS485)
- Modbus
- Up to 5 controllers can be connected
- Internal data storage
- Real time clock with backup battery
- Wide range power supply, 100-240V~, 50/60 Hz, alternatively 12-24V= via ST-Bus or 5V= via USB

Content

1	Safety instructions	3
2	Technical requirements	4
3	Commissioning	5
4	Status LED	6
5	Commander Web Interface	7
5.1	Login	7
5.2	Main screen	8
5.3	Settings	9
5.4	Events	15
5.5	Alarms	16
5.6	Scenes	16
6	Controller detail page	17
6.1	Controller panel	17
6.2	Controller charts	18
6.3	Controller events	18
6.4	Controller parameters	19
7	System reset	20

1 Safety instructions



Electrostatically sensitive device
Do not reach into the circuit or into the connectors!
Before working on the device, ensure potential equalisation.



Only insert the plugs in a de-energised state!
Plugging under voltage leads to wear of the contacts and malfunction.

Appropriate use

Installation, connection and commissioning may only be carried out by a qualified electrician.
Arbitrary interventions and manipulations are not permitted.

Device suitable for indoor installation, protect from direct sunlight and UV radiation.

Operating conditions

The maximum permissible ambient temperature is +55 °C / 131 °F. Protect from frost.

Usage

Rated voltage 100 ... 240V~
 12 ... 24 V= (ST-Bus)
 5V= (USB)

Over-voltage category II

Regular checks

Battery replacement

The date and the correct time are required to ensure data recording.
The real-time clock (RTC) is buffered by a primary battery with a maximum life of 10 years.
It is necessary to replace the battery in time (recommended every 3 years).
If the battery is empty, the controller reports every time the power supply is switched on with the request to set the time.

Attention:

The battery may only be replaced by trained personnel! The old battery must be disposed of properly.
The battery is accessible after unscrewing the cover (only in de-energized condition).



2 Technical requirements

The following describes the necessary network infrastructure in terms of hardware, software and services for the proper function of the **Commander Touch**, **ST-Commander Box** or **Commander Mini** (short: device).

Hardware requirements

You should provide a stable high-speed internet connection. Preferable by using DSL or better fiber, in this case you need:

- Wired connection (should always be preferred)
- An Ethernet cable (at least CAT5E) to connect the device
- A router to establish internet connection or an access point to your local network.
- A switch (often already part of the router) that is able to work as a DHCP server.

In case you want to use broadband cellular network for mobile web access (4G LTE, 5G) you need:

- A mobile router
- A network provider contract that is not limited in network data

Software requirements

Make sure to open the following ports in your firewall and other blocking applications:
All used IP addresses are dynamic!

Port **1194** UDP on:

- vpn1.commander-cloud.eu
- vpn2.commander-cloud.eu
- vpn3.commander-cloud.eu
- vpn4.commander-cloud.eu
- vpn5.commander-cloud.eu

Port **443** TCP (for Websockets) on:

- commander-cloud.eu
- gateway.commander-cloud.eu
- mqtt.gateway.commander-cloud.eu

Port **8883** TCP on:

- mqtt.gateway.commander-cloud.eu

Service requirements

The default configuration of the device uses DHCP to get its IP address, thus the easiest way is to provide a DHCP server in your local network. Otherwise you have to configure the device to use a static IP address (see the manual).

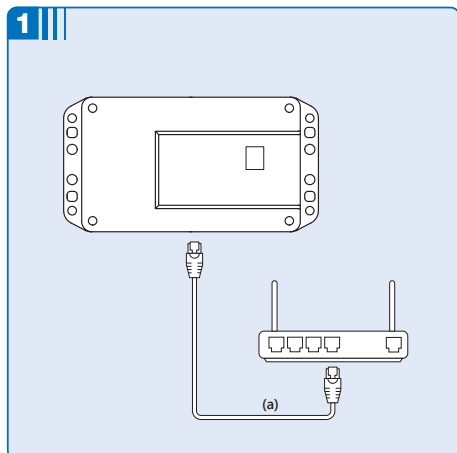
Internet connection (recommended are fiber or DSL):

Minimum speed: 300 kBit/s (up- and download)

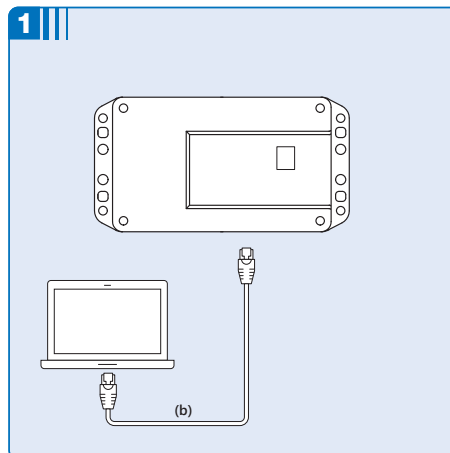
Minimum latency: < 80 ms (ping)

3 Commissioning

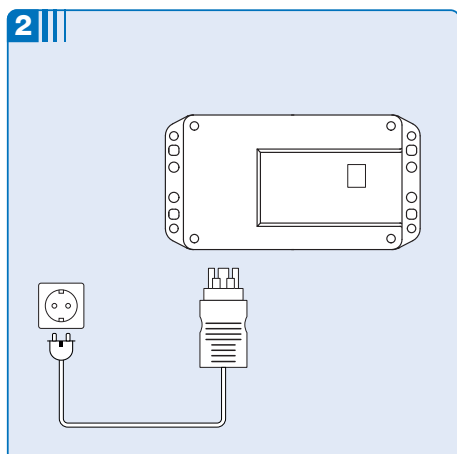
Follow these steps to start your Commander Mini:



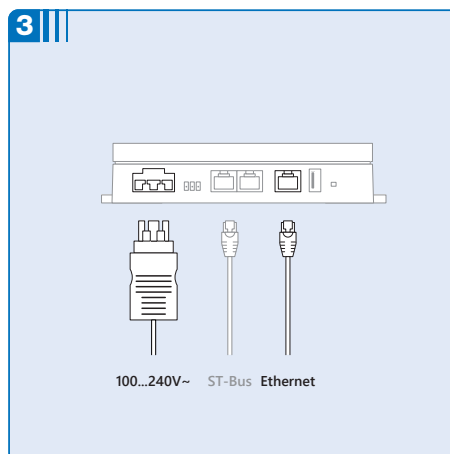
1a: Connect your Commander Mini to your router/switch with a network cable. Make sure that the Box is assigned an IP address (DHCP or static).



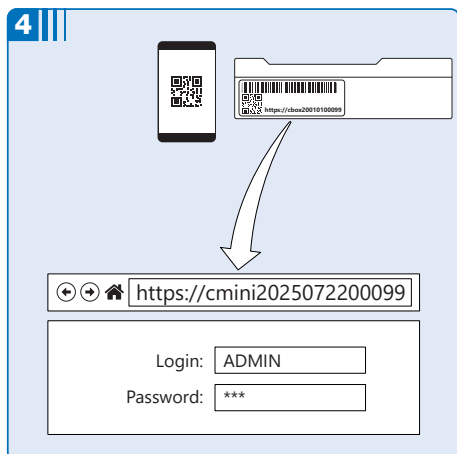
1b: Alternatively, you can connect the box directly to your PC.



2: Connect the supplied power cord to the box and the power outlet.



3: Make sure that the proper connectors are used.



4: Enter the URL shown on the label on the side of the box in your browser or scan the QR code.

If the connection cannot be established, try adding ".local" to the end of the address:

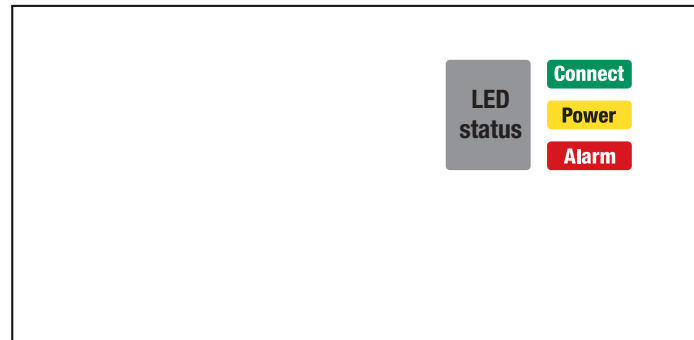
<https://cmini25072200099.local>

Alternatively, use the IP address of the box (if known).

Or you can also add the Commander to your Cloud Connect account using its Cloud Connect ID on <https://www.st-cloudconnect.com>



4 Status LED



The Commander Mini has a big LED status display, so you can quickly see the device's current operating state at a glance.

Meaning of the LED

Green: OK. There is connection to the connected controllers and connection to the Cloud.

Orange: There is power, there is connection to the controllers but Cloud not yet connected.

Red: There is an alarm.



5 Commander Web Interface

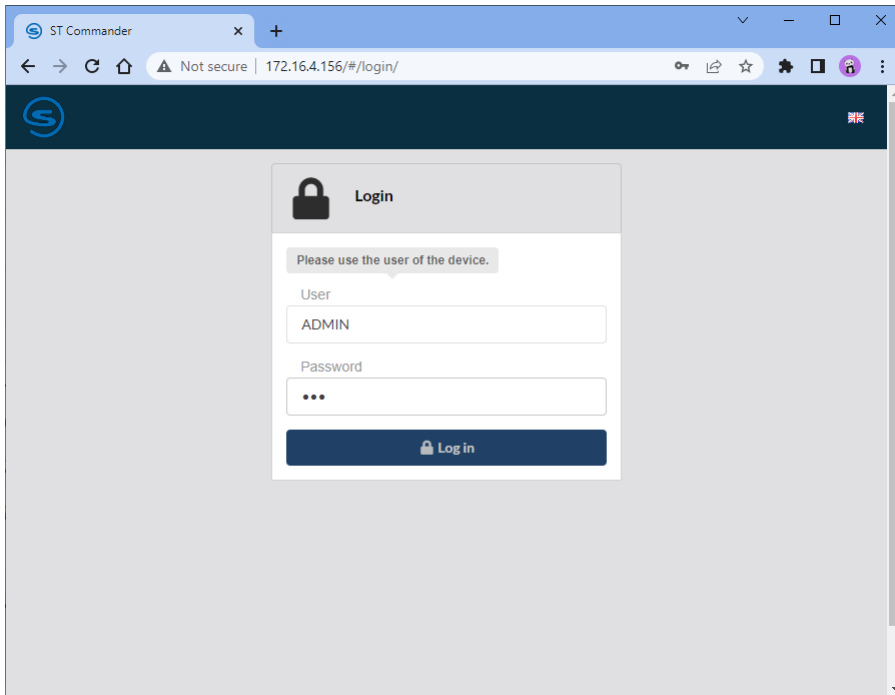
5.1 Login

You can reach the Commander either via the IP address assigned by your DHCP server (router) or via the URL specified on the Box.

If the URL is not accessible in your network, try adding “.local” to the end of the address.

Go to the URL named on the box and enter your login details.
Alternatively, you can select the box in Störk-Tronic Cloud Connect.

On the Login screen you can enter your credentials.



When you log in to the web interface for the first time, you must set a password for the user “ADMIN”.

Please note the specified restrictions:

Factory state

New main admin account password

Password score: 0

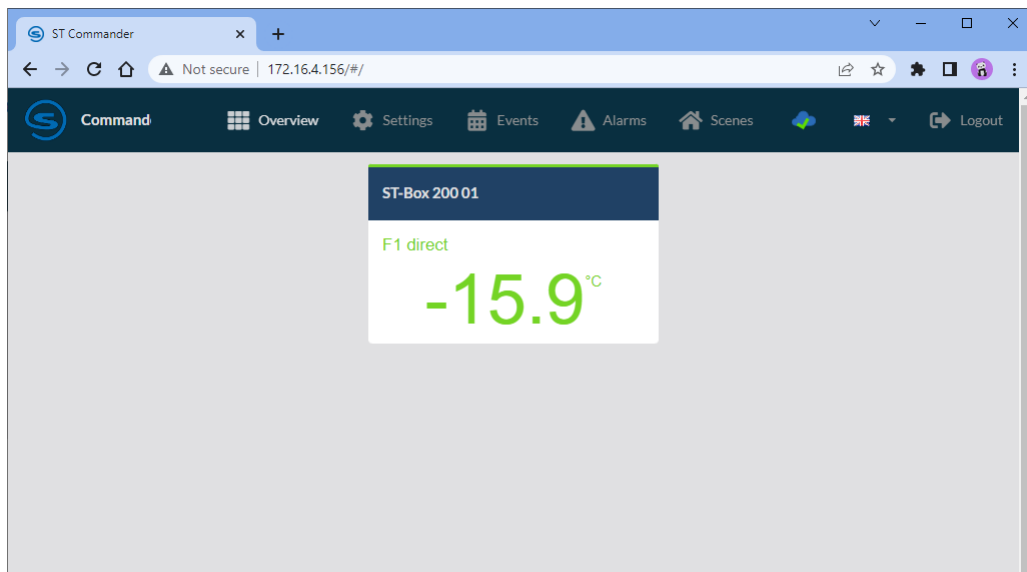
- ✗ At least 12 characters
- ✗ At least one uppercase letter
- ✓ At least one lowercase letter
- ✓ At least one digit
- ✗ No simple or insecure patterns (no dictionary words, repetitions or sequences such as abc, 123)

Confirm new main admin account password



5.2 Main screen

After successful login, you will see the following main screen. It is an overview of all controllers connected to the Commander.



5.2.1 Title bar

The buttons in the title bar have the following meaning.

(On smaller screens, open the hamburger menu  at the top right for the selection.)

 Overview	Return to the controller list
 Settings	Go to settings page
 Events	Shows a list of all events of the connected controllers
 Alarms	Shows a list of all alarms of the connected controllers
 Scenes	List of scenes and possibility to activate them.
	Cloud status
	Language selection
 Logout	Logout from the actual commander

5.2.2 Controller list

The lower part of the screen shows a controller list which provides a complete overview of all configured controllers connected to the Commander, including the main measured value they transmit.

The controllers are marked with different colours in this overview. These have the following meaning:

Light green:	The controller is in standard operating mode.
Dark green:	The controller is in “night mode” of day/night switching.
Orange:	The controller has started a defrost.
Red:	The controller has triggered an alarm.
Grey:	The controller is switched off.

Clicking on a specific controller takes you to its detail page.



5.3 Settings

5.3.1 Controller

Controllers

This is a list of all controllers connected to the Commander. Here, they can be renamed and various information about the individual controllers can be called up.

Controllers

Delete

Save

Name	Status	Information
ST-Box 200 01	INSTALLED	Program number: 36 Address: 25 Program variant: 56 id: 1021 Program version: 106 Serial number: 2 Product number: 900235026 Date of manufacture: 3.6.2020

Close

Add

Start the controller search to add more controllers to the Commander.

Controller search

Start controller search

NOTE: An individual ST bus address must be set for each controller in the network using the parameter L0. We recommend numbering the controllers consecutively from “1” to “32”. Addresses >32 are not recognised by the Commander.

In the following screen, a status bar shows the progress of the search.

Controller search

1 Scanning controllers...

2 Installing controllers...

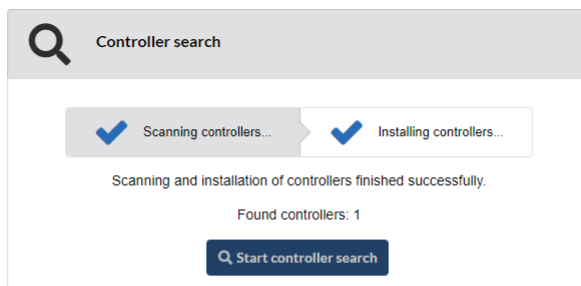
Searching controllers: 2 / 32

Found controllers: 0

Address	Status scan
2	NON
1	NON



After a successful search, a list of all controllers found is displayed.



Name	Status scan	Product / Version	Address
ST-Box 200 01	INSTALLED	900235026 / 36_56V106	25

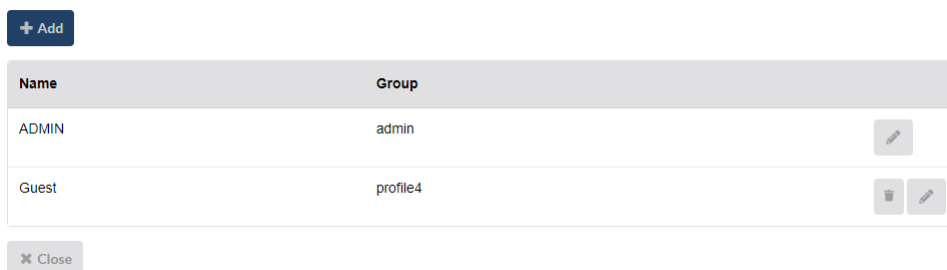
5.3.2 Users

Users can be created and deleted in this user administration section. In addition, rights for different user roles can be defined and assigned to one or more users.

User list

After selecting the menu item "User list", a list of the currently existing users is displayed. In the delivery state, there is only the user "ADMIN" with the password you set previously.

A new user can be created via the "Add" button. Name, password and the assigned role/group must be defined.



Roles

The user roles are managed here.





Different rights ("View"/"Change" respectively) can be assigned to each role.

Roles		
profile2	SETPOINT RIGHT	☒ View ☒ Change
	PARAMETER RIGHT	☒ View ☒ Change
	RAMSTATUS RIGHT	☒ View ☒ Change
	CONTROLUNIT RIGHT	☒ View ☒ Change
	HISTORY RIGHT	☒ View ☒ Change
	COMMANDER RIGHT	☒ View ☒ Change
	COMMANDER CONFIG RIGHT	☒ View

The rights to be assigned include, among others:

Setpoints:	Display and adjustment of setpoints
Parameters:	Display and adjust parameters
Functions:	Execution of functions
Controller:	Displaying and changing the controller settings
History:	Displaying the controller history
Commander:	Changing commander settings
Timer:	Creating timers and functions
User:	Access to the user administration

5.3.3 Remote access

IP configuration

Please enter the configuration for your local network here (either with static IP or via DHCP).

IP configuration

☒ Static IP address

IP address

172.16.4.156

Subnet mask

255.255.255.0

Standard gateway

172.16.4.1

DNS1

8.8.8.8

DNS2

☐ DHCP

Netmask: 255.255.0.0

Gateway: 172.16.0.1

MAC address: 3C:E4:B0:EC:88:CB

Reset

Close

Save

Cloud connect

Status information about the cloud can be called up here.
In addition, the Commander can be logged out of the Cloud.

Cloud connection

Cloud connect ID

7izAv33PYEiRT

Please note that the cloudID has similar looking letters:

- 0 (zero)
- O (upper case o)
- I (upper case i)
- l (lower case L)

Status: Connected

Close

Disable cloud

5.3.4 Functions

Various functions (so called scenes) can be created and edited here. These are either executed automatically at certain times or are then available as a “Scene” in the main screen.

Scenes				
+ Add				
Name	Controller(s)	Runtime mode	Status	
ST-Box On/Off	ST-Box 200 01	▶ Immediately	Not Active	
Morning defrost	ST-Box 200 01	🕒 06:00 Weekdays	Active (scheduled)	

A scene is created by first selecting the desired controller. Then it is determined whether the scene is activated time-controlled or manually (“by enable”).

Select the function(s) to be performed. The functions available depend on the type of controller connected.

Finally, enter a name for the new scene and click on “Save”.

Scenes

+ Add

Scene name

Manual defrost of ST-Box 200

Controller(s)

☒ ST-Box 200 01

When

☒ By enable

☐ On days of the week

☐ Mo. ☐ Tu. ☐ We. ☐ Th. ☐ Fr. ☐ Sa. ☐ Su.

At

12:00 AM

Action(s)

DEVICE

DEFROST 1

SUPERFROST...

HUMIDITY

✕ Cancel

💾 Save

Manual functions can be triggered with the respective buttons in the “Scenes” section of the Commander main screen.

Commander

Overview

Settings

Events

Alarms

Scenes

Logout

Scene activation

🔌 ST-Box On/Off

🔌 Start manual defrosting



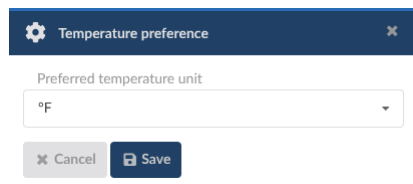
5.3.5 System

Colors

Select between a dark and a light theme.

Temperature preference

Select between °C and °F as your preferred temperature unit.



The dialog box titled "Temperature preference" has a close button (X) in the top right corner. It contains a label "Preferred temperature unit" above a dropdown menu currently set to "°F". At the bottom, there are two buttons: "Cancel" with an X icon and "Save" with a floppy disk icon.

Date & Time

Adjust Date/Time and time zone and activate NTP

Recording interval

The recording interval is the time interval between two measuring points. It can be freely selected in the range between 10 and 1500 seconds (25 min.). The setting applies to all connected controllers.

The factory setting is 120 seconds, which is sufficient for a 12-month recording.

If a smaller recording interval is selected, the recording period is correspondingly shorter.

Some exemplary values are listed below:

Measuring interval	Recording period
60 s = 1 minute	190 days = approx. ½ year
120 s = 2 minutes	380 days = approx. 1 year
300 s = 5 minutes	951 days = approx. 2 ½ years
600 s = 10 minutes	1902 days = approx. 5 years
900 s = 15 minutes	2854 days = almost 8 years

Master address

The ST bus address of the commander can be changed here. This is only necessary if several commanders (masters) are to be used in the same network. In this case, different addresses must be assigned to them.

It is recommended to use only addresses >247

Factory reset

This menu entry is used to reset the Commander to factory settings.

Clear data history

This menu entry is used to reset the data history.

ATTENTION: After confirming the safety query, all recorded data/measured values are deleted, please back up beforehand if necessary!

5.3.6 Information

Various information about the device can be called up here.

You can also change the name of the commander.



5.4 Events

A list of all events of the Commander and all connected controllers is made available here.

The list can be searched and filtered by specific controllers or times.

Events

Controller:

ST-Box 200 01 X

Commander X

Only digital channels

Last 24 hours

Type	Date ^	Controller ^	Category ^	Event ^	Value ^	User ^
*	17.03.2023 01:00:39	ST-Box 200 01	None	Compressor	On	
*	17.03.2023 01:00:39	ST-Box 200 01	None	Control loop 1	On	
*	17.03.2023 01:00:39	ST-Box 200 01	None	Control loop 2	Off	
*	17.03.2023 01:00:39	ST-Box 200 01	None	Night temperature	Off	
*	17.03.2023 01:00:39	ST-Box 200 01	None	Door frame heating	Off	
*	17.03.2023 01:00:39	ST-Box 200 01	Alarm	E14	Off	
*	17.03.2023 01:00:39	ST-Box 200 01	Alarm	E15	Off	

5.5 Alarms

As soon as the Commander registers a new alarm message from a connected controller, the controller is marked red in the overview.



The present alarm is indicated with a red alarm symbol in the upper status bar:



In the “Alarms” area, a list of all alarm messages of the connected controllers can be called up.

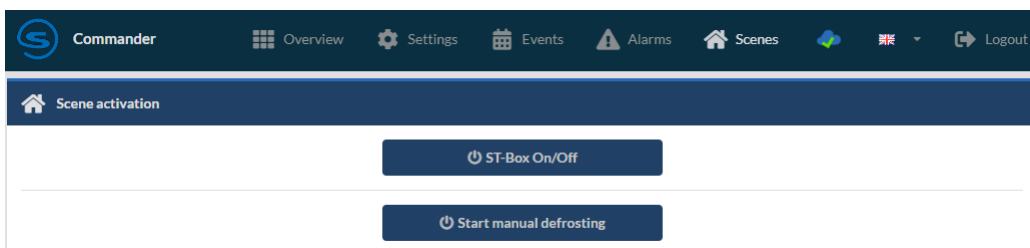
Alarms					
Controllers:		Last 24 hours	☐	Only active alarms	
Confirmed	Date	Alarm	Controllers	Value	Confirm
	17.03.2023 10:49:34	History autoreset	Commander	OK	
	17.03.2023 10:49:34	History autoreset	Commander	OK	
	17.03.2023 10:51:15	F90: Network error	ST-Box 200 01	On	
	17.03.2023 10:51:15	F90: Network error	ST-Box 200 01	On	
	17.03.2023 10:54:27	F90: Network error	ST-Box 200 01	On	
	17.03.2023 10:56:31	F90: Network error	ST-Box 200 01	Off	

All alarms can be acknowledged with the “Confirm” button.

The alarm functions of the two relays K1 and K2 (if available) can be configured in the alarm management (see chapter Settings - Alarms).

5.6 Scenes

Here, the scenes can be triggered that have been created as manual scenes in the settings in the “Functions” area.



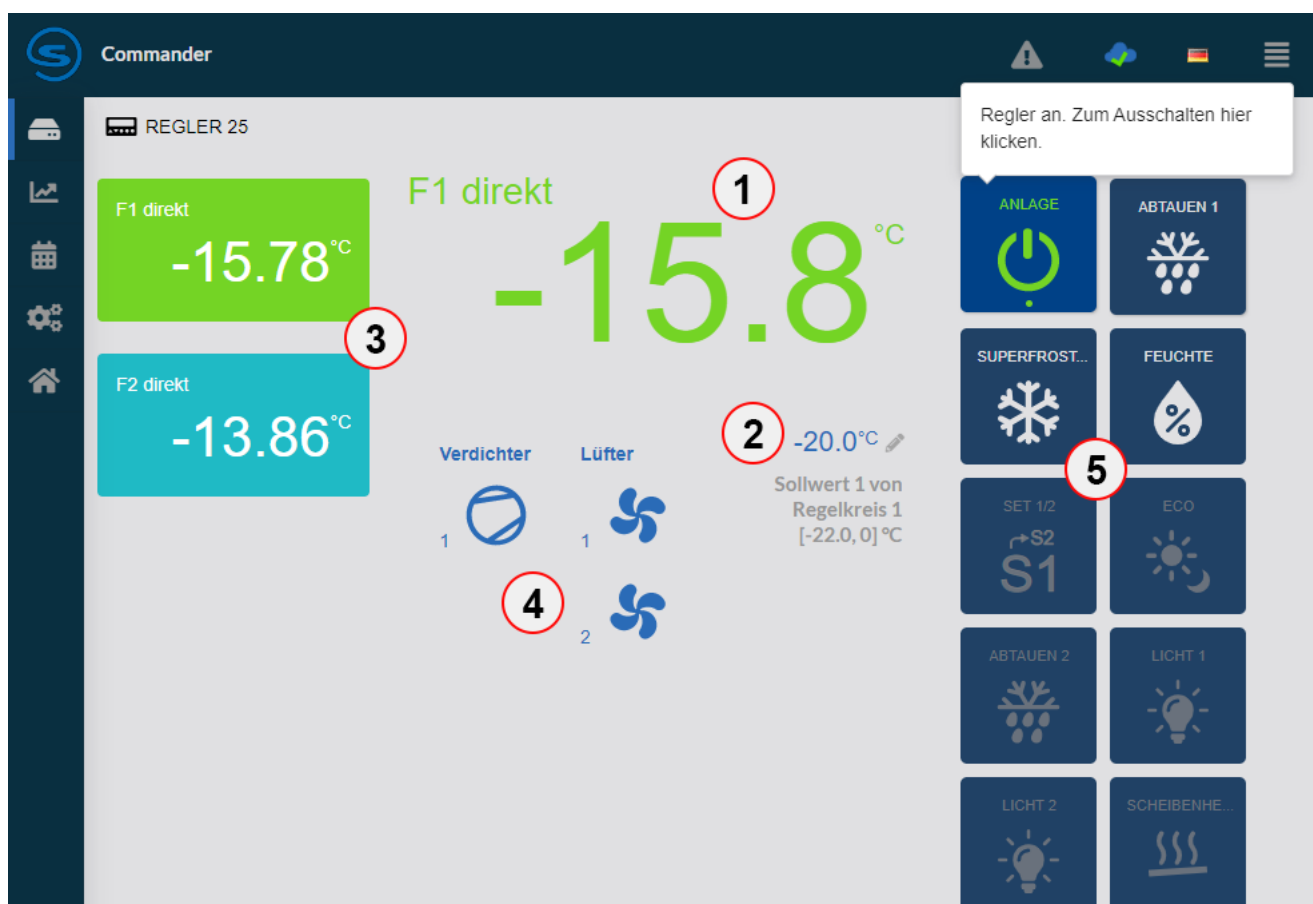
6 Controller detail page

Clicking on the tile of a controller in the overview page takes you to its detail page.

Different controller types can be networked with the Commander. A specific overview appears for each controller type. Both the buttons and the functions can be operated directly on the screen.

	Show controller panel
	Show controller charts
	Show controller events
	Show controller parameters
	Go back to Commander overview

6.1 Controller panel



- 1 Actual value of sensor F1
- 2 Setpoint, click on  to adjust the setpoint
- 3 List of actual values of all connected sensors
- 4 Animated status icons
- 5 Executable functions of the controller, depending on the type (note tooltip)

6.2 Controller charts



This view provides a graphical history of various measured values and digital channels.

⌚ Last 6 hours

Defining the period to be displayed.

🔍 Analog channels

Defining the analogue channels to be displayed.

🔍 Digital channels 5/55

Defining the digital channels to be displayed.

6.3 Controller events

This view lists all events of the controller. It is searchable and can be restricted to a specific time range.

Commander

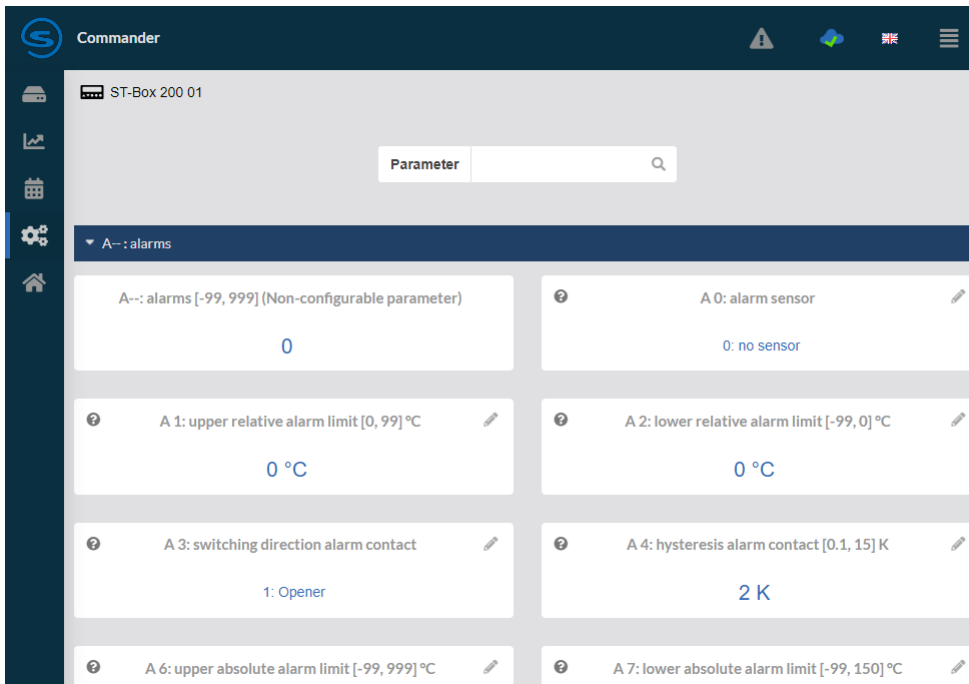
ST-Box 200 01

🔍 Only digital channels ⌚ Last 24 hours

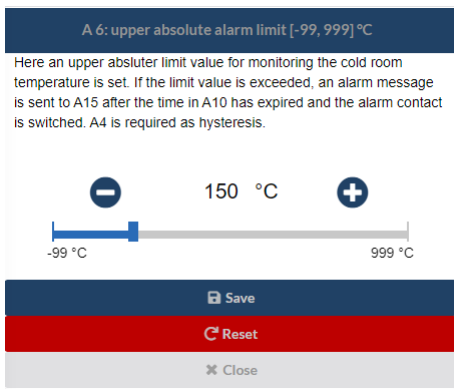
Type	Date	Controller	Category	Event	Value	User
•	20.03.2023 01:00:33	ST-Box 200 01	None	Compressor	On	
•	20.03.2023 01:00:33	ST-Box 200 01	None	Control loop 1	On	
•	20.03.2023 01:00:33	ST-Box 200 01	None	Control loop 2	Off	
•	20.03.2023 01:00:33	ST-Box 200 01	None	Night temperature	Off	
•	20.03.2023 01:00:33	ST-Box 200 01	None	Door frame heating	Off	
•	20.03.2023 01:00:33	ST-Box 200 01	Alarm	E14	Off	
•	20.03.2023 01:00:33	ST-Box 200 01	Alarm	E15	Off	
•	20.03.2023 01:00:33	ST-Box 200 01	Alarm	Error NM1	Off	
•	20.03.2023 01:00:33	ST-Box 200 01	Alarm	Error NM2	Off	

6.4 Controller parameters

The parameters of the controller can be set here.



Search and select the desired parameter from the list and click the  button.



The possible setting range and a short description are displayed. Select the desired value and click "Save".

The value can be reset to the factory setting with "Reset".



7 System reset

You can perform a system reset on the Commander Mini, which resets it to factory settings.

- Factory reset is possible with a power cycle only.
- While reconnecting power to the device, keep the WiFi/reset button pressed.
- Keep is pressed until the LED changes to first white, then to amber/yellow.
- Release the button as soon as the LED turns amber/yellow.

The following settings are reset:

- Timer configuration
- Email settings
- Event server configuration
- Address book
- Scenes
- Connected controllers
- Measurement history
- Users and groups
- Host name and network configuration (DHCP default)
- WiFi settings

Display	1 LED area for status display
Battery RTC	Coin cell 2032, 3V, 220mAh
Interface	ST-Bus interface (RJ45 or plug-in terminal) Interface driver: RS485, 57600 Baud, cable length max. 1000m The remote networking must be set up in line topology and terminated on both sides with 120 Ohm resistors. 1x Ethernet interface (RJ45) for configuration/web interface
Power supply	100...240V~ +/- 10%, 50/60Hz 12...24V= (ST-Bus) 5V= (USB) Power consumption < 10W
Connectors	WAGO/Wieland Plug-in terminals, 2 x RJ45, USB Typ C – Header WAGO, 2 pole, spacing 4.4 mm power supply – 2x RJ45 ST-Bus / Modbus – Header Wieland, 3 pole, spacing 3.5 mm Modbus Host – RJ45 Ethernet – USB Type C USB Host/Device
Ambient conditions	Storage temperature: -20...+70°C Operating temperature: 0...+55°C Relative humidity: max. 75% without dew
Enclosure	IP20
Protection class	Protection class II (double insulation)
Installation data	Material: Ultramid® A3X2G5 Dimensions: 151.5 x 80 x 41 mm (without connectors)

