Type ME25

LoggerHMIU module
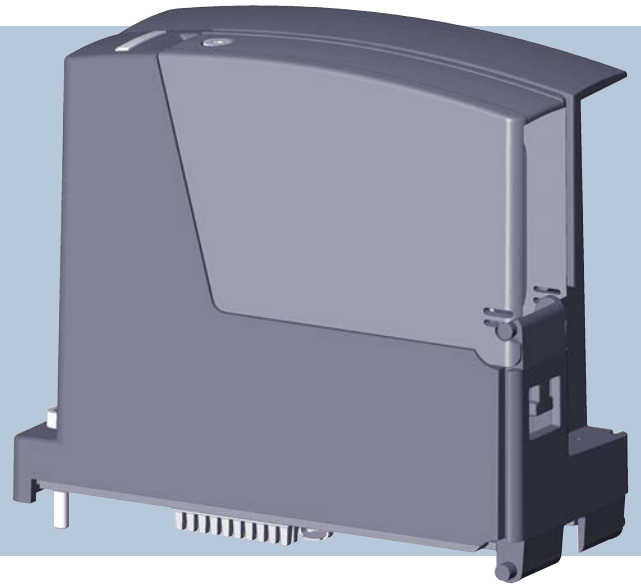
Operating Instructions

CONTENTS

1   ABOUT THESE INSTRUCTIONS

The operating instructions describe the entire life cycle of the device.

→ Keep these instructions ready to hand at the operation site.

⚠

Important safety information!

▸ Carefully read these instructions.

▸ Observe in particular the safety instructions, intended use and operating conditions.

▸ Persons, who work on the device, must read and understand these instructions.

1.1   Symbols

⚠ **DANGER!**

Warns of an immediate danger.

▸ Failure to observe the warning will result in fatal or serious injuries.

⚠ **WARNING!**

Warns of a potentially dangerous situation.

▸ Failure to observe the warning may result in serious or fatal injuries.

⚠ **CAUTION!**

Warns of a possible danger.

▸ Failure to observe the warning may result in moderate or minor injuries.

ATTENTION!

Warns of damage to property.

▸ Failure to observe the warning may result in damage to the device or system.

Indicates important additional information, tips and recommendations.

Refers to information in these instructions or in other documentation.

▸ Designates an instruction for risk prevention.

→ Designates a procedure which you must carry out.

✓ Indicates a result.

Menu Marks a user interface text.

1.2   Definition of terms

In these instructions the term "device" denotes the following device types:

LoggerHMIU module Type ME25

6

The term "büS" (Bürkert system bus) used in this manual refers to the communication bus developed by Bürkert, based on the CANopen protocol.

2   INTENDED USE

⚠

The LoggerHMIU module Type ME25 is designed for installation on the backplane Type BEF1 within a system. The LoggerHMIU module Type ME25 records measurement data of a system (e.g. Bürkert Online Analysis System Type 8905) or other measuring devices via the büS interface and stores this measurement data on an internal memory card.

▸ Use the device for its intended purpose only. Non-intended use of the device may be dangerous to people, nearby equipment and the environment.

▸ Correct transportation, correct storage as well as correct installation, commissioning, operation and maintenance are essential for reliable and problem-free operation.

▸ When using the device, observe the permitted data, operating conditions and application conditions. This information can be found in the contractual documents, the operating instructions and on the type label.

▸ Use the device only in conjunction with third-party devices and components recommended and authorized by Bürkert.

▸ Do not use the device outdoors without protection from the weather.

3   BASIC SAFETY INSTRUCTIONS

These safety instructions do not take into account any unforeseen circumstances and events which occur during installation, operation and maintenance.

The operator is responsible for observing the location-specific safety regulations, also with reference to the personnel.

To prevent injuries, observe the following:

▸ Secure device or plant to prevent unintentional activation.

▸ Only trained technicians may perform installation and maintenance work.

▸ Do not make any changes to the device and do not subject it to mechanical stress.

▸ Operate the device only in perfect state and in consideration of the operating instructions.

▸ Following interruption of the process, ensure that the process is restarted in a controlled manner.
  Observe sequence:
  1. Apply electrical or pneumatic supply.
  2. Charge with medium.

▸ Observe the general rules of technology.

▸ Install the device according to the regulations applicable in the country.

▸ Observe intended use.

ATTENTION!

Electrostatically sensitive components and assemblies.

The device contains electronic components that are susceptible to the effects of electrostatic discharging (ESD). Components that come into contact with electrostatically charged persons or objects are at risk. In the worst case scenario, these components are destroyed immediately or fail after start-up.

▸ Meet the requirements specified by EN 61340-5-1 to minimise or avoid the possibility of damage caused by sudden electrostatic discharge.

▸ Do not touch electronic components when the supply voltage is connected.

4 GENERAL NOTES

4.1 Contact address

Germany

Bürkert Fluid Control Systems

Sales Center

Christian-Bürkert-Str. 13–17

D-74653 Ingelfingen

Phone: + 49 (0) 7940 - 10 91 111

Fax: + 49 (0) 7940 - 10 91 448

E-mail: info@burkert.com

International

The contact addresses can be found on the back pages of the printed Quickstart. Also on the Internet at:
http://www.burkert.com

4.2 Warranty

A precondition for the warranty is that the device is used as intended in consideration of the specified usage conditions.

4.3 Information on the Internet

Operating instructions and data sheets for the Bürkert products can be found on the Internet at:

https://www.burkert.com/en

4.4 List of the licences and offer for the provision of the source code of certain software

This product contains copyright protected software which was placed under the "General Public Licence" (GPL), under the version "Lesser General Public Licence" (LGPL) and/or other "Free Open Source Software" licences.

There is no warranty for the software sold together with this product, insofar as this is permitted by law. Copies of these licences are included with this product (see under "General settings / Diagnostics / Licenses").

If, under the applicable licence, you are entitled to the source code of this software and / or other additional data, you may receive these for a period of 3 years after our last delivery of the product against payment of a fee for duplication and shipping, depending on the preferred delivery company and the place to which the shipment is to be made, by sending a request to:

Bürkert Werke GmbH & Co. KG

F+E Embedded Systems

Christian-Bürkert-Strasse 13-17

74653 Ingelfingen

Germany

When submitting your query, please include the name, the model number and the version of the product, for which you would like the corresponding source code, as well as your contact data so that we can agree the conditions and shipping costs with you.

The source code is sold WITHOUT WARRANTY and is placed under the same licence as the corresponding binary/object code.

This offer applies to all those who receive this information.

Bürkert Werke GmbH & Co. KG endeavours to supply the complete source code, as requested and on time, which has been placed under various Free Open Source Software licences.

However, if you run into problems in obtaining the corresponding complete source code, we would be grateful if you would inform us in writing, specifying the product and a description of the problem, and sending the information to the address above.

4.5   Network devices

On account of the continuous development of new techniques for infiltrating and attacking networks, Bürkert Werke GmbH & Co. KG does not accept any guarantee that the product, the software or the equipment, the system or the network, in which the product or the software is used, will not be infiltrated or attacked. The product may include software or service offers from third-party providers or may be bundled with them. Bürkert Werke GmbH & Co. KG is not liable for software or service offers from third-party providers.

5 PRODUCT DESCRIPTION

The LoggerHMIU module Type ME25 records measurement data of a system (e.g. Bürkert Online Analysis System Type 8905) or other measuring devices via the büS interface and stores this measurement data on an internal memory card.

The LoggerHMIU module Type ME25 has the following interfaces:

- Interface for connection cable for the 7" touchscreen of the Bürkert Online Analysis System

  This allows the user to configure connected products, the system and the display

- USB interface for data transfer

- Socket for RJ45 push-in connector for connection to an Ethernet network (VNC, OPC UA and web-interface)

5.1 Structure

LoggerHMIU module Type ME25

The module can only be used within a system in combination with other modules.

To assemble a system consisting of multiple modules, contact your Bürkert sales department.

A system using a minimal combination is shown below.
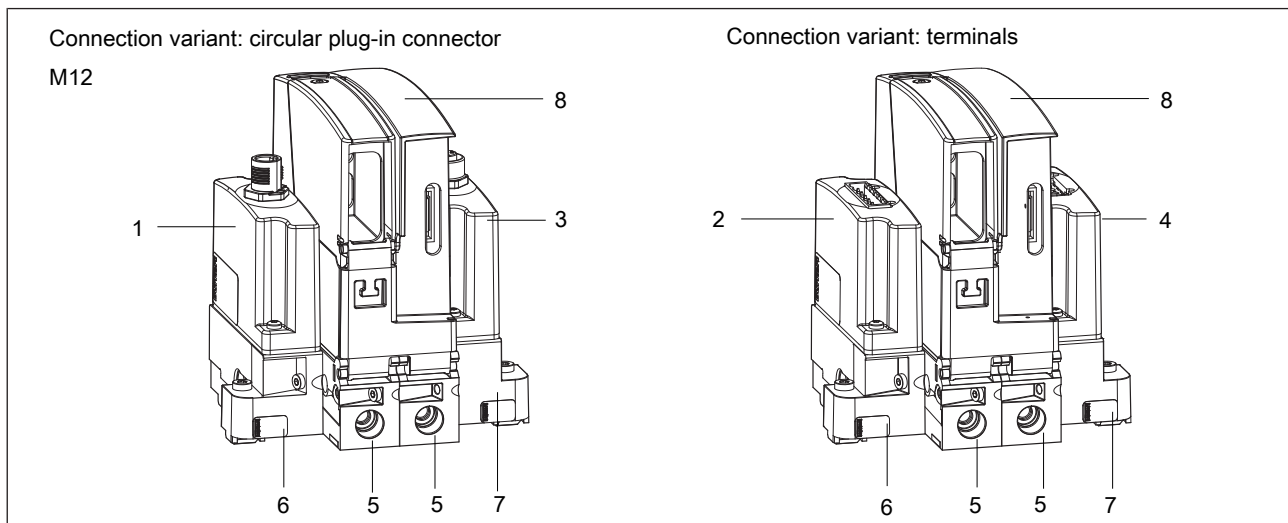
Fig. 1: Module in minimum combination

Module	Designation	Type	Order no.
1	Input module (connection variant: circular plug-in connector M12)	ME29	00564825
2	Input module (connection variant: terminals)	ME29	00564826
3	Output module (connection variant: socket M12)	ME29	00564827
4	Output module (connection variant: terminals)	ME29	00564828
5	Backplane	BEF1	00564841
6	Backplane left	BEF1	00564844
7	Backplane right	BEF1	00564846
8	LoggerHMIU module	ME25	

Tab. 1: Module in minimum combination

5.2 Functions

Adjustable functions:

	Logger	Record data and values and store on memory card
	Display	Set data in the display and the display itself
	USB flash drive	Data for the USB storage medium Update software (firmware) Only appears when the USB storage medium is connected
	Ethernet	Data to Ethernet Data to OPC UA
	General settings	Device information and system information Device and system settings
	Timer db backup	Settings for the timer

Tab. 2: Functions

5.2.1 Memory card

The device has a replaceable memory card with device-specific data.

The memory card is inserted in the device in the delivered condition.

The memory card allows the specific data of devices with the same identification number to be exchanged. This can be done, for example, to transfer the data from a faulty device to a new device.

The user settings and the data selected in the logger are stored on the memory card.

If the memory card inserted during the restart contains device-specific data, the device accepts this data.

If the memory card does not contain device-specific data, the device stores its own data on the card.

> **Do not use standard memory cards.**
>
> The memory card used is a special industrial version with multiple times as many write cycles as well as increased durability and reliability. The state of this memory card is also monitored.
>
> If the memory card is not formatted with the ext2 file system, the memory card is formatted when it is inserted and all existing data is lost.
>
> Purchase the memory card for the device only from your Bürkert sales department. See chapter "Replacement parts, accessories [▷ 122]".

5.3 Display elements

> You can find the description of the display element in the chapter "Operation [▷ 24]".

6 TECHNICAL DATA

6.1 Conformity

The device conforms to the EC directives as per the EC Declaration of Conformity (if applicable).

6.2 Standards

The applied standards, which are used to demonstrate conformity with the directives, are listed in the EU type examination certificate and/or the EU Declaration of Conformity (if applicable).

6.3 Type label, adhesive label
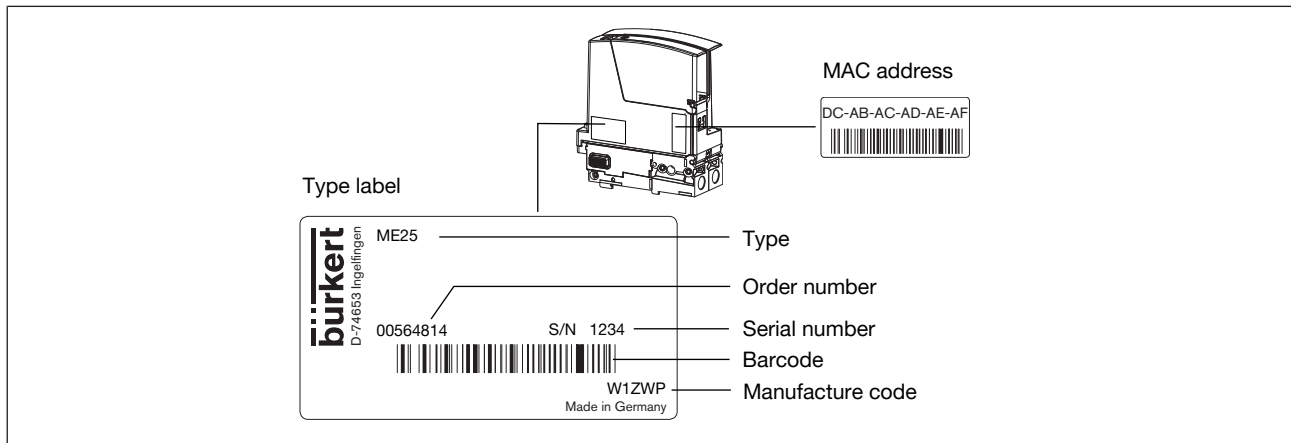
Fig. 2: Type label

6.4 Operating conditions

Ambient temperature	0...+50 °C
Degree of protection	IP20 according to EN 60529 / IEC 60529
	(only when cables or plugs and sockets are connected correctly)

6.4.1 Electrical data

Supply voltage	18...35 V via backplane BEF1
UL devices	Voltage supply unit restricted to class 2
Power consumption	< 4 W If USB devices are connected, the power consumption increases by the power of the USB devices
Interfaces	USB Interface
	Socket for RJ45 push-in connector
	Interface for connection cable to 7" touchscreen
	Socket for mini USB plug (only for Bürkert Service)

7 INSTALLATION

7.1 Safety instructions installation

⚠️ **WARNING!**

Risk of injury due to improper installation.

▸ Only trained technicians may perform installations.

▸ Perform installations with suitable tools only.

⚠️ **WARNING!**

Risk of injury due to unintentional activation of the system and uncontrolled restart.

▸ Secure plant to prevent unintentional activation..

▸ Ensure that the plant starts up in a controlled manner only.

7.2 Mount device on backplane Type BEF1
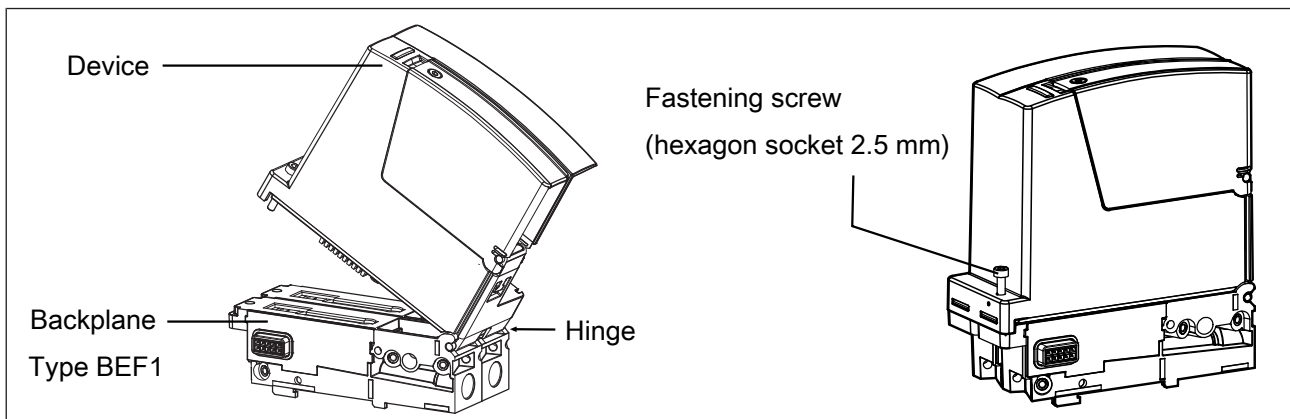
Fig. 3: Mount device on backplane Type BEF1

→ Insert the hinged part of the device into the counterpart on the backplane Type BEF1.

→ Push the device all the way to the stop on the backplane.

→ Tighten the fastening screw (hexagon socket 2.5 mm). Maximum tightening torque: 1 Nm.

☑ The device must be connected to the backplane and to the supply voltage.

🛈 Use a power supply with adequate power.

7.3 Connecting external connections

Fastening screw (hexagon socket 2.5 mm)

Cover folded up

USB Interface

Socket for RJ45 push-in connector

Recess for securing the cables

Cover closed

Opening for cables
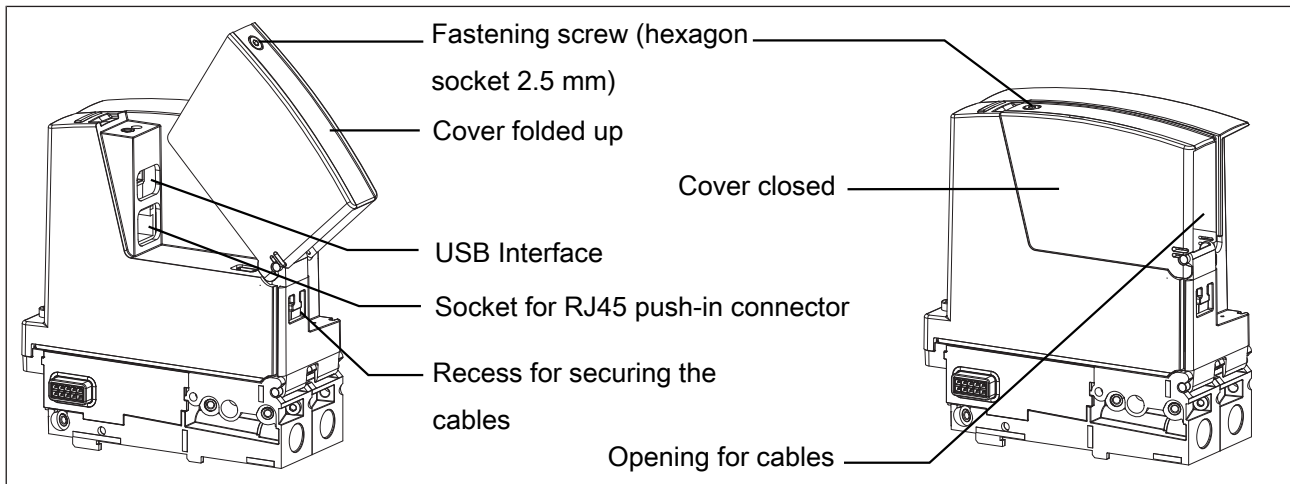
Fig. 4: Connecting external connections

→ Loosen the fastening screw on the cover.

→ Fold up the cover.

→ Connect the connections (see below for the corresponding description).

→ Close the cover and tighten the fastening screw on the cover. Maximum tightening torque: 1 Nm.

Securing the cables (strain relief):

→ For strain relief, secure the cables to the recess using a cable tie.

Connecting the USB storage medium:

→ Insert the USB storage medium for transferring data into the USB interface.

Connecting the Ethernet cable:

ATTENTION!

Electrical, magnetic or electromagnetic fields and operations in one device can interfere with another device or be disrupted by other devices.

The guarantee electromagnetic compatibility (EMC):

▸ Only use shielded Ethernet cables.

▸ To earth the cable shielding, connect the Ethernet cables of all participants via the backplane to the standard rail.

→ Feed the Ethernet cable through the opening on the rear side of the cover.

→ Insert the Ethernet cable into the socket for RJ45 push-in connectors.

7.3.1 Connecting the 7" touchscreen

View without cover

Interface for
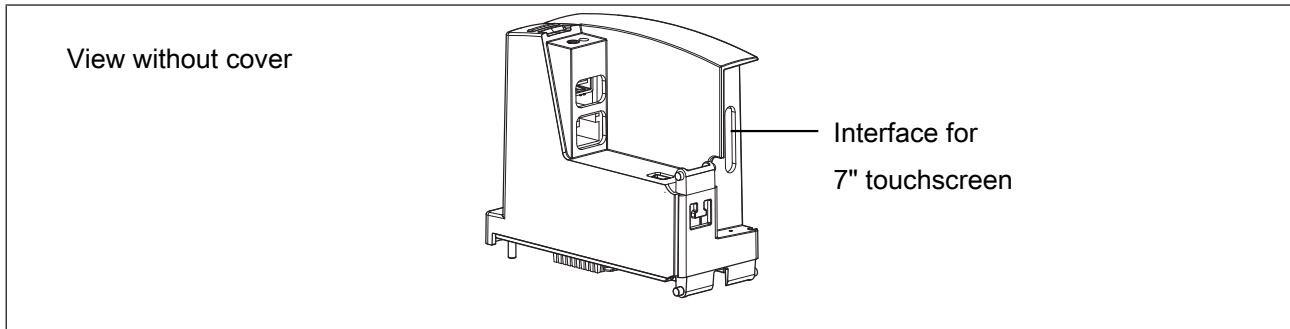
7" touchscreen

Fig. 5: Connecting the 7" touchscreen

→ ⚠ Switch off the supply voltage!

→ LoggerHMIU module Type ME25 and 7" touchscreen:
  Plug the connection cable for the 7" touchscreen into the interface.

7.3.2 Connecting to the Bürkert Communicator

Preconditions (see accessories):

1. USB-büS-Interface

2. Bürkert Communicator PC software

büS stick

Connection to LoggerHMIU

Terminating resistor
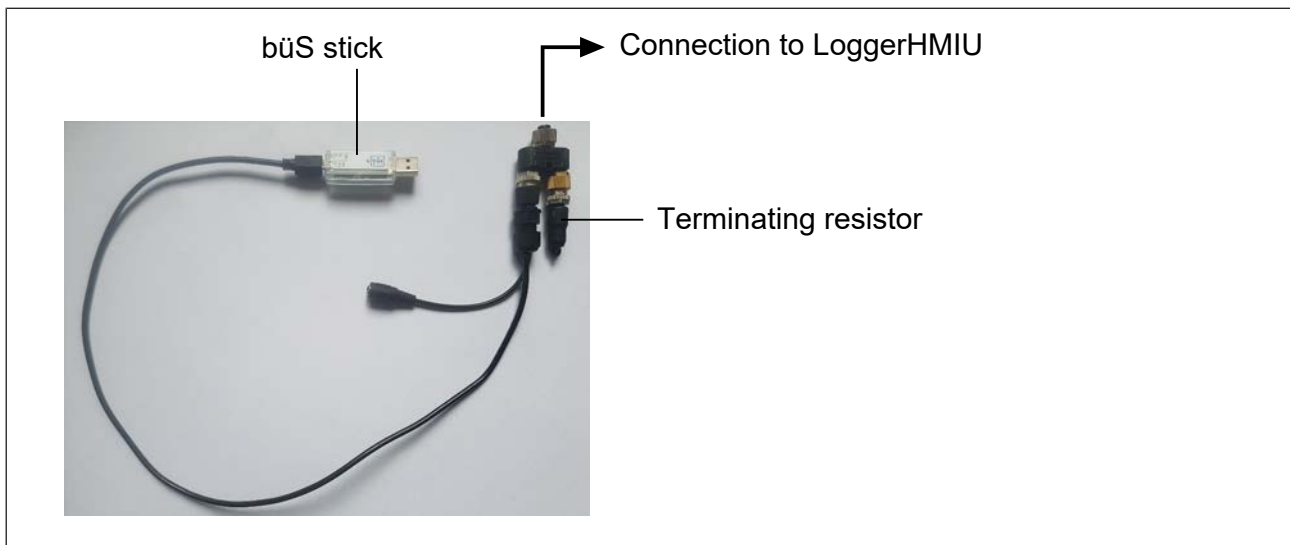
Fig. 6: USB-büS-Interface

Procedure:

→ Install the Bürkert Communicator on the PC.

→ Assemble elements of the USB-büS-Interface as shown in the image.

→ Connect the Y adapter to the LoggerHMIU.

→ Plug the büS stick into the USB interface on the PC.

✅ The connection to the PC is established.

MAN 1000239754 EN Version: C Status: RL (released | freigegeben) printed: 25.09.2023

8 START-UP

8.1 Safety instructions during the start-up

⚠️ **DANGER!**

Risk of injury due to improper operation.

▶ Only trained technicians may start up the device or system.

ATTENTION!

When password protection is disabled, the user level is: Installer (all settings can be changed).

To prevent unwanted access, enable password protection and change the passwords.

8.2 Configuring the device

The configuration can be performed using the following components:

- 7" touchscreen of the connected system

  Here, a startup wizard guides the user through the basic configuration (see chapter "Launch startup wizard")

- PC with the Bürkert Communicator software

❗ **For configuration using the Bürkert Communicator, you need the USB-büS-Interface, which is available as an accessory. See chapter "Replacement parts, accessories [▶ 122]".**

📖 **You can find the description of the configuration in the chapter "Operation [▶ 24]" and "Functions (menus) [▶ 33]".**

You can find the Bürkert Communicator software and associated general description on the Bürkert website.

You can find the general description of the 7" touchscreen in the chapter "Operating the 7" touchscreen [▶ 89]".

Before start-up, all functions of the device are set to the factory setting.

Factory settings for operation:

- Language: English
- Password protection: disabled

ATTENTION!

When password protection is disabled, the user level is: Installer (all settings can be changed).

To prevent unwanted access, enable password protection and change the passwords.

8.2.1 Setting with the 7" touchscreen

The following chapter contains descriptions of settings and operation:

- Operation
  - Description of the user interface
  - Description of the operating structure
  - Description of the display elements

- Functions (menus)
  - Description of the functions
  - Menu tree of the functions
- Operating the 7" touchscreen
  - Description of the views Desktop, Trend and Help view

8.2.1.1   Launching the startup wizard

The device can be configured conveniently using a startup wizard.

Initial start-up: The startup wizard can be launched directly here in the device view of the LoggerHMIU.

User level: Installer

Factory setting: Off

Menu or function	Values or description	
LoggerHMIU		
> General settings		
> Maintenance		
> Startup wizard	The startup wizard launches.	
Display		
> Language	⦿ English ◯ German ◯ French	
> System of units	⦿ Metric ◯ U.S. ◯ Imperial	
> Device name	LoggerHMIU	
> Device location		
Date and time		
> Editable	On Off	
> Day		
> Month		
> Year		
> Editable	On Off	
> Hour		
> Minute		
> Second		
Time zone		

Menu or function	Values or description	
> Region		
> Location		
User settings		
> Password protection	On Off	
> New password		
> Confirm password		
Static IP configuration		
> Static IP addressing	On Off	
> IP address*		
> Subnet mask*		
> Broadcast IP*		
> Default gateway*		*Appears if Static IP addressing On.
Remote access (VNC)		
> Current session	On Off	
> At startup	On Off	
> Password	Password	Password MUST be exactly 8 characters
Logger		
> Auto delete backup files	On Off	
> Log messages	On Off	
> Log min/max values	On Off	

Tab. 3: Menu tree

Startup wizard:

→ Startup wizard ●─○─○ ••••••▶

The startup wizard launches.

→ Next ••••••▶

Settings for the display appear.

| Language
System of units
Device name
Device location | German ✎
Metric ✎
LoggerHMIU ✎
✎ | → Choose language.
→ Choose unit system.
→ Set device name.
→ Set device location. |

→ Next ········►

→ Next ········►

Settings for the date appear.

| Editable
Day
Month
Year | Off ✎
✎*
✎*
✎* | → On or Off .
→ Set day.
→ Set month.
→ Set year.
*Adjustable if Editable On . |

→ Next ········►

Settings for the time appear.

| Editable
Hour
Minute
Second | Off ✎
✎*
✎*
✎* | → On or Off .
→ Set hour.
→ Set minute.
→ Set seconds.
*Adjustable if Editable On . |

→ Next ········►

→ Next ········►

Settings for the time zone appear.

| Region
Location | ✎
✎ | → Set region.
→ Set position. |

→ Next ········►

→ Next ········►

Settings for the user level appear.

→ Next ········►

| User logged in
Password protection
New password
Confirm password | Installer
Off ✎
****** ✎
****** ✎ |
→ On or Off .
→ Set new password.
→ Confirm password.
Default installer password: 1946 |

→ Next ·······►

→ Next ·······►

Settings for the IP address appear.

	Static IP addressing	Off ✎	→ On or Off .
	IP address*1	0.0.0.0*2	→ Set IP address.
	Subnet mask*1	0.0.0.0*2	→ Set subnet mask.
	Broadcast IP*1	0.0.0.0*2	→ Set Broadcast IP.
	Default gateway*1	0.0.0.0*2	→ Set standard gateway.
			*1*Appears if* Static IP addressing On.
			*2If no network is connected, "offline" appears here

→ Next ·······►

If Static IP addressing On the device is restarted.

→ Next ·······►

Settings for remote access (VCN) appear:

	Current session	Off ✎	→ On or Off .
	At startup	Off ✎	→ On or Off .
	Password	***** ✎	Factory setting: Password
			Password MUST be exactly 8 characters

→ Next ·······►

→ Next ·······►

Settings for logger appear:

	Auto delete backup files	On ✎	→ On or Off .
	Log messages	On ✎	→ On or Off .
	Log min/max values	Off ✎	→ On or Off .

→ Next ·······►

→ Finish ·······►

✔ The base settings for the device are set.

---------------------- Info: Switching to the views ----------------------

Changing to the device view (7" touchscreen):

→ From any view: 🏠* ·······► 〈

Changing to the detailed views (Communicator, 7" touchscreen):

→ Choose device (in the navigation area) ·······► Choose function (in the navigation area) ·······► if necessary: Change to the detailed view Diagnostics or Maintenance

Changes to the main view (adjustable, factory setting: Desktop 1 of x).

8.2.2   Setting with PC and Bürkert Communicator

Preconditions (see accessories):

1.   USB-büS-Interface

2.   Bürkert Communicator PC software

The following chapters and operating instructions contain descriptions of settings and operation:

▪ Operation

  – Description of the user interface

  – Description of the display elements

▪ Functions (menus)

  – Description of the functions

  – Menu tree of the functions

▪ Communicator Operating Instructions

Setting up a connection:

Precondition: The device is connected to the PC and Bürkert Communicator is installed.

→ Start the Bürkert Communicator

→ ⊞ Add interface...

✅ A window appears.

→ büS stick ┈┈►

→ Port Bürkert USB büS stick .

→ Finish ┈┈►

✅ The device appears in the navigation area.

9 OPERATION

This chapter describes in abbreviated form the user interfaces and operating structure of the operating software, the basic functions and the display elements.

> 📖ℹ️ **You can find all functions of the device in the chapter** "Functions (menus) [▶ 33]".

9.1 7" touchscreen

9.1.1 User interface 7" touchscreen

The user interface contains the following elements:

- 7" touchscreen
- Status LED
- Button (home button)
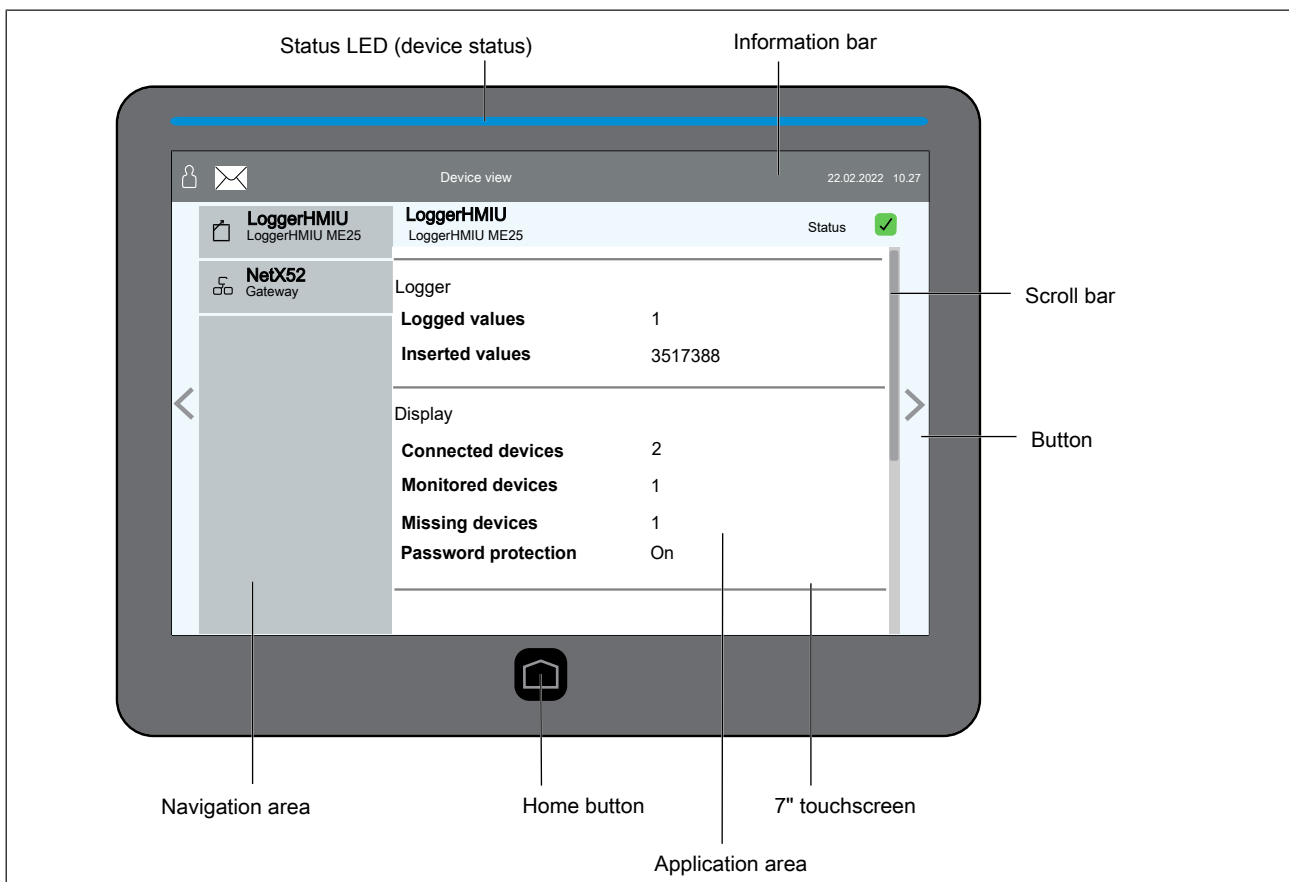
Fig. 7: User interface

Area	Description
Status LED	Indication of the device status in line with NAMUR NE107, Issue 2006-06-12
7" touchscreen	Display and operating

Area	Description
Button (home button)	Abort without saving and change to main view (factory setting: Desktop 1 of x)
	7" touchscreen displays a desktop: Change to device view

Tab. 4: User interface

Area	Description
Information bar	Designation of the displayed view or product, function and view (and sub-menu)
	Display of user level, date and time, available messages, USB storage medium connected
Button	Changing between the views Desktop views, Device view, Trend view, Help view
Application area	Designation according to the view
	Display of process values, graphs or input possibilities according to the view, product or function selected
Navigation area	Device view: Selection of connected products
	Detailed views: Selection of functions according to the selected product

Tab. 5: Areas of the 7" touchscreen

9.1.2   Operation with 7" touchscreen

The 7" touchscreen allows the user to conveniently set and monitor application-specific parameters of the connected system.

> **You can find the general description of the 7" touchscreen Type ME21 in the chapter "Operating the 7" touchscreen [▷ 89]".**
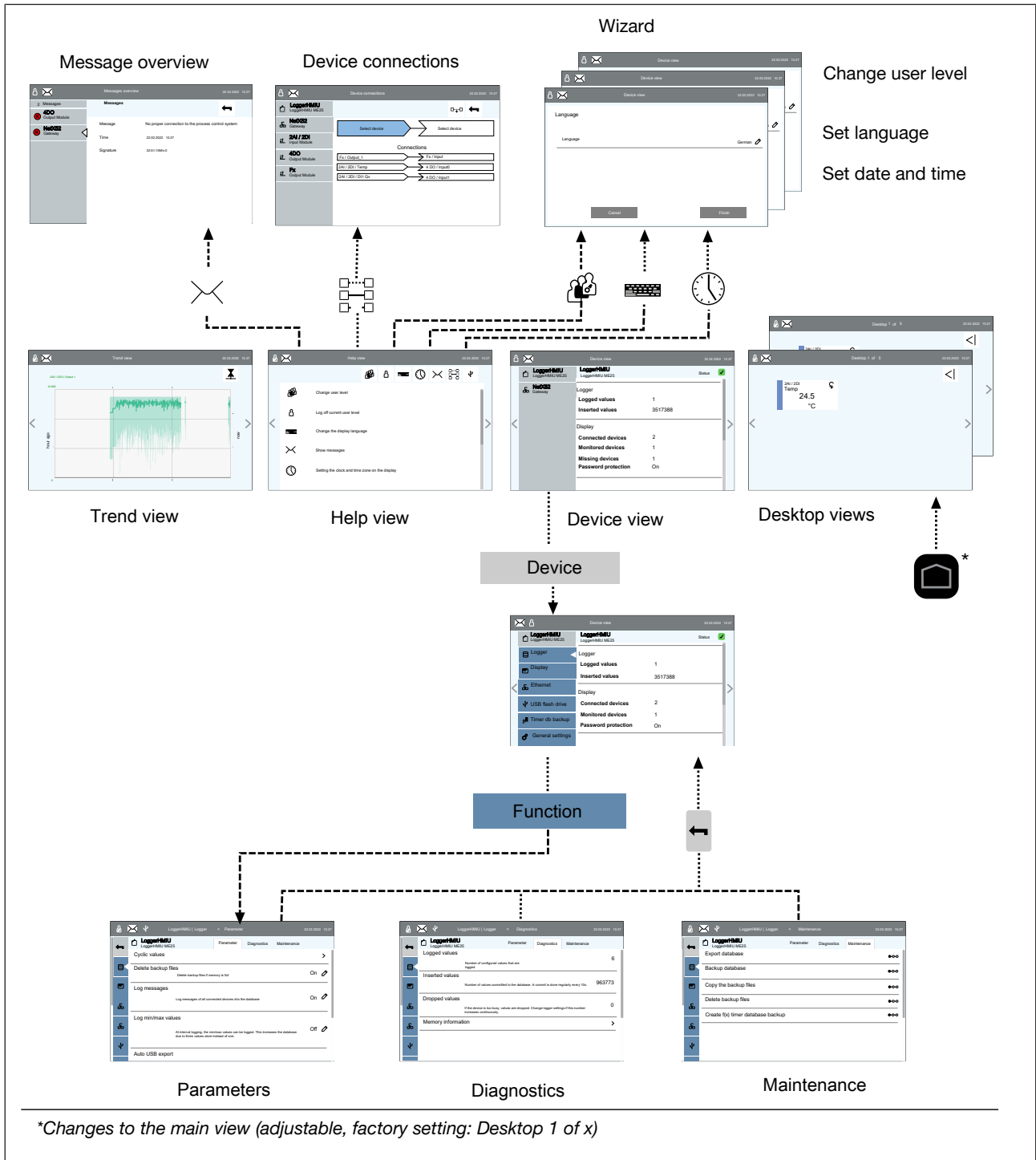
Fig. 8: Description

View	Description
Desktop 1 of x	View for value widgets
	View for designing by the user
Trend view	View for displaying recorded process values in graphs.

View	Description
Help view	Overview of icons with a short description
	Calling up the following functions: Change user level, set language, set time, display messages, set device connections
Device view	The connected products are displayed and can be selected in the navigation area.
	If a product is selected, the navigation area shows the possible functions.
	The application area shows the data from the selected product.
Detailed view Diagnostics	View for showing data.
	The functions of the products selected in the device view are displayed in the navigation area and can be selected.
Detailed view Parameters	View for showing and setting data.
	The functions of the products selected in the device view are displayed in the navigation area and can be selected.
Detailed view Maintenance	View for showing and setting supplementary data and commands.
	The functions of the products selected in the device view are displayed in the navigation area and can be selected.

Tab. 6: Description of the views

9.1.2.1   Settings on the 7" touchscreen: Changing the views

Changing to desktop views:

→ From any view: ⬛* ▬▬▶

☑ The view changes to desktop view 1 of x.

→ Additional desktop views (if available): ❯ ▬▬▶

Changing to detailed views:

Changing to the device view (7" touchscreen):

→ From any view: ⬛* ▬▬▶ ❮

To device view:

→ Choose product (in the navigation area).

→ Choose function (in the navigation area).

☑ The view changes to the detailed view Parameters.

→ If necessary, change to the detailed view Diagnostics or Maintenance.

Changing to the help view:

Changing to the device view (7" touchscreen):

→ From any view: ⌂* ·······► ‹

To device view:

→ ‹ ·······►

✅ The view changes to the help view.

Changing to the trend view:

Changing to the device view (7" touchscreen):

→ From any view: ⌂* ·······► ‹

To device view:

→ ‹ ·······►

→ ‹ ·······►

✅ The view changes to the trend view.

Changes to the main view (adjustable, factory setting: Desktop 1 of x).

9.2 Bürkert Communicator

9.2.1 Operating with Communicator

The Bürkert Communicator enables the user to conveniently set and monitor application-specific parameters of the connected system.

📖 The general description of the Bürkert Communicator can be found on the Bürkert website.

9.2.1.1 Communicator user interface
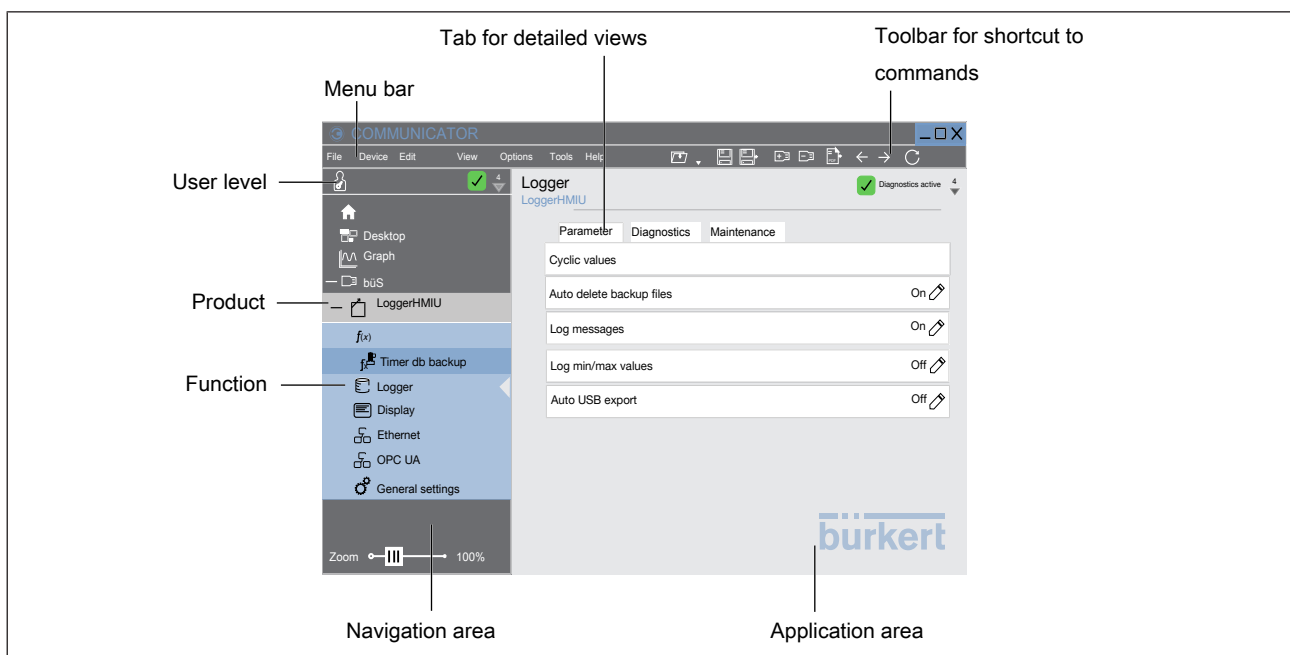
Fig. 9: User interface

Area	Description
Menu bar Toolbar	Menus and commands for operating the Communicator
Application area	Display of process values, graphs or input possibilities according to the view, product or function selected.
Navigation area	Display of user level and error messages Selection of connected interfaces Selection of connected products at the interface Selection of functions according to the selected product.

Tab. 7: Description of areas

9.2.1.2   Settings in the Communicator: Switching to detailed views

The user can make settings to connected devices in the detailed views:

→ Choose product in the navigation area.

→ Choose function in the navigation area.

→ If necessary, change to the detailed view Diagnostics or Maintenance.

---------------------- Info: Switching to the views ----------------------

Changing to the detailed views (Communicator,):

→ Choose product (in the navigation area) ▪▪▪▪▪▪► Choose function (in the navigation area) ▪▪▪▪▪▪► if necessary: Change to the detailed view Diagnostics or Maintenance

9.3   Display elements

9.3.1   Display element on the device (LoggerHMIU module)

The display elements provide information about:

▪ Device status

▪ Network connection

Device status LED

for network connection:

Link/Act LED (green)

Link LED (yellow)
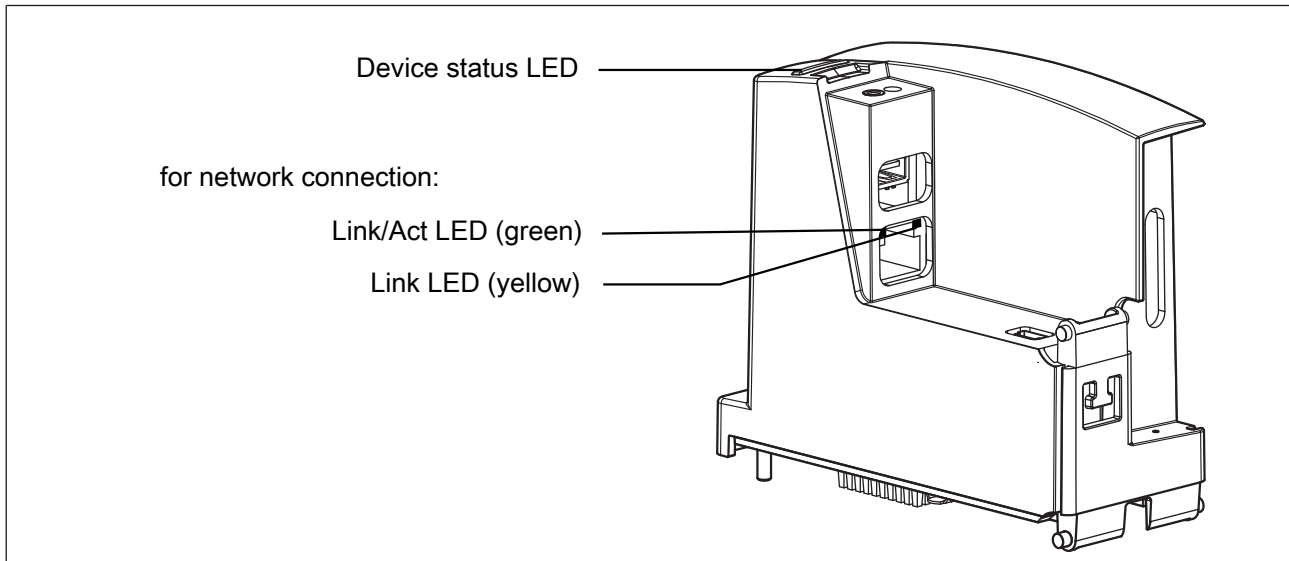
Fig. 10: Display elements

9.3.1.1   Light status of device status LED

Light status	Status	Description
Is not lit		No power is supplied to the device
Is lit green	Normal operation	Device is in normal operation
Is lit in a colour according to NAMUR NE 107, Issue 2006-06-12		For a description, see the table of the colour description according to NAMUR NE 107, Issue 2006-06-12 in the chapter "Display device status"
Flashing	Identification	Use to identify a device in the büS network. The device is selected using the Bürkert Communicator software or on a 7" touchscreen

Tab. 8: Light status of device status LED

9.3.1.2   Light status of the LEDs for network connection

LED	Light status	Description
Link/Act LED (green)	Is lit	Data is transmitted
	Is not lit	Connection to network inactive
Link LED (yellow)	Is lit	Connection to network active
	Is not lit	Connection to network inactive

Tab. 9: LED for network connection

9.3.2   Display elements 7" touchscreen

The display elements provide information about:

- Device status of the complete system
- Device status of a product
- Messages
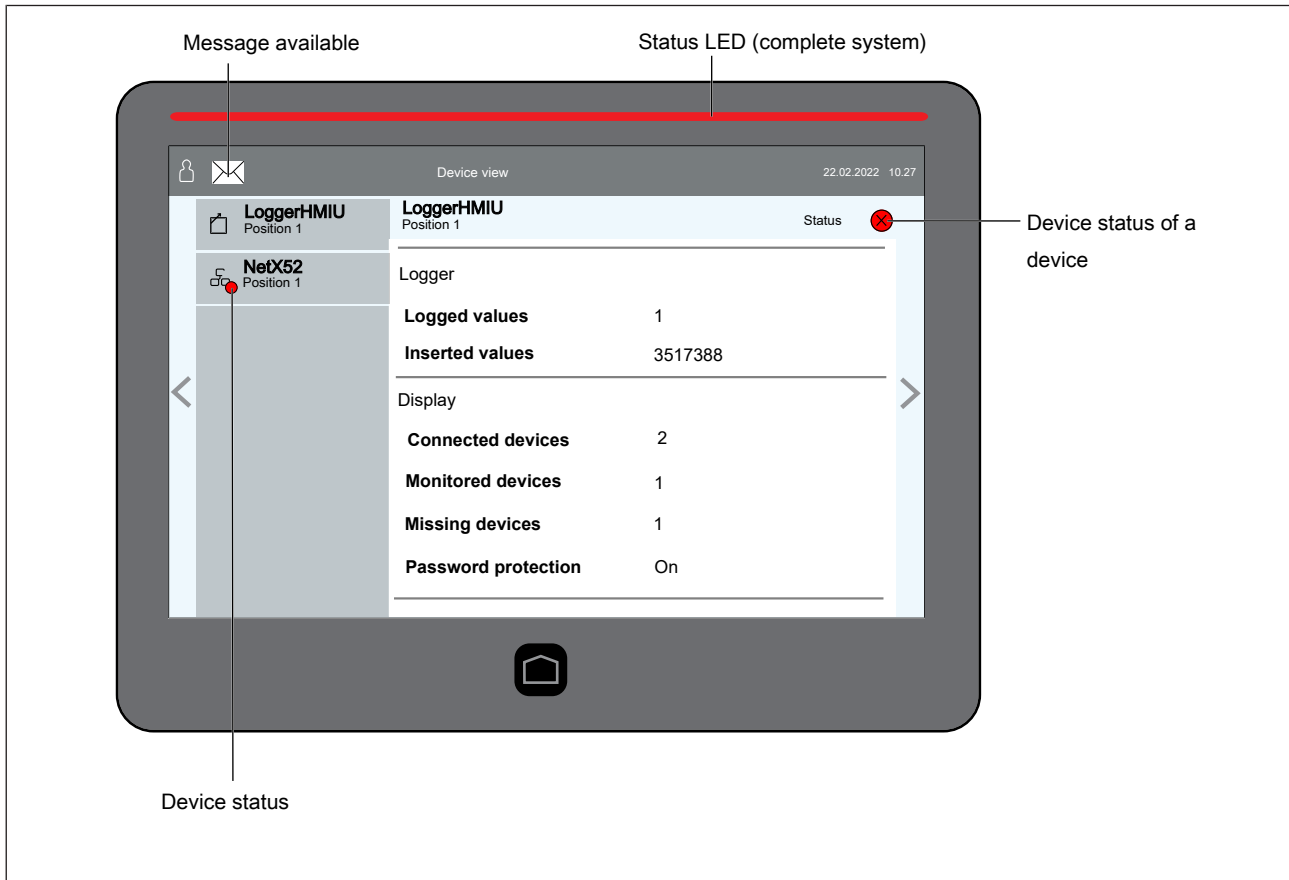
Fig. 11: Display elements

Light status of the status LED and display of a product device status:

For a description, see the table of the colour description according to NAMUR NE 107, Issue 2006-06-12 in the chapter "Display device status".

If there is a message about a product, information bar displays the icon ✉. An icon appears in the navigation area for the product concerned (e. g. ⊗).

9.3.3   Display of device status

The device status LED or status LED indicates the device status.

The display elements change color in accordance with NAMUR NE 107, issue 2006-06-12.

If several device statuses exist simultaneously, the device status with the highest priority is displayed. The priority is determined by the severity of the deviation from normal operation (red LED = failure = highest priority).

Color	Color code	Status	Description
red	5	Outage, error or malfunction	Normal operation is not possible due to a malfunction in the device or on its peripheral equipment.
Orange	4	Function check	Work is being carried out on the device; normal operation is therefore temporarily not possible.
yellow	3	Out of specification	Ambient conditions or process conditions for the device are outside the specified area.

Color	Color code	Status	Description
blue	2	Maintenance required	The device is in normal operation, although a function is briefly restricted. → Service device
green	1	Diagnostics active	Device is operating perfectly. Status changes are indicated in different colors. Messages are transmitted via a fieldbus if connected.
white	0	Diagnostics inactive	Device is switched on. Status changes are not displayed. Messages are not transferred via a fieldbus that may be connected.

Tab. 10: Description of the colors

10 FUNCTIONS (MENUS)

10.1 Function display

⬚	Display
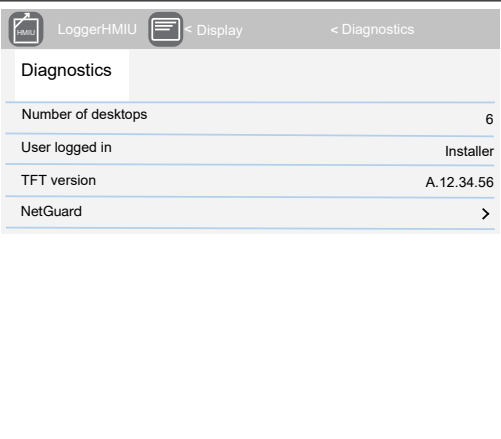
Functions:

- Displays for the desktop, user level and TFT version

User actions, setting of:

- Language
- Password protection
- User level
- Password
- Unit system
- Units of connected devices
- Brightness of the 7" touchscreen
- Main view
- Screen saver
- Date and time
- Time zone
- Remote access (VNC)
- Device scan (NetGuard)
- Device start-up time (NetGuard)
- Device monitoring (NetGuard)

10.1.1 Function display, description of views

	Detailed view Diagnostics
LoggerHMIU < Display < Diagnostics Diagnostics Number of desktops .... 6 User logged in .... Installer TFT version .... A.12.34.56 NetGuard .... >	Information: • Number of desktops • Active user level (access rights) • TFT version Setting: • Device scan (NetGuard) • Device start-up time (NetGuard) • Monitor devices (NetGuard) Setting dependent on user level.

LoggerHMIU ☰ < Display < Parameter **Parameter** Language German ✎ Brightness ○—100 %—▥ ✎ Screen saver Configure what to do when device is not used. > Homescreen Switch to this view at home button pressed or screensaver active. Desktop ✎ Desktop number 1 ✎ Password protection If disabled, the standard user has rights of an installer On ✎ Date and time > System of units Metric ✎ Unit selection Configure specific unit for specific device and value ●○○ *Desktop wallpapers Upload background image to the device. Then configure image at a specific desktop of the device. >	Detailed view Parameters Setting: ▪ Language ▪ Password protection ▪ Unit system ▪ Units of connected devices ▪ Brightness ▪ Main view ▪ Screen saver ▪ Date and time (display and format) Setting dependent on user level. *Only appears in the Bürkert Communicator.*
LoggerHMIU ☰ < Display < Maintenance **Maintenance** Remote access (VNC) > Change password ●○○ Date and time ●○○ Time zone ●○○ User level > Logout >	Detailed view Maintenance Setting: ▪ Remote access (VNC) ▪ Password ▪ Date and time ▪ Time zone ▪ Change user level Setting dependent on user level.

Tab. 11: Logger, detailed views

10.1.2 Set language

10.1.2.1 Setting the language on the 7" touchscreen

User level: Advanced user ⌘

Factory setting: English

Set language:

→ Change to help view.

→ ⌨ ·······►

The wizard starts.

→ Language ✎ ·······►

Possible selection:

◉ English
◯ German
◯ French

→ Choose language.

→ Finish ·······►

✅ The language is set.

📖 The language can also be set in the Display function in LoggerHMIU.

---------------------- Info: Switching to the views ----------------------

Changing to the help view:

Changing to the device view (7" touchscreen):

→ From any view: 🏠* ▪▪▪▪▪▪▶ ❮

To device view:

→ ❮ ▪▪▪▪▪▪▶

✅ The view changes to the help view.

Changes to the main view (adjustable, factory setting: Desktop 1 of x).

10.1.2.2   Setting the language in the display function

User level: Advanced user 👤

Factory setting: English

Menu or function	Values or description
LoggerHMIU	
> Display	
> Parameter	
> Language	◉ English ○ German ○ French

Tab. 12: Menu tree

Set language:

→ Language ✏ ▪▪▪▪▪▪▶

Possible selection:

◉ English
○ German
○ French

→ Choose language.

✅ The language is set.

---------------------- Info: Switching to the views ----------------------

Changing to the device view (7" touchscreen):

→ From any view: 🏠* ▪▪▪▪▪▪▶ ❮

Changing to the detailed views (Communicator, 7" touchscreen):

→ Choose device (in the navigation area) ▪▪▪▪▪▶ Choose function (in the navigation area) ▪▪▪▪▪▶ if necessary: Change to the detailed view Diagnostics or Maintenance

Changes to the main view (adjustable, factory setting: Desktop 1 of x).

10.1.3   Enabling, disabling password protection

	Enabling (on) or disabling (off) password protection
With this function, the user enables or disables the user levels (user, advanced user, installer) with the corresponding access rights.	

ATTENTION!

When password protection is disabled, the user level is: Installer (all settings can be changed).

To prevent unwanted access, enable password protection and change the passwords.

User level: Installer 🔒

Factory setting: Off

Menu or function	Values or description
LoggerHMIU	
> Display	
> Parameter	
> Password protection	On Off

Tab. 13: Menu tree

Enabling, disabling password protection:

→ Password protection ✎ ▪▪▪▪▪▶

→ On or Off .

---------------------- Info: Switching to the views ----------------------

Changing to the device view (7" touchscreen):

→ From any view: 🏠* ▪▪▪▪▪▶ ‹

Changing to the detailed views (Communicator, 7" touchscreen):

→ Choose device (in the navigation area) ▪▪▪▪▪▶ Choose function (in the navigation area) ▪▪▪▪▪▶ if necessary: Change to the detailed view Diagnostics or Maintenance

Changes to the main view (adjustable, factory setting: Desktop 1 of x).

10.1.4   Change password

	Change password

With this function, the user changes the password for the current user level (access rights).

User level: Advanced user ⬛ for password of advanced user

Factory setting: 5678

User level: Installer ⬛ for password of installer

Factory setting: 1946

Menu or function	Values or description
LoggerHMIU	
> Display	
> Maintenance	
> Change password	The wizard starts.

Tab. 14: Menu tree

Change password:

→ Change password ●○○ ⸱⸱⸱⸱⸱►

The wizard starts.

→ Change password ●○○ ⸱⸱⸱⸱⸱►

→ Password ✎ ⸱⸱⸱⸱⸱►

→ Enter current password.

→ New password ✎ ⸱⸱⸱⸱⸱►

→ Enter new password.

→ Confirm password ✎ ⸱⸱⸱⸱⸱►

→ Enter new password.

✅ The password is changed.

---------------------- Info: Switching to the views ----------------------

Changing to the device view (7" touchscreen):

→ From any view: ⬛* ⸱⸱⸱⸱⸱► ⟨

Changing to the detailed views (Communicator, 7" touchscreen):

→ Choose device (in the navigation area) ⸱⸱⸱⸱⸱► Choose function (in the navigation area) ⸱⸱⸱⸱⸱► if necessary: Change to the detailed view Diagnostics or Maintenance

*Changes to the main view (adjustable, factory setting: Desktop 1 of x).

10.1.5   Set unit system

	Set unit system
With this function, the user selects a unit system: metric, U.S. or Imperial	

User level: Installer ⬛

Factory setting: Metric

Menu or function	Values or description
LoggerHMIU	
> Display	
> Parameter	
> System of units	◉ Metric ○ U.S. ○ Imperial

Tab. 15: Menu tree

Set unit system:

→ System of units ✎ ••••••►

Possible selection:

◉ Metric
○ U.S.
○ Imperial

→ Choose unit system.

✅ The unit system is set.

---------------------- Info: Switching to the views ----------------------

Changing to the device view (7" touchscreen):

→ From any view: ⬛* ••••••► ❮

Changing to the detailed views (Communicator, 7" touchscreen):

→ Choose device (in the navigation area) ••••••► Choose function (in the navigation area) ••••••► if necessary: Change to the detailed view Diagnostics or Maintenance

*Changes to the main view (adjustable, factory setting: Desktop 1 of x).

10.1.6   Selecting units for a device in the system

	Selecting units for a device in the system (unit selection)
With this function, the user chooses the unit values for connected devices.	

User level: Advanced user 🔒

Menu or function	Values or description
LoggerHMIU	
> Display	
> Parameter	
> Unit selection	The wizard starts.

Menu or function	Values or description	
> Select device	◉ Device 1 ○ Device 2	Connected devices
> Select value	◉ Value 1 ○ Value 2	Possible values
> Select unit	◉ Unit 1 ○ Unit 2	Possible units

Tab. 16: Menu tree

Choosing units for a device in the system:

→ Unit selection ●–○–○ ·······▶

The wizard starts.

→ Select device ✎ ·······▶

Possible selection:

The connected devices appear here

◉ Device 1
○ Device 2

→ Choose device.

→ Select value ✎ ·······▶

Possible selection:

The possible values appear here.

◉ Value 1
○ Value 2

→ Choose value.

→ Select unit ✎ ·······▶

Possible selection:

The possible values appear here.

◉ Unit 1
○ Unit 2

→ Choose unit.

→ Finish ·······▶

☑ The unit for a device in the system is set.

---------------------- Info: Switching to the views ----------------------

Changing to the device view (7" touchscreen):

→ From any view: ⌂* ·······▶ ‹

Changing to the detailed views (Communicator, 7" touchscreen):

→ Choose device (in the navigation area) ·······► Choose function (in the navigation area) ·······► if necessary: Change to the detailed view Diagnostics or Maintenance

Changes to the main view (adjustable, factory setting: Desktop 1 of x).

10.1.7   Setting the brightness of the 7" touchscreen

User level: Advanced user

Factory setting: 100%

Menu or function	Values or description	
LoggerHMIU		
> Display		
> Parameter		
> Brightness	100%	Range: 10...100 %
		Increment: 10

Tab. 17: Menu tree

Setting the brightness of the 7" touchscreen:

→ Brightness ✎ ·······►

→ Set brightness.

☑ The brightness is set.

---------------------- Info: Switching to the views ----------------------

Changing to the device view (7" touchscreen):

→ From any view: ⬛* ·······► ‹

Changing to the detailed views (Communicator, 7" touchscreen):

→ Choose device (in the navigation area) ·······► Choose function (in the navigation area) ·······► if necessary: Change to the detailed view Diagnostics or Maintenance

Changes to the main view (adjustable, factory setting: Desktop 1 of x).

10.1.8   Set screen saver

	Set screen saver
With this function, the user sets the following parameters: ▪ Waiting time until the screen saver is active ▪ Enabling or disabling dimming the screen if the screen saver is active ▪ Setting the brightness of the 7" touchscreen if the screen saver is active (only if dim screen is active)	

If the 7" touchscreen is not touched within an adjustable time, the screen saver is enabled:

▪ The main view appears (factory setting: Desktop 1 of x).

▪ The user level changes to user if password protection is active

User level: Installer 🔒

Factory setting: `Wait time` 60 minutes, `Dimm screen` `On`, `Brightness` 80%

Menu or function	Values or description	
LoggerHMIU		
> `Display`		
> `Parameter`		
> `Screen saver`		
> `Wait time`	○ 1 min ○ 2 min ○ 5 min ○ 15 min ○ 30 min ◉ 60 min	
> `Dimm screen`	`On` `Off`	
> `Brightness`*	80%	Range: 10...100 % Increment: 10 *Only appears if* `Dimm screen` `On`.

Tab. 18: Menu tree

Setting the screen saver:

→ `Screen saver` > ·······▶

Setting the waiting time until the screen saver is active:

→ `Wait time` ✎ ·······▶

Possible selection:

○ 1 min

○ 2 min

○ 5 min

○ 15 min

○ 30 min

◉ 60 min

→ Set waiting time.

✅ The waiting time is set.

Enabling or disabling dimming the screen if the screen saver is active:

→ `Dimm screen` ✎ ·······▶

→ `On` or `Off` .

Setting the brightness of the 7" touchscreen if the screen saver is active:*

→ Brightness ✎ ┅┅►

→ Set brightness.

✅ The brightness is set.

Only appears if Dimm screen On.

---------------------- Info: Switching to the views ----------------------

Changing to the device view (7" touchscreen):

→ From any view: 🏠* ┅┅► ‹

Changing to the detailed views (Communicator, 7" touchscreen):

→ Choose device (in the navigation area) ┅┅► Choose function (in the navigation area) ┅┅► if necessary: Change to the detailed view Diagnostics or Maintenance

Changes to the main view (adjustable, factory setting: Desktop 1 of x).

10.1.9   Setting the date and time, display and format

	Setting the date and time, display and format
With this function, the user sets the following parameters: ▪ Enabling or disabling the display of date and/or time ▪ Enabling or disabling the 24-hour format ▪ Setting the date display	

User level: Installer 👤

Factory setting: Display Date and time enabled, 24-Hour-Format enabled, Date format DD.MM.YYYY

Menu or function	Values or description	
LoggerHMIU		
> Display		
> Parameter		
> Date and time		
> 24-Hour-Format	On Off	e.g. 14:32 e.g. 02:32 PM
> Date format	◯ MM.DD.YYYY ◉ DD.MM.YYYY ◯ YYYY-MM-DD	
> Display	◼ Date ◼ Time	

Tab. 19: Menu tree

Setting the date and time display:

→ `Date and time` > ·······▶

Enabling or disabling the display of date and/or time:

→ `Display` ✎ ·······▶

Possible selection:

◼ Date

◼ Time

→ Choose date and/or time.

Enabling or disabling the 24-hour format:

→ `24-Hour-Format` ✎ ·······▶

→ `On` or `Off` .

Setting the date display:

→ `Date format` ✎ ·······▶

Possible selection:

○ MM.DD.YYYY

◉ DD.MM.YYYY

○ YYYY-MM-DD

→ Set date format.

✅ The date format is set.

---------------------- Info: Switching to the views ----------------------

Changing to the device view (7" touchscreen):

→ From any view: ⌂* ·······▶ ‹

Changing to the detailed views (Communicator, 7" touchscreen):

→ Choose device (in the navigation area) ·······▶ Choose function (in the navigation area) ·······▶ if necessary: Change to the detailed view Diagnostics or Maintenance

----

10.1.10 Setting remote access (VNC)

	Setting remote access
With this function, the user sets the following parameters: 　▪ Enabling or disabling remote access for the current session 　▪ Enabling or disabling remote access during the start 　▪ Set password	

If a network connection exists, a VNC client can access the 7" touchscreen via port 5901.

> ⚠ We only recommend access within the company network. Bürkert Werke GmbH & Co. KG is not liable for software or service offers from third-party providers.

User level: Installer 🔓

Factory setting: Current session Off, At startup Off, Password Password

Menu or function				Values or description	
LoggerHMIU					
	> Display				
		> Maintenance			
			> Remote access (VNC)		
or					
	> Ethernet				
		> Parameter			
			> Remote access (VNC)		
			> Current session	On	
				Off	
			> At startup	On	
				Off	
			> Password	*****	Factory setting: Password
					Password MUST be exactly 8 characters

Tab. 20: Menu tree

Enabling or disabling remote access for the current session:

→ Current session ✎ ┈┈┈►

→ On or Off .

Enabling or disabling remote access during the start:

→ At startup ✎ ┈┈┈►

→ On or Off .

Set password:

→ Password ✎ ┈┈┈►

→ Set password.

Note: The password must be exactly 8 characters long.

---------------------- Info: Switching to the views ----------------------

Changing to the device view (7" touchscreen):

→ From any view: ⌂* ┈┈┈► ‹

Changing to the detailed views (Communicator, 7" touchscreen):

→ Choose device (in the navigation area) ▸▸▸▸► Choose function (in the navigation area) ▸▸▸▸► if necessary: Change to the detailed view Diagnostics or Maintenance

Changes to the main view (adjustable, factory setting: Desktop 1 of x).

10.1.11 Setting the main view

	Choose the main view
With this function, the user chooses the view that appears after the home button is pressed or if the screen saver is active.	

User level: Installer 🔒

Factory setting: Desktop

Menu or function	Values or description	
LoggerHMIU		
> Display		
> Parameter		
> Homescreen	⦿ Desktop ◯ Device view ◯ Trend view	
> Desktop number * *Only appears if the main view Desktop is selected and more than one desktop exists.*	⦿ 1 ◯ 2 : ◯ 10	Only the possible desktops appear (maximum 10).

Tab. 21: Menu tree

Setting the main view:

→ Homescreen ✎ ▸▸▸▸►

Possible selection:

⦿ Desktop
◯ Device view
◯ Trend view

→ Choose the main view.

✔ The main view is set.

Setting the desktop view:*

→ Desktop number ✎ ▸▸▸▸►

Possible selection (only the possible desktops appear):

⦿ 1

◯ 2

:

◯ 10

→ Choose desktop.

☑ The main view is set.

Only appears if the main view Desktop is selected and more than one desktop exists.

---------------------- Info: Switching to the views ----------------------

Changing to the device view (7" touchscreen):

→ From any view: ⌂* ┈┈► ‹

Changing to the detailed views (Communicator, 7" touchscreen):

→ Choose device (in the navigation area) ┈┈► Choose function (in the navigation area) ┈┈► if necessary: Change to the detailed view Diagnostics or Maintenance

Changes to the main view (adjustable, factory setting: Desktop 1 of x).

10.1.12   Starting the device scan

	Starting the device scan
This function identifies the connected devices and starts their monitoring.	

⚠ **If changes are made to connected devices, the function must be executed again.**

User level: Advanced user �

Menu or function	Values or description
LoggerHMIU	
> Display	
> Diagnostics	
> NetGuard	
> Trigger scan devices	The wizard starts.

Tab. 22: Menu tree

Starting the device scan:

→ Trigger scan devices ●─◯─◯ ┈┈►

☑ The connected devices are identified and monitored*.

Only if Monitor devices On .

---------------------- Info: Switching to the views ----------------------

Changing to the device view (7" touchscreen):

→ From any view: ⬠* ┉┉► ‹

Changing to the detailed views (Communicator, 7" touchscreen):

→ Choose device (in the navigation area) ┉┉► Choose function (in the navigation area) ┉┉► if necessary: Change to the detailed view Diagnostics or Maintenance

Changes to the main view (adjustable, factory setting: Desktop 1 of x).

10.1.13   Setting the device start-up time

	Setting the device start-up time
With this function, the user sets the time for the device start until a failed start is detected.	

User level: Installer 🔒

Factory setting: 30 s

Menu or function	Values or description	
LoggerHMIU		
> Display		
> Diagnostics		
> NetGuard		
> Start-up time device	30 s	Range: 0...63535 s

Tab. 23: Menu tree

Setting the device start-up time:

→ Start-up time device ✎ ┉┉►

→ Set time.

✅ The device start-up time is set.

---------------------- Info: Switching to the views ----------------------

Changing to the device view (7" touchscreen):

→ From any view: ⬠* ┉┉► ‹

Changing to the detailed views (Communicator, 7" touchscreen):

→ Choose device (in the navigation area) ┉┉► Choose function (in the navigation area) ┉┉► if necessary: Change to the detailed view Diagnostics or Maintenance

Changes to the main view (adjustable, factory setting: Desktop 1 of x).

10.1.14   Enabling or disabling monitor devices

	Monitor devices
With this function, the user enables or disables the device monitoring in the network.	

> ⚠ To initialise device monitoring, execute the `Trigger scan devices` function.

User level: Advanced user 🔓

Factory setting: `On`

Menu or function	Values or description
LoggerHMIU	
> `Display`	
> `Diagnostics`	
> `NetGuard`	
> `Monitor devices`	`On`
	`Off`

Tab. 24: Menu tree

Enabling, disabling monitor devices:

→ `Monitor devices` ✎ ┈┈►

→ `On` or `Off` .

---------------------- Info: Switching to the views ----------------------

Changing to the device view (7" touchscreen):

→ From any view: ⬜* ┈┈► ‹

Changing to the detailed views (Communicator, 7" touchscreen):

→ Choose device (in the navigation area) ┈┈► Choose function (in the navigation area) ┈┈► if necessary: Change to the detailed view Diagnostics or Maintenance

Changes to the main view (adjustable, factory setting: Desktop 1 of x).

10.2   General settings function

⚙	General settings

Functions:

- Displays and data for the device, system, büS, logbook, messages and licenses

User actions:

- Set the Bürkert system bus (büS)
- Enable or disable device status LED
- Enabling or disabling diagnostics functions
- Reset device to factory settings or restart
- Set date and time
- Set time zone

- Reset error counter
- Set CANopen status

10.2.1 General settings function, description of views

LoggerHMIU < General settings < Diagnostics **Diagnostics** Device status >￼ büS status >￼ Logbook >￼ Time zone >￼ Licenses ●-○-○￼ Driver versions Display drivers available to the display ●-○-○￼ System version A.12.34.56￼ Create system information report Export logbooks and system report files ●-○-○￼ Log messages Log messages of all connected devices into the database >￼	Detailed view Diagnostics Information: - Device status: Operating duration, number of device starts, memory status, system time - büS status: Receive error, send error, CANopen status - Time zone - Licenses - Driver versions - System version - Display logbook Setting: - Reset maximum values of the error counter - Export logbooks of the connected devices and system reports Settings dependent on user level.
LoggerHMIU < General settings < Parameter **Parameter** Status LED Colors and behavior of the device status LED >￼ büS Configuration of the büS interface >￼ Diagnostics Turn complete diagnostics on or off ●-○-○￼ PDO Configuration Configuration of the cyclic process data objects >￼	Detailed view Parameters Setting: - Device status LED - Bürkert system bus (büS) - Diagnostic functions - Cyclical process data objects Settings dependent on user level.
LoggerHMIU < General settings < Maintenance **Maintenance** Device information >￼ System information >￼ Reset device >￼ Date and time ●-○-○￼ Time zone ●-○-○￼ Fix internal configuration ●-○-○￼ In case of a corrupted internal configuration (e.g. USB does not work, Ethernet connection broken) diagnose the cause and force repair of the internal configuration.￼ Startup wizard ●-○-○￼	Detailed view Maintenance Information: - Device - System Setting: - Reset device to factory setting or restart - Date and time - Time zone - Repair internal configuration - Startup wizard Settings dependent on user level.

Tab. 25: Logger, detailed views

MAN 1000239754 EN Version: C Status: RL (released | freigegeben) printed: 25.09.2023

10.2.2   Set the Bürkert system bus (büS)

	Set the Bürkert system bus (büS)
With this function, the user sets the following parameters: ▪ User-specific data for device identification (designation, location, description) ▪ Expanded büS parameters (baud rate, address, bus operation mode, deallocation delay)	

User level: Installer

Factory setting: Baud rate 500kbit/s, Fixed CANopen address 0, Bus mode büS, Deallocation delay 500 ms

Menu or function	Values or description	
Device		
> General settings		
> Parameter		
> büS		
> Displayed name		
> Location		
> Description		
> Advanced		
> Unique device name		
> Baud rate	○ 50 kbit/s ○ 125 kbit/s ○ 250 kbit/s ◉ 500 kbit/s ○ 1 Mbit/s	
> Fixed CANopen address	0	Range: 0...255
> CANopen address	126	
> Bus mode	○ CANopen ◉ büS ○ Standalone	
> Deallocation delay	500 ms	Range: 0...65535 ms

Tab. 26: Menu tree

Setting user-specific data for device identification:

→ büS > ·······▶

Possible selection:

Displayed name ✎   Device name as displayed on displays and Communicator. Can be changed without affecting communication.

Location ✎   Location of the device. Will be displayed near the device name.

Description ✎	User description. Displayed in e.g. in tooltips
Advanced >	Advanced settings like baud rate, address or CANopen mode

Setting advanced büS parameters:

→ büS > ••••••►

→ Advanced > ••••••►

Possible selection:

Unique device name ✎	Used for partner allocations. Normally there's no need to change it
Baud rate ✎	○ 50 kbit/s
	○ 125 kbit/s
	○ 250 kbit/s
	◉ 500 kbit/s
	○ 1 Mbit/s
	Used CANopen transmission speed. Has to be the same for all devices in the network
Fixed CANopen address	0
	Change will only be accepted after a restart. If the given address is already used then the device deviates to a different address. '0' means 'auto addressing'
CANopen address ✎	126
	Actually used CANopen address
Bus mode ✎	○ CANopen
	◉ büS
	○ Standalone
	Mode of the büS interface: büS or CANopen compatibility mode
Deallocation delay ✎	Time between losing a partner and deleting its configuration. Lower values lead to earliert notification on partner loss, but can cause the system to boot up very slowly. Normally no need to change this value.

---------------------- Info: Switching to the views ----------------------

Changing to the device view (7" touchscreen):

→ From any view: 🏠* ••••••► ‹

Changing to the detailed views (Communicator, 7" touchscreen):

→ Choose device (in the navigation area) ••••••► Choose function (in the navigation area) ••••••► if necessary: Change to the detailed view Diagnostics or Maintenance

Changes to the main view (adjustable, factory setting: Desktop 1 of x).

10.2.3   Enable or disable device status LED

	Enable or disable device status LED

With this function, the user enables or disables the device status LED that is directly on the device.

The device status LED is directly on the device (see chapter "Display elements").

User level: Advanced user 👤

Factory setting: NAMUR mode

Menu or function	Values or description	
Device		
> General settings		
> Parameter		
> Status LED		
> Mode	◉ NAMUR mode ◯ LED off	

Tab. 27: Menu tree

Enabling or disabling the device status LED:

→ Status LED > •••••••►

→ Mode ✎ •••••••►

Possible selection:

◉ NAMUR mode   For a description, see chapter "Display device status".
◯ LED off

→ Choose operation mode.

✅ The mode is set.

---------------------- Info: Switching to the views ----------------------

Changing to the device view (7" touchscreen):

→ From any view: 🏠* •••••••► ‹

Changing to the detailed views (Communicator, 7" touchscreen):

→ Choose device (in the navigation area) •••••••► Choose function (in the navigation area) •••••••► if necessary: Change to the detailed view Diagnostics or Maintenance

Changes to the main view (adjustable, factory setting: Desktop 1 of x).

10.2.4 Enabling or disabling diagnostics functions

	Enabling or disabling diagnostics function
With this function, the user enables or disables the complete diagnostics of the device.	

User level: Installer 🔧

Factory setting: Off

Menu or function	Values or description	
Device		
> General settings		
> Parameter		
> Diagnostics	On	Turn complete diagnostics on or off
	Off	

Tab. 28: Menu tree

Enabling or disabling diagnostics functions:

→ Diagnostics ●‑○‑○ ‑‑‑‑‑►

→ On or Off .

✅ The diagnostics functions are enabled or disabled.

---------------------- Info: Switching to the views ----------------------

Changing to the device view (7" touchscreen):

→ From any view: ⌂* ‑‑‑‑‑► ‹

Changing to the detailed views (Communicator, 7" touchscreen):

→ Choose device (in the navigation area) ‑‑‑‑‑► Choose function (in the navigation area) ‑‑‑‑‑► if necessary: Change to the detailed view Diagnostics or Maintenance

*Changes to the main view (adjustable, factory setting: Desktop 1 of x).

10.2.5 Setting PDO configuration

	Setting PDO configuration
With this function, the user set cyclical process data objects.	

User level: User 🯄, installer 🯄
Factory setting: PDO 1 Inhibit time 1 s, Event timer 5 s

Menu or function	Values or description	
Device		
> General settings		
> Parameter		
> PDO Configuration		
> PDO 1	The wizard starts.	
> Inhibit time	1 s	Minimum time between two PDO transmission
		Range: 0...4999 s

Menu or function	Values or description	
> Event timer	5 s	**Maximum time between two PDO transmission** Range: 0...5 s
> Reset to default values	The wizard starts.	

Tab. 29: Menu tree

Setting the minimum and maximum time between 2 PDO transmissions:

→ PDO 1 ●─○─○ ┄┄┄►

The wizard starts.

→ Inhibit time ✎ ┄┄┄►

→ Set time.

→ Event timer ✎ ┄┄┄►

→ Set time.

✅ The minimum and maximum times are set.

Notes:

▪ The time of the Event timer must be greater than the time of the Inhibit time

▪ A low Inhibit time increases the bus load

▪ These settings are only valid at runtime. After a restart, the default values are used

Resetting to default values: Installer 🔧

→ Reset to default values ●─○─○ ┄┄┄►

→ Next ┄┄┄►

✅ The device is restarted and the default values are set.

---------------------- Info: Switching to the views ----------------------

Changing to the device view (7" touchscreen):

→ From any view: 🏠* ┄┄┄► ‹

Changing to the detailed views (Communicator, 7" touchscreen):

→ Choose device (in the navigation area) ┄┄┄► Choose function (in the navigation area) ┄┄┄► if necessary: Change to the detailed view Diagnostics or Maintenance

Changes to the main view (adjustable, factory setting: Desktop 1 of x).

10.2.6 Reset device to factory setting or restart

	Reset device to factory settings or restart (reset device)
With this function, the user executes the following actions: ▪ Restart device ▪ Reset device to factory settings	

User level: Installer

Menu or function	Values or description
Device	
> General settings	
> Maintenance	
> Reset device	
> Restart	The wizard starts.
> Reset to factory settings	The wizard starts.

Tab. 30: Menu tree

Restarting the device:

→ Restart ●-○-○ ┄┄►

The wizard starts.

→ Next ┄┄►

✔ The device is rebooted.

Reset device to factory settings:

→ Reset to factory settings ●-○-○ ┄┄►

The wizard starts.

→ Next ┄┄►

✔ The device is reset to factory settings.

---------------------- Info: Switching to the views ----------------------

Changing to the device view (7" touchscreen):

→ From any view: 🏠* ┄┄► ‹

Changing to the detailed views (Communicator, 7" touchscreen):

→ Choose device (in the navigation area) ┄┄► Choose function (in the navigation area) ┄┄► if necessary: Change to the detailed view Diagnostics or Maintenance

Changes to the main view (adjustable, factory setting: Desktop 1 of x).

10.2.7 Set date and time

	Set date and time
With this function, the user sets the date and time.	

User level: Installer

Menu or function	Values or description
LoggerHMIU	

Menu or function	Values or description
> General settings	
> Maintenance	
> Date and time	The wizard starts.
> Editable	On Off
> Day	
> Month	
> Year	
> Editable	On Off
> Hour	
> Minute	
> Second	

Tab. 31: Menu tree

Setting the date and time:

→ Date and time ●-○-○ ┈┈►

The wizard starts.

Settings for the date appear.

↓	Editable Day Month Year	Off ✎ ✎* ✎* ✎*	→ On or Off . → Set day. → Set month. → Set year. *Adjustable if Editable On .

→ Next ┈┈►

Settings for the time appear.

↓	Editable Hour Minute Second	Off ✎ ✎* ✎* ✎*	→ On or Off . → Set hour. → Set minute. → Set seconds. *Adjustable if Editable On .

→ Finish ┈┈►

✔ The date and time are set.

----------------------- Info: Switching to the views -----------------------

Changing to the device view (7" touchscreen):

→ From any view: [⌂]* ⸱⸱⸱⸱⸱► [‹]

Changing to the detailed views (Communicator, 7" touchscreen):

→ Choose device (in the navigation area) ⸱⸱⸱⸱⸱► Choose function (in the navigation area) ⸱⸱⸱⸱⸱► if necessary: Change to the detailed view Diagnostics or Maintenance

Changes to the main view (adjustable, factory setting: Desktop 1 of x).

10.2.8   Set time zone

	Set time zone
With this function, the user selects the region and position.	

User level: Installer [👤]

Factory setting: [Region] Europe, [Location] Berlin

Menu or function	Values or description
LoggerHMIU	
>[General settings]	
> [Maintenance]	
> [Time zone]	The wizard starts.
> [Region]	◉ Europe ○ Indian :
> [Location]	◉ Berlin ○ Bratislava :

Tab. 32: Menu tree

Setting the time zone:

→ [Time zone] ●–○–○ ⸱⸱⸱⸱⸱►

The wizard starts.

→ [Region] [✎] ⸱⸱⸱⸱⸱►

→ Set region.

→ [Location] [✎] ⸱⸱⸱⸱⸱►

→ Set position.

→ [Next] ⸱⸱⸱⸱⸱►

✅ The device is rebooted. The time zone is set.

----------------------- Info: Switching to the views -----------------------

Changing to the device view (7" touchscreen):

→ From any view: 🏠* ┈┈┈► ‹

Changing to the detailed views (Communicator, 7" touchscreen):

→ Choose device (in the navigation area) ┈┈┈► Choose function (in the navigation area) ┈┈┈► if necessary: Change to the detailed view Diagnostics or Maintenance

Changes to the main view (adjustable, factory setting: Desktop 1 of x).

10.2.9   Repair internal configuration

	Repair internal configuration
With this function, the system is analysed and the internal configuration repaired.	

❗ Only execute this function with your Bürkert Service.

User level: Installer 🔏

Menu or function	Values or description
LoggerHMIU	
> General settings	
> Maintenance	
> Fix internal configuration	The wizard starts.

Tab. 33: Menu tree

Repairing the internal configuration:

→ Fix internal configuration ●○○ ┈┈┈►

The wizard starts.

→ Next ┈┈┈►

❗ Note the displayed instructions.

→ Finish ┈┈┈►

✅ The device is rebooted.

✅ The system is analysed and the internal configuration repaired.

----------------------- Info: Switching to the views -----------------------

Changing to the device view (7" touchscreen):

→ From any view: 🏠* ┈┈┈► ‹

Changing to the detailed views (Communicator, 7" touchscreen):

→ Choose device (in the navigation area) ┈┈┈► Choose function (in the navigation area) ┈┈┈► if necessary: Change to the detailed view Diagnostics or Maintenance

Changes to the main view (adjustable, factory setting: Desktop 1 of x).

10.3   Function logger

	Logger

ℹ️ The function logger only appears if a memory card is available in the LoggerHMIU module.

Functions:

▪ Recording data and values and storing them in a database on a memory card in the LoggerHMIU module

User actions:

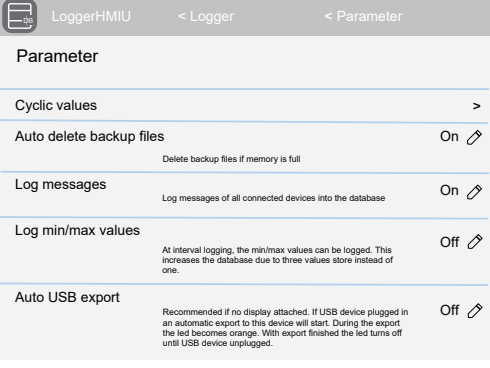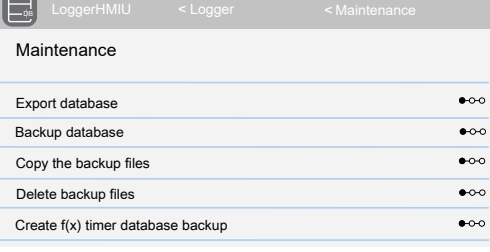▪ Choose values and settings for logging

▪ Export the stored values

The following values can be recorded:

▪ The values of the devices and the frequency of recording

▪ Messages

▪ Minimum and maximum values

ℹ️ To save sufficient data and values, delete earlier backup copies.

10.3.1   Function logger, description of views

LoggerHMIU	< Logger	< Diagnostics
Diagnostics		
Logged values		5
Inserted values		2504636
Dropped values		0
Memory information		>

LoggerHMIU	< Logger	< Diagnostics
Diagnostics	**< Memory information**	
Database size		36 MB
Free memory		696 MB
Days till memory full		284 d
Number of backup files		4
Size all backup files		0,9704 GB
SD card		

Detailed view Diagnostics

Information:

▪ The number and quantity of recorded or lost values

▪ Memory card

No user changes possible.

	Detailed view Parameters

LoggerHMIU   < Logger   < Parameter
 	
Parameter
 	
Cyclic values   >
 Auto delete backup files   On ✎
     Delete backup files if memory is full
 Log messages   On ✎
     Log messages of all connected devices into the database
 Log min/max values   Off ✎
     At interval logging, the min/max values can be logged. This increases the database due to three values store instead of one.
 Auto USB export   Off ✎
     Recommended if no display attached. If USB device plugged in an automatic export to this device will start. During the export the led becomes orange. With export finished the led turns off until USB device unplugged.
	Setting:
	 ▪ Values and settings for logger
	 ▪ Settings for database export
	 ▪ Settings for backup copies
	
	Settings dependent on user level.

LoggerHMIU < Logger < Maintenance **Maintenance** Export database ●–○–○ Backup database ●–○–○ Copy the backup files ●–○–○ Delete backup files ●–○–○ Create f(x) timer database backup ●–○–○	Detailed view Maintenance Setting: ▪ Export database ▪ Delete backup copies Settings dependent on user level.

Tab. 34: Logger, detailed views

10.3.2 Choose devices, values and settings for logger, cyclical values (logging)

	Set cyclical values for logger
With this function, the user selects the values of a device that the logger records in a database and stores on the memory card.	

Starting from a database size of 1 GB, a new database is automatically created.

User level: Installer 🖐

Factory setting: Logging method Off

Menu or function	Values or description	
LoggerHMIU		
> Logger		
> Parameter		
> Cyclic values	Logging or setting the logging method for cyclic values	
> Device	only display Choose device and measured value in list	If the Logging method is enabled, the icon appears black on the list.
> Measure value	only display Choose device and measured value in list	If the Logging method is enabled, the icon appears black on the list.

Menu or function	Values or description	
> Logging method	○ Off ◉ All values ○ Filtered ○ Interval	▪ No values are saved ▪ All values are saved ▪ A new value is only saved if this value deviates by an adjustable percentage rate from the last saved value ▪ The value is saved at an adjustable interval
> Filter percent*	3 %	*Appears if Logging method: Filtered. Range: 0...100 %
> Logging interval*	30 s	*Appears if Logging method: Interval. Range: 1...60 s

Tab. 35: Menu tree

Choosing values and settings for logging:

→ Cyclic values > ········►

→ Choose device and value in list.

→ Logging method ✎ ········►

→ Choose type of logging.

Possible selection:

◉ Off   No values are saved.

○ All values   All values are saved.

                      Caution: Depending on the device, a very large amount of data can accumulate.

○ Filtered   A new value is only saved if this value deviates by an adjustable percentage rate from the last saved value.

○ Interval   The value is saved at an adjustable interval

                      If Log min/max values is enabled, the extreme values of the preceding time interval are stored at the same time as the current value.

If necessary, set parameters for the selected logging:

→ If Filtered: Filter percent ········►
    The set percentage rate specifies the positive and negative maximum deviation of the last saved value.
    If this deviation is exceeded, the current value is saved.
    Note: To save all changes, set 0%.

→ If Interval: Logging interval ········►
    Time grid in seconds during which the current value is stored.

✅ The values and settings for logging are set.

----------------------- Info: Switching to the views -----------------------

Changing to the device view (7" touchscreen):

→ From any view: ⬚* ·······► ‹

Changing to the detailed views (Communicator, 7" touchscreen):

→ Choose device (in the navigation area) ·······► Choose function (in the navigation area) ·······► if necessary: Change to the detailed view Diagnostics or Maintenance

Changes to the main view (adjustable, factory setting: Desktop 1 of x).

10.3.3   Recording messages (logging)

	Record messages
With this function, messages are recorded in the database.	

User level: Installer 🔒

Factory setting: Off

Menu or function	Values or description	
LoggerHMIU		
> Logger		
> Parameter		
> Log messages	On	Log messages of all connected devices into the database
	Off	

Tab. 36: Menu tree

Record messages:

→ Log messages ✎ ·······►

→ On or Off .

---------------------- Info: Switching to the views ----------------------

Changing to the device view (7" touchscreen):

→ From any view: ⬚* ·······► ‹

Changing to the detailed views (Communicator, 7" touchscreen):

→ Choose device (in the navigation area) ·······► Choose function (in the navigation area) ·······► if necessary: Change to the detailed view Diagnostics or Maintenance

Changes to the main view (adjustable, factory setting: Desktop 1 of x).

10.3.4   Recording min, max values (logging)

	Record min/max values
With this function, all minimum and maximum values are recorded in the database.	

User level: Installer 🔒

Factory setting: Off

Menu or function	Values or description	
LoggerHMIU		
> Logger		
> Parameter		
> Log min/max values	On Off	At interval logging, the min/max values can be logged. This increases the database due to three values store instead of one.

Tab. 37: Menu tree

Record min/max values:

→ Log min/max values ✏ ┈┈►

→ On or Off .

---------------------- Info: Switching to the views ----------------------

Changing to the device view (7" touchscreen):

→ From any view: 🏠* ┈┈► ‹

Changing to the detailed views (Communicator, 7" touchscreen):

→ Choose device (in the navigation area) ┈┈► Choose function (in the navigation area) ┈┈► if necessary: Change to the detailed view Diagnostics or Maintenance

Changes to the main view (adjustable, factory setting: Desktop 1 of x).

10.3.5 Export database

	Export database
	If a USB storage medium is connected, this function performs the following actions:

1. Creating a backup copy of the database on the memory card
2. Creating a new database
3. Saving the backup copy on the USB storage medium

The function only appears if a USB storage medium is connected.

User level: Advanced user 🔧

Factory setting: CRC Off

Menu or function	Values or description
LoggerHMIU	
> Logger	
> Maintenance	
> Export database	The wizard starts.
> Selected storage device	Display name of storage medium

Menu or function	Values or description	
> CRC	On Off	Enabling or disabling cyclical redundancy check If On the copy process takes longer. Only activate in case of problems with a damaged database

Tab. 38: Menu tree

Export database:

→ Export database ●-○-○ ┈┈►

The wizard starts.

→ CRC ✎ ┈┈►

→ On or Off .

→ Next ┈┈►

→ Finish ┈┈►

☑ A backup copy of the database is created on the memory card.
A new database is created on the memory card.
The backup copy is stored on the USB storage medium.

> **❗ Since a new database is automatically created above a database size of 1 GB, a list of databases can be exported.**
>
> **The export can take several minutes.**

---------------------- Info: Switching to the views ----------------------

Changing to the device view (7" touchscreen):

→ From any view: ⌂* ┈┈► ‹

Changing to the detailed views (Communicator, 7" touchscreen):

→ Choose device (in the navigation area) ┈┈► Choose function (in the navigation area) ┈┈► if necessary: Change to the detailed view Diagnostics or Maintenance

Changes to the main view (adjustable, factory setting: Desktop 1 of x).

10.3.6   Save database

	Save database
This function performs the following functions:	
1. Creating a backup copy of the database on the memory card	
2. Creating a new database	

User level: Advanced user 👤

Menu or function	Values or description
LoggerHMIU	
> Logger	
> Maintenance	
> Backup database	The wizard starts.
> Selected storage device	Display name of memory card

Tab. 39: Menu tree

Save database:

→ Backup database ●─○─○ ·······▶

The wizard starts.

→ Next ·······▶

→ Finish ·······▶

☑ A backup copy of the database is stored on the memory card.
A new database is created on the memory card.

----------------------- Info: Switching to the views ----------------------

Changing to the device view (7" touchscreen):

→ From any view: 🏠* ·······▶ ‹

Changing to the detailed views (Communicator, 7" touchscreen):

→ Choose device (in the navigation area) ·······▶ Choose function (in the navigation area) ·······▶ if necessary:
Change to the detailed view Diagnostics or Maintenance

Changes to the main view (adjustable, factory setting: Desktop 1 of x).

10.3.7 Transfer backup copies

	Transfer backup copies
If a USB storage medium is connected, the backup copies can be copied to the USB storage medium.	

The function only appears if a USB storage medium is connected.

User level: Advanced user 🔧

Factory setting: CRC Off

Menu or function	Values or description
LoggerHMIU	
> Logger	
> Maintenance	
> Copy the backup files	The wizard starts.
> Selected storage device	Display name of storage medium

Menu or function	Values or description	
> CRC	**On** **Off**	Enabling or disabling cyclical redundancy check
		If **On** the copy process takes longer. Only activate in case of problems with a damaged database
> Number of backup files	Display number of backup copies	

Tab. 40: Menu tree

Copying backup copies to the USB storage medium:

→ Copy the backup files ●-○-○ ·······▶

The wizard starts.

→ CRC ✎ ·······▶

→ On or Off .

→ Next ·······▶

→ Finish ·······▶

☑ The backup copies are stored on the USB storage medium.

---------------------- Info: Switching to the views ----------------------

Changing to the device view (7" touchscreen):

→ From any view: ⬛* ·······▶ 〈

Changing to the detailed views (Communicator, 7" touchscreen):

→ Choose device (in the navigation area) ·······▶ Choose function (in the navigation area) ·······▶ if necessary: Change to the detailed view Diagnostics or Maintenance

Changes to the main view (adjustable, factory setting: Desktop 1 of x).

10.3.8 Deleting backup copies on the memory card

	Deleting backup copies on the memory card
With this function, the user can delete the backup copies on the memory card.	

⊘ **Once deleted, the data is irretrievably removed.**

User level: Advanced user 👤

Menu or function	Values or description
LoggerHMIU	
> Logger	
> Maintenance	

Menu or function	Values or description
> Delete backup files	The wizard starts.

Tab. 41: Menu tree

Deleting backup copies:

→ Delete backup files ●─○─○ ·······►

The wizard starts.

→ Finish ·······►

✔ The backup copies on the memory card are deleted.

---------------------- Info: Switching to the views ----------------------

Changing to the device view (7" touchscreen):

→ From any view: ⌂ * ·······► ‹

Changing to the detailed views (Communicator, 7" touchscreen):

→ Choose device (in the navigation area) ·······► Choose function (in the navigation area) ·······► if necessary: Change to the detailed view Diagnostics or Maintenance

*Changes to the main view (adjustable, factory setting: Desktop 1 of x).

10.3.9 Enabling or disabling automatic USB export

	Enabling or disabling automatic USB export
If a USB storage medium is connected, an automatic export is started.	

User level: Installer 🔒

Factory setting: Off

Menu or function	Values or description	
LoggerHMIU		
> Logger		
> Parameter		
> Auto USB export	On Off	Recommended if no display attached. If USB device plugged in an automatic export to this device will start. During the export the led becomes orange. With export finished the led turns off until USB device unplugged.

Tab. 42: Menu tree

Enabling or disabling automatic USB export:

→ Auto USB export ✎ ·······►

→ On or Off .

---------------------- Info: Switching to the views ----------------------

Changing to the device view (7" touchscreen):

→ From any view: 🏠* ┈┈► ‹

Changing to the detailed views (Communicator, 7" touchscreen):

→ Choose device (in the navigation area) ┈┈► Choose function (in the navigation area) ┈┈► if necessary:
Change to the detailed view Diagnostics or Maintenance

Changes to the main view (adjustable, factory setting: Desktop 1 of x).

10.3.10 Create f(x) timer for database backups

	Create f(x) timer for database backups
With this function, the user creates a timer in the device for backing up the database.	

User level: Installer 🔐

Menu or function	Values or description
LoggerHMIU	
> Logger	
> Maintenance	
> Create f(x) timer database backup	The wizard starts.

Tab. 43: Menu tree

Creating an f(x) timer for database backups:

→ Create f(x) timer database backup ●-○-○ ┈┈►

→ Next ┈┈►

→ Finish ┈┈►

☑ The device is rebooted and the function Timer db backup appears in the navigation area.

---------------------- Info: Switching to the views ----------------------

Changing to the device view (7" touchscreen):

→ From any view: 🏠* ┈┈► ‹

Changing to the detailed views (Communicator, 7" touchscreen):

→ Choose device (in the navigation area) ┈┈► Choose function (in the navigation area) ┈┈► if necessary:
Change to the detailed view Diagnostics or Maintenance

Changes to the main view (adjustable, factory setting: Desktop 1 of x).

10.4 Ethernet function

⊡ ETH	Ethernet

Functions:

- Displays for Ethernet: Designation and IP address
- Displays for the OPC UA server status

User actions:

- Setting remote access
- Configuring static IP
- Enabling OPC UA
  - Choose security setting
  - Setting server port
  - Choose OPC UA certification setting

10.4.1 Ethernet function, description of views

View	Description
LoggerHMIU < Ethernet < Diagnostics **Diagnostics** IP address 10.40.1.149 MAC address 00:1C:1E:08:38:05 Network interface configuration ●-○-○ OPC UA server status Running	Detailed view Diagnostics Information: - IP address - MAC address - Network configuration - OPC UA: Server status Settings dependent on user level.
LoggerHMIU < Ethernet < Parameter **Parameter** Remote access (VNC) > OPC UA On ✎ Server port 48020 ✎	Detailed view Parameters Setting: - Remote access - Enabling OPC UA - OPC UA: Server port Settings dependent on user level.
LoggerHMIU < Ethernet < Maintenance **Maintenance** Set static IP Configure static IP or enable DHCP ●-○-○ OPC UA > **LoggerHMIU** < Ethernet < Maintenance < OPC UA OPC UA ⌄ Select security setting ●-○-○ OPC UA certificate setup ●-○-○	Detailed view Maintenance Setting: - Remote access - Static IP - OPC UA: Security settings - OPC UA: Certificate settings Settings dependent on user level.

Tab. 44: Logger, detailed views

10.4.2   Setting remote access (VNC)

	Setting remote access
With this function, the user sets the following parameters:	

- ▪ Enabling or disabling remote access for the current session
- ▪ Enabling or disabling remote access during the start
- ▪ Set password

If a network connection exists, a VNC client can access the 7" touchscreen via port 5901.

> **We only recommend access within the company network. Bürkert Werke GmbH & Co. KG is not liable for software or service offers from third-party providers.**

User level: Installer

Factory setting: Current session Off, At startup Off, Password Password

Menu or function	Values or description	
LoggerHMIU		
> Display		
> Maintenance		
> Remote access (VNC)		
or		
> Ethernet		
> Parameter		
> Remote access (VNC)		
> Current session	On / Off	
> At startup	On / Off	
> Password	*****	Factory setting: Password / Password MUST be exactly 8 characters

Tab. 45: Menu tree

Enabling or disabling remote access for the current session:

→ Current session ✎ ┈┈►

→ On or Off .

Enabling or disabling remote access during the start:

→ At startup ✎ ┈┈►

→ On or Off .

Set password:

→ Password ✎ ┄┄►

→ Set password.

Note: The password must be exactly 8 characters long.

---------------------- Info: Switching to the views ----------------------

Changing to the device view (7" touchscreen):

→ From any view: ⬠* ┄┄► ‹

Changing to the detailed views (Communicator, 7" touchscreen):

→ Choose device (in the navigation area) ┄┄► Choose function (in the navigation area) ┄┄► if necessary: Change to the detailed view Diagnostics or Maintenance

Changes to the main view (adjustable, factory setting: Desktop 1 of x).

10.4.3   Choose static IP

	Choose static IP
With this function, the user configures the static IP or enables DHCP.	

User level: Installer 🔓

Factory setting: Off

Menu or function				Values or description	
Device					
	> Ethernet				
		> Maintenance			
			> Set static IP	The wizard starts.	Configure static IP or enable DHCP
			> Static IP addressing	On Off	
			> IP address*1	0.0.0.0*2	
			> Subnet mask*1	0.0.0.0*2	
			> Broadcast IP*1	0.0.0.0*2	
			> Default gateway*1	0.0.0.0*2	*1*Appears if* Static IP addressing On. *2If no network is connected, "offline" appears here

Tab. 46: Menu tree

Choosing static IP:

→ Set static IP ✎ ┄┄►

The wizard starts.

→ Static IP addressing ✎ ·······►

→ On or Off .

If Static IP addressing On the following functions appear:

→ IP address ✎ ·······►

→ Set IP address.

→ Subnet mask ✎ ·······►

→ Set subnet mask.

→ Broadcast IP ✎ ·······►

→ Set Broadcast IP.

→ Default gateway ✎ ·······►

→ Set standard gateway.

☑ The static IP is set.

---------------------- Info: Switching to the views ----------------------

Changing to the device view (7" touchscreen):

→ From any view: ⬛* ·······► ⟨

Changing to the detailed views (Communicator, 7" touchscreen):

→ Choose device (in the navigation area) ·······► Choose function (in the navigation area) ·······► if necessary: Change to the detailed view Diagnostics or Maintenance

*Changes to the main view (adjustable, factory setting: Desktop 1 of x).

10.4.4   Enabling OPC UA

	Enabling OPC UA
With this function, the OPC UA is enabled.	

User level: Installer 🔒

Factory setting: Off

Menu or function	Values or description	
LoggerHMIU		
> Ethernet		
> Parameter		
> OPC UA	On	
	Off	

Tab. 47: Menu tree

Choosing OPC UA:

→ OPC UA ✎ ·······►

→ On or Off .

---------------------- Info: Switching to the views ----------------------

Changing to the device view (7" touchscreen):

→ From any view: ⬛* ⸱⸱⸱⸱⸱⸱► ‹

Changing to the detailed views (Communicator, 7" touchscreen):

→ Choose device (in the navigation area) ⸱⸱⸱⸱⸱⸱► Choose function (in the navigation area) ⸱⸱⸱⸱⸱⸱► if necessary: Change to the detailed view Diagnostics or Maintenance

*Changes to the main view (adjustable, factory setting: Desktop 1 of x).

10.4.5   Choose security setting

	Choose security setting
With this function, the user chooses a security level (encryption) and the user authentication to protect the PLC against unauthorised and unwanted access by a higher-level system.	

🛈 Encryption slows down communication.

User level: Installer 👤

Factory setting: Security setting None, authentication setting Anonymous

Menu or function					Values or description	
LoggerHMIU						
	> Ethernet					
		> Maintenance				
			> OPC UA			
				Select security setting	The wizard starts.	
				Select security setting	⦿ None	No encryption
					◯ Basic128Rsa15	128-bit encryption
					◯ Basic256	256-bit encryption
					◯ Basic256Sha256	
				OPC UA, select authentication setting	⦿ Anonymous	*Only appears if encryption is selected.
					◯ Username/Password*	

Tab. 48: Menu tree

Choosing the security setting:

→ Select security setting ●○○ ⸱⸱⸱⸱⸱⸱►

The wizard starts.

→ Select security setting ✎ ⸱⸱⸱⸱⸱⸱►

Possible selection:

◉ None   No encryption
○ Basic128Rsa15   128-bit encryption
○ Basic256   256-bit encryption
○ Basic256Sha256

→ Choose security setting.

→ Next ·······►

→ OPC UA, select authentication setting ✎ ·······►

Possible selection:

◉ Anonymous
○ Username/Password*

Note: The users are: Anonymous, AdvancedUser and Installer.

*Only appears if encryption is selected.

→ Choose authentication setting.

→ Next ·······►

☑ The security and authentication settings are complete.

---------------------- Info: Switching to the views ----------------------

Changing to the device view (7" touchscreen):

→ From any view: 🏠* ·······► ‹

Changing to the detailed views (Communicator, 7" touchscreen):

→ Choose device (in the navigation area) ·······► Choose function (in the navigation area) ·······► if necessary: Change to the detailed view Diagnostics or Maintenance

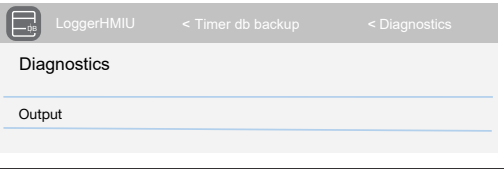*Changes to the main view (adjustable, factory setting: Desktop 1 of x).

10.4.6   Choose OPC UA certification setting

	Choose OPC UA certification setting
With this function, the user accepts or deletes communication certificates.	

> ⚠ **We only recommend access within the company network. Bürkert Werke GmbH & Co. KG is not liable for software or service offers from third-party providers.**

User level: Installer 🔧

Menu or function	Values or description
LoggerHMIU	
> Ethernet	
> Maintenance	

Menu or function			Values or description	
	> OPC UA			
		> OPC UA certificate setup	The wizard starts.	
		> Number of client certificates:	0	
		> Select action:	◉ Accept rejected client certificates ◯ Delete rejected certificates ◯ Delete all client certificates	

Tab. 49: Menu tree

Choosing an OPC UA certification setting:

→ OPC UA certificate setup ●-○-○ ••••••►

The wizard starts.

→ Select action: ✎ ••••••►

Possible selection:

◉ Accept rejected client certificates
◯ Delete rejected certificates
◯ Delete all client certificates

→ Choose setting.

→ Next ••••••►

☑ The OPC UA certificate settings are complete.

---------------------- Info: Switching to the views ----------------------

Changing to the device view (7" touchscreen):

→ From any view: ⌂* ••••••► ‹

Changing to the detailed views (Communicator, 7" touchscreen):

→ Choose device (in the navigation area) ••••••► Choose function (in the navigation area) ••••••► if necessary: Change to the detailed view Diagnostics or Maintenance

Changes to the main view (adjustable, factory setting: Desktop 1 of x).

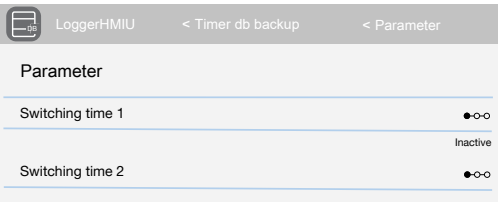---

10.4.7 Setting the server port

	Setting server port
With this function, the user chooses the port used by the OPC UA server.	

User level: Installer 🔧

Factory setting: Server port 48020

Menu or function	Values or description	
LoggerHMIU		
> Ethernet		
> Parameter		
> Server port	48020	Range: 1...65535

Tab. 50: Menu tree

Setting the server port:

→ Server port ✎ ▪▪▪▪▪▪▶

→ Choose setting.

✔ The server port is set.

---------------------- Info: Switching to the views ----------------------

Changing to the device view (7" touchscreen):

→ From any view: ⬚* ▪▪▪▪▪▪▶ ‹

Changing to the detailed views (Communicator, 7" touchscreen):

→ Choose device (in the navigation area) ▪▪▪▪▪▪▶ Choose function (in the navigation area) ▪▪▪▪▪▪▶ if necessary: Change to the detailed view Diagnostics or Maintenance

*Changes to the main view (adjustable, factory setting: Desktop 1 of x).

10.5   USB flash drive function

	USB flash drive
🔌	

⚠ The USB function only appears if a USB storage medium is connected

Functions:
▪ Displays for the storage medium: Designation, memory allocation and storage capacity
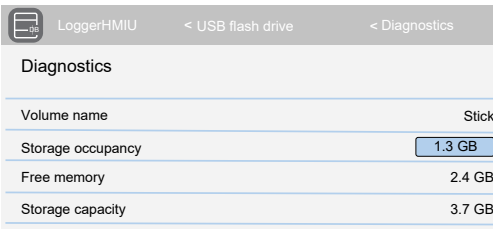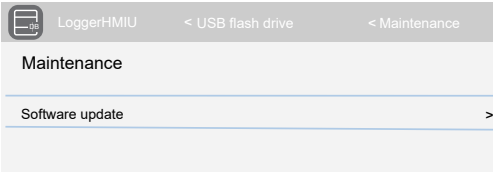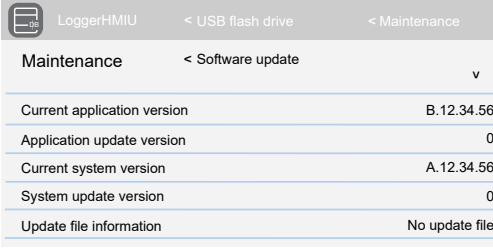
User actions:
▪ Update software (firmware)

USB storage medium:
▪ Hardware: USB flash drives or external hard discs
▪ Formatting: FAT32, ext2 or ext3
▪ USB properties: up to V2.0 supported
▪ Interface: up to 0.5 A

10.5.1 USB function, description of views

LoggerHMIU < USB flash drive < Diagnostics Diagnostics Volume name — Stick Storage occupancy — 1.3 GB Free memory — 2.4 GB Storage capacity — 3.7 GB	Detailed view Diagnostics ▪ Information for the USB storage medium No user changes possible.
LoggerHMIU < USB flash drive < Maintenance Maintenance Software update — > LoggerHMIU < USB flash drive < Maintenance Maintenance < Software update v Current application version — B.12.34.56 Application update version — 0 Current system version — A.12.34.56 System update version — 0 Update file information — No update file	Detailed view Maintenance ▪ Information about the application software ▪ Information about system software ▪ Update information The user can update the software.

Tab. 51: USB, detailed views

10.5.2 Updating the software (firmware)

If an update file is available on a USB storage medium, the firmware of the 7" touchscreen and of the Log-gerHMIU module can be updated.

User level: Installer

Menu or function	Values or description
LoggerHMIU	
> USB flash drive	
> Maintenance	
> Software update	
> Current application version	
> Application update version	
> Current system version	
> System update version	
> Update file information	
> Install*	The wizard starts. *Only appears if an update is available*

Tab. 52: Menu tree

Updating the software:

→ Plug the USB storage medium into the interface provided on the LoggerHMIU module Type ME25 or on the rear side of the 7" touchscreen.

→ Software update > ⋯⋯►

If an update is available on the connected USB storage medium, the following appears under Software update > ⋯⋯► Update file information: Valid*

→ Install ●─○─○ ⋯⋯►

The wizard starts.

→ Execute entries in the wizard.

✅ The firmware is updated.

If "missing encryption file" appears, remove the USB storage medium, wait 5 s and plug it in again.

---------------------- Info: Switching to the views ----------------------

Changing to the device view (7" touchscreen):

→ From any view: 🏠* ⋯⋯► ‹

Changing to the detailed views (Communicator, 7" touchscreen):

→ Choose device (in the navigation area) ⋯⋯► Choose function (in the navigation area) ⋯⋯► if necessary: Change to the detailed view Diagnostics or Maintenance

Changes to the main view (adjustable, factory setting: Desktop 1 of x).

10.6　Timer Db backup function

🔲ƒx	Timer DB backup

> ⚠️ The timer Db backup function only appears if the user executes the Create f(x) timer database backup function.

User actions:
- Choose settings for switching time

10.6.1　Timer Db backup function, description of views

LoggerHMIU　　< Timer db backup　　< Diagnostics Diagnostics Output	Detailed view Diagnostics Output No user changes possible.
LoggerHMIU　　< Timer db backup　　< Parameter Parameter Switching time 1　　　　●○○ 　　　　　　　　　Inactive Switching time 2　　　　●○○	Detailed view Parameters ・Choose settings for switching times Settings dependent on user level.

Tab. 53: Logger, detailed views

10.6.2   Set switching time

	Set switching time
With this function, the user sets the timer to determine when the database backup is performed.	

User level: User 👤

Factory setting: Off

Menu or function	Values or description	
LoggerHMIU		
> Timer db backup		
> Parameter		
> Switching time 1	The wizard starts.	
> Switching time 1	On Off	
> Hour		Date
> Minute		Date
> Second		Date
> Duration	10 s	Range: 0...65535 s
> Series duration	⦿ Once ◯ Every minute ◯ Every hour ◯ Every day ◯ Every week	
> Day		Series sample
> Month		Series sample
> Year		Series sample
> Switching time 2	The wizard starts.	
> Switching time 3	The wizard starts.	

Tab. 54: Menu tree

Set timer:

→ Switching time 1 ●─◖─◖ ┈┈┈►

The wizard starts.

→ On or Off . ┈┈┈►

→ Next ┈┈┈►

→ Set date ┈┈┈►

→ Set duration ✎ ┈┈┈►

→ Set series duration ✎ ┈┈┈►

Possible selection:

◉ Once
◯ Every minute
◯ Every hour
◯ Every day
◯ Every week

→ Next ┈┈►

→ Set series sample

→ Next ┈┈►

→ Finish ┈┈►

☑ The timer is set.

The user can set up to 8 switching times.

---------------------- Info: Switching to the views ----------------------

Changing to the device view (7" touchscreen):

→ From any view: ⬒ * ┈┈► ‹

Changing to the detailed views (Communicator, 7" touchscreen):

→ Choose device (in the navigation area) ┈┈► Choose function (in the navigation area) ┈┈► if necessary:
Change to the detailed view Diagnostics or Maintenance

Changes to the main view (adjustable, factory setting: Desktop 1 of x).

10.7   LoggerHMIU menu tree

Menu or function				Values or description	
LoggerHMIU					
	> General settings				
		> Parameter			
			> Status LED		Colors and behavior of the device status LED
				> Mode	NAMUR mode LED off	
			> büS		Configuration of the büS interface
				> Displayed name		Device name as displayed on displays and Communicator. Can be changed without affecting communication.

Menu or function	Values or description	
> Location		Location of the device. Will be displayed near the device name.
> Description		User description. Displayed in e.g. in tooltips
> Advanced		Advanced settings like baud rate, address or CANopen mode
> Unique device name		Used for partner allocations. Normally there's no need to change it
> Baud rate	50 kbit/s 125 kbit/s 250 kbit/s 500 kbit/s 1 Mbit/s	Used CANopen transmission speed. Has to be the same for all devices in the network
> CANopen address		Change will only be accepted after a restart. If the given address is already used then the device deviates to a different address. '0' means 'auto addressing'
> Bus mode	CANopen büS Standalone	Mode of the büS interface: büS or CANopen compatibility mode
> Deallocation delay		Time between losing a partner and deleting its configuration. Lower values lead to earliert notification on partner loss, but can cause the system to boot up very slowly. Normally no need to change this value.
> Diagnostics		Turn complete diagnostics on or off
> PDO Configuration		Configuration of the cyclic process data objects
> PDO 1		
> Reset to default values		
> Maintenance		
> Device information		
> Displayed name		
> Ident. number		

Menu or function		Values or description	
	> Serial number		
	> Software ident. number		
	> Software version		
	> büS version		
	> Hardware version		
	> Product type number		
	> Manufacture date		
	> eds version		
	> f(x) version		
	> Device driver		
	> Driver version		
	> Driver ident. number		
	> Firmware group		
	> Licenses		
	> System version		
> System information			
	> Name		
	> Ident. number		
	> Manufacture date		
	> Configuration version		
	> Serial number		
	> Product type number		
> Reset device			
	> Restart		
	> Reset to factory settings		
> Date and time			
> Time zone			
> Fix internal configuration			In case of a corrupted internal configuration (e.g. USB does not work, Ethernet connection broken) diagnose the cause and force repair of the internal configuration.
> Startup wizard			
> Diagnostics			
> Device status			

MAN 1000239754 EN Version: C Status: RL (released | freigegeben) printed: 25.09.2023

Menu or function		Values or description	
	> Operating duration		
	> Device boot counter		
	> Transferable memory status	Unknown status	
		Memory available	
		Memory not available	
		Memory not available	
		Memory optional	
		Memory in progress	
		Client searching for provider	
		Client is managed by a provider	
		Changes available	
		Provider search turned off	
		No active provider available	
		Client has been recon-figured	
	> Current system time		
> büS status			
	> Receive errors		Current receive error counter
	> Receive errors max.		Maximum value of receive er-ror counter since device start
	> Transmit errors		Current transmit error counter
	> Transmit errors max.		Maximum value of transmit er-ror counter since device start
	> Reset error counter		Resets both error counter maximum values
	> CANopen status	Pre-Op	
		Operational	
> Logbook			
> Time zone			
	> Region		
	> Location		
	> Offset		with respect to coordinated universal time
> Driver versions			Display drivers available to the display

Menu or function			Values or description	
	> Create system information report			Export logbooks and system report files
	> Messages			
> Display				
	> Parameter			
	> Language		English German French	
	> Brightness			
	> Screen saver			Configure what to do when device is not used.
		> Wait time	1 min 2 min 5 min 15 min 30 min 60 min	
		> Dimm screen		
		> Brightness		
	> Homescreen		Desktop Device view Trend view	Switch to this view at home button pressed or screensaver active.
	> Desktop number		1 2 3 4 5 6 7 8 9 10	
	> Password protection			If disabled, the standard user has rights of an installer
	> Date and time			
		> 24-Hour-Format		

Menu or function			Values or description	
		> Date format	MM.DD.YYYY DD.MM.YYYY YYYY-MM-DD	
		> Display	Date Time	Configure what to show at the status bar
	> System of units		Metric U.S. Imperial	
	> Unit selection			Configure specific unit for specific device and value
	> Desktop wallpapers			Upload background image to the device. Then configure image at a specific desktop of the device.
> Maintenance				
	> Remote access (VNC)			
		> Current session		
		> At startup		
		> Password		Password MUST be exactly 8 characters
	> Change password			
	> Date and time			
	> Time zone			
	> User level			
	> Logout			
	> Diagnostics			
		> Number of desktops		
		> User logged in		
		> TFT version		
		> NetGuard		
		> Monitor devices		
		> Trigger scan devices		
		> Start-up time device		
> Logger				
	> Parameter			
		> Cyclic values		Logging or setting the logging method for cyclic values

Menu or function	Values or description	
> Auto delete backup files		Delete backup files if memory is full
> Log messages		Log messages of all connected devices into the database
> Log min/max values		At interval logging, the min/max values can be logged. This increases the database due to three values store instead of one.
> Auto USB export		Recommended if no display attached. If USB device plugged in an automatic export to this device will start. During the export the led becomes orange. With export finished the led turns off until USB device unplugged.
> Maintenance		
> Export database		
> Backup database		
> Copy the backup files		
> Delete backup files		
> Create f(x) timer database backup		
> Diagnostics		
> Logged values		Number of configured values that are logged
> Inserted values		Number of values committed to the database. A commit is done regularly every 10s.
> Dropped values		If the device is too busy, values are dropped. Change logger settings if this number increases continuously.
> Memory information		
> Database size		
> Free memory		
> Days till memory full		Every 10 seconds a rough estimate is calculated that becomes more accurate over time. Wait at least 2 minutes if you changed the logger settings.
> Number of backup files		

Menu or function	Values or description	
> Size all backup files		
> SD card		
> Wear level		
> Ethernet		
> Parameter		
> Remote access (VNC)		
> Current session		
> At startup		
> Password		Password MUST be exactly 8 characters
> OPC UA		
> Server port		
> Maintenance		
> Set static IP		Configure static IP or enable DHCP
> OPC UA		
> Select security setting		
> OPC UA certificate setup		
> Diagnostics		
> IP address		
> MAC address		
> Network interface configuration		
> OPC UA server status		
> USB flash drive		
> Maintenance		
> Software update		
> Current application version		
> Application update version		
> Current system version		
> System update version		
> Update file information		
> Install		
> Diagnostics		
> Volume name		
> Storage occupancy		

Menu or function			Values or description	
		> Free memory		
		> Storage capacity		
	> USB flash drive 2			
		> Diagnostics		
		> Volume name		
		> Storage occupancy		
		> Free memory		
		> Storage capacity		

Tab. 55: Menu tree

11 OPERATING THE 7" TOUCHSCREEN

11.1 Operating structure of the views

11.1.1 Overview
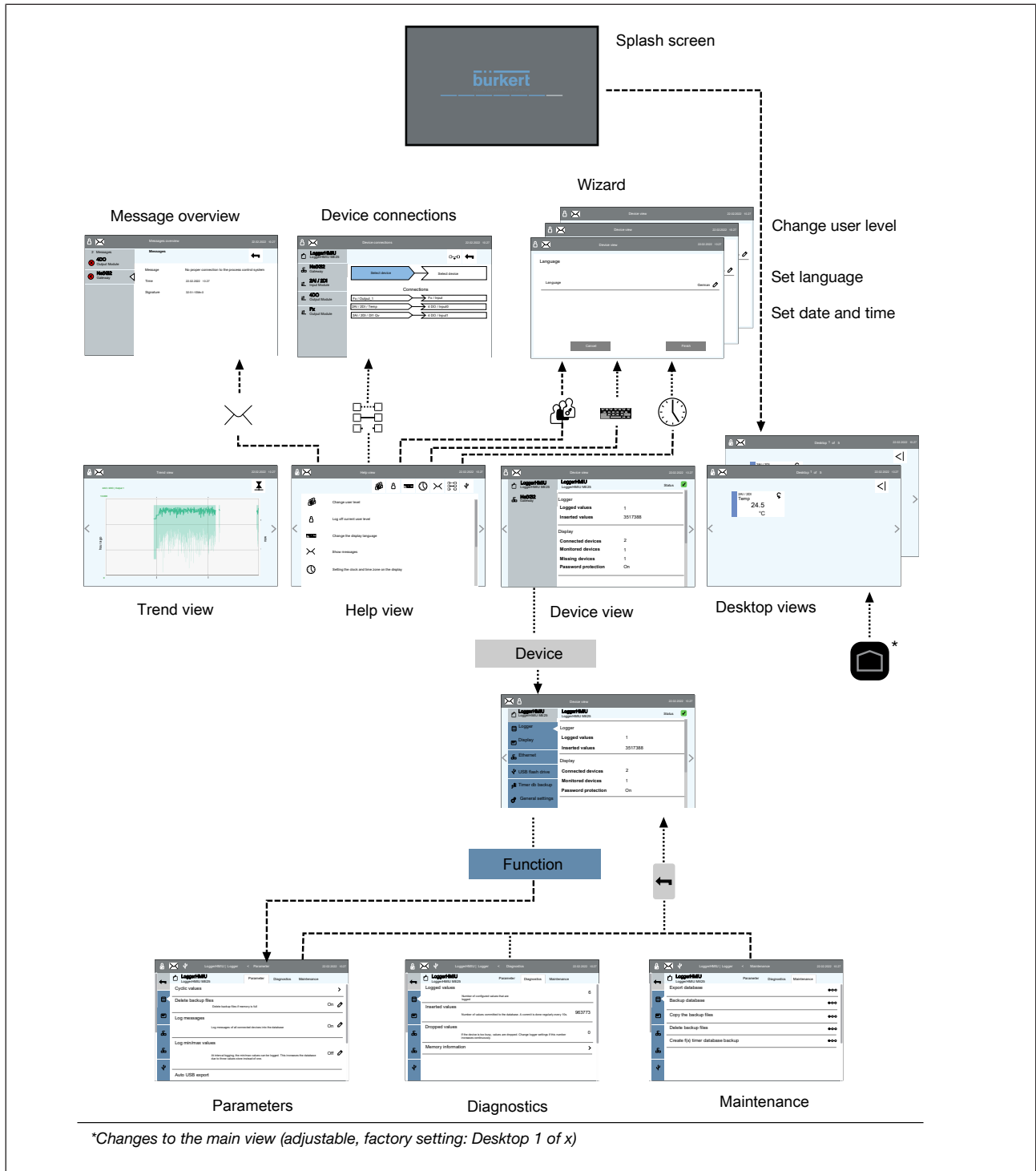
Fig. 12: Operating structure of the views

Operation consists of 2 levels.

In the upper level, the arrow keys on the display edge allows the user to change between the individual desktop views, the device view, the help view and the trend view. The user can add more desktop views.

In the help view, change to the message overview and device connections and start the following functions:

- Change user level
- Set language
- Set date and time

In the device view, the user chooses a device.
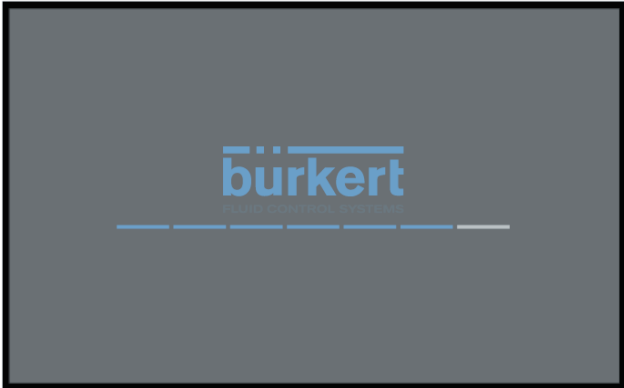
Based on the device chosen, functions are display. By choosing a function, the user changes to the detailed views parameters, maintenance and diagnostics.

More extensive settings are supported with wizards (overlaid dialogues).

11.1.2 Description of the views

You can find a more detailed description of the views in the corresponding chapter in these instructions.

Splash screen
Splash screen Meaning of the bars (information for Bürkert Service): - 1 and 2: Basic boot-up - 3: Main initialisation - 4: OPC UA initialisation - 6: büS initialisation - 7: Startup finished

Tab. 56: Splash screen
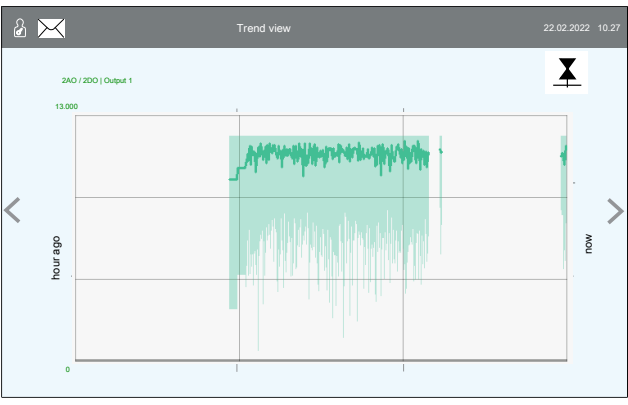
Desktop view	
Desktop 1 of 5 22.02.2022 10.27 2AI / 2DI Temp 24.5 °C	**Desktop 1 of x: Desktop view** View that appears: ▪ After system start ▪ After you press the home button ⬟ (in a different view)* ▪ After an adjustable time (see LoggerHMUI module ME25: Set the screen saver)* View for value widgets. View for designing by the user. View cannot be deleted. The user can create and delete additional desktop views. *if main view desktop 1 is set
	Desktop x of x: Desktop view View for value widgets. View for designing by the user. The user can create and delete additional desktop views.
Possible actions:* ▪ Change to desktop views, device view or trend view ▪ Arrange desktop with objects (values, parameters or background image) or change presentation ▪ Add or remove desktop views ▪ Tap widget: Change to device view of the selected device (widget) *If password protection is enabled, dependent on user level	

Tab. 57: Desktop view

Help view	
Help view 22.02.2022 10.27 Change user level Log off current user level Change the display language Show messages Setting the clock and time zone on the display	Description of symbols Start functions

Help view

Possible actions:*
 	
  ▪ Change to device view or trend view
 	
  ▪ Change user level
 	
  ▪ Log off user level
 	
  ▪ Set language
 	
  ▪ Set time and time zone
 	
  ▪ Show messages
 	
  ▪ Start function of device connections
 	
  ▪ If the USB storage medium is connected, change to the USB flash drive function
 	
If password protection is enabled, dependent on user level

Tab. 58: Help view

Trend view	
	Trend view: View for graphs View for displaying recorded process values in graphs. The representation is cyclically updated according to the set time interval. As a result, the trend view may be unchanged for several minutes even though process values change. If the data is updated, "updating" appears above the data designation. The thick line describes the progress of the average values. The brighter areas indicate the minimum and maximum values. If there are gaps, the device is either offline or no values are recorded.

Possible actions:*
 	
  ▪ Change to desktop views or help view
 	
  ▪ Choose data sources for graph
 	
  ▪ Setting the display of graphs:
 	
If password protection is enabled, dependent on user level	

Tab. 59: Trend view

Device view	
	Device view
	The connected devices are displayed and can be selected in the navigation area.
	If a device is selected, the possible functions are displayed and can be selected.
	The application area shows the data from the selected device.

Possible actions:*

▪ Change to desktop views or help view

▪ Choose connected devices in the navigation area and display the associated data in the application area

▪ Choose a function in the navigation area and change to the detailed view of the chosen device

If password protection is enabled, dependent on user level

Tab. 60: Device view
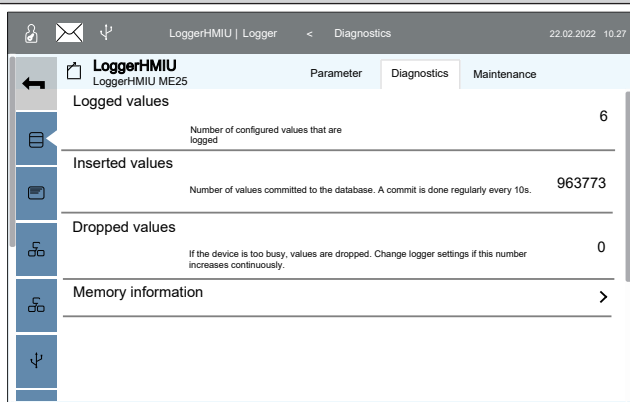
Detailed views	
	View for showing and setting data. The functions of the device selected in the device view are displayed in the navigation area and can be selected. The content depends on the device selected in the device view.
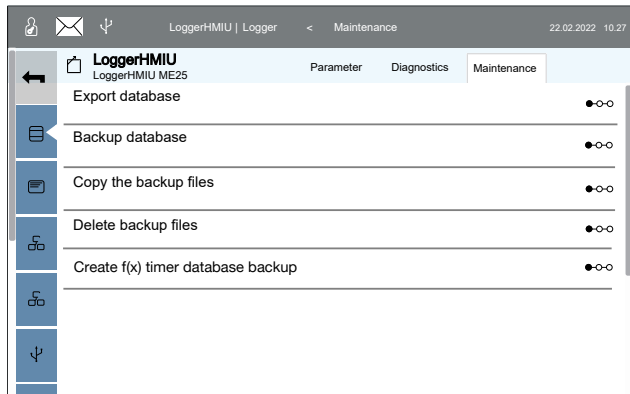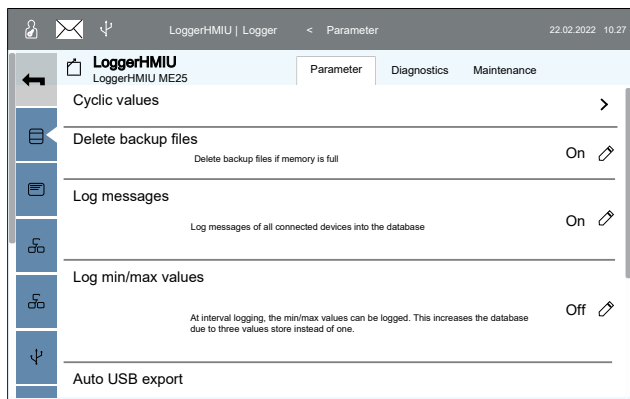
Possible actions:*

- Change to detailed view of parameters or maintenance
- Change back to device view
- Choose a function in the navigation area and change to the detailed view of the chosen device

If password protection is enabled, dependent on user level

Tab. 61: Detailed views
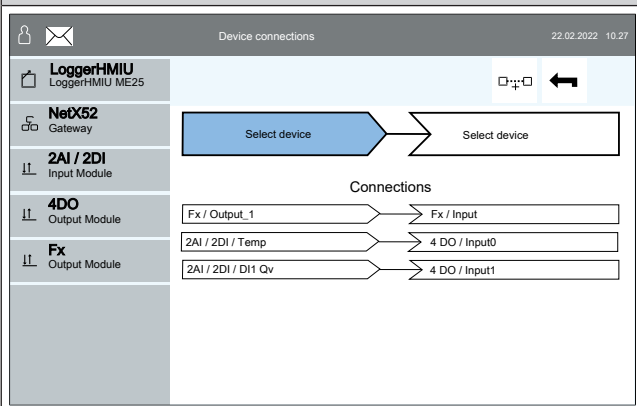
Device connections	
	Device connections view User level: Installer View shows the connections of the connected devices. The user can create, edit or delete connections.
Possible actions:* ▪ Create, edit or delete connections ▪ Change back to help view *If password protection is enabled, dependent on user level*	

Tab. 62: Device connections
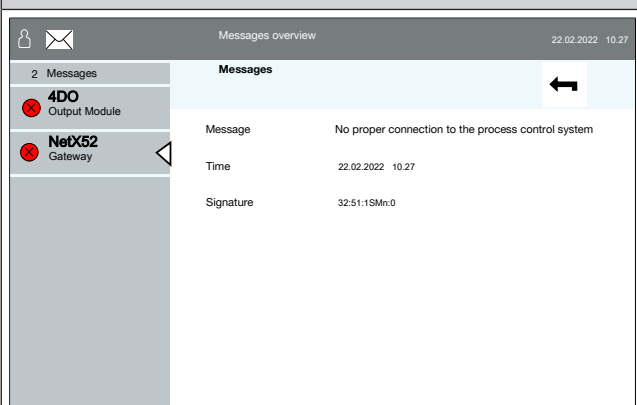
Message overview	
	Message overview view User level: User View shows messages of the connected devices.

Tab. 63: Message overview

Input views
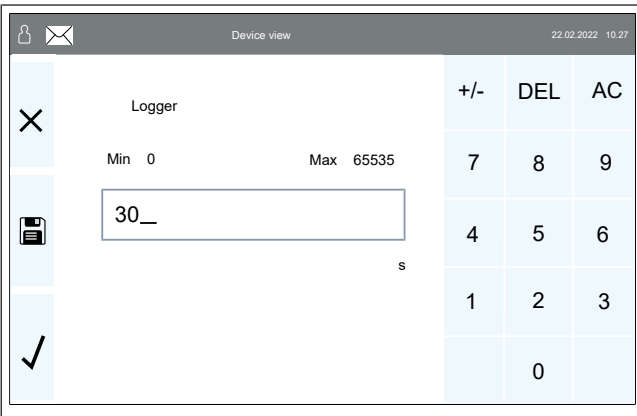
	Input mask view: Figures

	Input mask view: Text and figures
	Wizard view

Tab. 64: Description of the views

11.1.3   Description of buttons

Buttons	Command or description
>	Change view Desktop 1 of x > (desktop 2 of x) > Trend view > Help view > Device view > Desktop 1 of x
<	Change view Desktop 1 of x > Device view > Help view > Trend view > (Desktop 2 von x) > Desktop 1 of x

Tab. 65: Description of buttons

Buttons for functions on help view

Buttons	Command or description
	Change user level
	Log off current user level
	Change the display language

Buttons	Command or description
	Setting the clock and time zone on the display
	Show messages
	Change to device connections
	Access the USB interface

Tab. 66: Description of buttons

Buttons for editing the desktop

Buttons	Command or description
	Open editing buttons
	Close editing buttons
	Edit the desktop configuration
	Add desktop
	Delete desktop
	Select a desktop wallpaper
	Save the desktop configuration

Tab. 67: Description of buttons

Buttons for editing for widgets on desktop

Buttons	Command or description
	Set 2x2 grid on desktop
	Set 3x3 grid on desktop
	Set 6x3 grid on desktop

Buttons	Command or description
	Set coarse grid on desktop
	Set fine grid on desktop
	Set desktop without grid
	Fix widget positions
	Add widget

Tab. 68: Description of buttons

Buttons for editing for widgets

Buttons	Command or description
	Select the value to display for the widget
	Select the widget style
	Select widget color
	Select the unit of the displayed value for the widget
0.00	Select decimal places of the displayed value for widget
	Delete widget
	Close widget editing and save widget
	Back

Tab. 69: Description of buttons

Buttons for editing for trends

Buttons	Command or description
	Configuring data sources for trends
	Set time/update interval for trends

Buttons	Command or description
(icon)	Autoscaling of measured values in trends
(icon)	Fixed scale for measured values in trends
(icon)	Set scales for trends

Tab. 70: Description of buttons

Buttons for device connections

Buttons	Command or description
(icon)	Add device connection
(icon)	Delete device connection
(icon)	Back to help view
(icon)	Save input and go back
(icon) 0 1 2 3 4 5 6 7	Select valid bit mask

Tab. 71: Description of buttons

Buttons for editing for detailed views

Buttons	Command or description
(icon)	Edit setting
(icon)	Open submenu
(icon)	Close submenu
(icon)	Input not possible for current user level
(icon)	Open wizard
(icon)	Save input and go back

Buttons	Command or description
✕	Go back without saving
💾	Save

Tab. 72: Description of buttons

11.2 Arrange desktop

The user can arrange the desktop views:

- Add or delete desktops
- Add background image
- Add widgets and change representation
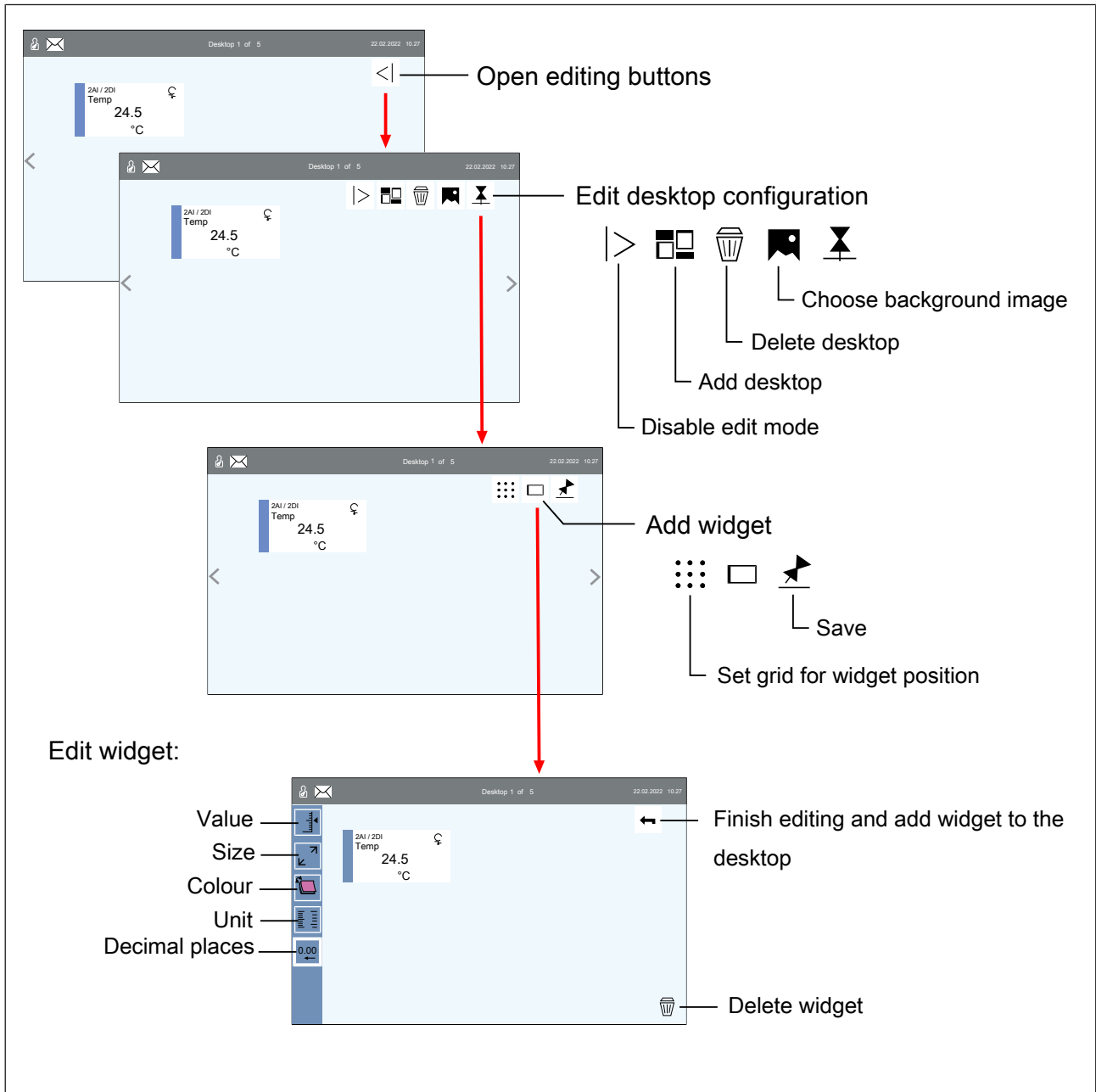
Fig. 13: Desktop

11.2.1 Add or remove desktop

🗗, 🗑	Add or remove desktop
With this function, the user can edit the desktop: ・ Add a new desktop in front of the current desktop ・ Remove the current desktop	

Possible number of desktops:

・ Minimum 1

・ Maximum 10

User level: Installer 🔒

Factory setting: 1 desktop

Editing a desktop:

→ Change to the display view that is being processed.

Open editing buttons:

→ ◁ ┈┈►

✔ The editing buttons appear.

Adding a desktop:

→ 🗔 ┈┈►

→ Finish ┈┈►

✔ The desktop is added to the current position.

Removing a desktop:

→ 🗑 ┈┈►

→ Finish ┈┈►

✔ The current desktop is removed.

Closing the editing buttons:

→ ◁ ┈┈►

✔ The changes are saved and the editing buttons are closed.

Pressing the home button 🏠 closes the editing button without saving.

11.2.2   Change background image

🔖	Change background image
With this function, the user chooses a background image for the 7" touchscreen.	

⚠ **To change the background image, you must load a background image with the Communicator via büS.**

User level: Installer 🔒

Factory setting: None

Editing a desktop:

→ Change to the display view that is being processed.

Open editing buttons:

→ ◁ ┈┈►

✔ The editing buttons appear.

Changing the background image:

→ 🖼 ·······►

→ Image ·······►

→ Choose graphic file ·······► ✓

→ Finish ·······►

✔ The background image is changed.

Closing the editing buttons:

→ ◁ ·······►

✔ The changes are saved and the editing buttons are closed.

Pressing the home button ⌂ closes the editing button without saving.

11.2.3 Load the background image on the desktop

	Transfer desktop background images
With this function, the user selects a background image with the Communicator from his or her own file system and copies the background image to the 7" touchscreen.	

User level: User 👤

Menu or function	Values or description
LoggerHMIU	
> Display	
> Parameter	
> Desktop wallpapers	Upload background image to the device. Then configure image at a specific desktop of the device.

Tab. 73: Menu tree

Loading a background image to the desktop:

→ Desktop wallpapers > ·······►

→ + ·······►

→ Choose image from file system.

→ Add ·······►

✔ The image is saved on the SD card of the device.

---------------------- Info: Switching to the views ----------------------

Changing to the detailed views (Communicator, 7" touchscreen):

→ Choose device (in the navigation area) ·······► Choose function (in the navigation area) ·······► if necessary: Change to the detailed view Diagnostics or Maintenance

----

11.2.4   Add widget, edit widget, delete widget

▭, ⫞, ↙↗, ◣, ⫼, 0.00 ← 🗑	Add widget, edit widget, delete widget
With these functions, the user can edit widgets on a desktop as follows: ▪ Add widget ▪ Choose the value and unit to be displayed (scaling) ▪ Change representation of the widget ▪ Delete widget	

User level: Installer 🔧

Editing a desktop:

→ Change to the display view that is being processed.

Open editing buttons:

→ ◁ ┈┈┈►

✅ The editing buttons appear.

Editing the desktop configuration:

→ ⊼ ┈┈┈►

✅ The desktop can be edited.

Adding a widget:

→ ▭ ┈┈┈►

✅ A widget appears.

✅ The buttons for editing the widget appear.

Changing a widget:

→ Choose widget on desktop.

✅ The buttons for editing the widget appear.

Choosing a value that is displayed:

→ ⫞ ┈┈┈►

→ Choose device in the navigation area.

→ Choose function in the navigation area.

→ Choose value.

✅ The value is set.

Choosing the widget size:

→ ↙↗ ┈┈►
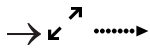
Possible selection:

Cell	Optimum for 6x3 grid
Row	Optimum for 6x3 grid
Medium	Optimum for 3x3 grid
Large	Optimum for 2x2 grid
Full screen	Widget is displayed in the size of the desktop.

→ Choose size.

✔ The size is set.

Choosing the widget colour:

→ ▨ ┈┈►

→ Choose colour.

✔ The colour is set.

Choosing the unit of the value (scaling):

→ ▥ ┈┈►
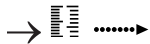
Possible selection:

General	General unit
Auto range	Automatic unit setting
Unit 1	Unit 1 according to the selected value
Unit 2	Unit 2 according to the selected value
:	

→ Choose unit.

✔ The unit is set.

Choosing decimal places for the value:

→ 0.00← ┈┈►
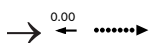
→ Choose decimal place with 0.00← .

✔ The decimal places are set.

Deleting a widget:

→ Choose widget on desktop.

→ 🗑 ┈┈►

✔ The widget is deleted.

Saving the desktop configuration:

→ 📌 ┈┈►

✔ The desktop configuration is saved.

Closing the editing buttons:
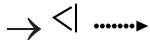
→ ◁ ┈┈┈►

☑ The changes are saved and the editing buttons are closed.

Pressing the home button ⌂ closes the editing button without saving.

11.3 Set trend view

❗ Only recorded values of the LoggerHMIU module ME25 can be presented in the trend view. For settings of the logger function, see the description of the LoggerHMIU module ME25.

The user can arrange the trend view:

- Choose data sources for the display
- Choose time interval and updating interval
- Choose scaling
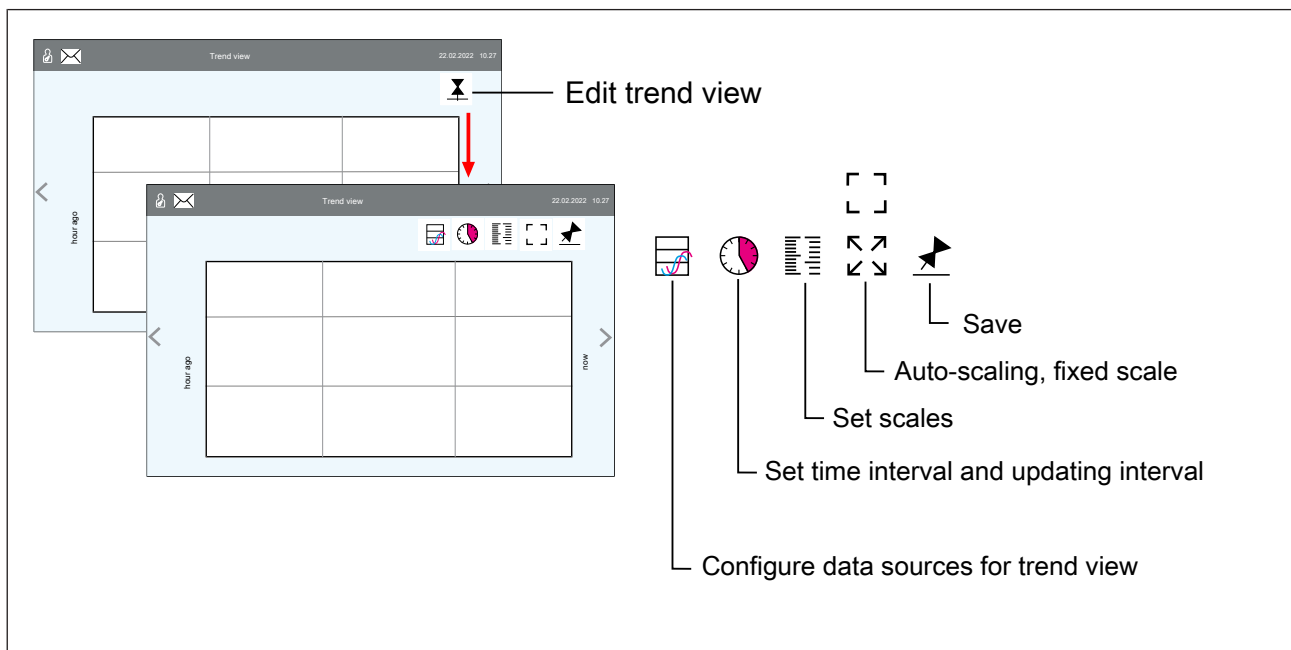
Fig. 14: Trend view

11.3.1 Configure data sources for trend view

User level: Installer 🔓

Editing a trend view:

→ Change to the trend view.

→ ⏳ ┈┈┈►

☑ The trend view can be edited.

Configuring data sources for trend view:

→ 📉 ┈┈┈►

→ Device ✎ ⋯⋯►

→ Choose device.

→ Value ✎ ⋯⋯►

→ Choose value.

→ Min ✎ ⋯⋯►

→ Set minimum scale value.

→ Max ✎ ⋯⋯►

→ Set maximum scale value.

→ Next ⋯⋯►

→ For additional data sources (up to 4), choose the inputs according to the device.

→ Time interval ✎ ⋯⋯►

→ Choose time interval.

→ Finish ⋯⋯►

✔ The data sources for the trend view are set.

Saving a trend view:

→ 📌 ⋯⋯►

✔ The trend view is saved.

11.3.2   Edit trend view

User level: Installer 🔓

Editing a trend view:

→ Change to the trend view.

→ ⌛ ⋯⋯►

✔ The trend view can be edited.

Setting scales for a trend view:

Only possible if ⤢ active.

→ ▥ ⋯⋯►

→ Graph1 Min ✎ ⋯⋯►

→ Set minimum scale value.

→ Graph1 Max ✎ ⋯⋯►

→ Set maximum scale value.

→ For additional graphs (up to 4), choose the inputs accordingly.

→ Finish ⋯⋯►

✔ The scales for the trend view are set.

Setting the time interval and updating interval for the trend view:

Only possible if ⤢ active.

→ ◷ ·······▶

→ `Time interval` ✎ ·······▶

→ Choose time interval.

→ `Update interval` ✎ ·······▶

→ Choose updating interval.

→ `Finish` ·······▶

✅ The time interval and updating interval for the trend view are set.

Saving a trend view:

→ 📌 ·······▶

✅ The trend view is saved.

11.4   Set device connections

The device connections view shows all connected devices or products and their active connections.

Possible actions for the user:

- Add device connections
- Delete device connections
- Edit device connections
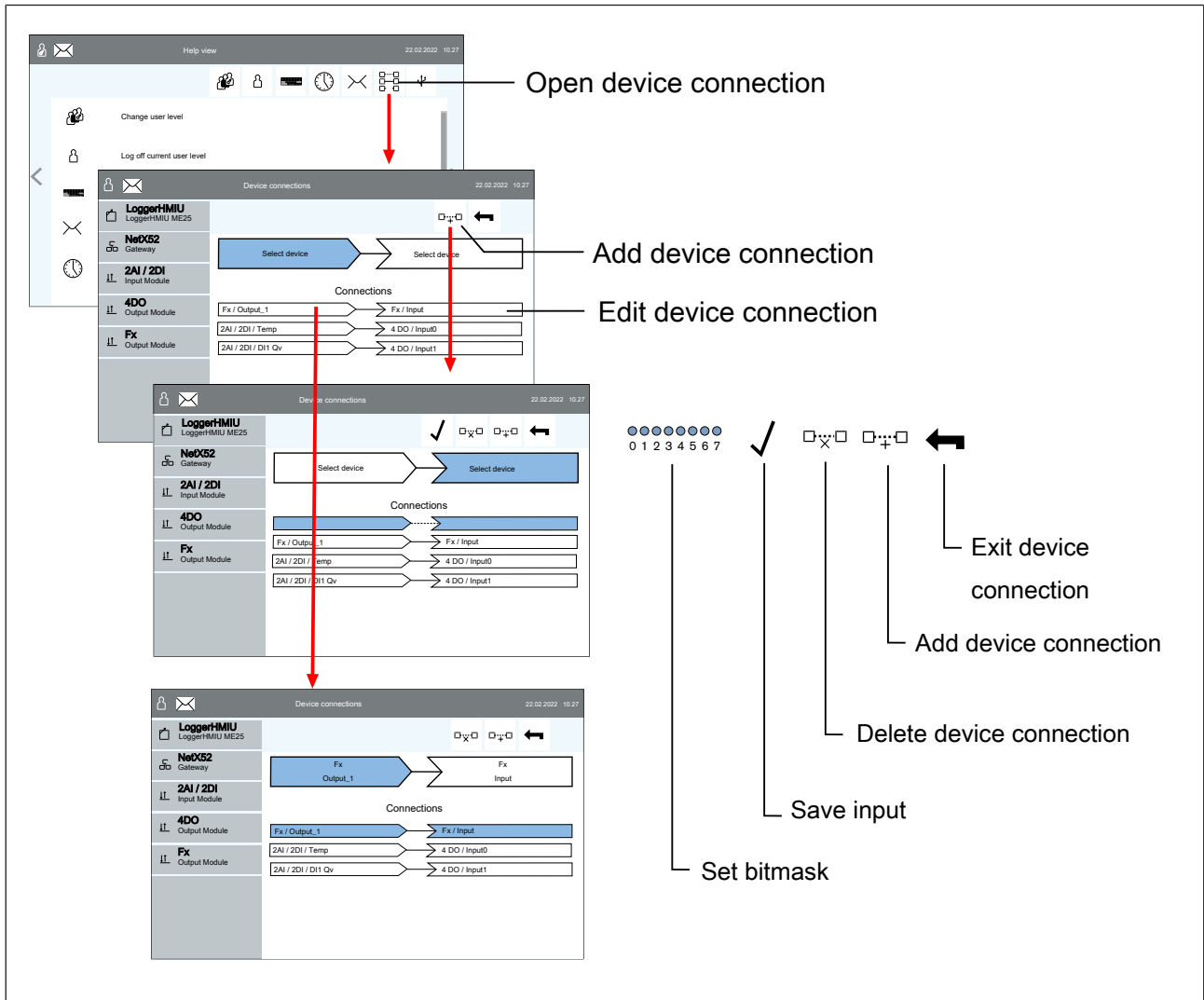
Fig. 15: Device connections

11.4.1 Add device connection
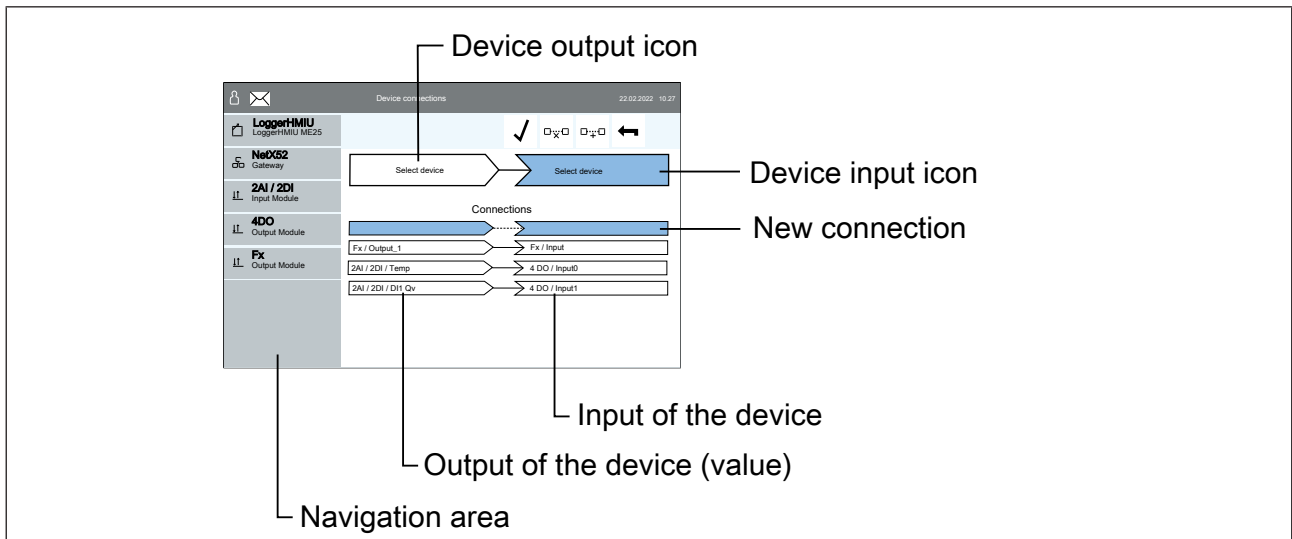
Fig. 16: Add device connection

User level: Installer 🔏

Opening device connections:

→ Change to help view.

→ ⊞ ┄┄┄▶

✅ The device connections can be processed.

Adding device connections:

→ ▫⫲▫ ┄┄┄▶

✅ A new connection appears and the device input icon is active.

→ Choose the device and input in the navigation area.
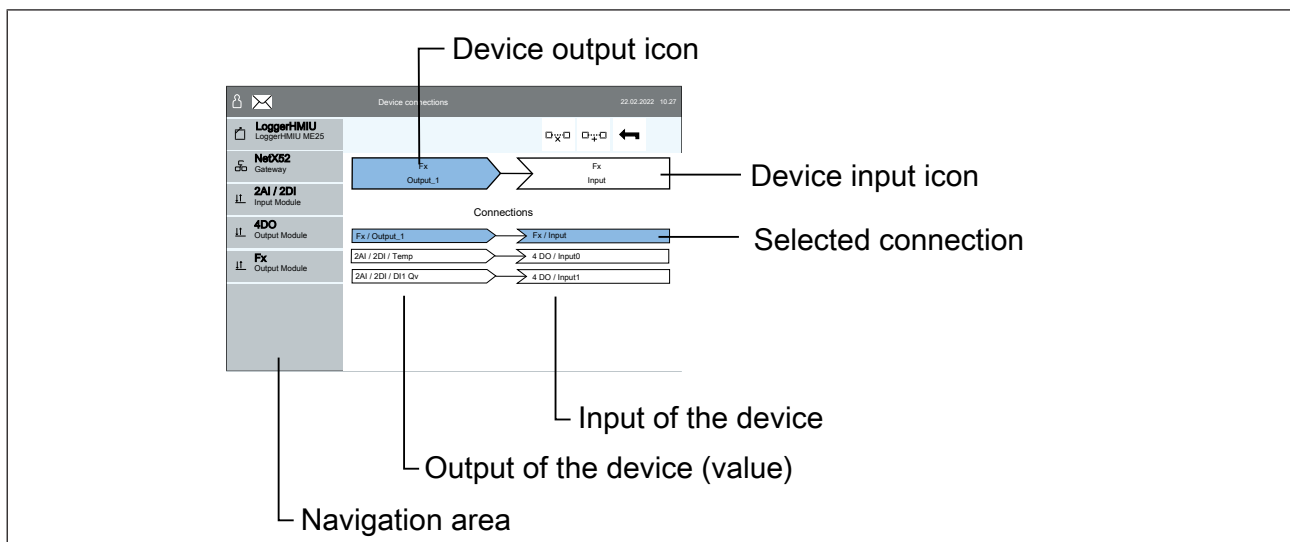
→ Choose the device output icon.

→ Choose the device and output (value) in the navigation area.

→ ✓

→ Finish ┄┄┄▶

✅ Device connection is added.

Closing device connections:

→ ⬅ ┄┄┄▶

✅ The device connections are closed.

11.4.2 Delete device connection

Fig. 17: Delete device connection
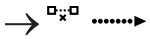
User level: Installer 🔏

Opening device connections:

→ Change to help view.

→ ⊞ ┄┄┄▶

✅ The device connections can be processed.

Deleting the device connections:

⟶ Choose device connection.

⟶ ⬚ˣ⬚ ▪▪▪▪▪▪►

⟶ Finish ▪▪▪▪▪►

⟶ √ ▪▪▪▪▪►

✅ The device connection is deleted.

Closing device connections:

⟶ ⬅ ▪▪▪▪▪►

✅ The device connections are closed.

11.4.3   Edit device connection

Fig. 18: Edit device connection

User level: Installer 🔒

Opening device connections:

⟶ Change to help view.

⟶ ⬚⬚ ▪▪▪▪▪►
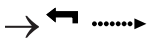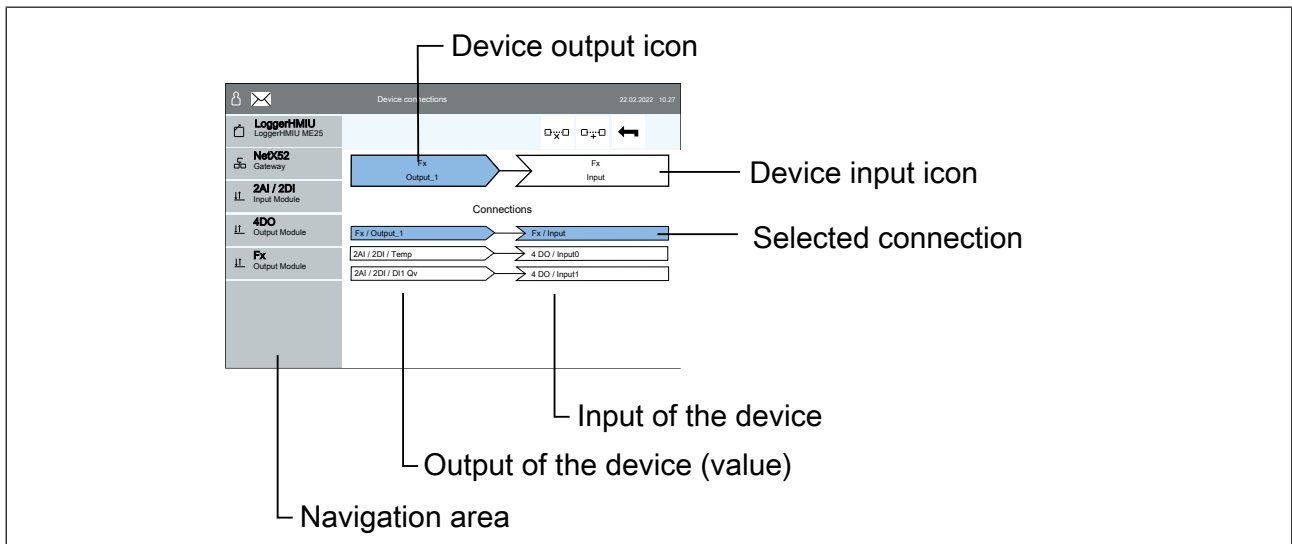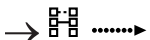
✅ The device connections can be processed.
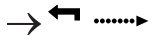
Editing device connections:

⟶ Choose device connection.

⟶ Choose the device input icon.

⟶ Choose the device and input in the navigation area.

⟶ Choose the device output icon.

⟶ Choose the device and output (value) in the navigation area.

→ ✓ ┉┉▶

→ Finish ┉┉▶
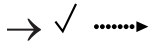
✅ The device connection is changed.

Closing device connections:

→ ↩ ┉┉▶

✅ The device connections are closed.

12 MAINTENANCE

12.1 Safety instructions maintenance

⚠️ **DANGER!**

Risk of injury due to improper maintenance.

▸ Only trained technicians may perform maintenance work.

▸ Perform maintenance work using suitable tools only.

⚠️ **WARNING!**

Risk of injury due to unintentional activation of the system and uncontrolled restart.

▸ Secure plant to prevent unintentional activation..

▸ Ensure that the plant starts up in a controlled manner only.

⚠️ **CAUTION!**

Risk of injury and/or damage due to the use of incorrect parts.

Incorrect accessories and unsuitable spare parts may cause injuries and damage the device and its environment.

▸ Use original accessories and original spare parts from Bürkert only.
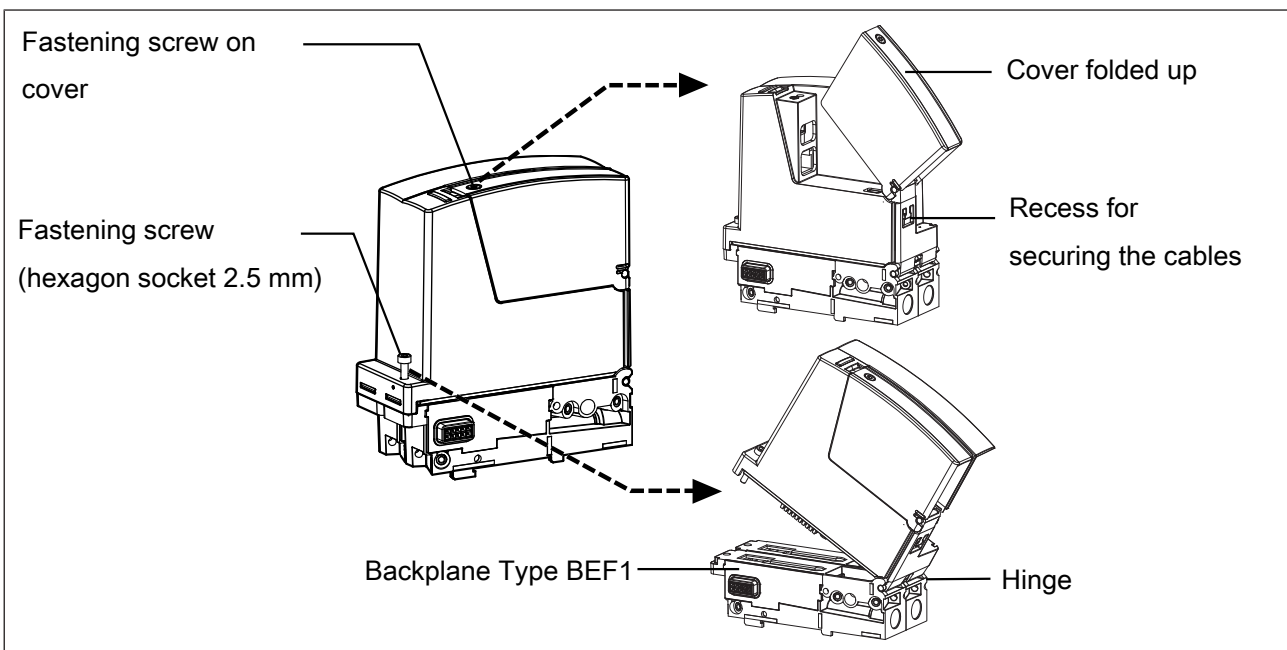
12.2 Exchange devices

Fig. 19: Exchange devices

Taking security measures:

→ ⚠️ Switch off the supply voltage!

Removing the connected cables:

→ If the cable is secured to the housing for strain relief, remove the cable from the fixing.

→ Loosen the fastening screw on the cover.

→ Fold up the cover.

→ Pull and remove cables from sockets.

→ LoggerHMIU module Type ME25 and 7" touchscreen:
Remove the connection cable to the 7" touchscreen from the interface.

Removing the device from the backplane Type BEF1:

→ Loosen the fastening screw on the rear side of the housing and remove the device.

Exchanging the memory card if necessary:

> The level of wear of the memory card can be read in the following menu:
>
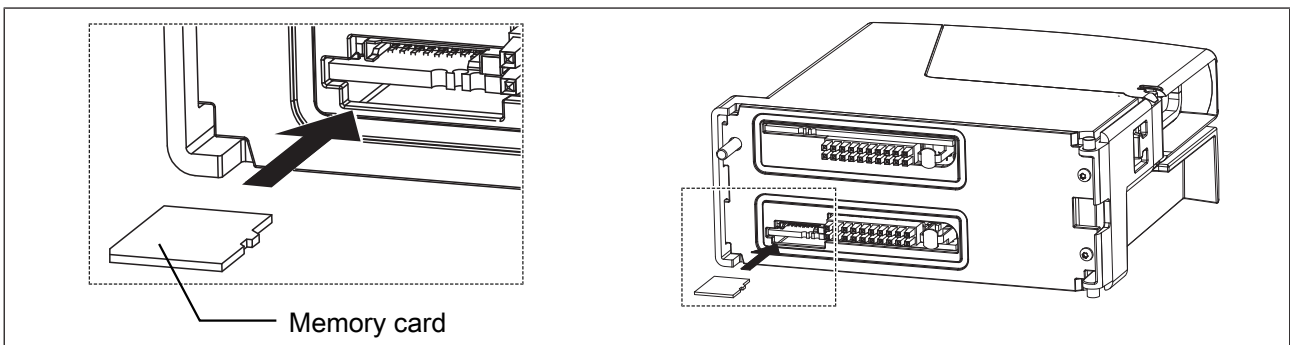> Logger ┈┈▶ Diagnostics ┈┈▶ Memory information ┈┈▶ Wear level

Memory card

Fig. 20: Exchange memory card

The memory card is on the underside of the device.

Removing the memory card:

→ Micro SD card: To unlock, press on the edge of the engaged micro SD card.

→ Pull out the memory card.

Inserting the memory card:

> You can only exchange the memory card if both devices have identical identification numbers.

⚠ Note the direction of insertion when inserting the card.

→ Slide the memory card into the card slot of the replacement device.
Micro SD card: Make sure that the micro SD card locks in position.

Installing the replacement device:

→ Insert the hinged part of the device into the counterpart on the backplane Type BEF1.

→ Push the device all the way to the stop on the backplane.

→ Tighten the fastening screw (hexagon socket 2.5 mm). Maximum tightening torque: 1 Nm.

☑ The device must be connected to the backplane and to the supply voltage.
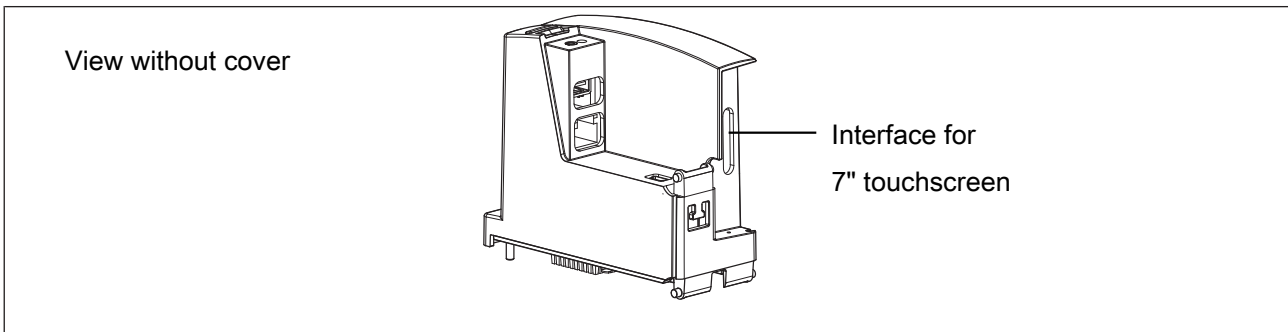
Connecting the 7" touchscreen:

View without cover

Interface for

7" touchscreen

Fig. 21: Connecting the 7" touchscreen

→ ⚠ Switch off the supply voltage!

→ LoggerHMIU module Type ME25 and 7" touchscreen:
   Plug the connection cable for the 7" touchscreen into the interface.

Connecting the cable:

→ Loosen the fastening screw on the cover.

→ Fold up the cover.

→ Connect the connections (see below for the corresponding description).

→ Close the cover and tighten the fastening screw on the cover. Maximum tightening torque: 1 Nm.

Securing the cables (strain relief):

→ For strain relief, secure the cables to the recess using a cable tie.

Connecting the Ethernet cable:

ATTENTION!

Electrical, magnetic or electromagnetic fields and operations in one device can interfere with another device or be disrupted by other devices.

The guarantee electromagnetic compatibility (EMC):

▶ Only use shielded Ethernet cables.

▶ To earth the cable shielding, connect the Ethernet cables of all participants via the backplane to the standard rail.

→ Feed the Ethernet cable through the opening on the rear side of the cover.

→ Insert the Ethernet cable into the socket for RJ45 push-in connectors.

12.3 Exchange memory card
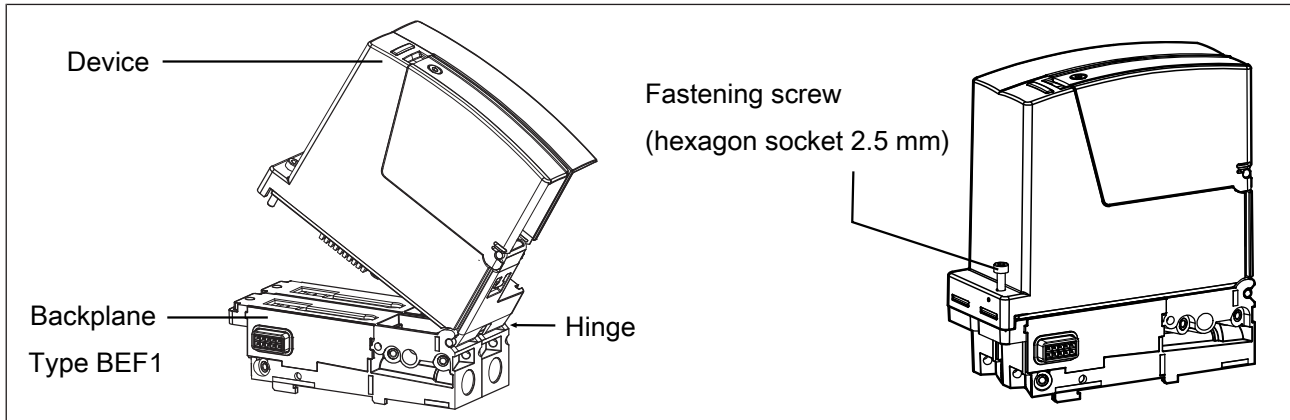
Fig. 22: Installing and removing the device

Taking security measures:

→ ⚠ Switch off the supply voltage!

Removing the device from the backplane Type BEF1:

→ Loosen the fastening screw on the rear side of the housing and remove the device.

Exchanging the memory card:

Fig. 23: Exchange memory card

The memory card is on the underside of the device.

Removing the memory card:

→ Micro SD card: To unlock, press on the edge of the engaged micro SD card.

→ Pull out the memory card.

Inserting the memory card:

⊘ You can only exchange the memory card if both devices have identical identification numbers.

⚠ Note the direction of insertion when inserting the card.

→ Slide the memory card into the card slot of the replacement device.
   Micro SD card: Make sure that the micro SD card locks in position.

MAN 1000239754 EN Version: C Status: RL (released | freigegeben) printed: 25.09.2023

Mounting the device on the backplane:

→ Insert the hinged part of the device into the counterpart on the backplane Type BEF1.

→ Push the device all the way to the stop on the backplane.

→ Tighten the fastening screw (hexagon socket 2.5 mm). Maximum tightening torque: 1 Nm.

☑ The device must be connected to the backplane and to the supply voltage.

13 TROUBLESHOOTING

Problem	Possible cause	Measure
Device status LED is not lit	No power is supplied to the device.	Power is supplied to the device.
Device status LED goes out periodically	The supply voltage fails periodically: The device performs a reset in each case.	Use power supply with adequate power.
	The voltage drop in the connection cable is too great.	Increase supply voltage (Attention: Do not exceed permissible voltage). Increase cable cross-section. Reduce cable length.
Device status LED flashes	The device is selected using the "Bürkert Communicator" software or on a 7" touch screen.	Deselect device.
Device status LED is lit in a colour according to NAMUR NE 107, Issue 2006-06-12		For the description, see the table of colour descriptions according to NAMUR NE 107, Issue 2006-06-12
Link/Act LED (green) is not lit	Interconnection to network inactive.	Check cable. If applicable Reboot LoggerHMIU.
Link LED (yellow) is not lit	Interconnection to network inactive.	Check cable.
Replacement device does not copy values on the memory card from the defective device.	The replacement device and the defective device have different device identification numbers.	Only values between devices with the same identification number can be transferred.
	The memory card is defective. The device cannot write any values to the memory card.	Replace the memory card and try to transfer the parameters of the defective device to the memory card again (see Chapter "Replacing the memory card").
Replacement device does not copy all values on the memory card from the defective device.	The replacement device and defective device have different EDS device descriptions.	Only existing values on the defective device can be copied to the replacement device. Set new values of the replacement device using the "Bürkert Communicator" software or on the 7" touch screen.

Tab. 74: Troubleshooting

13.1 Messages

Signature	Description	
Logger problems		
08:63:07	CANopen device connected. No driver loaded, therefore no logger functionality	Target behaviour. Request special driver from Bürkert Service

Signa-ture	Description	
04:63:01	Maintenance required. SD card full.	Export/backup data on USB flash drive. Check the data on the USB flash drive and then delete the backup copies on the SD card.
08:63:05	Database damaged. Backup copy created and new database opened.	Problem with the database. New database opened. You can find old malformed databases in the backup folder on the SD card. Copy the backup copies to the USB flash drive to check/repair the database.
08:63:00	Outside the specification. SD card almost full.	Important information
08:31:02	Not an original SD card	Only information, no guarantee provided
08:63:06	Deviation in database version. Database ignored and renamed. New database opened.	Information only
32:63:51	Could not start logging.	Error. In case of error, a separate message should appear.
01:35:04	Persistent memory in use	Information only. The logger functionality may be restricted.
16:31:05	SD card not available. No logger functionality!	Information only
32:31:03	Error accessing the SD card. No logger functionality!	Unknown problem with SD card. Try to replace the SD card. Check the card slot.
32:31:04	Cannot access SD card	Unknown problem with SD card. Try to replace the SD card. Check the card slot.
32:31:04	Could not open the database because there is no access to the SD card.	Unknown problem with SD card. Try to replace the SD card. Check the card slot.
32:35:02	Persistent storage errors	Unknown problem with SD card. Try to replace the SD card. Check the card slot.
32:35:05		
32:63:04	Database damaged. Creation of backup copy failed	Unknown problem with SD card. Try to replace the SD card. Check the card slot. Check data on the SD card (ext2 file format) with the PC.
Information/temporary		
01:38:01	Logged in at a specific user level	Information only
01:38:02		
01:38:03		
01:38:04		
01:63:10	Loading the driver	Please wait
08:32:13	Initialising the device	Please wait
08:52:26	f(x) is initialised	Please wait
16:33:12	Input simulation	Information only

Signature	Description	
16:33:13	Output simulation	Information only
16:33:14	Demo operation mode active	Information only
Information about büS network		
32:63:02	No driver available	CANopen device, or old büS device. Cannot be operated from display, request special driver from Bürkert Service
32:63:11	Monitored device missing.	Monitored device not detected/found
Communication error		
XX:45:XX	Communication error	Check büS network
XX:40:XX	Producer Emergency	Check büS network
Other		
16:63:49	OPC UA could not be initialised.	Attempt restart
32:35:03	File system not supported	Format USB flash drive
Internal device error		
XX:63:20	Internal database error	The device is too busy. Check the büS network, disable logging, trend views. Optimise configuration.
XX:63:48		
32:32:01	Internal error: Message buffer overflow. Device is too busy to process all messages via büS.	The device is too busy. Check the büS network, disable logging, trend views. Optimise configuration.
32:35:01	EEPROM error	Information for serviceervice
XX:38:XX	Notification associated with 7" touch-screen	Information for serviceervice
XX:52:XX	f(x)-associated message	f(x)-check configuration

Tab. 75: Messages

14   DEINSTALLATION

14.1   Safety instructions for deinstallation

⚠️ **WARNING!**

Risk of injury due to improper deinstallation.

▸ Only trained technicians may perform deinstallations.

▸ Perform deinstallations with suitable tools only.
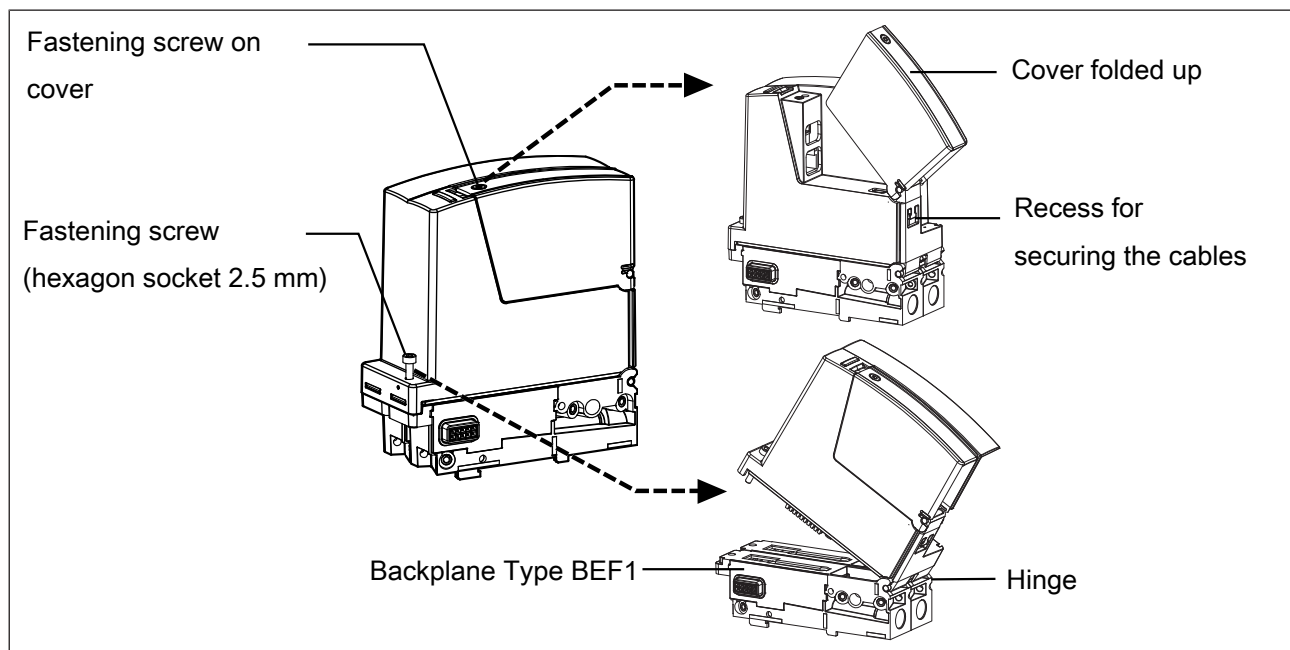
14.2   Deinstallation

Fastening screw on cover

Fastening screw (hexagon socket 2.5 mm)

Cover folded up

Recess for securing the cables

Backplane Type BEF1

Hinge

Fig. 24: Deinstall device

Taking security measures:

→ ⚠️ Switch off the supply voltage!

Removing the connected cables:

→ If the cable is secured to the housing for strain relief, remove the cable from the fixing.

→ Loosen the fastening screw on the cover.

→ Fold up the cover.

→ Pull and remove cables from sockets.

→ LoggerHMIU module Type ME25 and 7" touchscreen:
   Remove the connection cable to the 7" touchscreen from the interface.

Removing the device from the backplane Type BEF1:

→ Loosen the fastening screw on the rear side of the housing and remove the device.

15 REPLACEMENT PARTS, ACCESSORIES

Designation	Order no.
USB-büS-Interface set 1 (including power supply unit, büS stick, terminating resistor, Y-distributor, 0.7 m cable with M12 plug)	772426
USB-büS-Interface set 2 (including büS stick, terminating resistor, Y-distributor, 0.7 m cable with M12 plug)	772551
Memory card (micro SD card)	564555

Tab. 76: Accessories

16 TRANSPORTATION, STORAGE, DISPOSAL

ATTENTION!

Damage in transit due to inadequately protected devices.

▸ Protect the device against moisture and dirt in shock-resistant packaging during transportation.

▸ Observe permitted storage temperature.

ATTENTION!

Incorrect storage may damage the device.

▸ Store the device in a dry and dust-free location.

▸ Storage temperature: -20 to +70 °C

ATTENTION!

Damage to the environment caused by device components contaminated with media.

▸ Dispose of the device and packaging in an environmentally friendly manner.

▸ Observe applicable disposal and environmental regulations.

Observe national regulations on the disposal of waste.

MAN 1000239754 EN Version: C Status: RL (released | freigegeben) printed: 25.09.2023