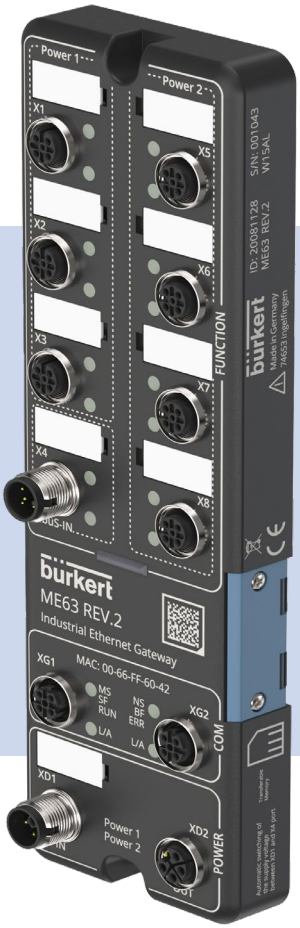
bürkert
FLUID CONTROL SYSTEMS

Type ME63 REV.2
FieldConnect

Fieldbus gateway

MAN 1000723455 EN Version: - Status: RL (released | freigegeben) printed: 09.02.2026

in process



Operating Instructions

These operating instructions apply to device variant REV.2
The operating instructions for device variant REV.1 can be found online at:
country.burkert.com

MAN 1000723455 EN Version: - Status: RL (released | freigegeben) printed: 09.02.2026

in process

We reserve the right to make technical changes without notice.
Technische Änderungen vorbehalten.
Sous réserve de modifications techniques.

© Bürkert Werke GmbH & Co. KG, 2025

Operating Instructions 2511/00_EUen_ 60042916/ Original DE

INHALT

1 OPERATING INSTRUCTIONS 7

1.1 Symbols 7

1.2 Definition of terms 7

2 INTENDED USE 8

3 BASIC SAFETY INSTRUCTIONS 8

4 GENERAL INFORMATION 9

4.1 Contact addresses 9

4.2 Warranty 9

4.3 Information on the Internet 9

5 PRODUCT DESCRIPTION 10

5.1 General description 10

5.2 Device functions 10

5.3 System monitoring 11

6 TECHNICAL DATA 12

6.1 Standards and directives 12

6.2 Operating conditions 12

6.3 Electrical data 12

6.4 Device labelling 13

6.4.1 Device top side labelling 13

6.4.2 Left and right device side labelling 14

6.5 Industrial Ethernet 14

6.5.1 PROFINET IO 14

6.5.2 EtherNet/IP 15

6.5.3 Modbus TCP 15

6.5.4 EtherCAT 15

6.5.5 CC-Link IE Field Basic 16

6.5.6 OPC UA 16

6.6 Dimensions 17

MAN 1000723455 EN Version: - Status: RL (released | freigegeben) printed: 09.02.2026

In process

7 INSTALLATION 18
7.1 Installing the device 18
7.2 Electrically connecting the device 18
7.2.1 Assignment of the connections 19
7.3 Power supply and troubleshooting 20
7.3.1 Operating modes and system behaviour 20
7.3.2 Monitoring and protective functions 22
7.4 Combining ME6x modules 23
7.4.1 Module connections for the power supply 23
7.4.2 Simplified power supply plan 25
7.4.3 Combining different ME modules 27

8 MEMORY CARD 29

9 START-UP WITH AN EXTERNAL CONTROLLER 30
9.1 Cabling of büS networks 30
9.2 Start-up files and description of the process data and parameters 30
9.3 Advanced gateway functionalities 30

10 START-UP WITH BÜRKERT COMMUNICATOR 31
10.1 User interface 31
10.2 Connecting the device to the Bürkert Communicator 32
10.3 Protocol settings for connecting the device to the PLC network 32
10.3.1 Selecting the protocol 32
10.3.2 Entering the EtherCAT address (Station Alias) 32
10.3.3 Entering a PROFINET, EtherNet/IP, Modbus TCP or CC-Link IE field basic address. 33
10.4 Configuring the fieldbus gateway 33
10.4.1 Downloading a gateway configuration 34
10.4.2 Editing a gateway configuration 34
10.4.3 Creating a new gateway configuration 34
10.4.4 Start gateway configuration automatically 46
10.5 Configuring the büS network 46
10.5.1 Automated büS mapping 46
10.5.2 Manual büS mapping 46

MAN 1000723455 EN Version: - Status: RL (released | freigegeben) printed: 09.02.2026

in process

11 START-UP USING A WEB SERVER 50
11.1 Function of the web server 50
11.2 Making a connection to the web server via Bürkert Communicator 50
11.3 Establishing a connection to the web server 50
11.4 Logging onto the web server 51
11.5 Passwords 52
11.5.1 Change password 52
11.5.2 Factory reset of password 52
11.6 Configuring the device 52

12 OPC UA 53
12.1 General description 53
12.2 Establishing a connection to OPC UA 53
12.2.1 Settings on the device 53
12.2.2 Settings for the OPC UA client 54
12.3 Server certificate 54

13 DISPLAY ELEMENTS 55
13.1 LEDs for indicating the bus status 55
13.1.1 PROFINET IO 56
13.1.2 EtherNet/IP 56
13.1.3 Modbus TCP 58
13.1.4 EtherCAT 59
13.1.5 CC-Link IE field basic 60
13.2 LED for indicating the device status 61

14 BÜRKERT COMMUNICATOR MENUS 62
14.1 f(x) configuration 62
14.2 “Web server” and “OPC UA” 62
14.3 Menus in the configuration area “PROFINET”, “EtherNet/IP”, “Modbus TCP”, “EtherCAT” and “CC-Link IE field basic” 63
14.4 Menus in the “General settings” configuration area 65

MAN 1000723455 EN Version: - Status: RL (released | freigegeben) printed: 19.02.2026

in process

15 TROUBLESHOOTING 68
15.1 Description of the error code 69
16 ACCESSORIES 73
17 LICENCE ACTIVATION 74
18 TRANSPORTATION, STORAGE, DISPOSAL 77

MAN 1000723455 EN Version: - Status: RL (released | freigegeben) printed: 09.02.2026

in process

1 OPERATING INSTRUCTIONS

The operating instructions apply to the entire life cycle of the device. Keep these instructions ready to hand at the operating site.

Important safety information.

- Read these instructions carefully.
- Above all, observe the safety instructions, intended use and usage conditions.
- All persons working on the device must read and understand these instructions.

1.1 Symbols

WARNING

Warns of a potentially hazardous situation.

- Failure to observe these instructions may result in serious injuries or death.

CAUTION

Warns of a potential danger.

- Failure to observe may result in moderate or minor injuries.

NOTE

Warns of damage to property.

- Failure to observe these instructions may result in damage to the device or the system.

Indicates important additional information, advice and recommendations.

Refers to information in these operating instructions or in other documentation.

▶ Indicates instructions to avoid a danger.

→ Designates a procedure which you must carry out.

✓ Designates a result.

MENU Symbol for software interface texts.

In process

1.2 Definition of terms

Term	Description
Device	Fieldbus gateway type ME63 REV.2
büS	Bürkert system bus; a communication bus developed by Bürkert, based on the CANopen protocol
Gateway configuration	Connection between gateway and programmable logic controller
büS mapping	Connection between büS device and gateway

MAN 1000723455 EN Version: - Status: RL (released | freigegeben) printed: 19.02.2026

2 INTENDED USE

The type ME63 REV.2 fieldbus gateway is used as a fieldbus converter for the process values between büS participants and an industrial Ethernet PLC. The type ME63 REV.2 supports the fieldbus protocols PROFINET, EtherNet/IP, Modbus TCP EtherCAT, and CC-Link IE field basic.

- The device must only be used for its intended purpose. Non-intended use of the device may be dangerous to people, nearby equipment and the environment.
- Use the device only in conjunction with third-party devices and components recommended or approved by Bürkert.
- Only operate the device when it is in perfect condition.
- Prerequisites for safe and trouble-free operation are correct transportation, correct storage, installation, start-up, operation and maintenance.
- To use the device, observe the permitted data, operating conditions and usage conditions. These specifications can be found in the contract documents, the operating instructions and on the device.

3 BASIC SAFETY INSTRUCTIONS

This safety information does not take into account any contingencies or occurrences that may arise during installation, use and maintenance of the device. The operator is responsible for observing the location-specific safety regulations, also with reference to personnel.

General hazardous situations.

To prevent injuries, observe the following:

- Use the device only when it is in a perfect state and in accordance with the operating instructions.
- Do not make any modifications to the device and do not subject it to mechanical stress.
- Secure device or system to prevent unintentional activation.
- Ensure that only trained technicians carry out installation and maintenance work.
- Install the device according to the regulations applicable in the respective country.
- After an interruption in the power supply, ensure that the process is restarted in a controlled manner.
- Observe the general rules of technology.

NOTE

Notes for UL certified devices:

- Device is only suitable for operation at SELV/PELV voltages (Class III).
- Device is suitable for indoor areas (dry areas) and not for wet areas.
- Observe the national and international guidelines for setting up electrical systems.
- External circuits connected to the connections must be galvanically isolated from the network, with the aid of double or reinforced isolation (SELV/PELV).
- Make sure that overcurrent protection is available during final installation.
- Device belongs to Overvoltage Category II, Degree of Contamination 2.

MAN 1000723455 EN Version: - Status: RL (released | freigegeben) printed: 19.02.2026
in process

NOTE

Electrostatically sensitive components and assemblies.

The device contains electronic components that are susceptible to the effects of electrostatic discharging (ESD). Components are at risk if they come into contact with electrostatically charged persons or objects. In the worst case scenario, can result in either immediate irreparable damage to the components, or to their failure after start-up.

- Meet the requirements specified by EN 61340-5-1 to minimise or avoid the possibility of damage caused by a sudden electrostatic discharge.
- Do not touch electronic components while the operating voltage is switched on.

4 GENERAL INFORMATION

4.1 Contact addresses

Germany

Bürkert Fluid Control Systems
Sales Centre
Christian-Bürkert-Str. 13-17
D-74653 Ingelfingen
Tel. + 49 (0) 7940 - 10-91 111
Fax + 49 (0) 7940 - 10-91 448
email: info@burkert.com

International

You can find the contact addresses online at: country.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:

country.burkert.com

MAN 1000723455 EN Version: - Status: RL (released | freigegeben) printed: 19.02.2026

in process

5 PRODUCT DESCRIPTION

5.1 General description

The fieldbus gateway represents the central control unit for Bürkert products. The type ME63 REV.2 Field Connect consists of a fieldbus gateway which transmits the internal communication of the Bürkert field devices to all common industry standards for industrial Ethernet.

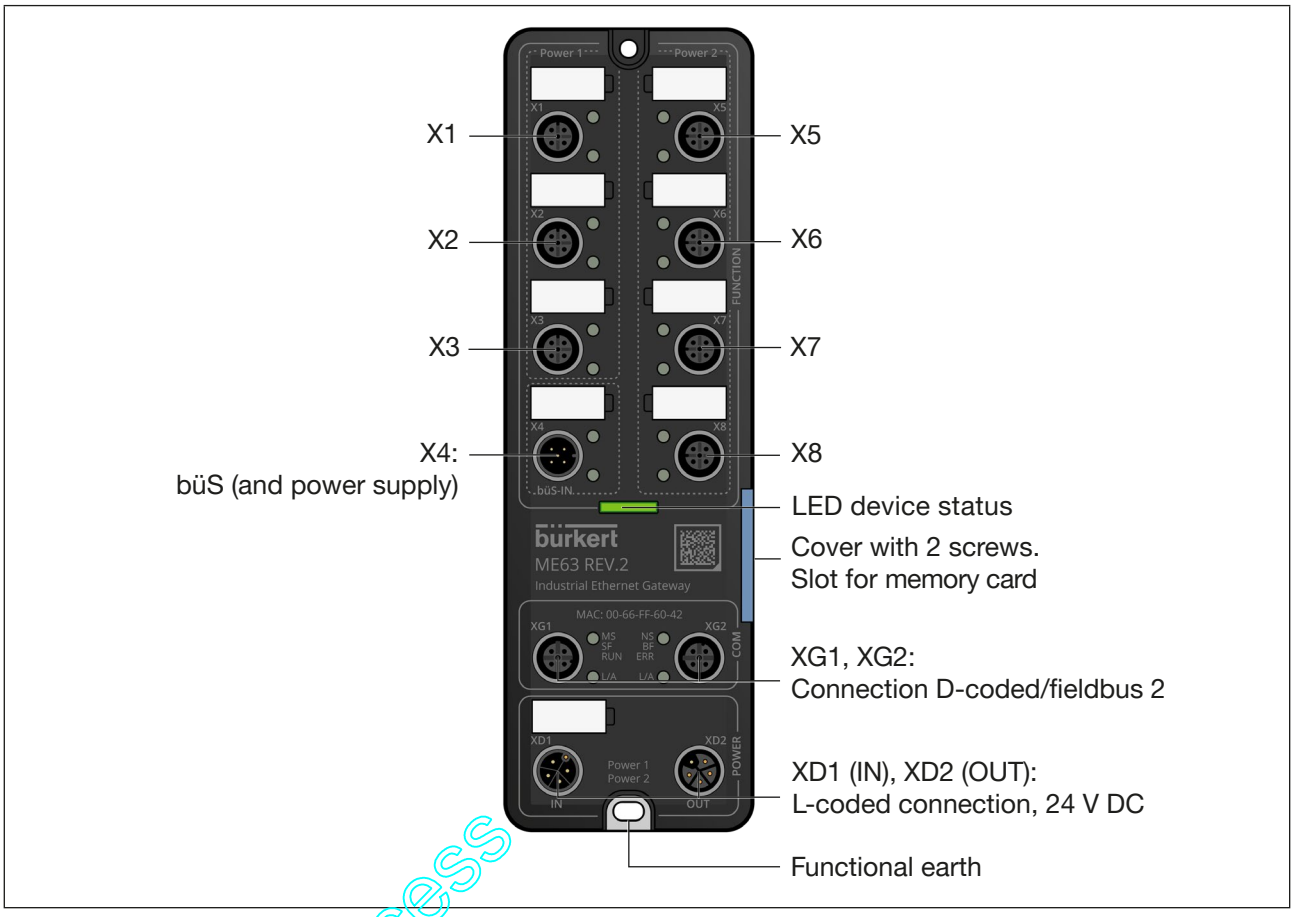


Fig. 1: View of ME63 REV.2 type

MAN 1000723455 EN Version: - Status: RL (released | freigegeben) printed: 19.02.2026

in process

5.2 Device functions

- Fieldbus converter between büS and Industrial Ethernet,
- Exchange process values between participants of fieldbus 1 and fieldbus 2.

Device	Fieldbus 1	Fieldbus 2
ME63 REV.2	büS	PROFINET
		EtherNet/IP
		Modbus TCP
		EtherCAT
		CC-Link IE field basic
		OPC UA

Table 1: Application range of fieldbus gateway

5.3 System monitoring

The system monitoring checks the gateway as well as the connected büS devices using the NAMUR status. The system monitoring is set in Bürkert Communicator at:

General settings > Parameters > System monitoring

The Diagnostics menu option is used to set which type of messages of the büS devices is transferred by the gateway as the overall status. If all types are set, one message per type appears on the gateway.
For example, if a connected device is in “Maintenance” status, the message ”At least one büS device is in status: maintenance” appears at the gateway and the NAMUR LED assumes the status, unless there are errors with higher priority.

The function is ensured when the following operating conditions are met:

- Gateway configuration has been created with a Communicator version higher than 6
- The product catalogue has been used for the configuration. In this process, each device is assigned a device ID
- For each büS device, the NAMUR status has been added to the gateway configuration as a cyclical value
- NAMUR status of the individual devices is connected to the gateway

Special features for PROFINET:
Under the menu option
General Settings > System Monitoring > Individual diagnostics of the system devices, the following is set: an error from a connected büS device means that (for “PROFINET alarms active”), an alarm is sent to the corresponding slot of the NAMUR status.

MAN 1000723455 EN Version: - Status: RL (released | freigegeben) printed: 19.02.2026

in process

6 TECHNICAL DATA

6.1 Standards and directives

The device complies with the valid EU harmonisation legislation. In addition, the device also complies with the requirements of the laws of the United Kingdom.

The harmonised standards that have been applied for the conformity assessment procedure are listed in the current version of the EU Declaration of Conformity/ UK Declaration of Conformity.

6.2 Operating conditions

NOTE

Malfunction due to heat and heavy frost.

▸ Do not use the device outside the specified ambient temperature.

Ambient temperature	–20 °C...+60 °C
Storage temperature	–30 °C...+80 °C
Material	Polycarbonate
Height above sea level	max. 2000 m

6.3 Electrical data

Operating voltage	24 V ⎓ ±10%, residual ripple 10%
Power consumption of the module	2.4 W
Maximum input current	32 A for input via XD1 (M12, L-coded, plug) **The module automatically detects the supply via X4 instead of XD1**
	4 A for input via X4 (M12, A-coded, plug)
Maximum current output	4 A via büS connection (X1-X3, X5-X8) for input via XD1
	4 A total (X1-X3, X5-X8) for input via X4
Degree of protection	IP65, IP67 and IP69K according to EN 60529/IEC 60529 (for connected cables and while using protective caps for unused connections)
Protection class	3 according to DIN EN 61140 (VDE 0140)

MAN 1000723455 EN Version: - Status: RL (released | freigegeben) printed: 19.02.2026
in process

MAN 1000723455 EN Version: - Status: RL (released | freigegeben) printed: 19.02.2026

6.4 Device labelling

6.4.1 Device top side labelling

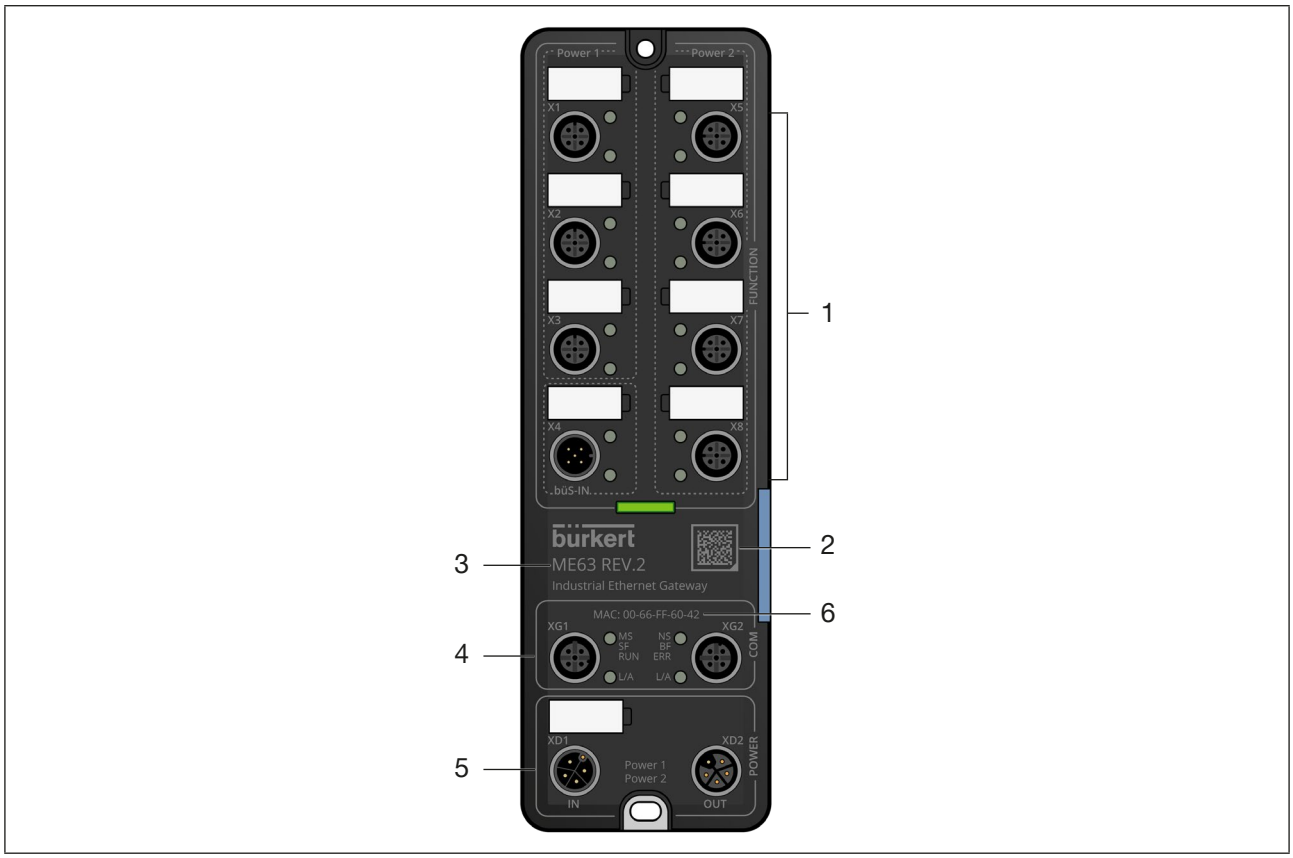


Fig. 2: Device top side labelling

Item	Designation
1	Device-specific function
2	Data matrix code with link to Bürkert product page
3	Type & device designation
4	Connections for industrial Ethernet (2-port switch)
5	Power supply
6	MAC address

in process

6.4.2 Left and right device side labelling

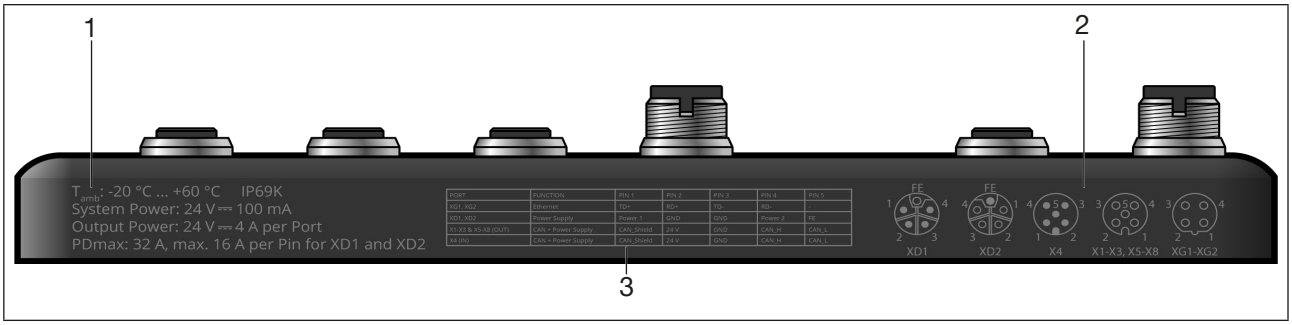


Fig. 3: Labelling on the left side of the device

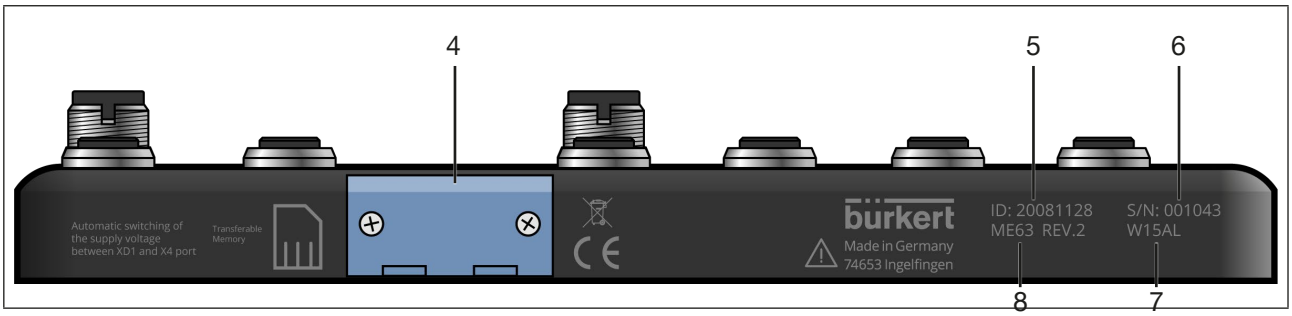


Fig. 4: Labelling on the right side of the device

Item	Designation
1	Performance data (ambient temperature, IP degree of protection for voltage, power consumption)
2	Symbols of push-in connectors
3	Pin assignment
4	Slot for memory card (located under the blue cover)
5	Article number
6	Serial number
7	Manufacture code (encrypted)
8	Type

6.5 Industrial Ethernet

6.5.1 PROFINET IO

Topology recognition	LLDP, SNMP V1, MIB2, Physical Device
Minimum cycle time	10 ms
IRT	not supported
MRP media redundancy	MRP client is supported
Additional supported features	DCP, VLAN Priority Tagging, Shared Device
Transmission speed	100 MBit/s
Data transport layer	Ethernet II, IEEE 802.3
PROFINET IO specification	V2.42
(AR) Application Relations	The device can simultaneously process up to 2 IO-ARs, 1 Supervisor AR and 1 Supervisor-DA AR.
PROFINET interface	2 x M12 sockets

MAN 1000723455 EN Version: - Status: RL (released | freigegeben) printed: 09.02.2026
in process

6.5.2 EtherNet/IP

Pre-defined standard objects	Identity Object (0x01) Message Router Object (0x02) Assembly Object (0x04) Connection Manager (0x06) DLR Object (0x47) QoS Object (0x48) TCP/IP Interface Object (0xF5) Ethernet Link Object (0xF6)
DHCP	supported
BOOTP	supported
Transmission speed	10 and 100 MBit/s
Duplex modes	Half duplex, full duplex, auto-negotiation
MDI modes	MDI, MDI-X, Auto-MDIX
Data transport layer	Ethernet II, IEEE 802.3
Address Conflict Detection (ACD)	supported
DLR (ring topology)	supported
Integrated switch	supported
CIP reset service	Identity Object Reset Service types 0 and 1
EtherNet/IP interface	2 x M12 sockets

6.5.3 Modbus TCP

Modbus function codes	1, 2, 3, 4, 6, 15, 16, 23
Mode	Message mode: Server
Transmission speed	10 and 100 MBit/s
Data transport layer	Ethernet II, IEEE 802.3

6.5.4 EtherCAT

Acyclic communication (CoE)	SDO SDO Master-Slave SDO Slave-Slave (depending on master capacity)
Type	Complex Slave
FMMUs	8
Sync managers	4
Transmission speed	100 MBit/s
Data transport layer	Ethernet II, IEEE 802.3

in process

MAN 1000723455 EN Version: - Status: RL (released | freigegeben) printed: 09.02.2026

6.5.5 CC-Link IE Field Basic

Number of occupied stations	1 to 16
Acyclic communication	SLMP Server
Transmission speed	100 MBit/s
Data transport layer	Ethernet II, IEEE 802.3
CC-Link interface	Cyclic data 61450 (UDP) Discovery and SLMP Server 61451 (UDP) SLMP Parameter 45237 (UDP) SLMP Communication 20000 (UDP)

6.5.6 OPC UA

On delivery, the OPC UA server is not enabled.

The OPC UA server runs in the background with the following protocols:

- PROFINET IO
- EtherNet/IP
- Modbus TCP

The function for enabling or disabling the OPC UA server can be set in Bürkert Communicator:

OPC UA > Parameters > Enable OPC UA

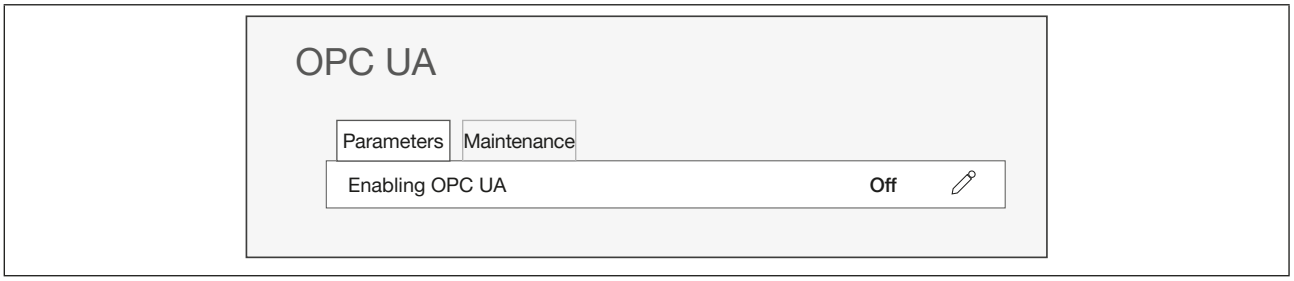


Fig. 5: Enabling OPC UA

After enabling the OPC UA, other OPC UA server settings will become visible (see chapter “12 OPC UA”).

If the OPC UA server is enabled, the “f(x) configuration” is not available.

in process

MAN 1000723455 EN Version: - Status: RL (released | freigegeben) printed: 19.02.2026

6.6 Dimensions

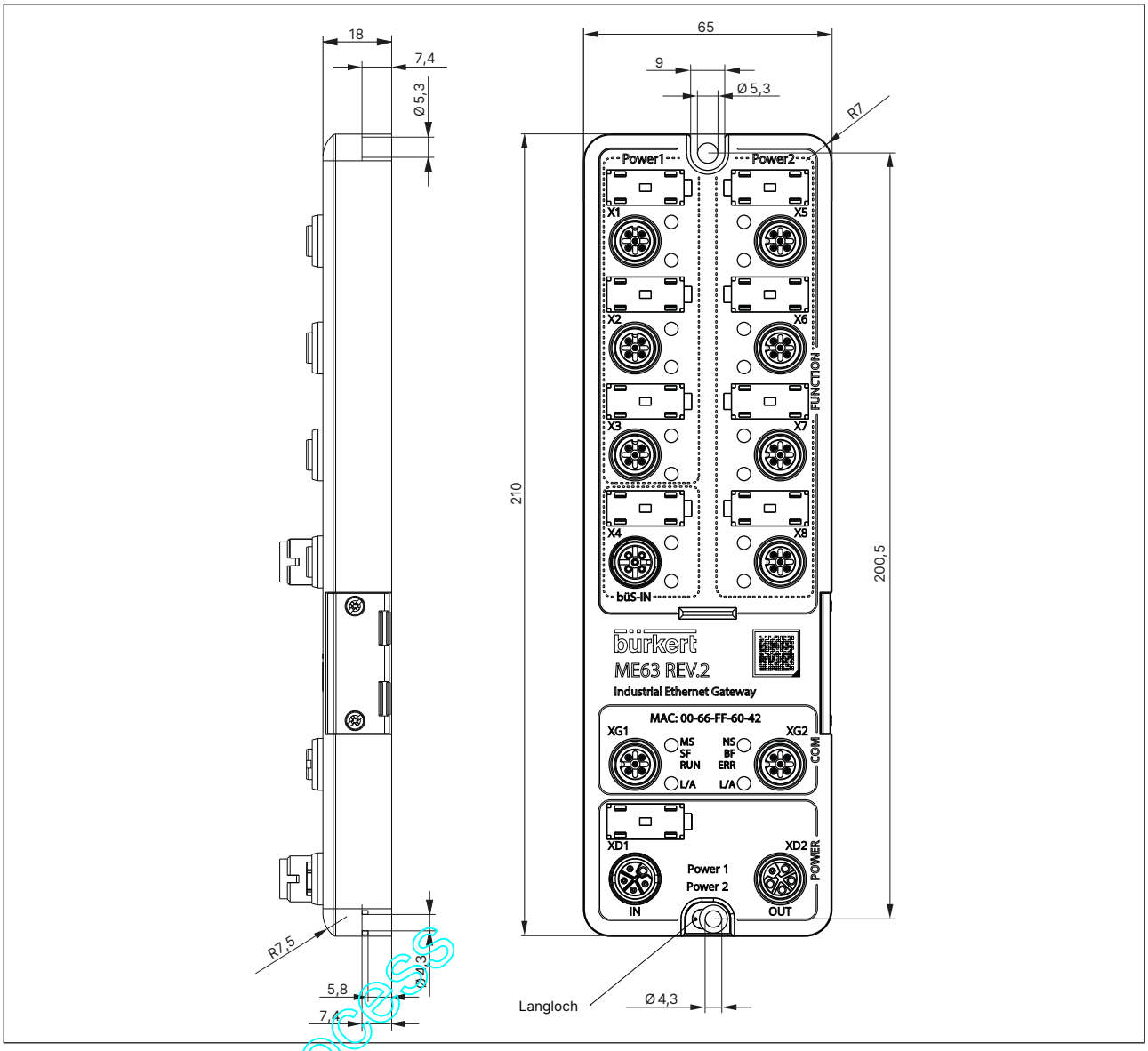


Fig. 6: Dimensions of gateway type ME63 REV.2

MAN 1000723455 EN Version: - Status: RL (released | freigegeben) printed: 19.02.2026

in process

7 INSTALLATION

WARNING

Risk of injury due to improper installation.

- Only trained technicians may perform installation work.
- Perform installation work using suitable tools only.

7.1 Installing the device

The device will be delivered fully installed. Modifications to the device are only permitted to be carried out by Bürkert.

→ Install the device on a level surface using 2 screws (M4) and 2 plain washers (according to DIN 125). Observe the maximum tightening torque of 1Nm.

To discharge interference currents and EMC resistance, the devices have a functional earth.

CAUTION

Malfunction due to electrostatic discharge.

Electrostatic discharge on the device may cause malfunctions.

- Connect the device to the functional earth.

Danger due to electromagnetic fields.

If the functional earth (FE) is not connected, this represents an infringement of the legal regulations of EMC directive.

- Connect the device to the functional earth.
- If the installation surface is not grounded, use an earthing strap or FE line. Connect the earthing strap or FE line to the earthing point using an M4 screw.

7.2 Electrically connecting the device

Requirements for UL-certified devices:

- Only connect devices with a UL-certified cable (CYJV or PVVA) with suitable nominal values.
- Maximum permitted cable temperature is 105 °C.
- Do not lay Ethernet cables used for communication outside buildings.
- Galvanically isolate external circuits connected to ports from mains circuits, in order to protect them against isolation breakdown in the communication network.

NOTE

Prerequisite for the fault-free functioning of the device and to avoid interference issues:

- Use only shielded cables with a braided or foil shield.

Ensure the degree of protection.

- Fit unused connections with protective caps.

→ Connect pins according to the variant.

MAN 1000723455 EN Version: - Status: RL (released | freigegeben) printed: 19.02.2026

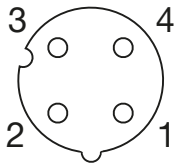
in process

Port	Function	Pin 1	Pin 2	Pin 3	Pin 4	Pin 5
XG1 (IN), XG2(OUT)	Ethernet	TD+	RD+	TD-	RD-	-
XD1 (IN), XD2 (OUT)	Power supply	Power 1	GND	GND	Power 2	FE
X1–X3, X5-X8 (OUT)	CAN + power supply	CAN_GND	24 V	GND	CAN_H	CAN_L
X4 (IN)	CAN + power supply	CAN_GND	24 V	GND	CAN_H	CAN_L

Table 2: Assignment of the connections

7.2.1 Assignment of the connections

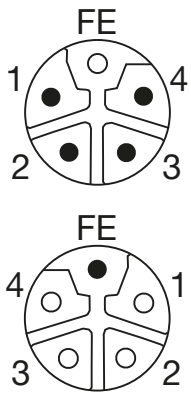
Connections XG1, XG2



Pin	Assignment	Function
1	TD+	Send data +
2	RD+	Receive data +
3	TD-	Send data -
4	RD-	Received data -

Table 3: Connections M12, XG1, XG2 (female connector), D-coded

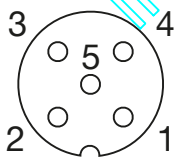
Connections XD1, XD2



Pin	Assignment	Function
1	24 V (Power 1)	Power supply
2	GND (Power 1)[1)]	Power supply
3	GND (Power 2)[1)]	Power supply
4	24 V (Power 2)	Power supply
5	FE	Shielding

Table 4: Connections M12, XD1 (plug), XD2 (female connector), L-coded

Connections X1-X3, X5-X8



Pin	Assignment	Function
1	CAN_Shield	Shielding
2	24 V	Voltage forwarding
3	GND	Voltage forwarding
4	CAN_H	büS communication
5	CAN_L	büS communication

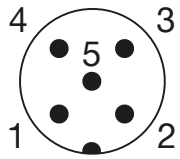
Table 5: Connections M12, X1-X3, X5-X8 (socket), A-coded

in process

MAN 1000723455 EN Version: - Status: RL (released | freigegeben) printed: 19.02.2026

1) *GND of Power 1 and Power 2 are bridged internally.*

Connection X4 (büS-IN)



Pin	Assignment	Function
1	CAN_Shield	Shielding
2	24 V (büS power)	Power supply
3	GND (büS power)	Power supply
4	CAN_H	büS communication
5	CAN_L	büS communication

Table 6: Connection M12, X4 (plug), A-coded

7.3 Power supply and troubleshooting

The device can be supplied via up to two external power sources (Power 1 and Power 2) and büS. This chapter explains the different operating modes, the associated status messages and the integrated protection functions.

7.3.1 Operating modes and system behaviour

The ME63 REV.2 can be supplied via connections XD1 or X4:

Connections for voltage supply	Description	Connections for voltage forwarding
XD1	Power 1	X1–X3
	Power 2	X5–X8
X4	büS + communication	X1–X3; X5–X8

Table 7: Device power supply

The power supply of the device requires special attention to avoid malfunctions and damage. There are certain permitted combinations for the connection

Important information on power supply

- The device must not be supplied with power simultaneously via Power 1 and büS or Power 2 and büS. This can lead to error messages and malfunctions.
- If the device is only operated via Power 1, Power 2 monitoring must be manually disabled. This is done in the general settings of the device:

  Gateway ME63 REV. 2 > General settings > Power 2 monitoring > Off

System behaviour in the absence of Power 2 voltage

If there is no Power 2 voltage while monitoring is enabled, an error message appears at the top right of the screen:

"Power supply (Power) 2 (XD1) is not connected! The connections X5–X8 are disabled. Confirm to disable power supply (power) 2 monitoring."

Confirming this error message automatically disables Power 2 monitoring.

MAN 1000723455 EN Version: - Status: RL (released | freigegeben) printed: 19.02.2026
in process

Operating modes and status

Fall	Power 1	Power 2	büS	Status	Behaviour/information
1	✓	✓	✓	❌ Out of specification	Device should not be supplied with Power 1 (XD1), Power 2 (XD1) and büS (X4) at the same time.
2	✓	✓	✖	✅ Permitted	**Recommended operating mode:** no errors
3	✓	✖	✓	❌ Out of specification	Simultaneous operation of Power 1 + büS not permitted. Message: Undervoltage detected at Power 2
4	✓	✖	✖	❌ Out of specification	Power 2 is not connected! Connections X5–X8 are disabled.
				✅ Permitted (special case)	**Special case:** **valid if Power 2 monitoring has been disabled by confirmation.**
5	✖	✓	✓	❌ Out of specification	Power 1 missing, simultaneous operation of Power 2 + büS not permitted.
6	✖	✓	✖	❌ Device OFF	Device does not start without Power 1 or büS.
7	✖	✖	✓	✅ Permitted	Device is fully supplied with power via büS. • Overload protection enabled (max. 4 A) • Power is distributed internally to Power 1 and Power 2. • Power 1 and Power 2 monitoring disabled.
8	✖	✖	✖	❌ Device OFF	No power supply available.

Table 8: Operating modes and status

Permitted

- **Case 2:** Power 1 + Power 2 (16 A + 16 A) *Recommended operating mode*
- **Case 7:** Only büS (max. 4 A)

Special case

- **Case 4:** Power 1 only (X1–X3 max. 16 A/X5–X8 [Power 2 monitoring] disabled)

Not permitted

- **Case 1:** Power 1 + Power 2 + büS
- **Case 3:** Power 1 + büS
- **Case 5:** Power 2 + büS
- **Case 6:** Only Power 2
- **Case 8:** No power supply

Switching between operating modes may require a restart.

MAN 1000723455 EN Version: - Status: RL (released | freigegeben) printed: 19.02.2026

In process

7.3.2 Monitoring and protective functions

The device is equipped with various monitoring and protective functions to prevent damage caused by unauthorised voltage values or overload.

Voltage monitoring

The voltage monitoring is enabled as soon as one of the primary current sources (Power 1, Power 2 or büS power) is connected. The following warnings and errors can be issued in the event of deviations in the voltage values:

Designation	Voltage value	Description
Overvoltage	> 29 V	**Error:** Overvoltage detected
High voltage	> 28 V	**Warning:** The voltage is above the warning limit
Low voltage	< 19 V	**Warning:** Voltage below warning limit
Undervoltage	< 18 V	**Error:** Undervoltage detected

Overload protection

The module has a built-in overload protection that is enabled when it is supplied exclusively via büS current (max. 4 A).

1. The power supply to the other ports is interrupted for 15 seconds.
2. **“Overload detected”** error is triggered.
3. After 15 seconds, all outputs are automatically enabled again and checked for overload.
4. If the current flow is back to normal, the error message is reset.
5. If the excessive current flow persists, the overload protection is enabled again and the protection mechanism is repeated every 15 seconds.

in process

MAN 1000723455 EN Version: - Status: RL (released | freigegeben) printed: 09.02.2026

7.4 Combining ME6x modules

7.4.1 Module connections for the power supply

Fig. 7: Power supply via büS connection

ME63 REV.2		ME64 16 Digital In and ME66	
X1–X3; X5–X8	M12-A, socket, büS/CANopen and 24 V DC, max. 4 A, for connection of a device via büS/CANopen	XG1	M12-A, plug, büS/CANopen IN, max. 4 A, for connection of büS/CANopen network
X4	M12-A, plug, büS/CANopen and 24 V DC, max. 4 A, preferably for büS/CANopen connection	XG2	M12-A, socket, büS/CANopen OUT, max. 4 A, for the integration of other büS/CANopen devices

MAN 1000723455 EN Version: - Status: RL (released | freigegeben) printed: 19.02.2026
in process

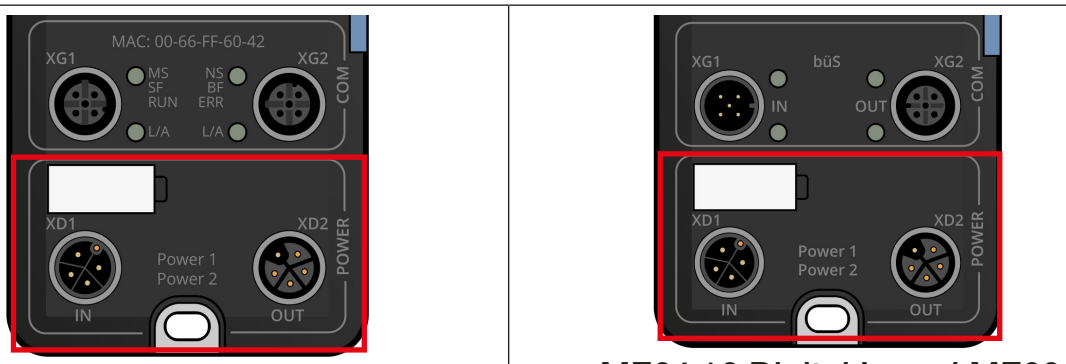


Fig. 8: Power supply via XD1, L-coded

Connection	Description
XD1 (IN)	M12-L, plug, power IN, max. 32 A, for power supply input
XD2 (OUT)	M12-L, socket, power OUT, max. 32 A, for power supply for other devices

NOTE

Damage to device

- The L-coded M12 connection (XD1, XD2) is designed for connecting two power supplies, each up to max. 16 A. Do not exceed these values.

in process

MAN 1000723455 EN Version: - Status: RL (released | freigegeben) printed: 19.02.2026

7.4.2 Simplified power supply plan

When modules in the ME6x product series are combined, the information provided in this chapter must be followed.

Important compatibility note:

For optimum function and secure connection, the ME63 REV.2 module should only be used together with the ME64 16DI and ME66 modules where the L-coded connections are labelled XD1 and XD2.

This reduces the susceptibility to errors that can arise from the combination of different device versions and ensures reliable operation.

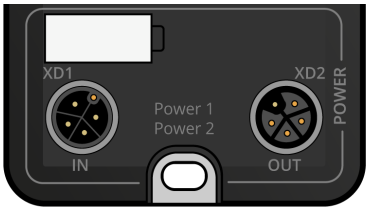


Table 9: Connection designation of the L-coded connections

For type **ME63 REV.2**, the supply can be made **via either** XD1 (max. 2×16 A) **or** X4 (max. 4 A). The module must not be supplied simultaneously via XD1 (Power 1 and Power 2) and X4 (büS Power).

- If the module is supplied via XD1, make sure that Power 1 and Power 2 are always available.
- If the module is supplied via X4, only a total of 4 A are available at connections X1–X3 and X5–X8.

For type **ME64 16DI** and **ME66**, Power 1 and Power 2 are two separate circuits with common ground.

ME64 16DI
Both supplies are routed separately to the module. Power 1 supplies connections X1–X8 (and the internal electronics assembly of the module).

ME66
Power 1 supplies connections X1–X4, Power 2 supplies connection X5–X8

- Supply via XD1
  - Switch is **not closed**
  - Power supply via connection XD1 with a current of max. 2x16 A
- Supply via X31 (büS power),
  - Switch under the blue cover **must be closed**
  - **Note:** Only max. 4 A will then be available for the entire module.
    When supplied via büS power, it must be ensured that the module is not supplied simultaneously via XD1.

MAN 1000723455 EN Version: - Status: RL (released | freigegeben) printed: 19.02.2026
in process

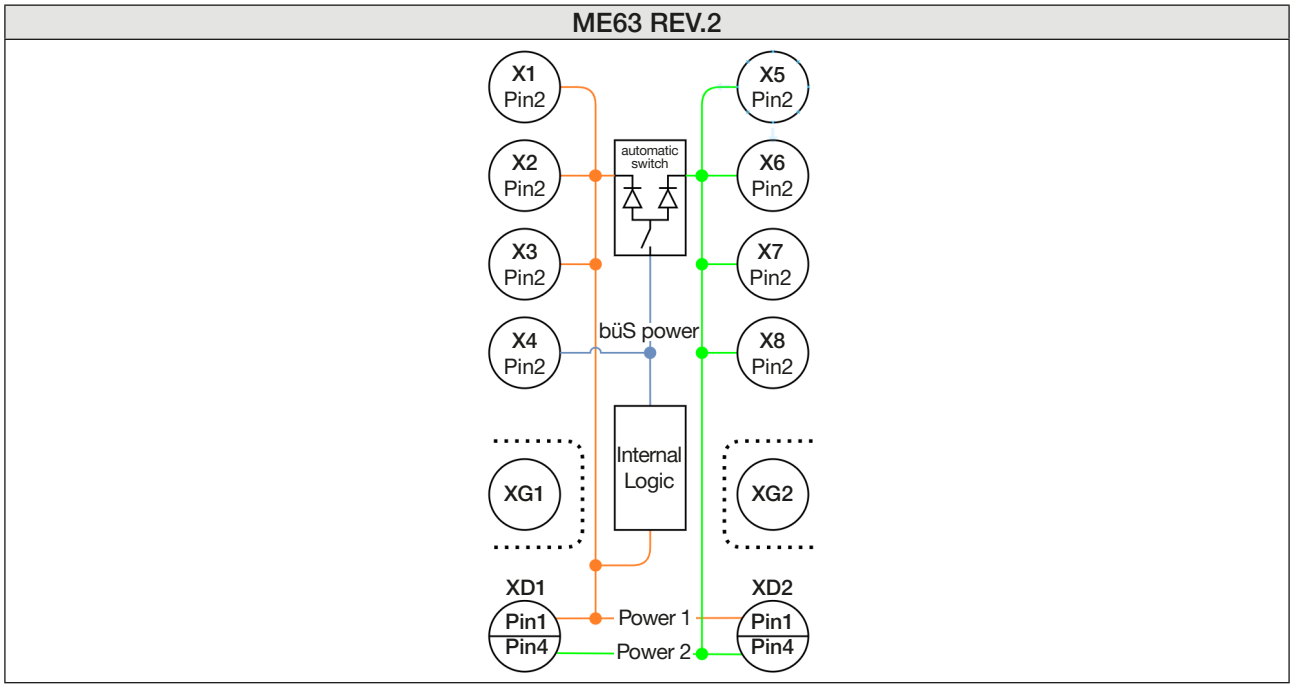


Fig. 9: Simplified circuit diagram of ME63 REV.2

Colour	Description
	Power 1
	Power 2
	büS power

Table 10: Legend of simplified circuit diagram for ME63 REV.2

Only power connections are displayed. **Note:** the “automatic switch” uses the büS current when neither Power 1 nor Power 2 are available.

Reverse protection – ME63 REV.2

If both supplies (A-coded and L-coded) are connected, it is not permitted for any return flow to occur via the A-coded supply. With the type ME63 REV.2, this is prevented via reverse protection.

If the modules are only supplied via the M12 A-coded (X4) supply, the reserve protection function switches over automatically.

in process

MAN 1000723455 EN Version: - Status: RL (released | freigegeben) printed: 19.02.2026

7.4.3 Combining different ME modules

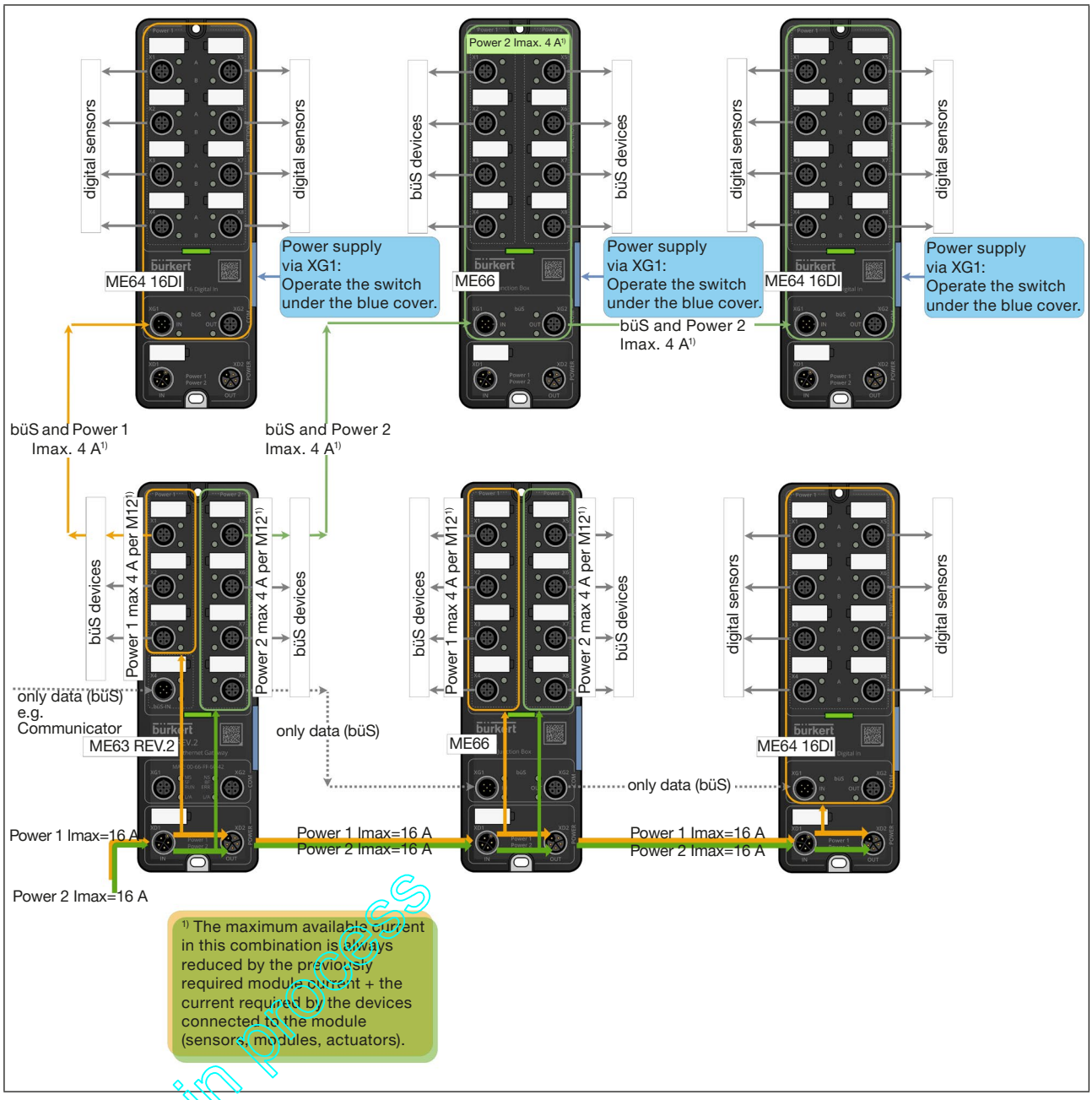


Fig. 10: Example for the combination of different ME modules

MAN 1000723455 EN Version: - Status: RL (released | freigegeben) printed: 22.07.2026

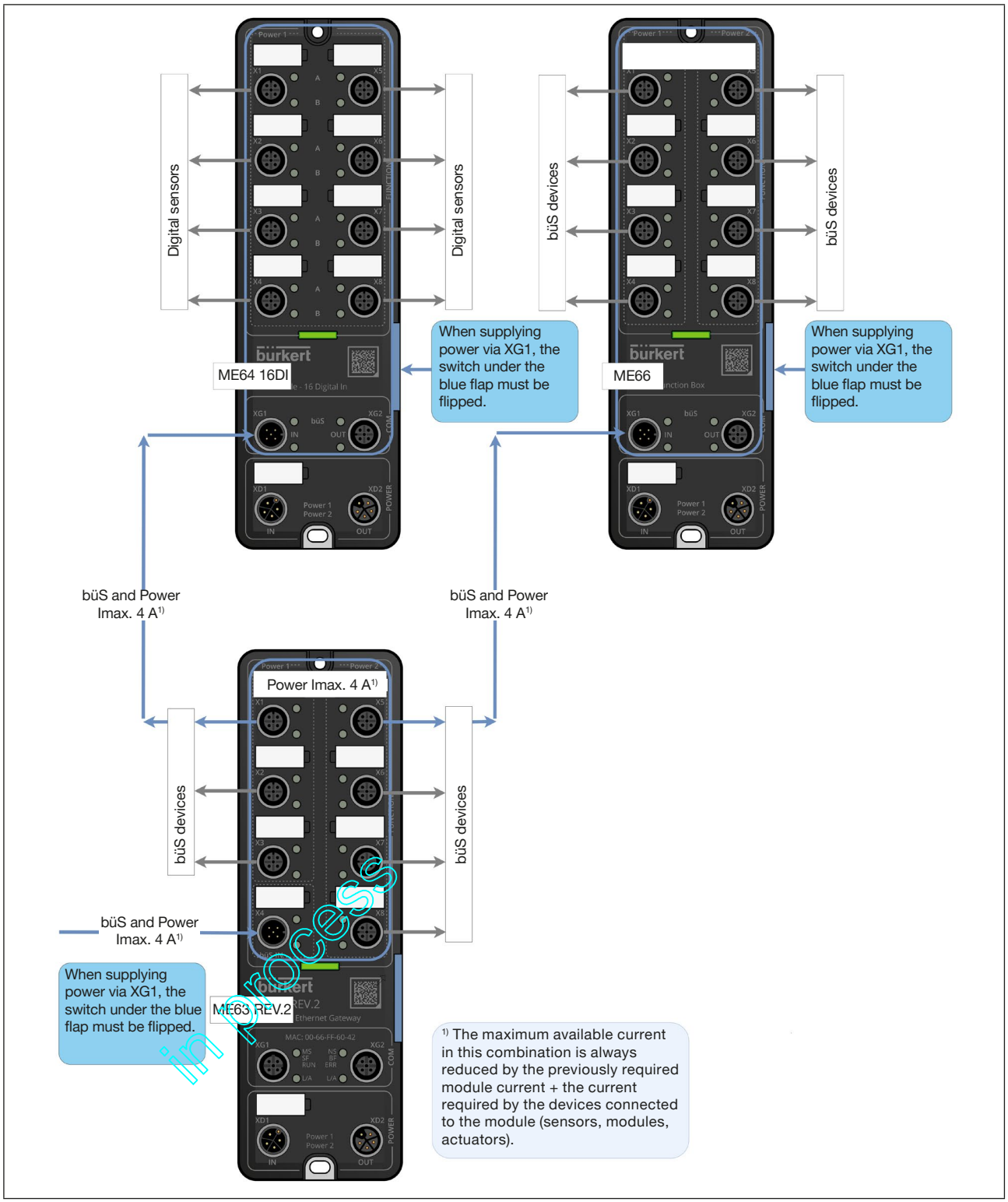


Fig. 11: Example of power supply via büS

MAN 1000723455 EN Version: - Status: RL (released | freigegeben) printed: 19.02.2026

8 MEMORY CARD

The memory card can be used to store device-specific values and user settings and transfer them to another device. The memory card is part of the accessories and is not enclosed as a standard.

The memory card is not suitable for back-ups. If the memory card of the device is reinserted at a later stage, the data last saved will not be restored. The function of the memory card is limited to data exchange.

Attention!
By resetting the device to the factory settings, the data saved on the memory card is also reset.

A newly created memory card is checked for the presence of existing data when the device is restarted. This data will be transferred or overwritten accordingly:

The memory card does not contain any data.	The existing device-specific values and user settings are saved to the memory card.
The memory card contains data compatible with the device.	The data on the memory card is transferred by the device. The existing device-specific values and user settings are overwritten.
The memory card contains data that is not compatible with the device.	**Attention!** The device overwrites the data on the memory card with its own device-specific values and user settings.

NOTE

The memory card used is a special industrial version that offers additional durability and temperature-resistance.

- ▶ Do not use a standard memory card for the device. **Only purchase the memory card for the device from your Bürkert sales department.**

NOTE

Removing the memory card while the supply voltage is applied can lead to data loss and damage to the card.

- ▶ Do not remove the memory card while the supply voltage is applied.

The memory card can be inserted while the supply voltage is applied.
A reboot is required to ensure that the device detects the memory card.

Insert memory card

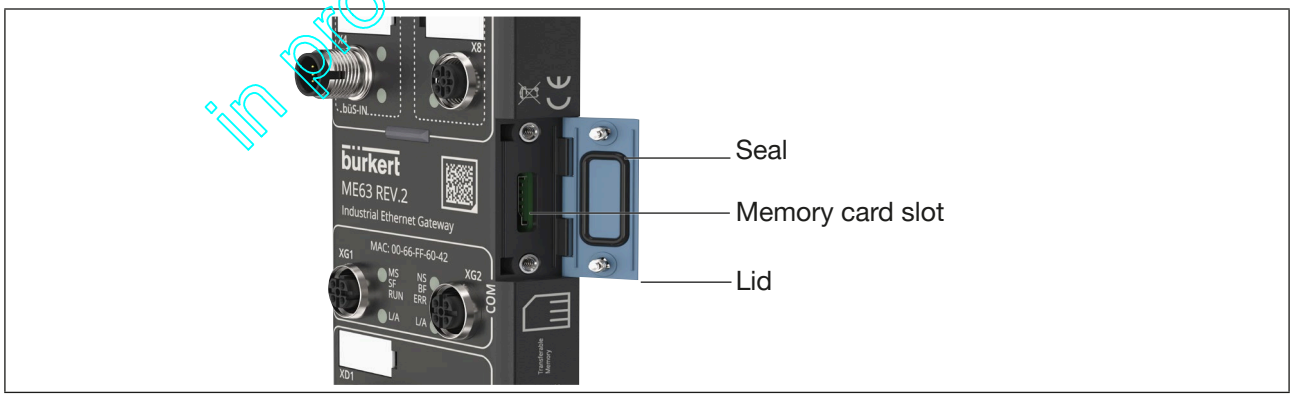


Fig. 12: Insert memory card

in process

MAN 1000723455 EN Version: - Status: RL (released | freigegeben) printed: 19.02.2026

⚠ **Note the direction of insertion when inserting the card.**

→ Slide the memory card into the card slot. Make sure that the memory card locks into position.

NOTE

Guarantee the degree of protection when screwing on the cover.

- ► Ensure that the seal is correctly fitted.
- ► When screwing on the cover, observe a maximum tightening torque of 0.4 Nm.

→ Screw on the cover.

Removing the memory card:

→ Loosen both screws with a suitable screwdriver and open the flap.
→ To unlock, press on the edge of the locked-in memory card.
→ Remove the memory card.

9 START-UP WITH AN EXTERNAL CONTROLLER

9.1 Cabling of büS networks

Detailed information on cabling büS networks is available online.

- ▸ Open the ME63 device type website.
- ▸ Navigate to the **downloads** section.
- ▸ In the **User Manuals** section, select *'Supplement | Cabling guide büS/EDIP'*.

9.2 Start-up files and description of the process data and parameters

The start-up files required by the project design software are either created during the configuration process or provided by the configurator.

Please refer to the documentation of your project design software for instructions regarding the installation of the start-up files.

9.3 Advanced gateway functionalities

Information on
Control Mode (communication settings),
Control Word (running cyclical commands) and
Object Route Function (access to other büS objects)
can be found at: www.buerkert.com → Type ME63 REV.2 → "Description fieldbus" operating instructions

In process

MAN 1000723455 EN Version: - Status: RL (released | freigegeben) printed: 19.02.2026

10 START-UP WITH BÜRKERT COMMUNICATOR

The Bürkert Communicator software can be downloaded free of charge from the Bürkert home page. In addition to the software, the USB-büS-interface-set, available as an accessory, is required.

This chapter describes the basic use of the Bürkert Communicator. Detailed information on how to use the Bürkert Communicator software can be found on the Bürkert home page at: www.buerkert.com → 8920 → Downloads “Operating instructions”.

10.1 User interface

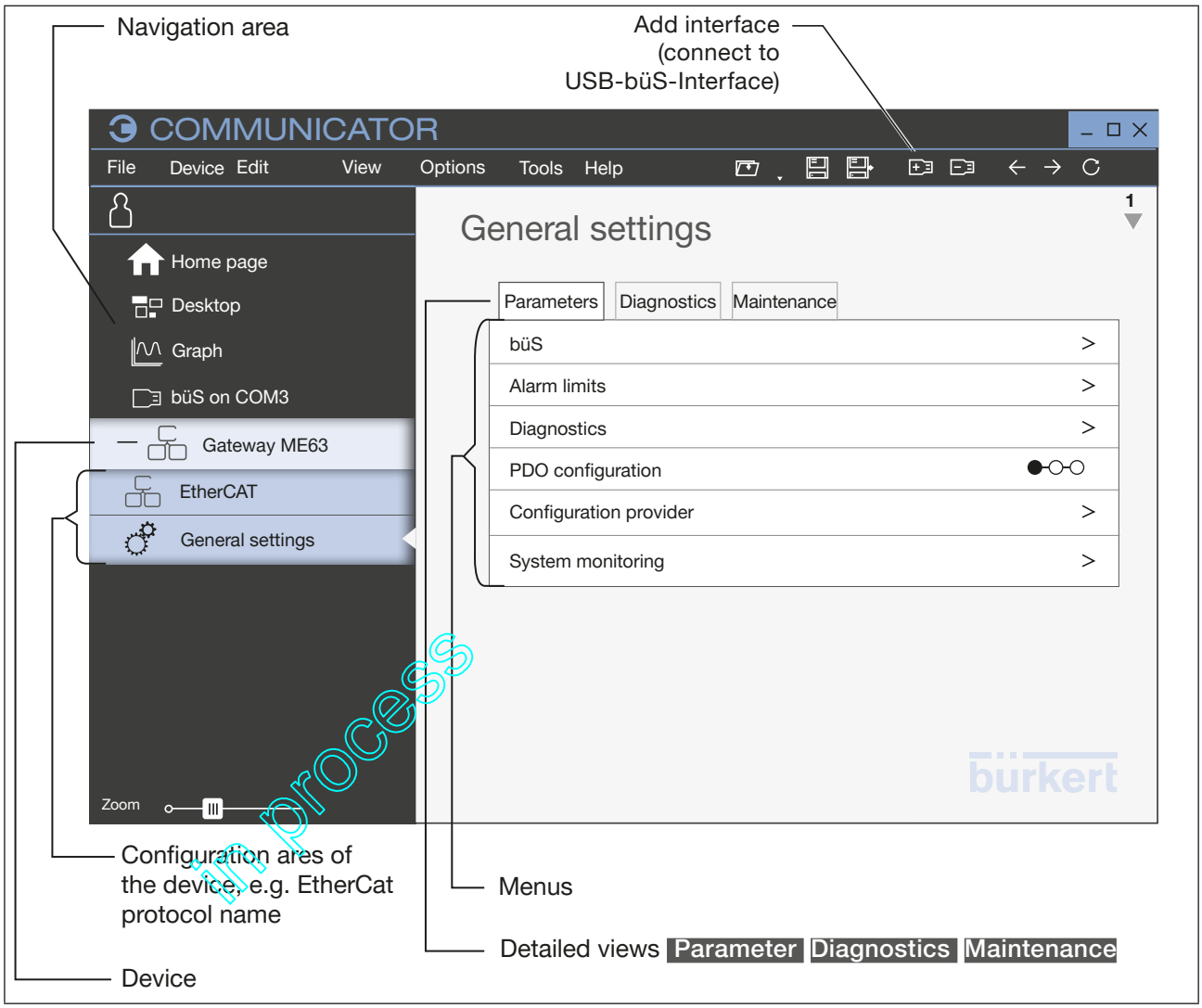


Fig. 13: Explanation of the terms in Bürkert Communicator

MAN 1000723455 EN Version: - Status: RL (released | freigegeben) printed: 19.02.2026

10.2 Connecting the device to the Bürkert Communicator

The Bürkert Communicator can be connected to the device via a büS network or with the büS stick.

→ Install Bürkert Communicator on the PC.

→ Use the USB büS interface set to establish the connection between the device and the PC.
Not required for the devices in a büS network.

→ Start Bürkert Communicator.

→ In the menu bar, click the icon for Add interface.

→ Select büS stick or büS via network.

→ Complete.

✔ The device is connected to Bürkert Communicator and is displayed in the navigation area.

10.3 Protocol settings for connecting the device to the PLC network

10.3.1 Selecting the protocol

(Protocol name) > Parameters > Change protocol > Protocol

→ In the drop-down menu on the right, select the protocol.

10.3.2 Entering the EtherCAT address (Station Alias)

The EtherCAT addressing runs by default via the physical connection to the EtherCAT port. If required, and if set on the controller, the station alias of the gateway can also be set.

(Protocol name) > Parameters > EtherCAT settings > Station Alias or wizard

→ Enter address. Valid addresses: 0...65536.
If an address outside the valid range has been set, the device will issue an error message.

in process

MAN 1000723455 EN Version: - Status: RL (released | freigegeben) printed: 19.02.2026

10.3.3 Entering a PROFINET, EtherNet/IP, Modbus TCP or CC-Link IE field basic address

With Modbus TCP, it is essential to set the Ethernet parameters.

(Protocol name) > Parameters > (Protocol name) Settings >Start-up wizard

→ Enter parameters.

Ethernet parameters:

- IP operation mode can only be set with EtherNet/IP, factory setting: fixed IP address
- DNS compatible name can only be set with PROFINET
- Fixed IP address factory setting: 192.168.0.100
- Network mask factory setting: 255.255.255.0
- Standard gateway factory setting: 192.168.0.1

Fig. 14: Protocol setting, Start-up wizard

The IP parameter settings menu option is used to check the IP parameters entered.

10.4 Configuring the fieldbus gateway

The name of the set protocol (protocol name) appears in the configuration area of Bürkert Communicator.

For configurations with more than 120 values, we recommend using a second gateway. This ensures that the state of function of the gateway is not impaired.

Fieldbus protocol	Input values	Output values	Total number of values	Input Bytes	Output Bytes	Total number of bytes
PROFINET	128	128	256	512	512	1024
EtherNet/IP	128	128	256	504	504	1008
Modbus TCP	128	128	256	512	512	2048
EtherCAT	128	128	130	512	512	520
CC-Link field basic	128	128	256	512	512	2048
The two additional standard values (Namur status and control word) from the gateway itself are included.						

Table 11: Maximum number of process values

MAN 1000723455 EN Version: - Status: RL (in process) | freigegeben | printed: 19.02.2026
in process

10.4.1 Downloading a gateway configuration

If a configuration file from an earlier project is present, the device can be configured directly using this.

(Protocol name) > Parameters > Gateway configuration > Download a gateway configuration file

→ Select Load device configuration to device.

10.4.2 Editing a gateway configuration

(Protocol name) > Parameters > Gateway configuration > Creating a gateway configuration

→ Select Edit existing configuration .

→ Edit configuration. Note chapter “10.4.3 Creating a new gateway configuration” on this topic.

10.4.3 Creating a new gateway configuration

(Protocol name) > Parameters > Gateway configuration > Creating a gateway configuration

→ Select Start new configuration.

→ Select protocol.

✔ A configuration wizard will open. The following settings can be made in the configuration wizard.

10.4.3.1 Edit general settings

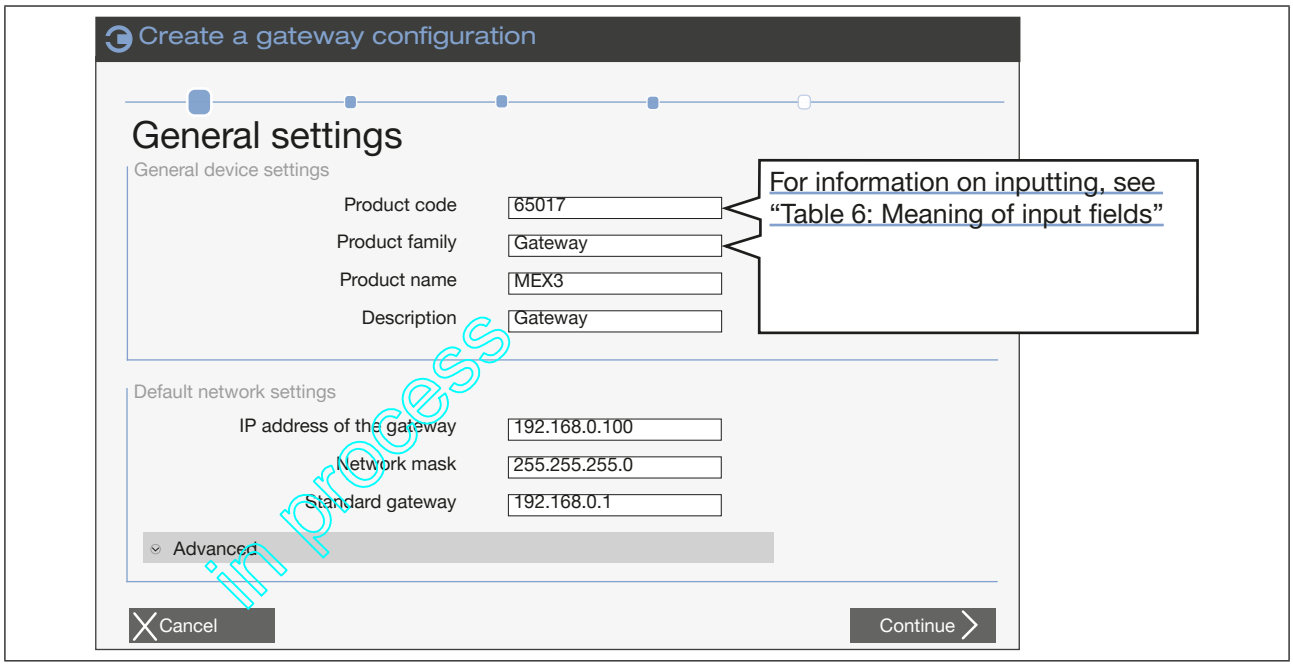


Fig. 15: Gateway configuration, general settings

MAN 1000723455 EN Version: - Status: RL (released | freigegeben) printed: 19.02.2026

Designation	Meaning
General settings	
Product code	Unique device number. e.g. article number or custom defined code. Important when using multiple devices: assign a separate code for each device.
Product family	Used for assignment to a device group in the PLC.
Product name	Name used to display the device on the PLC.
Description	Description of the device

Table 12: Meaning of the input fields

→ Adjust general settings for device description file of the target system (PLC) (if required).

→ Press **Continue**.

MAN 1000723455 EN Version: - Status: RL (released | freigegeben) printed: 19.02.2026

in process

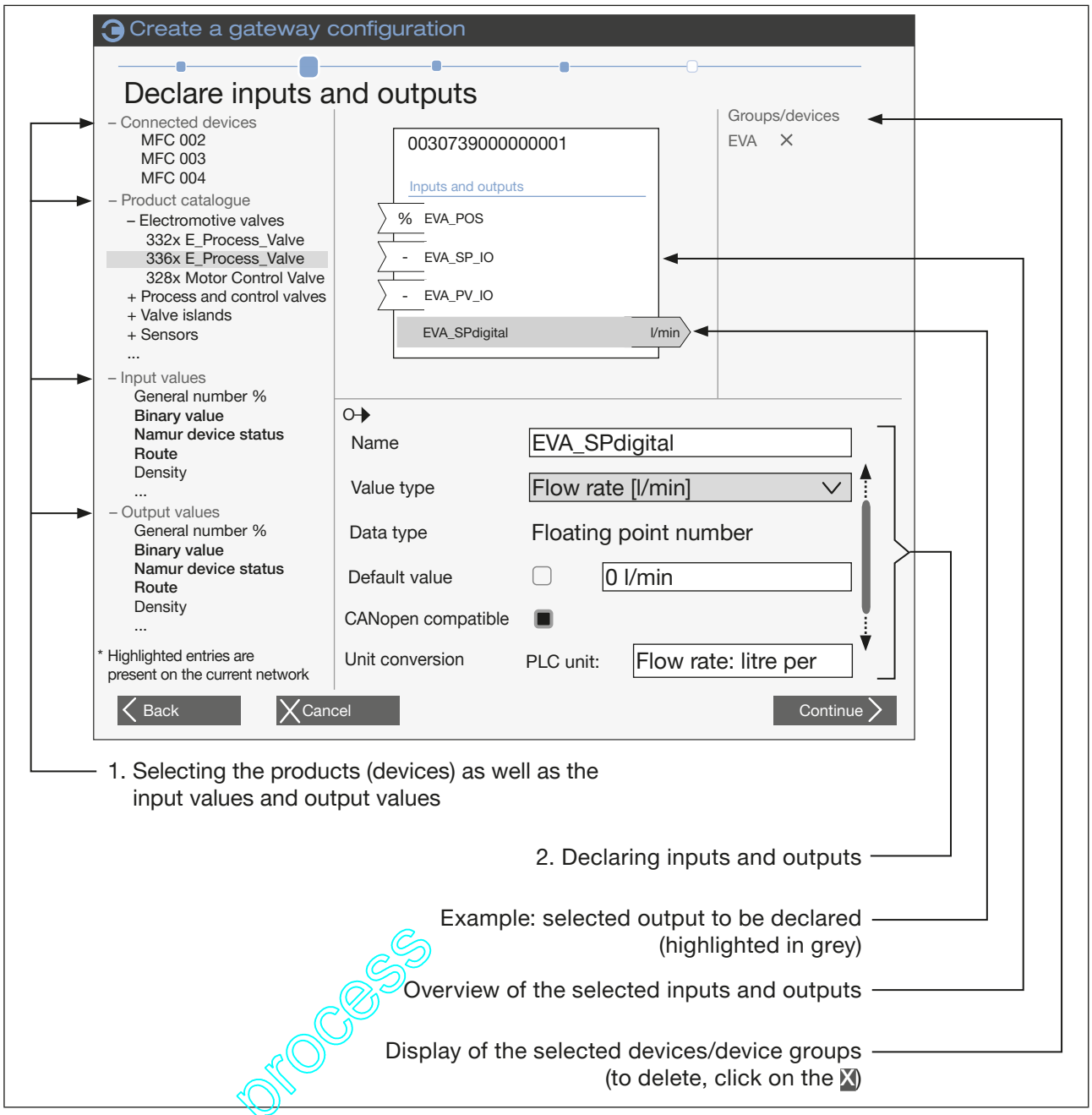


Fig. 16: Gateway configuration, declare inputs and outputs

1. Selecting the inputs and outputs:

The inputs and outputs to be declared are specified by selecting products or process values.

→ Open the list of products and process values by clicking on +.
The process values on the büS network are highlighted.

MAN 1000723455 EN Version: - Status: RL (released | freigegeben) printed: 09.02.2026
In process

Adding products:

Two procedures are available for configuring the gateway:

- **Recommended method:** Configuration via connected devices
- **Special cases:** Configuration via product catalogue

Gateway configuration via “Connected devices”

- In this procedure, the Bürkert Communicator automatically detects the actual connected devices.
- The required assignments are saved directly in the connected devices.
- After downloading the configuration files, the Communicator arranges the devices according to to this data.

✔ Manual büS mapping is no longer required.

Rules for automatic assignment:

- New configurations overwrite existing assignments.

Gateway configuration via product catalogue

- Configuration via the product catalogue is still possible, but is only recommended in special cases.
- This method is suitable if a configuration needs to be prepared even though not all devices are physically available yet.

✔ büS mapping must be performed manually.

→ Add products by drag-and-drop or double-clicking.

Values for declaring inputs and outputs have been predefined in the Add device(s) dialog box.

in process

MAN 1000723455 EN Version: - Status: RL (released | freigegeben) printed: 19.02.2026

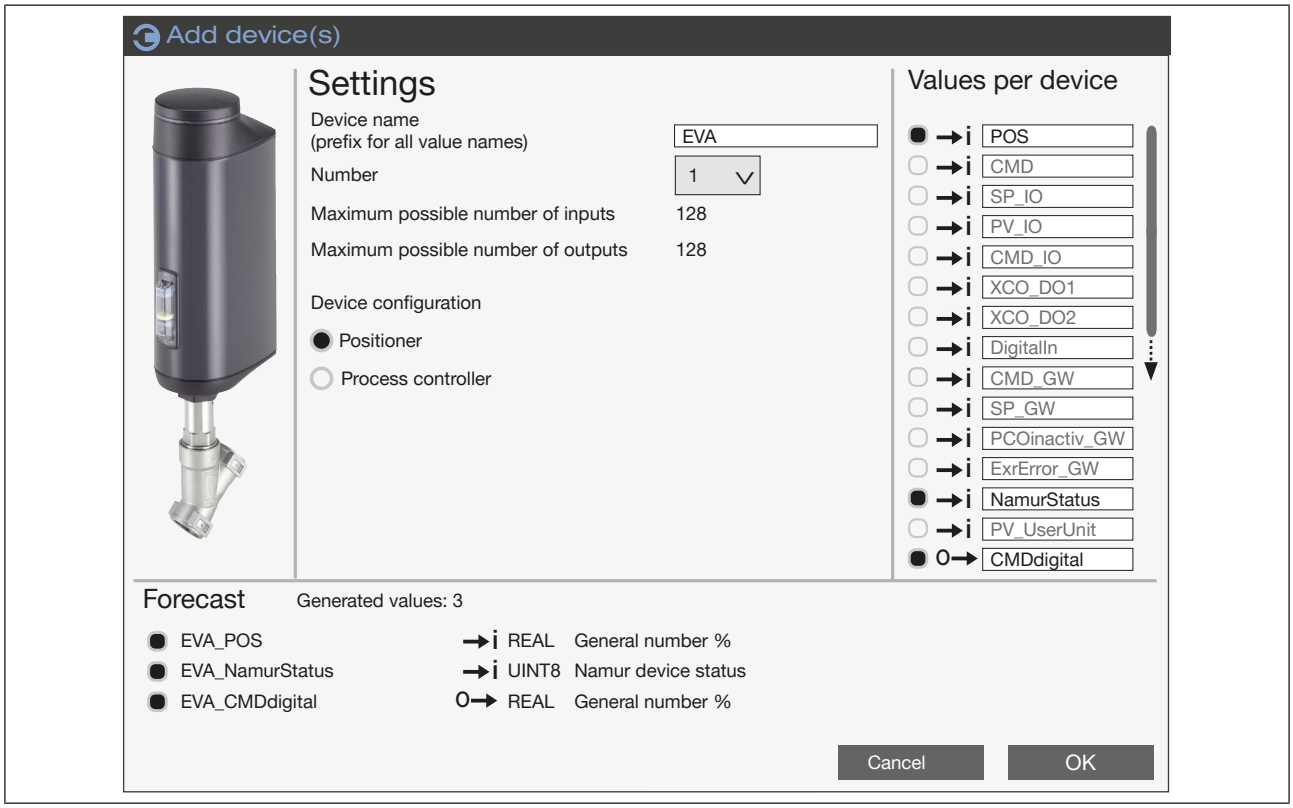


Fig. 17: Gateway configuration, add products

Make the following settings in the dialogue box:

→ Apply or change **device name** (max. 20 characters)
The name is used for protocol-specific grouping and to improve assignment on the network.

→ Select **Number** of devices.

→ Select **Device configuration** (if selection option available).

→ Apply **Values per device** or select other values.

The name of the value can be changed by overwriting it.

Adding process values:

→ Add input values and output values via drag-and-drop or double-clicking.

Adding multiple values of the same unit simultaneously:
→ Right-click on the unit and then on the **Add multiple** window.

in process

MAN 1000723455 EN Version: - Status: RL (released | freigegeben) printed: 19.02.2026

Context-related definition of the values

• Input values
Icon: →i
Input values are values which come from the büS participant and are read by the PLC (büS participant → Fieldbus gateway → PLC)

• Output values
Icon: O→
Output values are values which are written from the PLC to the büS participant/fieldbus gateway.

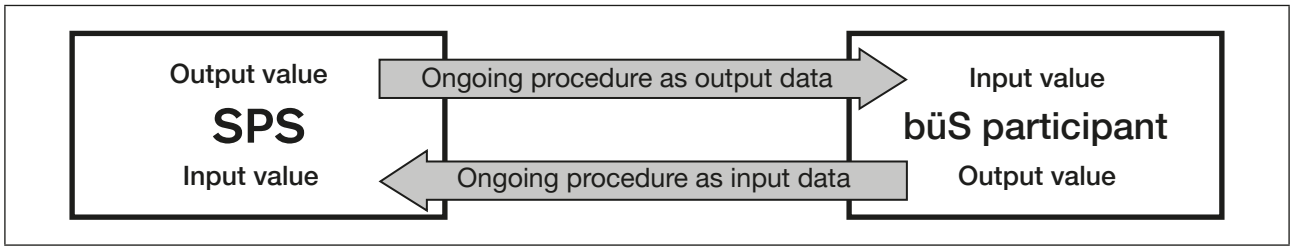


Fig. 18: Configuration; type of implementation for process values from the PLC to the büS participant

2. Adjusting properties of the values:

The properties for the values only require adjustment if deviations from the standard are requested.

→ In the overview click on the input value or output value to be declared.
The selected value is highlighted in grey.
The default values for the declaration are shown at the bottom right.

Meaning of the default values.
The default values are used when the device starts or if the partner device was not found.

For the declaration input or select the following:

→ Accept or adjust Name. These names appear via the device description file in the target control.

→ Select Value type. Specify physical size or device status for the input or output.

→ Select or do not select Default value.
The standard value is accepted if no signal arrives from the partner device.

→ Select or do not select CANopen compatible.
Is selected when the values are consumed by a CANopen device.

→ Select Unit conversion.
Specifies in which physical unit the value is received or sent by the PLC.

You have selected and declared the inputs and outputs for the gateway configuration.

→ Press Continue to open the menu for the fieldbus-specific address mapping.

10.4.3.2 Fieldbus-specific address mapping

→ Check editable fields and complete if required.
The protocol-specific settings are explained in the following screenshots.

→ Press Continue.

MAN 1000723455 EN Version: - Status: RL (released | freigegeben) printed: 09.02.2026

Address mapping for PROFINET:

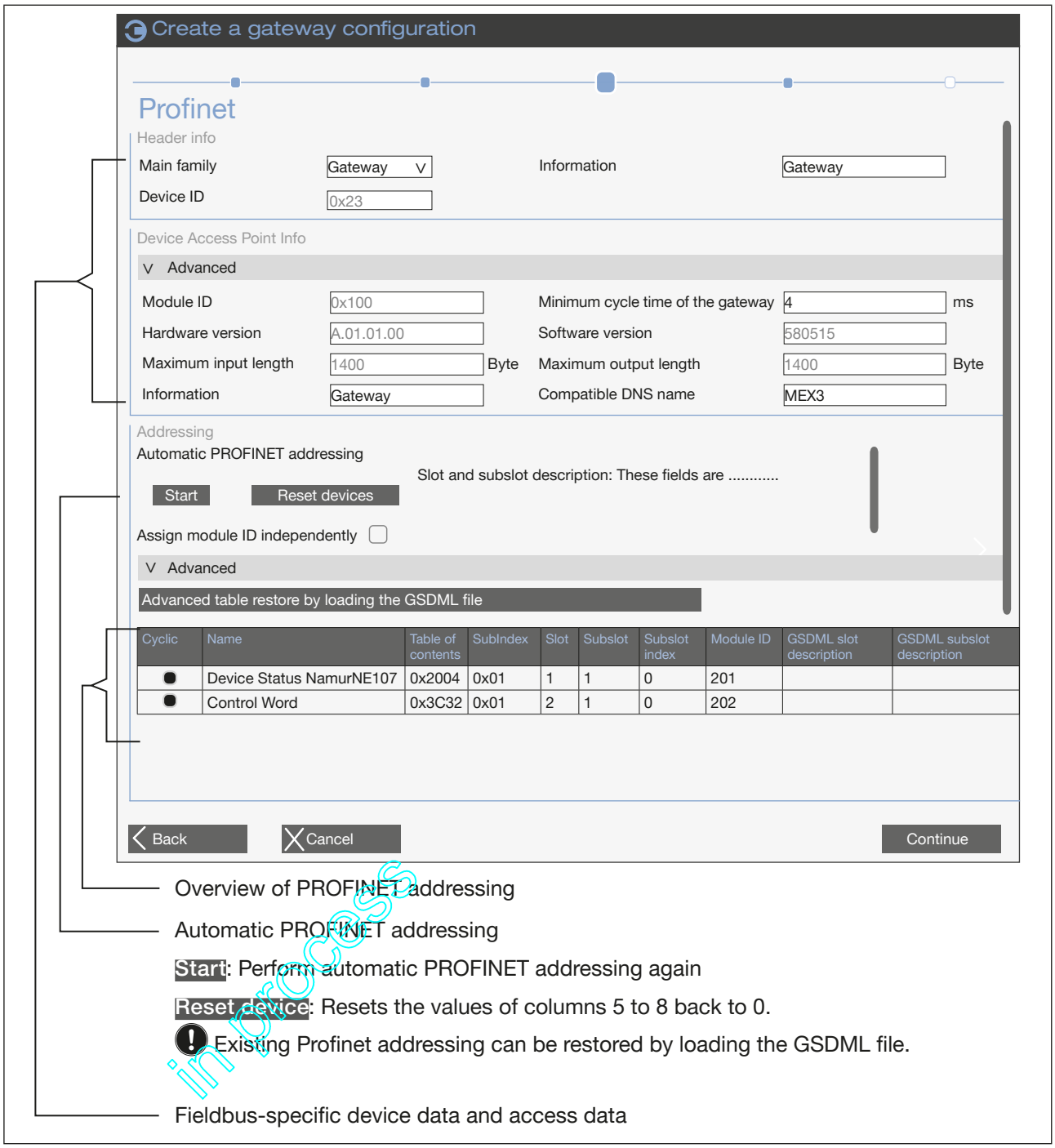


Fig. 19: Gateway configuration; PROFINET address mapping

MAN 1000723455 EN Version: - Status: RL (released | freigegeben) printed: 19.02.2026

in process

Address mapping for EtherNet/IP:

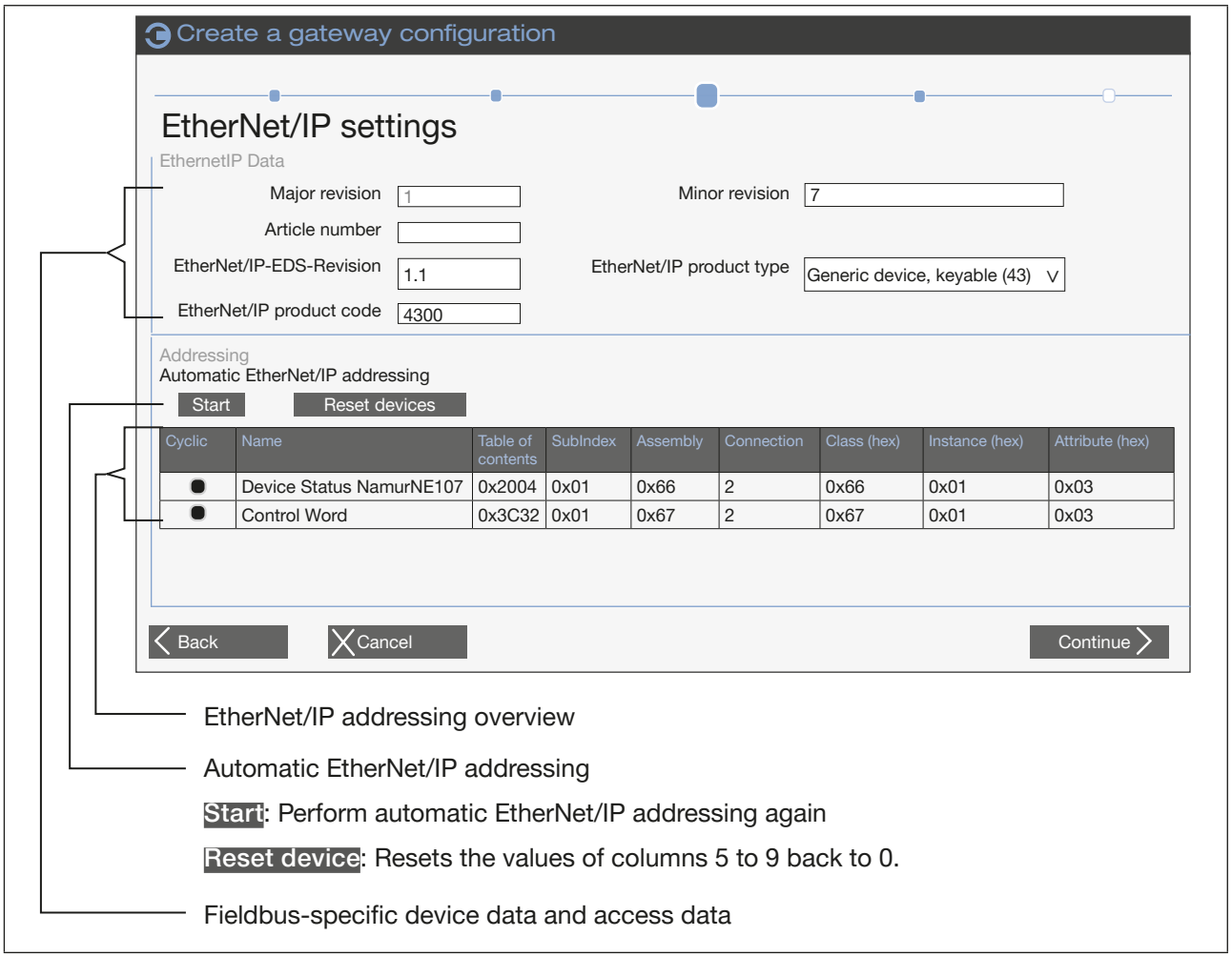


Fig. 20: Gateway configuration; EtherNet/IP address mapping

MAN 1000723455 EN Version: - Status: RL (released | freigegeben) printed: 19.02.2026

in process

Address mapping for Modbus TCP:

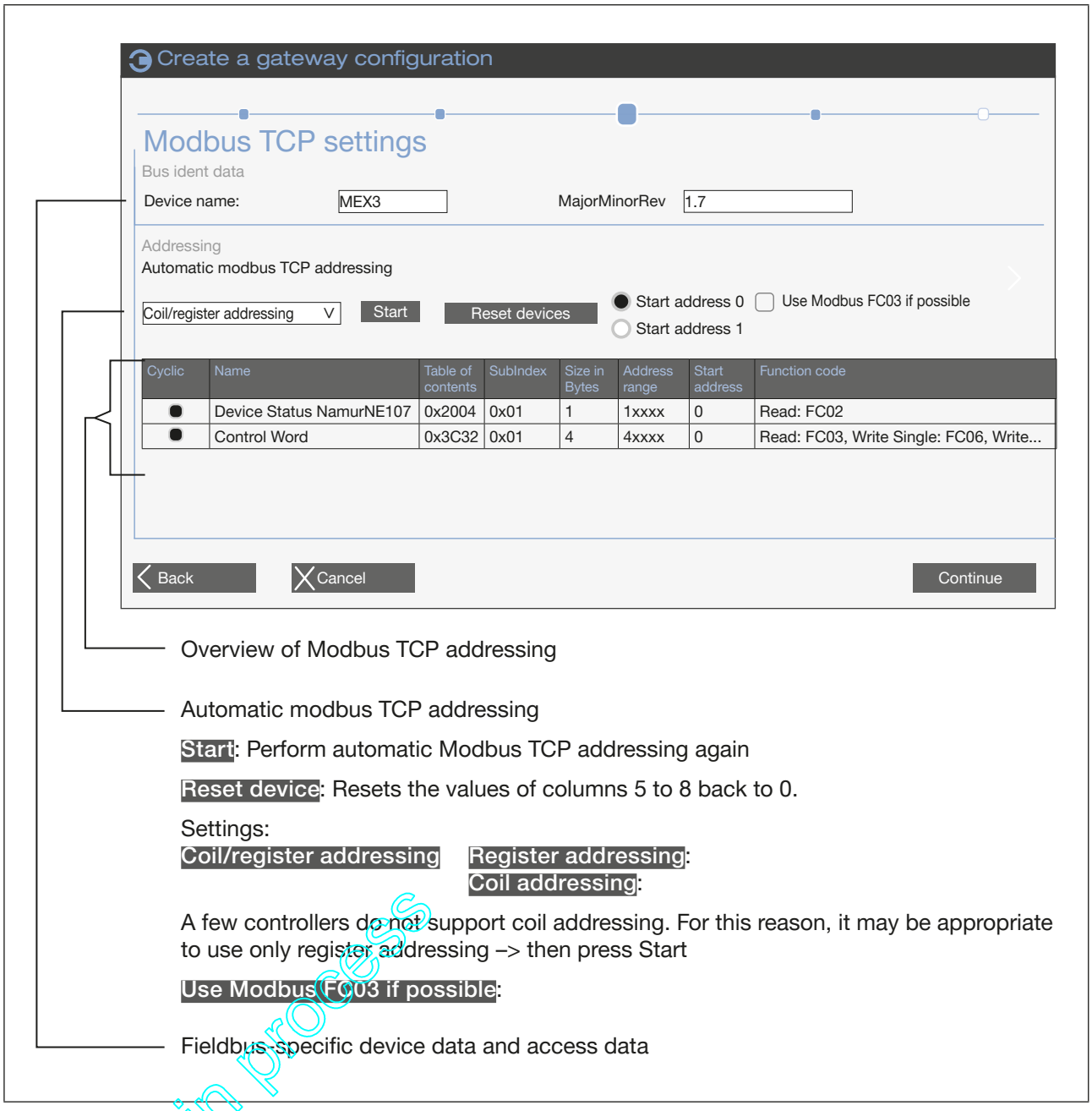


Fig. 21: Gateway configuration; ModbusTCP address mapping

MAN 1000723455 EN Version: - Status: RL (released | freigegeben) printed: 09.02.2026
in process

Address mapping for EtherCAT:

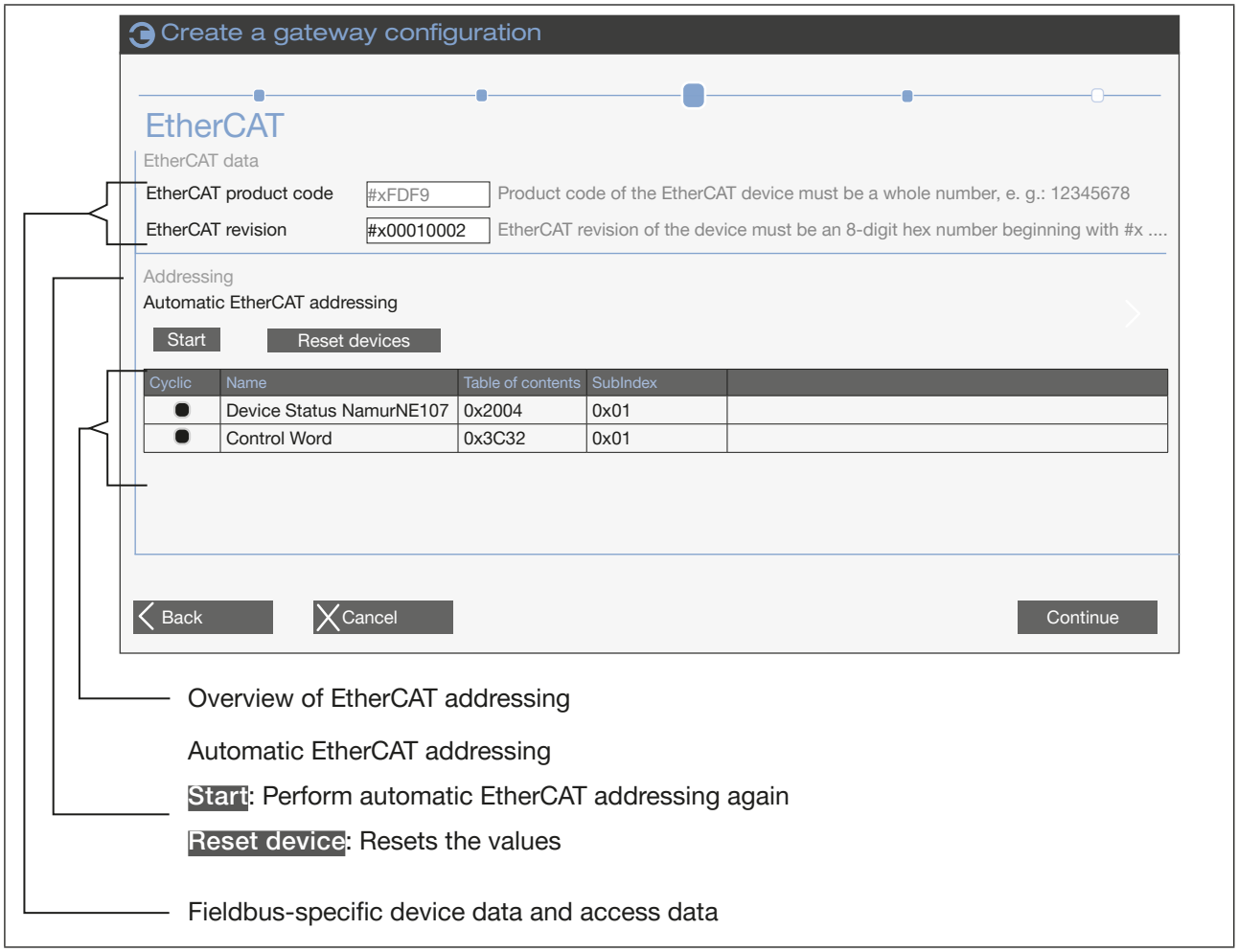


Fig. 22: Gateway configuration; EtherCAT address mapping

MAN 1000723455 EN Version: - Status: RL (released | freigegeben) printed: 19.02.2026

in process

Address mapping for CC-Link IE field basic:

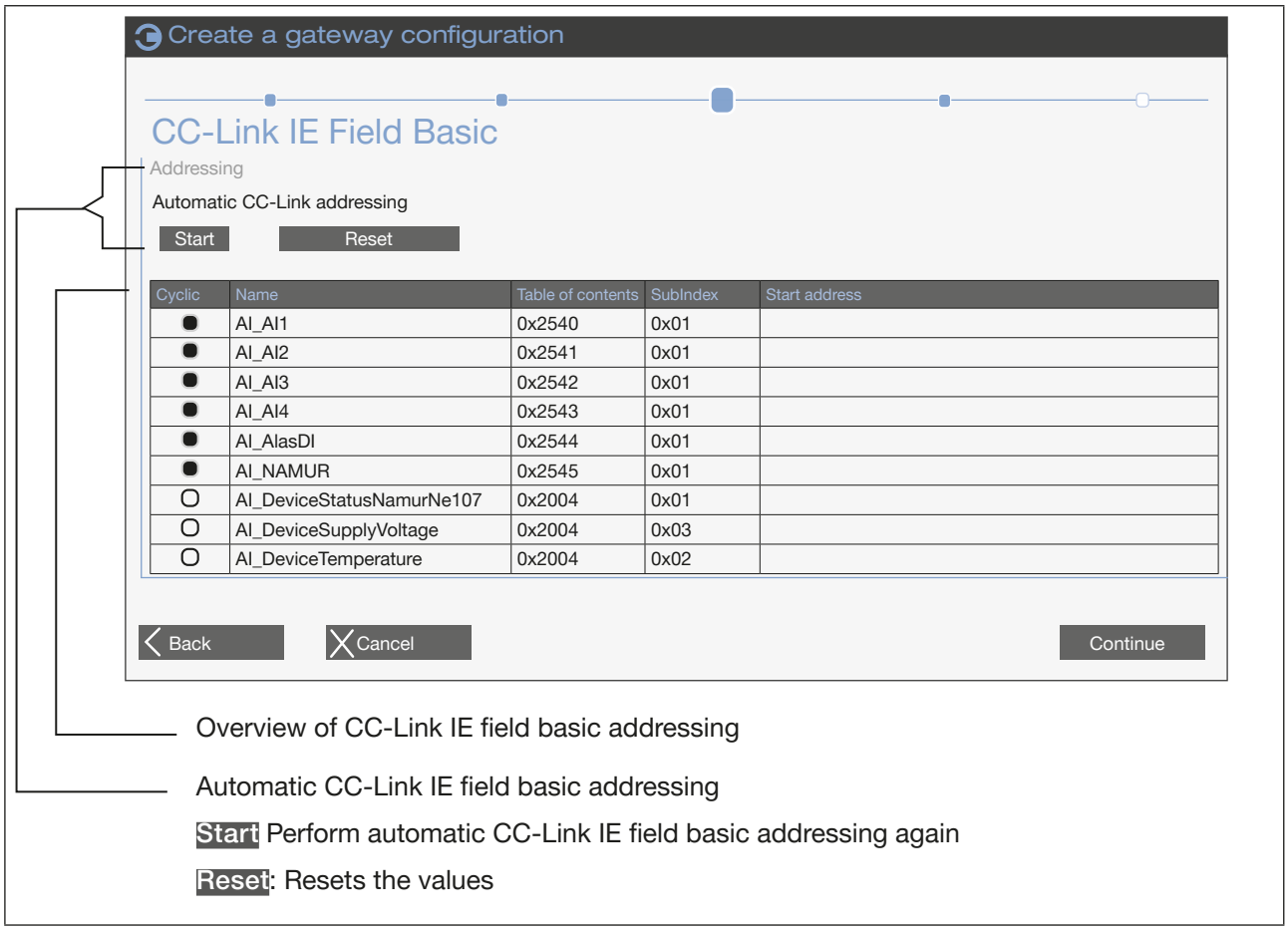


Fig. 23: Gateway configuration; CC-Link IE field basic address mapping

MAN 1000723455 EN Version: - Status: RL (released | freigegeben) printed: 19.02.2026

in process

10.4.3.3 Saving the gateway configuration

→ Select the output directory in the Final settings dialog box.

→ Press Continue.
The gateway configuration is saved.
The download onto the device runs in the background.
The existing device description file is also located on the specified path in the subfolder.

→ Press Complete.

✓ The configuration of the device is complete. The connection between the PLC and fieldbus gateway is established. The folder in which the description files are located opens automatically.
The following overview shows which files are generated during the gateway configuration.

Gateway configuration files	Storage folder	Description
Protocol-independent files		
Buerkert-Gateway-date-.bgc	No folder	Gateway configuration container
Buerkert-Gateway-Mapping-date-.xml	BGC	Gateway mapping file. The file is automatically downloaded to the device
Buerkert-Gateway-date-.eds	EDS	Gateway expansion file. The file is automatically downloaded to the device
Files for EtherCAT		
EtherCAT-Buerkert-Gateway-date-.xml	PLC_EtherCAT	Device description file. Optional: import to the PLC
help_ethercat.csv	PLC_EtherCAT	Overview of the cyclical and acyclic device values
Files for EtherNet/IP		
EthernetIP-Buerkert-Gateway-date-.eds	PLC_EtherNetIP	Device description file. Import to the PLC
help_ethernetip.csv/txt	PLC_EtherNetIP	Overview of the cyclical and acyclic device values
Connection-X-In/Out_Importdata.L5X	PLC_EtherNetIP	Data type for Rockwell users. Used for each assembly
Files for Modbus TCP		
ModbusTCP-Buerkert-Gateway-date-.txt	PLC_ModbusTCP	Device description file
help_modbusTcp.csv/txt	PLC_ModbusTCP	Overview of the cyclical and acyclic device values
Files for PROFINET		
GSDML-V2.32-Buerkert-Gateway-date-.xml	PLC_Profinet	Device description file. Import to the PLC
GSDML-0078-0023-icon.bmp	PLC_Profinet	Icon used together with the device description file.

MAN 1000723455 EN Version: - Status: RL (released | freigegeben) printed: 19.02.2026
in process

Gateway configuration files	Storage folder	Description
help_profinet.csv/txt	PLC_Profinet	Overview of the cyclical and acyclic device values.

Table 13: Overview of the files which are generated during the gateway configuration

10.4.4 Start gateway configuration automatically

(Protocol name) > Parameters > Gateway configuration > Creating a gateway configuration

→ Select Start automatic configuration.

NOTE

All devices in the network are connected to the gateway

- These are restarted during the process. Make sure that this does not cause any damage before proceeding.

The Communicator connects all devices present in the network to the gateway and automatically creates a gateway configuration with standard values of the existing büS network. All associated devices are restarted and the associated mapping is automatically generated.

No actions can be performed on the connected devices during the process. After completion, the gateway configuration created is available in the specified output directory.

10.5 Configuring the büS network

10.5.1 Automated büS mapping

If the gateway was configured via the “Connected devices” option, this step is no longer necessary as the büS mapping was performed automatically.

10.5.2 Manual büS mapping

In earlier driver versions of Bürkert Communicator, it was possible to select both a list and a diagram view for the büS mapping. However, this option was removed because the diagram view was often slow and error-prone on larger systems. Therefore, it is no longer listed as a selection option for the büS mapping.

→ - büS Select in the navigation area.

→ Select Detailed view of network configuration. List of all previously selected devices.

→ Select gateway ME63 REV.2.

This displays the values that were set when the gateway configuration was created.

MAN 1000723455 EN Version: - Status: RL (released | freigegeben) printed: 19.02.2026
in process

All available inputs and outputs are listed during network configuration. These must be assigned between the büS devices, the gateway and the programmable logic controller.

- i *büS device_value* = input for programmable logic controller
- o *büS device_value* = output for programmable logic controller

All gateway values should be filled in during network configuration. If no mappings are possible for certain values, this indicates unnecessary entries in the gateway configuration. Although this does not lead to any errors, it is useful to use only the required values in the gateway configuration.

The values of the büS devices do not have to be entered separately because the entire connection is made via the gateway. The assignment is automatically transferred to the respective büS device.

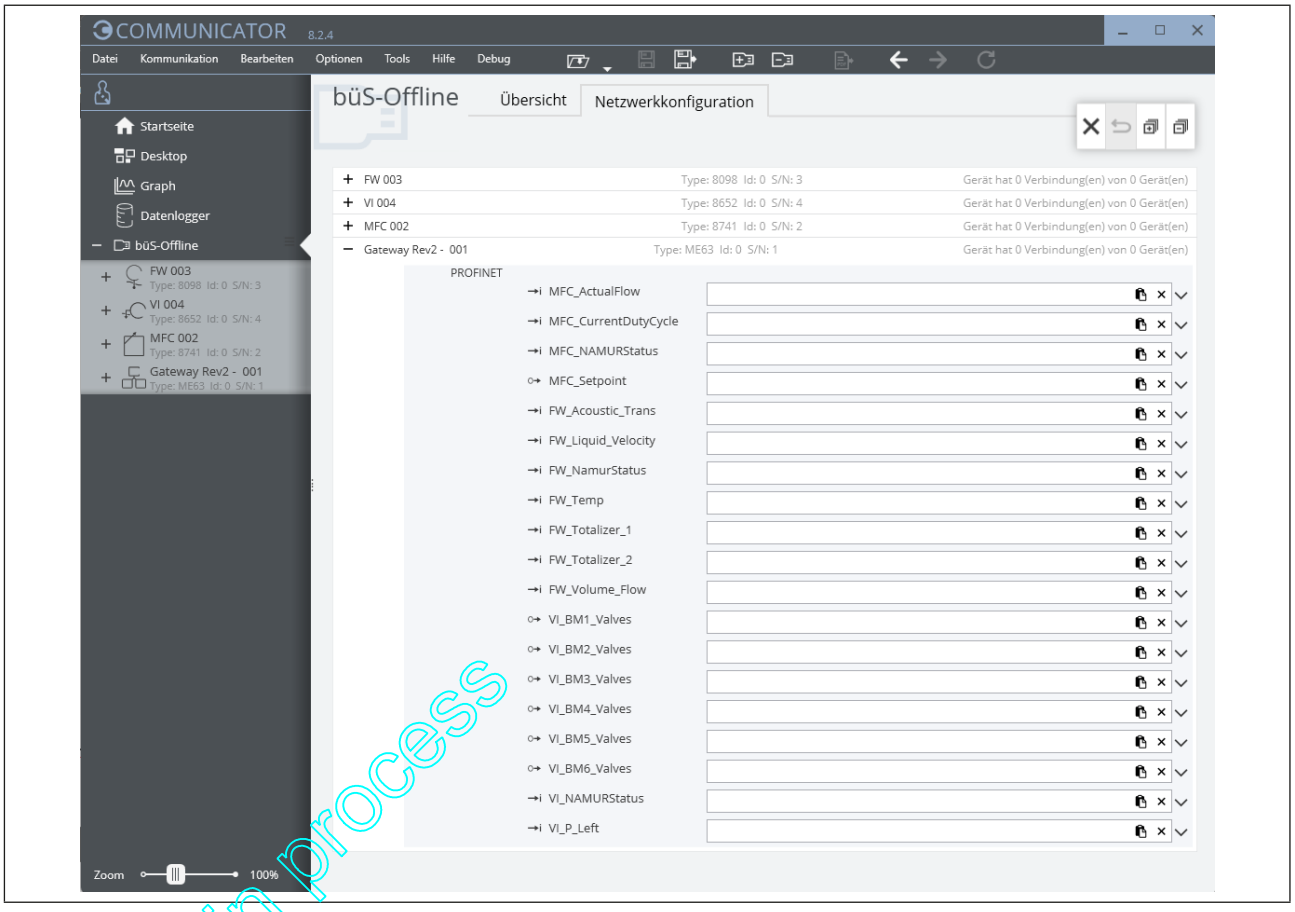


Fig. 24: List view of network configuration

→ Select values one after the other and assign them to the respective büS devices.

MAN 1000723455 EN Version: - Status: RL (released | freigegeben) printed: 09.02.2026
in process

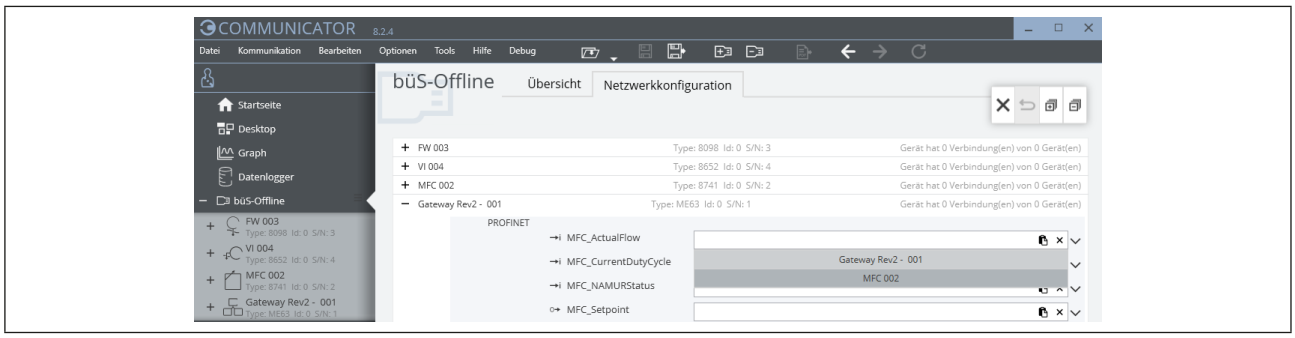


Fig. 25: Selectable büS devices

→ Select the büS device.

The Bürkert Communicator checks in the background which büS devices can measure the respective value. Only the appropriate devices are displayed in the drop-down list.

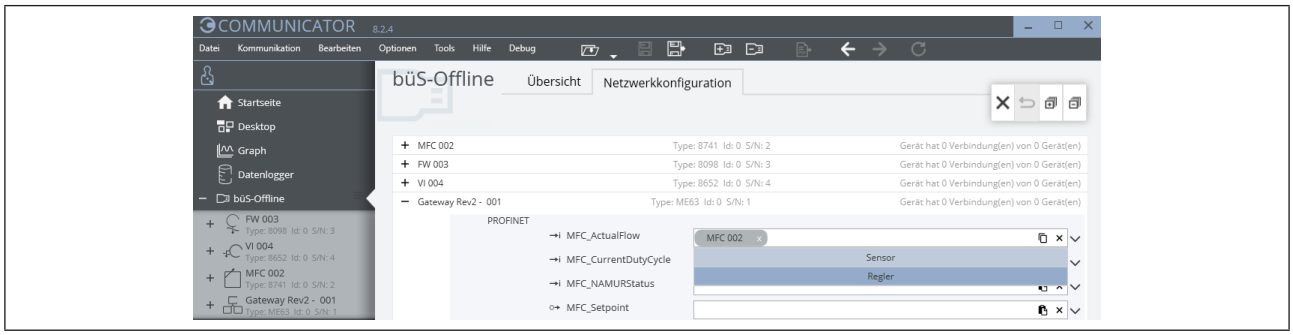


Fig. 26: Selectable categories

→ Select category.

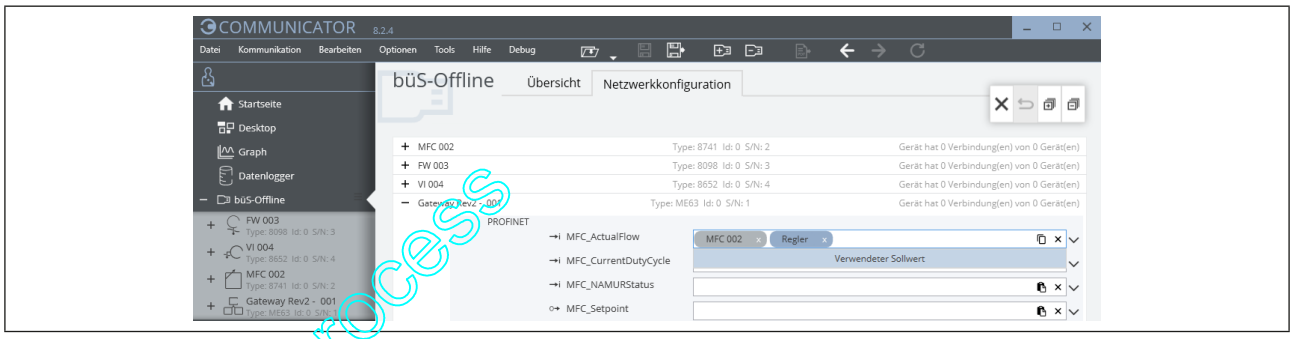


Fig. 27: Selectable values

→ Select value

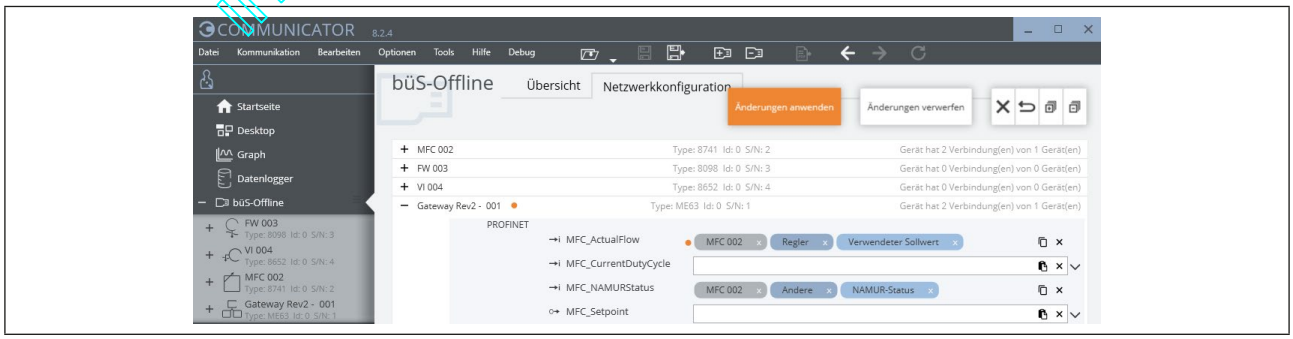


Fig. 28: Automatic assignment of büS mappings

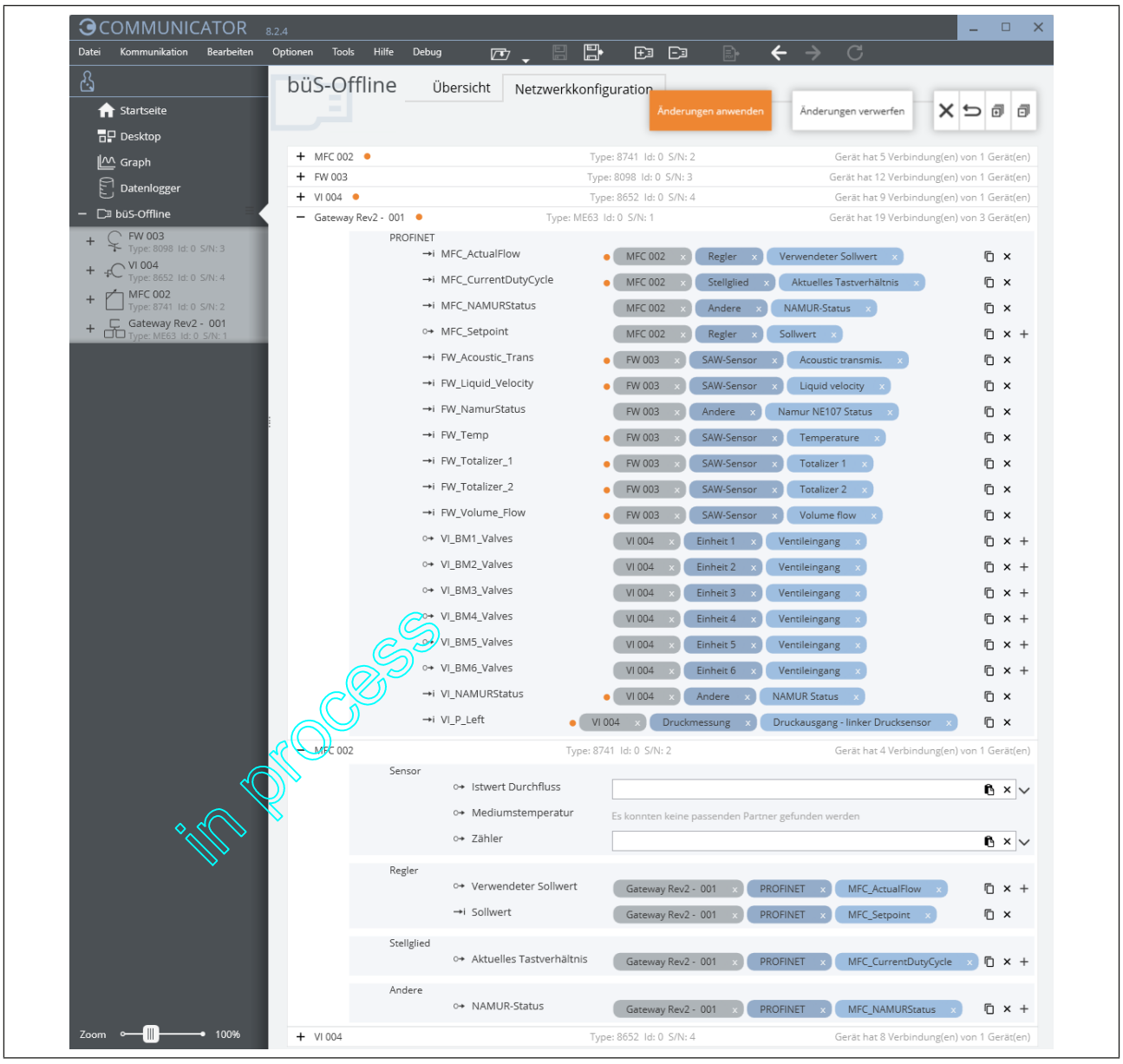
MAN 1000723455 EN Version: - Status: RL (released | freigegeben) printed: 09.02.2026
in process

If you select a value, the Bürkert Communicator automatically recognises whether further values also need to be recorded. In this case, it automatically creates a mapping for these additional values.

An example of this is the automatic assignment of **i MFC_NamurStatus** when selecting **i MFC_ActualFlow** (see “Fig. 28: Automatic assignment of büS mappings”).

In addition, the Bürkert Communicator has an integrated logic that detects whether assignments are useful and possible. If the setting is incorrect, the Communicator issues an error message and marks the corresponding line in red to indicate the problem.

Duplicate assignments of output values (double mapping) are not permitted. If an output value is selected a second time, this automatically overwrites the first assignment to prevent double mapping.



→ Click Apply changes.

All configured devices are restarted.

✓ The büS network is configured.

MAN 1000723455 EN Version: - Status: RL (released | freigegeben) printed: 09.02.2026

11 START-UP USING A WEB SERVER

The type ME63 REV.2 FieldConnect has an integrated web server that provides functions for configuring and displaying status information.

The web server can be used for the following protocols:

- PROFINET
- EtherNet/IP
- Modbus TCP

The IP address of the device is used for access via the web server.

NOTE

Unauthorised access to the web server.

▸ To prevent unauthorised access by third parties, operate the device only within a protected network.

MAN 1000723455 EN Version: - Status: RL (released | freigegeben) printed: 19.02.2026

11.1 Function of the web server

The web server can be used to specify a number of settings (such as the IP address).

If the gateway configuration is created with Communicator (version 5.1 or higher), the web server shows an image of the entire system. The connected devices are depicted on an overview page. Clicking a device will open a device-specific page.

The web server displays basic data such as serial number, device type, etc. In addition, all cyclical and acyclic data declared during the gateway configuration are displayed. This only functions when the corresponding devices are also connected to the gateway during the web server access and connected via büS mapping. If a device is not present during access, a gap is left on the web server for the assigned device ID.

11.2 Making a connection to the web server via Bürkert Communicator

Web server can be enabled or disabled via Bürkert Communicator.

Web server > Parameters > Enable web server

in process

11.3 Establishing a connection to the web server

→ Connect the PC to the device via a network cable.

→ Enter the IP address in the address line of the web browser.

The IP address of the device upon delivery is **192.168.0.100**.
If the IP address is changed to an unknown value, the current IP address of the device can be determined with the help of Bürkert Communicator.

Configuration of multiple devices:
On delivery, all devices have the same IP address: 192.168.0.100. So that the device can be identified for configuration, only 1 unconfigured device may be on the network.

▸ Connect to the network and configure the devices individually in sequence.

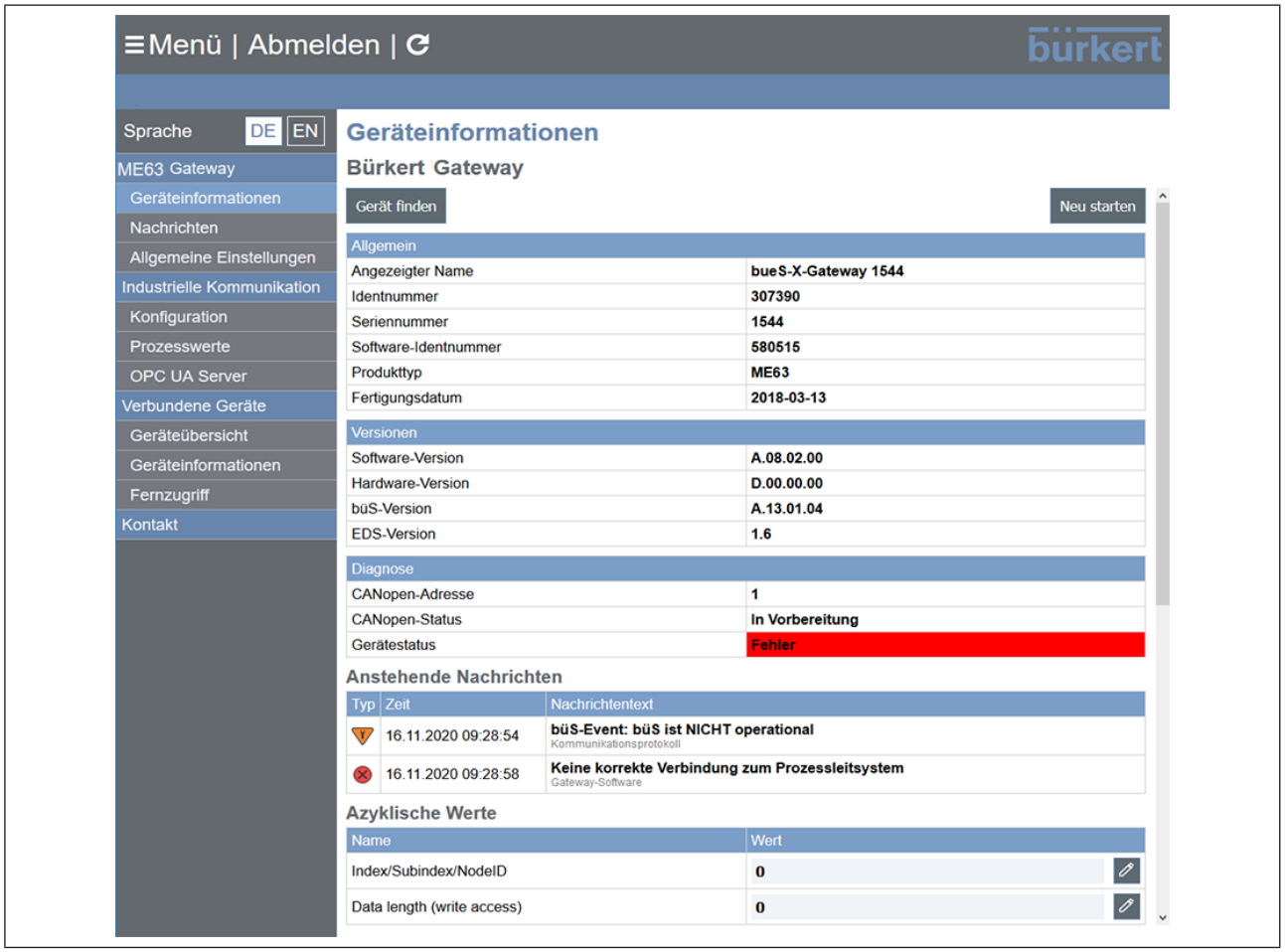


Fig. 29: Web server view

11.4 Logging onto the web server

→ On the home page, click on **Login** on the top left.

→ Enter your user name and password: Username: **admin**
Password: **admin**

→ Click on **Login**.

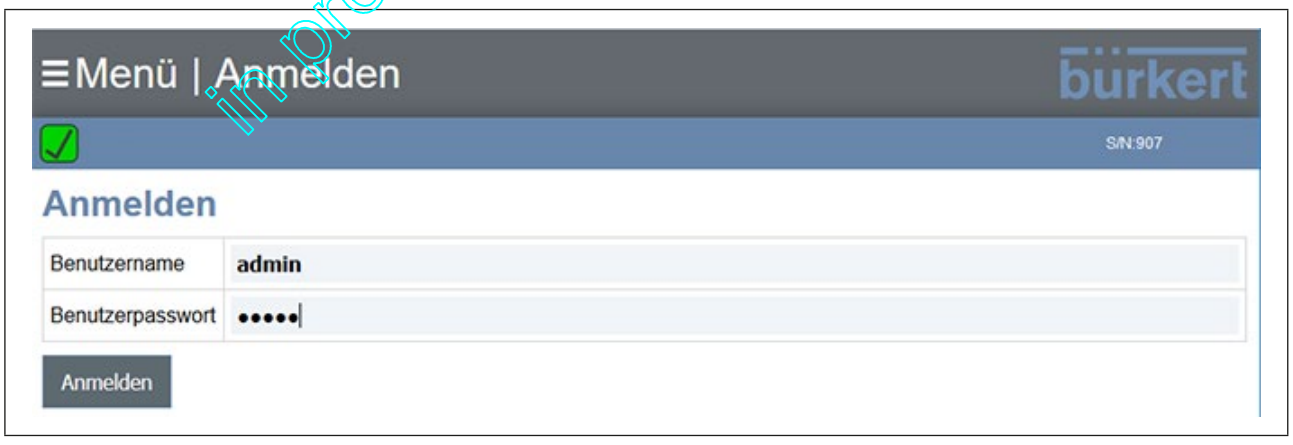


Fig. 30: Logging onto the web server

In process

MAN 1000723455 EN Version: - Status: RL (released | freigegeben) printed: 09.12.2020

11.5 Passwords

NOTE

Security risk due to standard passwords.

Unauthorised persons can log in to the web server and make changes to the system.

- ▶ Please change standard passwords.
- ▶ If the web server is not needed, disable access via Bürkert Communicator:
  Web Server > Parameters > Disable web server.

The user name and password are set to **admin** at the factory. These settings are reset to the default values when the passwords are reset.

11.5.1 Change password

→ Logging onto the web server.

→ Enter and confirm the new password in the menu General settings.

11.5.2 Factory reset of password

→ Click on Login.

→ On the bottom right of the login window, click on Reset passwords.

The device must be rebooted within 3 minutes so that the passwords can actually be reset. A restart can be triggered via the fieldbus gateway display, the Bürkert Communicator software or via a voltage reset.

11.6 Configuring the device

Configuration of multiple devices:
Since the devices have the same IP address on delivery, only 1 unconfigured device is permitted in the network so that the device can be identified.

- ▶ Successively connect the devices to the network individually and configure them.

→ Enter the device name and IP address for the device.
The device name (DNS compatible name) is used in the planning process.

→ Click Apply.

A voltage reset of the device is required to accept the changed parameters.

→ Restart the device.

in process

MAN 1000723455 EN Version: - Status: RL (released | freigegeben) printed: 09.02.2026

12 OPC UA

12.1 General description

The OPC UA server offers an OPC UA client the possibility to read and write the values (cyclical and acyclic) determined by the gateway configuration.

To make the data from the ME63 REV.2 and the connected büS devices available on an OPC UA client, the following points are to be observed:

- A gateway configuration with Communicator version 6 or higher must be carried out, meaning that acyclic values can also be selected.
- Values that are available at the PLC via the set protocol and at the OPC client are identical and cannot be differentiated.
- A büS mapping must be performed after the gateway configuration. If büS devices are not connected to the gateway via mapping, the values and names of the devices cannot be exported.

12.2 Establishing a connection to OPC UA

The function for enabling or disabling the OPC UA server can be set in Bürkert Communicator:

OPC UA > Parameters > Enable OPC UA

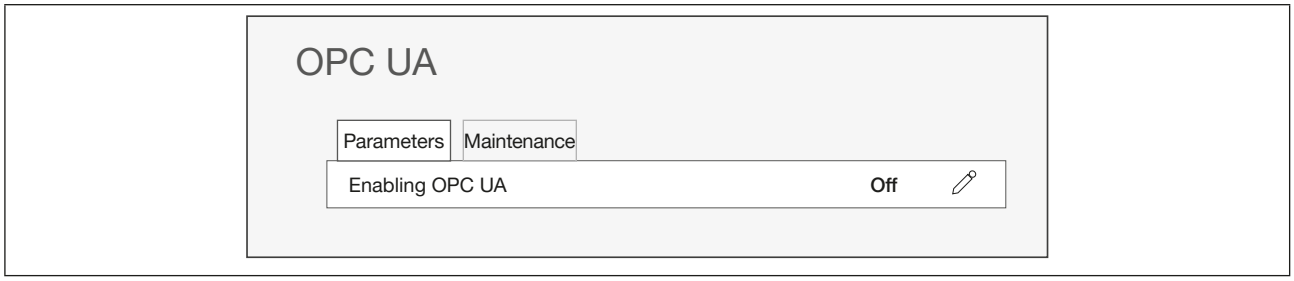


Fig. 31: Enabling OPC UA

After enabling the OPC UA, other OPC UA server settings will become visible.

If the OPC UA server is enabled, the “f(x) configuration” is not available.

12.2.1 Settings on the device

IP parameters are set in the protocol-specific settings.

Detailed view	Menu	
Parameters	Enabling OPC UA	OPC UA can be enabled or disabled here. The setting takes effect the next time the de
	Server port	Setting of the port for OPC UA communication. Status on delivery: 4840
	Number of objects being monitored	Used to limit the maximum number of values to be monitored by the OPC UA server
	Event type	Setting whether events of the ME63 REV.2 should be sent, and which type. To be able to send events from connected büS devices, the corresponding types must be selected under General settings > System monitoring > Diagnostics

Table 14: Settings on the ME63 REV.2 (OPC UA server)

MAN 1000723455 EN Version: - Status: RL (released | freigegeben) printed: 19.02.2026
in process

After changing the settings it is necessary to restart the device.

12.2.2 Settings for the OPC UA client

Endpoint URL	opc.tcp://*IP address of the ME63 REV.2*:*set server port (factory setting: 4840)* Example: opc.tcp://192.186.0.100:4840
Security settings	
Security policy	none
Message Security Mode	none
Authentication settings	Anonymous

12.3 Server certificate

The OPC UA server offers the user the possibility to exchange the factory server certificate for his own. The exchange is possible via the web server.

Exchanging a certificate:

→ Open the web server with the IP address of the ME63 REV.2.
The certificate can only be changed after registration.

→ Select **OPC UA Server**.

→ Under **Server certificate** click the symbol and select the file in the format “DER”.

→ Select **Change certificate**.

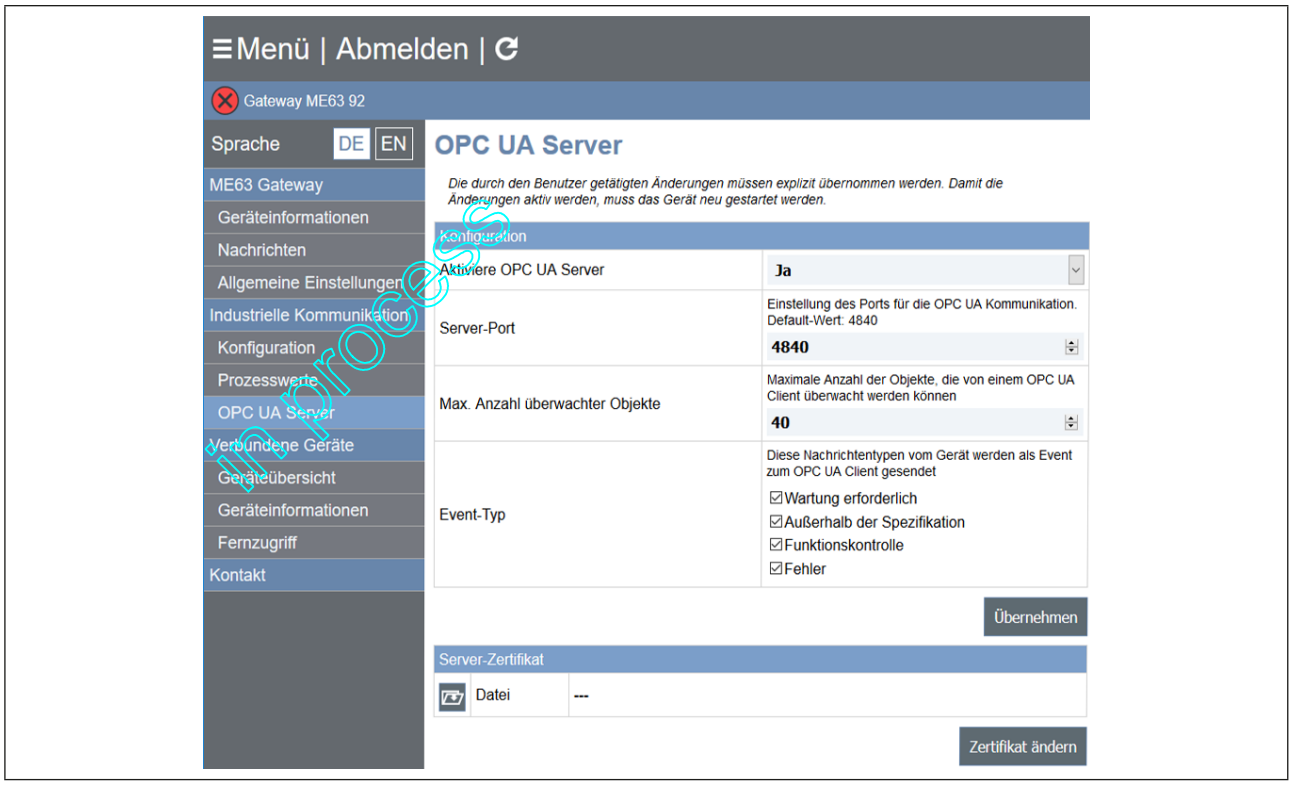


Fig. 32: Change server certificate

MAN 1000723455 EN Version: - Status: RL (released | freigegeben) printed: 09.02.2026

The device must be restarted after a successful exchange.

Delete user-specific certificate and set the factory certificate to active:

→ Click **Change certificate**.

→ Confirm with **OK**.

After the restart, the factory certificate is loaded.

When resetting to factory defaults, the user-specific certificate is deleted and the factory certificate is set to active.

The user-specific certificate is not saved on a removable storage device and is therefore not transferred when the configuration is transferred to another device.

13 DISPLAY ELEMENTS

Type ME63 REV.2 has the following LEDs for diagnostics on the device status:

- LEDs for indicating the bus status (communication status).
- LED for indicating the device status.

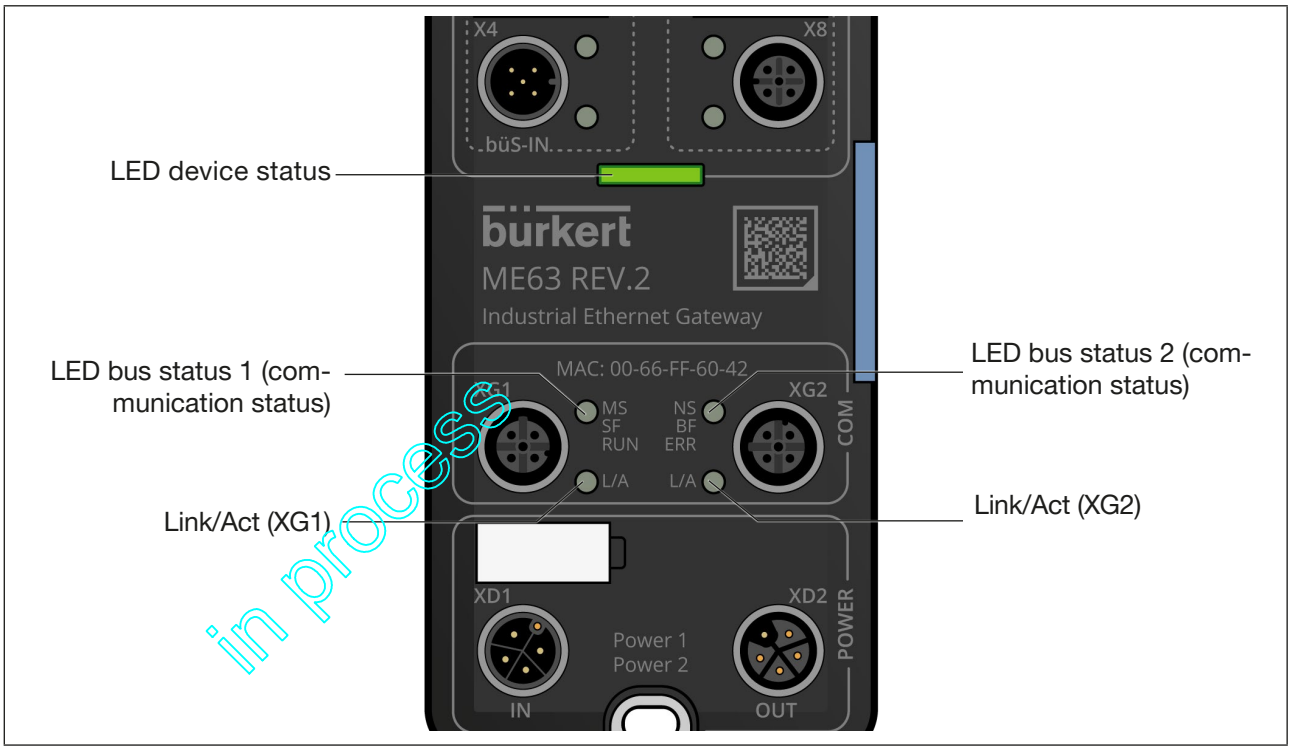


Fig. 33: Display elements for type ME63 REV.2

13.1 LEDs for indicating the bus status

Each bus status (communication status) is assigned a separate status indicator. The LEDs for indicating the communication status change between the colours green and red.

MAN 1000723455 EN Version: - Status: RL (released | freigegeben) printed: 09.02.2026

13.1.1 PROFINET IO

LED	Colour	State	Description
LED bus status 1 (System Failure **SF**)	**Duo-LED red/green**		
	off	off	no error
	red	flashing	DCP signal service is triggered via the bus
	red	on	Watchdog time-out, enhanced diagnostics present, system error
LED bus status 2 (Bus Failure **BF**)	**Duo-LED red/green**		
	off	off	no error
	red	flashing	no data exchange
	red	on	no configuration, slow or no physical connection
Link/Act (XG1, XG2) **(L/A)**	**LED green**		
	green	on	The device has a connection to the Ethernet
	off	off	The device has no connection to the Ethernet
	LED yellow		
	yellow	flickering	The device is sending/receiving Ethernet frames
	off	off	The device is not sending/receiving any Ethernet frames

Table 15: Description of the LEDs, PROFINET IO

13.1.2 EtherNet/IP

LED	Colour	State	Description
LED bus status 1 (Module Status **MS**)	**Duo-LED red/green**		
	green	on	Device in operation: the device is in operation and running correctly
	green	flashing	Standby: the device has not been configured
	green-red-green	flashing	Self-test: the device is running through its switch-on test. The test sequence for the module status display is carried out before the test sequence for the network status display, according to the following sequence: • Network status LED off • Module status LED lights up green for approx. 250 ms, turns red for approx. 250 ms and then lights back up in green (and maintains this status until the test has been completed) • Network status LED lights up green for approx. 250 ms, turns red for approx. 250 ms and then goes out (and maintains this status until the test has been completed)
	red	flashing	Serious, solvable error: the device has determined a serious, solvable error, e. g., an incorrect or inconsistent configuration can be categorised as a serious, solvable error
	red	on	Serious, non-solvable error: the device has determined a serious, non-solvable error
	off	off	Switched off: the device is switched off

in process

MAN 1000723455 EN Version: - Status: RL (released | freigegeben) printed: 19.02.2026

LED bus status 2 (Network Status **NS**)	**Duo-LED red/green**		
	green	on	Connected: an IP address is configured, at least one CIP connection (any transport class) has been established, and the time limit has not been exceeded for an exclusive owner connection
	green	flashing	No connections: an IP address is configured, but no CIP connections have been established, and the time limit has not been exceeded for an exclusive owner connection
	green-red-off	flashing	Self-test: the device is running through its switch-on test
	red	flashing	Connection time-out: an IP address is configured and the time limit has been exceeded for an exclusive owner connection for which this device is the destination. The network status display is only permanently reset to green when all exclusive owner connections whose time limits have been exceeded have been restored.
	red	on	Duplicate IP: the device has determined that its IP address is already being used
	off	off	Switched off, no IP address: the device has no IP address (or is switched off)
Link/Act (XG1, XG2) **(L/A)**	**LED green**		
	green	on	The device has a connection to the Ethernet
	off	off	The device has no connection to the Ethernet
	LED yellow		
	yellow	flickering	The device is sending/receiving Ethernet frames
	off	off	The device is not sending/receiving any Ethernet frames

Table 16: Description of the LEDs, EtherNet/IP

in process

MAN 1000723455 EN Version: - Status: RL (released | freigegeben) printed: 09.02.2026

13.1.3 Modbus TCP

LED	Colour	State	Description
LED bus status 1 (**RUN**)	**Duo-LED red/green**		
	green	on	Connected: at least one TCP connection is established.
	green	flashing (1Hz)	Ready, not yet configured.
	green	flashing (5Hz)	Wait for communication.
	off	off	Not ready.
LED bus status 2 (**ERR**)	**Duo-LED red/green**		
	off	off	no communication error
	red	flashing	System error
	red	on	Communication error active
Link/Act (XG1, XG2) (**L/A**)	**LED green**		
	green	on	The device has a connection to the Ethernet
	off	off	The device has no connection to the Ethernet
	LED yellow		
	yellow	flickering	The device is sending/receiving Ethernet frames
	off	off	The device is not sending/receiving any Ethernet frames

Table 17: Description of the LEDs, Modbus TCP

MAN 1000723455 EN Version: - Status: RL (released | freigegeben) printed: 09.02.2026

in process

13.1.4 EtherCAT

LED	Colour	State	Description
LED bus status 1 (**RUN**)	**Duo-LED red/green**		
	off	off	The device is in INIT state
	green	flashing	The device is in PRE-OPERATIONAL state (before operation)
	green	single flashing	The device is in SAFE-OPERATIONAL state (in safe mode)
	green	on	The device is in OPERATIONAL state (in operation)
LED bus status 2 (**ERR**)	**Duo-LED red/green**		
	off	off	No error: the EtherCAT communication of the device is in operation
	red	flashing	Invalid configuration: general configuration error Possible cause: a status change specified by the master is not possible due to the register or object settings.
	red	single flashing	Local error: the slave device application has automatically changed the EtherCATStatus Possible cause: – A host watchdog timeout has occurred – Synchronisation error; the device changes automatically to safe-operational.
	red	double flashing	Process data watchdog timeout: a process data watchdog timeout has occurred Possible cause: sync manager watchdog timeout
Link/Act **(XG1 = L/A IN)** **(XG2 = L/A OUT)**	**LED green**		
	green	on	The device has a connection to the Ethernet, and is not sending or receiving any Ethernet frames
	green	flickering	The device has a connection to the Ethernet, and is sending or receiving Ethernet frames
	off	off	The device has no connection to the Ethernet
	LED yellow		
	off	off	LED is not used

Table 18: Description of the LEDs, EtherCAT

in process

MAN 1000723455 EN Version: - Status: RL (released | freigegeben) printed: 19.02.2026

13.1.5 CC-Link IE field basic

LED	Colour	State	Description
LED bus status 1 (**RUN**)	**Duo-LED red/green**		
	green	on	Station in operation and ongoing cyclical communication
	green	flashing	Station in operation and stopped cyclical communication
	green	flickering	Station not configured
	off	off	Station is disconnected
LED bus status 2 (**ERR**)	**Duo-LED red/green**		
	red	on	Communication error
	red	triple flashing	DPM watchdog has elapsed
	off	off	Station is disconnected
Link/Act (XG1, XG2) **(L/A)**	**LED green**		
	green	on	Link: the station has a connection to the Ethernet, and is not sending or receiving any Ethernet frames
	green	flickering	Activity: the device has a connection to the Ethernet, and is sending/receiving Ethernet frames
	off	off	The station has no connection to the Ethernet
	LED yellow		
	off	off	LED is not used

Table 19: Description of the LEDs, CC-Link IE field basic

MAN 1000723455 EN Version: - Status: RL (released | freigegeben) printed: 19.02.2026

in process

13.2 LED for indicating the device status

The LED for indicating the device status changes colour and status in accordance with NAMUR NE 107.

If several device statuses exist simultaneously, the device status with the highest priority is displayed. The priority is based on the severity of the deviation from standard operation (red = failure = highest priority).

Indicators in NAMUR operation mode:

Indicator based on NE 107		Device status	Meaning
Colour code	Colour		
5	red	Failure, error or fault	Functional fault. The functionality of the device is not guaranteed.
4	Orange	Function check	The device is searching for a büS participant. This status is exited after a few seconds. Device simulation active.
3	yellow	Out of specification	Environment conditions or process conditions are not within the specified range. Internal device diagnostics indicate problems within the device or with the process properties. Data sheet values cannot be complied with.
2	blue	Maintenance required	The device has detected a deviation during ongoing diagnostics and has implemented a correction. → Perform device maintenance.
		Device configuration cannot be managed	Updated device configuration cannot be saved. Not possible to transfer the configuration when swapping devices.
1	green	Diagnostics active	Device is in error-free operation. Status changes are highlighted in colour. Messages are sent via any fieldbus that may be connected.
0	white	Diagnostics inactive	Device is switched on. Status conditions are not displayed. Messages are not listed in the message list or transmitted via any connected fieldbus. Device is running within its specifications.

Table 20: Indication of the device status in NAMUR operation mode

MAN 1000723455 EN Version: - Status: RL (released | freigegeben) printed: 19.02.2026
in process

14 BÜRKERT COMMUNICATOR MENUS

The overview below describes the device-specific settings of type ME63 REV.2 with the Bürkert Communicator software. It does not describe the basic operation of the software.

Detailed information on using the Bürkert Communicator software can be found on the Bürkert website at: www.buerkert.com → 8920 → “Operating instructions” downloads.

The overview below shows the menus that are displayed in the “installer” user level. This user level has the highest authorisation level.

14.1 f(x) configuration

The configuration area f(x) configuration includes the menu for the configuration of other device functions.

The f(x) configuration enables functional extensions through free programming using a graphical programming interface.
Examples of functions are e.g. a timer, a graphical program or a controller.

Information and instructions for the f(x) configuration software can be found on the Bürkert home page at: www.buerkert.com → 8922 → Downloads “Operating instructions”.

If the OPC UA server is enabled, the “f(x) configuration” is not available.

14.2 “Web server” and “OPC UA”

The menus for web server and OPC UA only appear with the following protocols:

- PROFINET IO
- EtherNet/IP
- Modbus TCP

Enabling or disabling the web server:

Web server > Parameters > Enable web server

Enabling or disabling the OPC UA server:

OPC UA > Parameters > Enable OPC UA

If the OPC UA server is enabled, the “f(x) configuration” is not available.

MAN 1000723455 EN Version: - Status: RL (released | freigegeben) printed: 19.02.2026

in process

14.3 Menus in the configuration area “PROFINET”, “EtherNet/IP”, “Modbus TCP”, “EtherCAT” and “CC-Link IE field basic”

Detailed view Parameters

Detailed view	Menu		
Parameters	PROFINET, EtherNet/IP, Modbus TCP, EtherCAT or CC-Link IE field basic settings	Wizard for specifying input check and start conditions for büS communication.	
		IP parameter settings	
		IP settings (EtherNetI/P only)	
		Set DNS compatible name. (Profinet only)	
		Set Fixed IP address.	
		Set Network mask.	
		Set Standard gateway.	
		Specify Temporary IP address.	
		Enter station alias (only EtherCAT)	
		MAC address is displayed.	
		Advanced settings	Alarm settings
			Internal cycle time
			Control mode settings
			Firmware update protocol
	Gateway configuration	Download a gateway configuration file	
		Create a gateway configuration	
	Unit conversion		
	Hide process values	Edit values to be hidden	
		Reset hidden values	
	Change protocol	Select Protocol	

Table 21: Settings in the configuration area “PROFINET”, “EtherNet/IP”, “Modbus TCP”, “EtherCAT” and “CC-Link IE Field Basic”, detailed view of parameters

Diagnostics detailed view

Detailed view	Menu		
Diagnostics	Configuration file information		
	Protocol		In these menus, the current values are displayed, not set.
	Communication status		
	Established connections to PLC		
	Current internal cycle time		
	Advanced	Last status code	

Table 22: Settings in the “PROFINET” configuration area, diagnostics detailed view

MAN 1000723455 EN Version: - Status: RL (released | freigegeben) printed: 09.02.2026

in process

Maintenance detailed view

Detailed view	Menu		
Maintenance	Version number	Stack name	In these menus, the current values are displayed, not set.
		Stack version	
		Stack build	
		Stack revision	
		Stack date	
		ICom version	
	Hardware reset of industrial communication		

Table 23: Settings in the “PROFINET” configuration area, maintenance detailed view

MAN 1000723455 EN Version: - Status: RL (released | freigegeben) printed: 19.02.2026

in process

14.4 Menus in the “General settings” configuration area

Detailed view Parameters

Detailed view	Menu		
Parameters	Status LED	Set operation mode	
	büS	Configuration of the büS interface	
		Assign displayed name for display and Bürkert Communicator.	
		Location Specify location displayed for the device.	
		Description Enter description text for tooltips	
		Advanced	Unique device name for partner assignment.
			Specify Baud rate.
			Specify CANopen address.
			Bus mode Set operation mode of the büS interface.
			Show errors from büS partners Set whether and from which partners errors are displayed.
			Deallocation delay Time from the loss of a partner until deletion of its configuration.
	Alarm limits	Set limits after which the device issues a warning or error.	
		Supply voltage Set alarm limit for supply voltage.	
		Device temperature Set alarm limit for device temperature.	
		Warning of battery voltage below display of the value.	
	PDO configuration	Configuring process data objects	
		PDO 1	
		Reset to default values	
	Configuration provider	Status Enable or disable configuration provider.	
		Remove all device configurations Set response after device restart.	
		Force reconfiguration of all devices Set response after device restart.	
		Enable or disable Ignore offline devices.	
	Managing device functions	Disable industrial communication, web server and OPC UA to use the f(x) configuration. Shows whether the f(x) configuration can be used with the current setting.	
	System monitoring	Diagnostics	
		Individual diagnostics of the system devices	
	Power supply 2 monitoring	On/off	

Table 24: Settings in the “General settings” configuration area, detailed view “Parameters”

MAN 1000723455 EN Version: - Status: RL (released | freigegeben) printed: 09.02.2026

in process

Detailed view “Diagnostics”

Detailed view	Menu			
Diagnostics	Device status	Operating duration		In these menus, the current values are displayed, not set.
		Device temperature		
		Supply voltage		
		Voltage drops Number since restart.		
		Min./Max. values	Max temperature	
			Min. temperature	
			Max. supply voltage	
			Min. supply voltage	
		Device start counter		
		Removable storage medium status		
		Current system time		
		Battery voltage		
	büS status	Receive errors Number since restart.		
		Max. receive errors Most serious receive error that was issued in the same way as the device status is displayed. The display can be reset to 0.		
		Send errors Number since restart.		
		Max. send errors Most serious send error that was issued in the same way as the device status is displayed. The display can be reset to 0.		
		Reset error counter		
		CANopen status operational or pre-operational		
	Logbook	The logbook lists all warning messages and error messages with details of the type, time and signature. The messages displayed in the logbook can be updated, saved and deleted.		
	Configuration provider	Status		In these menus, the current values are displayed, not set.
		Number of managed devices		
		– Number of which offline configurations		
		– Number of which authorised reconfigurations		
		Number of reconfigured devices		
		Number of loaded device configurations		
		Number of missing devices		
		Number of faulty configuration load processes since restart		
		Number of faulty reconfigurations		
		Removable storage medium status		

Table 25: Settings in the “General settings” configuration area, diagnostics detailed view

MAN 1000723455 EN Version: - Status: RL (released | freigegeben) printed: 09.02.2026
in process

Maintenance detailed view

Detailed view	Setting		
Maintenance	Device information	Displayed name only displayed if a name was entered in the menu of the same name for the Parameters detailed view.	In these menus, the current values are displayed, not set.
		Identification number	
		Serial number	
		Software identification number	
		Software version	
		büS version	
		Hardware version	
		Product type	
		Manufacture date	
		eds version	
		f(x) version	
		Device driver / Driver version	
		Firmware group	
		DLL version	
		Place of origin	
	Reset device	Restart	
		Factory reset	

Table 26: Settings in the “General settings” configuration area, maintenance detailed view

MAN 1000723455 EN Version: - Status: RL (released | freigegeben) printed: 19.02.2026

in process

15 TROUBLESHOOTING

Problem	Possible cause	Measure
NAMUR LED goes out periodically.	The power supply drops out periodically; the device implements a reset each time.	Use power supply with adequate power.
	The voltage drop in the connection cable is too great.	Increase cable cross-section. Reduce cable length.
No process values are transmitted between Industrial Ethernet and büS.	No cable connection	Check the Ethernet and büS cabling.
	The reading and writing of the values has not been enabled by the PLC in the control object of the device.	Enable the reading and writing of the values in the control object of the device.
	The process values are incorrectly configured.	Check the configuration of the process values.
	The process values are incorrectly assigned.	Check the assignment of the process values to the büS participants.
The process values cannot be assigned to the büS participants.	The process values are not configured.	Check the configuration of the process values.
	The transfer of the configuration must be ended with a restart of the device.	Reboot the device after configuration.
	The process values are assigned to different classes.	Check the assignment to ensure that the büS participants are using process values of the same class.
	The input and output direction must be observed as the assignment.	Check that the direction of the input and output is correct.
An incorrect value is applied or the value is zero.	The process values are not assigned or are assigned to the wrong participants.	Check the assignment of the process values.
Replacement device does not copy values on the memory card from the defective device.	The replacement device and the defective device have different device software identification numbers.	Only values between devices with the same ID can be transferred.
	The memory card is defective. The device cannot write any values to the memory card.	Replace the memory card and try again to transfer the parameters from the defective device to 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 the existing values on the defective device can be copied to the replacement device. New replacement device values must be parameterised using the Bürkert Communicator software.

Table 27: Troubleshooting

MAN 1000723455 EN Version: - Status: RL (released | freigegeben) printed: 19.02.2026
in process

15.1 Description of the error code

Error code	Description
1/3	Overload detected.
2/1	Overvoltage detected.
2/2	Undervoltage detected.
2/3	Voltage is above the warning limit.
2/4	Voltage is below the warning limit.
2/5	Battery voltage is below the warning limit.
2/6	Voltage drop detected.
3/1	Excess temperature detected.
3/2	Low temperature detected.
3/3	Temperature warning limit exceeded.
3/4	Temperature warning limit undershot.
18/4	The memory card is defective.
18/7	Removable storage present.
18/8	No access to the removable storage possible.
18/9	Configuration is being successfully managed by another device.
18/10	Configuration is NOT being successfully managed by another device.
18/11	Unable to load device configuration via the configuration provider.
18/12	At least 1 device is missing.
18/13	Bürkert Communicator is required.
18/14	Device must be replaced.
18/15	Device cannot be replaced as there are two many options present. Reduce the number of compatible devices.
18/16	Problems when replacing device.
18/17	Problems when replacing device. Unable to write to at least 1 object.
18/18	Device replacement failed.
18/19	Device replacement completed successfully.
18/20	Configuration provider is not active as no memory card has been detected.
18/21	More than 1 configuration provider is active! Switch off the other provider functions.
32/1	Capacity of the internal message storage exceeded.
32/130	Initialisation of the device.
33/1	Switch to “operation” state.
33/2	Switch to “diagnostics active” state.
33/3	Switch to “maintenance” state.
33/4	Switch to “out of specification” state.
33/5	Switch to “check function” state.
33/6	Switch to “error” state.
33/7	Switch to AUTO operating state.
33/8	Switch to MANUAL operating state.
33/9	Switch to special mode: LED flashing.
33/11	Switch to “off” state.
33/12	Input value simulation active for at least 1 value.

MAN 1000723455 EN Version: - Status: RL (released | freigegeben) printed: 19.02.2026
In Process

Error code	Description
33/13	Output value simulation active for at least 1 value.
33/14	Demo operation mode enabled.
33/32768	1 status message present.
35/1	EEPROM error detected.
35/2	At least 1 persistent memory cannot be used.
40/996	Error on 1 or more partner device(s).
45/256	büS event: büS is NOT operational.
45/257	büS event: initialisation of communication.
45/512	büS event: localisation.
45/768	büS event: a device is using the same address.
45/1024	büS event: bus connection lost/not available.
45/1792	büS event: partner search active.
45/1793	büS event: producer(s) not found.
45/1794	büS event: manually configured device without address. The search can take up to 1 minute.
45/1795	büS event: producer assignment faulty.
45/1796	büS event: removal of the producer failed.
45/1797	büS event: incorrectly configured CANopen device.
45/1798	büS event: GCV is configured on both büS interfaces.
45/1799	büS event: cyclical communication of the producer is not active.
45/2048	büS event: saving of persistent büS data (do not switch off device).
45/2049	büS event: deletion of persistent büS data (do not switch off device).
45/2304	büS event: router for acyclic data active.
45/2560	büS event: incorrect serial number.
45/2561	büS event: incorrect configuration of cyclical inputs (not enough filters).
45/2562	büS event: incorrect configuration of cyclical values.
45/2816	büS event: manager is active.
45/3072	büS event: monitored device failed.
45/3584	Wait for addressing.
45/4096	Error when initialising the device parameters.
45/4097	Configured address is already being used.
51/1	No correct connection to the process control system.
51/2	The cyclical data traffic was slower than the set timeout parameters.
51/10	Initialisation of industrial communication.
51/101	Error in the NetX configuration, e.g. when downloading the firmware.
51/102	Industrial communication is switched off.
51/103	Gateway configuration not available. Please create a gateway configuration using the Communicator.
51/104	No protocol firmware available.
51/105	Please select a protocol and restart the device.
51/201	Initialisation error of the fieldbus interface. Contact support.
51/202	Configuration error of the fieldbus interface. Check IP parameter, device name, addressing.
51/203	Error sending the MAC address.

MAN 1000723455 EN Version: - Status: RL (released | freigegeben) printed: 09.02.2026

In process

Error code	Description
51/204	The gateway configuration cannot be transferred by the device. Either too many objects are configured or addressing needs to be reset.
51/205	Error registering the connections, more than 5 specified.
51/206	Incorrect PROFIBUS address, only addresses 1–126 possible.
51/207	Incorrect CC-Link address, only addresses 1–64 possible.
51/208	Incorrect CC-Link baud rate.
51/300	The fieldbus master is in stop mode.
51/303	Error during cyclical data exchange.
51/400	The master attempted to connect a faulty module/sub-module.
52/2	Missing EDS extension entries for the f(x) function, reconfiguration required.
52/3	Function use data CRC error, re-configuration required.
52/4	Functionality could not be generated (unknown functionality?).
52/5	Functionality could not be initialised.
52/6	f(x) configuration incorrect, reconfiguration required.
52/7	Function number invalid, re-configuration required.
52/10	The usage data cache of f(x) is full; reduce the number of functions or the program size.
52/11	Error in calculating the function.
52/12	User message.
52/13	Function calculated for longer than its cycle time and has been disabled! Increase the cycle time where necessary.
52/15	The cycle times of the graphical f(x) program do not correspond to the associated function cycle time. Re-load the program back onto the device.
52/16	f(x) mapping is incorrect (mapping table invalid), reconfiguration required.
52/17	f(x) function is waiting for producers (are all inputs linked?)
52/18	Graphical programme editor: no programme loaded, load a programme to the device.
52/19	f(x) function has an error! (Correct the other active errors).
52/20	The cycle time of one f(x) function is too long! The cycle time must be shortened to avoid irreparable damage to the device.
52/21	Graphical programme editor: licence for programme not adequate! To enable full functionality, please contact the Bürkert sales department!
52/22	Graphical programme editor: invalid persistent data! Default values will be used.
52/23	Graphical programme editor: programme and programme configuration do not match, re-configuration required.
52/24	Graphical programme editor: no licence. The program will be disabled after running for one hour.
52/25	Graphical programme editor: no licence. The program has been closed! To enable full functionality, please contact the Bürkert sales department!
52/26	Initialising f(x).
63/10	At least one büS device is in status: maintenance.
63/11	At least one büS device is in status: out of specification.
63/12	At least one büS device is in status: functional test.
63/13	At least one büS device is in status: error.
63/20	f(x) function cannot be used while OPC UA is enabled.

MAN 1000723455 EN Version: - Status: RL (released | freigegeben) printed: 19.02.2026

In process

Error code	Description
63/30	F(x) Batch: the flow rate is insufficient to complete the batch within the specified time limit.
63/31	F(x) Batch: general error.
63/32	F(x) Batch: producer not found.
63/33	F(x) Batch: batch no. %1 successfully completed.
63/34	F(x) Batch: batch no. %1 cancelled.
63/35	F(x) Batch: batch no. %1 failed.
63/36	F(x) Batch: dosing timeout; the batch was not completed within the specified time limit.
63/37	F(x) Batch: the selected recipe has an invalid parameter.
63/38	F(x) Batch: no flow observed.
63/39	F(x) Batch: the flow direction is reversed. Set the flowmeter to a positive flow.
63/40	F(x) Batch: unexpected flow with closed valves.
63/41	F(x) Batch: batch no. %1 interrupted.
63/42	F(x) Batch: batch no. %1 resumed after interruption. The dosed quantity may be inaccurate.
63/43	F(x) Batch: memory card is not available. Confirm to disable batch logging.
63/44	F(x) Batch: writing batch log onto memory card failed.
63/45	F(x) Batch: log file on memory card is reaching the maximum permitted size of 100 MB. Current size: %1 MB.
63/46	F(x) Batch: log file on memory card has reached the maximum permitted size of 100 MB.
63/47	Device should not be supplied with power supply (Power) 1 (XD1) and büS (X4) at the same time.
63/48	Device should not be supplied with power supply (Power) 2 (XD1) and büS (X4) at the same time.
63/49	Power supply (Power) 1 (XD1) is not connected! Connections X1–X3 are disabled.
63/50	Power supply (Power) 2 (XD1) is not connected! Connections X5 - X8 are disabled. Confirm to disable power supply (Power) 2 monitoring.
63/51	Power supply (Power) 1 overvoltage detected.
63/52	Power supply (Power) 1 undervoltage detected.
63/53	Power supply (Power) 2 overvoltage detected.
63/54	Power supply (Power) 2 undervoltage detected.
63/55	Power supply (Power) 1 voltage above warning limit.
63/56	Power supply (Power) 1 voltage below warning limit.
63/57	Power supply (Power) 2 voltage above warning limit.
63/58	Power supply (Power) 2 voltage below warning limit.

Table 28: Description of the error code

MAN 1000723455 EN Version: - Status: RL (released | freigegeben) printed: 09.02.2026

in process

16 ACCESSORIES

NOTE

Property damage due to incorrect parts.

Incorrect accessories and unsuitable spare parts may cause damage to the device.

▸ Use only original accessories and original spare parts from Bürkert.

Accessories	Article number
USB büS interface set 1 (including power supply unit, büS stick, terminating resistor, Y-distributor, 0.7 m cable with M12 plug)	00772426
USB büS interface set 2 (including büS stick, terminating resistor, Y-distributor, 0.7 m cable with M12 plug)	00772551

Table 29: Accessories

MAN 1000723455 EN Version: - Status: RL (released | freigegeben) printed: 19.02.2026

in process

17 LICENCE ACTIVATION

The use of the f(x) function and/or the batch has been set by the manufacturer to only be available for an hour, for experimental purposes. In order to permanently use the functions without restrictions, a licence must be obtained.

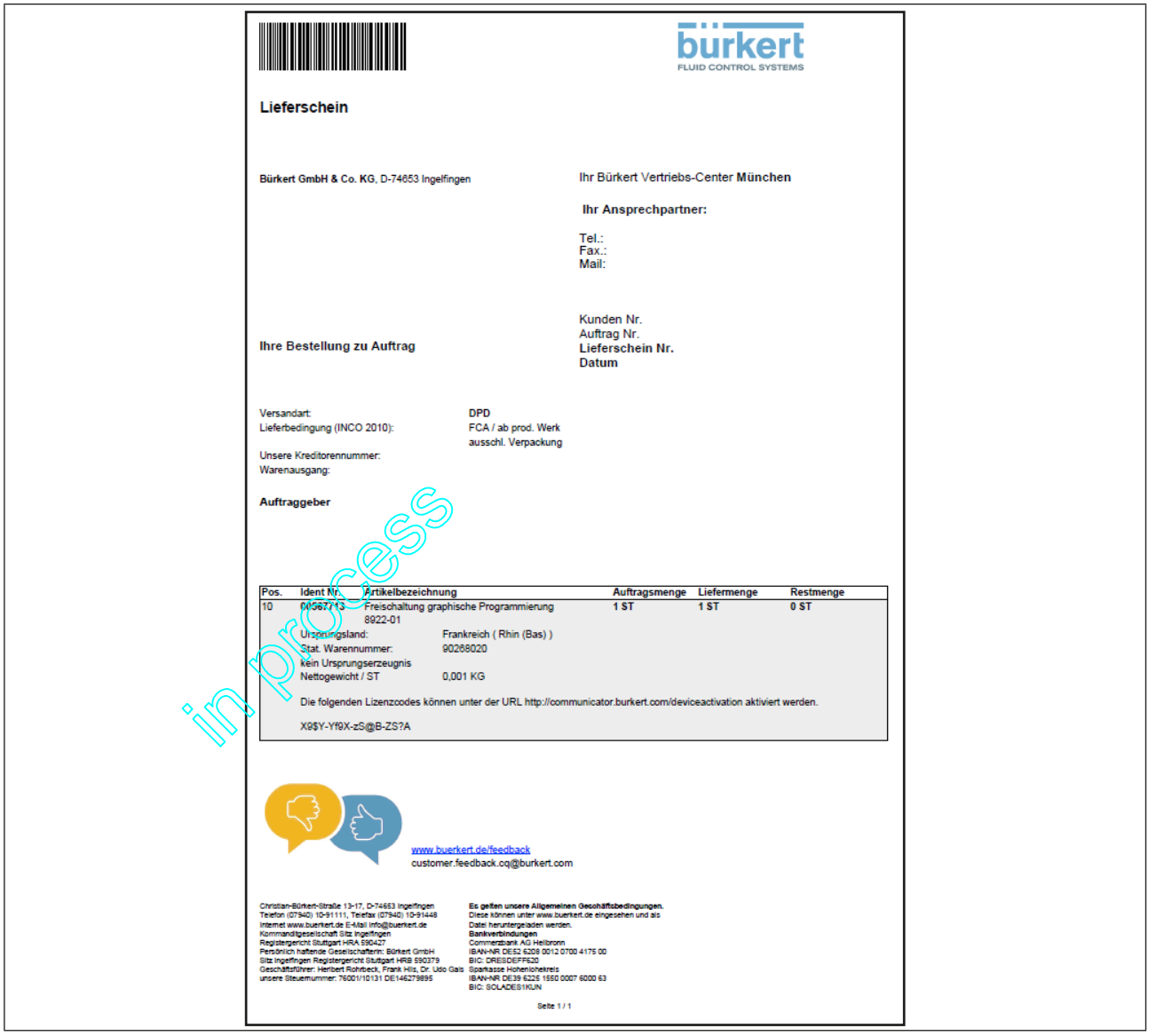
The following steps must be completed to obtain this licence:

→ Open Bürkert home page country.burkert.com and enter **licence key** or the **order number 567713** in the search field.
→ Start search.
→ Enable ordering/buying graphic programming.

Please note:
- The article and serial number of the device on which the batch controller is later used will be required for the order.
- You can find the order number and serial number on the type label.

→ After the order has been completed, a delivery note containing a licence is generated (see "Fig. 34: Example of a delivery note with the generated code")

MAN 1000723455 EN Version: - Status: RL (released) | printed: 22.07.2026



Lieferschein

Bürkert GmbH & Co. KG, D-74653 Ingelfingen

Ihr Bürkert Vertriebs-Center **München**

Ihr Ansprechpartner:

Tel.:
Fax.:
Mail:

Kunden Nr.
Auftrag Nr.
Lieferschein Nr.
Datum

Ihre Bestellung zu Auftrag

Versandart: DPD
Lieferbedingung (INCO 2010): FCA / ab prod. Werk ausschl. Verpackung
Unsere Kreditorennummer:
Warenausgang:

Auftraggeber

Pos.	Ident Nr.	Artikelbezeichnung	Auftragsmenge	Liefermenge	Restmenge
10	00567713	Freischaltung graphische Programmierung 8922-01	1 ST	1 ST	0 ST
		Ursprungsland: Frankreich (Rhin (Bas))			
		Stat. Warennummer: 90268020			
		kein Ursprungserzeugnis			
		Nettogewicht / ST 0,001 KG			

Die folgenden Lizenzcodes können unter der URL http://communicator.burkert.com/deviceactivation aktiviert werden.

X9$Y-Yf9X-zS@B-ZS?A

in process

www.buerkert.de/feedback
customer.feedback.cq@burkert.com

Christian-Bürkert-Straße 13-17, D-74653 Ingelfingen
Telefon (07940) 10-91111, Telefax (07940) 10-91448
Internet www.buerkert.de E-Mail info@buerkert.de
Kommanditgesellschaft Sitz Ingelfingen
Registergericht Stuttgart HRA 590427
Persönlich haftende Gesellschafterin: Bürkert GmbH
Sitz Ingelfingen Registergericht Stuttgart HRB 590379
Geschäftsführer: Heribert Rohrbeck, Frank Hils, Dr. Udo Gais
unsere Steuernummer: 76001/10131 DE146279895

Es gelten unsere Allgemeinen Geschäftsbedingungen.
Diese können unter www.buerkert.de eingesehen und als Datei heruntergeladen werden.
Bankverbindungen
Commerzbank AG Heilbronn
IBAN-NR DE52 6208 0012 0700 4175 00
BIC: DRESDEFF620
Sparkasse Hohenlohekreis
IBAN-NR DE39 6225 1550 0007 6000 63
BIC: SOLADES1KUN

Seite 1 / 1

Fig. 34: Example of a delivery note with the generated code

→ Open input mask at: https://communicator.burkert.com/deviceactivation and enter the following information:

- Licence code
- Article number of the product for which the f(x) function/batch function is to be enabled
- Item serial number

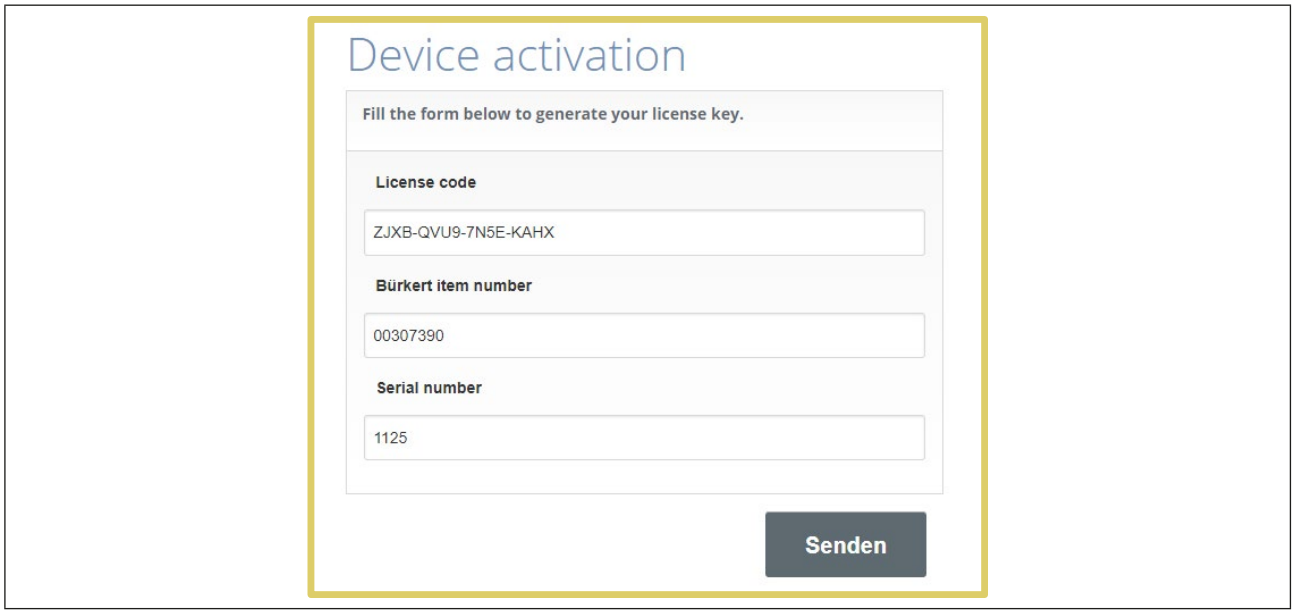


Fig. 35: Generate licence key

When the input mask is complete, a licence key (see “Fig. 36: Licence key”) that can be loaded into the Bürkert Communicator is generated.

Fig. 36: Licence key

MAN 1000723455 EN Version: - Status: RL (released | freigegeben) printed: 19.02.2026

→ Open Bürkert Communicator

→ **Tools**

→ **Enable device functions** (see “Fig. 37: Activate licence”)

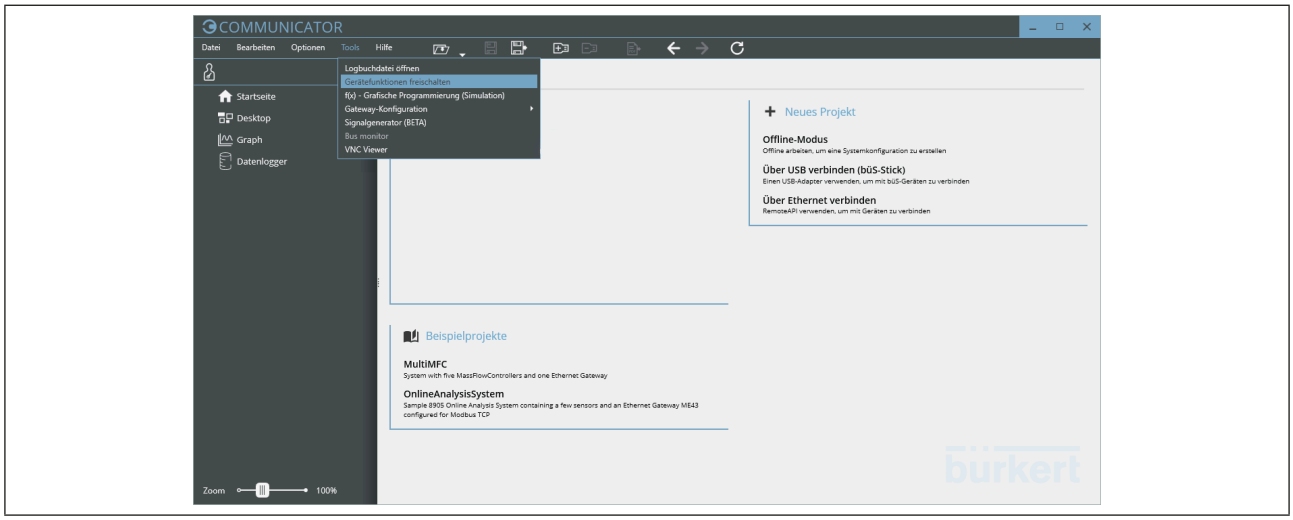


Fig. 37: Activate licence

→ **Load licence** (see “Fig. 38: Load licence”)

→ Open licence key

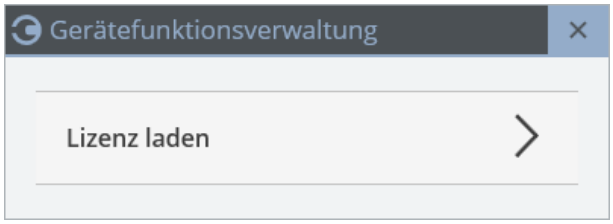


Fig. 38: Load licence

The unlimited f(x) function/batch function will be available after this procedure and can now be used.

in process

MAN 1000723455 EN Version: - Status: RL (released | freigegeben) printed: 19.02.2026

18 TRANSPORTATION, STORAGE, DISPOSAL

NOTE

Transport damages.

Inadequately protected devices may be damaged during transport.

- Use shock-resistant packaging to protect the device against moisture and dirt during transport.
- Avoid exceeding or dropping below the permitted storage temperature.

Incorrect storage may damage the device.

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

Storage temperature: –30…+80 °C

Environmentally friendly disposal

- Follow national regulations regarding disposal and the environment.
- Separate electrical and electronic devices and dispose of them as special waste.

Further information at country.burkert.com.

in process

MAN 1000723455 EN Version: - Status: RL (released | freigegeben) printed: 19.02.2026

bürkert
FLUID CONTROL SYSTEMS

MAN 1000723455 EN Version: - Status: RL (released) | printed: 09.02.2026

in process

country.burkert.com