

Fieldbus Gateway



Type ME43 can be combined with...



Type 8741
MFC/MFM



Type 8742
MFC/MFM



Type 8746
MFC/MFM



Type 8905
Online Analysis
System



Type 8652
Valve island

powered by
EDIP

- Gateway for Industrial Ethernet and Fieldbus standards
- Up to 128 input and 128 output variables can be assigned
- Easy integration in the process control system ensured through system specific device description files
- Graphical programming for automation of sub-systems

The fieldbus gateway of Type ME43 is the central control unit for Bürkert devices (valves, sensors, mass flow controller or displays), which are based on EDIP ("Efficient Device Integration Platform"). The basic version of Type ME43 consists of a fieldbus coupler which transmits the internal CAN-open based communication of the Bürkert field devices to industrial standards for Industrial Ethernet and fieldbus.

With the help of the graphical programming, which the ME43 module supports sub-systems can be automated specifically to the customer's needs. (For e.g. controlled mixing of gases, error monitoring through switching commands, timer switches etc.)

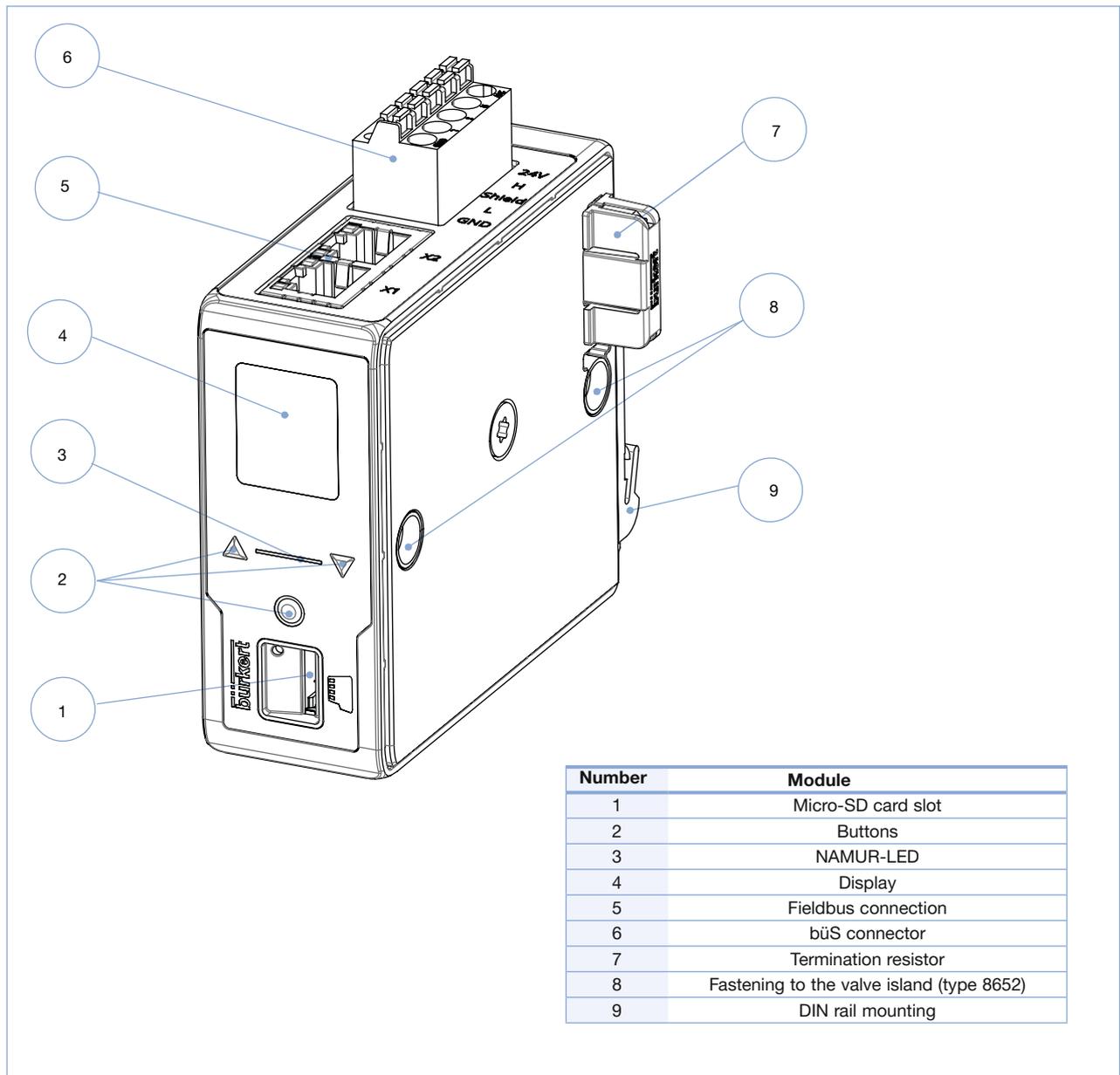
Technical data	
Housing material	PC (Polycarbonate)
Gateway functionality (Integrated switch for Industrial Ethernet)	PROFINET EtherNet/IP Modbus/TCP PROFIBUS DPV1 EtherCAT
Configuration storage	Micro SD Card (not included in delivery) (for storing device parameters, configuration and easy replacement of a module)
Operating voltage	24 V DC ± 10 % - residual ripple 10 %
Light diodes Housing (external)	RGB-LED based on NAMUR NE107
Power consumption	2 W
Ambient temperature	-20...+60 °C
Protection class ME43 (Fieldbus Gateway)	IP20
Installation	Horizontal or vertical on DIN rail EN 50022

EDIP – Efficient Device Integration Platform

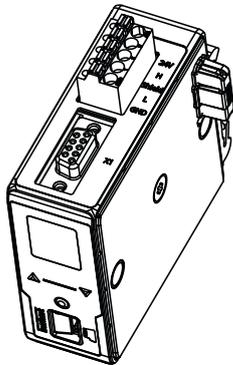
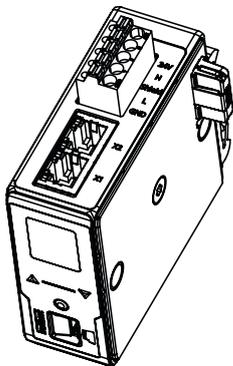
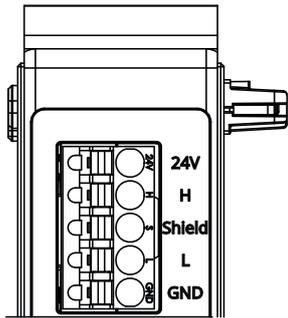
EDIP is the new Bürkert device platform which will in the future standardise the operation, communication and interfaces of many process devices (e.g. Sensors, Mass Flow Controller). Thanks to EDIP the devices can be intelligently networked and operated with the consistent Software, the Bürkert Communicator. The backbone and connecting link of EDIP is the digital interface which complies with the CANopen standard and is always downwards compatible to it. EDIP offers following advantages to the user:

- Interoperability - guaranteed by the uniform interface
- Comfortable operating and display concept
- Fast start-up and easy commissioning
- Modularity – allows adjustment of the devices to individual customer requirements
- Easy transfer and backup of device settings

Fieldbus Gateway ME43



Pin assignment



Spring terminal 5 pin	Color	Assignment
	Red	24 V DC
	White	CAN H (büS-connection)
	Green	SHIELD
	Blue	CAN L (büS-connection)
	Black	GND
Interface X1 and X2	Pin	Assignment
	1	TX+
	2	TX-
	3	RX+
	4	N.C.
	5	N.C.
	6	RX-
	7	N.C.
	8	N.C.
D-SUB 9 pin female	Pin	Assignment
	1	SCHIRM
	2	M24 (optional)
	3	RxD/TxD-P (B-Line)
	4	CNTR-P (optional)
	5	DGND
	6	+ 5 V (Supply for the termination resistor)
	7	+24 V (optional)
	8	RxD/TxD-N (A-Line)
	9	CNTR-N (Optional)

Note:

- 1) The disconnect resistor can be plugged in easily to the right of the module. (not included in delivery. For the Item no. see ordering chart on page6)
- 2) CANopen requires two termination resistors: one at the beginning and one at the end of the network. An indicator of the correct bus termination is the resistance between CAN_H and CAN_L when the power supply is disconnected; this should be about 60 Ohm.

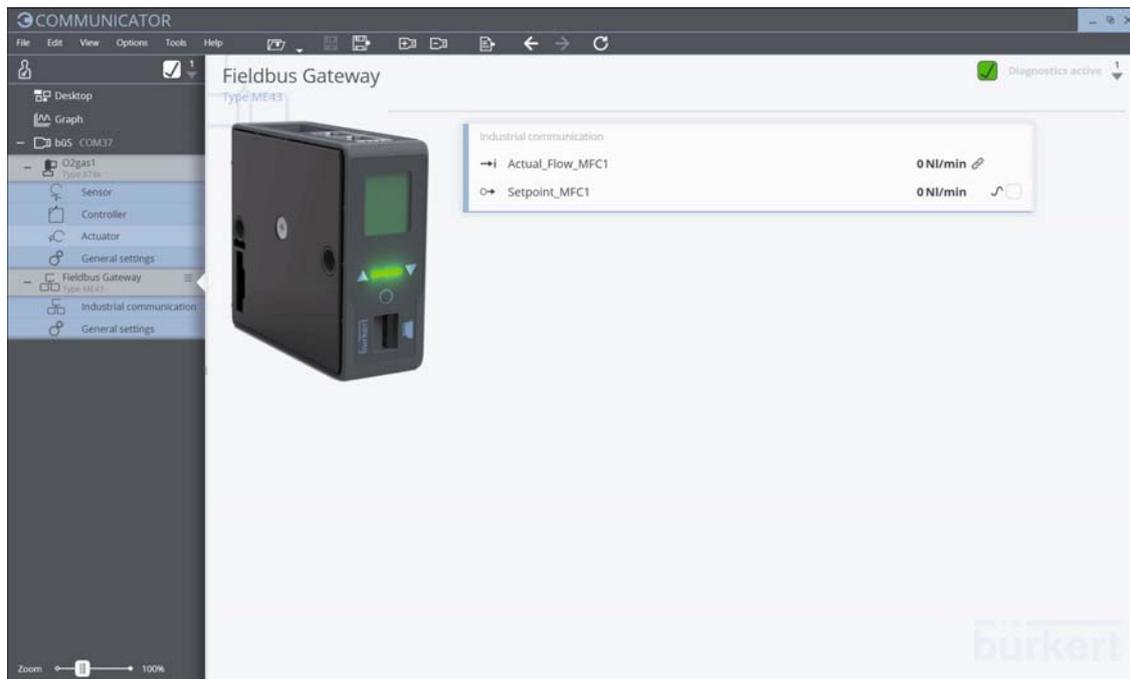
Software Bürkert Communicator

The Bürkert Communicator is the most important software component of the 'Efficient Device Integration Platform' (EDIP). Various features of this universal tool simplify the configuration and parameterization of devices equipped with a digital CANopen based interface. With this tool the user has a complete overview of cyclic process values as well as acyclic diagnosis data. In the near future, an integral part of the Communicator will be a graphical programming environment which will help in creating decentralized sub-system control functions. The connection to the PC is established with a USB-CAN adapter.

The communicator allows:

- Configuration, parameterisation and diagnosis of EDIP devices / networks
- Easy and comfortable mapping of cyclic values
- Graphical display of process values
- Firmware update for the connected EDIP devices
- Backup and restoring of device configurations

To install the software, click on the download button. [Download](#)



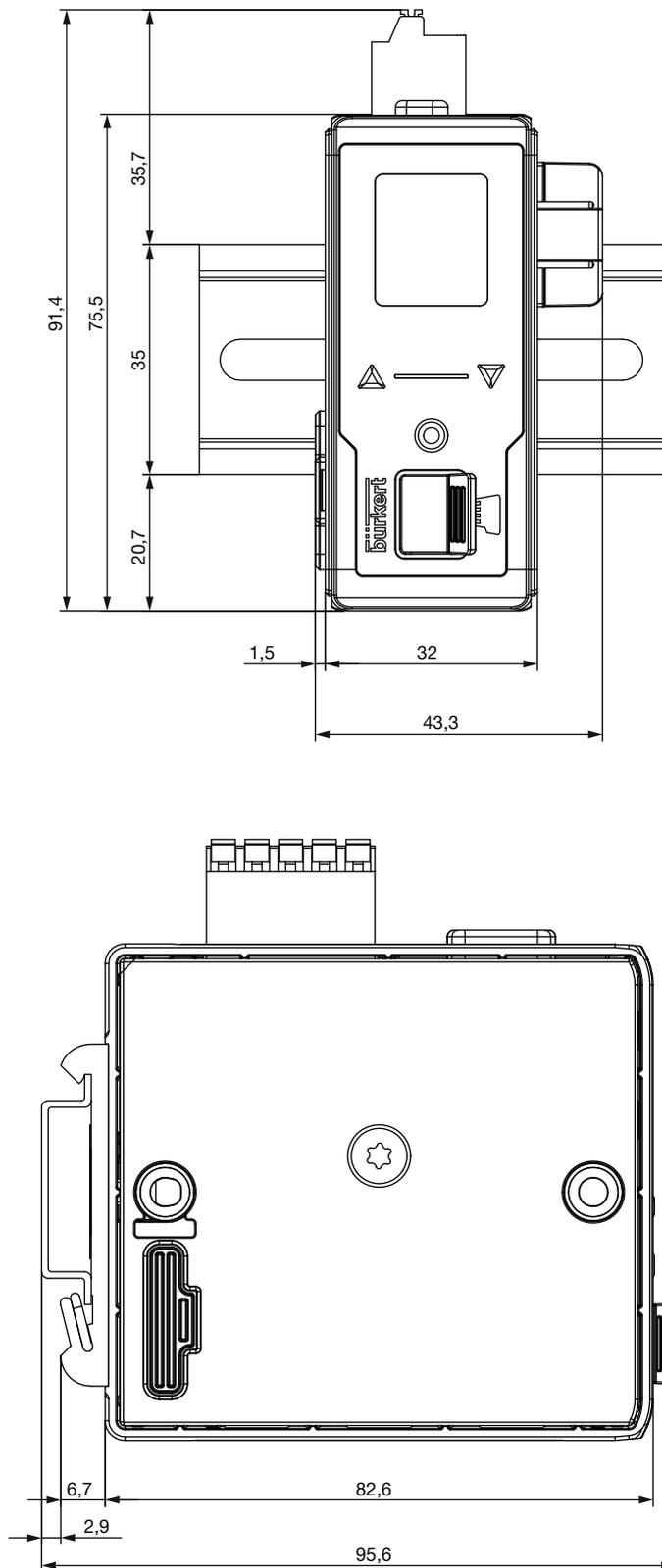
Operation in a network

Example of a network with Gateway ME43 and MFCs



Dimensions [mm]

Example with spring terminal block for bÜS connection



Ordering chart

Article	Item no.
Gateway Industrial Ethernet (PROFINET, EtherNet/IP, Modbus TCP, EtherCAT)	307 390
Gateway PROFIBUS DP	307 393
Gateway CANopen (bÜS)	307 391

Important note: Please note that the ME43 Gateway modules are not factory configured. However, these must be configured in order to be used in a system. The device description files for the required protocols must be generated with the Communicator software before commissioning a system. For further details, please refer to the operating instructions for ME43.

Ordering chart for accessories

Article	Item no.
bÜS cable extension M12 0.1 m	772 492
bÜS cable extension M12 0.2 m	772 402
bÜS cable extension M12 0.5 m	772 403
bÜS cable extension M12 1 m	772 404
bÜS cable extension M12 3 m	772 405
Connector M12, female, straight ¹⁾	772 416
Connector M12, male, straight ¹⁾	772 417
Connector M12, female, angled ¹⁾	772 418
Connector M12, male, angled ¹⁾	772 419
Y connector	772 420
Y connector for connecting two separately powered segments of a bÜS network	772 421
Termination resistor (directly pluggable)	303 833
Termination resistor 120 Ohm M12 male	772 424
Termination resistor 120 Ohm M12 female	772 425
Power supply Type 1573 for rail mounting, 100–240 V AC/ 24 V DC, 1.25A, NEC Class 2 (UL 1310)	772 438
Power supply Type 1573 for rail mounting, 100–240 V AC/ 24 V DC, 1A, NEC Class 2 (UL 1310)	772 361
Power supply Type 1573 for rail mounting, 100–240 V AC/ 24 V DC, 2A, NEC Class 2 (UL 1310)	772 362
Power supply Type 1573 for rail mounting, 100–240 V AC/ 24 V DC, 4A	772 363
Micro SD Card	on request
bÜS-Stick Set 1 (incl. cable (M12)), stick with integrated termination resistor, power supply and software	772 426
bÜS-Stick Set 2 (incl. cable (M12)), stick with integrated termination resistor	772 551
License for graphical programming (only when > 10 blocks are required)	567 713
Software Bürkert Communicator	http://www.burkert.com/en/type/8920

¹⁾ Due to lack of space, the M12 single connectors may not be suitable for their simultaneous use on the same side of the Y connector. Please use the available ready-made assembled cable in this case.

To find your nearest Bürkert facility, click on the orange box → www.burkert.com