

- Fire damper monitoring system**
- Control and monitoring of fire dampers
 - Turnkey automation station or controller for mounting on DIN rail
 - Complete motorisation sets for fire dampers
 - Data transmission via MP-Bus®
 - Modular structure, can also be embedded in a higher-level system (via contacts) if required

**Automation station
(controller with control cabinet)**

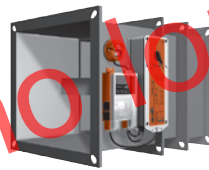


MONICO-..

**Component solution
(controller for mounting on
DIN rail)**



BKS24-..



BF24MP set or
BFG24MP set



BF24MP set or
BFG24MP set

System components

Automation station (controller with control cabinet)	MONICO-1M	Master controller	
	MONICO-1S	Slave controller	
Controller (for mounting on DIN rail)	BKS24-1M	Master controller	
	BKS24-1S	Slave controller	
Motorisation sets	BF24MP set	Complete OEM sets with Top Line fire damper actuator, thermoelectrical tripping device and communication and power supply unit	
	BFG24MP set		
Accessories	Z-PKT0FSW210	External operating panel for wall mounting	
	Z-S90CONN000	Cable 1.5 m with telephone plugs (RJ12)	See separate data sheets
	Z-PLW0PGSM00	GSM kit with aerial, connecting cables and power pack	
	Z-PCO100MDM0	RS232 interface card	

Brief description

Application Continuous and inexpensive monitoring of fire dampers in ventilation systems.

Field of application Ideal turnkey solution for small to medium-sized buildings. Thanks to the use of MP-Bus technology, excellently suited both for new buildings and when renovating older buildings. Future-oriented investment in a flexibly expandable system (up to 96 fire dampers) that conforms to the latest state-of-the-art technology.

Safety notes



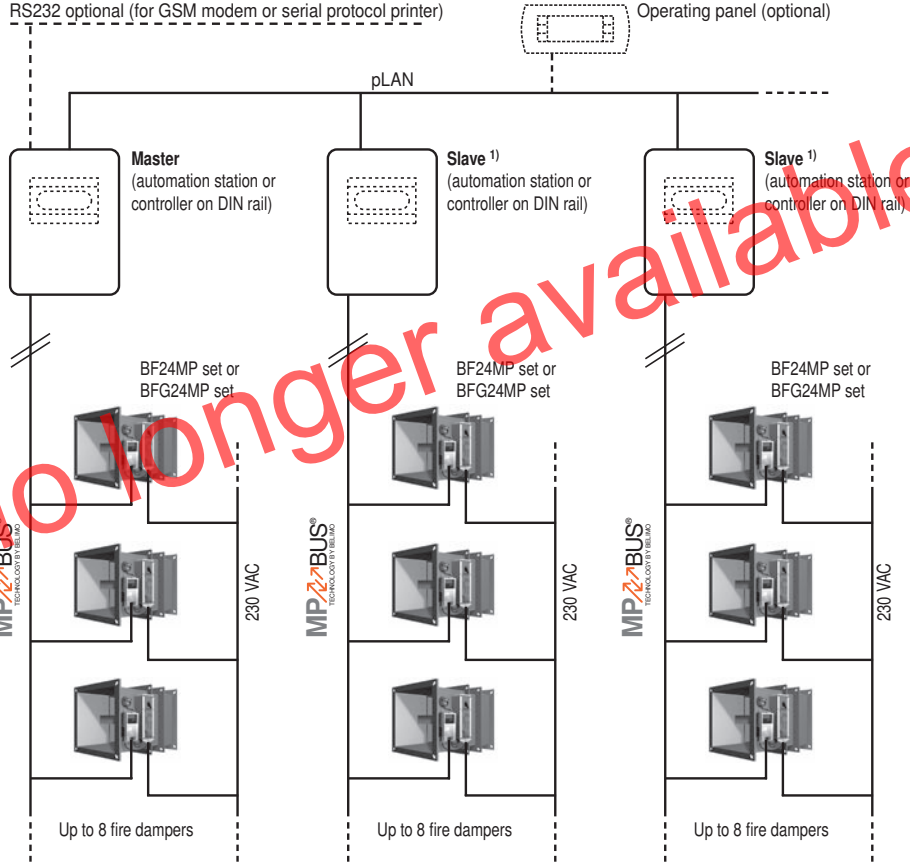
- The MONICO system solution is not allowed to be used outside the specified field of application, especially in aircraft or in any other airborne means of transport.
- Please note: 230 V power supply voltage!
- Only components explicitly approved for this purpose by Belimo are allowed to be used for the MONICO system solution.
- The network may only be configured, and the system configuration changed, by suitably trained and authorised personnel!
- Check the relevant standards and national directives prior to planning the system. Consult a fire protection expert if necessary.

System characteristics

Matched components	The MONICO system solution consists of an automation station or a controller and motorisation sets for the fire dampers. The system is available either as a turnkey system solution with a pre-wired control cabinet or as a stand-alone controller component (BKS24-.. for mounting on a DIN rail).
MP-Bus	Up to eight fire dampers can be connected to each automation station or controller via the MP-Bus (2-wire bus line, max. 800 m long, 0.75 mm ²).
Motorisation sets	The motorisation sets (BF24MP and BFG24MP) consist of a communications-capable fire protection actuator in the Top Line series with an integrated thermoelectrical tripping device and a communication and power supply unit for connection to the MP-Bus [®] network. These motorisation sets are only provided to fire damper manufacturers!
Stand-alone or master/slave configuration	The automation station or controller is expandable: <ul style="list-style-type: none"> • Up to 11 automation stations or controllers can be connected as slaves via the pLAN-Bus • Projects with up to 96 fire dampers can be implemented
Integration in higher-level systems	Via contacts
Accessories	<ul style="list-style-type: none"> • Z-PKT0FSW210: External operating panel (suitable for wall mounting) • Z-PLW0PGSM00: GSM kit with aerial, connecting cables and power pack • Z-PCO100MDM0: RS232 interface card (for connecting GSM modem or serial protocol printer) • Z-990CONN000: 1.5 m cable with telephone plug (for operating panel)

Topology

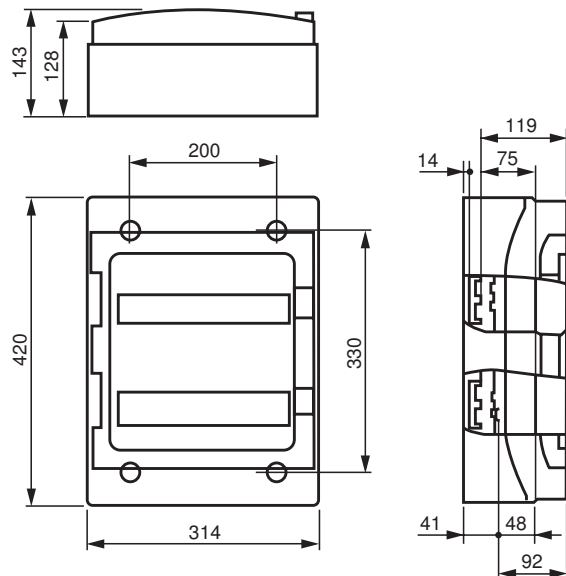
**Example:
Master and slave**



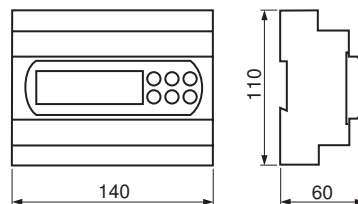
1) Up to 11 slave controllers possible (total of 96 fire dampers)

Dimensions

Automation station



Controller



Specification texts

Turnkey control and monitoring unit (automation station)

Monico-1M

Master unit for MONICO fire damper monitoring system.

Digital inputs/outputs (2/2).

Control and monitoring unit for connecting:

- Up to 8 fire dampers [BF(G)24TL-T-ST] with MP-Bus® interface
- Up to 11 slave units (each with 8 fire dampers)
- Configuring, addressing and commissioning without additional tools
- Integrated time switch to automatically perform periodic functional tests with logging
- Scenario control (choice of three predefined scenarios)
- Turnkey solution, including control cabinet, supply, connecting terminals, fuse, etc.

Monico-1S

Slave unit for MONICO fire damper monitoring system.

Expansion unit: Allows a master/slave system to be set up without programming.

- Up to 8 fire dampers [BF(G)24TL-T-ST] with MP-Bus® interface can be connected
- Turnkey solution, including control cabinet, supply, connecting terminals, fuse, etc.

Control and monitoring unit for control cabinet installation (controller for DIN rail)

BKS24-1M

Master unit for MONICO fire damper monitoring system (for mounting on DIN rail)

Digital inputs/outputs (2/2).

Control and monitoring controller for connecting:

- Up to 8 fire dampers [BF(G)24TL-T-ST] with MP-Bus® interface
- Up to 11 slave units (each with 8 fire dampers)
- Configuring, addressing and commissioning without additional tools
- Integrated time switch to automatically perform periodic functional tests with logging
- Scenario control

BKS24-1S

Slave unit for MONICO fire damper monitoring system (for mounting on DIN rail).

Expansion controller: Allows a master/slave system to be set up without programming.

- Up to 8 fire dampers [BF(G)24TL-T-ST] with MP-Bus® interface can be connected

Accessories

Z-PKT0FSW210

External operating panel for MONICO system

For wall mounting, 4-line x 20-character display, graphics resolution 120 x 32 pixels. Six operator buttons for data input

Z-S90CONN000

Connecting cable 1.5 m with RJ12 telephone plug for external operating panel

Z-PLW0PGSM00 GSM kit

Dual-band modem 900/1800, kit with cable, aerial and 230 V power pack

Z-PCO100MDM0

RS232 interface card

Motorisation sets for fire dampers

BF24MP set

BF24TL-T-ST fire protection actuator with MP-Bus capability and thermoelectrical tripping device

- AC/DC 24 V, connecting cable with plug, halogen-free, compatible with BKN230-24MP
- Safety function with spring
- Angle of rotation 95° (incl. 5° initial spring tension)
- Motor torque 18 Nm
- Spring torque 12 Nm

BKN230-24MP communication and power supply unit for connection to MP-Bus

- AC 230 V (connection: cable with Euro plug)

BFG24MP set

BFG24TL-T-ST fire protection actuator with MP-Bus capability and thermoelectrical tripping device

- AC/DC 24 V, connecting cable with plug, halogen-free, compatible with BKN230-24MP
- Safety function with spring
- Angle of rotation 180°
- Motor torque 11 Nm
- Spring torque 8.5 Nm

BKN230-24MP communication and power supply unit for connection to MP-Bus

- AC 230 V (connection: cable with Euro plug)