

komfovent®

FIRE DAMPER UVAF-M

CE-Certified fire
protection solutions
for ventilation
systems



Content

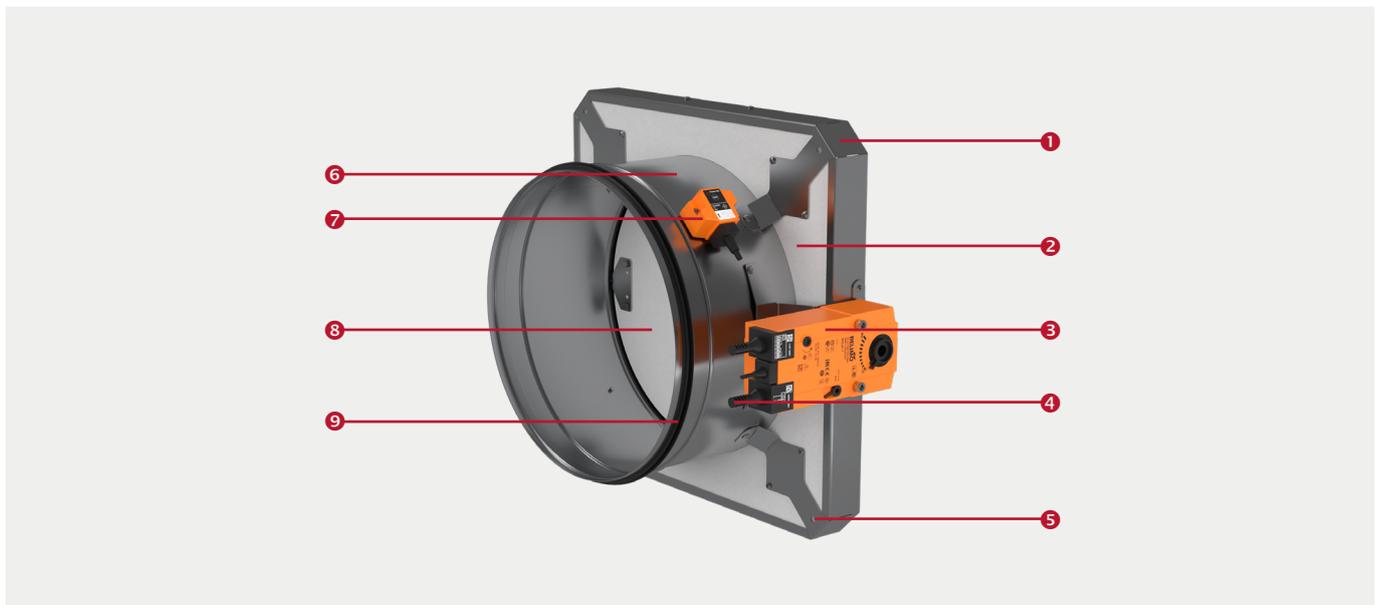
DESIGN AND DIMENSIONS.....	4
Design advantages	4
Main sizes of the damper.....	5
Main characteristics	5
Weights, free-cross sectional area and exposition of the blade.....	5
TECHNICAL DATA	6
Pressure drop and sound power level	6
Actuating system.....	6
Wiring diagrams.....	7
Control system.....	8
INSTALLATION METHODS	10
ORDERING SAMPLE	11

Design and dimensions

Circular fire damper UVAF-M with a fire resistance of 60 minutes is available in diameters from 100 to 315 mm. The fire damper is appropriate for at-the-surface mounting.

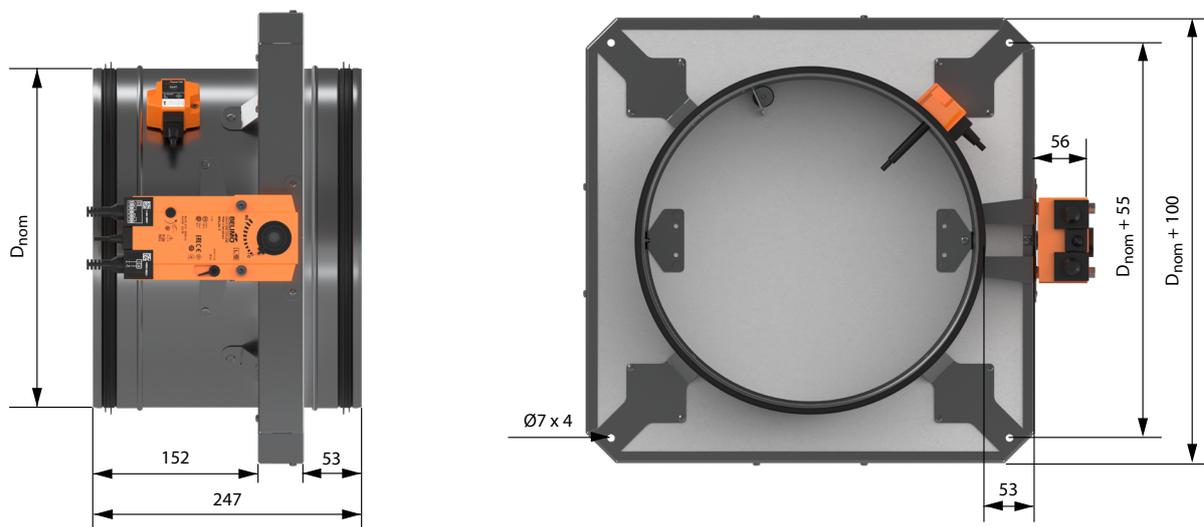
Design advantages

- Fast and easy installation.
- Extra-short 247 mm casing.
- Air-tightness class C3.
- Suitable for installation in flexible or solid walls and solid ceilings.
- Operating temperature -30 ... 55 °C.



- | | | |
|-------------------------|----------------------|----------------------------|
| 1 Metal collar | 4 Connecting wires | 7 72 °C thermosensor |
| 2 Fire-resistant flange | 5 Installation holes | 8 Calcium-silicate blade |
| 3 24 V / 230 V actuator | 6 Metal casing | 9 Casing insulating rubber |

Main sizes of the damper

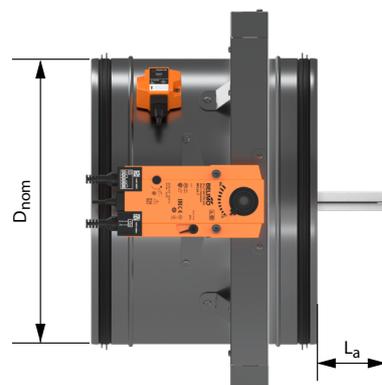


Main characteristics

- UVAF-M dampers available in six sizes $\varnothing 100$, $\varnothing 125$, $\varnothing 160$, $\varnothing 200$, $\varnothing 215$ and $\varnothing 315$ mm.
- CE certified according to EN 15650.
- Tested according to EN 1366-2.
- Classified in acc. with. EN 13501-3.
- Fire resistance EI60S.
- C3 leakage class in acc. to EN 1751.
- The metal parts are made of galvanized steel, stainless steel available on request.

Weights, free-cross sectional area and exposition of the blade

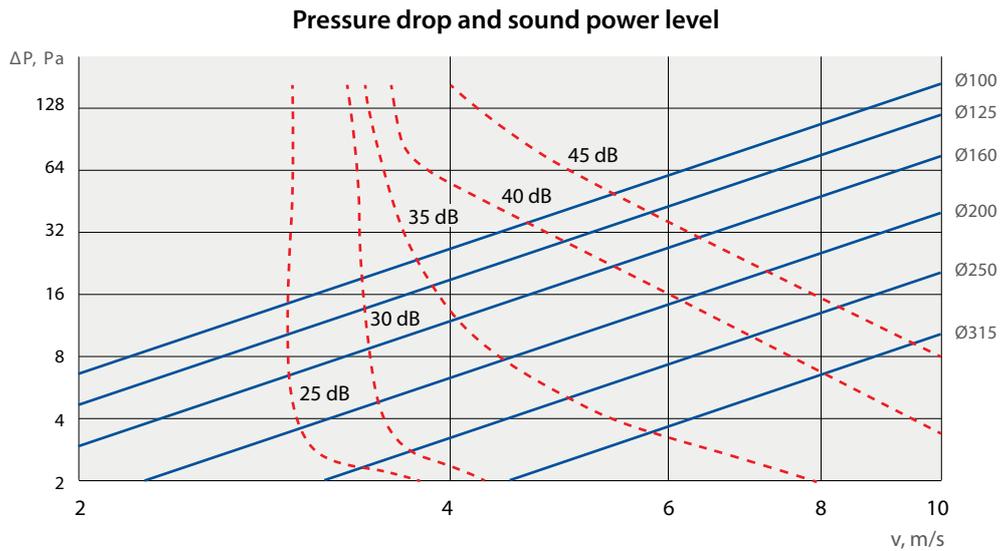
D_{nom} , mm	m, kg	Free area, m ²	L_a , mm
100	3,3	0,004	0
120	3,7	0,0075	0
160	4,3	0,015	0
200	5,0	0,025	13
250	6,0	0,04	38
315	7,4	0,068	71



Technical data

Pressure drop and sound power level

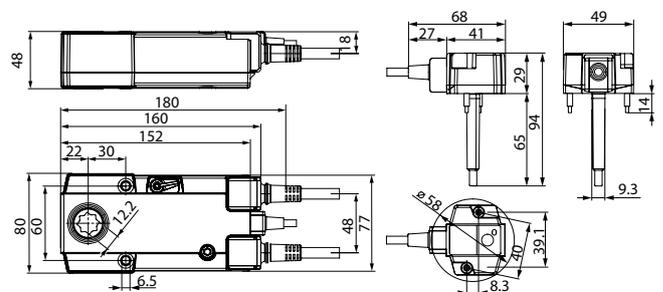
On the fully open UVAF-M fire damper pressure drop and generated sound power level can be determined using graph below for a specific air flow value.



Actuating system

Fire dampers UVAF-M are equipped with electrical BFL 24 V or 230 V actuator with spring return mechanism and integrated end position switch. In case of power failure, fire dampers will close automatically.

BFL24 -T/ BFL230-T



When an electric current is supplied to the actuator, the fire damper is in an open position. When the electricity supply to the actuator is interrupted, the return spring triggers and closes the damper. The actuator can also be controlled manually and fixed in any position. BFL24-T / BFL230-T actuators control fire dampers after receiving signals from a centralized control system, or in response to a temperature sensor.

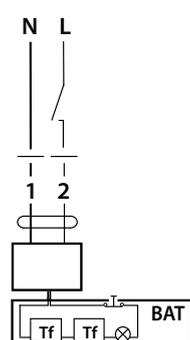
Once the air temperature reaches +72 °C, temperature sensors will respond and permanently terminate the power supply to the actuator. After each actuation, temperature sensors must be replaced.

ST model is equipped with connection plugs for simple integration in control and monitoring systems or bus networks via communication and power supply units.

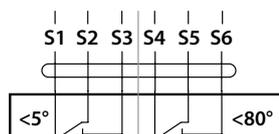
Technical specification	BFL24-T	BFL230-T
Electrical current	AC/DC 24 V 50/60 Hz	AC 230 V 50/60 Hz
Weight	1200 g	1200 g
Torque: Motor Return spring	min. 4 Nm min. 3 Nm	min. 4 Nm min. 3 Nm
Rotation angle	max. 95°	max. 95°
Normal operating temperature	-30...55 °C	-30...55 °C
Protection class IEC/EN	III Safety extra-low voltage	III Safety extra-low voltage
Protection class auxiliary switch IEC/EN	III Safety extra-low voltage	III Safety extra-low voltage

Wiring diagrams

AC 230 V, open/close



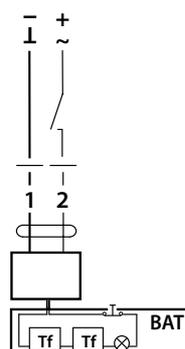
Auxiliary switch



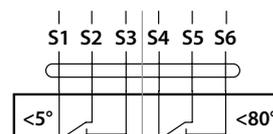
Cable colors:

- 1 = blue
- 2 = brown
- S1 = violet
- S2 = red
- S3 = white
- S4 = orange
- S5 = pink
- S6 = grey
- Tf: Thermal fuse

AC/DC 24 V open/close



Auxiliary switch



Cable colors:

- 1 = black
- 2 = red
- S1 = violet
- S2 = red
- S3 = white
- S4 = orange
- S5 = pink
- S6 = grey
- Tf: Thermal fuse

Technical data

Control system

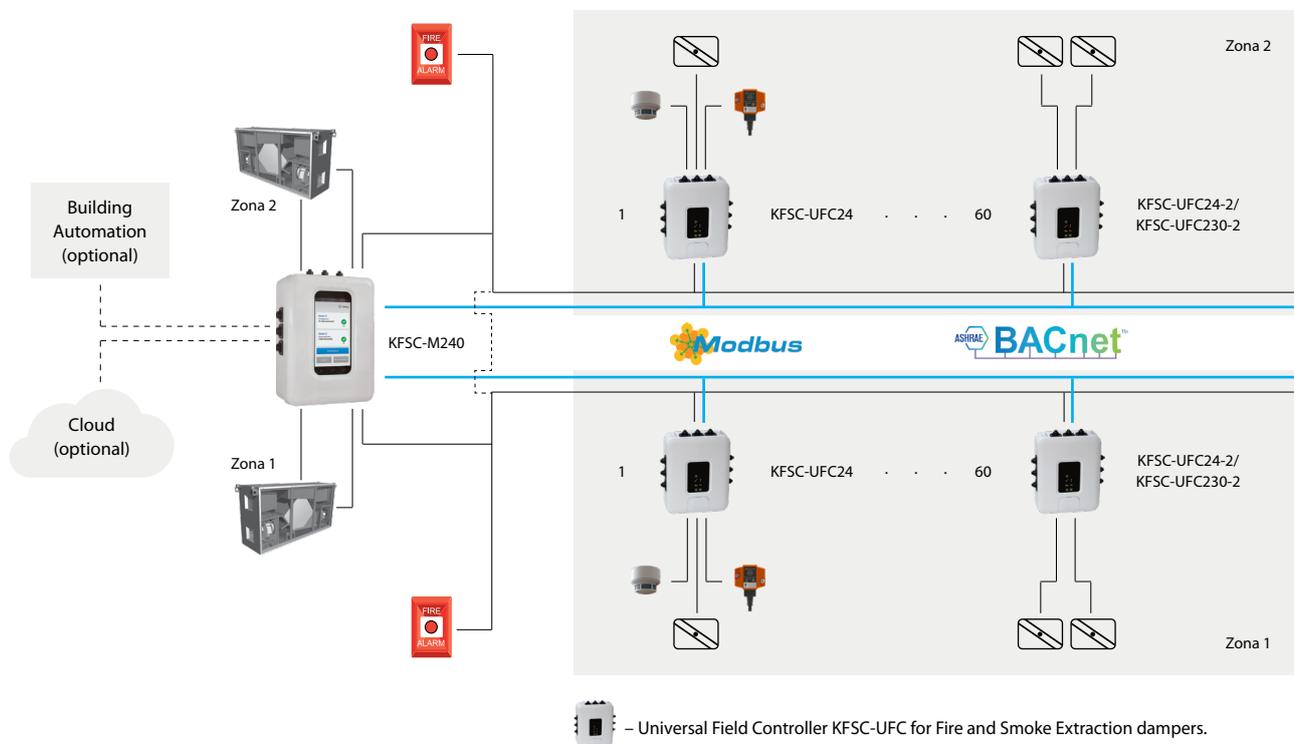
Fire dampers should be checked regularly. Doing this manual way is time consuming and requires a lot of human resources. The process can be fully automated with the KFSC-M240 dedicated controller and KFSC-UFC modules.

Using control system, the automation will regularly check the status of fire and smoke dampers and inform the user in case of a malfunction.

Benefits:

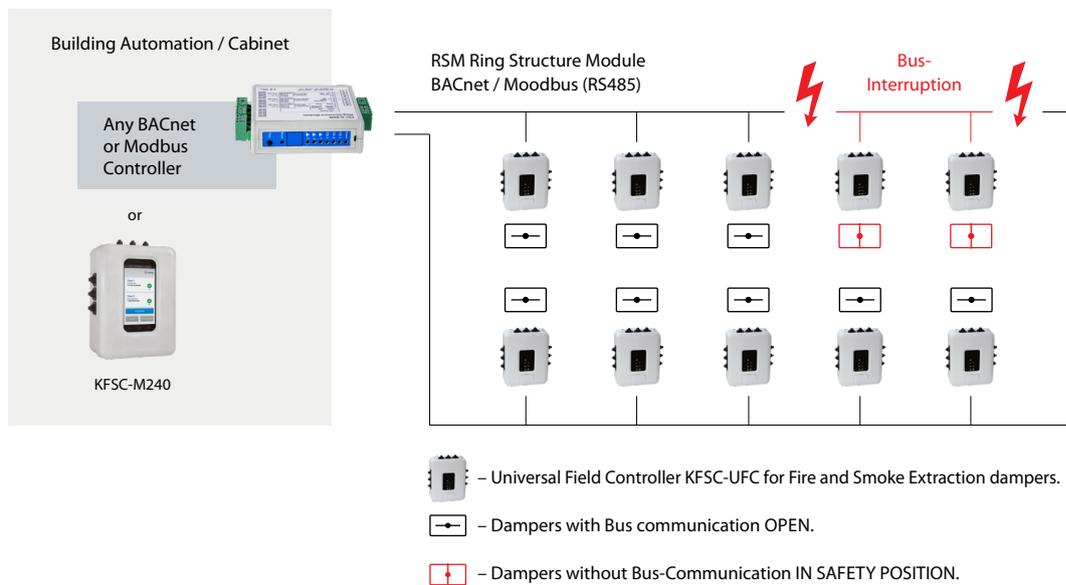
- Commissioning for the fire damper system including integration of the Fire Alarm Panel and the Ventilators also completed in a very short time frame.
- Datapoint test was concluded in a very short time.
- Remarkable cost savings on the controls system (>50 %) by using the bus system.

Fire/Smoke Extraction Damper Controls with Ring-Structure



© Systems & Modules Technology AG

Most simple Ring Solution for standard RS-485 Bus Systems with 1 Cable



Functionality

- Standalone solution for two fire- or two smoke extraction zones or one fire and one smoke extraction zone.
- Up to max. 240 dampers can be controlled via the KFSC-UFC (KFSC-UFC24, KFSC-UFC24-2, KFSC-UFC230-2) devices and together with the KFSC-M240.
- Pre-programmed and tested functionality.
- Self-commissioning of the KFSC-M240 and the connected KFSC-UFC's – saves time and costs at commissioning.
- Automatic test runs, test reports available. Automatic sending by e-mail possible.
- Remote access via cloud as option available – simplification of the physical test at site as one of the advantages.
- Cable length RS-485: up to 1200 m, without repeater.

Installation methods

UVAF-M fire dampers are suitable for vertical installation in flexible and solid walls ≥ 100 mm thick with minimal fire resistance of EI 90. Achieved fire resistance class for the installation in both wall types is EI 60S.

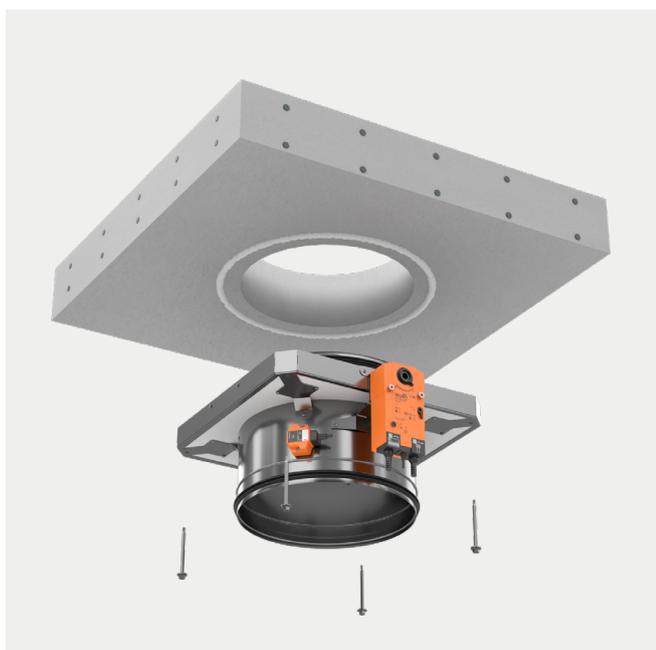
Installation in min. 100 mm solid wall



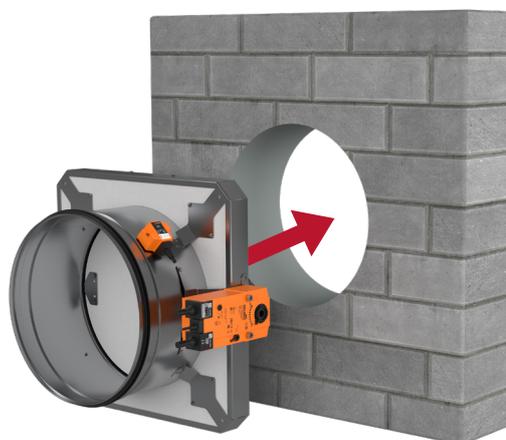
Installation in min. 100 mm flexible wall



Installation in min. 150 mm solid ceiling



UVAF-M fire dampers are suitable for extra-fast mortarless mounting directly to the installation opening, using an appropriate fastening.



For detailed installation information please refer to manufacturer's installation instructions.

Ordering sample

UVAF - M24T - 315 - AISI304

①

②

③

④

-
- ① **Product type:** Circular fire damper UVAF
-
- ② **Activation type:** M24T - 24V AC/VC spring-return actuator with thermoelectric tripping device
M230T - 230V AC spring-return actuator with thermoelectric tripping device
M24TST - 24V AC/VC spring-return actuator with thermoelectric tripping device and connection
plugs for Communication and power supply unit BKN230-...
-
- ③ **Dimension:** d – nominal diameter in mm
-
- ④ **Material of metal parts:** No entry – zinc-coated sheet steel
AISI304 – stainless steel grade AISI304
AISI316 – stainless steel grade AISI316
-



SIA KOMFOVENT

1, Bukaisu street,
LV-1004, Riga, Latvia
Mob.: +371 24 66 4433
info.lv@komfovent.com
www.komfovent.com

SALES REPRESENTATIVES

Maris Dervenieks
Mob.: +371 29519300 (also WhatsApp)
maris.dervenieks@komfovent.com

Aleksandrs Rakuts
Mob.: +371 27763483 (also WhatsApp)
aleksandrs.rakuts@komfovent.com