

### Components:

The MUB-EC pressure differential system is delivered as a project-related overall system.

#### Basic components include:

- Supply air fan unit MUB EC-P / MUB FU-P/B
- Pressure differential control panel module DS1 / DS2B
- Pressure differential sensor
- Manual call point DKM

#### Accessories:



#### Additional accessories:

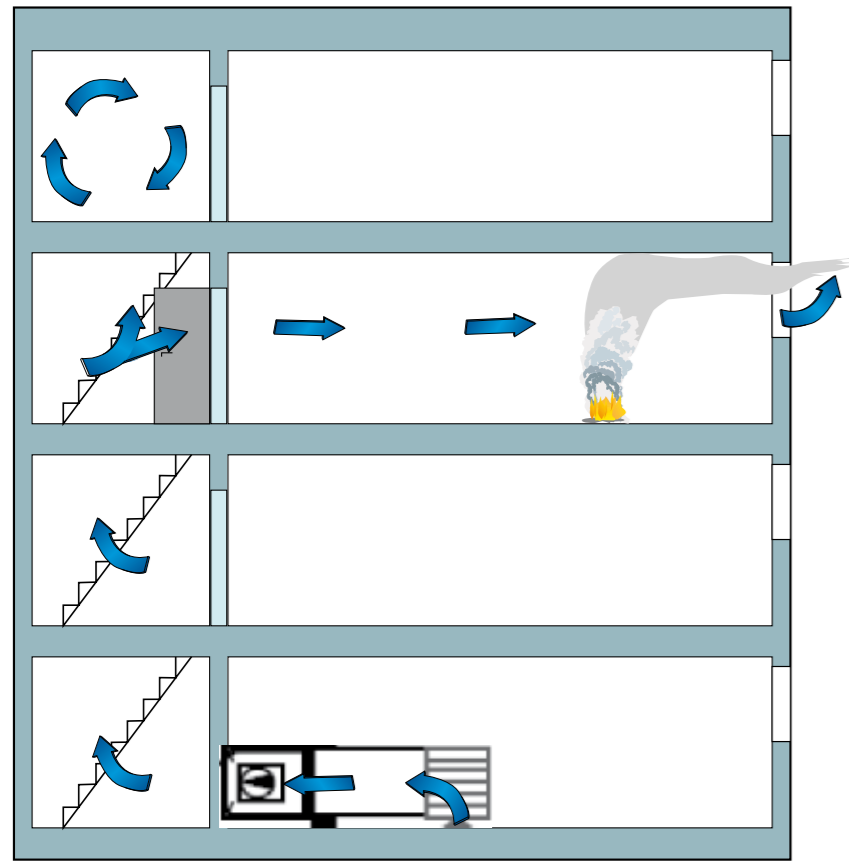
- Flap-/dome control
- Window control

## Pressure Differential System MUB-EC

The system solution in stairways



## Pressure differential system combined with smoke extraction function\*



MUB-EC



Control unit



Manual call point



Pressure sensor

### The pressurisation system MUB-EC as the system solution with EC driven motors for the pressure ventilation in stairways.

The pressurisation system MUB-EC by Systemair needs no pressure relief unit due to its control characteristics. It offers a complete solution with fewer components and actuators for the pressure differential ventilation in stairways and escape tunnels as conventional systems. The system is also available with smoke extraction function.

very low energy consumption during the ventilation process.

\*Optional smoke extract fan certified to EN 12101-3 F300 (Smoke- and heat control systems - part 3: Specification for powered smoke and heat exhaust fans) and DIBt approved.

A standard MUB unit is designed for residential buildings up to eight floors. The capacity can be increased by parallel operation. Higher buildings normally require several supply air units installed at different positions in the stairway. Alternatively a unit controlled by frequency converter can be used.

The complete system as well as its components meets the requirements according to EN 12101-6 (Smoke and heat control systems - part 6: specification for pressure differential systems). The adjusted EC motor regulation unit guarantees a standardised regulation performance plus

The self-regulating EC control panel is connected to the fan unit via a 0-10V-signal. There is just one standard 230 V cable necessary for the control unit. The operating switch of the EC ventilation unit is directly wired to the power supply.

Systemair's complete solution includes integrated flap control, connections for smoke detectors, manual call points and a fire indicator panel.

Individual solutions are especially designed by Systemair for your applications.

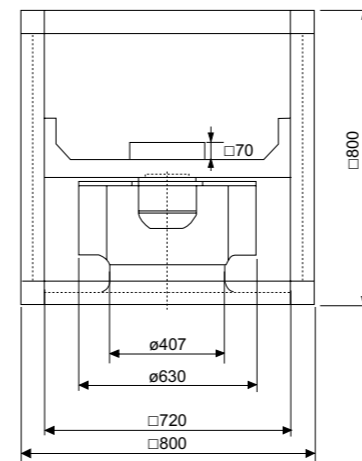
## Technical data MUB-EC



- 100 % speed controllable
- Integrated electronic motor protection
- Installation in any mounting position
- Low noise level
- Flexible airflow direction due to removable panels
- Safe and maintenance free operation
- Energy-saving

MUB 062		630
Voltage/Frequency	V/50 Hz	400
Phase	~	3
Power	W	2560
Current	A	3,90
Max. air flow A/B	m <sup>3</sup> /h	13050
R.p.m A/B	min <sup>-1</sup>	1210
Max. temp. of transported air	°C	60
Max. temp. of transported air when speed-controlled	°C	60
Sound pressure level at 3 m A/B (20 m <sup>2</sup> Sabine)	dB(A)	67
Weight	kg	95
Insulation class, motor		F
Enclosure class, motor	IP	54

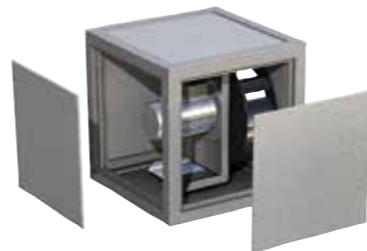
The MUB-EC fans are driven by EC-external rotor motors. These are energy saving motors with high efficiency. The power electronics are integrated in the motor housing. All models have one potential-free terminal for error message. The input voltage for single phase units can vary between 200 and 277V, for three phase units between 380 and 480 V. Speed control by a 0-10 V-signal. All models are equipped with impellers with backward curved blades, manufactured from aluminium. The casing consists of an aluminium frame with fibreglass reinforced plastic corners of PA6; highly shock-resistant. The double skin panels are manufactured from galvanized steel with 20 mm mineralwool insulation. To avoid condensation the profile is provided with a separate chamber to fix the screws. The panels are removable, any outlet side can be chosen, allowing flexible ventilation solutions.



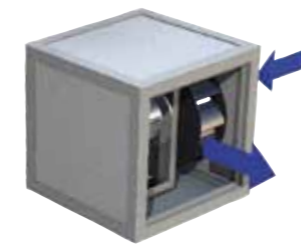
### Change the exhaust direction on site by simply changing the positions of the side panels!



Straight through airflow



Change the exhaust direction



Exhaust to the side

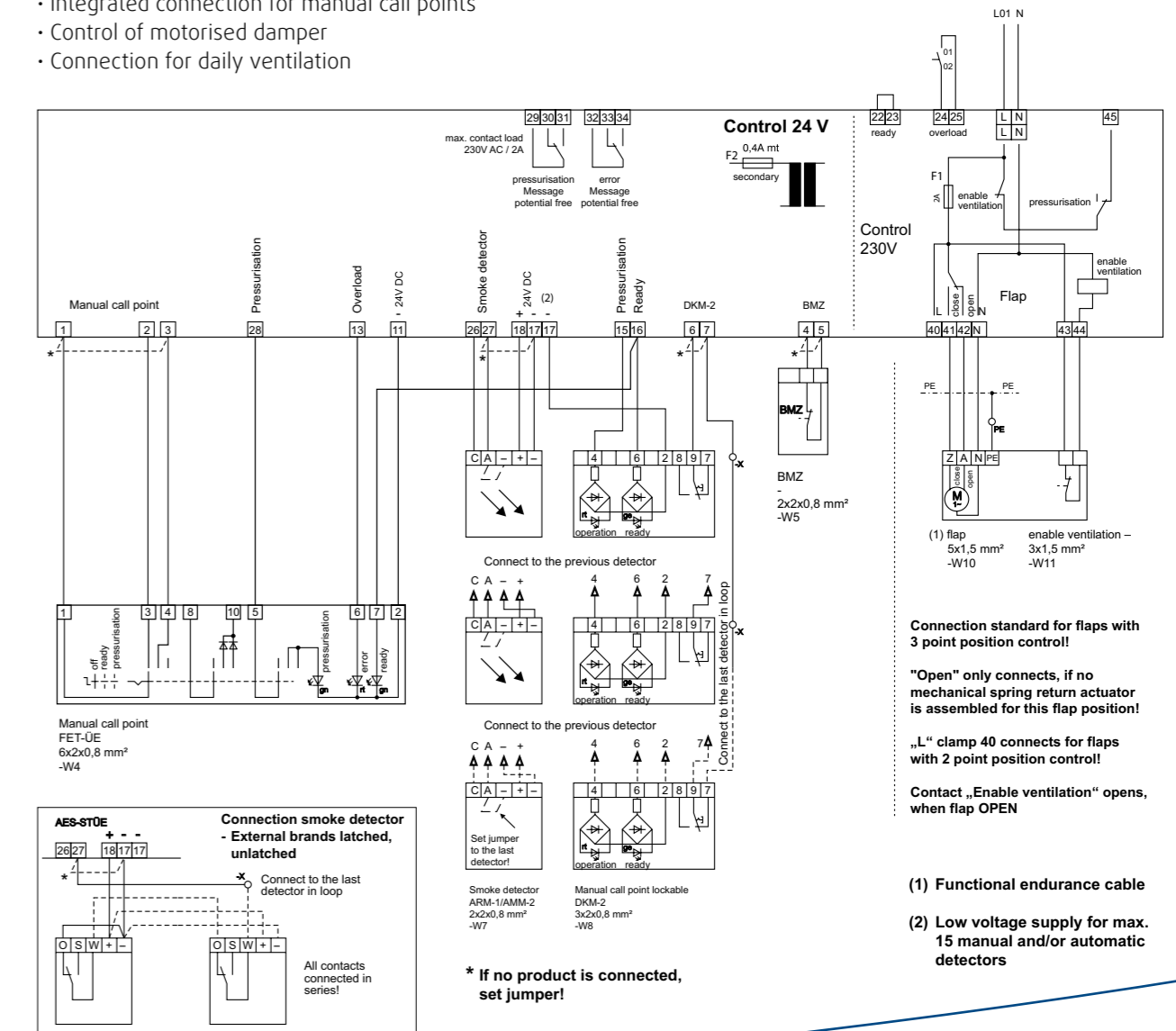
## Connection diagram MUB-EC

### Control panel DS-1 for MUB-EC

- Pressure differential regulation module as control cabinet for wall mounting
- Integrated module for EC driven motors
- Automatic regulation system for customisation of operational characteristics via numeric display
- Display of the operational characteristics in real time
- Integrated connection for suitable smoke detectors
- Integrated connection for manual call points
- Control of motorised damper
- Connection for daily ventilation

### Control panel DS-2 for MUB FU-P/B

- Pressure differential regulation module as control cabinet for wall mounting
- Integrated frequency converter for three phase motors
- Automatic regulation system for customisation of operational characteristics via numeric display
- Display of the operational characteristics in real time
- Integrated connection for suitable smoke detectors
- Integrated connection for manual call points
- Control of motorised damper
- Connection for daily ventilation



Connection standard for flaps with 3 point position control!  
 "Open" only connects, if no mechanical spring return actuator is assembled for this flap position!  
 „L“ clamp 40 connects for flaps with 2 point position control!  
 Contact „Enable ventilation“ opens, when flap OPEN

- (1) Functional endurance cable
- (2) Low voltage supply for max. 15 manual and/or automatic detectors