

# CONTROL UNITS



**S-200**



**The FUMEX automatic control unit offers good work environment, is adapted to all kinds of systems and very quiet. In addition it is a great energy-saver.**

The control unit includes both reliable components adequate for the purpose, and recommendations for choosing a suitable system.

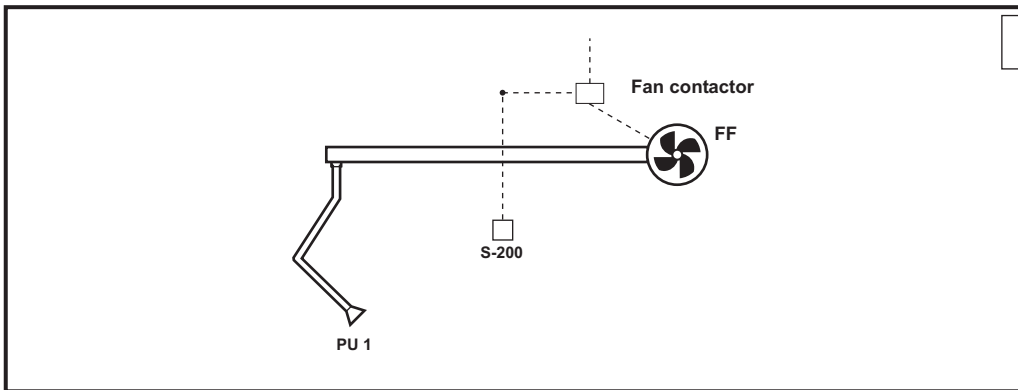
On pages 2 and 3, please find suggested system solutions that will meet your needs. The examples show local extractor arms in different system solutions. The control unit may also be used for other applications, such as exhaust fume extractors and extractors directly attached to machines. Most kinds of indicators, e.g. for gas, heat, light, vibrations etc. may be combined with the control unit S-200.

Do not hesitate to contact us at FUMEX, we will be happy to help you optimize your extraction unit or calculate your energy savings.

*Fumex also offers a range of local extractors, fans, accessories and filters for our local extractors.*

**FUMEX®**  
LOCAL EXTRACTOR  
**Pure advantage**

# SUGGESTED SYSTEM SOLUTIONS

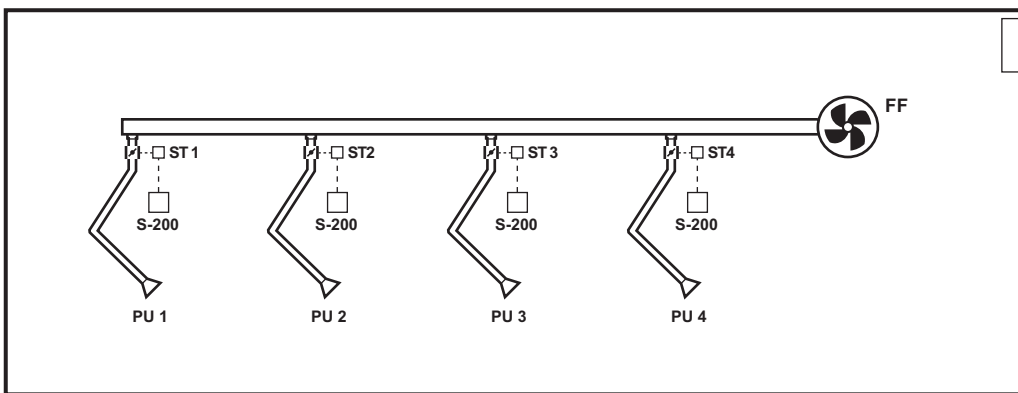


**1**

System 1 controls starting/ stopping of the fan with control unit S-200. (On p 4 of this leaflet the possibilities of S-200 are described).

Suitable for automatic operation during work in progress.

A great energy-saver.

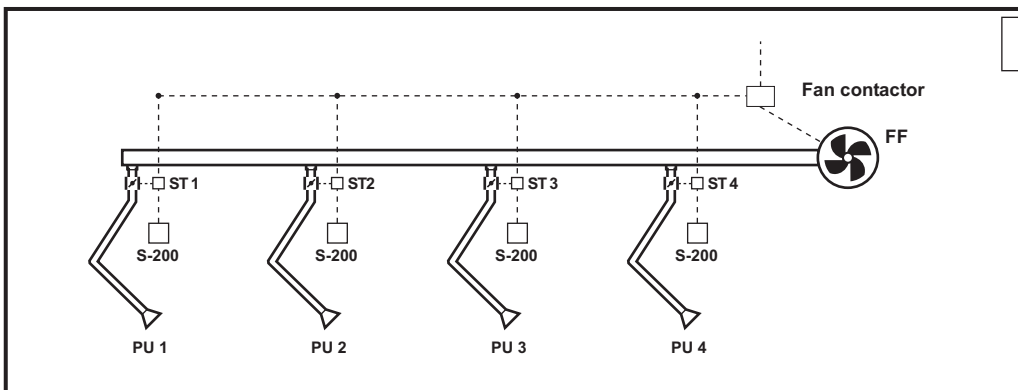


**2**

System 2 controls opening/ closing of dampers with control unit S-200. Starting/ stopping function of the fan is manually operated.

Suitable for workplaces with varying number of extractors in operation.

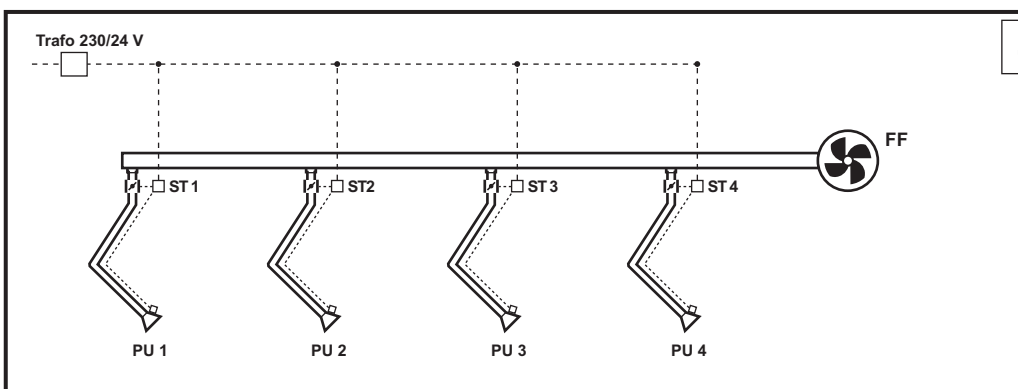
Saves energy as well as plant equipment.



**3**

System 3 controls opening/ closing of dampers as well as starting/ stopping of the fan.

Suitable for temporary use of the extractor system and for workplaces with varying numbers of extractors in operation.

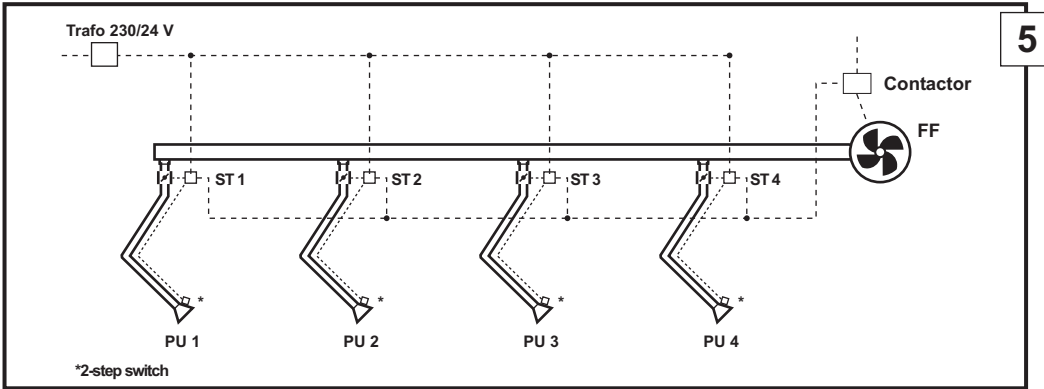


**4**

System 4 controls opening/ closing of dampers manually via a switch on the extractor arm. The fan is started/ stopped with a central switch.

A simple and cost-effective energy-saving solution.

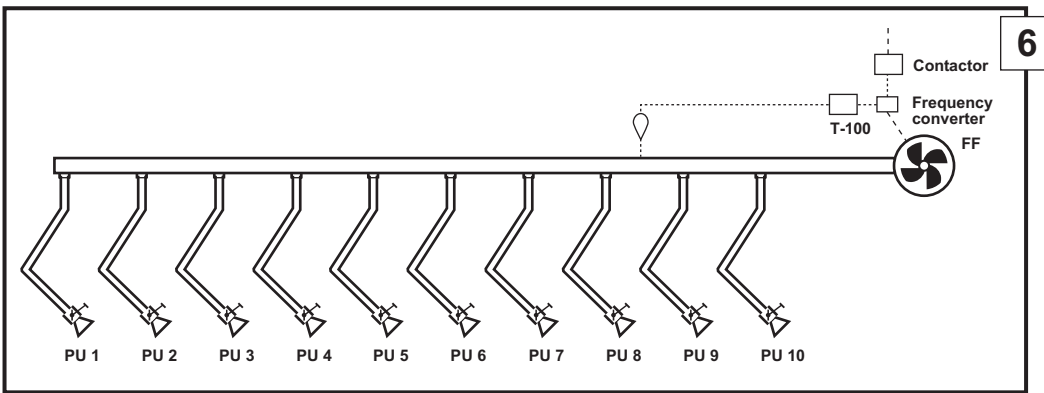
# SUGGESTED SYSTEM SOLUTIONS



5

System 5 controls opening/closing of dampers as well as starting/ stopping the fan. This is done manually using a switch on the extractor arm.

Saves more energy than alternative 4.

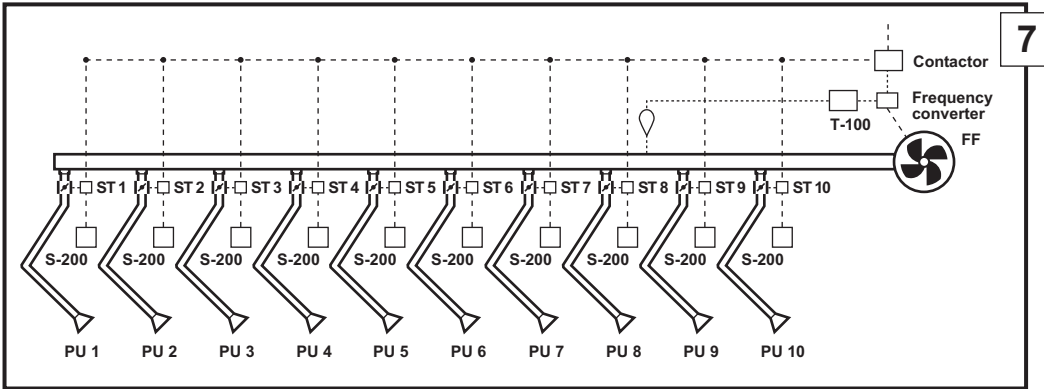


6

System 6 with a pressure regulator keeps constant duct pressure with a frequency converter. The extraction is manually operated with the dampers on the extraction arms.

Suitable where the right amount of extracted air in each extractor is required, regardless of how many extractors are in operation.

A great energy-saver that operates at the lowest possible sound-level.



7

System 7 with a pressure regulator keeps steady duct pressure with a frequency converter. Automatic damper control with control unit S-200.

Suitable where the right amount of extracted air in each extractor is required, regardless of how many extractors are in operation.

Saves more energy than alternative 6 and is easier to use with the all-automatic damper control.

ONLY CONNECTIONS BETWEEN INTEGRATED PARTS ARE SHOWN ABOVE. IN SOME CASES CURRENT FEED MUST BE ADDED.

# THE COMPONENTS

**Alt. A**  
For welding.  
Pliers sensor with time-delay 1994 (clamped onto underground cable to welding set)

**Alt. B**  
For manual control.  
from component 1992  
Cable mounting along the arm

**Alt. C**  
Sensor SR.  
Exhaust hose reel.

**Alt. D**  
Industrial sensor

### CONTROL UNIT S-200

Measurements .. 160x160x85 mm  
Sealing grade ..... IP 54  
Current feed ..... 230 V~, 1-phase (max 6A) 1 kVA  
Accessories ..... A range of sensors  
..... External switches  
..... Timecard for optional time-delay 30 s - 15 min

For automatic control of dampers and/or fan. Time-delay for extraction of secondary fumes. Direct control of 1-phase fans (max 4,4 A) with built-in relay, others are controlled by external switches. Also available with capacitive sensor to hose reel or remote switch for mounting on extractor arm. Other kinds of sensors may also be connected to the control unit.

Measuring outlet, static pressure

Frequency converter

### PRESSURE REGULATOR T-100

Measurements .... 234x141x95mm  
Sealing grade ..... IP 44  
Working radius .... 0-1, 0-2 & 0-5 kPa  
Current feed ..... 230 V~, 1-phase (5 VA)  
Control signal..... 0-10 V (alt 4-20 mA)  
Accessories ..... Measuring outlets and 3 m hose

Provides steady underpressure in the extraction duct, via the frequency converter that controls the fan rotation speed. Guarantees adequate flow in each extractor respectively, regardless of number of extractors in operation. A great energy-saver with the lowest possible sound-level. May also be used for damper control.



#### Protective motor contactor

Sealed contactor with overload circuit breaker. Sealing grade IP 55. Max 25 A. Please state rated motor current. Used together with external switch or control.



#### Protective motor switch

Manually operated, sealed protective motor switch. Sealing grade IP 55. Max 25 A. Equipped with switch I-0 for starting/stopping the fan and with built-in overload circuit breaker. Please state rated motor current. Used as motor protector with external switch, or as a complete motor protector and switch at manual fan operation. Most sizes of the switch also work as fusing.



#### Frequency converter

For variable speed control of fan. Used together with pressure regulator or other automatic device, or with a potentiometer for manual operation of the fan. Voltage interference filter available. Meets current requirements. Sealing grade, standard, IP 20. Available in higher sealing grades.



#### Automatic damper

Automatic throttle damper. The standard design includes an adjusting unit type Belimo LMC 230-F. The LMC24-F is also available. Works with voltage in both directions of propagation. The adjusting unit is available with alternating contact. The LMC230-F is dimensioned for 15 VA with power consumption of 1.5 W. The corresponding figures for LMC24-f are 3 VA and 2 W respectively. Sealing grade IP 54. The adjusting unit is electrically insulated and delivered with a 1 m cable for connection. Time-delay for 90° is 25-30 seconds. For other damper solutions, please contact Fumex.