

RXP 212: Pneumatic operating unit

How energy efficiency is improved

Permits fume cupboards to be switched off manually in order to save energy.

Areas of application

Monitoring of fume cupboards in combination with an air-volume controller, type RLP 100.

Features

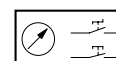
- Alarm function
- Visual monitoring of deviation
- Setpoint of front sash opening is fed to the controller by the TUP 224F901
- Comparison with actual value
- Setpoint is specified to controller via the manual switch on the operating unit
- Aluminium front panel with manual switch, mute button and pressure gauge
- Suitable for panel or wall mounting
- Compressed-air connection on plug nipple for flexible plastic hose (dia. = 4 mm)

Technical description

- Pressure gauge in accuracy class 1.6
- Manual switch for selecting between manual and automatic operation
- Mute button for acknowledging the acoustic alarm



T07768



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Type	Fitting	Position of manual switch	$\dot{V}_{\max}$	Positions	Weight kg
RXP 212 F001	vertically	emergency mode; damper fully open		2	0,2
RXP 212 F002	horizontally	emergency mode; damper fully open		2	0,2
RXP 212 F003	vertically	100% air volume, controlled		4	0,2
RXP 212 F004	horizontally	100% air volume, controlled		4	0,2

Manual switch and Mute button:

Nominal flow Q_N	(1,0 bar → 0)	3,0 m ³ /h
Max. leakage rate	(2,5 bar → 0)	1,2 l _n /h
Max. pressure/differential pressure		2,5 bar

Pressure gauge:

Error	Class 1,6
Max. operating pressure	1,4 bar

Permissible ambient temp.		0...55 °C	Dimension drawing	M03226
Wiring diagram	F001/F002	A04869	Fitting instructions	MV 505314
	F003/F004	A08539		

Accessories

0297780 001* Housing, including two screws, for wall mounting; not tested for explosion-free zones.

*) Dimension drawing or wiring diagram are available under the same number

For regulations on the quality of the air supply, especially at low ambient temperatures, see Section 60

Operation

Together with the RLP 100 F123 controller and the RXP 210 alarm unit, the operating unit monitors the air volume in the fume cupboard. The amount that the fume cupboard's sash is open is fed as a setpoint to the relevant VAV controller (RLP 100 F123) and compared to the actual value of the air volume (F001, F002). On the F003/F004 models, the amount that the fume cupboard's sash is open is fed as a setpoint (via the operating unit's manual switch) to the VAV controller and compared to the actual value of the air volume.

Any deviation is indicated visually (in accordance with DIN 12924) on the RXP 212. In the event of a malfunction, an acoustic signal is emitted by the RXP 210 alarm unit. It can be stopped by pressing the 'Mute' button on the operating unit for about two seconds (closes connector 6 on the alarm unit).

Pressure gauge For indicating the offset in air volume ($\Delta \dot{V}$).
Green sector: actual value = setpoint.
Red sector: the actual value is smaller or larger than the setpoint.

Manual switch RXP 212 F001, F002: with $\dot{V}_{\max}$ position (emergency mode; damper fully open) and $\odot$ position (control mode).
RXP 212 F003, F004: with $\dot{V}_{\min}$ position (minimum air volume, controlled), $\odot$ position (control mode), $\dot{V}_{\max}$ position (100% air volume, controlled), and $\odot$ position (control mode).

Mute button to suppress the alarm.

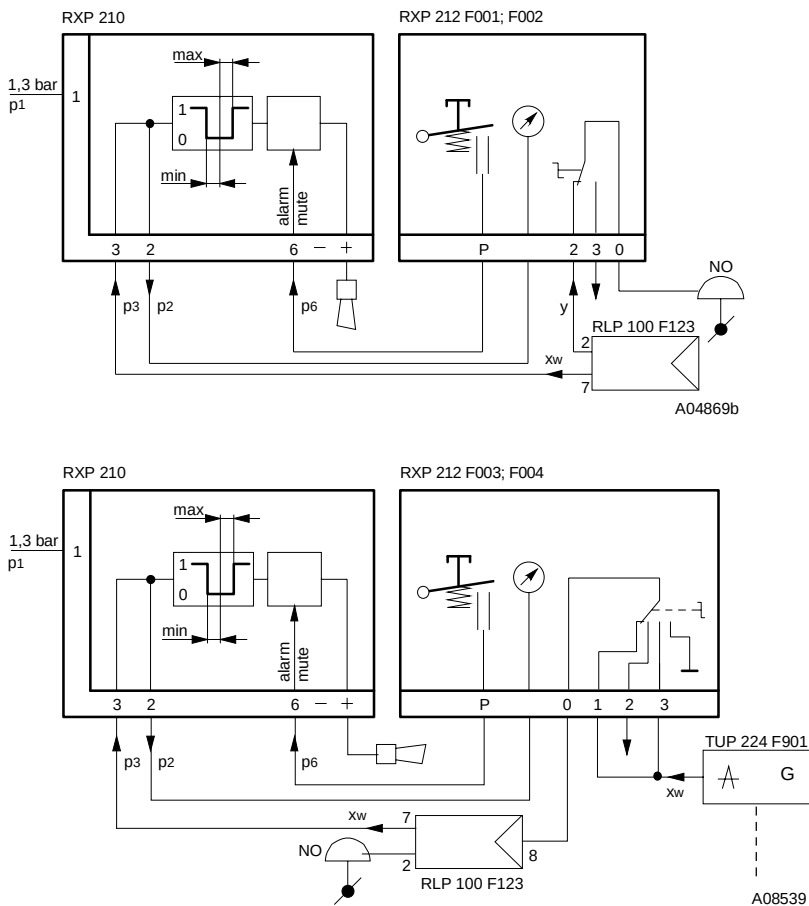
Technical information

Technical Manual VAV 7 000 621 001

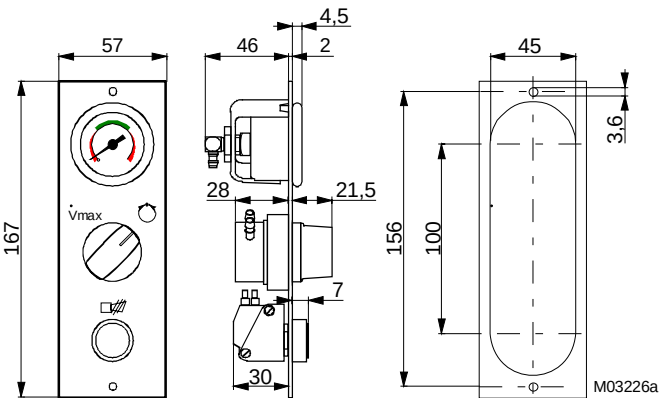
Additional information on accessory

0297780 001 Housing of black glass-fibre-reinforced thermoplastic. Due to the suitable choice of materials, the surface resistance is not higher than $10^9 \Omega$. When used in compliance with the guidelines, and when carrying out servicing and cleaning, no electrostatic charges occur. The housing complies with the EN 50014 standard.

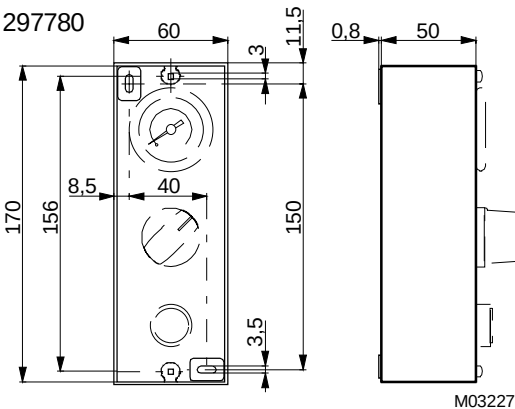
Connection diagram



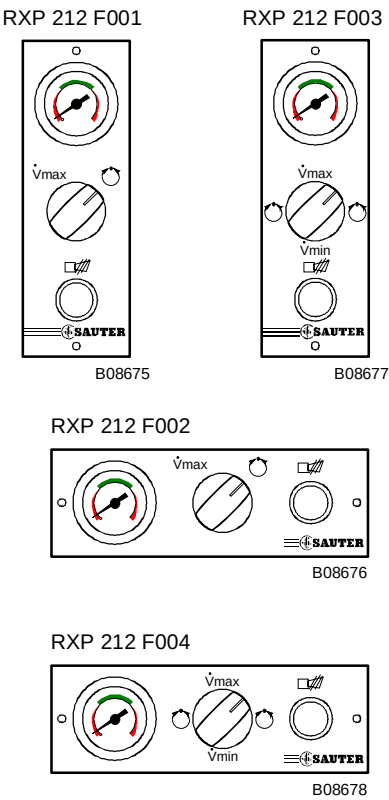
Dimension drawing



Accessories

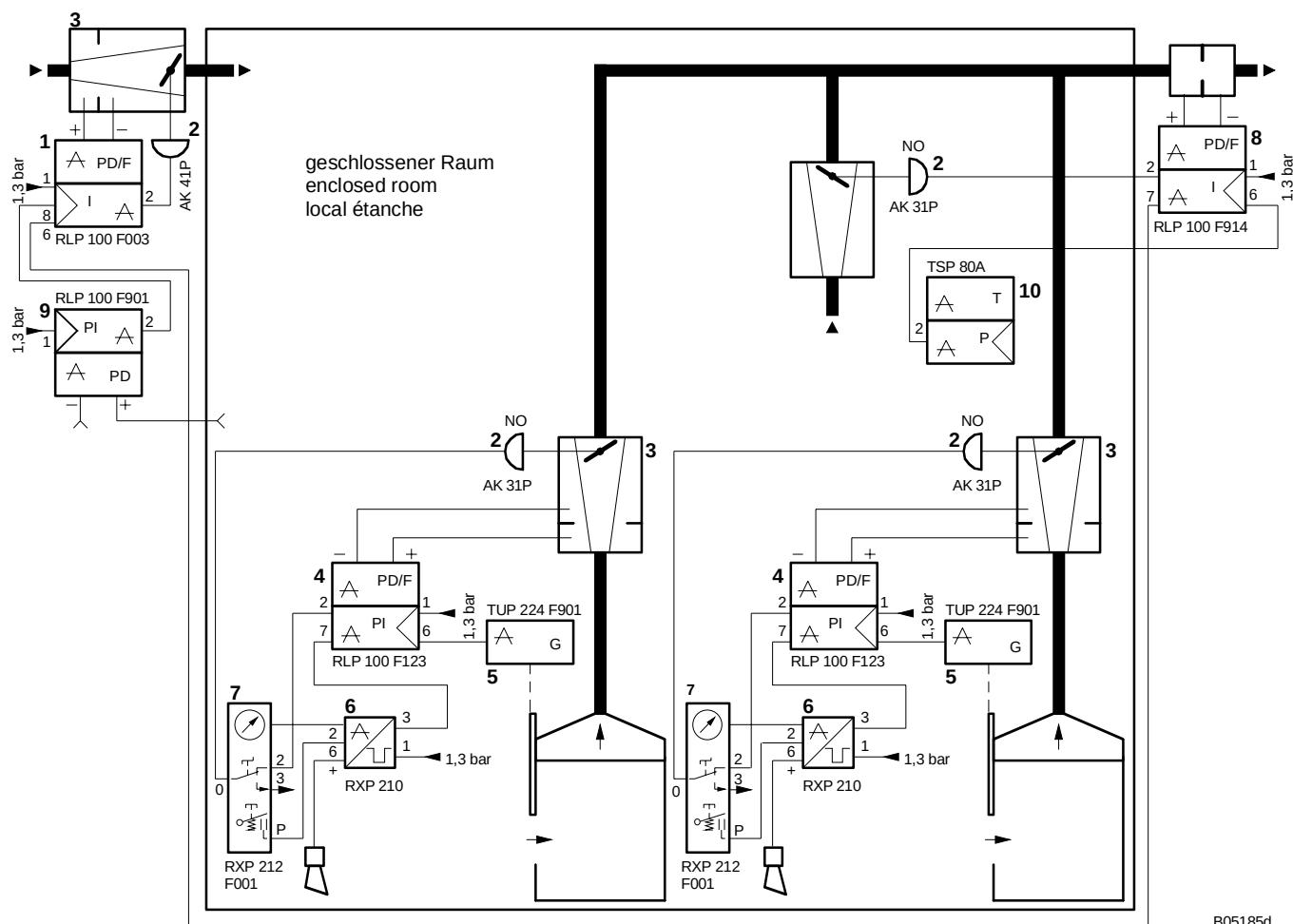


Variants



Example of use

Volume of return air controlled in proportion to the opening of the fume cupboard's sliding door; with sash sensor, alarm unit and operating unit; taking the room temperature into account.

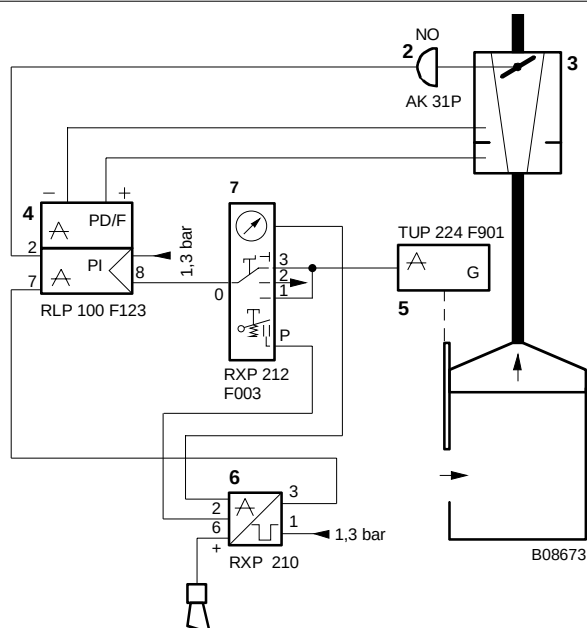


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Variant: RLP 100 F123

with: alarm unit RXP 210 and
operating unit RXP 212 F003
(manual switch $\text{Aut-}\dot{V}_{\min}-\text{Aut-}\dot{V}_{\max}$)

- | | |
|----|--|
| 1 | Volume-flow controller |
| 2 | Damper drive, NO |
| 3 | Reducing box |
| 4 | VAV return-air controller for fume cupboards |
| 5 | Sash sensor |
| 6 | Alarm unit |
| 7 | Operating unit |
| 8 | Room RA controller for aggressive gases |
| 9 | Pressure controller |
| 10 | Room-temperature controller |
| NO | Normally open (drucklos offen) |



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