

RXP 210: Air-volume alarm unit

Used in conjunction with the RLP 100 F123 VAV controller and the RXP 212 operating unit for monitoring the air volume in relation to the sash opening of a fume-cupboard; with visual and acoustic alarm signals (as per DIN 12924). The air volume's setpoint (which is dependent on the amount that the sash is open) is compared in the VAV controller to the actual value, and the difference is fed to the alarm unit. The VAV alarm unit complies with EN 13463-1 and EN 1127-1 (Ex II 2 G T6) and can be employed in Zone 1 areas where there is a risk of explosion. Conforms to the regulations on pressure equipment (97/23/EG Art. 3.3).

Housing is made of thermoplastic; front plate with adjustment knobs for the permissible volume-flow deviations (min/max). Supplied with whistle for the acoustic alarm. Suitable for fitting onto rails (C EN 50024 or EN 50022, see accessories) or walls. Compressed-air connections: Rp 1/8 female thread. Two stepped connectors for soft plastic tubing of 4 or 6 mm internal dia.



T05 183



Y03188

Type	Description	Air capacity ³	Air consumption ¹⁾	Weight kg
RXP 210 F001	for monitoring the air flow	180 l _n /h	40 l _n /h	0.2
Supply pressure ²⁾	1.3 bar ± 0.1	Response sensitivity	1%	
Input pressures		Perm. ambient temp.	0...55 °C	
connector 3	0...1.3 bar	Degree of protection	IP 20	
connector 6	0.1...0.6 bar			
Output pressures		Connection diagram	A09890	
connector 2	0...1.3 bar	Dimension drawing	M297240	
connector +	approx. 1.0 bar	Fitting instructions	MV 505381	

Accessories

0296936 000* Bracket for rail EN 50022, 35 × 7,5 and 35 × 15

0297354 000* Short screw-in connector Rp 1/8 for soft plastic tubing of internal dia. 4 mm, four pieces required

0297797 001* Manometer with indication of deviation in air volume

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

1) Extra air consumption when whistle is activated: 180 l_n/h

2) For regulations on the quality of the air supply, especially at low ambient temperatures, see section 60.

3) Air output at connector +.

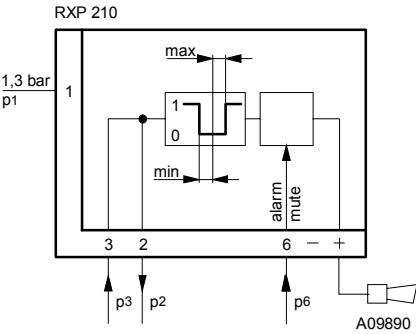
Operation

Together with the RLP 100 F123 controller, the alarm 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 and compared to the actual value of the air volume. Any deviation is indicated visually in accordance with DIN 12924 (RXP 212 operating unit). In the event of a malfunction, an acoustic signal is emitted, e.g. whenever the actual value of the air volume is either smaller (min.) by > 8% \dot{V} or larger (max.) by 10% \dot{V} than the setpoint (factory setting). The 'min.' adjuster should not be set to a difference of > 8% \dot{V} . The whistle sounds after a delay of four to twelve seconds. It can be stopped by closing connector 6 (pressing the 'mute' button on the RXP 212 operating unit for about two seconds). When actual value again equals setpoint, the acoustic alarm is again ready for operation.

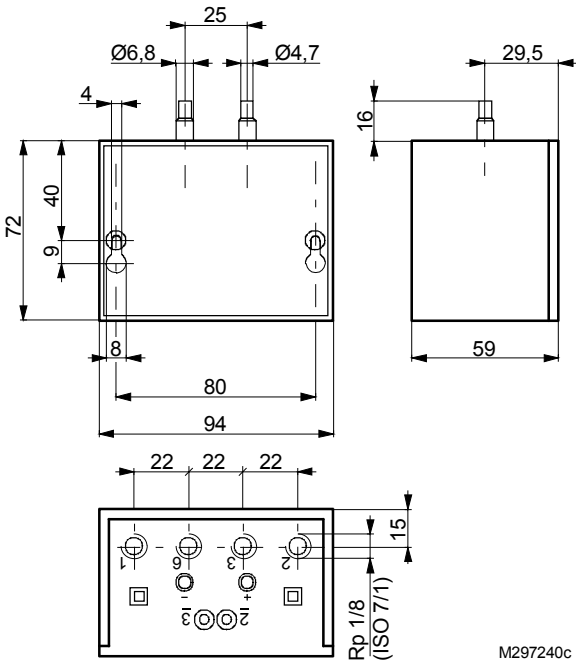
Technical information

Technical manual VAV 7 000621 003

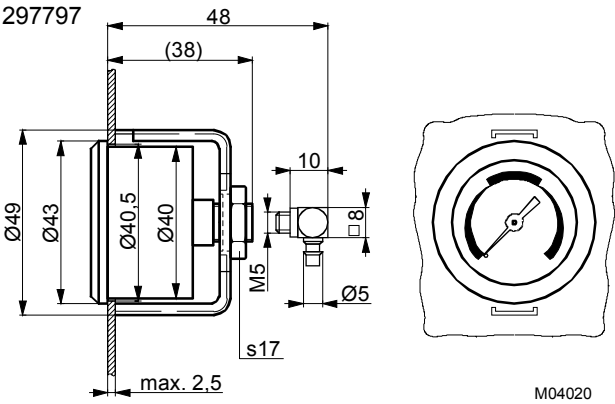
Connection diagram



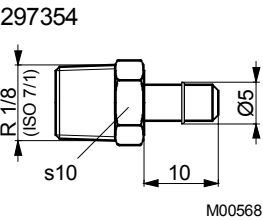
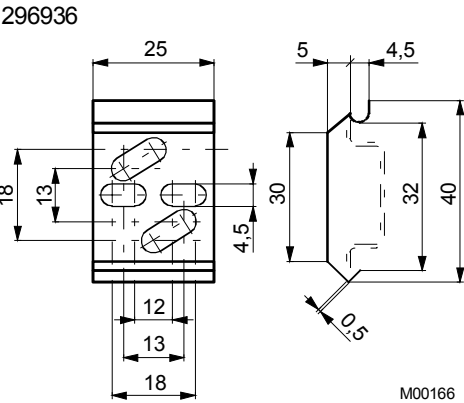
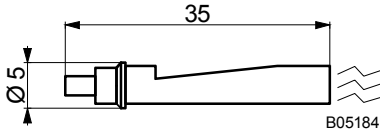
Dimension drawing



Accessories

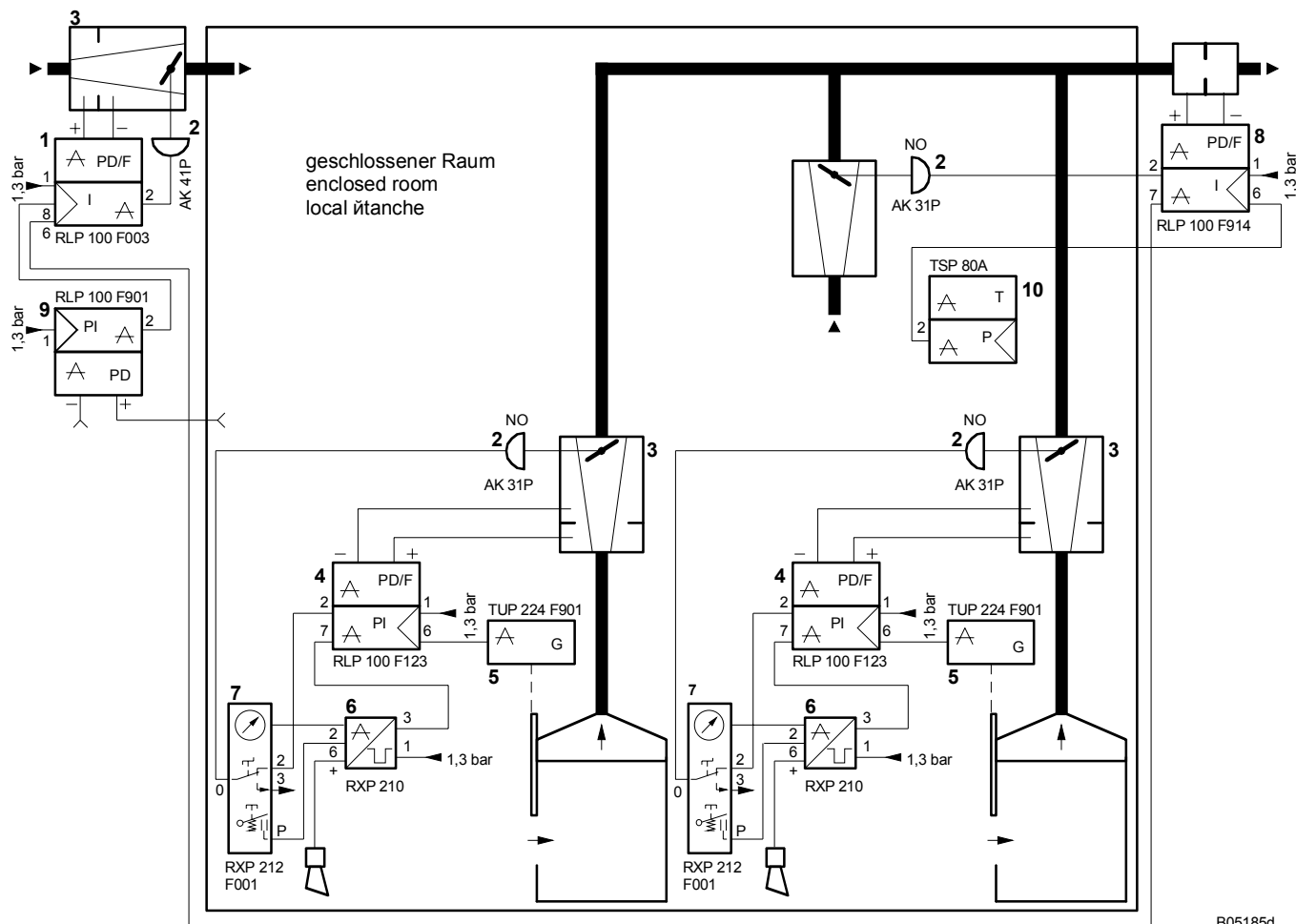


Alarm whistle (included in delivery)



Example of use

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



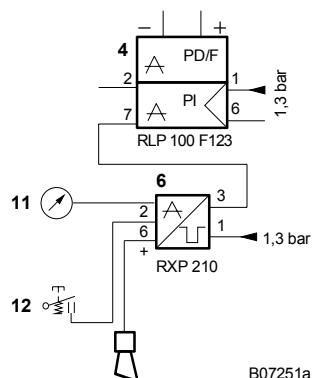
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1	Volume-flow controller	8	Room return-air controller for aggressive gases
2	Damper drive, NO	9	Pressure controller
3	Reducing box	10	Room-temperature controller
4	VAV return-air controller for fume cupboards	11	Manometer 0297797
5	Sash sensor	12	Mute button, alarm reset
6	Alarm unit		Micro-valve S0-3-PK-3-B
7	Operating unit		Pressure switch AT-06-B (made by Festo)
			NO = normally open

Variant: RLP 100 F123

with: alarm unit

without: operating unit



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