Ventilator insert Silvento V...
Installation directions

- Please pass on to the user -

Contents: **Page:**

Notes on these instructions

- Read these instructions carefully and completely prior to starting installation! Be sure to observe the safety precautions in general as well as the safety symbol marked notes in the text.
- Pass these directions on to the user (renter, owner, block manager or other) when installation has been completed.

Symbols in these directions:

This symbol warns on danger of injury

This symbol warns on danger of injury by electricity

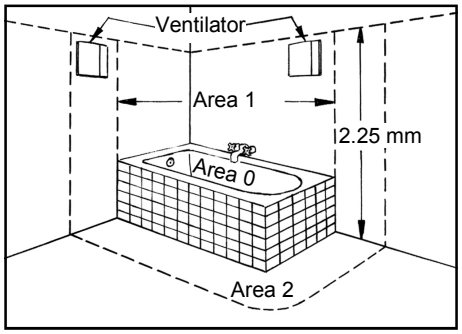
Safety precautions

Danger! Assembly work is only to be carried out on the ventilator when it is separated from the line voltage! The ventilator is protectively insulated to protective class II, the protective conductor protection is not needed!

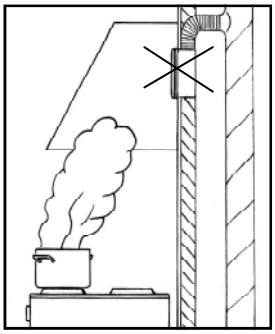
Caution! Electrical connection is only to be made by authorised skilled personnel and under observance of current VDE 0100 regulations of the German Electrical Engineering Association!

Caution! This piece of equipment is not to be operated (filter change, cleaning) by children or people who cannot operate it properly because of their physical, sensorial or mental ability, or their inexperience or lack of appropriate knowledge.

Ventilators in off-air exhaust operation must <u>always</u> be supplied with a functioning flow-in of outside air.



The German VDE 100 regulation permits installation in bath and shower room area 1



Ventilator installation as extractor hood is not permitted here

Technical specifications

Electrical connections

Voltage supply:	230 V AC 50 Hz
Control voltage (ventilator type ... FK):	12 V DC
Protection class:	II
Protection type:	IP X4
For use in area 1 of wet rooms	

General

Silvento type	Volume flow	Power consumption	Sound-pressure level	Run-out time	Interval	Inverse operation	Movement sensor	Humidity control range
V[1] or KL[2]	[m³/h]	[W]	[dB(A)]	[min.]	[h]			[% rh]
30/60/100	30/60/100	4.9/10.5/36.5	24/35/44					
30/60B	30/60	4.9/10.5	24/35				yes	
30/60ZII	30/60	4.9/10.5	24/35	6/ 15[3]	4	yes		
30/60BZII	30/60	4.9/10.5	24/35	6/ 15[3]	4	yes	yes	
60ZII	60	10.5	35	6/ 15[3]	4	yes		
60BZII	60	10.5	35	6/ 15[3]	4	yes	yes	
30/100ZII	30/100	4.9/36.5	35/44	6/ 15[3]	4	yes		
30/100BZII	30/100	4.9/36.5	35/44	6/ 15[3]	4	yes	yes	
100ZII	100	36.5	44	6/ 15[3]	4	yes		
100BZII	100	36.5	44	6/ 15[3]	4	yes	yes	
30-60 FK	30/40/50/60	5.3/7.2/8.9/10.9	24/27/32/35					50 - 70

Footnotes: 1) Silvento V units are ventilator inserts that additionally require either a concealed housing or surface-mount housing.
2) Silvento KL units are complete single pipe ventilators that are clamped in the curtain wall construction. Silvento KL single pipe ventilators fit in concealed housings of LUNOS Skalar versions.
3) The updated DIN 18017-3 requires the removal of a further 15 m³ air over the ventilation system after switching off the fan.
4) 30 min run-out time

All ventilators are equipped with a Class G2 (EN 779) filter and a filter change display.

Ventilators of the “Silvento” series fulfil all requirements:

- of DIN 18017-3; Allgemeine Bauaufsichtliche Zulassung Z-51.1-215
- for low voltage (CE) acc. to EC Directives (2006/95/EG)
- for electromagnetic compatibility (CE) acc. to EC Directives (2004/108/EG)

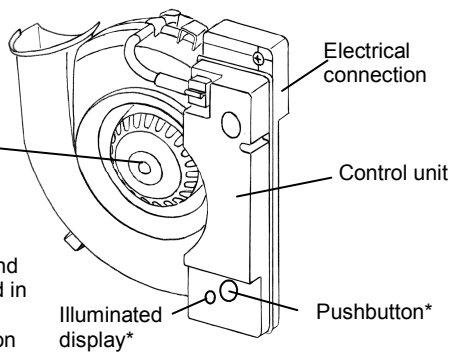
Waste disposal

Sort the packaging for appropriate disposal. Observe current requirements should you want to dispose of the ventilator. Within the framework of the Electrical and Electronic Device Act (ElektroG), the return of this device free of charge is guaranteed at your local turn-in center.

Parts supplied

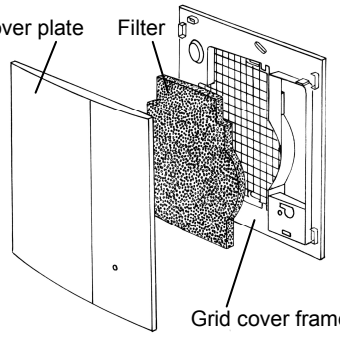
Check delivery for completeness and undamaged condition!

Ventilator insert



* Illuminated display and pushbutton are located in the grid cover frame in case of fans with motion detector

Decor plate



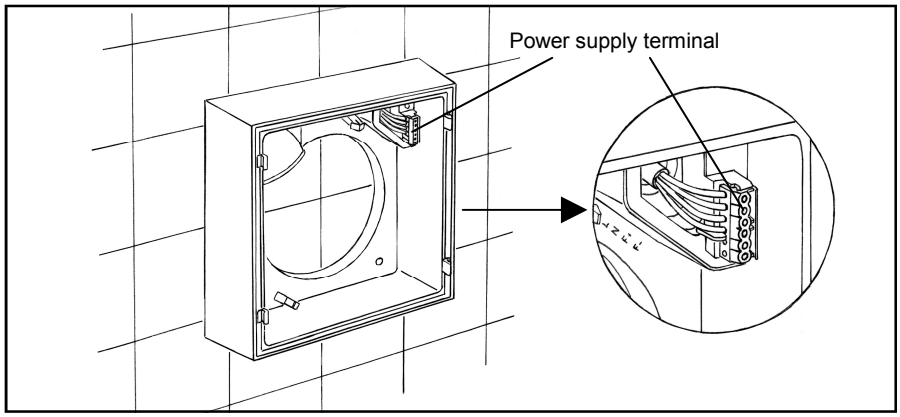
+ Screw accessories

Installation

Warning! Ventilator Installation work is only to be carried out when it is separated from the mains voltage! No additional installations and/or electrical components to or in the ventilator are permitted!

In all variants:

- Take the plaster protecting cover off of the housing if necessary
- Take the sound insulation out of the housing
- Check the electrical connection and position of the power supply terminal if necessary

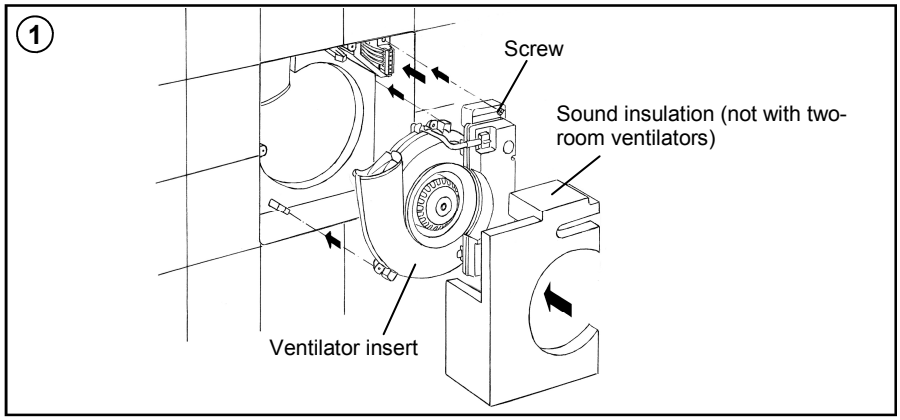


Concealed variants:

Ventilator insert installation:

- Take the plaster protecting cover off
- Take the sound insulation out of the housing
- Tightly snap-in the ventilator insert and screw to the mains supply area
- Re-insert the sound insulation (not applicable to two-room systems)

Caution: Do not operate one-room ventilators without sound insulation



Decor plate installation:

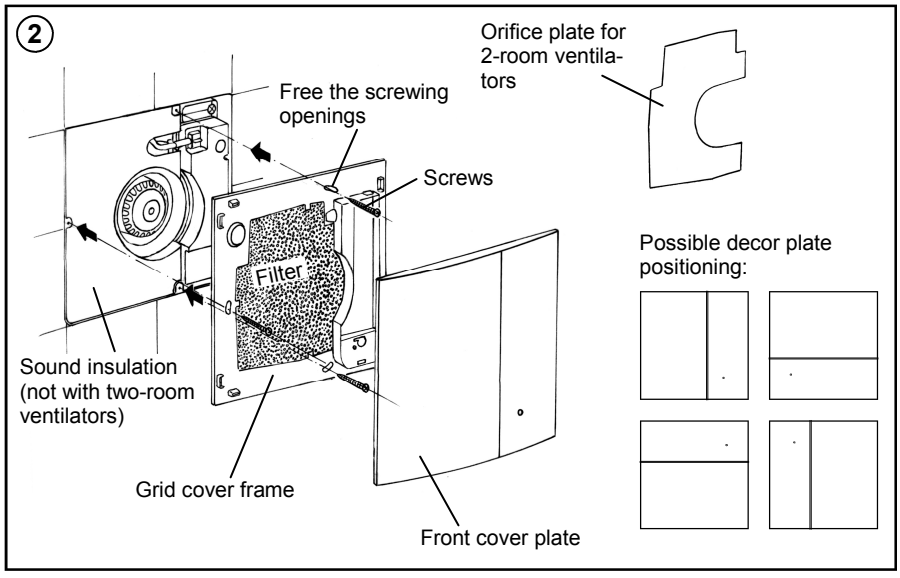
- Connect the grid cover frame to the ventilator housing with the screws supplied
- Fit the front cover part on and snap it in

Caution: Grid cover frame and front cover plate are always to be installed correspondingly to the ventilator installation position!

With two-room ventilators:

- Fit the orifice plate under the filter in the grid cover frame (two-room systems are without sound insulation)

(The orifice plate for two-room ventilators is included in the two-room accessories. It is not supplied with the ventilator insert)

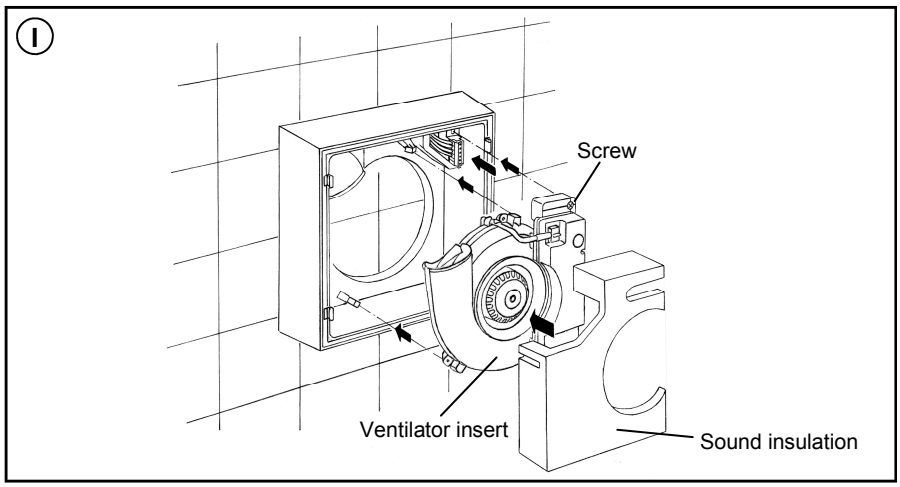


Surface mount variants:

Ventilator insert installation:

- Take the sound insulation out
- Tightly snap-in the ventilator insert and screw to the mains supply area
- Fit the sound insulation back in

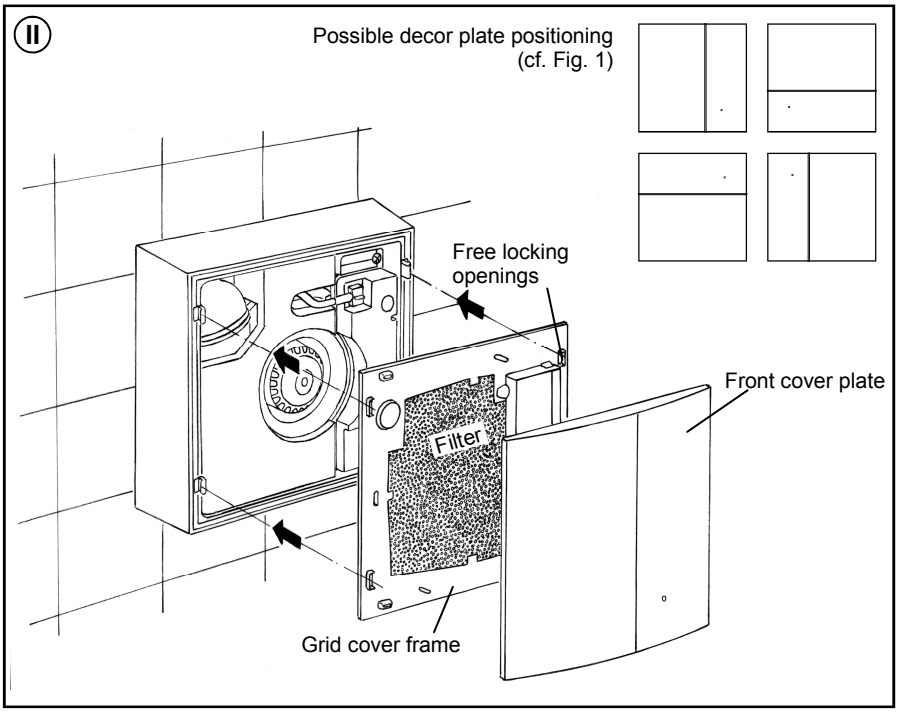
Caution:
Do not operate the ventilator without sound insulation!



Decor plate installation:

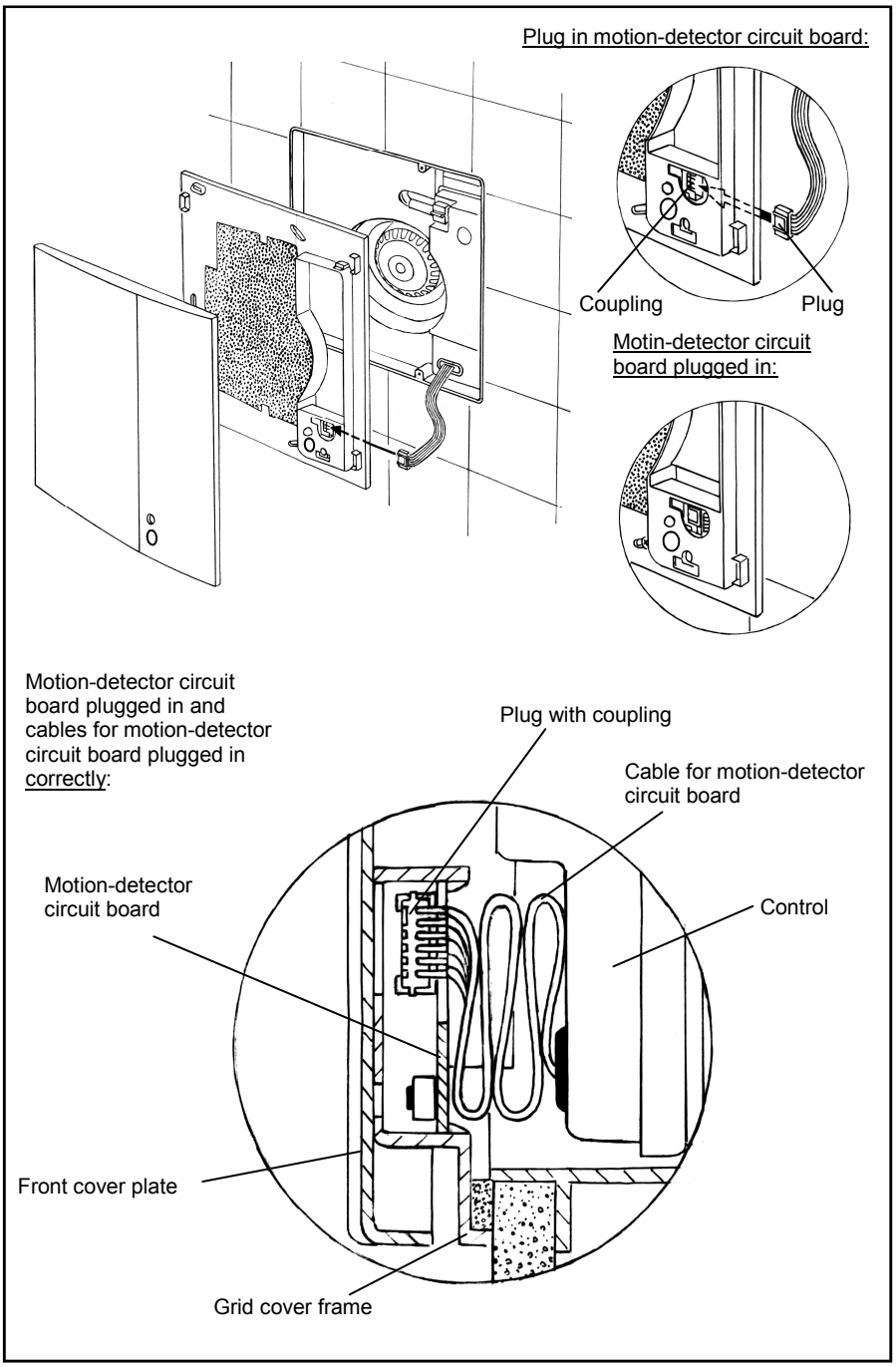
- Snap the grid cover frame on the housing.
- Fit the front cover plate on.

Caution:
Grid cover frame and front cover plate are always to be installed correspondingly to the ventilator installation position!



Installation of decor plate with movement detector:

- Mount the ventilator, insert the sound insulation
- Free the locking or screwing openings in the grid cover frame
- Plug in the cable for the motion – detector circuit board
- Snap the grid cover frame in or screw it on. Hereby lay the cable below the motion-detector circuit board (do **not** clamp it!)
- Put the front cover part back on and snap it in



Electrical connections - Wiring diagrams

Safety precautions:

⚠ Caution! Only carry out installation work on the ventilator when it is separated from the mains voltage! The ventilator is protectively insulated according to protective class II, the protective conductor connected is not needed.

⚠ Ensure that all connecting cables to the ventilator are dead before connecting it! (Separate from the mains with at least a 3 mm contact space, e.g. electric fuse).

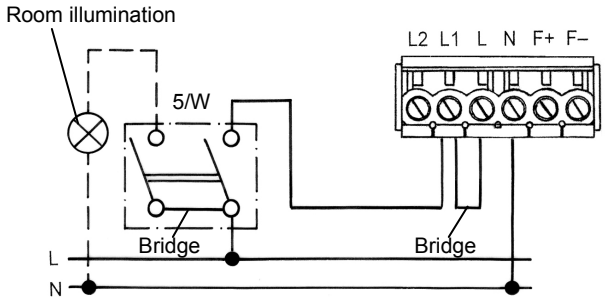
⚠ Each circuit belonging to the ventilator must be equipped with fault current protection (e.g. FI switch).

⚠ Electrical connection only by an electrician!

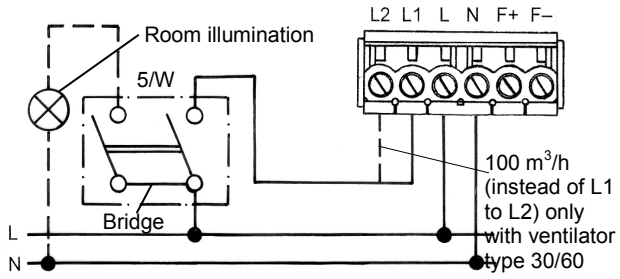
Additional installations and/ or electrical components are not permitted!

Wiring diagrams for further ventilator functions on request!

1 • **One-step operation, switchable to 60 m³/h**
(Ventilator types ... 30/60)

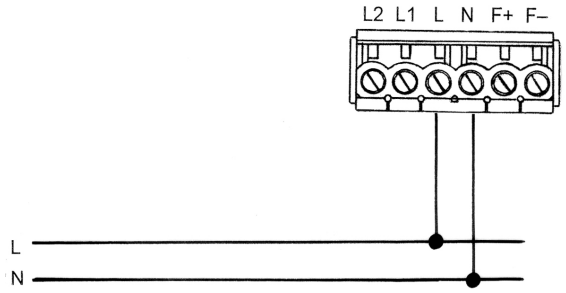


2 • **Continuous operation 30 m³/h, switchable to 60m³/h or 100 m³/h** (Ventilator types ... 30/60)
• **Run-out time controlled 60 m³/h or 100 m³/h**
(Ventilator types ... 60ZII; ... 100ZII)
• **Continuous operation 30 m³/h, with switchable run-out time controlled 60 m³/h or 100 m³/h**
(Ventilator types ... 30/60ZII; ... 30/100ZII)

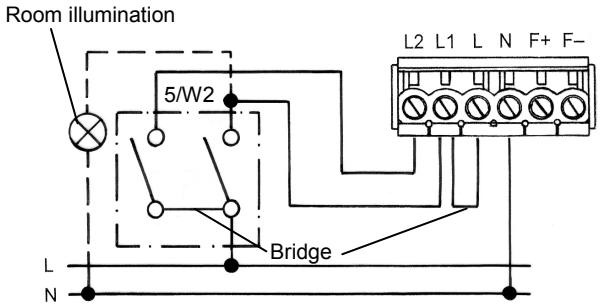


3 **With movement detector**

Note: For all circuits with movement detector
(Ventilator types ... 60BZII; ... 100BZII; ... 30/60BZII; ...30/100BZII; ... 30/60B)

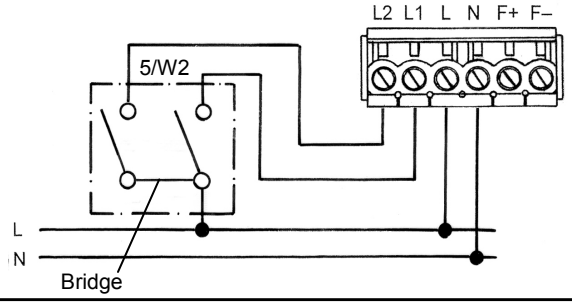


4 • **Two-step operation, switchable to 60 m³/h and 100 m³/h ON/OFF** (Ventilator types ... 30/60)



5 • **Three-step operation, continuous operation 30 m³/h, switchable to 60 m³/h and 100 m³/h**
(Ventilator types ... 30/60)

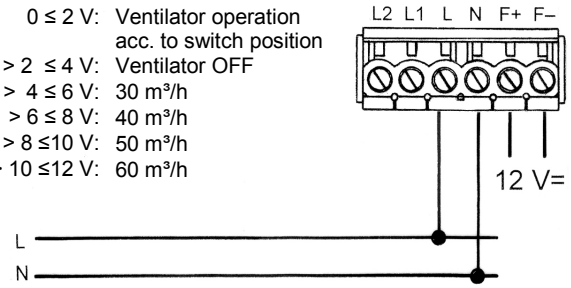
Note: Connection to light not possible



6 **With remote control** (ventilator types ... FK)

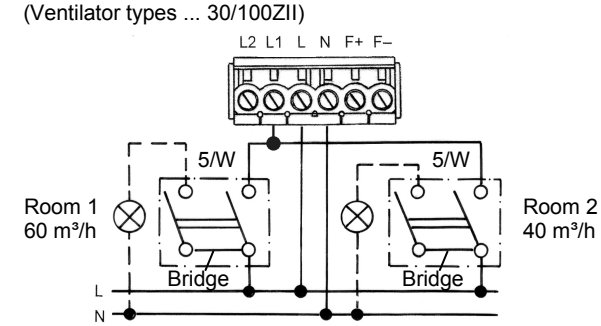
Note: Other circuits, e.g. via L1 or L2, are possible. Remote control always has priority

0 ≤ 2 V: Ventilator operation acc. to switch position
> 2 ≤ 4 V: Ventilator OFF
> 4 ≤ 6 V: 30 m³/h
> 6 ≤ 8 V: 40 m³/h
> 8 ≤10 V: 50 m³/h
> 10 ≤12 V: 60 m³/h



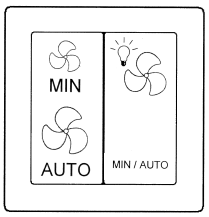
7 **Two-room ventilator with run-out time**:

• **Run-out time controlled 100 m³/h, switch-off in each of 2 rooms** (Ventilator types ... 100ZII)
• **Continuous operation 40 m³/h with run-out time controlled 100 m³/h, switch-off in each of 2 rooms**
(Ventilator types ... 30/100ZII)

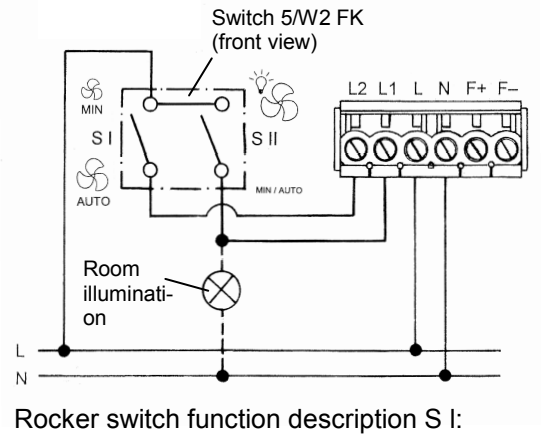


⑧ Humidity control (ventilator types...FK)

Caution! Ventilators with humidity control optimally adjust the exhaust air volume flow by means of the room air humidity and temperature



Switch
LUNOS type 5/W2 FK
Order no.: 039 840



The fan has an automatic summer/winter switchover. The illuminated display lights up green with active humidity control and red with clogged filter. The fan runs from May to September in summer operation and from October to April in winter operation. Using an integrated supply-voltage-independent clock, the fan "knows" which month it is. During the cold season and the transitional period, an excess humidification of the apartment is prevented and thus building damage and mold avoided. The system is controlled automatically and, by means of continuous adaptation of the exhaust air volume flow to the room air humidity and room temperature, it guarantees optimum comfort in the room to be ventilated. In this way, only as much ventilation as necessary, but as little ventilation as possible, is ensured and thus energy is saved. The fan never switches off completely in order to ensure a minimum air change. During summer months, the increased exterior air humidity does not make an increased level of ventilation appropriate. The automatic summer/winter changeover is overridden by operation with the rocker switch SI of the switch 5/W2 FK.

Rocker switch function description S I:

LOWERING OPERATION:
Volume flow 30m³/h, independent of the room air humidity and room temperature; function active only in the "winter months" October to April

HUMIDITY CONTROL:
Volume flow 30/40/50/60 m³/h, humidity control active; function active only in the "winter months" October to April.

Rocker switch function description S II:

Required ventilation ON:
Volume flow 60 m³/h, possible coupling with the light level.
The ventilation with 60 m³/h, by means of a priority control circuit, overrides the operating modes "Lowering operation" and "Humidity control", as well as the automatic summer/winter changeover.

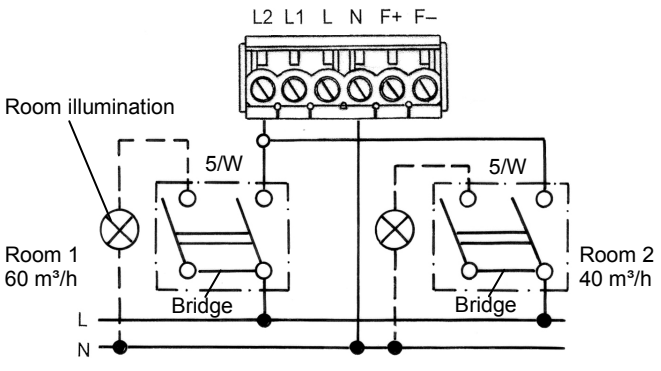
Required ventilation OFF:
Fan runs in automatic summer/winter operation according to setting of the rocker switch S I.

Remote control: Ventilator type ... FK is remote controllable via the F+ and F- connections and with 0 to 12 V.
0 ≤ 2 V: Ventilator operation according to the mains connection; > 2 ≤ 4 V: ventilator OFF; > 4 ≤ 6 V: 30 m^3/h; > 6 ≤ 8 V: 40 m^3/h; >8 ≤ 10 V: 50 m^3/h; > 10 ≤ 12 V: 60 m^3/h
Temperature switch-off: The ventilator switches off when the room temperature drops below 15°C for more than 1 hour and so helps to avoid freezing of the heating. When 17°C is exceeded, it switches on again.

Note: LUNOS standardly supplies an adhesive label set for marking switch positions when series switches from an installation-switch manufacturer are used.

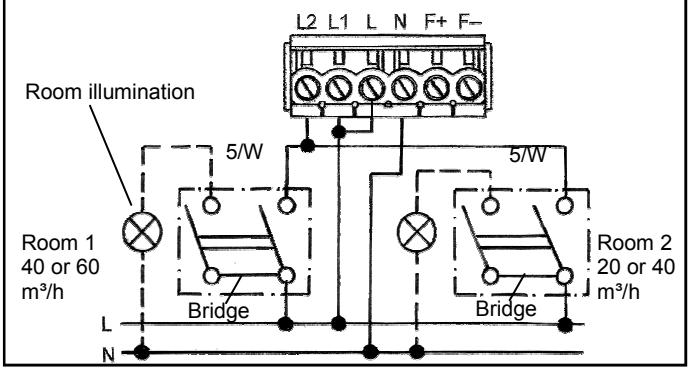
⑨ Two room ventilator

- **One step operation, switchable to 100 m^3/h from two rooms** (ventilator type ... 30/60)

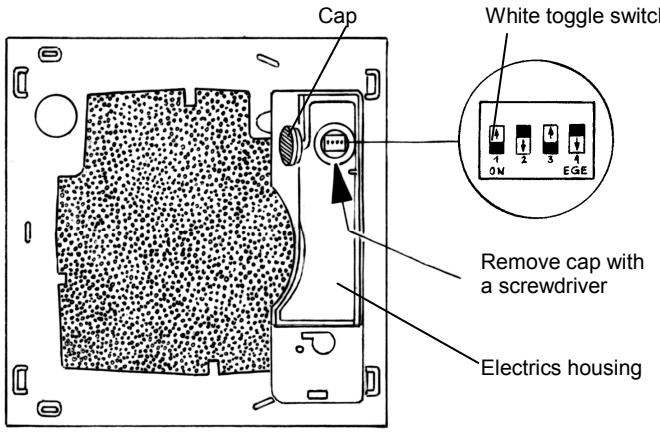


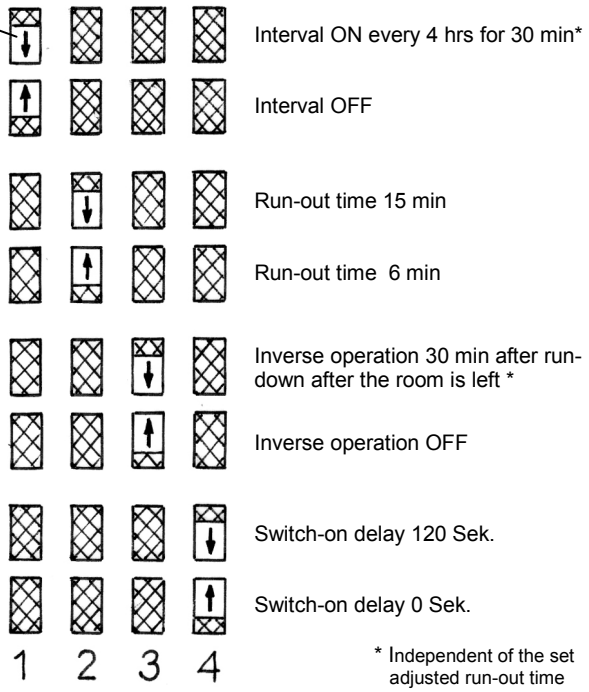
⑩ Two room ventilator

- **Continuous operation 60 m^3/h, switchable to 100 m^3/h from two rooms** (ventilator type ... 30/60)



Run-out time setting: For ventilators with run-out time 5/ZII





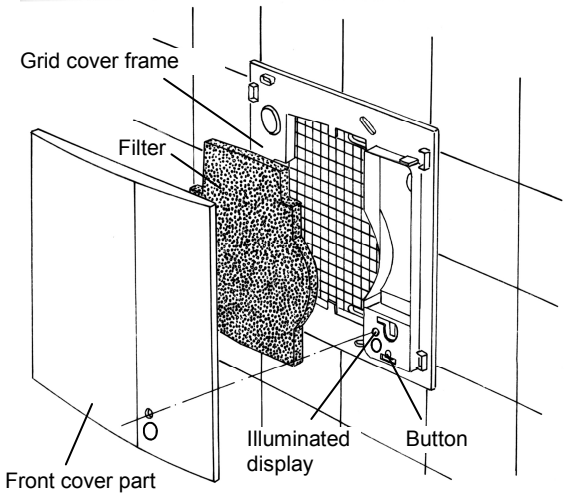
Caution! Only adjust the switch when ventilator is in the dead condition!

Factory settings :
- Switch -on delay 120 sec
- Run-out time 15 min
- Inverse operation OFF
- Interval switching OFF

To change settings:
1. Take the front cover plate off
2. Draw the cap off of the electrics housing
3. Make the wanted settings
4. Re-assemble in the opposite succession

Filter change

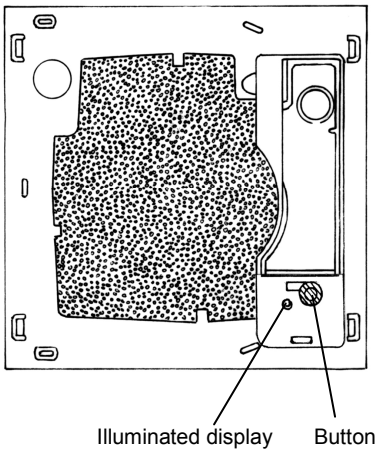
Ventilator with movement detector:
Button and illuminated display are in the grid cover frame



- Continuous red light up of the illuminated display indicates a dirtied filter
- Take of the front cover plate, remove filter. Insert new or cleaned filter. Dirty filters can be cleaned, e.g. in a washing machine.
- Operate button for 3 seconds with a pencil or similar to turn off the display illumination
- Replace the front cover plate

Never operate the system without a filter!

Ventilator with step switching, run-out time or humidity control: Button and illuminated display are in the electrics housing



Cleaning

Wipe the front cover plate and grid cover frame with a dry, soft cloth when appropriate.

⚠ Filter change and cleaning are not to be carried out by children or people who cannot manage this with certainty because of their physical, sensorial or mental ability, or their inexperience or lack of appropriate knowledge

Accessory and replacement parts

Filter, pack of 3	2/FSI-R	Order no. 039 721
Silvento decor plate incl. filter display	2/S	Order no. 039 551
Silvento decor plate with movement detector	2/SB	Order no. 039 578

For Notes

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