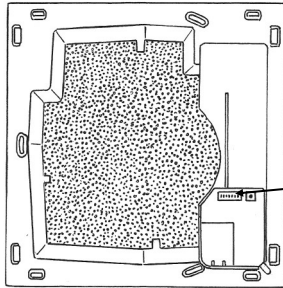


You have the option of setting a variety of fan functions via the DIP switches on the control board! Each of the white switches has three setting options!



Attention! Adjust the switch only when the ventilation unit is voltage-free!



Factory setting:

Basic ventilation: OFF
 Nominal load stage: 90 m³/h
 Interval: OFF
 Run-on time: OFF
 Switch-on delay: OFF











White Switch










Changing the settings:

1. Remove the design screen
2. Make the desired settings
3. Remount in reverse order










Basic Ventilation

0 m³/h	
15 m³/h	
20 m³/h	
30 m³/h	
40 m³/h	
45 m³/h	
50 m³/h	
60 m³/h	

Time Functions

Interval OFF	
Interval ON* Fan runs every 4 hrs. for 30 min	
Interval ON* Fan runs every 2 hrs. for 15 min	
Run-on time OFF	
Run-on time ON* Fan runs on for 15 min	
Run-on time ON* Fan runs on for 30 min	
Switch-on delay OFF	
Switch-on delay 120 s	
Switch-on delay 45 s	

Regulated Ventilation

0 m³/h	
15 m³/h	
20 m³/h	
30 m³/h	
40 m³/h	
45 m³/h	
50 m³/h	
60 m³/h	
90 m³/h	

* The time functions Interval operation and Run-on time are always carried out at the set regulated ventilation level (DIP switches 6 and 7).

The characteristic curve of the level 60 m³/h is part of the DIBt approval Z-51.1-215 and can be taken from it. The characteristic curve is also summarized with all other characteristic curves in a separate document that can be downloaded from www.lunos.de.

The fans of the Silvento ec series can be configured in combination with the circuit boards listed above and the volume flow can be calibrated. Instructions can also be found at www.lunos.de.

The volume flows specified in the accompanying documents refer to the installed condition, taking into account correct design/planning and corresponding installation.

6 Electrical Connection



Caution! Any installation work on the ventilation unit may only be carried out with the mains voltage disconnected! The ventilation unit is insulated in accordance with protection class II, a protective conductor connection is not required.



Make sure all connection lines are de-energized before connecting the ventilation unit to the power supply! (Disconnection from power supply with at least 3 mm contact opening, e.g. fuse)



Each circuit connected to the ventilation system must be fitted with residual current protection (e.g. RCD switch)!



Electrical connections must be carried out by qualified staff only!

Additional installations and electrical components in the ventilation unit are not permitted!
Connection diagrams for further fan functions available on request!

- 6.1** Automatic operation with humidity control according to DIP switch position of the control board.

Comfort control: Humidity controlled operation

Basic control: Interval switching possible

- 6.2** With remote control (0 - 10 V)

The remote control input is divided into two ranges. In the range of 0-5 V the level is set absolutely, i.e. with highest priority (corresponds to DIP 6,7 with switched L1). In the range of 6-10 V only the base load is set (corresponds to DIP 1,2). In the range of 0-0.4 V the fan operates autonomously.

Area absolute level	Step 0: 0,6 V - 0,9 V	Base load level area	Step 1: 6,1 V - 6,4 V
	Step 1: 1,1 V - 1,4 V		Step 2: 6,6 V - 6,9 V
	Step 2: 1,6 V - 1,9 V		Step 3: 7,1 V - 7,4 V
	Step 3: 2,1 V - 2,4 V		Step 4: 7,6 V - 7,9 V
	Step 4: 2,6 V - 2,9 V		Step 5: 8,1 V - 8,4 V
	Step 5: 3,1 V - 3,4 V		Step 6: 8,6 V - 8,9 V
	Step 6: 3,6 V - 3,9 V		Step 7: 9,1 V - 9,4 V
	Step 7: 4,1 V - 4,4 V		Step 8: 9,6 V - 9,9 V
	Step 8: 4,6 V - 4,9 V		

- 6.3** Depending on the control board, DIP switch position and module:

With run-on time (basic control): Deactivation of the run-on functions (L2), continuous operation basic ventilation or OFF according to DIP switches 1 and 2 switchable to regulated ventilation (L1) according to DIP switches 6 and 7

With humidity control (comfort control): Humidity control can be deactivated (L2), switchable to regulated ventilation (L1)

Note: No light coupling possible with VDE-compliant installation ((R) Bridge)

- 6.4** Depending on control board, DIP switch position and module:

Single-stage operation, switchable to regulated ventilation

Continuous operation basic ventilation and run-on time-controlled regulated ventilation

Humidity control, switchable to regulated ventilation

Run-on time-controlled regulated ventilation

Note: Use a two-pole switch to switch the room lighting simultaneously with the regulated ventilation!

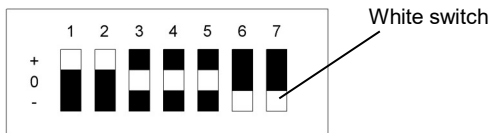
- 6.5** Direct connection to TAC via F+ and F-.

Setting the DIP Switches

Via the DIP switches (S) on the control board you have the option to set a variety of fan functions! Each of the white switches has **three** setting options!



Attention! Only adjust the switch when the ventilation unit is de-energised!



Factory setting 5/EC-ZI, 5/EC-FK:

Basic ventilation:	OFF
Nominal load stage:	60 m ³ /h
Interval:	OFF
Run-on time:	OFF
Switch-on delay:	OFF

Changing the settings:

1. Remove the front cover
2. Make the desired settings
3. Reassemble in reverse order

The following DIP switch positions with the following functions are available:

Using DIP switches 1, 2, 6 and 7, you can set the air volume flows for basic and regulated ventilation, and DIP switches 3, 4 and 5 can be used to configure the delay time functions.

DIP switch settings basic ventilation

0 m ³ /h	
15 m ³ /h	
20 m ³ /h	
30 m ³ /h	
40 m ³ /h	
45 m ³ /h	
50 m ³ /h	
60 m ³ /h	

DIP switch settings regulated ventilation

0 m ³ /h	
15 m ³ /h	
20 m ³ /h	
30 m ³ /h	
40 m ³ /h	
45 m ³ /h	
50 m ³ /h	
60 m ³ /h	

DIP switch settings interval, run-on time and switch-on delay



Interval OFF



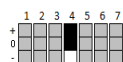
Interval ON,
Fan runs every 4 hours for 30 min in regulated ventilation



Interval ON,
Fan runs every 2 hours for 15 min in regulated ventilation



Run-on time OFF



Run-on time ON,
Fan runs on for 15 min in regulated ventilation



Run-on time ON,
Fan runs on for 30 min in regulated ventilation



Switch-on delay OFF



Switch-on delay 120 s



Switch-on delay 45 s

Humidity Control

Fans equipped with the comfort board 5/EC-FK have an independent humidity control with a standard control range of 50 - 70 % r.h. controlling between the set basic ventilation stage (DIP switches 1, 2) and the regulated ventilation stage (DIP switches 6, 7). This ensures that the exhaust air volume flow is constantly adjusted to the room air humidity and room temperature, thus achieving an optimum level of comfort. There is only as much ventilation as necessary, but also only as little as possible, which saves energy, prevents over-humidification of the apartment and avoids structural damage and mould.

The control is carried out in a virtually stageless and "intelligent" manner, differentiating between permanently high relative humidity or rapid increase (e.g. due to showers).

If the relative humidity cannot be significantly reduced within a period of two hours (e.g. in summer), the fan will be switched to basic ventilation mode.

If the relative humidity increases by more than 5% within one hour during reduced operation mode, the reduced operation mode will be terminated. If the relative humidity falls below the lower switching threshold and the basic ventilation level is set to OFF, the fan will be switched off.

If the fan is set to the basic ventilation level OFF, it will run once per hour for 3 minutes at the level of 15 m³/h (sniff mode). If a relative humidity above the set switching threshold, e.g. 50 % RH at 22°C, is measured during this time, humidity control will be activated.

If the measured relative humidity is lower than the switching threshold, the fan will be switched off again after these three minutes.

Notes:

- If voltage is applied to L2, all special functions, switch-on delay, run-on time, interval operation and humidity control (5/EC-FK only) will be deactivated.
- Within the first two hours after connection to the mains, the fan runs at the level corresponding to the relative humidity value currently measured .


7 Filter Change

- 7.1** The LED lights up continuously when the filter is dirty.
Remove the front cover, remove the filter. Insert a new or cleaned filter. The filter can be cleaned e.g. using a dishwasher.
Press the button (S) with a tool, e.g. a pen, for 3 seconds; the LED goes out.
Put the front cover back in place.

Never operate the unit without a filter!

Cleaning

When necessary, wipe the front cover and grille frame using a dry soft cloth.

 Filter change and cleaning must not be carried out by children or persons who are not able to operate the unit safely on account of their physical, sensory or mental capacity or due to their inexperience or lack of skills.

Additional Parts and Replacement Parts

Pack of 3 filters	2/FSI-R	Order no.: 39721
Control board basic variant	5/EC-ZI	Order no.: 40080
Control board comfort variant	5/EC-FK	Order no.: 40081
Control board basic variant up to 90 m ³ /h	5/EC-ZI90	Order no.: 40126
Control board comfort variant up to 90 m ³ /h	5/EC-FK90	Order no.: 40127
Control board comfort variant with VOC sensor	5/EC-FK+	Order no.: 40217
Control board comfort variant with VOC sensor up to 90 m ³ /h	5/EC-FK90+	Order no.: 40221
Control board for basement ventilation	5/EC-KE	Order no.: 40133
Motion detector module	5/BM	Order no.: 40082
Radio module	5/FM –EO	Order no.: 40083