



**SABIK**





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## 1. GENERAL SAFETY INSTRUCTIONS



### CAUTION

This appliance can be used by children aged from 8 years and above and persons with reduced physical, sensory or mental capabilities or lack of experience and knowledge if they have been given supervision or instruction concerning use of the appliance in a safe way and understand the hazards involved. Children shall not play with the appliance. Cleaning and user maintenance shall not be made by children without supervision.

The following safety instructions must be followed to prevent injuries or damages:

- Before you begin with the installation, operation, maintenance and repair of the ventilation system, read these operating and installation instructions carefully.
- Installation, repairs and electrical work may only be carried out by qualified specialists.
- When installing, commissioning and repairing the ventilation system, you must take into account and obey all necessary legal and national requirements (accident prevention provisions and the generally acknowledged rules of technology).
- While the ventilation system is operating, all covers must be closed.
- If you use a fireplace, whether or not it is dependent on indoor air, you must consult the chimney sweep responsible for the district.
- Keep these operating and installation instructions in a safe place or leave them on the ventilation system, since important information on operation is included in the instructions, see Logs preventive maintenance, p. 53, and page Commissioning log, p. 25.
- Liability for damages that arise due to improper storage, installation, operation or repair, insufficient maintenance or unintended use is excluded.
- We reserve the right to make technical modifications.

## 2. GENERAL INSTRUCTIONS

### 2.1. INTENDED USE

The ventilation system SABIK is intended for controlled ventilation and venting of single-family houses.

The unit assures a continuous and balanced ventilation system, extracting moist stale air from the wet rooms and at the same time introducing a tempered and filtered fresh air to the habitable rooms.

The unit contains as a standard filters in the supply and extract airflows to clean the incoming air and protect the heat exchanger.

For an easy adaption on site and facilitate the installation the handing (A version = supply/extract on left side; B version= supply/extract on right side) can be selected on the unit. There is also the possibility to connect the supply air on the bottom of the unit.

### 2.2. IMPROPER USE

Any other use of the ventilation system SABIK not described under "intended use" is prohibited.

Moreover, the ventilation system SABIK may not be installed in a room under +12°C.

The ventilation system SABIK may not be operated without outdoor air filter and extract air filter.

It should only be turned off for maintenance and repair work.

Central ventilation systems are, as a rule, designed for continuous operation. Unscheduled shutdown of the ventilation system can lead to formation of condensate inside the piping network and to damages to the ventilation system. For this reason, when shutting down the system for longer periods, the outdoor air and extract air lines must be sealed off.

The ventilation system SABIK is not suitable for drying construction.

### 2.3. WARRANTY

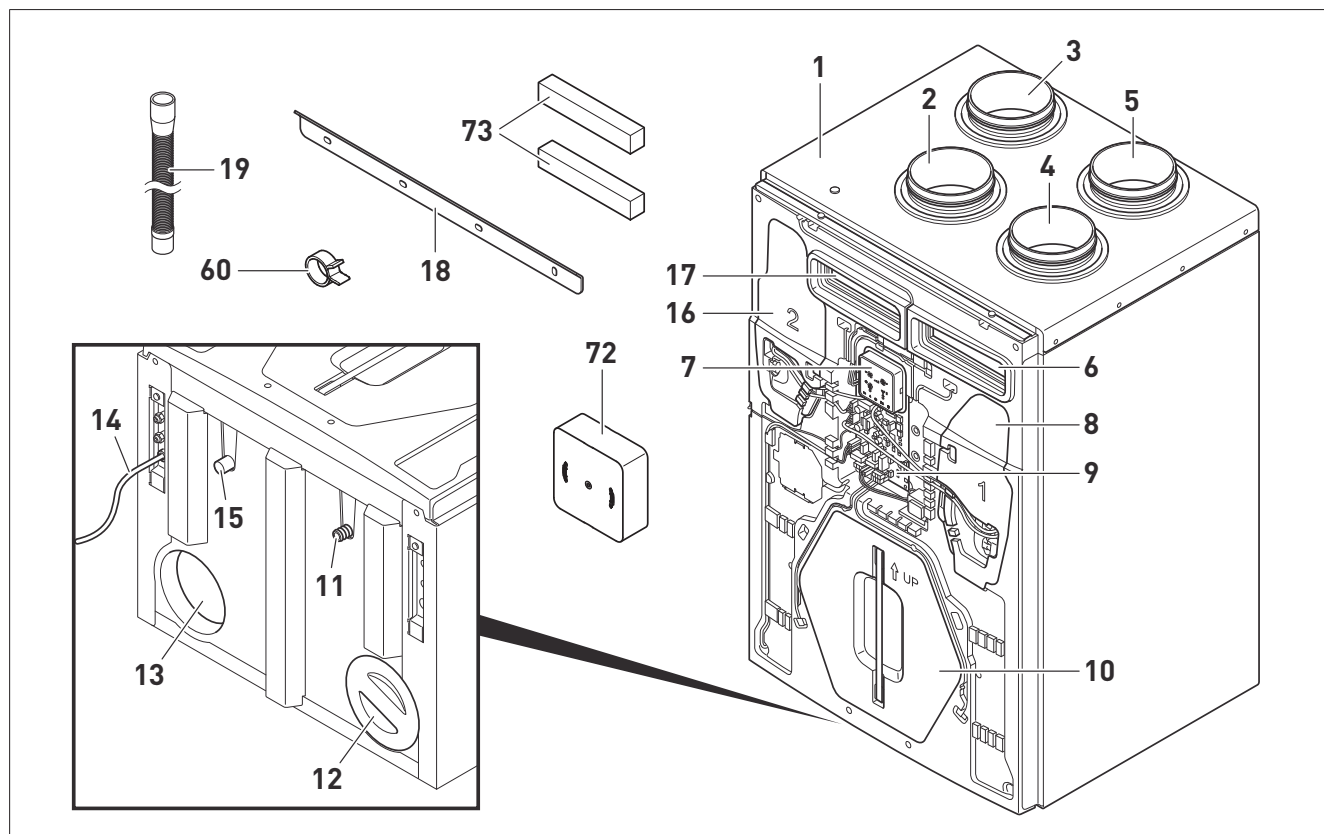
The unit supplied by S&P is warranted twelve (12) months, parts only, starting from the invoicing date.

S&P agrees to replace the parts or the unit whose operation is recognized defective by our departments except for all damages and interests or penalties such as operating losses, commercial prejudice, or other immaterial or indirect damages.

The following are not covered by our warranty: defects resulting from an abnormal usage or a usage not conforming to the recommendations of our manuals; faults observed as a consequence to normal wear; incidents caused by negligence, lack of monitoring, or servicing; faults due to the incorrect installation of the devices or to bad storage conditions before mounting.

In any case, S&P will not be responsible for transformed unit, repaired even partially.

### 3. COMPONENTS / ITEMS DELIVERED



|    | Filter (extract air) – ISO Coarse 65% (G4)   | Version B                                    |
|----|----------------------------------------------|----------------------------------------------|
| 1  | Ventilation system SABIK                     |                                              |
| 2  | Connection for extract air                   | Connection for outdoor air                   |
| 3  | Connection for supply air                    | Connection for outgoing air                  |
| 4  | Connection for outdoor air                   | Connection for extract air                   |
| 5  | Connection for outgoing air                  | Connection for supply air                    |
| 6  | Filter (outdoor air) – ISO Coarse 65% (G4) / | Filter (extract air) – ISO Coarse 65% (G4)   |
| 7  | Control panel (removable)                    |                                              |
| 8  | Fan cover / supply air fan                   | Fan cover / extract air fan                  |
| 9  | Main circuit board                           |                                              |
| 10 | Heat exchanger                               |                                              |
| 11 | Connection for condensate                    | Dummy cap for connection for condensate      |
| 12 | Dummy cover for connection supply air        | Connection supply air                        |
| 13 | Connection supply air                        | Dummy cover for connection supply air        |
| 14 | Cable for power supply                       |                                              |
| 15 | Dummy cap for connection for condensate      | Connection for condensate                    |
| 16 | Fan cover / extract air fan                  | Fan cover / supply air fan                   |
| 17 | Filter (extract air) – ISO Coarse 65% (G4)   | Filter (outdoor air) – ISO Coarse 65% (G4) / |
| 18 | Wall rail                                    |                                              |
| 19 | Flexible connecting hose DN19/23             |                                              |
| 60 | Clamp for flexible connecting tube DN19/23   |                                              |
| 72 | Dummy cover control panel                    |                                              |
| 73 | Spacing buffer                               |                                              |



### 3.1. ACCESSORIES

| Item no.   | Description                                                         |
|------------|---------------------------------------------------------------------|
| 5800017800 | SABIK-NEMBUS-SF Servoflow (constant airflow kit)                    |
| 5800023300 | SABIK210-PH Preheater                                               |
| 5800018300 | SABIK350-PH Preheater                                               |
| 5800018400 | SABIK500-PH Preheater                                               |
| 5800018900 | SABIK-VOC VOC-sensor                                                |
| 5800025400 | SABIK-WMC Wall bracket deep                                         |
| 5800046700 | SABIK210-F-G4G4 Replacement filterset (ISO coarse 65%)              |
| 5800046800 | SABIK210-F-G4F7 Replacement filterset (ISO coarse 65%/ISO ePM1 50%) |
| 5800046900 | SABIK350-F-G4G4 Replacement filterset (ISO coarse 65%)              |
| 5800047000 | SABIK350-F-G4F7 Replacement filterset (ISO coarse 65%/ISO ePM1 50%) |
| 5800047100 | SABIK500-F-G4G4 Replacement filterset (ISO coarse 65%)              |
| 5800047200 | SABIK500-F-G4F7 Replacement filterset (ISO coarse 65%/ISO ePM1 50%) |

### 3.2. REPLACEMENT PARTS

| Item no.   | Description                                                         |
|------------|---------------------------------------------------------------------|
| R153139001 | SABIK 210-M1 Fan M1                                                 |
| R153139007 | SABIK 210-M2 Fan M2                                                 |
| R153139101 | SABIK 350-M1 Fan M1                                                 |
| R153139107 | SABIK 350-M2 Fan M2                                                 |
| R153139201 | SABIK 500-M1 Fan M1                                                 |
| R153139207 | SABIK 500-M2 Fan M2                                                 |
| R153139016 | SABIK 210-PL Main circuit board                                     |
| R153139116 | SABIK 350-PL Main circuit board                                     |
| R153139216 | SABIK 500-PL Main circuit board                                     |
| R153139037 | SABIK-TFF Temperature/humidity sensor                               |
| R153139052 | SABIK-NEMBUS-HRE Preheater PCB                                      |
| R153139024 | SABIK-NEMBUS-FB Remote control                                      |
| R153139009 | SABIK 210-HRPTC Preheater module w/o PCB                            |
| R153139109 | SABIK 350-HRPTC Preheater module w/o PCB                            |
| R153139209 | SABIK 500-HRPTC Preheater module w/o PCB                            |
| R153139002 | SABIK 210-WT Heat exchanger                                         |
| R153139102 | SABIK 350-WT Heat exchanger                                         |
| R153139202 | SABIK 500-WT Heat exchanger                                         |
| R153139020 | SABIK 210-FD Front cover                                            |
| R153139120 | SABIK 350-FD Front cover (SABIK 350 and SABIK 500 are identically)  |
| R153139023 | SABIK 210-FA Filter cover                                           |
| R153139123 | SABIK 350-FA Filter cover (SABIK 350 and SABIK 500 are identically) |

### 4. TECHNICAL DATA

#### 4.1. CONDITIONS FOR INSTALLATION

|                                                                                      |                                                           |
|--------------------------------------------------------------------------------------|-----------------------------------------------------------|
| Ambient temperature installation site                                                | +12°C to +40°C                                            |
| Minimum outdoor air temperature (Including preheating radiator [optional accessory]) | -15°C                                                     |
| Environmental conditions                                                             | Non-saline, no aggressive chemicals, no risk of explosion |

#### 4.2. DEVICE DATA

|                                           |                                                                                                                                               |
|-------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------|
| Weight:                                   |                                                                                                                                               |
| SABIK 210                                 | 34.0 kg                                                                                                                                       |
| SABIK 350                                 | 45.0 kg                                                                                                                                       |
| SABIK 500                                 | 56.0 kg                                                                                                                                       |
| Materials:                                |                                                                                                                                               |
| Front cover                               | Plastic                                                                                                                                       |
| Casing of device                          | Steel sheet                                                                                                                                   |
| Filter covers                             | Plastic                                                                                                                                       |
| Body of device                            | EPP                                                                                                                                           |
| Connection for condensate                 | DN20                                                                                                                                          |
| Supply voltage                            | 230 V AV, 50 Hz<br>Safety plug                                                                                                                |
| Max. power input                          |                                                                                                                                               |
| SABIK 210                                 | $P_{max.} = 87 \text{ W}$ , $I_{max.} = 0.67 \text{ A}$                                                                                       |
| SABIK 350                                 | $P_{max.} = 145 \text{ W}$ , $I_{max.} = 0.98 \text{ A}$                                                                                      |
| SABIK 500                                 | $P_{max.} = 265 \text{ W}$ , $I_{max.} = 2.1 \text{ A}$                                                                                       |
| Nominal airflow rate (extract air):       |                                                                                                                                               |
| Air volume SABIK 210                      | Up to 140 m³/h at 100 Pa                                                                                                                      |
| Air volume SABIK 350                      | Up to 250 m³/h at 100 Pa                                                                                                                      |
| Air volume SABIK 500                      | Up to 380 m³/h at 125 Pa                                                                                                                      |
| Speed regulation                          | Four-level                                                                                                                                    |
| Direct-current fans                       | 2 pieces, angled backwards                                                                                                                    |
| SABIK 210                                 | DN 160                                                                                                                                        |
| SABIK 350                                 | DN 190                                                                                                                                        |
| SABIK 500                                 | DN 220                                                                                                                                        |
| Countercurrent heat exchanger             | Plastic                                                                                                                                       |
| Connection outdoor and outgoing air lines | S&P IPP46                                                                                                                                     |
| Filters                                   | Filter quality extract air:<br>• ISO Coarse 65% (G4)<br>Filter quality outdoor air:<br>• ISO Coarse 65% (G4)<br>• Optional: ISO ePM1 50% (F7) |
| Control panel with cable                  | Removable                                                                                                                                     |
| Programming                               | Four pre-set programmes                                                                                                                       |
| Protection class                          | IP21                                                                                                                                          |

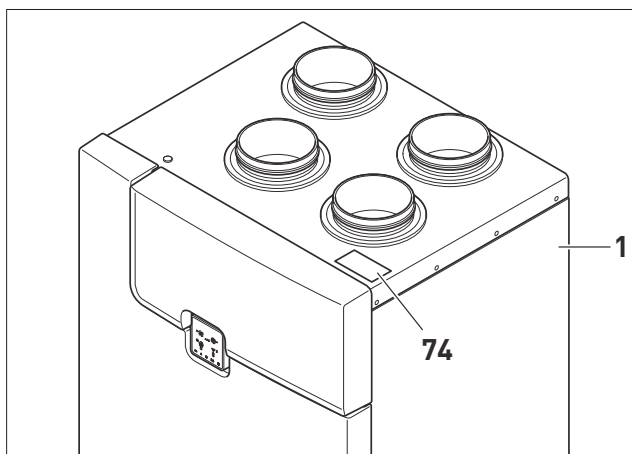
### 4.3. EFFICIENCY

#### NOTE

Fan speed V1 serves for humidity protection when living areas are empty. Use this fan speed only when nobody is there.

|              | Factory setting              |
|--------------|------------------------------|
| Fan speed V1 | Humidity protection (40%)    |
| Fan speed V2 | Reduced ventilation (70%)    |
| Fan speed V3 | Nominal air (100%)           |
| BOOST        | Intensive ventilation (130%) |

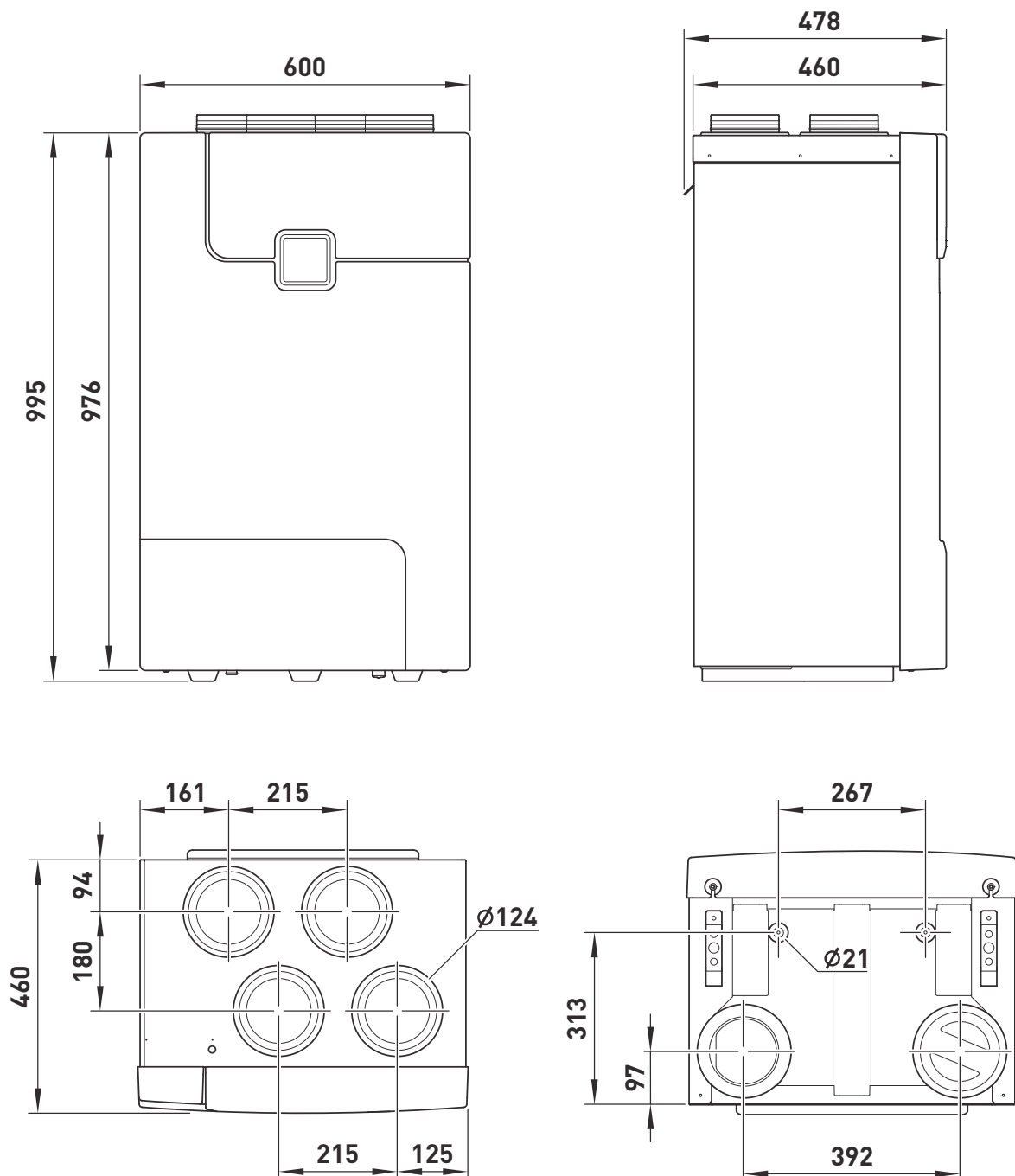
### 4.4. SERIAL NUMBER



The serial number is located on the nameplate (74) at the upper right on the ventilation system (1).

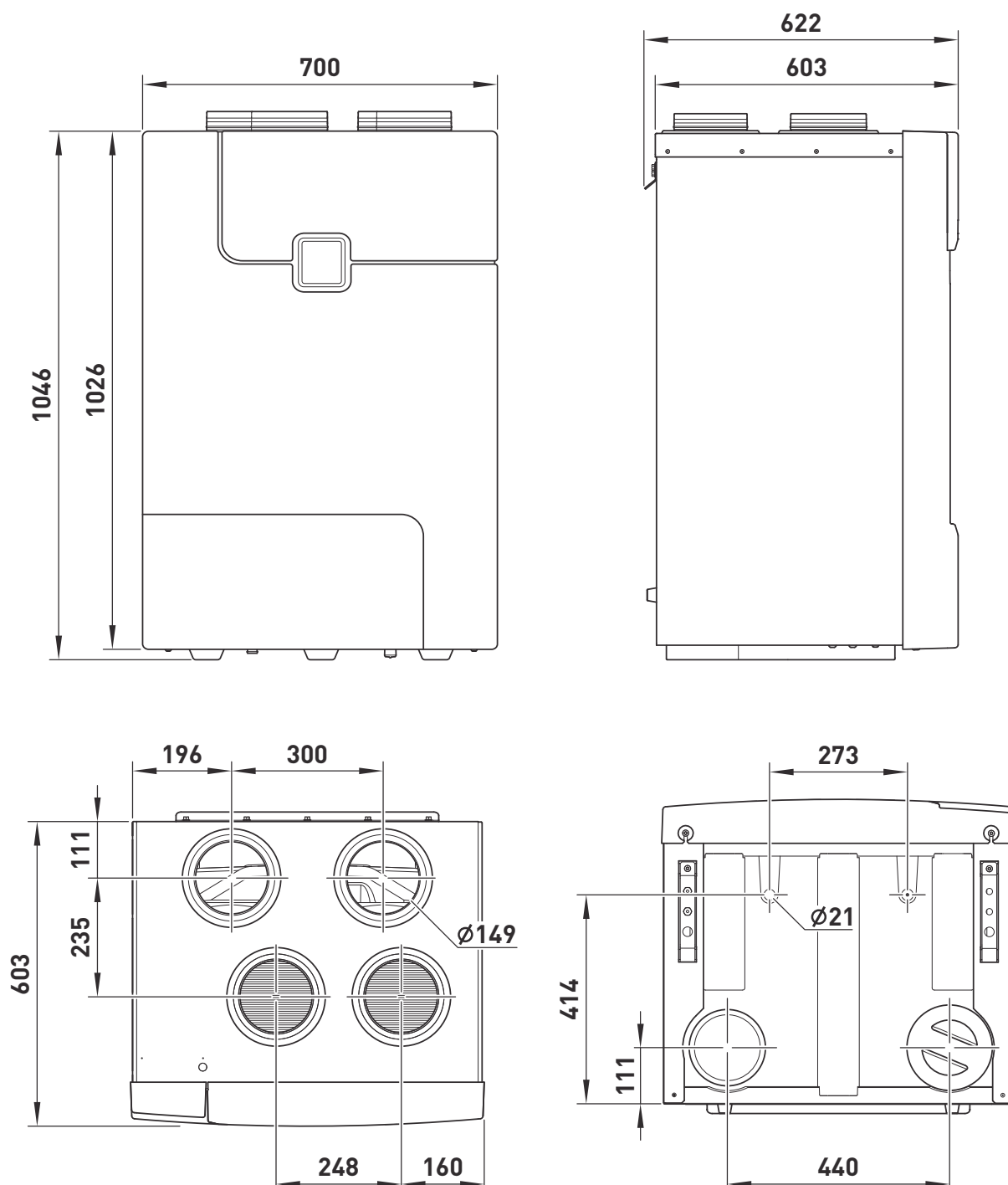
## 4.5. DIMENSIONS

### 4.5.1. SABIK 210



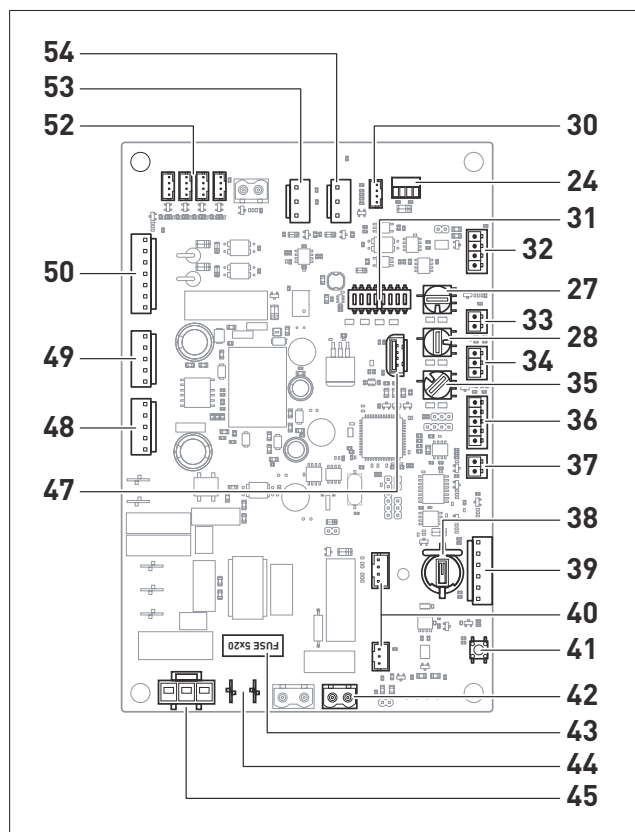


#### 4.5.2. SABIK 350





#### 4.6. CIRCUIT DIAGRAM MAIN CIRCUIT BOARD



- 30 Connection VOC sensor (optional accessory)
- 24 Connection control panel SABI-K-FB
- 31 Toggle encoding switch for setting ventilation system
- 32 Connection communication module (optional accessory)
- 27 Rotary encoding switch for adjusting nominal airflow rate (extract air) (factory setting Position 4)
- 33 Connection fan speed BOOST
- 28 Rotary encoding switch for adjustment of conditions flow rates (factory setting Position 0)
- 34 Connection 0-10 V signal (optional accessory)
- 35 Rotary encoding switch for target setting of humidity sensor or VOC sensor (optional accessory) (factory setting Position A)
- 36 Entrance pressure sensor for continuous pressure regulation
- 37 Contact EMERGENCY SHUTDOWN
- 38 Button cell type CR1220 for storing time
- 39 Connection preheating radiator (optional accessory)
- 40 Connection ServoFlow Kit (optional accessory)
- 41 Reset (factory setting)
- 42 Potential-free contact
- 43 Microfuse F5L250V
- 44 Harmonics filters
- 45 Voltage supply preheating radiator
- 47 USB connection for software updates
- 48 Voltage supply M1
- 49 Voltage supply M2
- 50 Connection summer bypass (optional accessory)
- 52 Connection temperature/humidity sensors
- 53 Control signals M2
- 54 Control signals M1

## 5. INSTALLATION (SPECIALISTS)



### CAUTION

The ventilation system may only be installed by qualified specialists, otherwise there is risk of injury or damages.



### CAUTION

In order to protect the system from dirt and humidity, all openings must be sealed, e.g. using a construction protector, until commissioning.

### 5.1. INSTRUCTIONS ON INSTALLATION

- As far as construction, the shell must be finished and the entire wall structure of the interior and exterior walls must be completed.
- During construction, the core bores must be made in the exterior wall for the outdoor and outgoing air lines.
- The ventilation system can be installed in dry rooms above +12°C, for example in the utility room.

### NOTE

If the temperature in the installation area drops below +12°C, then in individual cases condensate may form on the device casing.

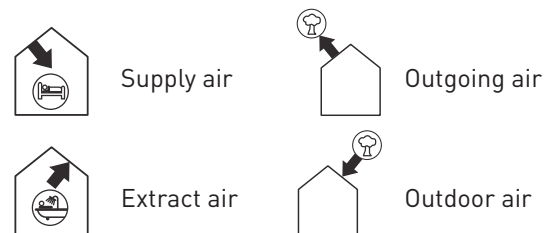
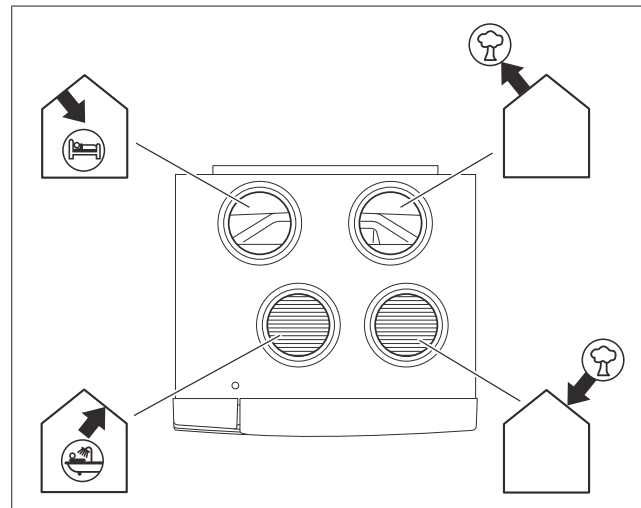
- Position the ventilation system and set Version A or B so that the outdoor air and outgoing air lines can be conducted out of the building by the shortest path.
- The ventilation system must be installed with noise coupling.
- The ventilation system must be easily accessible for all maintenance and repair work.
- Airflow rates must be set using the calculation suggestion "suggested solution."
- Start operation of the ventilation system only after completion of all installation tasks.

### 5.2. SET VERSION A OR B

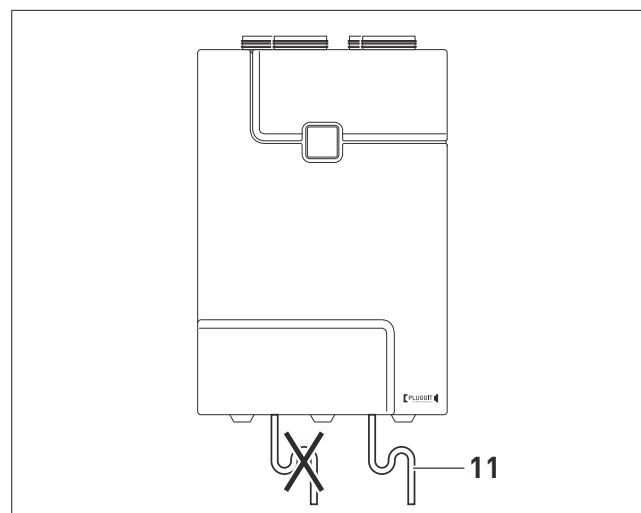
For flexible installation of the ventilation system, the device can be switched over at the installation site. To do so, the configuration of air connections and of the condensate connection is modified.

#### 5.2.1. Overview Version A (as delivered)

##### Air connections



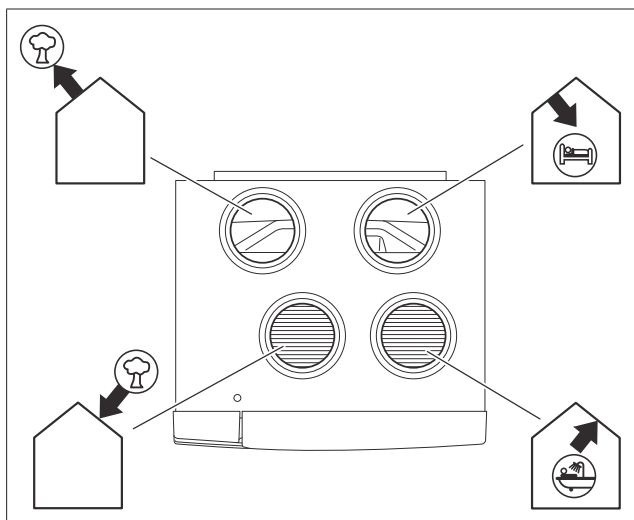
##### Connection for condensate



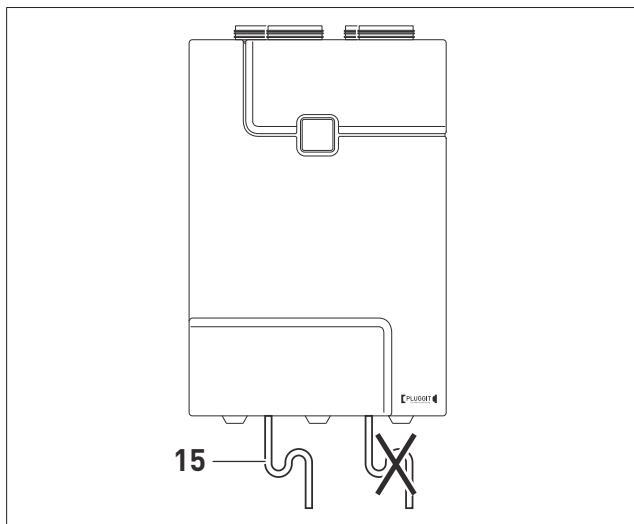
Utilise connection for condensate [11].

### 5.2.2. Overview Version B

#### Air connections

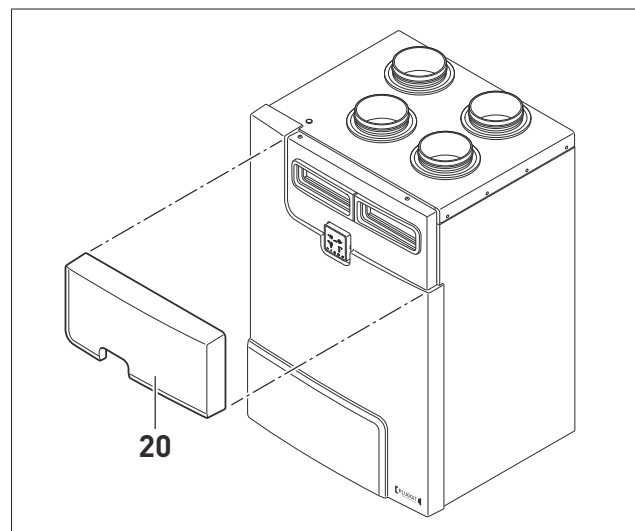


#### Connection for condensate

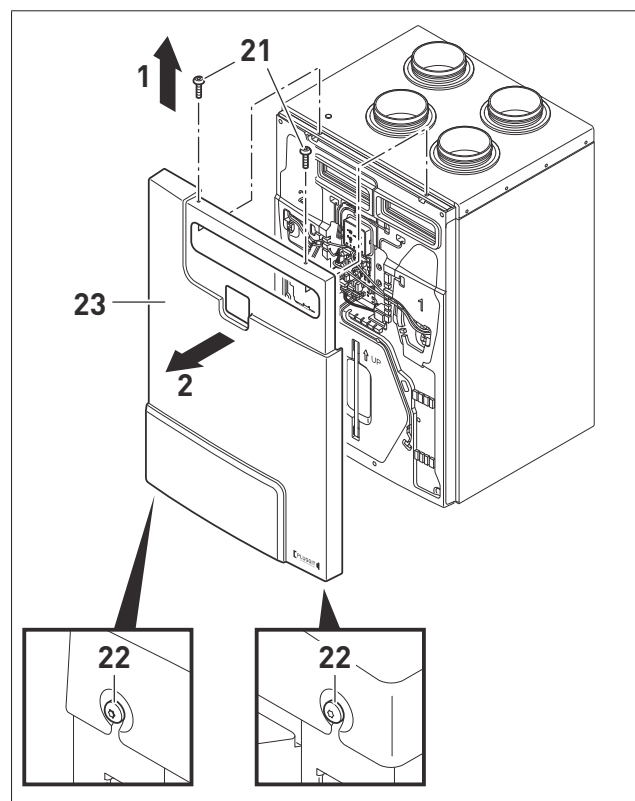


Utilise connection for condensate (15).

### 5.2.3. Set Version A or B

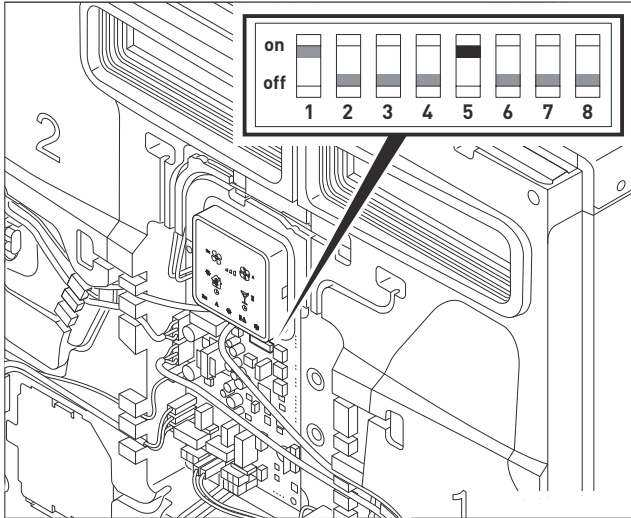


1. Remove filter cover (20).



2. Loosen screws Torx 30 (22) on the bottom of the device.
3. Unscrew screws Torx 30 (21) on top of device (Arrow 1).
4. Remove front cover (23) (Arrow 2).

#### 5.2.4. Ceiling installation



5. Set toggle encoding switch 5 to the desired position.  
on = Version A (factory setting)  
off = Version B

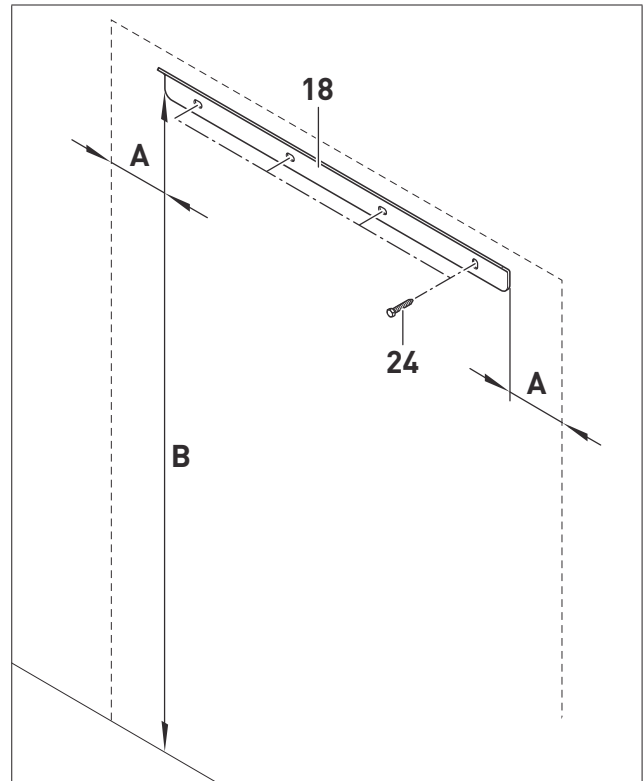
### 5.3. INSTALL VENTILATION SYSTEM SABIK

#### NOTE

All the following descriptions are depicted on the ventilation device of Version A (as delivered). To install the ventilation device to the switched over Version B, proceed in a similar manner. The ventilation system must be easily accessible for all maintenance and repair work.

#### 5.3.1. Fasten wall rail

Wall rail from among the items delivered



1. Position the wall rail (18) in a horizontal position and make drill holes.  
**A** min. 200 mm  
(from the wall on the left and right sides)  
**B** distance condensate connection plus height ventilation system, see p. 8.
2. Screw wall rail on tightly (18) with screws (24).

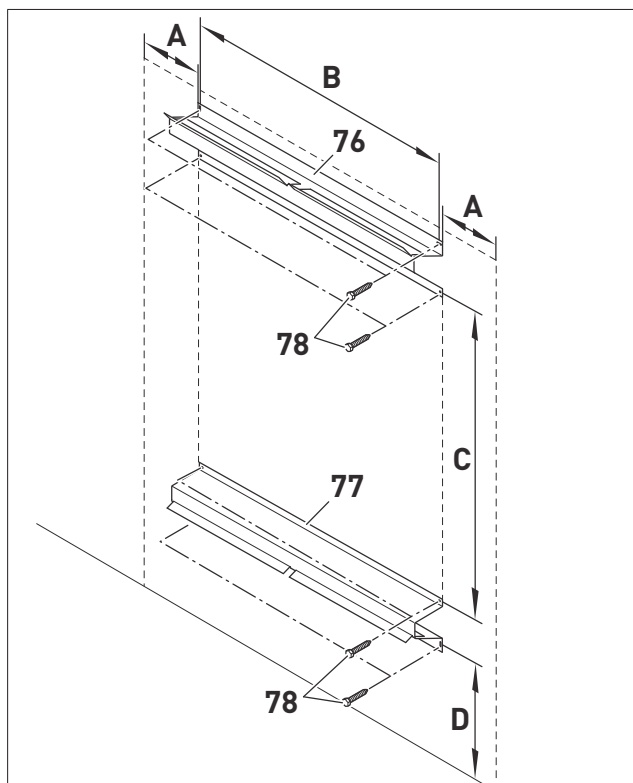
#### NOTE

Screws (24) are not included in items delivered. Select screws (24) with appropriate dowels for the brickwork.

### Wall rail SABI-K-DH (optional accessory)

If the outdoor and outgoing air lines directly behind the ventilation system are conducted to the outside, then the distance between the wall and the device may be too small after installation of the wall rail included among the parts delivered, when relevant.

If needed this wall rail can be substituted by the wall rail SABI-K-DH (optional accessory).



1. Place wall rail SABI-K-DH (76) and (77) in a horizontal position and create drill holes.

**A** min. 200 mm  
(away from the wall on the right or left side)

**B** 565 mm

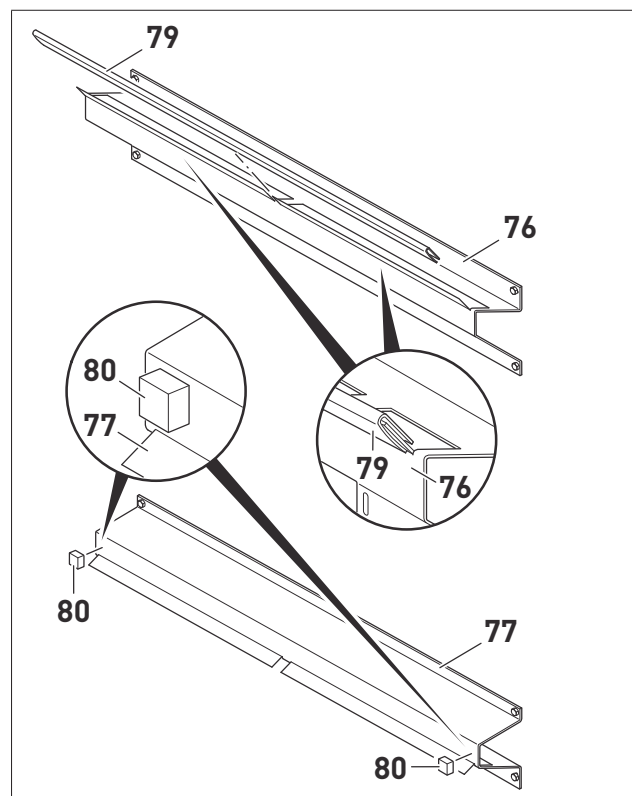
**C** 655 mm

**D** 390 mm  
(including space needed for condensate connection)

2. Fasten wall rail SABI-K-DH (76) and (77) with screws (78).

#### NOTE

Screws (78) are not included in items delivered. Select screws (78) with appropriate dowels for the brickwork.



3. Push rubber lip (79) onto wall rail SABI-K-DH (76).

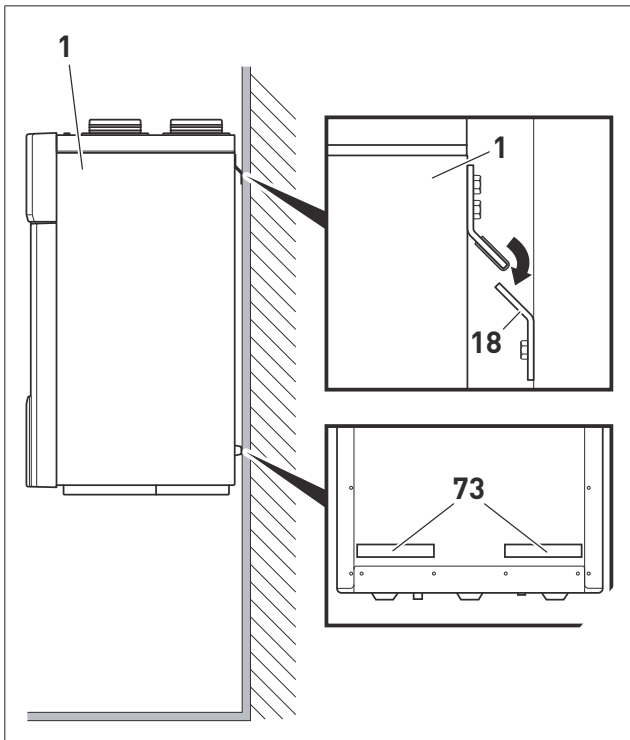
4. Attach rubber buffer (80) to wall rail SABI-K-DH (77).

### 5.3.2. Mount ventilation system

#### NOTE

The following description illustrates the mounting of the ventilation system using the wall rail from among the delivered items.

When using wall rail SABIK-DH, the spacing buffers (73) do not need to be affixed.



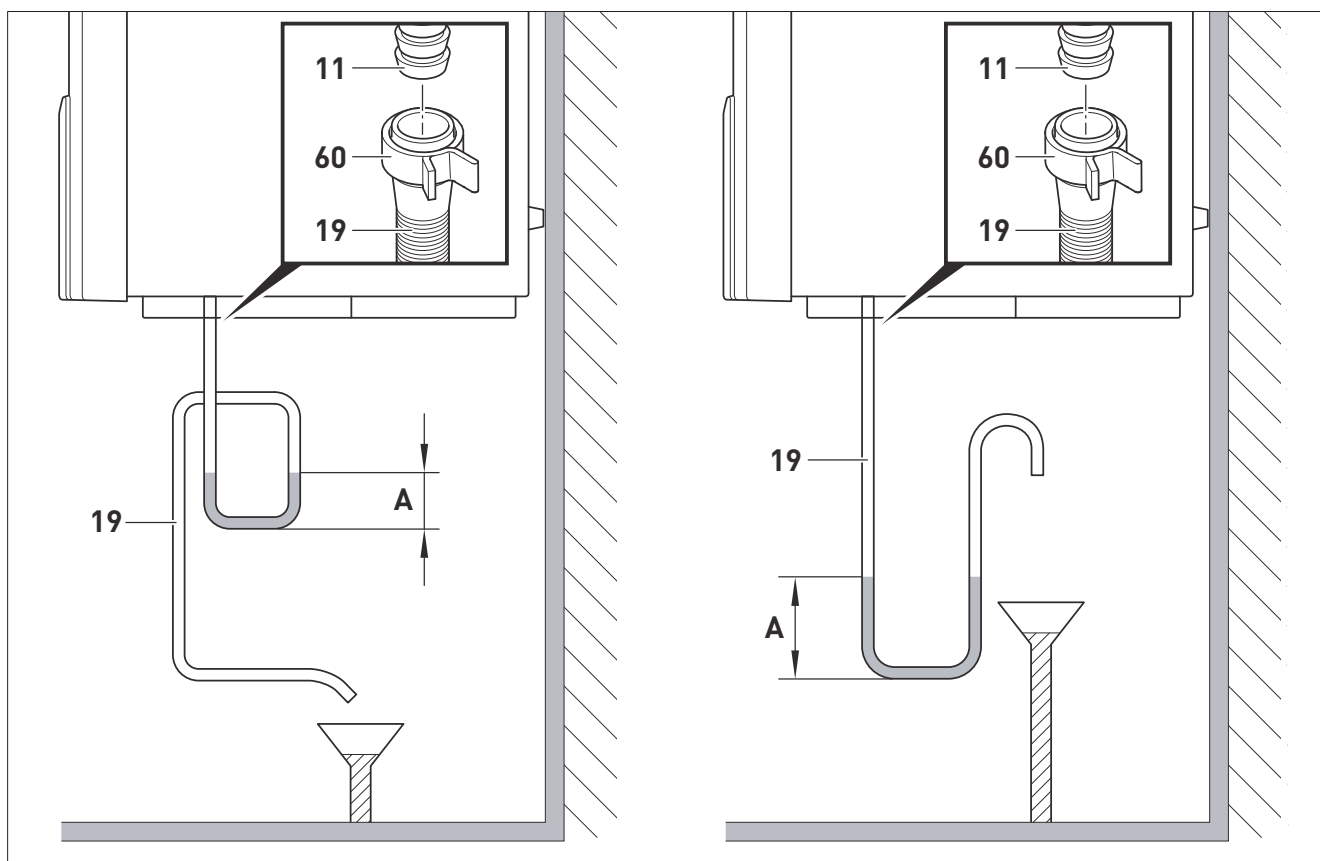
1. Affix spacing buffer (73) permanently within the indicated area on the back of the ventilation system (1).
2. Mount ventilation system (1) on wall rail (18).
3. Monitor vertical and horizontal mounting of the ventilation system (1) using spirit level.



### 5.3.3. Connect condensate line

#### NOTE

The following description is a suggestion for installation of the condensate line.



1. Fasten condensate line (19) with connection side DN19 with enclosed clamp (60) onto the condensate connection (11), and mount it in a siphon loop onto a funnel or a siphon.

#### NOTE

When converting the ventilation system to Version B, the dummy cover of the condensate connection must be turned over.

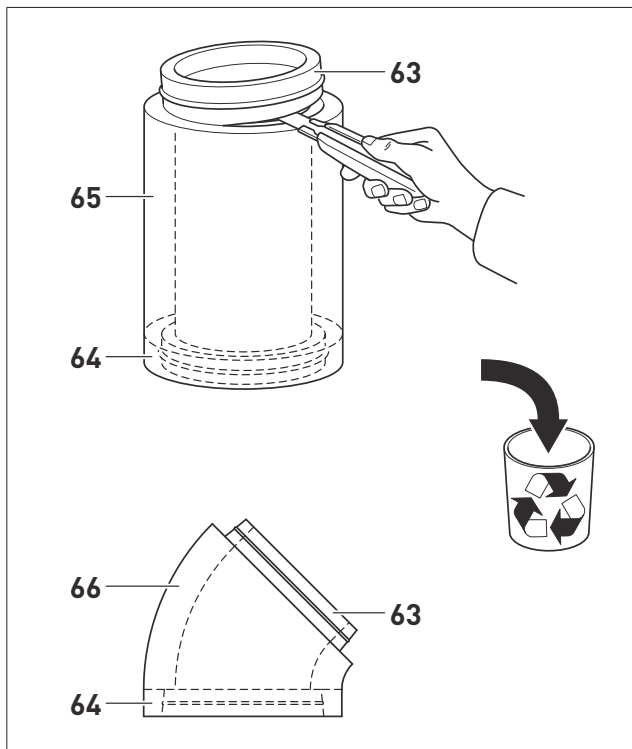
2. Fill condensate line (19) with water, observing a stipulated minimum fill level of roughly 100 mm.

## 5.4. INSTALL OUTDOOR AIR AND OUTGOING AIR LINES

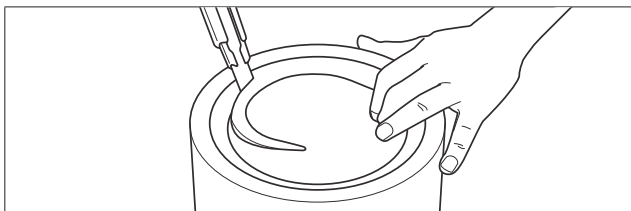
### NOTE

The following description serves as an example of installation of the outside air and outgoing air lines. Depending on the circumstances of construction, the lines can also be installed from the outdoor wall to the ventilation system. It must be ensured that the installation is stress-free.

In order to be able to mount the IsoPlugg insulated pipes and the IsoPlugg arches on the connection sockets on the ventilation system, depending on the sequence of installation steps, the nipples or bushings of the pipes or arches must be cut flush.



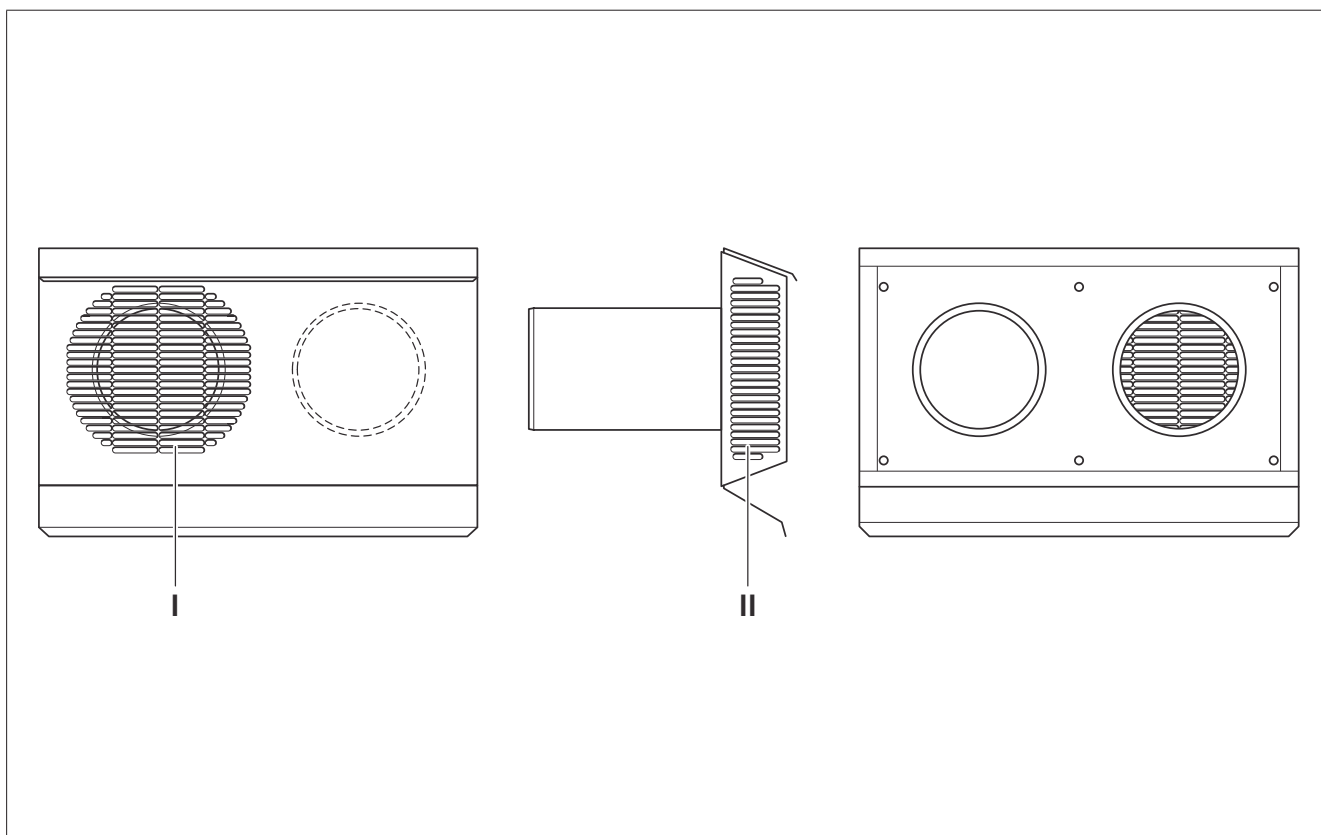
1. Depending on the sequence of installation tasks for lines, cut off and dispose of nipple (63) or bushing (64) of the IsoPlugg insulated pipes (65) and of the IsoPlugg arches (66).



2. For easier installation, chamfer the interfaces.

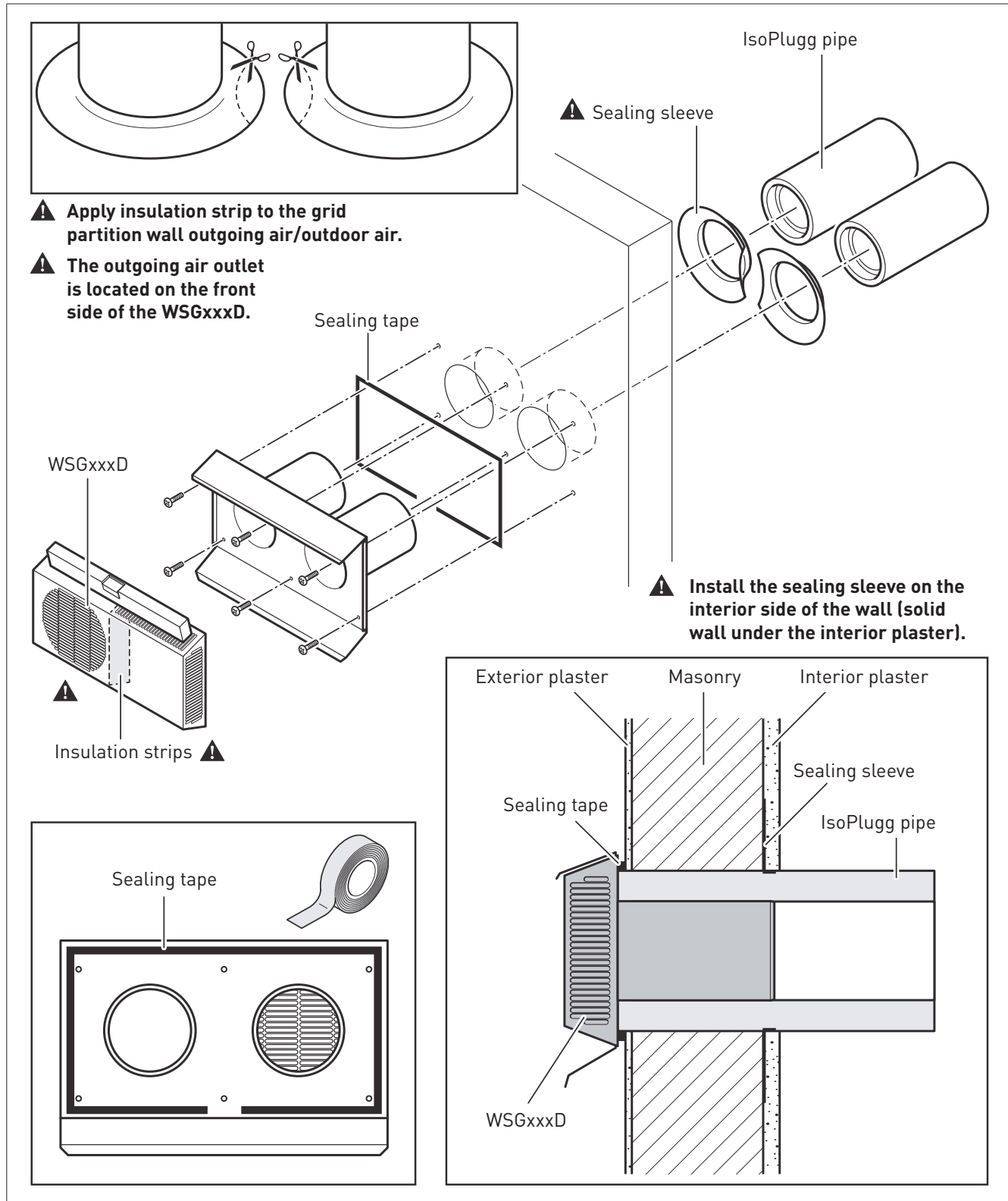
## 5.5. INSTALL WEATHER PROTECTION GRILLE WSG DOUBLED, HORIZONTALLY

### 5.5.1. Installation position weather protection grille



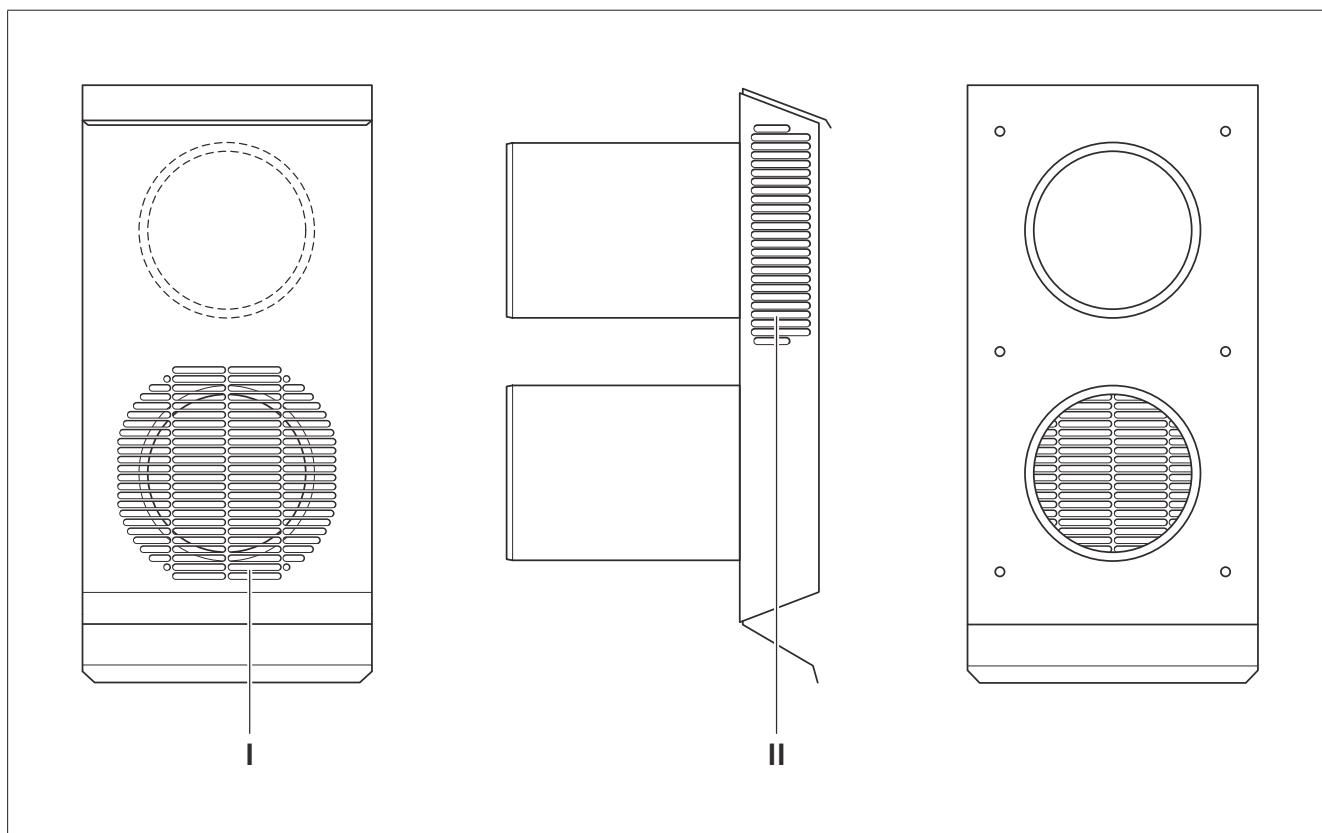
- I Outgoing air outlet
- II Outdoor air inlet

## 5.5.2. Install weather protection



## 5.6. INSTALL WEATHER PROTECTION GRILLE WSG DOUBLED, VERTICALLY

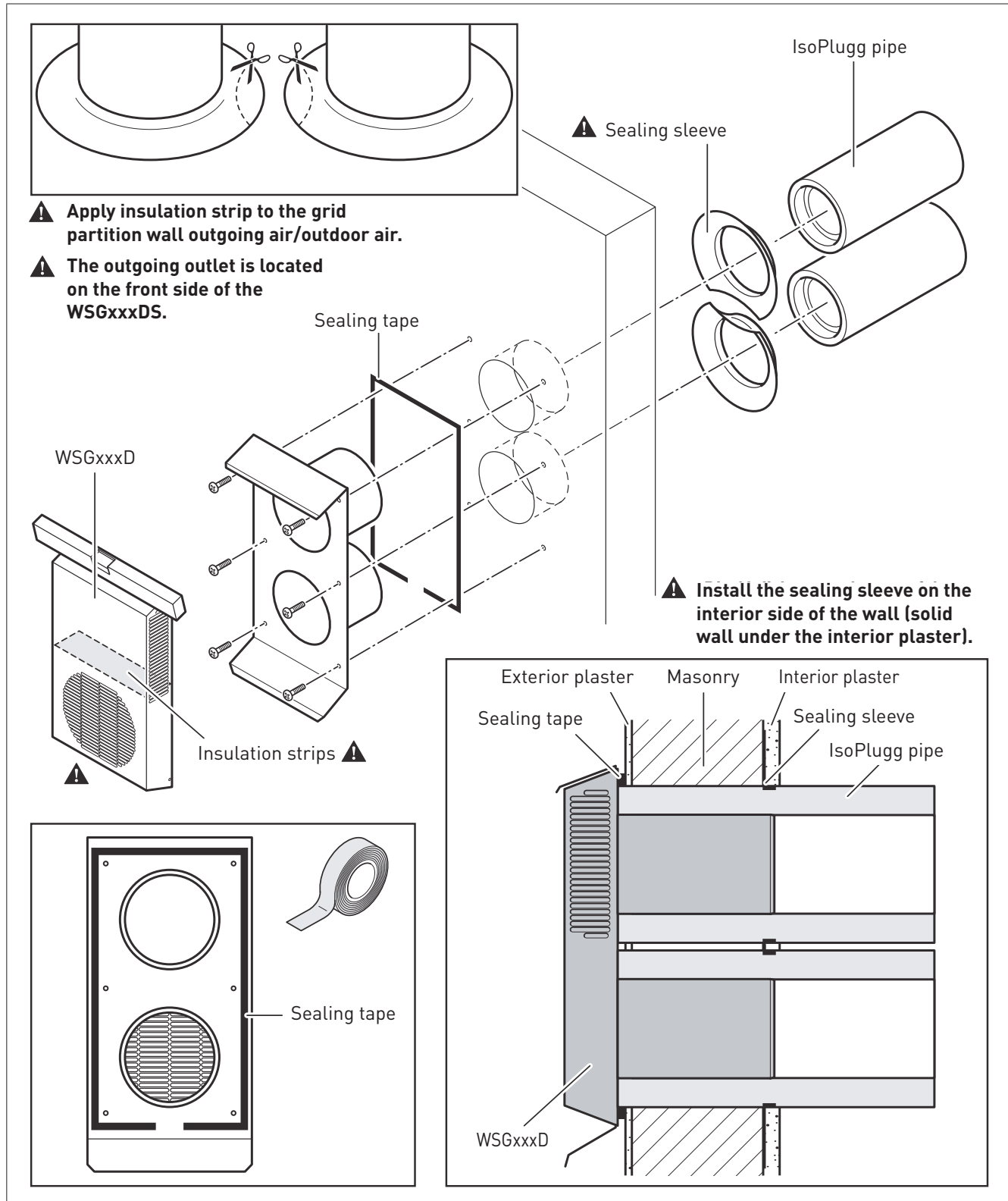
### 5.6.1. Installation position weather protection grille



I Outgoing air outlet

II Outdoor air inlet

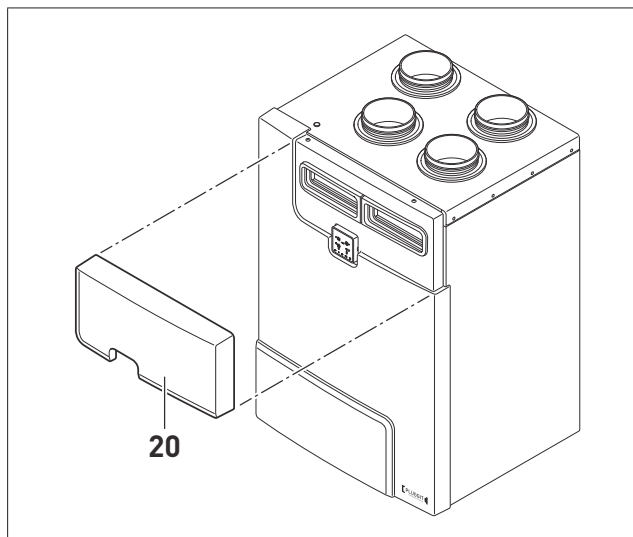
## 5.6.2. Install weather protection grille



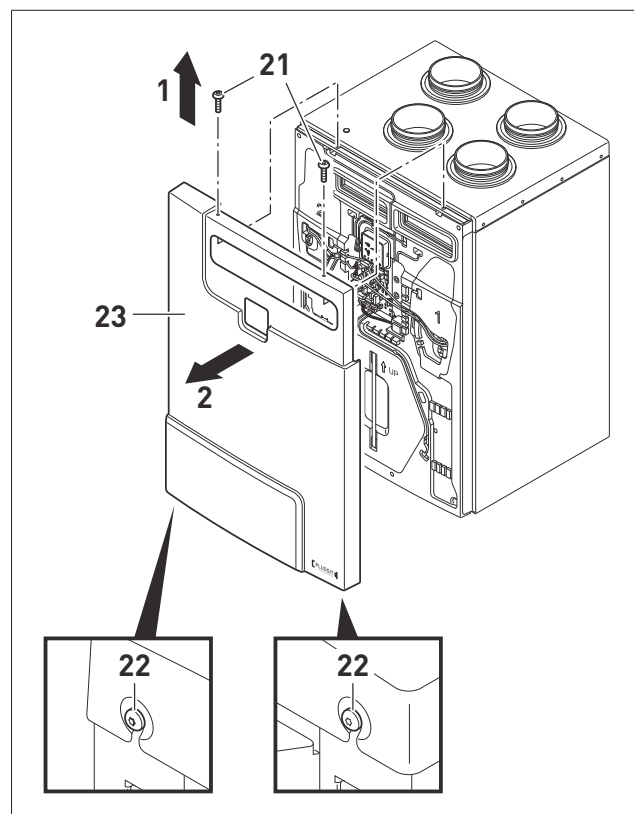
## 5.7. CONNECTION CONTROL PANEL SABI-K-FB

### NOTE

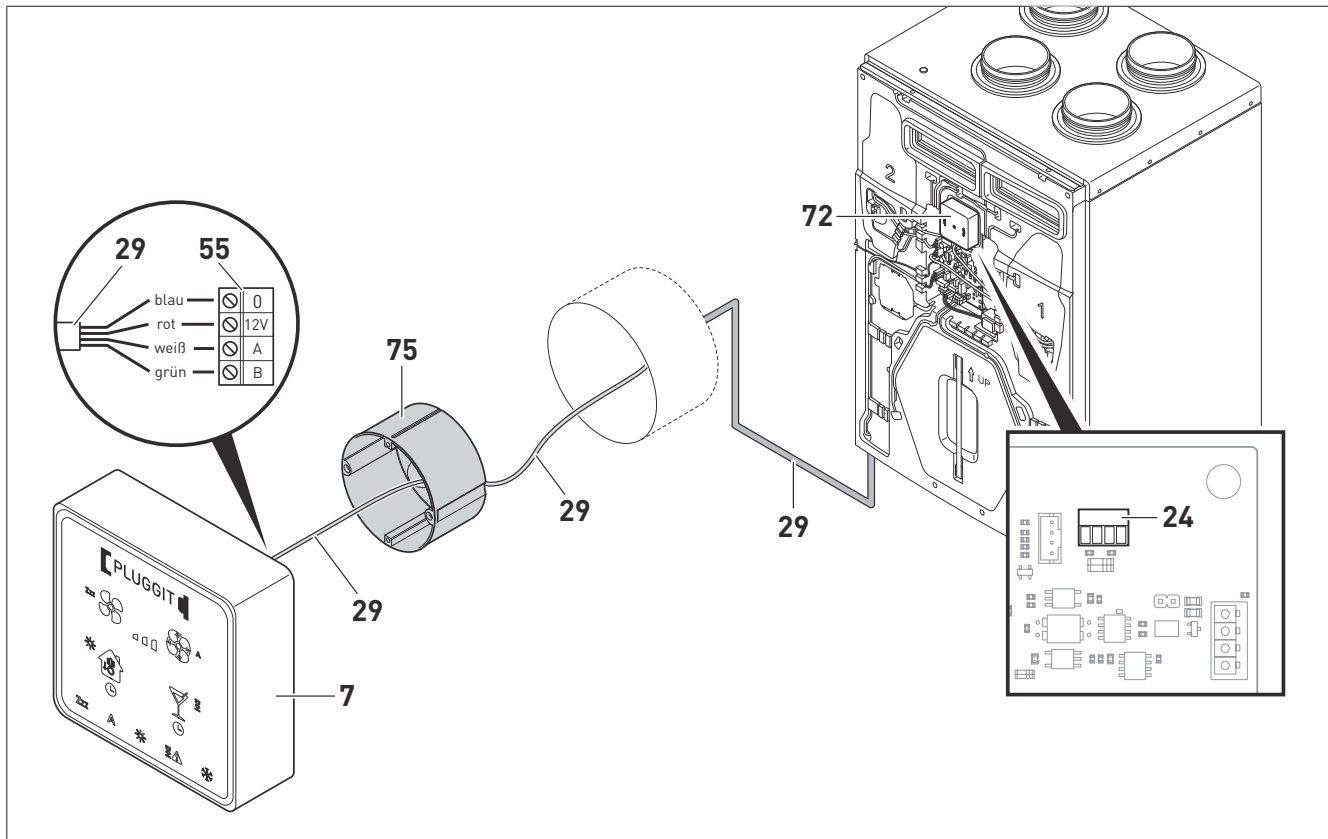
The control panel can be installed on the wall (surface-mounted), if needed, with a maximum length of 30 m.



1. Remove filter cover (20).



2. Loosen screws Torx 30 (22) on the bottom of the device.
3. Unscrew screws Torx 30 (21) on top of device (Arrow 1).
4. Remove front cover (23) (Arrow 2).



5. Remove control panel (7) from the ventilation system and insert dummy cover (72) into the ventilation system.
6. Connect cables (29) to the connection (24).

8. Conduct cables (29) from the wall opening into the flush-mounted box (75).

#### NOTE

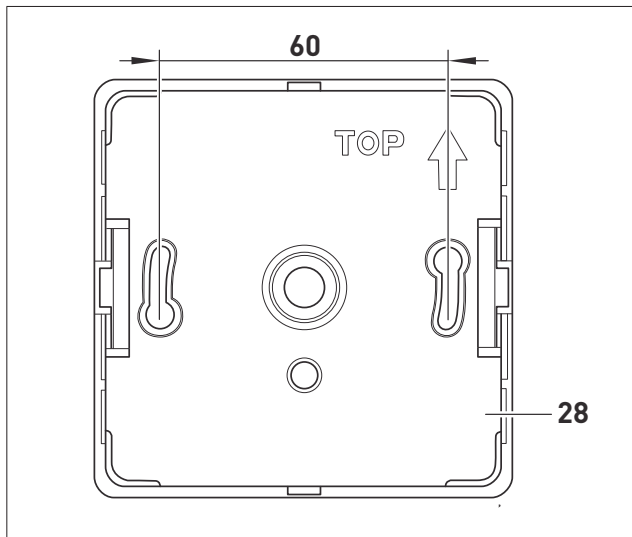
Flush-mounted box (75) is not included in the items delivered and must be provided on construction.

9. Insert flush-mounted box (75) in wall opening.
10. Connect cables (29) to plugs (55).
11. Insert control panel (7) into flush-mounted box (75) and screw on tightly.

#### NOTE

No screws are included in the delivered parts. Select screws with dowels appropriate for the brickwork.

12. Connect ventilation system to power grid.



7. Make drill holes for cover of control panel (28) at the intended installation location.



## 6. COMMISSIONING (SPECIALISTS)



### CAUTION

The ventilation system may only be commissioned by qualified specialists, otherwise there is risk of injury or damages.

### NOTE

All the following descriptions are depicted on the ventilation device of Version A (as delivered). To install the ventilation system in the switched over Version B, proceed in a similar manner, see Set Version A or B, p. 12.

### 6.1. INSTRUCTIONS FOR COMMISSIONING

- Before commissioning, the system including all air lines must be checked for possible pollution residues or foreign bodies and cleaned.
- All electrical safety features are properly connected and configured and in working order.

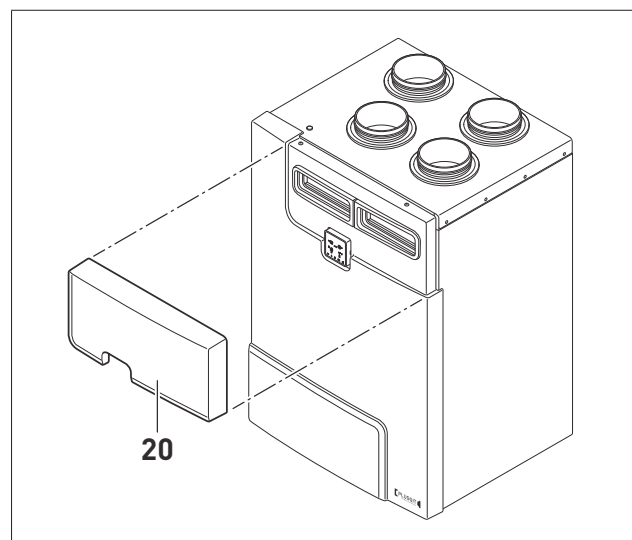
### 6.2. ADJUSTING FLOW RATES

The flow rates must be taken from the “suggested solution.” The flow rates can be set according to pV curves or according to differential pressure as it is measured at the differential pressure connecting piece.

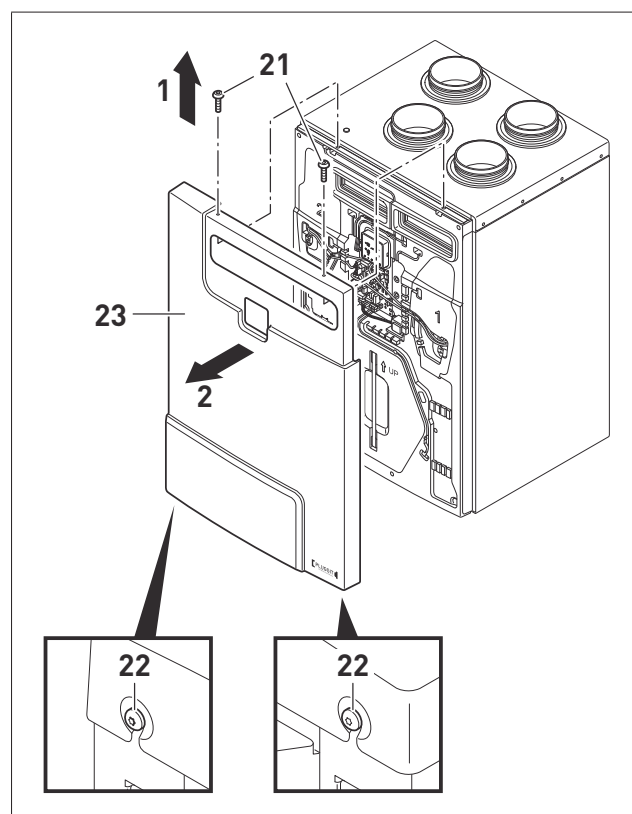
The condensate line must be installed before adjusting the flow rates. There must be a water seal at the condensate connection. Check this and secure it.

#### 6.2.1. Adjust nominal airflow rate (extract air) according to pV curves

The nominal airflow rate (extract air) must be taken from the “suggested solution.”



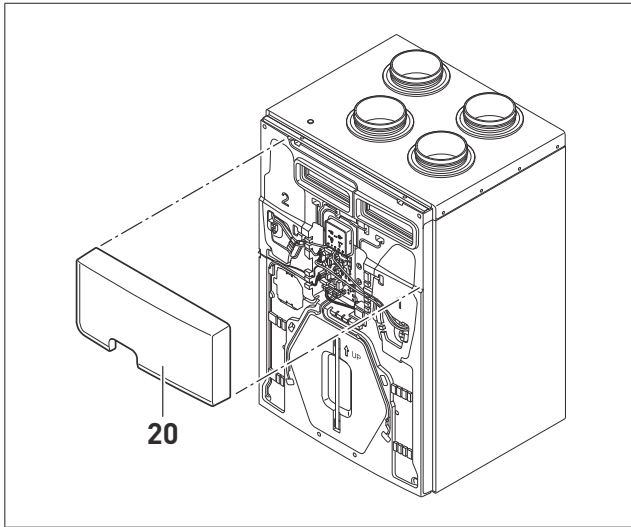
1. Remove filter cover [20].



2. Loosen screws Torx 30 [22] on the bottom of the device.

3. Unscrew screws Torx 30 [21] on top of device (Arrow 1).

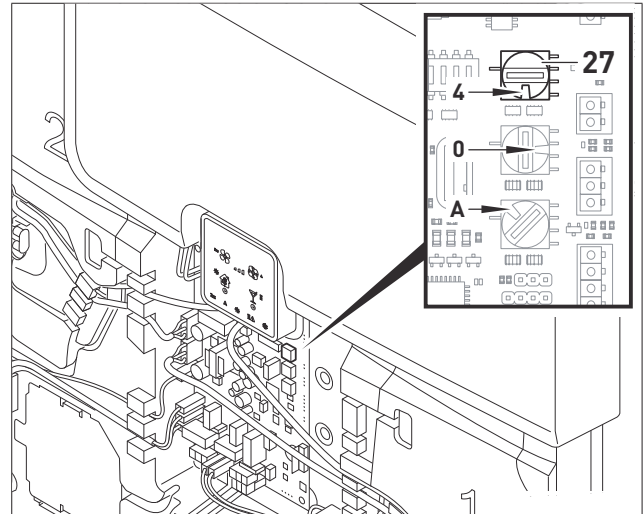
4. Remove front cover [23] (Arrow 2).



5. Reinsert filter cover (20).
6. Set up power supply of the ventilation system.
7. Switch on fan speed V3 on the control panel, see Set fan speed by hand, p. 49.

#### NOTE

The values from the diagrams below refer to setting fan speed V3.

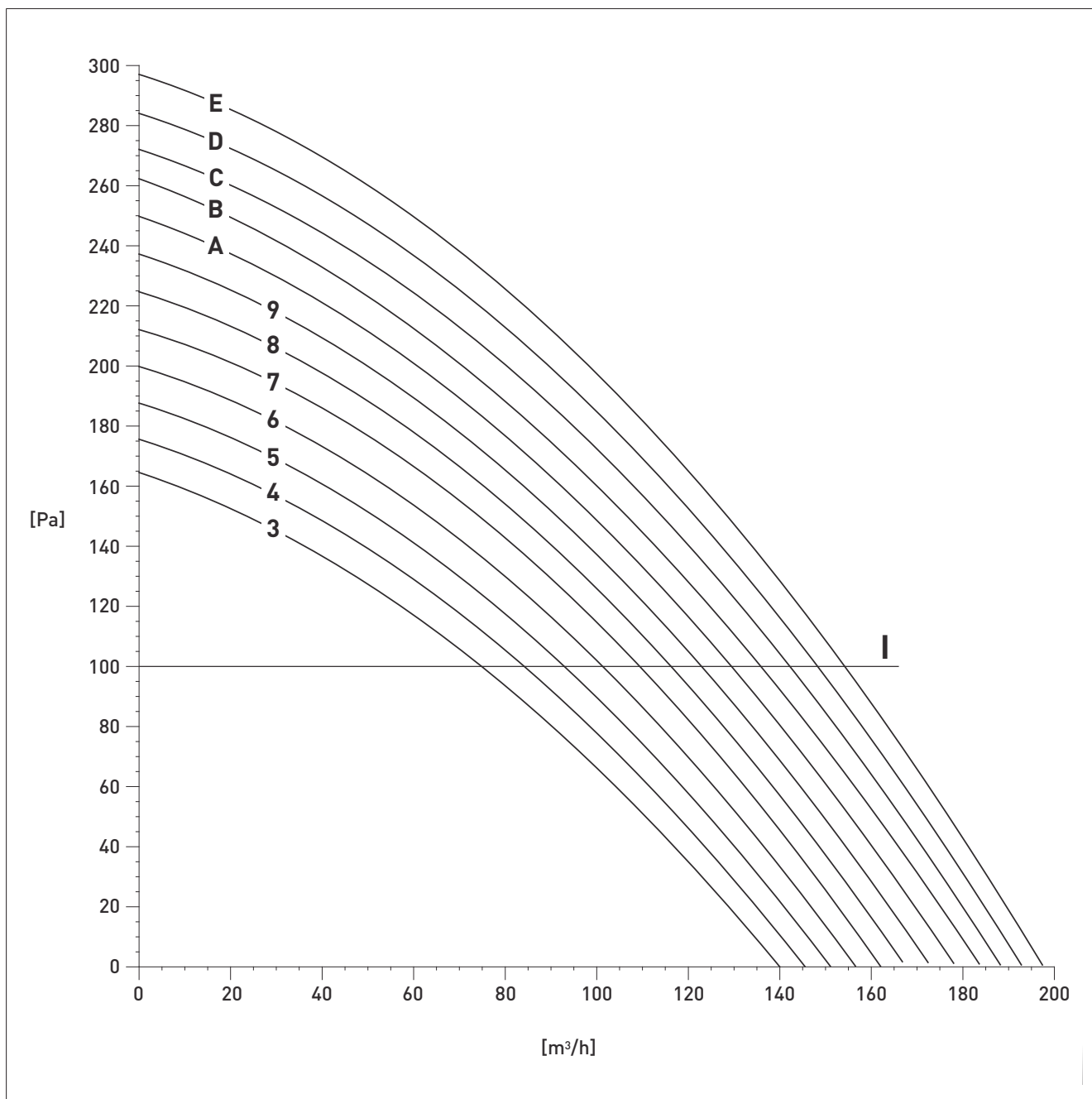


8. The nominal airflow volume (extract air) can be set in accordance with the specifications of the "suggested solution" using the pV curves with the rotary encoding switch (27), see the following diagram.

In the factory setting, the rotary encoding switch (27) is at Position 4. When setting the operating point, S&P recommends assuming a system operating pressure of 100 Pa. It must be set to the value of the curve that is closest to the intersection point between the nominal airflow rate and 100 Pa. Then, the extract and supply airflows must be checked and if needed a readjustment must be made with the rotary encoding switch (27) (extract air) and the rotary encoding switch (28) (supply air).

As an alternative, the flow rates can be set by measuring the differential pressure or by the automatic ServoFlow Kit (optional accessory).

# SABIK 210

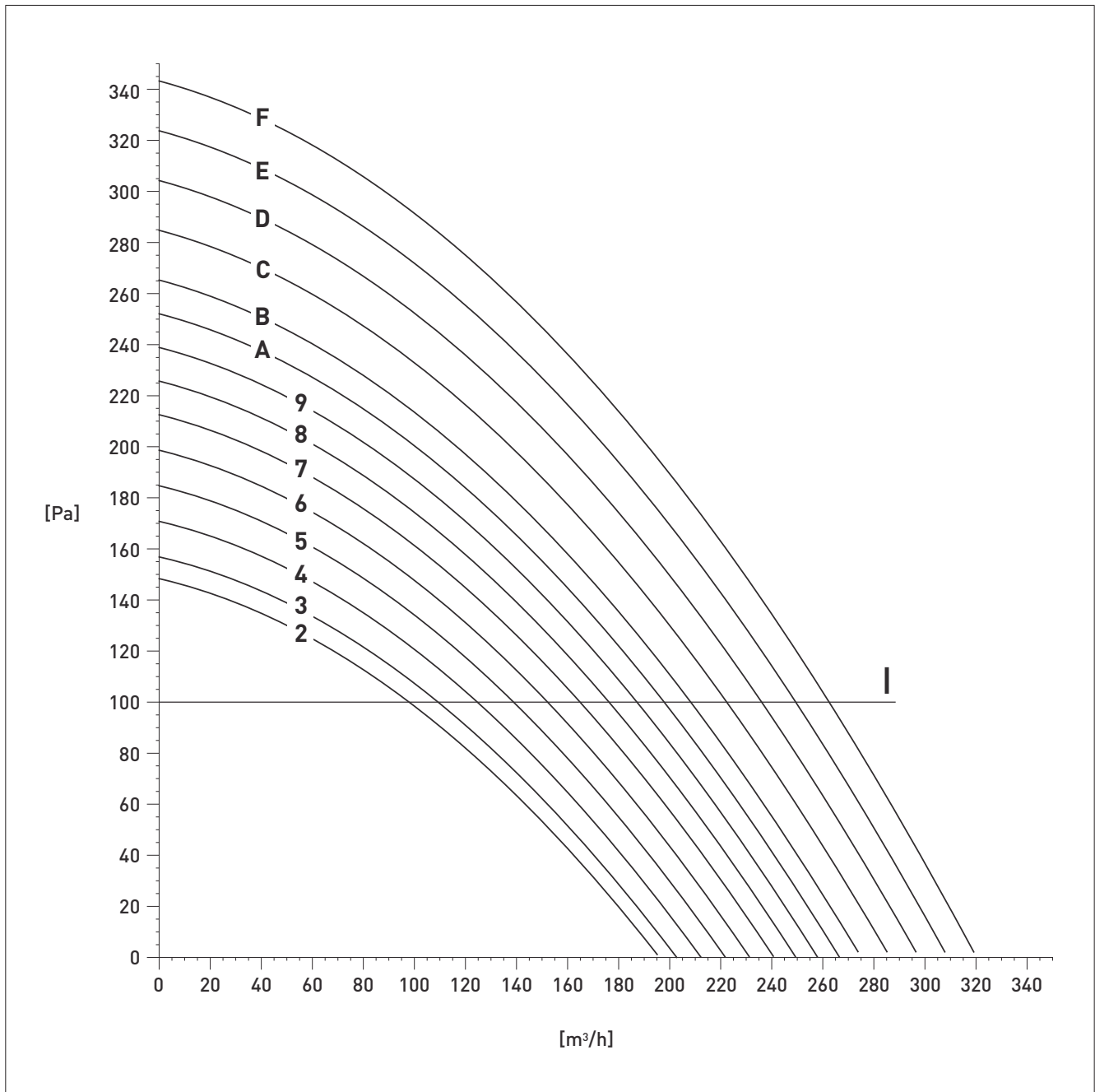


**[Pa]** Pressure loss

**[m³/h]** Nominal flow rate (extract air)

**I** System operating pressure

# SABIK 350

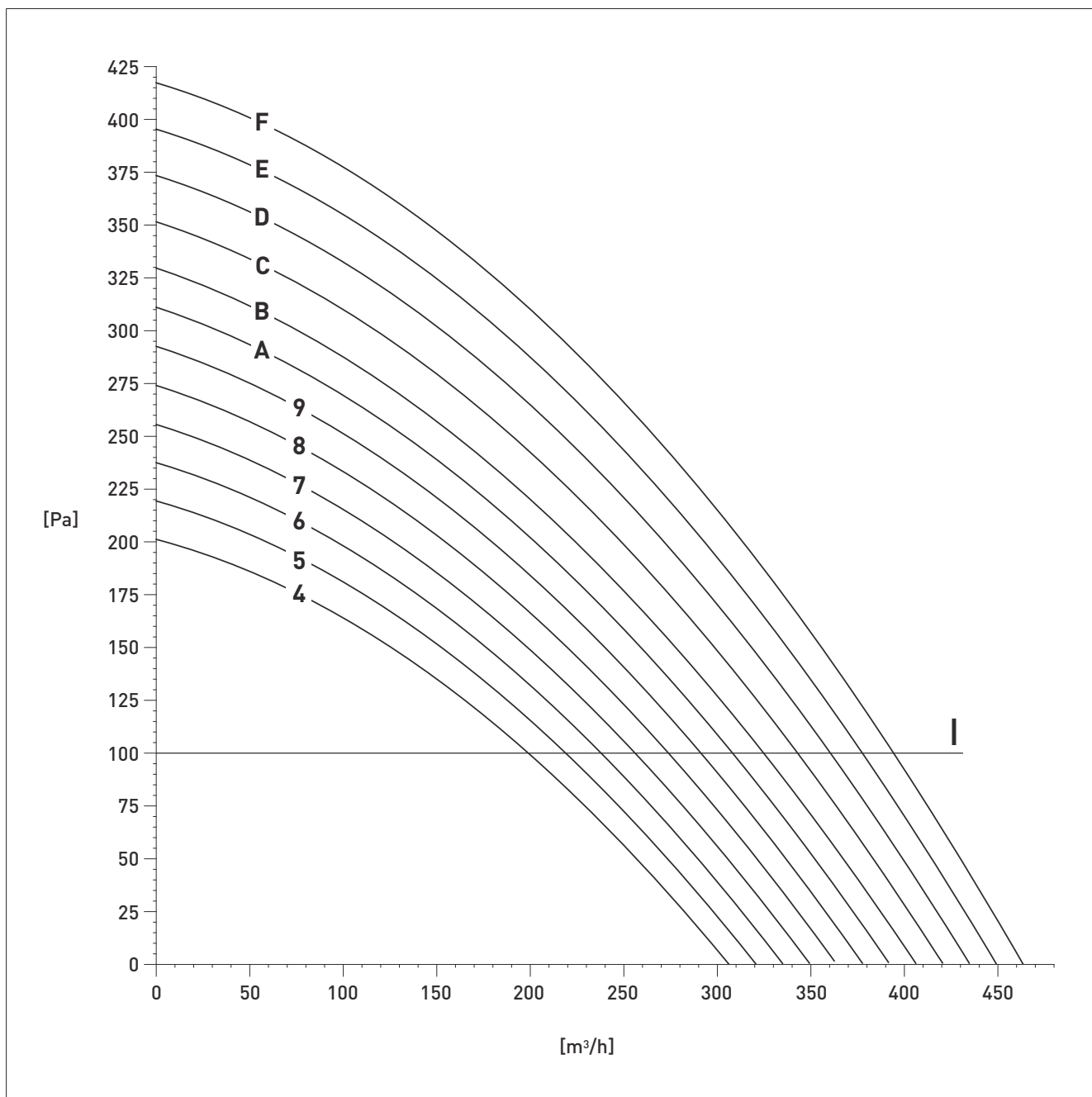


**[Pa]** Pressure loss

**[m³/h]** Nominal flow rate (extract air)

**I** System operating pressure

# SABIK 500



**[Pa]** Pressure loss

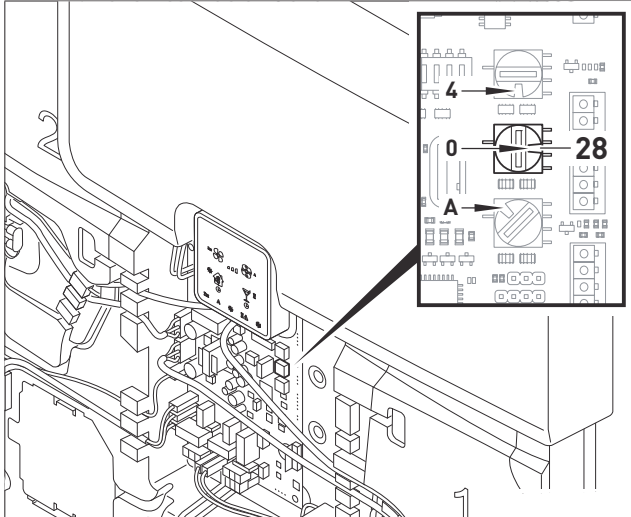
**[m³/h]** Nominal flow rate (extract air)

**I** System operating pressure

## Adjustment flow rate

The ratio of flow rates between supply and extract air can be adjusted. The supply airflow rate is adapted on a percentage basis to the extract airflow rate at the rotary encoding switch (28), see table below.

S&P recommends a ratio of supply air/extract air of -8%. This corresponds to position "E" on the rotary encoding switch (28).



Set rotary encoding switch (28) to the required ratio (factory setting Position 0).

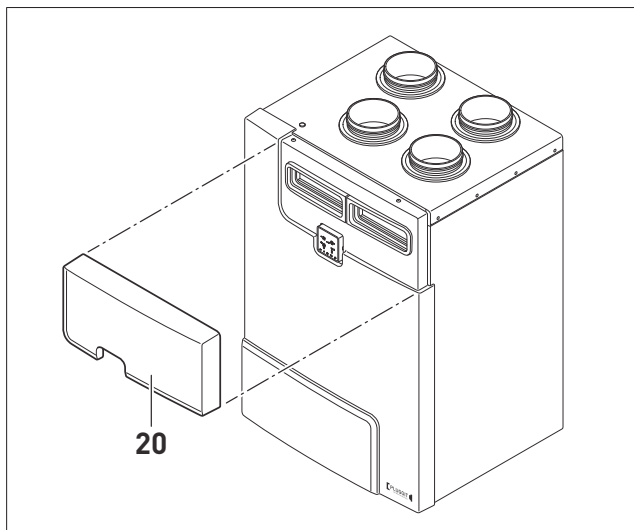
| Position rotary encoding switch (28) | 8    | 9    | A    | B    | C    | D    | E   | F   | 0 | 1   | 2   | 3    | 4    | 5    | 6    | 7    |
|--------------------------------------|------|------|------|------|------|------|-----|-----|---|-----|-----|------|------|------|------|------|
| Ratio supply air/extract air         | -32% | -28% | -24% | -20% | -16% | -12% | -8% | -4% | 0 | +4% | +8% | +12% | +16% | +20% | +24% | +28% |



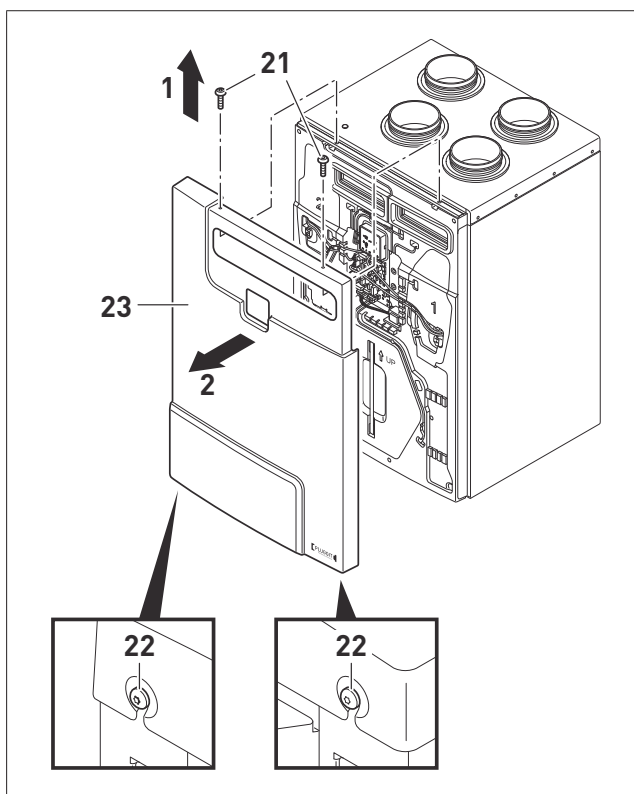
### 6.2.2. Adjusting nominal airflow rate (extract air) using differential pressure gauge

The nominal airflow rate (extract air) must be taken from the “suggested solution.”

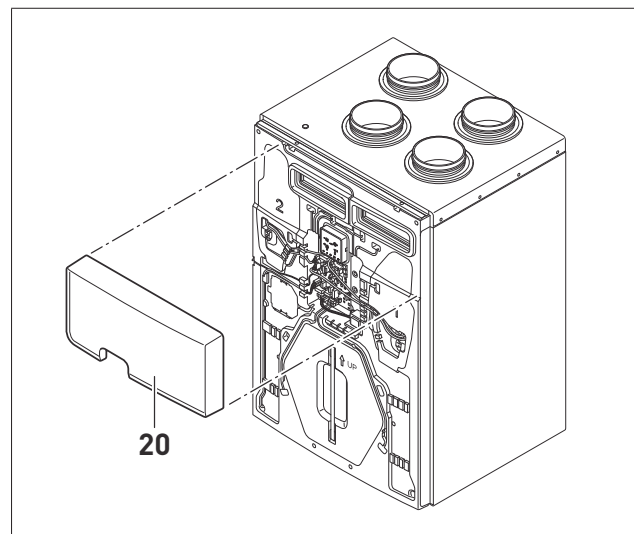
S&P recommends setting the supply airflow rate 8% lower than the extract airflow rate.



1. Remove filter cover (20).



2. Loosen screws Torx 30 (22) on the bottom of the device.
3. Unscrew screws Torx 30 (21) on top of device (Arrow 1).
4. Remove front cover (23) (Arrow 2).



5. Reinsert filter cover (20).

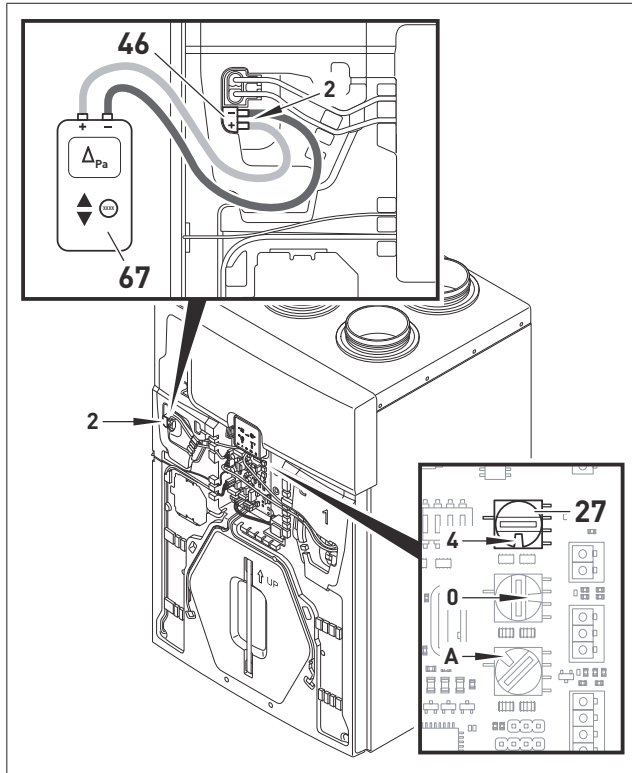
#### NOTE

The first step is always to set the nominal airflow rate (extract air). To this end, check on the toggle encoding switch (5) which version is installed (Version A or Version B), see Set Version A or B, p. 12.

6. Set up power supply of the ventilation system.
7. Switch on fan speed V3 on the control panel, see Set fan speed by hand, p. 49.

#### NOTE

The values from the tables below refer to the setting of fan speed V3.



8. Take the cap off of the differential pressure connecting piece 2 (46).
9. Connect differential pressure gauge (67) to the differential pressure connecting piece 2 (46) and take a reading of the differential pressure [Pa]. Be careful with the correct connection of + and - (+/+ and -/-).
10. Take the nominal airflow rate (extract air) from the "suggested solution."
11. Turn rotary encoding switch (27) until the desired differential pressure (= nominal airflow rate) is displayed on the differential pressure gauge (67). Take the values for the ventilation system from the tables below.

#### Example for SABIK 350:

1. The nominal airflow rate (extract air) from the "suggested solution" is 170 m<sup>3</sup>/h.
2. Look for the value 170 in the table for SABIK 350:
3. Turn rotary encoding switch (27) until 13.9 Pa is displayed on the differential pressure gauge (67).

#### SABIK 210

| Extract airflow rate<br>[m <sup>3</sup> /h] | Differential pressure<br>connecting piece 2/rotary<br>encoding switch (27)<br>[Pa] |
|---------------------------------------------|------------------------------------------------------------------------------------|
| 80                                          | 3.0                                                                                |
| 85                                          | 3.4                                                                                |
| 90                                          | 3.7                                                                                |
| 95                                          | 4.1                                                                                |
| 100                                         | 4.5                                                                                |
| 105                                         | 4.8                                                                                |
| 110                                         | 5.2                                                                                |
| 115                                         | 5.7                                                                                |
| 120                                         | 6.1                                                                                |
| 125                                         | 6.6                                                                                |
| 130                                         | 7.0                                                                                |
| 135                                         | 7.5                                                                                |
| 140                                         | 8.0                                                                                |
| 145                                         | 8.5                                                                                |
| 150                                         | 9.0                                                                                |
| 155                                         | 9.6                                                                                |
| 160                                         | 10.1                                                                               |

#### SABIK 350

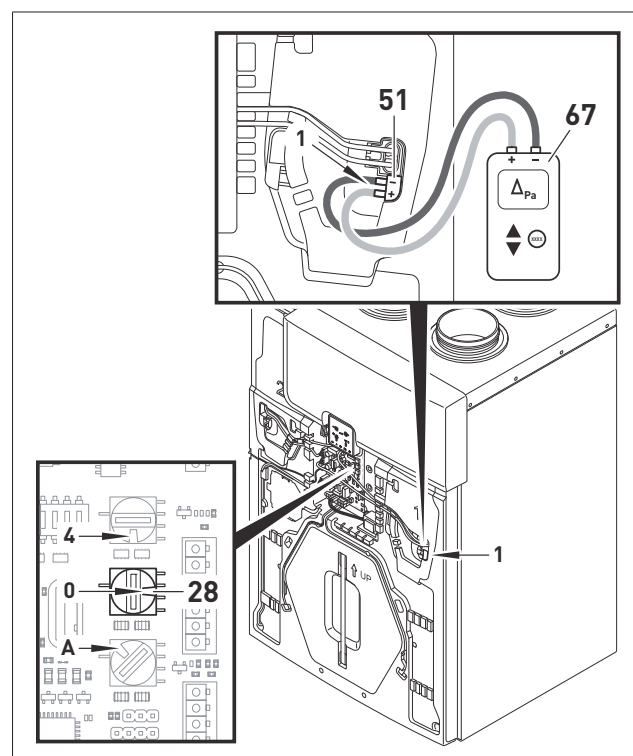
| Extract airflow rate<br>[m <sup>3</sup> /h] | Differential pressure<br>connecting piece 2/rotary<br>encoding switch (27)<br>[Pa] |
|---------------------------------------------|------------------------------------------------------------------------------------|
| 140                                         | 9.0                                                                                |
| 145                                         | 9.7                                                                                |
| 150                                         | 10.5                                                                               |
| 155                                         | 11.2                                                                               |
| 160                                         | 12.1                                                                               |
| 165                                         | 13.0                                                                               |
| 170                                         | 13.9                                                                               |
| 175                                         | 14.8                                                                               |
| 180                                         | 15.9                                                                               |
| 185                                         | 16.9                                                                               |
| 190                                         | 18.0                                                                               |
| 195                                         | 19.2                                                                               |
| 200                                         | 20.4                                                                               |
| 205                                         | 21.6                                                                               |
| 210                                         | 22.8                                                                               |
| 215                                         | 24.1                                                                               |
| 220                                         | 25.4                                                                               |
| 225                                         | 26.7                                                                               |
| 230                                         | 28.0                                                                               |
| 235                                         | 29.3                                                                               |
| 240                                         | 30.5                                                                               |
| 245                                         | 31.7                                                                               |
| 250                                         | 32.8                                                                               |



## SABIK 500

| Extract airflow rate<br>[m³/h] | Differential pressure<br>connecting piece 2/rotary<br>encoding switch (27)<br>[Pa] |
|--------------------------------|------------------------------------------------------------------------------------|
| 230                            | 20.3                                                                               |
| 235                            | 21.2                                                                               |
| 240                            | 22.1                                                                               |
| 245                            | 23.0                                                                               |
| 250                            | 24.0                                                                               |
| 255                            | 25.0                                                                               |
| 260                            | 26.0                                                                               |
| 265                            | 27.0                                                                               |
| 270                            | 28.1                                                                               |
| 275                            | 29.3                                                                               |
| 280                            | 30.4                                                                               |
| 285                            | 31.6                                                                               |
| 290                            | 32.8                                                                               |
| 295                            | 34.1                                                                               |
| 300                            | 35.4                                                                               |
| 305                            | 36.8                                                                               |
| 310                            | 38.1                                                                               |
| 315                            | 39.5                                                                               |
| 320                            | 41.0                                                                               |
| 325                            | 42.5                                                                               |
| 330                            | 44.0                                                                               |
| 335                            | 45.5                                                                               |
| 340                            | 47.1                                                                               |
| 345                            | 48.7                                                                               |
| 350                            | 50.3                                                                               |
| 355                            | 52.0                                                                               |
| 360                            | 53.6                                                                               |
| 365                            | 55.3                                                                               |
| 370                            | 57.0                                                                               |
| 375                            | 58.7                                                                               |
| 380                            | 60.4                                                                               |

## Adjust supply airflow rate



1. Take the cap off the differential pressure connecting piece 1 (51).
2. Connect differential pressure gauge (67) to the differential pressure connecting piece 1 (51) and take a reading of the differential pressure [Pa]. Be careful with the correct connection of + and - (+/+ and -/-).
3. Take the supply airflow rate from the “suggested solution.”
4. Turn rotary encoding switch (28) until the desired differential pressure is displayed on the differential pressure gauge (67).  
Take the values for the ventilation system from the tables below.

### Example for SABIK 350:

1. The supply airflow rate from the “suggested solution” is 160 m³/h.
2. Look for the value 160 in the table for SABIK 350:
3. Turn rotary encoding switch (28) until 17.4 Pa is displayed on the differential pressure gauge (67).



### SABIK 210

| Extract airflow rate<br>[m³/h] | Differential pressure<br>connecting piece 1/rotary<br>encoding switch (28)<br>[Pa] |
|--------------------------------|------------------------------------------------------------------------------------|
| 80                             | 2.5                                                                                |
| 85                             | 2.9                                                                                |
| 90                             | 3.3                                                                                |
| 95                             | 3.7                                                                                |
| 100                            | 4.1                                                                                |
| 105                            | 4.5                                                                                |
| 110                            | 5.0                                                                                |
| 115                            | 5.5                                                                                |
| 120                            | 6.0                                                                                |
| 125                            | 6.5                                                                                |
| 130                            | 7.0                                                                                |
| 135                            | 7.5                                                                                |
| 140                            | 8.0                                                                                |
| 145                            | 8.6                                                                                |
| 150                            | 9.1                                                                                |
| 155                            | 9.7                                                                                |
| 160                            | 10.2                                                                               |

### SABIK 350

| Extract airflow rate<br>[m³/h] | Differential pressure<br>connecting piece 1/rotary<br>encoding switch (28)<br>[Pa] |
|--------------------------------|------------------------------------------------------------------------------------|
| 140                            | 13.8                                                                               |
| 145                            | 14.7                                                                               |
| 150                            | 15.5                                                                               |
| 155                            | 16.5                                                                               |
| 160                            | 17.4                                                                               |
| 165                            | 18.4                                                                               |
| 170                            | 19.5                                                                               |
| 175                            | 20.5                                                                               |
| 180                            | 21.7                                                                               |
| 185                            | 22.8                                                                               |
| 190                            | 24.0                                                                               |
| 195                            | 25.3                                                                               |
| 200                            | 26.7                                                                               |
| 205                            | 28.1                                                                               |
| 210                            | 29.6                                                                               |
| 215                            | 31.1                                                                               |
| 220                            | 32.7                                                                               |
| 225                            | 34.5                                                                               |
| 230                            | 36.3                                                                               |
| 235                            | 38.2                                                                               |
| 240                            | 40.3                                                                               |
| 245                            | 42.4                                                                               |
| 250                            | 44.7                                                                               |

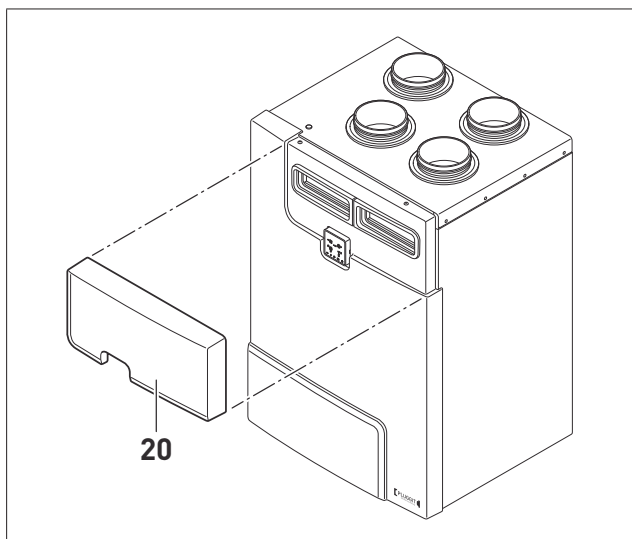
### SABIK 500

| Extract airflow rate<br>[m³/h] | Differential pressure<br>connecting piece 1/rotary<br>encoding switch (28)<br>[Pa] |
|--------------------------------|------------------------------------------------------------------------------------|
| 230                            | 20.1                                                                               |
| 235                            | 21.0                                                                               |
| 240                            | 21.9                                                                               |
| 245                            | 22.9                                                                               |
| 250                            | 23.8                                                                               |
| 255                            | 27.8                                                                               |
| 260                            | 25.8                                                                               |
| 265                            | 26.9                                                                               |
| 270                            | 28.0                                                                               |
| 275                            | 29.1                                                                               |
| 280                            | 30.2                                                                               |
| 285                            | 31.4                                                                               |
| 290                            | 32.6                                                                               |
| 295                            | 33.8                                                                               |
| 300                            | 35.1                                                                               |
| 305                            | 36.4                                                                               |
| 310                            | 37.7                                                                               |
| 315                            | 39.1                                                                               |
| 320                            | 40.5                                                                               |
| 325                            | 41.9                                                                               |
| 330                            | 43.4                                                                               |
| 335                            | 44.9                                                                               |
| 340                            | 46.4                                                                               |
| 345                            | 47.9                                                                               |
| 350                            | 49.5                                                                               |
| 355                            | 51.2                                                                               |
| 360                            | 52.8                                                                               |
| 365                            | 54.5                                                                               |
| 370                            | 56.3                                                                               |
| 375                            | 58.0                                                                               |
| 380                            | 59.8                                                                               |

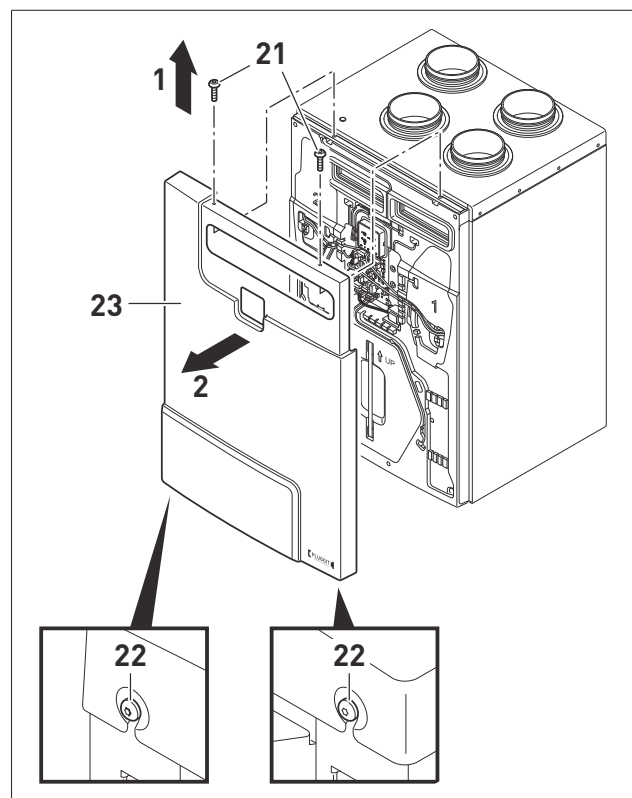
### 6.3. ENABLING/DISABLING HUMIDITY SENSOR FOR AUTOMATIC MODE

In the automatic mode, the ventilation system regulates the speed using the value set for relative humidity in the extract air. For this purpose, the humidity sensor must be activated.

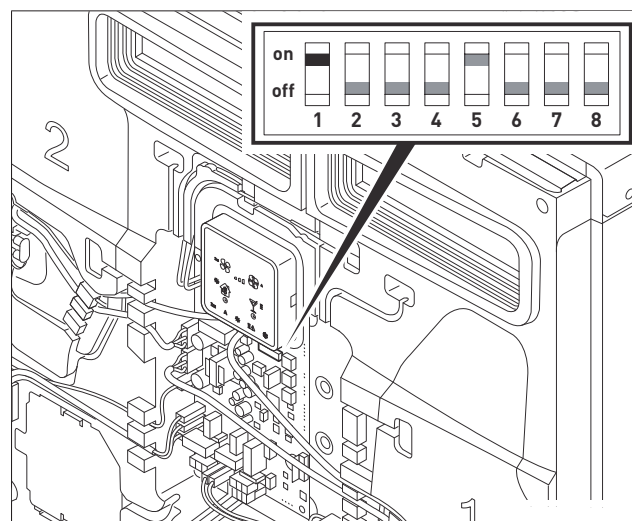
Factory setting: "on" = activated



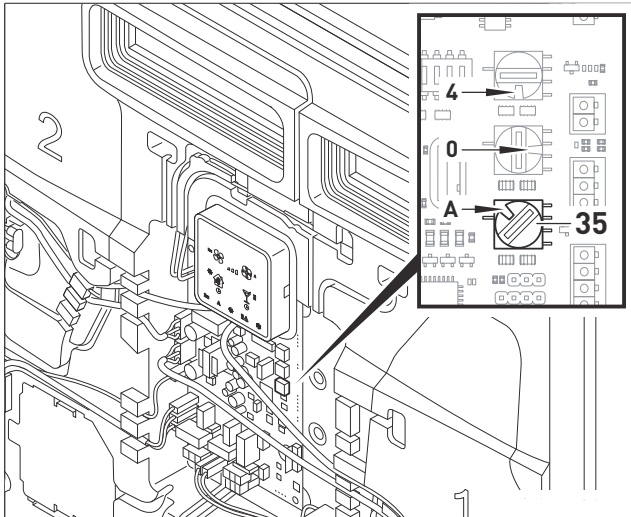
1. Disconnect power supply from ventilation system.
2. Remove filter cover (20).



3. Loosen screws Torx 30 (22) on the bottom of the device.
4. Unscrew screws Torx 30 (21) on top of device (Arrow 1).
5. Remove front cover (23) (Arrow 2).



6. Enable:  
Set toggle encoding switch 1 to "on."  
The humidity sensor feature is activated.
- Disable:  
Set toggle encoding switch 1 to "off."



7. Position rotary encoding switch (35) to the intended target extract air humidity, see the table below (factory setting Position A).

The upper target value for extract air humidity can be set between 60-90% using the rotary encoding switch (35) (factory setting 80%, Position A).

The lower target value is permanently set to 45%. Within the range set, the system adjusts continuously. If the system falls short of the lower target value, then the system runs in the humidity protection mode. If the system exceeds the upper target value, then the system runs with nominal air.

| Extract air humidity (%) |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | Position rotary encoding switch (35) |
|--------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------|
| 60                       | <div style="display: flex; align-items: center; justify-content: center;"> <div style="width: 50px; height: 100px; background: linear-gradient(to top, #ccc, #fff); border: 1px solid #ccc; margin-right: 10px;"></div> <div style="writing-mode: vertical-rl; transform: rotate(180deg); font-size: 0.8em; font-weight: bold;">Lower extract air humidity</div> <div style="width: 50px; height: 100px; background: linear-gradient(to bottom, #fff, #ccc); border: 1px solid #ccc; margin-left: 10px;"></div> </div> | 0                                    |
| 62                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | 1                                    |
| 64                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | 2                                    |
| 66                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | 3                                    |
| 68                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | 4                                    |
| 70                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | 5                                    |
| 72                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | 6                                    |
| 74                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | 7                                    |
| 76                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | 8                                    |
| 78                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | 9                                    |
| 80                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | A<br>(Factory setting)               |
| 82                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | B                                    |
| 84                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | C                                    |
| 86                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | D                                    |
| 88                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | E                                    |
| 90                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | F                                    |

8. Screw on front cover (23) firmly with screws Torx 30 (21) and (22).

9. Insert filter cover (20).

10. Set up power supply of the ventilation system.

11.  In order to set the ventilation system to the humidity-controlled mode, keep symbol depressed for 5 seconds. When the automatic mode (humidity control) is activated, the A symbol lights up below on the control panel.

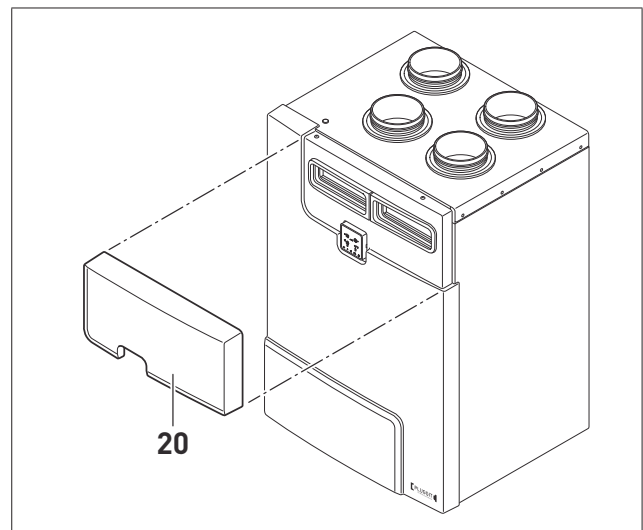
#### 6.4. ENABLING/DISABLING VOC SENSOR (OPTIONAL ACCESSORY) FOR AUTOMATIC MODE

In automatic mode, the ventilation system regulates proportionally the speed in dependence of the concentration of pollutants measured in the extract air. For this purpose, a VOC sensor SABI-K-VOC (optional accessory) must be installed, see separate operating and installation instructions.

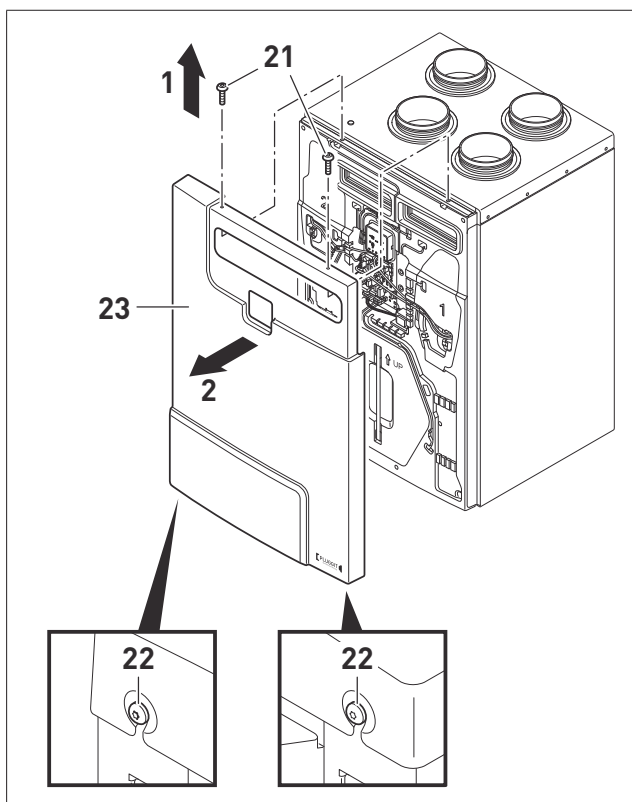
The VOC target value is set using the rotary encoding switch (35). The upper working range can be set between 1100-2000.

The lower threshold value of 450 ppm is permanently programmed. The upper target value has been pre-set to 1700 ppm at the factory.

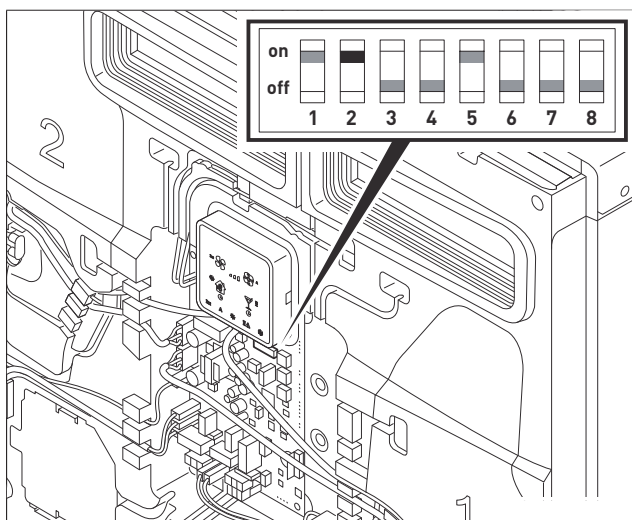
If the upper threshold value is exceeded, then the ventilation system runs with nominal air. If the system falls short of the lower threshold value, then the system runs in the humidity protection mode.



1. Disconnect power supply from ventilation system.  
2. Remove filter cover (20).



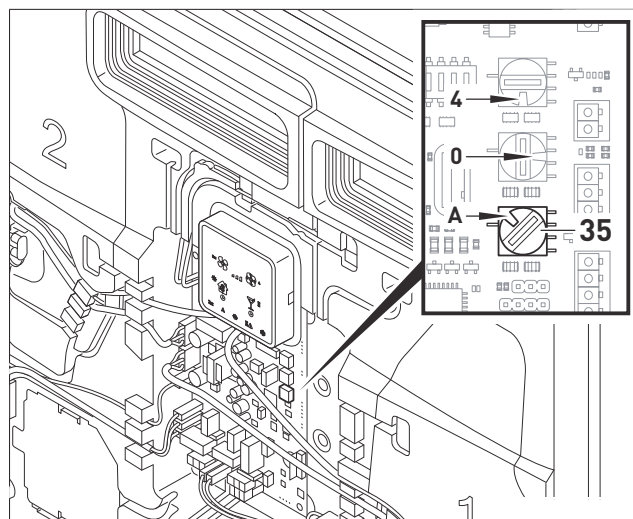
3. Loosen screws Torx 30 (22) on the bottom of the device.
4. Unscrew screws Torx 30 (21) on top of device (Arrow 1).
5. Remove front cover (23) (Arrow 2).



6. Enable:  
Set toggle encoding switch **2** to "on."  
The humidity sensor feature is activated.
- Disable:  
Set toggle encoding switch **2** to "off."

#### NOTE

If several modes are activated, then the mode with the highest priority is carried out. Position of the rotary encoding switch (35) is always identical for both functions, humidity and VOC.



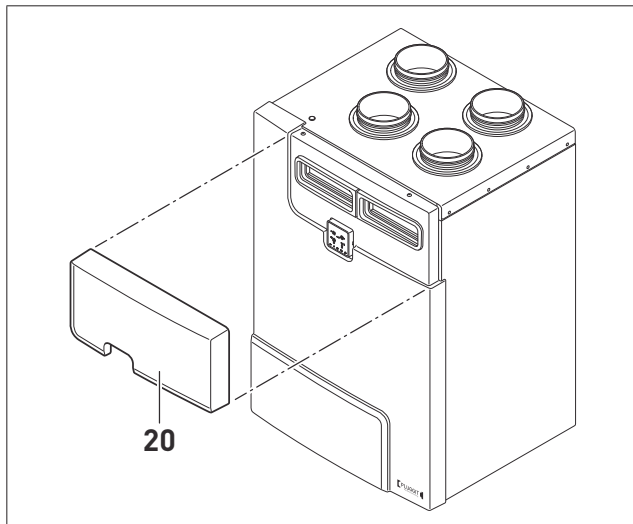
7. Adjust the rotary encoding switch (35) according to the target value of the maximum concentration of pollutants in the extract air, see the following table (factory setting Position A).

| Pollutant concentration (VOC) (ppm) |                                                                                                                                                                                                                                                                                                                                                                                                                                                 | Position rotary encoding switch (35) |
|-------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------|
| 1100                                | <div style="display: flex; align-items: center; justify-content: center;"> <div style="width: 100%; height: 100%; border: 1px solid black; position: relative;"> <div style="position: absolute; top: 0; left: 0; right: 0; bottom: 0; background: linear-gradient(to top, transparent 49%, #ccc 49%, #ccc 51%, transparent 51%); background-size: 100% 100%; background-position: center; background-repeat: no-repeat;"> </div> </div> </div> | 0                                    |
| 1160                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                 | 1                                    |
| 1220                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                 | 2                                    |
| 1280                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                 | 3                                    |
| 1340                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                 | 4                                    |
| 1400                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                 | 5                                    |
| 1460                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                 | 6                                    |
| 1520                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                 | 7                                    |
| 1580                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                 | 8                                    |
| 1640                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                 | 9                                    |
| 1700                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                 | A<br>(Factory setting)               |
| 1760                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                 | B                                    |
| 1820                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                 | C                                    |
| 1880                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                 | D                                    |
| 1940                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                 | E                                    |
| 2000                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                 | F                                    |

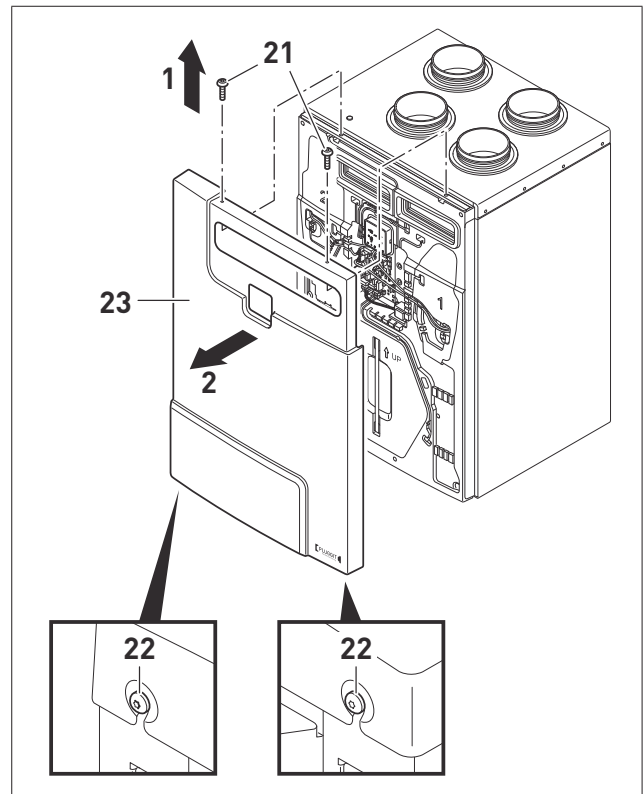
8. Screw on front cover (23) firmly with screws Torx 30 (21) and (22).
9. Insert filter cover (20).
10. Set up power supply of the ventilation system.
11.  In order to set the ventilation system to the VOC-controlled mode, keep symbol depressed for five seconds. When the automatic mode (VOC-controlled mode) is activated, the A symbol below on the control panel lights up.

## 6.5. ENABLING/DISABLING EXTERNAL ENTRANCE 0-10 V

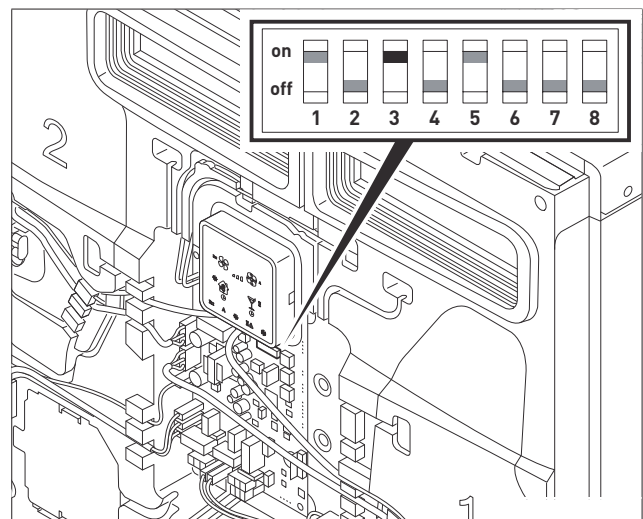
In automatic mode, the air volume in the ventilation system is regulated by an external 0-10 V signal. The input signal 0 V corresponds to the humidity protection flow rate. The input signal 10 V corresponds to the nominal airflow rate.



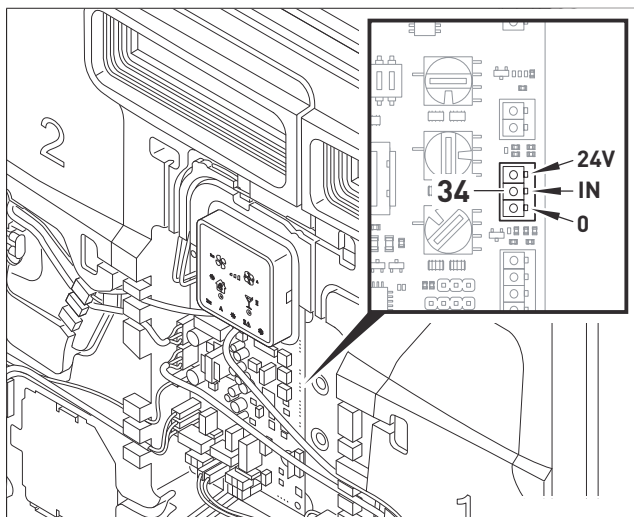
1. Disconnect power supply from ventilation system.
2. Remove filter cover (20).



3. Loosen screws Torx 30 (22) on the bottom of the device.
4. Unscrew screws Torx 30 (21) on top of device (Arrow 1).
5. Remove front cover (23) (Arrow 2).



6. Enable:  
Set toggle encoding switch 3 to "on."  
The humidity sensor feature is activated.
- Disable:  
Set toggle encoding switch 3 to "off."

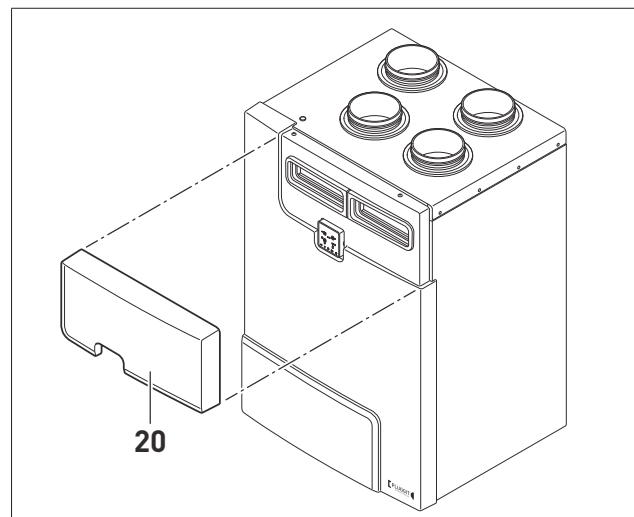


7. Connect external sensor (e.g. CO<sub>2</sub>, humidity, VOC) or control signal 0-10 V from an external control to the connection point (34).
8. Screw on front cover (23) firmly with screws Torx 30 (21) and (22).
9. Insert filter cover (20).
10. Set up power supply of the ventilation system.
11.  In order to set the ventilation system to the 0-10 V signal-controlled mode, keep the symbol depressed for 5 seconds. When the automatic mode (0-10 V-controlled mode) is activated, the A symbol on the bottom of the control panel lights up.

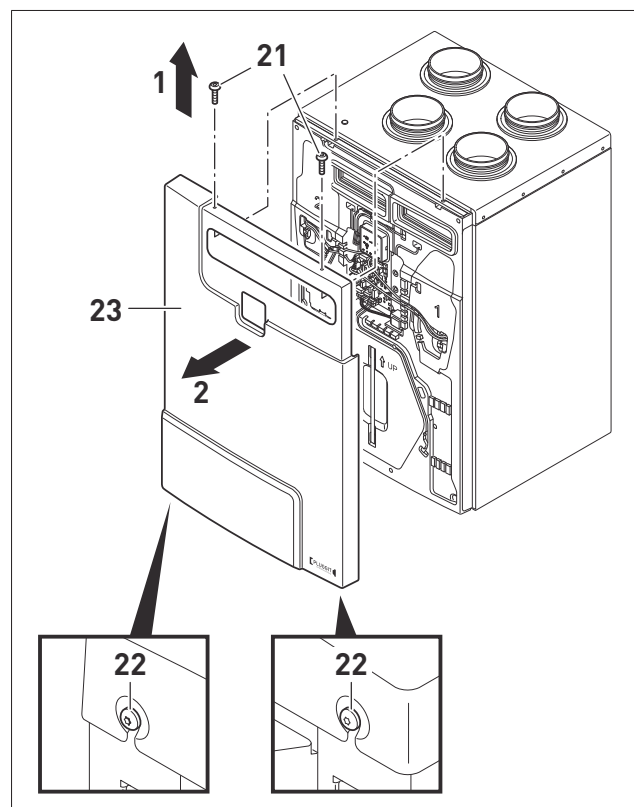
## 6.6. ENABLING/DISABLING FIREPLACE MODE

To avoid the back-flow of gases into the room from the open flue of gas or other fuel-burning appliances, the fireplace mode must be activated. When activating, S&P recommends that you also install a pre-heater SABIK 210-HR / SABIK 350-HR / SABIK 500-HR (optional accessory) in order to ensure continuous operation of the device.

If there is risk of freezing, then the ventilation system is shut down through the fireplace mode for 2 hours. When this time has elapsed, the device switches itself on and checks the conditions. If the conditions have not changed, the device shuts down again for 2 hours. This cycle repeats itself until conditions for continuous operation have been re-established.

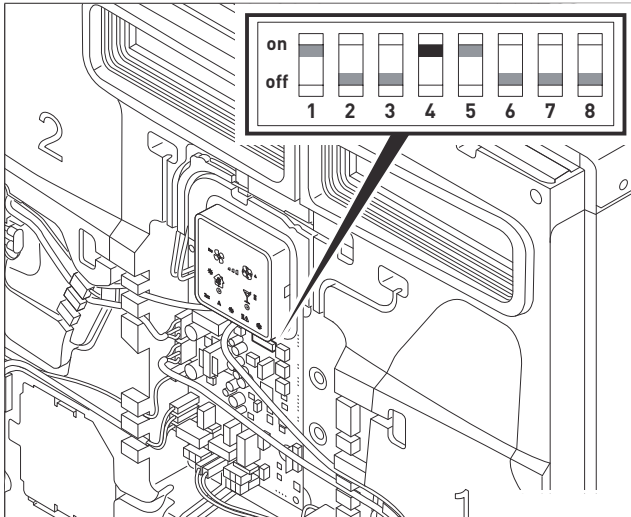


1. Disconnect power supply from ventilation system.
2. Remove filter cover (20).



3. Loosen screws Torx 30 (22) on the bottom of the device.
4. Unscrew screws Torx 30 (21) on top of device (Arrow 1).
5. Remove front cover (23) (Arrow 2).





6. Enable:  
Set toggle encoding switch 4 to "on."  
The humidity sensor feature is activated.
- Disable:  
Set toggle encoding switch 4 to "off."
7. Screw on front cover (23) firmly with screws Torx 30 (21) and (22).
8. Insert filter cover (20).
9. Set up power supply of the ventilation system.

### 6.7. ENABLING/DISABLING EMERGENCY SHUTDOWN CONTACT

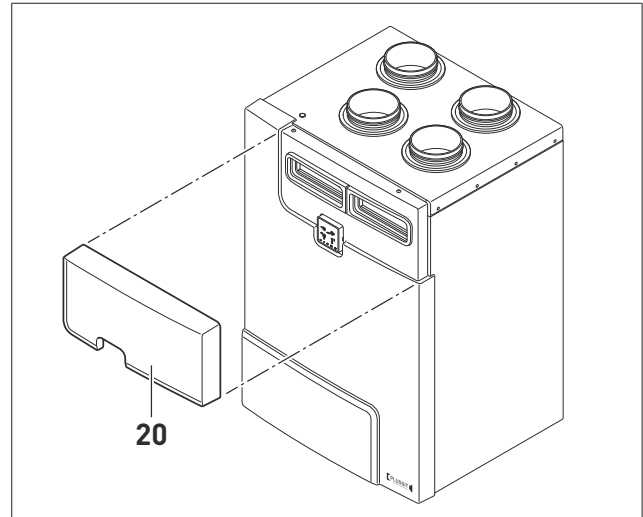
This contact can be used to shut down the ventilation system in an emergency case.

#### NOTE

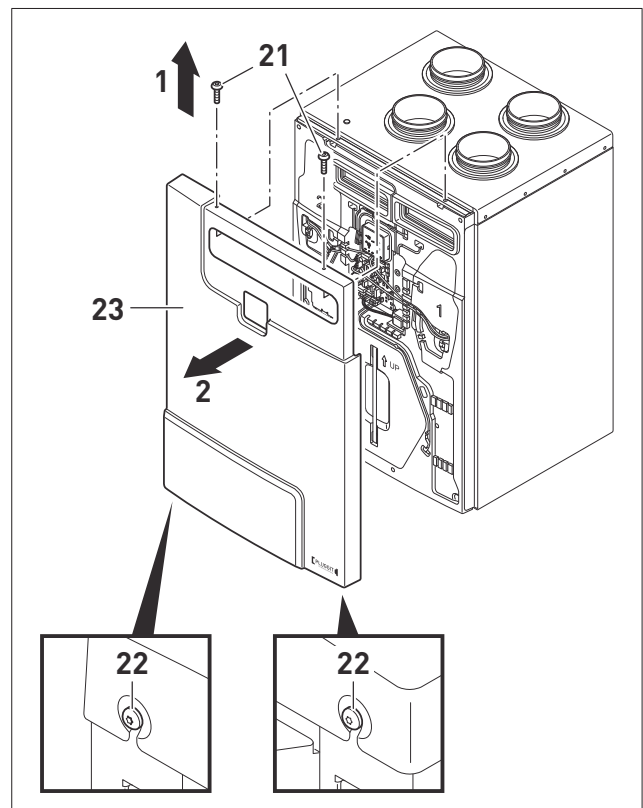
As soon the system has been triggered using this contact, the units has to be reseted disconnecting the unit from the power supply.

The switching function that must be set must be adapted to the components to be connected (normally open contact/normally closed contact). The contact is set using the toggle encoding switch 6, as follows.

Factory setting: "off" = normally open contact

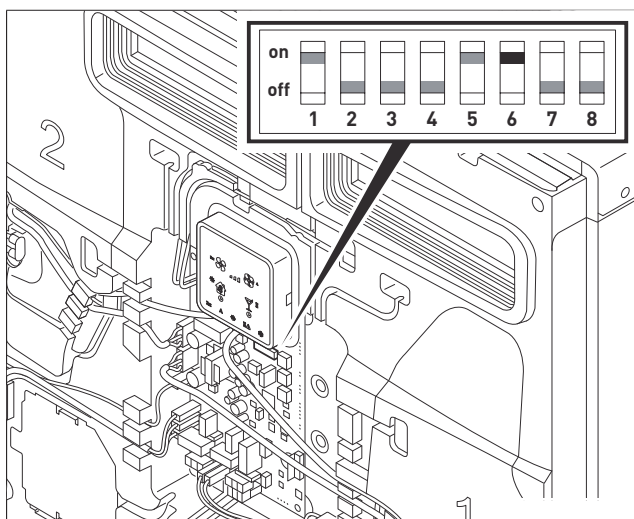


1. Disconnect power supply from ventilation system.
2. Remove filter cover (20).



3. Loosen screws Torx 30 (22) on the bottom of the device.
4. Unscrew screws Torx 30 (21) on top of device (Arrow 1).
5. Remove front cover (23) (Arrow 2).

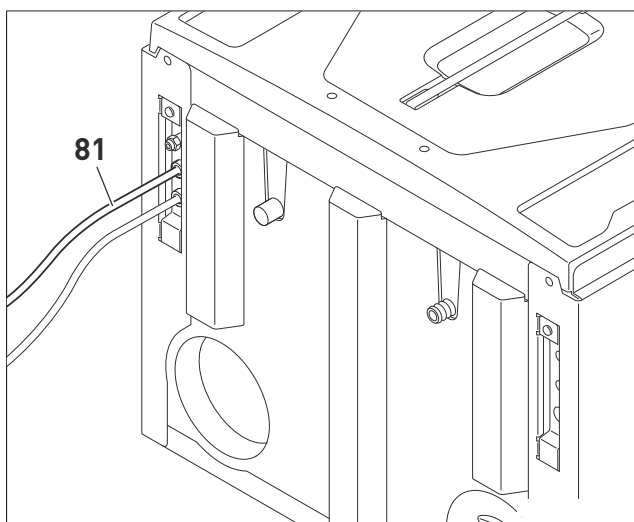




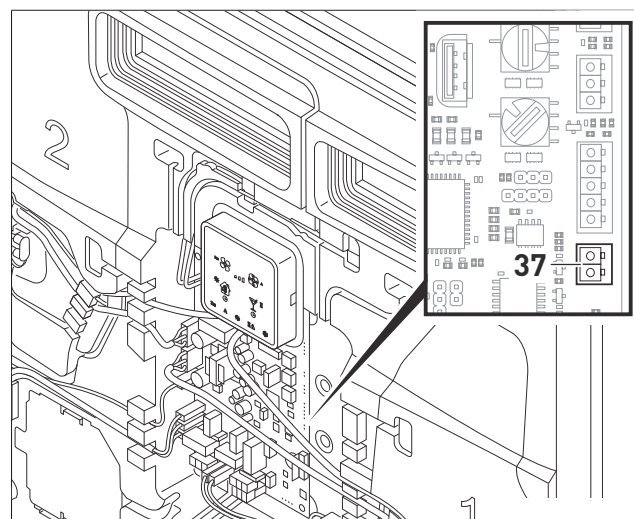
6. Enable:  
Reset toggle encoding switch **6** to "on" = normally closed contact.

Disable:

Reset toggle encoding switch **6** to "off" = normally open contact.



7. Conduct cables (81) of the components to be connected (smoke alarm, pressure switch, etc.) to the ventilation system by feeding them through.



8. Attach cables of the components to the connection (37).

9. Screw on front cover (23) firmly with screws Torx 30 (21) and (22).

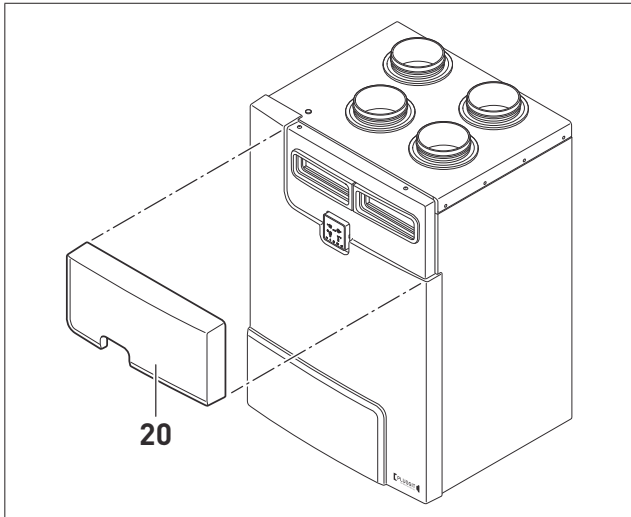
10. Insert filter cover (20).

11. Set up power supply of the ventilation system.

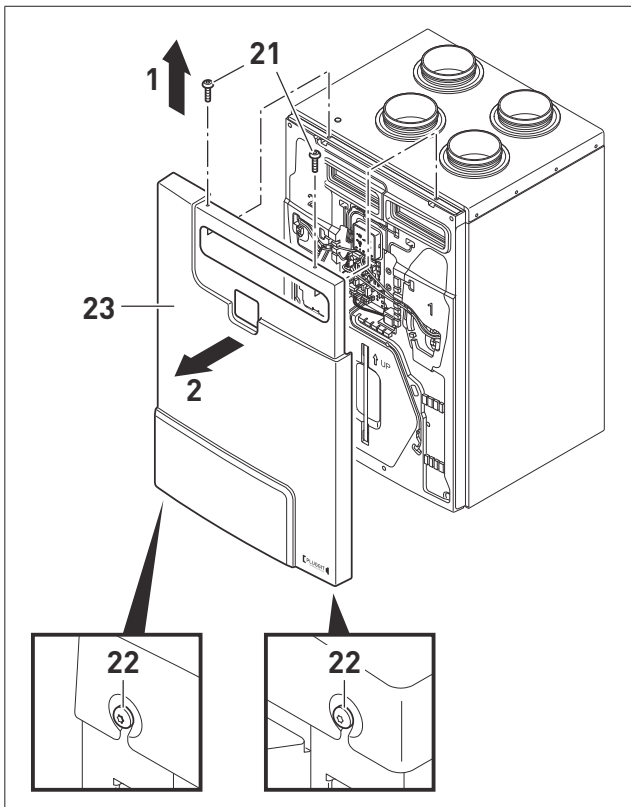
#### 6.8. ENABLING/DISABLING BOOST FAN SPEED

This contact can be used for activating the fan speed BOOST using an external switch. You can use toggle encoding switch 7 to set whether the contact functions as normally open contact or normally closed contact.

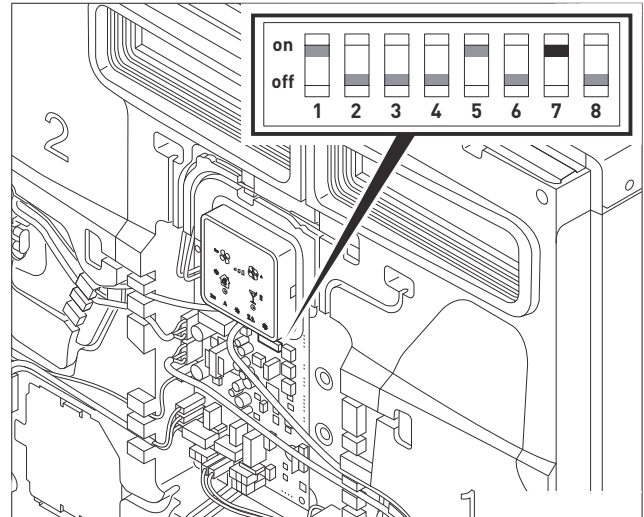
Factory setting: "off" = normally open contact



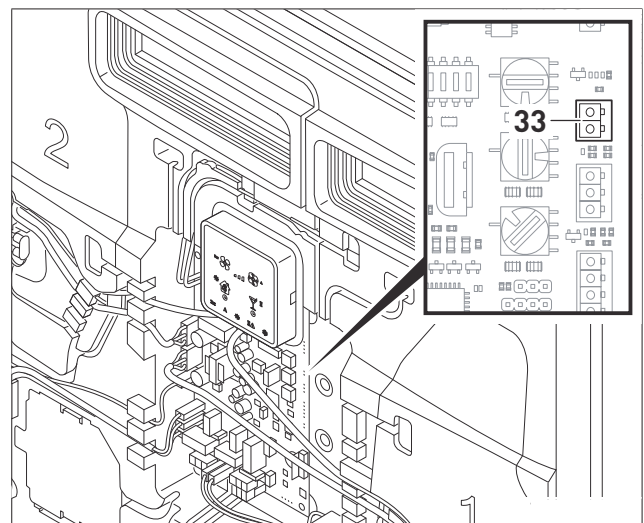
1. Disconnect power supply from ventilation system.
2. Remove filter cover [20].



3. Loosen screws Torx 30 [22] on the bottom of the device.
4. Unscrew screws Torx 30 [21] on top of device (Arrow 1).
5. Remove front cover [23] (Arrow 2).



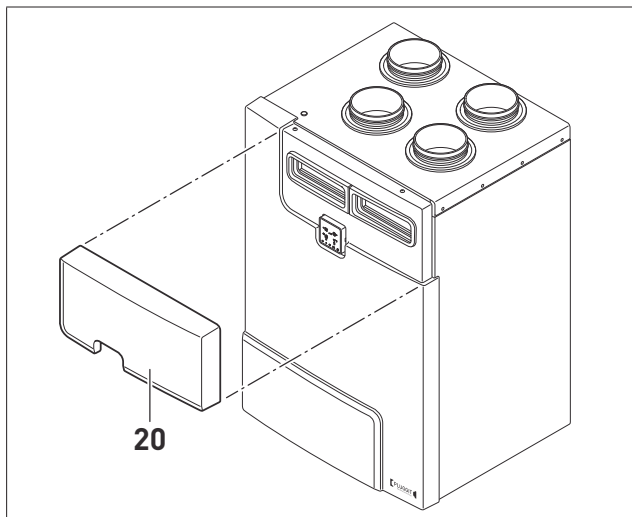
6. Enable:  
Reset toggle encoding switch **7** to "on" = normally closed contact.
- Disable:  
Reset toggle encoding switch **7** to "off" = normally open contact.



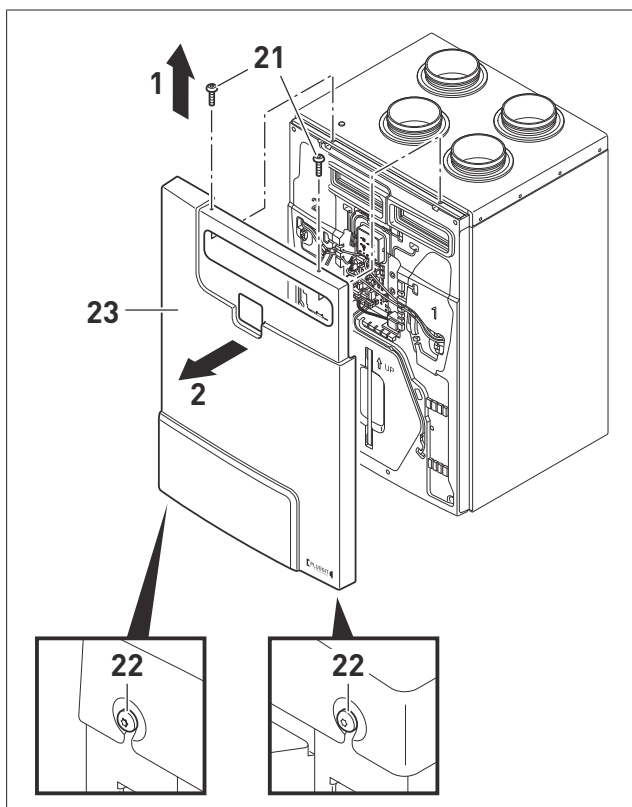
7. Connect switch at connection point [33].
8. Screw on front cover [23] firmly with screws Torx 30 [21] and [22].
9. Insert filter cover [20].
10. Set up power supply of the ventilation system.

## 6.9. ENABLING/DISABLING WEEKLY PROGRAMME

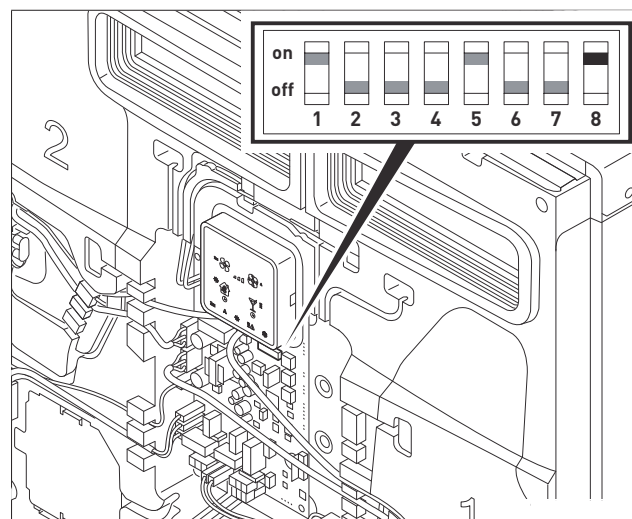
In automatic mode the ventilation system regulates the speed using the weekly programme that has been set, see Setting weekly programme, p. 45.



1. Disconnect power supply from ventilation system.
2. Remove filter cover (20).



3. Loosen screws Torx 30 (22) on the bottom of the device.
4. Unscrew screws Torx 30 (21) on top of device (Arrow 1).
5. Remove front cover (23) (Arrow 2).



6. Enable:  
Set toggle encoding switch 8 to "on."
- Disable:  
Set toggle encoding switch 8 to "off."

### NOTE

When using the weekly programme 3, see Weekly programme 3, p. 46, one of the sensors must be activated:

- Set humidity sensor (integrated as standard) = toggle encoding switch 1 to "on."
- Set VOC sensor (optional accessory) = toggle encoding switch 2 to "on."
- Set 0-10 V entrance (external signal) = toggle encoding switch 3 to "on."

7. Screw on front cover (23) firmly with screws Torx 30 (21) and (22).

8. Insert filter cover (20).

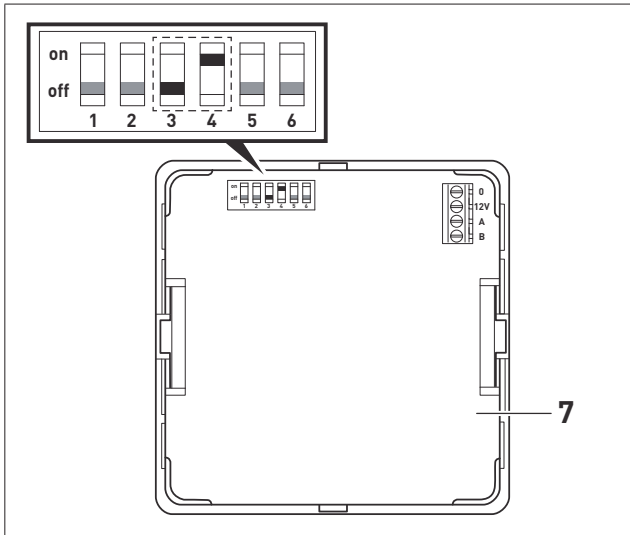
9. Set up power supply of the ventilation system.

10.  So that the ventilation system runs with the weekly programme that has been set, keep the symbol depressed for 5 seconds. When the automatic mode (weekly programme) is activated, the A symbol lights up below on the control panel.

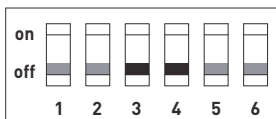
## 7. INDIVIDUAL USER SETTINGS

### 7.1. SET TIMER FOR FILTER ALARM

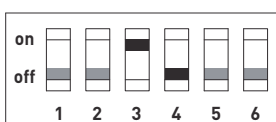
The factory setting for the timer for the filter alarm is 12 months. Replacing of the filter is highly dependent on the pollution of the outdoor air (pollen count, construction site activity). The timer for the filter alarm can be set to 6 months, 9 months or 15 months.



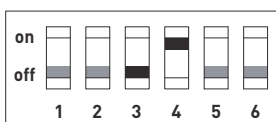
1. Remove back cover of control panel (7), see Connection control panel SABI-K-FB, p. 23.
2. Set toggle code switches 3 and 4 to desired timer.



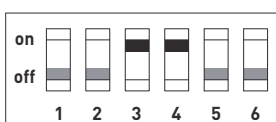
6 months



9 months



12 months  
(Factory setting)

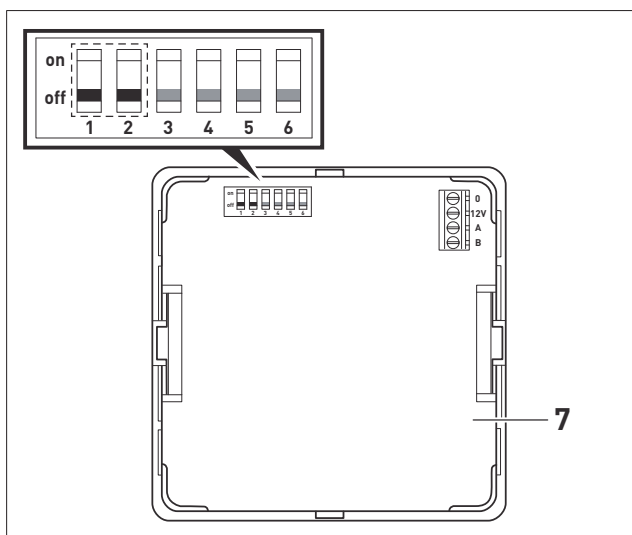


15 months

## 7.2. SETTING WEEKLY PROGRAMME

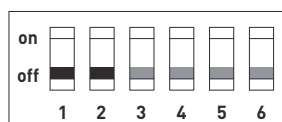
A weekly program for setting the fan speeds can be set using the toggle encoding switch on the back of the control panel. A total of four weekly programmes are available. The factory setting is weekly programme 1.

Regulation of the ventilation system using a weekly programme must be activated on the toggle encoding switch 8 on the main circuit board, see Enabling/Disabling weekly programme, p. 43.



1. Remove back cover of control panel [7], see Connection control panel SABIK-FB, p. 23.
2. Set toggle encoding switches 1 and 2 to the desired weekly programme.

### Weekly programme 1 (factory setting)

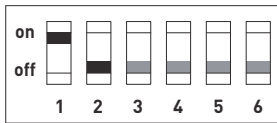


|              | Monday-Friday |             |             |             |             |             |             |             |             |             |               |               |               |               |               |               |               |               |               |               |               |               |               |               |
|--------------|---------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|
| Time / Speed | 0<br>-<br>1   | 1<br>-<br>2 | 2<br>-<br>3 | 3<br>-<br>4 | 4<br>-<br>5 | 5<br>-<br>6 | 6<br>-<br>7 | 7<br>-<br>8 | 8<br>-<br>9 | 9<br>-<br>1 | 10<br>-<br>11 | 11<br>-<br>12 | 12<br>-<br>13 | 13<br>-<br>14 | 14<br>-<br>15 | 15<br>-<br>16 | 16<br>-<br>17 | 17<br>-<br>18 | 18<br>-<br>19 | 19<br>-<br>20 | 20<br>-<br>21 | 21<br>-<br>22 | 22<br>-<br>23 | 23<br>-<br>24 |
| 4            |               |             |             |             |             |             |             |             |             |             |               |               |               |               |               |               |               |               |               |               |               |               |               |               |
| 3            |               |             |             |             |             |             |             |             |             |             |               |               |               |               |               |               |               |               |               |               |               |               |               |               |
| 2            |               |             |             |             |             |             |             |             |             |             |               |               |               |               |               |               |               |               |               |               |               |               |               |               |
| 1            |               |             |             |             |             |             |             |             |             |             |               |               |               |               |               |               |               |               |               |               |               |               |               |               |

|              |   | Saturday-Sunday |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
|--------------|---|-----------------|---|---|---|---|---|---|---|---|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
| Time / Speed | 0 | 1               | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 |
|              | 1 | 2               | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 1 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 |
| 4            |   |                 |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 3            |   |                 |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 2            |   |                 |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 1            |   |                 |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |



## Weekly programme 2



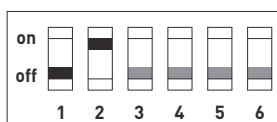
|              | Monday-Friday |        |        |        |        |        |        |        |        |        |          |          |          |          |          |          |          |          |          |          |          |          |          |          |
|--------------|---------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| Time / Speed | 0<br>1        | 1<br>2 | 2<br>3 | 3<br>4 | 4<br>5 | 5<br>6 | 6<br>7 | 7<br>8 | 8<br>9 | 9<br>1 | 10<br>11 | 11<br>12 | 12<br>13 | 13<br>14 | 14<br>15 | 15<br>16 | 16<br>17 | 17<br>18 | 18<br>19 | 19<br>20 | 20<br>21 | 21<br>22 | 22<br>23 | 23<br>24 |
| 4            |               |        |        |        |        |        |        |        |        |        |          |          |          |          |          |          |          |          |          |          |          |          |          |          |
| 3            |               |        |        |        |        |        |        |        |        |        |          |          |          |          |          |          |          |          |          |          |          |          |          |          |
| 2            |               |        |        |        |        |        |        |        |        |        |          |          |          |          |          |          |          |          |          |          |          |          |          |          |
| 1            |               |        |        |        |        |        |        |        |        |        |          |          |          |          |          |          |          |          |          |          |          |          |          |          |

|              | Saturday-Sunday |        |        |        |        |        |        |        |        |        |          |          |          |          |          |          |          |          |          |          |          |          |          |          |
|--------------|-----------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| Time / Speed | 0<br>1          | 1<br>2 | 2<br>3 | 3<br>4 | 4<br>5 | 5<br>6 | 6<br>7 | 7<br>8 | 8<br>9 | 9<br>1 | 10<br>11 | 11<br>12 | 12<br>13 | 13<br>14 | 14<br>15 | 15<br>16 | 16<br>17 | 17<br>18 | 18<br>19 | 19<br>20 | 20<br>21 | 21<br>22 | 22<br>23 | 23<br>24 |
| 4            |                 |        |        |        |        |        |        |        |        |        |          |          |          |          |          |          |          |          |          |          |          |          |          |          |
| 3            |                 |        |        |        |        |        |        |        |        |        |          |          |          |          |          |          |          |          |          |          |          |          |          |          |
| 2            |                 |        |        |        |        |        |        |        |        |        |          |          |          |          |          |          |          |          |          |          |          |          |          |          |
| 1            |                 |        |        |        |        |        |        |        |        |        |          |          |          |          |          |          |          |          |          |          |          |          |          |          |

## Weekly programme 3

### NOTE

- For Weekly Programme 3, one of the following sensors must be activated:
- Humidity sensor Enabling/Disabling humidity sensor for automatic mode.
- VOC sensor (optional accessory) Enabling/Disabling VOC sensor (optional accessory) for automatic mode.
- 0-10 V signal (optional accessory) Enabling/Disabling external entrance 0-10 V.



|              | Monday-Friday |        |        |        |        |        |        |        |        |        |          |          |          |          |          |          |          |          |          |          |          |          |          |          |
|--------------|---------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| Time / Speed | 0<br>1        | 1<br>2 | 2<br>3 | 3<br>4 | 4<br>5 | 5<br>6 | 6<br>7 | 7<br>8 | 8<br>9 | 9<br>1 | 10<br>11 | 11<br>12 | 12<br>13 | 13<br>14 | 14<br>15 | 15<br>16 | 16<br>17 | 17<br>18 | 18<br>19 | 19<br>20 | 20<br>21 | 21<br>22 | 22<br>23 | 23<br>24 |
| 4            |               |        |        |        |        |        |        |        |        |        |          |          |          |          |          |          |          |          |          |          |          |          |          |          |
| 3            |               |        |        |        |        |        |        |        |        |        |          |          |          |          |          |          |          |          |          |          |          |          |          |          |
| 2            |               |        |        |        |        |        |        |        |        |        |          |          |          |          |          |          |          |          |          |          |          |          |          |          |
| 1            |               |        |        |        |        |        |        |        |        |        |          |          |          |          |          |          |          |          |          |          |          |          |          |          |

|              | Saturday-Sunday |        |        |        |        |        |        |        |        |        |          |          |          |          |          |          |          |          |          |          |          |          |          |          |
|--------------|-----------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| Time / Speed | 0<br>1          | 1<br>2 | 2<br>3 | 3<br>4 | 4<br>5 | 5<br>6 | 6<br>7 | 7<br>8 | 8<br>9 | 9<br>1 | 10<br>11 | 11<br>12 | 12<br>13 | 13<br>14 | 14<br>15 | 15<br>16 | 16<br>17 | 17<br>18 | 18<br>19 | 19<br>20 | 20<br>21 | 21<br>22 | 22<br>23 | 23<br>24 |
| 4            |                 |        |        |        |        |        |        |        |        |        |          |          |          |          |          |          |          |          |          |          |          |          |          |          |
| 3            |                 |        |        |        |        |        |        |        |        |        |          |          |          |          |          |          |          |          |          |          |          |          |          |          |
| 2            |                 |        |        |        |        |        |        |        |        |        |          |          |          |          |          |          |          |          |          |          |          |          |          |          |
| 1            |                 |        |        |        |        |        |        |        |        |        |          |          |          |          |          |          |          |          |          |          |          |          |          |          |

# Weekly programme 4

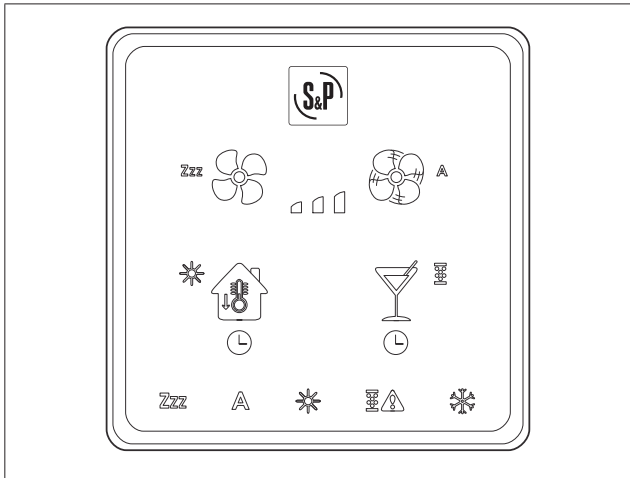
|     |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |
|-----|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|
| on  |  |  |  |  |  |  |
| off |  |  |  |  |  |  |
|     | 1                                                                                 | 2                                                                                 | 3                                                                                 | 4                                                                                 | 5                                                                                 | 6                                                                                 |

|              | Monday-Friday |        |        |        |        |        |        |        |        |        |          |          |          |          |          |          |          |          |          |          |          |          |          |          |
|--------------|---------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| Time / Speed | 0<br>1        | 1<br>2 | 2<br>3 | 3<br>4 | 4<br>5 | 5<br>6 | 6<br>7 | 7<br>8 | 8<br>9 | 9<br>1 | 10<br>11 | 11<br>12 | 12<br>13 | 13<br>14 | 14<br>15 | 15<br>16 | 16<br>17 | 17<br>18 | 18<br>19 | 19<br>20 | 20<br>21 | 21<br>22 | 22<br>23 | 23<br>24 |
| 4            |               |        |        |        |        |        |        |        |        |        |          |          |          |          |          |          |          |          |          |          |          |          |          |          |
| 3            |               |        |        |        |        |        |        |        |        |        |          |          |          |          |          |          |          |          |          |          |          |          |          |          |
| 2            |               |        |        |        |        |        |        |        |        |        |          |          |          |          |          |          |          |          |          |          |          |          |          |          |
| 1            |               |        |        |        |        |        |        |        |        |        |          |          |          |          |          |          |          |          |          |          |          |          |          |          |

|              | Saturday-Sunday |        |        |        |        |        |        |        |        |        |          |          |          |          |          |          |          |          |          |          |          |          |          |          |
|--------------|-----------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| Time / Speed | 0<br>1          | 1<br>2 | 2<br>3 | 3<br>4 | 4<br>5 | 5<br>6 | 6<br>7 | 7<br>8 | 8<br>9 | 9<br>1 | 10<br>11 | 11<br>12 | 12<br>13 | 13<br>14 | 14<br>15 | 15<br>16 | 16<br>17 | 17<br>18 | 18<br>19 | 19<br>20 | 20<br>21 | 21<br>22 | 22<br>23 | 23<br>24 |
| 4            |                 |        |        |        |        |        |        |        |        |        |          |          |          |          |          |          |          |          |          |          |          |          |          |          |
| 3            |                 |        |        |        |        |        |        |        |        |        |          |          |          |          |          |          |          |          |          |          |          |          |          |          |
| 2            |                 |        |        |        |        |        |        |        |        |        |          |          |          |          |          |          |          |          |          |          |          |          |          |          |
| 1            |                 |        |        |        |        |        |        |        |        |        |          |          |          |          |          |          |          |          |          |          |          |          |          |          |

## 8. OPERATION (USERS)

### 8.1. CONTROL PANEL SABIK-FB



|                                                                                     |                            |                                                                                     |                                                                                                                          |                                                                                      |
|-------------------------------------------------------------------------------------|----------------------------|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|
|    | Hold down<br>for 1 second  |    |                                       |   |
|   |                            |   |                                      |  |
|  |                            |  | Highest fan speed                                                                                                        |                                                                                      |
|  |                            |  | Summer bypass (optional accessory)<br>active for 18 hours                                                                |                                                                                      |
|  | Hold down<br>for 5 seconds |  | Ventilation system stops for 1 hour                                                                                      |                                                                                      |
|  |                            |  | In automatic mode, the ventilation system<br>is regulated using an activated sensor or an<br>activated weekly programme. |                                                                                      |
|  |                            |  | Reset filter alarm                                                                                                       |                                                                                      |
|  |                            |  | Summer mode activated                                                                                                    |                                                                                      |
|                                                                                     |                            |  | Anti-freeze activated                                                                                                    |                                                                                      |



## 8.2. SET FAN SPEED BY HAND

The fan speeds can be lowered or raised by hand if needed. The number of LEDs illuminated corresponds to the fan speed set.

## 8.3. SWITCHING BOOST ON/OFF

The ventilation system can be turned on to the fan speed BOOST for one hour, as needed, e.g., if many people are gathering in the house.

Then the system switches to the fan speed most recently selected or to the weekly programme set, see Setting weekly programme, p. 45.

## 8.4. TURN ON/OFF SUMMER BYPASS

The summer bypass serves to bypass the heat exchanger so that the cooler outdoor air is not heated. When outdoor temperatures are lower, e.g. in spring or fall, the ventilation system can be used without heat recovery so that the cooler outdoor air is conducted into the building.

The summer bypass can be activated for 1-8 hours by hand. For further information, see separate operating and installation instructions for the summer bypass SA-BIK-ESB.

Then the system switches to the fan speed most recently selected or to the weekly programme set, see Setting weekly programme, p. 45.

## 8.5. SWITCHING SLEEP MODE ON/OFF

When the sleep mode is activated, the ventilation system shuts off for one hour.

Then the system switches to the fan speed most recently selected or to the weekly programme set, see Setting weekly programme, p. 45.

## 8.6. TURN AUTOMATIC MODE ON/OFF

Once the automatic mode has been activated, the ventilation system can be controlled using one of the following options:

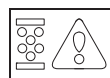
- Control of sensor
  - Activated humidity sensor, see Enabling/Disabling humidity sensor for automatic mode, p. 35,
  - Activated VOC sensor (optional accessory), see Enabling/Disabling VOC sensor (optional accessory) for automatic mode, p. 36 or
  - Activated 0-10 V signal (optional accessory), see Enabling/Disabling external entrance 0-10 V, p. 38.
- Weekly programme set, see Setting weekly programme, p. 45.
- Combination of sensor control and setting of weekly programme 3, see Setting weekly programme, p. 45.

### NOTE

A combination with one sensor is only possible with the weekly programme 3.

## 8.7. RESET FILTER ALARM

After each time the filter is replaced, the filter alarm must be reset.



The symbol lights up when the pre-set timer for the filter replacement has been exceeded. The filters must be replaced, see Replacing filters, p. 52.

If the filter is not replaced within 60 days, then the ventilation system shuts down automatically.

### NOTE

The factory setting for the timer for the filter alarm is 12 months. Replacing of the filter is highly dependent on the pollution of the outdoor air (pollen count, construction site activity). The timer for the filter alarm can be set to 6 months, 9 months or 15 months, see Set timer for filter alarm, p. 44.

## 8.8. SWITCH SUMMER MODE ON/OFF

When outdoor temperatures are cooler, e.g., at night, the supply air fan can be switched off. The outdoor air must then reach the house through open windows without heat recovery.

The summer mode can only be switched on when the outdoor air temperature is above +13°C. If the outdoor air temperature drops below this value, then the summer mode is switched off again automatically.

After 2 hours, the temperatures are checked. For this purpose, the outside air fan starts up again for 5 minutes. If the outdoor temperature continues to exceed +13°C, then the function continues until it is turned off by hand or until the temperature drops below +13°C.

## 8.9. ANTI-FREEZE FEATURE

Without installing an optional pre-heater module, the anti-freeze feature serves to protect the ventilation system from freezing. In this process, the supply air fan switches itself off.

## 9. REPAIRING FAULTS

### 9.1. MALFUNCTIONS

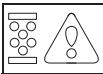
| Malfunction                                     |                                                                                                                                                                    |
|-------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| The air supplied into the living space is cold. |                                                                                                                                                                    |
| Cause                                           | Remedy                                                                                                                                                             |
| The air cools down in the ducts.                | <ul style="list-style-type: none"> <li>• Check installation and operation of the system.</li> <li>• Check insulation of outdoor and outgoing air lines.</li> </ul> |

| Malfunction                                                                                                                                                                |                                                                                                                                           |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------|
| <ul style="list-style-type: none"> <li>• The ventilation system no longer works.</li> <li>• The fans do not rotate.</li> <li>• The control panel does not work.</li> </ul> |                                                                                                                                           |
| Cause                                                                                                                                                                      | Remedy                                                                                                                                    |
| The mains voltage is interrupted.                                                                                                                                          | <ul style="list-style-type: none"> <li>• Set up the mains voltage again.</li> </ul>                                                       |
| A fuse has burned out in the ventilation system.                                                                                                                           | <ul style="list-style-type: none"> <li>• Call in customer service of the specialised company, check fuse and have it replaced.</li> </ul> |

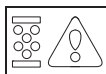
| Malfunction                                  |                                                                                                                                                        |
|----------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------|
| The ventilation system is loud and vibrates. |                                                                                                                                                        |
| Cause                                        | Remedy                                                                                                                                                 |
| A fan is off-balance.                        | <ul style="list-style-type: none"> <li>• Request customer service from the specialised company, check fan and, if needed, have it replaced.</li> </ul> |

| Malfunction                         |                                                                                                                                                                                                                            |
|-------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| The ventilation system is dripping. |                                                                                                                                                                                                                            |
| Cause                               | Remedy                                                                                                                                                                                                                     |
| The condensate cannot drain.        | <ul style="list-style-type: none"> <li>• Call in customer service of the specialised company and check whether condensate line, condensate vat and syphon dryer are in proper working order; have them cleaned.</li> </ul> |

| Malfunction                      |                                                                                                                                                                                           |
|----------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| The supply air fan stands still. |                                                                                                                                                                                           |
| Cause                            | Remedy                                                                                                                                                                                    |
| The anti-freeze feature is on.   | <ul style="list-style-type: none"> <li>• Turn off summer mode, if you no longer desire it, see p. 33.</li> </ul>                                                                          |
|                                  |  Normal operation of the ventilation system. The symbol is lit while anti-freeze feature is activated. |

| Malfunction                                                                                                                                                                                                                                                                                                                              |                                                                                                                                                                                                                                                                                                                                                                                            |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <ul style="list-style-type: none"> <li>• Calibration of the ServoFlow Kits installed (optional accessory) is not possible.</li> <li>• The LEDs of the fan speeds are blinking.</li> <li>•  The symbol in the control panel blinks 13x red.</li> </ul> |                                                                                                                                                                                                                                                                                                                                                                                            |
| Cause                                                                                                                                                                                                                                                                                                                                    | Remedy                                                                                                                                                                                                                                                                                                                                                                                     |
| There is a fault in the device.                                                                                                                                                                                                                                                                                                          | <ul style="list-style-type: none"> <li>• Call in customer service of the specialised company.</li> <li>• Check correct connection of the pressure hoses between differential pressure sockets 1 and 2, and also pressure sensors on the ServoFlow Kit.</li> <li>• Check that pressure hoses from the ServoFlow Kit have been laid correctly. The pressure hoses cannot be bent.</li> </ul> |
| The system pressure is too low.                                                                                                                                                                                                                                                                                                          | <ul style="list-style-type: none"> <li>• Call in the customer service of the specialised company and have the correct connection of the air lines checked.</li> </ul>                                                                                                                                                                                                                      |
| The system pressure is too high.                                                                                                                                                                                                                                                                                                         | <ul style="list-style-type: none"> <li>• Check whether all ventilation grates, valves and air outlets are open.</li> </ul>                                                                                                                                                                                                                                                                 |

## 9.2. ERROR MESSAGES



Error messages are displayed by different modes of blinking of the symbol in the control panel. The period between the blinking sequences is roughly 3 seconds.

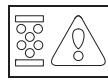
| Malfunction                                                            | Symbol                                                     | Consequence                                                                                                                                            |
|------------------------------------------------------------------------|------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------|
| A fire alarm was triggered.                                            | It blinks red 1x                                           | The ventilation system stops.                                                                                                                          |
| The extract air fan has had a breakdown.                               | It blinks red 2x                                           | The ventilation system stops.                                                                                                                          |
| The supply air fan has had a breakdown.                                | It blinks red 3x                                           | The ventilation system stops.                                                                                                                          |
| The summer bypass (optional accessory) has had a breakdown.            | It blinks red 4x                                           | The ventilation system stops.                                                                                                                          |
| The ServoFlow Kit (optional accessory) has had a breakdown.            | It blinks red 5x                                           | The ventilation system stops.                                                                                                                          |
| The supply air temperature has dropped below +5°C.                     | It blinks red 6x                                           | The ventilation system stops. Every 2 hours the ventilation system turns on by itself for 5 minutes in order to check conditions for normal operation. |
| The temperature sensor outdoor air has had a breakdown.                | It blinks red 7x                                           | The ventilation system stops.                                                                                                                          |
| The temperature sensor supply air has had a breakdown.                 | It blinks red 8x                                           | The ventilation system stops.                                                                                                                          |
| The temperature sensor extract air has had a breakdown.                | It blinks red 9x                                           | The ventilation system stops.                                                                                                                          |
| The temperature sensor outgoing air has had a breakdown.               | It blinks red 10x                                          | The ventilation system stops.                                                                                                                          |
| The VOC sensor (optional accessory) has had a breakdown.               | It blinks red 11x                                          | The ventilation system is running at fan speed V2.                                                                                                     |
| The preheating radiator (optional accessory) has had a breakdown.      | It blinks red 12x                                          | The ventilation system stops.                                                                                                                          |
| Calibration of the ServoFlow Kit (optional accessory) is not possible. | The red light blinks 13x, the LEDs of the fan speeds blink | The ventilation system stops.                                                                                                                          |
| The pre-set timer for filter replacement has been exceeded.            | The red light stays lit                                    | For up to 60 days, normal operation continues to be possible. After that, the ventilation system stops.                                                |

## 10. MAINTENANCE (USERS)

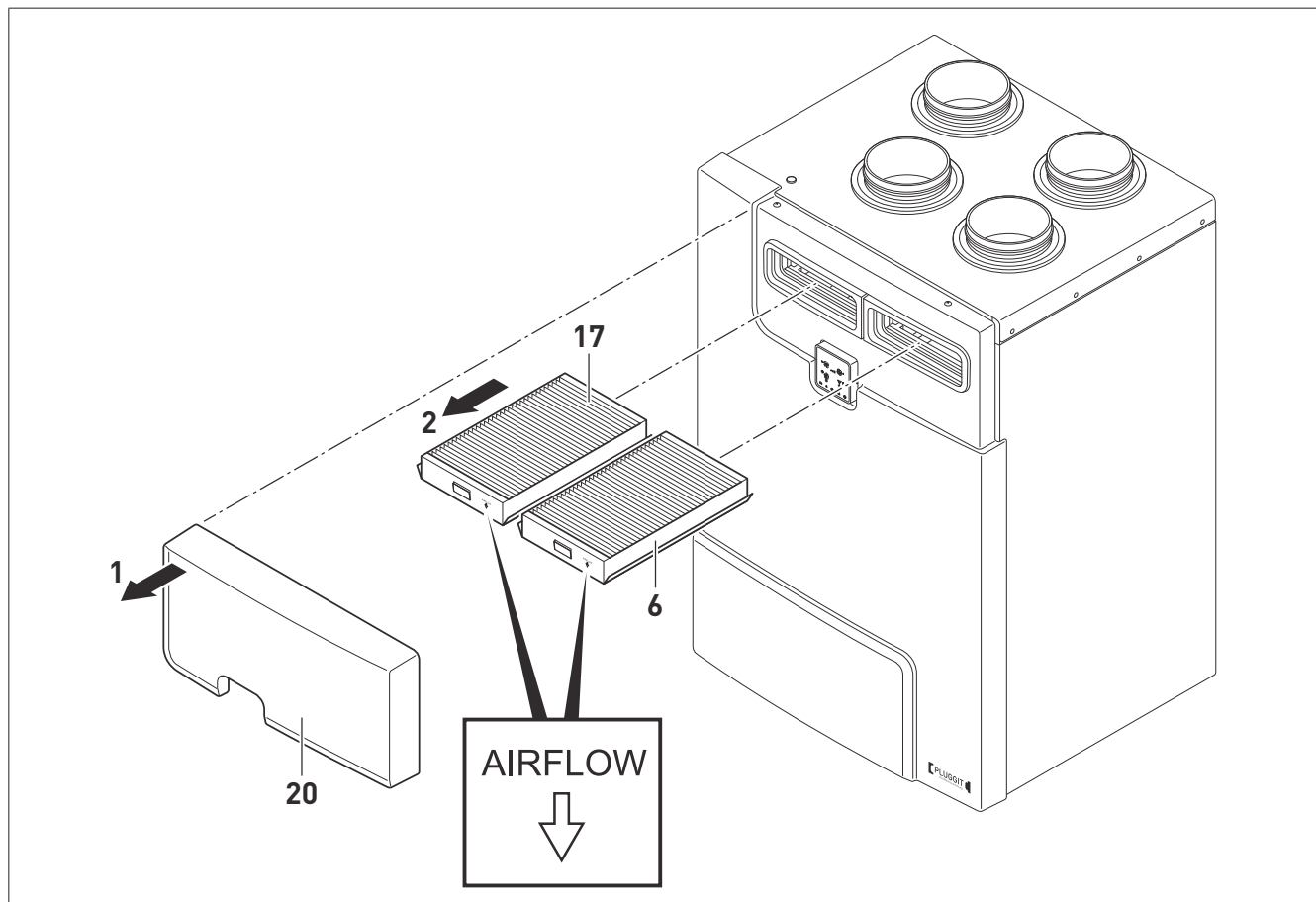
### 10.1. REPLACING FILTERS

Replacing the filter depends on the degree of pollution of the air (e.g. pollen count, construction site activity, particulate pollution).

The period between filter replacements is set to 12 months at the factory. This period can be reduced or extended depending on air pollution, see Set timer for filter alarm, p. 44.



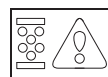
After the period set lapses, the symbol on the control panel lights up.



1. Remove filter cover (20) (Arrow 1).
2. Remove used filters (6) and (17) and dispose of them (Arrow 2).
3. Insert new filters. The printed arrows must be positioned downwards toward the middle of the casing.



Hold symbol down for about 5 seconds. The filter alarm is reset.



The light on the symbol goes out.

#### NOTE

See the filters available in [www.solerpalau.es](http://www.solerpalau.es)

## 11. MAINTENANCE/REPAIRS (SPECIALISTS)



### CAUTION

All maintenance and repair tasks described below for the ventilation system may only be carried out by qualified specialists, otherwise there is risk of injuries or damages.



### RISK OF INJURY

Disconnect all poles of the ventilation system from the power network before all maintenance and repair tasks, otherwise there is risk of injury.

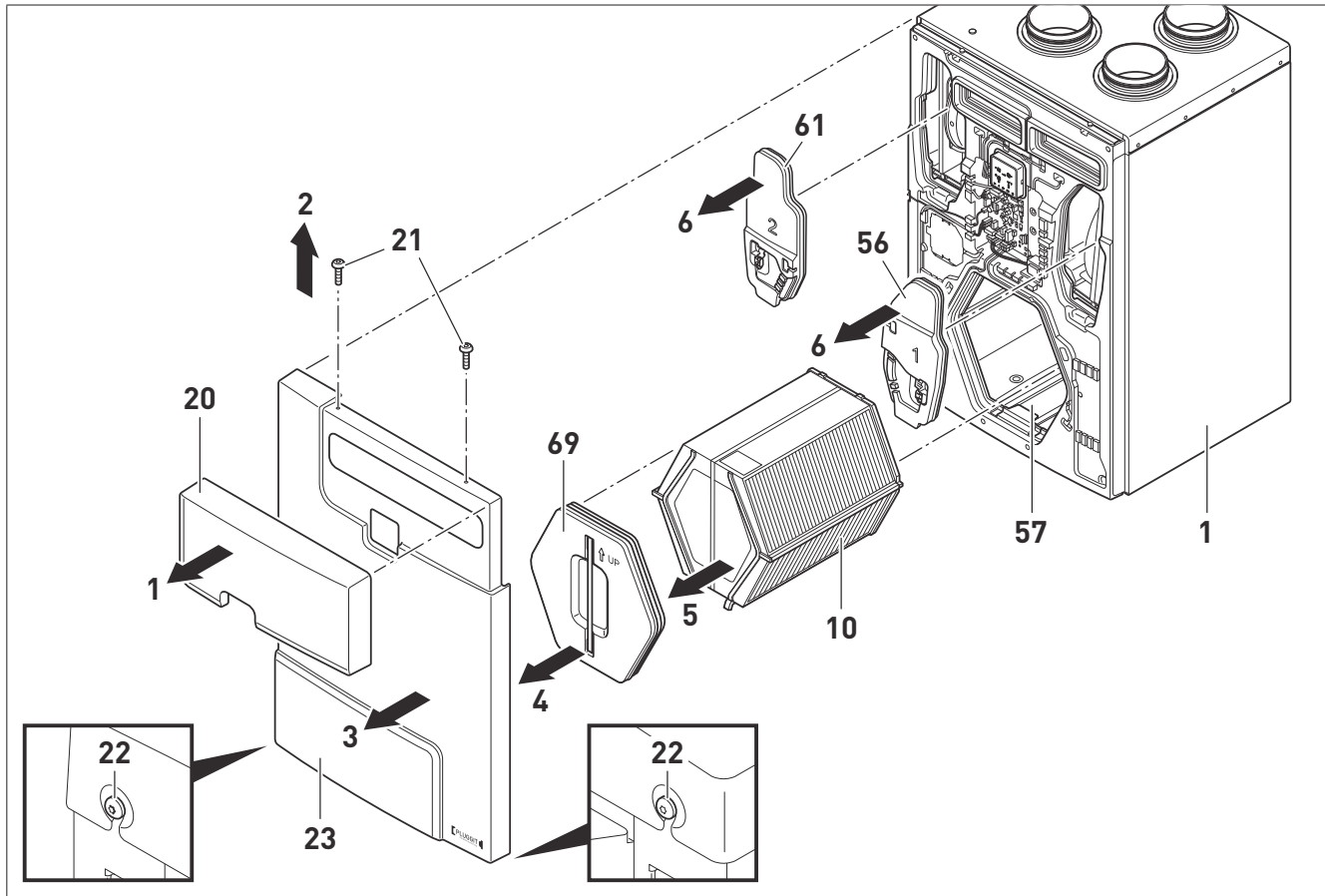
### 11.1. MAINTENANCE PERIODS

| Maintenance tasks                                                                               | Annually | Every 2 years |
|-------------------------------------------------------------------------------------------------|----------|---------------|
| Clean ventilation system, see Clean ventilation system, p. 54.                                  | X        |               |
| Clean and fill condensate line, condensate vat and siphon, see Clean ventilation system, p. 54. | X        |               |
| Clean heat exchanger, see Clean/replace heat exchanger, p. 55.                                  |          | X             |
| Clean fan blade, see Clean/replace fan blade, p. 56.                                            | X        |               |

### 11.2. LOGS PREVENTIVE MAINTENANCE

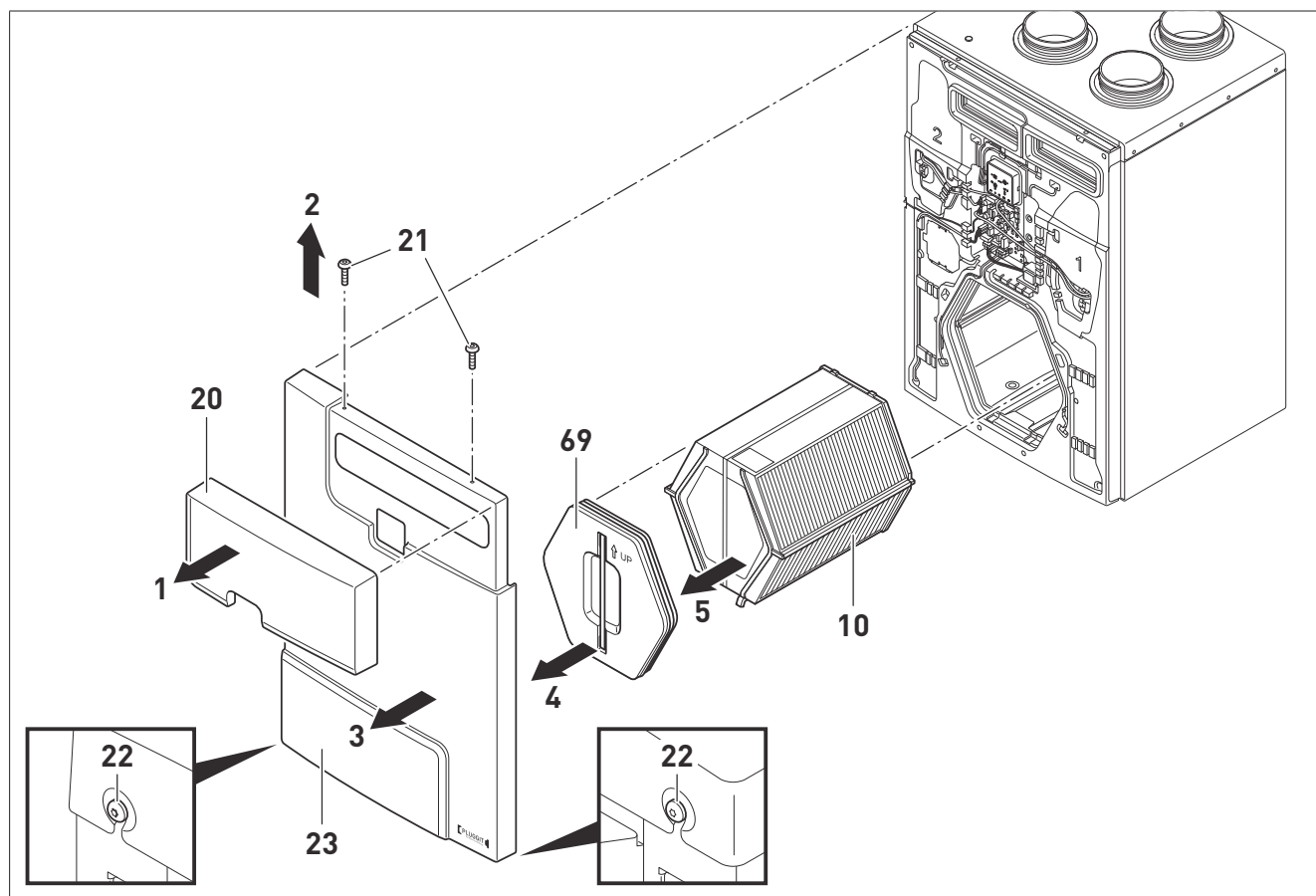
|                                                            | Yes | No |
|------------------------------------------------------------|-----|----|
| Are the fans clean and free of corrosion?                  |     |    |
| Do the fans produce no vibrations or noise when operating? |     |    |
| Can the fan blades turn freely when operating?             |     |    |
| Do the lines and insulation show damages?                  |     |    |

### 11.3. CLEAN VENTILATION SYSTEM



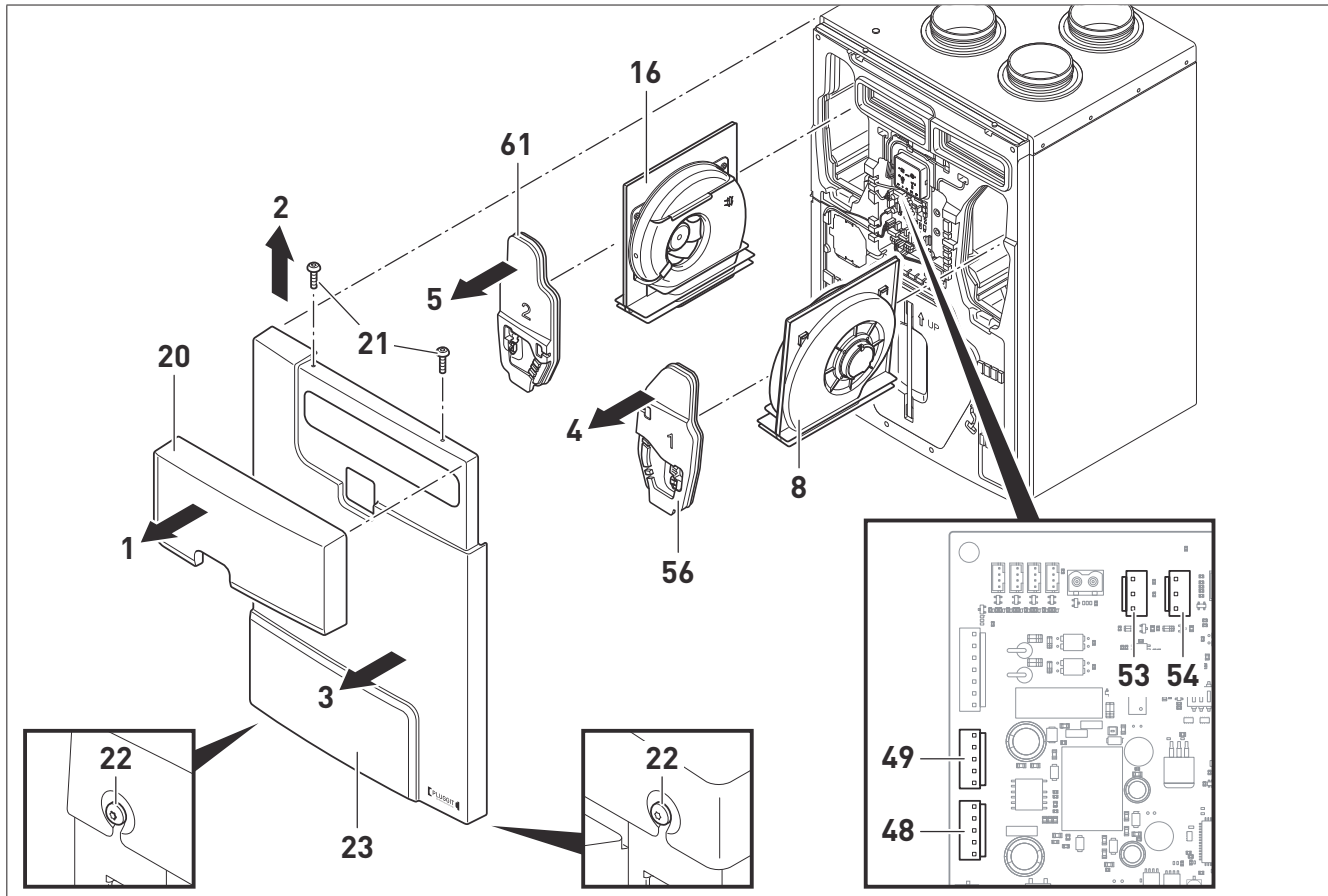
1. Remove filter cover (20) (Arrow 1).
2. Loosen screws Torx 30 (22) on the bottom of the device.
3. Unscrew screws Torx 30 (21) on top of device (Arrow 2).
4. Remove front cover (23) (Arrow 3).
5. Take out heat exchanger cover (69) (Arrow 4).
6. Take out heat exchanger (10) (Arrow 5).
7. Remove connection cables of the fans (56) and (61) on the fan cover, and take off fan cover (56) and (61) (Arrow 6).
8. Clean interior surfaces of the ventilation device (1) and condensate connection including condensate vat (57) with a moist cloth and neutral cleanser.
9. After drying, installation is carried out in the reverse sequence.

## 11.4. CLEAN/REPLACE HEAT EXCHANGER



1. Remove filter cover (20) (Arrow 1).
2. Loosen screws Torx 30 (22) on the bottom of the device.
3. Unscrew screws Torx 30 (21) on top of device (Arrow 2).
4. Remove front cover (23) (Arrow 3).
5. Take out heat exchanger cover (69) (Arrow 4).
6. Take out heat exchanger (10) (Arrow 5).
7. Cleaning:  
Soak heat exchanger (10) with a mixture of water and cleanser, rinse with clear water, allow all water to drain and allow heat exchanger (10) to dry completely.
8. Replacement:  
Take out heat exchanger (10) and replace (Arrow 5).
9. The installation is carried out in the reverse sequence. In this process, pay attention to the direction of installation of the heat exchanger (10).

## 11.5. CLEAN/REPLACE FAN BLADE



1. Remove filter cover (20) (Arrow 1).
2. Loosen screws Torx 30 (22) on the bottom of the device.
3. Unscrew screws Torx 30 (21) on top of device (Arrow 2).
4. Remove front cover (23) (Arrow 3).
5. Remove connection cables of the fans on the fan cover (56) and (61).
6. Disconnect voltage supply M1 (48) and M2 (49), as well as control signals M1 (54) and M2 (53) on the main circuit board.
7. Cleaning:
  - 7.1. Remove fan cover (56) and fan (8) (Arrow 4).
  - 7.2. Remove fan cover (61) and fan (16) (Arrow 5).
  - 7.3. Clean all fan blades with a brush.
8. Replacement:
  - 8.1. Remove fan cover (56) and fan (8) and replace both (Arrow 4).
  - 8.2. Remove fan cover (61) and fan (16) and replace both (Arrow 5).
9. The installation is carried out in the reverse sequence.

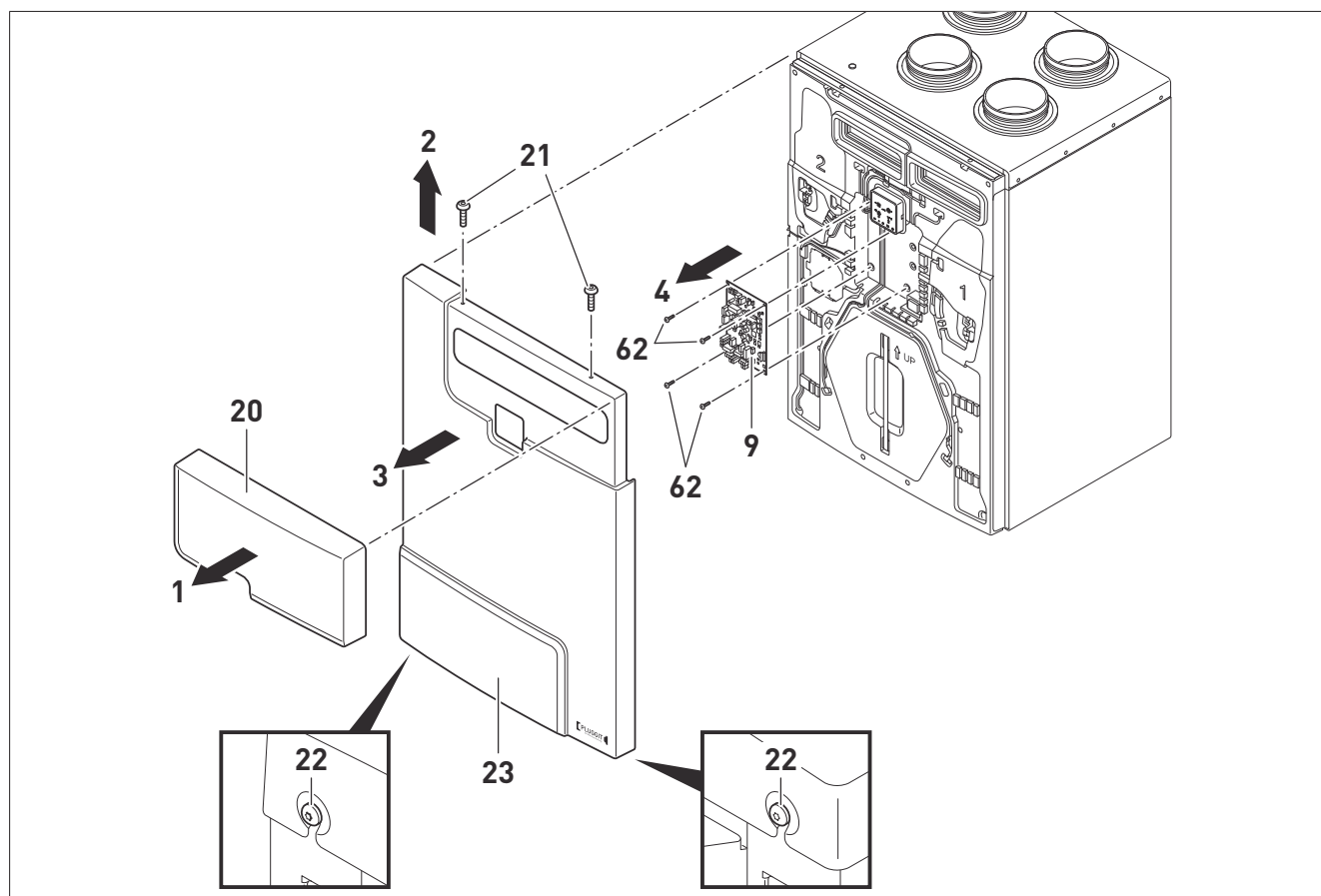


## 11.6. REPLACE MAIN CIRCUIT BOARD



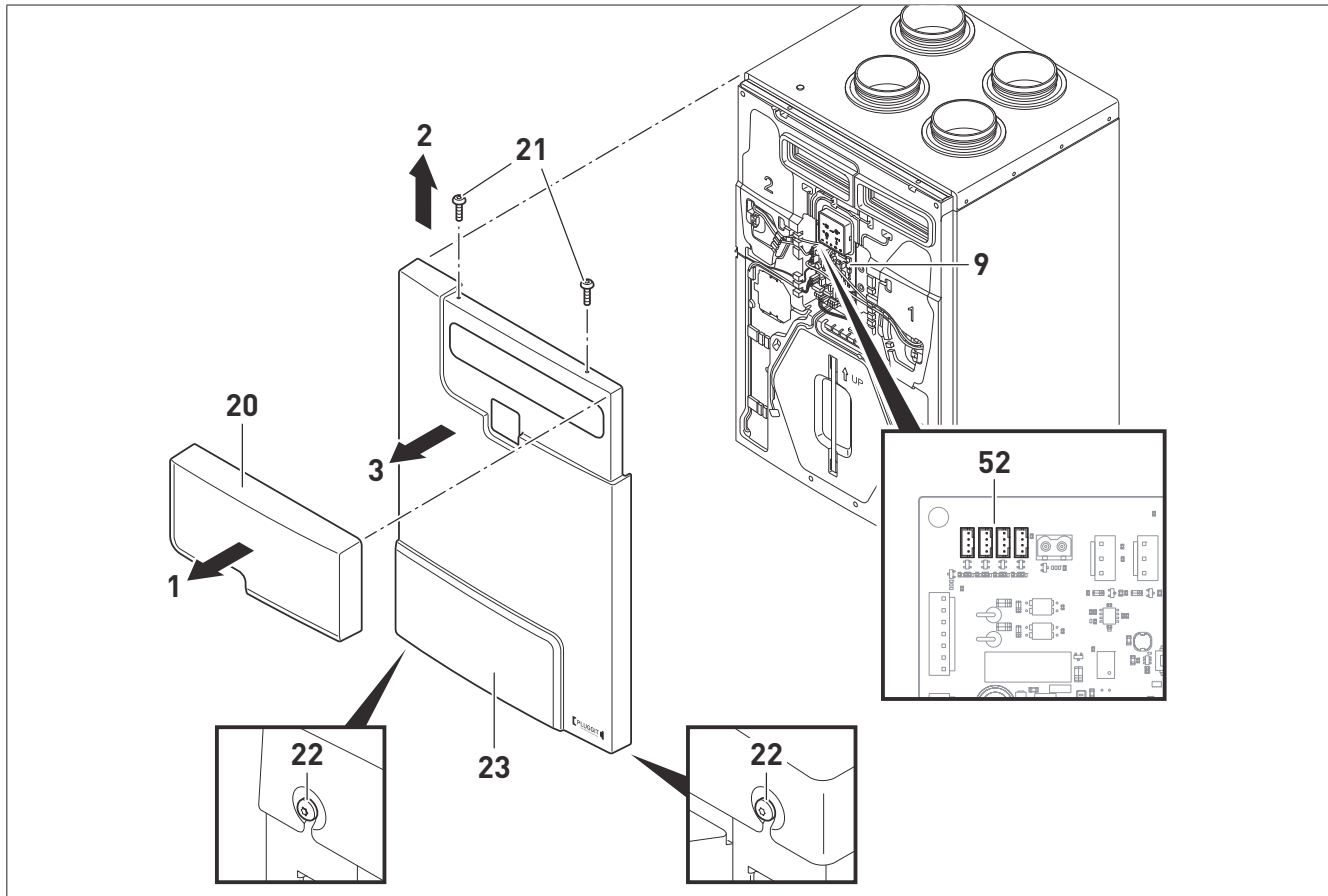
### MATERIAL DAMAGES

When replacing the main circuit board, it must be protected from electrostatic discharge, otherwise there is risk of damages. Avoid electric charge in the body, e.g., by dissipating and earthing of the body.

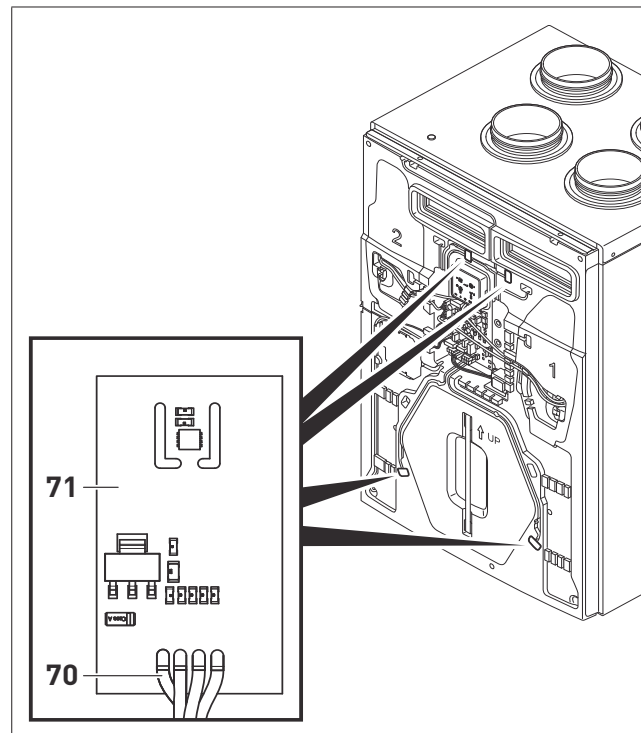


1. Remove filter cover (20) (Arrow 1).
2. Loosen screws Torx 30 (22) on the bottom of the device.
3. Unscrew screws Torx 30 (21) on top of device (Arrow 2).
4. Remove front cover (23) (Arrow 3).
5. Disconnect all plugs on the main circuit board (9).
6. Remove screws Torx 10 (62) and replace main circuit board (9) (Arrow 4).
7. Insert all disconnected plugs on the main circuit board (9), see Circuit diagram main circuit board, p. 11.
8. The installation is carried out in the reverse sequence.

## 11.7. REPLACE HUMIDITY/TEMPERATURE SENSORS



1. Remove filter cover [20] (Arrow 1).
2. Loosen screws Torx 30 [22] on the bottom of the device.
3. Unscrew screws Torx 30 [21] on top of device (Arrow 2).
4. Remove front cover [23] (Arrow 3).
5. Decouple all humidity/temperature sensors from the connection [52] of the main circuit board [9].



6. Disconnect connection cables [70] from the humidity/temperature sensors [71], and replace humidity/temperature sensors [71].
7. The installation is carried out in the reverse sequence.

## 12. DECOMMISSIONING/DISPOSAL

---

### 12.1. DECOMMISSIONING WITH DISASSEMBLY

The decommissioning may only be carried out by qualified specialists.

- Disconnect system from voltage.
- Disconnect all poles of the entire system from the power grid.

### 12.2. PACKAGING

The transport and protective packaging is largely made of recyclable materials.

All packaging materials must be disposed of according to local provisions.

### 12.3. USED DEVICES

The ventilation system contains valuable materials and substances that must not be disposed of with the residual waste. The used device can be handed over for reuse to a local recycling company.

## 13. PUTTING OUT OF SERVICE AND RECYCLING

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EEC legislation and our consideration of future generations mean that we should always recycle materials where possible; please do not forget to deposit all packaging in the appropriate recycling bins. If your device is also labeled with this symbol, please take it to the nearest Waste Management Plant at the end of its serviceable life.



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Ref.