I DE **Einbauanleitung**
Silvento Unterputz-Variante 1 und 2-Raum

- Bitte an den Nutzer weiterleiten -

II EN **Installation Manual**
Silvento Flush-Mounted Variant 1 and 2-Room

- Please pass on to user -

Installation manual EN

Content Page

About this manual

- Read this manual carefully and completely before assembly! Always observe the general safety instructions and the safety symbols with information in the text.
- Hand out this manual to the user (tenants, proprietors, property management etc.) after completing assembly.
- **Symbols in this manual:**

This symbol warns you against risks of injury

This symbol warns you against risks of injury from electricity

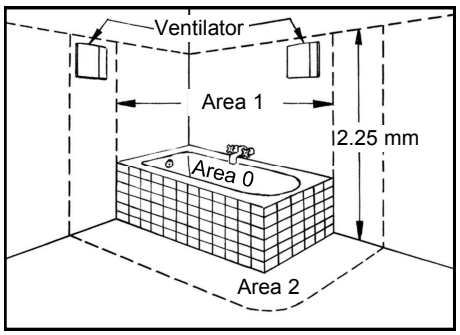
Safety instructions

Caution! Any assembly work to the ventilation device may only be carried out after disconnecting the supply voltage! The ventilation device is fitted with protective insulation according to Protection Class II; a protective conductor connection is not required!

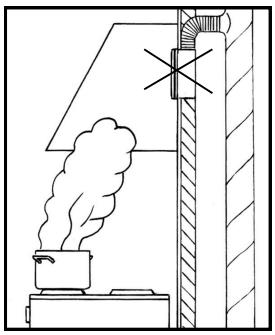
Attention! The electric connection may only be made by authorised qualified personnel and according to the applicable version of VDE 0100!

Attention! This device must not be operated by children and persons (filter replacement/cleaning) who are not able to operate the device safely due to their physical, sensory or mental abilities or their inexperience or lack of knowledge.

Fans for exhaust air operation must <u>at any time</u> be provided with a continued flow of outside air.



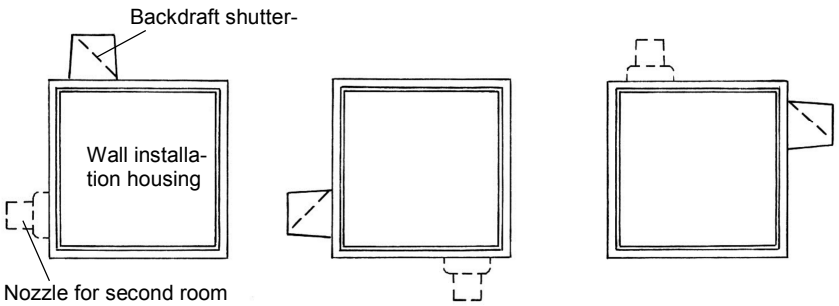
The German VDE 100 regulation permits installation in bath and shower room area 1.(Does not apply to Silvento ec!)



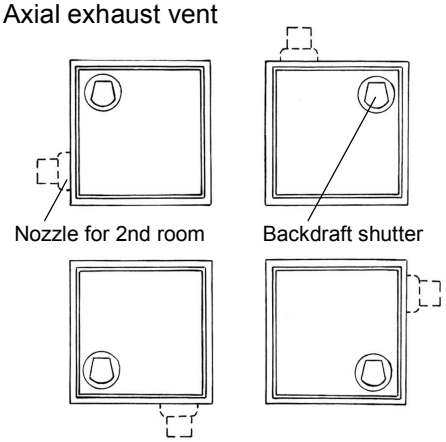
Fans must not be installed for usage as extractor hood.

Possible installation positions for duct installation EN

Radial exhaust vent



Axial exhaust vent



Caution: If appropriate, correct position and seating of the backdraft shutter (see “Installation”, diagram 2)

Technical specifications

Silvento V 30/60:

Supply voltage:	200 -240 V AC 50 Hz	Airflow volume:	30/60/90 m³/h
Protection class:	II	Electrical power consumption:	5,2/10,9/36,5 W
Protection type:	IP X5	Sound power level:	23//35/44 dB(A)

Admissable for use in area 1 of wet rooms

Silvento ec:

Supply voltage:	230 V AC 50 Hz	Airflow volume:	15 - 60 m³/h
Remote control input:	0 -10V DC	(with active humidity control „quasi“- stageless between 15 and 60 m³/h))	
Protection class:	II	Electrical power consumption:	1,8 - 6,2 W
		Sound insulation level:	22 - 35 dB(A)

Each Silvento ec can be combined with a control board without humidity sensor or with humidity board. Each control board can be combined with one extension module.

This allows the following configuration options:

- Silvento ec with basic control board without humidity sensor, with integrated delay time
- Silvento ec with basic control board without humidity sensor, with integrated delay time and motion sensor module
- Silvento ec with basic control board without humidity sensor, with integrated delay time and radio sensor module
- Silvento ec with comfort control board with humidity sensor, with integrated delay time
- Silvento ec with comfort control board with humidity sensor, with integrated delay time and motion sensor module
- Silvento ec with comfort control board with humidity sensor, with integrated delay time and radio sensor module

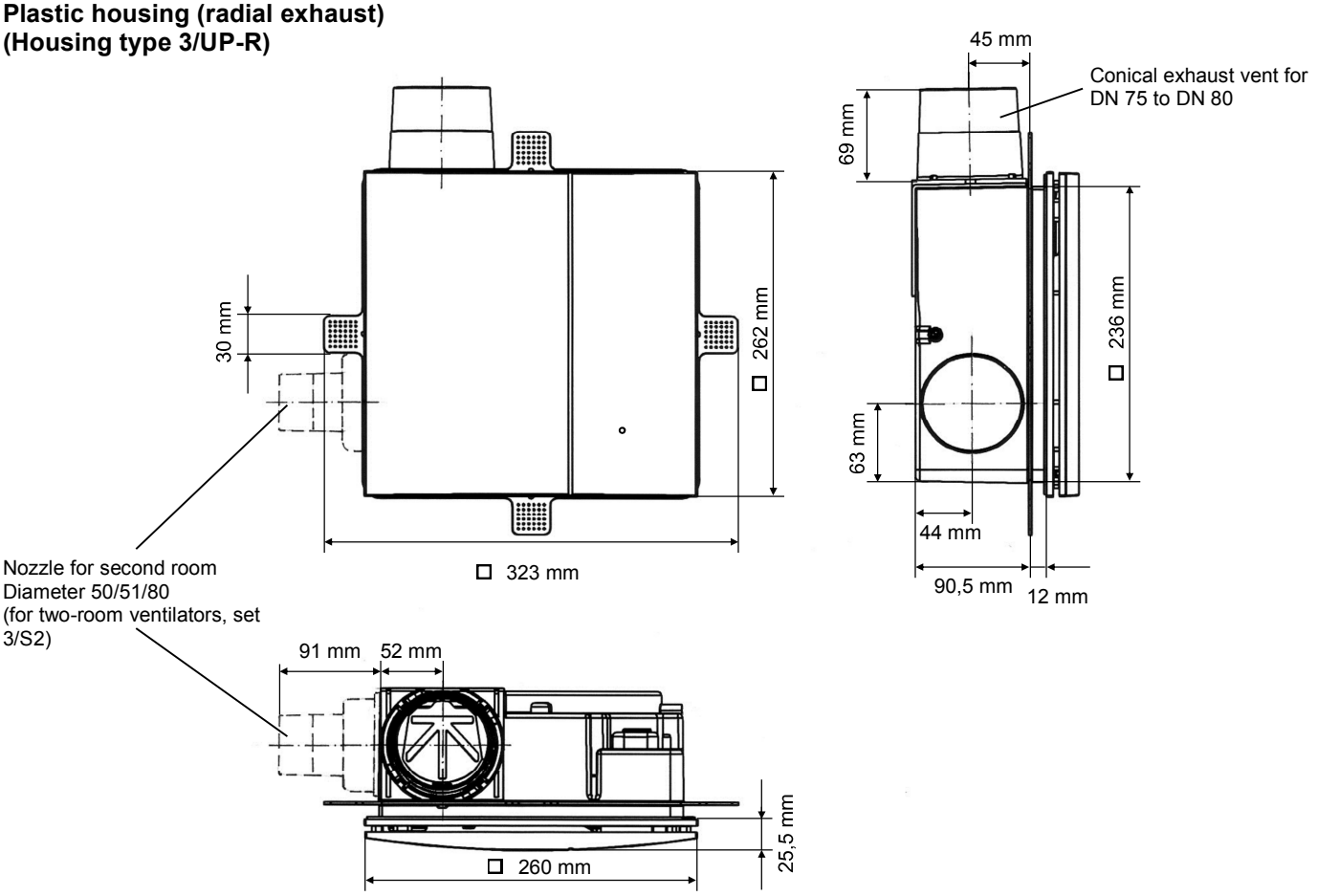
All devices are equipped with filters of the class G2 and a filter replacement indicator.

Ventilation devices of the series „Silvento“ meet all requirements of:
- DIN 18017-3
- for low voltage (CE) according to EC Directives (2006/95/EG; 2014/35/EU)
- for electromagnetic compatibility (CE) according to EC Directives (2004/108/EG; 2014/30/EU)

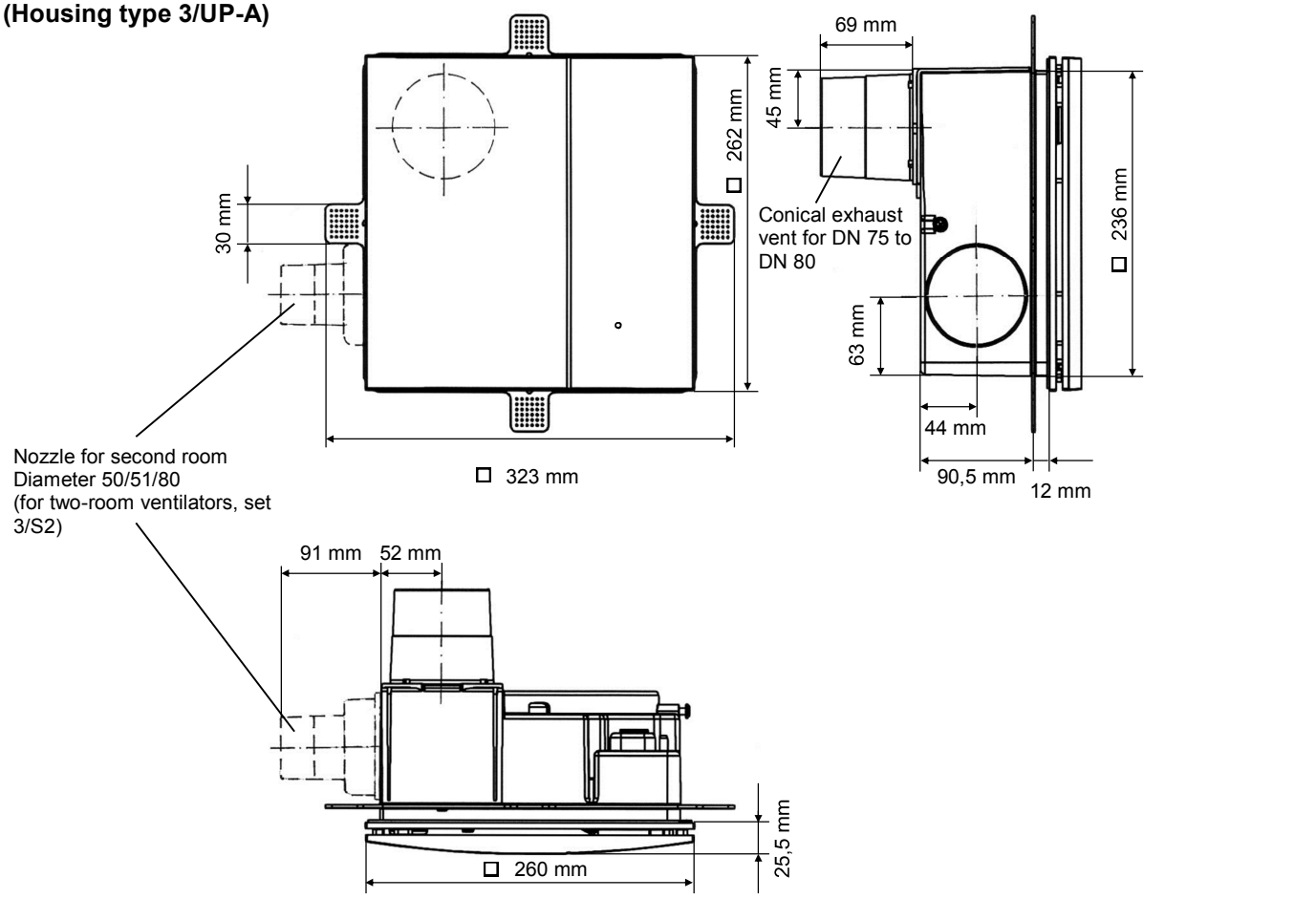
Disposal

The packaging must be sorted before disposal. If you wish to dispose of the ventilation device, observe the currently applicable regulations. Pursuant to the German Electrical and Electronic Equipment Act (ElektroG) this device can be returned to your municipal collection point free of charge.

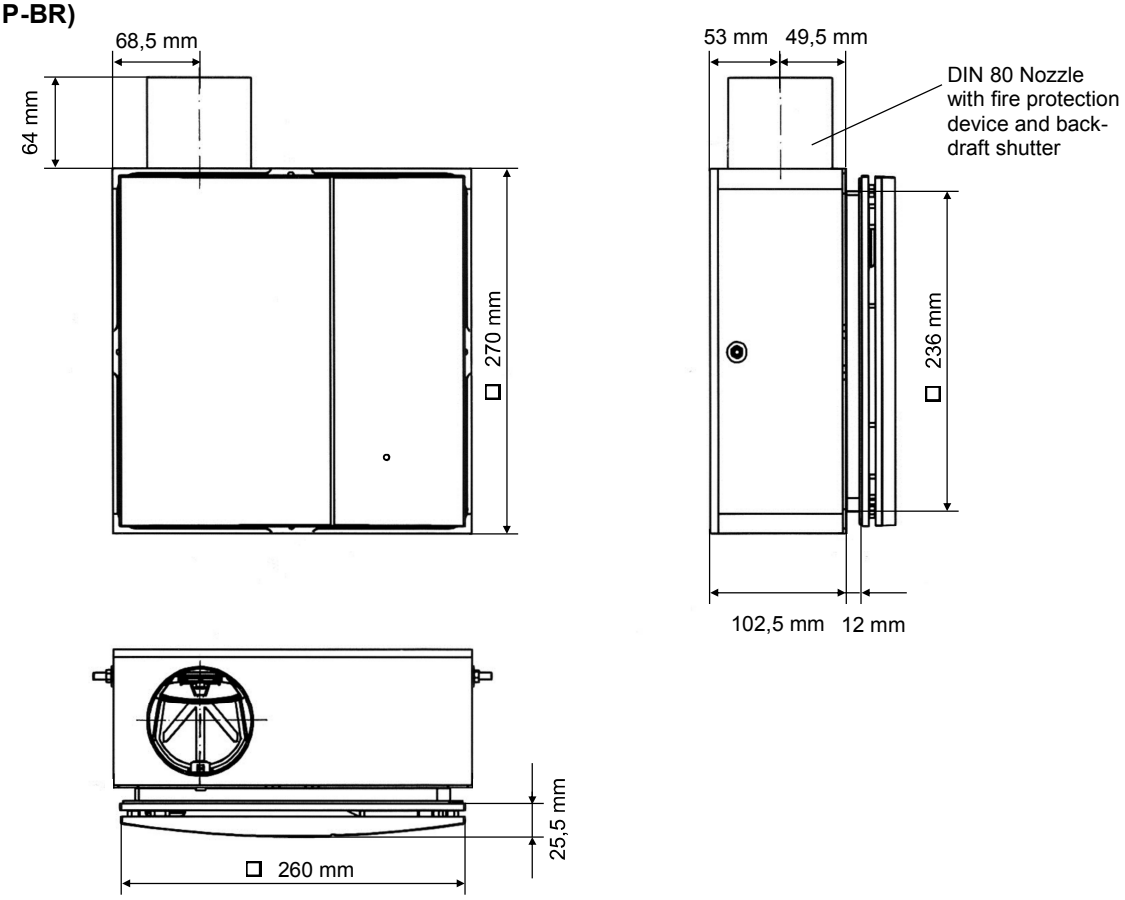
Plastic housing (radial exhaust)
(Housing type 3/UP-R)



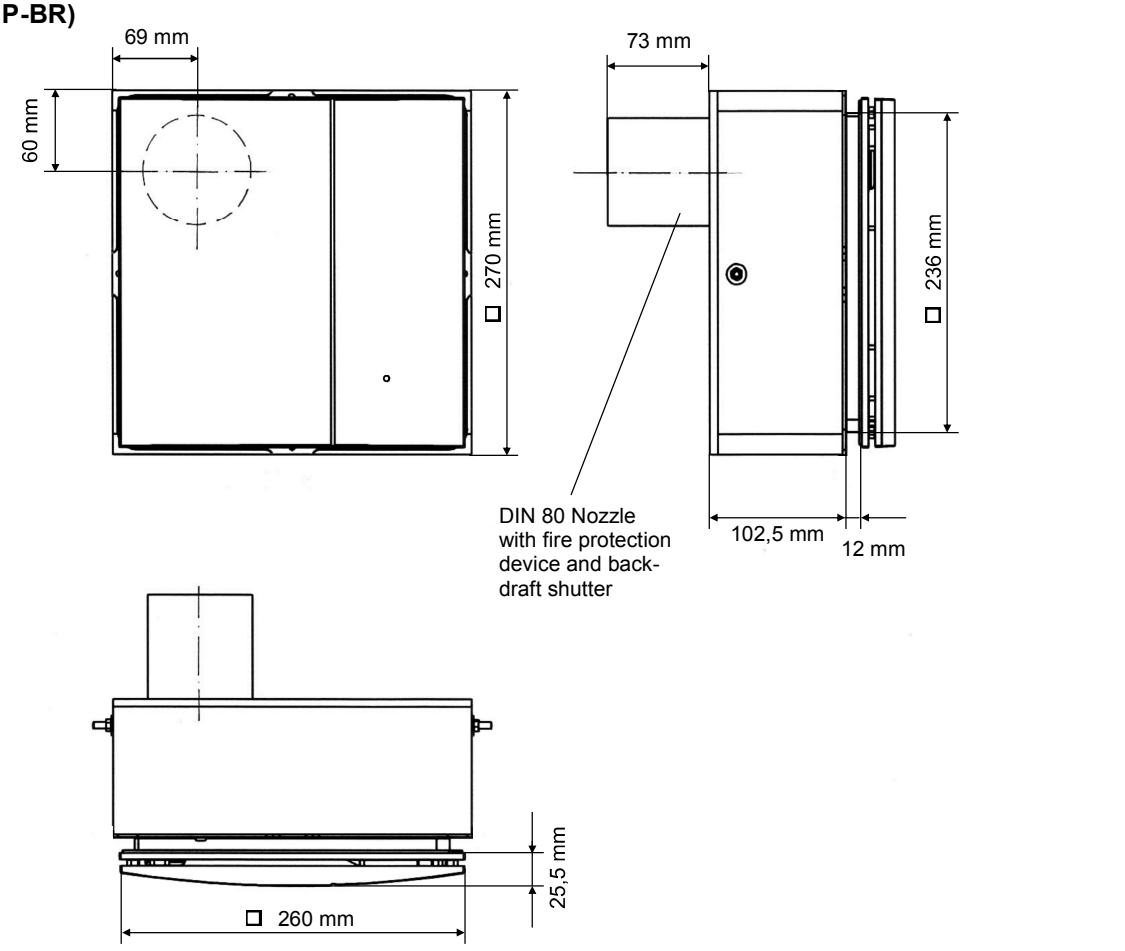
Plastic housing (axial exhaust)
(Housing type 3/UP-A)



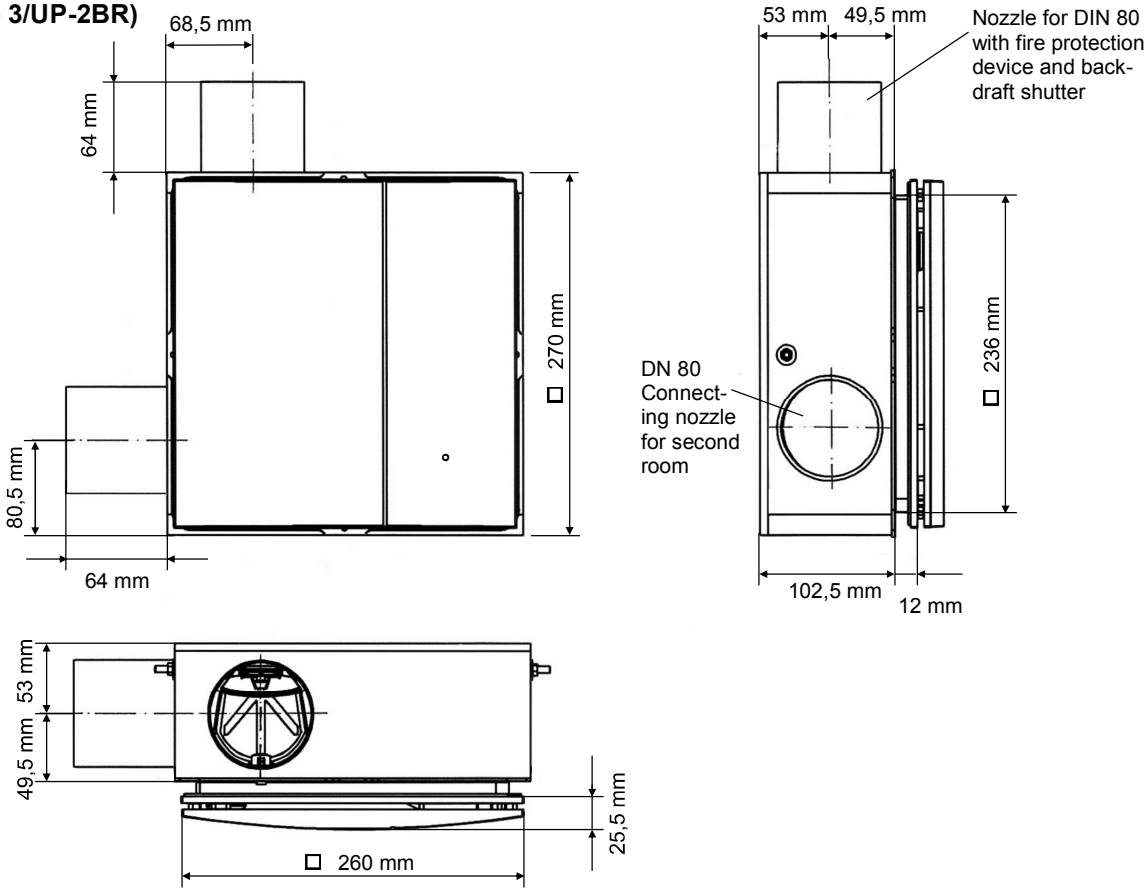
1-Room with kitchen fire protection (radial exhaust)
(Housing type 3/UP-BR)



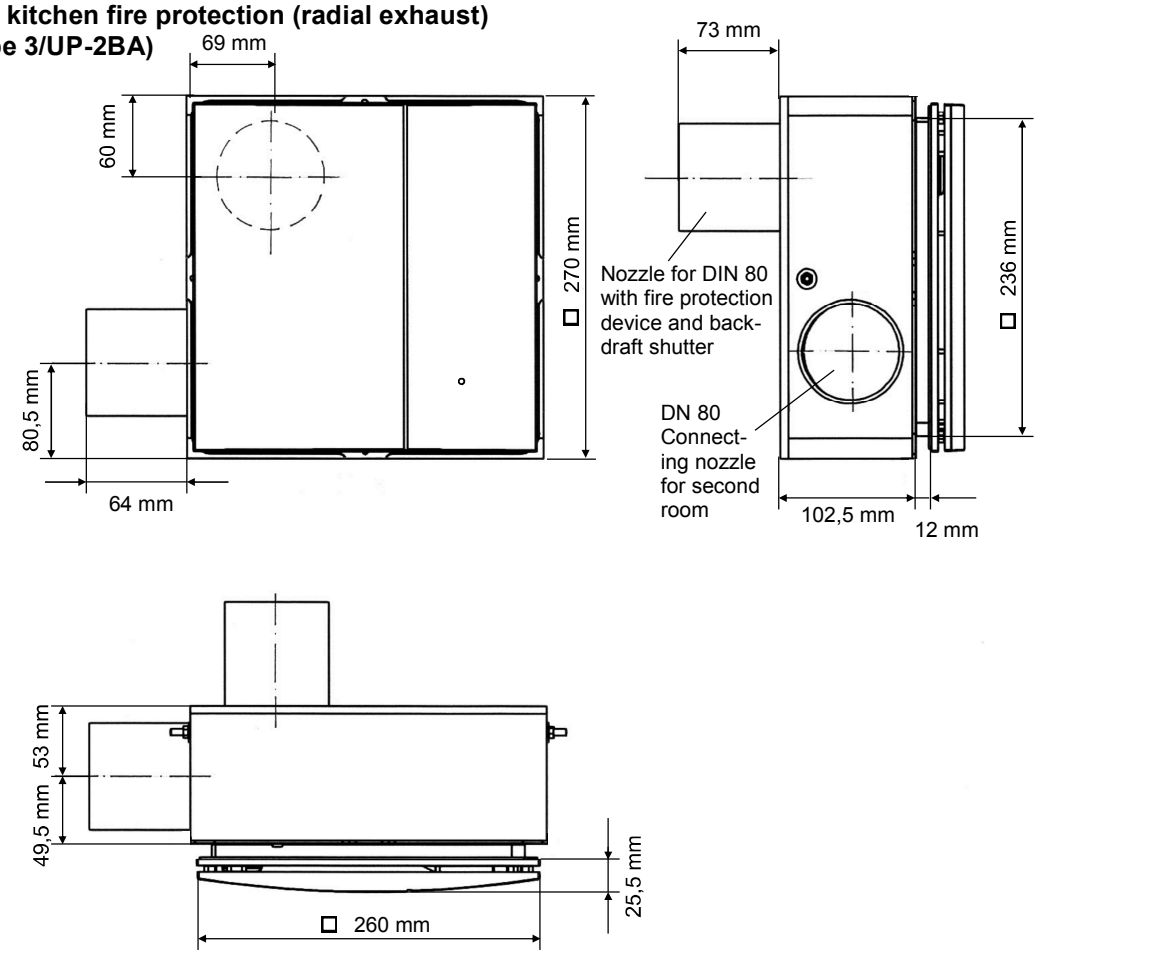
1-Room with kitchen fire protection (axial exhaust)
(Housing type 3/UP-BR)



2-Room with kitchen fire protection (radial exhaust)
(Housing type 3/UP-2BR)



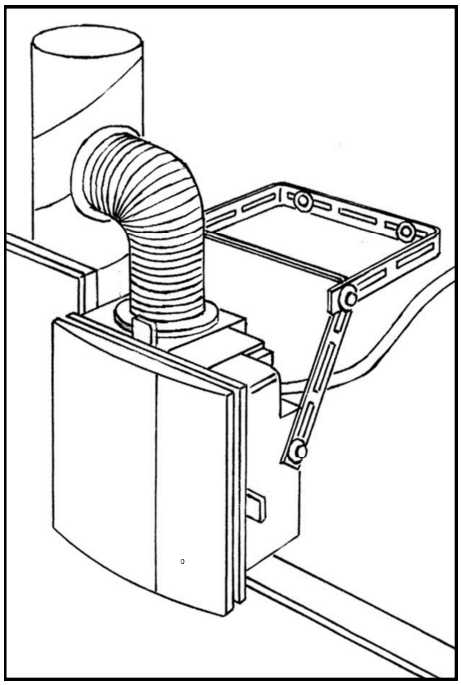
2-Room with kitchen fire protection (radial exhaust)
(Housing type 3/UP-2BA)



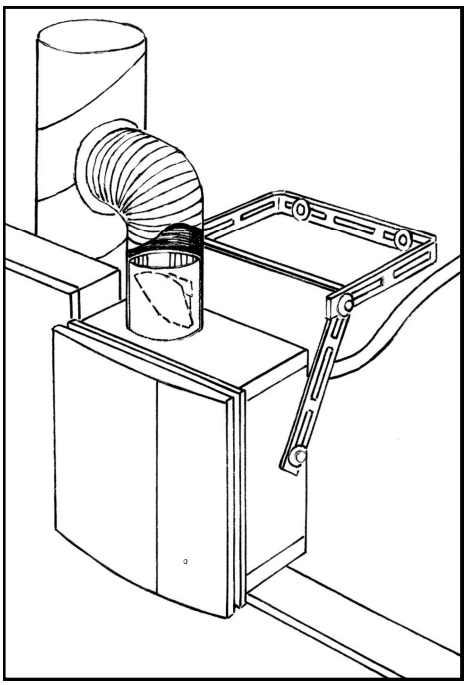
Installation examples (Figure shows decor screen Silvento V 30/60; Silvento ec is identical) EN

One-room ventilator: Duct installation

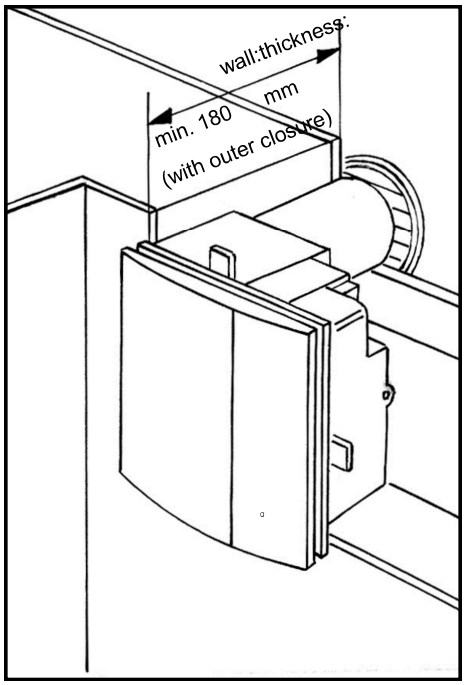
Duct installation without fire protection



Duct installation with kitchen fire protection

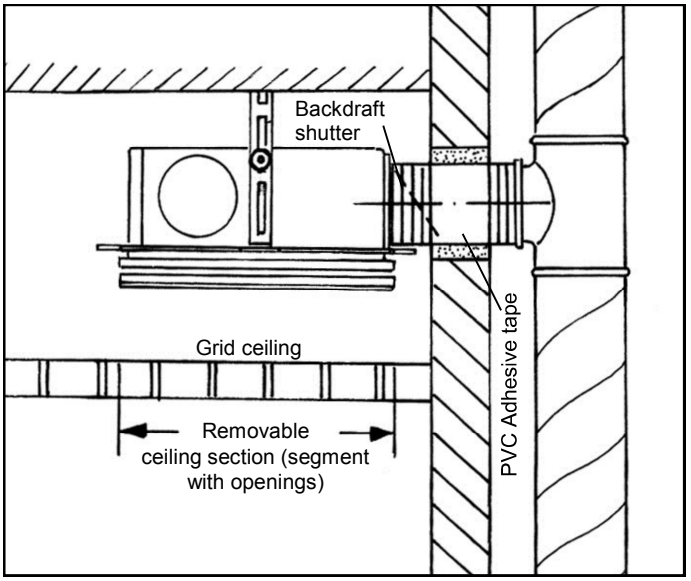


Outer wall installation

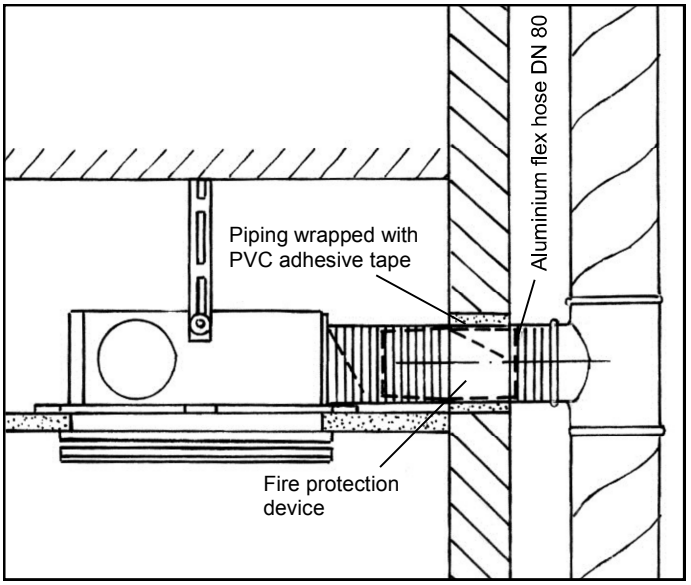


One-room ventilator: Ceiling installation

Ceiling installation without fire protection

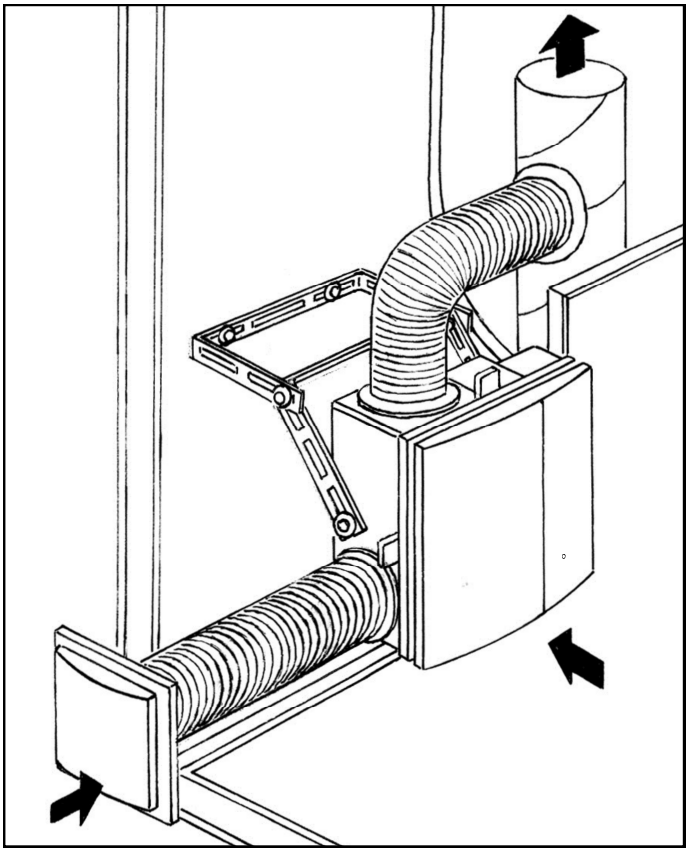


Ceiling installation with kitchen fire protection



2-Room ventilator: Duct installation

Duct installation without fire protection

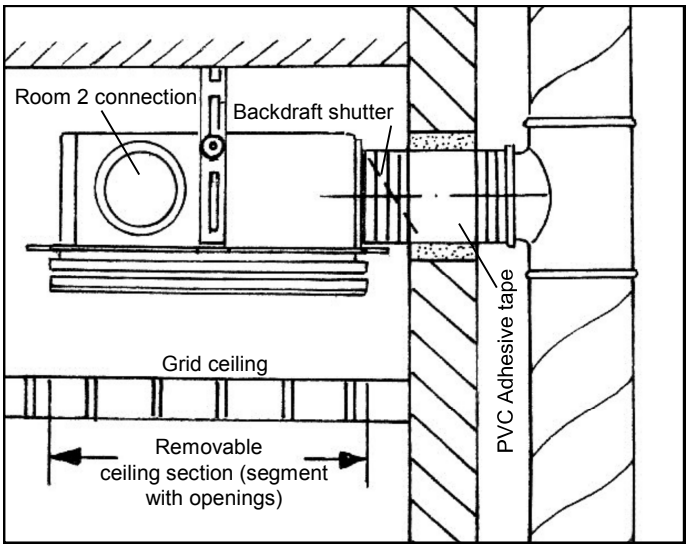


Note:
All installation examples shown are possible both with radial (“exhaust upwards”) and axial (“exhaust behind”) exhaust openings and can be selected according to purpose.

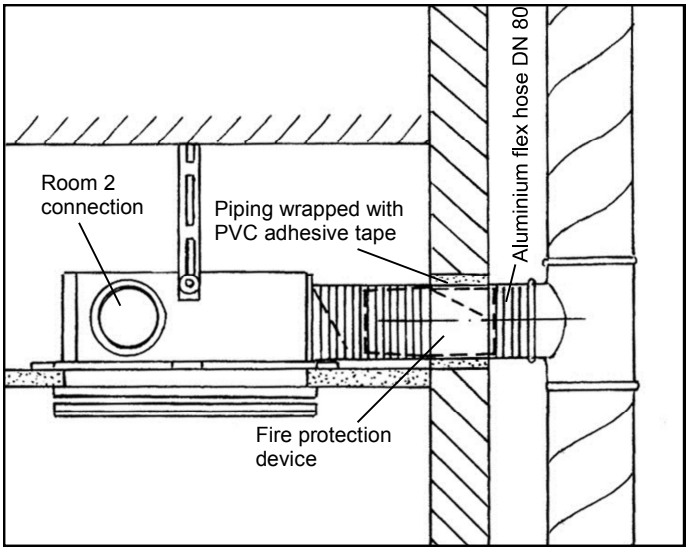
When with fire protection, the duct wall must have the required fire resistance duration

2-Room ventilator: Ceiling installation

Ceiling installation without fire protection



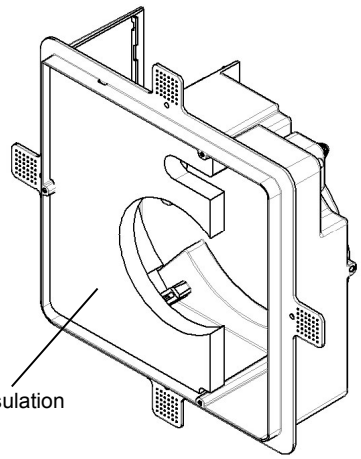
Ceiling installation with kitchen fire protection



Shipping units Please check the delivery for completeness and mint condition! EN

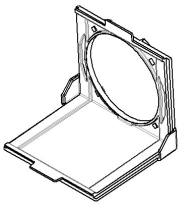
Wall installation housing made of plastic

(1a) (1b)

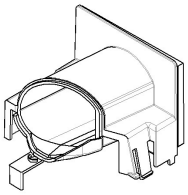


Wall installation housing made of plastic Type 3/UP
(Second-room connection possible)

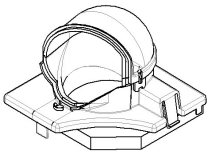
+ Angle*



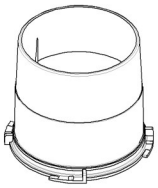
+ Deflection for radial discharge direction (1a)*



+ Deflection for axial discharge direction (1b)



+ Nozzle with backdraft shutter

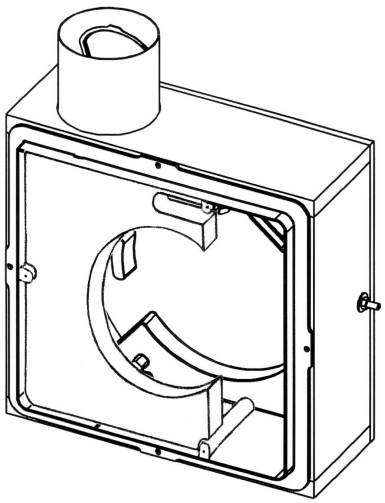


+ Adhesive tape

* In the as-delivered status, the angle and the deflection for the radial discharge direction are mounted in the wall installation housing; the nozzle and the deflection for the axial discharge direction are loosely enclosed .

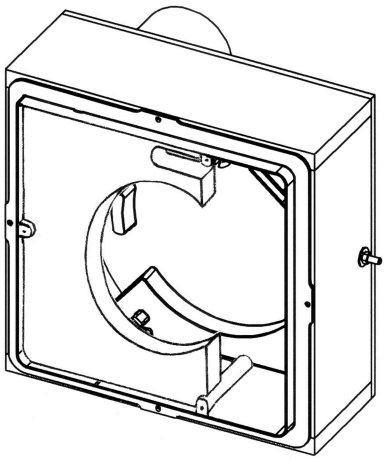
Fire-protection housing (available only as complete delivery unit)

(1c)



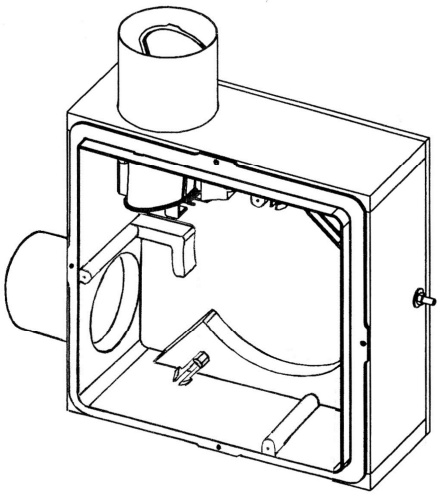
One-room fire-resistant housing with kitchen fire protection and radial exhaust opening type 3/UP-BR

(1d)



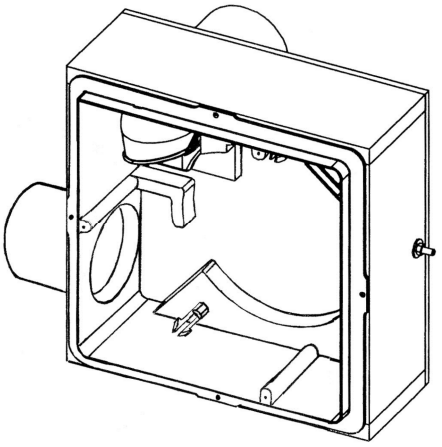
One-room fire-resistant housing with kitchen fire protection and axial exhaust opening type 3/UP-BA

(1e)



Two-room fire-resistant housing with kitchen fire protection and radial exhaust opening type 3/UP-2BR

(1f)



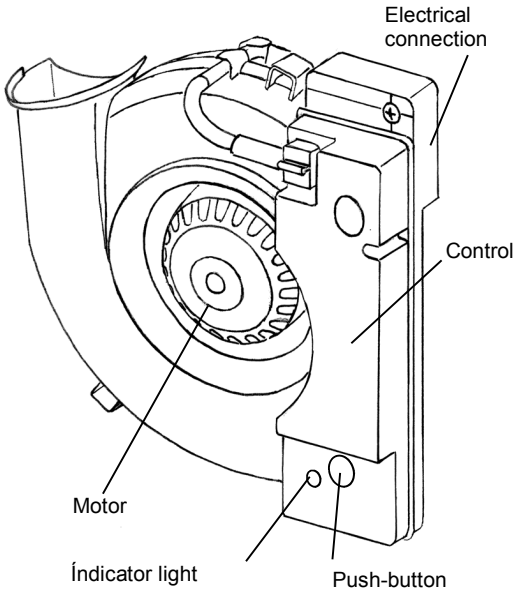
Two-room fire-resistant housing with kitchen fire protection and axial exhaust opening type 3/UP-2BA

All wall installation housings include:

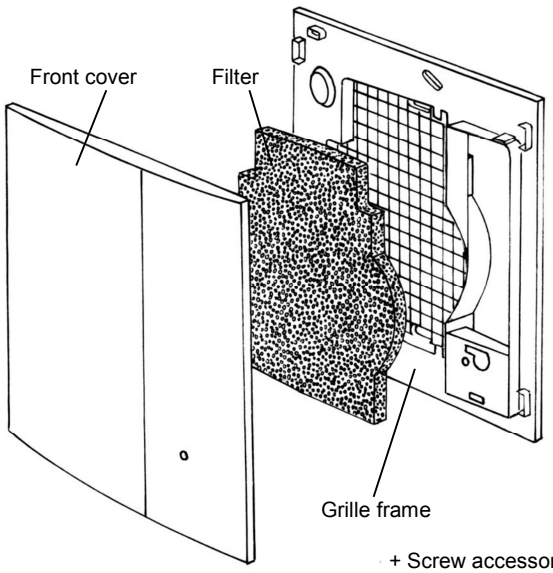
- Backdraft shutter
- Mains supply terminal
- Mounting bracket with screw accessories
- Plaster protection cap

② Fan insert Silvento V 30/60 or Silvento ec

Fan insert (Figure shows Silvento V 30/60



Decor screen (Figure shows Silvento 30/60

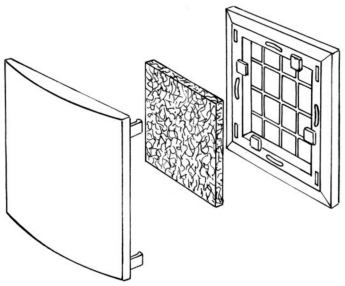


+ Screw accessories

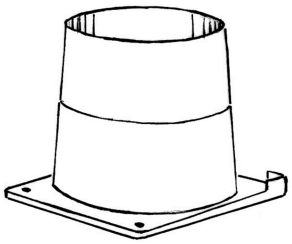
③ Two-room accessories

2-Room set 3/S2

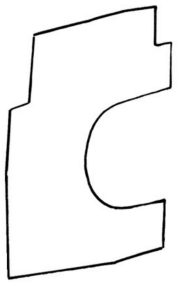
Two-room wall closure 2/ZSKA



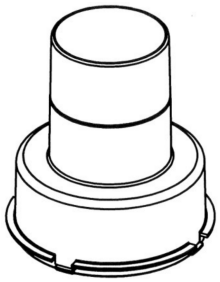
Connecting nozzle DN 80 2/STU



Screen for two-room ventilator

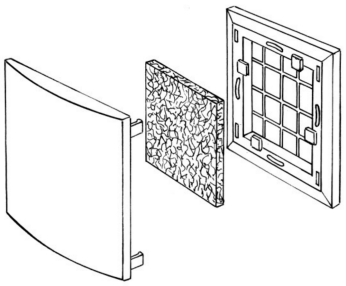


Two-room nozzle (fits plastic housing)

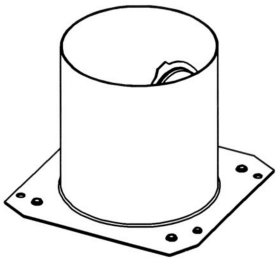


Fire protection - 2-Room set 8/B2

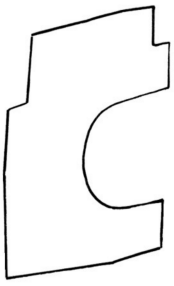
Two-room wall closure 2/ZSKA



Fire protection nozzle type 8/BS (fits on 2/ZSKA)



Screen for two-room ventilator

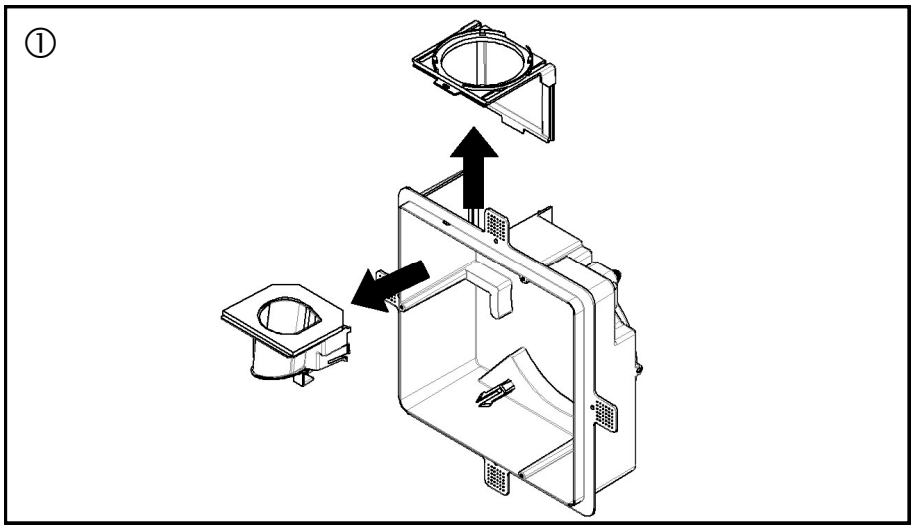


Installation of the angle and the deflection EN

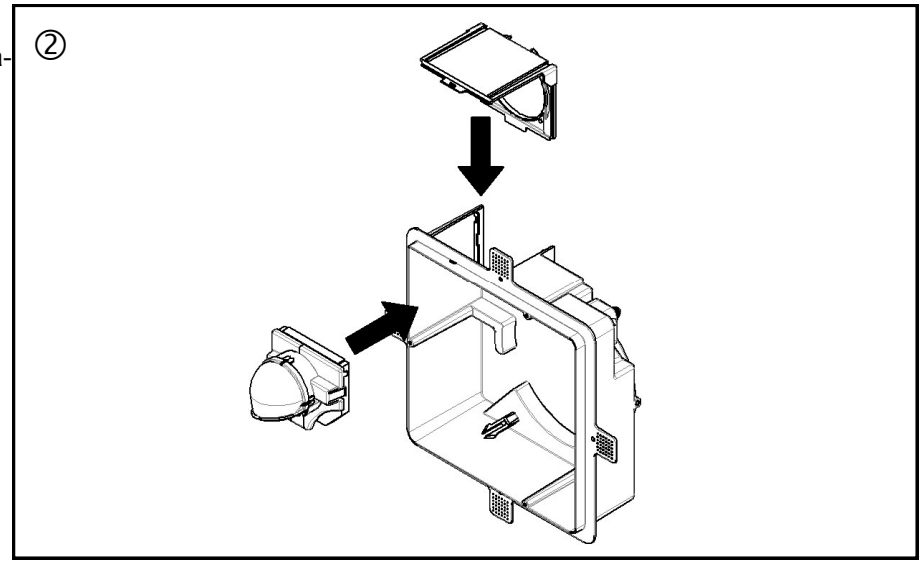
Note:

- **This mounting step is only applicable for wall installation housings made of plastic Type 3 / UP. For wall installation housings with fire-protection coating the angle can not be mounted variably, as it is already pre-assembled together with the deflection!**
- **In the as-delivered status of the wall installation housing made of plastic, the angle and the deflection for the radial discharge direction are already mounted. For the housing installation with axial discharge, the angle has to be turned and the deflection for the axial discharge direction must be mounted. In both variants, the angle must be fixed with adhesive tape!**

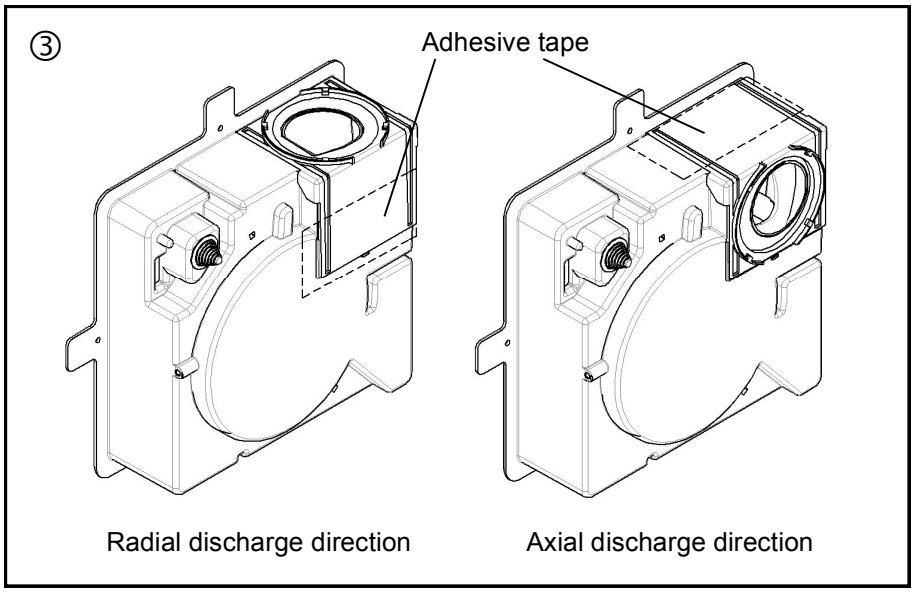
Conversion into variant with axial discharge direction:
Remove the sound insulation from the wall installation housing!
Unsnap the angle and the deflection for the radial discharge direction!



Insert the deflection for the axial discharge direction and the angle into the wall installation housing!
Make sure that the two components have securely snapped into place.
Leaks result in losses of airflow volume !
Re-insert the sound insulation into the wall installation housing!



Both variants:
Fix the angle using the adhesive tape enclosed in the delivery unit!

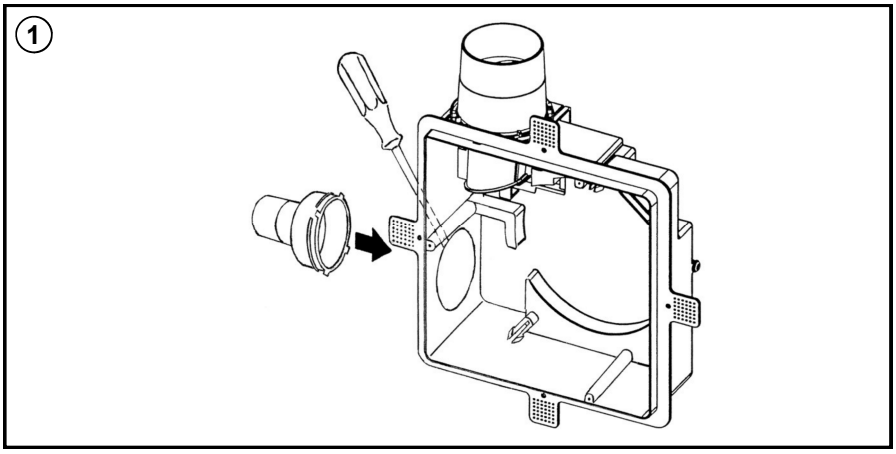


Assemby: Housing and electrical connection (Can be applied to all housing variants accordingly) EN

Note: Remove the plaster protection cap for installation steps 1 to 8 .

With two-room systems with plastic housing:

- Remove the sound insulation (is not used with two-room systems)
- Break out the two-room opening and mount the two-room nozzle

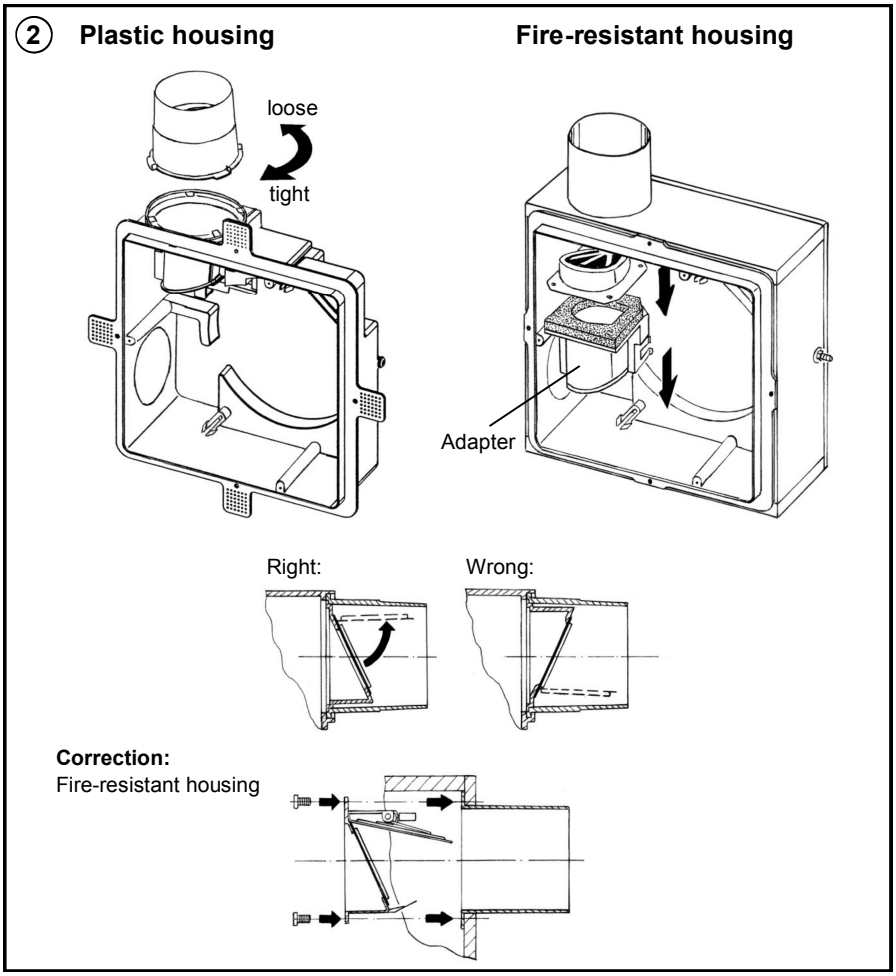


Check the backdraft shutter position relative to the selected installation position (see p. 4):

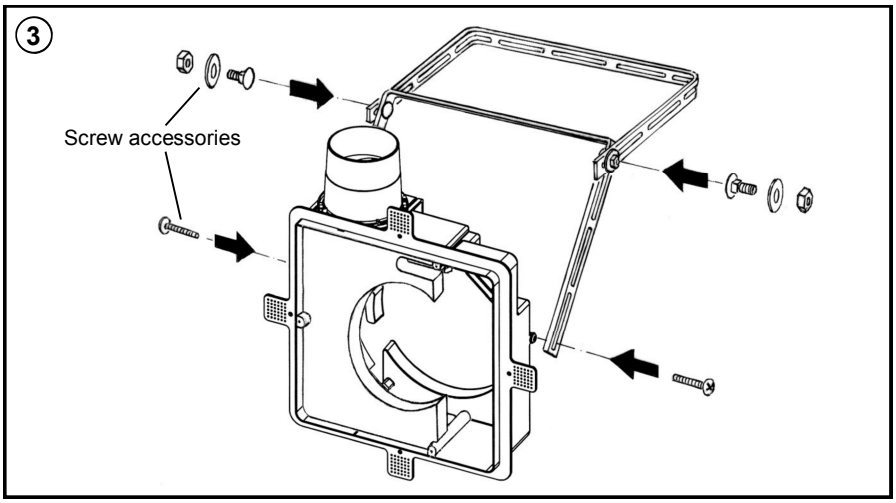
For correction:

- **With plastic housings**: Turn the nozzle with backdraft shutter to disengage it and snap it back into the correct position.
- **With fire protected housings**: Screw off the insert with backdraft shutter, turn it, then screw it back on.

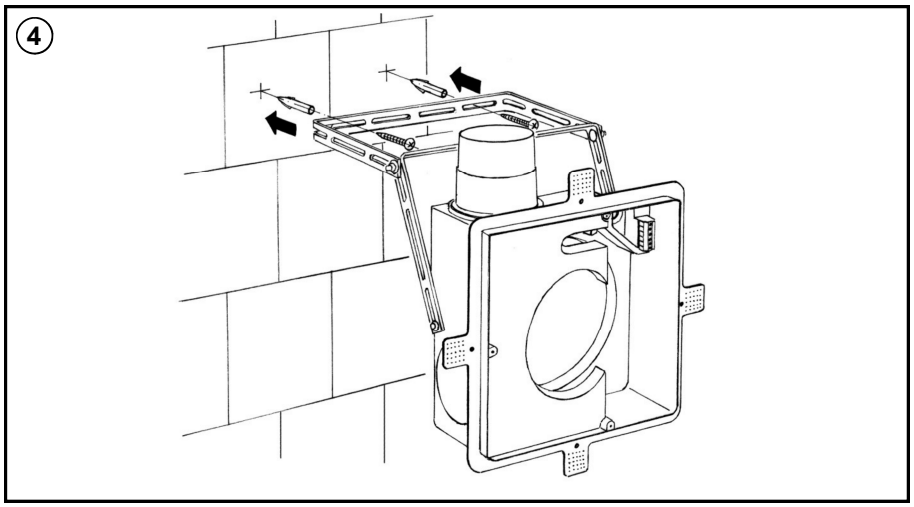
Reinsert the sound insulation!



Mount the assembly bracket to the housing using the enclosed screw accessories.

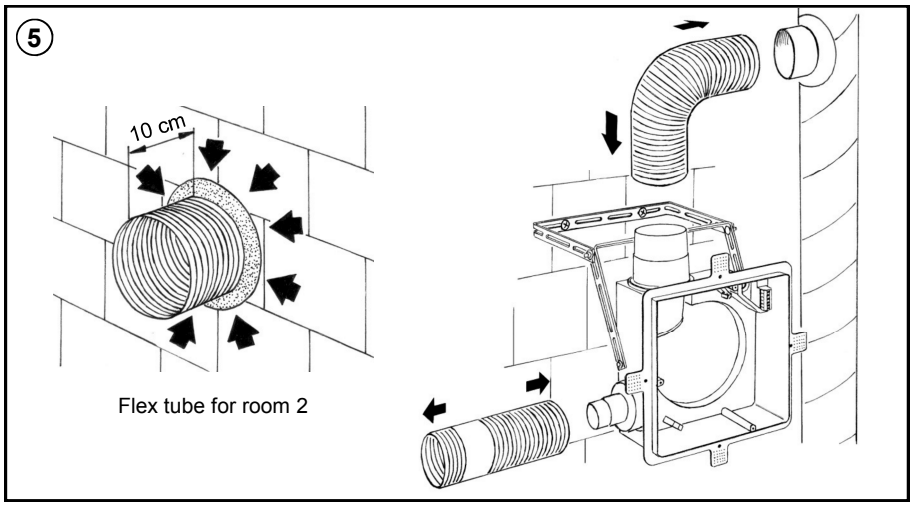


Fix the housing to the duct wall using the mounting bracket
(screw accessories are not standardly supplied)

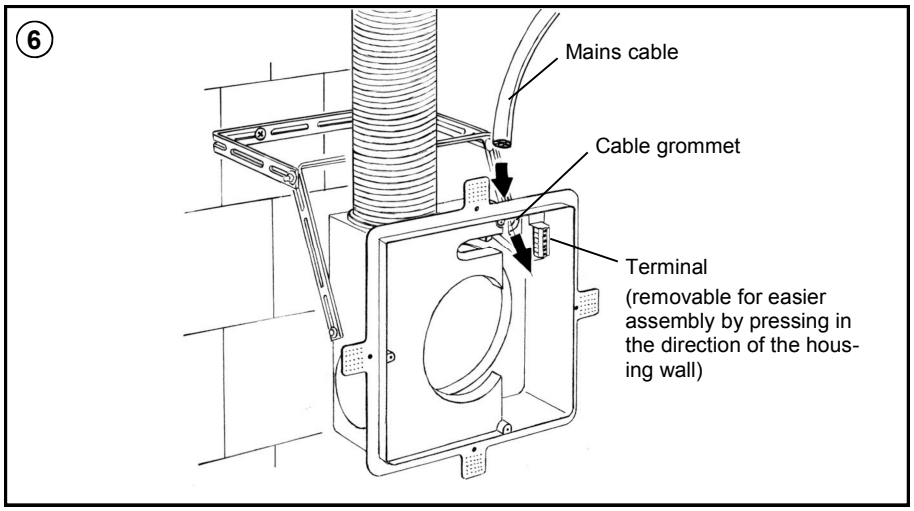


Connect the flex tube:
- Seal the connections flex tube - main piping and flex tube - nozzle with sealing tape or pipe clamps
- Flex tube for room 2

  - Wrap the piping in wall breakthrough area with PVC adhesive tape
  - Allow the tube end to overhang by approx. 10 cm to protect against penetrating dirt
  - Completely mortar the flex tube in

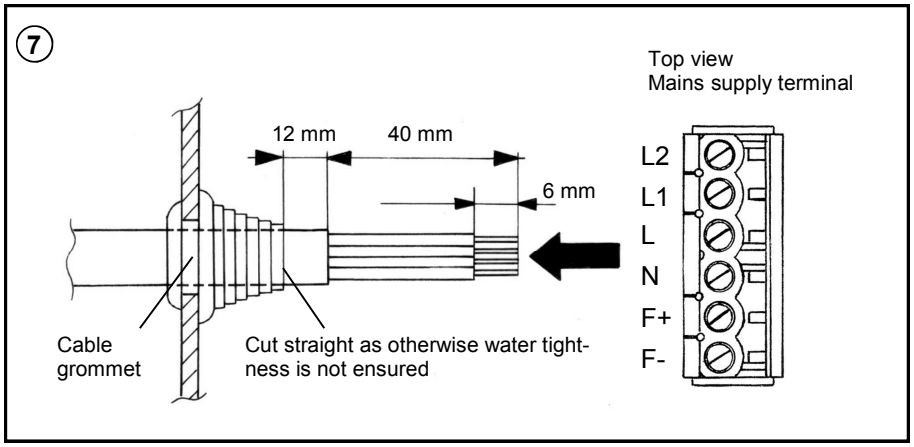


Open the cable grommet (cut off) and lead the cable through
Ensure water tightness, see Fig. 7



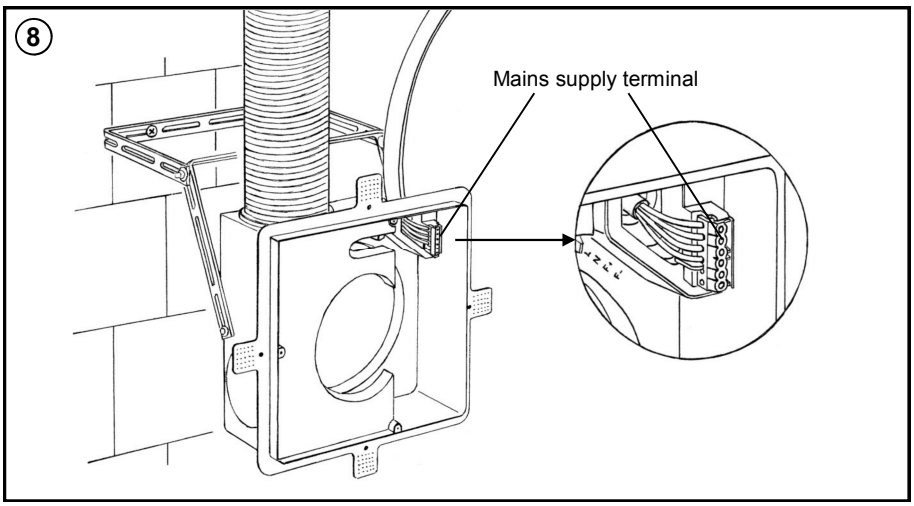
Mains connection:
- Strip the mains cable as shown
- Mount the mains supply terminal according to the selected connection diagram (see connection diagrams). For easier mounting, the terminal can be removed by pressing in the direction of the housing wall

Caution! The mains cable must be dead!



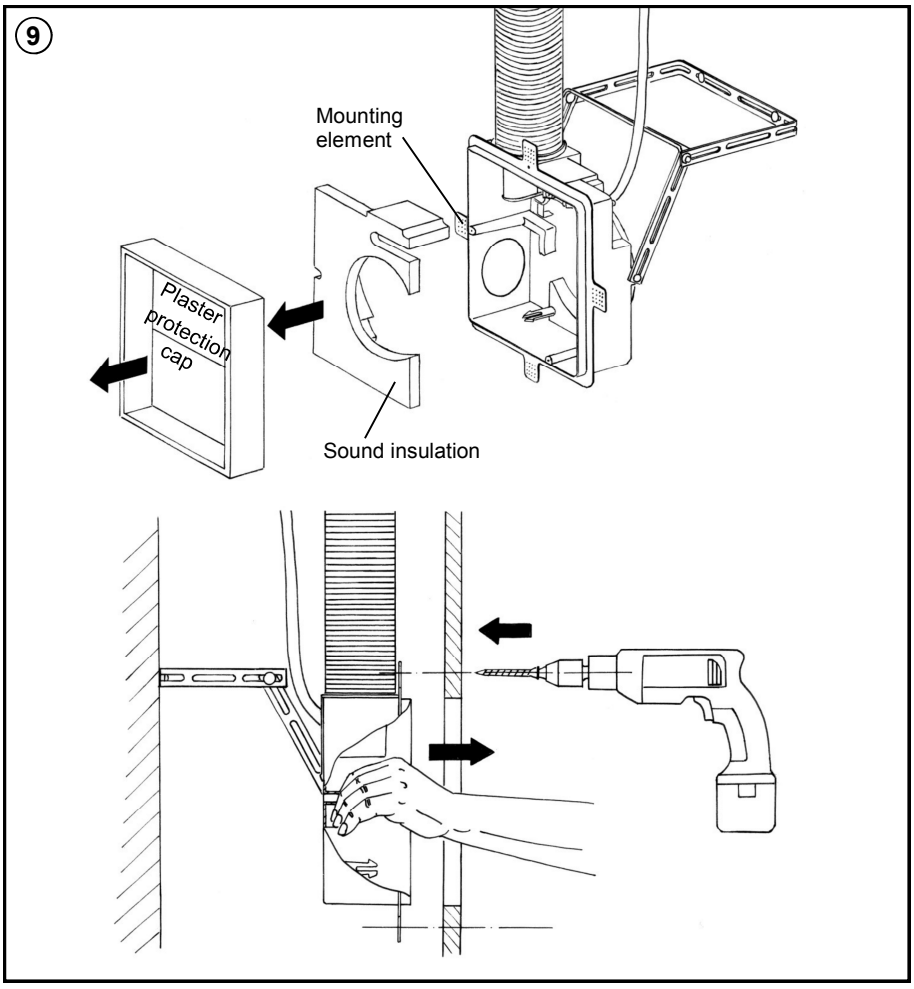
Snap the mains supply terminal into place:

Attention! The power cable must be free from mechanical stress after assembly. Use flexible cables if necessary.



For simple mounting of plastic housings to light-weight walls use the four mounting elements at the rim of the housing:

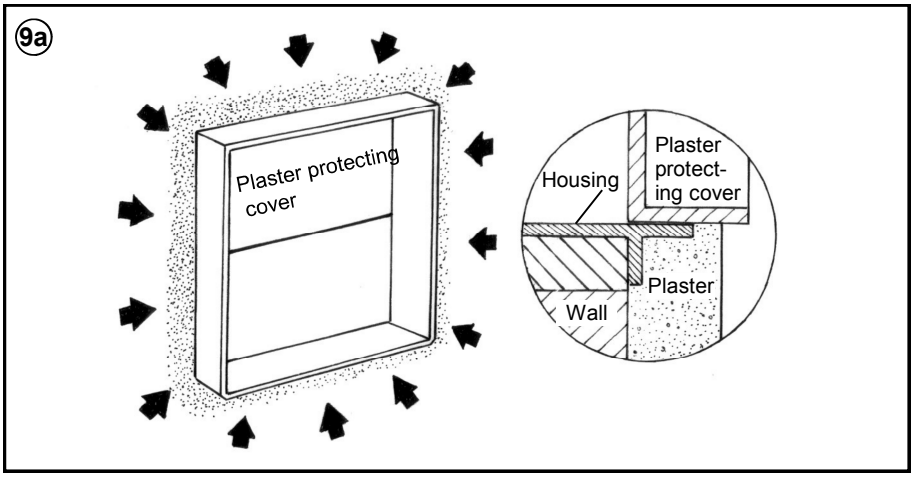
- Take the plaster protection cap off
- Remove the sound insulation
- Position the housing in the wall cutout from inside (recommendation: 238 x 238 mm) and fix it with drywall screws
- Reinsert the sound insulation
- Put the plaster protection cap back on
- Plaster in



Put the plaster protection cap back on:

If appropriate, pinch off the mounting elements (see Fig. 9a)

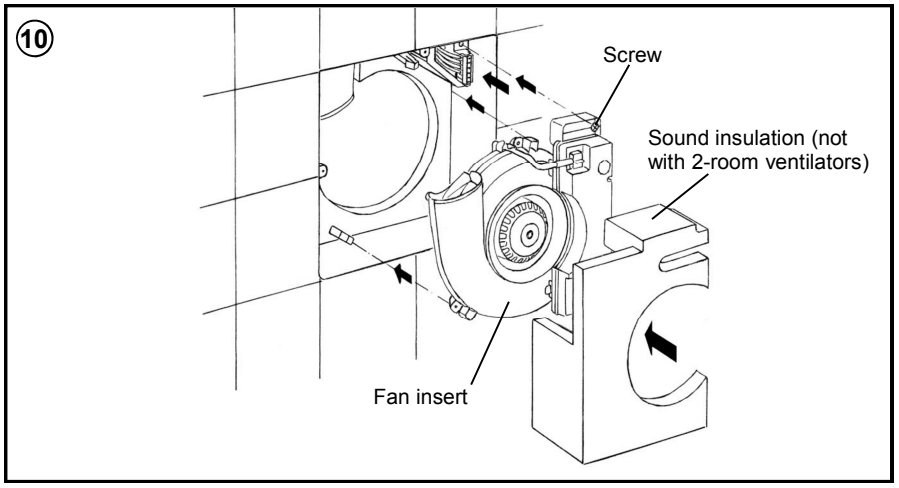
- Plaster in! Leaks lead to losses in airflow volume
- Firm seating of the installation housing is only achieved by duct wall and plaster



Assembly: Fan insert and decor screen (Figure shows Silvento V 30/60) EN

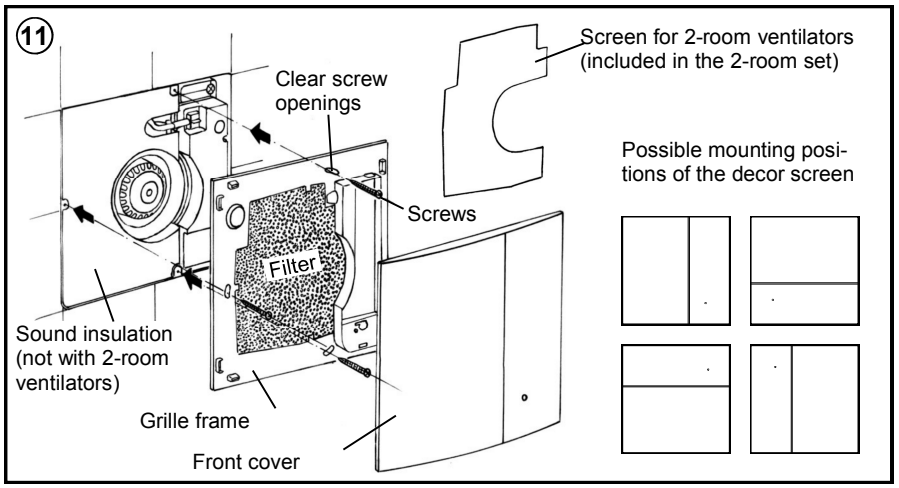
Assembly of fan insert:
- Remove the plaster protection cap
- Take out the sound insulation
- Tightly snap the fan insert into place and screw on the power supply area
- Reinsert the sound insulation (not required with two-room systems)

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

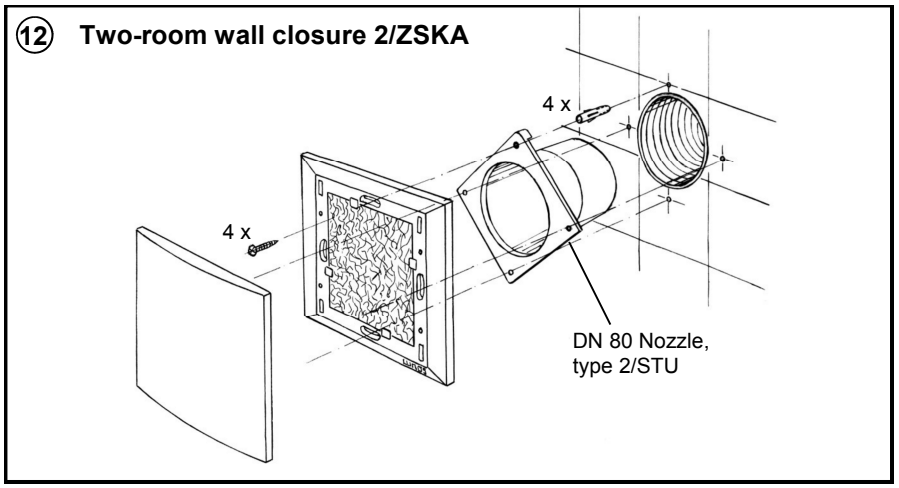


Assembly of decor screen:
- Clear screw openings in grille frame (marked with “UP”)
- Use the screws supplied to fasten the grille frame to the ventilator housing
- Put on the front cover and snap it into place

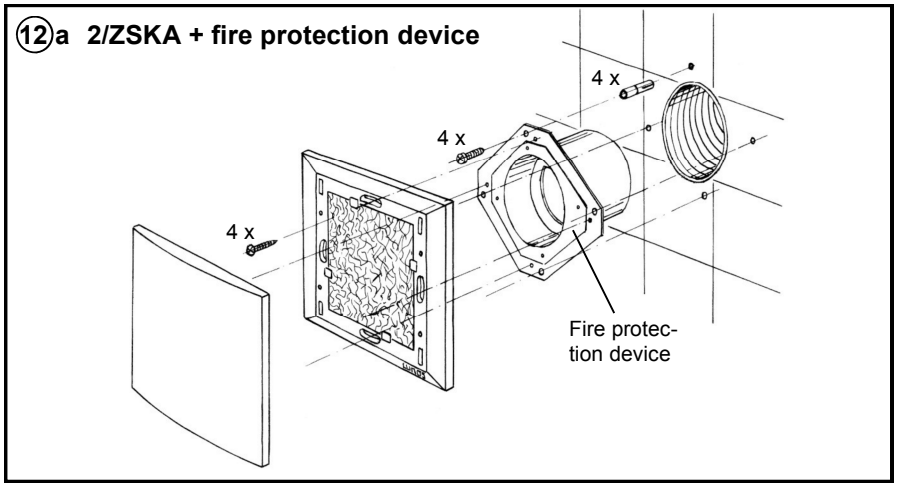
With two-room ventilators:
- Insert the screen under the filter in the grille frame (there is no sound insulation in two-room systems)



Two-room connection without fire protection:
- Use the drilling template enclosed in the 2-room set
- First shorten overhanging flex tube by cutting flush with the wall



Two-room connection with fire protection:
- Use the drilling template enclosed in the 2-room set
- First shorten overhanging flex tube by cutting flush with the wall



Caution! Any assembly work to the ventilation device may only be carried out after disconnecting the supply voltage! The ventilation device is fitted with protective insulation according to Protection Class II; a protective conductor connection is not required!

Make sure that the supply voltage of all connection lines is voltage-free (dead)! (Separation from the power supply with a minimum contact opening of 3 mm, e.g. electric fuse).

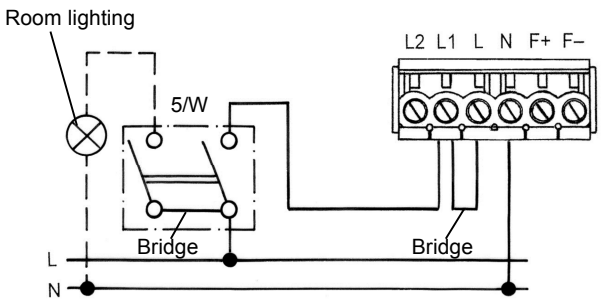
Each electric circuit of this ventilation system must be fitted with a residual current protection (e.g. FI switch/RCCB)!

Electric connection only by a specialist!

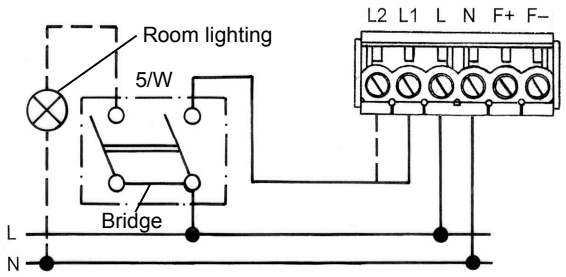
Additional installations and electrical components in the ventilation unit are not allowed!
Connection diagrams for further fan functions upon request!

Silvento V 30/60

1 • **Single-stage operation, switchable to 60 m³/h**

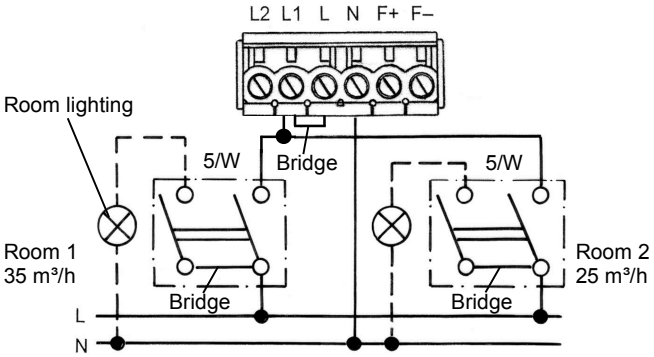


2 • **Continuous operation 30 m³/h, switchable to 60m³/h or 100 m³/h (L2)**



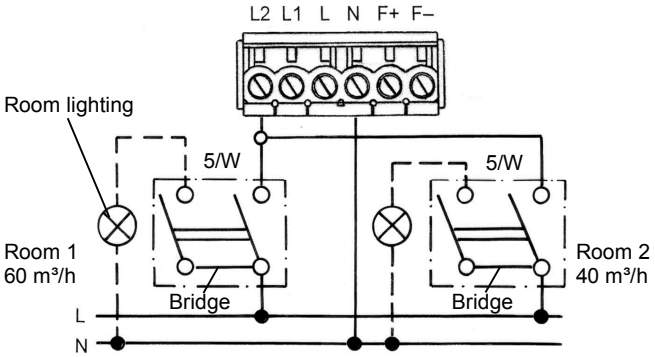
3 **Two-room ventilator**

• **Single-stage operation, switchable to 60 m³/h from 2 rooms**



4 **Two-room ventilator**

• **Single-stage operation, switchable to 100 m³/h from 2 rooms**



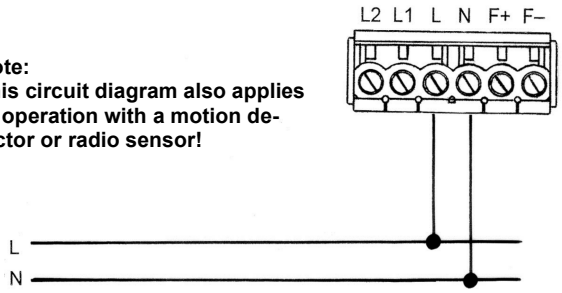
Silvento ec

Note:

- A variety of Silvento ec ventilation functions can be created using the DIP switches integrated in the control board of this type and via optional add-on modules. For this information, please refer to the "Fan Insert Silvento ec Installation Manual ".
- Basic ventilation can also be temporarily switched off by hand via a switch at L, however, for the use of the delay time functions and the humidity control L must be switched or permanently connected!

1 **Automatic operation**
according to DIP switch position of the control board
Comfort Control: humidity-sensitive operation
Basic Control: optional interval switching

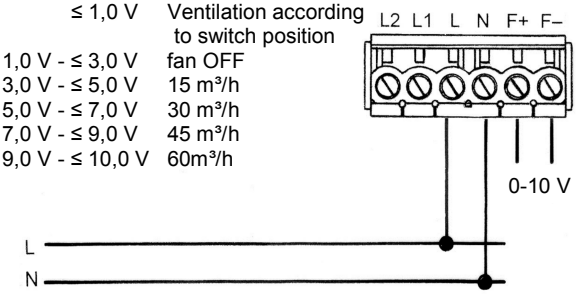
Note:
This circuit diagram also applies to operation with a motion detector or radio sensor!



2 **With remote control**

Note: Further settings possible, e.g. via L1 oder L2, remote control always has priority

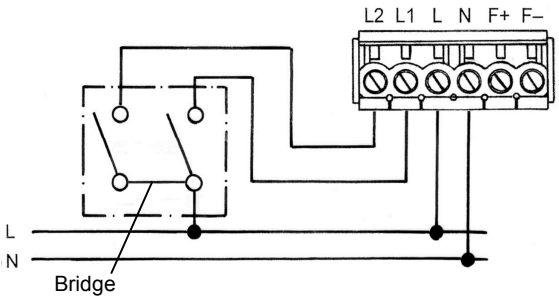
≤ 1,0 V -	Ventilation according to switch position
> 1,0 V - ≤ 3,0 V	fan OFF
> 3,0 V - ≤ 5,0 V	15 m³/h
> 5,0 V - ≤ 7,0 V	30 m³/h
> 7,0 V - ≤ 9,0 V	45 m³/h
> 9,0 V - ≤ 10,0 V	60m³/h



3 **According to control board, DIP switch position and module:**

- **With delay time (Basic Control): Deactivation of the delay functions (L2), continuous operation basic ventilation or OFF according to DIP switch 1 and 2 switchable to regulated ventilation (L1)**
- **With humidity control (Comfort Control): Deactivatable humidity control (L2), switchable to regulated ventilation (L1)**

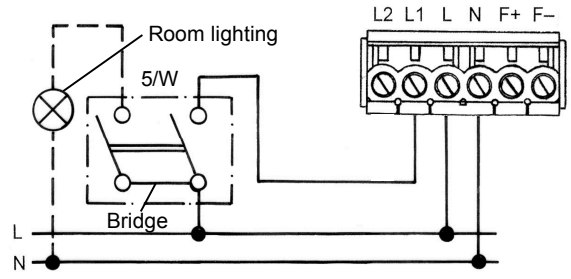
Note: Cannot be coupled with room lighting



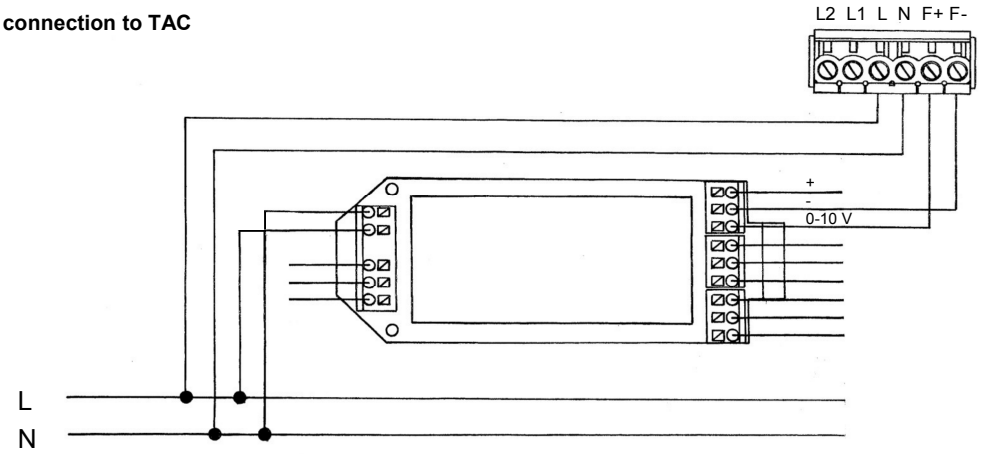
4 **According to control board, DIP switch position and module:**

- **Single-stage operation, switchable to regulated ventilation**
- **Continuous operation basic ventilation and delay time-controlled regulated ventilation**
- **Humidity control, switchable to regulated ventilation**
- **Delay time-controlled regulated ventilation**

Note: Use a bipolar switch if you wish to switch room lighting and regulated ventilation at the same time!

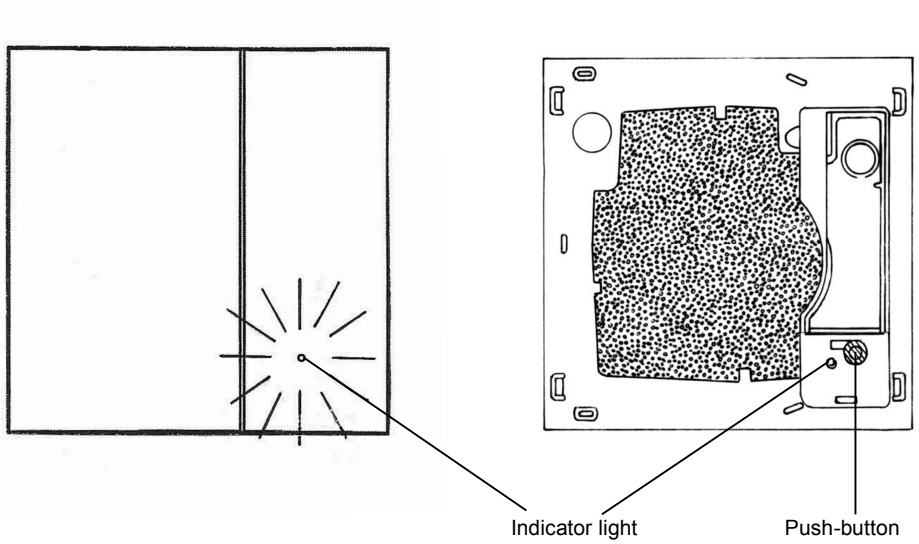


5 **Direct connection to TAC**



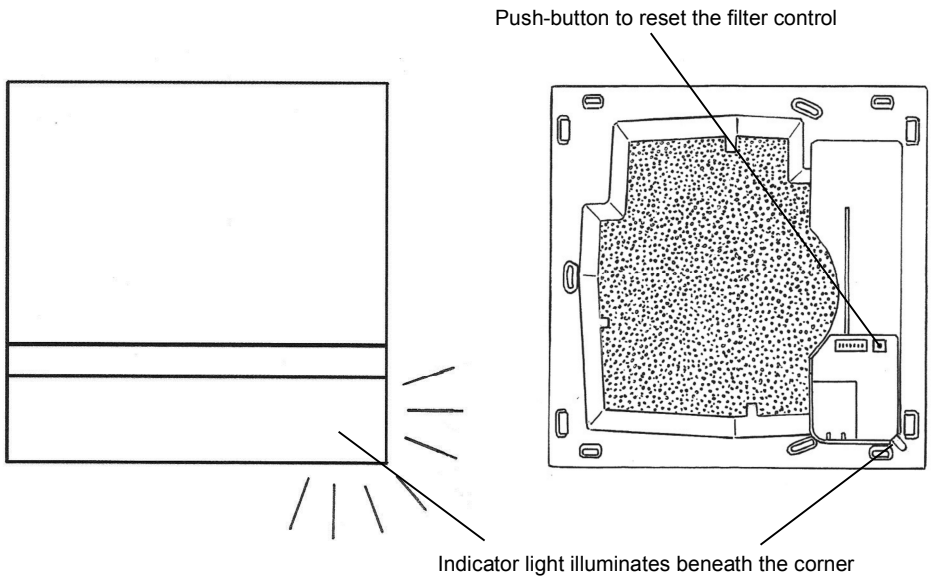
Silvento V 30/60

- Red indicator light illuminates continuously when filter is contaminated.
- Remove front cover, take filter out. Insert new or cleaned filter. Filters can be cleaned e.g. in a dish washer.
- Press push-button with a tool e.g. a pen for 3 seconds; indicator light goes out. Push-button and indicator light are located in the control housing.
- Put front cover on



Silvento ec

- Indicator light illuminates continuously when filter is contaminated.
- Remove front cover, take filter out. Insert new or cleaned filter. Filters can be cleaned e.g. in a dish washer.
- Press push-button with a tool e.g. a pen for 3 seconds; indicator light goes out
- Put front cover on



Never operate the device without filter!

Cleaning

If necessary wipe the front cover and grille frame with a soft, dry cloth.

Filter replacement and cleaning may neither be carried out by children nor by persons who are not able to operate the device safely due to their physical, sensory or mental abilities or their inexperience or lack of knowledge.

Additional parts / replacement parts

Filters, three-pack	2/FSI-R	Order- No.	039 721
Silvento design screen incl. filter display	2/S	Order- No.	039 551
2-Room-Set consisting of second-room vent, plastic film + 2/ZSKA	3/S2	Order- No.	039 209
Fire protection 2-room-set consisting of fire protection vent, plastic film + 2/ZSKA	8/B2	Order- No..	039 543

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