OPERATING AND INSTALLATION MANUAL FLUSH-MOUNTED UNIT LG 100 UP

AUSTRIA

Deutsches Institut für Bautechnik DIBt

ErP 2018

EU-regulation 1253/2014

EPREL

COMFORT VENTILATION

PICHLER

Systematic ventilation.

GENERAL
USERS
SPECIALIST PERSONNEL

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1. Introduction

Dear customer,

Thank you for choosing the decentralised compact ventilation unit LG100 from PICHLER.

To operate your compact ventilation unit safely, properly and economically, please read this manual carefully and follow the instructions provided. Keep this operating manual in a safe place and readily available at all times. These units are subject to ongoing improvement and further development. Your unit may therefore vary slightly from the description in this manual.

Use the ventilation unit only when in perfect condition and for its designated use, be aware of safety and any hazards and cognisant of all the notes and information contained in this manual.

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Equipment type:	08LG100UPFV
Volume flow:	max. 80 m^3/h
Dimensions WxHxD:	504x882x192 mm
Voltage/frequency:	230 V / 50 Hz
Power consumption:	max. 320 W
Order number:	
Serial number:	

Year of manufacture:
Weight: approx. 15 kg

Compact ventilation unit LG100 flush-mounted variant with preheating battery

Please always keep the model and serial number (see nameplate on unit) at hand in the case of queries or when ordering spare parts. Please contact us if you have any further questions or if you lose this documentation.

Your PICHLER team

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2. General

This manual contains notes and information on safe operation and proper installation of the decentralised compact ventilation unit LG 100 and on its use and servicing. Furthermore, reference this manual during servicing to ensure proper execution of the tasks.

Troubleshooting and procedures may be performed by an installation company (specialist company) only.

Changes reserved: This manual has been compiled with the utmost care. This does not, however, imply any rights. Your unit may therefore vary slightly from the description in this manual.

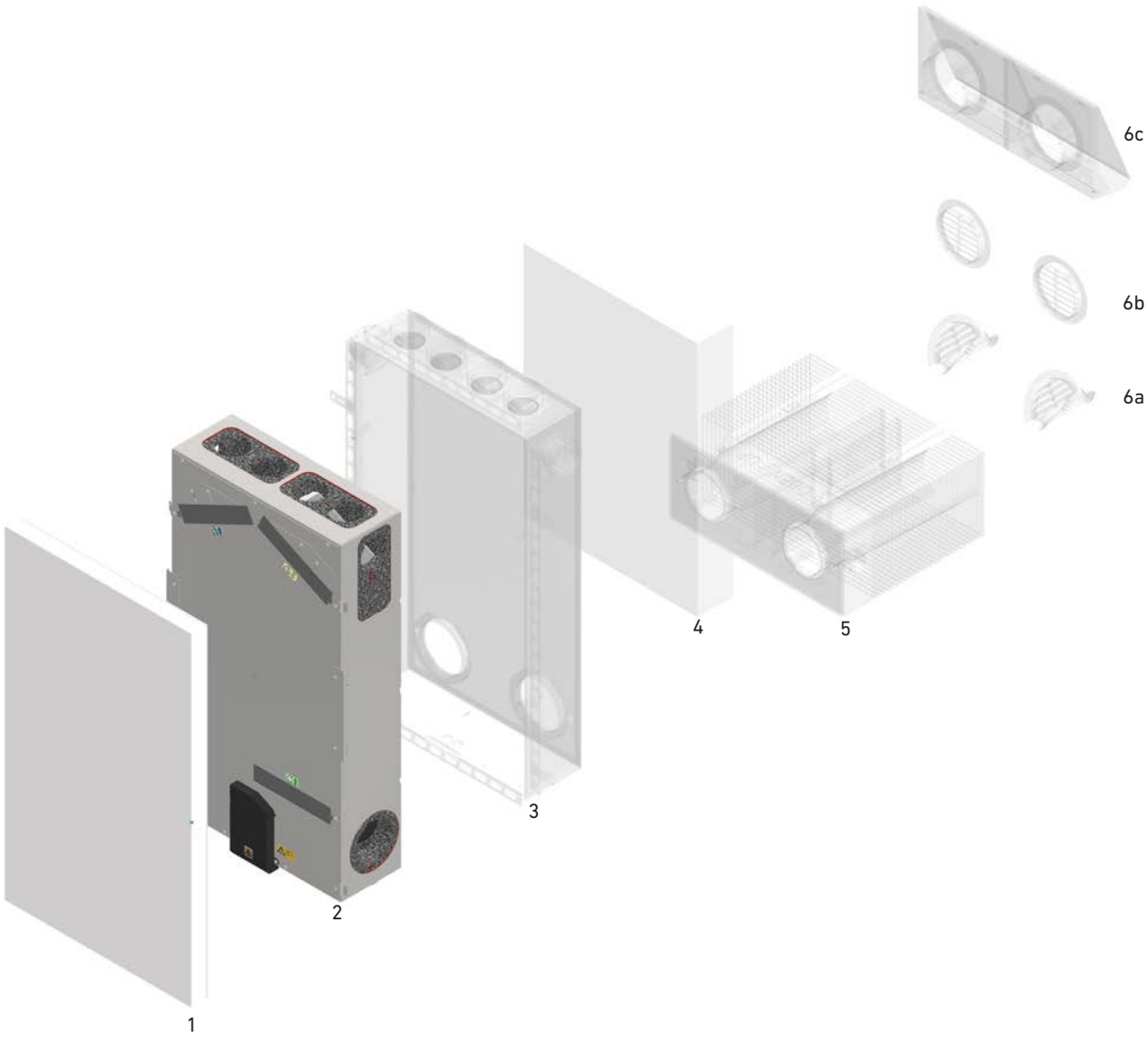
Our "General terms and conditions" in their latest version apply.

2.1. Version

2.1.1. SINGLE OR MULTI-ROOM APPLICATION IN FLUSH-MOUNTED HOUSING AS STANDARD

The compact ventilation unit LG100 in flush-mounted design consists of a flush-mounted housing (3) and a ventilation unit as slide-in module (2).

The ventilation unit is closed with a design front (1) at its front side. The outdoor air and exhaust air connections are led outside through a wall duct (5). On the rear side of the housing the compensation plate (4) has to be mounted. The outdoor air and exhaust air connections are sealed by means of weather protection grilles (6a, 6b or 6c).



Standard

In the shell construction phase, the flush-mounted housing (3) including the compensation plate (4) and wall duct (5) is mounted.

In single-room applications, the flush-mounted housing (3) has no connection sockets. For multi-room applications, the piping leading upwards for the supply and extract air is provided in addition. In the course of the installation work, the slide-in module (2) is inserted into the flush-mounted housing (3) and is electrically connected.

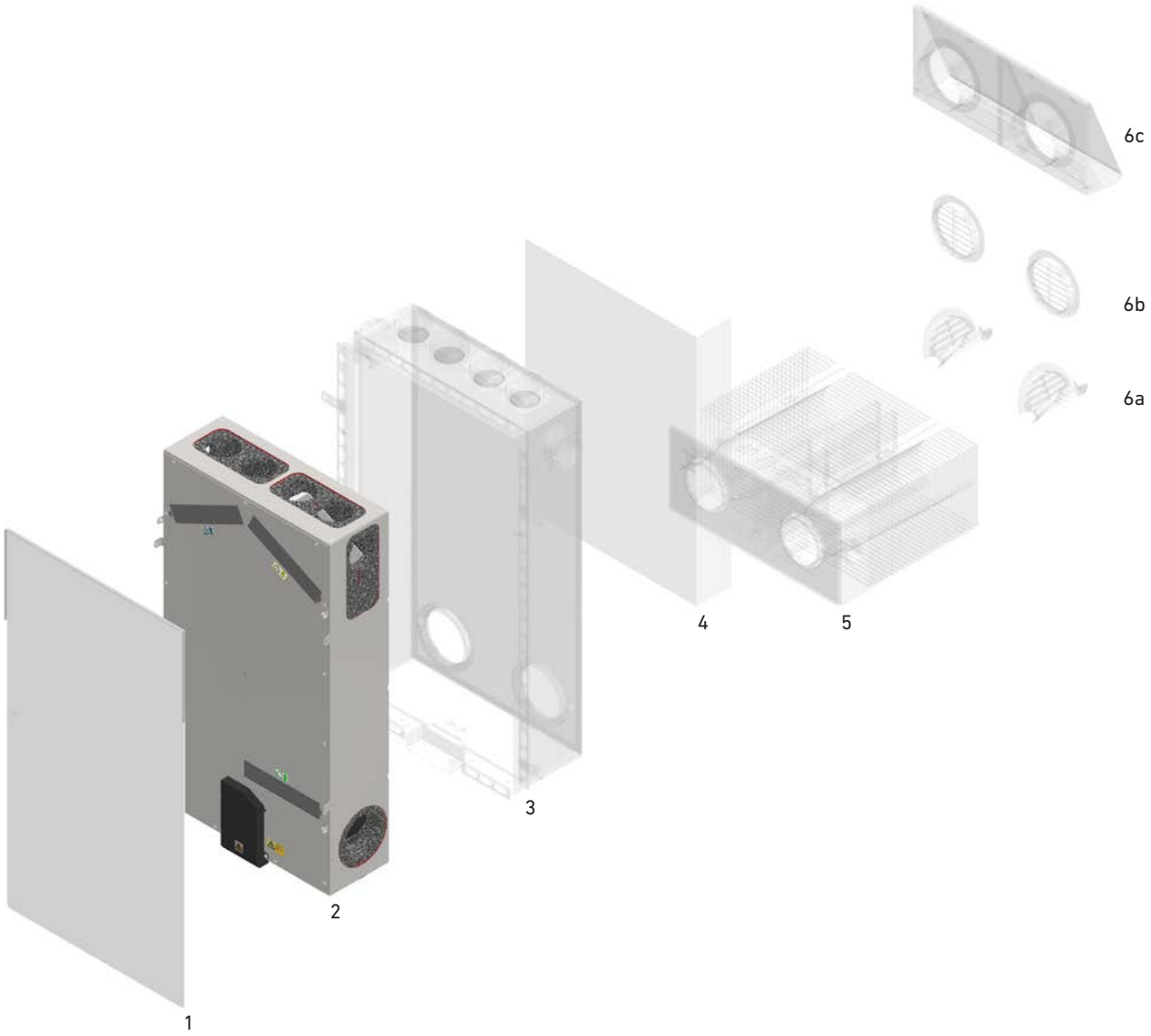
3, 4, 5, 6a and 6b are not dealt with in this installation manual.

The various flush-mounted housings are available separately. Information on the installation of all versions can be found in the installation instructions 08LG100_InstallationManual_flush-mounted housing.

2.1.2. MULTI-ROOM APPLICATION IN FLUSH-MOUNTED HOUSING INTEGRATED INTO THE WALL

The compact ventilation unit LG100 in flush-mounted design for reveals consists of a flush-mounted housing (3) with pre-assembled connectors and a ventilation unit as slide-in module (2).

The ventilation unit is closed with a design front (1) at its front side. The outdoor air and exhaust air connections are led to the outside via a wall duct (5). On the rear side of the housing the compensation plate (4) has to be mounted. The outdoor air and exhaust air connections are sealed by means of weather protection grilles (6a, 6b or 6c).



Integrated into the wall

In the shell construction phase, the flush-mounted housing (3) including the compensation plate (4) and wall duct (5) is mounted.

In addition, the piping upwards for the supply and exhaust air is provided. In the course of the installation work, the slide-in module (2) is inserted into the flush-mounted housing (3) and is electrically connected.

3, 4, 5, 6 and 7 are not dealt with in this installation manual.

The various flush-mounted housings are available separately. Information on the installation of all versions can be found in the installation instructions 08LG100_InstallationManual_flush-mounted housing

3. Overview of components

Contents of delivery: Slide-in module and design front

Komponentenübersicht		
Item number	**Designation**	**Sketch**
08LG100UPF 08LG100UPFGLA 08LG100UPFV 08LG100UPFVGLA	Slide-in module without preheating battery standard version Slide-in module without preheating battery GLA version Slide-in module with preheating battery standard version Slide-in module with preheating battery GLA version	
08LG100WIF 08LG100WIFGLA 08LG100WIFV 08LG100WIFVGLA	Integrated into the wall without preheating battery standard version Integrated into the wall without preheating battery GLA version Integrated into the wall with preheating battery standard version Integrated into the wall with preheating battery GLA version	
08LG100UPAPDF1A	Standard design front Further design fronts available on request!	
08LG100WIDF	Design front integrated into the wall	

3.1. Standard version

In the standard version, the ventilation unit can be switched off via the control unit, the Pichler app or the button on the unit.
In automatic mode of the standard version, the ventilation unit regulates independently and depending on the exhaust air quality properties (VOC and eCO2) between the preset volume flows of the basic ventilation (ventilation level 1) and ventilation level 3.

In this version the following ventilation levels can be selected:

- Standby (no volume flow, flaps closed)
- Ventilation level 1
- Ventilation level 2
- Ventilation level 3
- Automatic

3.2. GLA version (basic ventilation activated)

It is not possible to switch off the ventilation unit using the control unit, the button on the unit or the Pichler app. Continuous operation at the basic ventilation level is also not possible. The GLA function therefore meets the requirements of DIN18017-3.

As an alternative, continuous operation at level 2 (normal ventilation) or level 3 (boost ventilation) can be carried out.

The automatic operation of the GLA version still regulates the volume flow from basic ventilation (ventilation level 1 – 20 m^3/h) to ventilation level 2 depending on the exhaust air quality, although ventilation level 1 cannot be selected via the control unit, button on the device or the PICHLER app.

In this version the following ventilation levels can be selected:

- Ventilation level 2
- Ventilation level 3
- Automatic

3.3. WiFi seetings

Starting with firmware version 1.2, the service software can be used to prevent the WLAN from being switched off via the mini control unit. WiFi is always on and there is no error signal if the internet connection is lost.

4. Designated use

4.1. Intended use

The compact ventilation unit LG 100 is intended for the installation into ventilation and air conditioning systems for controlled domestic ventilation in small and medium-sized residential units (approx. 80 m^2). The purpose of controlled mechanical ventilation and deaeration of domestic areas is to improve air quality and reduce the heating energy demand through the use of a highly efficient heat recovery system, and to influence indoor air humidity. The scope and intended use of the unit is limited to the application in residential and recreational spaces for the suction of used air and the supply of fresh, tempered outdoor air at maximum air flow temperatures of -15 °C to +35 °C. Furthermore the airflow must be free from aggressive vapours and substances causing increased wear. Any other use shall be deemed contrary to designated use. The manufacturer shall accept no responsibility for damages or consequential damages arising from improper use. Designated use also includes adherence to our prescribed operating and installation manual. This unit is available to the general public and is intended for installation in residential or industrial buildings. The unit is used for mechanical aeration and ventilation of indoor air and, when combined with a heater battery, is also used to preheat air. The compact ventilation unit LG 100 is not suitable for outdoor installation and may be installed in suitable and frost-free interior areas only. The ventilation unit is not suitable for drying new buildings.

This unit can be used by children from an age of 8 years and furthermore by persons with reduced physical, sensory or mental capabilities or a lack of experience or knowledge, if they are supervised or if they have been instructed on how to use the unit safely and if they understand the hazards resulting therefrom. Children must not play with the unit. Cleaning and user maintenance must not be carried out by children without supervision.

In order to prevent uncontrolled condensate formation in the unit, continuous operation at outdoor temperatures below 0 °C with an extract humidity of more than 60% must be avoided (e.g. private spa area).

The compact ventilation unit is not a ready-to-use product. It must not be put into operation until it has been properly installed and connected. Only qualified and instructed personnel may carry out connection and service work on the unit.

Persons transporting, installing or working on the unit must have read and understood the operating instructions, in particular Section 5 "Safety". The end user must also be instructed on potential hazards.

4.1.1. STIPULATIONS FOR OPERATION WITH FIREPLACES

Local requirements must be taken into consideration by compliance with corresponding standards, laws and directives.
The decentralised compact ventilation unit LG 100 may only be installed in rooms, flats or utilisation units of a comparable size in which fireplaces dependent on room air are installed, if:
• simultaneous operation of room air-dependent fireplaces and the air extraction unit is prevented by safety devices, or
• the flue gas evacuation of the room air-dependent fireplace is monitored by special safety devices. In the case of room-air dependent fireplaces for liquid or gaseous fuels, activation of the safety device must lead to the switch-off of the fireplace or ventilation unit. In the case of room-air dependent fireplaces for solid fuels, activation of the safety device must lead to the switch-off of the ventilation unit.

The ventilation units for the controlled aeration and ventilation of a flat or a comparable living unit must not be installed if room air-dependent fireplaces in the living unit are connected to exhaust gas systems, which themselves have multiple connections. Normal operation of the ventilation systems requires the possibility of shutting potentially available combustion air ducts as well as exhaust gas systems off from room air-dependent fireplaces. In the case of exhaust gas systems of fireplaces for solid fuels, it must be ensured that the shut-off device can only be operated manually. The position of the shut-off device must be identifiable by the setting of the operating handle. This specification is considered as complied with if a shut-off device against soot is used.

Fire protection requirement: With regard to the fire protection installation regulations for the set-up of the ventilation unit, the provisions of national law, in particular the building regulation concerning the fire protection requirements with regard to ventilation systems in the relevant latest version must be observed.

4.1.2. STIPULATIONS FOR OPERATION WITH EXTRACTOR HOODS

Due to the heavy load as well as the irregular operation, the extract air of an existing kitchen extractor hood must not be integrated into the dwelling's ventilation system. Extract air from such extractor hoods must be conducted separately by means of an exhaust air pipe via the roof. The supply air must be provided for separately (e.g. by window ventilation).

If an extractor hood without the separate provision of supply air is operated, the balance of the air volume in the dwelling is no longer provided for and the proper function of the dwelling's ventilation system is no longer ensured (odour diversion, etc.). Another option is to operate the extractor hood in recirculation mode.

4.1.3. LIABILITY

The compact ventilation unit LG 100 has been developed and manufactured for controlled mechanical ventilation and deaeration of spaces with purposes similar, for example, to seminar rooms and small offices. Proper use of the ventilation systems have the facility to be shut off from fireplaces dependent on ambient air.

Any other use than the one described in Section 4 shall be deemed improper and may cause personal injury or damage to the compact ventilation unit, for which the manufacturer shall accept no liability.

The manufacturer accepts no responsibility for any damage due to:

- non-compliance with the safety, operating and servicing instructions given in this operating and installation manual.
- the installation of spare parts that have not been supplied by the manufacturer, the responsibility for the use of such spare parts being fully borne by the system builder/installer.
- normal wear and tear.

4.1.4. WARRANTY

Warranty details can be found in our “General terms and conditions” in their latest version as well as the merchant conditions of your respective country. The warranty shall be subject to proof of services performed as per our instructions and executed by a licensed installer/specialised company. Warranty claims shall be limited to material and/or constructional defects occurring during the warranty period. In the event of a warranty claim, the compact ventilation unit LG 100 must not be dismantled without prior written authorisation from the manufacturer. The manufacturer's liability shall be limited to spare parts installed by an installation company approved by the manufacturer. The warranty shall automatically lapse at the end of the warranty period, following improper operation such as operation without filters, if parts other than original manufacturer-supplied parts are installed, or if unauthorised changes are made to the unit. Furthermore, the warranty is automatically rendered void by failure to comply with the information in this operating and installation manual.

5. Safety

Read this operating and installation manual carefully and observe the safety instructions while you carry out installation, commissioning, servicing or general work on the ventilation unit. Keep the operating and installation manual near the unit for its entire service life.

Always observe the safety regulations, warnings, notes and instructions given in this operating manual. The specifications given in this document must not be altered. Non-observance of these safety regulations, warnings, notes and instructions may lead to physical injury or damage to the compact ventilation unit.

The conclusion of a service contract is recommended to ensure that the unit will be checked at regular intervals. Ask your supplier about approved specialised companies/installers in your area.

5.1. Symbols used in this document

The following Safety symbols highlight text containing warnings in respect of danger and potential hazards. Please familiarise yourself with these symbols.

Attention/Note!

Attention! Ignoring this warning may lead to injury or threat to life and limb and/or damage to the unit.

Attention – High voltage! Ignoring this warning may lead to injury or threat to life and limb.

5.2. Safety regulations

Installation, initial start-up, maintenance and repairs must only be carried out by an authorised specialist company.

Over and above this operating and installation manual, local and national regulations and standards shall also apply to the operation of this unit without limitation.

Take instruction from your installer on the unit and on its control unit following installation. The ventilation unit must only be used in accordance with the information provided in Section 4 "Designated use".

All safety and danger notices attached to the unit and specified in this description must be observed.

In the event of malfunctioning, switch off the unit immediately and disconnect the power plug. The unit must be appropriately secured against restart. Faults must be remedied immediately.

After repairs and maintenance work, qualified personnel must verify that the unit is safe to operate.

Attachment or installation of additional parts and components is not permitted. Any modification of the compact ventilation unit is prohibited. Only original spare parts may be used.

Modifications and alterations to the ventilation unit are prohibited and absolve the manufacturer from all warranties and liability.

Ensure that children do not play with the unit.

5.3. Setting up the unit

The national and local regulations must be heeded when installing and setting up the unit. The unit may only be installed in compliance with national installation regulations.

Installation shall be carried out in accordance with the general local building, safety and installation regulations of the relevant community or the water and electricity department and other bodies. The unit may only be installed in frost-free and dry rooms. The room temperature at the place of installation must be consistently between +5 °C min. and +35 °C max. The unit is designed for upright installation or wall installation and may only be set up on a suitable, load-bearing construction. The unit must not be exposed to vibration of any kind.

Suitable drainage of condensate arising during operation of the unit will be required, including an effective odour blocking trap (siphon). Installations for water, heating and condensate connections may be performed by a specialist only. The unit must be installed and executed appropriately so as to ensure seal-tightness and effective condensate drainage in order to exclude the possibility of building damage. Effective condensate drainage must be verified on-site prior to initial start-up and after servicing the unit. The maximum permissible load must be observed when transporting the unit.

Components of the ventilation unit, e.g. air ducts which may need to be installed in unheated areas, must be suitably insulated to prevent heat loss or condensate formation (for temperatures below dew point). Observe all locally-applicable construction and fire protection guidelines, regulations and standards. If necessary, appropriate suitable measures should be taken when installing the unit, e.g. installation of fire dampers in air ducts, etc.

5.4. ELECTRICAL CONNECTION WORK

Warning: hazardous electrical voltage! Ignoring the danger may result in death, injuries or material damage. Before carrying out any work on live parts, the unit must always be disconnected completely from the power supply (all poles) and secured against being switched back on.

Electrical connection work and work on the system's electrical components may be carried out by authorised electricians only, in compliance with national and local regulations.

Before opening the unit and when carrying out work on the unit, e.g. maintenance work and repairs, the unit must be isolated from the mains (all poles disconnected) and secured against being switched back on for the duration of the work. The compact ventilation unit must be connected to a 230V / 50Hz voltage supply and with the correct phases. The mains supply cable must be provided with a strain relief.

To the external interfaces exclusively fittings may be connected for which it is proven that there is an electrically protective separation between the interface and those active parts of the fitting, which are not operated with safety extra-low voltage (SELV/PELV), in compliance with DIN EN 1140, e.g. by double or reinforced insulation complying with DIN EN 60335-1 or DIN EN 60730-1.

Any work practices that could potentially impair the safety of the unit are prohibited! To ensure safe operation, safety devices must not be removed or bypassed.

Electrical equipment and the unit's warning and protective devices must be inspected regularly to ensure that they are in perfect working order. In the event of faults in the electrical power supply or identification of defects e.g. loose connections or burnt cables, the unit must be put out of operation immediately. Damaged or faulty power supply cables to the unit must be repaired immediately to avoid hazards. The unit may not be operated until safe operational conditions are restored.
Fault finding and immediate remediation of electrical defects and malfunctions shall be carried out by authorised electricians only.
All protective measures must be inspected (e.g. earth resistance etc.) after completion of electrical work on the unit.
For details, see Section 16.2. "Electrical connection"

5.5. Plant operation

Operation of the ventilation unit is permitted only if all built-in parts provided, e.g. silencers etc., have been properly connected.

In the event of any errors or defects that can cause harm to persons or property, the system must be put out of operation immediately. Further use must be actively prevented until the unit is fully repaired.

If error messages are output or in the case of damage, the ventilation unit must be switched off and disconnected from the mains immediately. When opening the unit or when removing cover fronts, keep safety and potential hazards in mind. Any work practices that could potentially impair the safety of the unit are prohibited.

Operation of the unit is exclusively permissible with a connected air duct or mounted system components such as silencers, in order to ensure that, for example, fans or electrical installation parts cannot be touched with the hand.

The compact ventilation unit may be operated only in accordance with the project documentation, which shall comply with the Equipment and Product Safety Act and the pertinent provisions of the EC Directives and Standards. Consider environmental impacts and refrain from installing the ventilation unit in the vicinity of flammable liquids or gases, in swimming pools or in areas exposed to chemicals or hazardous substances. Never operate the ventilation unit without air filters. The air filters must be checked regularly for dirt and damage and replaced, if necessary. The air filters must be changed at least every six months or when the "Change Filter" message appears on the control unit. Use original replacement filters only. If the plant is not used in summer, the air filters must, for hygienic reasons, be replaced prior to restarting.

Comply with safety requirements and standards when operating the ventilation unit simultaneously with ambient air-dependent fireplaces. When using fireplaces dependent on ambient air, combustion air supply must be provided separately. Due to the heavy load as well as the irregular operation, extractor hoods must in no case be integrated into the exhaust duct of the compact ventilation unit. Exhaust air extractor hoods must be operated via separate air pipes with suitable air replenishment, e.g. by means of window ventilation or in air recirculation mode. For details regarding this matter, see Section 4.1.1. and 4.1.2.

6. Customer service

Please contact the installer of your ventilation and air conditioning system or contact us directly for any questions relating to the compact ventilation unit LG 100.

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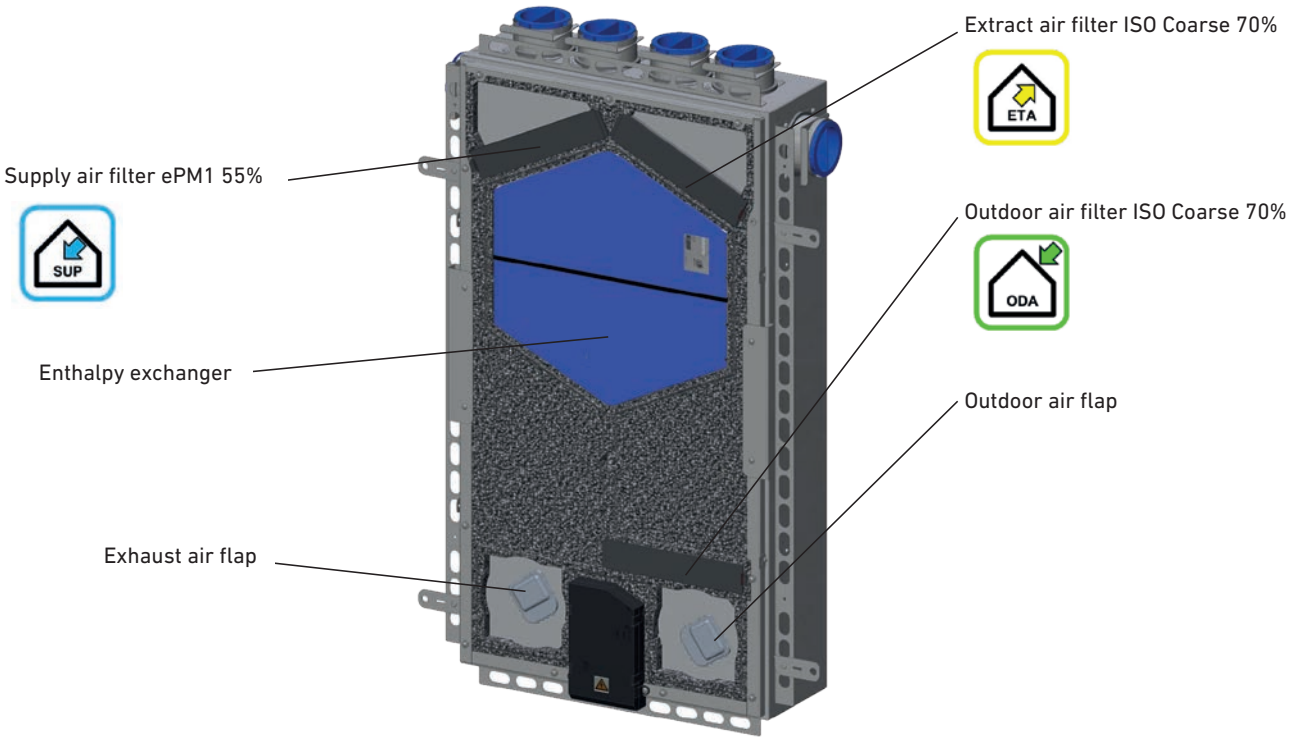
7. Design of the ventilation unit

The compact ventilation unit LG 100 consists of:

- a compact, thermally insulated and soundproof EPP housing
- a device enclosure made of galvanised sheet steel
- a design front that comes equipped as a standard with an exterior powder coating in RAL 9003
- a highly efficient enthalpy exchanger
- energy-saving EC radial fans
- an integrated sensor system for measuring the volumetric flow, temperature and VOC/eCO2 concentration
- Outdoor air and extract air filters ISO Coarse 70% and supply air filter ISO ePM1 55%
- an integrated filter monitoring function – when the time interval is reached
- standard operation via pushbutton on the unit, WLAN interface for control via the PICHLER APP and for remote access via PICHLER Connect and optionally with the control unit "MINI" for setting the basic functions.



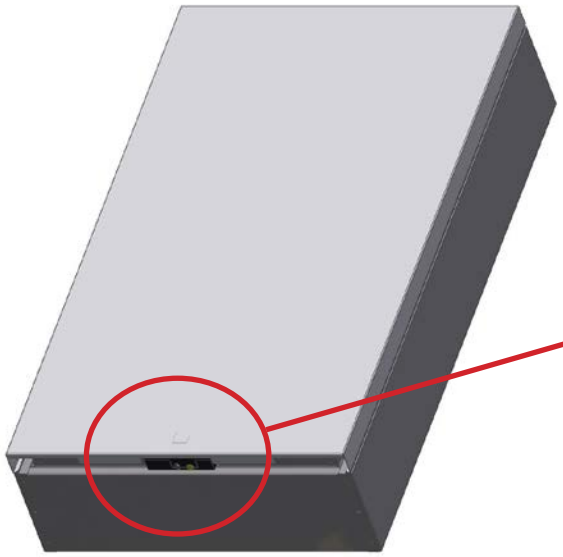
Flush-mounted housing as standard

8. How to operate the unit

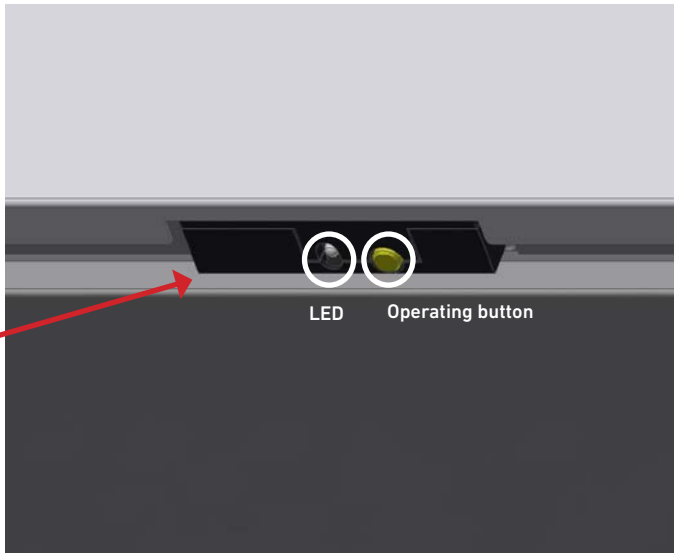
8.1. Functions, Buttons and LED

The ventilation unit can be operated without a control unit via a button on the bottom side of the unit. A green LED indicates the different operating states of the ventilation unit. A red LED indicates an error or a warning message of the unit. A detailed description of the error codes can be found in Section 19.2.

Pattern	Operation
Flashing red 1-5 x	Restart the device by switching it to standby (ventilation level 0) and then switching it back on (ventilation level 1-3). If the error message remains active, please contact the customer service.
Flashing red 6 x	Merely indicates a risk of frost or condensation, but is still in operation.
Flashing red 7 x	The unit cannot establish an Internet connection.



LED and operating button on the bottom side of the unit



Detailed view

The ventilation unit is switched on by pressing the operating button twice. The green LED indicates the active ventilation level through its flashing pattern. The flashing pattern of the ventilation level is displayed three times in a row at short intervals. The outside air and exhaust air dampers open and the fans deliver the selected operating volume flow.
With each additional press of the button during the flashing pattern, the ventilation unit switches up one ventilation level. After reaching the ventilation level "Automatic" (4 x green flashing LED) the ventilation unit switches back to the lowest ventilation level and the level switching starts again from the beginning.

The GLA version meets the requirements of DIN18017-3, which states that the device must not be switched off for moisture protection purposes. In this case, the "standby" and "ventilation level 1" levels are skipped and cannot be selected.

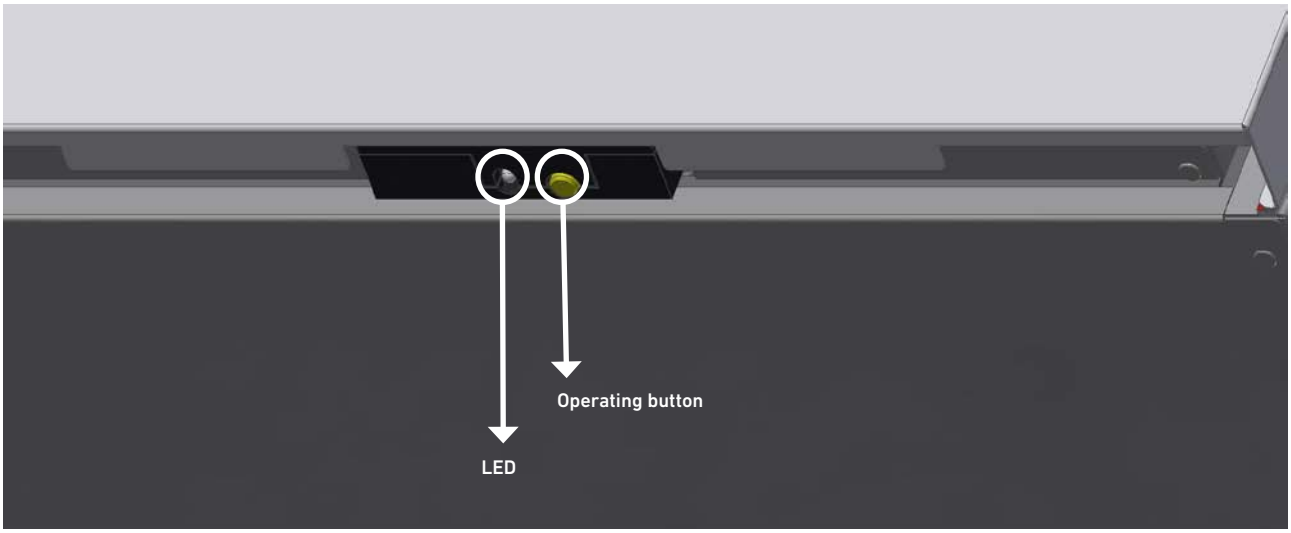
Wake-up call:
After showing the respective flashing pattern, the LED changes to the "Sleeping mode", the ventilation unit continuing its operation at the ventilation level currently set. By pressing the operating button, a "wake-up call" is carried out first and the sleeping mode of the LED is stopped. The LED indicates the current operating status (ventilation level, error and filter messages) by the different flashing modes. The flashing modes are repeated 3x, then the LED returns to the sleeping mode again.

In order to change the ventilation level, the button on the ventilation unit must be pressed after the "wake-up call" and within the flashing pattern (3 repetitions).

Pattern	Operation
no green Flashing standby	standby (not possible in the GLA version; this meets the requirements of DIN18017-3)
Flashing green 1 x	Ventilation level 1 standby. (not possible in the GLA version; this meets the requirements of DIN18017-3)
Flashing green 2 x	Ventilation level 2
Flashing green 3 x	Ventilation level 3
Flashing green 4 x	"Automatic" ventilation level
LED flashing green permanently	Access point for coupling to the WLAN

8.2. Error codes on the ventilation unit

The error messages of the compact ventilation unit are indicated by red LED flashing patterns on the bottom side of the ventilation unit.



Display of error messages on the unit

The meaning of the different flashing codes is described in greater detail in Section 19 "Error description" ("Specialized personnel" section). In any case, check the Internet connection and switch the unit on and off before consulting an expert.

9. MINI control unit

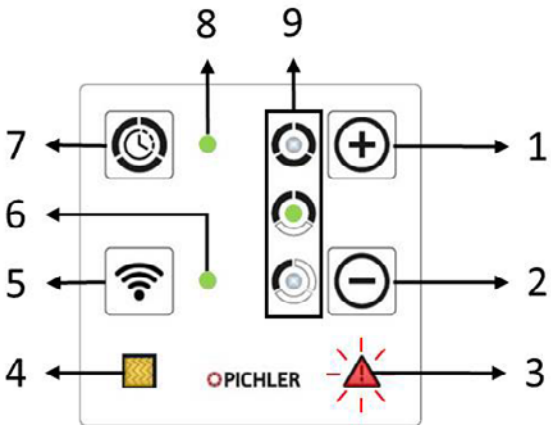
9.1. Functions

The following compact ventilation unit functions can be indicated and configured with the MINI control unit:

- Ventilation level of the compact ventilation unit
- Display of the filter change message
- Display of the fault messages via LED
- Boost ventilation mode for a defined time
- WIFI-modes

Bedieneinheit MINI

9.2. Buttons and LEDs



Functions of the MINI control unit

1. Plus button
Increasing the ventilation level

2. Minus button
Reducing the ventilation level

3. Error LED
Indicates errors with different flashing patterns that light up

4. Filter LED
After the filter time has elapsed, the filter must be checked.
For acknowledging the filter message, push the reset button.

5. WiFi button
- Press for 2 sec. to activate / deactivate the WiFi mode
- Press for 5 sec. to call the Access Point mode

6. WiFi LED
- LED off = WiFi deactivated
- LED is lit = WiFi mode
- LED flashes = Access Point mode

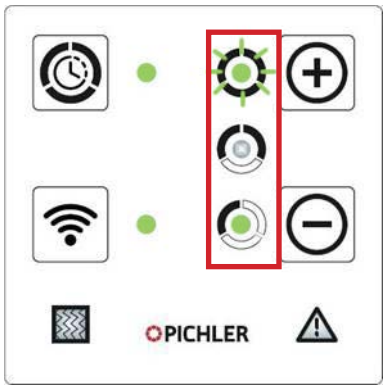
7. Boost button
Activates ventilation level 3 (boost ventilation level) for a defined period of time (standard: 60 minutes).

8. Boost LED
Is lit if activated.
The LED of the current ventilation level is lit and the LED of ventilation level 3 flashes.

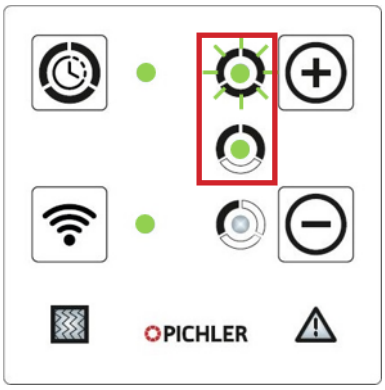
9. Ventilation level LEDs
Indicate the current ventilation level.

If all three LEDs are active, this corresponds to the automatic mode. The ventilation unit follows a demand-responsive air volume regulation via VOC.

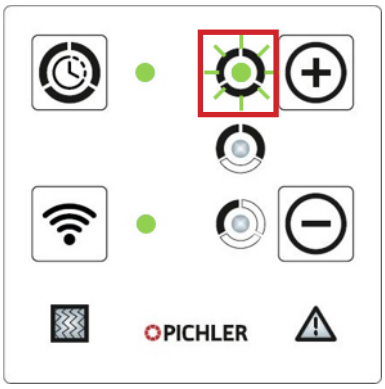
Pattern	Operation
no LED lights up	standby (not possible in the GLA version; this meets the requirements of DIN18017-3)
Green LED level 1 is lit	Ventilation level 1 (not possible in the GLA version; this meets the requirements of DIN18017-3)
Green LED level 2 is lit	Ventilation level 2
Green LED level 3 is lit	Ventilation level 3
Green LED levels 1 to 3 are lit	"Automatic" ventilation level



Ventilation level 1
Boost ventilation mode for a defined time



Ventilation level 2
Boost ventilation mode for a defined time



Ventilation level 3
Boost ventilation mode for a defined time

When the defined time (configurable) has elapsed in the highest ventilation level, ventilation operation switches back automatically to the ventilation level set last. Alternatively, you can end the boost ventilation mode manually before the time has passed. Simply press the [-]-button on your control unit.

9.3. Error codes on the MINI control unit

The error messages of the compact ventilation unit on the MINI control unit are indicated by red error LED flashing patterns.

MINI control unit error message

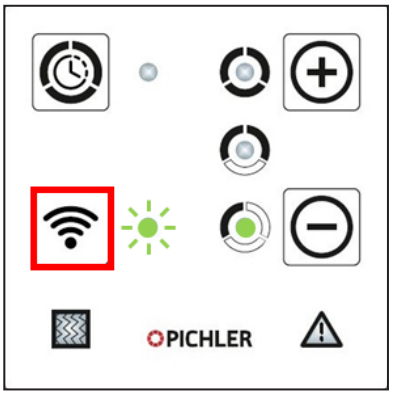
The meaning of the different flashing codes is described in greater detail in Section 19 "Error description" ("Specialized personnel" section). In any case, check the Internet connection and switch the unit on and off before consulting an expert.

10. Operation via PICHLER APP and PICHLER Connect

To ensure a stable WLAN connection of the LG 100 it may be required to boost the WLAN signal by using WLAN repeaters or to establish a mesh network.

2.4GHz The ventilation unit only supports the WiFi/WLAN standard 2.4 GHz.

10.1. Easy operation with the PICHLER APP



User-friendly: the compact ventilation unit can be operated easily with our free smartphone app for Android and iOS, whether you are at home or on the move.

Load and install the PICHLER APP from the App Store or from the Google Play Store. The PICHLER APP can control the ventilation unit directly or via the Internet.

By pressing the WiFi button (see red marking in the illustration on the left) for 5 seconds, ***the Access Point mode*** of the ventilation unit is activated, which is indicated when the WiFi LED flashes green.

PICHLER APP:
Error messages via PUSH notification

GET IT ON Google Play

Laden im App Store

10.2. Error codes in the APP

The app indicates a group error message via push notification. To obtain an exact error indication, please read off the flashing pattern from the control unit or the ventilation unit.

10.3. Remote access with PICHLER Connect

Operational safety: remote access allows the PICHLER customer service to respond quickly and easily in the event of faults.

PICHLER connect.

10.4. Data protection

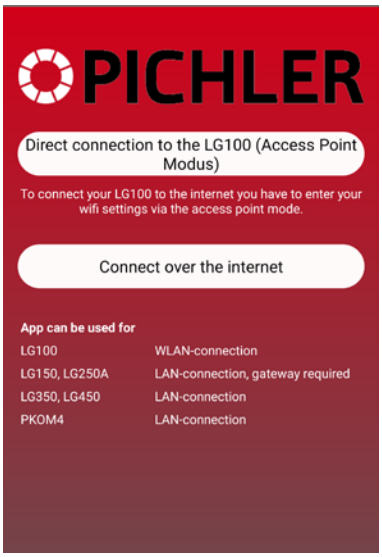
When you have installed the PICHLER APP and establish a connection to the device, we assume that you accept our current data privacy statement (see: www.pichlerluft.at/datenschutz.at).

10.5. Create an account

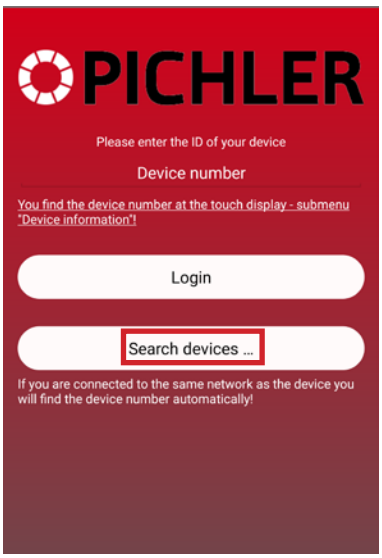
When the ***Access Point mode*** is active, the ventilation unit is visible via the WLAN settings of the smartphone.

1.) Select the network "LG100AHU" and enter the password "Pichler1234".

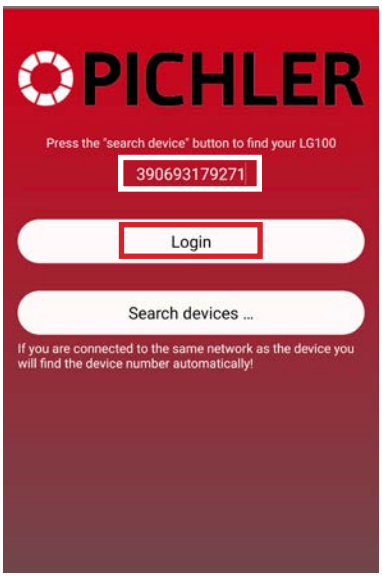
2.) When a connection with the ventilation unit has been established successfully, open the PICHLER-APP.
The following screen is shown:



3.) Press the "LG100 Direct" button in order to establish a direct connection with the ventilation unit.



4.) Then press the "Search units ..." button.

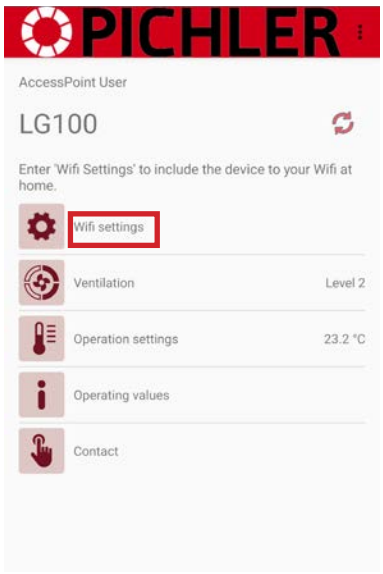


5.) If the ventilation unit is found via the Access Point mode, a 12-digit number is shown.

→ If no number is shown, the smartphone is no longer connected to the ventilation unit. **Please start again!**

Press the "Login" button. The app checks the connection and loads the data of the ventilation unit.

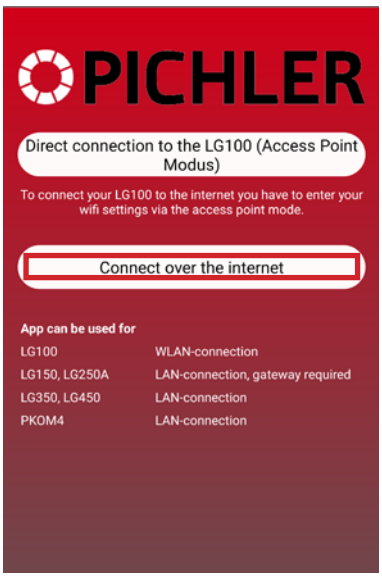
The following screen will open:



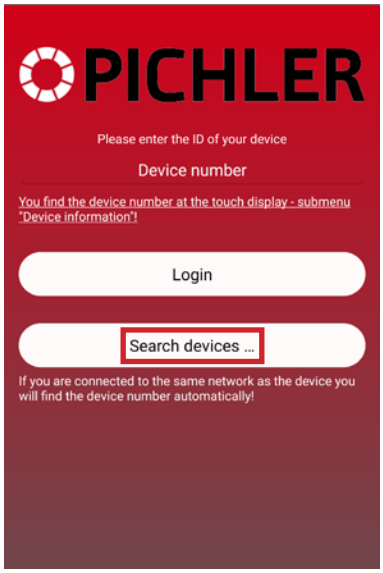
6.) Go to the „Wifi settings" menu.

7.) In order to connect the ventilation unit with the Internet router, you have to enter the network name (WIFI-SSID), the WiFi passwort and the WiFi encryption.

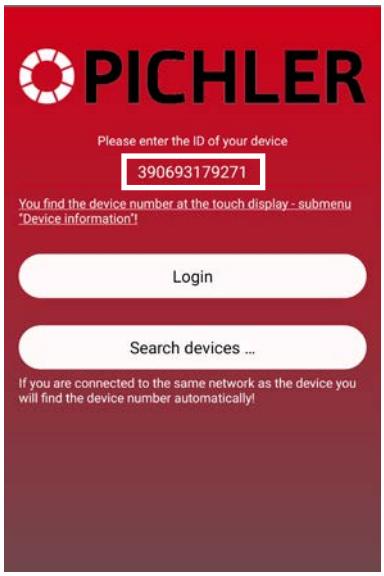
8.) Then press "Accept". The direct connection between the ventilation unit and your smartphone is interrupted.



9.) Connect your smartphone with the Internet router and select "Connect via Internet" on the screen.



10.) As you are connected with the same network, press the "Search units..." button.



11.) The same 12-digit number as in the Access mode is shown.

→ If no number is shown, either the ventilation unit or your smartphone is not connected to the Internet router. Please start again!

If you have successfully established a connection between the ventilation unit and your smartphone via the Internet, you have to allocate an account name, e-mail address and a password. Press the "Save" button and your account is created.
Then you can control your ventilation unit globally via your smartphone.

Changes reserved

11. Filter service

Each time the filters are maintained, always all three filters must be replaced.

11.1. MINI control unit filter message

When the filter lifetime has expired **(factory default: 6 months)**, the control unit indicates the necessity of a filter check via the LED provided for this purpose (bottom left), which is then lit yellow permanently.

MINI control unit filter message

11.1.1. Clearing the MINI control unit filter message

Required filter change
Reset the filter counter after changing the filters.

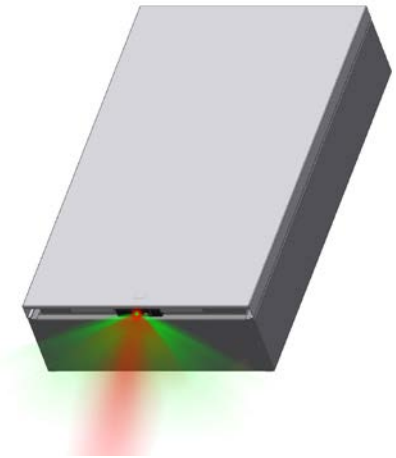
Press the [+]-button and the [-]-button at the same time for 5 seconds in order to do this. The filter message disappears after entering this combination.

Premature filter change
If the air filters are replaced prematurely, the filter counter must be reset without a pending filter message.

To do this, you again press the [+]-button and the [-]-button simultaneously for five seconds.

11.2. Filter message on the unit

When the filter lifetime has expired **(factory default: 6 months)**, the unit indicates a filter change on its control unit by alternating flashing of the LED in green and red.



Flashing LED

11.2.1. ACKNOWLEDGE FILTER MESSAGE ON THE VENTILATION UNIT

To acknowledge the filter message, keep the button (approx. 10 seconds) until the LED lights up red continuously.

11.3. Filter message via PICHLER APP

When the filter lifetime has expired, the app indicates a filter message via push notification.

11.4. Filter change

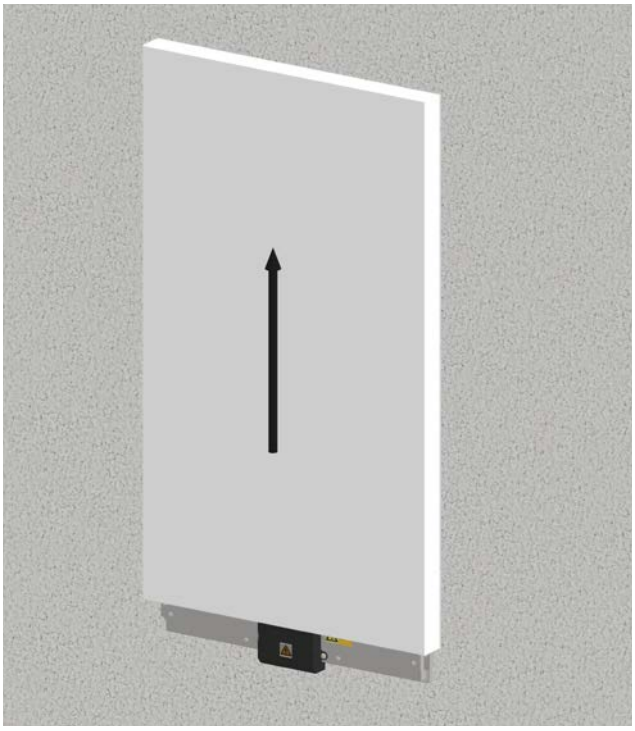
Only original replacement filters of the specified filter class may be used.

When replacing the air filters, avoid soiling the unit and its components. Dirty air filters must be immediately and suitably disposed of. The used air filters can be disposed of as residual waste.

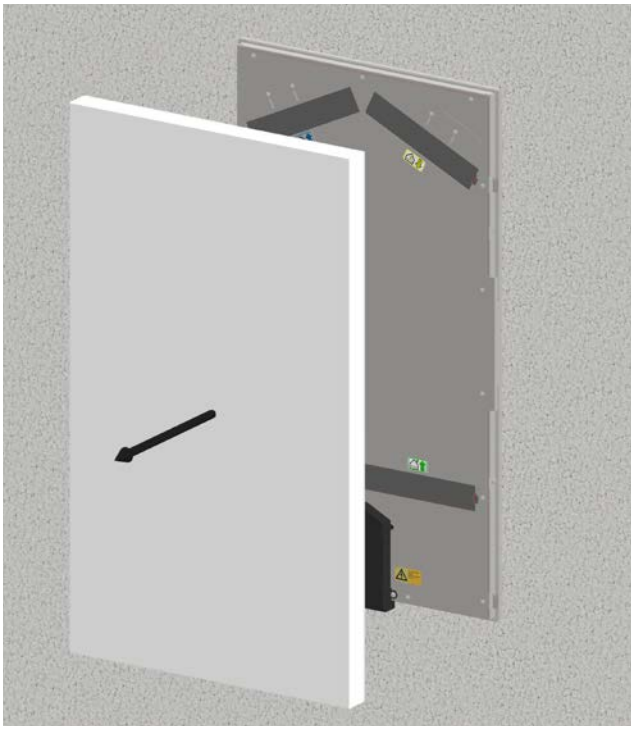
Symbol	Designation	Item no.
ODA pre-filter (outdoor air) ETA filter (extract air)	**Coarse 70%**	40LG0500006A
SUP fine filter (supply air)	**ePM1 55%**	40LG0500007A

11.5. Procedure for the filter change

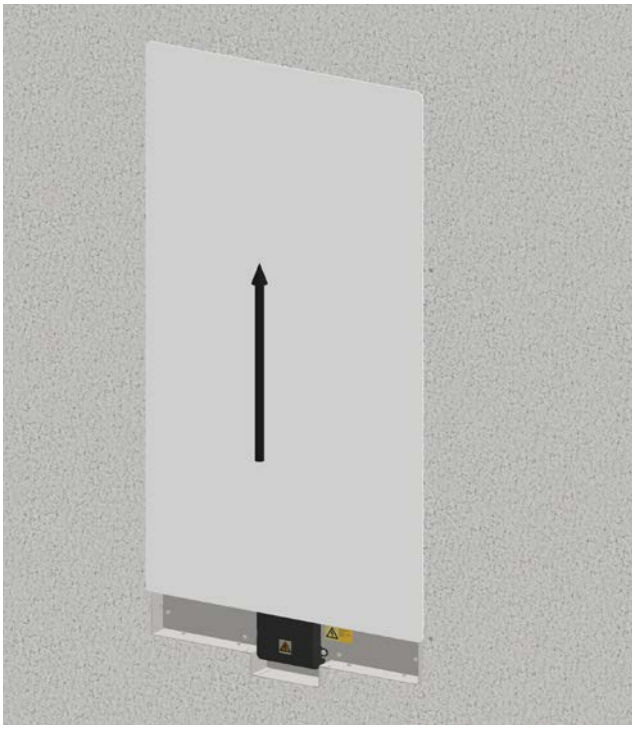
1. Filter message via flash code on the unit, on the MINI control unit, or via the Pichler-App.
2. Set the unit to Standby or to the lowest ventilation level.
3. Remove the design front:



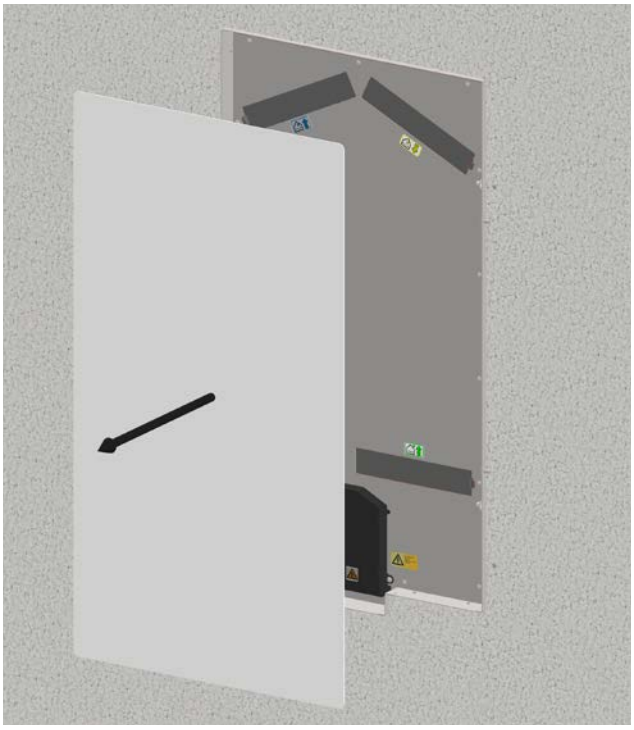
Standard version: Push the design front upwards



Standard version: Remove the design front

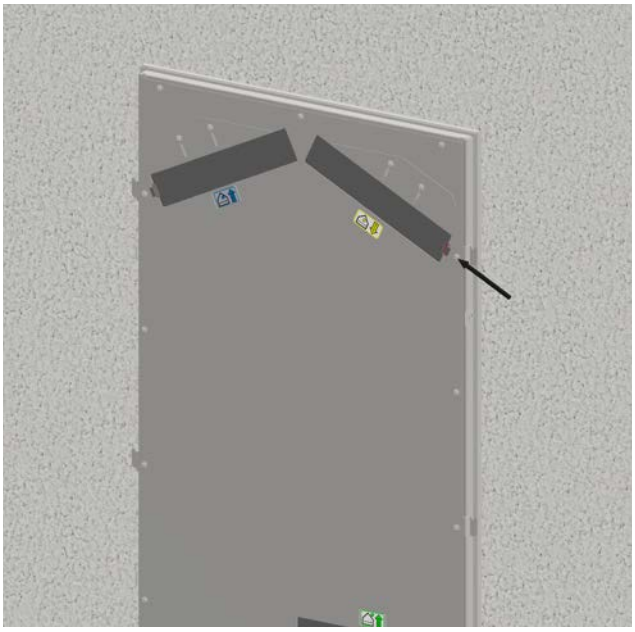


Wall-integrated version: Push the design front upwards

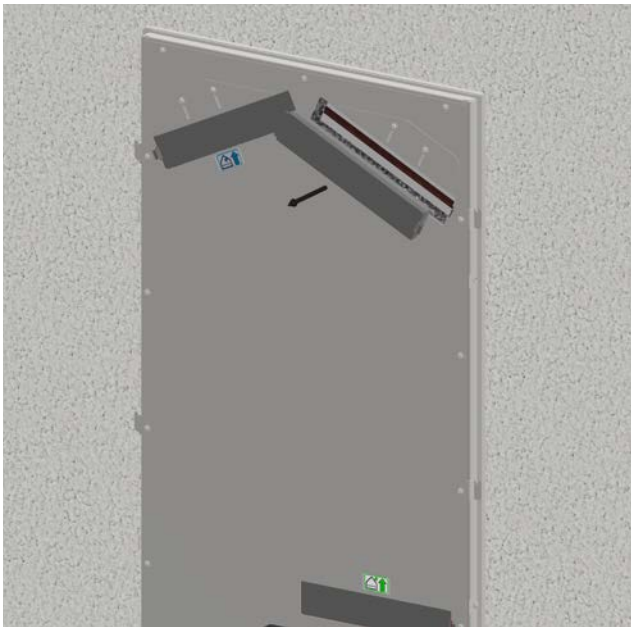


Wall-integrated version: Remove the design front

4. Remove the filter covers by pressing the latches positioned at the sides towards the inside:

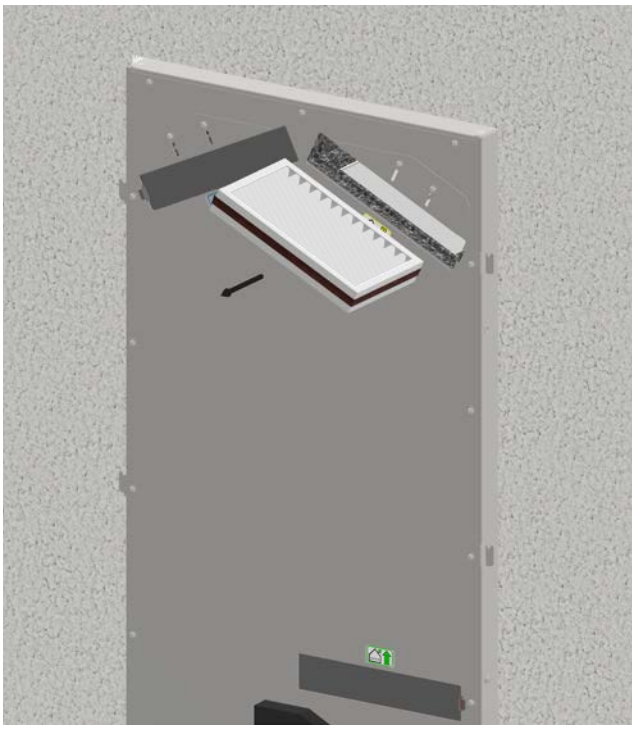


Open the filter cover

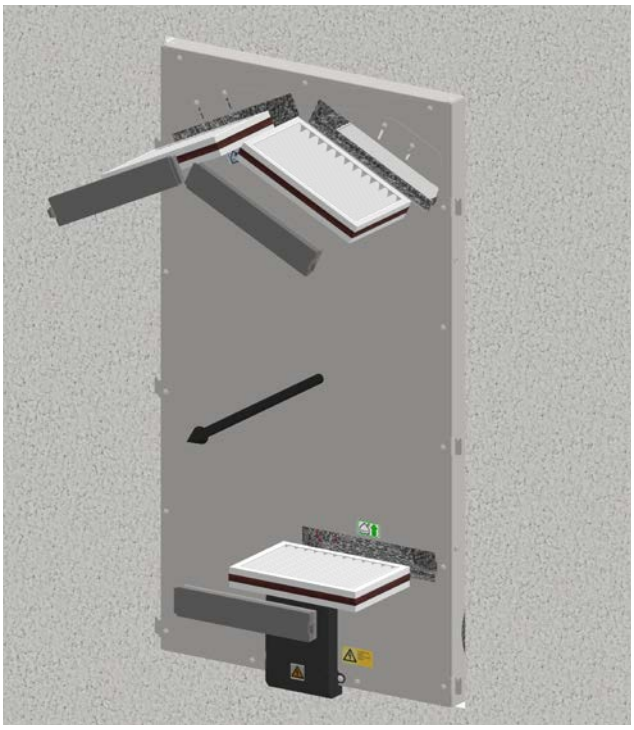


Remove the filter cover

5. Remove the respective air filter by the flaps:



Remove the filter



All 3 filters removed

6. Insert the new air filter and close the filter cover.
7. Mount the design front again.
8. Acknowledge the filter message.

Ensure that you take as little time as possible to change the filters. Never operate the ventilation unit without air filters. When inserting the new filters, observe the mounting position (direction of air).

SPECIALIST PERSONNEL - ASSEMBLY/INSTALLATION

12. Transport, storage and disposal

Any transport damage and/or missing parts must be reported immediately in writing to the forwarder or supplier.

12.1. Transport, strorage and packaging

The compact ventilation unit is delivered in a transport packaging. The safety markings on the packaging must be observed. The unit must be stored in its packaging and in a suitable dry space.

In order to prevent possible transport damage, the compact ventilation unit LG 100 has to be handled with care and secured correspondingly during transport. Ensure that the unit is not damaged, toppled or overturned. Avoid knocks and blows during transportation. Applicable safety and accident regulations must be complied with during transportation. If transported manually, ensure that necessary human lifting and carrying forces are reasonable.

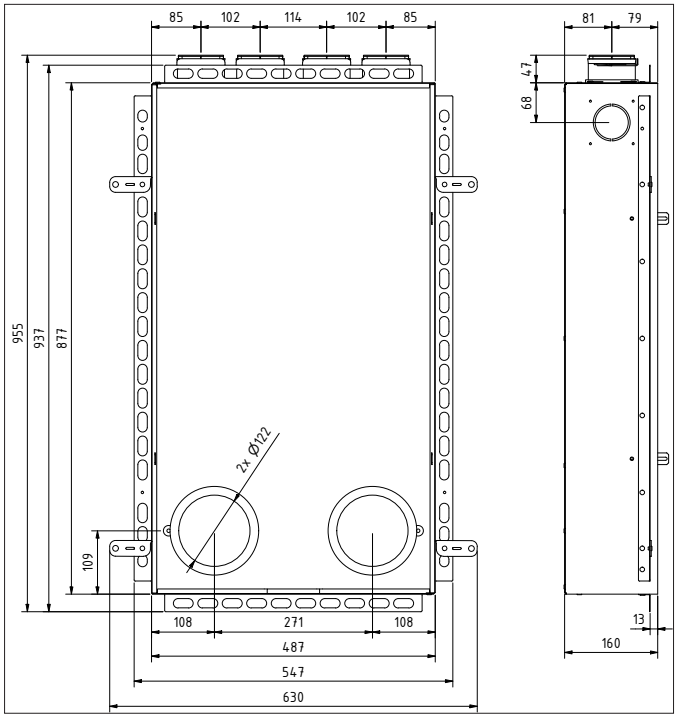
12.2. Disposal

The packaging materials must be disposed of in accordance with local regulations; wooden pallets or cartons must be recycled, for instance.

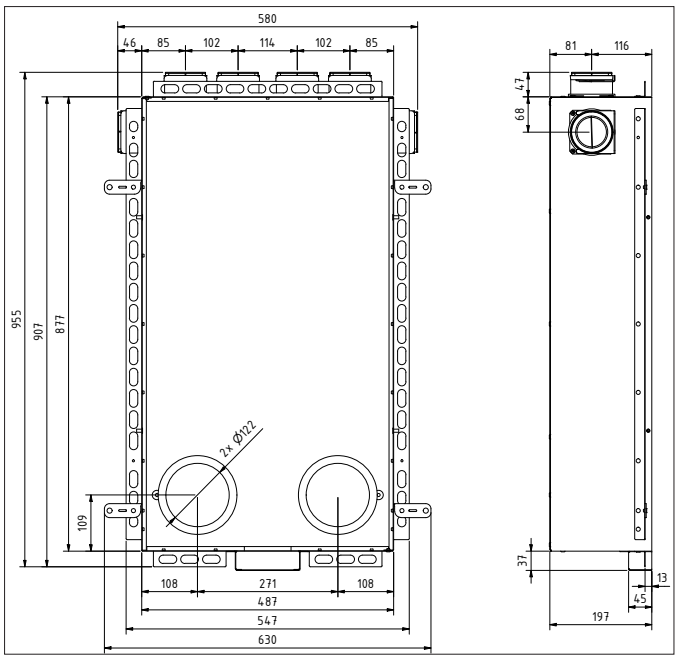
Units that are no longer in working order must be dismantled by a specialised company and properly disposed of via suitable collection centres in accordance with the Waste Electrical and Electronic Equipment Ordinance (WEEE), which provides for the implementation of community law, Directive 202/95/EC (RoHS) and Directive 2002/96/EC (WEEE Directive).

13. Technical specifications

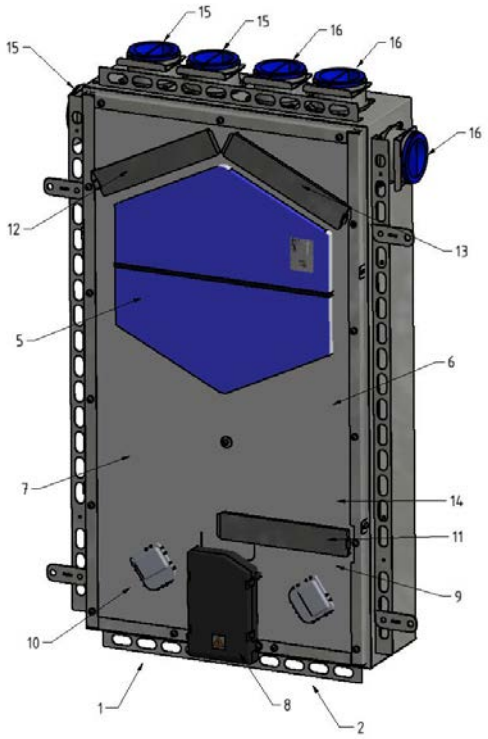
13.1. Unit set-up and dimensions



Flush-mounted housing as standard version

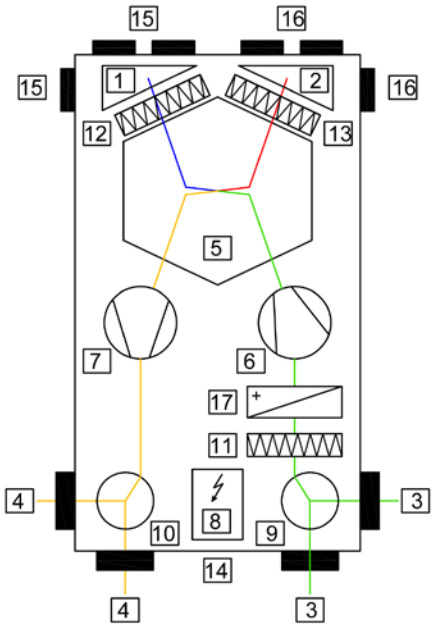


Wall-integrated version



1 Supply air (SUP)
2 Extract air (ETA)
3 Outdoor air (ODA) (100 mm)
4 Exhaust air (EHA) (100 mm)
5 Enthalpy exchanger
6 Outdoor air fan
7 Exhaust air fan
8 Controller
9 Outdoor air flap
10 Exhaust air flap
11 Outdoor air filter ISO Coarse 70%
12 Supply air filter ISO ePM1 55 %
13 Extract air filter ISO Coarse 70%
14 Cable inlets
15 Supply air connections for multi-room applications
16 Extract air connections for multi-room
17 Electrical pre-heating battery

13.2. System diagram



1. Supply air (SUP)	Supply air is the air supplied to the room.
2. Extract air (ETA)	Extract air is the air that is extracted from the room.
3. Outdoor air (ODA)	Outdoor air is the air that is drawn in from outside.
4. Exhaust air (EHA)	Exhaust air is the air that is blown out into the open.
5. Enthalpy exchanger	Serves to transfer heat and recover humidity from the warmer to the colder air.
6. Outdoor air fan	Sorgt für den erforderlichen Luftvolumenstrom in der Zuluft.
7. Exhaust air fan	Provides for the required air volume flow in the extract air.
8. Controller	The ventilation unit is regulated in a demand-oriented fashion via the VOC/eCO2 sensor system integrated into the ventilation unit. The ventilation unit can be optionally controlled by means of a push button on the unit, via Pichler-APP, or via the "MINI" control panel.
9. Outdoor air flap	Closes the outdoor air connection of the unit when the unit is switched off.
10. Exhaust air flap	Closes the exhaust air connection of the unit when the unit is switched off.
11. Outdoor air filter Iso Coarse 70%	Serves to pre-filter the outdoor air and to protect the unit interior. Furthermore the filter replacement intervals of the supply air filter are prolonged.
12. Supply air filter ISO ePM1 55%	Serves to filter particulate matter in the supply air.
13. Extract air filter ISO Coarse 70%	Serves to filter the coarse impurities from the extract air, in order to protect the unit's interior from being contaminated.
14. Cable inlets	Electrical connection cable
15. Supply air connections for multi-room applications	Serves to provide the KOMFLEX system connection with the possibility of ventilating further rooms.
16. Extract air connections for multi-room applications	Serves to provide the KOMFLEX system connection with the possibility of air extraction from further rooms.
17. Electrical pre-heating battery	Serves to offer protection against the formation of condensate and icing in the heat exchanger in the case of very low outdoor temperatures. By means of the optional electrical pre-heating battery, the outdoor air is preheated as a function of the outdoor and exhaust air temperature.

13.3. Safety devices

To ensure safe operation of the system, safety devices and covers must by no means be rendered inoperative; nor may measures be taken to bypass or dismantle them.

In the event of any errors or defects on the ventilation unit, which may cause harm to persons or property, the system must be put out of operation immediately and protected against being switched back on. Further use must be actively prevented until the unit is fully repaired. The unit may only be repaired by a specialised company.

13.4. Device data

Equipment type	**LG 100 UP - flush-mounted**	
Application	Single-room application	Multi-room application
Article number ventilation unit	08LG100UPF	08LG100UPF
Article number ventilation unit with preheating battery	08LG100UPFV	08LG100UPFV
Article number ventilation unit, GLA function / basic ventilation active	08LG100UPFGLA	08LG100UPFGLA
Article number ventilation unit with preheating battery, GLA function / basic ventilation active	08LG100UPFVGLA	08LG100UPFVGLA
Article number of housing	08LG100UPGERA	08LG100UPGMRA
Article number design front, RAL 9003	08LG100UPAPDF1A	08LG100UPAPDF1A
Device data		
Ventilation stages	1 - 2 - 3 - automatic	
Level 1 - basic ventilation (not selectable for the GLA version / basic ventilation active)	20	20
Level 2 - normal ventilation	42	56
Level 3 - intensive ventilation	60	80
Automatic (demand-based)	20 - 60	20 - 80
Energy efficiency class	A	A
Properties		
Volume flow constant function	yes	
Humidity control	yes	
Air quality control (VOC, eCO2)	yes	
Mechanical cover flap in the outdoor air and exhaust air pipe	yes	
Characteristic values in compliance with EN13141-8:2014 [1)]		
Temperature ratio supply air	83,6 %	80,4 %
Humidity ratio supply air	69,1 %	64,3 %
Specific input power SIP	0,28 Wh/m³	0,32 Wh/m³
Classification of air filters in accordance with EN ISO 16890		
ODA filter (outdoor air - pre-filter)	ISO Coarse 70 % (Art.Nr.: 40LG0500006A)	
SUP filter (supply air - fine filter)	ISO ePM1 55 % (Art.Nr.: 40LG0500007A)	
ETA filter (extract air)	ISO Coarse 70 % (Art.Nr.: 40LG0500006A)	
Operating conditions		
Permissible operating temperature (outdoor air) with / without preheating battery	-15 °C / -5°C	
Condensate drainage	not required [2)]	
Electrical system		
Electrical connection	230 V / 1 ~ / 50 Hz / 13 A	
Power consumption of ventilation unit	8 – 40 watts	
Power consumption of preheating battery	280 watts	

Materials and components		
Inner part	EPP and galvanised steel sheets	
Design front	Steel sheet, galvanised and powder-coated	
Heat exchanger	Enthalpy counterflow heat exchanger with a polymer membrane	
Fans	EC radial fans	
Air connections		
Outdoor / exhaust air	100 mm	
Multi-room connection supply air	-	3 x KOMFLEX 75
Multi-room connection extract air	-	3 x KOMFLEX 75
Sound levels		
Level of acoustic insulation standby	57 dB(A)	
Level of acoustic insulation operation	55 dB(A)	
Dimensions and weight		
Unit dimensions W x H x D (without connections)	547 x 937 x 200 mm	
Weight	25 kg	
Design front	525 x 908 x 43 mm	
Weight	5 kg	
Certifications		
TÜV tested	yes	
Building inspection approval (DIBt - German Institute for Structural Engineering)	Z-51.3-489	

[1] At 70% of the max. volume flow; corresponds to ventilation level 2
[2] When used as intended as living space ventilation unit, no condensate will form

13.5. Sound data

SINGLE-ROOM APPLICATION	Volume flow m³/h		
	25	42	60
Housing			
Sound pressure level at a distance of 1m $L_{PA\,1m}$ dB(A)	< 20	22	29
Sound power level L_{WA} dB(A)	29	35	43
Outdoor air / exhaust air			
Sound pressure level L_{PA} dB(A) weather protection	41	53	62
Sound power level L_{WA} dB(A) reveal	39	50	58

MULTI-ROOM APPLICATION (distribution: Design front approx. 1/3, KOMFLEX pipes approx. 2/3)	Volume flow m³/h			
	42	56	70	80
Housing				
Sound pressure level at a distance of 1m $L_{PA\,1m}$ dB(A)	< 20	22	27	29
Sound power level L_{WA} dB(A)	32	35	40	42
Outdoor air / exhaust air				
Sound pressure level L_{PA} dB(A) weather protection	48	55	57	64
Sound power level L_{WA} dB(A) reveal	45	52	54	60

14. Control

14.1. Frost protection with preheating battery

Optionally, the ventilation unit LG 100 is available with an integrated electrical PTC preheating battery. With activated preheating-battery the cold outdoor air is preheated via the electrical PTC heating element. This operating mode provides a guaranteed balanced air volume flow between supply air and extract air.

- At very low outside temperatures, with temperatures falling below a defined exhaust air temperature value, and if the defined temperature difference between extract air and supply air is exceeded, the preheating battery is switched on and remains in the switched-on state for a minimum runtime.
- If the exhaust air temperature exceeds a defined value, the preheating battery is switched off after the minimum runtime.
- If the unit is switched off and the preheating battery has been active beforehand, the fans continue running for a bit.

14.2. Condensate prevention

To prevent condensation from forming in the unit and to quickly remove moisture from the living space, the ventilation unit switches to ventilation level 2 as soon as the exhaust air temperature approaches the dew point by 1 K. (Condensate prevention level 1)

If the exhaust air temperature approaches the dew point by 0.5 K, the supply air volume flow is slightly reduced and the unit runs in imbalance, which ensures effective moisture removal. (Condensate prevention level 2) This means that less supply air is fed to the rooms by the ventilation unit than is discharged via the extract air. The slight negative pressure in the living space is compensated by an inflow of air due to leakages in the building (e.g. entrance door).

Note: If the disbalance control mode is not required or is not permissible (e.g. if there is a gas hot water heater), this function must be deactivated during commissioning by the specialist personnel.

If the exhaust air temperature remains close to the dew point despite this safety function, the ventilation unit switches to standby mode after 30 minutes. After one hour in standby operation, the ventilation unit will restart automatically, initiating a restart of the safety function.

If the exhaust air temperature moves away from the dew point again, the supply air volume flow is slowly increased again until a balanced supply air/exhaust air is achieved and the ventilation unit returns to normal operation.

This operating state is indicated by the red error LED flashing 6 times.

14.3. Frost protection without a preheating battery

Ventilation units without a preheating battery are subjected to the risk that the heat exchanger will freeze when outdoor temperatures fall to a very low level. Since the ventilation unit is not provided with a condensate connection, the formation of condensate is to be avoided by all means. Therefore the ventilation unit is automatically switched off for approximately one hour for reasons of safety at outdoor temperatures below -5 °C, and the mechanical flaps in the outdoor and exhaust air aperture are closed automatically. After this time, the ventilation unit is automatically restarted.

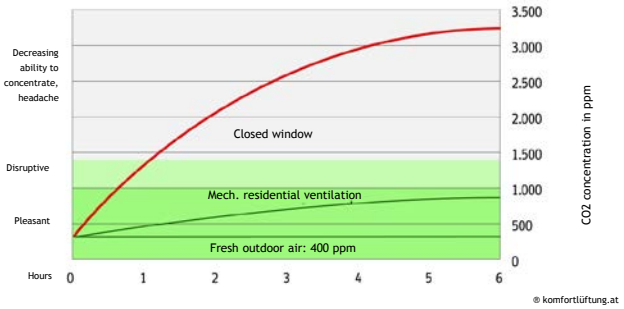
Attention! This safety function interrupts the ventilation operation at low outdoor temperatures.

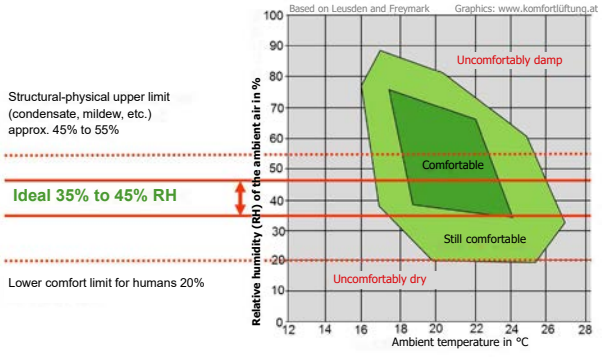
14.4. VOC/eCO2 control

The room air quality is measured via a VOC sensor including eCO2 measured and the air volume flow is controlled in a demand-oriented fashion. In automatic mode, the ventilation unit regulates independently and depending on the exhaust air quality properties (VOC and eCO2) between the preset volume flows of the basic ventilation (ventilation level 1) and ventilation level 2 (factory setting). From firmware version 1.2, the maximum ventilation level in automatic mode can be changed via the service software. You can choose between ventilation level 2 and ventilation level 3.

An acceptable room air quality should not exceed a CO2 value of approx. 1000 ppm and its air quality class should be 1 to 2.

Room air quality/ IAQ rating	Reference Level	TVOC (mg/m³)	Air quality
< 2.0	Level 1	< 0.3	Very good
2.0 to 2.99	Level 2	0.3 to 1.0	Good
3.0 to 3.99	Level 3	1.0 to 3.0	Medium
4.0 to 4.99	Level 4	3.0 to 10	Poor
5.0	Level 5	> 10	Bad



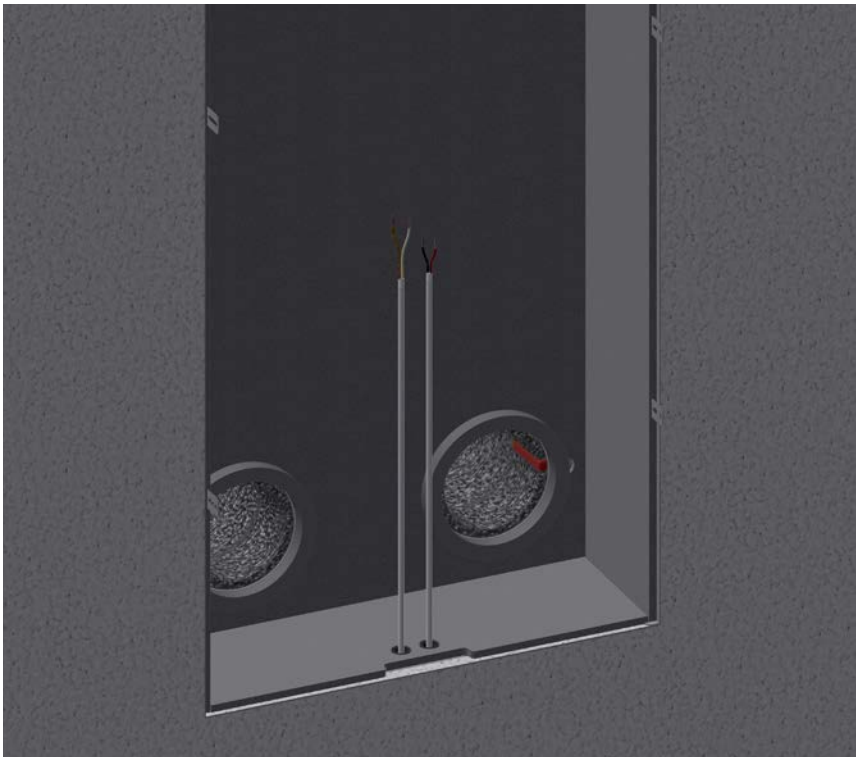


15. Mounting

15.1. Installation of the slide-in module in the flush-mounted housing

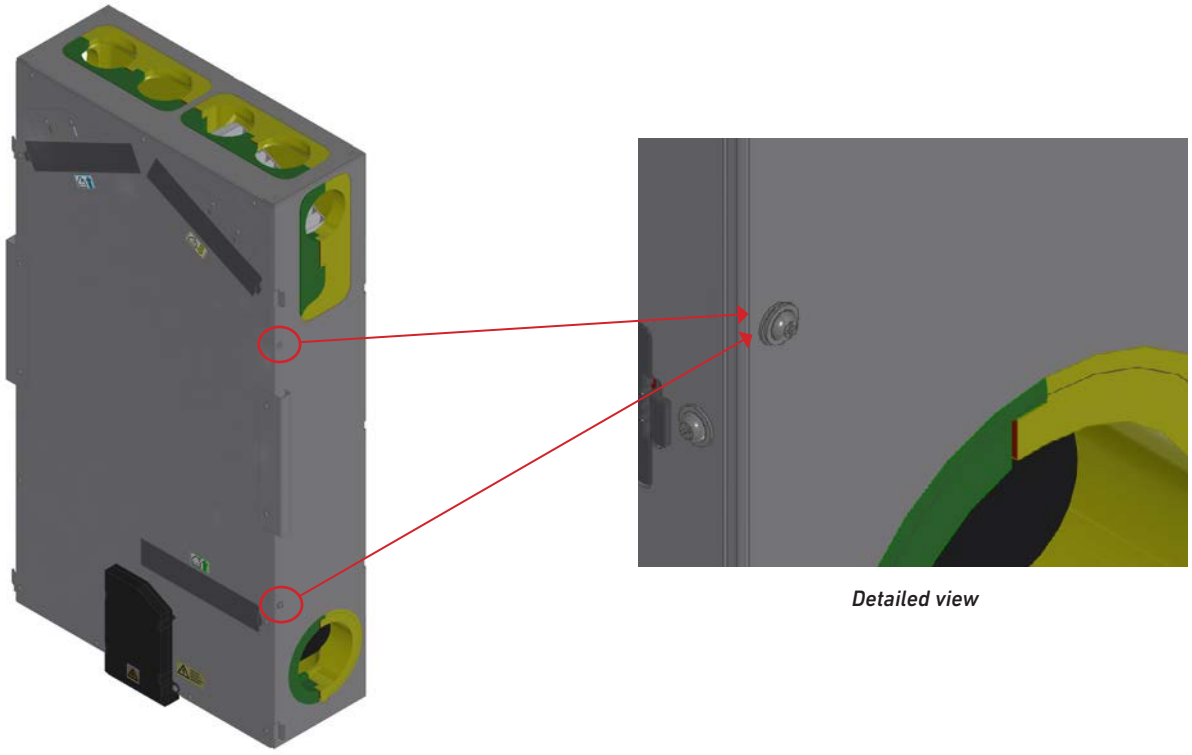
Before inserting the slide-in module into the flush-mounted housing, the cables for the supply and any connections (control unit, BMS connection, etc.) must be threaded by specialist personnel responsible. Low-voltage cables must be laid separately from mains cables; alternatively, screened cables must be used.

To be connected to the unit, the cables must protrude at least 40 cm from the flush-mounted housing.



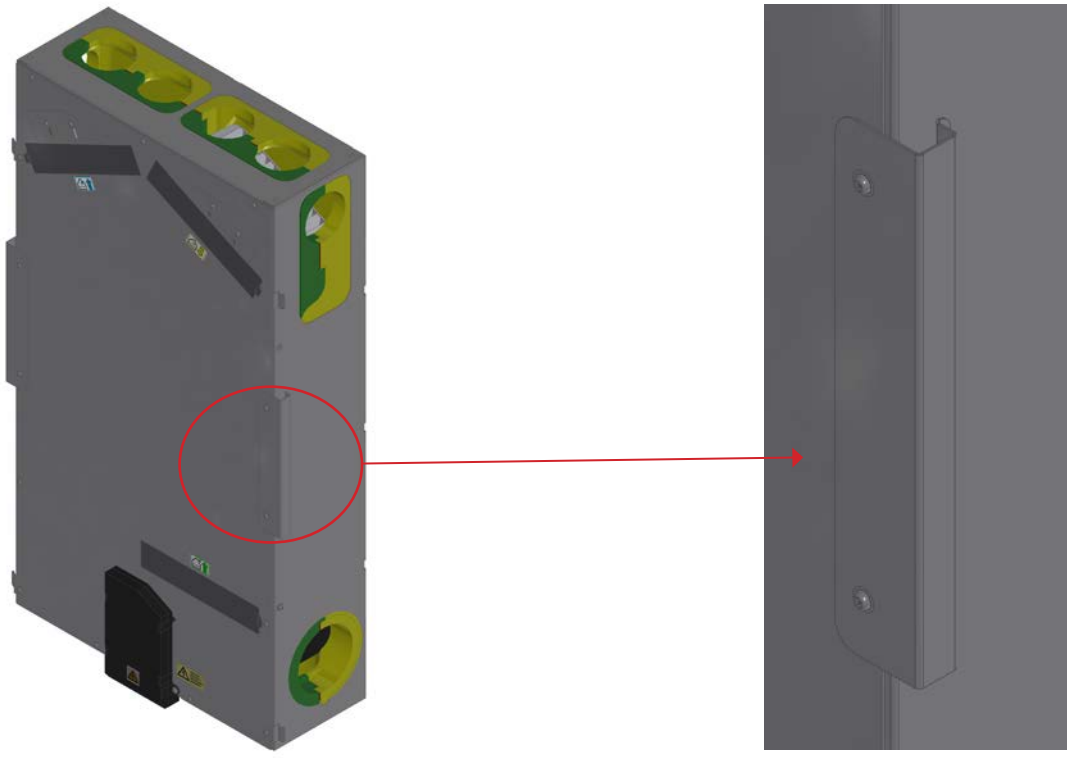
Built-in flush-mounted housing - see separate mounting instructions

Then the four screws from the slide-in module for fastening on the flush-mounted housing are removed. Keep the screws safe. The slide-in module can then be inserted into the flush-mounted housing by means of an assembly aid.



Detailed view

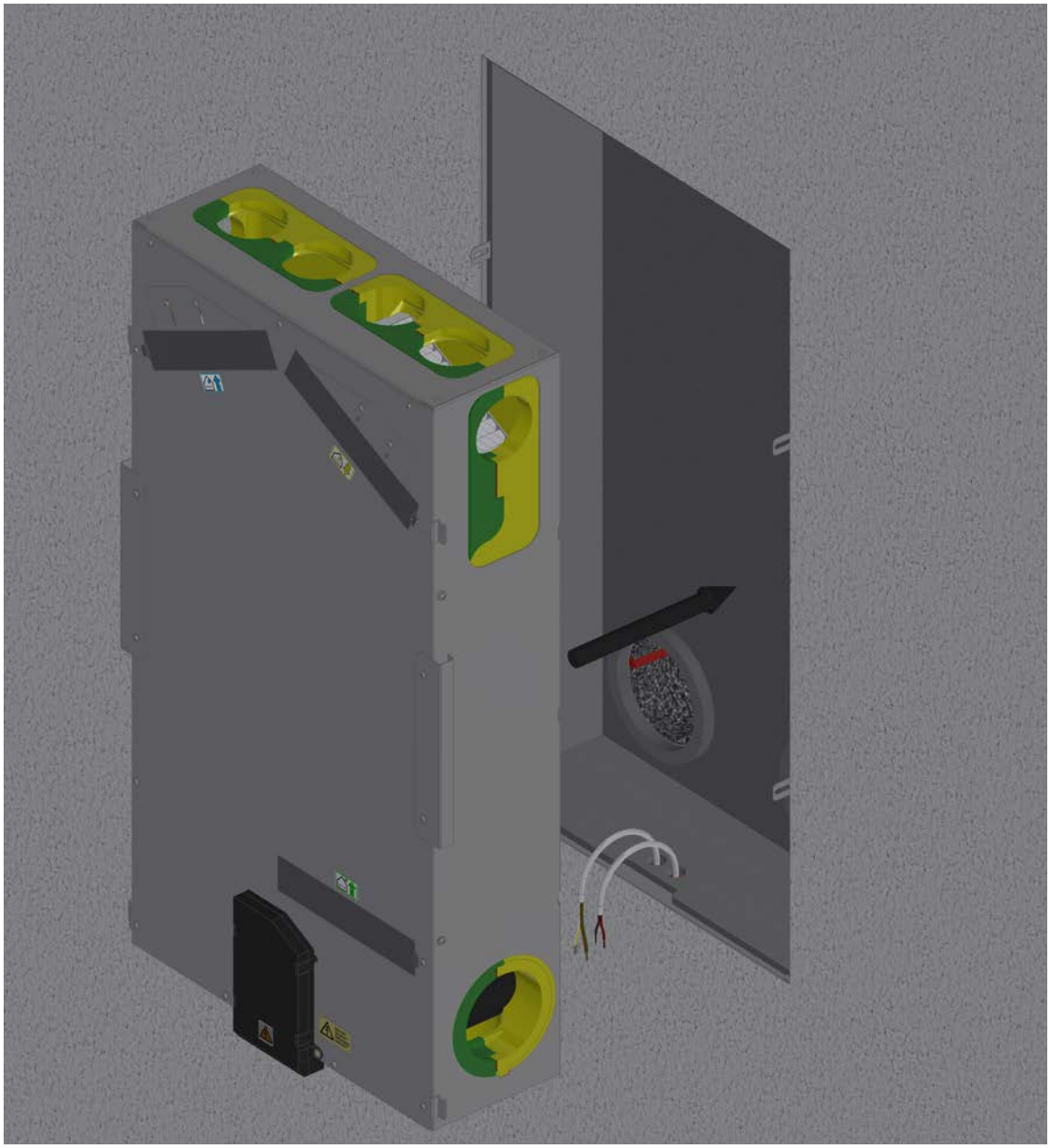
Screws for fastening at the flush-mounted housing



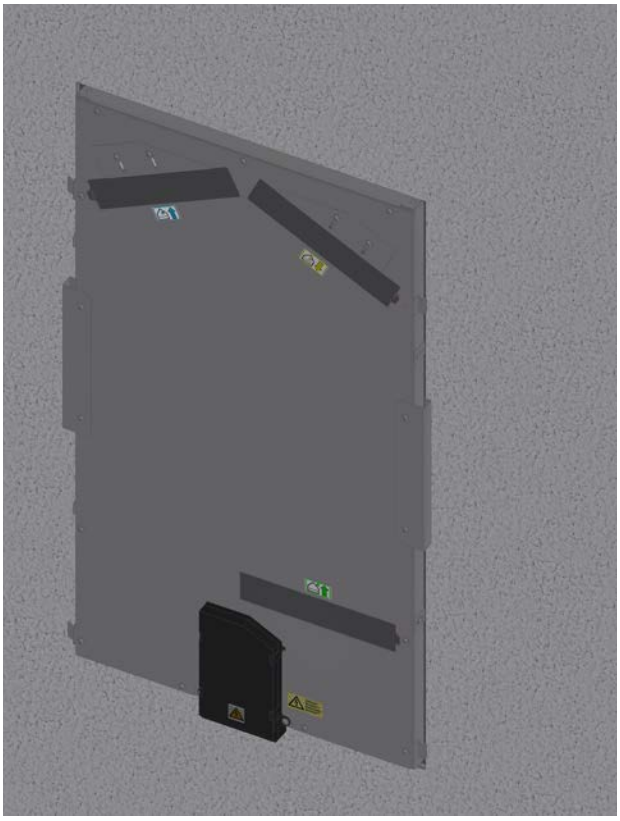
Assembly aid

Detailed view

In order to provide for a correct insertion position, the slide-in module must be inserted into the flush-mounted housing up to the point that the assembly aids touch the interior plaster closely.

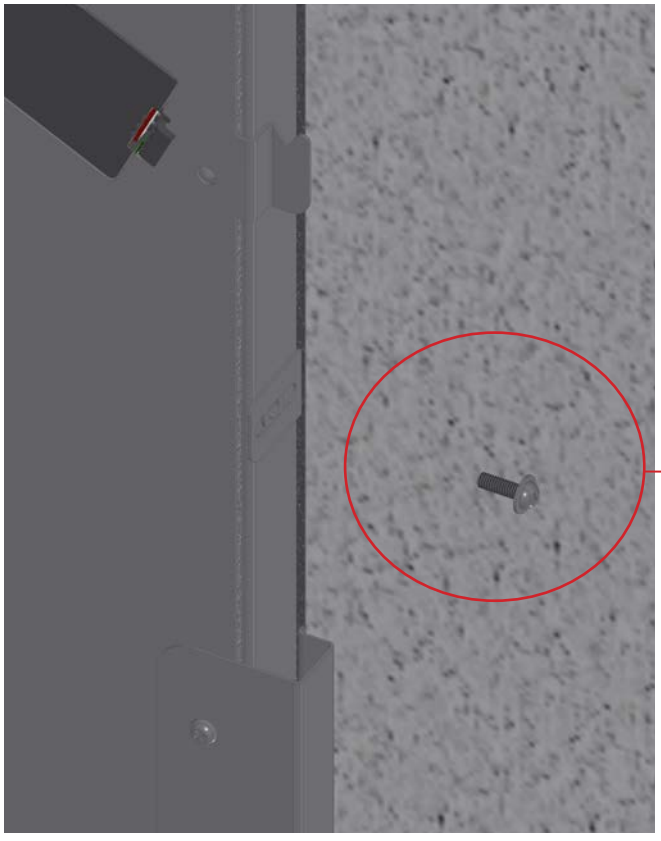


Inserting the slide-in module

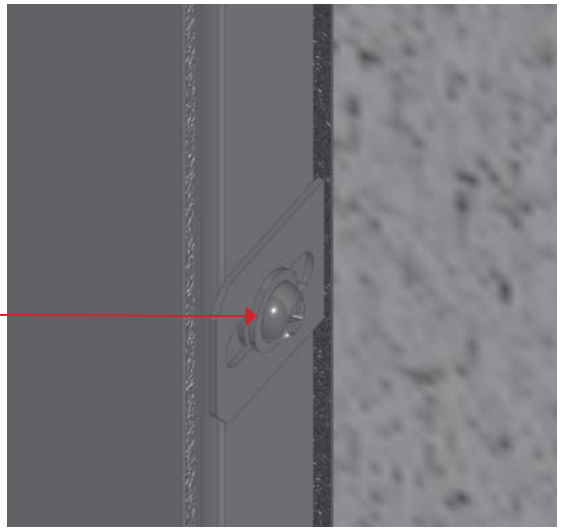


Assembly aids must touch the interior plaster closely

When the assembly aids touch the interior plaster, the correct position is ensured and the slide-in module is fastened to the four mounting brackets of the flush-mounted housing using the screws removed previously.



Screwing on the slide-in module



Detailed view

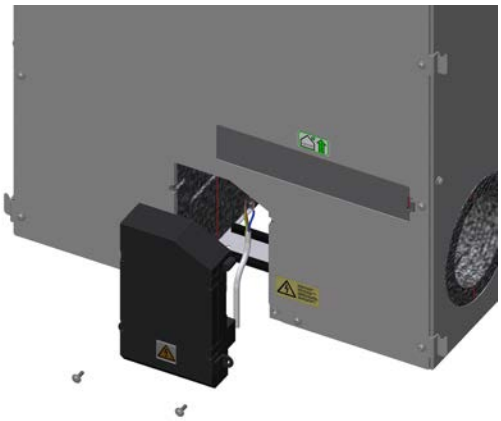
15.2. Electrical connection

Electrical connection and work on electrical components may only be carried out by authorised electricians.

Before working on the control board, the unit must be isolated from the mains (all poles) and protected from being switched back on.

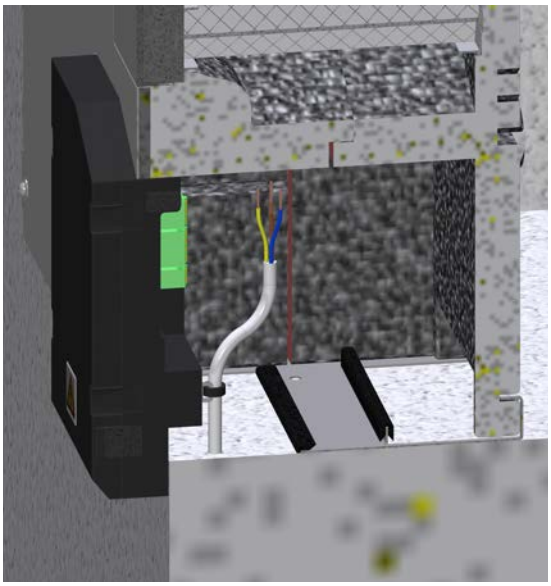
The LG 100 domestic ventilation unit may be installed and operated appropriately at a fixed electrical installation only, with a separating device for complete isolation in accordance with the conditions of overvoltage category III and the relevant regulations for installation.

To be able to implement the electrical connection, first the control housing has to be dismounted.

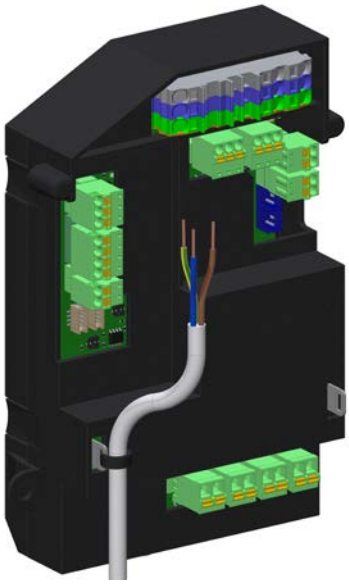


Disassembling the control housing

The strain relief of the mains supply cable must be established on the control housing by using cable ties.

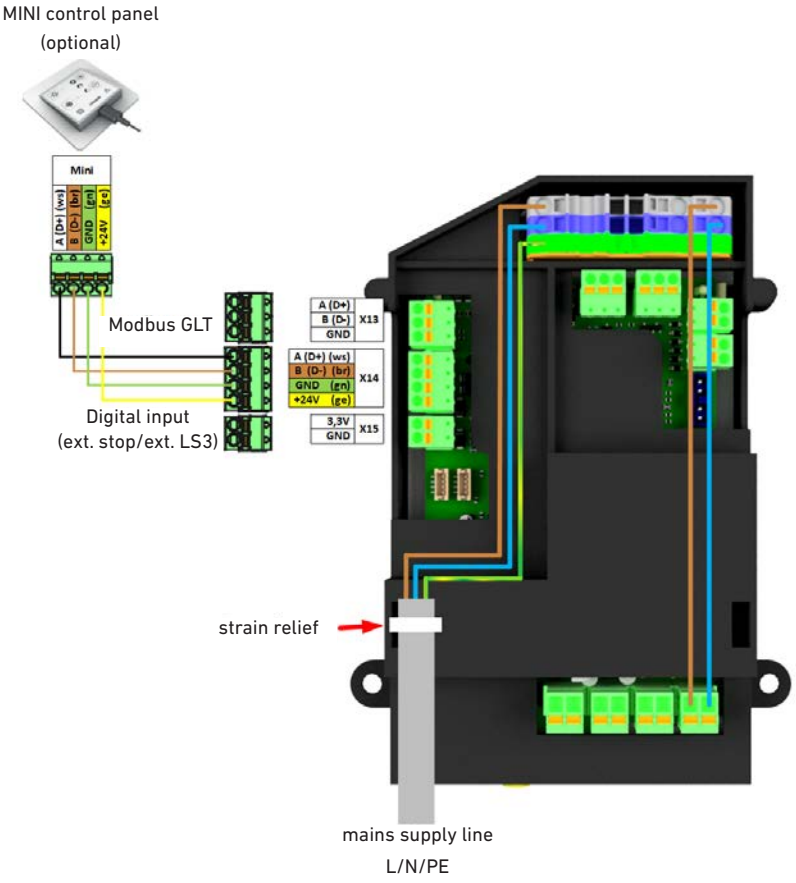


Disassembling the control housing



Fasten the mains supply cable using cable ties

Optionally, the ventilation unit can be controlled via the MINI control unit or via modbus RTU (GLT connection). A digital input is provided as "External off" (contact: NC or NO contact) or at "External ventilation level 3" (contact as NO contact), depending on the configuration. The standard setting configured for the digital input is "External ventilation level 3".



Connection diagram

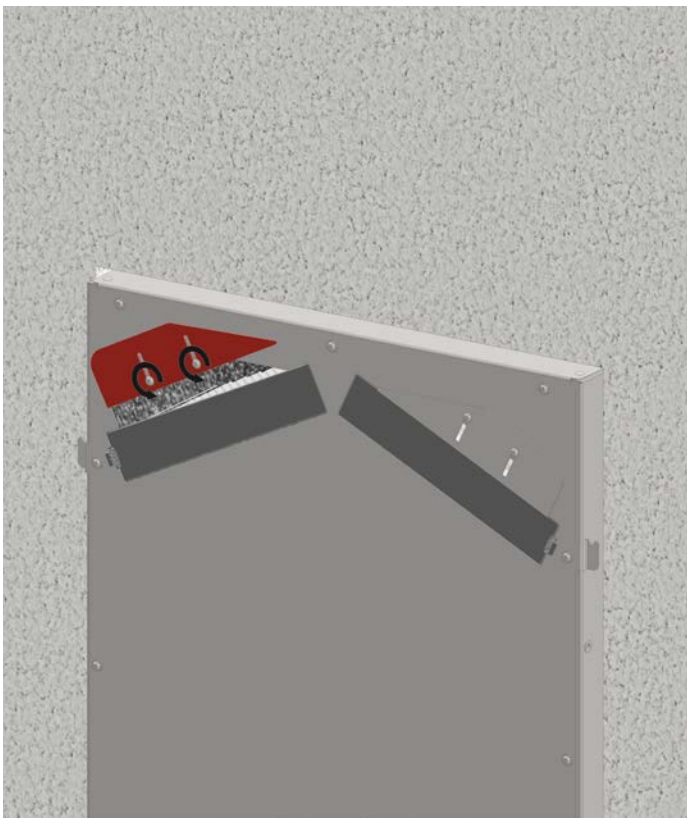
When the cabling process has been carried out successfully, fit the control housing again.

15.3. Adjusting the air regulation sheets

The LG 100 as flush-mounted type allows for single-room and multi-room application. For this purpose it is essential to adjust the air regulation sheets according to the application. The air regulation sheets are located above the supply air and extract air filters, respectively.

15.3.1. SINGLE-ROOM APPLICATION

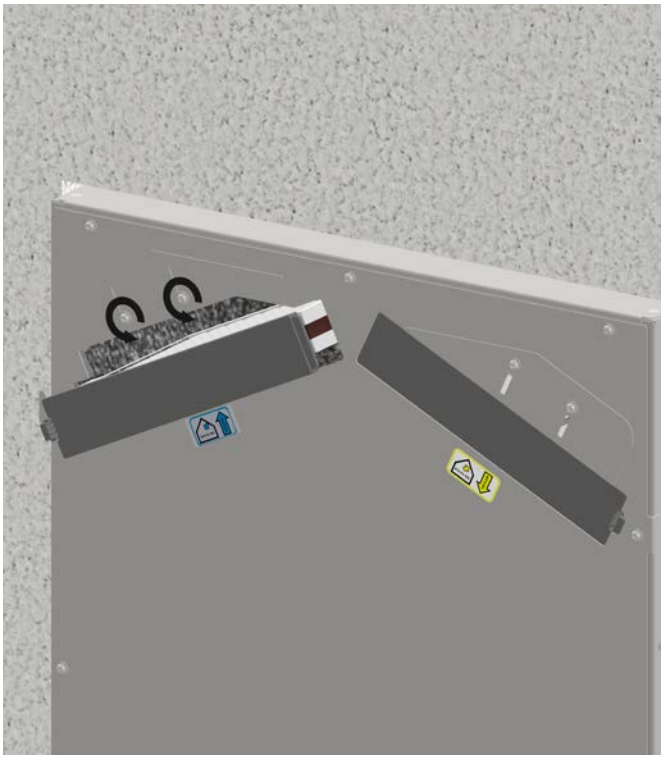
When the air regulation sheets are fully opened (delivered condition), the air is guided from the front across the design sheet and guided into the room via the outlets at the bottom side. The entire ventilation and deaeration is performed in the room where the unit is installed.



Air regulation sheet
- left fully opened and right fully closed

15.3.2. MULTI-ROOM APPLICATION

In order to be able to adjust the air regulation sheets, the screws must be unscrewed first.

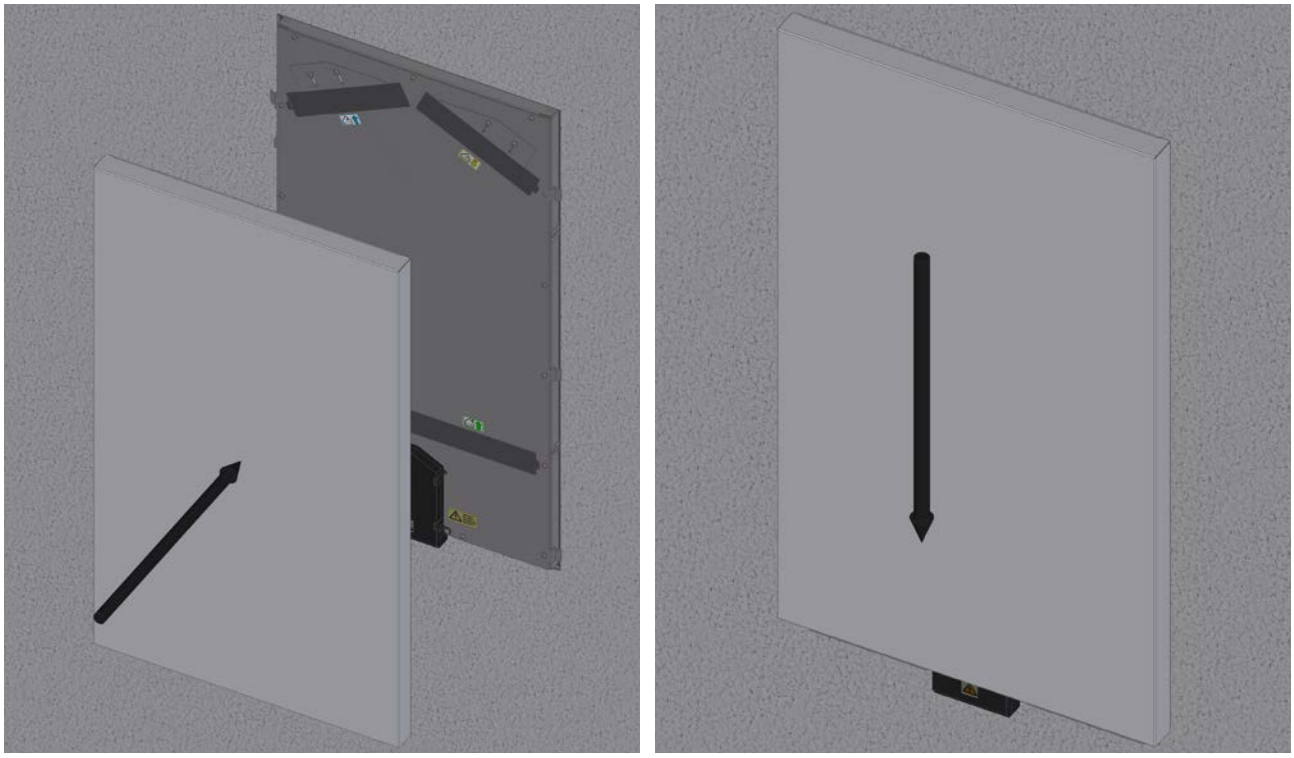


Air regulation sheet
- left fully opened and right fully closed

To adjust the correct air volume flow for a multi-room application, the air regulation sheet must be adjusted and the air volume flow must be measured on the outlet valve of the corresponding adjoining rooms. Depending on the requirement, adjust the air regulation sheet and measure the air volume flow again, if necessary.

15.4. Installation of the design front

In order to close the unit, the design front must be fastened at the retention points of the slide-in module. For this purpose, the cover front is pressed against the wall and slid into the retention points top down.



Installation of the design front

In order to ensure that the design front is tight, it has to be fastened properly!

SPECIALIST PERSONNEL - COMMISSIONING

16. Maintenance and cleaning

16.1. Safety instructions

For all cleaning or servicing work on the ventilation unit, always pull the unit from the mains (all poles)!

Other system components and parts must be maintained and cleaned in accordance with regulations. When opening sealing sheets or covers, work must be carried out with safety in mind. A vacuum cleaner should be used to remove dirt and dust. Cleaning with excessive force or compressed air can damage components and surfaces. Aggressive or solvent cleaning agents are not permitted. Electrical components must not come into contact with moisture. The safety instructions in Chapter 5 must be observed for all electrical work.

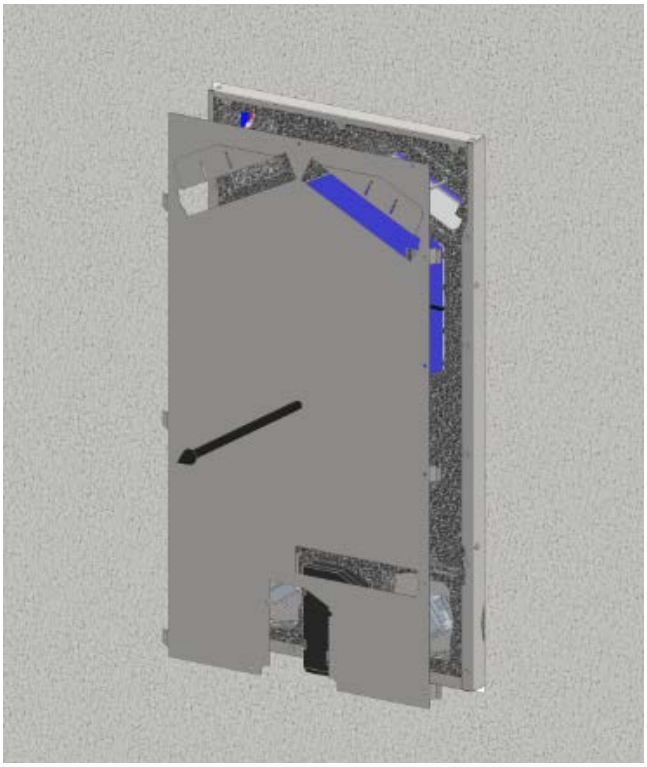
16.2. Maintenance instructions

Only specialists are allowed to carry out the work specified below on the ventilation unit. Any defects detected during servicing must be remedied immediately to ensure safe operation of the unit. Only original spare parts may be used for repairs and replacements.

16.3. Enthalpy exchanger

Annual cleaning is recommended at the least, depending on the degree of soiling of the enthalpy exchanger. When maintenance work is performed, the enthalpy exchanger must be carefully removed from the unit. Cleaning is performed by rinsing with warm water (maximally 35 °C). By no means blow through the enthalpy exchanger using compressed air. This might damage the device!

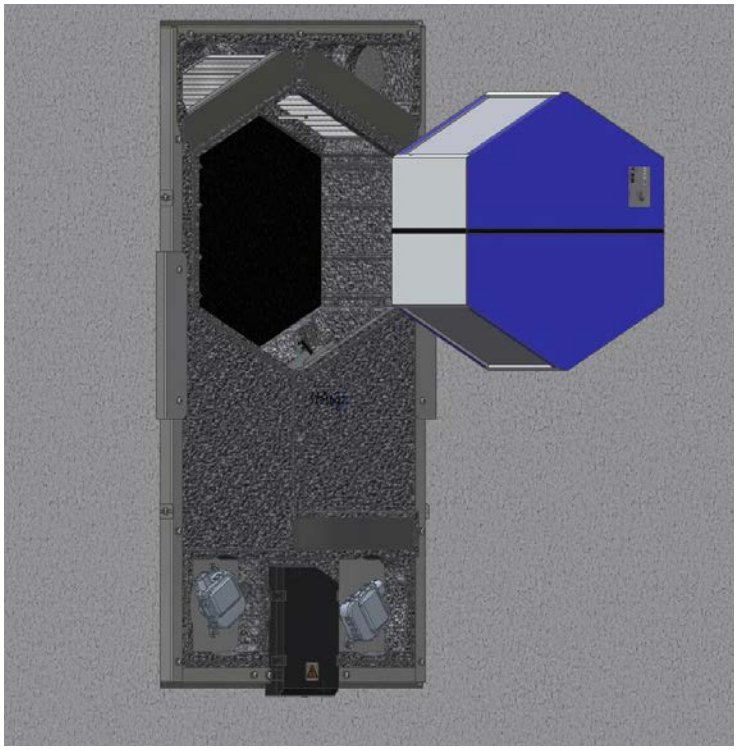
1.) Dismounting the design front:



Opening the sealing plate

For this purpose, the design front must be removed and the sealing plate must be opened by loosening the screws at the side and removed as well.

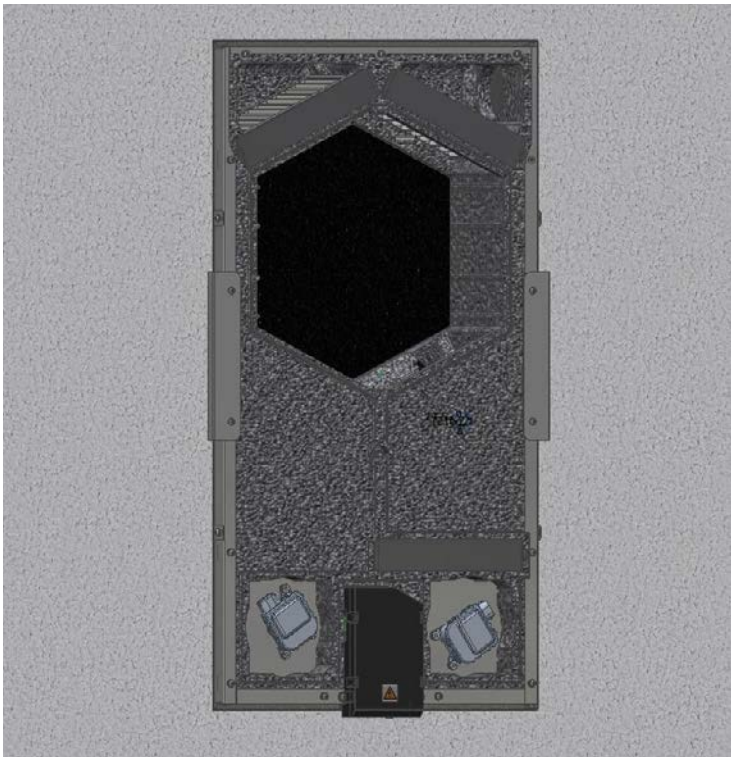
2.) Removing the heat exchanger:



Removing the heat exchanger

16.4. Cleaning the equipment housing inside

Annual cleaning, depending on the degree of soiling, is recommended. Careful handling of the device surface is important (strong force is not necessary) to avoid damage. A cloth or vacuum cleaner should be used to remove dust. Electrical components and connections must not come into contact with moisture.



Device cleaning

16.5. Service table

In order to document maintenance works, this table must be completed after performance of works on the unit:

System commissioned by:			Date
No.	**Maintenance work (e.g. filter change)**	**Performed by (signature)**	**Date**
1			
2			
3			
4			
5			
6			
7			
8			
9			
10			

11			
12			
13			
14			
15			
16			
17			
18			
19			
20			
21			
22			
23			
24			
25			

17. Commissioning

The ventilation system must be complete, connected and ready for operation before it is put into operation for the first time. The unit can be put into operation and system settings can be configured only when all work on the system is complete. The factory settings on the control unit may only be changed by a specialised company. Incorrect settings may cause the unit to malfunction.

Ventilation level	Operating mode	Designation	Factory setting
0	Standby operation (in the GLA version because of the requirements of DIN18017-3 deactivated)	Standby operation means that the flaps are closed and the building is not ventilated	No volume flow
1	Reduced ventilation (in the GLA version because of the requirements of DIN18017-3 deactivated)	Reduced ventilation with minimum aeration of the building	20 m^3/h
2	Standard ventilation	Operation with increased volume flow, with normal aeration of the building	56 m^3/h
3	Intensive ventilation	Operation with increased volume flow, boost ventilation for short, intensive building ventilation	80 m^3/h
4	Automatic	Operation with demand-oriented control via VOC-sensor	20 - 80 m^3/h

The volume flows of the individual ventilation levels can be changed via the service software and app.

17.1. Basic questions for commissioning

- Are all air ducts and components fully installed and airtight?
- Are all system components fitted and electrically connected?
- Is the electric wiring complete and the control unit fitted?
- Has the electrical connection of the control unit been implemented correctly?

17.2. Setting system parameters

- Check system components and correct settings where necessary.
- Set system parameters, e.g. adjust volume flow/ventilation level.
- Configure system extensions correctly.

18. Error description

18.1. Description of errors indicated by the MINI control unit

Error descriptions for the corresponding light patterns are provided in the following table.
Errors can be located precisely using the service software (available to specialist personnel only).

Pattern	Error
Error LED flashes 1x	Z04, Z05 (fan error)
Error LED flashes 2x	Z06 - Z13 (combi sensor error)
Error LED flashes 3x	Z14, Z15 (sensor error)
Error LED flashes 4x	Z17, Z18 (flap error)
Error LED flashes 5x	Z02, Z03 (data transmission error)
Error LED flashes 6x	Z19, Z20, Z21 (risk of frost)
Error LED flashes 7x	Z01 (no Internet connection possible)
Filter LED flashes	Z16 (filter message)

Error	Description
Z01	No Internet connection possible
Z02	Communication of combi sensor 1
Z03	Communication of combi sensor 2
Z04	Exhaust air fan blocked (speed monitoring)
Z05	Outdoor air fan blocked (speed monitoring)
Z06	Combi sensor 1: T1 - outdoor air
Z07	Combi sensor 1: volume flow - outdoor air
Z08	Combi sensor 1: relative humidity - outdoor air
Z09	Combi sensor 1: VOC/CO2 sensor - outdoor air
Z10	Combi sensor 2: T2 - exhaust air
Z11	Combi sensor 2: volume flow - exhaust air
Z12	Combi sensor 2: relative humidity - exhaust air
Z13	Combi sensor 2: VOC/CO2 sensor - exhaust air
Z14	T3 - extract air
Z15	T4 - supply air
Z16	Replace air filters
Z17	Outdoor air flap (current monitoring)
Z18	Exhaust air flap (current monitoring)
Z19	No power output from preheating battery
Z20	Risk of frost
Z21	Risk of condensation

18.2. Description of errors indicated by the ventilation unit

Error descriptions for the corresponding light patterns are provided in the following table.
Errors can be located precisely using the service software (available to specialist personnel only).

Pattern	Error
Red LED flashes 1x	Z04, Z05 (fans)
Red LED flashes 2x	Z06 - Z013 (invalid values of combi sensors)
Red LED flashes 3x	Z14, Z15 (thermal sensor)
Red LED flashes 4x	Z17, Z18 (flaps)
Red LED flashes 5x	Z02, Z03 (communication of combi sensors)
Red LED flashes 6x	Z19, Z20, Z21 (hazard of frost or condensate formation)
Red LED flashes 7x	Z01 (no Internet connection)
Green and red LEDs flash alternately	Z16 (filter message)

Error	Description
Z01	No Internet connection possible
Z02	Communication of combi sensor 1
Z03	Communication of combi sensor 2
Z04	Exhaust air fan blocked (speed monitoring)
Z05	Outdoor air fan blocked (speed monitoring)
Z06	Combi sensor 1: T1 - outdoor air
Z07	Combi sensor 1: volume flow - outdoor air
Z08	Combi sensor 1: relative humidity - outdoor air
Z09	Combi sensor 1: VOC/CO2 sensor - outdoor air
Z10	Combi sensor 2: T2 - exhaust air
Z11	Combi sensor 2: volume flow - exhaust air
Z12	Combi sensor 2: relative humidity - exhaust air
Z13	Combi sensor 2: VOC/CO2 sensor - exhaust air
Z14	T3 - extract air
Z15	T4 - supply air
Z16	Replace air filters
Z17	Outdoor air flap (current monitoring)
Z18	Exhaust air flap (current monitoring)
Z19	No power output from preheating battery
Z20	Risk of frost
Z21	Risk of condensation

19. Installation/operation of service software and firmware updates

The control unit must be connected to a laptop via the micro USB cable or a WLAN connection with the unit must be established in order to perform troubleshooting. To ensure a stable WLAN connection of the LG 100 it may be required to boost the WLAN signal by using WLAN repeaters or to establish a mesh network.

The ventilation unit only supports the WiFi/WLAN standard 2.4 GHz.

Further information on installation/operation of service software and firmware updates is available to certified partners on request.

Service hotline: +43 (0)463 32769-290
Email: service@pichlerluft.at

20. Spare parts and accessories

Only original spare parts may be installed or used for replacements and repairs. Dependable operation is ensured only if original spare parts are used!

20.1. Control elements

Designation	Item number
OPTIONALLY: MINI control unit for LG 100	08LGMINI100
Shielded connecting cable J-Y(ST)Y 2 x 2 x 0.8	40LG040340

20.2. Air filters

Designation	Item number
ODA/ETA filter ISO Coarse 70%	40LG0500006A
SUP filter ISO ePM1 55%	40LG0500007A

20.3. Gateway

Designation	Item number
MODBUS/KNX-GATEWAY	08KNXGAC

21. Changes reserved

It is our constant endeavour to technically improve and optimise our products and we reserve the right to change the design of the units or the technical specifications without prior notice.

22. EC Declaration of Conformity

Hersteller / Manufacturer:	J. Pichler Gesellschaft m.b.H.
Anschrift / Address:	Karlweg 5 A-9021 Klagenfurt am Wörthersee
Bezeichnung / Product description:	Dezentrales Kompaktlüftungsgerät mit integrierter Steuerung
Ausführungen / Type:	LG 100 UP / LG 100 AP / LG100 DE mit Bedieneinheit MINI

Die bezeichneten Produkte stimmen in der von uns in Verkehr gebrachten Ausführung mit den Vorschriften folgender europäischen Richtlinien überein:
The products described above in the form as delivered are in conformity with the provisions of the following European Directives:

2014/35/EU Zur Harmonisierung der Rechtsvorschriften der Mitgliedsstaaten über die Bereitstellung elektrischer Betriebsmittel zur Verwendung innerhalb bestimmter Spannungsgrenzen auf dem Markt
On the harmonisation of the laws of the Member States relating to the making available on the market of electrical equipment designed for use within certain voltage limits

2014/30/EG Zur Harmonisierung der Rechtsvorschriften der Mitgliedstaaten über die elektromagnetische Verträglichkeit
On the harmonisation of the laws of the Member States relating to electromagnetic compatibility

2009/125/EG Richtlinie des Europäischen Parlaments und des Rates zur Angleichung der Rechtsvorschriften der Mitgliedsstaaten zur Schaffung eines Rahmens für die Festlegung von Anforderungen an die umweltgerechte Gestaltung energieverbrauchsrelevanter Produkte
Council Directive on the approximation of the laws of the Member States establishing a framework for the setting of ecodesign requirements for energy-related products

Die Konformität mit den Richtlinien wird nachgewiesen durch die Einhaltung folgender Normen und Verordnungen:
Conformity to the Directives is assured through the application of the following standards and regulations:

VO 1253/2014/EU Verordnung (EU) der Kommission zur Durchführung der Richtlinie 2009/125/EG des Europäischen Parlaments und des Rates hinsichtlich der Anforderungen an die umweltgerechte Gestaltung von Lüftungsanlagen
COMMISSION REGULATION (EU) implementing Directive 2009/125/EC of the European Parliament and of the Council with regard to ecodesign requirements for ventilation units

VO 1254/2014/EU zur Ergänzung der Richtlinie 2010/30/EU des Europäischen Parlaments und des Rates im Hinblick auf die Kennzeichnung von Wohnraumlüftungsgeräten in Bezug auf den Energieverbrauch
VO 1254/2014/EU supplementing Directive 2010/30/EU of the European Parliament and of the Council with regard to energy labelling of residential ventilation units

DIN EN 60335-1:2012-10 + Ber.1:2014-04 + Ber.2:2014-11+Bbl.1:2016-06+A13:2018-07
DIN EN 60335-2-40:2014-01
ETSI EN 301 489-1 V2.1.1:2017-02
ETSI EN 301 489-17 V3.1.1:2017-02
EN IEC 61000-3-2:2019-03
EN 61000-3-3:2013-08
EN 62233:2008-04
EN 55014-1:2017-04
EN 55014-2:2015-04

Eine vom Lieferzustand abweichende Veränderung des Gerätes führt zum Verlust der Konformität.
Product modifications after delivery may result in a loss of conformity.

Diese Erklärung bescheinigt die Übereinstimmung mit den genannten Richtlinien, ist jedoch keine Zusicherung von Eigenschaften. Die Sicherheitsinformationen der mitgelieferten Produktdokumentation sind zu beachten.
This declaration certifies the conformity to the specified directives but contains no assurance of properties. The safety documentation accompanying the product shall be considered in detail.

J. Pichler Gesellschaft m.b.H.
Geschäftsleitung / General Manager

Klagenfurt, am 16. Juni 2020

Notes

klimaaktiv Partner
PASSIVHAUS Austria
Mitglied NETZWERK PASSIVHAUS www.passivhaus.at

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