

HEALTHBOX[®] 3.0

The smart and quietest solution for healthy indoor air



NO MORE 'BAD AIR DAYS'



THE IMPORTANCE OF VENTILATION

Do you have any building or renovation plans? Do you dream about having your own house or apartment? Then a ventilation system with Healthbox® 3.0 is a must. The Healthbox® 3.0 demand-controlled ventilation guarantees a silent and energy-efficient solution. Moreover, thanks to the various configuration possibilities, you can take full advantage of the intended energy performance of all types of homes.

NATURAL VENTILATION, GOOD FOR BOTH OCCUPANT AND HOME

In contrast to what many people think, the inside air quality is on average 10 times worse than the outdoor air quality. Cooking, showering, cleaning, sweating and even breathing all result in polluted air. A poor indoor air climate can in the long-term damage the health of the occupants. Respiratory problems, eye irritation, headaches, allergies and concentration loss are only a few of the potential consequences. What's more, excessively damp air can lead to bad odours, condensation and mould growth. That is why it is so important to ventilate constantly and efficiently.

The supply of fresh air happens directly through [window] vents. Therefore, natural ventilation is the healthiest choice.

Moreover, controlled ventilation is the best guarantee for a healthy indoor climate.

DEMAND-CONTROLLED VENTILATION

It is not possible for us humans to detect changes in air quality. We can't for example detect when certain air pollutants reach high concentrations. We therefore can't expect an occupant to assess what ventilation level is necessary in order to achieve a healthy indoor climate.

That is why it is important that the ventilation level should be adjusted automatically according to the most effective ventilation needs. By means of intelligent sensors, the ventilation level responds to the various situations at any moment of the day. If the air in the room is of a good quality, then the extraction flow rate in that room is lowered. This automatic adjustment will result in energy savings of 30 up to 50%.



Discrete integration
of the extraction point



NATURAL INTELLIGENT DEMAND-CONTROLLED VENTILATION WITH HEALTHBOX® 3.0

Healthbox® 3.0 forms the heart of the **energy-efficient ventilation concept C+**, whereby fresh air is supplied into the dry rooms via window vents and the polluted air is extracted mechanically via Healthbox® 3.0.

The advantages of the energy-efficient ventilation concept C+ are numerous. It is the healthiest choice because the **supply of fresh air** is done directly via (window) vents. Since there are no filters, the system is very maintenance-friendly.

The discrete window vent **Invisivent** stands for a high energetic, acoustic and thermal comfort.

The integrated demand-controlled ventilation control in **Healthbox 3.0** intelligently adjusts the ventilation level **per room** automatically [24/7], based on the measured indoor air quality. This ensures optimal comfort and maximum energy savings.



BREEZE FUNCTION



The Breeze function helps lower the risk of overheating. If it is too hot indoors during the summer whilst it is cooler outside, the Breeze function temporarily switches off the demand-controlled ventilation control so that the ventilation system can utilise its full capacity. In this way, the ventilation system contributes to cooling the house naturally.

THE SILENT, SMART AND ENERGY-EFFICIENT SOLUTION

Despite its compact size, Healthbox 3.0 **performs impressively**. Both the energy-efficient EC fan with a large impeller and its high-tech active variable pressure control are the basis for extremely silent and energy-efficient operation. Thanks to the 'extra silent setting' even occupants with highly sensitive hearing can be guaranteed a quiet and peaceful night.



Control valve: sensor[s] carry out measurements in the air flow



Printed circuit board with integrated variable pressure control

SmartZone ensures optimal air quality in the bedrooms

Valve vane: adjusting ventilation level

SIMPLY THE QUIETEST!

 32 dB[A]*

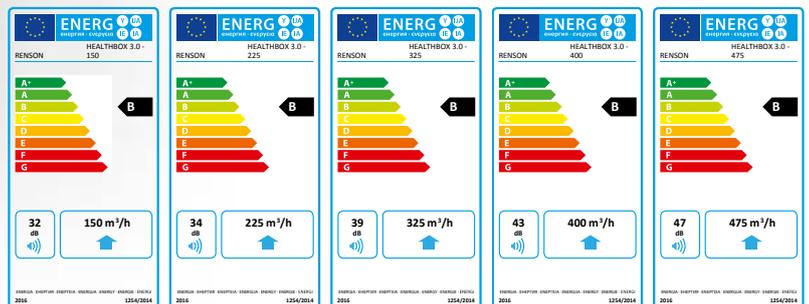
* Reference point Healthbox 3.0 - 150 in accordance with Ecodesign

Energy-efficient EC fan
[ø180 dia. impeller]

Elegant design

Low maintenance

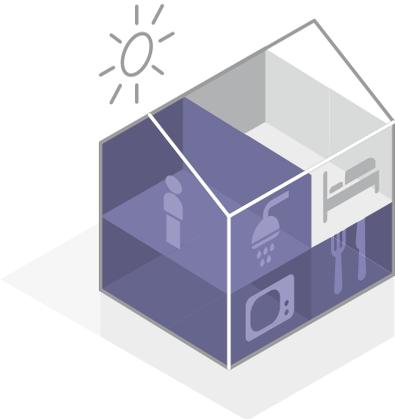
Smart home ready with
'SmartConnect'



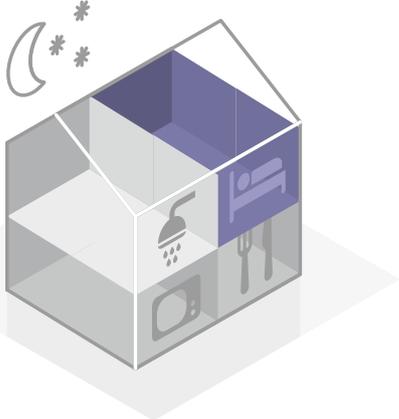
SMARTZONE

OPTIMAL AIR QUALITY IN BEDROOMS

With a SmartZone configuration, in addition to the extraction of air in wet rooms, air is also extracted from dry rooms, such as bedrooms. Optimal air quality with a low CO₂ concentration guarantees a healthy night's sleep.



During the day ventilation takes place mainly in the wet rooms



At night, ventilation is mostly present in the bedrooms

The combination of Healthbox 3.0 SmartZone and Invisivent window vents ensures the best air quality in every room. The window vents guarantee superior acoustic damping and the highest thermal and energetic comfort.

The interactive app gives the occupant a round-the-clock overview of indoor air quality

Personalise



A CLEAR VIEW ON AIR QUALITY

SMARTCONNECT TO THE DIGITAL WORLD SAFELY

The integrated SmartConnect establishes the link between Healthbox 3.0 and the digital world. Healthbox 3.0 can provide interaction with the user in this way [via the app] and with other smart devices in the Smarthome [in order to experience enhanced overall comfort]. Your internet connection keeps Healthbox 3.0 automatically up to date with new features.

HEALTHBOX® 3.0 APP

The free Healthbox 3.0 app* gives the user a clear view on the air quality and the ventilation level in the home. Moreover, it is possible to make fully customised adjustments to the ventilation level of each room in the house, not only using the various profiles but also manually.



The screen colour provides an indication of the air quality in each room

Ventilation level in the home over the last 24 hours



Besides the app, anyone who wishes to continue operating the ventilation units manually can do so via an optional traditional 3-position switch.

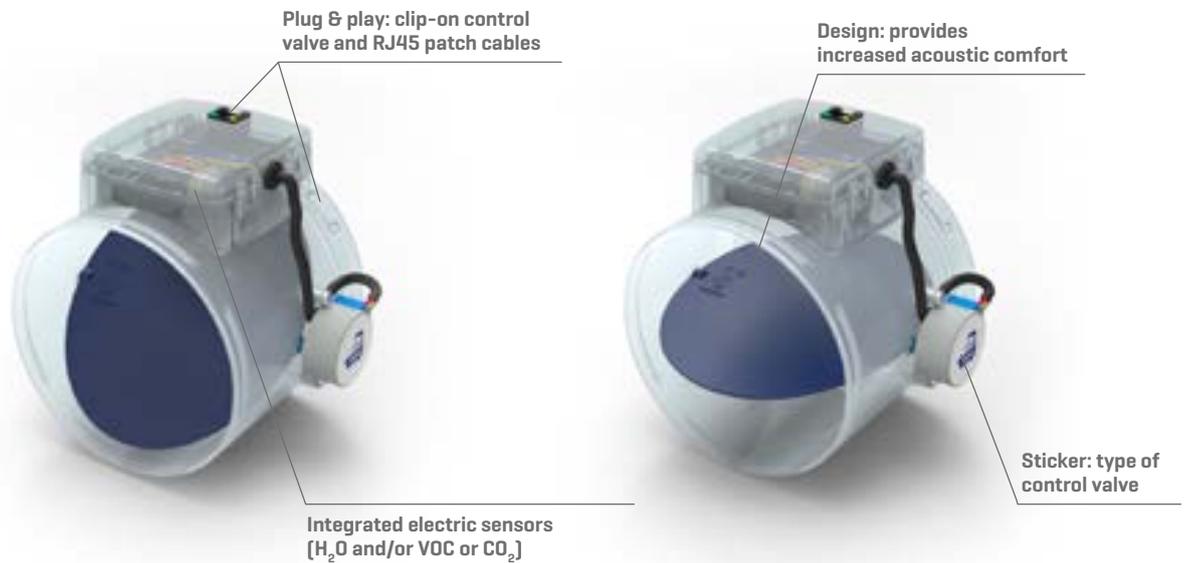
* The app is fully in line with the European regulations on data protection [GDPR].

A NEW STEP IN EASE OF INSTALLATION

The latest technology has been used in the development of Healthbox 3.0 in order to take a step forward in ease of installation and to engage with the world of digitalisation. Discover how the latest Healthbox 3.0 technologies can make the **installation of the ventilation much quicker and more practical** for you, the installer.

CONTROL VALVE: REGULATOR OF THE DEMAND-CONTROL

There are **5 types** of control valves. The sticker on the stepper motor indicates the type of control valve. The assembly of each type of control valve is virtually identical, the only differentiation being the plug-in printed circuit board with sensors.



The **5 types of control valves** enable correct detection/control to take place in every type of room:

Type of control valve	Advice for the room to connect	Detection
	Laundry room <i>Shower room, bathroom [without toilet]</i>	H ₂ O
	Bathroom [with toilet] <i>Wellness room, garage, cellar</i>	H ₂ O, VOC
	Toilet <i>Storeroom/technical area, workshop, dressing, hall/corridor</i>	VOC
	Kitchen [open/closed]	CO ₂
	Bedroom <i>Living room, office, practise area, study, hobby room, waiting room/sitting area, baby room, children's room, TV/music room, relax room, dining room, play room, attic</i>	CO ₂



Your ease of installation:

- Simple: 5 types of control valves mean all configurations are possible
- Connect air ducts of ø80 or ø125 to the adapter included
- The [nominal] extraction flow rate per control valve can be set via the installation App

FAN UNIT

THE SILENT BEATING HEART

The Healthbox 3.0 fan unit consists of one version that can be configured in different ways. There are 7 extraction points on the fan unit to extract air from **up to 11 rooms**.

Power: via mains plug or directly to the fuse box

Ventilation flow rate:
approx. 475 m³/h (135 Pa)



Your ease of installation:

- Reduced height, ideal for installation in a lowered ceiling or cupboard
- Can be mounted in any attitude:
 - Wall mounted, ceiling mounted, floor mounted or cord mounted
 - Upright, flat (above/below)



Exhaust: choice of $\varnothing 125$ or $\varnothing 150$ using an eccentric adapter. $\varnothing 160$ using optional vibration-damping connection

SmartConnect: connection with the App and the network

Height: only 20 cm

VALVE COLLECTOR

UNIQUE

SMART WAY OF DEALING WITH AIR DUCTS IN SMALL SPACES

Healthbox 3.0 can be equipped with 1 to 2 valve collectors. 1 to 3 control valves can be connected to each valve collector. This enables up to 11 control valves to be connected to Healthbox 3.0.

EXAMPLE OF A CONFIGURATION

Up to 11 control valves can be connected

Choice of which extraction point the valve collector can be fitted to.



Valve collector: up to 3 control valves can be connected



Your ease of installation:

- Installing air ducts can be much simpler and visually more attractive
- Less space necessary for the air ducts
- Lower pressure drop in the air duct network

SOME PRACTICAL EXAMPLES



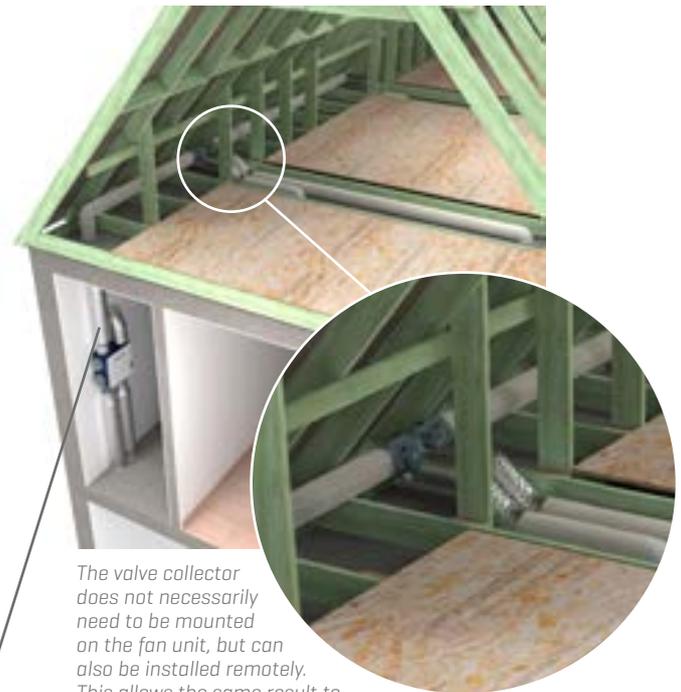
Multiple air ducts downwards



4 air ducts within a 90 cm width [cf. toilet void]



Concealing air ducts tidily in triangular void



The valve collector does not necessarily need to be mounted on the fan unit, but can also be installed remotely. This allows the same result to be achieved with fewer air ducts.

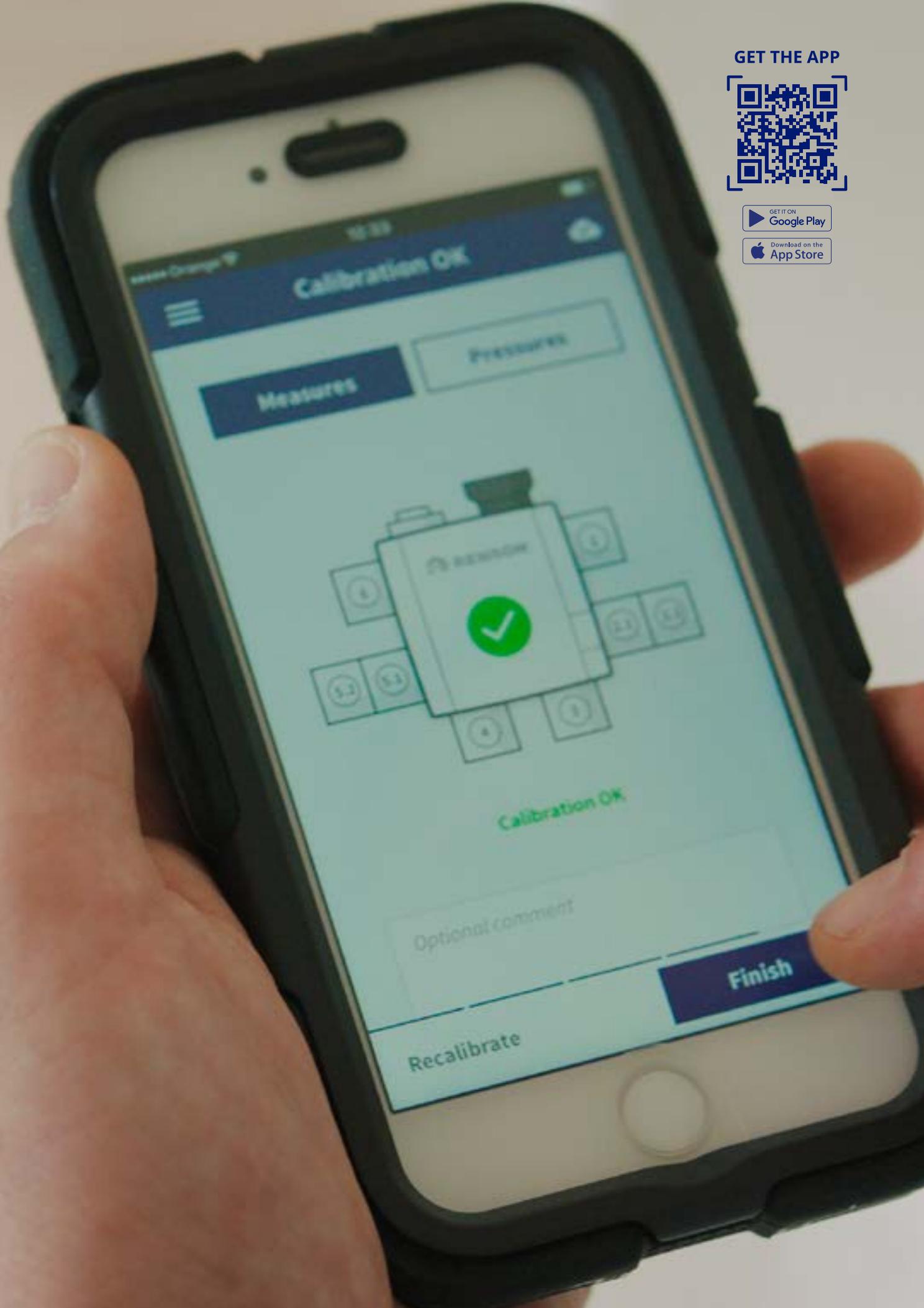
Only 1 air duct



Your ease of installation:

- Creating a system with fewer air ducts

GET THE APP



INSTALLATION APP

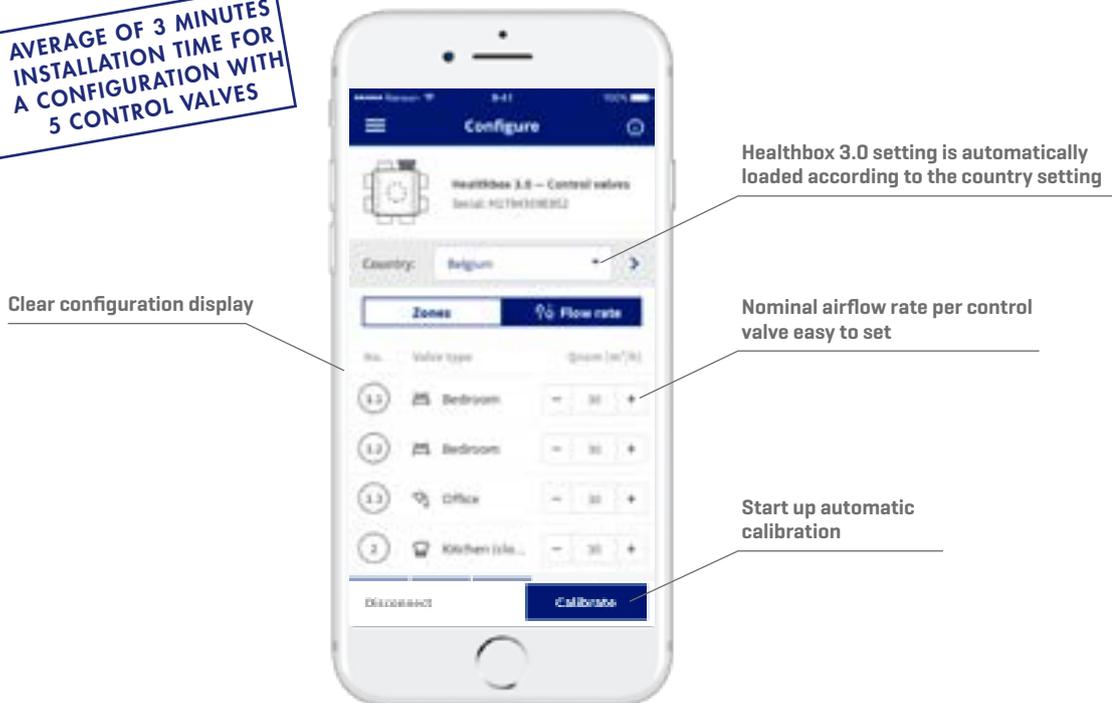


FOR A HIGH-QUALITY AND SPEEDY INSTALLATION

Manual calibration of the ventilation system belongs to the past, thanks to the Healthbox 3.0 automatic calibration.

The App for the installer provides a reliable guide throughout the installation process. Connect the app to Healthbox 3.0 via the Wi-Fi dongle included and the app initiates configuration upon start-up.

**AVERAGE OF 3 MINUTES
INSTALLATION TIME FOR
A CONFIGURATION WITH
5 CONTROL VALVES**



Automatic calibration can be started once the settings have been made. During the calibration, the app gives an **indication of the remaining time**. Any errors that might arise during the installation are shown by the app along with guidance and/or proposals for resolving it.

Automatic calibration of the airflow rates:

- Nominal airflow rates can be chosen
- After automatic calibration, the airflow rate can, if necessary, be adjusted in a simple manner. The adjustment is done immediately, without a new automatic calibration being necessary.

Pressure drops in the system can be looked up after the automatic calibration. In addition, manual measurements (airflow rate, etc.) can also be entered. Once the installation has been completed, the installation parameters and manual measurements are saved. These parameters can then be looked up via the Renson Lio web portal.



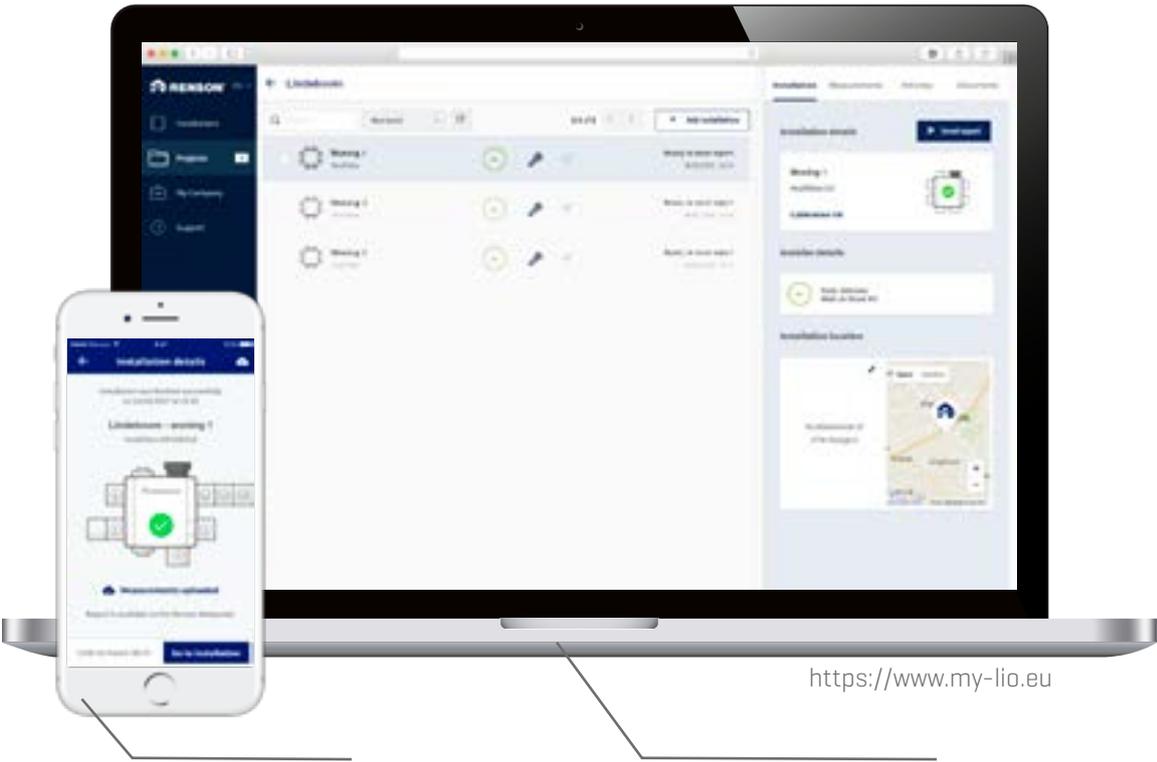
Your ease of installation:

- Speedy commissioning
- Several Healthbox 3.0 devices can be started up at the same time
- The app gives the installer more information, such as pressure drop and error messages
- Test button to determine which room is connected to the corresponding control valve

LIO WEBPORTAL

Digitisation of paperwork

The Renson Lio web portal is the tool for managing your installations, which is of benefit for both smaller installers and [large] installation companies. Link all related documents and choose the suitable installer(s) for a project.



On site

Starting up Healthbox 3.0

At the office

Creating and managing Healthbox 3.0 installations



Your ease of installation:

- Manage your installations (address details, installation details, etc.)
- Build up customer portfolio in a structured manner
- Less paperwork

OVERVIEW

TECHNICAL INFO	Type of ventilation	Mechanical demand-controlled extraction
	Fan	<ul style="list-style-type: none"> Extremely quiet & energy-efficient EC motor with 180 mm dia. impeller. Active variable pressure control: the lowest possible pressure level is set in each case consistent with the required extraction flow rates.
	[Max.] airflow rate	430 m ³ /h [at 200 Pa]
	Maximum fan operating pressure	350 Pa
	Readout calibration pressure	Via installer app & Renson Lio webportal
	Power dissipation fan unit	Variable 28 to 85 Watt depending airflow rate and operating pressure
	Dimensions: - Fan unit with control valves	567 x 567 x 200mm [LxWxH]
	Duration automatic calibration <i>[patented]</i>	Configuration of 2 to 5 control valves: up to ± 3 minutes Configuration of 6 to 8 control valves: up to ± 5 minutes Configuration of 9 to 11 control valves: up to ± 7 minutes
	Maximum number of connection points for extraction: - Basic form - Using valve collectors	7 11 <i>[subject to a few limiting conditions]</i>
	Valve collector	1 or 2 valve collectors to be connected to the fan unit, with 1 to 3 control valves to be connected to each valve collector. The valve collector can also be connected remotely from the fan unit. Electrical connection (UTP cable Cat 5e, wire gauge 24AWG, 30 metres max.).
	Connections	<ul style="list-style-type: none"> 1x Ethernet connection 2x USB connection [USB dongle for Wi-Fi connection included] Inputs: 3x DIGITAL, 1x ANALOGUE [0-10 V]
	Air quality detection [CO₂ or humidity and/or VOC]	Via electronic sensors in control valves. The sensors measure indoor air quality 24 hours a day in the extraction air for each room.
	Automatic control of extraction airflow rate for each room	The stepper motor positions the control valve vane based on measured sensor values. The extraction flow rate is controlled in this way consistent with air quality.
	User & installer app	Can be downloaded free of charge from Play Store [Android] and App Store [Apple]
	Automatic fault indication	<ul style="list-style-type: none"> Via user app Via installer app and Renson Lio web portal [installer]: error indication reported during start-up phase
	Automatic software updates	If Healthbox 3.0 is connected to the internet
Integration into smart home & domotics	<ul style="list-style-type: none"> Smart home: to integrate in the systems of our partners via the home network over the internet Domotics: switch module [3 contacts] 	
Fire protection [= release pressure in system with valves shut]	✓	
OPTIONS	Extraction valves	Design extraction valves [flush or wall mounted]
	Easyflex air ducts	Air transport ducts, best airtightness class D
	Acoudec	Air flexible duct with high acoustic insulation properties
	Roof exhaust / wall louver	Suitable feed-through fittings with low pressure drop

TOGETHER WE AIM FOR HAPPY CUSTOMERS

Do you have a specific project in the pipeline? We can work with you to come up with custom solutions. We can also help you with installation questions. A team of technically trained employees is ready with answers to all your questions.

The proper functioning of our products largely depends on their correct installation and adjustment by the installer. That is why we support you with a thorough technical training. Our experienced trainers are ready to show you the ropes and explain how to install everything correctly. Only in that way we come to properly working and reliable ventilation systems that provide the best possible indoor climate and meet all technical and quality requirements.

For more information: www.renson.eu/training



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