HEALTHBOX® 3.0

The smart and quietest solution for healthy indoor air

Export EN I 2019

RENSON®
Creating healthy spaces

NO MORE ‘BAD AIR DAYS’

THE IMPORTANCE OF VENTILATION

Are you thinking of building or renovating? Do you dream about having your own house or apartment? Then a ventilation system with the 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

Unlike 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 occupants' health. 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 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 THE HEALTHBOX® 3.0

The Healthbox® 3.0 is the heart of the **energy-efficient ventilation concept C⁺**, which enables the supply of fresh air into dry rooms through window vents and the mechanical extraction of polluted air through the Healthbox® 3.0.

The advantages of the energy-efficient ventilation concept C⁺ are numerous. It is the healthiest choice because **fresh air is supplied** directly through (window) vents. Since there are no filters, the system is also very easy to maintain.

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

Based on the measured indoor air quality, the integrated demand controlled ventilation control in the **Healthbox 3.0** intelligently adjusts the ventilation level in **each room** automatically (24/7). This ensures optimal comfort and maximum energy saving.

Healthbox® 3.0

The Healthbox® 3.0 measures the air quality in each room 24/7 and makes adjustments where necessary

Invisivent®

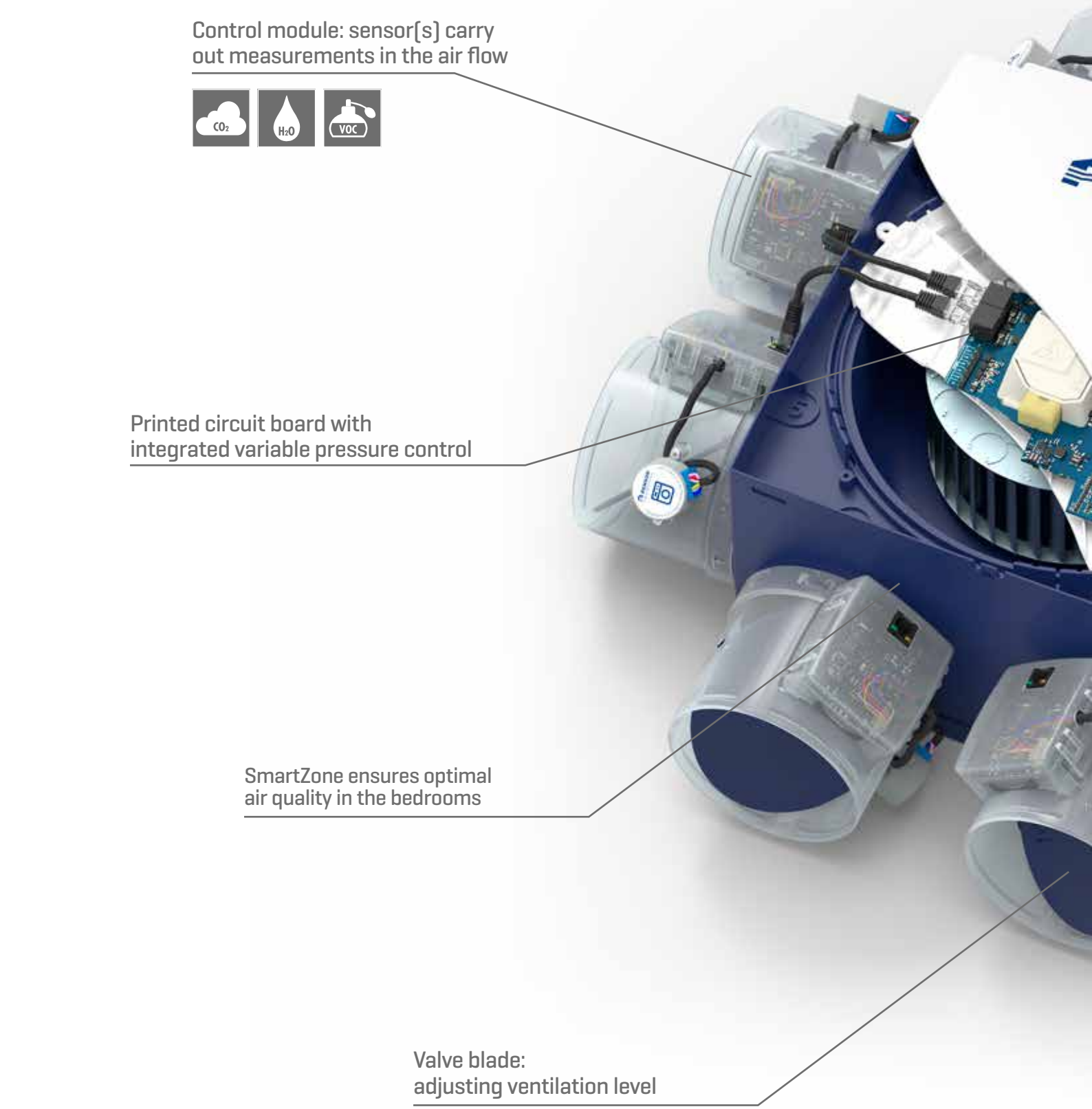
Natural supply of fresh air without draughts

BREEZE FUNCTION

The Breeze function helps lower the risk of overheating. During the summer months, if it is too hot indoors while it is cooler outside, the Breeze function temporarily switches off the demand controlled ventilation control in order for the ventilation system to use 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, the Healthbox 3.0 **performs impressively**. Both the energy-efficient EC fan with a large impeller and its high-tech active variable pressure control lay the foundation 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.



SIMPLY THE QUIETEST!

32 dB(A)*

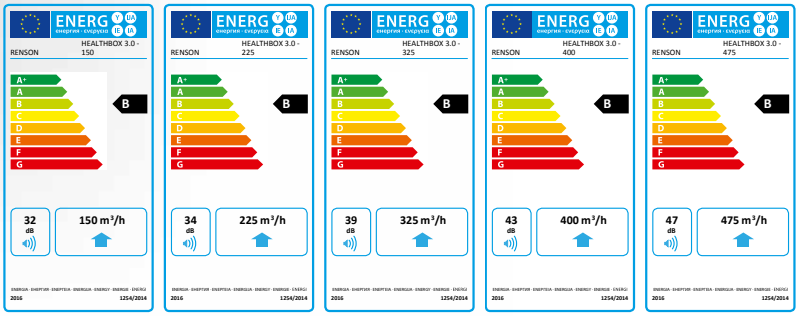
* Reference point Healthbox 3.0 - 150 in accordance with Ecodesign

Energy-efficient EC fan (ø180 impeller)

Elegant design

Low maintenance

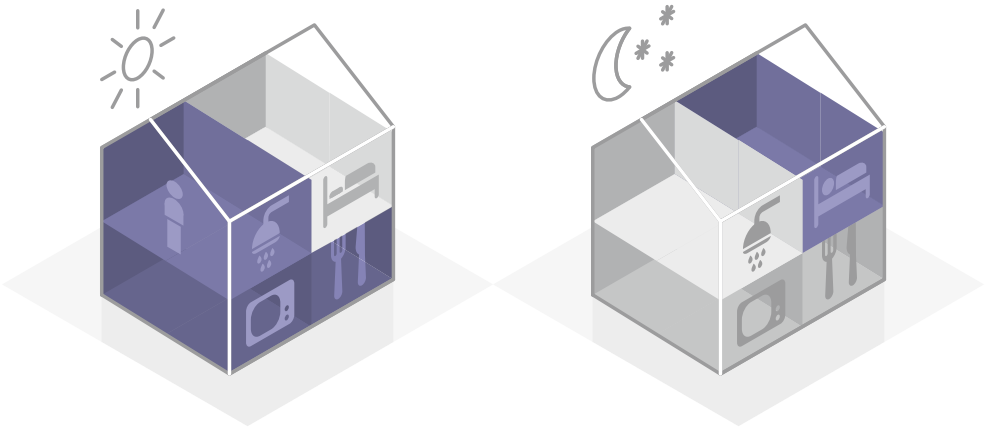
Smart home ready with 'SmartConnect'



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 CO_2 concentration guarantees a healthy night's sleep.



During the day, ventilation takes place mainly in the wet rooms

At night, ventilation takes place mainly in the bedrooms

The combination of the 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.

A CLEAR VIEW ON AIR QUALITY

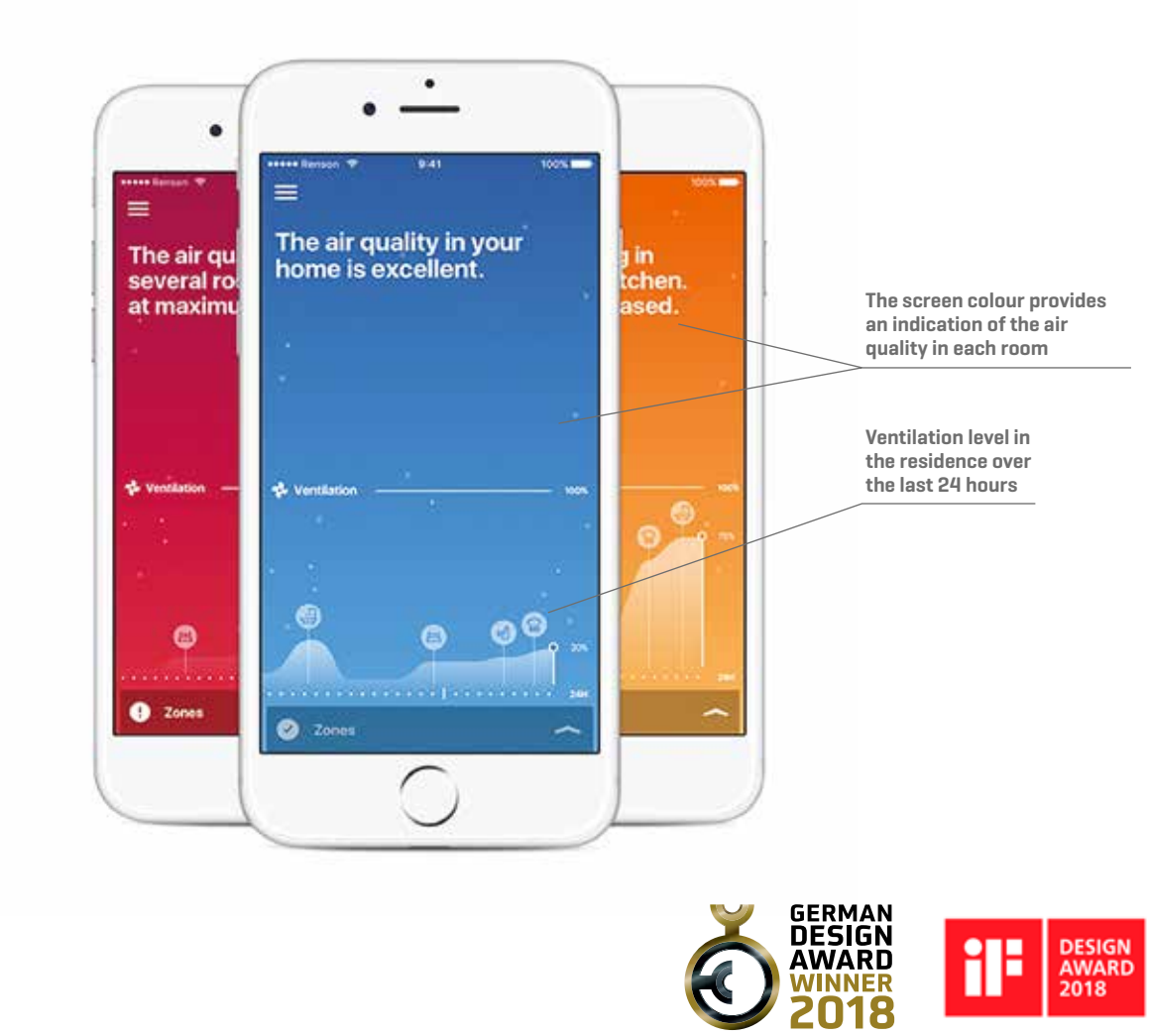
SMARTCONNECT TO THE DIGITAL WORLD SAFELY

The integrated SmartConnect establishes the link between the Healthbox 3.0 and the digital world. This way, the Healthbox 3.0 can interact with the user (through the app) and with other smart devices in the Smarthome (in order to experience increased overall comfort). Your internet connection keeps the Healthbox 3.0 automatically up to date about new features.

THE HEALTHBOX® 3.0 APP

With the free Healthbox 3.0 app*, the user gains insight into air quality and ventilation levels in the residence. Moreover, the user can, as desired, adjust the ventilation level of each room in the residence by using various profiles and by intervening manually.

Healthbox 3.0



GERMAN DESIGN AWARD WINNER 2018

DESIGN AWARD 2018

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

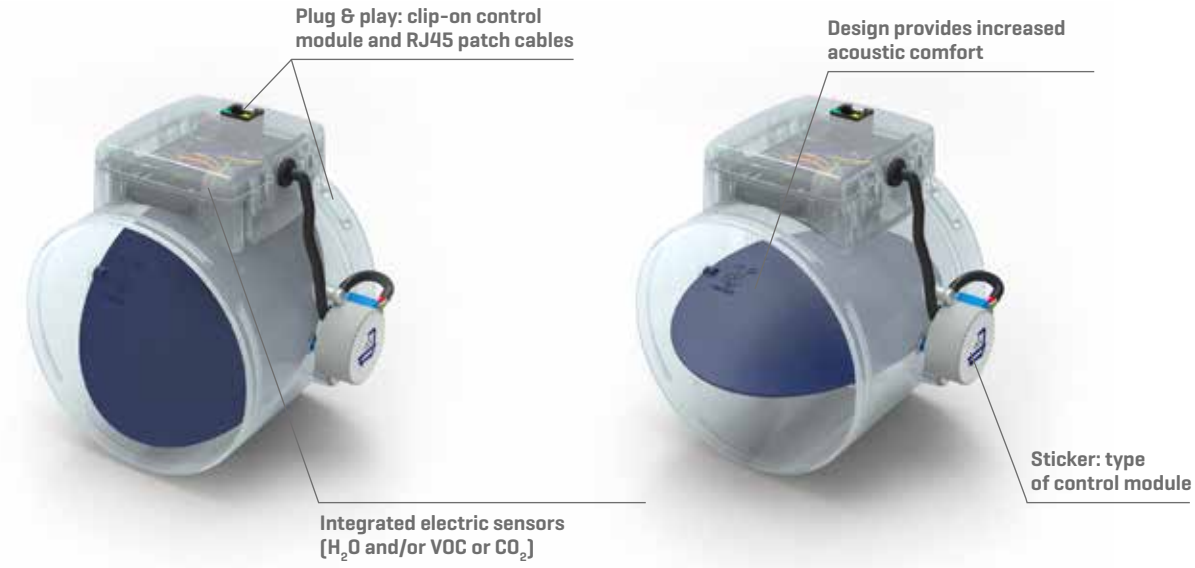
** The app is fully in line with the European regulations on data protection (GDPR).*

MOVING TOWARDS MORE INSTALLATION COMFORT

The latest technology has been used in the development of the Healthbox 3.0 in order to facilitate installation comfort and to engage with the world of digitalisation. Discover how the latest Healthbox 3.0 technologies can speed up and **make the installation of our ventilation system more practical** for you, the installer.

CONTROL MODULE: REGULATOR OF THE DEMAND CONTROLLED SYSTEM

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



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

Type of control module	Type of room to be connected	Detection
	Laundry room *Shower room, bathroom (without toilet)*	H_2O
	Bathroom (with toilet) *Wellness room, garage, cellar*	H_2O, VOC
	Toilet *Storage room/utility room, workshop, dressing, hall/corridor*	VOC
	Kitchen (open/closed)	CO_2
	Bedroom *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*	CO_2

Your installation comfort:

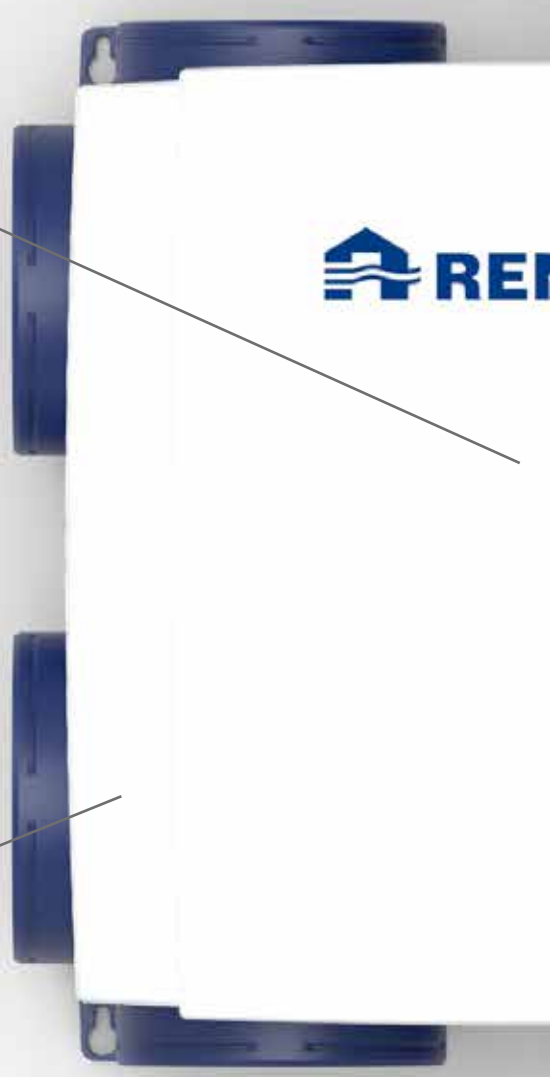
- ☑ Simple: 5 types of control modules allow for all possible configurations
- ☑ Connect air ducts of ø80 or ø125 to the adapter included
- ☑ The (nominal) extraction flow rate per control module can be set via the installation app

FAN UNIT

THE SILENT BEATING HEART

The Healthbox 3.0 fan unit comes in 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 installation comfort:

- ☑ 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 ø125 or ø150 using an eccentric adapter, ø160 using optional vibration-damping connection

SmartConnect: connection with the app and the network

Height: only 20 cm

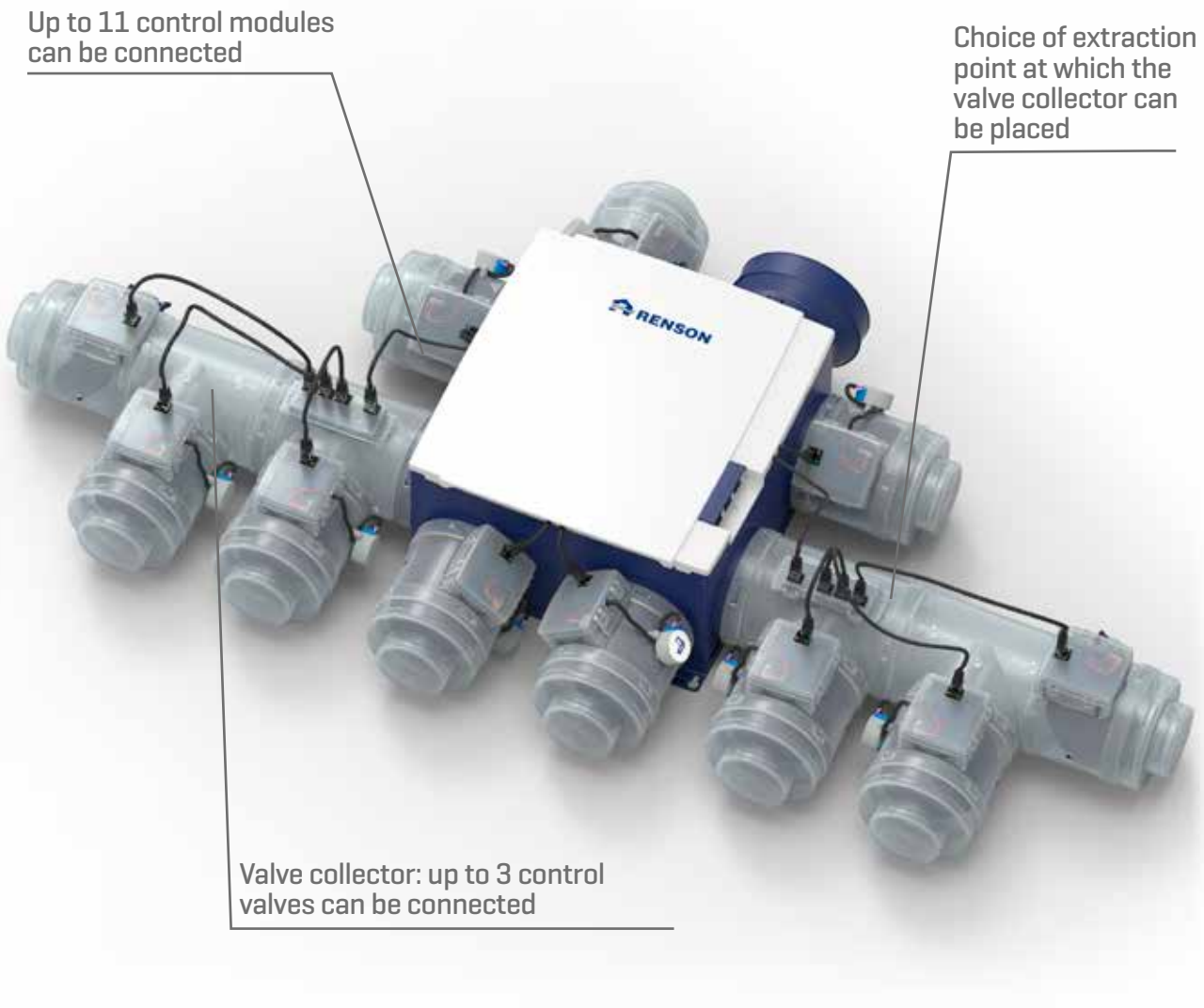
VALVE COLLECTOR

UNIQUE

SMART WAY OF DEALING WITH AIR DUCTS IN SMALL SPACES

The Healthbox 3.0 can be equipped with 1 to 2 valve collectors. 1 to 3 control modules can be connected to each valve collector. This implies that up to 11 control modules can be connected to the Healthbox 3.0.

CONFIGURATION EXAMPLE



Your installation comfort:

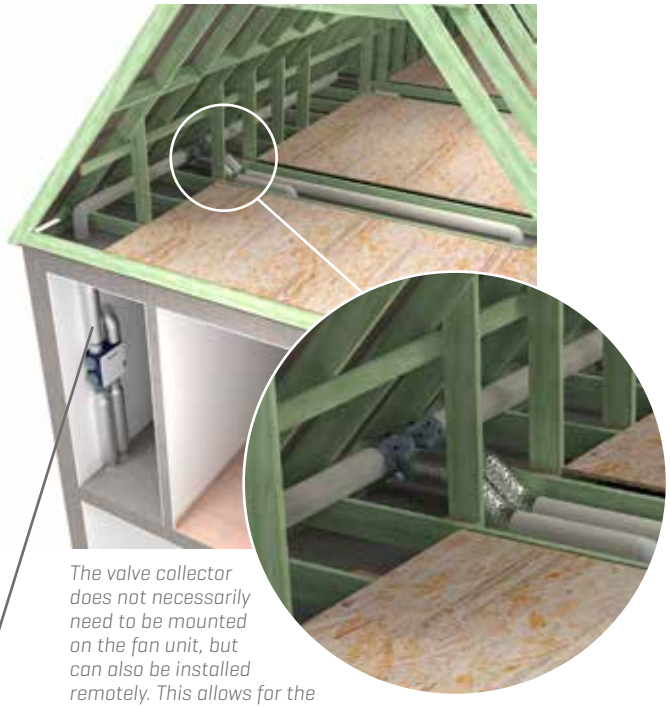
- ☑ Installing air ducts can be much simpler and visually more attractive
- ☑ Less space necessary for the air ducts
- ☑ Lower pressure drop in the air duct network

SOME PRACTICAL EXAMPLES

Multiple air ducts downwards

4 air ducts within a 90 cm width (cf. toilet void)

Concealing air ducts neatly in triangular void

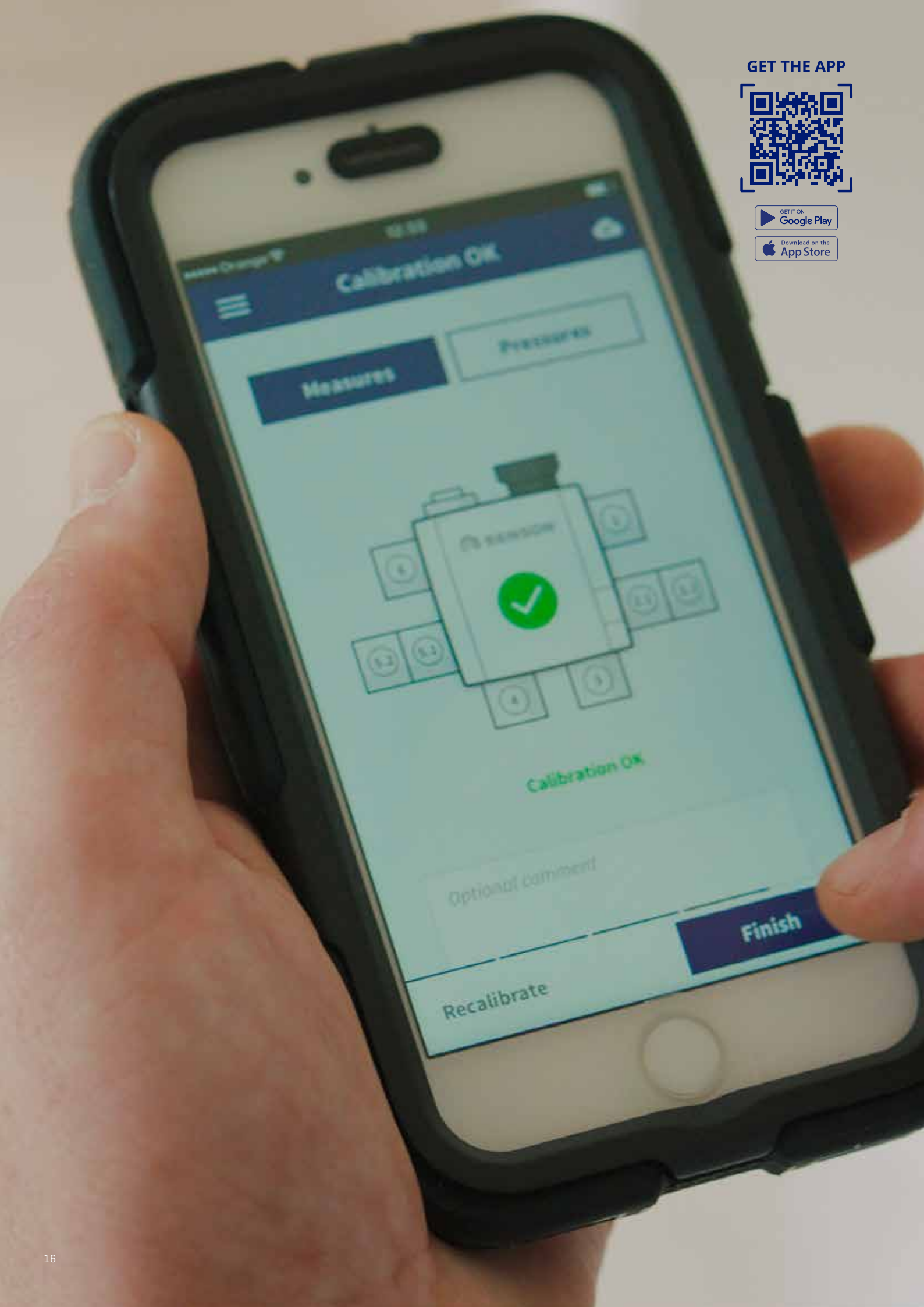


The valve collector does not necessarily need to be mounted on the fan unit, but can also be installed remotely. This allows for the same result to be achieved with fewer air ducts.

Only 1 air duct

Your installation comfort:

☑ Creating a system with fewer air ducts


GET THE APP
GET IT ON Google Play
Download on the App Store
Calibration OK
Measures
Calibration OK
Optional comment
Finish
Recalibrate

INSTALLATION APP

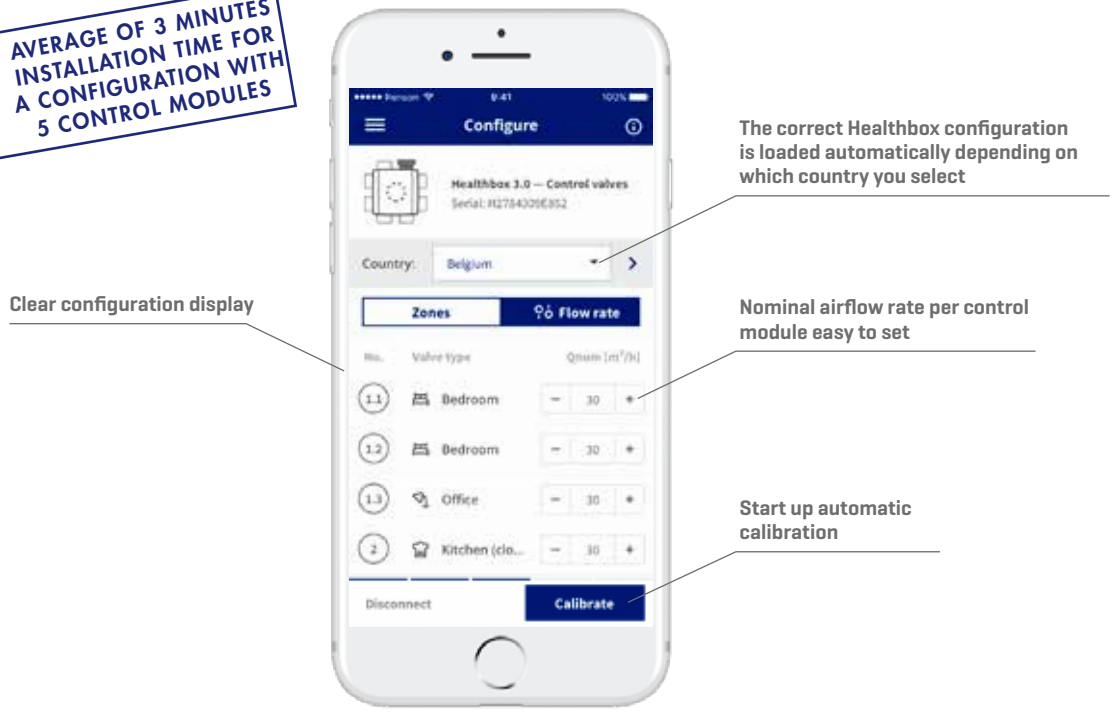
FOR A HIGH-QUALITY AND FAST INSTALLATION

Thanks to the Healthbox 3.0 automatic calibration, manual calibration of the ventilation system belongs to the past.

Healthbox 3.0 setup

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

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



Automatic calibration can be started as soon as the Healtbox 3.0 has been set up. 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 proposed solutions.

Automatic calibration of the airflow rates:

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

Pressure drops in the system can be consulted 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 consulted on the Renson® Lio web portal.

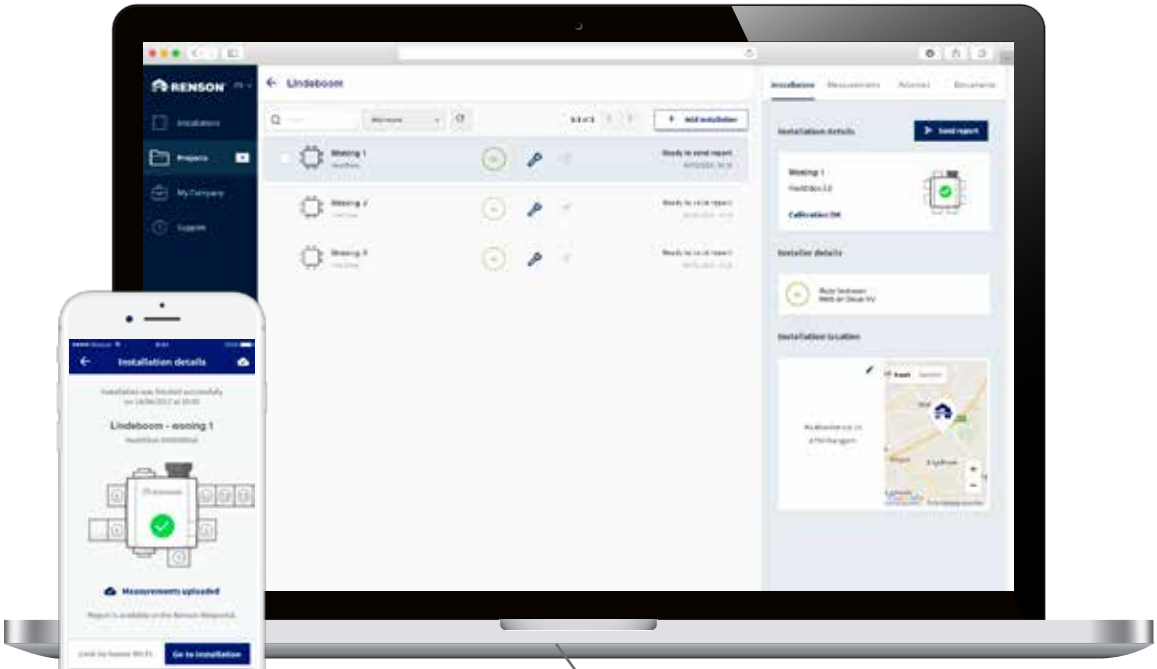
Your installation comfort:

- ☑ Fast installation
- ☑ 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 module

LIO WEBPORTAL

Digitisation of paperwork

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



www.my-lio.eu

On site

Starting up the Healthbox 3.0

At the office

Creating and managing Healthbox 3.0 installations

Your installation comfort:

- ☑ 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	– 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 modules	 567 x 567 x 200mm (LxWxH)
	Duration automatic calibration *(patented)*	Configuration of 2 to 5 control modules: up to ± 3 minutes Configuration of 6 to 8 control modules: up to ± 5 minutes Configuration of 9 to 11 control modules: up to ± 7 minutes
	Maximum number of connection points for extraction: – Basic form – Using valve collectors	 7 11 *(subject to a few limiting conditions)*
	Valve collector	1 or 2 valve collectors to be connected to the fan unit, with 1 to 3 control modules 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	– 1x Ethernet connection – 2x USB connection (USB dongle for Wi-Fi connection included) – Inputs: 3x DIGITAL, 1x ANALOGUE (0-10 V)
	Air quality detection (CO_2 or humidity and/or VOC)	Through electronic sensors in control modules. The sensors measure indoor air quality 24/7 in the extraction air for each room.
	Automatic control of extraction airflow rate for each room	The stepper motor positions the control valve blade based on measured sensor values. This way, the extraction flow rate is controlled consistently with the air quality.
	User & installer app	Can be downloaded free of charge from Play Store (Android) and App Store (Apple)
	Automatic fault indication	– Via user app – Via installer app and Renson Lio web portal (installer): error indication reported during start-up phase
	Automatic software updates	If the Healthbox 3.0 is connected to the internet
	Integration into smart home & domotics	– Smart home: to integrate in the systems of our partners through 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 exhaust	Suitable feed-through fittings with low pressure drop

TOGETHER WE AIM FOR HAPPY CUSTOMERS

Do you have a specific project in the pipeline? Together we can work out a tailor-made solution. We can also help you with questions about the installation of our products. A team of technically trained employees is always ready to answer all your questions.

The proper functioning of our products largely depends on their correct installation and calibration by the installer. That is why we support you with a thorough technical training. Our experienced trainers will show you the ropes and explain to you how to properly install everything. This is the only way we can ensure 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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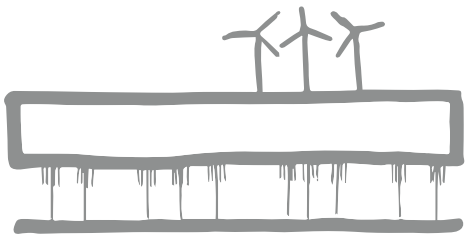

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