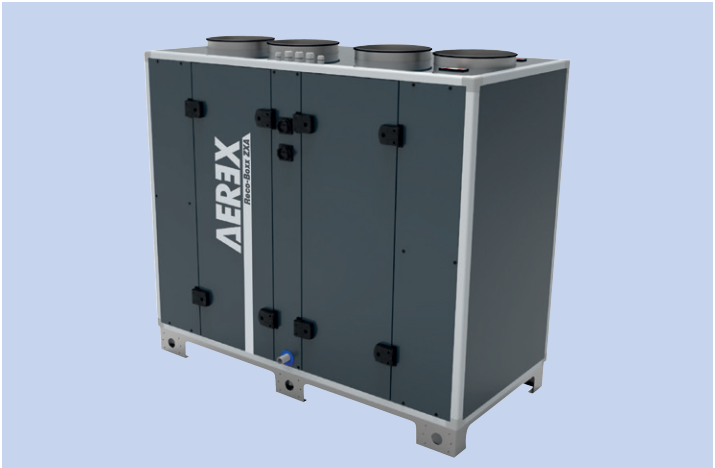
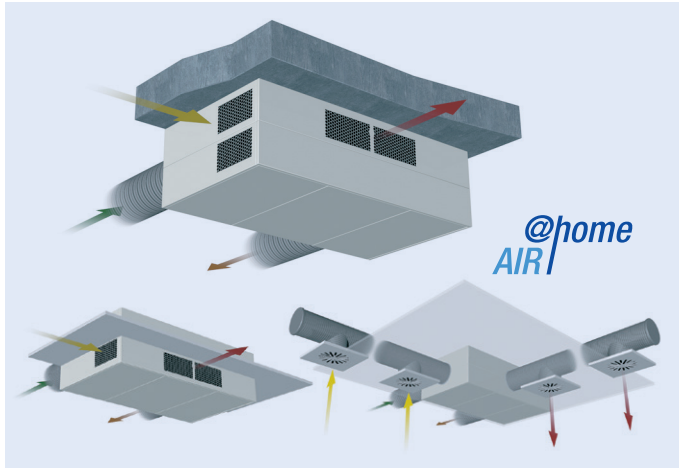
AEREX
HAUSTECHNIKSYSTEME





Comfortable climate

with heat recovery

Intelligent ventilation systems

Decentralised ventilation solutions
with heat and humidity recovery up to 900 m³/h
for schools, nurseries and offices

Central ventilation solutions
with heat recovery up to 7000 m³/h
for residential and business properties,
industrial and sports halls

www.aerex.de

Table of contents

geniovent.x

Made in Germany

Series of units in 3 different basic configurations:

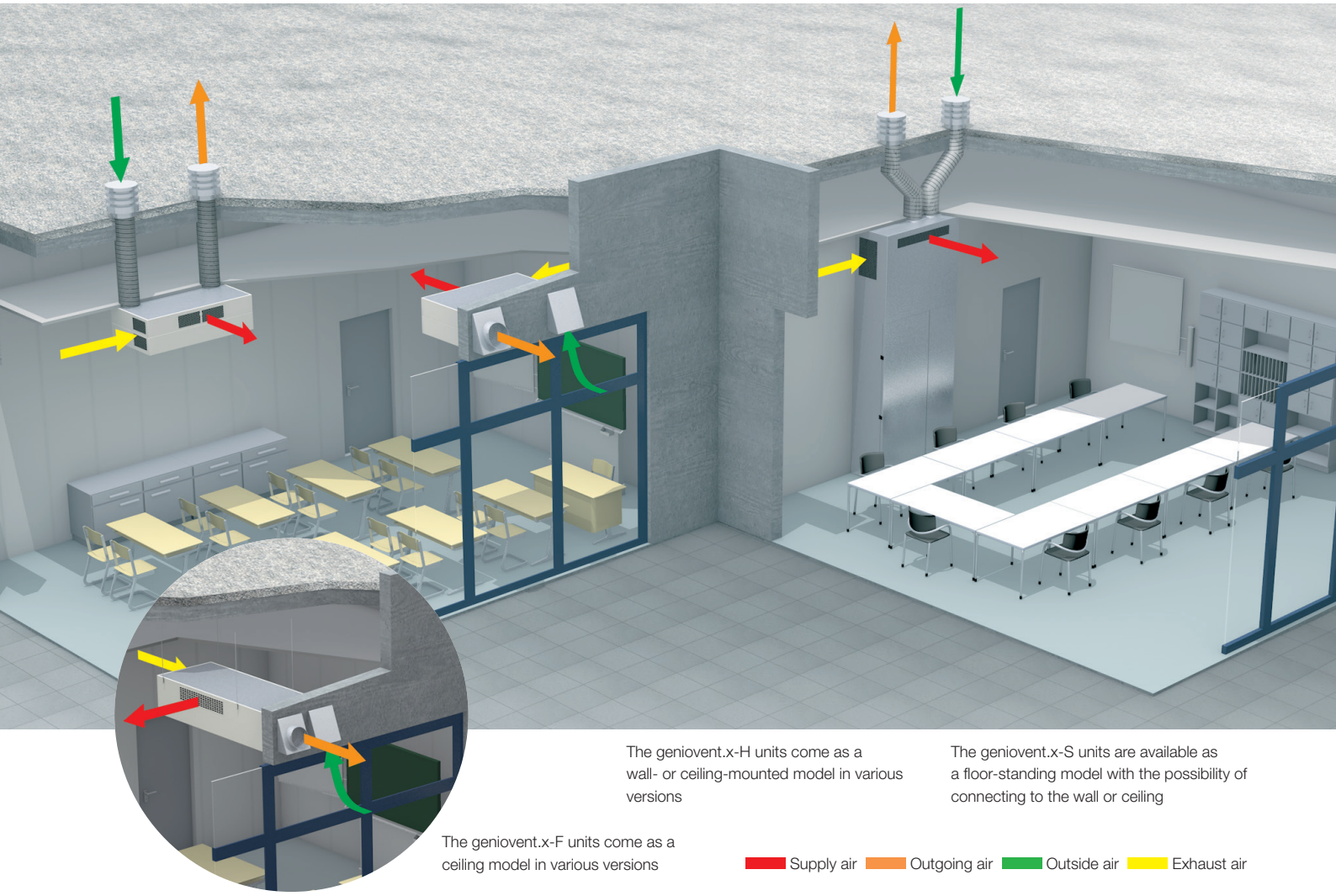
- **genio**vent**.x-H**
- **genio**vent**.x-F**
- **genio**vent**.x-S**

2 performance levels / sizes: **600 m³/h** and **900 m³/h**

For classrooms, offices and conference room

- ErP-compliant
- Very quiet operation
- Highly efficient EC fans
- Cross-counterflow heat exchanger with degree of heat provision of up to 95 %
- Optional: Heat- and humidity-transferring enthalpy heat exchanger; no transfer of viruses; no condensate drain needed
- Demand-driven operation by means of integrated CO_2 and/or VOC sensor
- Integrated automatic bypass for free cooling
- Automatically closing outside and outgoing air shutter
- Optimised air@home control with
  - automatic night-time cooling function
  - flush mode
  - fume hood operation
  - holiday program
  - comfortable supply air temperature control
  - option of activation via motion detector and selectable overrun time
  - integrated web server for mobile control via app and unit management using web tool

air@home Modbus® KNX enocean



The geniovent.x-H units come as a wall- or ceiling-mounted model in various versions

The geniovent.x-S units are available as a floor-standing model with the possibility of connecting to the wall or ceiling

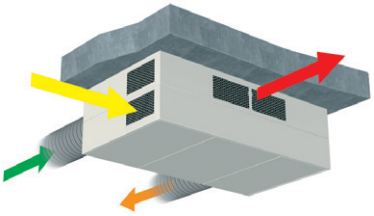
The geniovent.x-F units come as a ceiling model in various versions

Supply air | Outgoing air | Outside air | Exhaust air

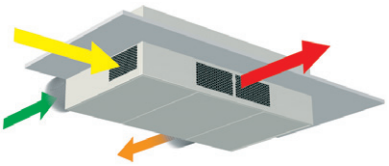
geniovent.x-H

Ceiling-mounted ventilation systems

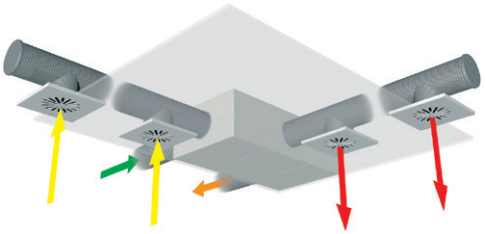
geniovent.x 600/900 H W: Outside and outgoing air connections on the rear



Installed below the ceiling

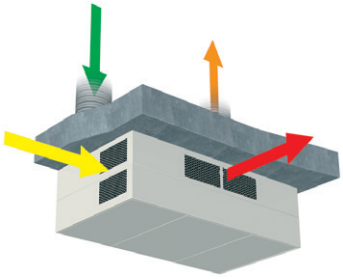


Installed partly integrated in the intermediate ceiling

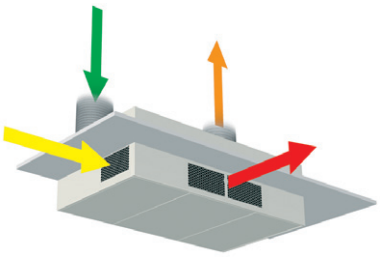


Installed fully integrated in the intermediate ceiling, supply / exhaust air via ducts

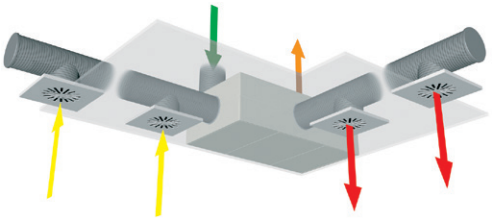
geniovent.x 600/900 H D: Outside and outgoing air connections on the top



Installed below the ceiling



Installed partly integrated in the intermediate ceiling

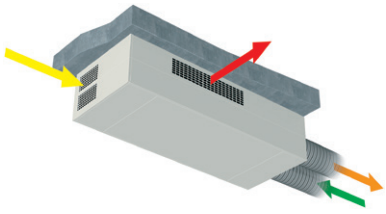


Installed fully integrated in the intermediate ceiling, supply / exhaust air via ducts

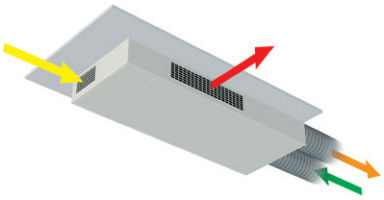
geniovent.x-F

Ceiling-mounted ventilation systems

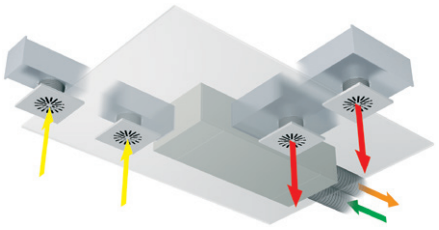
geniovent.x 600/900 F right-hand version: outside and outgoing air connections on the right-hand unit face end



Installed below the ceiling

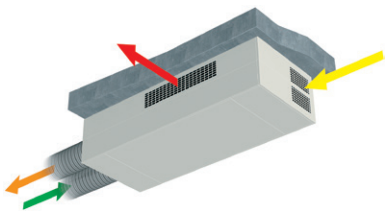


Installed partly integrated in the intermediate ceiling

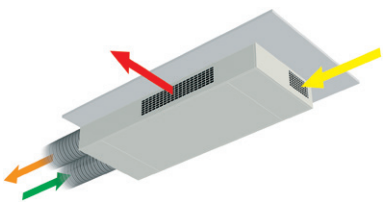


Installed fully integrated in the intermediate ceiling, supply / exhaust air via ducts

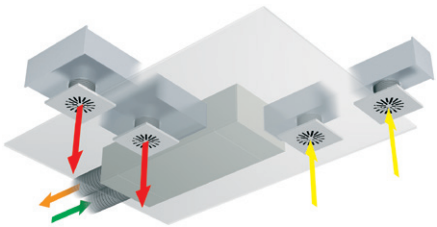
geniovent.x 600/900 F left-hand version: outside and outgoing air connections on the left-hand unit face end



Installed below the ceiling

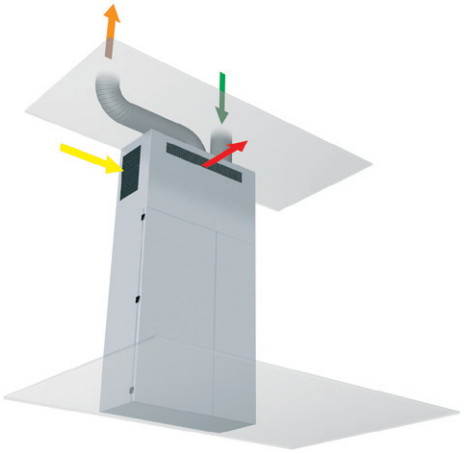


Installed partly integrated in the intermediate ceiling

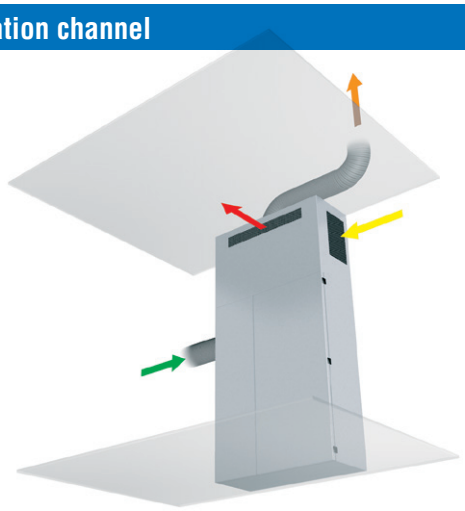


Installed fully integrated in the intermediate ceiling, supply / exhaust air via ducts

geniovent.x 600/900 S – with top box – ventilation without ventilation channel



Variant 1, right-hand version (outside air on right)



Variant 2, left-hand version (outside air on left)

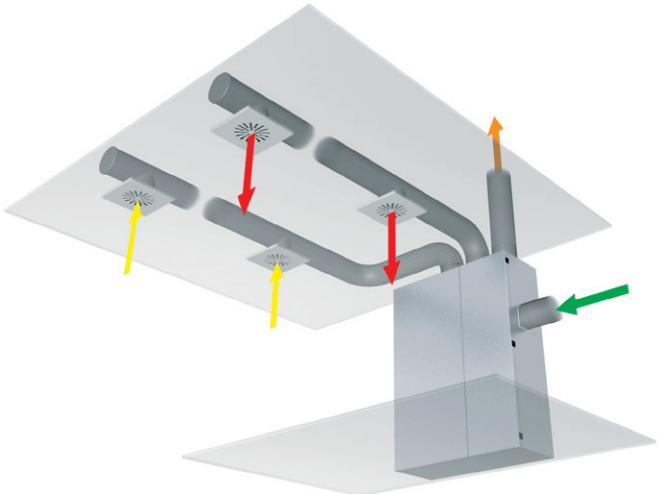
All geniovent.x-S floor-standing ventilation systems can have the top box module added and can therefore be adapted to room height.

Variant 1: Outside and outgoing air connections on the top of the top box. Supply and/or exhaust air grille with adjustable lamella at front / side on top box.

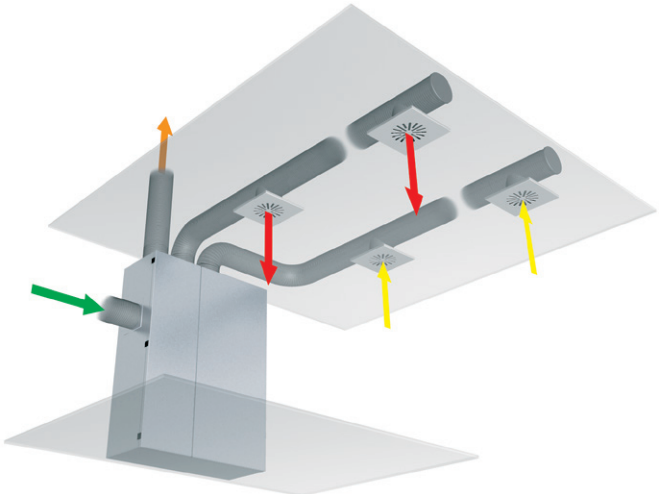
Variant 2: Outside air connection on side of ventilation unit. Outgoing air connection on top of top box. Supply and/or exhaust air grille with adjustable lamella at front / side on top box.

Variant 3 – special solution: Outside and outgoing air connections like variant 1 or 2. Supply air or exhaust air can also be led via a ventilation channel as an option.

geniovent.x 600/900 S – with ventilation channel



Right-hand version (outside air on right)



Left-hand version (outside air on left)

Variable arrangement of connections on room and outside air sides.

Variant 1: Outgoing air, supply and exhaust air are on the top. Outside air, at the side, either passing to external wall on left-/right unit side.

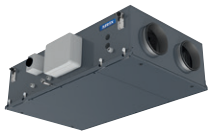
Variant 2: All four connections on the top. The outside air connection is either positioned on the ceiling to the left or right.

RECO-BOXX

Central compact ventilation systems with heat recovery

Heat recovery unit	Volumetric flow [m³/h]	Pressure reserve [Pa]	Dimensions (W x H x D) [mm]	Channel connection [mm]	Automatic bypass shutter	Pre-/ supple-mentary heating can be integrated	External, optional heating and/or cooling register can be controlled
Reco-Boxx 750 ZXR	200–800	800–190	1680 x 1465 x 610	DN 315	0–100% modulating	YES	YES
Reco-Boxx 1000 ZXR	200–1050	800–390	1680 x 1465 x 610	DN 315	0–100% modulating	YES	YES
Reco-Boxx 1300 ZXR	200–1380	830–420	1680 x 1465 x 815	DN 400	0–100% modulating	YES	YES
Reco-Boxx 1600 ZXR	200–1680	830–210	1680 x 1465 x 815	DN 400	0–100% modulating	YES	YES
Reco-Boxx 1800 ZXR	250–1860	690–200	1680 x 1465 x 995	DN 400	0–100% modulating	YES	YES
Reco-Boxx 2300 ZXR	400–2300	800–420	1680 x 1465 x 1182	1060 x 540	0–100% modulating	YES	YES
Reco-Boxx 2700 ZXR	400–2800	800–240	1680 x 1465 x 1182	1060 x 540	0–100% modulating	YES	YES
Reco-Boxx 2900 ZXR	300–3000	800–230	1680 x 1465 x 1382	1265 x 540	0–100% modulating	YES	YES
Reco-Boxx 3200 ZXR	300–3230	770–200	1680 x 1465 x 1640	1520 x 540	0–100% modulating	YES	YES
Reco-Boxx 4200 ZXR	300–4200	901–290	1880 x 1465 x 2015	1895 x 540	0–100% modulating	YES	YES
Reco-Boxx 4700 ZXR	600–4700	1000–210	2557 x 1825 x 1640	1520 x 670	0–100% modulating	YES	YES
Reco-Boxx 6200 ZXR	600–6260	890–300	2557 x 1825 x 2015	1895 x 670	0–100% modulating	YES	YES
Reco-Boxx 7000 ZXR	600–7000	880–220	2557 x 1825 x 2396	2275 x 670	0–100% modulating	YES	YES

Heat recovery unit	Volumetric flow [m³/h]	Pressure reserve [Pa]	Dimensions (W x H x D) [mm]	Channel connection [mm]	Automatic bypass shutter	Pre-/ supple-mentary heating can be integrated	External, optional heating and/or cooling register can be controlled
Reco-Boxx 900 ZXA	200–940	380–790	1680 x 1465 x 610	DN 250	0–100% modulating	YES	YES
Reco-Boxx 1500 ZXA	200–1500	300–840	1680 x 1465 x 815	DN 315	0–100% modulating	YES	YES
Reco-Boxx 1900 ZXA	300–1900	300–810	1960 x 1725 x 815	DN 315	0–100% modulating	YES	YES
Reco-Boxx 2500 ZXA	300–2550	280–800	1960 x 1725 x 995	500 x 300	0–100% modulating	YES	YES
Reco-Boxx 2800 ZXA	300–2850	250–850	1960 x 1725 x 1182	600 x 300	0–100% modulating	YES	YES
Reco-Boxx 3700 ZXA	400–3700	360–980	1960 x 1725 x 1382	800 x 300	0–100% modulating	YES	YES



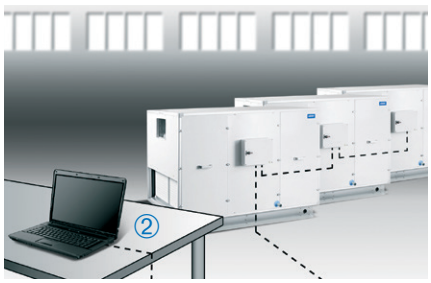
Heat recovery unit	Volumetric flow [m³/h]	Pressure reserve [Pa]	Dimensions (W x H x D) [mm]	Channel connection [mm]	Automatic bypass shutter	Pre-/ supple-mentary heating can be integrated	External, optional heating and/or cooling register can be controlled
Reco-Boxx 550 Flat-H	100–550	1010–210	1300 x 350 x 890	DN 200	0–100% modulating	YES	YES
Reco-Boxx 650 Flat-H	100–650	1020–180	1300 x 350 x 1100	DN 250	0–100% modulating	YES	YES
Reco-Boxx 1000 Flat-H	200–1000	800–460	2100 x 435 x 1050	DN 315	0–100% modulating	YES	YES
Reco-Boxx 1400 Flat-H	400–1400	760–320	2100 x 435 x 1300	DN 315	0–100% modulating	YES	YES
Reco-Boxx 1700 Flat-H	400–1800	610–220	2100 x 435 x 1600	Socket on suction side (outs./exh. air): 800 x 300 Socket on pressure side (outg./sup. air): 400 x 300	0–100% modulating	YES	YES
Reco-Boxx 2100 Flat-H	400–2200	610–180	2250 x 510 x 1700	Socket on suction side (outs./exh. air): 800 x 400 Socket on pressure side (outg./sup. air): 500 x 400	0–100% modulating	YES	YES
Reco-Boxx 2500 Flat-H	400–2550	810–270	2250 x 510 x 1700	Socket on suction side (outs./exh. air): 800 x 400 Socket on pressure side (outg./sup. air): 500 x 400	0–100% modulating	YES	YES
Reco-Boxx 2700 Flat-H	400–2850	810–200	2250 x 510 x 1940	Socket on suction side (outs./exh. air): 1000 x 400 Socket on pressure side (outg./sup. air): 500 x 400	0–100% modulating	YES	YES
Reco-Boxx 3300 Flat-H	400–3300	770–230	2800 x 660 x 1935	Socket on suction side (outs./exh. air): 700 x 500 Socket on pressure side (outg./sup. air): 700 x 500	0–100% modulating	YES	YES
Reco-Boxx 3700 Flat-H	400–3700	1020–360	2800 x 660 x 1935	Socket on suction side (outs./exh. air): 700 x 500 Socket on pressure side (outg./sup. air): 700 x 500	0–100% modulating	YES	YES

RECO-BOXX

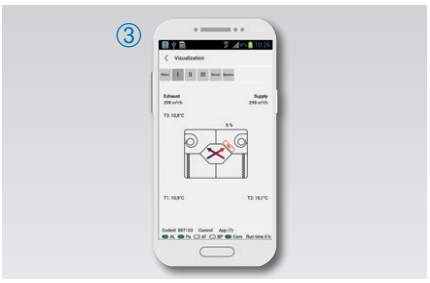
Central compact ventilation systems with heat recovery

Control options

① Stand-alone operation via touch panel



② Network solution via building control technology (MODBUS, BACnet, KNX)



③ PC and APP control via LAN network

■ TP-Touch touch panel

■ SAT KNX interface

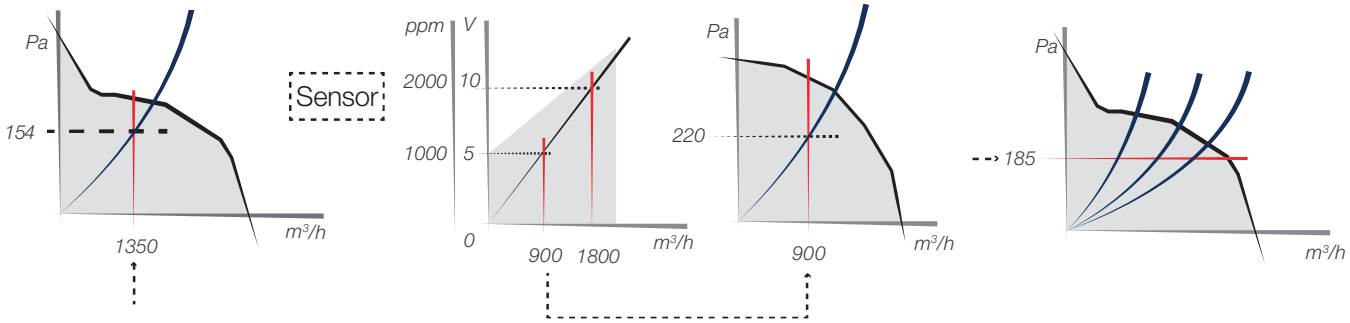
■ SAT MODBUS interface

■ SAT Ethernet interface

■ BACnet gateway

■ SAT WiFi interface

The 3 main operating modes



Mode for constant volumetric air flow.
The volumetric air flow is kept constant regardless of external changes in pressure.

Mode for demand-driven control
Linear voltage / volumetric air flow ratio.
The volumetric air flow can be controlled using, e.g., a CO_2 sensor by means of a 0–10 V signal.

Mode for constant pressure.
The pressure is kept constant regardless of external changes in pressure. An external DDT 500 pressure sensor is needed.

System accessories

Volumetric flow controller and room controls (VAV control)

AX-VSR variable volumetric flow controller (VAV)

Round, variable volumetric flow controller (VAV) with electronic controller and integrated pressure difference sensor.

Technical features

- Drive: Belimo LMV-D3-MP with NFC interface
- Extremely low upstream pressure of just 5 Pa needed
- Very accurate digital presetting
- Rated voltage: 24 V DC
- Imax: 83 mA
- Regulated voltage: 0–10 V DC
- Length: 400 mm

Type	Article no.	Setting range m³/h	Max. recommended air volume m³/h	Nominal size
AX-VSR-100	**0044.0351**	46– 231	50– 160	100
AX-VSR-125	**0044.0352**	78– 392	80– 250	125
AX-VSR-160	**0044.0353**	138– 688	140– 420	160
AX-VSR-200	**0044.0354**	225–1125	225– 660	200
AX-VSR-250	**0044.0355**	365–1822	365–1040	250
AX-VSR-315	**0044.0356**	595–2976	595–1650	315

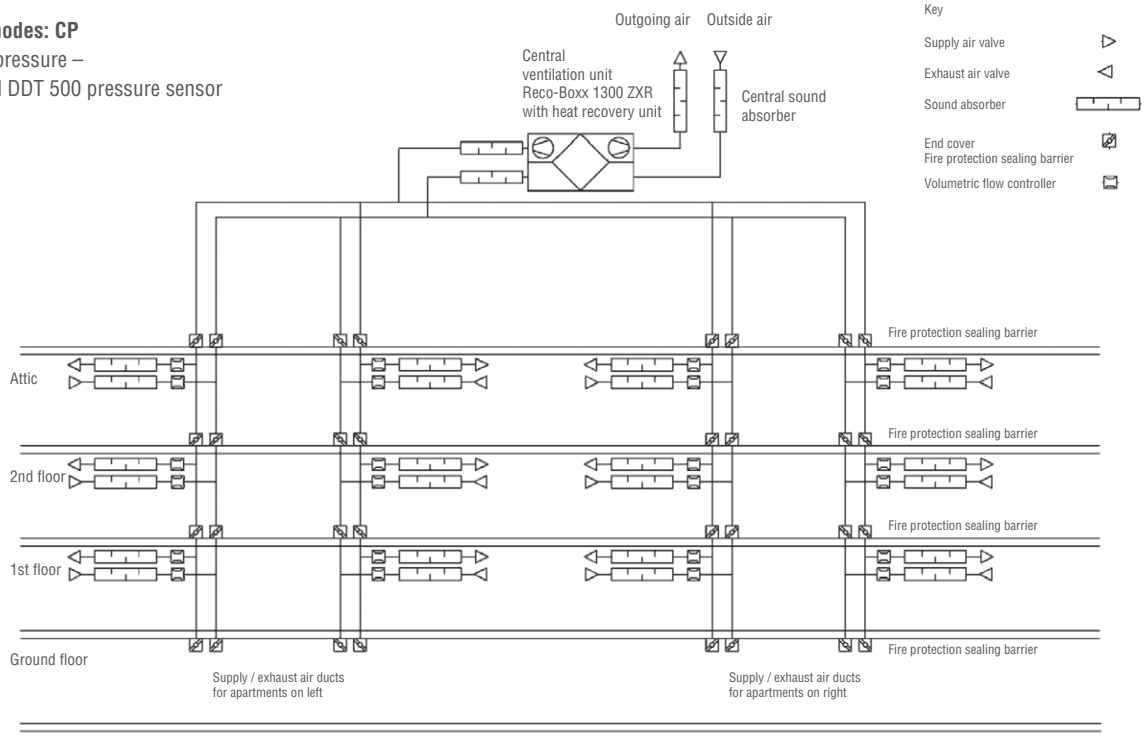
AX-CRA24-B1P 3-level switch for ventilation control

3 levels can be easily and reliably switched using the pushbuttons on the front.

- COMF (nominal ventilation)
- MIN (reduced ventilation)
- MAX (intensive ventilation)

Diagrams for 12 residential units with VAV control

Operating modes: CP
– Constant pressure –
with external DDT 500 pressure sensor



System accessories

Sensors / field units / ventilation control for smoke switch systems

CO_2 sensors

Article	Article no.
CFW CO_2 and humidity sensor	0043.0306

Power supply: 24 V AC/DC
CO_2 measurement range: 0–2000 ppm
Humidity measurement range: 0–100 %

Article	Article no.
CSK ducted CO_2 sensor	0043.0307

Power supply: 24 V AC/DC
CO_2 measurement range: 0–2000 ppm

Article	Article no.
CSI integrated CO_2 sensor	0043.0312

Power supply: 24 V AC/DC
CO_2 measurement range: 0–2000 ppm

Humidity sensors

Article	Article no.
RFS-W humidity sensor	0043.0716
RFS-E stainless steel humidity sensor	0043.0718

Power supply: 24 V AC/DC
Humidity measurement range: 0–100 %

Article	Article no.
FSK ducted humidity sensor	0043.0308

Power supply: 24 V AC/DC
Humidity measurement range: 0–100 %

Diode circuit

Article	Article no.
DIOS diode circuit	0041.0147

The DIOS diode circuit allows a maximum of 6 sensors with a 0–10 V signal to be connected to a ventilation unit.

Frost protection monitor

Article	Capillary tube length	Article no.
QAF3 frost protection monitor	3 m	0043.0719
QAF6 frost protection monitor	6 m	0043.0720

Power supply: potential-free

Ventilation smoke switch

Article	Article no.
AX-ORS144K-A optical smoke switch	0043.0310

For installation in the ventilation unit
Power supply: 24 V AC/DC

Article	Article no.
AX-LRS-01 ventilation smoke switch	0043.0311
AX-LRS-03 ventilation smoke switch	0043.0500

For installation in the air duct
Power supply: 24 V AC/DC

Article	Article no.
LRZ Base AX-LRZ-01	0043.0332

Central ventilation control for smoke switch
Power supply: 230 V AC

System accessories

Swirl diffusers and plenum boxes with flat shape

WP101S plenum box

- Extremely low installation height
- 2 Round pipe connections with double lip seal, each with a separately adjustable throttle shutter
- Air diffuser for an optimal flow pattern
- Centre hole for securing the swirl diffusers
- VDI 6022-compliant
- Number of channel connections: 2
- Max. installation height: 213 mm / 248 mm

Article	Article no.	DN	Width x height x depth mm
WP101S-125-394	**0044.0363**	2x DN125	355 x 213 x 355
WP101S-160-619	**0044.0368**	2x DN160	555 x 248 x 555

WS 400 swirl diffuser

- Colour: white, similar to RAL 9010

Article	Article no.	Min. recommended air volume m³/h	Max. recommended air volume m³/h	Pressure loss min.–max.	Width x height x depth mm
WS400-394	**0044.0366**	220	330	12 Pa–20 Pa	394 x 11 x 394
WS400-619	**0044.0371**	410	610	9 Pa–20 Pa	619 x 11 x 619

WT 100 swirl diffuser

- Colour: white, similar to RAL 9010
- Colour of air deflection lamella: black

Article	Article no.	Min. recommended air volume m³/h	Max. recommended air volume m³/h	Pressure loss min.–max.	Width x height x depth mm
WT100-394	**0044.0364**	220	320	9 Pa–20 Pa	394 x 11 x 394
WT100-619	**0044.0369**	410	600	16 Pa–35 Pa	619 x 11 x 619

WT 120 swirl diffuser

- Colour: white, similar to RAL 9010
- Colour of air deflection lamella: white

Article	Article no.	Min. recommended air volume m³/h	Max. recommended air volume m³/h	Pressure loss min.–max.	Width x height x depth mm
WT120-394	**0044.0365**	220	320	9 Pa–20 Pa	394 x 11 x 394
WT120-619	**0044.0370**	410	600	16 Pa–35 Pa	619 x 11 x 619

System accessories

Air inlets / outlets optimised in terms of flow /sound

RLV designer comfort valve for supply and exhaust air in DN 125

Since this valve is flow-optimised and offers unique acoustic properties, it is ideal for use in very quiet conditions in apartments, offices and conference rooms.
3 visually appealing front plates made from powder-coated aluminium in pure white – available in S (small-round), L (large-round) and SQ (square) variants.

- Recommended air volume: 20 m³/h – 125 m³/h
- Material of base housing: polypropylene ; front plate: aluminium, powder-coated
- Colour pure white, similar to RAL 9003
- Air direction: Supply air and exhaust air
- Nominal size: 125 mm

Article	Article no.	Nominal size mm	Dimensions of front plate mm
RLV-125 S	**0044.0403**	125	190
RLV-125 L	**0044.0404**	125	230
RLV-125 SQ	**0044.0405**	125	230 x 230

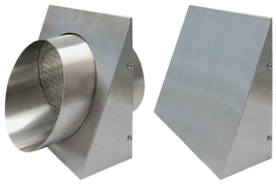
Front plate: **SQ** **S** **L**

WR230T swirl diffuser

Small, effective, round swirl diffuser in DN 125, 200 and 250 with permanently installed air deflection lamella with diffuser ring, complete with connection adaptor with connection at top. Connection adaptor made of galvanised sheet steel.

- Colour: white, similar to RAL 9010
- DSU throttle shutters available separately

Article	Article no.	Min. recommend-ed air volume m³/h	Max. recom-mended air volume m³/h	Connection diameter mm	Edge diameter mm
WR230T-160	**0044.0384**	50	140	125	250
WR230T-250	**0044.0385**	220	310	200	350
WR230T-315	**0044.0386**	320	450	250	450



AW-FL / AW-AL wall connections

The AW-FL (outgoing air) and AW-AL (outside air) wall connections are available in DN 125 to DN 315 and fit perfectly with the geniovent.x units and Reco-Boxx Flat units.
Available in the following colours:

- Brushed stainless steel
- White, similar to RAL 9010
- Special colour following RAL-classic colour system

Material: Stainless steel (V2A)

AEREX
HaustechnikSysteme

AEREX Haustechnik Systeme which was founded in the 1990s, is a subsidiary of MAICO and focuses on projects concerning controlled, energy-optimized domestic ventilation.

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