



inVENTer

## Centra by inVENTer

Flexible ventilation units for school, office and residential units



# School ventilation with Centra



Centra by inVENTer is a powerful and flexible ventilation system that meets the DIN specifications for classroom ventilation. The compact unit is suitable both for new buildings and for retrofitting. In different sizes, the ventilation system is suitable for wall or ceiling mounting and can optionally be placed in an adjoining room. It is controlled via the C6M intelligent control system; the unit can be operated via app, PC or a touch panel.

Aerodynamically coordinated components and balanced EC fans guarantee quiet and efficient ventilation with low power consumption.

The integrated rotary heat exchanger retains most of the heat in the interior.

## The inVENTer solutions



### Centra 1000

- + Decentralised ventilation of larger classrooms:  
One ventilation unit per room
- + Highly efficient rotary heat exchanger
- + Sensor-controlled: CO<sub>2</sub>, temperature and humidity sensor
- + Installation in drywall cabinet or directly in the room possible

MAXIMUM VOLUME FLOW [m <sup>3</sup> /h]	953
HEAT RECOVERY [%]	82
POWER CONSUMPTION [W]	241
SPI [W/m <sup>3</sup> /h]	0,31
SOUND PRESSURE LEVEL [dB(A)]	36
DIMENSIONS OF THE UNIT W×H×D [mm]	1070×950×637
ENERGY EFFICIENCY CLASS	A

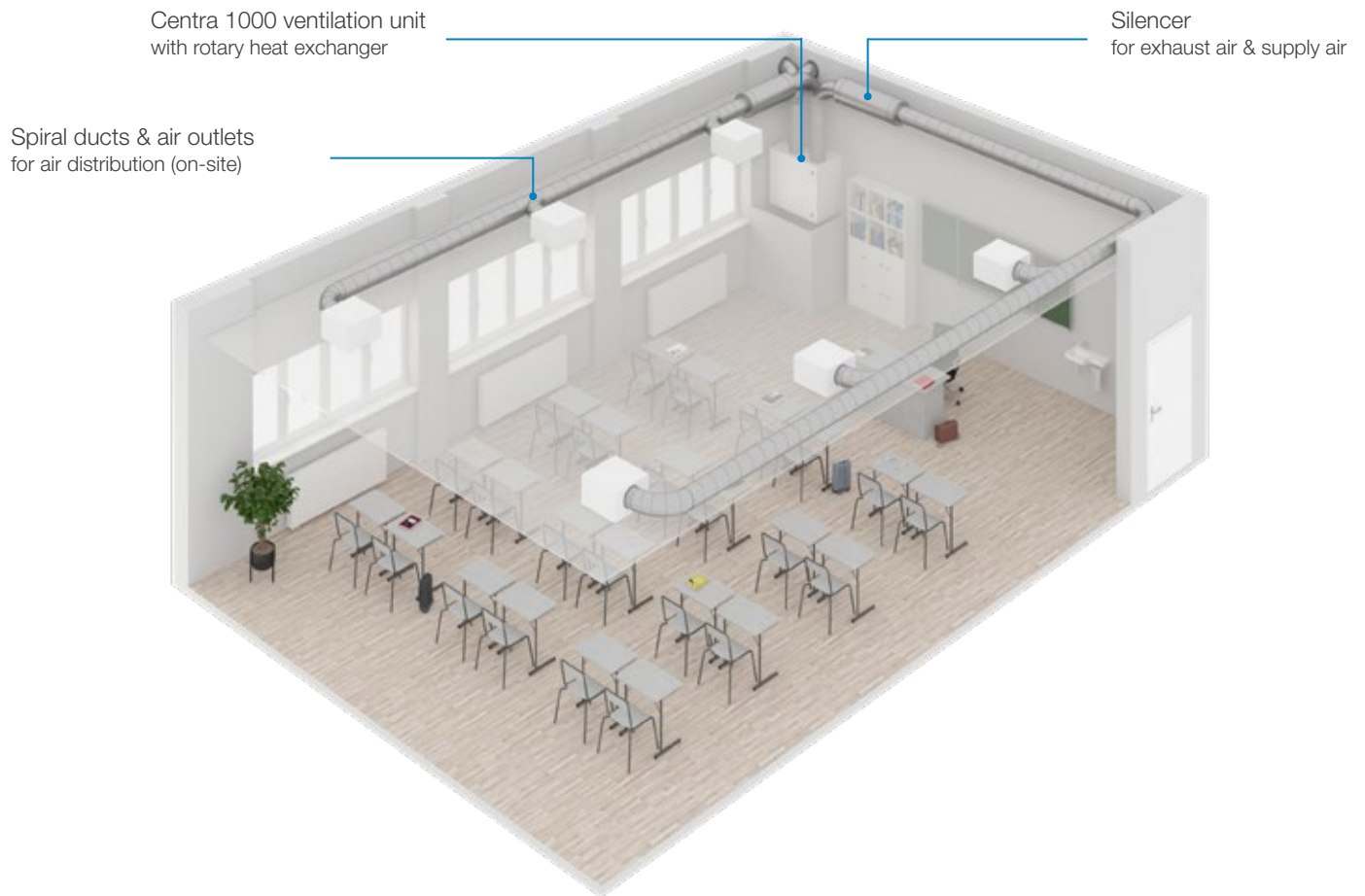


### Centra 400

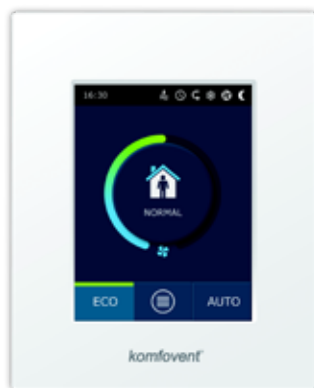
- + Decentralised ventilation of offices or ventilation support in schools/kindergartens
- + Automatic air volume regulation
- + Sensor-controlled: CO<sub>2</sub>, temperature and humidity sensor
- + Installation in the suspended ceiling

MAXIMUM VOLUME FLOW [m <sup>3</sup> /h]	438
HEAT RECOVERY [%]	82
POWER CONSUMPTION [W]	98
SPI [W/m <sup>3</sup> /h]	0,25
SOUND PRESSURE LEVEL [dB(A)]	33
DIMENSIONS OF THE UNIT W×H×L [mm]	700×310×1170
ENERGY EFFICIENCY CLASS	A

## Example installation: Centra in the classroom



## Intelligent and intuitive: Centra control with C6M



The Centra units by inVENTer are equipped with the state-of-the-art C6M intelligent control system. Based on sensor signals, a healthy room climate is automatically created. Using pre-programmed schedules or personal settings, the control can be easily adapted to the local conditions.

Should the control be accessible to everyone or only to authorised persons? Everything is possible – with the C6M control panel, the internet browser or the mobile app.

BACnet or Modbus can be used as an interface to the building management system.

## Reference project “Leonardoschule” Jena



In the secondary school “Leonardoschule” in Jena/Thuringia, Centra units from inVENTer were installed in several classrooms.

During planning, the DIN specifications for school ventilation, such as DIN EN 16798-1, were strictly observed.

The air supply system distributes the preheated fresh air optimally to the respective classrooms. Thanks to the intelligent sensors, the ventilation system automatically provides sufficient fresh air for everyone in the room, and the windows can remain closed.



Installation of the Centra ventilation unit on the wall in the classroom, including air ducts & sensor system



Exhaust air outlets and fresh air inlets are located in the skylights of the windows or at the corner of the outer wall.



Exhaust air pipe, ceiling installation in the classroom



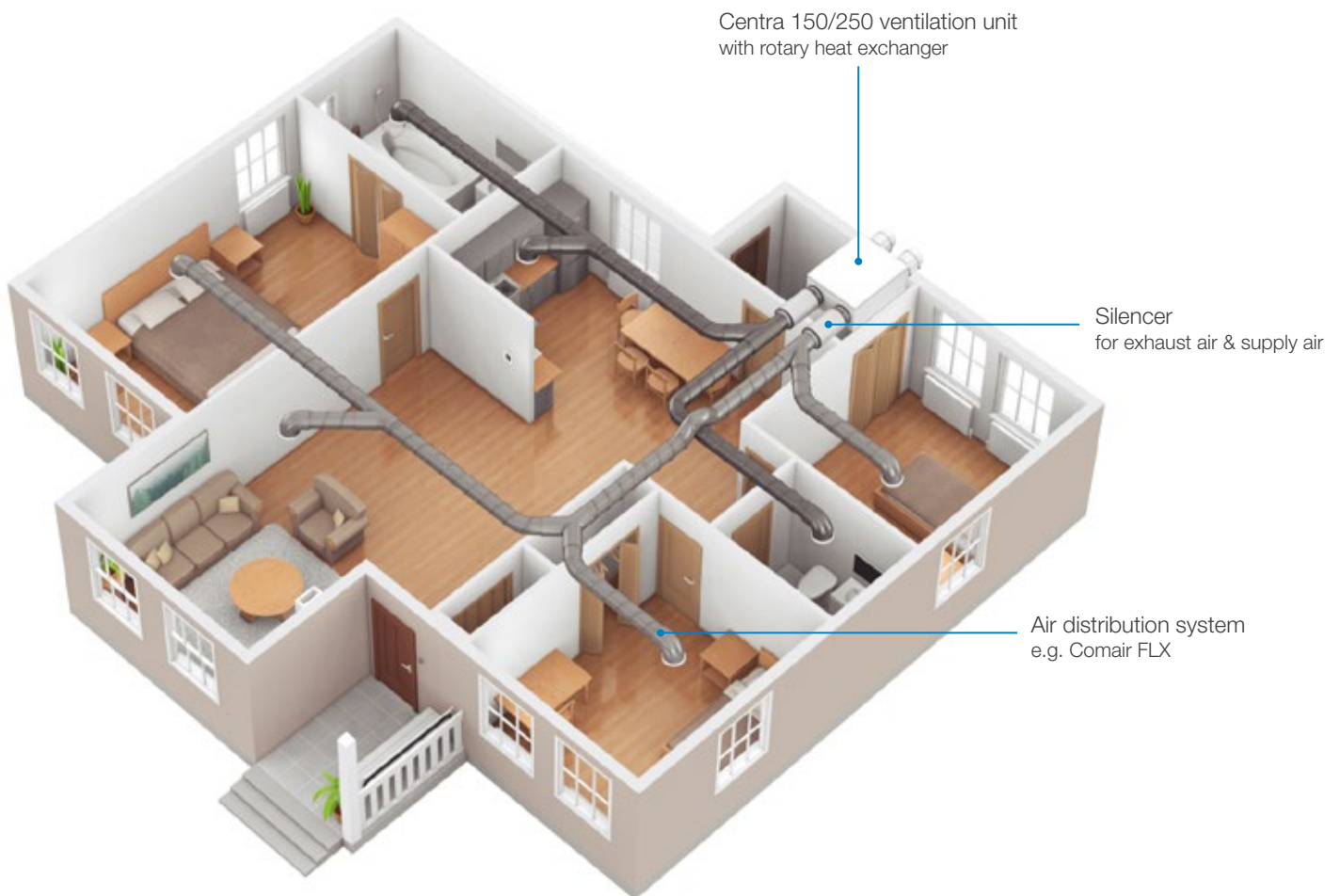
Supply air flows into the room via an air hose

# Residential ventilation with Centra

The Centra units by inVENTer offer optimum ventilation of all living spaces from a central ventilation unit. The central unit is ideally connected in a utility room or storage room and ventilates the living area from there via an air distribution system. The individual rooms are divided into supply and exhaust air rooms. Typically, the bathroom and kitchen are exhaust air rooms, while the bedroom and living room are supply air rooms. In addition, the Centra unit has a fifth connection that is specially designed for exhaust-only rooms, such as a guest bathroom.

Centra units are available in two variants: for ceiling mounting or for wall/floor mounting. Both variants have a rotary heat exchanger that ensures effective heat recovery.

## Example installation: Centra in the living room (ceiling unit)



# Die Lösungen von inVENTer



## Centra 150

- + Ideal for smaller living units
- + Installation in the suspended ceiling
- + Durable housing made of powder-coated steel, protection against moisture and dust

MAXIMUM VOLUME FLOW [m³/h]	154
HEAT RECOVERY [%]	82
POWER CONSUMPTION [W]	41
SPI [W/m³/h]	0,34
SOUND PRESSURE LEVEL [dB(A)]	32
DIMENSIONS W×H×L [mm]	460×280×780
ENERGY EFFICIENCY CLASS	A



## Centra 250

- + Installation in the suspended ceiling
- + Coated rotary heat exchanger, regenerates heat & cold and regulates humidity in the room
- + Low noise level due to balanced fans

MAXIMUM VOLUME FLOW [m³/h]	250
HEAT RECOVERY [%]	80
POWER CONSUMPTION [W]	90
SPI [W/m³/h]	0,39
SOUND PRESSURE LEVEL [dB(A)]	37
DIMENSIONS W×H×L [mm]	602×310×842
ENERGY EFFICIENCY CLASS	A



## Centra 200

- + Floor or wall installation
- + Fifth air opening for separate exhaust air space
- + Plug & Play: unit is pre-wired, integrated control system

MAXIMUM VOLUME FLOW [m³/h]	257
HEAT RECOVERY [%]	80
POWER CONSUMPTION [W]	66
SPI [W/m³/h]	0,28
SOUND PRESSURE LEVEL [dB(A)]	28
DIMENSIONS W×H×D [mm]	599×605×325
ENERGY EFFICIENCY CLASS	A

# The advantages with Centra



Energy-efficient ventilation of schools, kindergartens, commercial and residential premises according to DIN. Installation in new buildings and during refurbishment.



Protection against pollen and dust through integrated, highly efficient filter technology according to standard EN ISO 16890. High durability & large filter area.



Highest heat recovery with rotary heat exchanger. Optimised moisture exchange in the air.



Multifunctional sensor technology. Precise measurement of parameters in real time & adaptation of the air volume flow to conditions inside & outside.



Plug & Play: All units completely pre-wired. Integrated control system. Simple integration into the building management system.



Reliability & durability: Galvanised steel housing with powder coating. Protection of the motors against moisture and dust.



Innovative algorithms in the control system enable numerous functions. Control of Centra units via control panel, web or app.



Low noise level: Balanced fans; all components aerodynamically matched. Housing insulated with mineral wool.



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