

AL-KO AIRCABINET – Compact ventilation system for easy room installation – for healthy, fresh air



Now more than ever, attention is focused on the professional draught-free ventilation of closed rooms to reduce CO₂ and therefore viral levels. This has proven a massive challenge, not only in classrooms, universities, meeting rooms and nursery schools.

With the AL-KO AIRCABINET compact ventilation system, AL-KO offers an extremely efficient solution with the highest hygiene standards. The complete exchange of used air that is potentially contaminated by viruses in the room ensures the necessary supply of fresh air and thereby reduces the risk of infection for all those present.

The benefits for you:

- ! **Efficient CO₂ reduction** and constant supply for fresh air for optimum concentration levels
- ! **Easy to install** with modular plug-and-play system design
- ! **Lowest sound levels** with professional technology allow installation in the room

The **AL-KO AIRCABINET** system design

OTHER ADVANTAGES AVAILABLE ACCESSORIES:

- | High energy efficiency with heat recovery
- | Multiple air connection and distribution options for maximum flexibility
- | Fast and easy to install
Combination outdoor air diffuser for window installation as a fresh air/extract air connection
- | Unit connection 230 V (16 A)

Control system:

- | Occupancy switch

Base unit:

- | Warm water heat exchanger
- | Cold water heat exchanger
- | Direct evaporator
- | Condensate pump

Air distribution:

- | Combination fresh air diffuser window installation
- | Textile air diffuser
- | Air hose connection fresh and extract air

Housing:

- | Modular structure for easy installation
- | Hygienic air ducting with smooth and easy-to-clean surfaces
- | Double-walled for maximum silencing

Air distribution module:

- | Variable air connection options
 - | Supply air port (front)
 - | Fresh air/extract air ports (left or right)
 - | Exhaust air opening (top)

Silencer module:

- | Quiet unit operation with generously proportioned silencers
- | Sound-absorbing panels are easy to remove for cleaning

Air treatment module/base unit:

- | Complete separation between stale exhaust air and fresh supply air
- | Complies with all statutory energy requirements
- | Hygienic unit design complies with VDI guideline 6022
- | Heat recovery with over 80% efficiency

Fans:

- | Energy-efficient fan technology

Control system:

- | Preconfigured plug-and-play control system
- | User-friendly remote control
- | Variable ventilation mode with CO₂ sensor, time program or occupancy switch
- | Can be operated and monitored remotely

Filter technology:

- | High quality fresh air filtration with filter class ePM1 – 70%

Reheating:

- | Electric air heater (standard design)



AL-KO AIRCABINET				
Dimensions (W/D/H)	1306 x 730 x 2477 mm			
Weight	406 kg			
Height of individual modules	Base unit: 1173 mm / silencer: 983 mm / air distribution: 321 mm			
Weight of individual modules	Base weight: 213 kg / silencer module: 158 kg / air distribution module: 35 kg			
Air exchange rate in m ³ /h	800	1000	1200	1650
Electrical power consumption with/ without additional electrical heating system in kW	0.2 / 1.3	0.3 / 1.6	0.5 / 1.9	1.0 / 2.1
Efficiency heat recovery / Air outlet at -12 °C fresh air and 22 °C exhaust air with/without additional electrical heating system	84%	83%	82%	81%
	16.5 °C / 20.0 °C	16.0 °C / 20.0 °C	15.7 °C / 20.0 °C	15.3 °C / 20.0 °C
Sound power in dB[A]	37	42	47	51
Sound pressure at 2 m distance* in dB[A]	34	40	43	48

* measured in 9 x 10 x 2.75 m room with moderate room absorption

ONE UNIT – VARIOUS CONNECTION OPTIONS

Supply air:

- I Distribution by textile air tubing**
- I Distribution by air line with air diffusers (on-site option)



Combination air diffuser for installation in a window element or on the outside wall

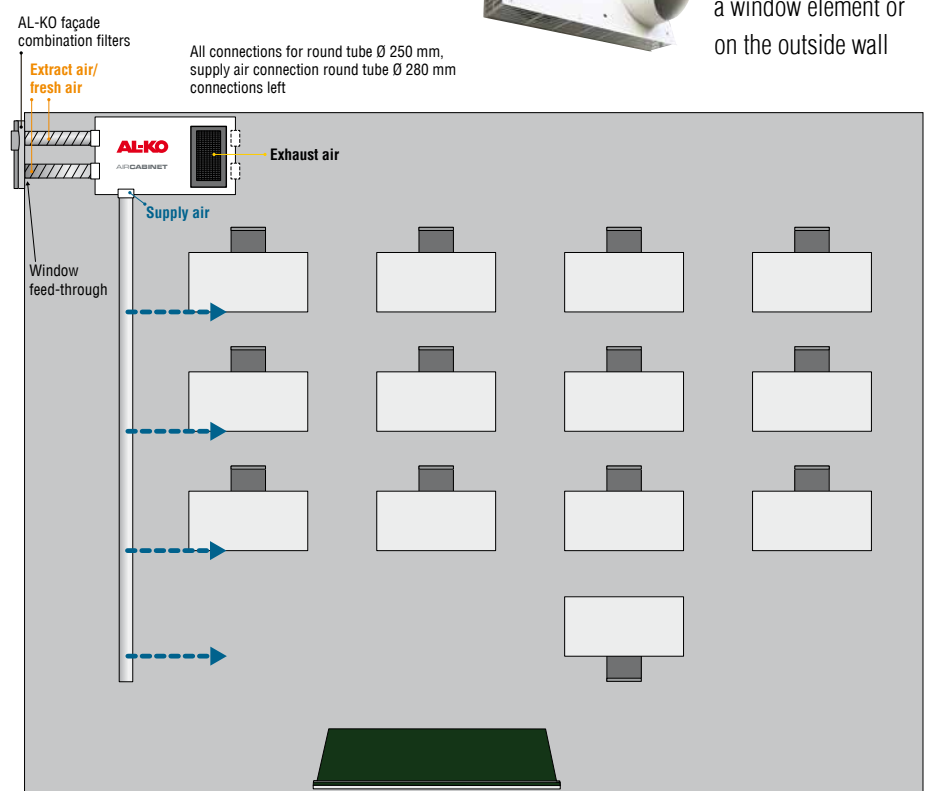
Fresh air/extract air:

- I Connection via insulated tubes (on-site option)
- I Connection via flexible tubes to fresh air/extract air**
- I Combination air diffuser for installation in a window element or on the outside wall**

Exhaust air:

- I Extraction directly on the unit

** Optional accessory



Example of installation, option of wide range of installation variants and choice of connection side

100% fresh air and professional protection from infection



Extract: German Environment Agency Guidelines for Indoor Air Hygiene in School Buildings

A good, hygienically safe air quality requires an air exchange rate of between 30 m³/h and 50 m³/h per person, depending on the age group of the persons in the room and emissions from the building. A typical design specification is approximately 30 m³/h per person for classrooms. A rate of 50 m³/h per person is often assumed for offices and meeting rooms. Without a ventilation system, these required rates of air exchange can only be achieved if windows are kept open constantly, with a large temperature difference between the inside and outside.

The AL-KO AIRCABINET compact ventilation system – constant air exchange, draught-free and uncomplicated

AN AL-KO AIRCABINET CAN BE INSTALLED IN ONLY A FEW HOURS.

Example calculation
“Classroom”
with 31 children and 1 teacher:

32 persons
x
30 m ³ /h per person
<hr/>
= 960 m³/h



WE PROVIDE A HEALTHY INDOOR CLIMATE – TRUST THE EXPERTS

This is at the heart of what we do, as AL-KO Air Technology has been a leading German expert in air technology for over 45 years. With professional technology and thanks to many years of experience, we cover a wide range of applications.

Our central ventilation systems are used in the medical field in the rooms inside thousands of buildings worldwide. Our ventilation systems are also used in schools, universities, office buildings, exhibition centres, meeting rooms and hospitals.



As long-standing air technology specialists, we are happy to advise you personally. Contact us.

AL-KO THERM GMBH

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