

AIR TECHNOLOGY

AL-KO
QUALITY FOR LIFE



INDIVIDUAL CENTRAL AIR HANDLING UNIT

AL-KO AT4

Healthy air for every
application



alko-airtechnology.com

Sustainable technology for a healthy indoor climate

For more than 50 years AL-KO Air Technology has been providing solutions for clean air wherever people come together. As a leading manufacturer of ventilation and air handling systems, we provide custom-tailored solutions in time-proven AL-KO quality for the complex requirements of various applications.

Your challenge

Do you want to ensure that commercial premises in industrial, medical and chemical environments have good and healthy air? Or ventilate all kinds of indoor spaces where many people gather? Units from the modular AL-KO AT4 series are designed for just that.



Our solution

AT4 units can be flexibly adapted to all applications and installation options. They comply with all current certifications and standards, thus offering maximum safety. Furthermore, they are also available in ATEX design for use in potentially explosive atmospheres. They are designed for air volumes between 1,000 and 150,000 m³/h and can be individually configured supported by digital design programs based on more than 100,000 components.

Your benefits



High thermal and sound insulation thanks to double-walled panel composition



Sound and thermal insulation material made of non-combustible mineral wool (DIN 4102, building material class A1)



Thermal decoupling between inner and outer shell



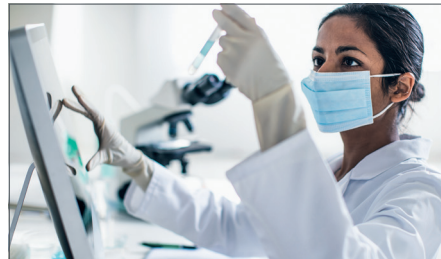
Minimized cold bridges due to thermally separated frame profile

AL-KO AT4 is industry-optimized for use in:



Human climate

- Meeting rooms
- Office buildings
- Commercial premises
- Education and sports facilities



Hygiene

- Medicine
- Pharmaceutical/chemical industry
- Food



Industry

- Mechanical/systems engineering
- Data centers
- Automotive

Tested quality

The performance data are backed up by voluntary certification programs (RLT Association, Eurovent). All sealing materials used are closed-pored and microbially inert.

Unit design and structure

DIN EN 1886
VDI 6022

DIN & VDI

Mechanical stability class D1

DIN EN 1886

With further options, use in hospitals

DIN 1946

Unit design, e.g. moisture-relevant components in stainless steel

VDI 3803
DIN EN 13053



Can be combined with a variety of perfectly matched components



Best energy efficiency class



Best possible life cycle cost

Equipment and service in time-proven AL-KO quality

Quality, so you can breathe easy. We not only produce and supply equipment in time-proven AL-KO quality, but also support you with smart digital tools for the individual design of your ventilation and air handling unit.

Digital support for your planning

AL-KO offers smart digital tools for the design and configuration of your individual ventilation unit. Your digital ecosystem:

AL-KO AIRCLOUD®

The free and freely accessible digital configuration program configures a ventilation and air handling unit in just five clicks and provides reliable planning documents.

KlimaSoft®

The detailed design of the unit is carried out with the design program. It provides an interface to AL-KO Air Technology production planning and supports the creation of specifications.

AL-KO BIM CONVERTER

Architects and building designers can easily import the data from both tools into their Building Information Modeling (BIM) using the AL-KO BIM CONVERTER.



Variable unit sizes

- Thanks to the intelligent grid concept, the right unit size is available for every application
- The unit widths and heights vary in a grid of 153 and 306 mm respectively
- Unit lengths can be selected individually in a 76.5 mm grid

High-quality manufactured housing

We manufacture our housings entirely in Germany using state-of-the-art machinery. Quality and care are our top priorities.



Panels

- Galvanized with powder coating
- No cold/heat bridges
- Standard in T2 / TB2 version



Suction chamber

- Durably robust against all weather influences
- Interior multi-leaf damper, aluminum or galvanized, optionally powder-coated



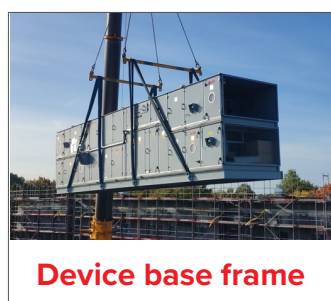
Accessibility

- All panels can be unscrewed
- Structure like housing panel
- Hinge bearings with clamp closure



Multi-leaf damper

- Fins sealed with special sealing lips
- Depending on the size, torsionally rigid hollow profile aluminum fins or galvanized steel profile fins



Device base frame

- Corrosion resistant
- With eyelets for crane transport
- Optionally continuous as a Complete base frame



Duct connection

- Rubber spouts (standard for hygiene units)
- Connection profile with foam rubber in between



Floor trays

- Underneath the heat exchangers, plate heat exchangers and droplet separators
- Made of stainless steel, easy to clean



Weather protection

- Fin suction hood powder-coated with integrated bird protection grille
- Unit roof covered with special plastic film

Maximum individuality – the AL-KO AT4 makes it happen

Thanks to numerous optional components and accessories, which are all tested and approved by AL-KO, you can tailor your ventilation and air handling unit to your individual needs.

Wide range of components to choose from

We offer bought-in components from well-known manufacturers.
All components are tested by AL-KO Air Technology.

Filters

- Standard pocket filters in common sizes
- Optional:
 - HEPA filter
 - Panel filter
 - Activated carbon filter
 - Grease trap filter

Fan

- Corrosion protection by powder coating
- Wide range of optional accessories

Heat recovery

- Increases energy efficiency to 80 percent and greater
- Three technologies available:
 - Diagonal/counter-flow plate exchanger
 - Rotary exchanger
 - Circulatory system

Heater & cooler

- Versions for water, refrigerant, steam, electrically heated are available
- Laterally expandable

Functional units

AL-KO provides self-manufactured functional units on request.

Integrated refrigeration

- Environmentally friendly refrigerants
- As integrated cooling or split units

Sound insulation

- Made of sound-absorbing mineral fiber panels
- Frame parts are powder-coated

Humidification systems

- Installed ready for connection
- As steam, contact or high-pressure humidifier

State-of-the-art AL-KO control technology

AL-KO's modular control technology always has the right solution ready and gives every control system access to AL-KO Remote Control. AL-KO supplies controls in a complete package with field devices, control cabinet, and pre- or complete wiring. After wiring, a factory test is carried out by the AL-KO technical experts. Control hardware from well-known manufacturers such as Siemens is used.

Intelligent electrical equipment

Frequency inverter

- Optionally installed on the outside or weather-protected on the inside
- Connected and pre-parameterized

Repair switch

- Integrated on the fan housing or in the frequency converter
- Wiring to the motor, incl. PTC resistor
- Weatherproof versions are splash-proof and UV-protected (IP65 degree of protection)

Cable duct

- Integrated into base frame
- Easily accessible
- Less time taken up on site with wiring

Practical delivery

Under each component is a stable base frame. An optional, continuous base frame simplifies delivery and reduces assembly effort on the construction site. Adjustable feet are mounted under each component weighing up to 1 ton. Solid gusset plates, placed on the inside of the unit frame, ensure an easy-to-install unit connection.

Efficient plug-and-play solution

Optionally we offer the design as **AT4 Complete**. Here, the unit is supplied as a plug-and-play solution on a Complete load base frame, pre-wired and with systems filled. This enables easy delivery, minimized installation efforts at the customer's site, and significant cost savings at the construction site.



AL-KO AIRTECH

AL-KO Airtech specializes in the manufacturing and distribution of ventilation and extraction systems. Airtech comprises **AL-KO Air Technology** and **AL-KO Extraction Technology**. These divisions develop and produce customized ventilation and air handling systems, as well as a broad spectrum of industrial extraction systems for diverse areas of application. What started out as a village blacksmith's shop in 1931 is now an international brand. Then and now, our brand promise "QUALITY FOR LIFE" stands for unique product and service quality.

AL-KO Air Technology

- 50 years of experience in ventilation and air handling technology
- More than 10,000 ventilation and air handling units per year
- All systems in time-proven AL-KO quality
- Tailor-made for customer-specific requirements
- All expertise from a single source
 - Planning and consultation
 - Digital tools
 - Air and climate technology
 - Plant control
 - Comprehensive service packages

AL-KO THERM GMBH

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Learn more:

