

ATFLEX® AND ATEASY®



THE
ADVANTAGES
ARE IN
THE AIR.



LIFE IN PURSUIT OF QUALITY – FROM THE VILLAGE FORGE TO A GLOBAL CORPORATION

AL-KO KOBER SE was founded in 1931 by Alois Kober as a small metalworking shop in the Bavarian-Swabian town of Großkötz, near Günzburg. Today, the company employs approximately 4,200 people at 50 locations across the globe. The third generation to run this family business, it is still managed as per the founder's wishes: constantly striving for quality, innovation and carefully designed functionality.

The Directors of AL-KO KOBER SE
(from right to left): Stefan Kober (CEO),
Harald Kober and Roland Kober



THE ADVANTAGES FOR YOU

- | Production at company manufacturing plants in Bavaria and Saxony-Anhalt
- | Highest quality thanks to decades of expertise in engineering, testing and manufacturing
- | Inhouse test facilities



AL-KO VENTILATION AND
AIR-CONDITIONING TECHNOLOGY
**ENGINEERED AND
MADE IN GERMANY**



VENTILATION TECHNOLOGY

Our ventilation and air-conditioning devices as well as our extraction systems enable you to calculate life cycle costs during the installation already. We guarantee highest energy-efficiency, perfect hygiene, maximum ease of use as well as reliable advice, delivery on time to the site and easy installation.

THE AL-KO COMPANY AND BRAND

Safety, convenience and joy are important factors of life and the aims of our work. Our identity, which is visible both in the AL-KO brand and our products, is reflected in this. It applies to all AL-KO divisions: Automotive technology, garden + hobby and ventilation technology.

We live for quality! After all, we are completely committed to a central message: Our constant focus is the improvement of our customers' quality of life. That's how we understand Quality for Life.

AL-KO

QUALITY FOR LIFE



AUTOMOTIVE TECHNOLOGY

With our products and accessories we make sure you are safe and comfortable on the roads. Whether you are on the move with a mobile home, caravan, commercial vehicle or trailer – we guarantee a safe drive.

We ensure a safe start to your holidays and make sure that you arrive back at home still feeling completely relaxed.



GARDEN + HOBBY

We develop and design innovative garden tools. Our products feature impressive technology and functionality and set the standard in terms of design – thus meeting the highest demands.

We increase the enthusiasm for your garden.

ATFLEX® AND ATEASY®

PROBLEMS VANISH INTO THIN AIR



ALWAYS THE RIGHT SOLUTION

There is a wide range of fans and motors, filter units, heaters and coolers, humidifiers and dehumidifiers, silencers and heat recovery systems as well as various standardised and customised control systems to choose from. All possible combinations are tailored to your needs by AL-KO, focussing on function, energy-efficiency and life cycle costs.



THE RIGHT SOLUTION FOR EVERY REQUIREMENT

ATFLEX® AND **ATEASY®** FROM THE MODULAR CONSTRUCTIONS KIT **AT4-F**

Modular construction kit

ATEASY®	1,000 to 25,000 m³/h	modular construction kit with several thousand standard components
ATFLEX®	1,000 to 100,000 m³/h	as ATEASY® plus bespoke device configurations according to your individual requirements

THE ADVANTAGES FOR YOU

- | Hygienic perfection across all energy standards
- | Solid, tested construction and configuration according to international standards and guidelines
- | Bespoke systems made from an extensive construction kit of fully compatible components that can be individually combined
- | Customised delivery logistics to suit requirements

ATFLEX® and **ATEASY®** devices from the AT 4-F construction kit include larger and hence logistically more challenging systems of up to 100,000 m³/h. On the other hand AL-KO offers **ATFLEX®** and **ATEASY®** systems for absolutely every desired air treatment task. The AT4-F modules are planned according to your requirements and T2/TB2 (EN 1886) and combined with perfectly matched components: fans, motors, filter units, heaters, coolers,

humidifiers and dehumidifiers, silencers and heat recovery systems as well as additional accessories. The required function is as much the focus of this process as energy-efficiency and optimum life cycle costs. Different control systems complement the programme if required.



ATFLEX® AND ATEASY®

PROVIDING CLEAN AIR WITHOUT CREATING A LARGE BILL

HYGIENE AND ENERGY EFFICIENCY

Up until now, you have had to decide between a low price, perfect hygiene and energy-efficiency. The modular construction kit AT4-F by AL-KO, from which you can configure your new **ATFLEX®** and **ATEASY®**, meets all three requirements. Calculated at the begin of the project, AT4-F offers the best life cycle costs for your requirements while ensuring the ideal hygienic climate. The housing's inner shell is completely smooth and can do without welding and cut edges. Powder-coating as standard ensures long-lasting quality. The specially developed profile joint completely decouples the inner from the exterior shell. The risk of extremely fine and thus even worse leaks known from other T2/TB2 constructions has therefore been eliminated by the AL-KO AT4-F construction kit.

The advantage is in the air: optimum indoor climate and purest air at truly economical and predictable operating costs.



COMPLIANCE

Compliant with all national and international standards



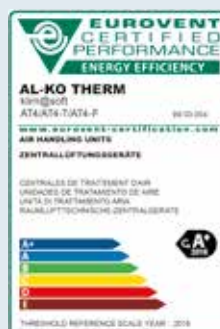


Thanks to the modular construction kit AT4-F your ventilation and air-conditioning system **ATFLEX®** and **ATEASY®** has the desired configuration while still conforming with T2/TB2.



Konstruktive Hygienemerkmale

- VDI 6022 Blatt 1 (D)
- VDI 3803 Blatt 1 (D)
- ÖNORM H 6021 (A)
- SWKI VA104-01 (CH)
- DIN EN 13779 (EU)
- DIN 1946 Teil 4 (D)
- SWKI 99-3 (CH)
- ÖNORM H 6020 (A)



ATFLEX® AND ATEASY®

AIR TO BREATHE IN DEEPLY: AIR-CONDITIONING APPLICATIONS FOR PEOPLE



HYGIENE AND ENERGY EFFICIENCY

AL-KO has many years of experience implementing ventilation and air-conditioning systems in buildings where people feel more comfortable and work more efficiently.

ATFLEX® and **ATEASY®** offer everything necessary to implement a cost- and energy-efficient solution.

PERFECT CLIMATE FOR PHARMACEUTICAL, CHEMICAL AND MEDICAL ENVIRONMENTS



If adhering to hygienic requirements is critical for economic success, health and even human lives, there is only one choice: **ATFLEX®** and **ATEASY®** by AL-KO. The completely smooth surface of the housing's inner shell and the thermally decoupled housing facilitate cleaning and thus perfectly pure air.

ATFLEX® AND ATEASY®

THE RIGHT AIR FOR PRODUCTION



When it comes to humidifying and dehumidifying as well as keeping air at a constant temperature, **ATFLEX®** and **ATEASY®** by AL-KO are the ideal solution. From a variety of sectors, like chip or automotive manufacturing, food production, chemical and pharmaceutical industries, renowned companies across the globe trust AL-KO solutions. Upon request, the AL-KO service centre can handle system maintenance on site or remotely as per VDMA standards.

COMPLETE SOLUTIONS FOR SWIMMING POOLS AND LEISURE PARKS



ATFLEX® and **ATEASY®** offer the perfect solution to create a comfortable climate in swimming pools, tropical water parks and leisure centres. Countless references are proof of the quality, flexibility and efficiency of AL-KO's ventilation and air-conditioning systems which are used just as much for constant air quality in swimming pool areas on luxury cruise ships as they are on dry land.

THE WHOLE THING IS AS GOOD AS ITS COMPONENTS **ATFLEX®** AND **ATEASY®** FUNCTION UNITS

Unlike other suppliers, AL-KO does not focus on simply one solution per task, but has been working with trusted suppliers for decades to be able to offer the ideal solution for your requirements in terms of function, energy-efficiency and life cycle costs.



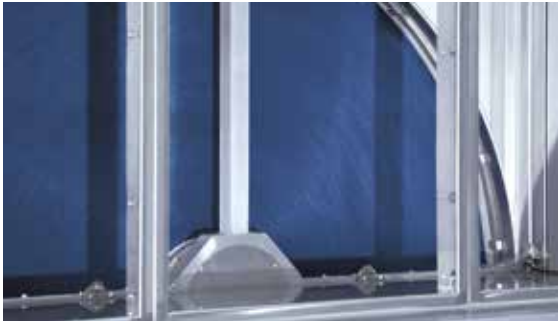
AT4-F HOUSING

- | Completely smooth interior with sealed joints for optimum hygiene
- | Elaborate sealing with overlapping profile for optimum tightness
- | Ideal corrosion protection due to powder-coating as standard and double powder-coating for highest corrosion protection on request
- | Stainless steel base plates
- | Aluminium frame profiles
- | Stainless steel inner shell of housing (option)



FILTER

- | Coarse dust filter for particularly dusty exhaust air.
- | Fine particle filter to efficiently reduce the amount of particles in the external air
- | HEPA filter for highest hygienic requirements
- | Filter seat with classic tension spring technology
- | Filter tension spring for quick and easy change of filters (option)
- | Choice of galvanised, power-coated or stainless steel filter frames



HEAT RECOVERY

- | Choice of plate heat exchanger rotary heat exchanger, switching buffer volume or circuit compound system.
- | Reliable and tested technical data to provide optimum transparency and predictability of the energy consumption



HYDROOPT® HEAT RECOVERY

- | AL-KO HYDROOPT® circuit compound system with more than 80% efficiency of heat recovery
- | Can demonstrably be cleaned down to the core
- | Hydraulic pump with control to connect supply and exhaust heat recovery system (Option)
- | Feeding heat and cooling energy into the heat recovery hydraulic system

HYDROOPT®



HEATER / COOLER

- | Heater or cooler at different performance levels and combinations of material
- | Eliminator for residual water after dehumidifying processes
- | Can easily be extracted from the housing for maintenance and care
- | Certified performance data



INTEGRATED COLD

- | Cooling systems integrated into the ventilation unit can be adjusted continuously or to different settings
- | Improved efficiency of heat recovery due to heat pump switching
- | External heat pumps "APESS system" for multi-stage heat recovery, combinable with renewable energy sources

FUNCTION UNITS



SILENCER

- | Sound-absorbing panels with glass fibre for easier cleaning and longer service life
- | Can easily be extracted with the handles for inspection or cleaning
- | Optimum energy efficiency thanks to rounded leading edges
- | Certified sound power levels for precise sound calculations



DAMPERS

- | Choice of tightness class 2 or "airtight" class 4 (EN 1751)
- | Galvanised steel, powder-coated, aluminium or stainless steel design



BASE PLATES

- | For maximum hygiene
- | Can easily be cleaned underneath the heat exchanger and eliminator



FANS AND MOTORS

- | Free-wheeling wheels combined with highly efficient driving motors for top overall efficiency
- | Housing fans on request
- | EC and free-wheeling fans combined with permanent magnet motors for optimum efficiency and lowest as well as predictable power consumption



CONTROL SYSTEMS

- | Choice of different systems
- | Configured and programmed for you as required
- | Accessing the applications via MP-Bus or Modbus



Konstruktive Hygienemerkmale

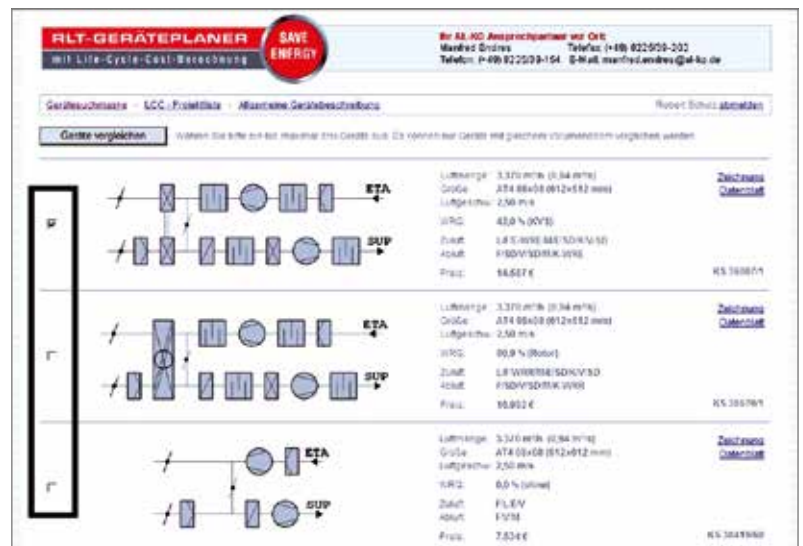
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- ÖNORM H 6020 (A)

INDEPENDENT HYGIENE CERTIFICATION

- | Can be cleaned down to the core
- | Independently tested and certified

PROJECT MANAGEMENT AND IMPLEMENTATION

- | AL-KO stands for long-standing cooperation with technical designers and manufacturers.
- | AL-KO has decades of experience in the international project business.
This expertise is available to you.
- | On site, the modular AL-KO **ATFLEX®** and **ATEASY®** systems, which can be disassembled, can easily be taken to premises that are difficult to access, like existing buildings.
- | AL-KO offers a comprehensive construction kit for ideal climate and air conditions. At the same time, AL-KO makes every effort to continue to reduce delivery times for even the most unusual requirements, so that the project succeeds on time.



IT IS EASIEST TO CALCULATE WHEN THE SUM IS KNOWN

EXCLUSIVE AL-KO LIFE CYCLE COST CALCULATION



**AT4-F: life cycle costs
are known from day 1**

Investors, owners and users of buildings are at an advantage with AL-KO: Even before signing the contract you know exactly which costs to expect during the service life of an **ATFLEX®** or **ATEASY®** system. Not only does the AL-KO life cycle cost (LCC) calculation ensure you are receiving a ventilation and air-conditioning system perfectly meeting your requirements. As part of the LCC calculation, AL-KO engineers combine the components best suited for you project in terms of function, energy-efficiency and life cycle costs.

The bottom line is a precise calculation including purchase price, maintenance costs and operating costs. Plain, transparent and definite. Do the test: <http://lcc.al-ko.de> is the gateway to the world of life cycle cost calculation by AL-KO.

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Figures show configuration examples which are not available in every market.
Please ask your AL-KO advisor.

Provided by your AL-KO partner:

Subject to modifications in response to technical developments.
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