

A GUARANTOR FOR QUALITY AND EFFICIENCY

The German AHU Manufacturers Association
and their labels of quality

RLT

Raumluftechnische Geräte

Herstellerverband e.V.

A strong duo!

Energy efficiency and
compliance





THE ASSOCIATION

A STRONG COMMUNITY

WHO WE ARE

The protectors of standards for central air handling units

We are the German AHU Manufacturers Association

From 1995 to 2004 we were the RAL-Gütegemeinschaft GZ 652 and founded the Herstellerverband Raumlufthtechnische Geräte e. V. (German AHU Manufacturers Association) in 2005. Ever since we can remember, we have actively participated in the compilation of standards and in preparing and designing political framework conditions. The number of members we have is growing constantly and comprises leading manufacturers of the European air-conditioning and ventilation sector.

Our codes of practice – AHU Guidelines

- **AHU Guideline 01** describes the general requirements for air handling units
- **AHU Guideline 02** sets out the explosion protection requirements for air handling units
- **AHU Guideline 03** covers the EG conformity assessment of air handling units
- **AHU Guideline 04** deals with ventilation systems with smoke extraction function, air handling units with system integrity during operation in smoke extraction mode

We consider the future

The A+ label of quality already fulfils the second level of the ErP Guideline for 2018.



OUR TARGETS

We want higher, faster, further!

We make use of synergies

Strong appearance as a community: As a manufacturers' association, we have considerably more possibilities than our individual members have alone. For example, we can conduct extensive studies and accompany university projects, i.e. perform activities that are too complex for the individual companies. In the end, it is you as an investor, user, architect, planner, operating company or manufacturer who benefits from this knowledge.

We have our finger on the pulse of time

Due to the constant dialogue with investors, engineers, planners and architects, we constantly seize new impulses from the market. Due to this we know which trends are becoming apparent in building services engineering and which requirements you have for air handling units in the future, so that we are able to offer you the ideal AHU systems to suit your needs in the future.

We increase efficiency

One of our main tasks is to advance and accelerate technical developments as our aim for the air handling units of tomorrow is to have a greater effect using less energy. This way we make a significant contribution towards a better environment. And that in two respects: Not only do we want to reduce the use of resources to a minimum; by way of optimized technologies, we would also like to contribute towards improved ambient air to give you and your customers the best air to breathe. In order to achieve this goal and make it measurable for you, our association has developed a procedure to define the energy efficiency of individual air handling units and certify these units in three different energy classes: A+, A and B.



OUR GOAL

INCREASING THE TECHNICAL NIVEAU

We are your link to politics

As an industrially oriented association, we are in constant contact with politics and the various working levels of the relevant ministries.

We play a part in political decision-making, actively support the national and European goals of energy, climate and environmental protection politics and focus on the significance of energy efficiency in technical building equipment.

In politics, the German AHU Manufacturers Association has been an important contact for a long time in all issues regarding energy efficiency in ventilation and air conditioning technology. We represent the interests of the sector and the member companies at parliamentary events.

We actively participate in exhibitions

Exhibitions are key platforms for information and communication. This is why a large number of members of the German AHU Manufacturers Association are represented at relevant national and international exhibitions with great commitment. The association actively supports the sector's interests at the world leading fair ISH in Frankfurt am Main, Germany.





BREATHE
BREATHE IN.
BREATHE DEEP.
BREATHE OUT



Our vision

Consider air as an
important food for life

We are experienced

Our association concentrates an enormous pool of experience and knowledge through the various members that consist of a large number of leading manufacturers of central air handling units. Whether this involves office buildings, museums, high hygiene requirements or even clean-room technology: The practical knowledge of our members is available for you!

We inform and communicate

We find it important to pass on our experience and knowledge - in the interests of the planners, architects, plant operators and investors. For this very reason we, as an association, provide intensive informational work and public relations. The association's regular symposiums, where we seize contemporary issues, present them in a practical way and discuss them with you and the experts, have become well-established.



A DUO YOU CAN RELY ON

The labels of quality for energy efficiency and compliance create transparency

We certify energy efficiency

The efficiency classes for air handling units combine the speed classes defined in DIN EN 13053:2012 with the classes for the input of the electrical power and the energy efficiency of heat recovery to constitute a simple, transparent and verifiable parameter.

Efficiency classes based on DIN EN 13053:2012

Unit designs / Classes	A+	A	B
Without thermal air treatment	V5	V6	V7
With air heating	V4	V5	V6
With further functions	V2	V3	V5
Electrical power consumption - fan	P2	P3	P4
Heat recovery	H1	H2	H3

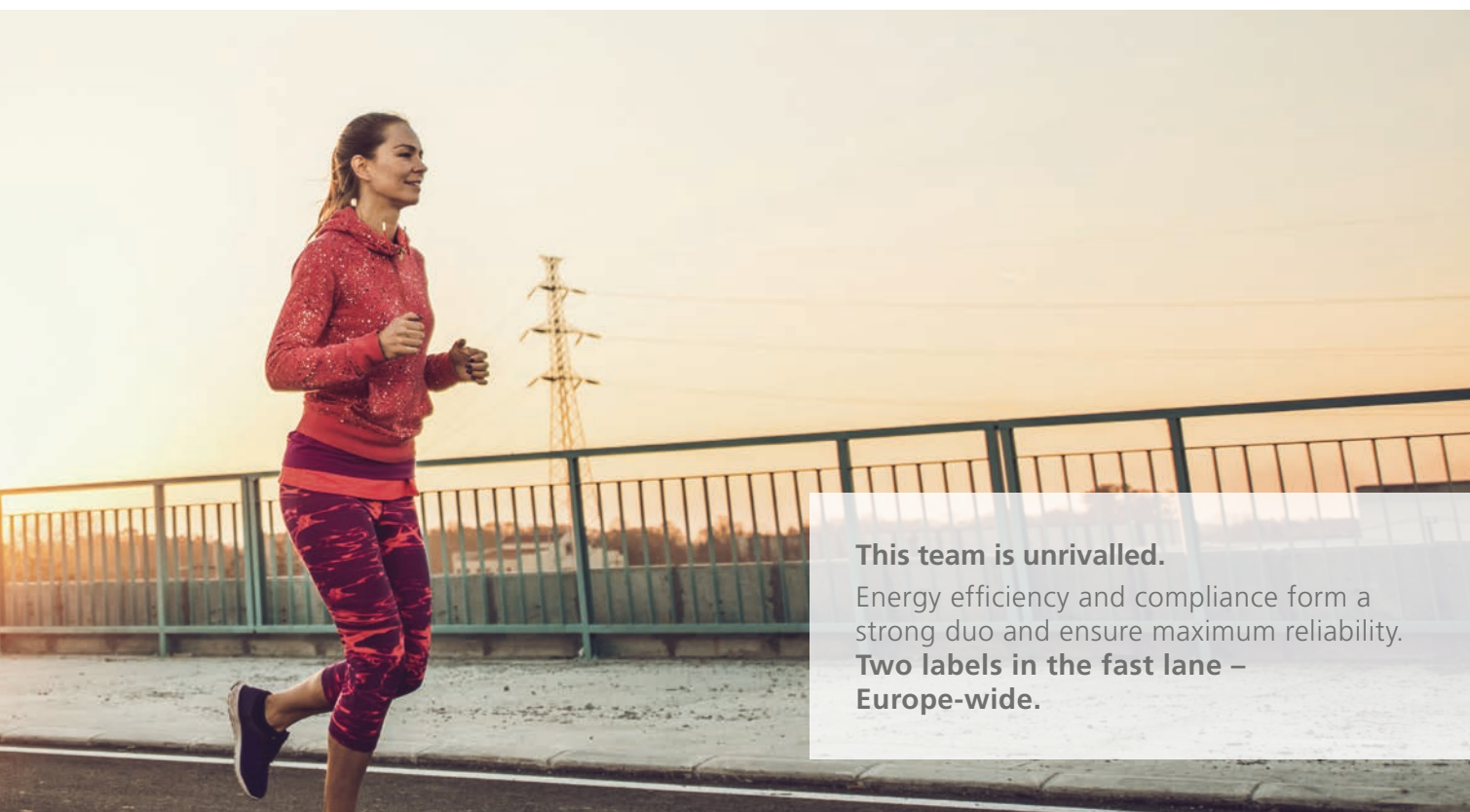
We use measurable parameters

With our measurable parameters V, P and H, we help you to reproduce the efficiency of your air handling unit.

The air velocity in the air handling unit is measured by parameter V which measures the flow-through velocity in unobstructed housing cross-section in reference to filter unit or fan unit if no filter is installed.

The efficiency parameter P analyses the electrical power consumption of fan drives according to DIN EN 1353:2012.

Finally, the heat recovery is evaluated with the efficiency parameter H. The energy efficiency is calculated based on the temperature transmission ratio and the electric expenditure caused by the pressure loss of the air-flow volume and the drive power for the rotor or pump.



This team is unrivalled.

Energy efficiency and compliance form a strong duo and ensure maximum reliability.

Two labels in the fast lane – Europe-wide.

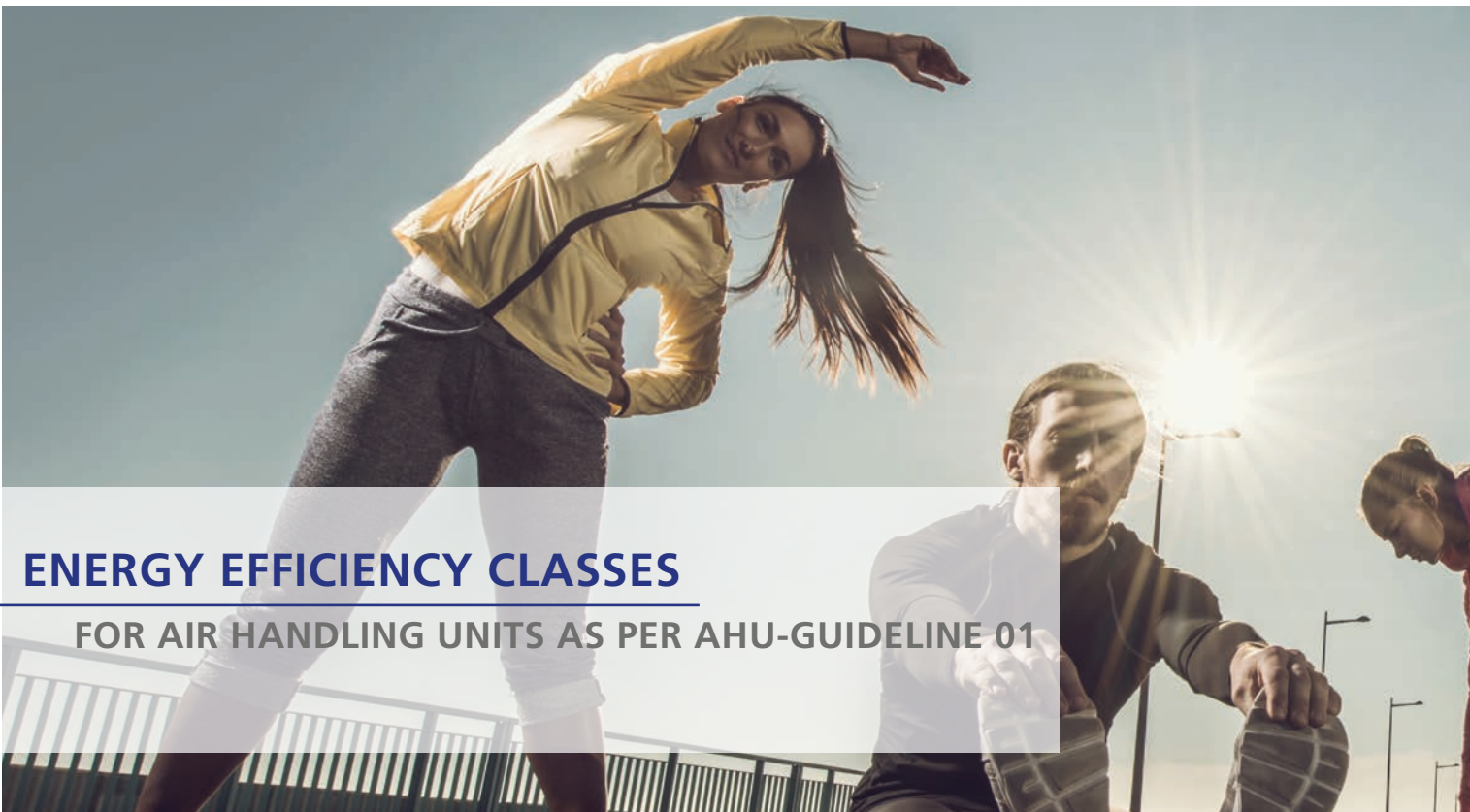
We are compliant

Besides the energy efficiency classification, we have introduced another label of quality for compliance. The additional label "Regelkonformität" (compliance) offers a reliable basis for decision-making for a high quality standard of air handling units, because only the members of German AHU Manufacturers Association who fulfil the requirements of the AHU Guideline 01 with their respective units and who are also certified for the energy efficiency label as per our guidelines receive the additional label of quality. With this new label we create more transparency on the market and you can absolutely be certain to install an energy efficient, safe and immaculately hygienic air handling unit in your process.

We give you that plus in safety

If an AHU fulfils all criteria of the efficiency classes A+, A and B and if this is verified by TÜV SÜD and monitored by continuous certification, the manufacturer is entitled to indicate the efficiency class and use the quality mark. And with our compliance label we assure you that all standards and guidelines were complied with.





ENERGY EFFICIENCY CLASSES

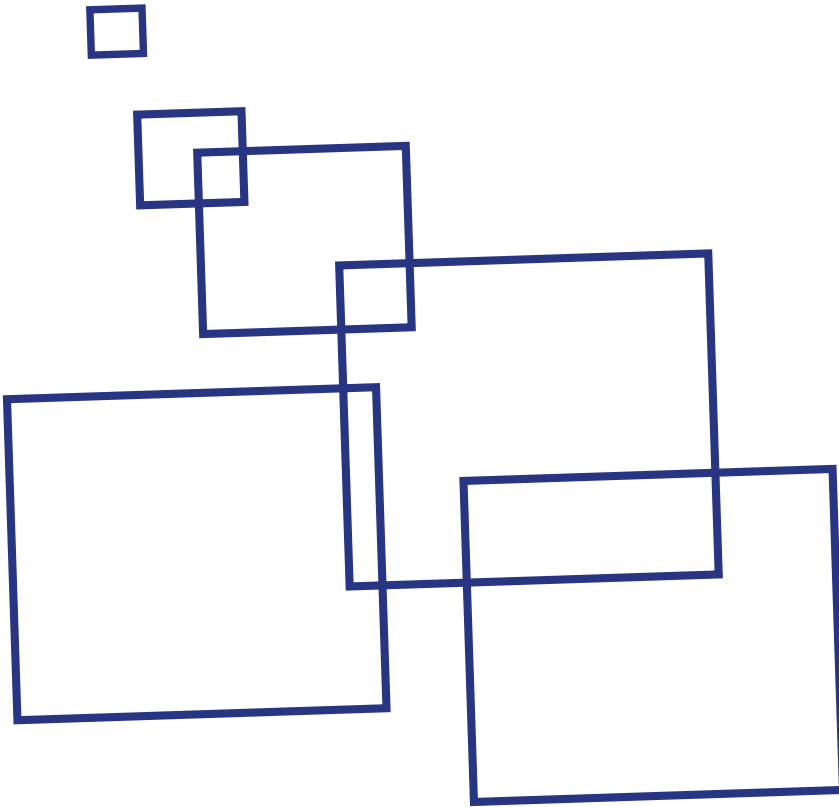
FOR AIR HANDLING UNITS AS PER AHU-GUIDELINE 01

ENERGY EFFICIENCY AND COST EFFECTIVENESS GO HAND IN HAND

Investing in energy efficiency is always profitable

The additional price of an AHU with the efficiency class A+ depends in essence on the associated larger size of the casing in comparison to a unit with efficiency class B and is about 15 %. However, model calculations show that even with air handling units with low to average annual runtimes, the use of a unit of efficiency class A+ is the most economic and, in ecological terms, best solution.

The compliance with an SFP class (SFP = Specific Fan Power) as demanded in the EGE Energy Conservation Regulations can only be fulfilled partly by the quality of the AHU, as the unit-related, extreme pressure loss of the entire system is given great significance. An A+ unit, however, offers ideal preconditions for complying with the demanding SFP values due to the constantly minimized inner pressure losses.



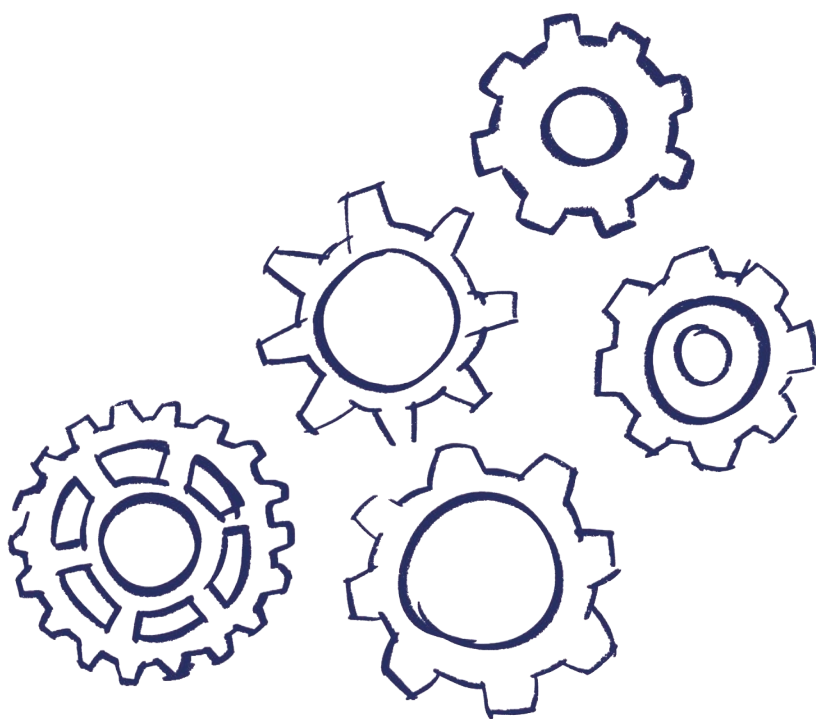


ARE YOU ERP-READY?

New tool for determining the energy efficiency classes

Together with the Umwelt-Campus Birkenfeld of the Trier University of Applied Sciences, the German AHU Manufacturers Association has developed a tool with which you can easily check whether your air handling units conform to certain specifications. The tool determines on the basis of various parameters whether an air handling unit complies with the Ecodesign Directive EU 1253/2014 and which energy efficiency class it achieves according to the AHU Guideline 01. To do so, for example details regarding the volume flow rate, fans or other technical details need to be entered into the user interface of the computer. After this, the tool automatically calculates the result.

The tool is manufacturer-independent and available in German. In principle, it is suitable for all air handling units available on the market that are subject to the Ecodesign Directive.



Access the
tool here:





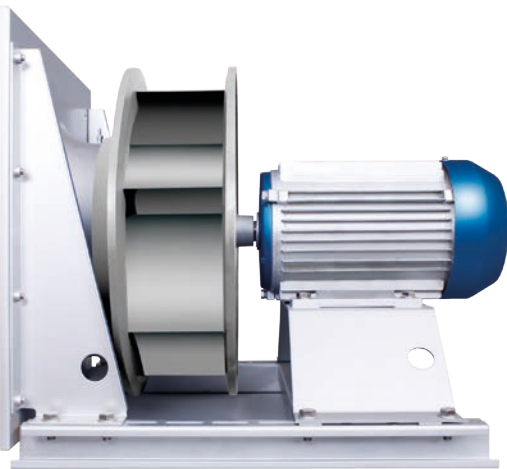
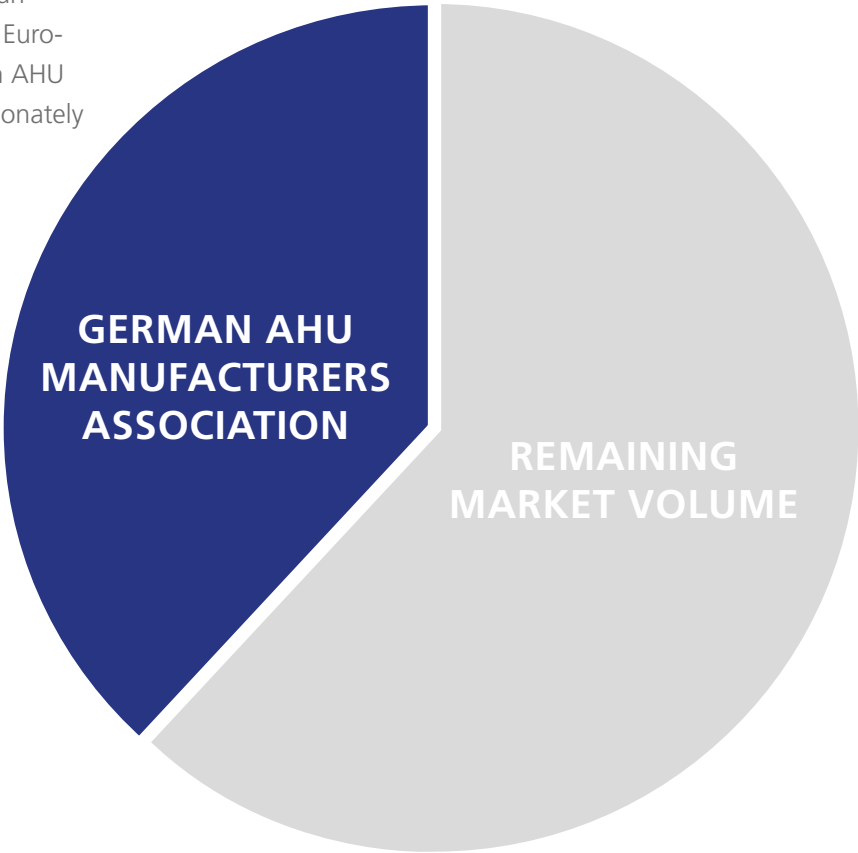
GERMAN AHU MANUFACTURERS ASSOCIATION

ALWAYS A GOOD CHOICE

ASSOCIATION’S PERCENTAGE OF SALES OF MARKET VOLUME

A strong association of leading manufacturers of the European air conditioning and ventilation sector

The German AHU Manufacturers Association with its members covers almost half of the entire European percentage of sales. Measured on the ratio to all European market participants, the sales of all German AHU Manufacturers Association members are proportionately very high.

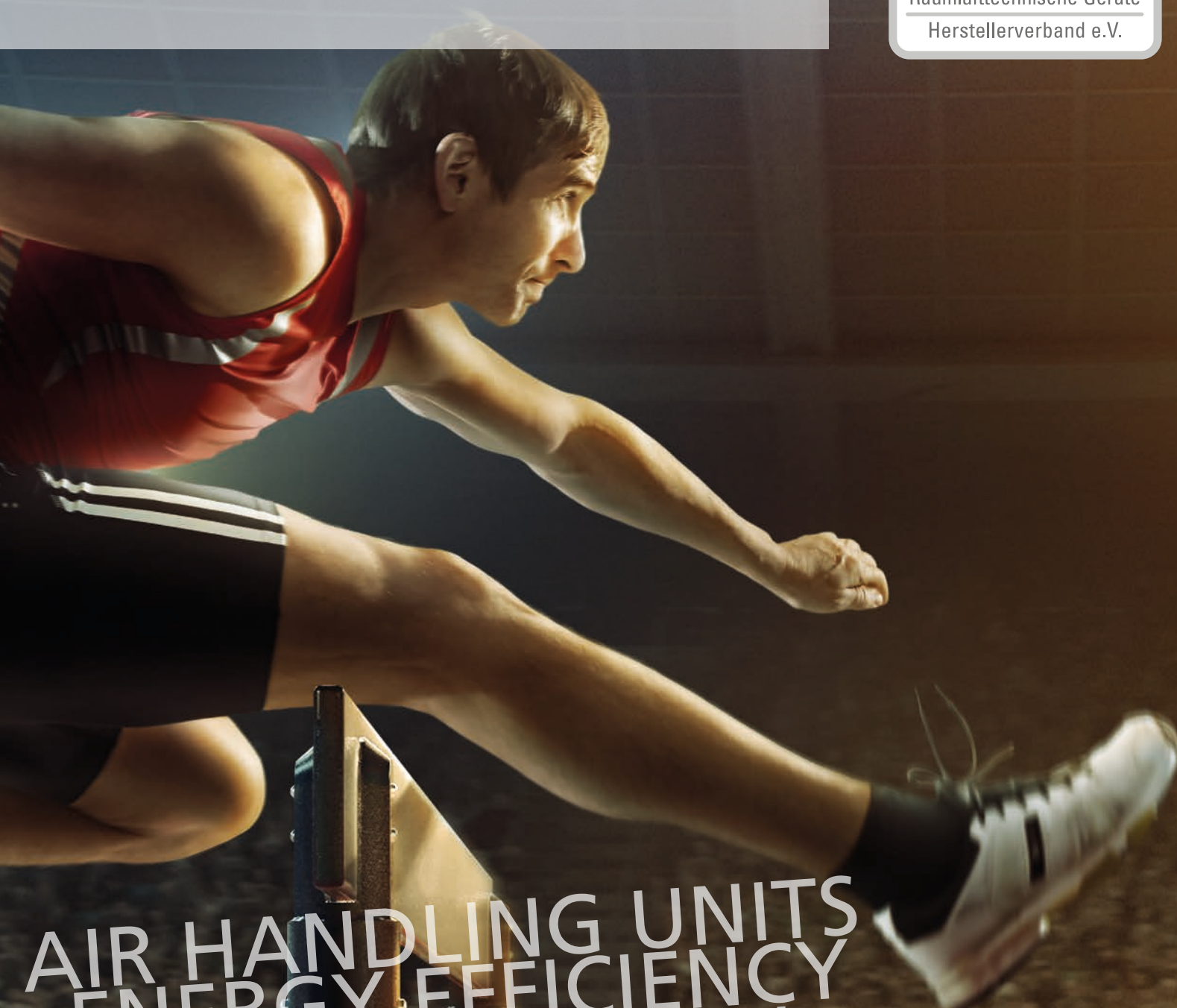




**YOU CAN MASTER ANY
OBSTACLE WITH US**



Raumlufotechnische Geräte
Herstellerverband e.V.



**AIR HANDLING UNITS
ENERGY EFFICIENCY
STANDARDIZATION
COMPLIANCE
GUIDELINES
CONSULTING
STRONG PARTNERS**

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