

## DECENTRALISED AIR HEATERS AND AIR COOLERS

FULL  
PRODUCT  
RANGE



# AL-KO "DESIGN"

## AIR HEATING FOR CHALLENGING SPACES

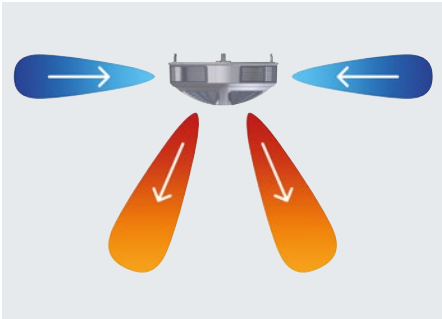


Looking at the areas of application and buildings, in which air heaters and air coolers are usually used, reveals a very important point:

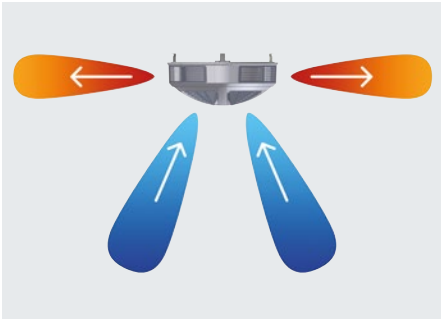
Many buildings are open to the public. These are often DIY shops, supermarkets, exhibition halls, showrooms, shopping centres and all kinds of commercial spaces which – visible to our customers' customers – are equipped with air heaters and air coolers.

Consequently the "DESIGN" stands out due to its appealing visuals, low noise levels and the "V-0" fire protection class of the plastic cover. Thanks to the aesthetically pleasing exterior of the "DESIGN", the expert planner no longer has to "hide" the ventilation equipment from the architect or the building owner, or especially from our customers' customers.

Heating for ceiling heights up to 7 m



Heating for ceiling heights up to 5.7 m



### THE SYMBIOTIC RELATIONSHIP BETWEEN ENERGY ISSUES, NEW FUNCTIONALITY AND CREATIVE DESIGN:

- AL-KO "DESIGN" – Air heaters and air coolers have never been packaged more aesthetically!
- | Best airflow patterns thanks to variable discharge directions.
  - | The air direction can be set either horizontally or vertically, depending on the height of the room.



### TECHNICAL DATA

Heating									
Installation sizes	ED-H1-C1	ED-H1-C2	ED-H1-C3	ED-H2-C1	ED-H2-C2	ED-H2-C3	ED-H3-C1	ED-H3-C2	ED-H3-C3
max. airflow rate (m³/h)	2,030	1,960	1,610	3,110	2,900	2,850	4,300	4,150	3,900
max. heat capacity (KW) (at PWW 70 / 50, air intake +20°C)	7.4	12.2	16	8.5	16.7	21.6	11	18.5	28.1
Drive (2-stage)	3 x 400 V / 50 Hz								



# AL-KO "DESIGN"

## AIR COOLING FOR CHALLENGING SPACES

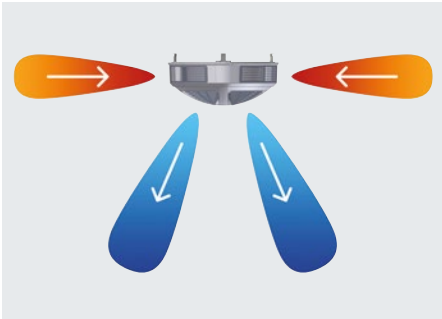


### AESTHETICS AND CONVENIENCE

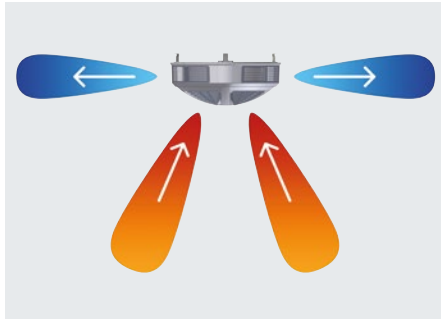
For rooms with high demands for convenience, AL-KO has developed the "DESIGN" PCW air cooler. It is designed for use in buildings that are frequently visited by the public. The air cooler can both heat and cool depending on the requirements of the season. As a result it is very easy to implement ventilation solutions for buildings such as DIY shops, supermarkets, exhibition halls, showrooms and shopping centres.

The "DESIGN" stands out due to its appealing visuals, low noise levels and the special "V-0" fire protection class of the plastic cover.

Cooling for ceiling heights up to 10 m

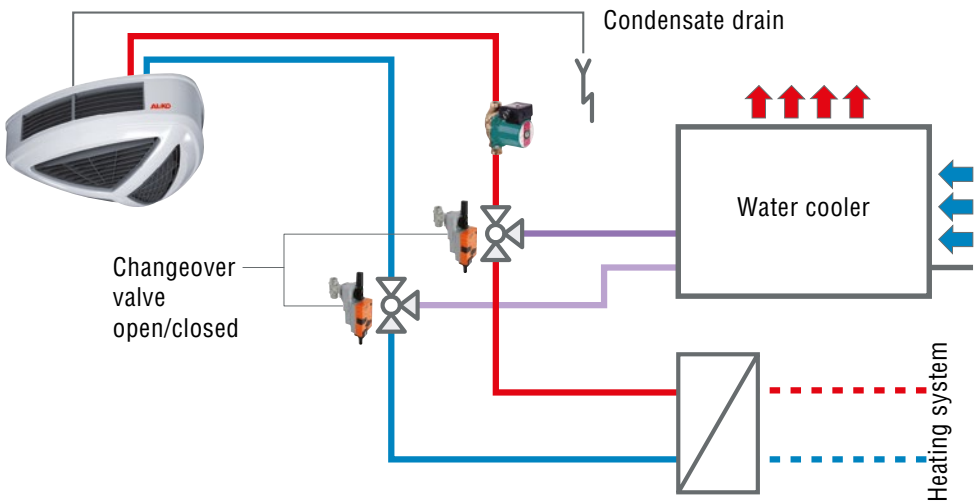


Cooling for ceiling heights up to 5.7 m



### THE SYMBIOTIC RELATIONSHIP BETWEEN ENERGY ISSUES, NEW FUNCTIONALITY AND CREATIVE DESIGN:

Best airflow patterns thanks to variable discharge directions. The fundamental concept of the cooler is based on the technology used in the "DESIGN" heater. All that is required is a condensate pump and few accessories. This allows the cooling function to be added to an already installed "DESIGN" heater. Expensive pipework installation is not necessary, since the existing heating circuit can be used (provided it is only planned for "DESIGN" devices).



### TECHNICAL DATA

Cooling									
Installation sizes	ED-K1-C1	ED-K1-C2	ED-K1-C3	ED-K2-C1	ED-K2-C2	ED-K2-C3	ED-K3-C1	ED-K3-C2	ED-K3-C3
max. airflow rate (m³/h)	2,030	1,960	1,610	3,110	2,900	2,850	4,300	4,150	3,900
max. cooling capacity (KW) (at PCW 10/16, air intake +32°C / 40% rh)	3.5	5.6	7.4	3.8	7.6	9.8	5.1	10.0	12.8
Drive (2-stage)	3 x 400 V / 50 Hz								

# AL-KO "INDUSTRY"

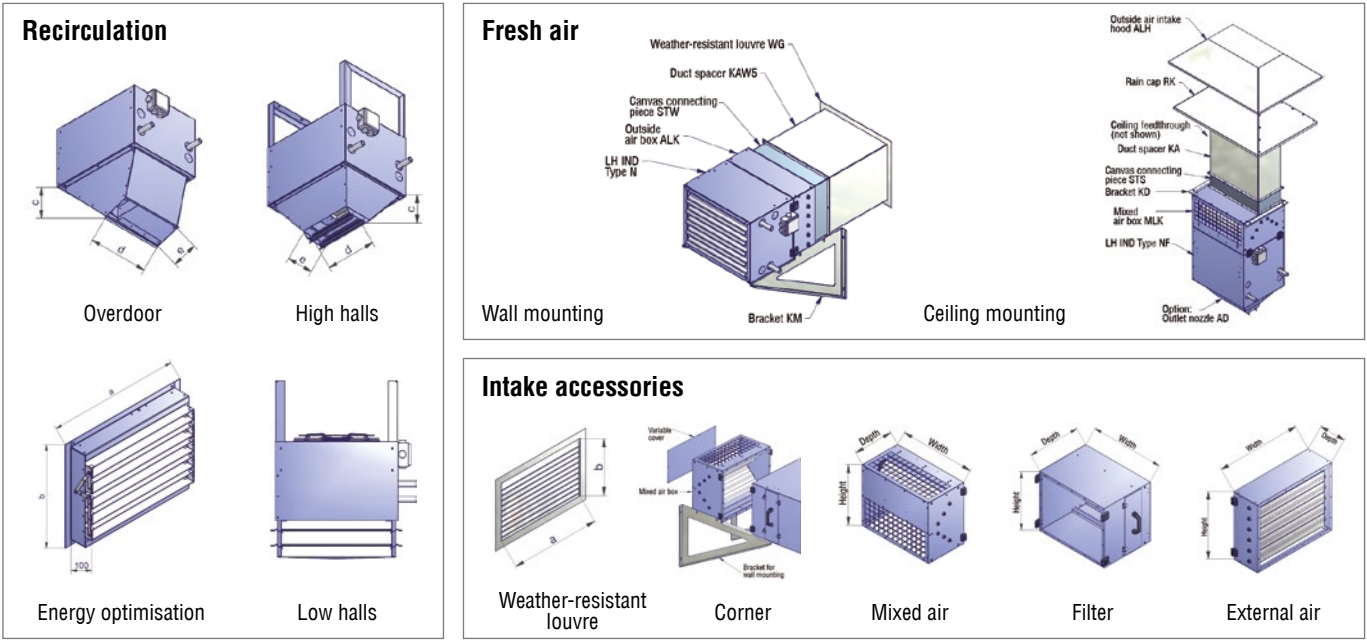
## AIR HEATER FOR EVERY APPLICATION



The AL-KO "INDUSTRY" air heater is designed for use in storage rooms, production facilities, assembly halls and DIY shops. The AL-KO "INDUSTRY" is characterised by its solid construction, the optional wall or ceiling installation as well as its energy efficiency and numerous accessories. Fitted with special accessories, this device is perfectly suited to being combined with overdoor air curtains. The advantage of this range is the universal usage thanks to the modular construction and simple installation.



AL-KO "INDUSTRY" air heater with efficient controls and continuous speed regulation and injection louvre for accelerated heating of the air in the room.



### TECHNICAL DATA

Heating					
Installation sizes	140	250	400	650	1,000
min. – max. airflow rate (m³/h)	1,230 – 2,140	2,230 – 3,610	3,110 – 5,500	4,760 – 8,600	6,080 – 10,280
max. heat capacity (KW) (at PWW 70 / 50, air intake +20°C)	5.8 - 10.6	9.3 – 21.7	17.4 – 38.8	26.4 – 53.8	36.2 – 73
Drive (2-stage)	3 x 400 V / 50 Hz				



# AL-KO "INDUSTRY"

## AIR COOLER FOR EVERY APPLICATION



The AL-KO "INDUSTRY" air cooler is designed for use in storage rooms, production facilities, assembly halls and DIY shops. The AL-KO "INDUSTRY" is characterised by its solid construction as well as energy efficiency and numerous accessories. The "INDUSTRY" air cooler is designed with a condensate trough for free drainage of the condensate. An extensive range of accessories completes the system. The illustration shows the wall-mounted version of the "INDUSTRY" air cooler for recirculated air operation.

## TECHNICAL DATA

### Cooling

Installation sizes	LK 140-N..	LK 250-N..	LK 400-N..	LK 650-N..	LK 1000-N..
max. airflow rate (m <sup>3</sup> /h)	1,750	3,050	4,600	7,600	9,400
min. – max. cooling capacity (KW) (at PCW 6/12, air intake +32°C / 40% rh)	4.9 - 11.2	8.4 – 19.8	13.4 – 33.6	20.3 – 50.4	25.3 - 66.1
Drive (2-stage)	3 x 400 V / 50 Hz				

# AL-KO "ENERGY"

## RECIRCULATION UNIT FOR FEEDBACK OF HEAT

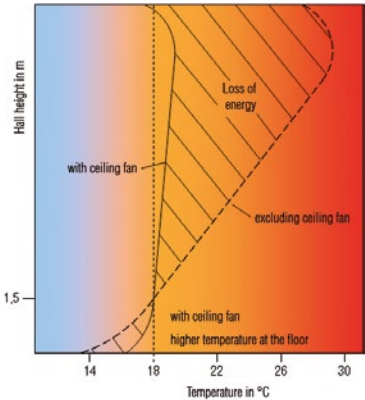


The AL-KO "ENERGY" is designed for use in storage rooms, production facilities and assembly halls. In recirculation mode, the AL-KO "ENERGY" sucks in hot air collected at the hall ceiling due to the thermal uplift and feeds it back into the centre of the room. In this way, already heated air is fed back into the centre of the room by the AL-KO "ENERGY" as a perfect complement to AL-KO air heaters. The air doesn't have to be constantly reheated. The AL-KO "ENERGY" is also beneficial as a complement to static heating systems.

**Feedback of accumulated heat**  
Warm air in rooms rises due to physics. The resulting temperature stratification is approximately 1 K per meter of ceiling height. This behaviour works against the aim of only supplying heat to the area where people are located.

**AL-KO "ENERGY" operating principle**  
The "ENERGY" ceiling fan sucks the warm air collected under the hall roof and conveys it back into the area where people are located. At the same time, the air flow directed downwards counteracts the rising warm air. The "ENERGY" is controlled by a separate control cabinet with selectable switch-on temperatures.

**Applications**  
AL-KO "ENERGY" ceiling fans can be used in all high halls where accumulated heat collects in the ceiling area. Since the devices operate independently of any system, a retrofit of any existing system should also be checked.



## TECHNICAL DATA

Recirculation			
"ENERGY" model	DL-140-E	DL-250-E	DL-650-E
max. airflow rate (m³/h)	2,070	4,000	8,400
Discharge distance, vertical (m)	11	12	14
Drive (2-stage)	3 x 400 V		

**AL-KO THERM GMBH**  
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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:

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