

Products
 Overview

# Products

For Heating, Cooling and Ventilation • Overview



#### Applications



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Offices and Commercial Buildings





Functions

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Cooling

Heating



Commercial and Industrial Buildings

Warehouses and Logistics Buildings



**B** 

Churches and Historical Buildings

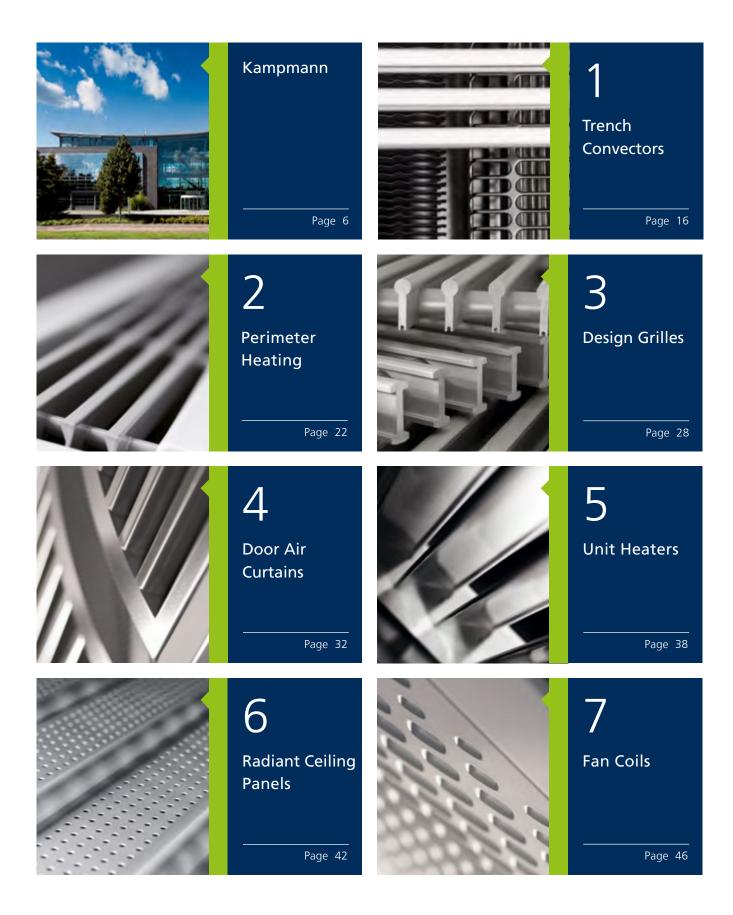


Nursery Schools and Schools

22,

Residential Buildings

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# Kampmann. Genau mein Klima.

With over 950 employees at 16 locations around the world, Kampmann is one of the major players in the construction and building services industries. Kampmann systems for heating, cooling and ventilation are at the forefront of different market segments today.

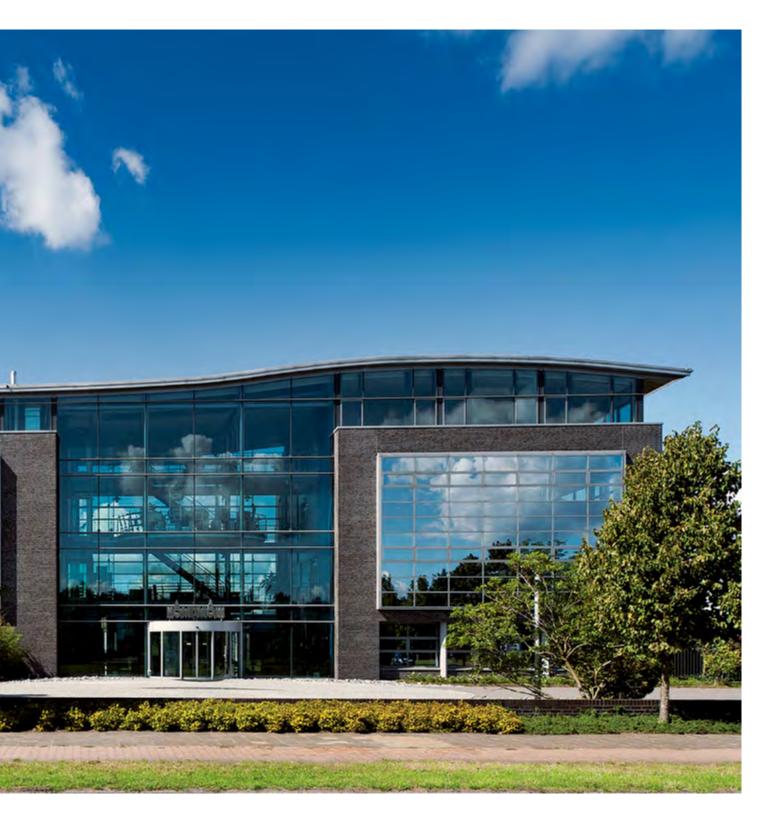
Innovation and the ultimate quality standards in all divisions reinforce this success for the future as well.

Our customers attach importance to working with reliable partners rather than with interchangeable suppliers. We can state clearly and succinctly why Kampmann is such a reliable partner: **Genau mein Klima - "Precisely my kind of climate"** 

#### Precisely:

The precision with which Kampmann adapts its solutions to customers' requirements. **My:** The individual approach Kampmann offers its customers. Kind of climate: The partnershipbased atmosphere that customers and suppliers alike experience with Kampmann.







Kampmann. Genau mein Klima. Wherever our customers and partners need us: we are there. Around the corner. Around the globe. On the web. We are there transforming today's challenges into tomorrow's solutions. We are there when the standards and norms of the future are defined. Down-to-earth, attentive, available at any time. And always ready to go the extra mile

# Consistently cooperative.

Kampmann. Genau mein Klima. We believe that fairness is the best foundation for sustainable success. That a handshake can mean more than a 100-page contract. And that mutual respect comes from seeing eye-to-eye. This is the way we are – and this is how we interact, with our customers, with our suppliers, with each other: a cordial and sincere invitation to genuine partnership.

# Consistently sophisticated.

Kampmann. Genau mein Klima. We leave nothing to chance. Including the future. We check and recheck. We enhance and optimise. And we don't let go until we are thoroughly satisfied. With a love for detail that is only rivalled by our passion for thinking in systems, we maintain and nurture our spirit of discovery and invention that drives us from good ideas to useful products.

# Consistently solution-focused.

Kampmann. Genau mein Klima. A hotel needs a different climate than a retail outlet. And when the southern side of an office block needs to be cooled down, the north may still need warming up. Our customers' requirements are highly specific. So are our solutions. Which means that even the trickiest challenges have a predictable (and most satisfying) outcome: We turn complexity into clarity – and create the perfect climate.

## Kampmann as a Family Company

# One person – one product: Kampmann GmbH has continuously evolved since the company was set up in 1972.

With its vision and keen insight into future markets, Kampmann GmbH grew to become one of the leading international specialists in heating, cooling, ventilation and integrated building automation. The company is still family-owned and, now in its second generation, is managed by Hendrik Kampmann.

The company focuses on customer satisfaction. Some 56 external sales representatives are out on the road in Germany and across the globe for our customers. Together with staff in the 16 (inter-) national representative offices, they provide customers with qualified professional advice on site.

Our customer service team in the Lingen Service Centre supports customers with 28 internal employees. There is a further employee in our Munich Service office handling any problems that might arise. Germany-wide, we also maintain 50 Service Centres and, internationally, our customers can call upon Kampmann Customer Service at 28 Service Centres in twelve countries.



Company founder Heinrich Kampmann and the present Managing Director Hendrik Kampmann.

# **Corporate Group**



Traditionally, Kampmann's expertise has focused on series production with an extraordinary variety of options, as well as on visually attractive, custom-made, project-based solutions.

Outstandingly well-trained, skilled personnel in our three factories produce Kampmann-quality products for customers around the world. In addition to the company's headquarters in Lingen/Lower Saxony, housing administration and production, Kampmann Group has two further production sites in Baden-Württemberg, Germany and in Łęczyca, Poland.

In the spring of 2011, Kampmann acquired a majority stake in NOVA Apparate GmbH, Donaueschingen. NOVA serves ventilation manufacturers with centralised units. Centralised and decentralised air conditioning and ventilation technology grow together. Kampmann UK Ltd., established in 2013, is responsible for the sale and distribution of Kampmann HVAC products in the United Kingdom, Ireland, Australia, New Zealand, the USA and Canada.

emco Klima GmbH has been working as part of the Kampmann group of companies since 2018, which provides an environment clearly focussed on the building services sector for the company's knowledge and expertise in air outlets, decentralised ventilation systems, chilled ceilings and controls.

Exciting synergies become possible through the cooperation of professionals in the merged companies. All customers benefit from this and can now access even more comprehensive and coordinated system solutions.





Emco-klima.com



#### Kampmann GmbH head office in Lingen (Ems)

- development, production, final assembly and sale of virtually all product groups
- Research & Development Centre
- > approx. 62,000 m<sup>2</sup> production area



#### KAMPMANN Polska Sp. z o. o.

- production of unfinished and finished products for heating, cooling and ventilation systems
- in addition to finished products for the regional market, a large proportion of the production output is sent to the German main factory in Lingen for further processing
- approx. 8,300 m<sup>2</sup> production area

# **Research & Development Centre**



# The company's own Research & Development Centre is one of the most modern of its kind.

#### The R&D Centre (FEC) enables the company to

- develop new standard products
- continually improve its products
- undertake applied research
- > provide detailed analysis of the units to be tested
- undertake standard tests.

Major investment requires performance that can be tested. That is what we offer our customers in our in-house R & D Centre (FEC) adjacent to our headquarters in Lingen. Built in June 2008, with an investment of approx. four million  $\in$ , it is one of the most modern facilities of its type in Europe.

The multifunctional design of the building with a floor area of approx. 1,200 m<sup>2</sup> houses an air flow laboratory, a multipurpose laboratory and a sound chamber.

The technically state of the art fit-out of the laboratory, which also houses a test chamber, two climate simulation units and a climate chamber, is designed to meet customers' ever-changing demands:

- functional demonstration and presentation of products
- product testing in real installation situations
- reliable technical data and proof of outputs
- > continuous new developments and product enhancements.

We work closely with leading scientific research institutions, universities and test laboratories. The focus of our work is on sustainable products that operate energy-efficiently and have a long service life, with adaptable operation and manufactured using recyclable materials.





The company's own Research & Development Centre (FEC) at its headquarters in Lingen (Ems), Germany.

# Kampmann International

Professional advice - worldwide



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# Kampmann Online

You will find the best solutions and best support for your everyday business at Kampmann.eu.



#### Products

A wealth of filter options quickly and easily limits the Kampmann product range. In addition to the extensive product information, the product configurator enables configuration even with limited available data, from the product group to final article number.

#### Solutions

Differentiated by building and type of use, designers obtain tailor-made solutions and planning-relevant information, such as technical documentation or current guidelines.

#### Service

Kampmann is always on hand in an advisory capacity to ensure that your project runs seamlessly throughout all stages of your project – from efficiency calculations on green building projects to on-site support.

#### **Social Media**

- Linkedin.com/company/kampmann-gmbh
- Twitter.com/kampmanngmbh
- Facebook.com/kampmann.de
- Youtube.com/user/kampmannlingen



# Trench Convectors



# Perimeter Heating



Door Air Curtains

**Control BMS** 

## **Trench Convectors**

Indoor climate from the floor





Often heating and cooling units are visually unacceptable in front of the windows of modern commercial buildings. At the same time, demands are growing on the part of the users for improved air conditioning.

The wide range of products from the Katherm trench convector product line always offers the perfect solution. As the market leader in this segment, Kampmann offers a wide range of designs: from natural convection, different fanassisted designs to special solutions, like displacement ventilation.

Supply air modules can be added to all Katherm versions above a height of 112 mm. The 400 mm long additional trenches supply conditioned primary air on demand to wherever it is needed.

With the Katherm QK nano, Kampmann offers a trench convector unit with smallest dimensions. The product group takes into account installations that impact on the design of the building, for instance by offering an extensive range of design grilles with different bar profiles, colours and materials. Moreover, the most diverse trench shapes are also possible. Thanks to the Katherm modular system, this can largely be adjusted directly on site.

In terms of control, the trench convector system can easily be integrated into modern BMS systems.

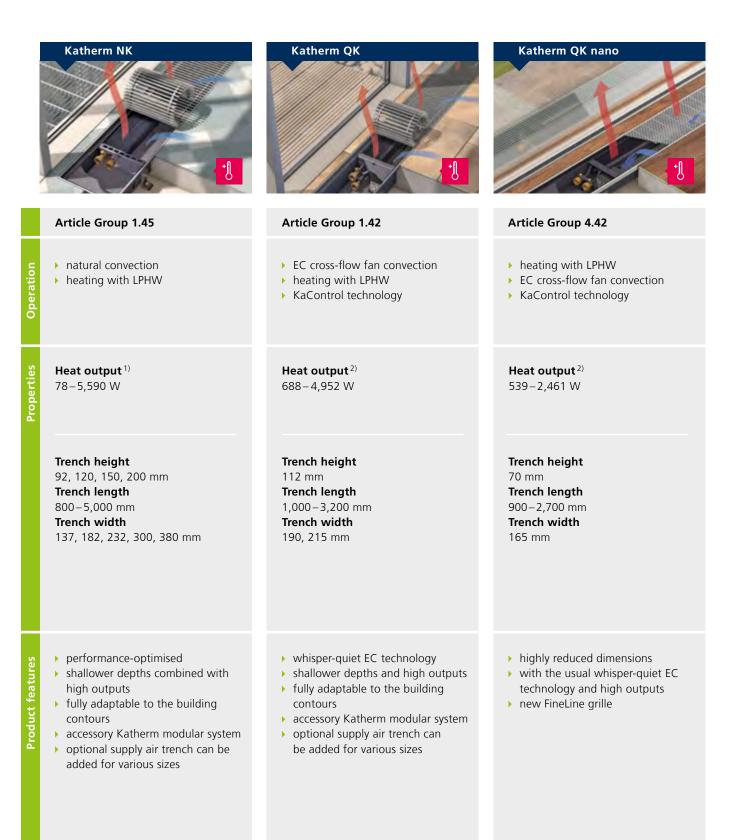
EC technology guarantees maximum energy efficiency. EC fans can be operated on-demand infinitely variably within a low fan speed range, even at low air volumes, with intelligent, integrated electronics and thus energy-efficiently. Low fan speeds have a positive effect on noise levels in areas, like offices, where the noise levels lie far below the audible threshold or the usual measuring range.

#### Overview



## **Trench Convectors**

Overview



Perimeter Heating

Design Grilles

Door Air Curtains





#### Article Group 1.43

- EC cross-flow fan convection
- heating with LPHW
- cooling with CHW
- > 2 or 4-pipe system
- KaControl technology

#### Heat output<sup>2)</sup>

Operation

Properties

**Product features** 

919–10,680 W **Cooling output**<sup>3)</sup> 267–1,645 W

#### Trench height 130, 160, 210 mm Trench length Height 130/160: 915 (height 130 mm), 950 (height 160 mm), 1,200, 1,700, 2,000, 2,500, 3,000 mm Height 210: 950, 1,200, 1,350, 1,850, 2,250 mm Trench width Height 130:320 mm | Height 160:290 mm | Height 210:360 mm

- EC tangential fan, whisper-quiet and energy-efficient, optimised air flow and cascaded in the form of a continuous line of fans
- tangential fan is easy to remove
- condensate tray can be removed for ease of cleaning
- Eurokonus valve connection for fast installation
- accessory Katherm modular system
- optional supply air trench can be added for various sizes

Katherm NE		
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#### Article Group 2.45

- heating with electric heating element
- natural convection
- fast heat-up
- virtually silent operation

#### Heat output

250-880 W

#### Trench height 150 mm

**Trench length** 750, 1,150, 1,550, 1,950 mm **Trench width** 207 mm





#### Article Group 2.42

#### heating with electrical element

- EC cross-flow fan convection
- high heat output at low sound pressure level
- for full space heating

**Heat output** 800-2,400 W

#### Trench height 112 mm Trench length 825, 1,250, 1,700 mm Trench width 207 mm

> 2-stage safety switch

- integrated output control
- room thermostat or BMS control
- specially designed heating elements
- 2-stage safety switch comprising safety thermostat and temperature fuse as protection against incorrect operation
- integral 0–100 % output control
   low surface temperatures
  - low surface temperatures
- easy control via room thermostat or BMS
- fast warm-up of the room

KaControl BMS

Radiant Ceiling

Air Handling Units

# **Trench Convectors**

At a glance









# QK nano

11



Whisper-quiet EC technology. Made to



NE



KaControl BMS

# Perimeter Heating



## **Perimeter Heating**

Multi-functional, durable, highly responsive



Uncased or cased, wall-mounted or free-standing encased convectors: Kampmann convectors meet the most exacting design requirements. They blend seamlessly into the interior style both in residential and commercial buildings.

Steel convectors release their high heat output when encased. At the same time, they are extremely robust and durable, and thus meet customers' high demands in terms of service life and performance. The steel convectors are galvanised for optimum corrosion protection using state-of-the-art production methods. It is undisputed in the trade that convectors also offer a practical solution for use with low water temperatures. Kampmann also produces made-to-measure sill casings and trenches including accessories on request, thus offering professional solutions for the most diverse requirements.

PowerKon + W and PowerKon + F encased convectors with PowerKon copper/aluminium heat exchanger represent the functional and cost-effective version for effective heating. Systematic design meets a compact construction with low heights and depths.

The low water content results in short heating-up times and accurate controllability. Modern galvanising and sheet steel casing guarantee corrosion protection even in challenging environments.



Trench Convectors

# **Perimeter Heating**

Overview



#### Article Group 1.26

heating with LPHW

natural convection

Operation

Properties

222-3,676 W

Heat output 1)

#### Height

80, 130 mm **Length** 600–2,600 mm **Depth** 130, 180, 230 mm

#### Air outlet

- linear grille with C-shaped profileColour
- standard RAL 9016,
- other colours on request
- Applications
- functional, value-for-money model for the visually appealing use of convectors, for instance for installation along the facade of the building
- free-standing installation



#### Article Group 1.26

heating with LPHW

natural convection

Heat output <sup>1)</sup> 176–6,768 W

Height 250, 400, 550, 700 mm Length 600 – 2,600 mm Depth 70, 120, 170, 220 mm

#### Air outlet

- perforated profile
- Inear grille with C-shaped profile
- Colour
- standard RAL 9016,
- other colours on request
- for the encased use of convectors
- > available in two different design models
- wall-mounted

Operation

Properties

Applications

PowerKon nano

1	
Article Group 1.34	Article Group 1.10
<ul><li>EC cross-flow fan convection</li><li>heating with PWW</li></ul>	<ul><li>heating with LPHW</li><li>natural convection</li></ul>
<b>Heat output</b> <sup>2)</sup> 610 – 2,320 W	<b>Heat output</b> <sup>1)</sup> 149–16,023 W (bei H <sub>V</sub> = 500 mm)
<b>Height</b> 160 mm <b>Length</b> 950, 1,150, 1,400, 1,800, 2,150 mm	<b>Height</b> 70, 150 mm <b>Length</b> 500–5,000 mm <b>Depth</b> 50, 100, 150, 200, 250, 300 mm
<ul> <li>Air outlet</li> <li>FineLine steel grilles powder-coated or stainless steel</li> <li>Colour</li> <li>standard DB 703</li> </ul>	<ul> <li>Air outlet</li> <li>individual air outlet</li> <li>Colour</li> <li>galvanised</li> </ul>
<ul> <li>functional version for use in front of facades</li> <li>free-standing installation</li> <li>visually attractive due to FineLine grille</li> </ul>	for use in convector casings or for installation in a trench: the professional solution!

#### Steel Convector

 $^{2)}$  with PWW 75/65°C, 20 °C, at 60% fan speed

KaControl BMS

# **Perimeter Heating**

At a glance







# B Design Grilles

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# **Design Grilles**

For modern buildings

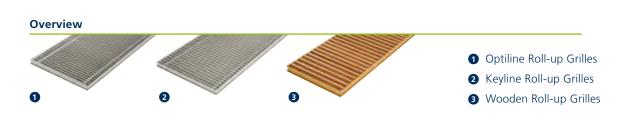


For some years now, the trend in modern architecture has been to actively incorporate required operating systems into the overall interior design. Kampmann design grilles take this development into account.

The wide range of materials and colours open up numerous design options. In terms of metal, the available finishes range from aluminium to brass and stainless steel. Oak, beech, maple and merbau offer four wooden grilles to create an individual homely impression.

Thanks to the many projects that Kampmann has already completed, we are able to call on an extensive stock of special solutions, like different angles, curves, adjustments to pass around columns and polygonal connections, recesses, mitred corners and many more.

Kampmann will take care of everything, from site measurements to delivery.



Trench Convectors

Chillers/ Heat Pumps

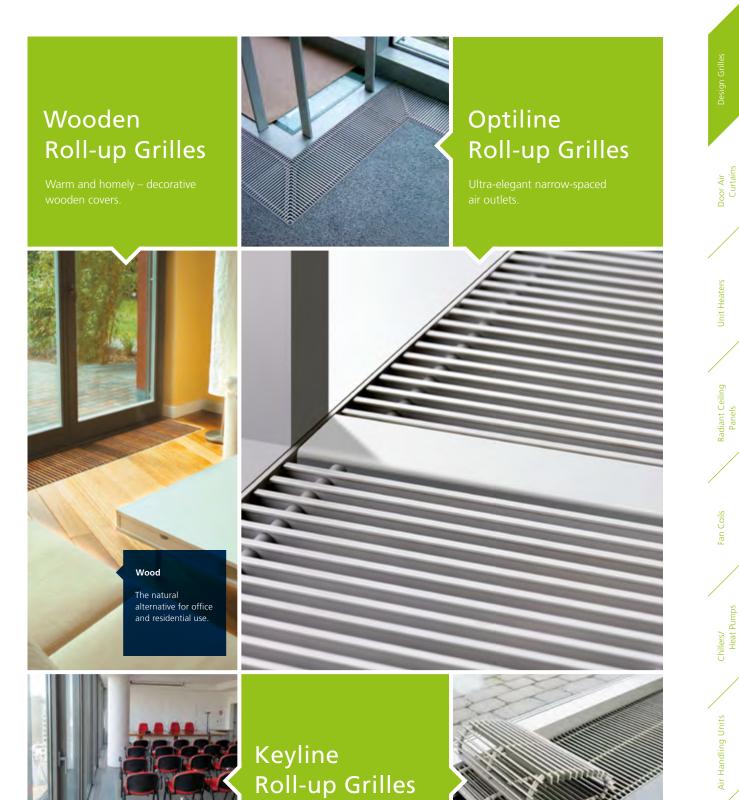
# **Design Grilles**

Overview





### At a glance



# Door Air Curtains



# **Door Air Curtains**

Keep the cold outside!



Kampmann commercial and industrial door air curtains offer optimum screening for air conditioned interior spaces. They reliably do their job wherever outdoor and indoor climates meet.

Thanks to their screening effect across open doors, door air curtains provide a comfortable interior environment during the colder months. The noticeable warm air flow creates a rapid sense of comfort especially when the outside temperatures drop.

### Door air curtains also have a number of additional benefits:

- minimal energy losses by screening cold outside air in winter
- fewer draughts. Workstations can be arranged closer to the entrance area, thereby maximising the use of the floor space
- in summer they aid air conditioning systems when operated without heat, reducing the ingress of warm outside air, saving on cooling output and energy costs
- accumulated heat from the ceiling area is utilised for air screening
- versatile use in retail outlets of all kinds, malls and public buildings

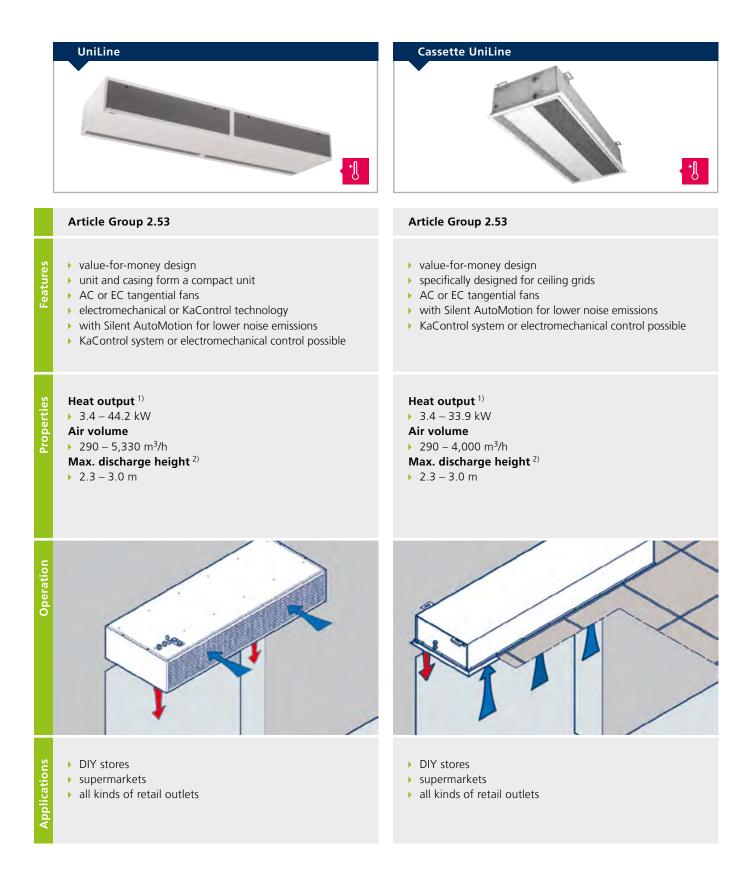
ProtecTor is unique in the industrial heating sector: this door air curtain operates with a warm and ambient air stream, saving up to 38 % energy compared to conventional systems. The discharge nozzles concentrate the air stream for targeted output.

#### Overview



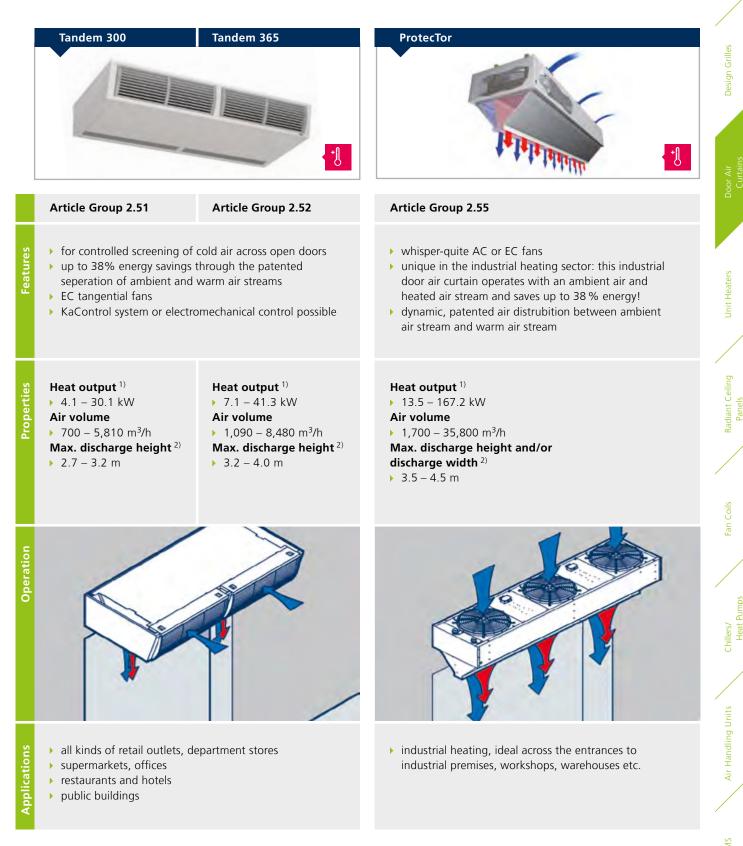
# **Door Air Curtains**

Overview



Perimeter Heating





KaControl BMS

# **Door Air Curtains**

At a glance





### **ProtecTor**

Door air curtain with ambient air and heated air streams for effective screening.









## 5 Unit Heaters





**Top-class performance** 



## Top-level heating, cooling and ventilation is crucial in large expansive spaces.

Kampmann comes into its own with its wide range of unit heaters. Whether wall-mounted or ceilingmounted units, with heat exchangers for water or steam or thermal oil, recirculating air or mixed air – the large range of units provides the optimum solution for every possible application. Unit heaters are particularly suitable for optimum, decentralised heating and ventilation of the following types of building:

- production halls
- warehouses
- industrial or commercial workshops
- retail stores
- greenhouses
- buildings with connection to district heating systems or with high temperature differences (barracks, etc.)
- buildings with steam heating systems

**EC technology:** The unit heaters TOP and Ultra are now also available with energy-efficient EC technology.

#### Overview



Door Air Curtains

## **Unit Heaters**

#### Overview



#### Article Group 1.57

#### Casing

Properties

Equipment

Applications

 fully manufactured from galvanised sheet steel

#### Fan

- 1-stage, AC-sickle blade, whisper-quiet 230 V/50 Hz
- 2-stage, three-phase sickle blade, whisper-quiet fan, 400 V/50 Hz

#### Heat exchanger

- copper/aluminium
- suitable for LPHW

#### Installation options

- wall- or ceiling-mounted
- simple attachment of discharge-side accessories, like the two-row louvre and the four-way diffuser
- production plants, workshops and assembly halls
- industrial and trade workshops



#### Article Group 1.53

#### Casing

 fully manufactured from galvanised sheet steel

#### Fan

- 1-stage, AC-sickle blade, whisper-quiet 230 V/50 Hz
- 2-stage, three-phase sickle blade, whisper-quiet 400 V/50 Hz
- infinitely variable speed control
- EC fans

#### Heat exchanger

- copper/aluminium (suitable for LPHW)
- galvanised steel (suitable for LPHW)
- galvanised steel for use with steam
- galvanised steel, cross-flow

#### Installation options

- wall- or ceiling-mounted
- extensive accessories, modular system for simple adaptation to technical and structural requirements
- KaControl system or electromechanical control possible
- production halls, warehouses
- buildings with connections to district heating systems or with high temperature spreads
- > areas at risk of explosion
- buildings with steam heating systems

Ultra



#### Article Group 1.54

#### Casing

- contemporary housing
- with 6-sided air outlets, each with six pre-set defined adjustment angles

#### Fan

- > axial fans, sickle blade, 1 or 2-stage
- infinitely variable speed control
- EC fans

#### Heat exchanger

- circular design for maximum output from minimal dimensions
- copper pipes with aluminium fins
- suitable for LPHW

#### Installation options

ceiling installation

#### all units in the range come complete with fitted bracket set and are available with a range of controls

- KaControl system or electromechanical control possible
- supermarkets, retail stores or exhibitions
- for recirculating or mixed air operation



#### At a glance



### TIP

Vall- and ceiling-mounted unit eater. The simple solution.





## Ultra

Ceiling unit for heating, cooling, ventilation within architectural interiors. Meets the most exacting demands in terms of design and comfort.



KaControl BMS

## TOP

Wall- and ceiling-mounted unit heater. The warm air solution for almost all requirements.



## 6 Radiant Ceiling Panels



## **Radiant Ceiling Panels**

Radiant heat for halls and large spaces



Heat distribution is crucial to achieve thermal comfort in high-ceilinged spaces. The Galaxis radiant ceiling panels generate a favourable temperature profile from the floor to the full height of the ceiling.

Galaxis radiant ceiling panels are designed for use in industrial buildings, warehouses and production plants, sports halls and indoor riding arenas, as well as in retail stores.

The heat outputs have been tested by the HLK Stuttgart according to EN 14037, registered by DIN CERTCO and monitored by Keymark certification, registration number 011-8D003. Galaxis radiant ceiling panels can be fitted with ball guards, tested by MFPA Leipzig, Examination Report No. UB 2.1/13-567-1 and -2.

Overview

#### Comfort and energy savings

If radiation heat is provided, the air temperature plays a minor role for the comfort of those in the building. Here is an example: air temperatures are approximately identical in the sun and in the shade. However, when the outside temperatures are low, people have a greater sense of well-being in the sun, when radiant heat plays an additional role.

#### **Energy-efficient heating with many benefits:**

- pleasant perception of temperature due to radiation, at the same time saving energy
- minimal air movements, therefore no swirling dust and no draughts
- no risk of fire or explosion
- maintenance-free operation
- no space needed on the floor and walls
- minimal floor to ceiling temperature stratification (approx. 0.2 K/m)
- good control due to smaller volumes of water

Combined with integrated LED lighting, the Galaxis LED offers an innovative and, at the same time, visually compelling solution for numerous applications. The integral LED technology helps to lower electrical energy consumption by up to 60%, at the same time providing a longer service life. In addition, the environmentally-friendly LED Galaxis delivers 100% luminosity from the first second.

Galaxis
Galaxis LED

Trench Convectors

Air Handling Units

## **Radiant Ceiling Panels**

#### **Overview**





#### Article Group 2.31

- made of 1.0 mm thick cold-rolled sheet steel with semi-circular grooves for optimum seating of the tubes in the panel
- perforated design possible
- > powder coated in RAL 9016, other RAL colours available

#### **Thermal radiation**

#### up to 76%

Heating

Properties

LPHW

#### **Panel widths**

- ▶ 300-1,500 mm
- **Panel lengths**
- ▶ 3.0-70.0 m

#### Installation options

ceiling installation

## Accessories Equipment

Applications

- press-fit sleeves, cover panel
- mounting kits and regulating valve combinations
- control accessories

#### Article Group 2.31

- with energy-efficient LED technology
- Iowers electrical energy consumption by up to 60%
- Iong service life with a high number of switching cycles
- 100% luminosity from the first Þ second
- no mercury

#### **Light efficiency**

- > 154 lm/W
- Light colour
- ▶ 4,000 K/5,000 K

#### Panel widths

- ▶ 300 1,500 mm
- **Dimensions of LED light strip**
- ▶ 560 x 62 x 70 mm

#### Installation options

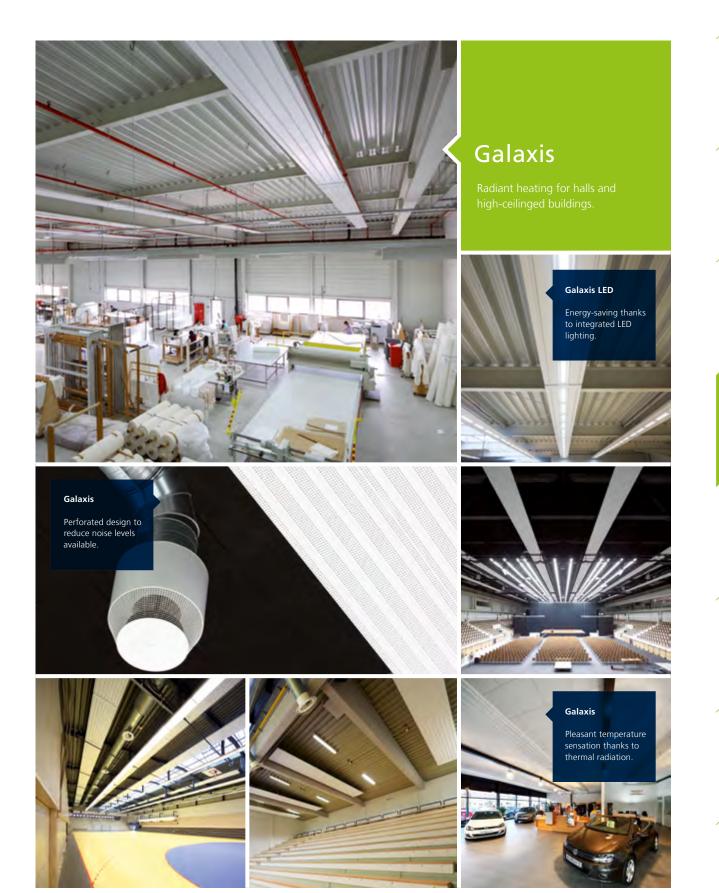
ceiling-mounted (LED light strip factory-fitted in the radiant ceiling panel)

#### LED light strip consisting of

- aluminium housing
- clear cover, ball-impact-resistant
- dimmable, DALI
- production plants, workshops and assembly plants
- industrial units, warehouses and production halls
- exhibition halls
- > sports halls and indoor tennis courts, indoor riding arenas
- industrial premises and warehouses, workshops
- > sports halls and indoor tennis courts, multi-purpose halls
- impact-proof design optionally available



### At a glance





Perimeter Heating

Design Grilles

Door Air Curtain

**adiant** Ceiling

Heat Pump

Chillers/

Air Handling Units

## **Fan Coils** Decentralised heating and cooling for almost every requirement



Fan coils are high-quality decentralised units for heating and cooling and are used in many different kinds of buildings. They are predominantly installed in hotels, offices and public buildings, but are equally suitable for other commercial buildings. Their extensive range, comprising traditional fan convectors, cassette units, wallmounted units and the innovative KaDeck system, offer an appropriate solution for almost every requirement.

Fan coils run primarily with LPHW or CHW and thus combine an energy distribution free of refrigerant with individual heat and cooling transfer in the room. A range of different designs offers maximum flexibility. Alongside wall- and ceiling-mounted units with designer casings, there are also models for installation in suspended ceilings or under the ceiling.

The outstanding workmanship of the components, sound-optimised housings and fans, as well as the low-maintenance construction of the fan coil units, combine to provide a high degree of safety for operators and users alike.

Optimum control options and their ease of use make fan coils an efficient element in every heating and cooling system. Connection to an on-site BMS is also possible. The KaControl automation system has proved itself to be an affordable and reliable solution for these cases.

Overview



## Fan Coils

#### Overview



#### Article Group 1.48

#### Casing

Properties

- flexible combination by basic unit and casing
- the quietest on the market
- casing in slim design in all common RAL colours
- easy to install
- VDI 6022 hygienekonform in Verbindung mit ePM 1 ≥ 50% Filter

#### Fan

- stage-controlled AC fans
- infinitely variable EC fans

#### Heat exchanger

> 2- or 4-pipe unit

#### Heating

#### LPHW

Cooling

Features

CHW

#### Cooling output<sup>1)</sup>

- ▶ 0.88-9.52 kW
- Heat output<sup>2)</sup>
- ▶ 1.82-22.12 kW

#### **Control options**

- EC variation: KaControl or electromechanical
- AC variation: KaControl or electromechanical

#### Installation options

wall-mounted, ceiling-mounted or free-standing

#### Variations

available in seven sizes

#### Accessories

- > 2- or 4-way valve kit
- possible fresh air supply
- > pre-installed condensate pump and condensate tray



#### Article Group 3.26

#### Casing

- optimised model for dry or wet cooling
- discreet and elegant designer panel
- simple maintenance, no requirement for additional access openings, no visible latches
- > all visible parts powder-coated, different colours on request

#### Fan

infinitely variable EC fans

#### Heat exchanger

- 2-pipe unit
- Heating
- ▶ LPHW
- Cooling
- CHW

#### Cooling output<sup>1)</sup>

- > 579-3,114 W (wet cooling)
- Heat output<sup>2)</sup>
- ▶ 743-3,755 W

#### **Control options**

- KaControl optional
- with optional dew point monitoring

#### Installation options

within suspended ceiling, below the ceiling, at the perimeter or in the centre of the room

#### Variations

> available in four versions (dry or wet cooling)

#### Accessories

- flexible waterside connections optional
- possible primary air supply
- optional dew point monitor sensor

Perimeter Heating

Design Grilles

Door Air Curtains

Radiant Ceiling



KaCool D AF



#### Article Group 3.25

#### Casing

Properties

- AtmosFeel for maximum comfort
- Optional primary air connection
- ABS panel with AF (AtmosFeel) in RAL 9010 (pure white)

#### Fan

- stage-controlled AC fans
- infinitely variable EC fans

#### Heat exchanger

> 2- or 4-pipe unit

#### Heating

- LPHW
- Cooling

Features

CHW

#### Cooling output <sup>1)</sup>

#### 1.94–11.77 kW Heat output<sup>2)</sup>

▶ 1.91-22.66 kW

#### **Control options**

- EC variation: KaControl or electromechanical , infrared remote control
- AC variation: electromechanical

#### Installation options

ceiling installation

#### Variations

available in seven sizes

#### Accessories

- 2- or 3-way valves
- > Optionally available with infrared remote control

#### Article Group 3.24

#### Casing

- energy-saving EC fan
- integrated 3-way valve
- elegant and discreet
- easy to install

#### Fan

- stage-controlled AC fans
- infinitely variable EC fans

#### Heat exchanger

- 2-pipe unit
- Heating
- LPHW
- Cooling
- CHW

#### Cooling output <sup>1)</sup>

▶ 680-4,810 W

- Heat output <sup>3)</sup> 990-5,970 W
- 990-5,970 W

#### **Control options**

electromechanical or infrared remote control

#### Installation options

wall-mounted

#### Variations

available in four sizes

#### Accessories

 condensate pump can be fitted as an accessory below the wall-mounted unit

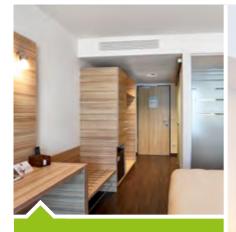
Air Handling Units

Chillers/ Heat Pumps

# KaCool W

## Fan Coils

At a glance



Venkon

Sickle blade whisperquiet fan.

## Venkon

Fan convectors, FCU, recirculating air. Heating, cooling and filtering with maximum comfort.



## KaCool W

Wall-mounted room heating and cooling unit. Attractive and discreet on your wall.













Cine.

## KaDeck

Versatile ceiling-mounted air conditioning system for use in commercial buildings.

## KaCool D AF

Ceiling cassette with AtmosFeel for the highest standards of comfortable air supply and design.



**Design Grilles** 

12%

-

1000 C

KaCool D AF

Minimalist cassette

design, optional with energy saving EC fans.

Air Handling Units

## 8 Chillers/Heat Pumps

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## **Chillers/Heat Pumps**

#### Environmentally-friendly air conditioning of buildings for today and tomorrow



Chillers and heat pumps are suitable for the heating and cooling of the most diverse types of buildings. Using water as an energy carrier in a building offers massive benefits over complex and extensive direct evaporation pipe systems that use large volumes of refrigerant:

#### Versatile to use

Since they use water as the medium, chillers can be readily extended with a wide range of products. It is, thus, very easy to integrate components with high ecological value such as CHP units, wood fired boilers and solar-driven heat generators and chillers, as well as a large number of different terminal appliances. Integrated heat pump functions optionally offer an attractive alternative for a complete heat generation.

#### Advantageously priced

In selecting this system, while its installation costs are similar to those of a direct evaporation system, the primary focus will be on its running costs. The lower volume of refrigerant required, the overall efficiency and the opportunity to integrate resource efficient systems all argue in favour of chillers.

#### Sustainable in terms of procurement

Since legislators are making high demands of air conditioning systems in terms of ecological compatibility, regulations have been developed that prescribe a minimum standard of energy efficiency and that limit or prohibit the use of various refrigerants. These requirements are constantly changing, meaning that the chillers themselves sometimes have to be replaced. With a chilled water system, it is significantly easier to adapt to changing conditions.

Given the ecological and economic benefits of water-based cooling equipment it is possible to provide affordable and environmentally responsible air conditioning for buildings, for today and for the future.

#### Übersicht





KaClima AO 4 - 50 kW
 KaClima AO 50 - 124 kW

Trench Convectors

## **Chillers/Heat Pumps**

#### Overview



#### Article Group 3.50

 air-cooled compact unit for outdoor installation, for small to medium output range

#### Compressor

Operation

- speed-controlled inverter-compressor
- extremely quiet as no ON/OFF cycles

#### Fan

- infinitely variable EC fans
- optional diffusers for output boost and sound attenuation

#### Heat output 1)

4.7 – 49.3 kW **Cooling output**<sup>2)</sup> 4.7 – 49.2 kW

#### Basis design

Properties

- cooling and heating mode (cooling mode: -10 °C - +45 °C; heating mode: -20 °C - +45 °C)
- continuously variable power adjustment via DC inverter compressor
- refrigerant R410A
- circulation pump, savety valve, flow monitor and dirt trap

#### Installation options

outdoor installation

#### Accessories

AXI-TOP diffusor for noise reduction

#### KaClima AO 50 – 124 kW



#### Article Group 3.50

 air-cooled compact unit for outdoor installation, for medium output range

#### Compressor

- 1x speed-controlled inverter-compressor for optimum output adjustment
- 1x ON/OFF switch for optimum efficiency in full-load operation

#### Fan

- infinitely variable EC fans
- optional diffusers for output boost and sound attenuation

#### Heat output 1)

49.6 – 120 kW **Cooling output**<sup>2)</sup> 50.1 – 124 kW

#### Basis design

- cooling and heating mode (cooling mode: -10 °C - +45 °C; heating mode: -20 °C - +45 °C)
- continuously variable power adjustment via DC inverter compressor
- refrigerant R410A

Optional hydraulic equipment coordinated to use

#### Installation options

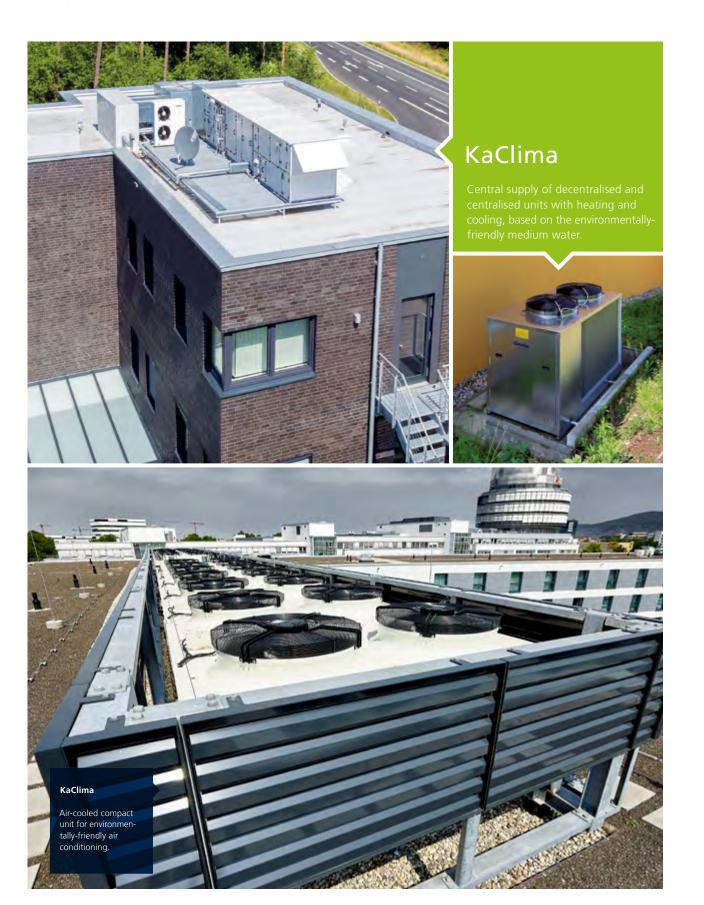
outdoor installation

#### Accessories

- AXI-TOP diffusor for noise reduction
- circulation pump



### At a glance



## 9 Air Handling Units



## **Air Handling Units**

Centralised air conditioning for an optimum indoor climate



Air handling units are used for the ventilation of individual rooms in hotels and office buildings, ventilation of retail and production areas, as well as the air conditioning of complex buildings.

Combining air handling units with decentralised units has proved itself to be effective for the air conditioning of buildings. Complementing the output range with a versatile control system offers the additional benefits of a coordinated complete system.

#### Various unit designs

A wide range of requirements caused by different structural conditions within buildings can be met thanks to a comprehensive product portfolio, consisting of slimline units, compact units as well as individually configured units. It is immaterial whether the ventilation unit is positioned outdoors, for instance on the roof of the building, or indoors. A range of solutions are also available to meet specific challenges, such as renovating existing buildings or smaller access openings.

#### **Quality and comfort**

Optimised in terms of air flow and fitted with energyefficient fans, air handling units comply with the requirements of all relevant regulations and thus offer a high level of safety for operators and users alike. However, comfort is just as important as functionality: low air velocities in the units and optionally available sound baffles guarantee very low sound pressure levels. Air handling units are therefore ideal for use in areas in which disruptive noises from building services systems are to be avoided.

### Sustainable in terms of operation and procurement

A range of systems for heat recovery permit the economically sensible selection of appropriate units, alongside the energy-efficient ventilation of buildings, taking into account the application, use and use behaviour. Various heat exchangers for use with LPHW, CHW and refrigerant are also available to condition the air perfectly.

#### KaControl

The KaControl automation system allows air handling units to be combined with decentralised units, for example, to create an efficient overall system. Interfaces to different building management systems also provide the option of flexible integration into an on-site building automation system.

Overview



1 Airblock FG

## Air Handling Units

#### Overview



#### Article Group 1.50

- slimline AHU for heating, cooling, ventilation and filtering
- expandable with heat recovery module (HRV) incl. bypass function
- for use with fresh, mixed or recirculating air, heating or cooling mode

#### Fan

Properties

 direct-driven radial fan with backward-curved impeller, infinitely variable EC fans

#### Heat recovery

 aluminium counterflow plate heat exchanger for excellent heat recovery and complete separation of the air passages

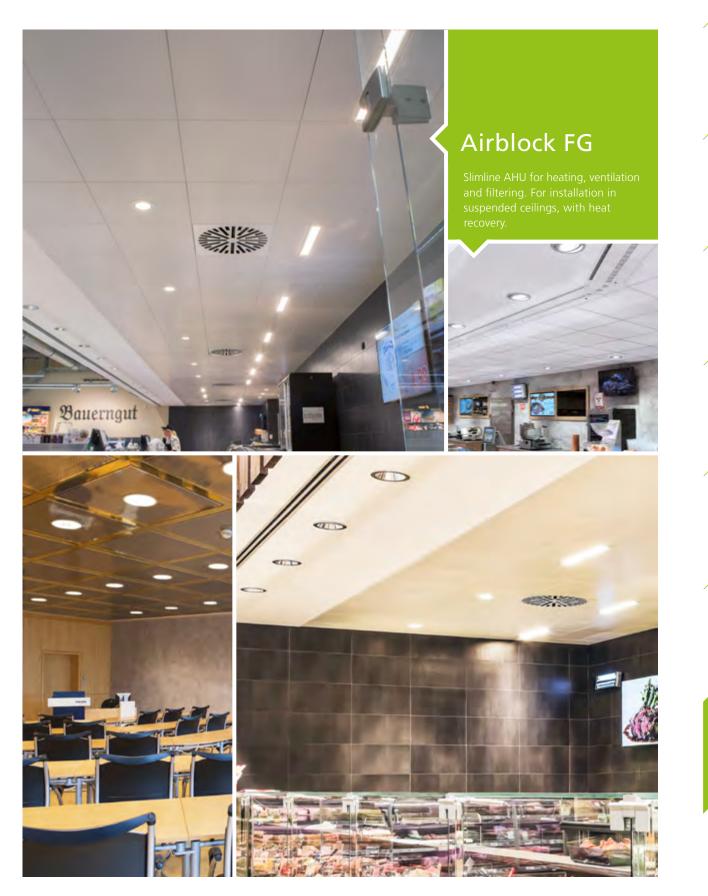
#### Installation options

- indoor installation
- suitable for installation in suspended ceilings

- differential pressure measurement with digital flow rate indicator
- filter monitoring device with digital pressure drop indicator
- extensive accessories
  - air filter ISO ePM2,5  $\geq$  65% / ISO ePM10  $\geq$  85%
  - cooling (LPHW, CHW)
  - heat recovery
  - sound attenuation



### At a glance



Perimeter Heating

## 10 KaControl BMS





## KaControl



#### KaController room control unit

The KaController room control unit is the universal interface between people and Kampmann air conditioning technology. Intuitive operation via a push-turn button, in conjunction with the large display and attractive appearance, meets all expectations for convenient use.

#### Overview





0

 KaController Room Control Unit
 KaController Room Control Unit with Operating Keys **Design Grilles** 

Trench Convectors

## KaControl:

#### Rationality through modularity

The KaControl automation system is tailored to the control and regulation of heating, cooling and ventilation systems.

The focus is on optimum use and adaptation of automation to the required functions when selecting and configuring the equipment and system controllers.

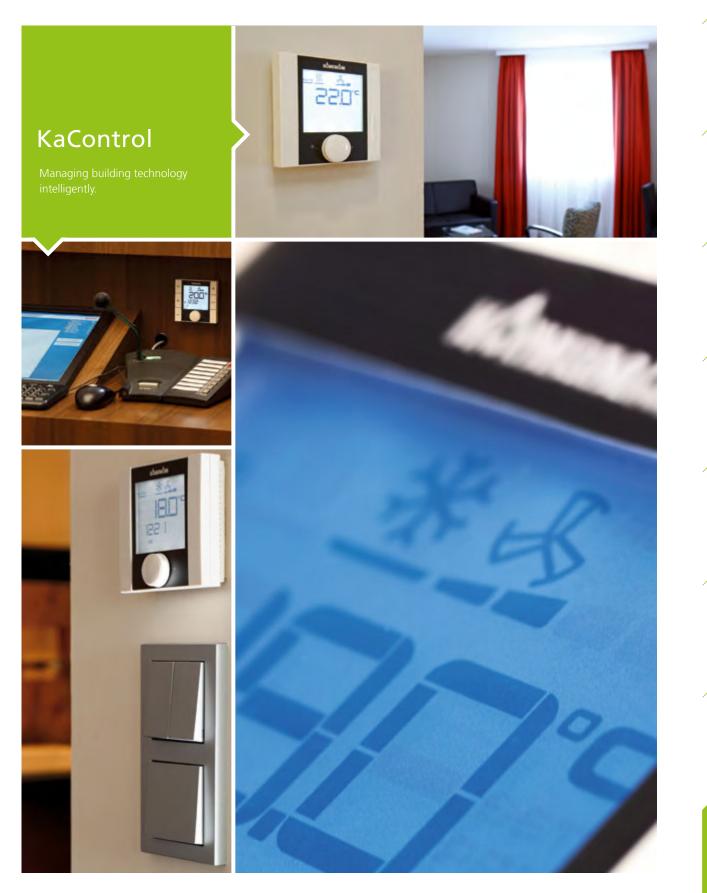
#### **Basic Controller**

The family of Basic Controllers is primarily used at a field level. The scope of functions is limited to the main purposes of heating and cooling. The controllers are factory-equipped with a fixed software. Depending on the use, adjustable parameters can be used to make adjustments to operation. The Basic Controller can optionally be equipped with interface cards for direct connection to automation systems.

Typical applications include the control of fan-assisted trench heaters, fan convectors, chilled water ceiling cassettes or even door air curtains. Unit heaters can be networked and operated in combination or in individual zones in industrial premises or large spaces.



### At a glance



Perimeter Heating

Design Grilles

Air Handling Units

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