



German Products

Suitable for low energy / sustainable buildings

Lingen (Ems) site

Administration and Production



750 employees (total)
65 apprentices
140,000 m² total floor area
62,000 m² production floor area

Research & Development Centre

incorporating climate chamber, air stream laboratory,
multi-purpose laboratory, acoustic measurement chamber



Kampmann System Solutions

KaControl-Applikationen



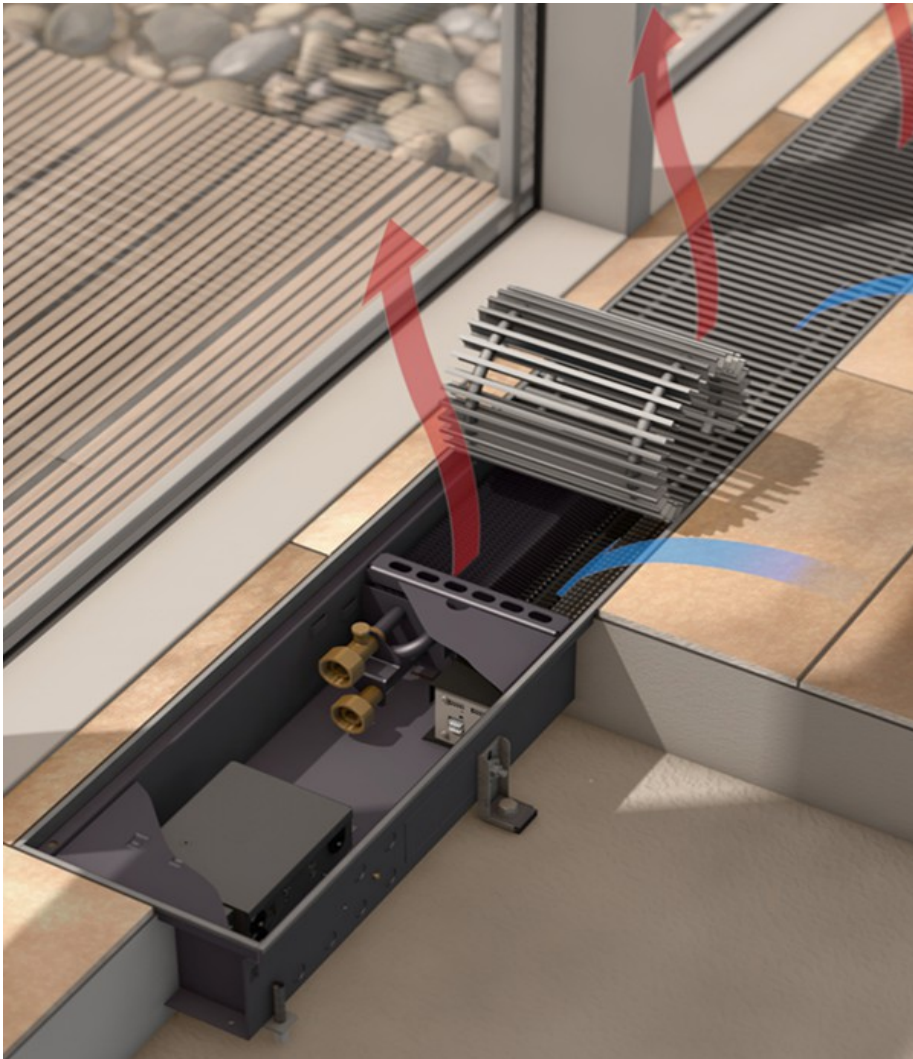
Source: Kampmann Special KaControl

PowerKonNT - at a glance



- ▶ Heating convector with fan assistance
- ▶ Ideal for low and very low-temperature heating systems, such as heat pump systems
- ▶ Suitable for new buildings and renovations
- ▶ Cooling (optional)
- ▶ Energy-efficient EC motor with boost stage
- ▶ Valve assembly can be integrated within the casing
- ▶ Networking possible to the Kampmann KaControl system

Katherm trench units for heating, cooling, ventilating

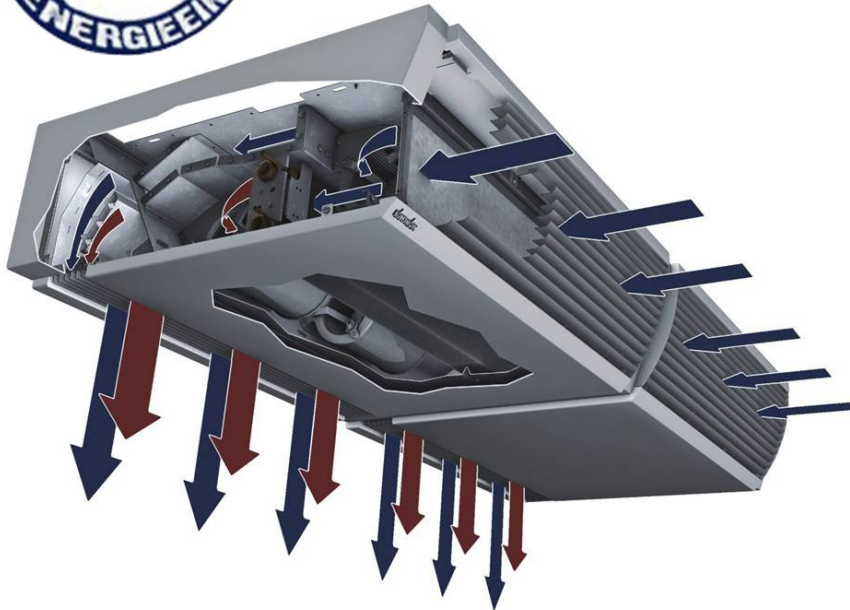


Kavent BA • Kavent BA Plus



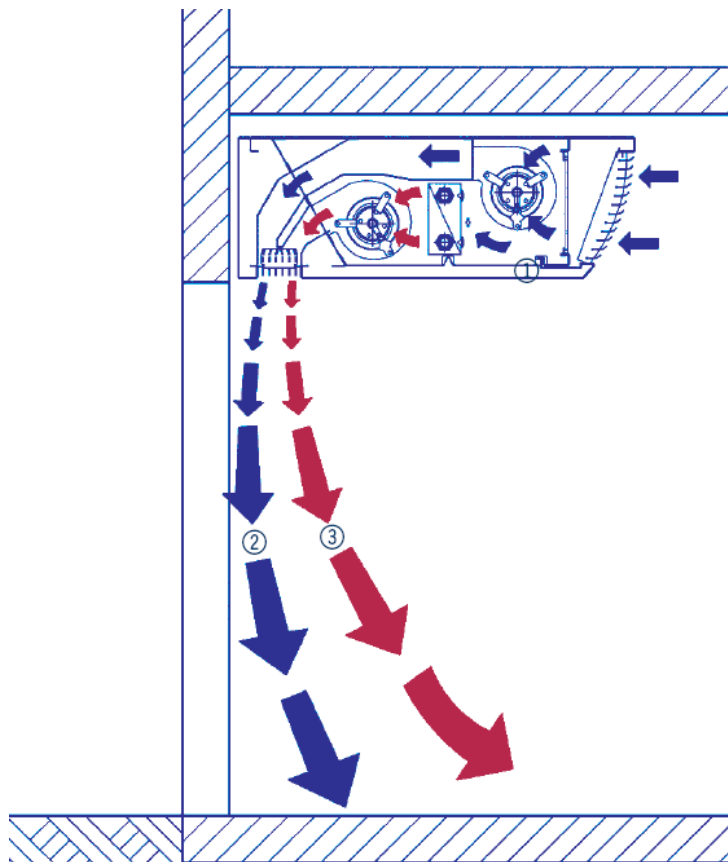
- ▶ In-floor air-conditioning system with fresh air supply, cooled or heated
- ▶ Decentralised and individual control
- ▶ Low-turbulence and low-noise cooling/ventilation
- ▶ Ease of maintenance
- ▶ Combination with recirculating in-floor units

Tandem 300/385 Door Air Curtains



- ▶ Increased shielding effect thanks to two fan groups, arranged on top of each other
- ▶ Ambient and warm air streams
- ▶ For high air flows/heat outputs
- ▶ Large discharge heights:
 - ▶ 2.7 - 3.4 m with Tandem 300
 - ▶ 3.5 - 4.0 m with Tandem 385
- ▶ 38% energy savings compared with conventional systems

Tandem 300/385 Door Air Curtains



- ① Türluftschleier-Grundgerät mit Verkleidung
- ② Vorschleier
- ③ Warmluftschleier

Effectiveness of Tandem Technology

- ▶ Operates with different conditioned air flows, prevents unnecessary heat losses through 2-layered air stream
- ▶ Ambient air stream on the outside works as a back-up air stream for the cosy warm air stream on the room side.
- ▶ Minimises the boiler output to be maintained

TOP Unit Heaters



- ▶ Largely meet the demand for economical and controllable air handling
- ▶ Wall or ceiling-mounted
- ▶ Sickle-blade, whisper-quiet fan with optimised full nozzle
- ▶ 2-stage, 3-stage or 5-stage motor using 5-stage switch
- ▶ Included as standard:
 - ▶ Single-row louver
 - ▶ Fan guard
 - ▶ Suspension lugs

Unit Heater Accessories

Discharge-side accessories

Enable optimum adaptation to technical and spatial requirements:

The outstanding technical design ensures consistent mixing of indoor air.

KaMAX (Kampmann **M**ulti **A**ir **M**iX)

- ▶ Bridges thermal lift
- ▶ Prevents accumulation of heat under the hall ceiling

Result:

- ▶ Minimal transmission losses
- ▶ Energy costs are reduced
- ▶ Comfort at ground level

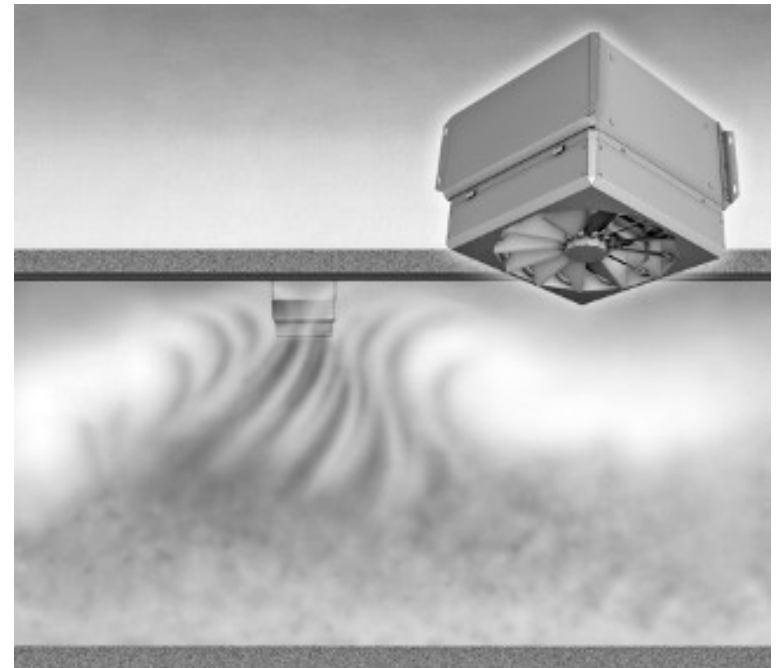


Unit Heater Accessories

KaMAX (Kampmann Multi Air MiX)

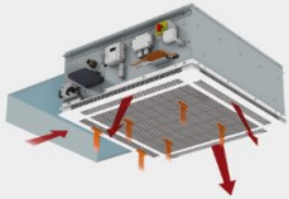
Example : Ceiling heights of between 5 and 10 metres, air discharge at any angle

- ▶ Slight vertical positioning of the slats increases the induction proportion of the air and lowers the leaving air temperature
- ▶ Incorporation of inside air by swirl movements
- ▶ No direct primary air flow at ground level
- ▶ Intensive mixing of indoor air with low air speed and minimal temperature stratification
- ▶ Comfort and energy savings



Centralised ventilation – decentralised temperature adjustment

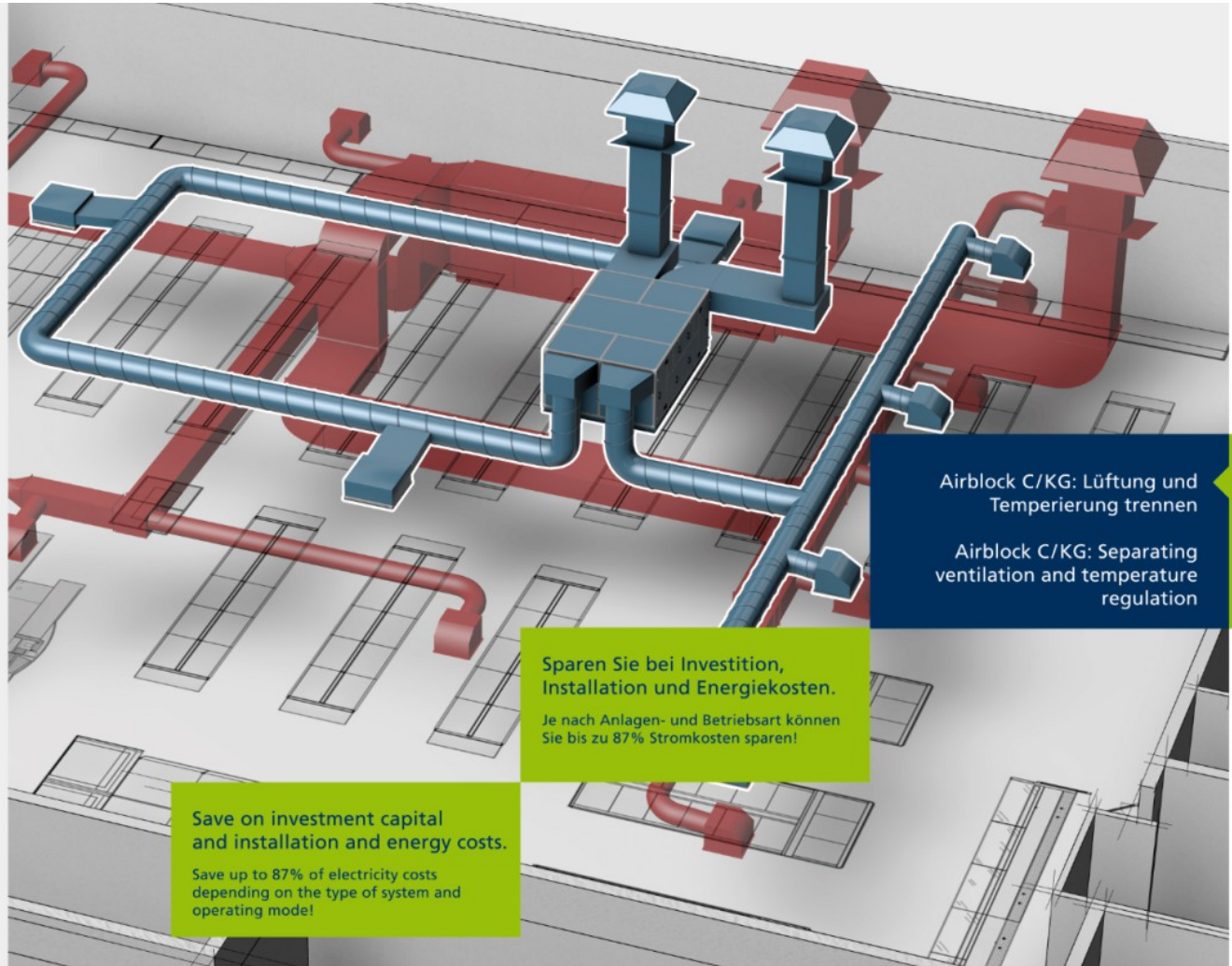
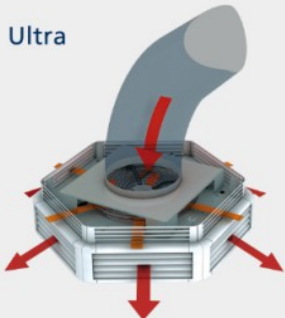
Planeck



TOP



Ultra



Airblock C/KG: Lüftung und Temperierung trennen

Airblock C/KG: Separating ventilation and temperature regulation

Sparen Sie bei Investition, Installation und Energiekosten.

Je nach Anlagen- und Betriebsart können Sie bis zu 87% Stromkosten sparen!

Save on investment capital and installation and energy costs.

Save up to 87% of electricity costs depending on the type of system and operating mode!

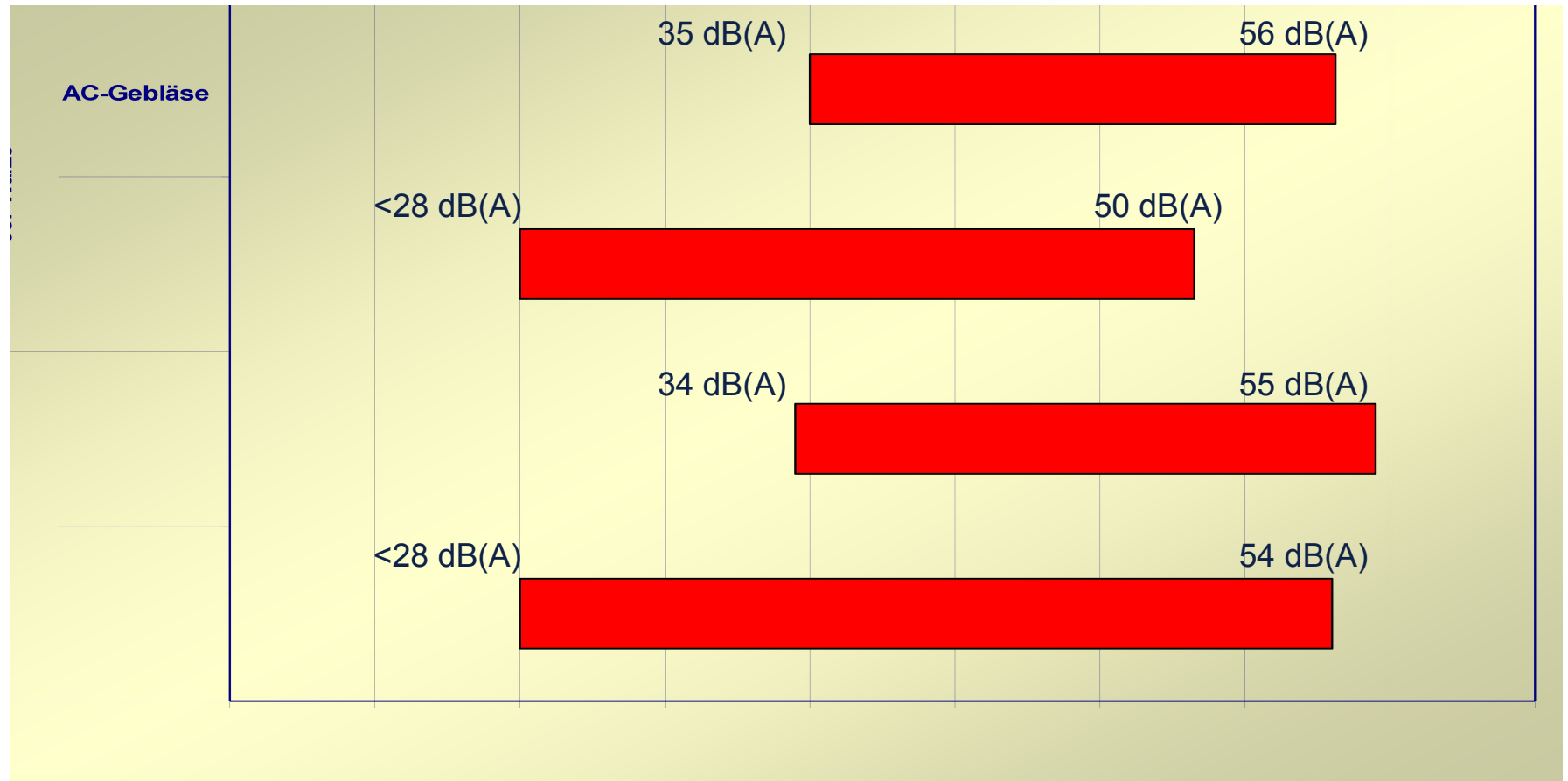
Energy Efficiency with EC Technology



- ▶ High energy saving potential of 20 – 50 % compared to AC
- ▶ Significantly enhanced speed range, particularly at lower speeds
- ▶ Infinitely adjustable operation as standard
- ▶ Reduced noise levels due to extremely low-vibration inner rotor motor design
- ▶ Motor fault reporting in conjunction with KaControl

Energy Efficiency with EC Technology

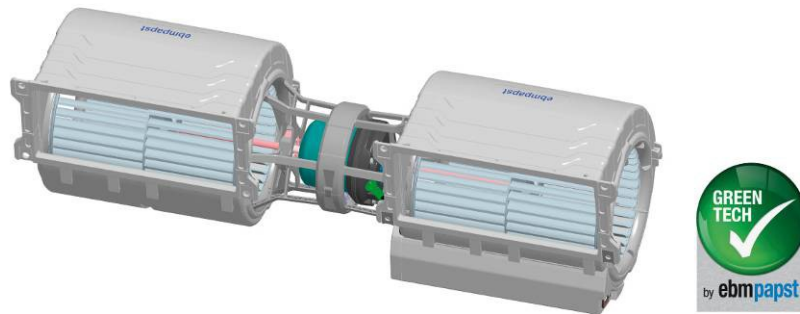
Comparative speed range (including sound power)



The ace up your sleeve

That's new EC technology, a revolution in electronic drive technology, considerably enhancing DC motor technology even at low output ranges.

High-performance with minimum energy consumption.

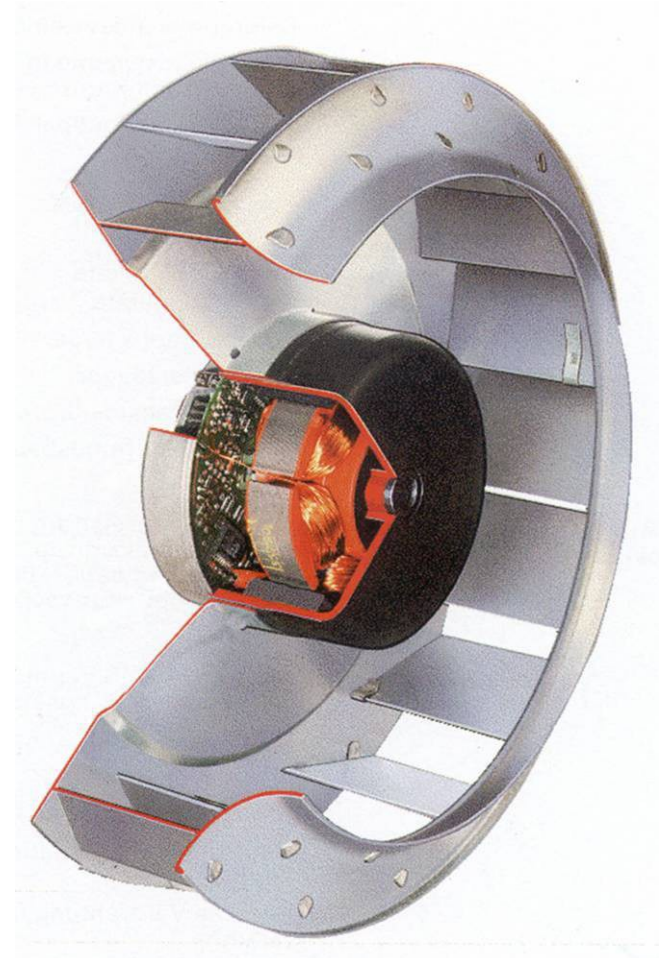


Unser Lieferant für EC-Motoren ist der Marktführer ebmpapst, Muldingen.

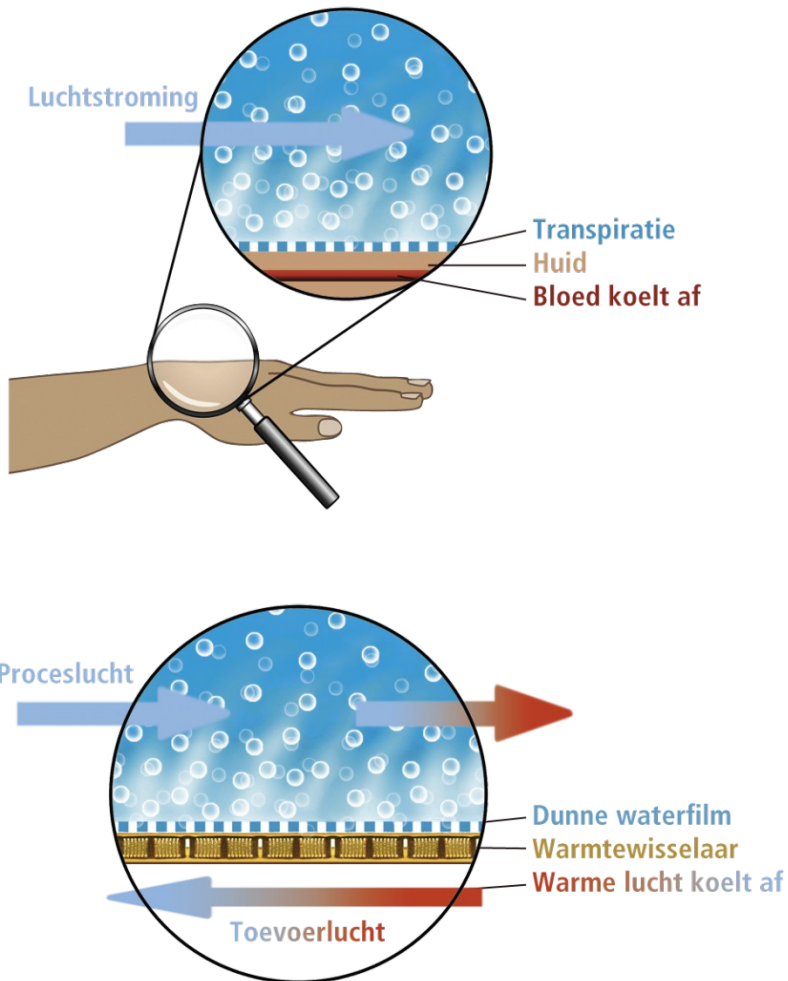


Kavent EC fan control

- ▶ Energy-saving EC technology
- ▶ Stepped or infinitely adjustable speed control
- ▶ Volume-constant speed control by programming of characteristic curve and "binary monitor"
- ▶ State-related louvre control



KLIMANAUT



Dew point cooling

- ▶ Sweat buildings on the surface of the human body in heat
 - ▶ Sweat evaporates, the body cools down through the resulting evaporation cooling
- ▶ KLIMANAUT systems make use of this natural principle: a film of water sprinkled continuously onto the fins of the heat exchanger evaporates
- ▶ Cool air is produced; temperature drops of around 6 K (in the room) are possible

KLIMANAUT INDOOR 400 WRG

**HYGIENE
ZERTIFIZIERT**
NACH VDI 6022 (BLATT 1)
DURCH
UNABHÄNGIGES LABOR

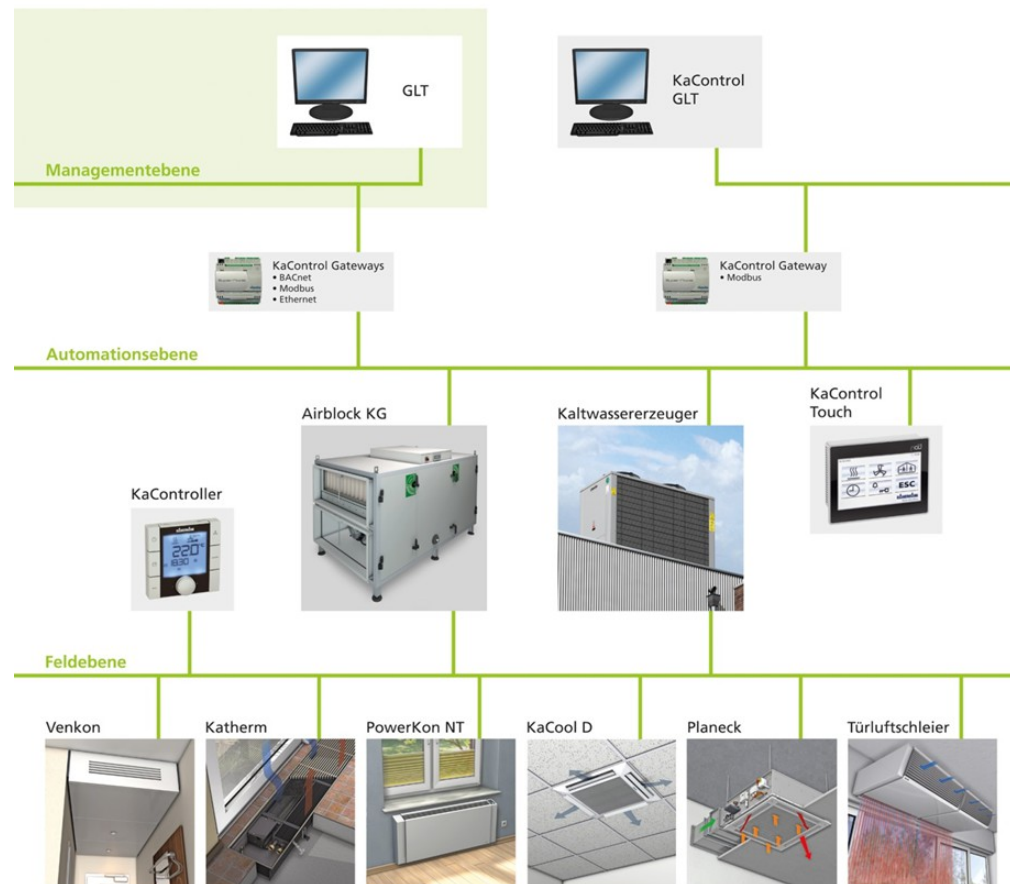


**EINSATZ
ALS WOHNUNGS-
LÜFTUNGSGERÄT**
- AUCH IM PASSIVHAUS

IM
FÖRDER-PROGRAMM
DER KFW FÖRDERBANK
IN DEN BEREICHEN
"WOHNRAUM MODERNISIEREN"
UND
"ÖKOLOGISCH BAUEN"

- ▶ Radial fans with new energy-efficient EC technology
- ▶ Automatic speed control depending on the operating mode required
- ▶ Integrated extract air fan
- ▶ Microprocessor control for manual or automatic control of fan stages and room temperature
- ▶ Filter: Pollen filter (F7 quality) in the supply air
- ▶ Max. air volume: 400 m³/h

Kampmann System Solutions



Kampmann System Solutions

We speak many languages

- ▶ BACnet / Modbus / LON / KNX

▶ We integrate ...

- ▶ Heat generators and chillers
- ▶ Ventilation units / Door air curtains
- ▶ Decentralised heating and cooling units.

▶ We network ...

- ▶ Kampmann KaControl products

Thank you for your
attention!