







emcovent Product overview

Decentralised ventilation

<p>emcovent</p> <p>floor ventilation units</p> <p>sound-insulated ventilation units</p> <p>facade ventilation units</p>	<p>emco klima was established in 1972, manufacturing a range of sturdy diffusers that were suitable for all requirements at that time.</p> <p>Specific developments for different air ducting systems, flexibility in terms of devising bespoke solutions and on-time delivery are factors that have allowed emco klima to build a relationship of trust with its specialist partners.</p>	<p>Today, emco provides a comprehensive range of air and water ducting systems, and services such as calculations involving proprietary computer programs and laboratory testing. Comfort and well-being are fundamental to ensuring efficiency, safety and good health.</p> <p>Any air conditioning solution for enclosed spaces within residential and office buildings and industrial premises requires a coordinated climate control concept that is geared to the needs of the users concerned and the conditions that are specific to the building in question.</p>	<p>Decentralised ventilation systems provide architects and planners with a whole range of options for combining centralised and decentralised air conditioning systems.</p> <p>Innovative control technology makes it possible to control the various systems in a coordinated manner.</p>
			



Project: Sandtorkai (Hafencity), Hamburg, Germany



Project: Allianz headquarters, Frankfurt, Germany



Project: office block Hafenklang, Hamburg, Germany



Project: Kreissparkasse, Groß-Gerau, Germany



Project: office CUBES, Düsseldorf, Germany



Project: Intercity Hotel, Hamburg, Germany

emcovent decentralized systems

create a comfortable working atmosphere in modern office buildings with ventilation, cooling or heating of the room air. Application areas are primarily office buildings with glass facades with a lot of daylight and technical equipment which lead to a high thermal load and natural ventilation through windows is not possible.

System benefits

- Flexible integration into the facade, ceiling or facade close into the floor. Individual adaptation to buildings.
- Space gains through compact design and the lapse of large supply shafts, fresh air supply directly over the facade.
- Individual, targeted control with emcoMFC.
- Saving fossil fuels with a low-loss transport of heat or cold and user-specific control. Minimize CO₂ emissions and costs.
- With emcocool chilled ceiling systems or floor convectors reducing high calorific performance.
- No additional fire protection measures, because of the lapse of complex air distribution in the building.
- Heat recovery to minimize the additional energy required for room temperature control (not for model emcovent UZS).

emcovent floor ventilation units

emcovent models UZAS, UZA and UZS for underfloor installation are ideal for areas with high demands on indoor air quality and thermal comfort. The units can be used self-sufficient or in combination with floor convectors.

Application areas

- Offices and administration rooms
- Business premises
- Reception areas and foyers
- Exhibition rooms
- Rooms requiring external air
- Rooms where windows cannot be opened
- Rooms whose appearance and layout should not be disturbed by heating components

Central and decentralized ventilation systems in comparison

Criterion	Central ventilation	Decentralized ventilation
Space requirements engineering room	high	low
Space requirements ceiling	high	low
Complexity fire protection	high	low
Complexity noise insulation	high	low
Complexity architectural acoustics	low	high
Complexity flexible room use	high	low
Achieve hygiene requirements	possible	possible
Complexity demand-oriented ventilation	high	low
Humidification and dehumidification	possible	not possible
Heat recovery	> 90 %	< 70% (future 90%)

emcovent model UZAS



- For heating, cooling and ventilation with supply air (SUP), exhaust air (ETA) and secondary air (SEC) in forced convection
- With heat recovery
- Continuously control
- High calorific performance with low acoustic load
- Comfortable air-conditioning thanks to the facade-close air intake
- Accessible
- Low construction depth
- Specific adjustment
- Euroconical valve connection for time-saving valve assembly

emcovent model UZA



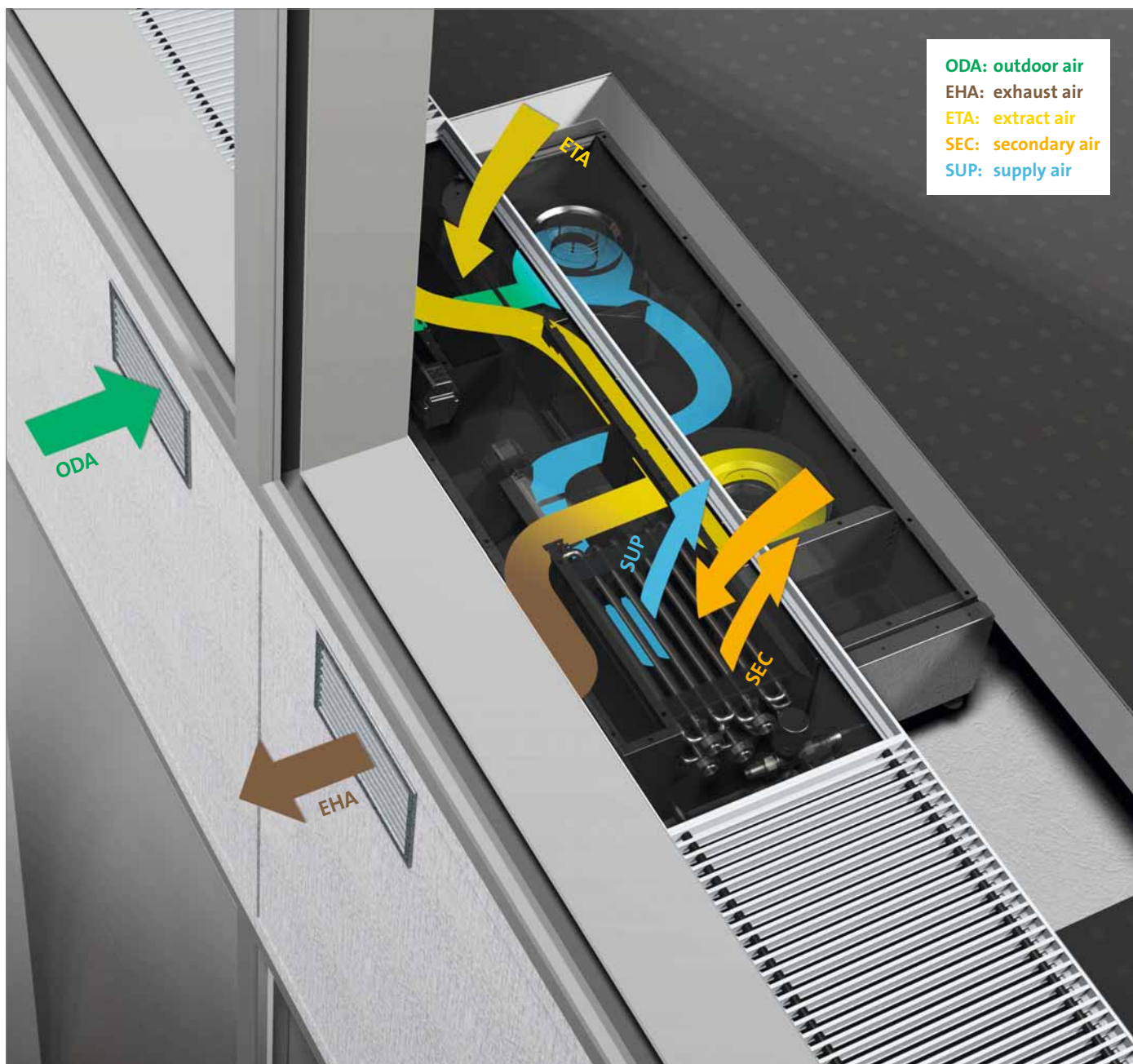
- For heating, cooling and ventilation with supply air (SUP) and exhaust air (ETA) in forced convection
- With heat recovery
- Extra slim construction
- Filtering via an integrated and easy to maintain F7 filter
- Easy to remove and easy to clean thanks to the removable grid grate cover

emcovent model UZS



- For heating, cooling and ventilation with supply air (SUP) and secondary air (SEC) in forced convection
- Filtering via an integrated and easy to maintain F7 filter
- With 2 or 4-pipe convector element
- High calorific performance due to admixture of secondary air

Method of operation (emcovent UZAS)



Dimensions (mm)	emcovent model UZAS	emcovent model UZA	emcovent model UZS
Length	1000	1250	1150
Width (total)	824	600	603
Width (visible area)	345	345	345
Height (total)	214	230	200
Height (below floor)	172	172	143

emcoMFC control technology



The emcoMFC multifunctional control system allows all emco air conditioning units and components to be connected to an intelligent system. The result is climate comfort at the highest level: efficiently, individually programmable, intuitive to operate and flexible.

Benefits

- Intuitive setting of setpoints via touchpad and display on a glassy device
- Integration of customer-specific interfaces such as window contacts, motion detectors or other potential-free contacts into the zone control
- Extension to a gateway for connection to open bus systems
- Targeted facility management in the desired zone by bundling and forwarding all relevant data
- Low installation costs due to the digital exchange of all devices via 4-wire emco-BUS

Zone communication via emcoMFC components

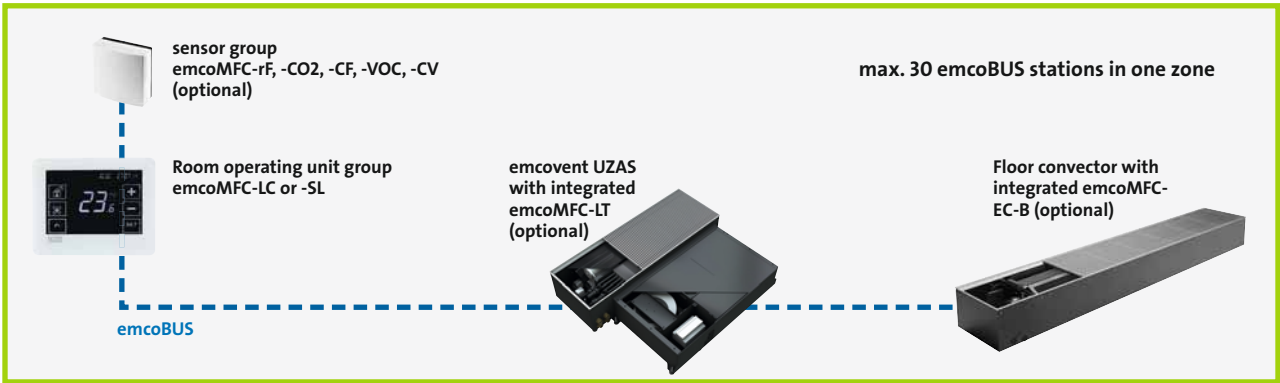


Figure 1 shows a simple zone (a room i.e.), in which the devices are connected via emcoBUS.

In this case they are controlled by CO₂ and VOC sensors.

Devices and sensors are plug and play compatible and expandable without limitations.



We offer innovative engineering

We accept every project challenge! As needed, we develop individually customized technical solutions for our customers worldwide – supported by the numerous possibilities of the emco R&D center.

The emcovent DZAS is a good example: a compact decentralized ventilation unit with heat recovery for ceiling installation to create a comfortable climate in office spaces.

Kampmann and emco Klima: A strong partnership in air conditioning.

“The emco Klima brand has always been synonymous with high-quality engineering and high-grade building services products. Since the start of 2018, this work has continued under the auspices of the Kampmann Group: an environment in which the focus is clearly on building services, as Kampmann is one of the leading lights in this sector.

What we find at Kampmann is an operating climate in which our knowledge and expertise can flourish and where the collaboration between specialists on both sides now makes way for exciting synergies. It will be our customers, first and foremost, who will benefit from this and will now have access to comprehensive and coordinated system solutions.”



Dipl.-Ing. Frank Bolkenius
Managing Director emco Klima GmbH



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