

# AIAS

Boost your efficiency!



## AIAS

### Efficient Demand Controlled Ventilation

The traditional concept of high room air quality achieved by demand oriented VAV-system becomes now much more efficient.

Bring only as much air to the room as it is required to meet the room air quality demand at every moment.

Produce only as many disturbing air flow control side effects like noise, as it is unavoidable to meet the room air quality demand at every moment.

Produce only as much of high quality air as it is required to meet the actual air volume demand of all the ventilated rooms at every moment.

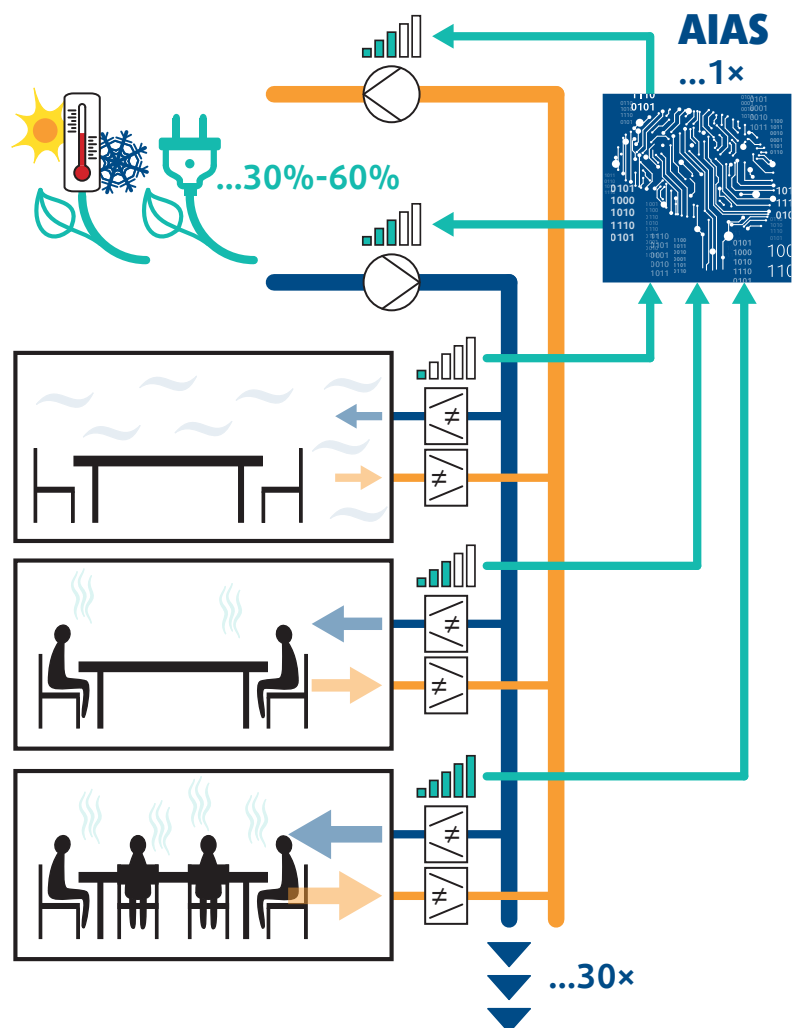
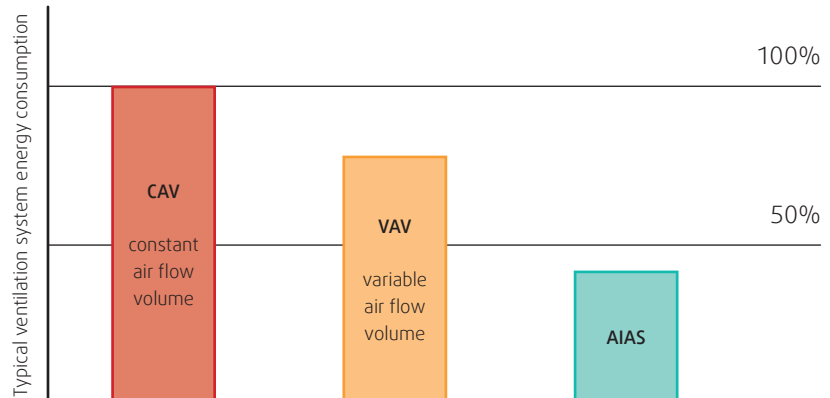
Spend only as much energy as it is required to produce high quality air to meet ventilation demands of the rooms at every moment.

Spend only as much of financial resources, engineering, installations, automation and maintenance, to meet the demand on high efficient automated controlled ventilation system.

Meet AIAS.

### Boost your efficiency!

The demand controlled ventilation is a powerful instrument to influence many aspects of room climate quality like temperature, pressure, humidity, CO<sub>2</sub> or particles content and others. For many years our customers and we could experience these quality benefits in public buildings, offices, sport halls, hospitals, homes. Systemair always stands for quality, but as well for efficiency. AIAS will boost the efficiency of your demand oriented climat control to a higher level. Providing simple and full overview and communication interface for commissioning, operation and maintenance and BMS integration.



## Highlights

- Operability with any air handling unit or fan system with continuous fan power control by DC 0-10V signal
- Separate fan power optimization for the supply fan and for the exhaust fan by a single AIAS "Combox" central control unit.
- Up to 30 separate rooms or zones with VAV control, each with up to 10 operation variables can be connected by ExoLine bus communication to a single AIAS "Combox" central control unit and participate in optimized operation of the corresponding air handling unit.
- Virtually unlimited number of AIAS "Combox" central control units can be connected in cascade in order to optimize operation of the corresponding air handling unit.
- Reduction of fan power to a minimum, that just can cover the ventilation demand. There by saving of electrical energy and air quality processing energies (heating, cooling etc.).
- Minimizing the static air pressure in the duct to a level that just can cover the ventilation demand.
- Minimizing the pressure loss and noise generation on the VAV-dampers by operation in possibly most open position due to minimized duct pressure.
- Easy system build-up.
- Easy system configuration and start-up via display menu.
- Open system architecture for subsequent expansion and integration.
- Integration of both, analog- and bus-communicating VAV controllers, retrofit ability.
- Operation with overrides and interlocks like fire alarms, heat/cool change-over, free cooling etc.
- Calendar/time schedule dependent operation.
- Alarm handling, messaging and acknowledging with priority levels.
- Recording functionality.
- Web interface, remote management.

