

Movement by Perfection



Ventilation, control and drive technology

ZAc core

Control technology platform

ZAcore – One platform. Full control. Ready to face the future.

Modern heating, ventilation and air conditioning systems should work efficiently in a networked and transparent solution. In practice, however, lots of individual components, gateways and interfaces create unnecessary complexity - with high integration and operating expenses over the entire life cycle.

This is where ZAcore comes in:

As a central control platform for fans, ZAcore combines communication, automation and central data availability via web and cloud access in one system. This reduces device diversity and interfaces, simplifies planning and startup, and creates a stable basis for long-term operation and future digital enlargements.

One platform - three key capabilities:



Integrated communication & gateway function

ZAcore connects different types and makes of fan and field device in parallel via BACnet and Modbus in building management and IT systems. Existing infrastructure remains in place, while modernisation takes place gradually and without system discontinuity.



Flexible automation on one common platform

From simple speed control to complex, application-specific control logics: ZAcore supports different levels of automation within the same system architecture - without changes to the basic system design.



Central data availability & monitoring

Operation and status data are available in a structured and continuous manner and can be accessed centrally via a web-based user interface and via optional cloud services. This generates transparency as the basis for efficient operations, predictive servicing and data-based optimisation.



ziehl-abegg.com/zacore



Greater efficiency, less effort - digital added value for your fan operations

ZAcore accompanies you throughout the entire life cycle of your fans - from startup to daily operation and data-based optimisation. It saves time and costs,

increases operational reliability and creates the basis for long-term efficiency and digital services.



Figure: AI-generated



Setup - Get productive fast, right from the get-go

Fans are integrated into the IT network in a structured manner and managed centrally. Single fans as well as complete fan walls can be controlled and regulated in a targeted manner - with a clear and controlled approach right from the outset.

Your benefits:

- Significantly reduced commissioning times
- Less manual effort and less susceptibility to errors
- High level of transparency and safety from the first operating day



Service - Stop failures before it's too late

During ongoing operation, all relevant parameters are available centrally - regardless of your location. Clear alarm structures and push notifications inform you about deviations at an early stage and enable targeted intervention.

Your benefits:

- Less unplanned downtime
- Fewer on-site visits
- Significantly lower service and operating costs



Analysis - Turning data into knowledge

Long-term data and trends provide a sound basis for evaluating system operation. Potential for optimisation is revealed, measures can be planned and new digital services become a reality.

Your benefits:

- Informed, data-driven decisions instead of gut instinct
- Improved efficiency and system performance
- Future-proof basis for further digital applications

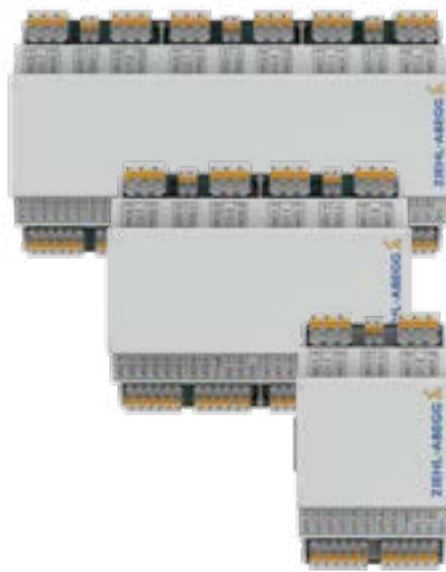
Scalability and modular architecture

ZAcore has a modular design and grows with the requirements of your application. From compact base modules to advanced accessories with additional I/Os and communication connections.

Basic modules



I/O modules



Communications module



Innovative plug and play connectors

Your benefits

- Wireless expansion with additional modules
- Always the right number of inputs and outputs
- No change of architecture necessary
- Future-proof platform concept



The right version of ZAcCore for every application

Based on this modular platform logic, ZAcCore is available in clearly defined variants - optimally tailored to different requirements and application scenarios.

Fan gateway	Fan control	Open control
Gateway & monitoring	Control & optimisation	Development & customization
Designed for: ▪ Gateway & communication - Translation between protocols (e.g. Modbus ↔ BACnet) ▪ Transparency & access - Local and remote access to all operating and status data (incl. cloud connection) ▪ Fan control - start/stop as well as simple specification of setpoints (e.g. speed)	Designed for: ▪ Fan control - Automatic control of fan speed ▪ Preconfigured applications - Speed, temperature, capacitor, pressure, air flow, air velocity	Designed for: ▪ Free programming with CODESYS - Development-oriented applications and individual solutions ▪ Flexibility - Customised functions, customer-specific logic and IoT applications

