roda
Licht- und Lufttechnik GmbH

Information about ISOVENT

Large illustration: An ISOVENT mechanical ventilation unit integrated in a EUROLIGHT.

ISOVENT mounted longitudinally

Mixed-air unit and bag filter

Ventilator module with a radial fan

Information about ISOVENT

The ISOVENT air inlet and circulation system is a central unit that filters and heats the ambient and circulating air as required and depending on the specification. The air is channelled into the working area by modules from the AIRSYSTEM modular system. The unit is manufactured according to the monoblock principal and can be combined according to the most varied requirements. The self-supporting modular system can be roof-mounted on a plinth, or, when installed inside the building, be mounted on a supporting structure.

Advantages:

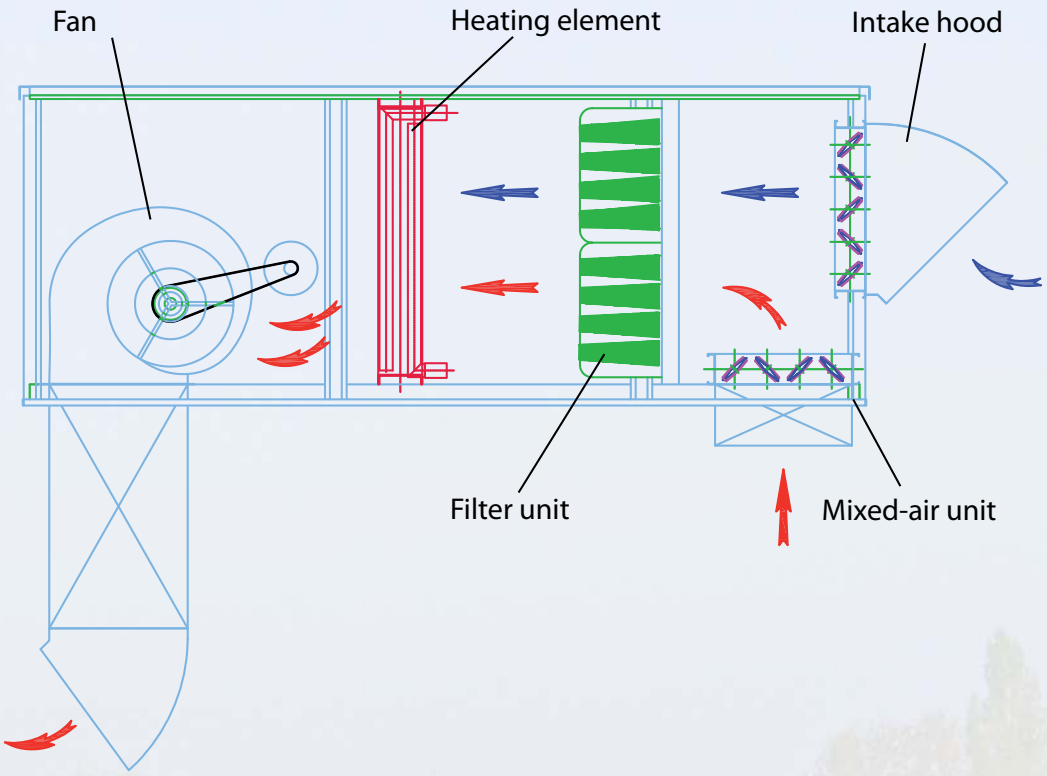
- Modular design, which can be individually planned and easily modified if the application changes
- Fan section with high-performance dual-inlet radial fan rotor, dynamically and statically balanced, with a repair switch at the front
- Intake and circulated air are regulated by means of two flaps and a servomotor depending on the specification or by a duct sensor
- Insulated and soundproofed versions are available on request
- In roof-mounted systems, the heating element (copper-aluminium) can be fitted inside the duct, further saving energy costs
- A frost-guard thermostat protects the heating element at low temperatures
- The filter medium is made of synthetic fibres in U-channel frames made of sendzimir-galvanised sheet steel. The frame and the inlay can be disposed of separately
- Where filters are used, a differential-pressure switch can be fitted optionally to monitor them
- A suction hood with a stainless steel grid prevents rain being sucked in with the ambient air
- Low energy costs and environmentally friendly

Design characteristics:

The ISOVENT has an aluminium frame design cladded with sheet-metal panels. The housing has hinged inspection doors on one side, thus enabling simple maintenance. The system is available in an insulated or a non-insulated version. The ventilator is individually designed according to the airflow rate and pressure requirements. Generally, dual-inlet fan rotors with forward-curved blades, V-belt drives and rocker-mounted electric motors are used.

ISOVENT

Modular design:



The unit has a modular design and every individual module is available as an option. The mixed-air unit is located behind the intake hood. The ambient air and the warm air in the building are mixed using servomotors and either manually controlled or regulated using a duct sensor depending on the specification. The air is cleaned by a bag filter. If necessary, the air can be heated using a air-heater battery. This can be installed in the AIRSTREAM duct system. If necessary, the ISOVENT can be supplied with empty modules, allowing options to be retrofitted at a later date.

Sizes:

The ISOVENT is available with an airflow rate of 1,200 to 22,000 m^3/h. For precise sizing of the complete system, please contact our qualified personnel.