

## ► Quality and reliability ►

To ensure that our products meet the very high TROX quality standards, all components, sensors and actuators as well as the communication functions and all configured equipment functions undergo extensive tests on a dedicated test rig.

Quality and reliability are built into our measurement and control systems, which facilitate the servicing of our products and ensure:

- easy filter changes
- easy replacement of actuators and sensors
- guided functional tests
- testing of the communication between master units, slave units and control panels

The TROX Technical Service is available to provide commissioning support, thereby ensuring that our products and systems work reliably once installed.

### Bespoke solutions

TROX FSL-CONTROL II is exceptionally flexible. Due to its modular structure it can be adapted to individual requirements.



**TROX<sup>®</sup> TECHNİK**  
The art of handling air  
[www.troxtechnik.com](http://www.troxtechnik.com)

## FSL-CONTROL II

Smart, subtle and decentralised



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**TROX<sup>®</sup> TECHNİK**  
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► **Top-level efficiency and maximum comfort – with a modular control strategy** ►►

Decentralised ventilation systems must meet the demands of both buildings and occupants, and then with maximum efficiency and providing the highest level of comfort. This is why we have developed FSL-CONTROL II, a control module that offers a whole range of measurement and control functions to adapt decentralised ventilation units to your needs.

Integrated sensors, intelligent control of operating modes and precise volume flow rate control are just three of the wide range of functions that complement one another perfectly and work towards first class efficiency and hence significant energy savings.

► **The functions** ►►

The system features a wide range of functions that ensure both maximum energy efficiency and maximum comfort: Heating, cooling, ventilation – triggered by changes in temperature or air quality or by the presence (or absence) of people.

**FAN TECHNOLOGY AND VOLUME FLOW RATES**



State-of-the-art EC fans move the air in decentralised ventilation units. Airflows are treated in various ways, depending on the requirements. FSL-CONTROL II provides specific functions such as:

- Fan speed control (stepless)
- Different volume flow rate setpoints for supply and extract air
- Control of fresh air, exhaust air, bypass and secondary air dampers

**COOLING**



Air cooling is achieved with a cooling coil. The TROX FSL-CONTROL II system also integrates:

- Room temperature control (maintenance of comfort room conditions)
- 'Start cooling' signal
- Window contact
- Free cooling
- Night purge
- Summer compensation

**AIR QUALITY**



We have built decentralised ventilation units not just to supply air, but to supply air of the best quality. The FSL-CONTROL II module includes:

- Air quality control
- Air quality sensor (VOC)
- Temperature sensors
- Filter monitoring function (filter life)
- Forced fan activation (e.g. fume cupboards in schools)

**HEAT RECOVERY**



Effective heat recovery is the heart of a combined supply and extract air system. With FSL-CONTROL II, the effective heat exchanger for heat recovery can be integrated and protected from ice build-up.

A bypass damper or secondary air function provides protection from ice build-up on the heat recovery unit and allows for free heating and cooling.

**HEATING**



Air heating is usually achieved by PWW coils. FSL-CONTROL II supports:

- Room temperature control (maintenance of comfort room conditions)
- 'Start heating' signal
- Anti-icing protection
- Window contact
- Start-up delay in winter
- Free heating
- Winter compensation

► **Display and monitoring** ►►

**Information, information, information**

What is the current operating mode? What are the actual values? Other parameters? The FSL-CONNECT software supports you with:

- Access to setpoint values and timer
- Dynamic display of system functions, including measurement and control signals and values
- Extensive scheduling functions

**Communication**

If several devices are used simultaneously, it is possible to define one master and up to 14 slaves. For example, the master can be set to default the fan stages to the slave devices. The devices communicate via standard patch cables.

**Building management systems and interfaces**

To control the building services the control system can be integrated with a state-of-the-art BMS. The most extensive functions are available to transfer parameters and to access the equipment settings.

The following interfaces are available:

- BACnet MS/TP
- Modbus RTU
- LON

**Other features of TROX controls**

Several analogue and digital inputs and outputs for configuring a wide variety of functions are available as standard.

Many control applications for either supply air or extract air systems, for combined supply and extract air systems, and for systems with secondary air function can be implemented with FSL-CONTROL II. If you have any questions, just give us a call or send a text message! Our expert team will be happy to help.

**Control panels**

Control panels allow you to change functions and setpoint values. If a filter change is required, it will be displayed on the control panel.

The TROX portfolio includes different control panels for surface mounting or for integration with various frames to meet aesthetic requirements.

TROX decentralised ventilation units are exceptionally flexible and can be configured to meet the most diverse building requirements. This applies to both the construction and the controls.