

ROOM PRESSURE CONTROL



TROX EASYLAB ensures the fast and precise control of volume flow rates in a room. Short response times and precise control are basic requisites for the perfect room air management.

EASYLAB controllers are the brains of our air management systems; due to their modular structure they can be adapted to each individual project. The controllers include plug and play communication, which allows for the fast, clean and easy integration of all components into the air management system. The software has been designed for lab control; it is very precise and ensures that the required room pressure values are maintained.

Specialist consultants and HVAC contractors benefit from the flexible EASYLAB control system, which is also easy to install:

- Easy integration of room controllers using a standard communication cable; no addressing required
- Flow rate balancing with defined air transfer
- Room pressure control
- Automatic volume flow rate balancing including all supply air and extract air controllers
- Diversity control
- Optimised extract air balancing
- The minimum discharge velocity on air terminal devices is maintained
- Uninterruptible power supply

Room pressure control as a cascade.

If pressure control is required due to legal directives or ordinances, or if the room leakage is too low and it is no longer possible to alter the nominal volume flow rate within required tolerances, it is possible to supplement or combine room balancing with pressure control. The room balancing control strategy is maintained also for pressure control.

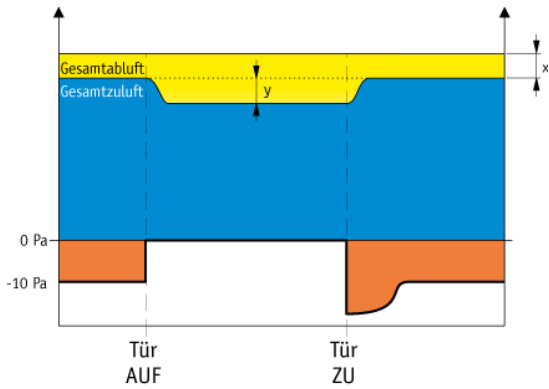
Integration of a door contact.

In addition to pressure control, EASYLAB allows for integrating a door contact. This provides the following options:

- Suppressing the acoustic alarm, which is emitted in case of a pressure deviation, for a certain period of time (can be configured)
- Suppressing alarm signalling to the central BMS for a certain period of time (can be configured). If a door contact is used, opening the door does not immediately lead to an alarm. An alarm is signalled only (optional) when the door remains open for too long.
- Temporarily switching off pressure control.



EASYLAB control components for room pressure control in sensitive areas.



REFERENCE PRESSURE.

The reference pressure must never be neglected. A stable reference pressure is the prerequisite for satisfactory room pressure control.



DEFINED ROOM PRESSURE CONTROL.

EASYLAB lets you change from volume flow rate control to pressure control at a later stage, without the need to change any controllers. What is required is the addition of a room pressure transducer, and room pressure control must be enabled in the controller configuration.