

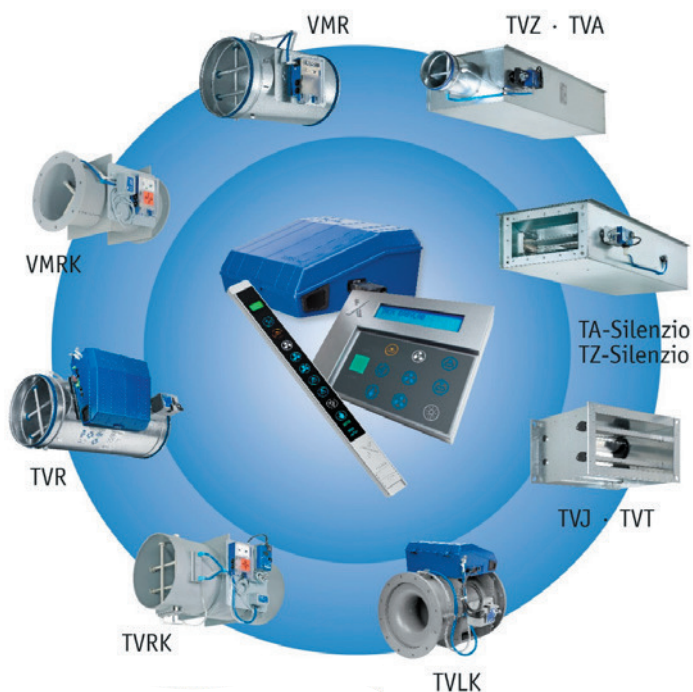


TROX[®] TECHNIK
The art of handling air

EASYPAC Air Management System

The TROX EASYPAC air management system is designed for specific environments bringing together safety, energy efficiency and comfort in a unique way. This tailor-made solution is aimed at the safe and energy-efficient air management in critical areas such as laboratories, clean rooms, and hospitals. Because of its quick-response control loop it can be used for a variety of applications from fume cupboards to rooms requiring pressure control. It brings together safety, energy efficiency and comfort in a unique way. This solution combines a high-performance volume flow controller with an automatic sash controller in a simple yet efficient manner. Automatic control of the sash and of the volume flow reduces energy.

Easy installation using plug and play EASYPAC system - the name says it all. All components are supplied ready to operate and are automatically recognised by the preconfigured system. Integration into existing LON, Modbus or BACnet networks is also easy. Additionally the system can be adapted to individual customer requirements at any time via the EasyConnect software. This is the way to save time and costs. Modular system Thanks to the modular design, the controller can be perfectly adapted to the needs of customers. A whole range of options is available, so a LON, BACnet or Modbus interface for connection to a BMS, that the EASYPAC system can meet individual requirements. TROX EASYPAC makes it easy to save time and costs.



Combination of the LABCONTROL controllers with air terminal units

ADVANTAGES

- Reduced installation effort thanks to plug and play communication.
- Flexible and easy adaptation to customer requirements due to the modular design.
- Virtually maintenance-free as the parameters and hardware are monitored by the diagnostic function.
- Easy, interactive commissioning with the TROX EasyConnect software.
- Simple integration into building management systems using interfaces with the LonWorks, BACnet or Modbus standards.





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Areas of application and advantages

LABCONTROL systems consist of an electronic controller, an actuator and a control panel, and can be combined with VARYCONTROL VAV terminal units TVR · TVRK · TVLK · TVT · TVJ · TVZ · TVA · TZ-Silenzio · TA-Silenzio · VMR · VMRK.

LABCONTROL system vs. VARYCONTROL

The greatest difference is in speed. VARYCONTROL units generally need about 120 seconds. EASYLAB controllers need only about 3 seconds.

Rapid response

While the response time of VARYCONTROL standard controllers is usually about 120 seconds, this time is reduced to about 3 seconds in the case of EASYLAB/TCU-LON-II controllers.

These rapid response times ensure that no outbreak of hazardous substances can occur, e.g. in fume cupboards with variable, demand-based extract air. For sequence control loops, these rapid response times enable stable room situations that ensure room pressure conditions according to the requirements of DIN 1946, part 7. Dedicated actuators move the damper blades such that the setpoint value is reached quickly and precisely.

High-quality actuators

For rapid response control systems, TROX relies on fast-running, modulating actuators since affordable three-point actuators (PWM technology) cannot always achieve the required minimal damper movements. Actuators with a three-point design need minimum pulse durations in order to achieve the required torque and thus prevent very small positioning movements.

This is why TROX only uses high-quality actuators with internal position recording. The precision of these actuators permits a precise positioning of the damper blade to 0.5°.

This is an important advantage particularly for room pressure control. A torque of 8 Nm and a brushless actuator guarantee a precise positioning of the damper blade at any time and thus a long service life.

Static volume flow rate measurement

EASYLAB uses only static measurement transducers as they offer the following advantages:

- Resistant to contamination, with room air induction as an additional advantage
- Rapid response measurement
- Long-term stable volume flow rate measurement due to automatic zero point correction



System demonstration in the TROX laboratory, Neukirchen-Vluyn, Germany

For more details on Easy Lab please visit Walkair website, Control System EASYLAB - LABCONTROL

