

FUME CUPBOARD CONTROL



Fume cupboard control in a laboratory is a principal issue since people working in a lab must be protected. Gases or aerosols, which may be the product of some chemical reaction, should be removed at the source. Contaminated air must be diluted, cleaned, filtered and removed from a building on the shortest possible way such that the environment is not also contaminated.

Rapid response.

Rapid response times ensure that no outbreak of hazardous substances can occur, e.g. in fume cupboards with variable, demand-based extract air. This is why EASYLAB controllers, which have been developed for the ventilation of laboratories, act within only 3 s, while the reaction time is only milliseconds. These values comply with EN 14175 for fume cupboards and have been verified and certified by a test institute. For comparison: The action time of standard controllers is usually 120 s. For slave control loops, these rapid response times, which are necessary to meet the room air conditioning requirements of DIN 1946, part 7, put control components under a lot of strain. This is why EASYLAB uses on the room supply air and extract air sides the same quick controllers as those used for fume cupboards.

Lower energy consumption.

The TROX FSE automatic sash device saves energy costs while increasing safety and comfort in laboratories. It is easily integrated with the

EASYLAB fume cupboard control using plug and play. The TROX FSE can automatically close the sash if nobody is working at the fume cupboard. Ideally, a closed sash will result in a lower volume flow rate and hence in less energy being consumed. Perfect safety for the surroundings is an added bonus.

More safety, more comfort. The TROX FSE is definitely a safety feature as sashes that have been left open unintentionally will be automatically closed after a certain time. Users working at a fume cupboard can comfortably open or close the sash by just pushing it lightly or by pressing a button or actuating a pedal switch.



VAV terminal unit TVLK, made of plastic, for lab extract air systems, for the removal of aggressive media V: 30 - 515 l/s V: 108 - 1854 m³/h ∆p: 5 – 1000 Pa Ø 250 mm Closed blade air leakage to EN 1751, class 4 Casing air leakage to EN 1751, class C



CAV controller RN – for supply air and extract air systems, easy volume flow rate setting without any tools V: 11 – 1,400 l/s V: 40 – 5040 m³/h Δ p: 50 – 1000 Pa Ø 80 – 400 mm Closed blade air leakage to EN 1751, class 4 Casing air leakage to EN 1751, class C