

Hamilton Automatic Sash Operator

Enhancing Fume Hood Safety

In addition to providing user safety, the Automatic Sash Operator generates energy savings by automatically closing the sash when the fume hood is unoccupied.

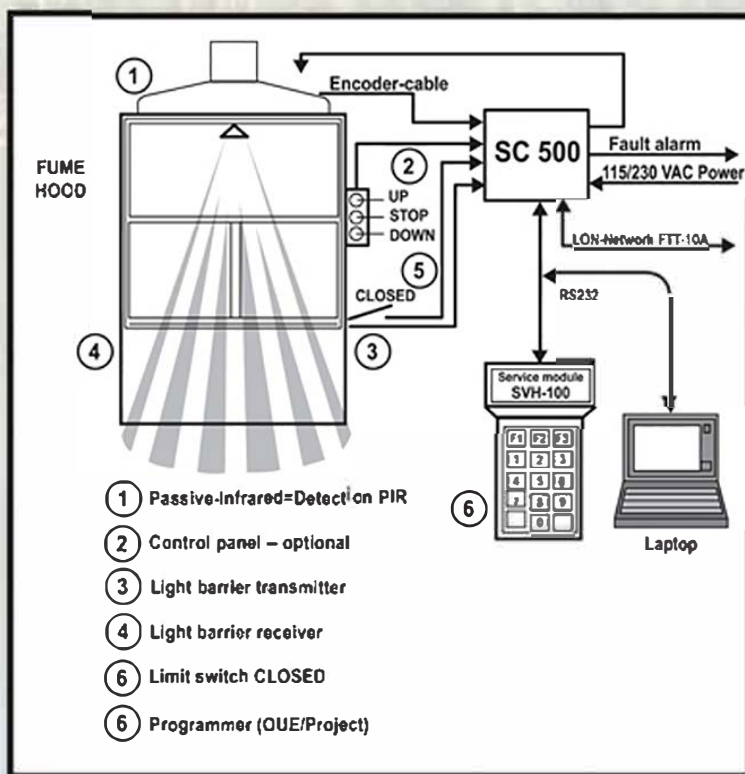
Benefits

- Protects your employees and laboratory from unsafe conditions
- Maximizes energy savings through variable air volume systems
- Offers easy installation, programming and maintenance



Functional Description

- A passive infrared movement detector (PIR) constantly monitors the work area in front of the fume hood.
- Nonattendance directly in front of the fume hood triggers the automatic closing process of the sash following a variable closing delay (10 seconds to 30 minutes).
- An infrared light barrier, mounted to the sash plate, automatically stops the sash if an obstacle is detected during closing.
- The electromotive drive unit is equipped with a servomotor that features a strong and very safe automatic clutch.



Specifications

1. An automatic sash closing device which closes the sash when the fume hood is unoccupied must be provided. This protects the lab and personnel from unattended procedures and can provide energy savings if the hood sash location varies the hood exhaust volume via variable air volume controls. The proximity sash control shall be motor driven. A proximity motion sensor located on the face of the hood shall detect inactivity at the hood and close the sash after a predetermined time frame.
2. All features to be programmable via a portable hand held service module or laptop computer (provide required laptop software to communicate with the system).
 - a. Sash stop-open positions can vary and must be programmable. Must have an adjustable delay timer for auto sash closing which can be set for a minimum of 10 seconds to a maximum of 1800 seconds (30 minutes).
 - b. System shall be controlled by a microprocessor to close the fume hood sash.
 - c. Integrated power supply 120/230V AC.
 - d. All system data is saved main voltage fail-safe in the EEPROM.
 - e. Two motor speeds are programmable with soft stop.
 - f. The motor shall have an automatic and manual current shut off.
 - g. Teach-in mode, for easy commissioning of different fumes hood types.
 - h. A monitored closing process by infrared light barrier & auto shutoff at obstacle recognition must be provided. Contact switches – not acceptable.
 - i. ANSI-AIHA Z9.5 compliant.
 - j. Suitable for all types of fume hoods utilizing a vertical sash and chain and sprocket counterbalance mechanism.
 - k. Sash shall be easily operated manually.
 - l. Optional push button panel must be available.