TEL Variable-Air-Volume Controllers

A VAV fume hood control system from TEL automatically controls exhaust and supply air for fume hoods to maximize energy cost savings while maintaining safety for hood operators.

**AFA 1000/E Product Specifications**

Display range: 0-999 fpm (0-5.0 m/s).
Alarm range: 0-999 fpm (0-5.0 m/s).
Control range: 30-999 fpm.
Control resolution: 1 fpm.
Control output: 0-10V DC for damper or inverter.
Control response: Less than 1 second.
Field setup: 2-point velocity calibration (with on-screen instructions).
Accuracy: Sensor-display resolution: 1 fpm; face velocity accuracy +/-10%.
Alarm delays: User definable (0 to 60 seconds).
Relay output: 4 (three on board, four on optional plug-in relay interface unit).
Analog output: 0-10V, directly proportional to velocity (optional).
Relay input: 3.
Communications Port: RS232 (can be connected via Serial interface to LAN network; full software available).
Sash high indication: Yes, with separate plug-in connection.
Night setback: Yes.
External alarm indication: Yes.
Power requirement: Input: 120VAC, 60Hz; output:15VDC, 500ma.
Units: English and metric (user selectable).
Display: Analog bar graph of VAV output or fault timeline; LEDs: red, alarm; yellow, caution; green, normal; Digital display of velocity reading (can be turned off).
Alarm indication: Red LED and audible alarm (to a certain sound spec).
Horn silence: Yes, temporary or permanent/automatic, depending on type of alarm or external input.
Auxiliary pushbuttons: 3 (typically used for fan start/stop, light on/off, scrubber pump on/off, emergency purge, etc. Buttons can be interlocked to each other).
Mounting: Semi-flush (MK3) or surface (MK2).
Operating temperature: 55 to 86°F (13 to 30°C).
Storage temperature: -40 to 150°F (-40 to 65°C).
Dimensions: Instrument Case: 5.71" H x 3.46" W x 1.38" D (148mm H x 88mm W x 35mm D).
Agency listings: CE.

**Optional remote PSU/relay interface for damper control**

Power requirement: Input: 120VAC, 60Hz; output: 24VDC, 500ma.
Relay output: 4 volt free change over contacts (120V 5A AC1)
Connection: 8 Way RJ45 Connector (Standard 2M length).
Enclosure material: Polystyrene.
Enclosure dimensions: 5.12" x 5.12" x 2.95" (130mm x 130mm x 75 mm).
Agency listings: VDE, CE.
Optional electric damper actuator
Power supply: 28-32V DC.
Power consumption: 15VA max.
Control signal: 2-10V DC.
Torque: 30 inches/pound or 3.5Nm at rated voltage.
Damper size: 7.5 square feet or 0.7 square inches.
Angle of rotation: 0-90 degrees, adjustable.
Direction of rotation: Reversible.
Rotation time: 1.5 seconds minimum through 90 degrees.
Ambient temperature: 0 to 140°F (-18 to 60°C).
Fail safe drive: Full rated torque, 1.5 second closure (reversible).
Electronics enclosure: UL recognized QMFZ2 Fire Rated 94V-O.
Agency listings: CE.

MK3 (Semi-flush): This version is semi-flush mounting and will fit into a standard U.S. power outlet cut out 3 inches tall by 2 inches wide. It is the preferred choice for fume hood manufacturers who install the monitors in the factory.

MK2 (Surface): This version comes with a custom mounting box at no additional charge, allowing a surface mounted unit that can be installed without cutting a full-sized hole (4.65 inches tall by 3.35 inches wide). Or, order the MK2 and make the full post cutout for a true flush mount appearance.