

Fume Hood Controllers

CONTROLLER FEATURES

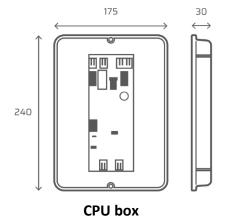
PLASTEC's Fume Hood controllers are designed for accurate monitoring and control over the fume hood. All controllers come equipped with a HD digital touchscreen interface and air speed sensor. PLASTEC's Fume Hood controllers also come available in multiple options, including Constant Air Volume (CAV), Variable Air Volume with PID Output (VAV PID), and Variable Air Volume with two speed settings (VAV 2-Speed).

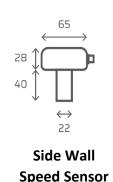
The CAV controller will monitor and display the airflow, as well as allow for On/Off control of the fan. It will also notify the user when the sash is too high when using a sash contact switch or if the airflow is insufficient

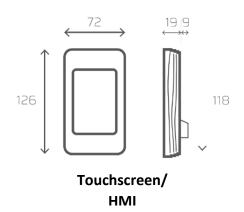
Both VAV controllers have similar control and monitoring as the CAV but with the additional of a 0-10V output for adjustable the fan speed and therefore the airflow as the sash opens or lowers. The PID controller will adjust the flow linearly with the sash. As the sash lowers, the speed sensor will read a lower air speed and thus tell the controller to increase the speed of the fan to maintain the preset air speed. If the sash is too high and the measured air speed is too high, the controller will lower the speed of the fan to maintain the preset air speed. The 2-Speed controller will adjust based on preset high and low sash heights in combination with sash contact switches.

	Constant Air Volume REF 819771	Variable Air Volume PID REF 819774	Variable Air Volume 2-Speed REF 819777
Audible and Visual Alarm	✓	✓	✓
Sash Overrun Indication	✓	✓	✓
Speed Probe	✓	✓	✓
0-10V Output	×	✓	✓
Ventilation Relays (#)	√ (2)	√ (2)	√ (2)
Light Relays (#)	√ (1)	√ (1)	√ (1)
Alarm Relays (#)	✓ (1)	✓ (1)	√ (1)
Back-up Battery	✓	✓	✓
Auxiliary Inputs	1	1	1
MODBUS Communication	×	×	×



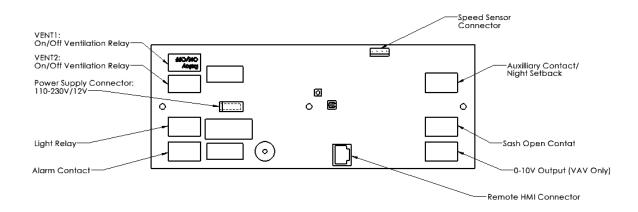








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CONNECTOR SPECIFICATIONS

Power Supply	110-230v/12v 500mA Wall Plug (Provided)
VENT1/FAN1	ON/OFF ventilation (Normally Open Relay) Max Cut-Off Voltage: 120v Max Cut-Off Current: 0.5 A
VENT2/FAN2	Same as VENT1
0/10V (Only Available on VAV Models)	0/10v output which sends a voltage according to the speed measured by the speed sensor. This output must be sent to the exhaust fan via a 0-10V controller (VFD) or to the BMS system.
LIGHT	ON/OFF lighting (Normally Open Relay) Max Cut-Off Voltage: 220v Max Cut-Off Current: 3 A
ALARM	Relay controlled by alarm activation. (Normally Open Relay) Max Cut-Off Voltage: 120v Max Cut-Off Current: 0.5 A
SASH Open	Sash contact which triggers a visual and audible alarm.
IDLE	Auxiliary speed contact which triggers a visual and audible alarm.

