



# ASI Controls

# ASIC/1-6000 ASIC/1-6000-PD

## Integrated VAV Controller

### ASIC/1-6000 Features

- Integrated Damper Actuator
- Compatible with WS-051 Digital Wall Sensor
- Sequences include:  
Cooling Damper Only  
Hot Water or Electric Heat  
Intermittent or Constant Fan
- Features include:  
Auto-Changeover  
Lighting Control  
Variable User Adjust  
After-hours Override  
Trending
- Calibrated on-board airflow sensor.
- Compatible with ASI WebLink & ASI Data Server Products
- Flash programmable firmware

The ASIC/1-6000 is a pre-programmed communicating digital controller with an integral damper actuator for the control of pressure independent Variable Air Volume (VAV) and Fan-Powered VAV terminal units. The controller maintains the space temperature by varying the air volume and includes an on-board airflow sensor. The controller monitors zone temperature through a WS-0X1 Wall Sensor and calculates the correct air volume to be distributed to the space by comparing the zone temperature with the cooling and heating setpoints.

This controller mounts directly on the VAV terminal being controlled. The motor attaches to the damper shaft, and the controller is secured with the anti-rotation screw. The ASIC/1-6000 contains the most frequently used VAV applications and has personalities for cooling only, and cooling with hot water or electric reheat, and constant or intermittent fan. No user programming or calibration is necessary. To be fully operational, the operator needs only to enter a unique device address, select the appropriate personality for the application, and verify or modify duct area and airflow K-factors.

The ASIC/1-6000 may be used in both new construction and retrofit applications. The pre-configured controller allows newly installed zones to be started up quickly and efficiently. Pre-tuned PI algorithms mean that controllers can accurately maintain space temperature. The pressure dependent ASIC/1-6000-PD is suited for individual zone volume and temperature control applications that do not require an airflow sensor.

The ASIC/1-6000 includes after-hours override, user temperature adjustment, and lighting control features. Afterhours usage time is automatically stored at each unit for retrieval by the building operator. Time-based features such as scheduled changes in setpoints and lighting control may be used when the controller is connected in a network and can be synchronized by broadcast time message.

The ASIC/1-6000 can operate-stand alone or as part of a larger communicating control network with other ASI controllers. Communication at speeds up to 19,200 baud means rapid access to information. This enables integrated control of the complete mechanical system to ensure optimum building performance. Temperatures, airflow, setpoints, and other controller information may be easily reported to ASI WebLink, or to any Windows based software that is a client for OLE for Process Control (OPC).

The ASIC/1-6000 has flash programming. The firmware can be upgraded over the local RS-485 communications bus.





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#### Specifications

##### Control Power

Supply Voltage: 24 Vac +/- 15%, 50/60 Hz  
Power Consumption: 6 VA (plus loads)

##### Binary Outputs 5

Type: 5 Binary solid state switch  
Voltage rating: 24 Vac, 1 Amp, MOV protected

##### Damper Motor

Type: Brushless  
Torque: 35 in-lb (4 N-m)  
Drive time : 95 s  
Power: 24 Vac, 3 VA

##### Analog Outputs 1

Voltage rating: 0-10 Vdc, 20 mA

##### Inputs 6

Type: Universal Analog/Binary  
Range: 0 to 5 Vdc, 10 bit, 0.1% full scale  
Temperature Sensor: WS-0X1, WS-051  
3 kohm at 77 °F (25 °C) thermistor.  
Air Flow Sensor: 1, 6000, 0, 6000-PD  
Integral solid state AWM 3300.  
Control Resolution: 25 FPM at K-factor = 2338.  
Range: 0 to 3300 FPM  
Maximum Error for all reasons: +/- 5% Full Scale

##### Communications

Format: RS-485 1/2 duplex  
Protection: 100 mA polyswitch  
500 mW-s TVS  
Baud Rate: 1200 to 19,200

##### Connections

Power and I/O: Screw terminal  
Communications: 3-position screw terminals  
Zone Sensor: 8-position, modular jack, RJ-45  
for use with ASI cable SCP-0XX  
Screw Terminal

##### Other

Indication: 3 LEDs, Power, Rx/Tx  
Dimensions: 5.9" x 8.9" x 2.5"  
150 mm x 225 mm x 64 mm  
Housing: NEMA Type 1, UL94-5V  
Polylac PA-766+, FR/ABS,  
Weight: 1.66 lbm (0.76 kg)

##### Environmental

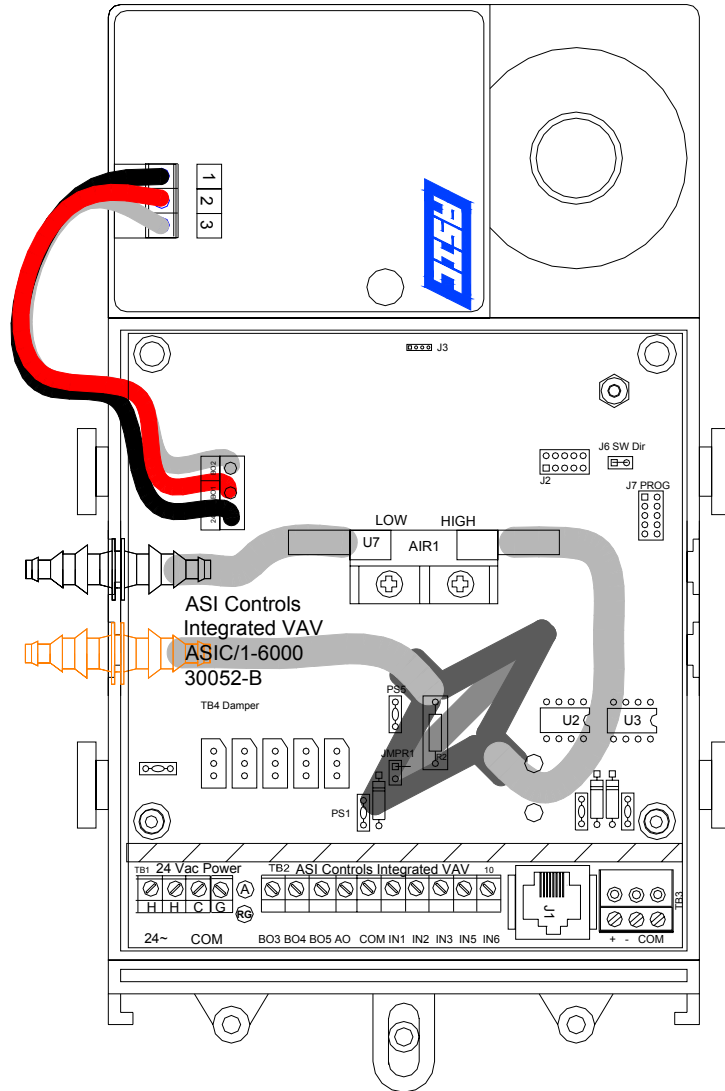
Operating: 0 to 45 °C (32 to +113 °F)  
10 to 95% RH non-condensing  
Storage: -37 to 80 °C (-35 to +180 °F)  
5 to 95% RH non-condensing

##### UL Listing

UL-916 Open Energy Management Equipment  
File E123287 (PAXZ) Class 2 Device



Meets CE Requirements.



How to Order:	Order Number
VAV Controller with Actuator	ASIC/1-6000
Pressure Dependent VAV with Actuator	ASIC/1-6000-PD

Accessories:	Order Number
Wall Temperature Sensor	WS-0X1
Digital Display Wall Sensor	WS-051
Sensor Cable	SCP-0XX

Software & Documentation:	Order Number
ASI Expert Configuration Software	ASI Expert
ASIC/1-6000 Users' Manual	6000 Manual