

ASI Controls

Tracking VAV Controller

ASIC/1-8755 Features

- Volume or Pressure Tracking
- Positive, Neutral, or Negative Control.
- Hot Water or Electric Heat
- Features include:
 - Auto-Changeover
 - Lighting Control
 - Variable User Adjust
 - After-hours Override from Pushbutton
- Two calibrated on-board airflow sensors.
- Compatible with ASI WebLink & ASI Data Server Products

The ASIC/1-8755 is a pre-programmed communicating digital controller for the control of zone volume or pressure tracking with pressure independent Variable Air Volume (VAV) terminal units. The controller includes two on-board airflow sensors and is mounted on a steel base.

This pressure independent controller is mounted on the primary VAV terminal that is used to maintain the space temperature. The second airflow sensor monitors the exhaust airflow volume. The controller monitors exhaust volume and modulates the exhaust damper at the exhaust box to maintain a predetermined positive or negative zone pressure or exhaust volume differential. The controller has personalities for cooling only, and cooling with hot water or electric reheat. A three-position switch allows positive, neutral, or negative zone pressure control.

No user programming or calibration is necessary. To be fully operational, the operator needs only to enter a unique device address, select the correct personality for the application and verify or modify duct area and airflow K-factors, and setpoints.

The controller monitors zone temperature through the WS-0X1 Wall Sensor. It calculates the correct air volume to be distributed to the space based upon comparing this temperature with the cooling and heating setpoints.

The ASIC/1-8755 may be used for both new construction and retrofit applications. The pre-configured controller allows newly installed zones to be started up quickly and efficiently. A pre-tuned PI algorithm means that controllers can accurately maintain space temperature.

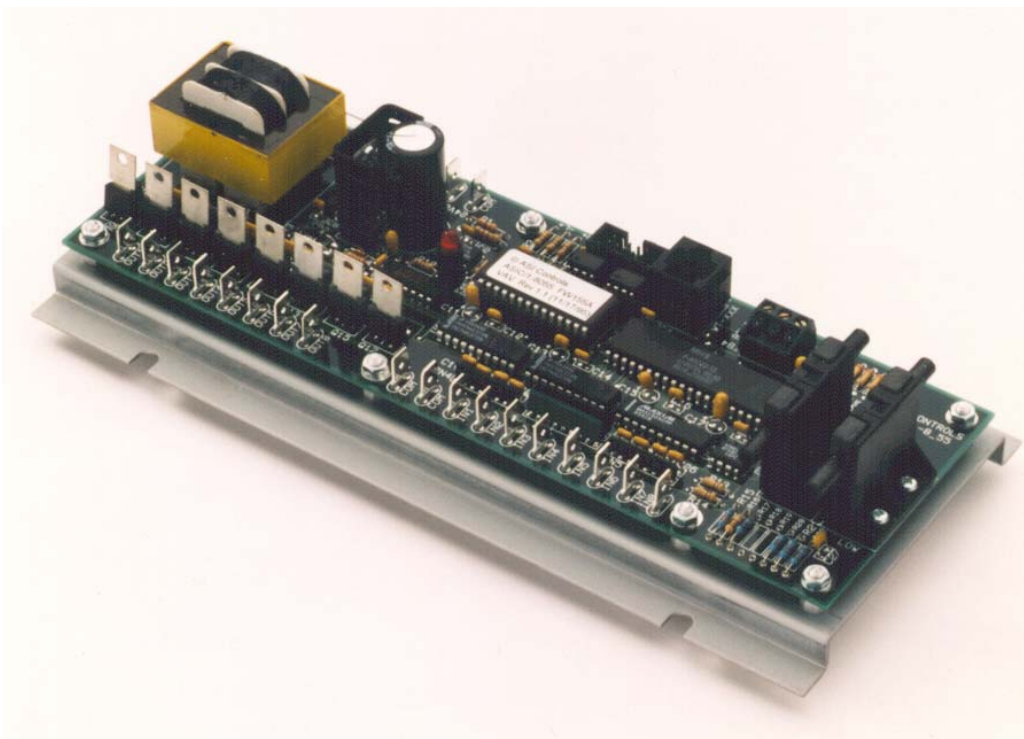
The controllers include after-hours override, user temperature adjustment, and lighting control features. Afterhours usage is automatically stored at each unit for retrieval by the building operator.

The ASIC/1-8755 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) or Dynamic Data Exchange (DDE).





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Specifications

Control Power

Supply Voltage: 24 Vac +/- 15%, 50/60 Hz

Power Consumption: 6 VA (plus loads)

Outputs 8

Type: 8 Binary solid state switch

Voltage rating: 24 Vac, 1 Amp

Inputs 8

Type: Universal Analog/Binary

Range: 0 to 5 Vdc

Accuracy: 10 bit, 0.1% full scale

Temperature Sensor: WS-0X1

3 kohm at 77 °F (25 °C) thermistor.

Air Flow Sensors: Integral solid state AWM 3300

2, ASIC/1-8755

Measurement Resolution:

5 FPM at K-factor = 2338.

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: 1/8 A pico fuse, or 100 mA polyswitch
500 mW-s TVS

Baud Rate: 1200, 9600, or 19,200

Repeater: ASI Converter/Repeater
every 32 devices

Connections

Power and I/O: Male spades (0.25")

Communications: 3 Position screw terminals

Zone Sensor: 8 position, modular jack,
for use with ASI cable, SCP-0XX
or male spades (0.25")

Other

Indication: 1 LED

Dimensions: 3.25" x 9.50" x 1.50"

83 mm x 241 mm x 38 mm

Steel Base: 4.5" x 9.7" x 0.70" (WxLxH)

114 mm x 246 mm x 18 mm

mounting 6.7" x 3.95" (170 mm x 100 mm)

Weight with base: 1.46 lbm, (0.66 kg)

Environmental

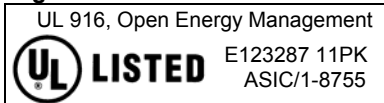
Operating: 0 to 50 °C (32 to +122 °F)

10 to 95% rh non-condensing

Storage: -37 to 80 °C (-35 to +180 °F)

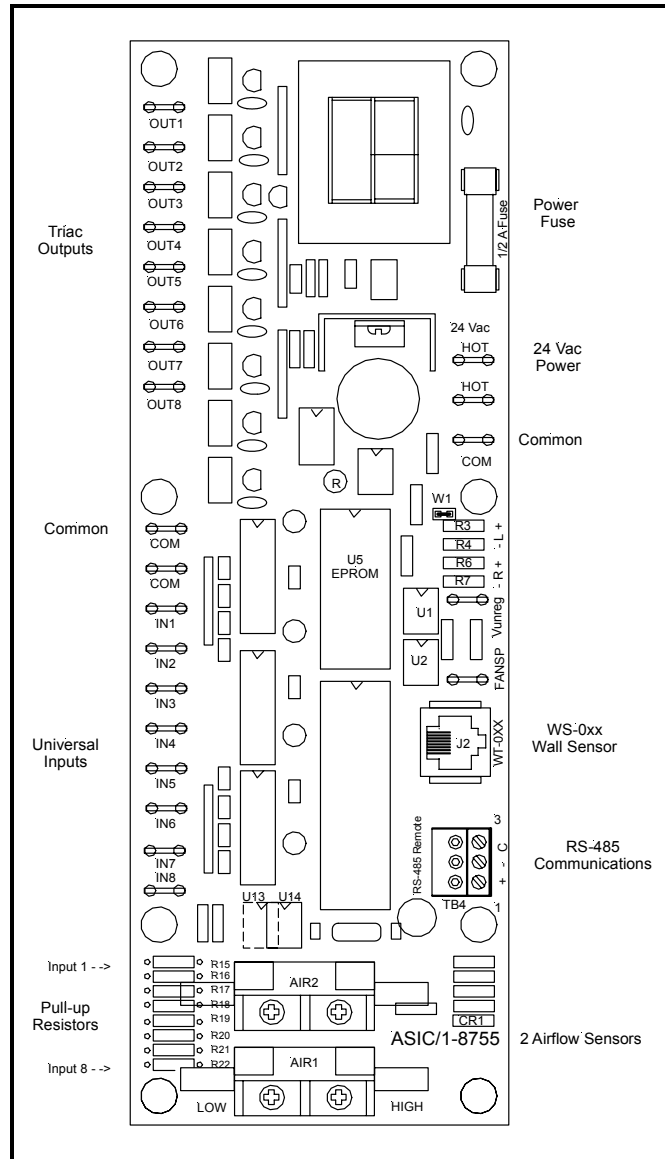
5 to 95% rh non-condensing

UL Listing



Rated as a Class 2 Device, Pilot Duty. Includes terminal connector kit with wiring instructions. Use provided connectors.

Meets CE Requirements



How to Order:	Order Number
VAV Controller on base	ASIC/1-8755

Accessories:	Order Number
Airflow Filter (Required for each airflow)	AF-001
Wall Temperature Sensor	WS-0XX
DP Pressure Transmitter	ASI-DP-3-1
Sensor Cable	SCP-0XX
Top Cover Kit	CE-055

Software & Documentation:	Order Number
ASI Expert Configuration Software	ASI Expert
ASIC/1-8755 Users' Manual	8755 Manual