ASIC/1-8055

ASI Controls

Variable Air Volume Controller

ASIC/1-8055 Features

- Sequences include:
  Cooling Damper Only
  Hot Water or Electric Heat
  Intermittent or Constant Fan
  Dual Duct
- Features include:
  Auto-Changeover
  Lighting Control
  Variable User Adjust
  After-hours Override
- Compatible with WS-051 Digital Wall Sensor
- Calibrated on-board airflow sensor. Optional second airflow sensor
- Optional IAQ sequence to maintain outside airflow
- Compatible with ASI WebLink & ASI Data Server Products

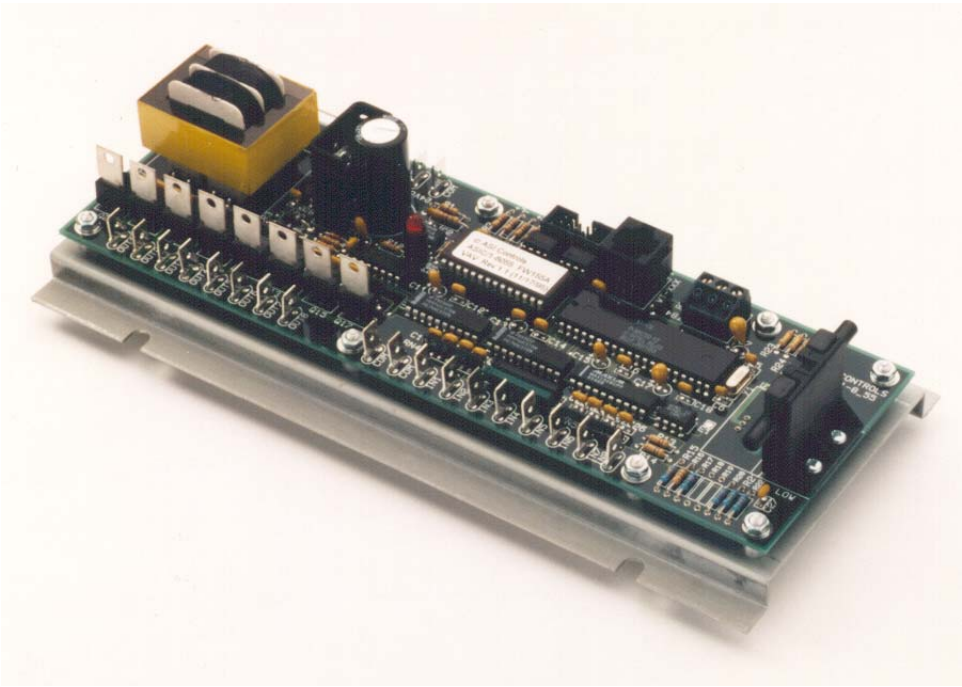
The ASIC/1-8055 is a pre-programmed communicating digital controller for the control of pressure independent Variable Air Volume (VAV), and Fan-Powered VAV terminal units. The controller includes an on-board airflow sensor and maintains the space temperature by varying the air volume. The controller monitors zone temperature through the WS-0X1 Wall Sensor and calculates the correct air volume to be distributed to the space based upon comparing this temperature with the cooling and heating setpoints. This pressure independent controller is mounted on the VAV terminal being controlled. The controller 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.

The ASIC/1-8055-D dual duct controller is for pressure independent dual duct VAV, or for control of outside airflow for Indoor Air Quality. The ASIC/1-8055-D includes all features of the ASIC/1-8055, plus a second calibrated airflow sensor.

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.

The ASIC/1-8055 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. Pre-tuned PI algorithms mean 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. Time-based features such as scheduled changes in setpoints and lighting control may be used when the controller is connected in a network that can synchronize the ASIC/1 internal software clock by broadcasting a time message.



The ASIC/1-8055 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, MOV protected

Inputs 8
Type: Universal Analog/Binary
Range: 0 to 5 Vdc,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
1, ASIC/1-8055 VAV and Fan Powered
2, ASIC/1-8055-D Dual Duct
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, RJ-45
for use with ASI cable SCP-0XX
Inputs: male spades (0.25")

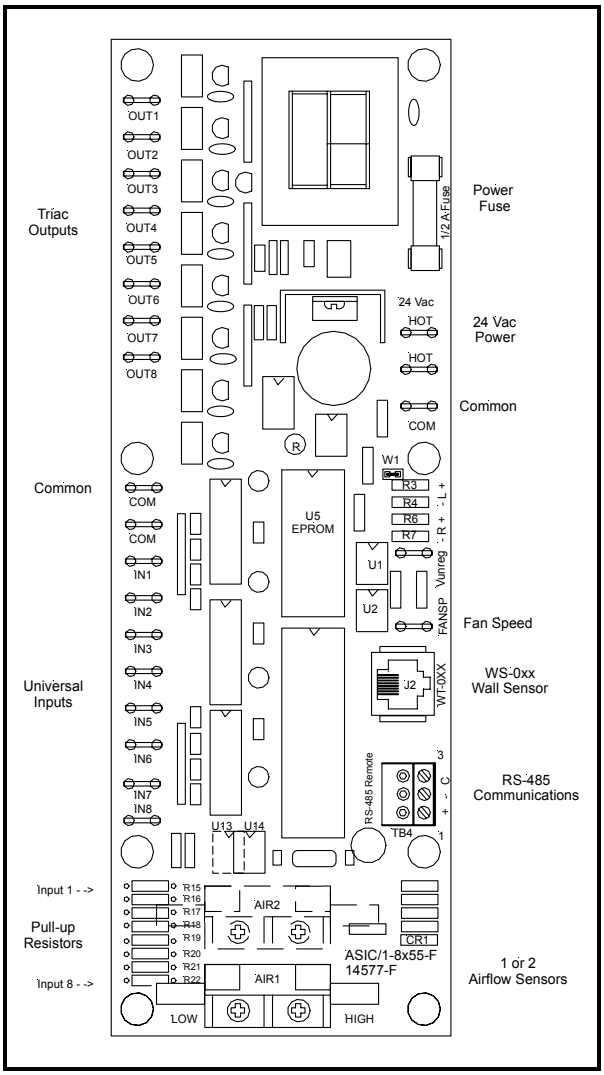
Other
Indication: 1 LED
Dimensions: 3.25" x 9.50" x 1.50"
83 mm x 241 mm x 38 mm
Steel Base: 4.5" x 9.7" x 0.70" (WxLxH)
114 mm x 246 mm x 18 mm
Mounting 6.7" x 3.95" (170 mm x 100 mm)
Weight: 1.46 lbm, (0.66 kg)

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
UL 916 Open Energy Management
UL LISTED E123287 11PK
ASIC/1-8055

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

Meets CE Requirements. CE



How to Order:	Order Number
VAV Controller on base	ASIC/1-8055
Dual Duct Controller on base	ASIC/1-8055-D
VAV Controller with Fan Speed	ASIC/1-8055-FS

Accessories:	Order Number
Airflow Filter (Required for each airflow)	AF-001
Wall Temperature Sensor	WS-0XX
Sensor Cable	SCP-0XX
Varistor Kit, 47 V	MOV-47
Top Cover Kit	CE-055

Software & Documentation:	Order Number
ASI Expert Configuration Software	ASI Expert
ASIC/1-8055 Users' Manual	8055 Manual