

ASIC/1-6100-MB Features

- Sequences include: Cooling Damper Only
Hot Water or Electric Heat
Intermittent or Constant Fan
- Requires separate Damper Actuator
- BACnet MS/TP protocol interface
BTL Listed (B-ASC)
- Also supports ASI Legacy protocol
- Multiple BACnet object types supported: Analog Input, Binary Input, Analog Output, Binary Output, Analog Value, Binary Value
- Up to 48 instances BACnet Custom Analog or Binary Value object type supported per device.
- Send & Receive ASI protocol over MS/TP network using BACnet tunneling.

The ASIC/1-6100-MB 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.

This controller is mounted on a metal base and requires a separate damper motor. 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.

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/1-6100-MB controller communicates as a native BACnet device. ASI Analog Inputs are scaled based on the Input Convert Type and Units field to deliver the BACnet Present Value and Units properties. Analog Inputs may be overridden by setting the OutOfService property and writing to the Present Value. ASI Normally Open, Normally Closed, and Multiplexed Inputs are reported as BACnet Binary Inputs.

The Analog Output is scaled in percent of full scale, and may be overridden by writing to the BACnet Present Value.

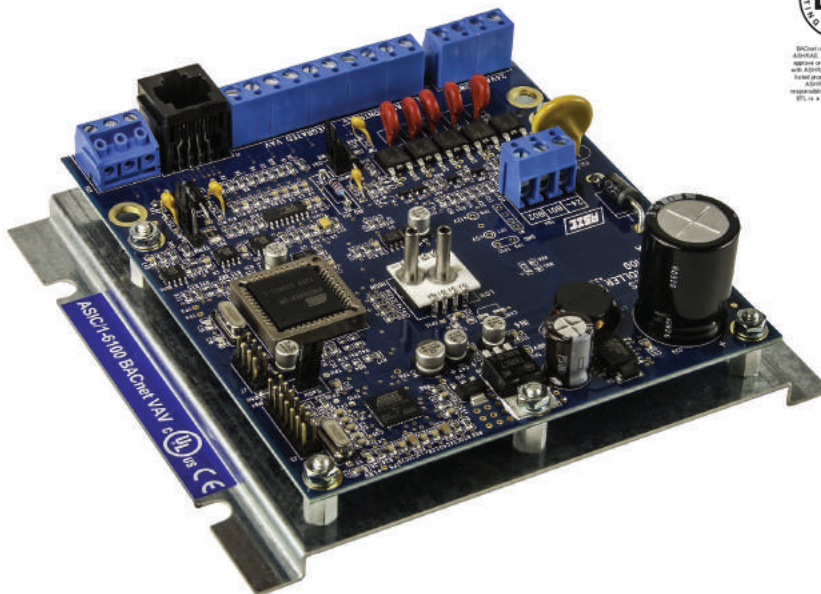
ASI Triac Outputs are reported as BACnet Binary outputs and may be overridden by writing to the BACnet Present Value.

Read/write BACnet Analog Values and Binary Values are based on the configuration of the BACnet Custom Tables. Up to 48 Custom Analog or Binary Values may be configured for monitoring and changing Setpoints, Status, and other parameters in the controller. In addition some Standard Analog and Binary Values are preconfigured. The ASIC/1-6100-MB can communicate concurrently on the BACnet MS/TP bus and through the Wall Sensor with ASI protocol.



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The ASIC/1-6100-MB controller can also communicate on a Legacy ASI Network using ASI Protocol and is a drop-in replacement for an ASIC/1-6000-MB controller.



Specifications

Control Power

Supply Voltage: 24 Vac +/- 15%, 50/60 Hz
 Power Consumption: 12 VA (plus loads)

Binary Outputs 5

Type: 5 Binary solid state switch
 Voltage rating: 24 Vac, 1 Amp, MOV protected
 Maximum combined current not to exceed 3A.

Damper Motor

Type: By Others
 Power: 24 Vac, 3 VA

Analog Output 1

Voltage rating: 0-10 Vdc,
 Current Rating: 20 mA at 10Vdc
 Protection: TVS, 10 V,600 W peak

Inputs 6

Type: Universal Analog/Binary
 Range: 0 to 5 Vdc, 12 bit, 0.1% full scale
 Temperature Sensor: WS-0X1, WS-051
 3 kohm at 77 °F (25 °C) Type 2 thermistor.
 Air Flow Sensor: 1, 6100-MB, 0, 6100-MB-PD
 Integral solid state AWM 3300.
 Includes filter kit AF-001

Control Resolution: 25 FPM at K-factor = 2338.

Range: 0 to 3300 FPM
 Maximum Error for all reasons: +/- 5% Full Scale

BACnet MS/TP Communications

BACnet is a registered Trademark of ASHRAE Inc.
 BTL Listed (B-ASC)

Format: RS-485
 Baud Rate: 9600, 19,200, 38,400 or 76,800 baud
 Optional 120 ohm termination
 Protection: 100 mA Polyswitch fuse

ASI Communications

Format: RS-485
 Baud Rate: Up to 38,400 baud

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

Other

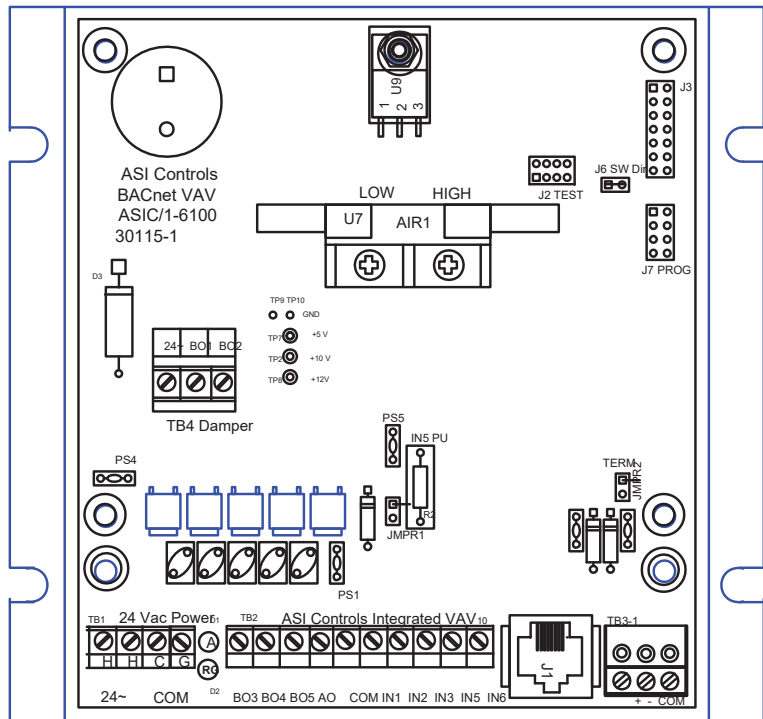
Indication: 3 LEDs, Power, Communication
 Dimensions: 5.5" x 5.2" x 2.0"
 140 mm x 132 mm x 51 mm
 Mounting Holes: 3.25" x 5.10" (0.25" dia)
 83 mm x 130 mm (6 mm dia)
 Weight: 0.78 lb (0.35 kg)

Environmental

Operating: Maximum 45 °C (+113 °F)
 10 to 95% rh non-condensing



Assembled in USA



How to Order:	Order Number
VAV Controller with Metal Base	ASIC/1-6100-MB

Accessories:	Order Number
Wall Temperature Sensor	WS-0X1
Digital Display Wall Sensor	WS-061
Sensor Cable	SCP-0XX
Airflow Tubing Kit	STK-10S

Software & Documentation:	Order Number
ASI Expert Configuration Software	ASI Expert

FCC/CE Requirements

Meets CE requirements. EN 61326 Class A,
 EN 61000-3-2 Class A and EN 61000-3-3
 Complies with FCC Part 15 (CISPR 22) Class A

UL Listing

UL-916 Open Energy Management Equipment
 File E123287 (PAXZ) Class 2 Device
 Canada: C22.2 No. 205-M1983

