

The SBC-ASC™ and SBC-ASCe™ are application selectable controllers. These controllers can be programmed from a list of pre-configured applications. The current applications are Heat Pump, Rooftop, and Fan Coil.

The SBC-ASC(e) works on existing Public Unitary Protocol™ (PUP) networks and has an integrated SBC-STAT™ Sensor Bus for sensor communications.

FEATURES

- ▼ Backward compatible with the American Auto-Matrix family of products.
- ▼ Future adaptability for BACnet™.
- ▼ Flash memory for easy updates and pre-configured applications.
- ▼ Real-time Clock module (standard in the SBC-ASCe and optional in the SBC-ASC).
- ▼ Zone temperature input with 15-bit resolution.
- ▼ Time-of-day and holiday scheduling.
- ▼ State-of-the-art Motorola Digital DNA Technology.

CONTROLLING CAPABILITIES

The SBC-ASC(e) can be configured to do custom control applications and can perform pre-configured applications with various combinations of output actuation and control strategies including:

- ▼ Fan Coil
- ▼ Rooftop
- ▼ Heat Pump.

The pre-configured applications can be downloaded into the controller using the flash updating feature in *SoloPro for Windows*™. *SoloPro for Windows* can also be used for system monitoring and for changing system setpoints. The SBC-ASC/ASCe can also connect to the SBC-STAT room sensor. The SBC-STAT provides zone temperature sensing and setpoint adjustment, both of which can be read by the SAGE^{MAX}™.

Four Proportional+Integral+Derivative (PID) loops are provided for controlling two or four analog outputs. These PID loops are reset selectable



from one of the two (SBC-ASC) or four (SBC-ASCe) analog inputs, from the SBC-STAT input, or from supply temperature. The measured variable is selectable from one of the analog inputs, the SBC-STAT input, or the supply temperature.

SBC-ASC(e) Model	Digital Outputs	Analog Outputs	Universal Inputs	Optically Isolated DI	SBC-STAT Sensor Bus	Real-time Clock
SBC-ASC	5 Relays	2	2	0	1	optional*
SBC-ASC(e)	5 Relays	4	5	1	1	installed

*The Real-Time Clock must be purchased separately and installed by the customer.

SBC-ASC(e)TM

NETWORKING

The SBC-ASC(e) interfaces with existing American Auto-Matrix systems through direct connection to SAGE^{MAX} or SF1 area controllers, or peer direct digital controllers. For each network, one (1) to 32,767 unit identification numbers can be assigned. The actual number of devices per network is dependent on the details of each installation.

- ▼ **Line signaling:** EIA-485
- ▼ **Wiring:** shielded, twisted pair, 18-22 AWG
- ▼ **Network protection:** opto-isolated
- ▼ **Communications speed:** 1200 to 115.2k baud, programmable
- ▼ **Network configuration:** multidrop up to 5,000 ft. (1.5km) total
- ▼ **Protocol:** Public Unitary Protocol (PUP)

SBC-ASC(e) can be connected to the SBC-STAT room sensor that provides zone temperature sensing, remote setpoint adjustment, and occupancy override. For applications where alarm detection, real-time data trending, or color graphics are of importance, the SBC-ASC—via an area controller such as the SF1TM or SAGE^{MAX}—is networked to the *Auto-Pilot*TM software. *Auto-Pilot* enables a PC-compatible computer to provide a user-friendly interface with a network of distributed controllers.

SPECIFICATIONS

Terminations

- ▼ Pluggable terminal blocks for inputs, outputs, power, and network connection

Input Supply

- ▼ NEC class 11 transformer
- ▼ 24VAC, 50/60 Hz, 10VA maximum, 5VA typical
- ▼ 5A fuse load protection

Operating Environment

- ▼ **Temperature range:** 0 to 50°C
- ▼ **Humidity range:** 0 to 95% RH non-condensing

Dimensions

- ▼ **Overall size:** 5.55 x 3.75 x .9
- ▼ **Shipping weight:** .84lb.

Agency Approvals

- ▼ UL listed 916, Management Equipment, Energy (PAZX)
- ▼ FCC rules Part 15, Class B Computing Device
- ▼ UL 873 listed, Component-temperature-indicating and regulating equipment (XAPX2)
- ▼ Complies with CE directives and standards

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part no. 1E-05-00-0099