AMERICAN AUTO-MATRIX®

SBC-GPC3 Advanced Applications Controller

DESCRIPTION

The ultimate PUP controller, the SBC-GPC3 offers complete stand-alone control as well as full peer-to-peer capabilities with other devices on the same physical PUP network. The flexibility of inputs, outputs and programmable capabilities allows the SBC-GPC3 to be used in a wide variety of applications, including large built up air handling units, central plant control, multiple boilers, optimization, pump control, and load shedding algorithms.

FEATURES

- Fully programmable and flexible, PUP Network over EIA-485
- Can be used in stand-alone and networked applications
- Easy configuration and over-the-network firmware flash updates via SoloPro commissioning environment
- Inputs and Outputs updated up to 10 times per second
- User-defined custom programming capabilities
- Self-diagnostic circuits and LED indicators for device status and troubleshooting
- I/O count can be expanded via Statbus technology

- Thermostatic, PID, and Motor Control Logic Loops for Output Control
- Advanced Math and Logic objects to eliminate complex custom programming
- Up to 24 UIs, 12 AOs, 12 DOs, 8 DI
- 8 File Regions (custom programming or LOGO files)
- Shipped with no on-board I/O, serving as a programming platform for applications using SSB/IOX modules

American Auto-Matrix STATbus™ Technology

STATbus is American Auto-Matrix's innovative sensor networking technology. STATbus is an open-topology network protocol that allows flexible connection of up to thirteen I/O devices per channel using a single non-polar, twisted pair cable. This provides unprecedented flexibility in the installation and wiring of I/O sensors and devices to the SBC-GPC3. Substantial saving can be realized in both wiring and installation costs as compared to conventional sensors because sensors can be wired together in an open topology. Also, STATbus uses digital communications signals, giving it a higher level of noise immunity than conventional, analog sensors.

The GPC3 STATbus

- Twenty-four Universal Inputs
- Eight Digital Inputs
- Twelve Analog Outputs
- Twelve Digital Outputs

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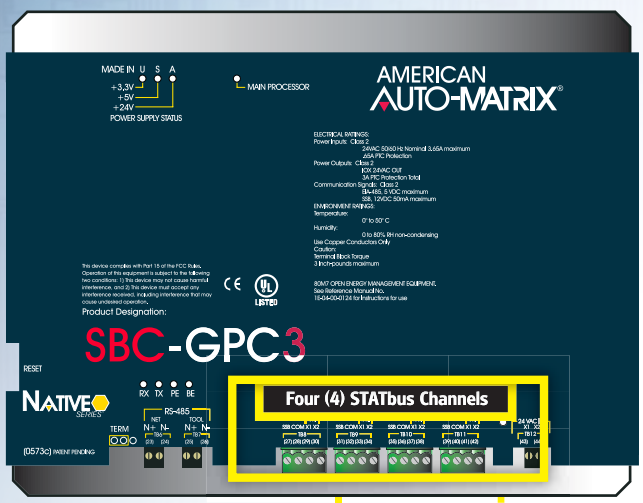
AMERICAN AUTO-MATRIX® SMART BUILDING SOLUTIONS®

AMERICAN AUTO-MATRIX® SBC-GPC3 Advanced Applications Controller

The SBC-GPC3 Controller



IOX Modules

One (1) Universal Input • Resistance: • 0-5 VDC, • 0-10 VC, 0-20mA • No External Power Supply Needed	SSB-FI1	SSB-DO1 SSB-DO2	One (1) Digital Output (Relay) Two (2) Digital Outputs (Relay) • Max Load Up to 10 A up to 250 VAC/DC
One (1) Universal Input • Resistance: • 0-10 VDC • 0-20mA • Requires External Power Supply • Excitation power available for powered sensors	SSB-UI1	SSB-DO1-I SSB-DO2-I	One (1) Dry Contact Input One (1) Digital Output (Relay) Two (2) Dry Contact Inputs Two (2) Digital Outputs (Relay) • Max Load Up to 10 A up to 250 VAC/DC
One (1) Analog Output • 0-10 VDC into One (1) kW Load • 0-20mA into 250 kW Load	SSB-AO1	SBC-STAT	STAT1-D, STAT2-D, STAT3 • Direct Digital Sensor (STAT1-D, STAT2-D, STAT3, RH1, RH3, RHT)
One (1) Digital Input • Updated Every 100 mS • Measures Pulse width as small as 50 mS	SSB-DI1		

STATbus Expansion Limits

- Up to 24 Additional Universal Inputs
- Up to 8 Additional Digital Inputs
- Up to 12 Additional Analog Outputs
- Up to 12 Additional Digital Outputs

Specifications - SBC-GPC3

Mounting

- Flat surface with screws

Terminations

- Pluggable terminal blocks for inputs, outputs, power and network connections for 18-22 gauge wire

Input Supply

- Line Input: 22 to 29VAC 50/60Hz @ 3.65A max, PTC protection
- Transformer: Internal isolated switching power supply
- Indicators: LEDs for line power, regulated DC voltages

Terminations

- Analog Outputs: 0-10VDC into 1kW load or 0-20 mA into 250W load
- Digital Outputs: Able to switch 10-29 Vrms 50/60Hz @ 1A resistive or inductive load
- Digital Outputs provide varistor protection

Input Supply

- Overall Size: 8.2 x 6.5 x 1.0 in. (20.83 x 16.51 x 2.54 cm.)
- Shipping Weight: 3 lbs. (1.36 kg.)

Operating Environment

- Operating temperature: 32 to 122°F (0 to 50°C)
- Storage temperature: -40 to 151°F (-40 to 66°C)
- Relative humidity: 0 to 80% RH non-condensing

Agency Listings

- UL listed 916, Management Equipment, Energy (PAZX)
- FCC rules Part 15 Class B computing Device
- UL Recognized 873, Component-Temperature Indicating and Regulating Equipment
- Complies with CE directives and standards

American Auto-Matrix is a Service-Disabled Veteran-Owned Small Business / Woman-Owned Business (CCR Cage #4LL80)

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