BZ424
BACzone VAV

Configurable VAV/Zone
BACnet MS/TP Controller

Strato Automation

Description

- Configurable with factory pre-loaded applications
- 4 AI/BI, 2 AO's & 4 BO's
- Supports up to three zone room sensors
- BACnet MS/TP **BTL** certified as a B-ASC

Application

The BZ424 controller is designed to facilitate the control of standard Fan Powered VAV, VVT, and Dual Duct HVAC equipment. The BZ424 offers multiple configuration profiles which can be used to meet project requirements. Features a very flexible (Not Fixed) I/O set.

Technical specifications

Power supply:
- 24 VAC ± 15%; Class 2
- 2 Amp Field Replaceable fuse

Current Consumption:
- 5 VA controller only
- 38.6 VA Max (including Triac outputs 0.35A each)

Communication Protocols:
- BACnet MS/TP half-wave device
- BTL listed: B-ASC, BACnet Application Specific Controller
- Baud 9600, 19200, 38400, 76800 Bps (76800 default)
- Addressing: Dipswitch
- TZ Comm Bus
- Mini USB2 MS/TP network access (Strato Automation USB-485 cable adapter)
- **All Strato Controllers are ¼ unit load devices.**

Hardware
- Microprocessor: STM32 (ARM Cortex™ M3) 32 bits
- CPU Speed: 72MHz
- Memory: 768 KB non-volatile Flash
- (Application Program)
- RAM: 96 KB RAM
- Real-time clock (RTC): Built-in capacitor (one-week backup)

Inputs:
4 Universal Inputs (AI/BI)
- Thermistor 10KΩ (type 2 or 3)
- Dry contact, 500 ms minimum (On-Off)
- Voltage 0 - 10 Vdc (Input impedance of 100 K Ω)
- Current 0-2 mA (internal resistance of 162 Ω)
- Resolution: 12 Bits (4096 segments)

Outputs:
4 Binary Outputs
- Triac Relays, Isolated
- 10 to 30VAC/VDC, 0.35A max
2 Analog Outputs
- Voltage 0 - 10 VDC linear

Internal Actuator Outputs:
2 Binary Outputs (open/Close)
- Triac Relays, Isolated
1 Analog Output

Damper actuator:
- Motor: Belimo Brushless DC Motor
- Torque: 45 in/lb 5 Nm
- Shaft Diameter: 1/4" to 5/8" [6mm to 16mm]
- Noise level: 35 dB(A).

Mechanical:
- Dimensions:5.75" x 8.94" x 2.81" 146.05 mm X 227.01mm X 71.43 mm
- Stocking temperature: -30 °C to 50 °C / -22 °F to 122 °F
- Operating conditions: -25 °C to 50 °C / -13 °F to 113 °F 10% to 90% H.R. without condensation
- Weight: 744 g / 1.5 lb
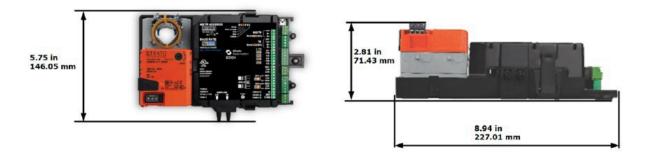- Enclosure: Black color, ABS material UL94-5V FR/ABS

Programming:
- Configurable writing to the BACnet objects or utilizing Strato Software tools.

Warranty: 1 Year

Certifications:
- UL 916 Energy Management Equipment
- BTL listed: B-ASC, BACnet Application Specific Controller

Designed and assembled in CANADA