

# Continuum<sup>®</sup> BA Cnet Family<sup>™</sup>



- **Native BACnet MS/TP Communications for Interoperability to Third-Party Systems**
- **Powerful, Flexible System Controller for the Most Demanding Applications**
- **Ideal for Monitoring Small or Large Groups of Inputs in a Concentrated Area**
- **Universal Inputs Can be Configured as a Supervised Input for Monitoring Open Wires or Short Circuits**
- **Non-Volatile Flash Memory Provides Utmost Reliability — Stores Both Application Program and Operating System**
- **Local, Extended Storage of Log Data**

## **b3600 Series Local Controllers**

The *Continuum* b3600 series controllers are native BACnet Advanced Application Controllers (B-AAC) that communicate on an RS-485 field bus as Master devices using the MS/TP BACnet protocol.

The b3600 series are designed for monitoring a small or large concentration of input points from a single controller. Choose the b3600 series controller with the input configuration that matches your application:

- The **b3608**, with eight Universal inputs, is designed for stand-alone equipment monitoring for a small concentration of input points. This controller is also configurable for Supervised Input monitoring to determine broken wire detection or shorts. The b3608 is ideal for Security applications (motion detection, glass break detection, intrusion detection) or traditional control applications (temperature, humidity, etc).
- The **b3624** provides the same functionality as the the b3608 and in the same small footprint of the b3608, but with three times the number of input points (24) for monitoring various device signals. With the small footprint and high point count, the b3624 is ideal for large concentration of inputs, reducing the number of controllers required in the system, and decreasing cost, complexity, and maintenance requirements.

The b3600 series also features Flash memory, increased user memory, and a fast (32-bit) processor for faster scan times, with plenty of memory available for data logging of your critical data.

As a native BACnet controller, the b3600 series can communicate with other BACnet devices on the MS/TP network, in strict accordance with **ANSI/ASHRAE standard 135-2001**. By connecting to Andover's *Continuum* b4920 device, the b3600 series and other MS/TP devices can share data from the wider Ethernet/IP network of controllers.

### **INCREASED RELIABILITY WITH FLASH MEMORY**

The b3600's non-volatile Flash memory stores your operating system *and* application programs, so that in the event of a power loss, your application will be restored when power is returned. In

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In addition, the Flash memory allows for easy upgrades of your operating system via software downloads, eliminating the need to swap out proms. The b3600 controllers include an on-board battery to safeguard your runtime data — protecting all point data and log data from being lost if power is removed.

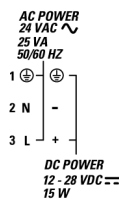
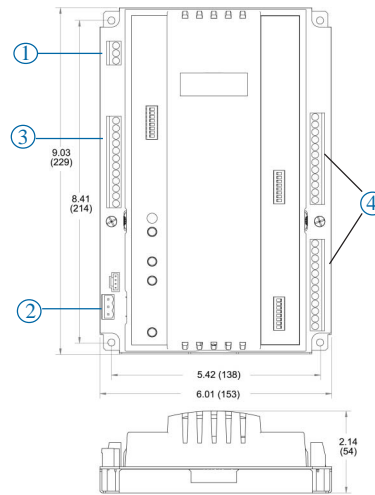
## INPUTS

The input configuration on the b3600 series consists of eight full range, 10-bit Universal inputs that accept voltage (0-5VDC), digital (on/off), counter signals (up to 4Hz), temperature signals, or supervised alarm circuits for security applications or broken wire detection.

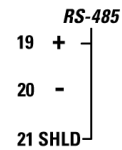
## SOFTWARE CAPABILITIES

The dynamic memory of the b3600 can be allocated for any combination of programs, scheduling, alarming, and data logging using the powerful Andover Controls *Plain English*<sup>®</sup> programming language. Our object-oriented *Plain English* language with intuitive keywords provides an easy method to tailor the controller to meet your exact requirements. Programs are entered into the b3600 using the *Continuum CyberStation*<sup>®</sup>. Programs are then stored and executed by the b3600 controllers.

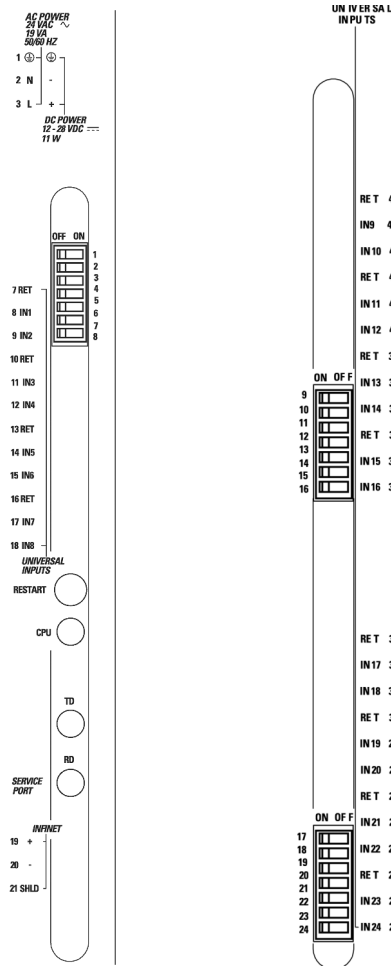
Programming multiple b3600 series controllers is inherently easy with *Plain English*. A complete copy of one b3600's programs can be loaded directly into other b3600s without changing any point names or programs.



① Power Drawing



② Communications Drawing



③ b3608 and b3624

④ b3624

Inputs Drawings

# SPECIFICATIONS

## 600 Series Local Controllers

### ELECTRICAL

<b>Power:</b>	24VAC, 12-24VDC - auto sensing, +10% - 15%, 50/60 Hz
<b>Power Consumption:</b>	25 VA
<b>Overload Protection:</b>	Fused with 3 amp fuse. MOV protected.
<b>Software Real-Time Clock:</b>	Synchronized through MS/TP via BACnet

### MECHANICAL

<b>Operating Environment:</b>	32°–120°F (0–49°C), 10–95% RH (non-condensing)
<b>Size:</b>	9.03"H x 6.01"W x 2.14"D (229 H x 153 W x 54 D) mm
<b>Weight:</b>	1.19 lbs. (.54 kg)
<b>Enclosure Type:</b>	UL Open class, IP 10. Flammability rating of UL94-5V
<b>Mounting:</b>	Panel mount

### BATTERY

<b>Battery Backup:</b>	Replaceable, non-rechargeable, lithium battery. Provides 5 years typical accumulated power failure backup of RAM memory
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### COMMUNICATIONS

<b>Communications Interface:</b>	RS-485 BACnet, MS/TP 127 devices maximum
<b>Communications Speed:</b>	9600, 19.2K, 38.4K, 76.8K baud*
<b>BACnet Device Profile:</b>	B-AAC, BACnet Advanced Application Controller
<b>Bus Length:</b>	4,000 ft. (1,220m) standard. BACnet repeater allows extension to longer distances.
<b>Bus Media:</b>	Twisted, shielded pair, low capacitance cable

*Note: Baud rates REQUIRE Continuum V1.62 version (or later) of software*

### INPUTS

<b>Inputs:</b>	b3608: 8 Universal inputs b3624: 24 Universal inputs Voltage (0-5.115 VDC); Temperature -30°F to 230°F (-34°C to 110°C), Digital (on/off), Counter (up to 4Hz at 50% duty cycle, 125 ms min. pulse width), Supervised Alarm (single or double resistor), Current input (0-20 mA) using external 250 ohm resistor
<b>Input Voltage Range:</b>	0-5.115 volts DC
<b>Input Impedance:</b>	10K ohm to 5.120V or 5M ohm with pull-up resistor disabled
<b>Input Resolution:</b>	5.0 mV
<b>Input Accuracy:</b>	±15mV (±0.56°C from -23°C to +66°C or ±1°F from -10°F to +150°F)

### CONNECTIONS

<b>Power:</b>	3-position fixed screw terminal connector
<b>Inputs:</b>	Inputs 1-8 ( <i>both b3608 and b3624</i> ): 12-position fixed screw terminal connector  <i>b3624 only:</i> Inputs 9-16: 12-position fixed screw terminal connector Inputs 17-24: 12-position fixed screw terminal connector
<b>Communications:</b>	3-position removable screw terminal connector
<b>Service Port:</b>	4-position shrouded connector

### USER LEDS/SWITCHES

#### Status Indicator LEDS:

CPU	CPU Active
TD	Transmit Data
RD	Receive Data

#### Switches:

RESET
Input Pull-up Resistor Switch (per input)

### GENERAL

<b>Memory:</b>	128K SRAM, 1MB FLASH
<b>Processor:</b>	Motorola 32-bit Coldfire

**Note: b3600 Series REQUIRES Continuum V1.6 version (or later) of software**

### AGENCY LISTINGS

UL/CUL 916, FCC CFR 47 Part 15, ICES-003, EN55022, AS/NZS 3548, Class A, CE



### OPTIONS

UL864, Smoke Control System Equipment, UUKL (b3608-S, b3624-S)

**Andover Controls Corp.**

**World Headquarters**

300 Brickstone Square  
Andover, Massachusetts 01810 USA  
Tel: +1 978 470 0555 Fax: +1 978 470 0946

**Andover Controls Europe**

Smisby Road  
Ashby-de-la-Zouch  
Leicestershire LE65 2UG England  
Tel: +44 1530 417733  
Fax: +44 1530 415436

**Andover Controls Germany**

Am Seerhein 8  
D-78467 Konstanz  
Germany  
Tel: +49 7531 99370  
Fax: +49 7531 993710

**Andover Controls France**

Immeuble Dolomites 2  
58 Rue Roger Salengro  
94126 Fontenay Sous  
Bois, France  
Tel: +33 1 53 99 16 16  
Fax: +33 1 53 99 16 15

**Andover Controls Poland**

Radzikowskiego 56  
31-315 Krakow  
Poland  
Tel: +48 126385500  
Fax: +48 126385501

**Andover Controls Asia**

Unit 1201-02, Phase 1, Cheuk Nang Centre  
9 Hillwood Road,  
Tsim Sha Tsui East  
Kowloon, Hong Kong  
Tel: +852 2739 5497  
Fax: +852 2739 7350

**Andover Controls Mexico**

Insurgentes Sur 1722-501  
Col. Florida  
Mexico D.F. 01030, Mexico  
Tel: +5255 5661 5672  
Fax: +5255 5661 5415

[www.andovercontrols.com](http://www.andovercontrols.com)

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