

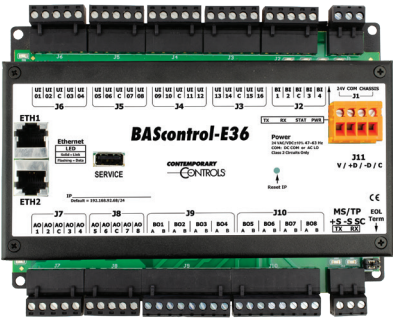
# BAScontrol-E36

## 36-point Edge Controllers

The BAScontrol-E36 are 36-point edge controllers which support BACnet/IP client/server operation over a built-in 2-port Ethernet switch connection or BACnet MS/TP over an EIA-485 port. A wall setter port on BASC-E36W supports an optional wall setter device. The controllers comply with the B-ASC device profile having a convenient mix of sixteen universal inputs, four binary inputs, eight analog outputs, and eight binary outputs.

The controllers have the necessary computing power and input/output (I/O) points to execute recommended advanced sequences published in ASHRAE Guideline 36-2018 High-Performance Sequences of Operation for HVAC Systems (GL-36). They utilize BACnet for communication protocol and Sedona for control. The BAScontrol-E36 run on a Linux platform and have edge-connected features, such as a cloud connector to Azure IoT Central, a JavaScript Object Notation (JSON)-node programable dashboard, email alarms and notifications, and access to an online weather service.

They are fully webpage configurable and freely programmable using Sedona’s drag-and-drop programming methodology and can be programmed using Contemporary Controls’ free BAScontrol Toolset. A Sedona N4 driver is available for programming via N4 Workbench. Rugged design, low profile, and wide temperature operation make them suitable for indoor or outdoor use.



### Electrical (Class 2 Circuits Only)

INPUT	DC	AC
Voltage (±10%):	24 V	24 V
Power:	15 W	22 VA
Frequency:	N/A	47-63 Hz

### Environmental

Operating temperature:	−40°C to +75°C
Storage temperature:	−40°C to +85°C
Relative humidity:	10–95%, non-condensing

Functional	Physical Layer	Cable length limit	Comments
Ethernet	10BASE-T 100BASE-TX	100 m (328 ft.)	
MS/TP	EIA-485	1200 m (4000 ft.) 1000 m (3280 ft.)	9.6-76.8 kbps 115.2 kbps Jumper selectable bias and termination 31 full-load devices
Wall Setter (BASC-E36W only)	EIA-485	30 m (100 ft.)	19.2 kbps, even parity, 1 stop bit, 1 full-load device

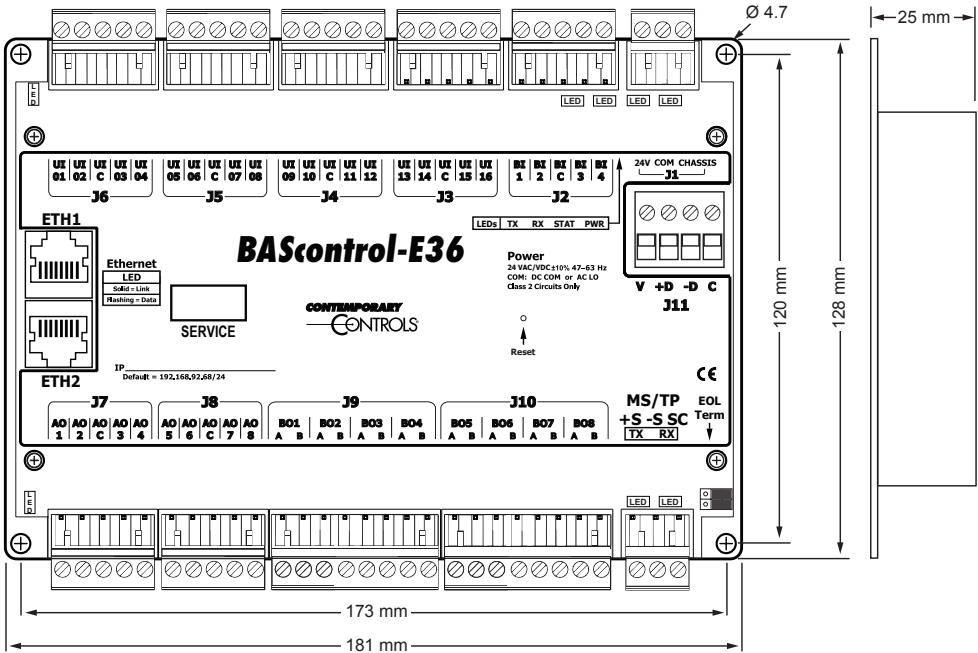
## Installation

### Power

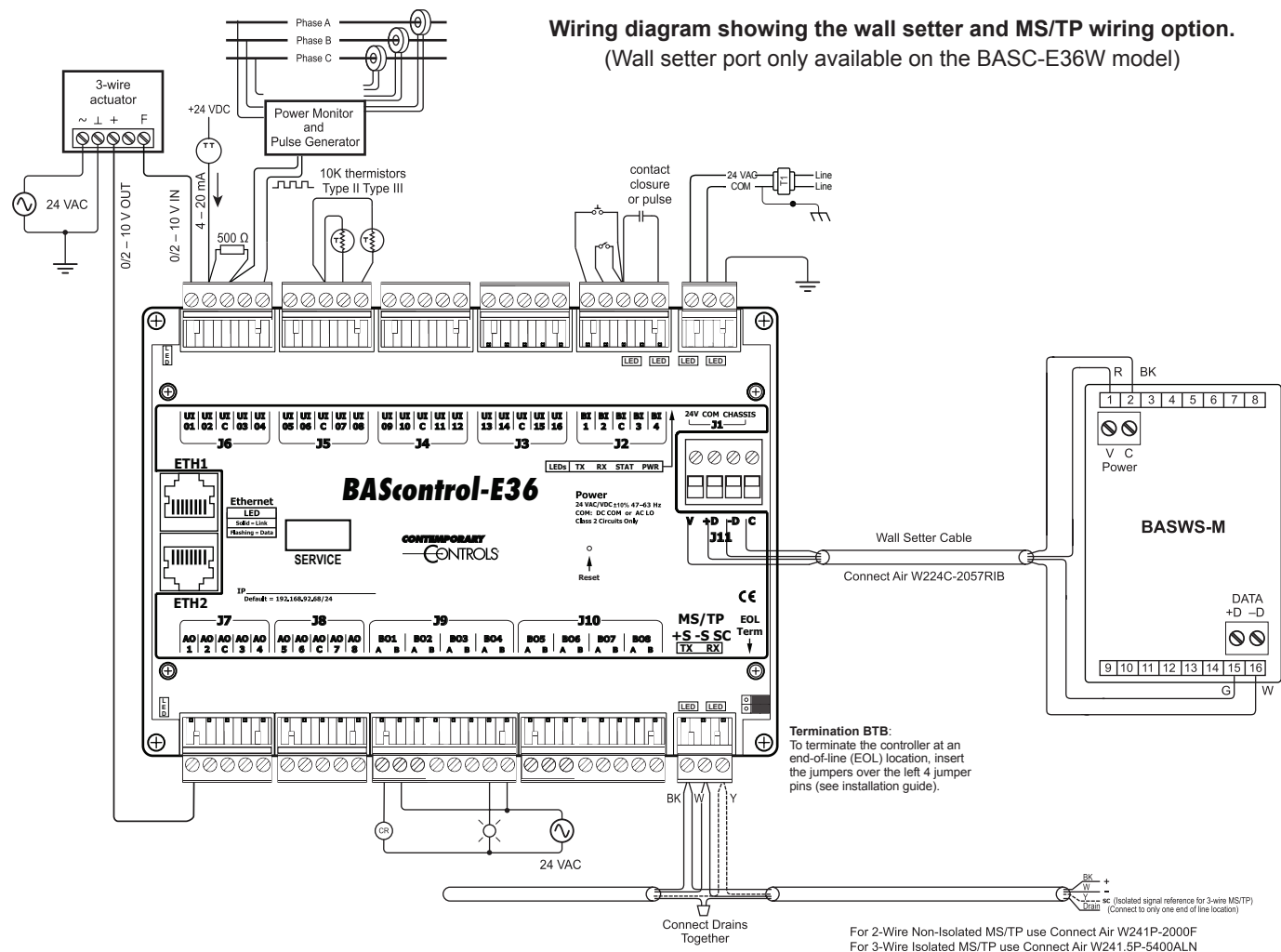
The power source for the internal supply is applied via the two terminals labelled HI and COM. COM is for the power source return and serves as the common ground connection. Primary 24 VAC/VDC (± 10%) power is applied to HI and COM. HI connects to a diode and accomplishes half-wave rectified power—while providing reverse input voltage protection. The recommended power conductor size is 16–18 AWG (solid or stranded). Ground is directly connected to zero volts. Input connections are reverse polarity protected. These controllers are intended for use with Class 2 circuits. A ground lug is provided to connect the devices to either earth or control panel ground. Use a green 16-18 AWG for connection.

**WARNING:** Internally, the BAScontrol-E36 utilize a half-wave rectifier and therefore can only share the same AC power source with other half-wave rectified devices. Sharing a common DC power source is also possible. Sharing AC power with full-wave rectified devices is NOT recommended. Devices powered from a common AC source could be damaged if a mix of half-wave and full-wave rectified devices exists.

The dimensions are the same on all models. All units are in mm.

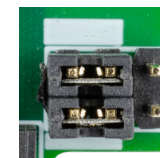


## Input/Output Connections

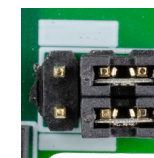


To enable or disable bias/termination, install jumpers as shown.

**Bias/Termination Enabled**



**Bias/Termination Disabled**



## Web Page Configuration

The BAScontrol-E36 contains an interactive web server accessible from any Internet-compatible PC on the local network with recent versions of most standard web browsers such as Microsoft Edge, Mozilla Firefox, Apple Safari, or Google Chrome. To configure a controller, connect it to your PC using an Ethernet cable and set the PC's IP and subnet mask in Local Area Connection → Properties. In the Internet Protocol Version 4 (TCP/IPv4) settings of your PC, specify an IP address and a Subnet mask in the same subnet as the BAScontrol-E36 (e.g., 192.168.92.5 /24).

BAScontrol-E36 factory settings: **Default IP address is 192.168.92.68 and a Class C subnet mask of 255.255.255.0 (/24)**  
**User Name is admin and Password is admin**

**Reset IP** switch is located on the front, underneath the metal case edge, and also indicated on label. Remove power, then press and hold the Reset IP switch. Apply power again while holding down the Reset IP switch. I/O channels will alternately flash after startup. Log in to the default IP address and set new IP, User ID, and Password. For complete datasheet and details on BAScontrol-E36, support, or compliance information, please visit our product page at: <https://www.ccontrols.com/basautomation/bascontrole36.php> and click on the Support tab under More Information.

Contemporary Control Systems, Inc. reserves the right to make changes in the specifications of the product described within this manual at any time without notice and without obligation of Contemporary Control Systems, Inc. to notify any person of such revision or change.

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