Installation Guide

22-point BACnet/IP Sedona Unitary Controller

The BAScontrol22 version 4.0 is a 22-point unitary controller series which supports BACnet/IP and Sedona over an Ethernet connection. There are four models in the 4.0 series. All controller models comply with the B-ASC device profile having a convenient mix of 8 universal inputs, 4 binary inputs, 4 analog outputs and 6 relay outputs. While all models support BACnet/IP over Ethernet, two models also have a MS/TP connection, and two models support a digital wall setter port for local setpoint control.

BASC-22DR: BAScontrol22 2-Ethernet

BASC-22SR: BAScontrol22 Ethernet MS/TP

BASC-22WR: BAScontrol22 2-Ethernet Wallset

BASC-22WSR: BAScontrol22 Ethernet MS/TP Wallset

Unique to the unit are 48 web components which link Sedona wire sheet readable/writeable data to web pages, and 24 virtual points which link Sedona wire sheet readable/writeable data to a BACnet client. Each device is fully web page configurable, and freely programmable using Sedona's drag-and-drop programming methodology of assembling components onto a wiresheet to create applications. Each unit can be programmed and archived using the BAScontrol Toolset. The controllers are designed for panel-mounting with screws (not provided). Rugged design, low profile, and wide temperature operation make it suitable for indoor or outdoor use.

Electrical (Class 2 Circuits Only)

 INPUT
 DC
 AC

 Voltage (±10%):
 24 V
 24 V

 Power:
 4 W
 8 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 100 m (328 ft.)

100BASE-TX

MS/TP (BASC-22SR & BASC-22WSR only)

EIA-485 1200 m (4000 ft.) 9.6-76.8 kbps 1000 m (3280 ft) 115.2 kbps

000 III (3200 II) 113.2 KDPS

31 full-load devices

Wall Setter (BASC-22WR & BASC-22WSR only)

EIA-485 30 m (100 ft.)

19.2 kbps, even parity, 1 stop bit, 1 full-load device

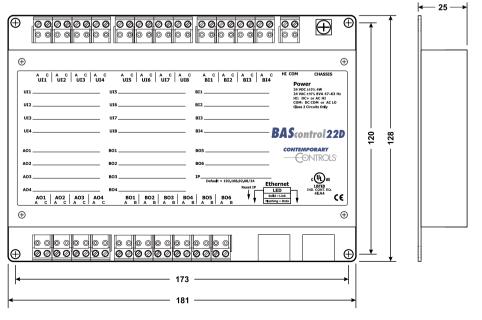
Installation

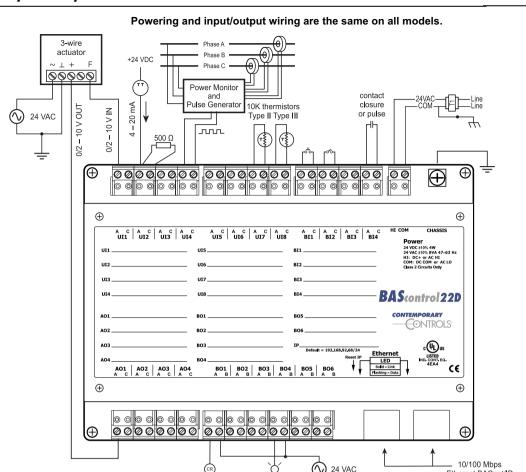
Power

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. This device is intended for use with Class 2 circuits. A ground lug is provided to connect the device to either earth or control panel ground. Use a green 16-18 AWG for connection.

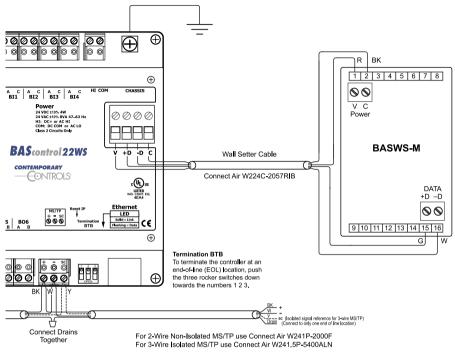
WARNING: Internally, this device utilizes a half-wave rectifier and therefore can only share the same AC power source with other half-wave rectified devices. Sharing a common DC power source is also possible. Sharing AC power with full-wave rectified devices is NOT recommended. Devices powered from a 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.





Wiring diagram showing the wall setter and MS/TP wiring option.



Web Page Configuration

The BAScontrol22 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 the 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 BAScontrol22 (e.g., 192.168.92.5 /24).

Ethernet BACnet/IP

BAScontrol22 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 BAScontrol22, support, or compliance information, please visit our product page at: www.ccontrols.com/bascontrol4 and click on the Support tab under More Information.

