BAC-12xxxx/13xxxx/14xxxx Series FlexStat™

Contents

Stil■ . . . Made in the U.S.A.

(Shown with Optional Motion and Humidity Sensors)

◆ Heat pump unit, with up to two compressor stages, and with optional auxiliary heat, emergency heat, dehumidification, and/or fan status

◆ Roof top unit, with up to two H/C stages, and with optional economizer, dehumidification, and/or fan status

FlexStats also provide the capability to customize the standard library of sequences using a KMC programming tool (BACstage or TotalControl). This enables a local authorized KMC installing contractor to adapt the standard library to the unique site needs and application-specific requirements of a particular project.

BACnet over **MS/TP** communication is standard. **"E" versions, with an RJ-45 jack, add BACnet over Ethernet, BACnet over IP, and BACnet over IP as Foreign Device** (for communication across the Internet).

Description and Application

The award-winning FlexStat is a **controller and sensor** in a single, attractive package that creates a flexible solution to stand-alone control challenges or BACnet network challenges. Temperature sensing is standard with **optional humidity, motion, and CO$_2$ sensing**. Flexible input and output configurations and built-in or custom programming ensure that a variety of application needs can be met. Such applications include single- and multi-stage packaged, unitary, and split systems (including high SEER/EER variable speed packaged equipment), as well as factory-packaged and field-applied economizers, water-source and air-to-air heat pumps, fan coil units, central station air handling units, and other similar applications.

In addition, an on-board library of programs permits a single model to be rapidly configured for a wide range of HVAC control applications. Thus, a single "one size fits all" FlexStat model can replace multiple competitor models. A single BAC-120163CW, for example, can be quickly configured for any of these application options:

◆ Air handling unit, with proportional heating and cooling valves, and with optional economizer, dehumidification, and/or fan status

◆ Fan coil unit, 2-pipe or 4-pipe, proportional or 2-position valves, with optional dehumidification (w/ 4-pipe option) and/or fan status

Features

Interface and Function

◆ User-friendly English-language menus (no obscure numeric codes) on a 64 x 128 pixel, dot-matrix LCD display with 5 buttons for data selection and entry

◆ Multiple display options include selectable space temperature display precision, degrees F/C toggle, rotation values, display blanking, hospitality mode, and locked mode

◆ Built-in, factory-tested libraries of configurable application control sequences

Specifications and design subject to change without notice.

- Integral energy management control with optimum start, deadband heating and cooling setpoints, and other advanced features to assure comfort while maximizing energy savings

- Schedules can easily be set uniquely by the entire week (Mon.–Sun.), weekdays (Mon.–Fri.), weekend (Sat.–Sun.), individual days, and/or holidays; six On/Off and independent heating and cooling setpoint periods are available per day

- Three levels of password-protected access (user/operator/administrator) prevent disruption of operation and configuration—plus Hospitality mode and Locked User Interface mode offer additional tamper resistance

- Integral temperature and optional humidity, motion, and/or CO_2 sensors

- All models have 72-hour power (capacitor) backup and a real time clock for network time synchronization or full stand alone operation

- Models functionally replace most Viconics and other competitors' products

Inputs

- Six analog inputs for additional configurable remote external sensors, such as remote space temperature (with averaging, highest, and lowest options), remote CO_2, OAT, MAT, DAT, water supply temperature, fan status, and other sensors

- Inputs accept industry-standard 10K ohm (Type II or III) thermistor sensors, dry contacts, or 0–12 VDC active sensors

- Input overvoltage protection (24 VAC, continuous)

- 12-bit analog-to-digital conversion on inputs

Outputs

- Nine outputs, analog and binary (relays)

- Each short-circuit protected analog output capable of driving up to 20 mA (at 0–12 VDC)

- The NO, SPST (Form "A") relays carry 1 A max. per relay or 1.5 A per bank of 3 relays (relays 1–3 and 4–6) @ 24 VAC/VDC

- 8-bit PWM digital-to-analog conversion on outputs

Installation

- Backplate mounts on a standard vertical 2 x 4-inch wall handy-box (or, with an HMO-10000 adapter, a horizontal or 4 x 4 handy-box), and the cover is secured to the backplate by two concealed hex screws

- Two-piece design provides easy wiring and installation (see *Dimensions and Connectors on page 9*)

Connections

- Screw terminal blocks, wire size 14–22 AWG, for inputs, outputs, power, and MS/TP network

- "E" versions add an RJ-45 jack

- A four-pin EIA-485 (formerly RS-485) data port on the underside of the case enables easy temporary computer connection to the BACnet network (access with a KMD-5624 cable—requires use of KMD-5576 or third-party interface)

BACnet Communication and Standards

- Integral peer-to-peer BACnet MS/TP LAN network communications on all models (with configurable baud rate from 9600 to 76.8K baud)

- "E" versions add BACnet over Ethernet, BACnet over IP, and BACnet over IP as Foreign Device

- Meets or exceeds BACnet AAC specifications in the ANSI/ASHRAE BACnet Standard 135-2008

Configurability

I/O

- Up to 10 analog input objects (IN1 is space temperature, IN2–IN4 and IN7–IN9 are 0–12 VDC inputs, IN5 is reserved for humidity, IN6 is reserved for motion detection, IN10 is reserved for CO_2)

- Up to 9 analog or binary output objects

Value

- 150 analog value objects

- 100 binary value objects

- 40 multi-state value objects (with up to 16 states each)

Program and control

- 20 PID loop objects

- 10 program objects (contains a library of 5 built-in programs and customized Control Basic programming in the other 5 program objects can be done through BACstage or TotalControl)

Schedules and trends

- 2 schedule objects

- 1 calendar object

- 8 trend objects, each of which holds 256 samples

Alarms and events

- 5 notification class (alarm/event) objects

- 10 event enrollment objects

Models

If your application is a:

◆ FCU (Fan Coil Unit) or Packaged Unit, AHU (Air Handling Unit), or RTU (Roof Top Unit)—see all models

◆ HPU (Heat Pump Unit)—see the BAC-1xxx**63**CW models only

For more details, see *Application/Model Selection Guide on page 4*. See also the **FlexStat Catalog Supplement and Selection Guide (SP-091)**!

Model*	Outputs**	Optional Sensors***	Typical Applications
BAC-12xxxx models (e.g., BAC-120036CW) are standard and do not have a CO_2 sensor. BAC-13xxxx/14xxxx models (e.g., BAC-140136CW) have CO_2 sensors to add Demand Control Ventilation to the applications below. **DCV is only available when using an AHU, RTU, or HPU application with a modulating economizer option enabled.** See "Specifications, CO2 Models Only" for more information.			
BAC-1x0036CW	3 Relays and 6 Analog Outputs	None	• 1H/1C, fan, and 6 universal outputs • 3-speed fan, 2- or 4-pipe FCUs with modulating valves • Central station AHUs with modulating/1/2 Heat/Cool • Variable-speed fan output • Single-stage applications
BAC-1x0136CW		Humidity****	• Same as BAC-1x0036CW • Dehumidification sequence • Humidification sequence (AHU or 4-pipe FCU)
BAC-1x1036CW		Motion/Occupancy	• Same as BAC-1x0036CW • Occupancy-based operation
BAC-1x1136CW		Humidity and Motion/Occupancy****	• Same as BAC-1x0136CW • Occupancy-based operation
BAC-1x0063CW	6 Relays and 3 Analog Outputs	None	• 1 or 2 H and 1 or 2 C, fan • Multi-stage packaged or split systems • Multi-stage heat pumps with or without factory-packaged economizers • Central station AHUs with modulating Heat/Cool • 3-speed fan, 2- or 4-pipe FCUs with modulating or 2-position valves
BAC-1x0163CW		Humidity****	• Same as BAC-1x0063CW • Dehumidification sequence (AHU, 4-pipe FCU, or RTU)
BAC-1x1063CW		Motion/Occupancy	• Same as BAC-1x0063CW • Occupancy-based operation
BAC-1x1163CW		Humidity and Motion/Occupancy****	• Same as BAC-1x0163CW • Occupancy-based operation

*The standard color is white. To order the optional light almond color, remove the "W" at the end of the model number (e.g., BAC-121163C instead of BAC-121163C**W**). **To order the IP version**, add an E after the C (e.g., BAC-121163C**E**W**).** All models have a real-time clock.

Analog outputs produce 0–12 VDC @ **20 mA** maximum, and **relays** carry **1 A** max. **per relay or 1.5 A per bank** of 3 relays (relays 1–3, 4–6, and 7–9) @ 24 VAC/VDC.

***All models have a 32-bit processor, an internal temperature sensor, and 6 analog **inputs**. All models have optional discharge air temperature monitoring/trending and fan status monitoring. Optional sensors include humidity, motion, and CO_2.

****In models with CO_2 sensors, humidity sensors come standard.

Application/Model Selection Guide

Applications and Options	FlexStat Models							
	6 Relays and 3 Analog Outputs				3 Relays and 6 Analog Outputs			
	BAC-1x0063CW	BAC-1x0163CW (+ Humidity)	BAC-1x1063CW (+ Motion)	BAC-1x1163CW (+ Humidity/Motion)	BAC-1x0036CW	BAC-1x0136CW (+ Humidity)	BAC-1x1036CW (+ Motion)	BAC-1x1136CW (+ Humidity/Motion)
Packaged Unit (Air Handling Unit and Roof Top Unit)								
1 Heat and 1 Cool					✔	✔	✔	✔
1 or 2 Heat and 1 or 2 Cool (in BAC-1xxx63 RTU Menu Only)	RTU	RTU	RTU	RTU				
1 or 2 Heat and Modulating Cool					✔	✔	✔	✔
Modulating Heat and 1 or 2 Cool					✔	✔	✔	✔
Modulating Heat and Modulating Cool (in AHU Menu Only)	AHU	AHU	AHU	AHU	✔	✔	✔	✔
Opt. Outside Air Damper, Modulating	✔	✔	✔	✔	✔	✔	✔	✔
Opt. Outside Air Damper, 2 Position (in RTU Menu Only)	RTU	RTU	RTU	RTU	✔	✔	✔	✔
Opt. Fan Speed Control					✔	✔	✔	✔
Opt. Dehumidification		✔		✔		✔		✔
Opt. Humidifier						✔		✔
Opt. Motion/Occupancy Sensor			✔	✔			✔	✔
Opt. CO2 Sensor with DCV (Demand Control Ventilation)	BAC-13xxxx or BAC-14xxxx (see Note below)							
Opt. IP/Ethernet BACnet Communications	Add an E to the model number: BAC-1xxxxxCEx (see Model Code)							
FCU (Fan Coil Unit)	With 3-speed fan							
2 Pipe, Modulating	✔	✔	✔	✔	✔	✔	✔	✔
2 Pipe, 2 Position	✔	✔	✔	✔				
4 Pipe, Modulating	✔	✔	✔	✔	✔	✔	✔	✔
4 Pipe, 2 Position	✔	✔	✔	✔				
Opt. Dehumidification (4 pipe only)		✔		✔		✔		✔
Opt. Humidifier (4 pipe only)						✔		✔
Opt. Motion/Occupancy Sensor			✔	✔			✔	✔
Opt. CO2 Sensor with DCV (Demand Control Ventilation)	DCV N/A for FCU applications, but CO2 levels still displayed							
Opt. IP/Ethernet BACnet Communications	Add an E to the model number: BAC-1xxxxxCEx (see Model Code)							
HPU (Heat Pump Unit)	1 or 2 compressors with auxiliary and emergency heat							
Opt. Outside Air Damper, Modulating	✔	✔	✔	✔	N/A			
Opt. Dehumidification		✔		✔				
Opt. Motion/Occupancy Sensor			✔	✔				
Opt. CO2 Sensor with DCV (Demand Control Ventilation)	BAC-13xxxx or BAC-14xxxx (see Note below)							
Opt. IP/Ethernet BACnet Communications	Add an E to the model number: BAC-1xxxxxCEx (see Model Code)							

NOTE: All models have a real-time clock (see Model Code). On models with a CO2 sensor, the humidity sensor is standard and Demand Control Ventilation is only available when using an AHU, RTU, or HPU application with a modulating economizer option enabled. For the differences between the types of CO2 sensors in the BAC-13xxxx and BAC-14xxxx, see page 6. The BAC-12xxxxx has no CO2 sensor.

Model Code for BAC-1*xmhra*CEW:

BAC = BACnet Device	*r* = Number of Relay Outputs (3 or 6 standard, or 5 relays & 1 triac)
1 = Model Series	*a* = Number of Analog Outputs (3 or 6)
x = CO2 Sensor Type (3 or 4) or None (2)	C = Real-Time Clock (RTC standard on all models)
m = Motion Sensor (1) or None (0)	E= IP/Ethernet Communications Option (no E = MS/TP only)
h = Humidity Sensor (1) or None (0)	W = White Color (no W = light almond)

NOTE: See also *Models on page 3*. For details about the CO_2 model options, see *Specifications, CO2 Models Only on page 6*. See also the **FlexStat Catalog Supplement and Selection Guide (SP-091)**!

Specifications, General

Supply Voltage	24 VAC (+20%/–10%), Class 2
Supply Power	13 VA (not including relays)
Outputs (3/6 or 6/3)	Binary outputs (NO, SPST, Form "A" relays) carry **1 A** max. per relay **or** a total of **1.5 A per bank** of 3 relays (relays 1–3 and 4–6) @ 24 VAC/VDC
	Analog outputs produce 0–12 VDC, **20 mA** maximum
External Inputs (6)	Analog 0–12 VDC (active, passive contacts, 10K thermistors)
Connections	Wire clamp type terminal blocks; 14–22 AWG, copper
	Four-pin EIA-485
	(Opt.) eight-pin Ethernet jack
Display	64 x 128 pixel dot matrix LCD
Case Material	White (standard) or light almond flame-retardant plastic
Dimensions*	5.551 x 4.192 x 1.125 inches (141 x 106 x 28.6 mm)
Weight*	0.48 lbs. (0.22 kg)
Approvals*	UL 916 Energy Management Equipment; FCC Class B, Part 15, Subpart B and complies with Canadian ICES-003 Class B; BACnet Testing Laboratory (BTL) listed; SASO PCP Registration KSA R-103260

Humidity Sensor (optional internal)

Sensor Type	CMOS
Range	0 to 100% RH
Accuracy @ 25°C	±2% RH (10 to 90% RH)
Response Time	Less than or equal to 4 seconds

Temperature Sensor (without humidity sensor)

Sensor Type	Thermistor, Type II
Accuracy	±0.36° F (±0.2° C)
Resistance	10,000 ohms at 77° F (25° C)
Operating Range	48 to 96° F (8.8 to 35.5° C)

Temperature Sensor (with humidity sensor)

Sensor Type	CMOS
Accuracy	±0.9° F (±0.5° C) offset from 40 to 104° F (4.4 to 40° C)
Operating Range	36 to 120° F (2.2 to 48.8° C)

Environmental Limits*

Operating	34 to 125° F (1.1 to 51.6° C)
Shipping	–22 to 140° F (–30 to 60° C)
Humidity	0 to 95% RH (non-condensing)

Specifications, Motion Sensor

Motion Sensor (Opt.) Passive infrared with approx. 10 meter (32.8 feet) range (for details about operation of the motion sensor, see the **FlexStat Application Guide**)
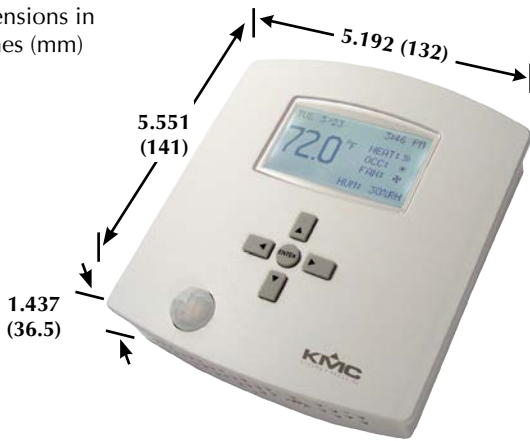
Motion/Occupancy Sensor Detection Performance

Top View

Side View
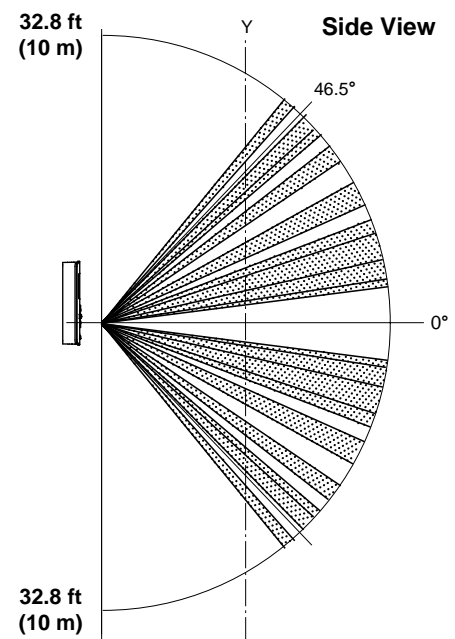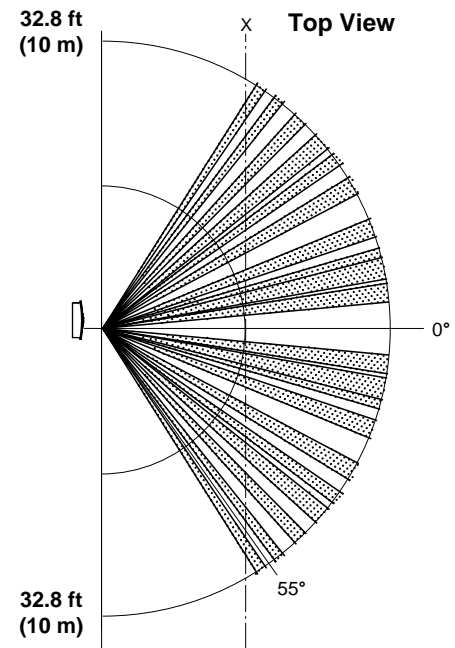
*NOTE: **Except for CO$_2$ sensor models**—see the next page for those specifications.

Dimensions in Inches (mm)

5.192 (132)

5.551 (141)

1.437 (36.5)

KMC

Dimensions	5.551 x **5.192** x **1.437** inches (141 x **132** x **36.5** mm)
Weight	0.**5** lbs. (0.**28** kg)
Environmental Limits	
Operating	34 to **122**° F (1.1 to **50**° C)
Approvals	FCC Class **A**, Part 15, Subpart B and complies with Canadian ICES-003 Class **A**

NOTE: See the previous page for specifications in common with other models.

NOTE: The CO_2 models are not approved for residential applications.

CO_2 **Sensor**	**BAC-13xxxx**	**BAC-14xxxx**
Applications	For zones with **occupied/unoccupied** times*	For zones with **continuous occupancy***
Method	Non Dispersive Infrared (NDIR), with ABC Logic*	Non Dispersive Infrared (NDIR), dual channel*
Calibration	Self-calibrates over several weeks*	Self-calibrates approximately once every 24 hours*
Typical Life of Sensor	15 years	10 years
Measurement Range	400 to 2000 ppm	0 to 2000 ppm
Accuracy (at nominal operating temperature)	±35 ppm @ 500 ppm, ±60 ppm @ 800 ppm, ±75 ppm @ 1000 ppm, ±90 ppm @ 1200 ppm	±75 ppm or 10% of reading (whichever is greater)
Altitude Correction	Configurable from 0 to 32,000 feet	
Pressure Dependence	0.135 of reading per mm Hg	
Temperature Dependence	0.2% FS (full scale) per °C	
Stability	< 2% of FS over life of sensor	< 5% of FS or < 10% reading annual over life of sensor
Response Time	< 2 minutes for 90% step change typical	
Warm Up Time	< 2 minutes (operational) and 10 minutes (maximum accuracy)	
*The BAC-13xxxx series has been certified to comply with CA Title 24, Section 121(c), as well as sub-paragraph 4.F. See explanations below.		

The BAC-13xxxx series uses Automatic Background Calibration Logic, or ABC Logic, a patented self-calibration technique designed to be used in applications **where concentrations will drop to outside ambient conditions** (approximately 400 ppm) at least three times in a 14 day period, typically during unoccupied periods. With ABC Logic enabled, the sensor will typically reach its operational accuracy after 25 hours of continuous operation if it was exposed to ambient reference levels of air at 400 ±10 ppm CO_2. The sensor will maintain accuracy specifications with ABC Logic enabled, given that it is at least four times in 21 days exposed to the reference value and this reference value is the lowest concentration to which the sensor is exposed. ABC Logic requires continuous operation of the sensor for periods of at least 24 hours.

NOTE: The BAC-13xxxx series, with ABC Logic, has been certified to comply with **CA Title 24, Section 121(c), as well as sub-paragraph 4.F** that specifies accuracy will be maintained within tolerance for a minimum of 5 years without recalibration and that a detected sensor failure will cause the controller to take appropriate corrective action.

The BAC-14xxxx series, for zones with **continuous occupancy**, has a dual channel sensor. A CO_2 channel measures gas concentration, and a reference channel measures the sensor signal intensity. Self-calibrations are performed approximately every 24 hours using the reference channel. During the self-calibration the sensor ppm reading is frozen and will not react to changing CO_2.

NOTE: See also the Demand Control Ventilation (DCV) section on the next page.

Demand Control Ventilation (DCV)

When using applications with a modulating econo-mizer option, the three types of Demand Control Ventilation (DCV) configurations available are:
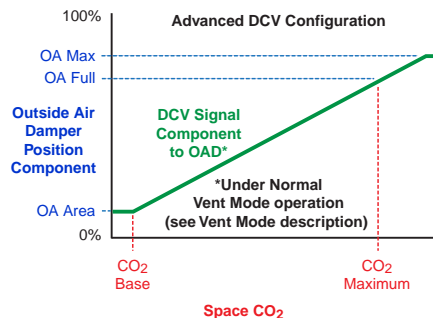
◆ Basic—Provides simple DCV, modulating the outside air damper in direct response to the cur-rent CO_2 level with respect to its setpoint. Basic DCV is much more energy efficient than no DCV at all, while maintain-ing adequate IAQ (Indoor Air Quality). It is the easi-est DCV method to configure. However, where VOCs, radon, or other pollutants become exces-sive during unoccupied times (with no ventila-tion), the FlexStat's Standard or Advanced DCV configuration is recommended.
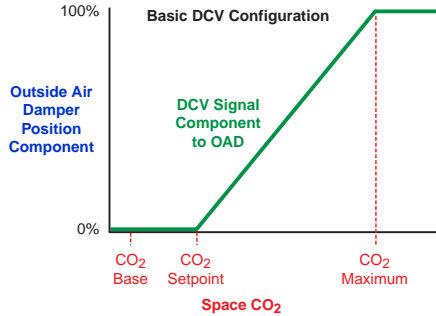
◆ Standard—When the BAC-1**3**xxxx settings are properly configured, this complies with **CA Title 24, Section 121(c)**. This would also apply to a properly configured BAC-1**2**xxxx with a remote SAE-10xx CO_2 sensor. Stan-dard DCV, under most conditions, is somewhat less energy efficient than Basic, but it enhances IAQ.
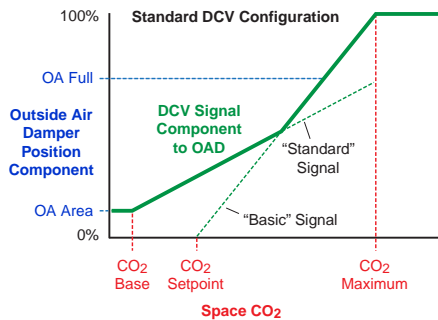
◆ Advanced—When the settings are properly configured, this configuration complies with **CA Title 24, Section 121(c)** and **ASHRAE Standard 62.1-2007** and follows guide-lines by **Port-land Energy Conservation, Inc. (PECI)**.
Although Advanced DCV is the most complex to configure, it is more energy efficient than Stan-dard while still optimizing IAQ.

Although BAC-1**2**xxxx FlexStats do not have a built-in CO_2 sensor, they still have DCV control sequences available. When DCV is enabled in these models, IN9 is assumed to be connected to an external KMC SAE-10xx CO_2 sensor. BAC-13xxxx/14xxxx FlexStats also have the external sensor option, and if used, the highest of the two readings (internal vs. external) will be used to control DCV sequences. The CO_2 ppm display (when enabled) also shows the highest of the two levels.

NOTE: The three DCV Configuration graphs on the left show the DCV **component** of the signal to the outside air damper. Depending on the conditions and the DCV configuration, the signal to the damper might be controlled by Minimum Position, Economizer Loop, or other components. The **maximum** of these component values is used, not the sum of them. (If there is a Low Limit alarm, however, these signals are overridden, and the damper is closed.)

NOTE: **DCV is only available when using an AHU, RTU, or HPU application with a modulating economizer option enabled.** Without that configuration, DCV will not appear in menus, but the CO_2 ppm readings will (unless turned off in the User Interface menu) still show on the lower right of the display.

The graph below shows an example of how a cool-ing setpoint and the outside air damper position could be efficiently controlled by a FlexStat's built-in combination of schedule, motion sensor (configured for occupancy standby and occupancy override), and CO_2 sensor (configured for Advanced DCV).

*(*Available only on FlexStats with motion sensors)*
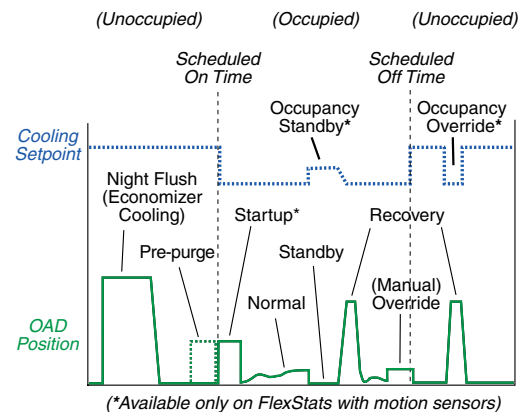
For more details about DCV configuration and operation, see the **FlexStat Operation Guide** and **FlexStat Application Guide**.

Accessories

Damper (OAD/RTD) Actuators (Fail-Safe)

MEP-5372	6.25 ft^2 max. damper area, 50 in-lb., 2–10 VDC, 19 VA
MEP-7252	15 ft^2 max. damper area, 120 in-lb., 0–10 VDC, 25 VA
MEP-7552	22.5 ft^2 max. damper area, 180 in-lb., 0–10 VDC, 25 VA
MEP-7852	40 ft^2 max. damper area, 320 in-lb., 0–10 VDC, 40 VA

Mounting Hardware

HMO-10000	Horizontal or 4 x 4 handy box wall mounting plate for BAC-12xxxx models (not needed for BAC-13xxxx/14xxxx models), light almond (shown)
HMO-10000W	HMO-10000 in white
HPO-1602	Replacement backplate for BAC-12xxxx models
HPO-1603	Replacement backplate for BAC-13xxxx/14xxxx models (shown)
SP-001	Screwdriver (KMC branded) with flat blade (for terminals) and hex end (for cover screws)

Network Communications and Firmware

HTO-1103	FlexStat firmware upgrade and BAC-14xxxx CO_2 calibration adapter kit
KMD-5567	Network surge suppressor
KMD-5575	Network repeater/isolator
KMD-5576	EIA-485 to USB Communicator
KMD-5624	PC data port (EIA-485) cable (FlexStat to USB Communicator)—included with the KMD-5576 (buy for third-party EIA-232 interfaces)

Relays (External)

REE-3211	(R1/R2/R3) SPDT, multi-voltage control relay, 1.2 VA
REE-3112	(HUM) SPDT, 12/24 VDC control relay

Sensors (External)

CSE-110x	(FST) differential air pressure switch
STE-1402	(DAT) duct temperature sensor w/ 8" rigid probe
STE-1416	(MAT) 12' (flexible) duct averaging temp. sensor
STE-1451	(OAT) outside air temp. sensor
STE-6011	Remote space temp. sensor
SAE-10xx	Remote CO_2 sensor, space or duct
STE-1454/1455	(W-TMP) 2" strap-on water temp. sensor (with or without enclosure)

Transformers, 120 (or more) to 24 VAC (TX)

XEE-6111-040	40 VA, single-hub
XEE-6112-040	40 VA, dual-hub
XEE-6311-050	50 VA, dual-hub
XEE-6311-075	75 VA, single-hub
XEE-6311-100	96 VA, dual-hub
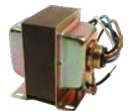
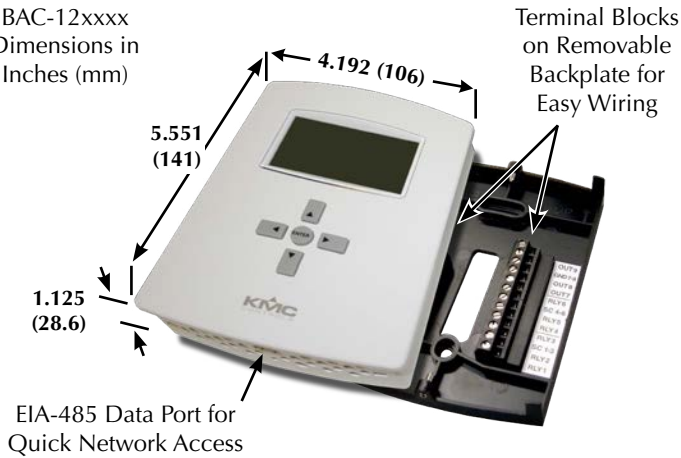### Valves (Heating/Cooling/Humidification)

VEB-43xxxBDL	(HUMV/CLV/HTV) Fail-safe control valve, w/ MEP-5372 2-10 VDC actuator, 19 VA
VEB-43xxxBCK	(VLV/CLV/HTV) control valve w/ MEP-4002 0–10V actuator, 4 VA
VEZ-4xxxxMBx	(VLV/CLV/HTV) fail-safe control valve, 24 VAC, 9.8 VA

NOTE: For details, see the respective product data sheets and installation guides. See also the **FlexStat Application Guide**.

Dimensions and Connectors

BAC-12xxxx
Dimensions in
Inches (mm)

Terminal Blocks
on Removable
Backplate for
Easy Wiring

4.192 (106)

5.551 (141)

1.125 (28.6)

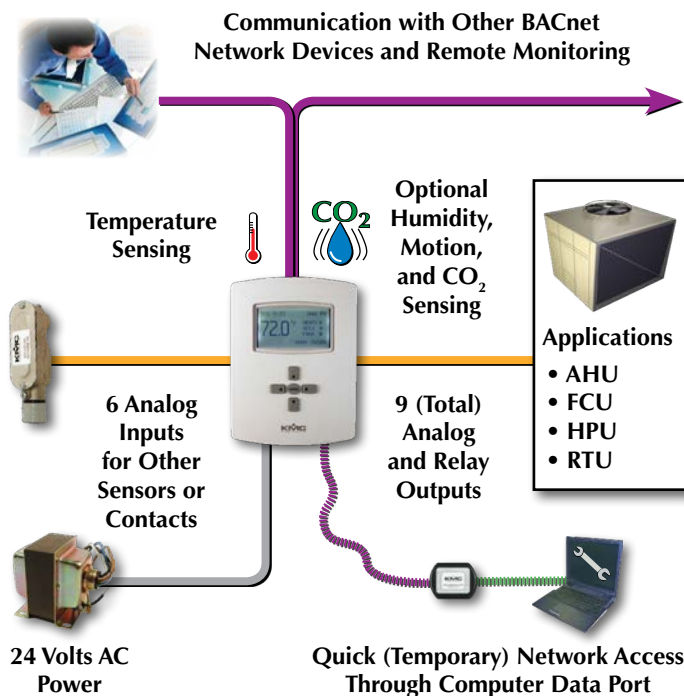EIA-485 Data Port for
Quick Network Access

NOTE: Two-piece design allows field rough-in
and termination of field wiring to the
backplate without needing the FlexStat at
the site—permitting FlexStats to be bulk-
configured off-site and plugged into the
wired backplates at a later time if desired.

Product and Documentation Awards

◆ Gold medal in the Networked/
   BAS category of *Consulting-*
   Specifying Engineer magazine's
   Product of the Year competi-
   tion (September 2010)

◆ Editors' Choice product in
   Commercial Building Products
   (October 2010)

◆ Winner in the HVAC & Plumb-
   ing category of *Green Thinker*
   Network's Sustainability 2012
   competition (April 2012)

◆ FlexStat support documents
   also won an Award of Merit
   in the 2009–2010 publications
   competition sponsored by the
   Chicago Chapter of the Society
   for Technical Communication
   (April 2010)

Sample Installation

**Communication with Other BACnet
Network Devices and Remote Monitoring**

**Temperature
Sensing**

CO_2

**Optional
Humidity,
Motion,
and CO_2
Sensing**

72.0°

Applications
• AHU
• FCU
• HPU
• RTU

**6 Analog
Inputs
for Other
Sensors or
Contacts**

**9 (Total)
Analog
and Relay
Outputs**

**24 Volts AC
Power**

**Quick (Temporary) Network Access
Through Computer Data Port**

Support

FlexStats come with a printed Installation Guide.
Additional award-winning resources for configura-
tion, application, operation, programming, upgrad-
ing and much more are available on the KMC Con-
trols web site (**www.kmccontrols.com**). To see all
available files, log-in to the KMC Partners site.

NOTE: For specifications on the older BAC-10000
series FlexStats (with only three external
inputs and no Ethernet or CO_2 options), see
the **BAC-10000 Series FlexStat Data Sheet**
(913-035-01).

BACnet
International

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