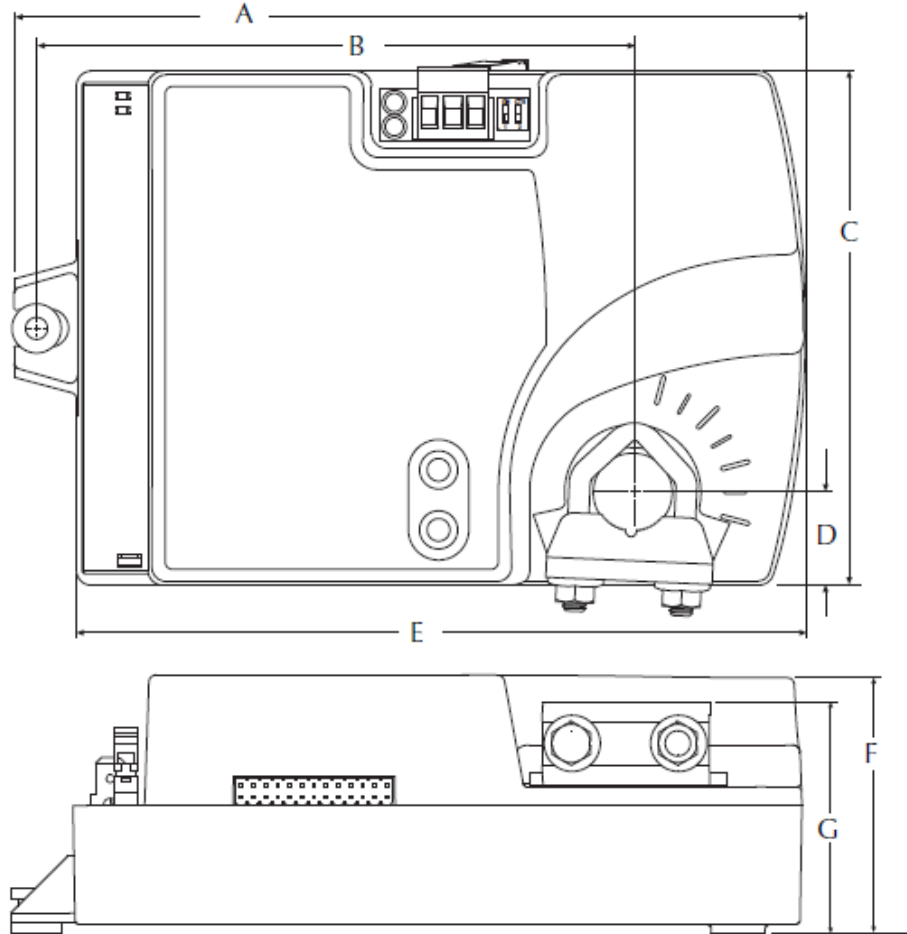


Titus Alpha BACnet Controller

(ACS) Application Specific Controller with Integral Actuator

(EMCS) Energy Management

Stand-alone or networked operation



Dimensions

A	B	C	D	E	F	G
6.53 in.	4.89 in.	4.25 in.	0.77 in.	6.00 in.	2.14 in.	1.92 in.
166 mm	124 mm	108mm	19 mm	152 mm	54 mm	49 mm

Note: See page 2 for specifications

This submittal is meant to demonstrate general dimensions of this product. The drawings are not meant to detail every aspect of the product. Drawings are not to scale. Titus

reserves the right to make changes without written notice.

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Titus Alpha BACnet Controller Specifications

Analog inputs	All inputs are configured as analog objects	Air flow sensor features	Configured as BACnet analog input object. CMOS differential pressure 0-2 inches of water (0-500 Pa) measurement range. Internally linearized and temperature compensated. Span accuracy 4.5% of reading. Barbed connections for 1/4 FR tubing. Range dependent upon DP pickup, tubing size/length and connections.
Active inputs	1	Actuator specifications	
Passive inputs	3	Torque	40 in-lb. (4.5 N•m)
Air flow sensor	1	Angular rotation	0 to 95° Adjustable end stops at 45° and 60° rotation
Key features	Standard units of measure. Overvoltage input protection	Motor timing, BAC-8005	90 sec./90° at 60 Hz 108 sec./90° at 50 Hz
Connector	Spade connectors, 0.25 inch	Motor timing, BAC-8205	60sec./90° at 60 Hz 72 sec./90° at 50 Hz
Conversion	12-bit analog-to-digital conversion	Shaft size	Directly mounts on 3/8 to 5/8 inch (9.5 to 16 mm) round or 3/8 to 7/16 inch (9.5 to 11 mm) square damper shafts.
Input range	0-12 volts DC	Regulatory	UL 916 Energy Management Equipment FCC Class B, Part 15, Subpart B BACnet Testing Laboratory listed as an application specific controller (ASC). UL 864 smoke controls (BAC-8205 only)
Outputs, analog	2	Installation	
Key features	Output short protection Configured as BACnet analog objects. Standard units of measure	Supply voltage	24 volts AC, -15%, +20% 5 VA
Connector	Spade connectors, 0.25 inch	Weight	13.2 ounces (376 grams)
Conversion	12-bit analog-to-digital conversion	Case material	Flame retardant plastic
Output voltage	0-10 volts DC	Environmental limits	
Output current	30 mA per output, 30 mA total for all analog outputs	Operating	32 to 120° F (0 to 49° C)
Outputs, binary	4 triacs for external equipment 2 for the internal actuator	Shipping	-40 to 140° F (-40 to 60° C)
Key features	Optically isolated triac output	Humidity	5-95% relative humidity (non-condensing)
Conversion	12-bit analog-to-digital conversion	Models	
Connector	Spade connectors, 0.25 inch	BAC-8005	Cooling VAV controller with 90 second actuator and reheat
Output range	Maximum switching 24 VAC at 3 amperes	BAC-8205	Cooling VAV controller with 60 second actuator, reheat, and UL 864 smoke control application
Communications			
BACnet MS/TP	EIA-485 operating at rates up to 76.8 kilobaud. Removable screw terminal block. Wire size 12-24 AWC		
Sensor jack	RJ-45 jack compatible with model STE-8000 and STE-6000 models with RJ-45 jacks		
Supported objects	See PIC statement for supported BACnet objects		
Control Basic	5 program areas in BAC-8005 6 program areas in BAC-8205		
PID loop objects	2		
Value objects	60 analog, 32 binary, and 12 multistate		
Memory	Programs and program parameters are stored in nonvolatile memory. Auto restart on power failure		
Applications programs	KMC Controls supplies the BAC-8x07 with programming sequences for dual-duct VAV applications: <ul style="list-style-type: none"> ◆ Cooling VAV with modulating, time proportional, two-stage, three-stage, and tri-stage reheat ◆ Monitor CO2 to control indoor air quality ◆ Control local lighting with motion sensing ◆ Fan control ◆ Balancing ◆ UL 864 smoke controll (BAC-8205 only) 		

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Titus Alpha BACnet Controller

Room sensors

Digital display

~~**Digital w/occupancy sensor**~~

Dimensions

A	B	C	D	E	F
3.25 in	5.16 in.	2.58 in.	3.25 in.	0.87 in	1.07 in.
83 mm	116 mm	66 mm	83 mm	22 mm	27 mm

Display	Multifunctional LCD 1.88 x 1.25 in. (48 x 32 mm)
Compatibility	BAC-8000 series VAV controllers
Controller Connection	
Connector type	Eight-wire RJ-45 modular jack
Cable type and length	Standard Ethernet cable up to 75 feet (22.9 meters)
Power	Supplied by connected controller
Mounting	Surface mount directly to any flat surface or to a 2 x 4 inch or 4 x 4 inch handy-box. Mounting on a 4 x 4 inch box requires a mounting backplate.
Weight	2.8 ounces (80 grams)
Material	Flame retardant plastic
Accessories	
Mounting backplate	HMO-1161W
Gasket	HPO-116
Replacement Allen screws	HPO-0044 (package of 10)
Environmental Limits	
Operating Temperature	34° to 125° F (1.1 to 51.6° C)
Shipping	-40° to 140° F (-40° C to 60° C)
Humidity	0 to 95% relative humidity non-condensing

Motion sensor range

Detector type

Range

Top view

~~**Model STE-8201 only**~~

~~Passive infrared~~

~~33 feet (10 meters). See diagrams~~

~~Side view~~