OptiFlex™ OF342-E2

ADVANCED VAV CONTROLLER (UL 864, 10TH ED. COMPLIANT)

PART NUMBER: OF342-E2



Controllers for the WebCTRL® Building Automation System

The OptiFlex advanced VAV controller, model OF342-E2, is a central component of the WebCTRL system. These controllers are ideal for zone-level temperature and air quality control applications. Designed to operate in a wide range of environmental conditions, these controllers are well suited to satisfy the market demands of Variable Air Volume (VAV) and Variable Volume and Temperature (VVT) applications. Factory, pre-engineered ASHRAE Guideline 36 compliant control algorithms reduce energy consumption and increase occupant comfort.

Key Features and Benefits

Application Features

- Versatile controller suitable for a variety of applications, including zone level temperature, air quality, and energy management
- Standard library of control programs available for most unitary equipment and zone applications
- Supports EIKON® graphical programming software, an object oriented tool that provides complete flexibility for any custom control sequence that you need
- Supports Automated Logic communicating ZS sensors, which are available in a variety of zone and equipment sensing combinations
- Supports touchscreen interfaces for managing and troubleshooting the connected equipment easily and for occupant engagement
- Supports smart valves and accessories
- Supports live, visual displays of control logic, helping operators troubleshoot and optimize system operation

Hardware Features

- Employs a bright LED locator light to help determine the unit's location and a damper rotation direction, minimizing the need to be in front of the electrical panel, in the ceiling, or at the air stream to assess the controller location or operation of the damper
- Includes dual high-speed ethernet ports supporting native BACnet over IP; daisy chain, Spanning Tree Protocol (STP) enabled
- Supports hard-wired and wireless service connections
- Uses non-volatile memory to store control programs and historical data, eliminating the need for batteries
- Features a capacitor-backed real-time clock that keeps time in the event of power failure for up to three days
- Includes USB port for local device updates, hard-wired and wireless service connections
- Features large termination strips for easy installation
- Supports remote firmware upgrades
- Accepts DIN rail or screw mounting

WebCTRL®

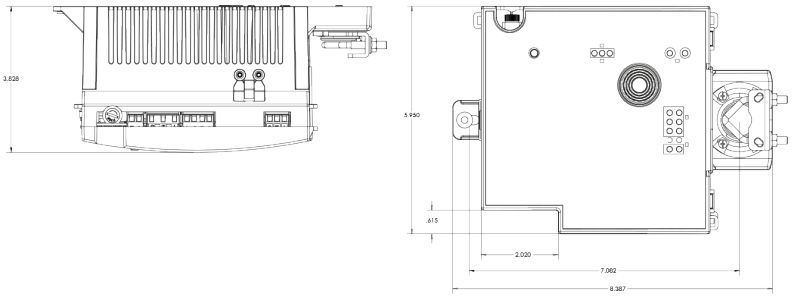
The WebCTRL building automation system gives you the ability to understand your building operations and analyze the results. Integrate environmental, energy, security and safety systems into one powerful management tool that helps you reduce energy consumption, increase occupant comfort, and achieve sustainable building operations.



Specifications

Part # OF342-E2	
BACnet Conformance	BTL Tested and conforms to the BACnet Advanced Application Controller (B-AAC) and BACnet Broadcast Management Device (B-BBMD) standard device profiles, as defined in BACnet 135-2001 2012 Annex L, Protocol Revision 14. Please see BTL listing page.
Power	24 Vac Nom (-15 to +10%), 50/60Hz, 50VA | 24 Vdc (-15 to +10%), 18W
Communication	
BAS Primary Port	10/100 Base T, full duplex, Ethernet ports with BACnet/IP and/or BACnet/Ethernet communication
Rnet Port	12 VDC @ 260mA supporting: Up to 5 wireless and/or ZS sensors; One Equipment Touch or OptiPoint interface ***Not to be used within a Smoke Control application**
Act Net Port	Supports up to 5 Act Net communicating devices ***Restricted to same room use, and wired within conduit**
Service Ports	USB 2.0 host ports for setting up the controller and troubleshooting through a local connection to a computer, connecting to the touchscreen display or the Automated Logic wireless service adapter
Inputs	
Universal	4 Universal inputs configurable to the following types: Dry | Pulse Counting |Thermistor | 0-5 Vdc, 0-10 Vdc
Outputs	
Analog Output	2 analog outputs, 0-10 Vdc configurable as 12Vdc pulse width modulated (PWM) control signal
Binary Output	3 N.O. binary outputs. Each relay contact rated 30 Vac/Vdc @ 3.75 A max
Integral Airflow Sensor	Precision differential pressure sensor 0-2 in. H20, sensitive down to ±0.001 in. H2O. Barbed tapered airflow connections accept 3/16 in. (4.75 mm) I.D. tubing. Allows for readings across the 0–2in. H2O range, accurate to accurate to ±3% of sensor reading at 2 in. H2O
Microprocessor	32-bit ARM, Cortex-A8, 600 MHz processor with multi-level cache memory
Visual Indicators	Net, Sync, Power, BO, AO, Ethernet (2), and features two (2) programmable, tri-color LEDs. The actuator release button employs a bright LED locator light to help determine the unit's location and a damper rotation direction, minimizing the need to be in front of the electrical panel, in the ceiling, or at the air stream to assess the controller location or operation of the damper.
Memory	8 GBs eMMC Flash memory and 256 MB DDR3 DRAM
Protection	Protected by field-replaceable glass fuse (3A fast acting 5 mm x 20 mm)
Environmental Range	32 to 120°F (0 to 49°C), 93% relative humidity, non-condensing
Real Time Clock	Real-time clock keeps track of time in the event of a power failure for up to 3 days
Compliance	**United States:** FCC compliant to Title CFR47, Part 15, Subpart B, Class A. UL Listed, File E143900; CCN PAZX, UL916, Energy Management Equipment, **UUKL** certified (UL864 10th edition compliant); **AS/NZS:** RCM Mark IEC 61000-6-3; **Canada:** UL Listed File E143900, CCN PAZX7, CAN/CSA C22.2 No. 205 Signal Equip., Industry Canada Compliant, ICES-003, Class A; CE Mark Compliant with 2014/30/EU, and RoHS Compliant: 2015/863/EU; **UKCA** Mark compliant with Electromagnetic Compatibility Regulations 2016 – Gov. UK and RoHS for Electrical and Electronic Equipment 2012, REACH Compliant
Plastic Rating	Fire-retardant plastic ABS, UL94-5VA
Mounting	Damper shaft/mounting bushing

Figure 1: Physical Dimensions



	in.	cm
Width:	8.39	21.30
Height:	5.95	15.11
Depth:	3.83	9.72
Weight:	1.8	0.82

	in.	cm
Minimum Shaft Diameter	3/8	.95
Maximum Shaft Diameter	1/2	1.27
Minimum Shaft Length	1 3/4	4.45

Automated Logic

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