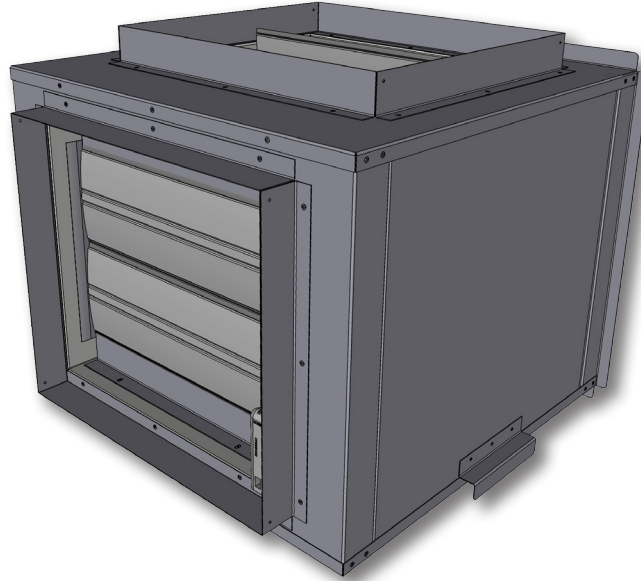




INDOOR AIR QUALITY C2ECON23K High Performance Economizer Dampers

Bulletin No. 210750
February 2015

PRODUCT SPECIFICATIONS



FEATURES

Approvals

Approved for California Title 24 building standards.
ASHRAE 90.1-2010 compliant.

Application

Designed for applications requiring outdoor air to be utilized in a HVAC system. The economizer unit will allow the entry of fresh outdoor air for free cooling, reducing the requirement for mechanical cooling.

Economizer dampers will modulate to maintain 55°F supply air when outdoor air is suitable.

Economizer features rack and pinion operation, high torque 24-volt fully-modulating spring return damper motor, return air and outdoor air dampers, nylon bearings, enhanced neoprene blade edge seals and flexible stainless steel jamb seals to minimize air leakage.

NOTE - Economizer is not approved for use with enthalpy controls in Title 24 applications.

Cabinet

Damper cabinet is constructed of heavy gauge galvanized steel and is lined with thick fiberglass insulation.

Duct Connections have flanges for ease of installation. Large access panels on both sides of the cabinet provide complete service entry. Panels have handles for ease of removal.

Mixed Air Sensor

Furnished for installation in the supply air duct.

Outdoor Air Sensor

Furnished for installation in the outdoor air inlet. Sensor is a CEC approved, California Title 24 fixed dry bulb device

Transformer

Transformer (120/24V/75VA) is furnished for replacement of existing 40VA transformer in furnace or air handler.

FEATURES

High Performance

Economizer Control Module

Module provides inputs and outputs to control economizer based on parameter settings.

Module automatically detects sensors by polling to determine which sensors are installed in system.

Module displays any alarm messages (fault detection and diagnostics) as an aid in troubleshooting.

Non-volatile memory retains parameter settings in case of power failure.

Keypad with four navigation buttons and LCD screen is furnished for setting economizer parameters.

- Menu Up/Exit (↑) button returns to the main menu.
- Arrow Up (▲) button moves to the previous or next parameter within the selected menu.
- Arrow Down (▼) button moves to the next parameter within the selected menu.
- Select (enter) (↵) button confirms parameter selection.

Main Menu Structure:

- STATUS (economizer and system operation status)
- SETPOINTS (settings for various setpoint parameters)
- SYSTEM SETUP (settings/information about the system)
- ADVANCED SETUP (freeze protection, CO₂ settings, stage 3 delay and additional calibration settings)
- CHECKOUT (damper positions)
- ALARMS (output signal that can be configured for remote alarm monitoring)

NOTE - The Free Cooling setpoint for Title 24 applications must be set based on the Climate Zone where the system is installed. See Section 140.4 "Prescriptive Requirements for Space Conditioning Systems" of the California Energy Commission's 2013 Building Energy Efficiency Standards.

Refer to Installation Instructions for complete setup information and menu parameters available.



Options/Accessories

Single Enthalpy Temperature Control (Not for Title 24)

Outdoor air enthalpy sensor enables Economizer if the outdoor enthalpy is less than the setpoint of the control.

Differential Enthalpy Control (Not for Title 24)

Use two Single Enthalpy Controls. One is field installed in the return air section, the other in the outdoor air section. Allows the economizer control board to select between outdoor air or return air, whichever has lower enthalpy.

IAQ Sensor


An IAQ sensor is used when demand control ventilation (DCV) is required.

NOTE - Use Honeywell C7232 or C7632, 2-10 Vdc control signal; minimum impedance >50k ohm.

OPTIONS/ACCESSORIES

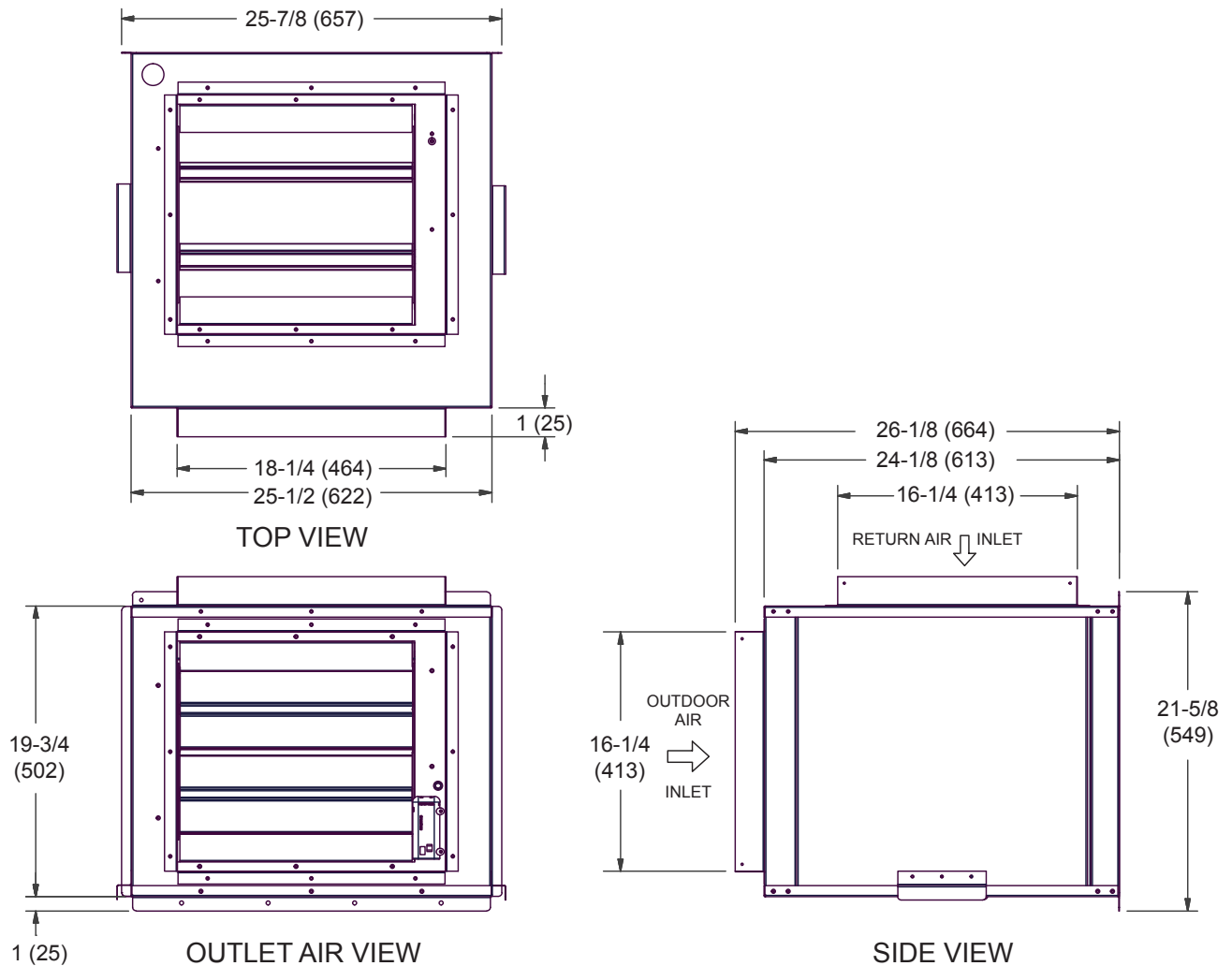
Item	Model No.	Catalog No.
Economizer Controls (Not for Title 24)		
Single Enthalpy Control	C1SNSR60FF1	10Z75
Differential Enthalpy Control (order 2)	C1SNSR60FF1	10Z75

OPTIONAL CONVENTIONAL TEMPERATURE CONTROL SYSTEMS - FIELD INSTALLED

Item	Model No.	Catalog No.
COMMERCIAL TOUCHSCREEN THERMOSTAT		
 <ul style="list-style-type: none"> Two-Stage Heating / Two-Stage Cooling Conventional or Heat Pump Intuitive Touchscreen Interface Seven-Day Programmable Four Time Periods Per Day Economizer Output Title 24 Compliant Backlit Display Automatic Changeover 	COSTAT02AE1L	14W81
Sensors For Touchscreen Thermostat		
¹ Remote non-adjustable wall mount 20k temperature sensor	C0SNZN01AE2-	47W36
¹ Remote non-adjustable wall mount 10k averaging temperature sensor	C0SNZN73AE1-	47W37
¹ Remote non-adjustable duct mount temperature sensor	C0SNDC00AE1-	19L22
Outdoor temperature sensor	C0SNSR03AE1-	X4148
Accessories For Touchscreen Thermostat		
Locking cover (clear)	COMISC15AE1-	39P21

¹ Remote sensors for COSTAT02AE1L can be applied in the following combinations: (1) C0SNZN01AE1-, (2) C0SNZN73AE1-, (2) C0SNZN01AE1- and (1) C0SNZN73AE1-, (4) C0SNZN01AE1-, (3) C0SNZN01AE1- and (2) C0SNZN73AE1.

DIMENSIONS - INCHES (MM)





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