

A smart way to save on your warm air heating system costs.

E-con 33

Warm Air System Fuel Economizer



E-con is a microprocessor-based, fuel-saving control for warm air heating systems. *E-con 33* reduces burner run time, eliminating harmful heat exchanger over heating and reduces fuel consumption, when installed on any new or existing warm air furnace or combination RTU. *E-con 33* uses intelligent Dynamic Cycle Management (DCM) technology to save energy by adjusting the burner run pattern to manage the discharge air temperature based on the system's "heating load."

Features

- For systems up to 350 MBH
- Dynamic Cycle Management (DCM) technology reduces fuel consumption—typically 10% to 15%
- Illuminated LCD display shows fuel consumption savings, operating modes and air temperatures
- Short payback period—typically 12 to 18 months
- UL listed, "Energy Management Equipment"
- Increased savings without replacing or upgrading costly system components
- "State-of-the-art" microprocessor-based control
- Required sensors included
- Simple installation by qualified installer
- Limited programming required and no follow-up visits required
- Maximum efficiency year-round
- Reduces maintenance and extends heat exchanger life
- Fail-safe operation included for piece of mind
- 10-year replacement warranty for breakdowns or defects

Specifications

Mounting:

Any position via molded-on 1/2"

Electrical Fitting

Size:

4"H x 4"W x 2 1/2"D

Operating Humidity:

5% - 95% Non-Condensing

Operating Temperature Range:

-10°F - +120°F

Power Input:

24/115/220 VAC @ 5W

Control Circuit:

24 VAC/DC, 115/220 VAC

Relay Contact:

10A @ 220 VAC General Purpose

UL cUL Listed:

"Energy Management Equipment"

Made in USA

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E-con 33 uses Dynamic Cycle Management (DCM) technology to determine the heating demand and thermal characteristics of the entire warm air system by monitoring the out-flow air temperature as it is blown out of the heat exchanger into the heating ducts. The absolute temperature value of the air inflow and outflow, coupled with the rate the temperature is changing, is indicative of the load placed on the heating system. The *E-con 33* measures and records how many times the burner is turn on and off and the duration of each cycle. The *E-con 33* analyzes how fast the heat is being lost in the system and in the space. Using this information, the optimum discharge air temperature is maintained to achieve the desired heating level. This improved process augments the existing controls and results in the system using less fuel to maintain the same amount of comfort. The *E-con's* microprocessor allows the control to precisely determine the most efficient burner cycles.

Field testing of the *E-con 33* has demonstrated that this intelligent modification of the burner cycling with DCM technology leads to significant fuel savings.

These savings have been confirmed on both properly sized and maintained systems as well as on oversized systems and those not properly maintained. Just as computer control has increased the gas mileage of automobiles,

E-con 33 with DCM Technology improves the fuel utilization of warm air systems by supplementing the antiquated on/off control action of the thermostat with the analysis and control capabilities of a computer.

Installation by a qualified service technician is recommended and normally takes less than 2 hours. *E-con 33* typically reduces fuel consumption 10% to 20% while improving overall comfort. After installation, the *E-con 33* includes an LCD display that shows temperatures and fuel savings since installation

