



ENERGY & WATER EFFICIENCY

# ***E-con ube 144***

***A smart way to save on your Commercial Heating system costs.***

## ***E-con ube 144***

Commercial Boiler Heating System Fuel Economizer



*E-con Ube 144* is a microprocessor-based, fuel-saving control for Steam or Hydronic boiler heating systems. It reduces fuel consumption, wear on parts, flue emissions and electrical usage, when installed on most new or existing gas or oil burners. *E-con Ube 144* uses DCM technology to save energy by adjusting the burner run pattern to match the system's "heat load." Its action is similar to the industry accepted method of "outdoor-air temperature reset control," but does not require an outdoor-air temperature sensor or the need to profile the building in order to adjust the "reset" controller properly. *E-con Ube 144* determines the "heat load" by using an easily installed steam pressure transducer or strap-on temperature sensor that monitors the boiler's steam pressure and \ or out-flow water temperature and the rate that the heating medium temperature or pressure is changing.

### **Features**

- For Steam or Hydronic systems 1.0 million BTU and larger
- Dynamic Cycle Management (DCM) technology reduces fuel consumption, typically 10% to 20%
- Touch Screen interface & display shows fuel consumption savings, operating modes, system diagnostics and operating temperatures
- WiFi function *available*
- Short payback period—typically 12 to 24 months or less
- Increased savings without replacing or upgrading costly system components
- "State-of-the-art" microprocessor-based control
- Easily installed sensor(s) (up to 3 sensors can be used)
- Simple installation by qualified installer
- After commissioning, no follow-up visits are required
- Maximum efficiency year-round
- Reduces maintenance and extends boiler life
- Fail-safe operation
- Guaranteed to reduce fuel consumption
- 10-year replacement warranty for breakdowns or defects

**Contact us: [mayer@ewesystems.com](mailto:mayer@ewesystems.com) [www.ewesystems.com](http://www.ewesystems.com)**



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## Specifications

### Mounting:

On Vertical Surface via 4 Point Mounting System, or via conduit fittings.

### Dimensions:

11.5"H x 6.2"W x 3"D

### Operating Humidity"

5% - 95% Non-Condensing

### Operating Temperature:

Range: -10F - +120F

### Power Input:

115/208-230 VAC

### Control Circuit:

24 VAC/DC, 115/208-230 VAC

### Relay Contact:

10A @ 220 VAC

### General Purpose:

"Energy Management Equipment"

### Made in U.S.A.

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## Commercial Boiler Heating System Fuel Economizer

A heating system must be able to provide acceptable comfort at the lowest anticipated outdoor temperatures. In the U.S. and abroad, most boilers have a heat capacity between 1.5 to 2 times larger than that needed to maintain the room temperature on those extreme days. Due to this over-sizing of the boiler, the burner will cycle on and off repeatedly to prevent overheating of the system water during any call for heat. Using our intelligent Dynamic Cycle Management (DCM) Technology, E-con Ube 144 increases "system efficiency."

Thus, the heating system uses less fuel to generate the same amount of heat. This is done by dynamically changing the pressure or aquastat control's effective dead-band based upon the measured "heating load." This causes the average steam pressure or water temperature to be varied (depending upon the measured load), and is accomplished by extending the burner's "off-time."

Extending the "off-time" also results in longer burns that are more efficient and a reduction in burner on/off cycling. Just as computer control has increased the gas mileage of automobiles, E-con Ube 144 with DCM Technology improves the fuel utilization of heating systems, by supplementing the antiquated on/off control action of the steam pressure control with the analysis and control capabilities of a computer.

The E-con Ube 144 can be used on systems where a HeatTimer is being used. Installation by a qualified service technician is recommended and the E-con Ube 144 can be easily programmed for maximum energy savings. E-con Ube 144 typically reduces fuel consumption 10% to 20% and usually decreases burner cycling 20% or more. After installation, E-con Ube 144 does not require any maintenance or seasonal programming and the Touch Screen display shows the system diagnostics and the fuel savings achieved since installation.

