A smart way to save on your commercial heating costs.



# IntelliCon<sup>®</sup>-LCS

**Light Commercial Steam Heating System Fuel Economizer** 



IntelliCon®-LCS is a microprocessor-based, fuel-saving control for light-commercial steam heating systems.

IntelliCon-LCS reduces fuel consumption, wear on parts, flue emissions and electrical usage, when installed on any new or existing gas or oil burner. IntelliCon-LCS uses intelligent Dynamic Cycle Management (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" control properly. IntelliCon-LCS determines the "heat load" by using an easily installed pressure sensor that monitors the boiler's steam-pressure and the rate that this pressure is changing.

#### **Features**

- For commercial systems rated up to 2.5 million BTU
- Dynamic Cycle Management (DCM) Technology reduces fuel consumption—typically 10% to 20%
- Illuminated LCD display shows fuel consumption savings, operating modes, system diagnostics and operating temperatures
- UL listed, "Energy Management Equipment"
- Increased savings without replacing or upgrading costly system components
- "State-of-the-art" microprocessorbased control
- Easily installed plug-in sensor(s) (includes 1 required sensor)
- Simple installation by qualified installer
- Easily programmed for maximum savings
- Maximum year-round efficiency
- Reduces maintenance and extends boiler life
- Fail-safe operation
- Guaranteed to save energy
- 15-year replacement warranty for breakdowns or defects





### **Specifications**

#### Mounting:

In 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:**

Made in U.S.A.

10A @ 220VAC General Purpose

#### UL Listed.

"Energy Management Equipment"

## IntelliCon°-LCS **Light Commercial Steam Heating System Fuel Economizer**

Any heating system must be able to provide acceptable comfort at the lowest anticipated outdoor temperature. In the U.S. and abroad, most light commercial boilers have a heat capacity between 1.5 to 2 times larger than that needed to maintain the facility's temperature on those extreme days. Due to this over-sizing of the boiler, the burner will cycle on and off continuously to maintain the desired steam pressure.

Using our intelligent Dynamic Cycle Management (DCM) Technology, IntelliCon®-LCS increases "system efficiency." Thus, the heating system uses less fuel to generate the required amount of heat. This is done by dynamically changing the pressure-controller's effective dead-band based upon the measured "heating load." This causes the average steam pressure 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, more efficient burn cycles and reduces burner on/off time. Just as computer control has increased the gas mileage of automobiles, IntelliCon-LCS with DCM Technology improves the fuel utilization of heating systems, by supplementing the antiquated on/off control action of the pressure-controller with the analysis and control capabilities of a computer.

Service personnel will appreciate the LCD readout, which displays useful information relative to the unit's status, steam pressure and domestic hot-water temperature (if the optional sensor is installed), which can be useful for system diagnostics and maintenance.

IntelliCon-LCS typically reduces fuel consumption 10% to 20% and decreases burner cycling by 30% or more. Initial installation programming is easily done by a qualified service technician by following the on screen directions. After installation, IntelliCon-LCS requires no maintenance.



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