A smart way to save on your steam heating system costs.

i-CON 1110 & 1112

Steam Heating System Fuel Economizer

i-con is a microprocessor-based, fuel-saving control for steam boiler heating systems. *i-con 1110* reduces fuel consumption, wear on parts, flue emissions and electrical usage, when installed on most new or existing gas or oil burners. *i-con 1110* 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" controller properly. *i-con 1110* determines the "heat load" by using a steam pressure sensor mounted in the header that monitors the system steam pressure and the rate that the pressure is changing.

Features

- For systems 1.5 million BTU and larger
- 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
- WiFi function available on *i-con 1112*
- Short payback period—typically 12 to 24 months
- UL listed, "Energy Management Equipment"
- Increased savings without replacing or upgrading costly system components
- "State-of-the-art" microprocessor-based control
- Easily installed plug-in 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

Intelligent Control Systems LLC

208 Rte 109, Ste 211, Farmingdale, NY 11735, USA • Telephone 516-340-1011 • Fax: (888) 711-0750

www.icssaves.com • sales@icssaves.com

i-con 1110 & 1112

Steam Heating System Fuel Economizer

Specifications

Mounting:
On Vertical Surface via 3 Point Mounting System, Units with WiFi, Can Have Antenna Remotely Mounted If Necessary

Size:
7.5”H x 9.5”W x 4”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 Listed,
“Energy Management Equipment”

Made in U.S.A.

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, *i-con 1110* 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 control'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 burns that are more efficient and a reduction in burner on/off cycling. Just as computer control has increased the gas mileage of automobiles, *i-con 1110* 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 *i-con 1110* can be used on systems where HeatTimer is being used. Installation by a qualified service technician is recommended and the *i-con 1110* can be easily programmed for maximum energy savings. *i-con 1110* typically reduces fuel consumption 10% to 20% and usually decreases burner cycling 20% or more. After installation, *the i-con 1110* does not require any maintenance or seasonal programming and the LCD shows the system diagnostics and the fuel savings achieved since installation.

Intelligent Control Systems LLC

208 Rte 109, Ste 211, Farmingdale, NY 11735, USA • Telephone 516-340-1011 • Fax: (888) 711-0750

www.icssaves.com • sales@icssaves.com