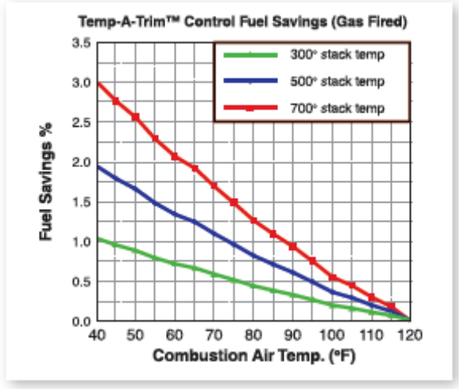
TEMP-A-TRIM
Air Density Trim

① Temp-A-Trim™ Control Module
② Flame Safeguard
③ Variable Frequency Drive



Options available:

- Alarm light
- Control by-pass switch (operates the VFD as a motor starter and bypasses all TEMP-A-TRIM ™ functions)
- Dual Fuel: gas only control (for burner mounted oil pump), control only operates on gas fuel.
- NEMA 4 enclosures (may require VFD to be shipped loose)
- Optional “Savings Meter” allows a continuous display of the efficiency saving of the control

Compressed Air-Pumps-Water-Vacuum-Piping Products

770 532-7736 Toll Free 800 752-0556 Fax: 770 535-0536
email: csisales@bellsouth.net
website: www.control-specialties.com
Phones Answered 24-7

CONTROL SPECIALTIES

TEMP-A-TRIM
Air Density Trim

Here’s how Temp-A-Trim™ saves you money:

The air temperature in your boiler room can change dramatically from day to night and from season to season. These changes cause significant combustion inefficiencies and degrade combustion stability. Temp-A-Trim ™ senses air temperature and automatically varies the fan speed to create a constant air flow mass for combustion. By maintaining optimum fuel/air rations, you are assured that your burner is operating at maximum efficiency.

CONTROL SPECIALTIES

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Website - www.control-specialties.com

We are never closed-phones answered 24 hours per day!

STEAM - AIR - VACUUM - HVAC - WATER EQUIPMENT & CONTROLS

PRODUCT DESCRIPTION:
A combustion control system that corrects for changes in the combustion air temperature to maintain a constant Fuel-Air-Ratio. The TEMP-A-TRIM ™ option uses a variable frequency drive (VFD) to change the fan speed as required to exactly compensate for changes in air density due to temperature. This improves combustion efficiency and reduces electrical usage.

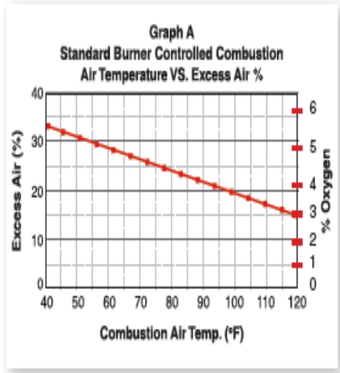
PRODUCT APPLICATIONS:
- New and retrofit Webster burners
- All fuels and combination of fuels
- All control systems including parallel positioning
- All low emission burner options
- Not for oil firing with burner mounted oil pump (see option for gas firing on dual fuel versions)

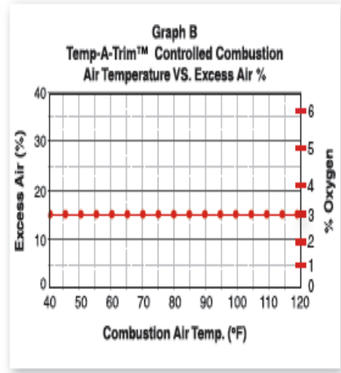
TECHNICAL SPECIFICATIONS:
- Control Elec: 120vac, 2 amp
- Motor Style: Electric induction, three phase (1)
- Multiple voltages: 120,208,240,480 and 575VAC, 60Hz
- Control Ranges: 10-90F or 40-120F (field selectable)
- Ambient temperature range: 0-120F
- Alarm Output: Dry contacts, 120VAC, 3amps
- Temperature Control Output: 4-20mA signal (used by efficiency monitor)
- Junction Box: 14”wx9”hx7”d, NEMA 1 (N-4 available)
- VFD: ABB and Emerson, Voltage, amp and dimensions vary by application

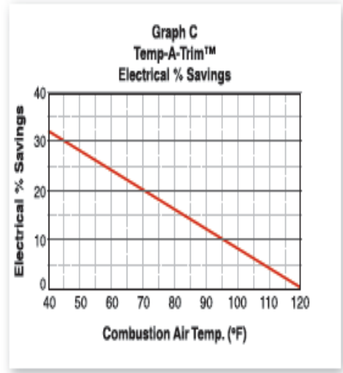
LISTINGS:
- UL 353 (circuit board)
- Package listing for 508 control panels

FEATURES:
- Improved combustion efficiency
- Reduced electrical usage
- Reduced noise from slower motor and fan speed
- Soft start reduces electrical demand changes and improves motor life
- Run/Test switch allows quick verification of operation
- No programming or tuning involved

Note 1: On 120VAC burners, the VFD will convert the single phase to three phase. Burner must use a three phase motor..







GRAPH A:
Combustion air temperature change results in excess air (% Oxygen) change. Running a burner with high excess air is inefficient. Running with low excess air results in unburned fuel and high CO.

GRAPH B:
With Temp-A-Trim ™, Webster burners can maintain a consistent, efficient excess air (% Oxygen) level throughout a wide range of combustion air temperatures. Ideal for ducted air systems.

GRAPH C:
Typical electrical savings

TEMP-A-TRIM ™ Features and Benefits:

- Precisely corrects for changes in air density to optimize combustion efficiency 24/7
- Reduces the need for seasonal tuning of your burners
- Feed-forward control for smooth, accurate operation
- Easy to install, with no special set up or programming required
- Compatible with linkage or linkage-less controls
- Saves fuel and electricity, plus it lowers noise levels
- Available on all sizes of new or existing Webster Burners
- Lower cost, complexity, and maintenance than typical O2 trim systems