# Unfired Steam Generator



## Technical Bulletin / Product Enhancement

Solid State Operating Controller—Steam-trol®

Cemline® Steam-trol® Control Module incorporates operating and limit functions in one solid state controller. This controller replaces the current controls used on Cemline Unfired Steam Generators. The controller features an LCD touch screen display of the pressure and on board operating PID pressure control along with settings of high and low pressure safety cut off and alarms. The Steam-trol® simplifies the control of the Unfired Steam Generator, enhances the look of the product, and follows industry trends to touch screen and solid state control.







Cemline Steam-trol® Steam Generator Control Module combines all pressure controlling, limit, and control functions for the Cemline Unfired Steam Generator into one simple to use and easy to understand control module.

#### **Features:**

#### **PID Control Signal**

• PID Control Signal used to modulate an electronic control valve or to control I-P transducer modulating an air operated control valve. The PID controller allows for precise pressure control of the steam generator.

#### LCD Touch Screen Display

• Display of operating pressure, set point pressure, control out put signal along with user friendly interface of the controller.

#### **Modulating Feed Water Control**

• Along with the current feed water controls, the Steam-trol™ has an option for modulating feed water control. The controller used in conjunction with a 4 − 20 mA level transmitter and a modulating feed water valve will provide modulating feed water to the Unfired Steam Generator. The benefit of supplying modulating feed water is to reduce suppression of steam production rate when water enters the Unfired Steam Generator.

#### **On-Off Switch**

• Allows for local on/off and is convenient for service in the unlikely event of service.

#### **Single Point Wiring**

• Only one 120 VAC connection required to the unit.

#### **Pressure Readout**

 $\bullet$  The Steam-trol TM features an easy to read LCD digital read out of the steam pressure.

#### **High Pressure Set Point**

• Closes control valve in the event of a high pressure situation.

#### Low Water Cut Off

• Closes control valve in the event of a low water situation.

#### **High Water Cut Off**

• Closes normally closed (power to open spring to close) ball valve in the feed water line to prevent over filling the Unfired Steam Generator and the system.

#### **Blow Down Control**

• Integrated automatic timed blow down allows for setting the interval and duration of blow down.

#### **Remote Pressure Readout**

• Building Automation System can remotely read the pressure using a 4-20 mA signal.

#### **Remote Pressure Setting**

• Building Automation System can remotely set the pressure using a 4-20 mA signal.

#### Remote ON/OFF Control

• Building Automation System can remotely turn the unit ON/OFF via a dry contact.

#### Modus Interface

• Building Automation System can remotely communicate with the Steam-trol™ via a RS-485 connection.

## LCD Display of Functions & Contacts to notify BAS (Building Automation System) of functions

- Power On
- Low Water
- High Pressure
- Water Feed
- High Water
- Low Pressure
- Blow Down
- Optional Input/Output

### Ratings:

Input: Selectable 120/220v AC - 50/60 Hz Output Contacts: 1 amp at 24v AC

Building Automation outputs: Dry contacts, NO

0.5 amp maximum, non inductive

LCD display with resolution of 0.3% of scale
Operating water temperature range: 32°F - 200°F
Operating ambient temperature: Min 32°F max 140°F
Operating Humidity: 5% to 95% relative humidity

(RH) non-condensing NEMA 4 enclosure

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