

SELLERS

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PLSC – PROGRAMMABLE LOGIC STAGING CONTROL – FOR IMMERSION FIRED PRODUCTS

GENERAL DESCRIPTION

The Sellers PLSC is designed to allow for very tight temperature or pressure control by adding multi-staged firing capabilities to the standard control system. This control allows the unit to stage the gas burners after an initial call for heat is satisfied while maintaining the unit in an ultra low fire condition with pilots lit and blower running in anticipation of the next call for heat. If a subsequent call for heat occurs within the programmers adjustable period, the main burners are brought back on line at full firing rate. The temperature or pressure differential that will be realized in the boiler shell will fluctuate only as much as the required differential of the operating control.

OPERATING SEQUENCE

On a call for heat by the operating control, the boiler will go through the normal starting cycle with pre-purge and pilot ignition. After the safety circuits are checked and the pilots are proven, the main burners are ignited. The main burners will fire until the initial demand for heat is satisfied. The operating control circuit will then open and shutoff the main burners. The programmable logic control will then be energized and the pilots and blower assembly will remain on line. If the boiler temperature or pressure is not maintained and the operating control circuit closes within the programmers adjustable period, the main burners are instantly brought back on line to satisfy the demand. The programmable logic staging control will reset after each call for heat is satisfied. If an additional call for heat does not occur within the programmed period, then the unit is allowed to go through the normal shut down procedure including the standard 15 second post purge period.

- ◆ Provides multi-staged burner capabilities
- ◆ Maintain pressure to within 5 PSIG
- ◆ Maintain temperature to within 5 Degrees F.
- ◆ Prevents short cycling
- ◆ Maintain maximum efficiency at full firing rate regardless of load demand
- ◆ Simple operation



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