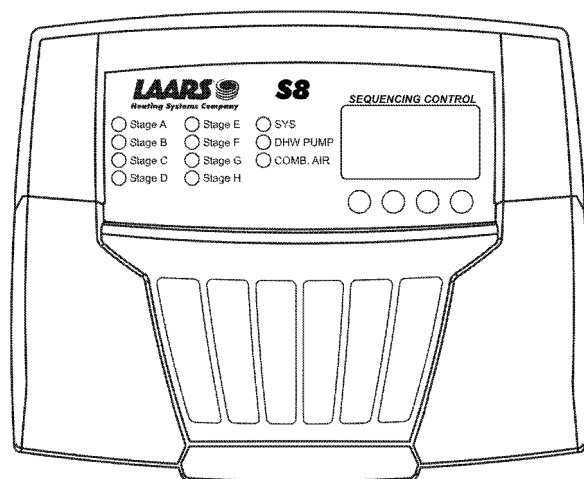


Control for Multiple Stage-Fired Boilers



Date:

Project #:

Engineer:

Prepared By:

Bid Date:

CA004000

Submittal Data



Project Name:

Location:

Contractor:

Standard Equipment

- Multiple boiler control, for up to eight boiler stages
- Ready to use with up to two S8EXT extension modules for control of up to twenty-four boiler stages
- Outdoor reset or setpoint control
- Ready to use with XSIG module to accept external 4-20mA control signal
- System water temperature sensor
- System water temperature sensor well
- Outdoor air temperature sensor
- Outdoor air temperature sensor clip

Features

- Graphics that display in plain English
- Brightly lit LCD, visible with no ambient light
- Can be used with on/off, two-stage and four-stage units
- Each boiler can be set individually to be automatically operated, fully on, manually adjusted, off or standby.
- Communicates with EMS (energy management systems) by adding the XSIG 4-20mA interface module
- Can be configured for indirect domestic hot water pump control with the additional the DHW sensor, or by using a dry contact closure, for a variety of domestic water priority and control options
- Settings are pre-configured, but adjustable
- Three rotation options – timed, manual or first-on/first-off
- Minimum boiler return feature with optional return sensor
- Adjustable day and night schedule
- PID Lo/Hi/Lo/Hi or Lo/Lo/Hi/Hi sequencing or over-sized-system sequencing with features such as last stage hold, reaction time or minimum run time, to minimize short-cycling
- System output relay for system pump with adjustable run-on delay, or combustion air damper with prove for air damper
- Adjustable outdoor temperature cutoff and customizable reset curves
- Internal programming switch protected by locking cover for security against unexpected changes to program
- UL Listed, tested per standard 916
- Boost feature
- Summer shutdown option with domestic water override
- Memory and backup with lithium battery to store information for 100 days

Specifications

Voltage Input	20VAC 60Hz
Power Consumption	12 VA Max
Operating Temperature	20°F to 120°F
Operating Humidity	20% to 80%
Dimensions	11-3/8" wide x 9-1/4" high x 3-3/4" deep
Weight	2.5 pounds
Lead Stage Rotation	Time (1 to 999 hours [41 days]) manual, first-on/first-off
Stage Modes	Auto, standby, on, off
Standby Time (PID only)	1 to 60 minutes
Output Relay Ratings	2 Amp inductive at 120 VAC 60 Hz
Add-on Extension Panels	Up to two S8EXT panels using included RS485
Temperature Display	Fahrenheit or Celsius
Display	Graphical alphanumeric (7 rows of 21 characters)
Temperature Sensor Ranges	-35°F to 250°F
Outdoor Cutoff Range	20°F to 100°F, ON and OFF
Set Point	-10°F to 240°F
External Set Point	-10°F to 240°F using XSIG 4-20mA interface (optional)
Reset Ratio Range (outdoor reset only)	(1:4) to (8:1) (outdoor : system water) and custom ratio
Offset Adjustment (outdoor reset only)	-40°F to 40°F
Minimum Target (outdoor reset only)	70°F to 170°F
Maximum Target (outdoor reset only)	90°F to 240°F
Reaction Time (PID only)	1 to 10 minutes
Min. Run-Time (PID only)	80°F to 140°F
Purge Delay (PID only)	0.0 to 10.0 minutes
Last Stage Hold (PID only)	0°F to 30°F
Throttle Range (OSS only)	2°F to 20°F
Domestic Hot Water Priority Options	Parallel piping w/ or w/out priority and primary-secondary
Pump Run-On	0 to 60 minutes
Pump Exercise	Yes or no
Schedules	1 day and 1 night (setback) settings per day
Night Setback	0°F to 80°F
Power Backup	Lithium coin battery, 100 days minimum 5 year replacement (maintains clock in power outage)
External Inputs	Shutdown input and prove input (dry contacts only)
Seasons	Winter and Summer

Laars Heating Systems Company reserves the right to change specifications, components, features, or to discontinue products without notice.