



POWER FLAME, INC.

Sync-Matic-1200 HMI Lead-Lag Controller

The new Sync-Matic HMI lead-lag Controller is a fully programmable PLC based lead-Lag system with Touch Screen (HMI) input and display for the selectable parameters. It will automatically control the header temperature or steam pressure to maintain optimal system efficiencies. Visual indication of the steam pressure or temperature, number of boiler's on line, current firing rate, set point and actual header value. The Sync-Matic is capable of controlling two to six boilers and is standard with wall mounting brackets or for optional remote free standing base.

LEAD SELECT (1 of 2)		
Manually Set #1 As Lead	Manually Set #2 As Lead	Manually Set #3 As Lead
Manually Set #4 As Lead	Manually Set #5 As Lead	Manually Set #6 As Lead
Cycle Equalize Mode	Cycle Alternate Mode Selected	Weekly Rotation Mode
Time Equalize Mode	Time Alternate Mode	ModBus Mode
		Last Screen Next Screen

BOILER ROOM OVERVIEW		
Process Variable: 155.5 °F		
Night Setpoint: 160.0 °F		
Boiler 1: Lead	Baseloading	Firing Rate: 70 %
Boiler 2:	Unavailable	Firing Rate: 0 %
Boiler 3:	Alarm	Firing Rate: 0 %
Boiler 4:	Standby	Firing Rate: 0 %
Boiler 5: A Lag	Modulating: Auto	Firing Rate: 77 %
Boiler 6: B Lag	Ignition Trial	Firing Rate: 0 %
Shutdown	Battery Failure Replacement Required	Menu Selections

Features:	
Touch screen user interface (HMI):	Standard 5.7" monochrome or optional 10" color touch screen. (Pending)
Lead Selection Modes:	
Manual Selection	Manually select boiler sequence
Time Alternate	Rotate lead boiler after user specified number of hours.
Time Equalize	Boiler with least amount of run time hours is selected as lead.
Cycle Equalize	Boiler with least amount of cycles is selected as lead.
Cycle Alternate	Rotate lead boiler after user specified number of cycles
Base Loading for Lag Boilers	Selectable Base load modulation position for lag boilers.
Failure Transfer	Automatically transfer lead boiler to next available boiler.
Night or Weekend Set-back	Alternate set point for night or weekend operation.
Time Delay	Delay next boiler in and or next boiler out values
MODBUS Communications	Field selectable 9600,19200 or 38400 baud rate for BMS systems.

Additional features:

- PID controlled Series or Parallel Modulation Modes.
- 135 ohm or 4-20 mA modulation signal output.
- Adjustable on and off delay timers
- Manual/Auto firing rate adjustment
- Instant cut in and cutout values
- Screen Adjustable Set point
- Boiler Cycle Counters
- Boiler Hour Counters

The Power to Manage Energy

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