

Laars M4-LHS and Sola Controller Comparison

| FEATURES | M4-LHS | NEOTHERM SOLA CONTROLLER |
|--|---|---|
| Control multiple boilers | Control 4 units or stages with controller, up to 16 with ext. modules | Control up to 8 units, 1-master and 7 slave units |
| Lead lag rotate | lead/lag/rotate-user programmable based on days/hours/last on, last off | Lead/lag/rotate based off of run time. Not adjustable |
| Choose condensing or non-condensing groups based on system temperature | Yes | No |
| Outdoor reset with adjustable system water temperature | Yes | Yes |
| Warm weather shutdown | Yes | Yes |
| Accepts external control signal from BMS | Yes: 4-20mA, using the XSIG interface module | Yes: 4-20mA standard, or 0-10 with converter kit CA 006100 |
| Control temperature range between on/off cycles | Yes: adjustable start point and modulation start point | Yes: built into the control, using the Base Load (BL) to control input rate before next boiler fires, and Hysteresis (HS) to control the temp range between on/off cycles |
| Communicates with BMS or EMS | Yes: BacNet, with the BacNet interface module | Yes: Mod Bus built into controller |
| Enable system pump | Yes: using terminals 3 & 4 (dry contacts) | Yes: using the system pump dry contacts on TB5, good for 7.4 A or 1 HP max |
| Enable DHW pump | No | Yes: using the system pump dry contacts on TB5, good for 7.4 A or 1 HP max |
| DHW priority | Yes: with or without DHW priority | Yes: with priority |
| Built-in day/night schedule with adjustable night setback for fuel savings | Yes | No |
| Alarm contacts | Yes | Yes |
| Parallel or normal modulation | Yes: both | Yes: both |
| Each boiler can be individually operated fully on, manually adjusted, off, or be considered a standby boiler | Yes | No: units are enabled/disabled by the controller, based off Base Load (BL) settings, and Hysteresis without the option of being a standby boiler |
| Anti short-cycle setting | Yes: soft-off feature, lag delay and last stage hold assist in minimizing boiler short-cycling | Yes: ASC setting allows you a set delay time before the unit(s) come back on to minimize short cycling |
| BacNet / ModBus / LonWorks | BacNet only with the following contacts: • Outdoor temperature • System temperature • Output status • Control status • Season • Reset ratio • Offset • Outdoor cutoff • Minimum water temp. • Maximum water temp. • Setback • Purge delay • System run-on • Rotation time • Standby time • Last stage hold • Condensing unit lead stage • Non-condensing unit lead stage • Reaction time • Minimum run time • Gain • Lag delay • Soft off • Set time • Day schedule • Night schedule | ModBus only with the following contacts: • Burner Status • Fan speed RPM • System sensor • CH setpoint • DHW setpoint • Inlet temp • Outlet temp • LL setpoint • Modulation input • Lockout code • Alarm codes • DHW priority count • Pump status |