

SYSTEM AND PUMP CONTROLS

Pump Lead-Lag (PLL)

Pump Lead-Lag (PLL) Description:

The PLL control provides a lead-lag rotation functionality to a dual pump system. In addition, it is capable of controlling two operating pumps and one auxiliary pump in a 3 pump system.

In a 2 pump system, the PLL acts as a rotation control to rotate the lead pump either based on demand/per call or timed rotation. Rotation can be set based on Dip Switches 2 through 6. Alternating pumps based on demand, activates a different pump each time a call for a pump is initiated. The demand must be initiated through Pump 1 Input terminals. Timed rotation has four options; 4 hours, 12 hours, 24 hours, and 7 days rotation. When rotation is to take place while the lead pump is in operation, the lag pump relay will energize and the lead pump will continue to run, in addition to the lag pump, for a few extra seconds to prohibit the flow switch from tripping and restarting the boiler.

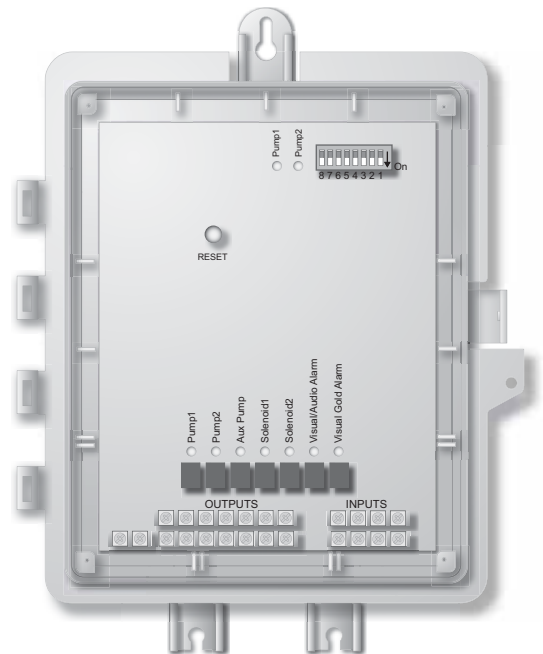
If the lead pump flow fails for over 30 seconds, using Flow1 input terminals, the PLL will de-energize that pump relay, turn on the relevant pump LED alarm, and

Pump Lead-Lag (PLL) Features:

- 2 Rotating Pump Operation mode.
- 2 Primary Pump Operation with an Auxiliary Pump. (3 Pump mode.)
- Rotation Options Alternate, 4 Hour, 12 Hour, 24 Hour, and 7 Days. (Available in 2 Pump Mode only.)
- When in timed rotation, Lead Pump will continue to run for a few additional seconds after Lag Pump starts for continual flow.
- Visual Gold Alarm in addition to Visual/Audio Alarm for No flow for 30 seconds.
- Auxiliary Pump operation when any primary pump fails for 30 seconds. (Available in 3 Pump Mode only.)
- Solenoid valve control relays for primary Pump failure. (Available in 3 Pump Mode only.)
- Controllable Pump exercise for 10 seconds for every week of no operation. Applies to all pumps including Auxiliary Pump.

energize the lag pump relay and the 2 alarm relays. If the lag pump flow fails for over 30 seconds while the lead pump is in alarm, the PLL will de-energize the 2nd pump relay and turn on the relevant pump LED alarm. The PLL will not operate any pumps until the situation has been rectified and the Reset button is pushed.

In a 3 pump system, no rotation functionality is available. The PLL control manages an auxiliary pump in addition to 2 primary pumps. The auxiliary pump will run whenever any of the primary pumps fails for over 30 seconds. In that case, the PLL will deenergize that pump relay and energize the auxiliary pump relay and the two alarm output relays in addition to the relevant alarm LED and solenoid valve. If the 2nd primary pump flow fails for over 30 seconds while the 1st primary pump is in alarm, the PLL will de-energize the 2nd pump relay and energize the relevant solenoid valve. This will allow the auxiliary pump to replace both primary pumps until the situation is rectified and the Reset button is pushed.



Item Description

Pump Lead-Lag (PLL)

Part #

926720-00

CSA Approved