

Title:

i-Controller 2.0 REV.300 Water Source Condenser Balancing Mode

Overview

After a FLō unit with a water source condenser is installed on a customer site, the water loop must be balanced outside the FLō unit to ensure that the unit’s GPM is set within the designed range of the FLō submittal.

The FLō i-controller 2.0 is equipped with a “Water Balance Mode” to ensure that the modulating water actuator valve is in the correct maximum position during the loop balancing. **IMPORTANT NOTE:** Water Balance Mode is not intended to be the building balance point.

The factory default position of the water actuator modulation during normal compressor operation is 40% minimum and 100% maximum. When compressors are not operational, the water actuator will modulate to 0%. The purpose of the modulating water actuator is to maintain the required temperature differential between discharge or suction (depending on operating mode) between the compressor and the water.

How To Utilize The Water Balance Mode in i-Controller 2.0 REV.300

1. Introduction screens are displayed during controller startup. Press any button to enter the Overview screen.



Figure 1. Introduction Splash screen / Standby screen

2. From the iController 2.0 ‘Overview’ screen, press the ‘Program’ button two times to go to the ‘Field Tech Menu’.

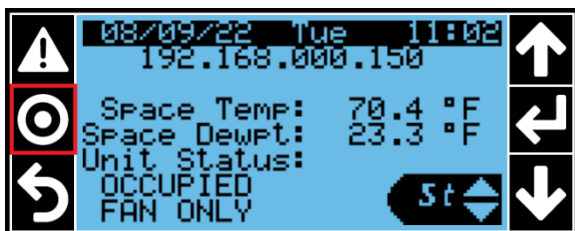


Figure 2. Overview screen

3. From the ‘Field Tech Menu’ use the ‘Up’ / ‘Down’ arrows to scroll to the ‘Test Modes’ option and press the ‘Enter’ button.

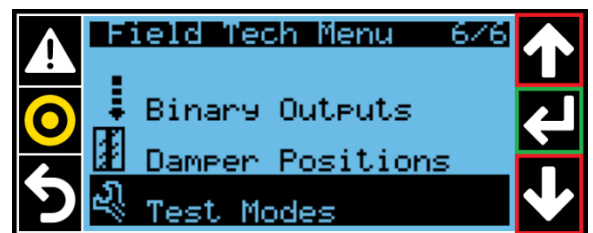


Figure 3. Field Tech Menu

4. From the ‘Test Modes’, use the ‘Up’ / ‘Down’ arrows to scroll to ‘Features Test’ option and press the ‘Enter’ button.

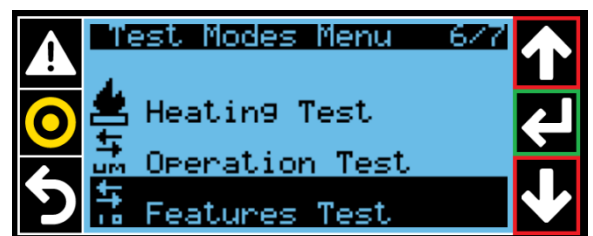


Figure 4. Test Modes Menu

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- Now that you are in 'Features Test' use the 'Up' / 'Down' arrows to scroll to 'Water Balance Mode'.

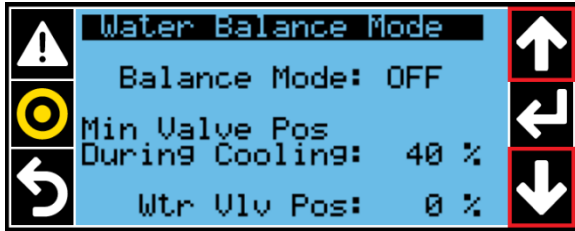


Figure 5. Water Balance Mode Screen

- From this screen, you can initiate water balance mode and set the minimum position for the valve during dehumidification and cooling modes. Use the 'Enter' button to move the cursor on the screen to the desired entry.

- To end water balance mode, press the 'Escape' button to return to the 'Test Modes Menu' screen. Use the 'Up' / 'Down' arrows to select 'Clear Test Modes' and press 'Enter' button.

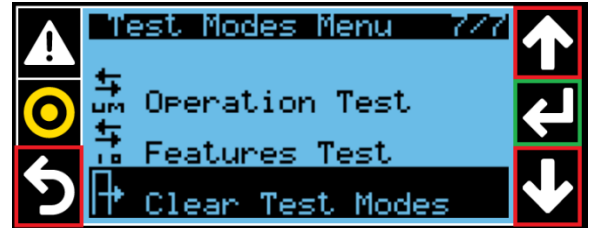


Figure 6. Test Modes Menu Screen

- On the 'Clear Test Modes' screen, press the 'Enter' button to move the cursor to the '-----' line. Use the 'Up' arrow to change the value to 'CLEAR' and press 'Enter' to clear all test modes.

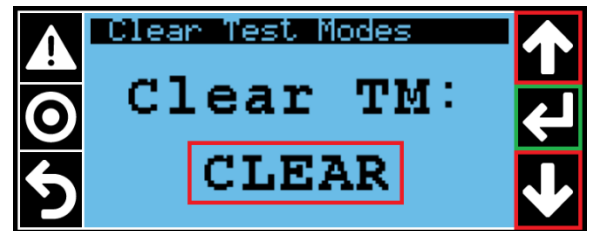


Figure 6. Clear Test Modes Screen

Water Balance Mode:

NOTE: During the 'Water Balance Mode', cool or heat mode will be overridden to open the valve and start compressors for the duration of the test mode. Valve will be overridden to 100%. Test mode will only remain active for 90 minutes.

- From the 'Water Balance Mode' screen, press 'Enter' button to move the cursor to the 'Balance Mode' line. Use the 'Up' / 'Down' arrows to select mode 'ON' and then press the 'Enter' button.

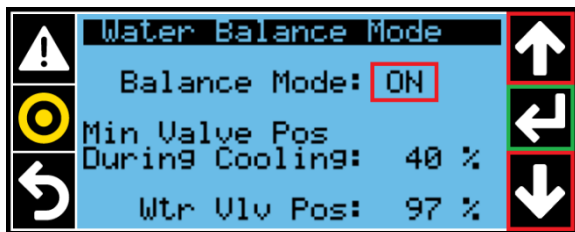


Figure 6. Water Balance Mode Screen

- Adjust building waterflow to meet the design flow specification found in the FLō submittal.

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Minimum Valve Position:

1. From the 'Water Balance Mode' screen, press 'Enter' button to move the cursor to the 'Min Valve Pos During Cooling' line. Use the 'Up' / 'Down' arrows to select desired minimum position for the valve. Press the 'Enter' button to accept value.

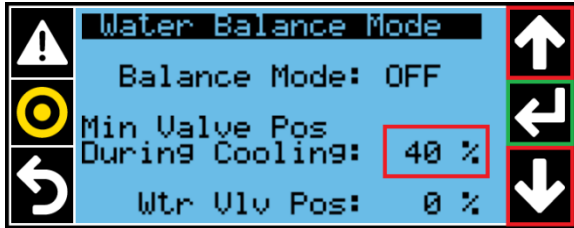


Figure 6. Water Balance Mode Screen

NOTE: Do not set minimum valve position below 40%. Doing so could impair waterflow switch operation and could lead to irregular compressor cycling.

If you need any assistance during this process, please call FLō technical support at 888-598-1198 or email us at techsupport@systemsflo.com.