Programmable Water Feeder for Commercial Boilers

120 VAC Operating Voltage

- **Programmable Feed Delay Settings**: Prevents over filling by allowing time for condensate to return to the boiler before initiating a feed cycle.
- **Programmable Feed Amount Settings**: Includes one setting to raise the water level to the boiler control and five additional settings to raise the water level *above* the boiler control.
- **LED Status Indicator**: Displays mode of operation. Also provides timer for convenient set-up of programmable feed amount setting.
- **Manual Feed Button**: Allows for manual feeds with the touch of a button.
- **Lock-Out Flood Protection**: Locks out after sustained 10 minute feed cycle to prevent flooding.
- **Water Meter**: Heavy duty meter tracks make-up water added to system. (Not included with Model VXTC-WF).

### HOW TO INSTALL

**WARNING**: To prevent electrical shock and equipment damage, power must be off during installation and servicing of the control. To prevent serious burns the boiler should be thoroughly cooled before installing or servicing the control. Only qualified personnel may install the control in accordance with local codes and ordinances. Read instructions carefully before proceeding.

1. Prior to piping, remove the solenoid valve from the VXTC Control Housing.
2. The VXTC is designed for installation in 3/4" NPT black iron or steel piping. For servicing of the control, the VXTC should be installed with unions and a bypass. The bypass should be constructed so that all water added to the boiler is metered.

### COMPONENTS

- **A**: 3/4" NPT "Y" strainer
- **B**: 10 GPM flow restrictor
- **C**: 3/4" NPT solenoid valve
- **D**: (2) 3/4" NPT bronze adapters with connection gaskets
- **E**: Heavy-duty water meter
- **F**: VXTC controller

Be sure flow arrows on solenoid, meter and strainer are aligned correctly. Use teflon tape between meter and solenoid to prevent leakage.
3 WIRING

SAFGARD MODELS 250, 250M, 250WC, 250MWC

SAFGARD MODELS 450, CG450, CGT450

NOTE: Feeder must be set with at least a 45 second delay.

MCDONNELL & MILLER MODELS 67, 67S, 63

Powered by burner circuit
WITH JUMPER

Powered by separate power source
WITHOUT JUMPER

NOTE: 47 or 51-2 should not be connected to water supply and should be used as a signalling device only.

MCDONNELL & MILLER MODELS 47-2, 51-2

MCDONNELL & MILLER MODEL 150 & 157

MCDONNELL & MILLER MODEL 150E & 157E

MCDONNELL & MILLER MODEL 159 & 159S

VXT USED AS SECONDARY FEED DEVICE
(PUMP BACK-UP)

VXT USED AS PRIMARY FEED DEVICE
DETERMINING PROPER FEED SETTINGS

To determine the proper feed setting follow these steps:

1. With the feeder in the "LWCO" position, power-up the system and set the thermostat so there is no call for heat. Open the boiler drain and slowly lower the water level until the boiler control calls for a feed. Stop draining the water and allow the VXTC to raise the water level in the boiler. Check the water level following the feed cycle.

2. If the VXTC raised the water level to the normal operating range, the "LWCO" setting should not be changed.

3. If the water level is below the normal operating range, push and hold the FEED button on top of the VXTC until the water level reaches the optimum level. While you are holding the FEED button, the Diagnostic LED on the VXTC will function as a stopwatch, counting the number of seconds the FEED button is pressed. Use the number displayed by the LED to select the proper feed amount setting, rounding up or down as necessary. For example, if the LED reads 28 seconds, select the "LWCO+30" setting.

7 OPERATING TEST & MAINTENANCE

After selecting the Delay and Feed settings and at least once a year, test the VXTC by opening the boiler drain until the boiler control calls for a feed. The feeder should go into either its delay mode (reading dLY on the LED) or will begin to feed immediately depending on the setting. After the feed cycle, check the water level in the boiler. If the VXTC does not raise the water to the desired level, repeat steps 1 through 3 in section above. The Y strainer should be inspected and cleaned annually.

SPECIFICATIONS

FLOW CURVE

<table>
<thead>
<tr>
<th>Max Fluid Temperature:</th>
<th>100°F</th>
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<tbody>
<tr>
<td>Max Flow Rate:</td>
<td>10 GPM @ 40 PSI</td>
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<tr>
<td>Maximum Single Cycle Feed:</td>
<td>10 minutes @ 10 gpm = 100 gal.</td>
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<tr>
<td>Electrical:</td>
<td>120 VAC - 60 HZ</td>
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LIMITED MANUFACTURER'S WARRANTY

We warrant products manufactured by Hydrolevel Company to be free from defects in material and workmanship for a period of two years from the date of manufacture or one year from the date of installation, whichever occurs first. In the event of any claim under this warranty or otherwise with respect to our products which is made within such period, we will, at our option, repair or replace such products or refund the purchase price paid to us by you for such products. In no event shall Hydrolevel Company be liable for any other loss or damage, whether direct, indirect, incidental or consequential. This warranty is your EXCLUSIVE remedy and shall be IN PLACE OF any other warranty or guarantee, express or implied, including, without limitation, any warranty of MERCHANTABILITY or fitness for a particular purpose. This warranty may not be assigned or transferred and any unauthorized transfer or assignment thereof shall be void and of no force or effect.

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