Zurn Z1020 Electronic Trap Primer (ETP)

Features and Benefits

- Primes each drain with a minimum of two ounces of water, once every 24 hours.
- Meets LEED credit 3.2 and 5.2 for water reduction and regional material usage.
- Can be installed in recessed wall or surface mounted for easy access.
- Made of durable, long-lasting galvanized steel.
- Anti-scaling outlet nozzles for dependable operation.
- Can serve drains up to 60 feet away.
- When used with additional distribution units, can service up to 20 drains.
- Standard PEX waterway for superior corrosion resistance.
- All copper waterway version also available.
- Includes manual test button for immediate priming.
- Low voltage device operates on 24 VAC.
- Tested and conforms to ASSE, CSA, UL, and UPC standards.
Description
A complete, enclosed automatic electronic trap primer unit programmed to maintain the water seal of floor traps. Factory programmed with standard flush time intervals with modified intervals available for special applications. Includes vacuum breaker protection and fuse protection. Easy to install. Maintenance free and reliable.

Applications
Various commercial constructions such as hospitals, schools, manufacturing plants and warehouses, laboratories, bathrooms, and food processing facilities. Unit provides priming to various floor drains in a facility, avoiding possible odors emanating from drains. Capable of servicing drains up to 60 feet away. For applications requiring further distances, contact Zurn for custom versions.

Characteristics
- Low voltage (24 VAC) with LED indicator.
- Permanently programmed electronic timer.
- Manual override and testing push button.
- Factory installed header with multiple ports supplies water to many traps.
- Factory programmed water injections to each trap set for 24-hour intervals. (Can be factory modified to specific intervals.)
- Factory programmed water injection spray time set for 6 seconds as default. (Can be factory modified to your specific intervals.)
- Slow closing 24 VAC solenoid valve to avoid water hammer.
- Solenoid valve with integral strainer.
- Cast brass atmospheric vacuum breaker.
- 1/2” [13 mm] copper water inlet for solder connection.
- Brass ball type stop valve.
- Durable manifold with 5 or 10 outlets.
- PEX or copper outlet connections.
- Cover and box made of galvanized steel.
- Complete unit is preassembled and pretested.
- Power supply transformer included.
- UL and CSA approved components.
- Built-in, anti-scale self-cleaning outlet ports.
- Vandal-resistant cover upon request.

Available Models
All models, complete with access panel and supply transformer, available in surface mount or recessed mount, both in galvanized steel.
- 5 Outlets with Mounting Box (Surface or Recess)
- 10 Outlets with Mounting Box (Surface or Recess)
- Additional Distribution Units Available (Suffix -DU4) Can service up to 20 drains.

Technical Data
Type: Electronic programmed EPROM module controlling a solenoid valve
Valve: Normally closed 24 VAC solenoid valve
Inlet: 1/2” [13 mm] copper
Outlet Type: PEX or copper 1/2” connections
Outlet Quantity: 5 or 10
Minimum Pressure: 3 psi
Working Pressure: 20 to 150 psig
Default Settings: Frequency: 24 hours
Injection Time: 6 seconds
Frequency Choices: Special Request
Water Injection Time Choices: Special Request
Protection: One “A” fuse
Connections: Wires and screw terminal blocks
**Engineering Specification**
Zurn Z1020 Electronic Trap Primer programmed as standard to provide a six-second water injection to traps every twenty-four hours*, complete with galvanized steel combination surface or recessed mount box and cover, 1/2” [13 mm] solder copper inlet connection, brass ball type stop valve, slow closing 24 VAC solenoid valve with integral strainer, 24 VAC transformer, brass atmospheric vacuum breaker, PEX waterway, and anti-scaling multi-port manifold with five 1/2” [13 mm] PEX outlet connections. (For copper connection outlets, -CW option must be specified.) *May be adjusted per special request.

<table>
<thead>
<tr>
<th>Dimensions in Inches [mm]</th>
<th>A Inlet Pipe Size</th>
<th>B Outlet Pipe Size</th>
<th>Approx. Wt. Lbs. [kg]</th>
</tr>
</thead>
<tbody>
<tr>
<td>1/2” [13 mm] Solder</td>
<td>1/2” [13 mm] PEX Conn.</td>
<td>12 [5]</td>
<td></td>
</tr>
</tbody>
</table>

**Options**

- **Suffixes**
  - -CW  Copper Waterway (with 1/2” [13 mm] IPS connection)
  - -DU4  Additional Distribution Units (-CW must be specified – contact Zurn for sizing specifications.)
  - -10  Ten Outlets
  - -VP  Vandal-Resistant Cover

**Installation**

- Inlet connections to be soldered in compliance with ASME B16.23 or B16.29.
- The outlet of each port shall be connected via a sealed connection to the inlet side of each trap/drain served.
- The Electronic Trap Primer must be installed a minimum of 12” [305 mm] above the flood level of the highest trap/drain being served.
- Minimum recommended working water pressure of 20 psig to the Electronic Trap Primer.

**Procedure**

*Note: The unit must be installed a minimum of 12” [305 mm] above the flood level of the highest trap/drain being served.*

- Secure the unit correctly between the wall studs or on the finished wall as near as possible to drains serviced.
- Connect the water inlet to main water supply. Make sure the ball valve is turned off.
- Connect all outlets from header manifold to floor drains.
- Plug all unused outlets.
- Install the transformer to the dedicated electric box.
- Install wire between transformer and electronic module (#18 gage minimum wire, not more that 300 feet).
- Turn the water valve on.
- Push the test/override button to prime traps.
- Make sure water has reached all drains and the traps are full of water.
- Continue pushing the override/test button until drains are all filled with water.
- For drains approximately 100 feet away or more, repetitive priming may be required.
- Check for leaks in the installation.
## Troubleshooting Guide

<table>
<thead>
<tr>
<th>Problem</th>
<th>Cause</th>
<th>Solution</th>
</tr>
</thead>
<tbody>
<tr>
<td>System does not operate.</td>
<td>No power supply.</td>
<td>Check if the 24 VAC LED is on. If not, check to ensure the transformer is energized. Make sure the transformer is connected.</td>
</tr>
<tr>
<td></td>
<td>No water supply.</td>
<td>Check if water is coming from water supply.</td>
</tr>
<tr>
<td></td>
<td>Inlet valve is closed.</td>
<td>Open inlet valve.</td>
</tr>
<tr>
<td></td>
<td>Valve strainer is blocked.</td>
<td>Unscrew inlet and outlet ring from solenoid. Remove the valve, remove the strainer, clean, and replace.</td>
</tr>
<tr>
<td></td>
<td>System has not been primed</td>
<td>Push the override/test button.</td>
</tr>
<tr>
<td></td>
<td>(test button).</td>
<td></td>
</tr>
<tr>
<td>One of the drains will not prime.</td>
<td>Tube to drain is bent or</td>
<td>Check for kinks or replace tube to drain.</td>
</tr>
<tr>
<td></td>
<td>blocked.</td>
<td></td>
</tr>
<tr>
<td>System does not supply enough water in some or all drains.</td>
<td>There is a flow restriction in the tube.</td>
<td>Change tube to drain.</td>
</tr>
<tr>
<td></td>
<td>Lack of pressure to drains.</td>
<td>Prime the system multiple times by pressing the test button.</td>
</tr>
</tbody>
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