HLPC-TIMER-120P / HLPC-TIMER-240P
Programmable Outlet Cycle Percentage Timer for Heat-Line Freeze Protection Systems

Installation and Operating Instructions

General Information
Timers are a beneficial optional accessory when incorporated with any Heat-Line freeze protection system. Regardless of the overall system length and or operating voltage, a Heat-Line Timer will reduce energy costs by decreasing overall energy consumption. A Timer can be added to Heat-Line systems in order to duty cycle the heating cable at a selected time interval and percentage. This field adjustable timer offers true flexibility for repetitive cycle times, and offers 8 selectable cycle durations with 30 separate percentage positions for ON time periods. To obtain the best results from your investment, please read these instructions and acquaint yourself with your purchase before installing your new timer. Then follow the installation procedures, one step at a time. This will save you time and minimize the risk of damaging the timer and the system it controls.

IMPORTANT! Please read all instructions carefully before beginning installation. Save them for future reference.

WARNING: Only use with 120V-15A or 240V-15A GFCI model Heat-Line brand self-regulating heating cable systems.

Compatibility
The Heat-Line HLPC-TIMER-120P/240P Programmable Outlet Cycle Percentage Timer is for use with 120Volt/ 240V, 15 Amp plug-in, 60 Hz GFCI model Heat-Line Self-Regulating Freeze Protection Systems including ArcticVent, CARAPACE, EXT5R, EXT3T, Paladin, Heat-Line, Retro-DWS, Retro-FM, Retro-Line, Rizer-Line, and Tandem-Link systems. This is a timer control designed to increase energy efficiency of Heat-Line brand products, it is NOT to be used as a high limit device for other heating cable brands.

Features
- Plugs directly into standard 120V and 240V 15 Amp receptacles
- Provides 8 field selectable cycle durations: 30 seconds, 1 minute, 3 minutes, 5 minutes, 10 minutes, 30 minutes, 1 hour, and 4 hours
- Provides 30 separate detent positions for precise selection of percentage ON time
- User settings stored in non-volatile memory
- Control buttons on front of timer
- No DIP switches to program cycle time
- Easy to install and program
- Manual ON/OFF control allows for temporary or permanent override
- Designed to function in dusty, ammonia, and wash-down environments
- Able to withstand surge of up to 6,000 VAC
- Operating Temperature from 14°F to 129°F (–10°C to 54°C)
- Product weight 1.4 lbs. (0.6 kg)
- Limited 1 year Product Warranty

Ratings
- 120V/60 Hz (120P) and 240V/60 Hz (240P)
- Maximum load is 20 Amps at 120/ 240 Volts
- Power Consumption 2.5 W (maximum)
- Plug and Receptacle NEMA
- Tungsten (Incandescent): 5 Amps @ 240 VAC
- Pilot Duty: 470 VA @ 240 VAC
- Ballast (Fluorescent): 10 Amps @ 277 VAC
- Plug and Receptacle NEMA 5-15R/ 5-15R (120P Model) and NEMA 6-15R/ 6-15P (240P Model)

Approvals

WARNING: Read these rules and instructions carefully. Failure to follow them could result in serious bodily injury and/or property damage.

- Check your local building and electrical codes before installing. You must comply with their rules.
- To reduce the risk of electric shock, this product has a grounding type plug that has a third (grounding) pin. This pin will only fit into a grounding type power outlet. If the plug does not fit into the outlet, contact a qualified electrician to install the proper outlet.
- Do not use Outdoors. Dry and indoor locations only.
- Disconnect power at the circuit breaker(s) or disconnect switch(es) before beginning installation and before servicing.
- Do not use the manual off position of the timer for equipment service. Always disconnect the power at the circuit breaker(s) or disconnect switch(es).
- Avoid the use of extension cords as this may increase the risk of electric shock, fire and property damage.
- Check unoccupied residences regularly to ensure that all systems are operating properly.
- Avoid the use of extension cords as this may increase the risk of electric shock, fire and property damage.
- Use this thermostat only as described in this manual. Any other use not recommended by the manufacturer may increase the risk of fire, electric shock, or injury to persons.
Cycle Time Setup

To Program Cycle Timer:

1. Turn knob until the “Select Cycle Time” arrow aligns with triangle to choose total cycle time.
2. Push the Select Cycle Time button to scroll through cycle times.
3. Push and hold button to save desired time (LED Blinks).
4. Turn knob until desired percentage of cycle time aligns with triangle.

Higher percentage positions provide additional ON time, and less OFF time, as shown below.

A permanent ON and a permanent OFF position are provided to allow manual override of the cycle at any time.

**WARNING! Risk of Shock.** Do not use the manual OFF position for equipment service. Always disconnect power at the disconnect switch(es) or breaker panel.

<table>
<thead>
<tr>
<th>Cycle Time Duration</th>
<th>Selector Knob %</th>
<th>ON Time</th>
<th>OFF Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>30 sec.</td>
<td>10%</td>
<td>3 sec.</td>
<td>27 sec.</td>
</tr>
<tr>
<td>30 sec.</td>
<td>50%</td>
<td>15 sec.</td>
<td>15 sec.</td>
</tr>
<tr>
<td>30 sec.</td>
<td>80%</td>
<td>24 sec.</td>
<td>6 sec.</td>
</tr>
<tr>
<td>10 min.</td>
<td>10%</td>
<td>1 min.</td>
<td>9 min.</td>
</tr>
<tr>
<td>10 min.</td>
<td>50%</td>
<td>5 min.</td>
<td>5 min.</td>
</tr>
<tr>
<td>10 min.</td>
<td>80%</td>
<td>8 min.</td>
<td>2 min.</td>
</tr>
<tr>
<td>1 hour</td>
<td>10%</td>
<td>6 min.</td>
<td>54 min.</td>
</tr>
<tr>
<td>1 hour</td>
<td>50%</td>
<td>30 min.</td>
<td>30 min.</td>
</tr>
<tr>
<td>1 hour</td>
<td>80%</td>
<td>48 min.</td>
<td>12 min.</td>
</tr>
<tr>
<td>4 hours</td>
<td>10%</td>
<td>24 min.</td>
<td>216 min.</td>
</tr>
<tr>
<td>4 hours</td>
<td>50%</td>
<td>120 min.</td>
<td>120 min.</td>
</tr>
<tr>
<td>4 hours</td>
<td>80%</td>
<td>192 min.</td>
<td>48 min.</td>
</tr>
</tbody>
</table>

- The OFF indicator will be steady RED in the OFF position and during the OFF portion of the cycles.
- The ON indicator will be steady GREEN in the ON position and during the ON portion of the cycles.
- The yellow Cycle Time indicator will be ON except when in the permanent ON or OFF positions.

Heat-Line Freeze Protection Systems

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