BH-3100 SERIES BATTERY HEATER

The BH-3100 Series Battery Heater utilizes heat energy from the engine cooling system or diesel fired coolant heater to warm the battery, allowing for improvement of battery state of charge.

BENEFITS

- Increases available cold cranking amps
- Reduces required battery charge time
- Extends battery life
- Simple installation

WHERE TO USE

- Available for 4D, 8D and group 31 battery configurations. Custom sizes available upon request.

HERE’S HOW IT WORKS

TYPICAL CHARGEABILITY OF BATTERY

Chart A depicts a typical scenario at 0°F (-18°C) where 75% to 80% of full charge is accomplished in approximately 2-1/4 hours with a battery warmer. Without a battery warmer, it would require 8 hours to reach the same state of charge. As shown in chart B, batteries that accept 3 amps at -20°F (-29°C) can accept up to 60 amps when the electrolyte temperature is raised to 30°F (-1°C).

TYPICAL CHARGE AMPERAGE VERSUS TEMPERATURE SCENARIO

SPECIFICATIONS:

- Durable stainless steel coolant tubes
- Light weight aluminum heating plate
- 1/2” NPT coolant connections
- Optional thermostat is available
BH-3100 SERIES BATTERY HEATER MODELS

NOTE: All models require minimum 1” / 25.4mm clearance above the batteries.

### BH-3100 SERIES BATTERY HEATER MODELS

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Length Inches/mm</th>
<th>Width Inches/mm</th>
</tr>
</thead>
<tbody>
<tr>
<td>BH-3101</td>
<td>12-7/8 / 327</td>
<td>6-5/8 / 168</td>
</tr>
<tr>
<td>BH-3102</td>
<td>13 / 330</td>
<td>13 / 330</td>
</tr>
<tr>
<td>BH-3103</td>
<td>21 / 533</td>
<td>14 / 356</td>
</tr>
<tr>
<td>BH-3104</td>
<td>27 / 686</td>
<td>14 / 356</td>
</tr>
<tr>
<td>BH-3110</td>
<td>21-1/2 / 546</td>
<td>11 / 279</td>
</tr>
<tr>
<td>BH-3113</td>
<td>21-1/2 / 546</td>
<td>11 / 279</td>
</tr>
<tr>
<td>BH-3119</td>
<td>21 / 526</td>
<td>8-1/2 / 216</td>
</tr>
<tr>
<td>BH-3124</td>
<td>25-1/4 / 641</td>
<td>6-1/4 / 159</td>
</tr>
</tbody>
</table>

**Note:** BH-3102—Both batteries may be placed parallel or perpendicular to the coolant ports.

**Note:** BH-3104—All 4 batteries may be placed parallel or perpendicular to the coolant ports, or 2 either way.

### DIMENSIONAL INFORMATION

**NOTE:** Schematic below, battery warming is discontinued when cab heater temperature switch is off.

**BPT - 2800 BATTERY HEATER BY-PASS THERMOSTAT**

- Coolant In Temperature Sensor
- Coolant Out
- Battery Heater
- Cab Heater
- Engine
- Wave
- 8.5” 215.9mm
- 5.52” 254mm
- 10.0” 254.0mm