



BH-3100 SERIES BATTERY HEATER

OVERVIEW

FEATURES

- Durable stainless steel coolant tubes
- Light weight aluminum heating plate
- 1/2" NPT coolant connections
- Optional thermostat is available

BENEFITS

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

APPLICATIONS

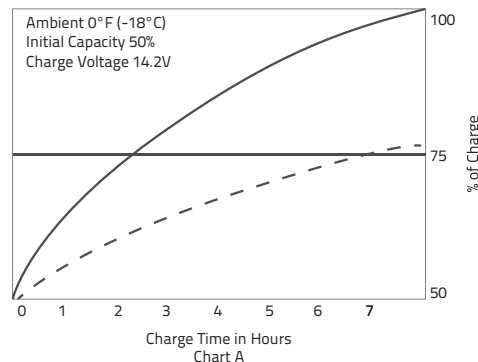
- Available for 4D, 8D and group 31 battery configurations. Custom sizes available upon request.

Circulates warm coolant from the engine or auxiliary heater through the stainless steel tubes to keep batteries at optimal temperature. It can be fitted with a by-pass thermostat that measures the air temperature inside the battery box for year round operation.



HERE'S HOW IT WORKS

TYPICAL CHARGEABILITY OF BATTERY



TYPICAL CHARGE AMPERAGE VERSUS TEMPERATURE SCENARIO

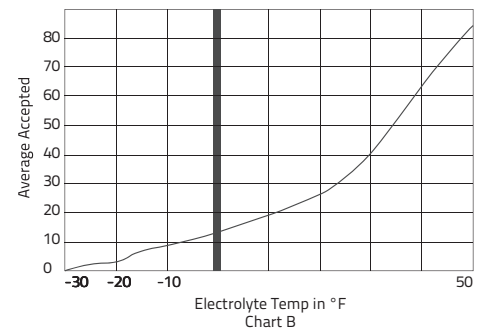
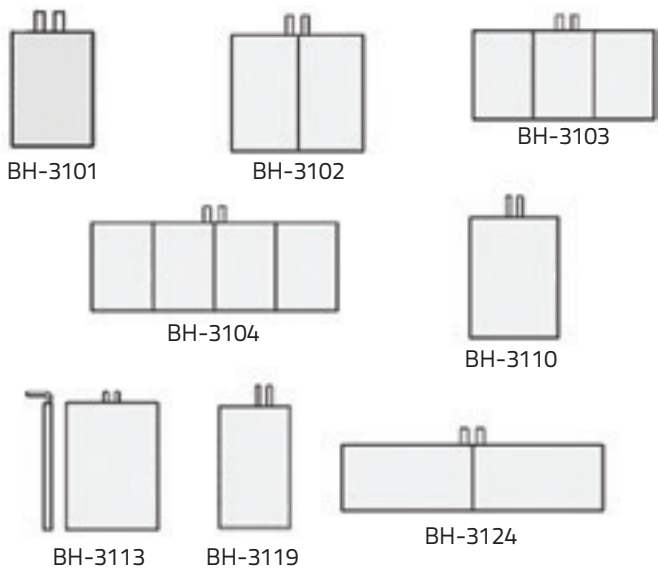


Chart A depicts a typical scenario at 0° F (-18°C) where 75% to 80% of full charge is accomplished in approximately 2-1/4 hours with a battery warmer. Without a battery warmer, it would require 8 hours to reach the same state of charge. As shown in chart B, batteries that accept 3 amps at -20°F (-29°C) can accept up to 40 amps when the electrolyte temperature is raised to 30°F (-1°C).

BH-3100 SERIES BATTERY HEATER MODELS

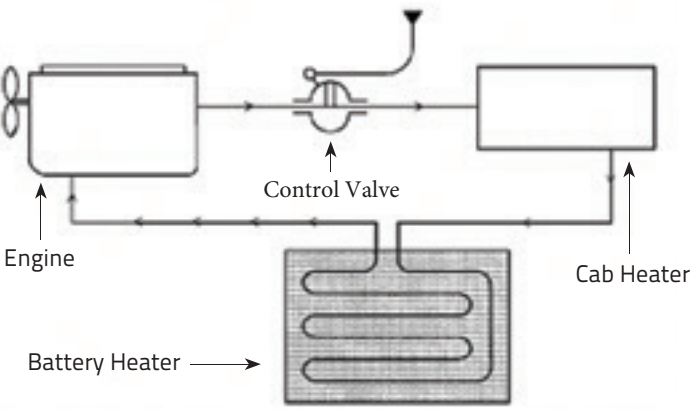
NOTE: All models require minimum 1" / 25.4mm clearance above the batteries.



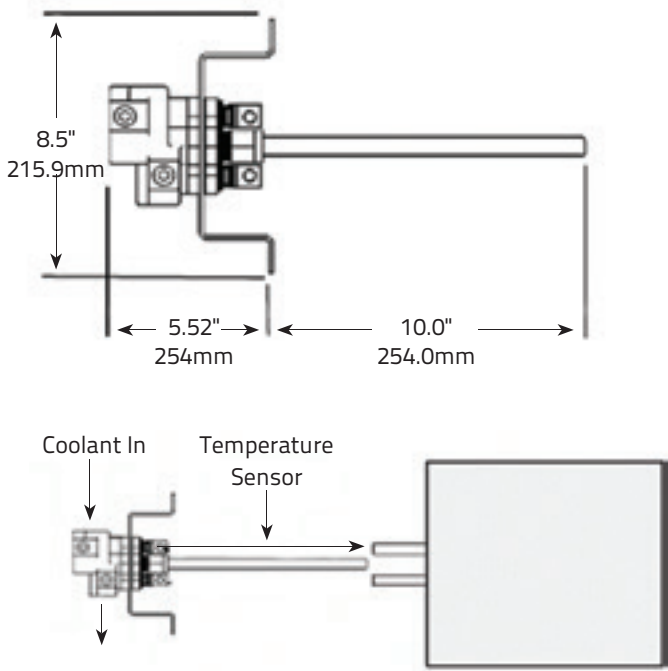
DIMENSIONAL INFORMATION

Part Number	Length Inches/mm	Width Inches/mm
BH-3101	12-7/8 / 327	6-5/8 / 168
BH-3102	13 / 330	13 / 330
Note: BH-3102—Both batteries may be place parallel or perpendicular to the coolant ports.		
BH-3103	21 / 533	14 / 356
BH-3104	27 / 686	14 / 356
NOTE: BH-3104—All 4 batteries may be place parallel or perpendicular to the coolant ports, or 2 either way.		
BH-3110	21-1/2 / 546	11 / 279
BH-3113	21-1/2 / 546	11 / 279
BH-3119	21 / 526	8-1/2 / 216
BH-3124	25-1/4 / 641	6-1/4 / 159

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



BPT - 2800 BATTERY HEATER BY-PASS THERMOSTAT



Schematic for Battery Heater with Optional By-Pass Thermostat