THE COOLANT HEATER OF CHOICE FOR THERMAL SOLUTIONS
POWERFUL AND RUGGED COOLANT HEATER FOR COLD WEATHER SOLUTIONS

Proheat X45 Plus is a powerful, diesel powered system heating solution. The Proheat X45 Plus can provide engine and fluid preheat for easy cold weather starting, interior heat for occupant comfort and clear windows. The X45 Plus can also help reduce maintenance by maintaining engine and system heat during vehicle operation ensuring emission systems are operating at optimal temperature.

CURRENT MODES

Preheat
Use this to warm up engines, fluids and vehicle interiors prior to starting service. The heater will come on via a switch or timer and run for up to 180 minutes. This mode can be configured to either shift to a different mode such as supplemental or shut off entirely when the vehicle is started.

The cycle on/off temperatures are fixed at 150°F to 185°F (65°C to 85°C).

Standard Mode
This is a similar mode to Preheat but there is no timed feature. The heater will run, cycling on and off until it is commanded to turn off via a switch input, timer or CAN bus.

The cycle on/off temperatures are fixed at 150°F to 185°F (65°C to 85°C).

Supplemental Mode
Use this mode to maintain engine temperature while the engine is running. This is especially important if there is little load on the engine. This mode can also be used to maintain interior heat or help keep hydraulic fluid or fuel warm during cold weather operation. The heater will cycle on and off at fixed set points but will not operate its integrated coolant pump unless the heater is firing. This has an added benefit of minimizing coolant pump hours. This mode is enabled via a switch input or CAN bus.

The cycle on/off temperatures are fixed at 150°F to 185°F (65°C to 85°C).

NEW FEATURES & OPERATING MODES

HEATER FEATURES

- SAE J1939 CAN bus communication
- Easily integrates into OEM systems
- Reduces wiring and installation costs by running on vehicle communication network
- Full control and error reporting available over CAN bus
- Integrated Mechanic’s Switches
- Convenience of being able to program, service and operate the heater without external switches or timer input
- Temporarily turn the heater on or off right at the heater
- Program heater or replacement components
NEW MODES

Anti-Freeze Mode
This mode is designed to maintain a minimum system temperature for extended periods of time such as over a weekend all while maximizing battery life and reducing fuel consumption. This is accomplished by reducing cycle on/off set points and employing a low power standby scheme. In this mode, the system runs the coolant pump every 20 minutes to ensure the coolant temperature throughout the system is maintained at the set points. Anti Freeze mode will drop out if a different signal is received such as preheat or supplemental heat and will reengage once that signal is no longer present to ensure a minimum temperature is always maintained for critical components.
The cycle on/off temperatures are set at 41°F to 60°F (5°C to 20°C).

Supplemental Max Heat Feature
This is a similar mode to our current supplemental mode but is useful for Tier 4 engines to help maintain higher engine temperatures to reduce emissions and resulting regens or when more heat is needed such as high HVAC demands.
The cycle on/off points are set at 170°F to 190°F (77°C to 88°C).

Global Low Temperature Feature
This mode is used to prevent short cycling due to either a small coolant loop or when a lower system temperature is all that is required.
This mode reduces the set points for ALL modes except Anti Freeze.
The cycle on/off points are set at 73°F to 108°F (40°C to 60°C).

Supplemental Priority Feature
This setting is used in conjunction with either Supplemental or Supplemental Max Heat modes to ensure the supplemental mode takes priority over any other modes. This mode over rides but does not cancel the original mode which is useful for intermittent or start stop operation or systems that are split between two engines.

TWO YEAR WARRANTY
Proheat X45 is backed by a full two year parts and labor warranty and is supported by a nationwide network of Authorized Proheat Dealers.
SPECIFICATIONS

18.9” (480 mm)

11.2” (285 mm)

ABOUT PROHEAT

Proheat is a global leader in advanced auxiliary heaters. Our customers include aftermarket vehicle dealers and service organizations as well as manufacturers of transport trucks, buses, off-highway, and military vehicles.

Proheat is manufactured by Marine Canada Acquisition Inc. (DBA SEASTAR SOLUTIONS).

**Possible Heating Options**

1. X45 Plus Heater
2. Timer
3. Thermostat
4. Heat Exchanger
5. Coolant Return
6. Heated Engine
7. Hydraulic Tank
8. Heat Probe
9. Fuel Pick-Up
10. Electrical Connection
11. Exhaust

<table>
<thead>
<tr>
<th>MODEL</th>
<th>X45 PLUS-12</th>
<th>X45 PLUS-24</th>
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</thead>
<tbody>
<tr>
<td>RATING</td>
<td>45,000 BTU</td>
<td>45,000 BTU</td>
</tr>
<tr>
<td>OPERATING VOLTAGE RANGE</td>
<td>10.0 – 15 VDC</td>
<td>20 – 30 VDC</td>
</tr>
<tr>
<td>CURRENT (Nom.)</td>
<td>7.5 Amps</td>
<td>3.75 Amps</td>
</tr>
<tr>
<td>FUEL CONSUMPTION (average to maximum)</td>
<td>0.1 to 0.45 gal/hr. (0.4 to 1.7 L/hr.)</td>
<td></td>
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<tr>
<td>COOLANT FLOW</td>
<td>8.0 gal/min. (30 L/min.)</td>
<td></td>
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<tr>
<td>COOLANT TEMPERATURE (at heater)</td>
<td>150 to 185 °F (65 to 85 °C)</td>
<td></td>
</tr>
<tr>
<td>OPERATING TEMPERATURE RANGE</td>
<td>- 40 to 122 °F (- 40 to 50 °C)</td>
<td></td>
</tr>
<tr>
<td>FUEL TYPES</td>
<td>Diesel (ULSD #1, #2 and Arctic Blend), Kerosene (K-1), Jet (A, A-1 and JP8), Bio fuels (up to B20)</td>
<td></td>
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<tr>
<td>IGNITION TYPE</td>
<td>Electronic spark ignition</td>
<td></td>
</tr>
<tr>
<td>HEAT EXCHANGER CAPACITY</td>
<td>1 quart (.98 litre)</td>
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<tr>
<td>WEIGHT</td>
<td></td>
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heater only with enclosure 40 lb (18 kg) 55 lb (25 kg) |
| DIMENSIONS – HEATER (L x W x H) | 18.9 x 11.2 x 10.6 inches (480 x 285 x 270 mm) |
| DIMENSIONS – ENCLOSURE (L x W x H) | 20.2 x 12.3 x 10.6 inches (513 x 313 x 270 mm) |
| WARRANTY | Two years parts and labor |

Please Note: Specifications are subject to change without notice.

Proheat is a registered trademark of Marine Canada Acquisition Inc.

Dealer: