



## Heat King® 450 Series

*Dependable freeze protection for temperature-sensitive cargo*



## HEAT KING 450 MAX AND 450 HO



# MAXIMUM FREEZE PROTECTION

### KEEP CARGO SAFE

Freeze-sensitive cargo will stay warm, no matter how cold it gets outside.

- Beverages
- Paints, chemicals and adhesives
- Pharmaceuticals and cosmetics
- Flowers and plants
- Electronics
- Building materials

### FEATURES:

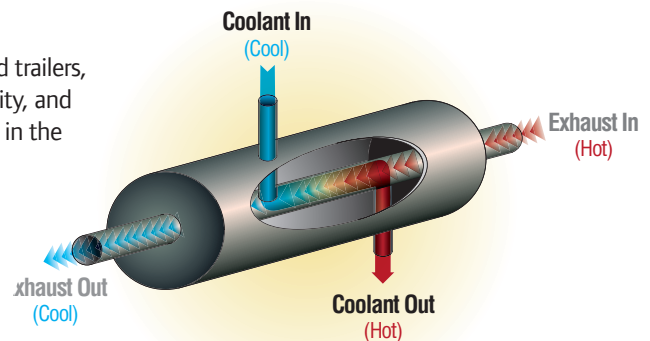
- Extra capacity available for longer thin-walled trailers
- Powerful airflow circulates throughout entire cargo
- DOT-approved for transport of flammable liquids and gases
- High and low speeds for optimal fuel economy
- EPA Tier IV compliant

The Heat King® keeps transported products above freezing in the coldest conditions. It delivers maximum uptime, ease of maintenance and long-term reliability with its heavy duty, rugged and simple design.

### HEAT KING 450 MAXIMUM OUTPUT (MAX)

The Heat King 450 MAX utilizes an exhaust heat exchanger that extracts even more heat from the engine, allowing the unit to become 70% efficient in the transfer of energy from diesel fuel to heat. This design produces **33% more heat capacity** and transfers heat more efficiently than the closest competitor product.

This allows operators to use thinner walled trailers, which increases the overall payload capacity, and ensures loads are protected from freezing in the coldest climates.



### THERMOGUARD® VII FEATURES:

- Integrated cycle-sentry feature ensures optimal fuel economy and the battery voltage monitor ensures batteries are charged
- Operational data and alarm codes are automatically logged and can be downloaded via USB
- Flash loadable programming and diagnostics through PC monitor USB interface
- Optional status light
- Compact design for mounting directly to or recessed into the trailer
- Includes on/off switch, hour meter and display
- Alarm codes are easily accessed through TGVII display and PC monitor USB interface



## NEW

### SOLAR BENEFITS

Heaters sit all summer and likely were not fully charged at the end of last season. Adding ThermoLite® 40w solar panels to your Heat King offers:

- **Increased battery life**  
*Keeping batteries charged all year round will negate failure from extended periods of low charge levels and proliferation of sulfation*
- **Fuel savings**  
*Reduces load on the engine with alternator working less and reduced cycle-sentry operation*
- **Extended component life**  
*Run time is reduced, alternator offloading and reduced starter engagement*
- **Improved employee efficiency**  
*Cuts time spent managing low battery alarms and battery breakdowns*

# 50,000 BTUs

Highest capacity transport heater available today.

## SYSTEM PERFORMANCE

HEATING CAPACITY			
Engine Speed	Btu/hr	Watts	RPM
<b>Heat King 450 MAX (Maximum Output)</b>			
High	50,000	14,650	3,200
Low	10,000	2,930	1,550
<b>Heat King 450 HO (High Output)</b>			
High	36,000	10,550	3,050
Low	10,000	2,930	1,550

AIRFLOW		
Engine Speed	CFM	M <sup>3</sup> /hr
<b>Heat King 450 MAX</b>		
High	3,600	5,925
Low	1,700	2,800
<b>Heat King 450 HO</b>		
High	3,400	5,600
Low	1,700	2,800

### OPERATION

Automatic cycle-sentry heating for freeze protection

### STANDARD FEATURES

- TK 2.7 diesel engine
- One-piece unit frame
- Alternator, 37 amp, 12V dc
- Programmable ThermoGuard VII microprocessor controller
- Cycle-sentry start/stop, including battery sentry and block temperature-initiated restart
- Heavy duty battery hold-down and tray
- Remote TGVII display
- Centigrade thermometer
- Installation hardware
- Auto engine restart to charge battery and when engine block temperature drops below 30°F
- Threaded battery post cable

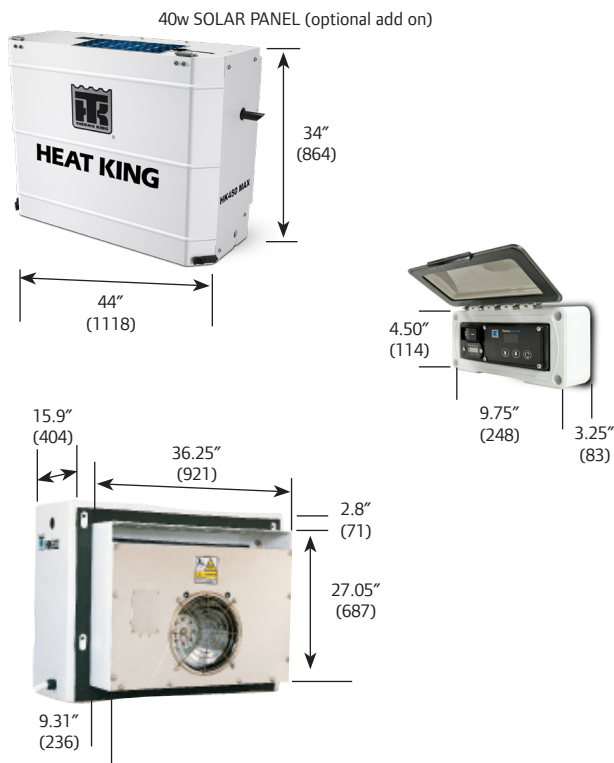
### OPTIONAL FEATURES

- 40w solar panels
- Zero cube unit installation kit
- CE mark
- Fuel heater – electric
- Battery cable, clamp post
- Custom paint
- Exhaust extension
- Fuel tanks:
  - 30 gallon (114 liter) undermount aluminum
  - 50 gallon (189 liter) undermount aluminum
  - 50 gallon (189 liter) USFLS ready
  - 110 gallon (416 liter) undermount steel

## SPECIFICATIONS

### DIMENSIONS

Inches (Millimeters)



### WARRANTY

Terms of the Thermo King warranty are available on request. The unit and its components are warranted to be free from defects in material and workmanship from date in service as follows:

- 12 months parts and labor - entire unit including ThermoGuard TG-VII microprocessor
- 24 months parts and labor - injection pump, engine and internal parts and radiator coil

Manufacturer is not responsible and will not be held liable in contract or tort (including strict liability and negligence) for any special, indirect or consequential damages including but not limited to injury or damage caused to vehicles, contents or person, by reason of the installation or use of any Thermo King product or its mechanical failure.

### WEIGHT (APPROXIMATE WITH BATTERY)

HK 450 HO.....	448 lbs (203 kg)
HK 450 MAX.....	488 lbs (221 kg)
30 gallon fuel tank with brackets (w/o fuel).....	90 lbs (41 kg)
50 gallon fuel tank with brackets (w/o fuel).....	100 lbs (45 kg)
110 gallon fuel tank with brackets (w/o fuel).....	308 lbs (140 kg)



Thermo King – by Trane Technologies (NYSE: TT), a global climate innovator – is a worldwide leader in sustainable transport temperature control solutions. Thermo King has been providing transport temperature control solutions for a variety of applications, including trailers, truck bodies, buses, air, shipboard containers and railway cars since 1938. For more information, visit [thermoking.com](http://thermoking.com) or [tranetechnologies.com](http://tranetechnologies.com).

