



## T-Series

*An all-new line of self-powered truck units destined to become the new industry benchmark.*





# Welcome to the all-new T-Series

*Delivering what matters.*

**T**hey're here. After years of engineering research and development. After extensive customer input. After exhaustive testing in the lab and on the road. After all of this and much more, the all-new T-Series line of truck units from Thermo King is ready to deliver what you and your customers demand. Lower life cycle costs. Lower fuel consumption. Cleaner, quieter operation. Unmatched performance and reliability. Greater capacities at lower operating speeds. Precise temperature control. Ease of use and service.

**The new T-Series: Delivering what matters.**



## Greater Fuel Savings

Fuel costs recently reached record levels and take a big bite out of your budget every day. The T-Series

was developed to take advantage of the latest fuel-saving technologies, including:

- ✓ Stationary and Hybrid SmartPower™ electric operation
- ✓ Fuel efficient engineering for greater fuel economy in all ambient conditions, hauling fresh or frozen
- ✓ ETV (electronic throttling valve) pulls down temperature faster, consuming less fuel to reach the set point
- ✓ Advanced Fuel-Saving Control Technology with the new SR-2 T-Series control system means less fuel used



## Easy to Use and Service

The latest technological advances mean little if the driver can't use the equipment easily and properly. The T-Series features the intuitive new TSR-2 control system and other

enhancements for easy use and service:

- ✓ Symbolic Display on controller for easy, error-free operation
- ✓ Easy Service Accessibility to electrical and engine compartments
- ✓ Liquid Level Fill Alerts warn of low fluid levels
- ✓ Programmable Service Intervals and Scheduled Maintenance Reminders keep unit running at peak efficiency



## Lower Life Cycle Costs

Reducing the everyday costs of operating the reefer was essential in the development of these new units.

The following features of the T-Series will help you realize reduced operating costs, every day you run, for the life of the unit:

- ✓ TSR-2 controller helps ensure correct parameters are set for every load, quickly and easily
- ✓ EMI-2000 means longer service maintenance intervals
- ✓ Our longest truck unit warranty ever (See your Thermo King dealer for details)
- ✓ Hybrid SmartPower™ reduces engine hours, resulting in lower maintenance costs



## Cleaner and Quieter


The T-Series was developed not just to meet environmental requirements, but to set new benchmarks in the

reduction of emissions, waste and noise pollution:

- ✓ Hybrid SmartPower™ electric operation produces zero emissions
- ✓ Whisper™ quiet operation
- ✓ Cleanest diesel engine in class
- ✓ EMI-2000 reduces waste
- ✓ Poly-V stretch belt technology reduces noise

*Thermo King is the Green Leader*

Thermo King offers industry-leading products and solutions that enable businesses around the world to reduce energy consumption and costs and decrease harmful environmental emissions.

The  symbol indicates a feature that delivers a significant environmental advantage over previous models or the competition.

# Choose from the Latest in Compressor Technology!



## Up to 10% Fuel Savings with Scroll

Results from independent testing based on regional average ambient temperatures.

### Estimated Annual Fuel Consumption

■ Scroll      ■ Reciprocating

St. Louis test



Boston test



Chicago test



## The Most Advanced Scroll Compressors Ever

The clear choice for peak efficiency and maximum cooling capacity.

- High efficiency and greater capacity
- Less noise and vibration
- Less maintenance (87% fewer moving parts)
- E nickel-plated Oldham coupling for greater reliability



## Reliable Reciprocating Compressors

The industry standard for proven reliability and easy service.

- High volumetric efficiency vs. other reciprocating compressors due to more pumping capacity per cubic inch
- Reliable, time-tested design
- Field-repairable for easy service
  - No special tools or facilities required
  - Removable and replaceable cast iron cylinder sleeve design



## Hybrid SmartPower™

In addition to our SmartPower electric standby, Thermo King's new T-Series will be available with Hybrid SmartPower, which provides electric operation while moving.

- ✓ Electric operation uses up to 60% less fuel than diesel operation
- ✓ Emissions are reduced by up to 60%
- ✓ Less wear and tear on engine for reduced maintenance
- ✓ Reduced noise and vibration by up to 87%



Reduce maintenance costs and waste with

## EMI-2000

extended  
maintenance  
interval

- Reduces clean up and disposal costs
- Reduces environmental impact with less spillage and less waste
- Extends engine life
- Lower maintenance costs than competitive models
- More uptime with less time in the shop



# The All-in-One



	T-500R	T-600R	T-800R	T-1000R
<b>Replaces</b>	MD-100	MD-200	MD-300	RD-II
<b>Capacity*</b> 35°F	15,000	17,500	20,000	24,000
<b>(BTU/hr)</b> 0°F	9,000	10,500	12,500	16,500
-20°F	5,300	7,000	7,800	10,500
<b>Heating Capacity (35°F)</b>	11,000	13,000	14,000	15,000
<b>Weight**</b>	TBD	1032 lbs.	1032 lbs.	1178 lbs.
<b>Key Features</b>	<p>TSR-2 symbolic controller interface microprocessor control system</p> <p>Tier 4 diesel engine</p> <p>ACTiV (Ambient Compensating Throttle Valve)</p> <p>Whisper™ quiet operation</p>	<p>TSR-2 symbolic controller interface microprocessor control system</p> <p>Recyclable Geloy injected molded skins with in-mold color</p> <p>Poly-V stretch belt system with quiet channel technology</p> <p>Self-tensioning idler pulley</p> <p>80+% part commonality across platform</p> <p>Tier 4 diesel engine</p> <p>Robotic welded steel frame with automotive grade 2 coat paint finish</p> <p>Liquid level fill alerts</p> <p>Silicone coolant hoses</p> <p>Time tested TK 2 cylinder reciprocating compressor</p> <p>ACTiV (Ambient Compensating Throttle Valve)</p> <p>Whisper quiet operation</p>		
<b>Key Options</b>	<p>SmartPower operation (standard 230v/3 phase/60 Hz), (460/3/60), (400/3/50)</p> <p>Hose management system</p> <p>Body mount HMI enclosure systems</p> <p>Top cover system</p> <p>Whisper™ Plus sound kit</p>	<p>SmartPower operation (standard 230v/3 phase/60 Hz), (460/3/60), (400/3/50)</p> <p>Hose management system</p> <p>Telematics (TracKing)</p> <p>Data acquisition system (DAS)</p> <p>Hand-held TSR-2 electronic diagnostic tool</p> <p>Body mount HMI enclosure systems</p> <p>Incremental heating (electric &amp; over the road)</p> <p>Top cover system</p> <p>Whisper™ Plus sound kit</p>		

\*Cooling capacities rated at 100°F ambient, heating at 0°F ambient.

\*\* Weight refers to units with SmartPower option

## Application Chart

Box Size	14	16	18	20	22	24
35°F	T-500R T-600R	T-500R T-600R	T-500R T-600R	T-600R T-600	T-600R T-600	T-600R T-600
0°F	T-600R T-600	T-600R T-600	T-600R T-600	T-600R T-600	T-800R T-800	T-1000R T-1000
-20°F	T-1000R T-800	T-1000R T-1000	T-1000R T-1000	T-1000R T-1000	T-1000R T-1000	T-1000

Assuming 3" of insulation for 35°F, 0°F and 4" for -20°F; ten door openings per day; box dimensions of 96"W and 72"H on trucks 10' and over in length. Unit selection may vary. Consult your Thermo King dealer for a detailed analysis of your requirements.

# New T-Series



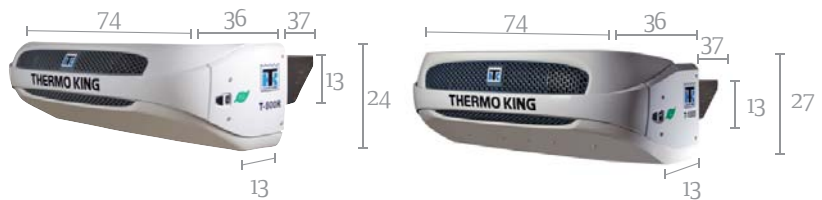
T-600	T-800	T-1000	T-800 SPECTRUM	T-1000 SPECTRUM
TS-200	TS-300	TS-500	MD-200 MT	SPECTRUM TS
18,500	23,500	27,500	20,500	20,500
12,000	13,500	19,000	13,000	19,500
7,000	8,100	12,500	7,000	13,000
15,000	15,000	16,000	12,000	13,000
1054 lbs.	1054 lbs.	1138 lbs.	TBD	TBD

TSR-2 symbolic controller interface microprocessor control system  
 Recyclable Geloy injected molded skins with in-mold color  
 Poly-V stretch belt system with quiet channel technology  
 Self-tensioning idler pulley  
 80+% part commonality across platform  
 Tier 4 diesel engine  
 Robotic welded steel frame with automotive grade 2 coat paint finish  
 Liquid level fill alerts  
 Silicone coolant hoses  
 New generation TK04 & TK06 scroll compressors  
 Top cover system  
 ACTiV (Ambient Compensating Throttle Valve)  
 Whisper quiet operation

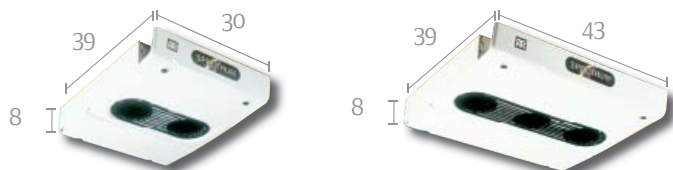
SmartPower operation (standard 230v/3 phase/60 Hz), (460/3/60), (400/3/50)  
 ETV  
 Hose management system  
 Telematics (TracKing)  
 Data acquisition system (DAS)  
 Hand-held TSR-2 electronic diagnostic tool  
 Body mount HMI enclosure systems  
 Incremental heating (electric & over the road)  
 Whisper™ Plus sound kit  
 Top cover system

SmartPower operation  
 Hose management system  
 Telematics (TracKing)  
 Data acquisition system (DAS)  
 Hand-held TSR-2 electronic diagnostic tool  
 Body mount HMI enclosure systems  
 Whisper™ Plus sound kit  
 Single temp with remote evap

## Dimensions (inches)



SPECTRUM S-2 & S-3 Evaps



T-600R T-600	T-800R T-800
T-1000R T-1000	T-1000R T-1000
Contact Your Local Thermo King Dealer	Contact Your Local Thermo King Dealer

## The New TSR-2 Control System

# Easy to use. Hard to beat.



**Powerful and simple to use, the new TSR-2 Control System makes it easy for your drivers to accurately manage the temperature in the truck, no matter what you're hauling.** Step-by-step instructions, depicted in symbolic form, make precisely setting and adjusting the reefer quick and easy, helping your drivers, your customers and, ultimately, your bottom line.

### New Symbolic Interface

No language required, so it's easy-to-understand and use, no matter what language the driver speaks. Designed to greatly reduce operator errors.

### Fuel Savings

The TSR-2 features several improved fuel-saving features:

- CYCLE-SENTRY™ mode
- ETV
- Fuel Saver II
- Electronic door switch input

### Enhanced Load Management

Electronic Throttling Valve (ETV) provides optimum unit capacity over the full range of ambient and cargo temperatures, effectively managing the load on the engine.

### Improved Diagnosing with ServiceWatch™

Better diagnostics make it easier for drivers to understand and respond to potential problems, the first line of defense in transport refrigeration.

ServiceWatch preventative maintenance logger is a precise built-in recorder that provides improved diagnostics and keeps track of system performance and functionality. It records all operational parameters to significantly improve service diagnostics.

### Easy-to-Read LED Display

New LED (Light Emitting Diode) display is bright and clear for better visibility in all light conditions and functions perfectly in all temperature conditions.

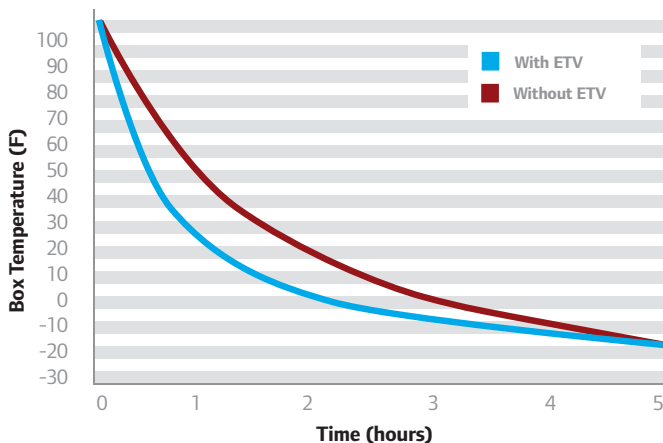
### Enhanced Safety and Security

At the end of the day, protecting your load is what it's all about. The TSR-2 was designed to make that job easier and even more effective with:

- Keypad with lock-out
- Mode-lock
- Automatic phase-correction
- Diesel/electric auto switching
- Setpoint warning
- Return air control (with ETV)
- Liquid fill alerts
- Different security access levels for appropriate personnel
- Engine and electric hour display
- Data Acquisition System (DAS) and TracKing capability
- Refrigeration capacity alarms

## Save time and fuel with ETV

*ETV (electronic throttling valve) gets your truck to the right temperature faster.*



**ETV: The fastest pull down (and pull up) in the industry with less fuel used and fewer emissions**

## Unmatched Quality and Reliability

*Using the latest and most rigorous testing techniques at state-of-the-art R&D centers worldwide, Thermo King's new T-Series delivers unsurpassed quality in every unit.*

- Quality and Reliability delivered day 1
- Dedicated engineering and testing
- State-of-the-art testing centers worldwide



# T-Series Options

	T-500R	T-600R	T-800R	T-1000R	T-600	T-800	T-1000	SPECTRUM T-800	SPECTRUM T-1000
SmartPower (230v/3 phase/60Hz)	■	■	■	■	■	■	■	■	■
SmartPower 460/3/60 (400/3/50)	■	■	■	■	■	■	■	■	■
ETV (Electronic Throttling Valve)	■	■	■	■	■	■	■	■	■
Premium Display	■	■	■	■	■	■	■	■	■
Hand Held TSR-2 Diagnostic Tool	■	■	■	■	■	■	■	■	■
Body Mount Enclosure for HMI	■	■	■	■	■	■	■	■	■
Rear Remote Control (flushmount)	■	■	■	■	■	■	■	■	■
Easy-Read Thermometer	■	■	■	■	■	■	■	■	■
Remote Indicator Lights	■	■	■	■	■	■	■	■	■
DAS (Data Acquisition System)	■	■	■	■	■	■	■	■	■
Door Switch	■	■	■	■	■	■	■	■	■
Battery Box	■	■	■	■	■	■	■	■	■
Battery (truck)	■	■	■	■	■	■	■	■	■
Heat (electric)	■	■	■	■	■	■	■	■	■
Engine Block Heater	■	■	■	■	■	■	■	■	■
Fuel Tank (30 gallon aluminum side fill)	■	■	■	■	■	■	■	■	■
Quick Oil Drain Kit (external mounted, quick connect)	■	■	■	■	■	■	■	■	■
Whisper™ Plus Sound Kit	■	■	■	■	■	■	■	■	■
Hose Management Channel	■	■	■	■	■	■	■	■	■
Top Cover and Screen	■	■	■	■	■	■	■	■	■
Evap Side Screens	■	■	■	■	■	■	■	■	■
Snow Cover	■	■	■	■	■	■	■	■	■
Special Finish Paint	■	■	■	■	■	■	■	■	■
Chrome Grills	■	■	■	■	■	■	■	■	■
Single Temp with Remote Evap	■	■	■	■	■	■	■	■	■
MT Evap Tubing	■	■	■	■	■	■	■	■	■
Transverse Drain Kit	■	■	■	■	■	■	■	■	■

■ Available option    ■ Not available    ■ Standard feature

## Available Thermo Gard™ Service Programs

### Silver

#### Centralized Billing

Billing made easy to save you time and money.

### Gold

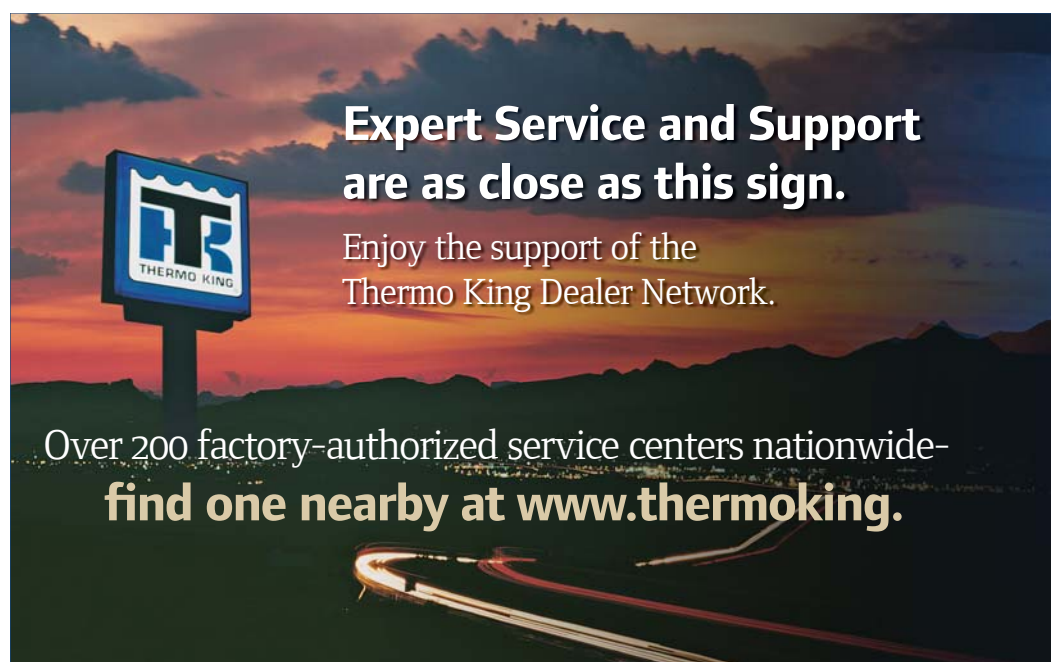
#### Extended Warranty

Flexible configurations that can be designed to meet your specific business requirements.

### Platinum

#### Guaranteed Maintenance

Four service plan options designed to lower costs and increase uptime.



**Expert Service and Support are as close as this sign.**

Enjoy the support of the Thermo King Dealer Network.

Over 200 factory-authorized service centers nationwide—**find one nearby at [www.thermoking.com](http://www.thermoking.com).**



Providing equipment and services to manage controlled-temperature environments for food and other temperature-sensitive products, our Climate Control Technologies sector encompasses both transport and stationary refrigeration solutions. Our product brands include Thermo King®, a world leader in transport temperature control systems, and Hussmann®, a manufacturer of refrigeration and food merchandising equipment.

[www.thermoking.com](http://www.thermoking.com)   [www.hussmann.com](http://www.hussmann.com)   [www.ingersollrand.com](http://www.ingersollrand.com)

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