



Self-powered T-Series M Units *Delivering What Matters*



- *Low fuel consumption*
- *Lower life cycle costs*
- *Easy to use and service*
- *Reduced emissions & waste*
- *Quieter operation*
- *Capacities that match your requirements*



Ingersoll Rand (NYSE:IR) advances the quality of life by creating comfortable, sustainable and efficient environments. Our people and our family of brands — including Club Car®, Ingersoll Rand®, Thermo King® and Trane® — work together to enhance the quality and comfort of air in homes and buildings; transport and protect food and perishables; and increase industrial productivity and efficiency. We are a \$13 billion global business committed to a world of sustainable progress and enduring results.



www.ap.thermoking.com

www.ingersollrand.com

Asia Pacific Headquarters & China Office
8-12F, L'Avenue Shanghai,
99 Xianxia Road, Shanghai, 200051, P.R.C
Tel: +86 21 2221 5000
Fax: +86 21 2221 5409

Global Headquarters
314 West 90th Street
Minneapolis, Minnesota, 55420, U.S.A.
Tel: +1 952 887 2200
Fax: +1 952 887 2529

TK-SP-T-201612-EN

©2016 Ingersoll-Rand Company

Specifications are subject to change without notice.

We are committed to using environmentally conscious print practices.




The new T-Series

Delivering what matters



Content

The new T-Series: Delivering what matters	3
• Introducing the T-Series	4
• The GreenTech  engine	6
• The new TSR controller	7
• Quality you can rely on	8
Key features and options	10
Specifications	13
Genuine Thermo King service parts	14
Thermo King Asia Pacific & India Dealer Service Network	15

Thermo King's new T-Series is the result of years of R&D and exhaustive testing. Built on the proven reliability of the TS and MD product ranges, the T-Series sets new industry standards for reliability, performance and efficiency.

The range has been specially developed to exceed your and your customers' expectations when it comes to truck refrigeration.

The T-Series delivers greater capacities at lower operating speeds and allows for precise temperature control.

Low operation and maintenance costs, as well as fuel saving technologies, make sure you save money throughout your unit's life cycle.

Easy system operation reduces the risk of user errors, while easy service and monitoring allow the unit to run at optimum efficiency at all times.

The T-Series also sets new standards when it comes to the reduction of emissions, waste and noise pollution, offering unmatched performance with minimal environmental impact.

Whatever your application and needs, the T-Series is available in a complete range of capacities, making it the perfect fit for all your transportation requirements.



Introducing T-Series truck refrigeration units

Low fuel consumption

- Through extensive development and field experience, Thermo King have found the right balance between system efficiency, fuel consumption and performance in all ambient conditions for both fresh and frozen produce
- Advanced fuel-saving control technology with the new TSR controller means greater fuel efficiency



Lower life cycle costs

- The TSR controller allows optimum management of all functionalities of the unit in order to deliver what matters for every load
- The Extended Maintenance Interval Programme EMI 2000 reduces maintenance costs

Easy to use and service

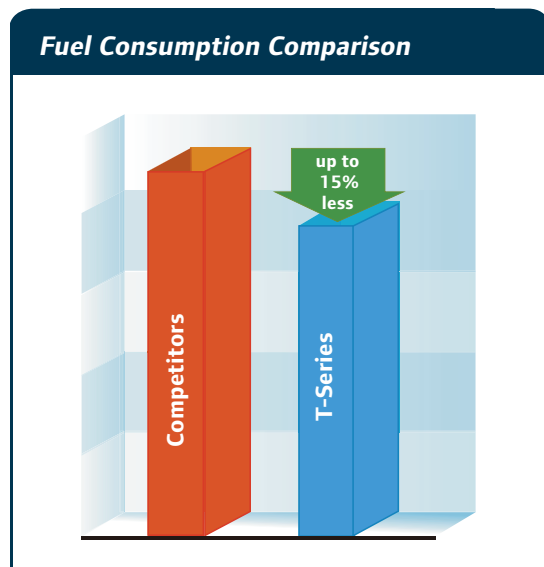
- The new and intuitive TSR controller features a symbolic display for error-free operation
- Low level alerts for oil and coolant
- Programmable service intervals and scheduled maintenance reminders
- Easy service accessibility to electrical and engine components
- Easy to use PC Monitor application for diagnostics and communication with USB port

Reduced emissions & waste

- T-Series units are now equipped with GreenTech™ engines which are the cleanest on the market, exceeding all existing EU requirements
- Reduction of waste through EMI 2000
- 99.7% of the unit material is recyclable

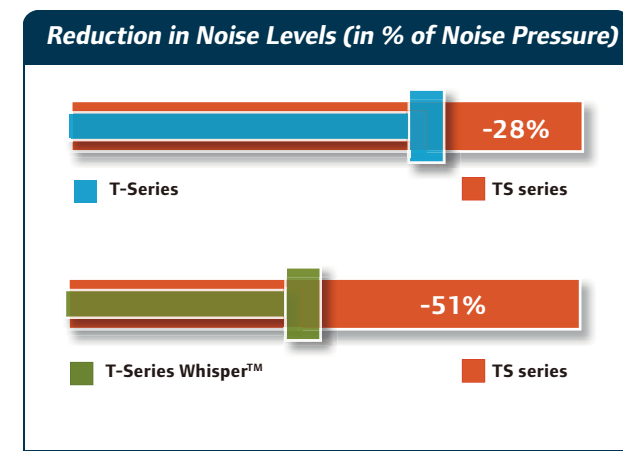
Capacities that match your requirements

- The perfect capacity fit for your specific application
- Eliminate energy waste and save costs
- Capacities from 6000 W to 10600 W at 0°C
- Capacities from 3700 W to 5700 W at -20°C



Quieter operation

- Whisper™ quiet operation
- Poly-V stretch belt with Quiet Channel technology for reduced noise



The GreenTech Engine from Thermo King

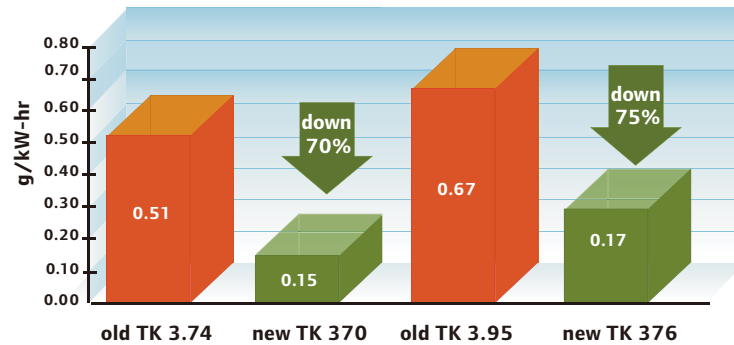
Low emissions, high performance



All the T-Series truck refrigeration units are equipped with the new range of GreenTech engines from Thermo King. These engines drastically reduce emissions, waste and noise pollution, exceeding all known requirements, including the most stringent EU standards. So, when you see the GreenTech name and symbol, you know at a glance that you are looking at refrigeration units that contain the cleanest engines on the market today. Performance has been enhanced too; GreenTech engines are more powerful and cause less stress to components. It is the easy choice for you and the best choice for the environment.



Particulate Matter Emissions



Emissions of particulate matter (PM) from all engines have been substantially reduced

Engine life

Our new range of engines for the T-Series is more powerful, even running at no more than 80% of their maximum output. Thus, both oil and coolant temperatures are reduced, resulting in less component stress and less engine wear.

Bio-fuel compatibility

All the new engines are approved for use with B5 (5% bio/95% petroleum diesel) fuel with no change in maintenance schedules. Fuels with higher bio-diesel content (B6 up to B100) require shorter intervals between oil changes and injector servicing.

The new TSR controller

Easy to use, hard to beat



Powerful and simple to use, the new TSR T-Series controller makes it easy for your drivers to accurately manage the temperature in the truck, no matter what you are hauling. Step-by-step instructions, depicted in symbolic form, make it quick and easy to precisely set and adjust the refrigeration unit, helping your drivers, your customers and ultimately your bottom line.

New intuitive interface

The new TSR in-cab interface displays all information in clear symbols; It doesn't matter what language you speak. This increases ease-of-use and reduces the risk of operator errors.



New TSR in-cab interface



Fuel savings

The TSR includes features that improve fuel savings such as:

- Cycle-Sentry™ mode
- Fuel Saver Mode

Improved diagnostics with PC Monitor™

PC Monitor™ allows you to do all configuration and communication

Easy-to-read LED display

The new LED display is bright and clear, ensuring better visibility in all light conditions. It also functions perfectly in all ambient temperatures.

Enhanced safety and security

At the end of the day, protecting your load is what matters. The TSR makes that job easier and even more effective with a range of enhanced features:

- Keypad with lock-out
- Phase correction
- Diesel/electric auto switching
- Set-point warning
- Oil and coolant level alerts
- Tiered security access levels for appropriate personnel
- Diesel engine and electric stand-by hour meter display

Quality you can rely on

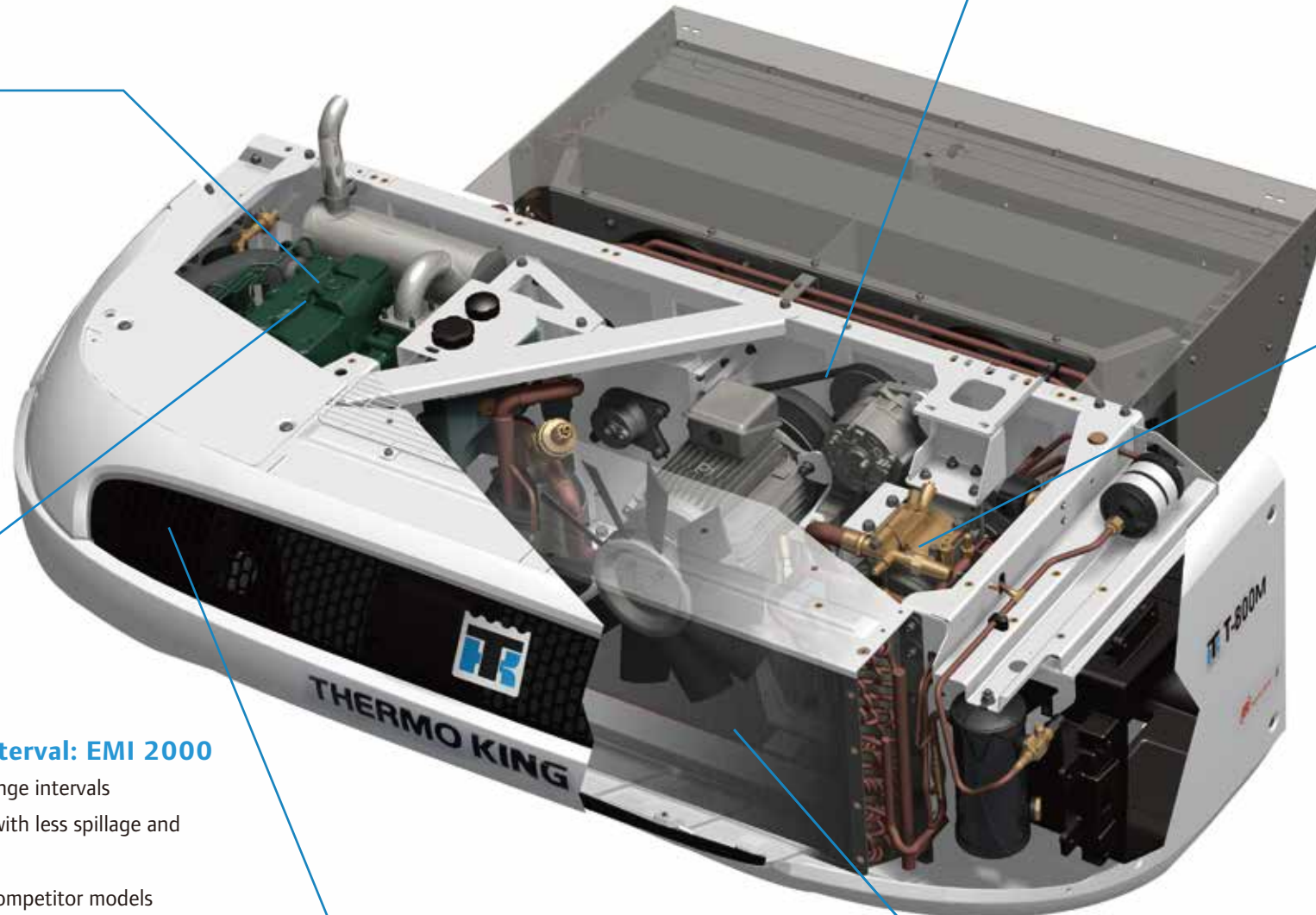
Thermo King's T-Series is the result of years of extensive research and stringent testing, ensuring each unit can provide unmatched reliability and efficiency from day one.

At every stage of the development, the T-Series has undergone rigorous testing procedures in cutting-edge R&D centres worldwide. This includes nonstop endurance tests, accelerated life tests and exposure to extreme operating environments.

All of these measures ensure that you can rely on your T-Series refrigeration unit for any type of application, in all conditions, and without compromise.

GreenTech Engine

- Low emissions
- High performance
- Increased life
- Reduced maintenance



Powertray

- Poly-V stretch belt system delivers exceptional belt life
- Made with Quiet Channel technology: advanced materials virtually eliminate the usual noise caused by misalignment

Thermo King Reciprocating Compressors

- The industry standard for proven reliability and easy service
- X214 & X426 C5 compressors with extended life crankshaft bearings
- High volumetric efficiency due to more pumping capacity per cubic centimetre
- Reliable, time-tested design
- Field-repairable for easy service
- No special tools or facilities required

Extended Maintenance Interval: EMI 2000

- 2000 hours / 24 months oil change intervals
- Reduced environmental impact with less spillage and less waste
- Lower maintenance costs than competitor models

Unit Grill and Skins

- Aerodynamic skins
- Removable side doors for easy service
- Impact-resistant, in-mould colouring process helps reduce and hide scratches
- Recyclable Geloy® engineered plastic

Coils

- Bigger condenser/evaporator gives high ambient capability, more capacity and more efficiency with less noise
- Mechanical-drive evaporator fans reduce maintenance costs



X214 Compressor



X426 C5 Compressor

Key Features and Options

Features and Options	T-600M	T-700M	T-800M	T-900M	T-1000M	T-1100M
FUEL EFFICIENCY & LIFE COST MANAGEMENT						
Cycle-Sentry™	●	●	●	●	●	●
Extended maintenance interval: EMI 2000	●	●	●	●	●	●
Thermo King high performance battery	▲	▲	▲	▲	▲	▲
Whisper™ Low Noise kit	▲	▲	▲	▲	▲	▲
Thermo King EON battery	▲	▲	▲	▲	▲	▲
TherMax™ System	●	●	●	●	●	●
High speed lock out	●	●	●	●	●	●
Fuel Saver Mode	●	●	●	●	●	●
Pre-trip check	●	●	●	●	●	●
DATA CAPTURE & COMMUNICATIONS						
PC Monitor diagnostics & data record software	●	●	●	●	●	●
LOAD PROTECTION						
TSR in-cab HMI	●	●	●	●	●	●
Auto phase correction	●	●	●	●	●	●
Diesel/Electric auto switching	●	●	●	●	●	●
TRANSPORT SCOPE EXTENSION						
Water-heating	▲	▲	▲	▲	▲	▲



● Standard Feature ▲ Option

1 Cycle-Sentry

This stops the engine when refrigeration is not needed and restarts it when refrigeration or battery charge is needed.

- Fuel and CO₂ savings of up to 80%
- Increase component life
- Reduce maintenance costs

2 Extended maintenance interval: EMI 2000

Thermo King EMI 2000 will extend your maintenance interval and reduce your operating costs by:

- Reducing clean-up and disposal costs
- Reducing environmental impact with less spillage and less waste
- Extending engine life with improved, highly efficient filtration

3 Thermo King high performance battery

- Designed exclusively for transport applications
- Incorporates silver-calcium technology to extend service life over 20% longer than conventional batteries

4 Whisper™ low noise kit

The Whisper low noise kit reduces noise levels by over 50% compared to the previous generation of truck units.

5 Thermo King EON battery

- Uses Absorbed Glass Mat (AGM) technology with deep-cycle capability and enormous cranking power
- Maintains capacity at low temperatures better than a wet cell battery
- Saves you the time and money of battery replacements through expected five to eight year service life

6 TherMax system

- Faster defrosts



7 PC Monitor Software

- Record unit data automatically
- Allow you to do all configuration
- Easy to communicate with unit
- Support to do diagnostics

8 TSR in-cab interface

- Simplified keypad to reduce the risk of incorrect operation of the system
- Visible set-point confirmation for load protection
- Enhanced temperature management
- Unit self-check for reduced down time
- Alarm codes for simplified troubleshooting
- Programmable features to tailor operating conditions to the load



9 Auto phase correction

- Avoids reverse fan rotation while on electric stand-by
- Protects your load

10 Diesel/Electric auto switching

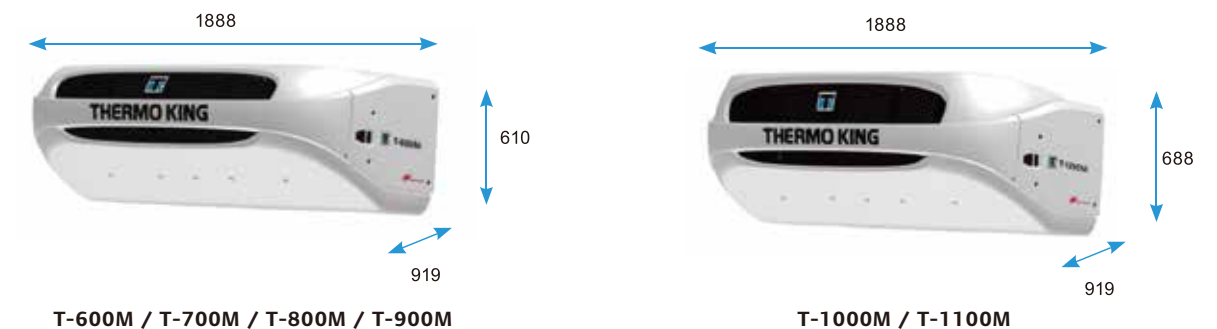
- Auto switching between diesel and electric
- Manual override for ferry operation
- Protects the load automatically (without manual intervention)

T-Series M Units Specifications

SPECIFICATIONS	T-600M	T-700M	T-800M	T-900M	T-1000M	T-1100M
REFRIGERATION CAPACITY: SYSTEM NET COOLING CAPACITY AT 30°C AMBIENT TEMPERATURE UNDER A.T.P. CONDITIONS						
Engine Power (W)	0°C	6,000	6,550	7,600	8,050	10,600
	-20°C	3,700	4,000	4,300	4,500	5,700
Electric Stand-by (W)	0°C	3,700	4,600	5,900	6,200	6,720
	-20°C	2,600	3,200	3,300	3,470	4,200
HEATING CAPACITY: BOX TEMPERATURE 2°C, AMBIENT TEMPERATURE -18°C						
Engine power(W)	3,100	3,100	3,100	3,100	4,100	4,100
Engine power and Water-heating(optional)(W)	6,300	6,300	6,300	6,300	7,300	7,300
AIRFLOW: ON HIGH SPEED ENGINE OPERATION						
Airflow volume @ 0 Pa static pressure (m³/h)	2,700	2,700	2,700	2,700	3,200	3,200
WEIGHT: NOT INCLUDES BATTERY						
Model 30: cooling and heating on engine operation (kg)	443	440	443	440	461	457
Model 50: cooling and heating on engine and stand-by operation (kg)	468	465	468	465	510	505
ENGINE: LOW EMISSIONS, 3 CYLINDER, LIQUID COOLED						
Model	TK 370	TK 370	TK 370	TK 370	TK 376	TK 376
Rating (kW)	11.2	11.2	11.2	11.2	14.6	14.6
Maintenance interval (hr)	2,000	2,000	2,000	2,000	2,000	2,000
COMPRESSOR: LIGHTWEIGHT ALUMINIUM ALLOY						
Model	X214	X214	X214	X214	X426 C5	X426 C5
Displacement (CC)	228	228	228	228	426	426
ELECTRIC STAND-BY OPTION						
Voltage / Phase / Frequency (V/Ph/Hz)	380V/3Ph/50Hz					
Rating (kW)	4.5	4.5	4.5	4.5	7.5	7.5
REFRIGERANT: R-404A ZERO OZONE DEPLETION POTENTIAL (ODP), INTERNATIONALLY APPROVED						
Charge (kg)	3.6	3.0	3.9	3.0	4.1	3.0

Note: Refrigerant charge listed is for reference. Vehicle and piping configurations determine correct charge weights

Dimensions(mm)



Warranty Terms

Please contact the local dealers directly for specific warranty terms.



Always insist on genuine Thermo King service parts

Thermo King understands the importance of parts availability and performance. That's why we have expanded our range of aftermarket products. Now you can get the parts and accessories you need, where you need them, when you need them, quicker and more efficiently than ever before. Our goal is to provide you with a total solutions package to increase operating performance and reduce life cycle costs.

Replacement parts

Genuine Thermo King replacement parts are proven time after time in side-by-side testing to be superior to other non-original parts. Specifically engineered to provide optimal performance and maximum life, Thermo King replacement parts protect your investment and give you confidence and peace of mind on the road.

Maintenance parts

Thermo King offers the highest quality in durable maintenance parts. All parts have been carefully selected and designed to keep your Thermo King equipment operating efficiently and at full capacity for longer and to reduce life cycle costs.



14



Thermo King Asia Pacific & India Dealer Service Network

When you buy a Thermo King, you're buying the most reliable transport refrigeration unit on the planet. And to make sure it stays that way, we throw in the most reliable, most skillful dealer service network on the planet. It's a network that keeps the light on 365 days a year, 24 hours a day.

Thermo King Dealers have been servicing transport temperature control equipment for nearly 80 years now. Nearly 500 service points are across Asia Pacific & India. We offer Thermo King service at every crossroads and in every port. When the customers can't come to us, we go to them.

Dealers are a great platform for long-term successful customer relationships. Each dealer provides: Thermo King trained and certified technicians, comprehensive service contract programs, 24 hour and mobile service, Thermo King and competitive replacement parts, etc.

Anywhere in Asia Pacific & India



15

- Sales & Service Dealer
- Service Station

Note: dealer sales & service point quantity

Japan & Korea	183
China	108
Australia & New Zealand	95
India	48
SEA	47

