

MD-200/MD-300/MD-200 MT

Proven reliability, unbeatable quality and multi-temperature flexibility.



- Now available for multi-temperature trucks
- Reliability and performance you've come to expect in an innovative new design
- Aluminium frame and exterior panels for light weight and corrosion resistance
- Reduced maintenance costs through EMI 2000
- Exclusive TherMax™ (MD-200/MD-300) system provides faster defrosts, superior heating capacity



Superior quality and reliability



High capacity compressor

At the heart of the MD range is the X214 Deep Sump two cylinder compressor, engineered specifically for R-404A. It is considered to be the most efficient reciprocating compressor in the industry, delivering optimum pumping and cooling capacity.



Reduced maintenance

Maintenance is a significant portion of the total life cost of a temperature control system. Thermo King's MD range uses innovative design to minimise maintenance, resulting in lower maintenance cost.

These units come equipped as standard with Thermo King's exclusive EMI-2000 filters and fluids package increasing service intervals.

- · 2,000 hour oil change
- 12,000 hour coolant

Low Decibel Sound Reduction System

The new MD range offers our new Low Decibel Sound Reduction System as an option.

Warranty coverage

- 1st year complete warranty
- · 2nd year major components warranty: covers specified components

Thermo King customers have the reassurance of our worldwide dealer network.

We're at your service twenty-four hours a day, seven days a week. Our multilingual telephone service (Thermo Assistance) makes us easy to reach from anywhere, at any time.

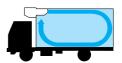




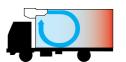
Belt-driven dual evaporator fans

Delivering superior air flow. Thermo King MD-200 / MD-300 / MD-200 MT systems employ two high output,

belt driven fans that are powered by the system's diesel engine. This creates a large volume of high velocity air, which results in increased air circulation throughout the entire cargo area. Superior air circulation provides faster box temperature pulldowns, faster recoveries after door openings, minimal temperature fluctuations and virtual elimination of hot spots and short cycling.



Thermo King's Load Encircling™ full air throw.



Prevents short cycle air flow.

TherMax[™] system for faster defrosts and superior heating capacity

An exclusive feature in all Thermo King MD-200 / MD-300

SMART REEFER® units is the proven TherMax heat and defrost system. TherMax is simply a better way to generate more heating capacity when it's needed. By using a special condenser evacuation cycle, more refrigerant is made available during heat and defrost modes.



Economy and efficiency

The MD range's exclusive space saver condenser provides maximum cab clearance and reduces truck body height on conventional chassis.

The cube saver evaporators optimise payload space below the evaporator for all types of cargo.

The MD range is designed for use with totally chlorine-free R-404A refrigerant. This means that the MD range meets all international requirements for refrigerants.

Fuel economy

Fuel contributes approximately 40% of the total life cost of a temperature control system. The new MD range consumes significantly less fuel than competitive products. This means less fuel costs and reduced environmental emissions.



Service accessibility

Designed for rapid and full access to the engine compartment, saving time and money in service

operations.

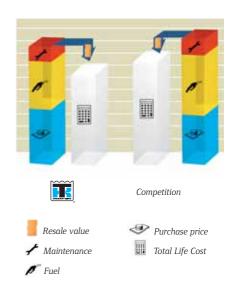
The unique exterior design allows individual panels to be removed and replaced instead of the entire skin.

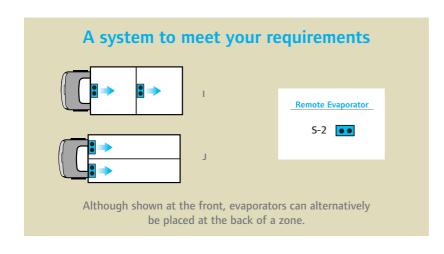
Total Life Cost

Too often, purchase price is the prime concern when specifying equipment. However, lower fuel costs, lower maintenance costs and higher resale values mean that a Thermo King unit's total life cost is actually lower than competitive products.

Furthermore, Thermo King offers superior design, components, build quality and performance.

This means enhanced load protection and reduced downtime resulting in increased revenues.







MD-200/MD-300/MD-200 MT: key features and options

1- TOTAL KARE

Because maintenance costs constitute a key variable in the Total Life Cost of a temperature control system, we now offer, through Total Kare, a complete selection of maintenance programmes.



2- CYCLE-SENTRY

Stops engine when refrigeration is not needed and restarts when refrigeration or battery charge is needed.

- Fuel savings of up to 80%
- Increases component life
- Reduces maintenance costs

3- EXTENDED MAINTENANCE INTERVAL

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

- Reducing clean-up and disposal cost
- Reducing environmental impact with less spillage and less waste
- Extending engine life with improved, highly efficient filtration
- Reducing scheduled maintenance cost by up to 40%



4- THERMO KING HIGH PERFORMANCE RATTERY

The Thermo King high performance battery is designed exclusively for transport refrigeration applications. It is the only battery recommended by



Thermo King for its equipment. It incorporates new Silver and Calcium technologies that provide performance far superior to that of any conventional automotive battery technology. The Thermo King high performance battery minimises your costs and maximises your confidence on the road; it is totally maintenance free and delivers a service life more than 20% longer than conventional batteries.

5- WARRANTY COVERAGE

- 1st year complete warranty
- 2nd year major components warranty: covers specified components



6- DAS (DATA ACQUISITION SYSTEM)

High performance data recorder system. Records temperatures, set point, operating modes and external events.

- Data can be output to computer or printer
- Operates independently of unit controller
- 512K memory stores over one year's data
- Reassures customer of total quality control
- Provides evidence of correct practice
- Approved to EN-12830, CE Mark and IP-65 standards
- Up to six independent sensors
- Automatic power-up and shut-off to protect unit battery

7- WINTRAC (DATA ANALYSIS SOFTWARE)

Wintrac is a Windows based, simple to use, multilingual management software package designed to communicate and read data from all Thermo King temperature recorder devices. It provides quick and easy answers to all your questions in relation to the performance of the temperature control unit and the temperature of the produce while in transit

8- TKDL (DATA CAPTURE)

- TKDL
- User-friendly temperature recorders for all makes of temperature-controlled equipment
- Simple data offload to PC
- Delivery and journey printouts at the touch of a button
- Approved to EN-12830, CE Mark and IP-65 standards
- Up to four independent sensors and 512K memory

9- FLEETWATCH

FleetWatch

TracKind

User-friendly software empowers fleet manager with automatic custom reporting.

- Provides seamless connection to collect and organise output from Thermo King's DAS and TKDL data recorders
- Automatically organises data recorder output data into simple, selectable reports useful to your operation
- Reports are easy to understand and user-friendly

10-TRACKING

Complete load monitoring and fleet tracking at your fingertips

- Monitors sensitive loads via the web
- Increases truck asset utilisation
- Reduces operating costs
- Enhances customer satisfaction
- Increases security and reduces insurance risk
- TracKing can be sold with a Total Kare service contract
- TracKing is compatible with all Thermo King dataloggers and trailer controllers
- www.tktracking.com

11- SMART REEFER® IN-CAB CONTROLLER

- Simplified keypad to reduce 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 trouble-shooting
- Programmable features to tailor operating conditions to the load



12- TG-V IN-CAB CONTROLLER

Monitor and control of both compartments







| | MD-200/MD-300 | MD-200 MT | | | | | |
|---|---------------|-----------|--|--|--|--|--|
| Life Cost Management | | | | | | | |
| 1- Guaranteed Maintenance Contracts | | | | | | | |
| 2- Cycle-Sentry start / stop control system | • | 0 | | | | | |
| 3- EMI 2000 extended maintenance | • | • | | | | | |
| 4- Thermo King High Performance Battery | • | • | | | | | |
| 5- Warranty Coverage | • | • | | | | | |
| 6- TherMax system | • | | | | | | |
| Data Capture & Communications | | | | | | | |
| 6- DAS (Data Acquisition System) | 0 | | | | | | |
| 7- Wintrac data analysis software | | | | | | | |
| 8- TKDL data capture | • | • | | | | | |
| 9- FleetWatch fleet management software | • | • | | | | | |
| 10- TracKing tracking and load monitoring | • | | | | | | |
| Load Protection | | | | | | | |
| 11- SMART REFFER® In-cab Controller | • | | | | | | |
| 12- TG-V In-cab Controller | | • | | | | | |
| 13- Remote Monitoring | • | | | | | | |
| 14- Auto Phase Correction | • | | | | | | |
| 15- Diesel/electric auto-switching | • | | | | | | |
| 16- Door Switches | | | | | | | |
| Environmental Protection | | | | | | | |
| 17- Low Decibel Sound Reduction System | 0 | 0 | | | | | |
| 17- Low Decibel Sound Reduction System | O | O | | | | | |

Standard Feature

O Option : factory installed

Option : dealer supplied

13- REMOTE MONITORING

Remote monitoring allows you to have controls where you want them. Drivers can operate the unit safely and easily. No more climbing on the cab to read gauges or adjust settings.

14- AUTO PHASE CORRECTION

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

15- DIESEL/ELECTRIC AUTO SWITCHING

• Ensures cargo protection even if electricity supply is interrupted

16- DOOR SWITCHES

- Magnetic door switch minimises cargo temperature fluctuations
- Protects load



17- LOW DECIBEL SOUND REDUCTION SYSTEM

• Quieter operation and reduction of noise emissions



Exclusive driver training software

Thermo King's Tutor Series with "Professor Kool" provides rapid and effective interactive training to reduce driver error and ensure optimum equipment operation.

MD-200/MD-300/MD-200 MT: specifications

SYSTEM PERFORMANCE

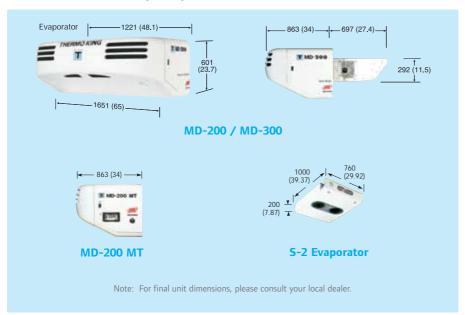
| | | MD-200 6 m - 6.5 m | | MD-300 | | \$ | |
|--|-----------------|-----------------------|-------|-----------|-------|----------------|-------|
| Refrigeration capacity: System net cooling capacity at 30°C ambient temperature under A.T.P. conditions | | | | | | | |
| Return Air To Evaporator | | 0°C | -20°C | 0°C | -20°C | 0°C | -20°C |
| Capacity on engine power | W | 5,200 | 3,500 | 6,300 | 4,000 | 5,900 | 3,900 |
| Capacity on electric stand-by | W | 3,600 | 2,600 | 4,300 | 2,700 | 3,700 | 2,700 |
| Airflow: on high speed engine operation | | | | | | | |
| Airflow volume @ 0 Pa static pressure | m³/hr | 2,720 | | 2,720 | | 2,260 | |
| Discharge Velocity (airthrow) | m/s | 7.9 | | 7.9 | | 9.1 | |
| Weight: includes Low Decibel package | | | | | | | |
| Model 30: cooling and heating on engine operation | kg | 363 | | 378 | | 348* | |
| Model 50: cooling and heating on engine and electric stand-by operation | kg | 385 | | 400 | | 370* | |
| Engine: 3 cylinder, liquid cooled | | | | | | | |
| Model | | TK3.74 | | .74 TK3.7 | | .74 TK3.74 | |
| Rating | kW | 9.3 | | 9.3 | | 3 9.3 | |
| Maintenance Interval | hrs | 2000 | | 0 200 | | 00 2000 | |
| Compressor: lightweight aluminium alloy | | | | | | | |
| Model | | TK X214 | | TK X214 | | TK X214 | |
| Displacement | cm ³ | 228 | | 228 | | 228 | |
| Electric Stand-by Motor | | | | | | | |
| Voltage / phase / cycles | | 400/3/50 | | 400/3/50 | | 400/3/50 | |
| Rating | kW | 3.13 | | 3 3.13 | | 3.13 | |
| Refrigerant: R-404A zero Ozone Depletion Potential (ODP), internationally approved | | | | | | | |
| Charge | kg | 3.0 | | 3.0 3.0 | | 5.2 | |

^{*} Condenser only

INDIVIDUAL EVAPORATORS

| Refrigeration capacity: (NB: Capacities of host unit and individual evaporators not cumulative.) System net cooling capacity at 30°C ambient temperature under A.T.P. conditions | | S-2 | |
|--|-----------|-------|-------|
| Return Air To Evaporator | | 0°C | -20°C |
| Capacity | W (Up to) | 5,500 | 3,290 |
| Airflow | | | |
| Airflow volume @ 0 Pa static pressure | m³/hr | 1,130 | |
| Discharge Velocity (airthrow) | m/s | 9.1 | |
| Weight | | | |
| | kg | 45 | |

Dimensions: Millimetres (inches)



Warranty Summary

Specific terms of the Thermo King Ireland Ltd. 24 month limited warranty (TK 52506-9-CH) are available on request. Thermo King excludes liability in contract and tort (including strict liability and negligence) for any special, indirect or consequential damages by reason of the installation or use of any covered product or its mechanical failure.

Specifications are subject to change without notice

SERVICE PARTS AND ACCESSORIES

Now, you can get the parts, accessories and services you need, where you need them, when you need them, quicker and more efficiently than ever. Recognised as the industry leader, Thermo King understands the importance of immediate parts availability and quality service performance. That's why we are expanding our aftermarket product line and increasing our service offerings. Our goal is to provide you with the total solutions package to keep your units operating for longer, with less down time.

Replacement Parts

Genuine Thermo King replacement parts are proven time after time to beat the competition in side-by-side testing. Engineered to provide optimal performance and maximum life, Thermo King service parts protect your investment and provide you peace of mind and confidence on the road. Insist on Genuine Thermo King Parts, every time!

For Maintenance

Thermo King offers the highest quality in durable maintenance parts on the market today. All products have been carefully selected and designed to keep your Thermo King equipment operating efficiently and at full capacity for longer.

Insist on genuine Thermo King products . . . there is a difference!

TOTAL KARE Service Contracts

Because maintenance costs constitute a key variable in the Total Life Cost of a temperature control system we can offer, through Total Kare, a complete selection of maintenance programs.

Thermo King - Total Kare is the solution for all your concerns about fleet management, offering you a program tailored to your needs. You only have to ask Thermo King Total Kare and we will answer what else we can do for you.

Life Cost Management

*** Full Services

*** Extended Warranty

** Preventative Maintenance

* Central Administration

Your Needs + TK² Advantages = Your Benefits

Anywhere in Europe, 24 hours a day, 365 days a year.







www.thermoking.com



Providing equipment and services to manage controlled-temperature environments for food and other perishables, 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 system and Hussmann®, a manufacturer of refrigeration and food merchandising equipment.

 $www.thermoking.com \\ www.hussmann.com \\ www.ingersollrand.com$

For further information please contact:

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