## **THERMO KING**

UT-1200X

High capacity and reliability for skirt-mount applications.



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UT-1200X



# The all-new UT-1200X

Welcome to the all-new UT-1200X, a skirt-mount refrigeration unit designed to have a big impact on your bottom line, but very little impact on the environment.

The UT-1200X is designed especially for skirt-mount applications, rather than being adapted from nose-mount units, as some competitive units are. This new unit was developed and extensively tested at our state-of-the-art global research and development centers, resulting in increased reliability, durability and performance, all while saving you money and giving mother nature a hand.



### Delivers to You:

- Lower fuel costs
- Improved reliability
- Increased airflow
- Improved corrosion resistance
- Easy, lower-cost installation
- Easier service accessibility
- Designed specifically for skirt-mount applications



## Helps the **Environment:**

- $\boldsymbol{\cdot}$  Lower fuel consumption
- Reduced engine emissions
- R-404a refrigerant
- Standard Whisper<sup>™</sup> noise reduction
- EMI-2000 extended maintenance interval

Thermo King is the Green Leader

Thermo King offers industryleading 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.



## The future of truck temperature control: the Scroll compressor

The clear choice for peak efficiency and maximum cooling capacity.

## How the Scroll compressor WORKS:



- Compression in the scroll is created by • the interaction of an orbiting spiral and a stationary spiral. Gas enters an outer opening as one of the spirals orbits.

The open passage is sealed off as gas 2. is drawn into the spiral. As the spiral continues to orbit, the gas is compressed into an increasingly smaller pocket.

By the time the gas arrives **3.** at the center port, discharge pressure has been reached.

Actually, during operation, all six **4.** gas passages are in various stages of compression at all times, resulting in nearly continuous suction and discharge.

## Scroll compressor Advantages

### **Technological**

- High efficiency means high capacity
- Greater capacity means fast pulldown/recovery
- 83% fewer moving parts means high reliability/long life
- Lower fuel consumption means more operating profit
- No pistons or rods means less vibration

### Environmenta

- Less fuel required means less fuel consumed
- Less fuel consumed means lower diesel emissions
- Quieter operation means lower noise emissions
- Chlorine-free R-404A means zero ozone depletion

## The UT-1200X: Big time Perform

### SMART REEFER Controller

**features** an easy-to-use keypad that reduces errors, visible set point confirmation, enhanced load protection and reduced operating and maintenance costs.

#### Auto Phase Reversal avoids

reverse fan rotation while on electric standby and protects loads.

#### **Magnetic Door Switches**

minimize cargo temperature fluctuations and protect the load.

### DAS (Data Acquisition System)

A high performance data acquisition system that records temperatures, set point, operating modes and external events.

### **TKDL (Thermo King Data**

**Logger)** user-friendly stand-alone temperature recorders for all makes of temperature-controlled equipment.

**Two-Year Warranty** on all major components (please see our Warranty Statement).

### Reduced Maintenance

Thermo King extends your maintenance interval and reduces your operating costs by:

- Utilizing the EMI-2000 extended maintenance interval
- Reducing clean-up and disposal cost
- Reducing environmental impact with less spillage and waste
- Reducing scheduled maintenance costs by up to 40%

• Extending filter and belt life with the patented cyclonic air filter and the poly "V" belt

### CYCLE-SENTRY™,

Stops system when heating or cooling is not needed and restarts system when heating, cooling or battery charging is needed.

- Fuel savings of up to 85%
- Increases component life
- Reduces maintenance costs
- Reduces emissions

#### **Diesel/electric auto switching**

- Automatically starts diesel engine if electric power is interrupted
- Manual override for inside operation
- Protects the load automatically (without manual intervention)

#### TherMax system

 Refrigeration management technology offering faster defrosts and greater heating capacity

## Delivering Environmental Benefits while Saving You Money

- Reduced clean up and disposal co
- Reduces environmental impact with the second second
- Reduces maintenance costs over
- Extends engine life



### SmartPower <sup>4</sup>

saves fuel and cuts emissions

SmartPower electric standby allows the unit to operate on electric power in addition to being powered by the standard diesel engine.

During SmartPower operation, power to the unit is supplied by an electric motor connected to a standard power source.

### Lowers your Operating Costs by

- Reducing energy costs by up to 75%
- Lowering maintenance costs
- Extending reefer lifespan

### Helps the Environment by

- · Reducing diesel emissions
- Reducing noise
- Cutting amount of waste generated

## ance

### A lower life cycle 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's life cycle cost is actually lower than a cheaper competitor's product.



sts th less spillage and less waste competitive models



## EMI-2000

Maintenance Interval

reduces maintenance costs and waste

### Standard Features

TK376 Diesel Engine Scroll Compressor SmartPower Electric Standby

Microprocessor Controller

CYCLE-SENTRY™ 🗸

EMI-2000

#### **Diagnostic Tools**

- Unit Self-Check
- Service Test Mode
- Interface Board Test
- 40 Alarm Codes

Whisper<sup>™</sup> Quiet Operation

### Optional Features

DAS (Data Acquisition System) Magnetic Door Switch Battery Box Scissor Kit Fuel Tank Synthetic Oil Remote Indicator Lights



TherMax System Remote Cab Box with Hardware 404A Refrigerant Compressor Oil Filter

3 Programmable Hourmeters

Inlet and Outlet Fuel Lines

4-Gauge Battery Cables, 8-Gauge Control Cable Bypass Oil Filter

# SMART REEFER Controller delivers

Thermo King's SMART REEFER microprocessor controller features an easily read backlit liquid crystal display, simple-to-operate touch keys and can be customized to match individual needs. The controller installs conveniently in the driver's cab or, in a weatherproof enclosure, on the truck body.

Exclusive driver training software such as Thermo King's Tutor Series provides rapid but effective interactive training to reduce driver error and ensure optimum equipment operation. Hour meters indicate when service is due.





### SMART REEFER offers easy access to gauge information:

- Discharge and return air temperature
- Engine coolant temperature
- Battery voltage
- Coil temperature
- Engine oil pressure
- Engine r.p.m.
- 6 hour meters
  - Total on switch hours
  - Diesel engine hours
  - Electric run hours
  - 3 programmable (maint. intervals, etc.)



## 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 nationwidefind one nearby at www.thermoking.com

### System Performance

A one-piece, skirt mount, high-capacity, diesel- powered cooling and heating system for truck and trailer applications. Designed for use with totally chlorine-free R-404A refrigerant. Powered by a special Clean and Silent diesel engine.

### **Refrigeration capacity**

System net cooling capacity at 100°F (38°C) ambient and high speed engine/60 Hertz electric power operation.

#### S-3 + S-3 Evaporator

Evap. Return Air	Btu/hr	
Engine Power:		
35°F (2°C)	34,600	
0°F (-18°C)	22,300	
-20°F (-29°C)	14,700	
Electric Power:		
35°F (2°C)	30,500	
0°F (-18°C)	20,000	
-20°F (-29°C)	12,500	
UTS-E Evaporator		
UTS-E Evaporator Evap. Return Air	Btu/hr	
•	Btu/hr	
Evap. Return Air	<b>Btu/hr</b> 34,000	
Evap. Return Air Engine Power:		
Evap. Return Air Engine Power: 35°F (2°C)	34,000	
Evap. Return Air Engine Power: 35°F (2°C) 0°F (-18°C)	34,000 21,000	
Evap. Return Air Engine Power: 35°F (2°C) 0°F (-18°C) -20°F (-29°C)	34,000 21,000	
Evap. Return Air Engine Power: 35°F (2°C) 0°F (-18°C) -20°F (-29°C) Electric Power:	34,000 21,000 15,000	

### Defrost/heating capacity

System net heating at -20°F (-29°C) ambient and high speed engine/60 Hertz electric power operation.

#### (For S-3 + S-3 or UTS-E Evaporators) Engine Power Electric Power

Btu/hr	Btu/hr	
18,000	11,940	

#### Operation

- Continuous run cool/heat
  on engine operation
- Start/stop cool/heat electric standby operation
- Start/stop cool/heat on engine operation with CYCLE-SENTRY™
- Automatic defrost initiation & termination with microprocessor controlled "Smart Defrost" designed to minimize defrost time
- Automatic defrost initiation
  with air switch

### Airflow

(on high-speed engine operation) **Airflow Volume** @0 pa static pressure S-3 + S-3 2350 cfm UTS - E 2000 cfm **Discharge Velocity** (airthrow) S-3 + S-3 31.2 ft/sec UTS - E 19.3 ft/sec

### **Clean and Silent engine**

- TK 376u diesel engine
- Meets all known EPA emission requirements
- Three-cylinder, 19.6 hp liquid-cooled
- 68 in. displacement
- 11.6 qt. oil capacity

### Proven, high performance compressor

- Thermo King TKO 6 hp compliant Scroll<sup>®</sup>
- 5.98 cu. in. (98 cm<sup>3</sup>) displacement

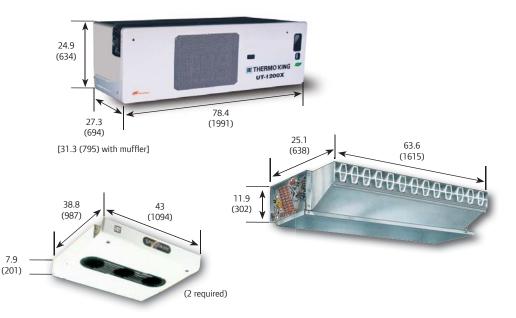
### **Electric motor**

230V/3-Phase/60Hz, 12 hp

### **Specifications**

### Dimensions

Inches (Millimeters)



### Weight (Approximate)

	lbs.	kg
UT-1200X	1200	544
S-3 + S-3	243	110
UTS-E	140	64

### Warranty

Terms of the Thermo King Warranty are available on request from your local Thermo King dealer. Please reference TK 50047 for the Thermo King Self-Powered Truck unit warranty.



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<sup>®</sup>, a world leader in transport temperature control systems, and Hussmann<sup>®</sup>, a manufacturer of refrigeration and food merchandising equipment.

www.thermoking.com www.hussmann.com www.ingersollrand.com

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