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V-700 MAX

The most powerful range with the most advanced controller.

Key Points:

- User friendly and advanced controller Direct Smart Reefer
- A full range available
- As powerful in both cooling and heating modes
- Environmentally friendly
- Low noise

V-700 MAX Features and Options

Standard Features:

- Jet Lube™ compressor lubrication
- Jet Cool™ compressor injection
- In-cab Direct Smart Reefer controller
- Automatic hot gas defrost /Reverse cycle
- Electronic thermostat

Dealer Options:

- Data Capture and Communications
 - TKDL-PRO
 - TKDL-SPR
 - TKDL-DCS
 - [Wintrac data analysis software](#)
 - [TracKing tracking and load monitoring](#)
 - Load Protection
 - [Door switches](#)
 - Life Cost Management
 - [Guaranteed Maintenance Contracts \(Total Kare\)](#)

V-700 MAX Specifications

Description:

- The V-700 Series from Thermo King comprises two-piece split units designed for fresh, frozen and deep frozen applications on trucks. The road compressor is powered by the vehicle's engine and the electric stand-by compressor is powered by an electric motor.

New Exclusive Reverse Cycle Operation:

In a reverse cycle, the condenser fully exchanges functions with the evaporator. This is done by reversing the refrigerant flow using a reverse valve (4-way valve). This provides:

- High heating capacity in similar order to the refrigeration capacity
- Ultra-quick defrost cycle of both condenser and evaporator

TCC (Triple Cooling Capacity):

- Offers you three cooling capacities and fan speeds to automatically match cooling needs of varying intensity. The TCC level is adjusted according to the pressures read within the refrigeration circuit. [Click for chart.](#)
- With TCC you receive the following benefits
 - Outstanding Pulldown Capacity with TCC1. The unit is working at its highest capacity level with both condenser fans running at maximum speed.
 - Ideal for Tropical Conditions. The maximum capacity level makes it possible to function in ambient temperatures up to 50 degrees C.
 - Low Fuel Consumption and Running Costs. Performance is optimized according to the capacity demand thereby reducing the fuel consumption of the truck the capacity delivered is matched to the demand. when working in steady or low demanding conditions, the condenser fans will run at low speed or stop as required.
 - Low Noise Level. Noise is kept to a minimum level in any operating conditions. Particularly in steady state conditions, where there is virtually no noise. In electric stand-by operation, the sound power level varies by 6dBa according to the TCC level. On road operation, the compressor is driven by the engine of the vehicle, hence the noise from the unit is very small in comparison with that of a self-powered unit.

Low Life Cycle Operating Cost Due To:

- Reduced fuel consumption
- Lower maintenance costs)

Lower Maintenance Costs:

- Brushless dc fans in both the condenser and the evaporator offer under extreme working conditions a minimum life of 40,000 hours
- Exclusive reciprocating road compressor and semi-hermetic reciprocating electric stand-by compressor offer long work lives
- Electrical components protected from water and humidity inside a hermetic box
- TCC control system reduces the working time of the fans

Environmentally Friendly:

- A direct drive system is driven by the vehicle engine therefore there are:
 - No direct emissions
 - Les noise
 - Economical fuel consumption

Modern Design:

- Styled with rounded angles
- Smooth curvature of the front panel
- Chic design of the electric box panel
- Ultra Slim Evaporator (only 220mm in height) to maximize payload

Easy Access for Servicing and Maintenance:

- The various doors on the unit allow for rapid access for servicing even in the undermount version. The clip-on electric cover makes for quick and easy access to the electrics of the unit. There are two hourmeters to count the working hours on road and electric stand-by operation.

Models Available:

- V-700 MAX 10
- V-700 MAX 20
- V-700 MAX 30
- V-700 MAX 50

Refrigeration Capacity: European Standard - System net cooling capacity under ATP conditions including 30 degrees C (86 degrees F) ambient and 2400 compressor rpm

Degrees C	Degrees F	Air Return/On the Road		Electric Stand-by 50Hz	
		Watts	Btu/hr	Watts	Btu/hr
0	32	6900	23735	6050	20700
-20	-4	3800	1300	3215	11000
-25	-13	3100	10600	2560	8750

Heating Capacity: (Models 30/50) Conditions: 5 degrees C internal air temperature, -20 degrees C ambient air temperature

Degrees C	Degrees F	Air Return/On the Road		Electric Stand-by 50Hz	
		Watts	Btu/hr	Watts	Btu/hr
5	41	7030	24000	6450	22000

Refrigerant:

- HFC R-404A
- Chlorine: Zero
- Refrigerant charge:
 - V-700 MAX 10/30: 4.7 kg (10.4 lbs)
 - V-700 MAX 20/50: 5.0 kg (11.0 lbs)

Defrost:

- Automatic hot gas defrost /Reverse cycle

Compressor (Engine Driven):

- Reciprocating compressor (TK-315R)
- Number of cylinders: 3
- Displacement: 13.8 cu in (226 cm³)
- Speed Max recommended: 3,000 rpm
- Jet Lube™ and Jet Cool™ compressor lubrication and cooling systems

Evaporator Fan Performance:

- Host evaporator ES700MAX: 2340 m3/h (1370 cfm)

Electric Motors:

- Total current consumption: 24Vdc – 30A
- Total stand-by current consumption:
 - 400V / 3 Phase / 50 Hz: 11.9A
 - 230V / 3 Phase / 50 Hz: 20.6A

- 400V / 3 Phase / 60 Hz: 13.8A
- 230V / 3 Phase / 60 Hz: 23.9A

System Components:

- Condenser
- ES700 MAX Ultra Slim Evaporator
- Reciprocating road compressor
- Installation kit
- In-cab control box

Weight: (approximate)	lbs	kg
Condenser Without electric stand-by	220	100
Condenser With electric stand-by	353	160
ES700 MAX Ultra Slim Evaporator	77	35
Reciprocating Compressor	33	15

Dimensions:	Height		Width		Depth	
Condenser	18 in	458.7 mm	62.7 in	1593 mm	20.6 in	523 mm
ES700 MAX Ultra Slim Evap	8.7 in	220 mm	65.0 in	1650 mm	23.3 in	592 mm
In-cab Controls	2.0 in	52 mm	5.2 in	130 mm	4.3 in	108 mm

Specifications are subject to change without notice.

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