



## V-800 Series

*The most powerful vehicle-powered solution for medium and large truck applications.*



# V-800 Series

The V-800 Series from Thermo King is a two-piece, split design for fresh, frozen and deep frozen applications on medium to large-sized trucks. The road compressor is powered by the vehicle's engine and the electric stand-by compressor is powered by an electric motor located in the unit.

The V-800 Series is equipped with an industry standard swash plate compressor, which uses a wide range of drive kits for ease of installation.

- Standard swash plate compressor for ease of installation
- Highest cooling and heating capacity on the market
- Greener footprint than self-powered units
- Low noise
- Fresh or frozen configurations
- User-friendly Direct Smart Reefer controller

## V-800 Series range

- V-800 MAX 10
- V-800 MAX 20
- V-800 10
- V-800 20

## System components

- Condenser
- ES800 evaporator
- Swash plate road compressor
- Installation kit
- In-cab controller

10 = road compressor only; 20 = road compressor plus standby power

## Unit Selection Guide

The table below indicates a guide to select the right unit in the V-800 Series to match your application based on truck body length and box temperature at an ambient temperature of 100°F. Please consult your Thermo King dealer to determine the right configuration for your application.

| Box Temp | Truck Body Length |           |
|----------|-------------------|-----------|
|          | V-800             | V-800 MAX |
| 35°F     | up to 22'         | up to 24' |
| 0°F      | up to 12'         | up to 20' |
| -20°F    | -                 | up to 16' |

Recommendations are based on precooled loads and K value of 0,35W/m<sup>2</sup>K is used for frozen goods (-20°C) and 0,5W/m<sup>2</sup>K for fresh goods (0°C and +6°C) for a distribution cycle of 8 hours. Recommendations are not a guarantee of performance as there are many variables to be considered. See your Thermo King dealer for complete information.

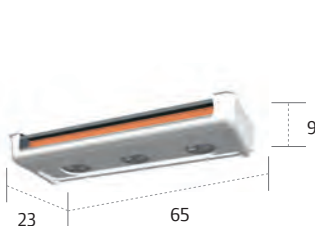




# Specifications

| SPECIFICATIONS  |                  | V-800                            |              |              |
|---|------------------|----------------------------------|--------------|--------------|
| <b>REFRIGERATION CAPACITY: V-800 SYSTEM NET COOLING CAPACITY AT 100°F AMBIENT CONDITIONS (BTU/HR)</b> |                  |                                  |              |              |
| <b>Return air to evaporator</b>   |                  | <b>35°F</b>                      | <b>0°F</b>   | <b>-20°F</b> |
| Capacity on engine power - Swash Plate Compressor (2400 rpm)  | R-404A           | 20,500                           | 9,500        | 6,000        |
| Capacity on electric standby (60HZ)   | R-40 4A (Btu/hr) | 21,000                           | 11,000       | 6,200        |
| <b>REFRIGERATION CAPACITY: V-800 MAX SYSTEM NET COOLING CAPACITY (BTU/HR)</b>                         |                  |                                  |              |              |
| <b>Return air to evaporator</b>   |                  | <b>35°F</b>                      | <b>0°F</b>   | <b>-20°F</b> |
| Capacity on engine power - Swash Plate Compressor (2400 rpm)  | R-134a (W)       | 16,400                           | 6,175        | -            |
| Capacity on electric standby (60HZ)   | R-134a (W)       | 16,500                           | 7,700        | -            |
| <b>EVAPORATOR FAN PERFORMANCE</b>   |                  |                                  | <b>ES800</b> |              |
| Airflow volume  | CFM              | 1600                             |              |              |
| <b>WEIGHT</b>   |                  |                                  |              |              |
| Condenser without electric stand-by   | lbs              | 212                              |              |              |
| Condenser with electric stand-by  | lbs              | 352                              |              |              |
| Evaporator ES800  | lbs              | 77                               |              |              |
| <b>COMPRESSOR: MAX RECOMMENDED SPEED 3000 RPM</b>   |                  |                                  |              |              |
| Model   |                  | TK-21 - Swash Plate              |              |              |
| Displacement  | cc               | 215                              |              |              |
| Number of cylinders   |                  | 10                               |              |              |
| <b>ELECTRIC MOTOR</b>   |                  |                                  |              |              |
| dc voltage options  |                  | 12 Vdc and 24 Vdc                |              |              |
| Electric stand-by option  |                  | 230V/3 Phase/60 Hz               |              |              |
| Total current consumption on the road   |                  | 12Vdc: 50 A, 24Vdc: 30 A         |              |              |
| Total stand-by current consumption  |                  | 230V/3 Phase/60 Hz: 23.9 A       |              |              |
| <b>REFRIGERANT</b>  |                  |                                  |              |              |
| Charge  | R-404A lbs       | 10 version: 10.3, 20 version: 11 |              |              |
|   | R-134a lbs       | 10 version: 10, 20 version: 10.7 |              |              |
| <b>DEFROST</b>  |                  |                                  |              |              |
|   | R-134a/R-404A    | Automatic hot gas defrost        |              |              |

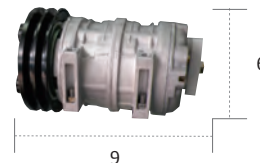
## Dimensions (in)



ES800 Ultra slim evaporator



V-800 condenser



Swash Plate Compressor TK-21



In-cab Direct Smart Reefer



Ingersoll Rand's Climate Solutions sector delivers energy-efficient HVACR solutions for customers globally. Its world class brands include Thermo King, the leader in transport temperature control and Trane, a provider of energy efficient heating, ventilating and air conditioning systems, building and contracting services, parts support and advanced controls for commercial buildings and homes.

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