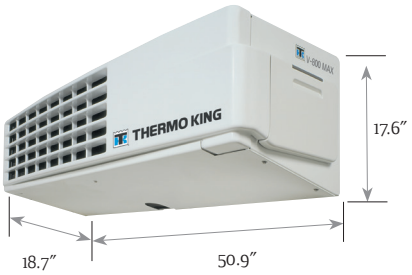
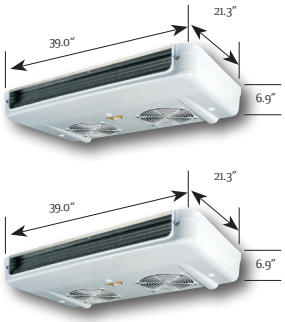
THERMO KING

SPECIFICATION SHEET

# V-520/V-520 MAX




ES300 - SPECTRUM Units




ES500 - Single Temp Units




Thermo King has a Direct Drive unit to meet the needs of your specific application



## R-134a Refrigerant for Fresh Applications

- Lower pressure refrigerant means a longer unit lifespan
- More reliable with better temp management for fresh loads

## R-452A Refrigerant for Frozen Applications

- Greater cooling capacity
- Better temp management for frozen loads

## Unit Features

- Engine-driven compressor
- Multi-temp configuration possible (V-520 SPECTRUM)
- SmartPower™ electric standby option
- DSR microprocessor controller
- Jet Lube compressor lubrication
- Jet Cool compressor injection cooling
- Automatic hot gas defrost
- Optional heating package
- Unit includes installation kit

## Swash Plate Compressor



The V-520 typically uses a swash plate compressor and it is available with the following belt configurations:

- Double A groove
- Poly V groove

| Swash Plate Compressor | |
|---|---|
| Size | 16 |
| Cylinders | 6 |
| Displacement | 9.9 inches$^3$ |

## Reciprocating Compressor



The TK-312R reciprocating compressor has the life of 5 swash plate compressors.

| Reciprocating Compressor | |
|---|---|
| Model | TK-312R |
| Cylinders | 3 |
| Displacement | 11.4 inches$^3$ |

# System Performance

## V-520 Refrigeration Capacity

(System net cooling capacity at 100°F ambient and 2,400 RPM engine operation)

| | 35°F | 0°F |
|---|---|---|
| Engine Power Swash Plate (BTU/hr) | 12,200 | 5,000 |
| Engine Power Recip. Comp. (BTU/hr) | 13,700 | 5,410 |
| Smart Power Electric Standby (BTU/hr) | 10,000 | 3,500 |
| Refrigerant | | R-134a |
| Charge | | 7.9 lbs |

## V-520 MAX and V-520 SPECTRUM™ Refrigeration Capacity

(System net cooling capacity at 100°F ambient and 2,400 RPM engine operation)

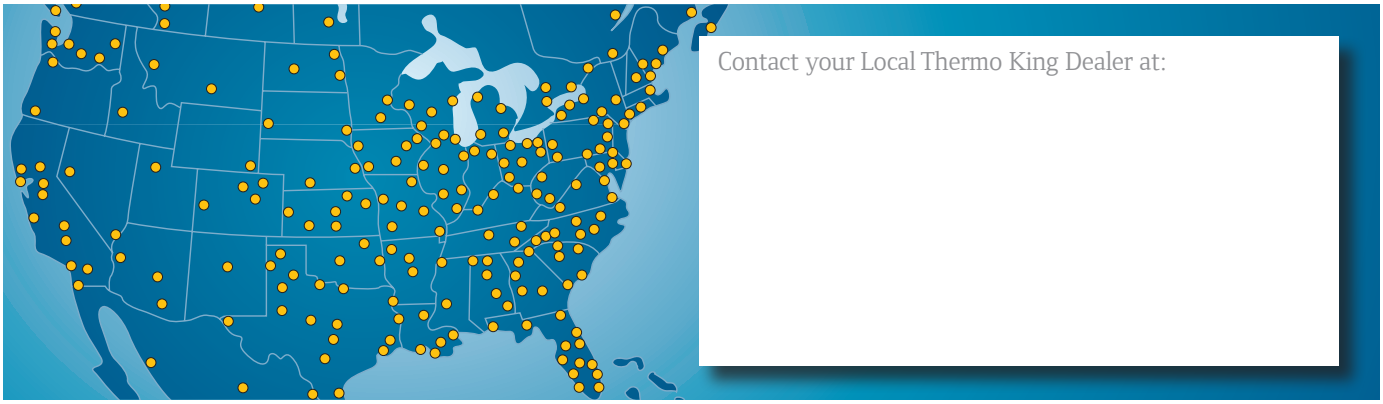
| | 35°F | 0°F | -20°F |
|---|---|---|---|
| Engine Power Swash Plate (BTU/hr) | 15,500 | 8,200 | 5,000 |
| Engine Power Recip. Comp. (BTU/hr) | 16,600 | 8,700 | 5,300 |
| Smart Power Electric Standby (BTU/hr) | 10,400 | 6,600 | 3,500 |
| Refrigerant | | | R-452A |
| Charge | | | 8.2 lbs |

(The V-520 SPECTRUM is the multitemp unit and it has the same capacity as the V-520 MAX)

## V-520 and V-520 MAX System Specifications

| Evaporator Airflow Capacity | |
|---|---|
| ES500 (Single Temp) | 1,415 cfm |
| ES300 (Multi Temp) | 765 cfm |
| **Electric Standby OptionsTotal** | **Total Current Consumption** |
| 230V/1 Phase/60 Hz | 12.7A |
| 230V/3 Phase/60 Hz | 14.1A |
| **Hot Gas Heat Option (MAX Only)** | |
| BTU/hr | 14,000 |
| **System Weight** | |
| ES500 Evaporator (Single Temp) | 60 lbs |
| ES300 Evaporator (SPECTRUM Multi Temp 2) 2 req'd | 40 lbs |
| Condenser with SmartPower Elecric Standby | 277 lbs |
| Condenser w/o SmartPower Elecric Standby | 157 lbs |
| Swashplate Compressor | 16 lbs |
| Reciprocating Compressor | 29 lbs |
| Install Kit | 10 lbs |
| Hose Kit | 16 lbs |

All Thermo King equipment is backed by the Thermo King dealer service network, with over 200 locations across North America.




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