



## Maryville, TN

### SCOPE

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**Model:** VF-500  
**Application:** \_\_\_\_\_  
**Options:** \_\_\_\_\_

### OPERATING CONDITIONS

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|   |       |
|---|-------|
| <b>Air Flow Rate (SCFM)</b>                 | 500   |
| <b>Inlet Air Operating Pressure (PSIG)</b>  | 100   |
| <b>Inlet Air Temperature (°F)</b>           | 100   |
| <b>Relative Humidity (%)</b>                | 100   |
| <b>Minimum Ambient Temperature (°F)</b>     | 32    |
| <b>Maximum Ambient Temperature (°F)</b>     | 100   |
| <b>Maximum Inlet Temperature (°F)</b>       | 100   |
| <b>Maximum Pressure (PSIG)</b>              | 200   |
| <b>Air Pressure Drop (PSI)</b>              | <5    |
| <b>Air Temperature at Dryer Outlet (°F)</b> | 69-80 |
| <b>Outlet Dew Point (°F)</b>                | 38    |

### DRYER ASSEMBLY

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|                                       |     |
|---------------------------------------|-----|
| <b>Height (in.)</b>                   | 45  |
| <b>Width (in.)</b>                    | 34  |
| <b>Depth (in.)</b>                    | 45  |
| <b>Weight (lbs.)</b>                  | 582 |
| <b>Inlet/Outlet Connections (in.)</b> | 2   |

### ELECTRICAL DETAILS

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|                                    |          |
|------------------------------------|----------|
| <b>Electrical Connection</b>       | 460-3-60 |
| <b>Condensing Unit Power (KW)</b>  | 4.38     |
| <b>Compressor LRA (Amp)</b>        | 63.0     |
| <b>Compressor RLA (Amp)</b>        | 9.6      |
| <b>Min Circuit (Amp)</b>           | 15.2     |
| <b>Electrical Protection Class</b> | NEMA 1   |

## SYSTEM DETAILS

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|                                      |       |
|--------------------------------------|-------|
| <b>Drain Outlet Connection (in.)</b> | 0.5   |
| <b>Number of Drains</b>              | 2     |
| <b>Drain Type</b>                    | Timer |
| <b>Noise Level (dB)</b>              | < 85  |

### Heat Exchanger:

|   |                    |
|---|--------------------|
| <b>Heat Exchanger Volumetric Flow Rate (SCFM)</b> | 500                |
| <b>Number of Heat Exchangers</b>                  | 1                  |
| <b>Air to Air Heat Exchanger Type</b>             | Aluminum Plate-Fin |
| <b>Air to Refrigeration Heat Exchanger Type</b>   | Aluminum Plate-Fin |
| <b>Separator Type</b>                             | Internal Demister  |

### Condensing Unit:

|                                      |                         |
|--------------------------------------|-------------------------|
| <b>Type of Cooling</b>               | Air-Cooled              |
| <b>Type of Refrigerant</b>           | R-134a                  |
| <b>Nominal HP</b>                    | 3 1/2                   |
| <b>Condenser Air Flow Rate (CFM)</b> | 2170                    |
| <b>Capacity Control</b>              | Hot Gas Bypass Valve    |
| <b>Expansion System</b>              | Thermal Expansion Valve |

### Refrigeration:

|                                    |              |
|------------------------------------|--------------|
| <b>Refrigerant Charge</b>          | 7 lbs. 0 oz. |
| <b>Refrigerant Compressor Type</b> | Scroll       |
| <b>Maximum Suction (PSIG)</b>      | 65           |
| <b>Minimum Suction (PSIG)</b>      | 28           |
| <b>Maximum Discharge (PSIG)</b>    | 230          |
| <b>Minimum Discharge (PSIG)</b>    | 100          |

### Fan:

|                                    |       |
|------------------------------------|-------|
| <b>Fan Motor Quantity</b>          | 2     |
| <b>Amps Per Motor</b>              | 0.5   |
| <b>Motor Power Consumption (W)</b> | 420   |
| <b>Motor Size (HP)</b>             | 0.167 |