

# DESICCANT DRYAIR 12500 VRF



- > Lower footprint/weight per m<sup>3</sup>/hr
- > A unique triple point control on all machines over 1500 m<sup>3</sup>/hr, measuring the regeneration temperature onto the wheel, the wheel off temperature (wet air) and the RH or Dew point of the air being dried. This combination ensures the amount of energy input is relevant to the moisture being extracted. This can be applied to 500 m<sup>3</sup>/hr units as option extra.
- > Numerous options available, pre-heaters and coolers, post heaters and coolers, humidifiers and many other variations as special machines.
- > Filters up to F7 as standard with HEPPA & ULPA available.
- > Highly efficient Silica Gel Rotor for efficiency & durability, high moisture removal efficiency with the lowest energy costs.
- > Various regeneration options available on units above 1500 m<sup>3</sup>/hr.  
All options are fully modulating.

## APPLICATIONS

- |                   |                    |                      |
|-------------------|--------------------|----------------------|
| → SILOS           | → FOOD INDUSTRIES  | → PHARMACEUTICAL     |
| → TIMBER DRYING   | → MILITARY STORAGE | → PACKAGING          |
| → ARCHIVE STORAGE | → FREEZER STORAGE  | → POWDER MANUFACTURE |

## SPECIFICATIONS

|  |  |                     |
|--|--|---------------------|
| <b>Process Airflow Nominal</b>         | 12500  | m <sup>3</sup> / hr |
| Process Pre filter                     | 3 x 600 x 600 3 x 600 x 300 pleated panel G4 | No / Size / Grade   |
| Process main filter                    | 3 x 600 x 600 3 x 600 x 300 rigid bag F7     | N / Size / Grade    |
| High Perf Silica Gel Rotor             | 1725 x 200                                   | mm                  |
| Desiccant Wheel Rotation Speed         | 9  | RPH                 |
| Process Fan Model                      | DD SRER-11-0630                              |                     |
| Motor Power                            | 5.5  | kW                  |
| <b>Moisture Removal</b>                |  |                     |
| 20°C @ 40% RH                          | 76.2   | kg / hr             |
| 20°C @ 60% RH                          | 104.7  | kg / hr             |
| 25°C @ 60% RH                          | 114.6  | kg / hr             |
| 30°C @ 80% RH                          | 131.55                                       | kg / hr             |
| Total Pressure / External Pressure     | 1128 / 461                                   | Pa                  |
| <b>Regeneration Airflow Nominal</b>    | 4538   | m <sup>3</sup> / hr |
| Regeneration Filter                    | 2 x 600 x 500 pleated panel G4               | No / Size / Grade   |
| Heater Option                          | Electric Thyristor control                   | Electric PTC        |
| Heater Power (on startup)              | 189.1  | kW                  |
| Heater Power (after initial start)     | 113.4  | kW                  |
| Heater option                          | Electric   Gas   Steam                       | ***                 |
| Fan Model                              | DD SRER-11-0400                              |                     |
| Motor Power                            | 2.2  | kW                  |
| Total Pressure / External Pressure     | 995 / 441.5                                  | Pa                  |
| <b>Electrical Supply</b>               | 3p/N/E 50 / 60 Hz                            | 1p/N/E              |
| Voltage                                | 380   415                                    | V / Ac              |
| Electrical Input Power (on start up)   | 7.7  | kW                  |
| Amps per phase                         | 11.71   10.72   -----                        | A/Phase **          |
| ΔPa Process / Regeneration / Pre-purge | 196 / 247 / 163                              | Pa                  |
| <b>Dimensions</b>                      | 2600 x 1900 x 2000                           | L x W x H mm        |
| Process Inlet                          | 1700 x 800                                   | mm                  |
| Process Outlet                         | 800 x 400                                    | mm                  |
| Regeneration Inlet                     | 500 x 1000                                   | mm                  |
| Regeneration Outlet                    | 500 x 250                                    | mm                  |
| <b>Weight</b>                          | 1300   | kg                  |

Process and regeneration fan supplied with a VSD control.

\* pressure readings at dirty filter condition

\* Electrical power consumption on electric

Please note this value does not include regeneration if electric.

\*\*\* Regeneration options.

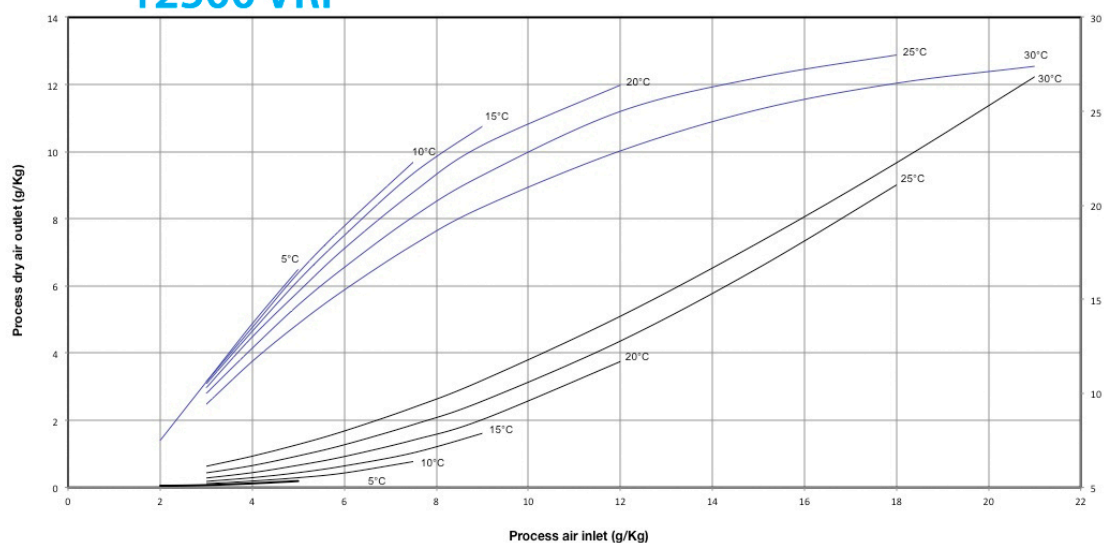
1. electric thyristor control fully modulating not available above Dryair !0000 VRF
2. Natural gas direct fired fully modulating
3. Liquefied petroleum Gas direct fired fully modulating
4. Steam minimum 5 Bar(g) fully modulating but dry steam must be supplied
5. HPHW High pressure hot water fully modulating.

## PERFORMANCE TECHNICAL DRAWINGS AVAILABLE UPON REQUEST

**DESICCANT  
DRYAIR  
12500 VRF**

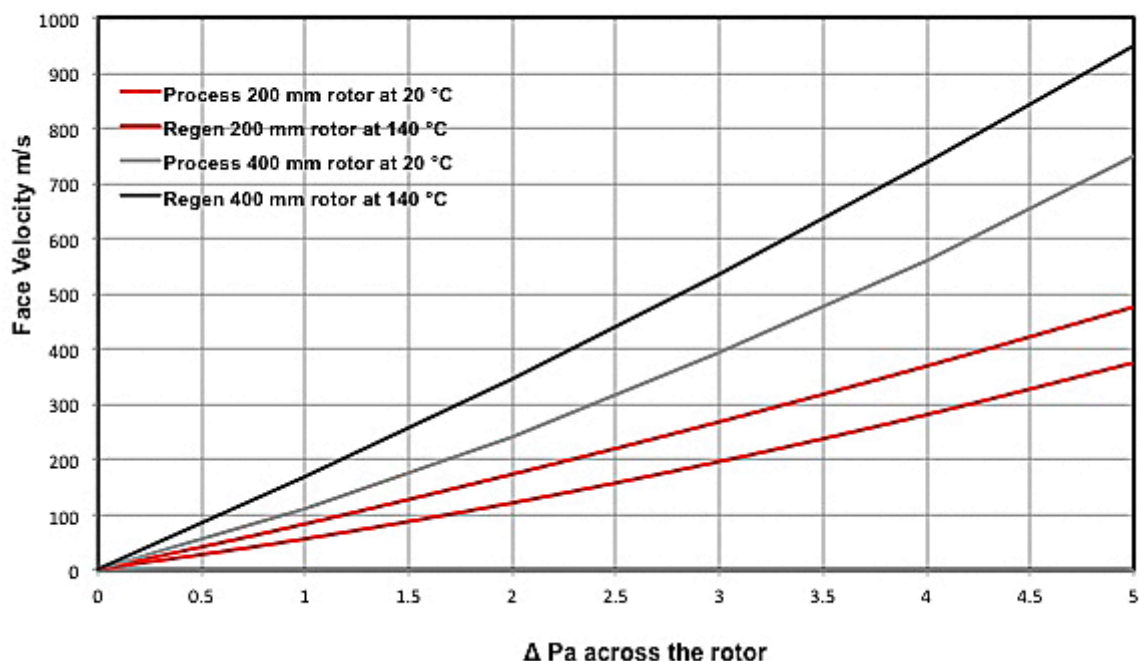
Dryair Performance Chart

234" process, 90" react, & 36" pre-purge  
rotor speed 9 RPH  
Regen temp. 140°C, rotor depth 200 mm.



Dryair Performance Chart

Desiccant rotor pressure drop for the Process  
and regeneration sectors of 200 and 400 deep  
rotors



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TECHNICAL DRAWINGS AVAILABLE UPON REQUEST

