BMIL®

Dry Zone DZ-2000

Desiccant Dehumidifier

ADVANTAGES

- **Simple Installation**
  - **Hang the unit**
  - **Connect power**
  - **Connect a drain line**
  - **No ducting required!**
- **Reduce humidity in the space without adding significant heat**
- **Eliminate frost formation and condensation**

The DZ-2000 is a desiccant dehumidifier that is used to reduce humidity in spaces maintained from 20°F to 55°F. Maintaining a lower humidity level prevents mold and mildew growth, frost formation, condensation drips, and increases shelf-life of the product. The DZ-2000 operates on a patent pending desiccant dehumidification technology. This innovative new design can be installed directly in the space, eliminating the need for duct work. Other cold room dehumidifiers require two large holes in the cold room walls, which result in wasted energy and increased humidity levels due to air leakage.

The regeneration air stream is a completely closed loop cycle. The only byproducts are water vapor from the space that is condensed on the cooling coil and drained away; and an insignificant amount of heat that can easily be removed by the existing cooling equipment. Other cold room dehumidifiers add excessive heat to the cold room requiring post cooling, resulting in an increase in refrigeration horsepower of 25% to 100%. The DZ-2000 cold room dehumidifier does not require post cooling refrigeration and minimizes energy consumption through the use of EC motors, a digital scroll compressor and air-to-air energy recovery. This patent pending design has 50% more dehumidification capacity with 50% less energy consumption than other similar cold room dehumidification equipment.

Dry Zone DZ-2000 Desiccant Dehumidifier

In cold room applications from 20°F to 55°F the DZ-2000 can eliminate the need for defrost cycles which saves energy, reduces temperature fluctuations, protects product integrity, and increases perishable product shelf life.

Construction Features:

- 2" foam-injected double wall panels
- Aluminum interior and exterior walls
- Removable panels for easy component access and minimal clearance requirements

Process Air Components

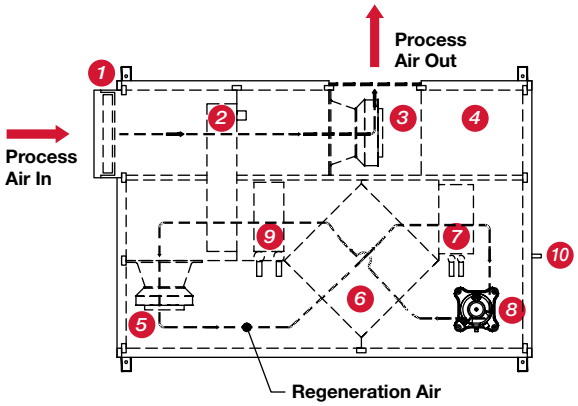
- 2" MERV 8 front access filter rack
- Desiccant wheel
- High efficiency EC motor impeller process air fan

Regeneration Air Components

- Desiccant wheel
- High efficiency EC motor impeller regeneration air fan
- Aluminum air-to-air flat plate heat exchanger
- Fully intertwined DX coil with stainless steel drain pan
- Full capacity condenser coil
- Digital scroll compressor to match dehumidification load

Controls

- DDC controller with remote user terminal
- RA temperature and humidity sensors included (used to calculate space dew point)
- BMS connectivity
- ETL listed



1. Process Air Filter
2. Desiccant Wheel
3. Process Air Fan
4. Controls Section
5. Regeneration Fan
6. Air-to-Air Heat Exchanger
7. DX Coil
8. Compressor
9. Condenser Coil
10. Condensate Drain

DZ-2000 Sizing Chart

APPLICATION	Cold Room									Cold Room & Ice Rink			
Cold Room Space Temperature	20 F			30 F			40 F			50 F			
Cold Room Space Humidity	90% RH	70% RH	50% RH	90% RH	70% RH	50% RH	90% RH	70% RH	50% RH	90% RH	65% RH	56% RH	50% RH
Maximum Capacity (lbs/hr)	8.9	6.6	4.2	12.5	9.5	6.4	15.0	11.6	8.0	15.0	9.3	8.6	7.2
Process Leaving Air Temp/Dew Point (F)	27 / 2.5	25.7 / -1.4	24.3 / -6.1	38.8 / 14.6	37.2 / 9.6	35.4 / 3.7	50.2 / 26.4	48.2 / 21.1	46.2 / 14.4	59.8 / 40	57.2 / 32.8	56.2 / 28.4	55.5 / 26.3
Unit Voltage / Phase / FLA / MCA	208V / 3P / 25.5 / 28.4						230V / 3P / 24.1 / 27.0			460V / 3P / 9.2 / 10.8			
Unit Dimensions and Weight	90" long x 60" wide x 34" high									970 pounds			

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