IceDry[®] Series Desiccant Dehumidifier



Product Description

Frost free cold storage can be a reality with the installation of an IceDry[®] dehumidifier. When an IceDry[®] unit is installed accumulated ice and frost will be significantly reduced or eliminated.

IceDry[®] is the only dehumidifier that has been developed especially for installation inside cold storage areas. The tough cold environment demands new and special features created to ensure a reliable and energy efficient operation of the unit.

Installation of the unit is simple. The IceDry[®] unit is placed close to a wall and ducting around the unit is minimal. Reactivation air is taken from the room next to the cold storage area. Immediately after being started the unit will begin to reduce the ice and frost.

Unique features of the IceDry[®] unit include:

- Thermostat controlled heating fan within the electrical panel
- Special reactivation fan in an insulated fan box with a heating cable
- Reversible panel construction provides installation flexibility

PRODUCT INFORMATION

DEHUMIDIFICATION UNITS FOR FROST FREE STORAGE

Advantages:

- Improved worker safety
- Ice and frost free storage ensures quality
- Reduced electrical and mechanical failures
- Less downtime
- Lower maintenance costs
- Reduced defrost requirements
- Increased efficiency of evaporators

Desiccant Rotors



In the 1950's Munters invented modern industrial dehumidification when it introduced the self-regenerating desiccant rotor, the heart of the dehumidifier.

Today, Munters offers rotors with five desiccant formulations and is the acknowledged expert in the integration of rotors into dehumidification systems and air handlers.





Suggested Specification Guide:

Dehumidifier shall be of the non-cycling sorption type with a single desiccant rotary structure. The unit will be equipped with an internally sealed rotor unit. The rotor casing shall be constructed of durable thermoset plastic and contain isolated sections that will provide a precise balance for dehumidification, reactivation, and heat recovery airflows. The metal frame and access panels shall be constructed from corrosion resistant ALUZINK®. Suitable access panel shall allow access for inspection or servicing without disconnecting ducting or electrical wiring.

The rotary structure shall be a monolithic fabricated extended surface consisting of inert silicates reinforced with uniform diameter glass fibers for maximum strength. The fabricated structure shall be smooth and continuous in the direction of airflow without interruptions or sandwich layers which restrict airflow or create a leakage path at joining surfaces. Desiccant shall not channel, cake or fracture due to repeated temperature and moisture cycling. The materials of construction shall be non-toxic and NFPA 225-ASTM E84 compliant.

Full face contact pressure seals shall be provided to separate the process and reactivation air streams and eliminate detrimental leakage of air or moisture with static pressure differentials of up to 3" of water gauge.

Dehumidifier shall be factory assembled. fully automatic, complete with HoneyCombe desiccant wheel, reactivation heaters, reactivation energy control system, roughing filters, motors, fans, non-racheting desiccant drive unit, automatic controller and all components' auxiliaries. Reactivation Energy Modulation shall be stepless solid state proportioning type. Dehumidifier shall be functionally tested at the manufacturer's factory and shipped complete with all components necessary to maintain normal operation.

*Continual engineering and research for product improvement may result in design and specification changes. Consult factory for certified technical data.

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Technical Specifications*

Process Volume: 825 scfm

Max Reactivation Volume: 225 scfm

Maximum FLA: 23.0A @ 230V/3/60Hz 12.5A @ 460V/3/60Hz

Max noise level unducted (dBA): 80

30% process and reactivation filters

Fan External Static Pressure (in. w.g.) Process: 1.0 Reactivation: 0.5

Process Air Temperature Rise (°F): Process inlet temp $\leq 10^{\circ}$ F = 15°F 20° F = 20°F 30° F = 25°F

Process Outlet Moisture = 0.4 gr/lb when Process Inlet Temperature is $\leq 32^{\circ}\text{F}$

