



*The choice for
desiccant dehumidification*

Typical Unit Specification

Bry-Air MiniPAC

- A. Scope of Work**
- B. Dehumidifier**
- C. Filters**
- D. Volume Dampers**
- E. Electrical**
- F. Options**

A. SCOPE OF WORK

Contractor shall furnish, install and place in operation, acceptable to the engineer, all dehumidifier units with flexible connectors, filters, volume dampers, control panel, and all necessary controls for proper operation of the system, as shown on contract drawings and as specified herein.

The dehumidifier unit shall be arranged to provide continuous dehumidification with constant outlet temperature and humidity for a given inlet condition. The unit shall be a two compartment type using Brysorb desiccant media with process and regenerative sections.

Dehumidifier unit shall be as manufactured by Bry-Air, Inc.

MiniPAC Series "Model MP- " as shown on the plans.

B. DEHUMIDIFIER

Unit shall be capable of sustained operation of either process or react fan without energized reactivation heat for prolonged periods of operation without damage to the humidity transfer media.

The dehumidifier shall be a fully automatic factory assembled package unit, complete with reactivation heaters, filters, motors, fans, desiccant rotor and rotor drive assembly, access panels, volume dampers, automatic electrical panel, and all component auxiliaries as recommended by the manufacturer for safe, unattended automatic operation.

Unit casing shall be constructed of 18 gauge steel to ensure air and vapor tight construction. Air plenums and ducts shall be constructed of 18 gauge steel. Easy-to-remove access panels with vapor proof gasketing shall allow for simple service and inspection. The unit shall have a high grade industrial powder coated finish for corrosion protection.

Unit shall not require field piping, pneumatics, or field erection of fans unless specifically requested by the engineer. Field connection of the utilities shall be performed by the installation contractor.

The dehumidifier desiccant shall consist of high efficiency Brysorb fluted desiccant media in a horizontal rotor with a stainless steel rim mounted on a vertical fixed shaft arrangement. The media shall be adsorbent, non-toxic, non-corrosive and non-flammable.

An observation window shall be provided to permit visual inspection of the rotor while the unit is in operation. Both reactivation air fan and process air fan shall be factory mounted on the dehumidifier. The reactivation and process air fans shall be arranged to provide counter-flow air streams.

BRY-AIR COMPACT DEHUMIDIFIER UNIT – TYPICAL SPECIFICATION

The process and reactivation sections shall be divided by seals designed for long life. High quality PTFE protected silicone rubber wiper seals shall be utilized to seal airstreams. Seals shall be adjustable and removable and access shall be provided to facilitate inspections.

Starting and stopping of the unit shall be accomplished by a (wall or duct) mounted humidistat furnished by the dehumidifier manufacturer with provisions made for its connection on the terminal strip of the control panel, or termination as specified by the engineer.

Reactivation heat for the dehumidifier shall be supplied by electricity, and installed with filters as detailed in the plans.

The dehumidifier shall have [redacted] CFM process air capacity. Reactivation air capacity shall be [redacted] CFM. Both process air fan and reactivation air fan shall have external static pressure of [redacted] " of W.G. and [redacted] " of W.G. respectively. Dehumidifier shall be capable of removing [redacted] lbs/hr of moisture with inlet air condition of [redacted] degree F, dry bulb temperature with [redacted] grains of moisture per pound of dry air.

C. FILTERS

All air entering the dehumidifier must be filtered. Unless otherwise specified, filters shall be cleanable with minimum 30% efficiency and of a size and capacity as recommended for air volumes shown. Filters shall be installed for removal from the side of the housing.

D. VOLUME DAMPERS

Dampers shall be factory installed at the outlets of both process and reactivation air fans. The damper shaft exposed at the quadrant shall be clearly marked to indicate position of damper blades.

E. ELECTRICAL

Electrical characteristics of all dehumidifiers shall be as shown in the schedule on the contract drawings. Unit shall operate on 208-230 volts, [redacted] phase, 60 hertz. Control voltage shall be 230VAC/1PH/60 Hz. Control panel shall be factory mounted and prewired for the system operation and shall be supplied with all necessary components to insure continuous automatic operation. A factory mounted and wired terminal strip shall be supplied within the control panel. The dehumidifier shall be equipped with circuit breakers for circuit protection. Additional standard features shall include reactivation overheat thermostat, cool-down thermostat, and reactivation air proving switch. The dehumidifier shall be equipped with panel indicator lamps for power, run, and fault conditions, and shall have an automatic shut-down circuit in the event of the rotor failing to turn. Manual hand-off-auto switch shall be provided on dehumidifier panel. The dehumidifier shall be able to operate the process fan constantly with the simple addition of a jumper on the terminal strip.

F. OPTIONS

1. Wall mounted or duct mounted humidistat – to sense the air conditions and cycle the dehumidifier on and off in response to the dehumidification load.

Note: This document is subject to change without notice.