

Munters HCD Series

Modular desiccant dehumidifiers

Features

- Weather-tight construction for indoor or outdoor use
- Configurable pre-and post-air treatment module options
- Quick access for easy maintenance
- Easy duct connections
- Multiple blower orientations



Munters HCD series modular dehumidifiers provide end users the essential dehumidification function in capacities of 600 to 12,000 scfm. Along with the basic HoneyCombe® rotor-drive-and-seal assembly, HCD offers your choice of process and reactivation fan and either gas, steam or electric reactivation.

Customers can integrate the desiccant dehumidifier into their own processes or air conditioning systems, or additional modules can be combined to make an HCD Plus. The HCD Plus provides additional process air filtration, cooling, heating and mixing functions that many end users require. The HCD Plus arrangement is skid-mounted, providing a single source, factory assembled package.

These modular dehumidifiers are used in a wide variety of applications from clean room humidity control to chocolate coated candy and central dry air systems for pharmaceutical manufacturing.

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HCD Series standard technical specifications and features

Nominal SCFM	Moisture Removal (lbs/hr) at 75°F, 50% RH	General Dimensions L x W x max H (in.)	General Weight (lbs.)	Typical ESP (in. W.G.)	
				Process	React
600	16	76 x 31 x 56	400	3.5	2.75
1,125	30	130 x 37 x 72	925	3.5	1.4
2,250	60	146 x 47 x 80	1,150	3.75	1.65
4,500	120	146 x 66 x 98	2,050	2.5	2.3
9,000	240	169 x 85 x 112	3,100	1.9	0.8

* Dimensions and weight are approximate

Features

Utilities: 208, 230, 460 or 575 volts

Reactivation heaters:

Electric: 208-575 volts

Steam: 10-150 psig

Indirect/direct fired natural gas or propane,
4.5 to 14" W.G. pressure

Reactivation filter: Permanent and washable

Electric controller: NEMA 4

Installation: Indoor or outdoor

Options: On/off or modulating humidity control, fixed or variable integrated bypass, skids, weatherhoods, pre- and post-air treatment modules can include filtration, cooling and heating, and UL certification

Advanced features

Contact air seals: Separate process and reactivation air at pressures up to 8" W.G. with a five year life expectancy.

Process & reactivation fans: Centrifugal, direct drive with totally enclosed fan cooled motors.

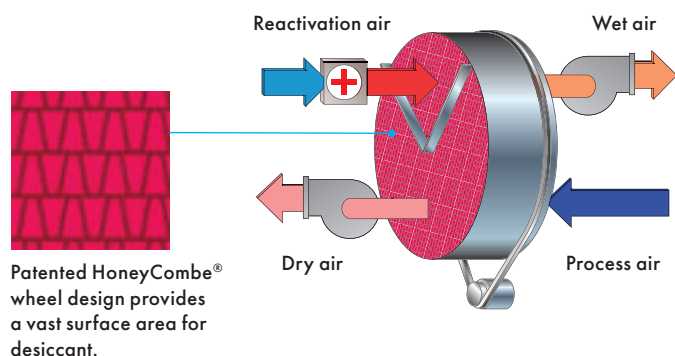
Electrical controls: Continuous automatic operation including motor starters, overload protective devices, microprocessor with indicating lights and fault circuits. All wiring meets the NEC.

Drive system: Simple, self-tensioning drive belt arrangement, few moving parts.

Reactivation utility: Electric with solid state proportioning control, steam with proportional air volume control or gas (direct/indirect) with modulating gas valve.

Dehumidifier housing: Process and reactivation air flow insulation. Durable air-dry polyurethane paint. All welded aluminum cabinet.

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



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HCD-Plus (HCD dehumidifier with add-on modules)

1. Process air blower plenum

The process air blower plenum is insulated to avoid condensation when process air temperature is below the dew point of surrounding air. Also, the process air blower plenum provides in-line airflow to the mixing box, coil module or ductwork.

2. Mixing plenum

The mixing plenum allows incoming air to be mixed with up to four other incoming air streams. Manual dampers are provided to balance the airflows. The mixed air stream can then be further conditioned by downstream modules.

3. Post-heat/cool coil plenum

5. Pre-heat/cool coil plenum

The coil plenum is designed to house a maximum of 10 rows of coils for direct expansion refrigeration, chilled water, hot water, steam or combinations to provide pre- or post-cooling or heating. Alternatively, electric heating elements can also be housed in this plenum. The maximum face velocity is 500 fpm for cooling coils and 900 fpm for heating coils/elements.

4. Face-and-bypass plenum

The face-and-bypass plenum provides 100% bypass capabilities. Face-and-bypass dampers of low leakage design are operated by proportioning actuators.

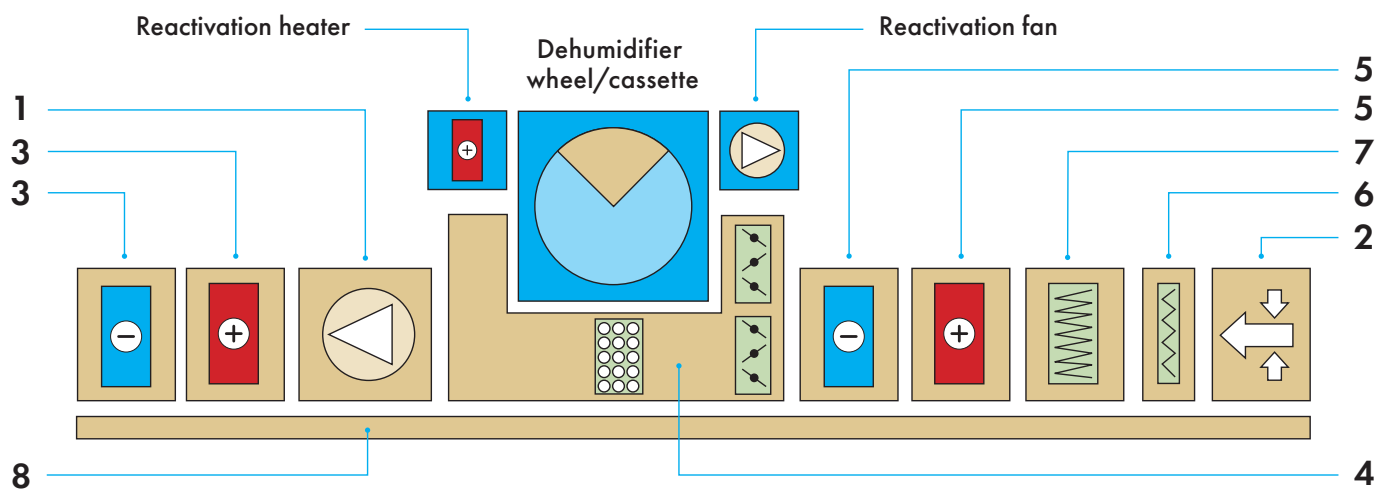
6. Filter plenum, 30%

7. Filter plenum, high efficiency

A disposable filter of 30% efficiency has slide rails that provide easy access for maintenance. A disposable, high efficiency filter of up to 95% (combined with disposable 30% efficiency pre-filter) has slide rails that provide easy side access for maintenance. Consult factory for HEPA filters and plenums.

8. Skid

A structural aluminum skid of "C" channel design is between 6" to 10" in height. On smaller units, with shorter lead times, formed steel can be utilized.



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