



FORGET HUMIDITY FOR EVER!



STANDARDS

The equipment comply to all of the applicable US, CA&EU directives and regulations.



MADE IN EUROPE

All components made exclusively by European manufacturers.



VAST EXPERIENCE

Practical experience in the desiccant dehumidification more than 15 years.



TECHNICAL DATASHEET

Desiccant dehumidifier

MDC 300

GENERAL INFORMATION

The MDC 300 desiccant dehumidifier is designed to efficiently dehumidify air in open system applications. The unit could operate in recirculation mode too. The compact construction allows extended periods of operation with a minimum of maintenance. The design facilitates easy transport by one person.

Dehumidifier is designed for drying-out buildings, new buildings as well as waterdamaged buildings. Furthermore, it is used for room air dehumidification, dry air storage, water works and pump stations, etc. Especially suitable for low temperature and low humidity operation.

In addition to above mentioned application, desiccant dehumidifiers are irreplaceable in:



Protecting against window condensation and glass ceiling in the administrative as well as residential buildings.



Improving the quality of the finishing works during apartment repairs due to drying without thermal movements in the covering products used for walls, floor and ceiling.



Elimination of the effects of the floods, drying new buildings.



Increasing the shelf life of hygroscopic materials: medicines, detergents, building materials and other bulk materials.



Maintaining a low level of humidity during the production of food items as well as products made of wood, rubber and plastic, during the manufacture of furs.



Maintaining the marketable condition of clothing and packaging items.

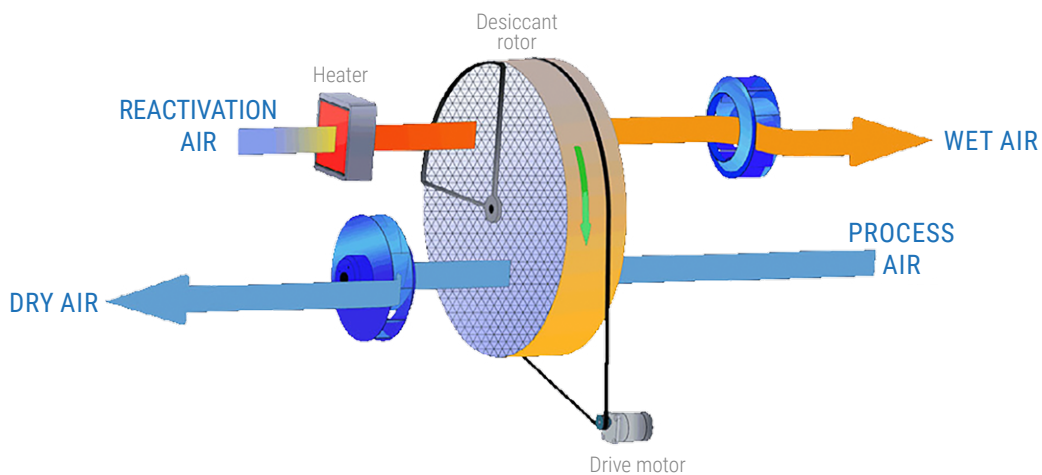


Reducing the growth of bacteria, etc.

METHOD OF OPERATION

A desiccant dehumidifier removes water from a flow of the air that passes through it. The heart of this process is an adsorption rotor coated with a special substance that absorbs the water molecules that make up the moisture in the passing air (Process air). When saturated, the rotor is rotated over to

a regeneration zone, where it is dried with heated air (Reactivation air). The warm, humid regeneration air is led away out of the unit (Wet air) and the rotor is once again ready to absorb water molecules.



CONSTRUCTIONAL FEATURES

- The casing has high resistance to atmospheric corrosion and made of 1,0 mm stainless steel sheet metal; some parts made of 1,5 and 2,0 mm stainless steel in order to achieve rigidity;
- Compact design and low weight of the unit;
- High performance at low temperatures and low relative humidity in a room;
- Optional humidistat is available as an accessory;
- Easy access to the internal components of the dehumidifier for the maintenance;
- PTC-heater;
- High efficiency of the washable silica gel rotor;
- The design facilitates easy transport by one person;
- All components made exclusively by European manufacturers.

TECHNICAL DATA

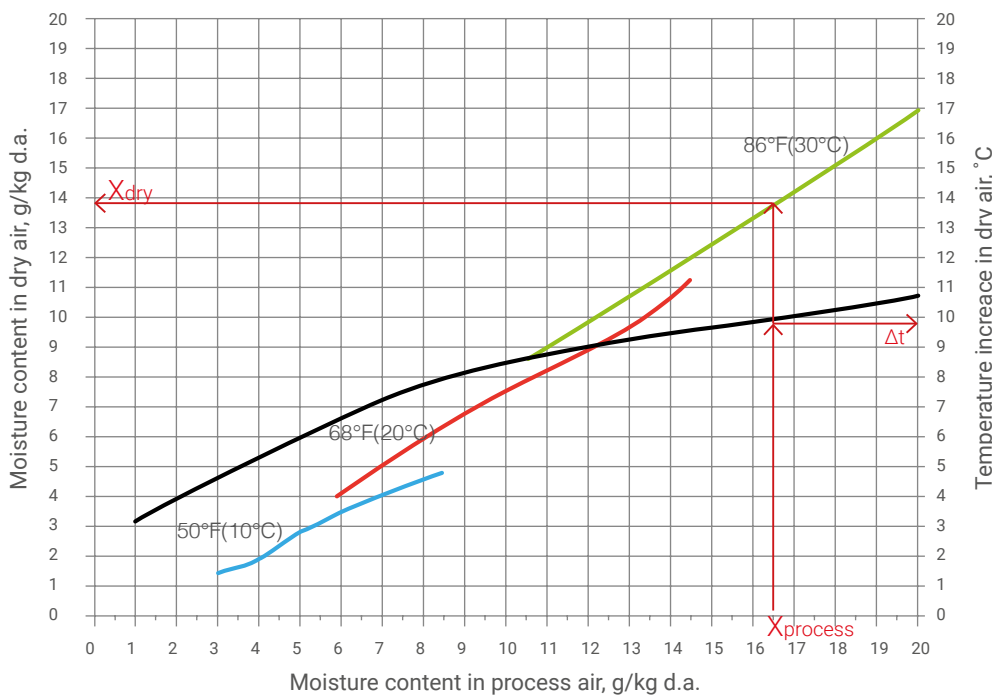
Process air		
Rated airflow	180 CFM	(300 m ³ /h)
Available static pressure	1.0 " wc	(250 Pa)
Reactivation air		
Rated airflow	30 CFM	(50 m ³ /h)
Available static pressure	0.4 " wc	(100 Pa)
Power supply		
(1x120V, 60 Hz)	1,4 kW	
Current	6,1 A	

Miscellaneous data		
Dehumidification capacity (at 68°F (20°C), 60%RH)	3.09 lb/h	(1,4 kg/h)
Weight	42 lbs	(19kg)
Operating temperature	-22/+104°F (-30/40°C)	
Max noise level without ductworks	55 dBA	
Air filter	MERV7	
IEC protective class	NEMA3	

DEHUMIDIFICATION CAPACITY

	50%	60%	70%	80%	90%
41°F (5°C)	1,54(0,7)	1,76(0,8)	2,20(1,0)	2,20(1,0)	2,65(1,2)
50°F(10°C)	1,95(0,9)	2,65(1,2)	2,65(1,2)	2,87(1,3)	3,09(1,4)
68°F(20°C)	2,87(1,3)	3,09(1,4)	3,09(1,4)	3,31(1,5)	3,31(1,5)
86°F(30°C)	3,31(1,5)	3,31(1,5)	3,53(1,6)	3,75(1,7)	3,97(1,8)

Approximate capacity in lb/h (kg/h) at different inlet process air relative humidity (%) and temperature (°F) (°C)

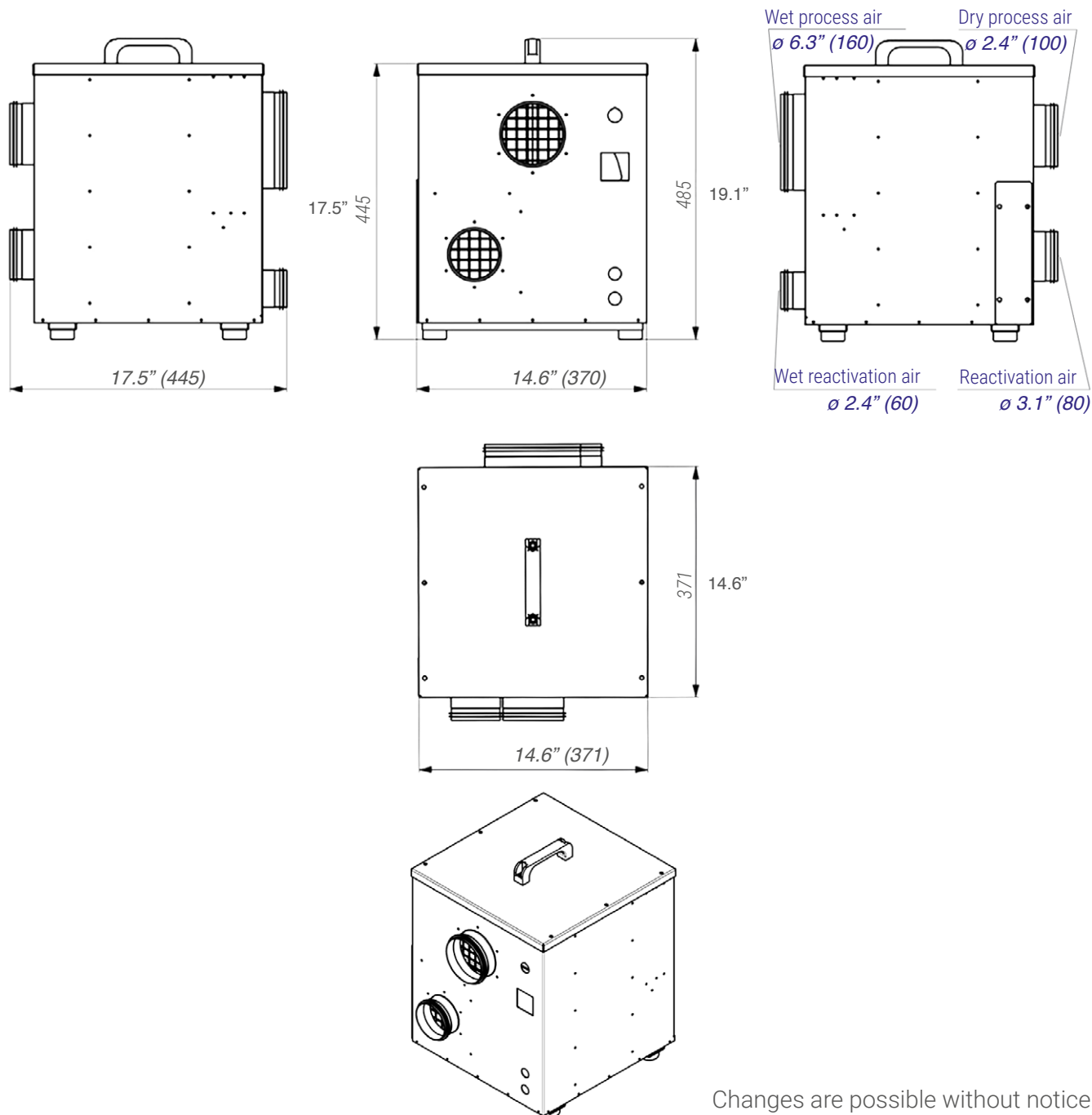


— Temperature increase in dry air

Example

X_{process}=16,5g/kg d.a.;
t_{process}=30°C

X_{dry}=13,8 g/kg d.a.;
Δt=9,7°C;
t_{dry}=30+9,7=39,7°C



Changes are possible without notice.



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