

PORTABLE ADSORPTION DEHUMIDIFICATION

AD 200-300-400

IDEAL FOR DRYING AT LOW TEMPERATURES IN CONSTRUCTION, WATER DAMAGE AND WATERWORKS INDUSTRIES





INDEX

1					
	Intr	\sim	110	tı	n
	Intr	ou	uc	u	OI I

Introduction	
Ensuring dry conditions at low temperatures	
AD 200 Adsorption dehumidifier	
AD 300 Adsorption dehumidifier	
AD 400 Adsorption dehumidifier	1

PORTABLE ADSORPTION DEHUMIDIFIERS - INTRODUCTION

ENSURING DRY CONDITIONS AT LOW TEMPERATURES

Adsorption dehumidification ensures dry conditions at low temperatures. This makes the AD portable range the obvious choice for drying out new buildings or water damage during the winter season and for maintaining low levels of relative humidity at facilities with a low ambient temperature.

Humidity problems are most often associated with hot and damp environments, and usually a condense drying dehumidifier is applied. However, at ambient temperatures below 10°C condensation is not very easily achieved, whereas humid air and moisture from materials, open water surfaces, and production processes can cause serious damage at even very low temperatures.

The AD portable range offers reliable control of the relative humidity of the air, and drying out water damage or newly constructed buildings even at winter temperatures. – After all, accidents happen regardless of the seasons, and construction work goes on all the year round.

Sturdy and compact design

The portable units have been designed for easy handling and transportation. The sturdy stainless steel cabinets are surprisingly compact and low weight compared to capacity. The countersunk control panel is well protected and folding handles for carrying make the units easy to stack during transportation and storage.

Key features

- Ensures dry conditions at low temperatures
- Reliable control of the relative humidity of the air
- Sturdy and compact design
- Cabinet in stainless steel/hot galvanized powder coated steel
- Designed for easy handling and transportation
- Low weight
- Easy to stack during transportation and storage
- MID approved energy counter (optional with AD 400)
- Hour counter
- Internal hygrostat (AD 400: connection for external hygrostat)







AD 200 AD 300 AD 400

Dantherm®

PORTABLE ADSORPTION DEHUMIDIFIERS - INTRODUCTION

ENSURING DRY CONDITIONS AT LOW TEMPERATURES

Easy installation and service

The portable units are fast and easy to install. Just connect one or two hoses to the dry air and one hose to the regeneration air outlet and lead it to the outside. The cabinet provides easy access for internal cleaning and service, and the air filter can be changed without opening the cabinet

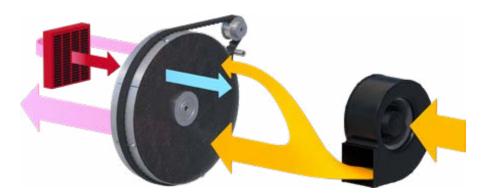
High-performance operations

The built-in hour and energy counter shows the accumulated hour and energy consumption. The energy counter of the AD 200/AD 300 is very precise and has the MID approval which is highest marked standard. The portable range offers reliable high-performance operations at low temperatures and easy installation ensure fast results in drying out constructions and emergency situations minimizing the long-term damage caused by flooding. The portable units can run continuously, or they can be controlled by internal hygrostat with the AD 200/AD 300 or external hygrostat with the AD 400.

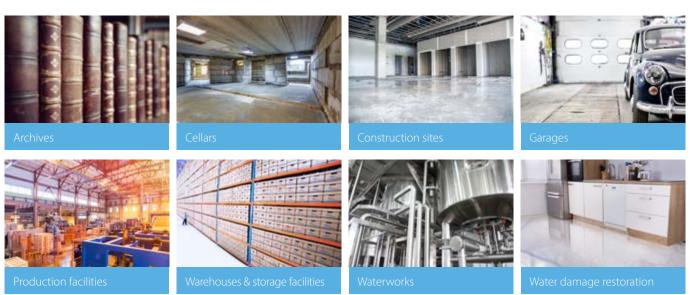
How the dehumidifier works

An adsorption dehumidifier is divided into two zones. In the drying zone humid air from the air inlet passes through a silica gel rotor that adsorbs the moisture and the dry air is returned to the room. In the regeneration zone hot air is blown through the rotor drying out the silica gel and carrying the moisture through the connected hose to the outside.

How an adsorption dehumidifier works



Applications



AD 200



AD 200

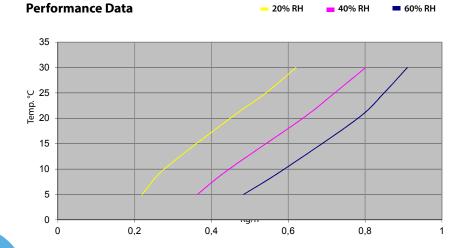
The AD 200 is a robust compact adsorption dehumidifier with a silica gel rotor as standard. Process air is drawn into the dehumidifier and through the rotor, which slowly turns between two sections in the dehumidifier. The silica gel rotor adsorbs the moisture from the air in the drying section. This moisture is removed again by blowing hot air through the rotor in the regeneration section. The process air leaves the dehumidifier as dry air, and the moisture is led out of the room through the regenerated air outlet.



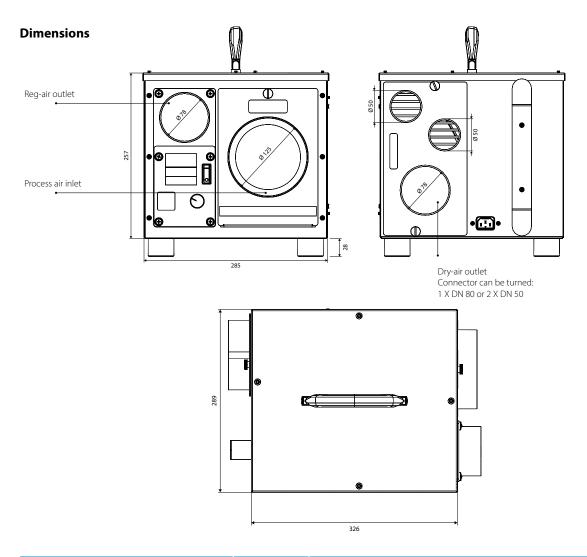
- MID approved energy counter
- Hour counter
- Internal humidistat
- One common fan for process air and regeneration air
- Cabinet in stainless steel / hot galvanized powder coated steel
- Low weight
- PTC regeneration heater
- Robust and compact metal construction
- Carrying handle
- Easy internal access for service and maintenance
- Four rubber bumpers to fix the unit in place
- Flexible dry air outlet

Optional accessories





AD 200



Specifications	Units	AD 200
Capacity (20°C/60% RH)	kg/24h	18.75
Air volume – dry air/regeneration air	m³/h	210/110
Ext. pressure – dry air/regeneration air	Pa	150/50
Operating temperature range	°C	-10 - +35
Operating humidity range	% RH	10-95
Nominal power consumption	W	694
Power supply	V/Hz	230/1ph/50
Sound level	dB(A)	48
Duct sizes:		
Air inlet	Ømm	125
Dry air outlet	Ømm	1 x 80 or 2 x 50
Regeneration air outlet	Ømm	80
Power cord	m	4.5 with plug
Protection class		IP23
Product size (h x w x d)	mm	285 x 289 x 395 (incl. fittings and feet)
Weight	kg	14



AD 300



AD 300

The AD 300 is a robust compact adsorption dehumidifier with a silica gel rotor as standard. Process air is drawn into the dehumidifier and through the rotor, which slowly turns between two sections in the dehumidifier. The silica gel rotor adsorbs the moisture from the air in the drying section. This moisture is removed again by blowing hot air through the rotor in the regeneration section. The process air leaves the dehumidifier as dry air, and the moisture is led out of the room through the regenerated air outlet.

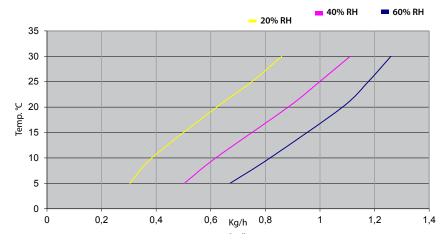


- MID approved energy counter
- Hour counter
- Internal humidistat
- One common fan for process air and regeneration air
- Cabinet in stainless steel / hot galvanized powder coated steel
- Low weight
- PTC regeneration heater
- Robust and compact metal construction
- Carrying handle
- Easy internal access for service and maintenance
- Four rubber bumpers to fix the unit in place
- Flexible dry air outlet

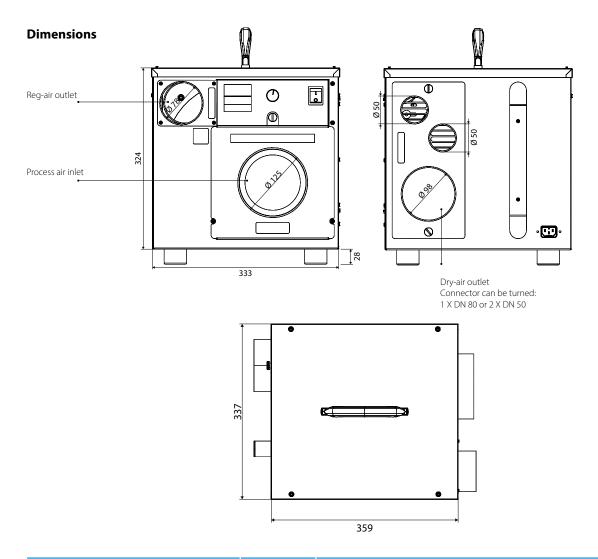
Optional accessories



Performance Data



AD 300



Specifications	Units	AD 300
Capacity (20°C/60% RH)	kg/24h	25.7
Air volume – dry air/regeneration air	m³/h	300/110
Ext. pressure – dry air/regeneration air	Pa	150/50
Operating temperature range	°C	-10 - +35
Operating humidity range	% RH	10-95
Nominal power consumption	W	1,040
Power supply	V/Hz	230/1ph/50
Sound level	dB(A)	57
Duct sizes:		
Air inlet	Ømm	125
Dry air outlet	Ømm	1 x 100 or 2 x 50
Regeneration air outlet	Ømm	80
Power cord	m	4.5 with plug
Protection class		IP23
Product size ($h \times w \times d$)	mm	352 x 337 x 429 (incl. fittings and feet)
Weight	kg	18



q

AD 400



AD 400

Despite weighing out at just 25 kilos, the AD 400 is the right choice for applications that require an air change of up to 480m³/h (environments of up to 450m³). That's 20% more than other units of comparable size that are currently on the market. With its integrated lifting handle and stackable design, the unit has been designed for easy handling and transportation. It comes with a built-in hour counter with an optional MID-approved energy counter. The portable adsorption dehumidifiers can run continuously, or they can be controlled by an external hygrostat.



- Ventilation only mode available if pre-set humidity level is exceeded, normal dehumidification mode starts (only with optional external hygrostat)
- Sturdy unit made of stainless steel and powder coated sheet steel, supported by four rubber non-marking feet
- Integrated lifting handle and stackable design for easy use
- The rotor unit is easy to remove for cleaning purpose
- Dynamic, safe and self-regulating PTC heating element
- Energy-efficient radial fan
- High-performance ECODRY G3-MH rotor for maximum water absorption
- Air filter on the process air inlet
- Noise reduced via integrated silencer: 60 dB
- Connection for external hygrostat
- Non-resettable hour counter







Optional accessories



Spare filter set 098895



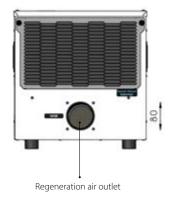
External hygrostat 351036

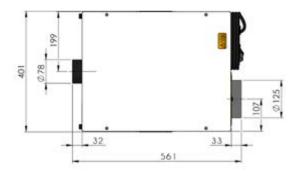
AD 400

Dimensions

Dry air outlet







Specifications	Units	AD 400
Capacity (20°C/60% RH)	kg/24h	36
Air volume – dry air/regeneration air	m³/h	480/185
Ext. pressure – dry air/regeneration air	Pa	150/100
Operating temperature range	°C	-10 - +35
Operating humidity range	% RH	10-95
Nominal power consumption	W	2,200
Power supply	V/Hz	230/1ph/50
Sound level	dB(A)	60
Duct sizes:		
Dry air outlet	Ømm	125
Regeneration air outlet	Ømm	80
Power cord	m	4.5 with plug
Protection class		IP23
Product size (h x w x d)	mm	410 x 395 x 560
Weight	kg	25





Dantherm A/S

Marienlystvej 65 DK-7800 Skive Denmark t. +45 96 14 37 00

Dantherm Sp. z o.o.

ul. Magazynowa 5a 62-023 Gądki Poland t. +48 61 65 44 000

Dantherm AB

Fridhemsvägen 3 602 13 Norrköping Sweden t. +46 (0)11 19 30 40

Heylo GmbH

lm Finigen 9 28832 Achim Germany t. +49 4202 9755 Dantherm Ltd.

Unit 12, Galliford Road Maldon CM9 4XD United Kingdom t. +44 (0)1621 856611

Dantherm SP S.A.

C/Calabozos 6 (Polígono Industrial) 28108 Alcobendas, Madrid Spain

Dantherm LLC

Transportnaya 22/2 142800, Stupino Moscow Russia t. +7 (495) 642 444 8

SET Energietechnik GmbH

August-Blessing-Straße 5 71282 Hemmingen Germany t. +49 7150 94540 **Dantherm GmbH**

Oststraße 148
22844 Nordersted
Germany
+ ±49 40 526 8790

Dantherm SAS

23 rue Eugène Hénaff 69694 Vénissieux Cedex France t. +33 4 78 47 11 11

MCS China

Unit 2B, No. 512 Yunchuan Road Baoshang, Shanghai, 201906 China t. +8621 61486668 Dantherm S.p.A.

Via Gardesana 11 37010 Pastrengo (VR) Italy

Dantherm AS

Løkkeåsveien 26 3138 Skallestad Norway t. +47 33 35 16 00

AirCenter AG

Täfernstrasse 14 CH-5405 Baden Dättwil Switzerland t. +41 43 500 00 50

Dealer:

nuary 2022

