



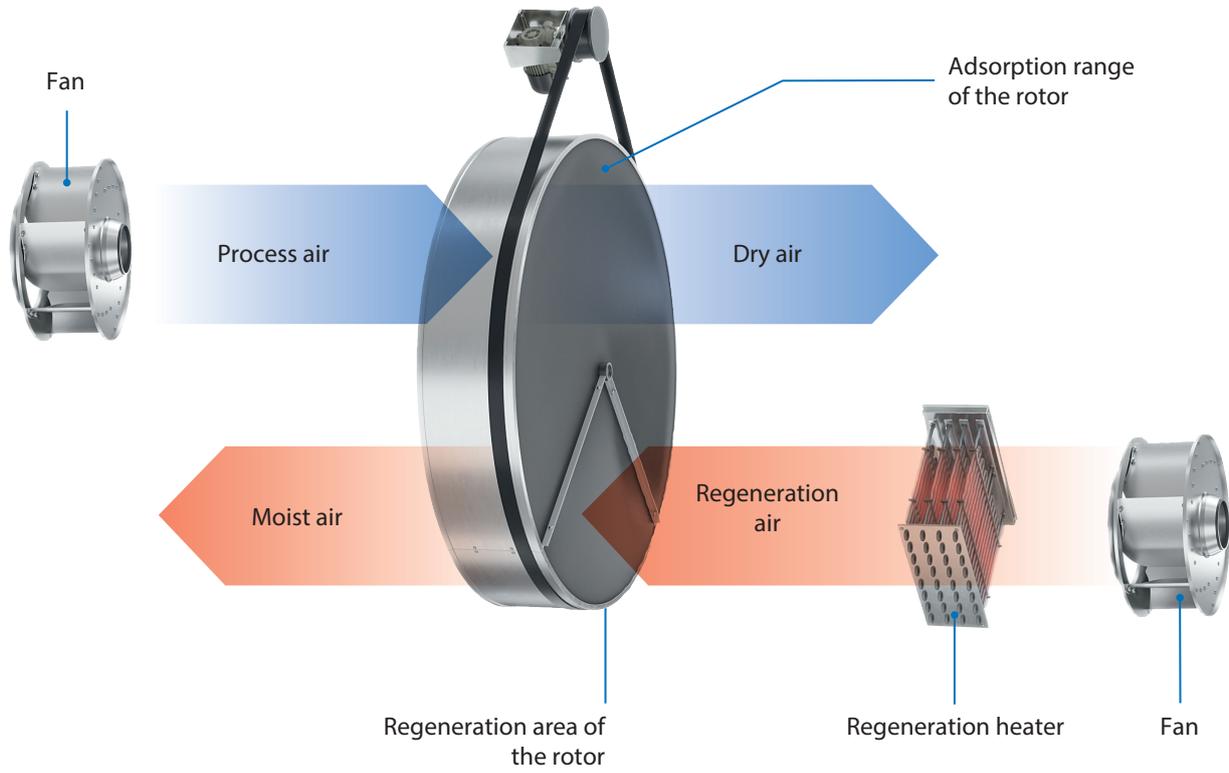
INDUSTRIAL DEHUMIDIFIERS

Advanced range of
desiccant dehumidifiers



Dehumidification and drying

 **condair**



Desiccant drying - typical principle of operation

Condair DA desiccant dehumidifiers

Condair DA desiccant dehumidifiers are designed to operate in very cold conditions or wherever extremely low humidity is required.

The Condair DA's powerful desiccant rotor allows it to bring humidity levels down to a minimum at temperatures as low as -30 °C.

Standard models offer drying capacities from 7 to 44 lbs/h of moisture removal and airflows between 300 and 2400 CFM.

Standard models come ready to be fitted to pre and/or post cooling additions by others without obstructions.

Post-cooling is often necessary to reduce the heat given off by the air drying process.

Condensation modules can be used to remove moisture from the regeneration air for applications where outside venting of regeneration air is not possible.

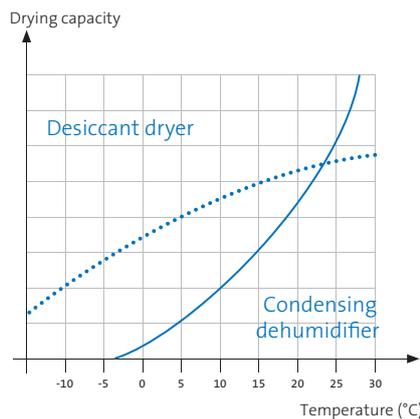
The standard models come equipped with extremely safe electric PTC heaters. Depending on size of the unit, these

heaters can be stage to provide staged modulation.

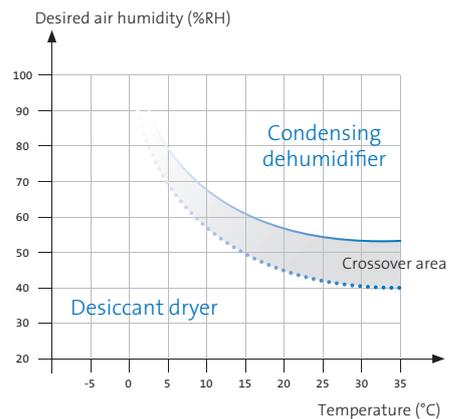
The desiccant rotor used in Condair desiccant dehumidifiers is non-flammable and silicone-free.

All standard units are UL approved.

Performance characteristics



Recommended usage by temperature/humidity



Double-wall housing

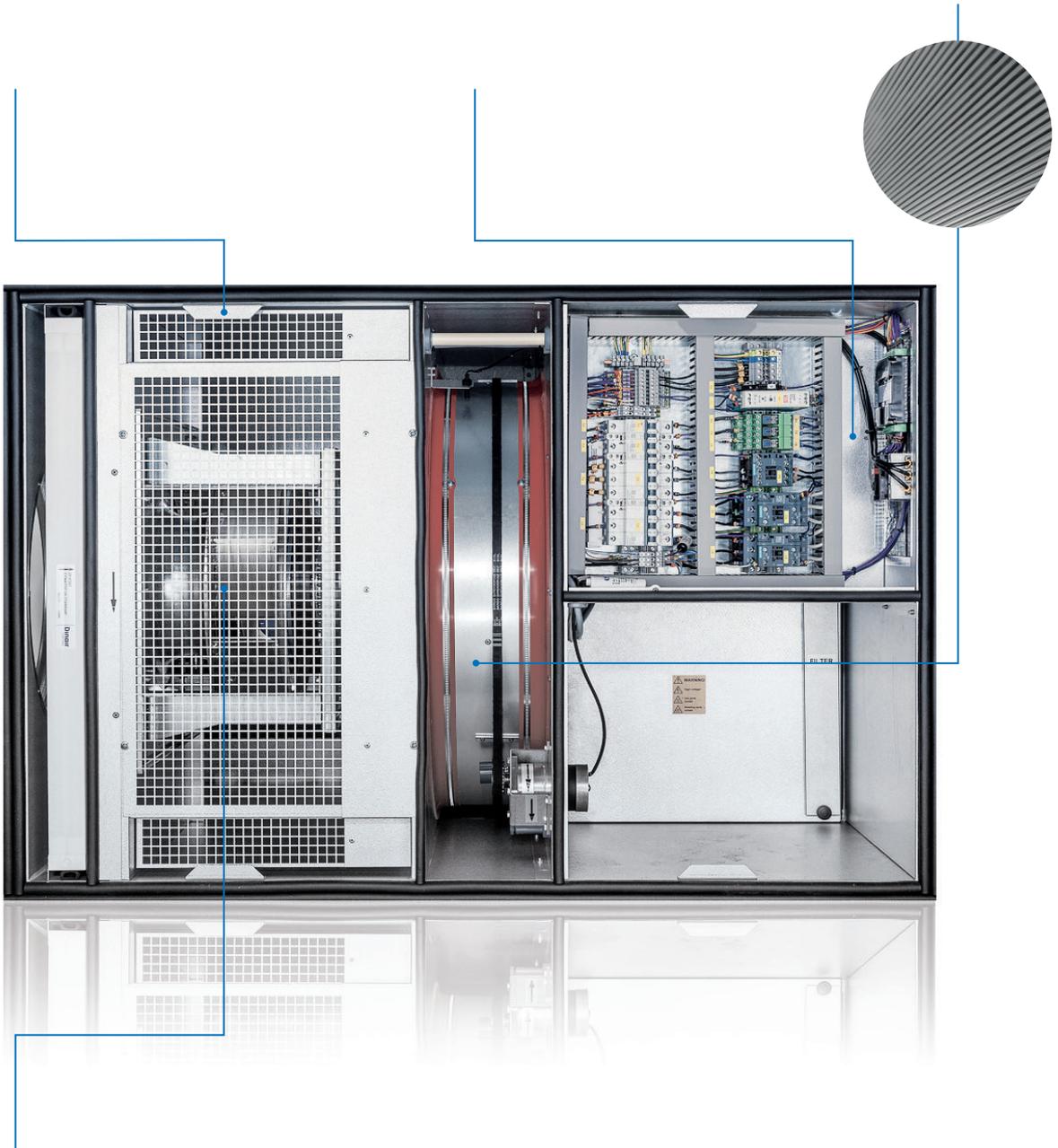
As of size DA 500, all units have a fully insulated double-wall housing made of corrosion-resistant Aluzinc® with powder coating as standard. The spaces between the housings are filled with at least 30 mm of mineral wool as an insulation material. This ensures safe and efficient operation even at very low temperatures as well as maximum hygiene.

Comprehensive controller

The Condair adsorption dryers are equipped with a PLC with touch screen, which allows the control of humidity. In addition, the PLC increases operational reliability because it monitors the internal components and issues a service note or alarm depending on the situation

Highly efficient desiccant rotor

The desiccant rotor consists of a fiber optic honeycomb structure which is coated with an extremely hygroscopic silica gel. This honeycomb structure creates an enormous internal surface for efficient moisture transmission. The rotor material is hygienic, non-flammable and non-respirable, and the rotors are largely maintenance-free.



Efficient fans

High quality EC fans are used in an efficient push configuration. This ensures the air for the regeneration process is directed over the desiccant rotor with positive pressure. This enables problem-free use even at very low humidity levels, because the regeneration fan does not come into contact with hot moist air from the desiccant rotor.

Regenerative heat sources

All adsorption dryers up to and including size DA 2400 have electrical PTC heating elements for the regeneration process. The self-regulating properties of the PTC heating elements provide protection against fusing and thermostat interruptions.

Sophisticated construction

All of the components are designed to be easy to remove and maintain. The filter inserts can be replaced easily. Construction with a vertically arranged rotor enables a low overall height. The optimum load distribution of the installed components ensures a long service life and high operational reliability.



DA desiccant dryer



DA 500

Technical data		DA 300	DA 400	DA 600	DA 800	DA 1400	DA 2000	DA 2400
Drying capacity at 20 °C – 60% RH	lbs/h	7.3	11.2	15.6	22	29.7	31.9	44.1
Nominal process air volume	CFM	294	412	589	824	1413	2001	2354
Nominal regeneration air volume	CFM	88	129	206	235	294	323	500
Ext. compression – process air	psi	0.044	0.029	0.044	0.029	0.044	0.044	0.029
Ext. compression – regeneration air	psi	0.044	0.036	0.029	0.044	0.036	0.029	0.029
Electrical connected load	208V	5.8	8.8	11.9	14.8	21.6	22.1	n/a
	480V	7.9	9.6	12.9	15.6	20	23.4	31.4
Temperature/humidity operating range	° F / % RH	-30 to 104 / ORH to 100RH						
Voltage supply	V/Ph/Hz	208/3/50-60 or 480/3/50-60						480/3/50-60
Process air connection diameter	in (mm)	15.7 (400)						
Dry air connection diameter	in (mm)	12.4 (315)						
Humid/regeneration air connection diameter	in (mm)	7.9 (200)						
Dimensions (H x W x D)	in (mm)	36 x 48 x 39 (910 x 1199 x 991)						
Sound pressure levels 1)	dB	62	62	62	63	68	69	69
Weight	lbs	408	419	419	430	441	441	452

