

# DEHUMIDIFIER

MOISTURE & HUMIDITY CONTROL SPECIALIST











ТҮРЕ	PORTABLE COMMERCIAL DEHUMIDIFIERS				
MODEL	MDH - 12A	MDH - 20A MDH - 30B		MDH - 50B	MDH - 90
PRODUCT	(€		- CE		CE
MOISTURE REMOVAL CAPACITY (30 C, 80%RH) (L/DAY)	12L/day	20L/day	30L/day	50L/day	90L/day
OPERATING TEMPERATURE	5c -35c	5c -35c	5c -35c	5c -35c	5c -35c
REFRIGERANT	R134a	R134a	R134a	R410a	R410a
COMPRESSOR TYPE	Rotary	Rotary	Rotary	Rotary	Rotary
CONTINUOUS DRAIN OUT OPTION	Yes	Yes	Yes	Yes	Standard
WASHABLE AIR FILTER	Yes	Yes	Yes	Yes	Yes
SOUND LEVEL dB(A)	≤ 40	≤ 43	≤ 46	≤ 56	≤ 60
CASTERS	Yes	Yes	Yes	Yes	Yes
AUTO REFROST	Yes	Yes	Yes	Yes	Yes
ELECTRONIC CONTROL	Yes	Yes	Yes	Yes	Yes
SOFT KEY BUTTON	Yes	Yes	Yes	Yes	Yes
DISPLAY SCREEN	LED	LED	LED	LED	LED
MICROPROCESSOR SELF CHECK AT START UP	Yes	Yes	Yes	Yes	Yes
FAN SPEED	2	2	3	3	2
AUTO TIMER	Yes	Yes	Yes	Yes	Yes
WATER CONTAINER SIZE	2.3L	6.5L	6.5L	7.5L	Direct Discharge
UNIT DIMENSION (W X D X H) MM	308 x 229 x 478	360 x 285 x 564	402 x 260 x 610	396 x 341 x 637	480 x 440 x 970
NET WEIGHT (KG)	11	14	15.8	22	45
WARRANTY	2	2	2	2	2
PACKAGING DIMENSION (W X D X H) MM	360 x 280 x 520	410 x 320 x 640	425 × 310 × 665	460 × 400 × 700	550 x 490 x 1080
SHIPPING WEIGHT (KG)	13	15	17.5	24	50
POWER SUPPLY	240V/1Ph/50Hz	240V/1Ph/50Hz	240V/1Ph/50Hz	240V/1Ph/50Hz	240V/1Ph/50Hz
POWER CONSUMPTION (W)	245	265	240	670	1350



ТҮРЕ	Industrial Mobile Dehumidifier	INDUSTRIAL DEHUMIDIFIERS			
MODEL	MDH - 100	MDH - 120	MDH - 180	MDH - 240	MDH - 480
PRODUCT					
MOISTURE REMOVAL CAPACITY (30 C, 80%RH) (L/DAY)	100L/day	120L/day	180L/day	240L/day	480L/day
OPERATING TEMPERATURE	5c -35c	5c -35c	5c -35c	5c -35c	5c -35c
REFRIGERANT	R410A	R410A	R410A	R410A	R410A
COMPRESSOR TYPE	Rotary	Rotary	Rotary / Scroll	Rotary / Scroll	Rotary / Scroll
CONTINUOUS DRAIN OUT OPTION	Yes with pump	Yes	Yes	Yes	Yes
WASHABLE AIR FILTER	Yes	Yes	Yes	Yes	Yes
SOUND LEVEL dB(A)	≤ 60	≤ 60	≤ 65	≤ 65	≤ 68
CASTERS	Industrial Grade Large Wheels	Commercial	Heavy Duty	Heavy Duty	-
AUTO REFROST	Yes	Yes	Yes	Yes	Yes
ELECTRONIC CONTROL	Yes	Yes	Yes	Yes	Yes
SOFT KEY BUTTON	Yes	Yes	Yes	Yes	Yes
DISPLAY SCREEN	Digital LCD	LED	Digital	Digital	Digital
MICROPROCESSOR SELF CHECK AT START UP	Yes	Yes	Yes	Yes	Yes
FAN SPEED	1	2	2	2	2
AUTO TIMER	Yes	Yes	Yes	Yes	Yes
WATER CONTAINER SIZE	Direct Discharge	Direct Discharge	Direct Discharge	Direct Discharge	Direct Discharge
UNIT DIMENSION (W X D X H) MM	530 x 515 x 830	600 x 380 x 1000	774 x 470 x 1685	774 x 470 x 1685	1190 x 450 x 1750
NET WEIGHT (KG)	45	51	110	130	230
WARRANTY	2	2	2	2	2
PACKAGING DIMENSION (W X D X H) MM	610 x 580 x 870	670 x 450 x 1100	900 x 580 x 1860	900 x 580 x 1860	1300 x 610 x 1980
SHIPPING WEIGHT (KG)	49	58	163	163	271
POWER SUPPLY	240V/1Ph/50Hz	240V/1Ph/50Hz	240V/IPh/50Hz	415V/3Ph/50Hz	415V/3Ph/50Hz
POWER CONSUMPTION (W)	1150	1190	2400	3900	6500



ТҮРЕ	CEILING DUCTED REFRIGERANT DEHUMIDIFIERS					
PRODUCT	DEYOODS					
MODEL	MDH-CD-100	MDH-CD-140	MDH-CD-170	MDH-CD-240	MDH-CD-360	
Moisture Removal Capacity (30°C,80%RH) (L/Day)	90L/Day	138L/Day	168L/Day	240L/Day	360L/Day	
Operating Temperature	5°C - 38°C	5°C - 38°C	5°C - 38°C	5°C - 38°C	5°C - 38°C	
Power Supply	240V/IP	h/50Hz	415V/3Ph/50Hz			
Rated Power (W)	1150 1300		2280	3400	4900	
Rated Current (A)	5.3	6	4.6	6	9	
Refrigerant	R410A	R410A	R410A	R410A	R410A	
Pressure (PA)	150	150	150	150	150	
Filtering Level	G4	G4	G4	G4	G4	
Humidity Setting (RH%)	30~95	30~95	30~95	30~95	30~95	
IP Rating	IPx4 IPx4		IPx4	IPx4	IPx4	
Drainage Mode	Continuous drainage pipe can be connected externally					
Compressor Protection	High and Low Pressure Protection/Compressor Three Minutes Delay Start Protection					
Air Inlet Flange (mm)	150ø x 2 150ø x 2		630 x 505	630 x 505	1080 x 490	
Air Outlet Flange (mm)	150 ø	150 ø	610 x 310	610 x 310	1155 x 290	
Air Outlet Mode	Front: Air Inlet, Back: Air Outlet					
Unit Dimension (W x D x H) mm	1050 x 62	20 x 465	1080 x 820 x 600		1300 x 1188 x 600	
Net Weight (Kg)	63 70 110 140			235		



ТҮРЕ	CLIMATE CONTROL DEHUMIDIFIERS					
PRODUCT	DEVOODS:					
MODEL	MDH-FA- 1000	MDH-FA- 2000	MDH-FA- 1500	MDH-FA- 3000	MDH-FA- 4000	
Moisture Removal Capacity (30°C,80%RH) (L/Day)	50L/Day	90L/Day	120L/Day	168L/Day	240L/Day	
Operating Temperature	5°C - 38°C	5°C - 38°C	5°C - 38°C	5°C - 38°C	5°C - 38°C	
Power Supply	240V/1Ph/50Hz			415V/3Ph/50Hz		
Rated Power (W)	620	1050	1280	2400	3700	
Rated Current (A)	3	4.6	5.8	5.2	6	
Refrigerant	R410A	R410A	R410A	R410A	R410A	
Max Power (W)	950	1480	2630	3630	5360	
Max Current (A)	4.2	6.8	12	6.9	8.5	
Display Screen	Yes	Yes	Yes	Yes	Yes	
Timer On / Timer Off	Yes	Yes	Yes	Yes	Yes	
Drainage Mode	Continuous drainage pipe can be connected externally					
Compressor Protection	High and Low Pressure Protection/Compressor Three Minutes Delay Start Protection					
Temperature and Humidity Display	Yes	Yes	Yes	Yes	Yes	
Unit Dimension (W x D x H) mm	800 x 500 x 390	900 x 680 x 420	900 x 680 x 420	1000 x 800 x 550	1000 x 800 x 550	
Net Weight (Kg)	47	64	66	89	105	



## **DESICCANT DEHUMIDIFIERS**

Dehumidification Principle: Model: Consorb CSA-5,5L Consorb DCA-5 Consorb DCA-10 Recusorb R DCA-31 T10,T16



Capacity kg/h (20°C/60%RH): 0.35 - 0.4

0.5

0.6

1.4 - 2.1

Airflow (m3/h):

65 - 90

120

190

300 - 490

Dehumidification Principle: Model:

Recusorb RLA-60R,60LR Recusorb RLA-61R,61LR, RLA-71R,71LR Recusorb RLZA-81R,82R,101R, 102R,102LR,104R

Consorb CZ-82,102,102L,104



Capacity kg/h (20°C/60%RH):

Airflow (m3/h):

7 0

4 - 5

850 - 1000

-5

7.5 - 17

1300 - 3200



19 - 54

2900 - 12 000



22 - 69

3200 - 12 000



Capacity at 20°C / 60%: 8 - 238 kg/h

Airflow: 1200 - 36 000 m3/h

Flexisorb: Consorb, Econsorb, Frigosob, Recusorb

CFA Dehumidifiers:

CFA-061,061L,081,081L,101,101L,102,102L,122,122L, 152,152L,172,172L,192,192L,222,242,CFA-SP Series



## **SORPTION DEHUMIDIFICATION**

#### **HOW DOES IT WORK?**

In sorption dehumidification, the basic principle is that a rotating rotor in the dehumidifier continuously adsorbs moisture from the process air. Then through a regeneration cycle the moisture is driven out of the rotor and exhausted in different ways, the principle pictures are demonstrating how.



Incoming moist air



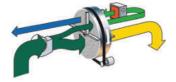
Outgoing dry air



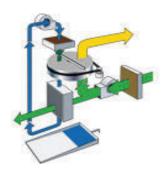
Outgoing wet air, either passed or condensed out



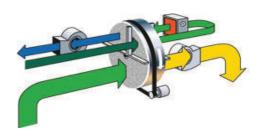
The **Consorb** principle is best used at lower regeneration temperatures, typically where waste heat is available or where the air inlet moisture content is very high. The Consorb principle is also used in balanced 'closed' type systems where the dry process air is recirculated.



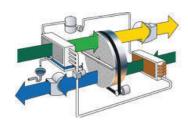
Recusorb DR has an internal heat recovery with one fan that produces both the dry airflow and the wet airflow. Used for introducing dry fresh air into a process or to an 'open' or 'total loss' system where the dehumdified air is ducted into the object. Can be used on both 'open' and 'closed' type systems.



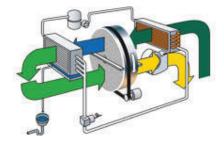
**Aquasorb** basically functions as a Consorb but moisture in the wet air is condensed through an air cooled condenser. One centrifugal fan is used for both the dry air and the condenser cooling air, so all energy released during the process accumulates in the room. Commonly used where it is impractical to use ducting for the reactivation air system.



**Recusorb** R has an internal heat recovery to improve operating efficiency. Heat transferred to the rotor during regeneration is effectively recovered by the incoming regeneration air, thus reducing the amount of energy required by the generation heater. The process air outlet is both cooler and drier when compared to other dessicant dryers.



**Econosorb** combines a heat pump with the sorption rotor in a unique way, providing very low energy consumption with a low dry air temperature. It's probably the most energy efficient dehumidifier on the market, with approximately 25% of the total energy consumption of regular sorption dehumidifier. Econosorb has both condensation and wet air flow.



**Frigosorb** is used in applications where it is difficult to remove a wet air flow. Thanks to the heat pump function Frigosorb is very energy efficient, using approximately 33% of the total energy consumption of regular sorption dehumidifiers.

## **HUMIDITY & MOISTURE CONTROL SOLUTIONS**

## **Humidity Problems**

#### Corrrosion

Merchandise manufactured in materials such as iron and steel, demand low humidity. Vehicles, aircraft, machines and tools do not rust if the surrounding air is kept at a relative humidity below 50%.

#### Mold

Organic materials such as leather and paintings, contain micro-organisms. These can develop into fungus and mould, but will not occur if the relative humidity level is kept below 70%.

#### **Bacteria**

Bacteria require a high humidity to survive and to multiply. If the humidity level of the surrounding air is kept below 50%, most bacteria will not survive. The limit is especially important when storing food products which are susceptible to bacteria.

#### **Dry Products**

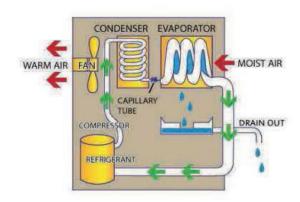
When manufacturing dry products like soups or sauces, it is important to dehumidify the production premises. The right climate can help ensure the ingredients do not stick together during mixing or in the packets. Production quality is ensured to maintain the same production speed all year around.

- Condensation
- Flood Restoration Recovery
- Product Drying & Conditioning
- Mould & Fungus Prevention

### How it works?

#### **Condensation Principle**

The air is laden with moisture. The dehumidifier to remove this moisture by changing it from its vapor state to liquid state. Air is drawn through an air filter and passes through an evaporator which cools it to a temperature below dew point. Water vapour the airstream condenses and is collected in a reservoir. Dehumidified air continues through the condenser and is warmed and recirculated back into the dry room as



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AAQ's brand assurance offers complete confidence to our customers as all our products and technologies are from renowned partners from Germany, USA, France, Japan and China. Our customers benefit from extra warranty package and maintenance is assured with the largest service team in the industry in Malaysia.