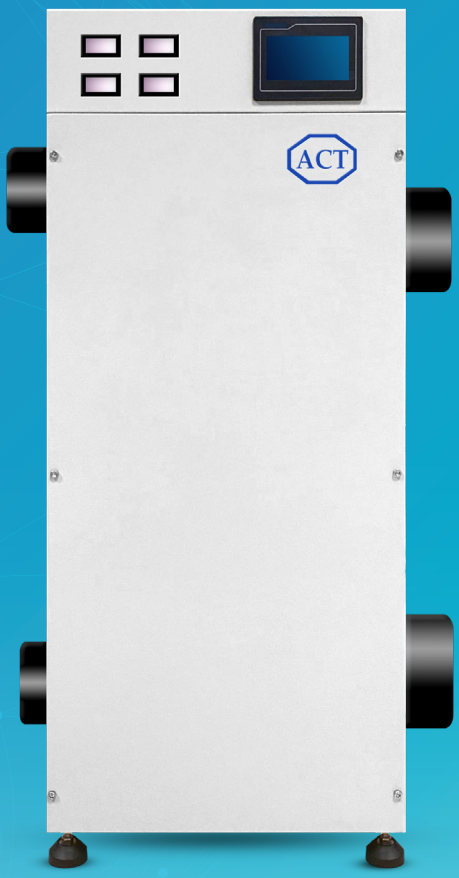
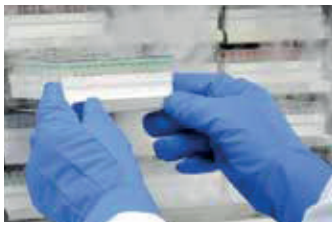
ADVANCE COOL TECHNOLOGY CO.,LTD.

THE CHILLER EXPERT

Revo Smart



- Pharmaceutical Cold Storage
- Small-scale Cold Storage
- Foodstuffs Cold Storage
- Refrigerated Freezer



Pharmaceutical

Protect precision instrument;
Keep experimental material dried;
Reduce the impact of biological experiments on the environment to a minimum;

Small-scale Cold Storage

Control RH;
Prevent goods from getting damp;
Prevent equipment corrosion;

Foodstuffs Cold Storage

High requirements for air cleanliness;
Protect food against moisture;
Protect production equipment;

Refrigerated Freezer

High requirements for environment;
Protect food against mold;
Protect production equipment;

Pain points of common dehumidifiers

Too heavy, covers a large area

Waste of space, inconvenient transportation, difficult later maintenance

Too high energy consumption costs

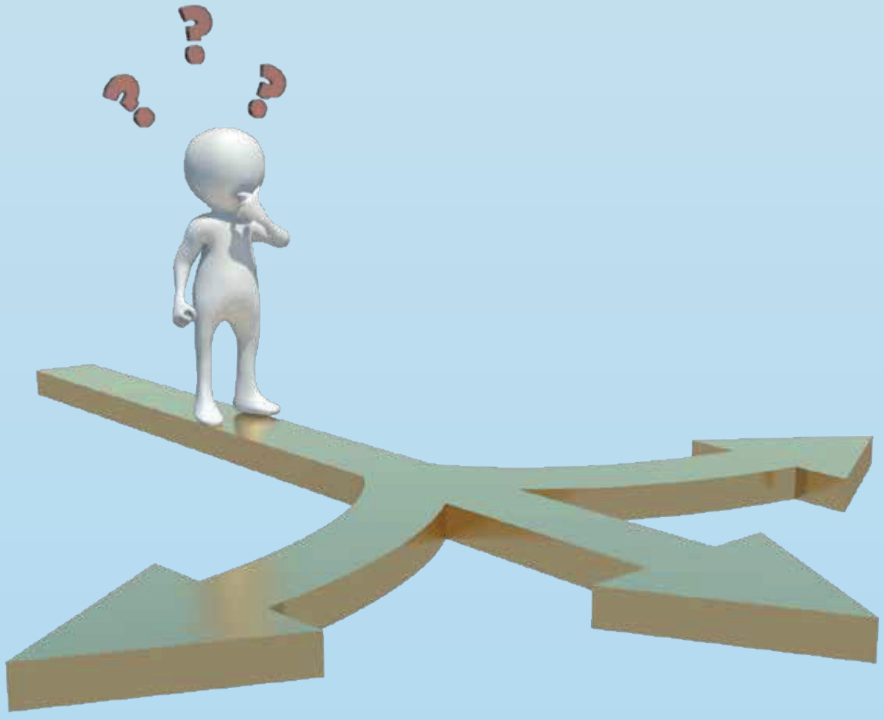
Increased production costs

Complicated accuracy adjustment, high learning costs for users

Increased training and operating costs

With fewer extension functions and limited availability

Limited dehumidification application -



ADVANCE COOL TECHNOLOGY CO.,LTD.

What have we solved

ACT focus on products and technical solutions for energy-saving on air temperature & humidity control、 air sterilization & purification in light industrial and commercial areas.

On the basis of traditional temperature & humidity control and the adjustment technology, we have added energy saving and intelligent control technology to make it more energy-saving, more convenient, and easier to control.

Functional-level disinfection products are based on years of R&D experience and manufacturing of catalytic materials, and are coordinated with UV technology to enable air disinfection with industrial-grade powerful functional application effects.

REVO SMART

REVO SMART

Cost-effective and efficient dehumidifier-REVO SMART

Small cost, big dehumidification application Light, efficient , energy-saving & smart

Model	REVO-R280	REVO-R370	REVO-R480	REVO-R590
Airflow (m^3/h)	200-400	400-700	700-1200	1200-1800

ADVANCE COOL TECHNOLOGY CO.,LTD.

No fear of cold

Easily cope with dehumidification requirements in cold storage application

REVO SMART

THE CHILLER EXPERT

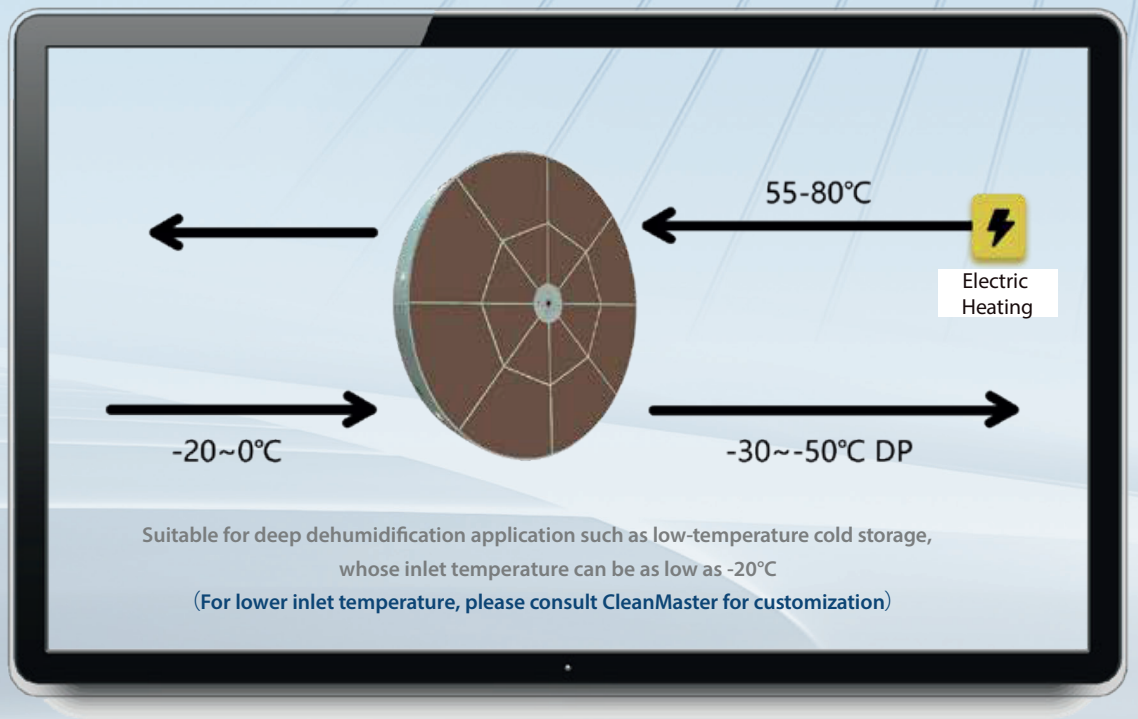
Free adjustment of airflow parameters Regenerative heating control in steps

Simultaneous application of dehumidification needs in multiple scenarios

REVO SMART

Cold store dehumidication application

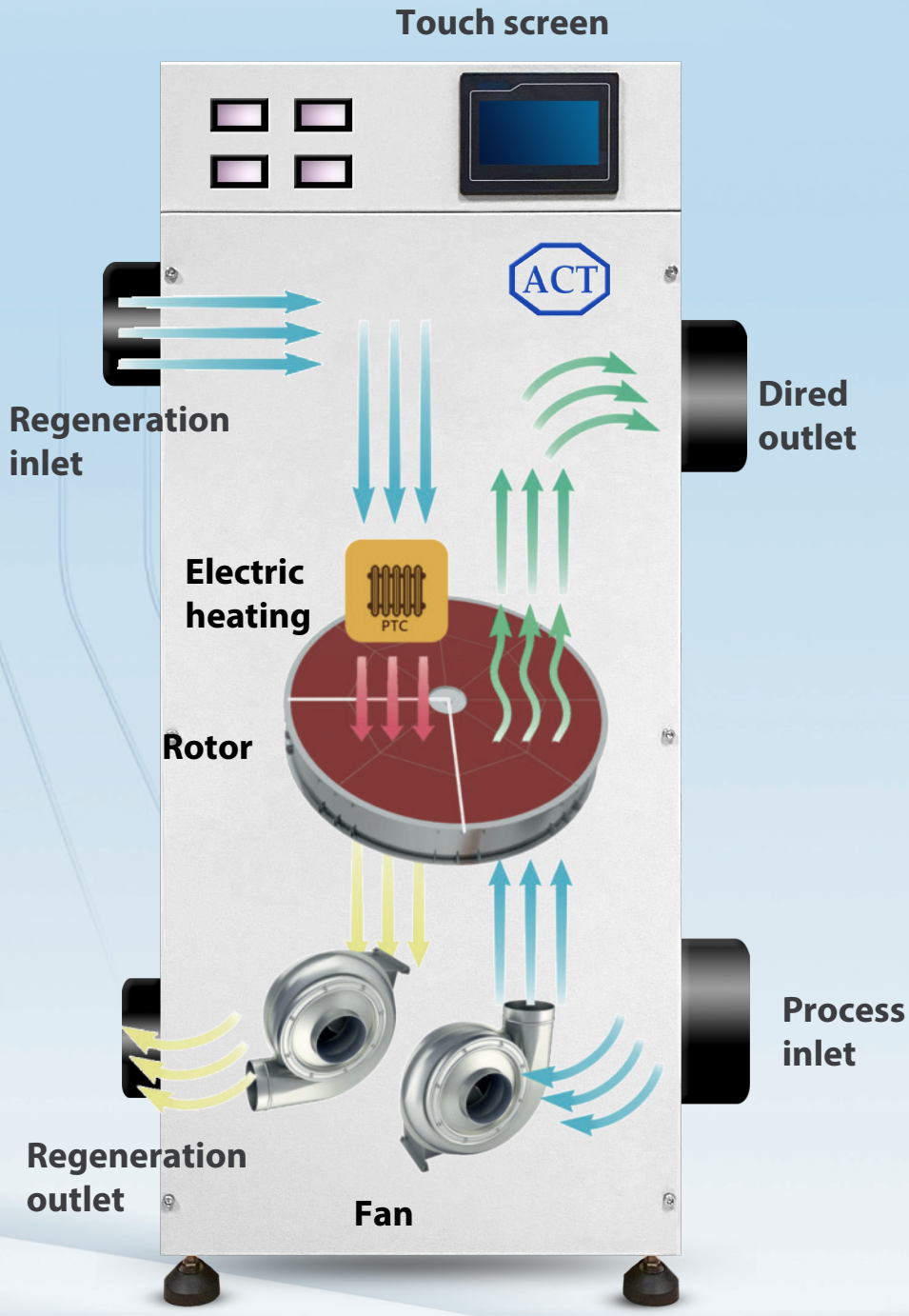
Process inlet			Power (kW)	Process outlet	
Airflow (m^3/h)	Temp.(°C)	Dew point (°CDP)		Temp.(°C)	Dew point (°CDP)
200	-2.0	-6.0	1.68	6.9	-35.4
200	-6.0	-11.0	1.75	1.1	-37.6
200	-8.0	-16.0	1.73	-3.6	-40.2
200	-15.0	-21.0	1.60	-7.6	-40.2
300	-2.0	-6.0	2.44	8.2	-41.7
300	-6.0	-11.0	2.50	1.8	-46.1
300	-15.0	-21.0	2.17	-9.8	-48.9
400	-2.0	-6.0	2.55	7.8	-38.4
400	-6.0	-11.0	2.50	2.5	-41.4
400	-8.0	-16.0	2.52	0	-43.8
400	-15.0	-21.0	2.60	-10.5	-44.4



Suitable for deep dehumidification application such as low-temperature cold storage, whose inlet temperature can be as low as -20°C

(For lower inlet temperature, please consult CleanMaster for customization)

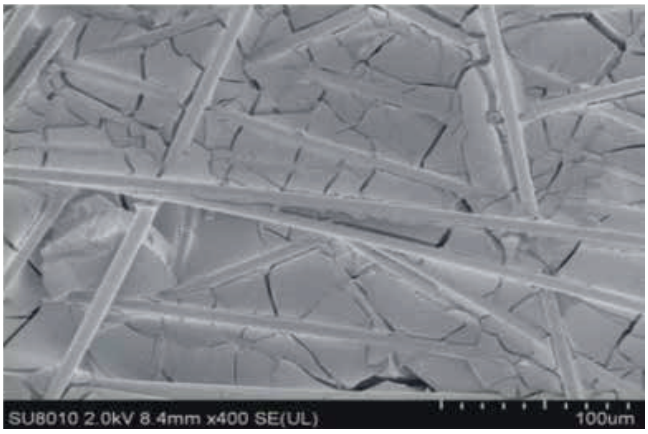
Working Principle

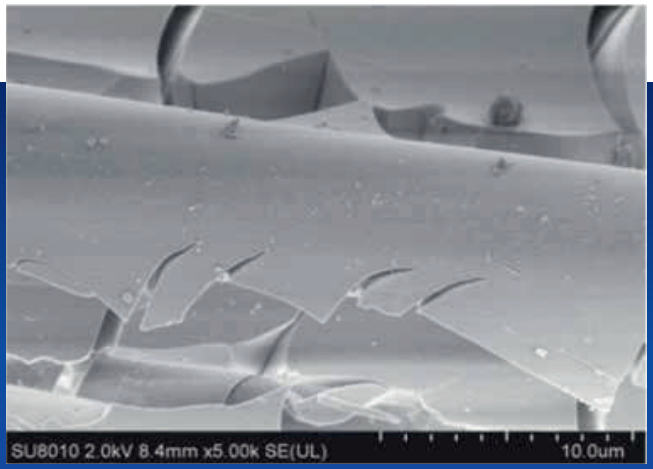


ADVANCE COOL TECHNOLOGY CO.,LTD.

Adopt MTR & energy saving desiccant rotor developed by Puresci as core component

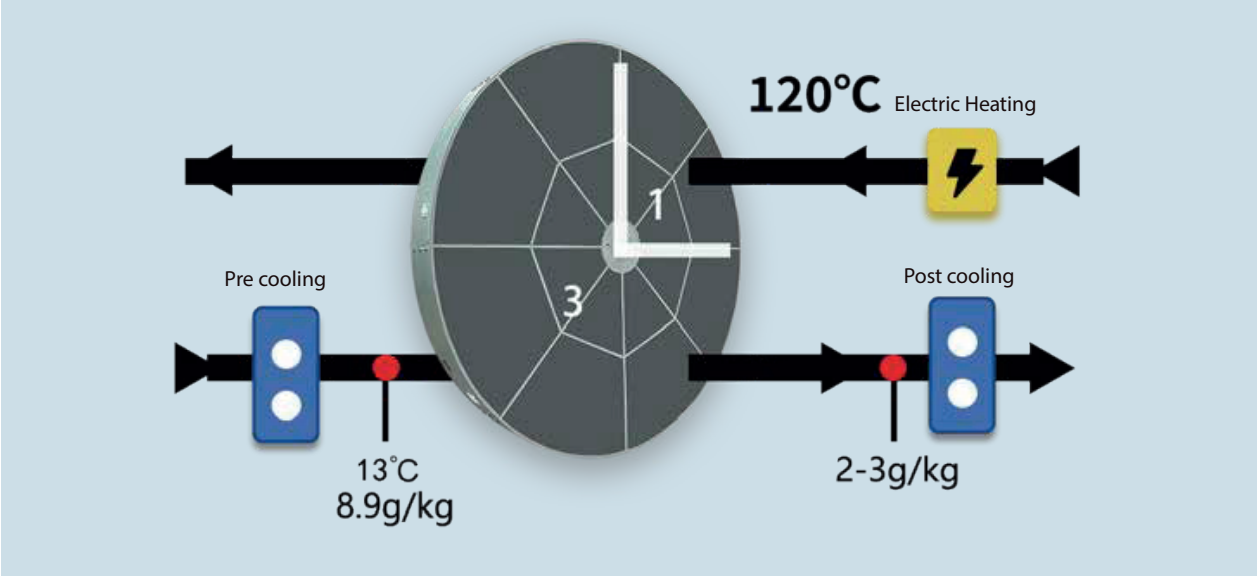
Various molecular sieve are mixed to reach the low dew point performance similar to that of ordinary molecular rotor (high temperature regeneration) in low dew point working condition. The regeneration temperature is also 20-40 °C lower than that of the ordinary rotor. The breakthrough on adsorption materials can greatly reduce the regeneration temperature, reduce the energy consumption of the whole machine and improve the operation safety while ensuring the dehumidification effect. The regeneration temperature of the medium temperature rotor is 70~90 °C, and the regeneration temperature can be lower than 70 °C in a special low temperature environment.Several dehumidification materials be uniformly blend with inorganic fibers by grafting. Multiple inorganic materials and zeolite materials are both with the characteristics of high water absorption capacity and deep adsorption ability.



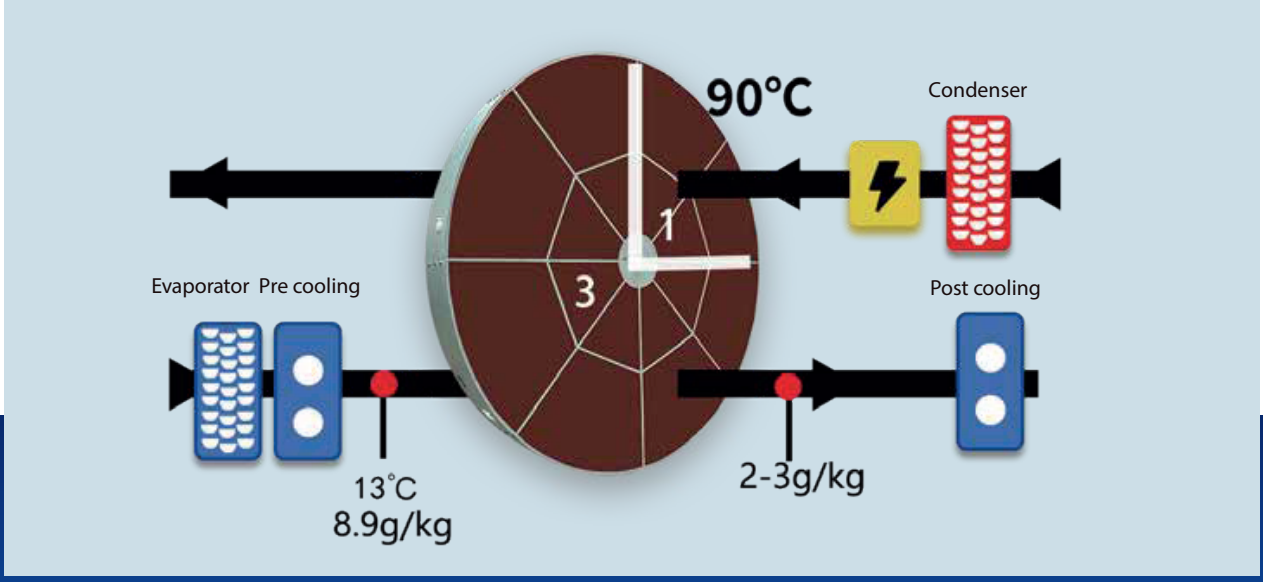


REVO SMART

The regeneration temperature of traditional high-temperature rotor is 120-140°C, and that of medium-temperature rotor is 70-90°C. With high efficiency and energy saving medium temperature rotor, we can ensure safe and stable operation



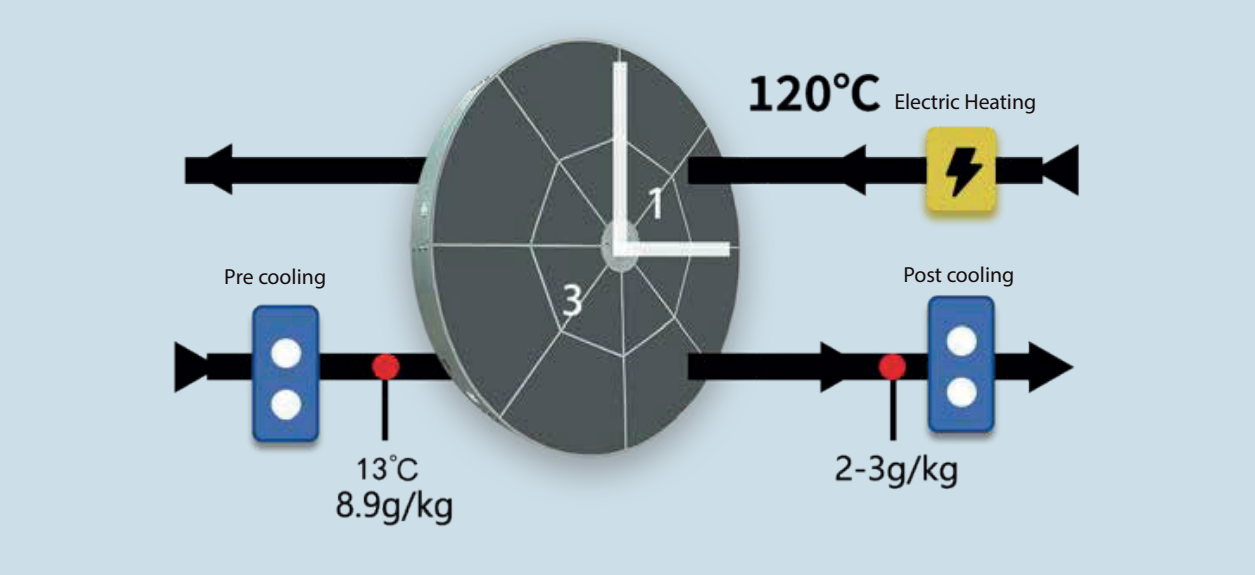
Traditional high temperature desiccant rotor



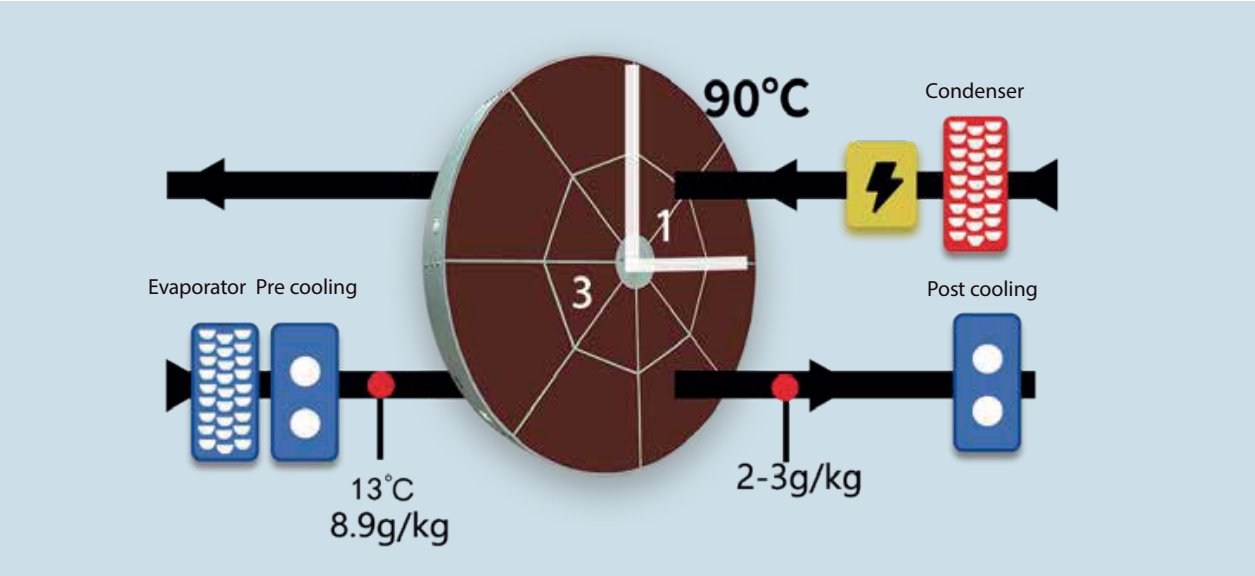
Energy saving medium temperature desiccant rotor

ADVANCE COOL TECHNOLOGY CO.,LTD.

The regeneration temperature of traditional high-temperature rotor is 120-140°C, and that of medium-temperature rotor is 70-90°C. With high efficiency and energy saving medium temperature rotor, we can ensure safe and stable operation



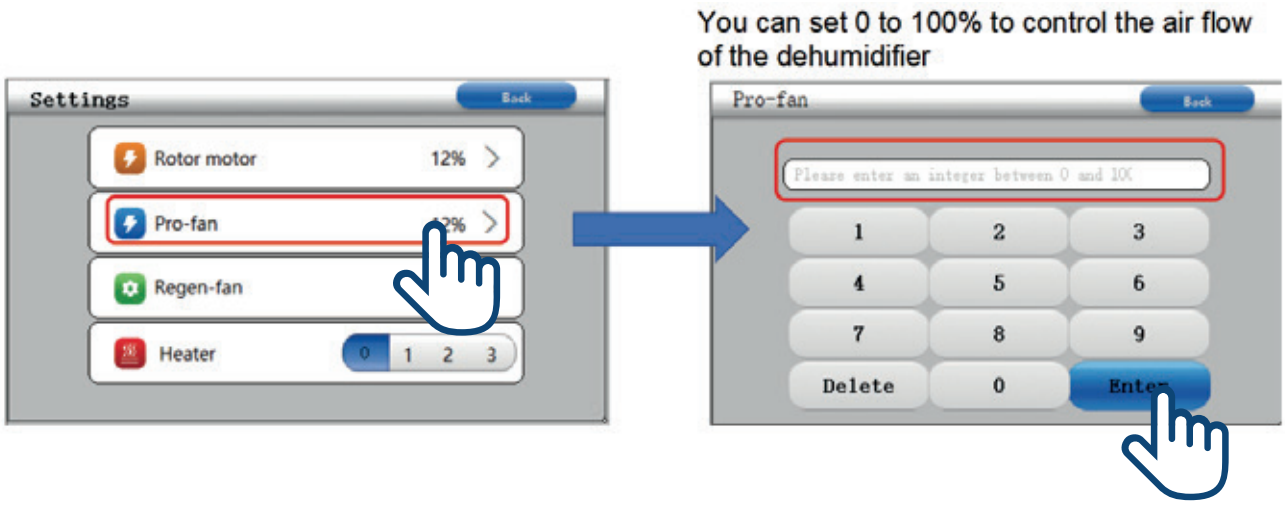
Traditional high temperature desiccant rotor



Energy saving medium temperature desiccant rotor

The logic of intelligent wind speed control

- The airflow and regeneration temperature can be adjusted freely,which can be applied to multiple dehumidification applications at the same time
- Touch the screen to enjoy a differ ent intelligent dehumidification control experience



No.	Processing fan frequency (%)	Airflow (m^3/h)
1	60	190
2	70	250
3	80	300
4	90	360
5	100	420

Different airflow corresponding to different processing fan frequencies

No.	Regeneration fan frequency (%)	Airflow (m^3/h)
1	80	160
2	90	190
3	100	220

Different airflow corresponding to different regeneration fan frequencies

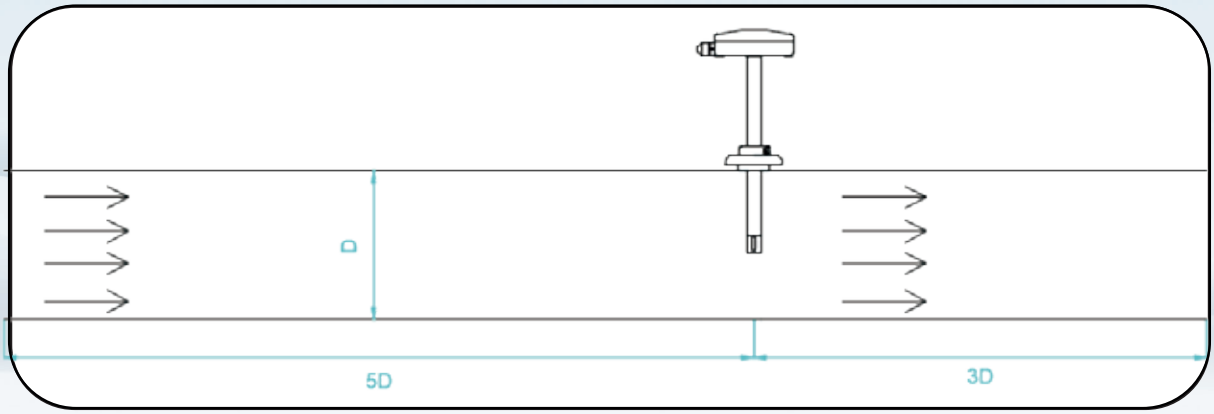
No.	Transmission motor frequency (%)	Rotor rotation speed (r/h)
1	60	8.9
2	70	10.1
3	80	11.3
4	90	12.5
5	100	13.5

Different airflow corresponding to different motor frequencies

Convenient for you to realize the control needs of airflow in light industrial applications

The anemometer needs to monitor in a straight pipe section. The standard is to leave 5 times the diameter of the front section and 3 times the diameter of the post section. The specific pipe length is up to the pipe diameter(m/s x m2)x3600=m3/h

E.g.: for a straight pipe with a diameter of 150mm, the flow velocity in the pipe is 6m/s, then the wind speed is 6m/s, the cross-sectional area of the pipe is (0.15/2)2 x π =0.0177m2, then the airflow is (6 x 0.0177) x 3600 = 382m3/h



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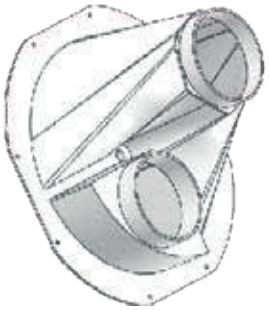
Accseeories Introduction



Air duct cover

High-temperature resistant
plastic air duct end cover replaces the
traditional sheet metal structure one, with a
better structure to ensure better sealing

Fan

EC Fan with high efficiency
and stable operation， easy to regulate speed

Heating method selection

Various heating methods are available for users to choose from

suitable for different conditions

PTC is available as regeneration heating source

Thermal protection temperature 150°C

Heat Pump is available as regeneration heating source

Gas & Hot Water are both available as regeneration heating source

We don't supply

Technicial Data

Model	REVO-R280	REVO-R370	REVO-R480	REVO-R590
Airflow (CMH)	200-400	400-700	700-1200	1200-1800

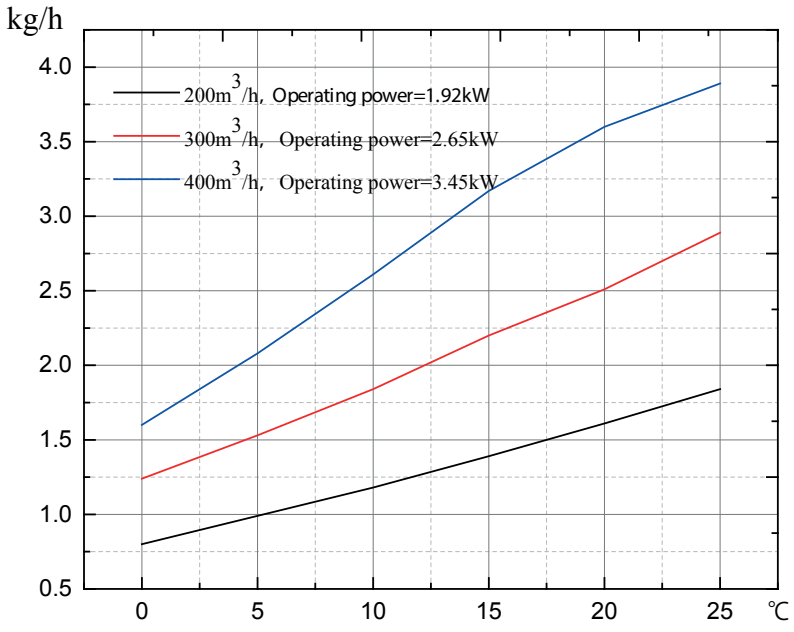
Since this product has the function of process airflow and heating power adjustment, the following will introduce the dehumidification performance of the product with three types of aiflow corresponding to three heating powers:

Note：

The data are calculated according to the rated airflow; The process and regeneration inlet airflow are calculated on the basis of RH95% at the corresponding temperature; Different airflow correspond to different operating power of the machine.

Transverse direction represents the inlet air temperature（℃）

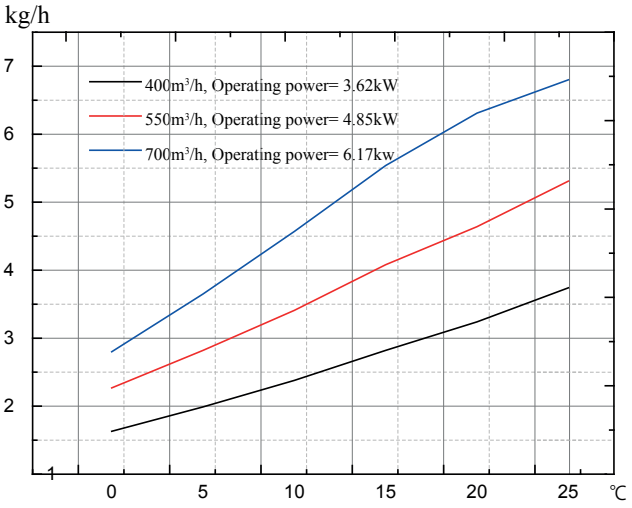
Longitudinal represents the dehumidification capacity （kg／h）



Test under RH 95%

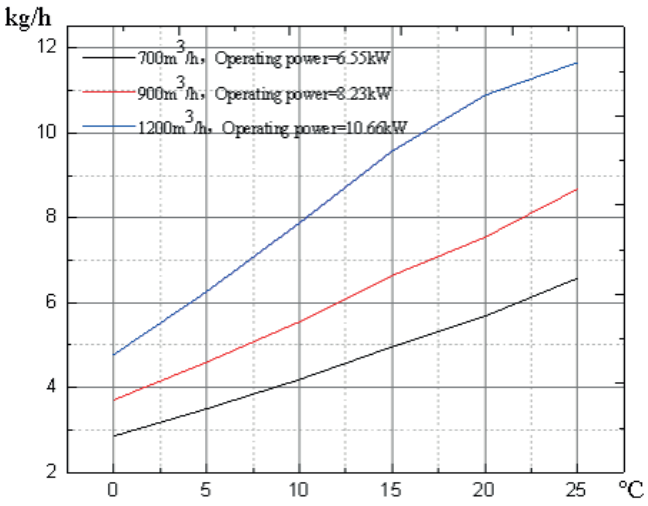
REVO-R280

Technicial Data



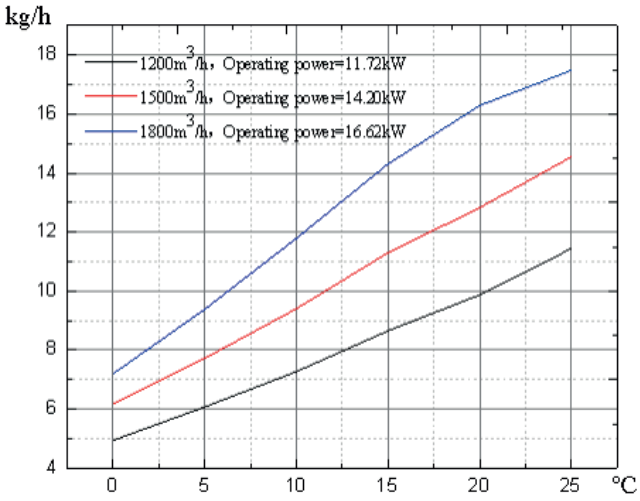
Test under RH 95%

REVO-R370



Test under RH 95%

REVO-R480



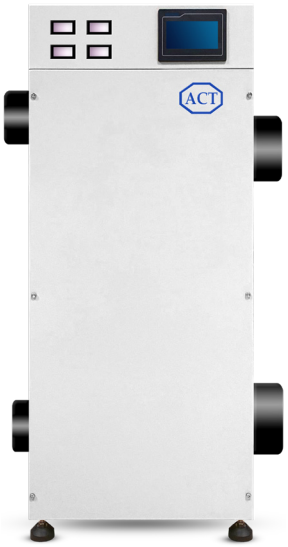
Test under RH 95%

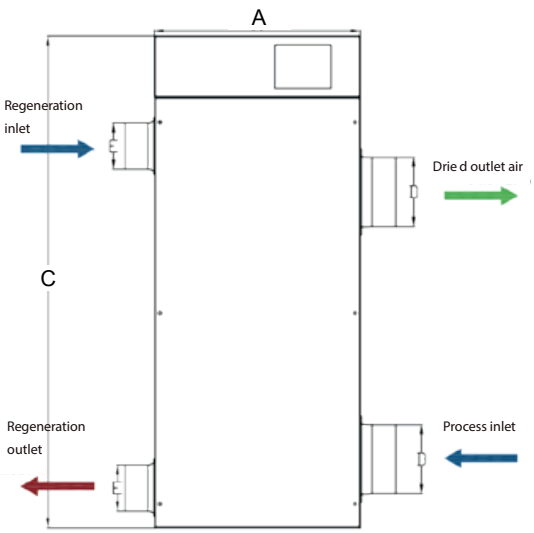
REVO-R590

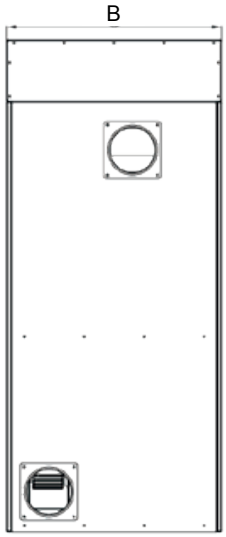
Product Parameter

Product Size (with electric heating)

For the size with other heating methods, please consult CleanMaster







Model	Size (mm)				
	A	B	C	D	E
REVO-R280	433	468	1029	147 (Customizable)	96
REVO-R370	598	672	1190	198 (Customizable)	120
REVO-R480	813	877	1420	246 (Customizable)	160
REVO-R590	1013	1082	1590	293 (Customizable)	198

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