REHOBOTH

Rehoboth Compact Dehumidifier

RCD 030
RCD 060
RCD 100
RCD 150
RCD 200

Product Description:

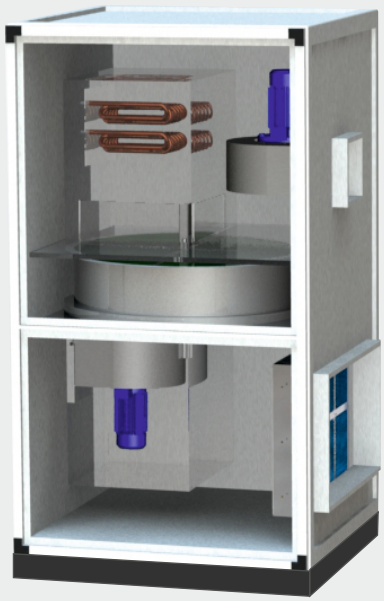
Dehumidifier unit complete with desiccant rotor section fitted with our rotor drive, regeneration module with electric heaters, G4 grade regeneration filter and reactivation fan and motor assembly. The desiccant wheel is constructed from a unique high temperature substrate media corrugated and impregnated with a non-migrating water selective low temperature regenerating desiccant which will have positive sealing between process and reactivation air stream to allow independent air flows.

Operating Principle

- **REHOBOTH** dehumidifiers operate on the principle of adsorption of water vapor from the air. The desiccant used is silica gel, which is formed on an inorganic substance.
- The desiccant and substrate are arranged in a wheel-shaped rotor matrix having thousands of small parallel air passages extending through its thickness.
- The desiccant rotor is housed in a cabinet that is separated into process and reactication sections. In the process section, moist air passes through the rotor, and the silica gel adsorbs the moisture.
- To drive the absorbed moisture out of the desiccant, the rotor slowly rotates into the reactivation section, where a second heated air stream passess through the rotor. The hot air heats the desiccant, driving the water out of it. The moisture-laden reactivation air is usually exhausted outside. The reactivated desiccant rotor rotates back into the process section to provide continuous drying of the process air.
- In many applications, the process air is cooled before entering the desiccant rotor to enable the system to produce dry air.
- The reactivation air stream may be heated by electrical heaters or any other source of heat depending on the application and available utilities.

Product Range

- Available in 5 models, 300- 2000 CMH supply air,
- Highly efficient solid desiccant fluted wheel
- PLC or relay based control choice
- G4 grade on both air streams side
- Robust industrial duty structural frame and panel design
- Highly compact design - lowest foot print area
- Fully factory assembled
- Reduced installation time on site and costs
- Uprated supply air flow capacity and higher available static pressure available
- Stainless steel sheet metal casing (optional)



REHOBOTH ENVIRO SYSTEMS

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West - M: +91 7977501917 E: rehoboth.mby@gmail.com
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Plant : Plot No.17, Chintupada, Palghar(w), Maharashtra, India - 401 404

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TECHNICAL DATA - REHOBOTH COMPACT DEH(RCD)													
DEH MODEL	Process air				Reactivation air					Dimensions			Weight
	Air Flow:-		Fan Details:-		Air Flow		Fan Details		Heater	Length	Width	Height	
	CMH	CFM	Static Pr(Pa)	Motor (HP)	CMH	CFM	Static Pr(Pa)	Motor (HP)	(KW)	mm			kg
RCD 30	ĊĆĆ	180	150	0.25	100	60	100	0.25	3.5	600	600	1000	150
RCD 60	ĎĆĆ	360	200	0.5	200	120	150	0.5	7	700	700	1200	150
RCD 100	ĈĆĆĆ	600	200	1	300	180	150	1	12	800	800	1300	180
RCD 150	ĈĎĆĆ	900	200	2	500	300	150	1	18	950	950	1600	200
RCD 200	ĈĆĆĆ	1200	200	2	700	420	150	1	24	1000	1000	1700	225

AHU Units have 415v/3ø/50 Hz Supply , RCD 30 is having single phase 220v Supply

Some of the Industrial Applications-

Food :
Production & packing of Biscuit, Cookies, Candies, Chocolate, Chewing gums, Chips, Conveying of dried Milk, Coffee, cereals, sugar, dried energy/health drinks, Tea/herbs drying, Brewery, Cold Rooms, Frozen food processing areas, Loading docks, Dried fruit/vegetables, Seed drying & storage, Yeast making

Pharmaceuticals :
Soft gelatine capsule drying, manufacturing and packing areas of Effervescent, Hygroscopic salts/powders, Vitamins, Tablet coating, Aseptic manufacturing and packing areas

Paper & Printing :
Libraries, Archives storage, Paper pre-conditioning, Gravure printing, Currency printing, Paper fibre moulding

Electricals & Electronics :
HT Transformer and Capacitor manufacturing HV cable wrapping, Clean spaces for Semiconductor manufacturing, PCB assembly, Lithium batteries

Automotive :
Glass lamination, Radial tyre creel room, Engineering plastic components, Engine test room

Corrosion Prevention :
Storage of military equipments, Leather, Precision components, Power plant lay up, Water and sewage treatment plants

Mould & Fungus Prevention :
Schools, Assembly areas, Theatres, Restaurants, Hotels, Hospitals, Cargo protection

Condensation Prevention :
Injection and blow moulding, Ice skating rinks, Surface preparation & coating

Applications

- Pharmaceuticals
- Chocolate Candies
- Dry Cold Seed Stores
- Operation Theaters
- Sugar Coating Pans
- Rotogravure Printing
- Long Term Storage
- Injection Moulding
- Garment Packing

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