

I. Product specification

1. Overview

- RT series is a complete set: aluminum wheel, casing, sealing, drive belt, and motor with controller
- **Recovery /wheel types:**
 - sorption (total: sensible and latent)
 - enthalpy (hygroscopic: sensible and moderate latent)
 - condensation (non-hygroscopic: sensible-only)
- Airflow range: from 325 – 40 273 m³/h
- Wheel diameters: 500 – 2400 mm, with depth of 200mm
- Performance certified with Eurovent
- Wheels independently tested and certified according to Hygienic norms
 - VDI 6022, SWKI VA104-01

2. Wheel Construction

- Wheel structure: Monolith (patent-pending solution)
- Wheels available in two wave heights: 1.9 mm & 1.6 mm
- Hub: made of extruded aluminum, diameter of 150mm or 250mm, depending on wheel diameter. For wheel diameters over 1200mm, hub is reinforced with 500mm spokes to reduce torque and eliminate material fatigue
- Permanently sealed and lubricated ball bearings. Bearings designed for over 200 000 hours of duty (20000 L10 hours of duty, 1000 rpm, 3000 kg). Maintenance free

3. Energy Recovery Solution

- Transfer media: corrugated aluminum with optional desiccant coating for latent recovery
- Desiccant type: 3A molecular sieve as desiccant for fast absorption of moisture and antimicrobial properties
- Cross-contamination: minimal - high selectivity desiccant absorbs only water molecules of 2.7Å (only water molecules fits desiccant pores of 3Å; most contaminants like ammonium >3Å)
- Performance certification: Eurovent

4. Casing

- Structure: double wall
- Frame material: 1mm to 1.5mm prime G90 hot-dip galvanized steel (DX51D+Z275), tested for corrosion resistance of 400 hours of salt spray

5. Sealing system

- System: twin on both sides of wheel
- Sealing on wheel peripheries: non-contact sealing type around both diaphragms, reinforced and industrial-grade fabric
- Sealing on central beams: durable brush seals along both central beams

6. Motor

- Stepper motors: 2 Nm - 55 W, 4 Nm -110 W, 8 Nm - 200 W for all sizes with integrated controls for variable speed
- Motor voltage: 3 phase 208-240 V
- Controls: 0-10V analog signal or ModBus digital connection
- Controller power: 27.5/55 W, 110/220 W
- Controller supply voltage: 1x230 V AC
- Size [mm]: 183x142.7x55

7. Belt Drive System

- Segmented belt, dust free

8. Cleaning, Purge, Masking

- Transfer media: cleanable (low-pressure air or water, max. 20bar, temp. below 25°C, at distance over 60cm)
- Purge section and maskings: for own application

II. RT Series - technical data:

1. Models: sizes, electrical options and performance at velocity range of 5 m/s (min/max) for wave height 1.9 mm:

Model	Media	Diameter	W x H x D	Airflow min/max	Effectiveness min/max			Pressure loss min/max
					Sensible %	Latent %	Total %	
Type		mm	mm	m ³ /h				Pa
RT-500	Monolith	500	580x580x215	325 - 1600	61.0 - 85.0	70.0 - 86.0	66.0 - 85.0	41 - 281
RT-600	Monolith	600	680x680x215	480 - 2380	61.0 - 85.0	70.0 - 86.0	66.0 - 85.0	41 - 282
RT-700	Monolith	700	780x780x215	660 - 3304	61.0 - 85.0	70.0 - 86.0	66.0 - 85.0	41 - 283
RT-800	Monolith	800	880x880x215	865 - 4364	61.0 - 85.0	70.0 - 86.0	66.0 - 85.0	41 - 283
RT-900	Monolith	900	980x980x215	1108 - 5566	61.0 - 85.0	70.0 - 86.0	66.0 - 85.0	41 - 283
RT-1000	Monolith	1000	1080x1080x215	1380 - 6909	61.0 - 85.0	70.0 - 86.0	66.0 - 85.0	41 - 283
RT-1100	Monolith	1100	1180x1180x215	1680 - 8393	61.0 - 85.0	70.0 - 86.0	66.0 - 85.0	41 - 283
RT-1200	Monolith	1200	1280x1280x215	2010 - 10019	61.0 - 85.0	70.0 - 86.0	66.0 - 85.0	41 - 283
RT-1300	Monolith	1300	1380x1380x215	2350 - 11786	61.0 - 85.0	70.0 - 86.0	66.0 - 85.0	41 - 283
RT-1400	Monolith	1400	1480x1480x215	2750 - 13695	61.0 - 85.0	70.0 - 86.0	66.0 - 85.0	41 - 283
RT-1500	Monolith	1500	1580x1580x215	3150 - 15745	61.0 - 85.0	70.0 - 86.0	66.0 - 85.0	41 - 283
RT-1600	Monolith	1600	1680x1680x215	3600 - 17936	61.0 - 85.0	70.0 - 86.0	66.0 - 85.0	41 - 283
RT-1700	Monolith	1700	1780x1780x215	4060 - 20269	61.0 - 85.0	70.0 - 86.0	66.0 - 85.0	41 - 283
RT-1800	Monolith	1800	1880x1880x215	4570 - 22743	61.0 - 85.0	70.0 - 86.0	66.0 - 85.0	41 - 283
RT-1900	Monolith	1900	1980x1980x215	5040 - 25075	61.0 - 85.0	70.0 - 86.0	66.0 - 85.0	41 - 283
RT-2000	Monolith	2000	2080x2080x215	5550 - 27832	61.0 - 85.0	70.0 - 86.0	66.0 - 85.0	41 - 283
RT-2200	Monolith	2200	2280x2280x215	6750 - 33770	61.0 - 85.0	70.0 - 86.0	66.0 - 85.0	41 - 283
RT-2400	Monolith	2400	2480x2480x215	8050 - 40273	61.0 - 85.0	70.0 - 86.0	66.0 - 85.0	41 - 283

*data and dimensions may be changed please contact for the individual drawing and data

2. Models: sizes, electrical options and performance at velocity range of 5 m/s (min/max) for wave height 1.6 mm:

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RT-600	Monolith	600	680x680x215	480 - 2380	63.0 - 87.0	73.0 - 89.0	68.0 - 88.0	74 - 343
RT-700	Monolith	700	780x780x215	660 - 3304	63.0 - 87.0	73.0 - 89.0	68.0 - 88.0	74 - 344
RT-800	Monolith	800	880x880x215	865 - 4364	63.0 - 87.0	73.0 - 89.0	68.0 - 88.0	73 - 344
RT-900	Monolith	900	980x980x215	1108 - 5566	63.0 - 87.0	73.0 - 89.0	68.0 - 88.0	74 - 344
RT-1000	Monolith	1000	1080x1080x215	1380 - 6909	63.0 - 87.0	73.0 - 89.0	68.0 - 88.0	74 - 344
RT-1100	Monolith	1100	1180x1180x215	1680 - 8393	63.0 - 87.0	73.0 - 89.0	68.0 - 88.0	74 - 344
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RT-2400	Monolith	2400	2480x2480x215	8050 - 40273	63.0 - 87.0	73.0 - 89.0	68.0 - 88.0	74 - 344

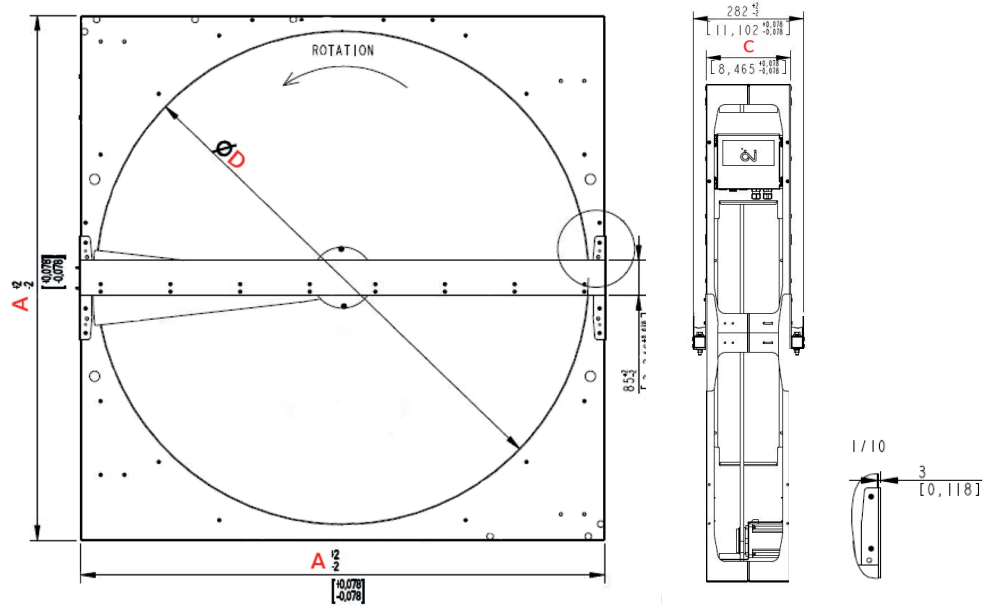
*data and dimensions may be changed please contact for the individual drawing and data



3. Casing drawings and dimensions [mm], wheel without vertical bracket support

Model	D [mm]	A [mm]	C [mm]
RT-500	500	580	215
RT-600	600	680	215
RT-700	700	780	215
RT-800	800	880	215
RT-900	900	980	215
RT-1000	1000	1080	215
RT-1100	1100	1180	215

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4. Casing drawings and dimensions [mm], wheel with vertical bracket support

Model	D [mm]	A [mm]	C [mm]
RT-1200	1200	1280	215
RT-1300	1300	1380	215
RT-1400	1400	1480	215
RT-1500	1500	1580	215
RT-1600	1600	1680	215
RT-1700	1700	1780	215
RT-1800	1800	1880	215
RT-1900	1900	1980	215
RT-2000	2000	2080	215
RT-2200	2200	2280	215
RT-2400	2400	2480	215

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