ComX-RT

HRV Rotary Heat Exchanger



VEHUM

www.vehum.com.au

1300 137 115

About Us

VEHUM is the commercial ventilation brand of DEHUM, created to meet the practical demands of modern commercial and industrial buildings. It builds on DEHUM's long experience in ventilation and humidity control and focuses solely on reliable ventilation systems.

Our systems are manufactured for us in Europe and built to high standards of performance and durability. This gives us confidence in the quality, consistency, and compliance of every unit we supply, even in demanding operating environments.

With over 17 years of direct experience in heat recovery ventilation, we understand how these systems perform in the real world and what the Australian market actually needs. That experience shapes the way VEHUM systems are designed — from component choice and layout to efficiency, access, and long-term serviceability.

VEHUM systems are designed to deliver steady airflow, effective heat recovery, and solid construction, providing practical solutions that installers, consultants, and end users can trust.

COMX-RT ROTARY HEAT RECOVERY RANGE

Where Fresh Air Becomes Confidence

The VEHUM ComX-RT range has been developed for commercial projects requiring high-efficiency heat and moisture recovery, low operating costs, and exceptional indoor air quality.

Utilising advanced rotary heat exchanger technology, ComX-RT units recover both sensible and latent energy from exhaust air streams, significantly reducing heating and cooling loads while helping maintain indoor humidity levels.

The ComX-RT range includes nine standard models with airflow capacities from 1,500 m³/h to 14,000 m³/h.

Custom-built configurations are also available for specialised project requirements.

VEHUM is present wherever fresh air is essential:

- Offices & Commercial Buildings
- Hotels & Hospitality Facilities
- Shopping & Retail Centers
- Industrial Buildings
- Laboratories & Clean Areas
- Hospitals & Healthcare Facilities
- Nursing Homes
- Conference & Concert Halls
- Banks & Financial Institutions
- Restaurants & Cafés
- Exhibition Centers & Museums
- Markets & Supermarkets
- Schools & Universities
- Stadiums & Sports Halls
- Stations & Airports

Engineered for efficiency.
Designed for reliability.
Built for confidence.



COMX-RT

ComX-RT by VEHUM is a high-efficiency rotary heat recovery unit designed to provide fresh air supply while efficiently exhausting stale indoor air.
Equipped with a high-performance rotary heat exchanger and low-noise EC fans, CFR-RT ensures energy savings, stable airflow and reliable operation.

Standard configuration includes:

- ePM1 55% (F7) supply air filter
- ePM10 50% (M5) exhaust air filter
- Optional ePM1 80% (F9) filtration
- CAV, VAV and DCV control options are available, with Modbus TCP/IP connectivity and fire alarm dry contact integration.

Efficient. Compact. Reliable.



Airflow Range: 1000 – 15000 m³/h
Model Range: 9 optimized sizes
Heat Recovery: Rotary heat exchanger
Fans: High-efficiency EC fans
Filtration: ePM1 55% (F7) and ePM10 50% (M5)supply / ePM10 50% (M5) exhaust
Pressure Drop: Low internal pressure loss
Casing: Compact, modular & dividable structure
Installation: Suitable for indoor & outdoor use
Heating Options:
• Electric pre-heater
• Electric or water final heater
Cooling Option:
• External water or DX cooling module

UNIT SPECIFICATIONS

ROTARY HEAT EXCHANGER

- High-efficiency rotary heat recovery wheel
- Sensible and latent heat transfer
- Up to 89% total energy recovery efficiency
- Low pressure drop design
- Variable speed rotor control
- Frost-resistant operation
- High separation efficiency between air streams

FANS

- Direct-drive EC motor technology
- Backward-curved impellers
- Low energy consumption
- Quiet operation
- Reduced maintenance requirements

CASING

- Inner panels made of galvanized steel
- Outer panels made of powder-coated galvanised steel
- Insulated with 50 mm thick rock wool (70 kg/m³ density)
- High air tightness construction



FILTRATION

- ECO-DESIGN compliant filtration system
- Standard: ePM1 55% (F7) supply / ePM10 50% (M5) exhaust
- Optional ePM1 80% (F9) for enhanced air quality
- Easy maintenance access

CONTROLS

- CAV, VAV and DCV operating modes
- Optional CO_2 demand control
- Temperature control
- Humidity control
- Modbus RTU/TCP integration
- Fire alarm interface
- BMS compatibility

NINE STANDARD MODELS AVAILABLE



AIR PERFORMANCE

Model	COMX-RT 1500	COMX-RT 2000	COMX-RT 3000	COMX-RT 4000	COMX-RT 5500	COMX-RT 7000	COMX-RT 9000	COMX-RT 11000	COMX-RT 14000
Nominal Air Flow (m^3/h)	1500	2000	3000	4000	5500	7000	9000	11000	14000
External Static Pressure (Pa)	200	200	200	200	200	200	200	200	200
Heat Recovery Efficiency (%)	77	79	76	78	77	78	78	77	76

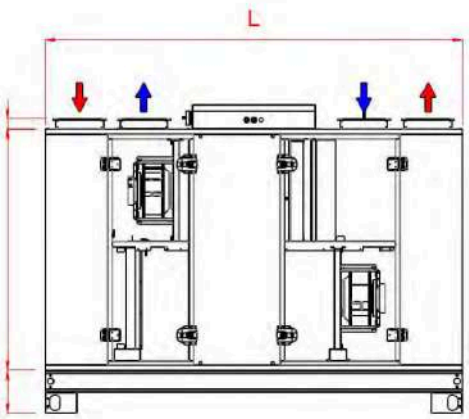
ELECTRICAL DATA

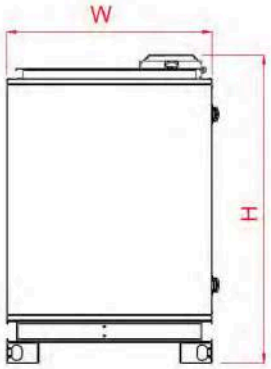
Model	COMX-RT 1500	COMX-RT 2000	COMX-RT 3000	COMX-RT 4000	COMX-RT 5500	COMX-RT 7000	COMX-RT 9000	COMX-RT 11000	COMX-RT 14000
Fan Type	EC	EC	EC	EC	EC	EC	EC	EC	EC
Voltage (VAC)	230	230	230	380	380	380	380	380	380
Current (A)	2.2	2.9	3.3	2.1	2.9	4.2	5.4	7.3	10.3
Fan Power (W)	500	660	750	1320	1850	2730	3510	4700	6750
Sound Power Level LwA (dB(A)	54	54	51	58	54	57	58	56	60

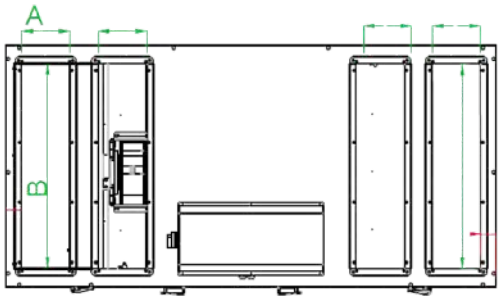
GENERAL SPECIFICATIONS

Feature	Specification
Heat Exchanger	**Rotary Heat Recovery Wheel**
Supply Filter	**ePM10 60% (G4) + ePM1 90% (F9)**
Extract Filter	**ePM10 70% (M5)**
Operating Temperature	**-20 / +60 °C**
Casing	**Double skin galvanized steel**
Panel Insulation	**50 mm mineral wool**
Protection Class	**IP31**

DIMENSIONS

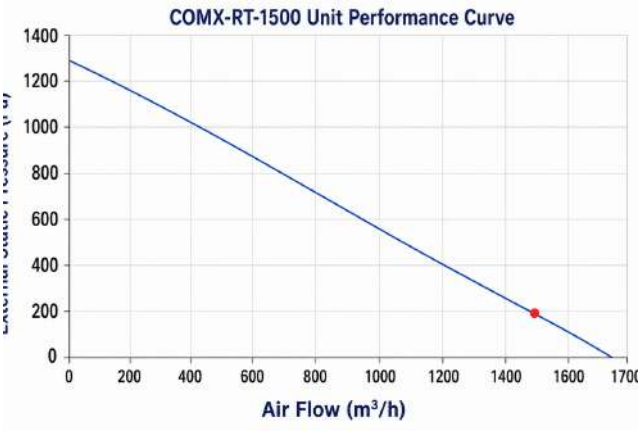


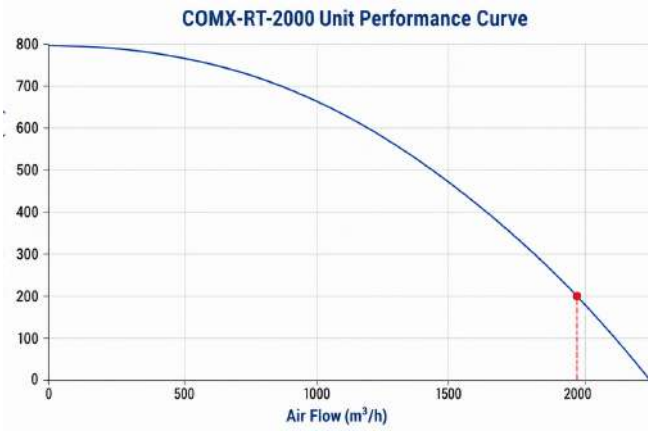


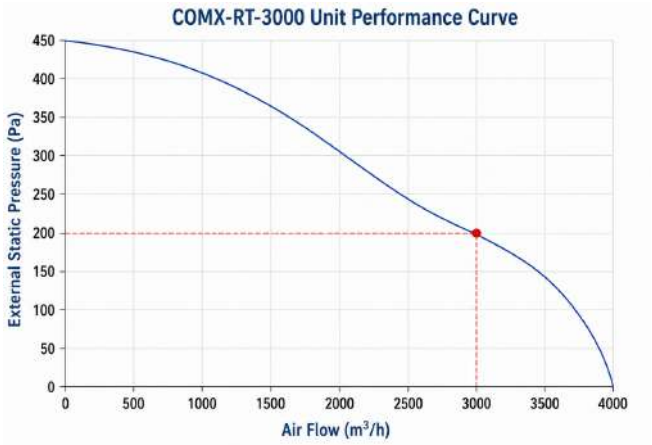


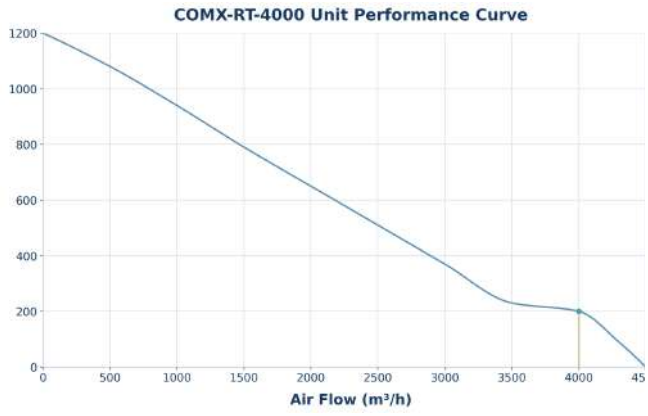
Model	COMX-RT 1500	COMX-RT 2000	COMX-RT 3000	COMX-RT 4000	COMX-RT 5500	COMX-RT 7000	COMX-RT 9000	COMX-RT 11000	COMX-RT 14000
L	2050	2050	2080	2080	2340	2900	3100	3100	3600
W	1005	1005	1250	1250	1300	1350	1350	1450	2050
H	1510	1510	1610	1610	1700	1700	1750	1750	2250
A	200	200	300	350	400	450	450	500	600
B	850	850	1000	1000	1100	1100	1150	1250	1800
KG	200	215	310	416	610	810	965	1050	1260

DATA

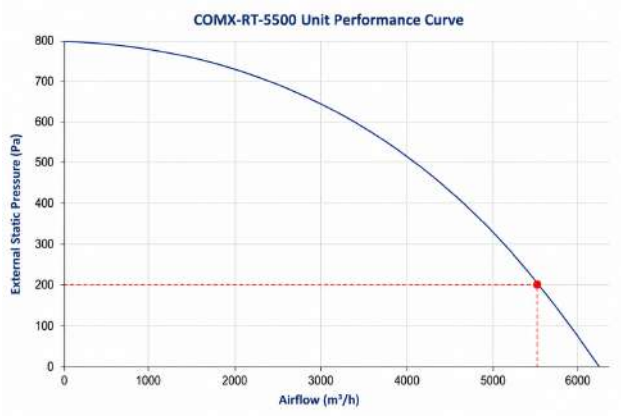

COMX-RT-1500 Unit Performance Curve
1400
1200
1000
800
600
400
200
0
0
200
400
600
800
1000
1200
1400
1600
Air Flow (m³/h)

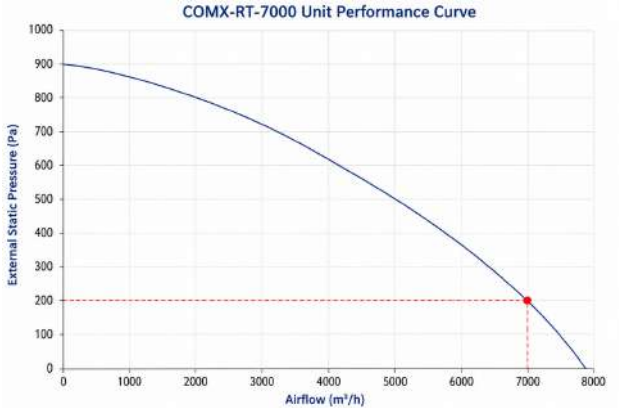

COMX-RT-2000 Unit Performance Curve
800
700
600
500
400
300
200
100
0
0
500
1000
1500
2000
Air Flow (m³/h)

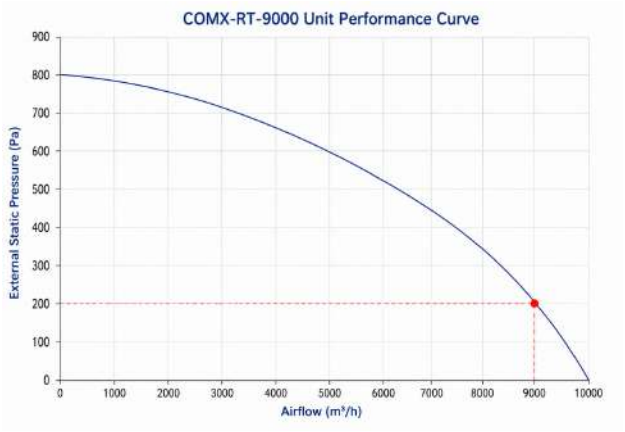

COMX-RT-3000 Unit Performance Curve
External Static Pressure (Pa)
450
400
350
300
250
200
150
100
50
0
0
500
1000
1500
2000
2500
3000
3500
4000
Air Flow (m³/h)

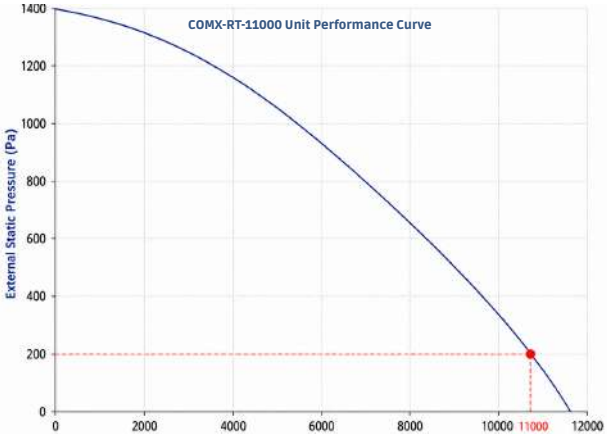

COMX-RT-4000 Unit Performance Curve
1200
1000
800
600
400
200
0
0
500
1000
1500
2000
2500
3000
3500
4000
Air Flow (m³/h)

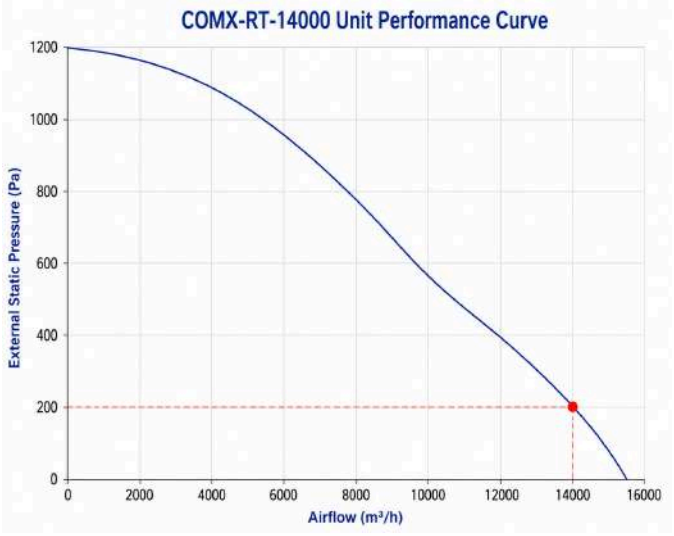
DATA


COMX-RT-5500 Unit Performance Curve
External Static Pressure (Pa)
Airflow (m³/h)


COMX-RT-7000 Unit Performance Curve
External Static Pressure (Pa)
Airflow (m³/h)


COMX-RT-9000 Unit Performance Curve
External Static Pressure (Pa)
Airflow (m³/h)


COMX-RT-11000 Unit Performance Curve
External Static Pressure (Pa)
11000


COMX-RT-14000 Unit Performance Curve
External Static Pressure (Pa)
Airflow (m³/h)

Automation & Control Functions

Control Functions	Standard	Optional	Basic Controller	Pro Controller
Outdoor Air Temperature		✓	✓	✓
Return Air Temperature		✓	✓	✓
Supply Air Temperature	✓		✓	✓
Exhaust Air Temperature		✓	×	✓
Supply fan control	✓		✓	✓
Exhaust fan control	✓		✓	✓
Fan Alarm	✓		✓	✓
Filter monitoring (Timer)	✓		✓	✓
Filter monitoring (Differential		✓	✓	✓
Fire Alarm Interface	✓		✓	✓
Rotor control (On-Off)	✓		✓	✓
Rotor Speed Control (0-10V)		✓	×	✓
Frost Protection		✓	×	✓
Constant Airflow Control		✓	×	✓
CO_2 Control		✓	○	○
Heating Water Coil Control		✓	✓	✓
Cooling Water Coil Control		✓	✓	✓
DX Coil Control		✓	✓	✓
Electric Heater Control		✓	✓	✓
Damper Control		✓	✓	✓
Modbus RTU		✓	✓	✓

ACCESSORIES

Measures indoor CO_2 concentration and automatically adjusts ventilation rates to maintain healthy indoor air quality while optimising energy consumption.



CO_2 sensor



LCD Control panel

Provides local monitoring and control of airflow, operating modes, alarms, temperatures, and system status through an intuitive user interface.

Replacement filters are available in G4, F7, and F9 grades to suit project requirements and maintain optimal indoor air quality.



Spare Filters (G4 / F7 / F9)

ACCESSORIES

Optional duct type water coil can be installed in the air duct to provide additional heating or cooling. It helps maintain the desired supply air temperature and improves indoor comfort.



Duct Type Water Coil



Duct Type Silencer

Optional duct type silencer is installed in the air duct to reduce noise generated by the ventilation unit. It helps improve acoustic comfort by lowering sound levels in the duct system

Optional duct type electric heater can be installed in the air duct to provide additional heating of the supply air. It helps maintain the desired supply air temperature and ensures indoor thermal comfort.



Duct Type Water Coil

VEHUM

www.vehum.com.au

3/12 Lee Street, Emu Plains, NSW 2750