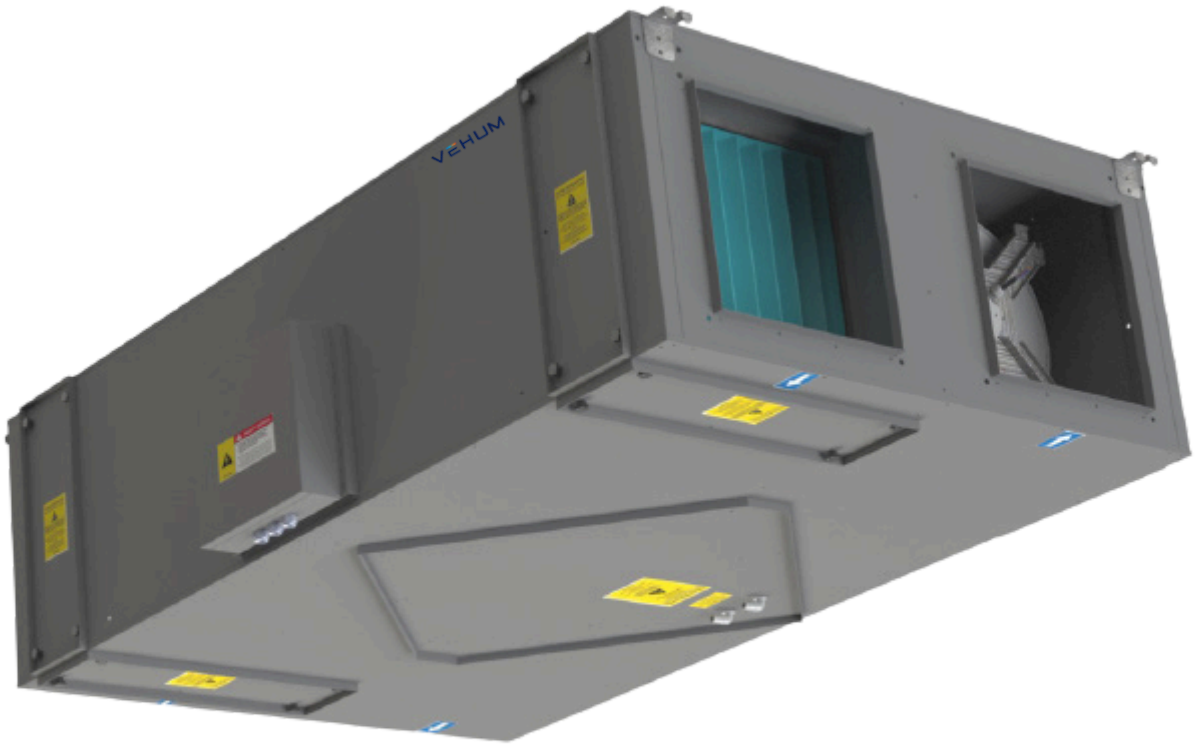
ComX-S

Heat Recovery Ventilators



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-S UNIT

The studies show that people spend most of their lives in indoor conditions in civilised cultures. Because of that,air quality becomes one of the core point for health.On the other hand, increasing demand for energy efficiency and the fact that energy sources are limited, consumption of the energy should be more efficient. VEHUM Heat Recovery Ventilator are designed for longlife usage to supply both energy efficiency and air quality.

VEHUM Heat Recovery Ventilator range has 8 models between 800m3/h and 5.000m3/h. The design made for recovering and transferring the thermal load on the exhaust air to fresh air.

Functions
VEHUM units;

- Supplying fresh air to indoor
- Exhausting
- Filtering of supply air
- Transfering energy of the exhaust air to fresh air

Advantages;

- Double drain pan
- Galvanized steel case
- Mounting from both sides thanks to functional design
- Removable plate exchanger
- Electrical heater or water coil application(optional)
- Easy replacing of air inlet-outlet connections
- Provides alternative duct connection options with additional duct outlets
- High efficienct Eurovent certified plate heat exchangers
- Low noise level and high efficiency by using back curved plug fans
- Easy maintenance for all components without demounting of unit
- Thermal and sound isolation(Non flammable)
- Functional control panel

Why Choose VEHUM Heat Recovery Ventilators

- Low Energy Consumption with high efficiency plug fans
- Eurovent-certified aluminum recuperator of brand for high thermal efficiency
- Low noise levels
- G class filter
- Smart automation solutions(optional)
- Proportional speed control
- 8 different models between 800m3/h and 5000m3/h
- Easy mounting for electrical heaters
- Water coil (optional)

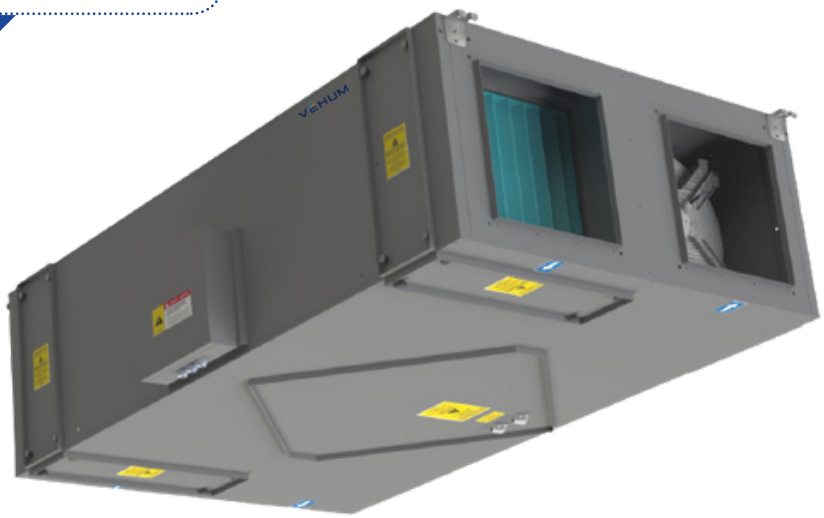
UNIT SPECIFICATIONS

Low noise level and high efficiency by using back curved plug fans

VEHUM Units use direct driven plug fans with AC motors. Thanks to aerodynamic structure of their wings, they reach high efficiency levels. They can work on high performances with low noise levels.

Easy maintenance for all components without demounting of unit.

All the components are detachable in case of maintenance needs without demounting of the unit. Provides alternative duct connection options with additional duct outlets



High efficiency with Eurovent certified heat exchangers

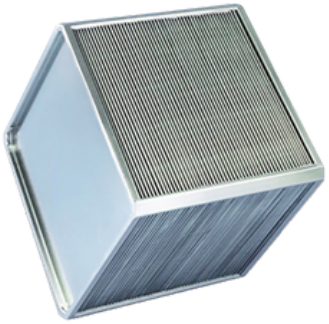
The exchangers that are used in VEHUM units are tested in laboratories and their performance are certified.

Exchangers supply low pressure drops thanks to state of art technology wing structure which brings energy efficiency as well as lower capacity needs on heating and cooling.

Thermal and sound isolation (Flame retardant)

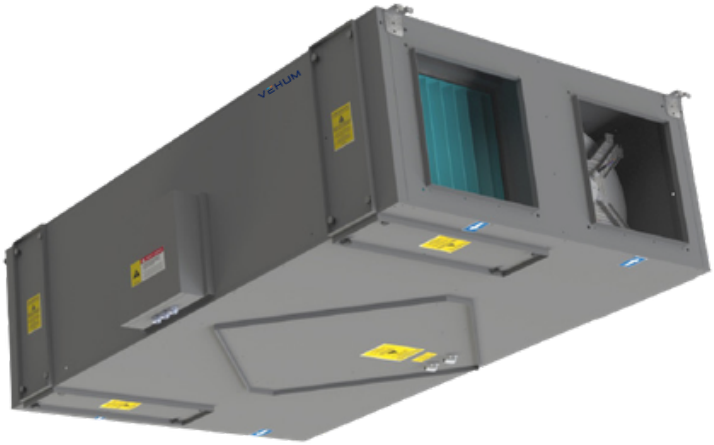
Flame retardant, polyurethane foams are used in VEHUM units to assure thermal and sound isolation. The flame retardant feature of isolation prevents thermal transfer. Fans ,filters and heat recovery exchangers of the CHR are reachable in false ceiling through service doors.

COMPONENTS



Heat Recovery Exchanger

- Longlife,plate type heat recovery exchanger
- High thermal efficiency
- Low pressure drop
- Eurovent certified
- Detachable, easy maintenance
- Washable



Body of the Unit

- High Corrosion resistant sheet metal painted
- Easy maintenance with service doors
- Alternative duct connection outputs
- Easy service
- Flame retardant thermal and sound isolation
- Easy mounting with hangers



Plug Fan

- Direct driven Plug fans with, AC motor
- Mono-phase connection
- Low electrical consumption
- Low noise level
- Protection against overheating
- Easy maintenance with service cover and easy detachment with smart connection socket



Filters

- G class according to EN 779
- Cleanable
- Leakproof sledge design
- Easy service with side and down service covers

'Optional'

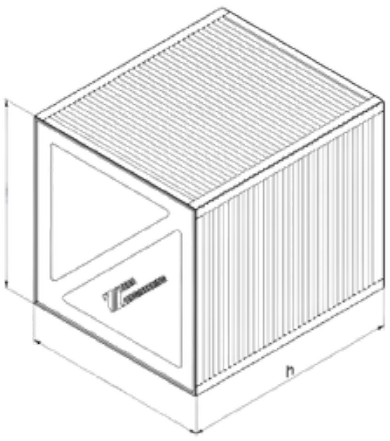
▶ Enthalpy heat exchanger, detail below

Enthalpy cross-flow heat exchanger
E-EX4 300

E-EX4 cross-flow enthalpy heat exchangers are available for applications requiring both sensible and latent heat recovery.

The ultra-thin polymer membrane allows heat and moisture transfer while preventing the transfer of contaminants, odours, microorganisms, and airborne pollutants between air streams.

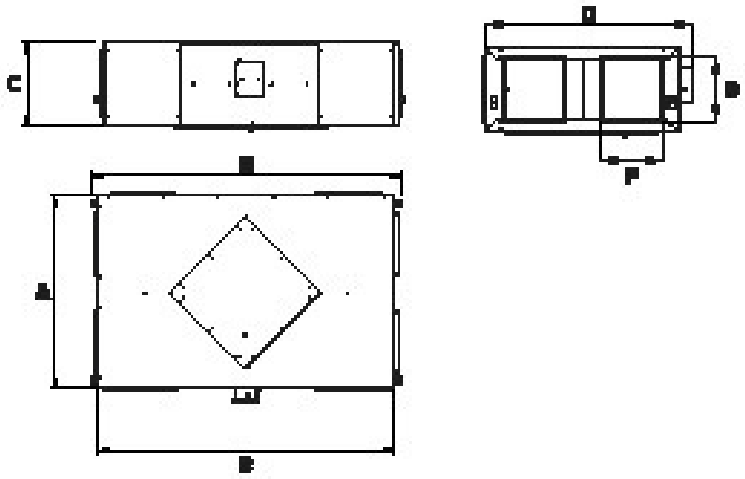
This assists in maintaining more stable indoor humidity levels during both dry winter conditions and humid summer operation.



DATA

		ComX-S range								
		800	1000	1500	2000	2500	3000	4000	5000	6000
Electrical Connections		1~230V / 50Hz								
Performance Data										
Air Flow [1]	m³/h	850	1000	1500	2000	2500	3100	3900	5100	5800
Sound Level [2]	dB(A)	44	45	46	48	48	49	50	52	52
Electrical Requirements										
Fan Power[3]	kW	240	310	420	450	450	750	960	1360	1550
Maximum Current	(A)	0,9	1,36	1,8	2	2	3,5	4,8	6	6,8

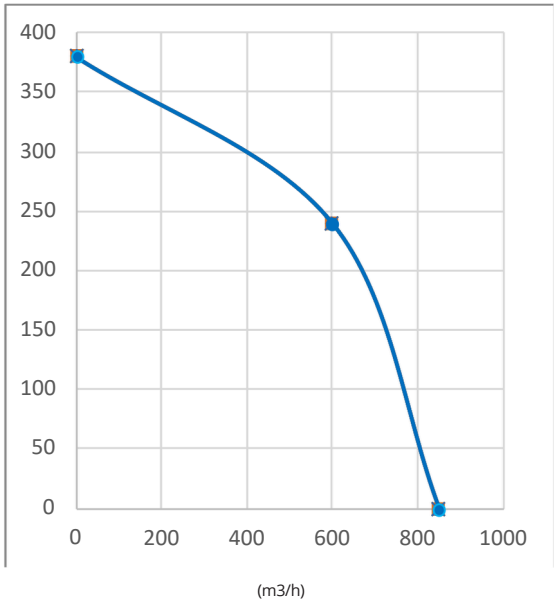
1. Air flow data when the ESP is 0 Pa.
2. Sound Levels are measured at 250Hz and 1.5m distance.
3. Power Consumption



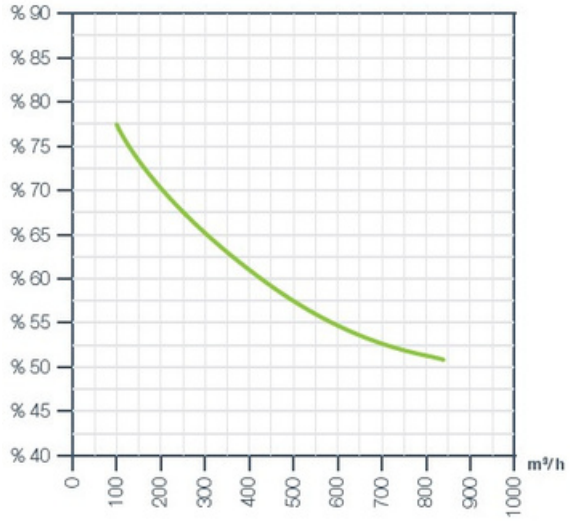
		Dimensions (mm)					
COMX-S RANGE	MODEL	A	B	C	F	G	Weight (kg)
	800	680	1210	300	200	200	51
	1000	842	1360	375	200	200	52
	1500	842	1360	427	170	270	72
	2000	1040	1740	500	250	300	84
	2500	1040	1740	500	300	300	103
	3000	1140	1940	545	370	370	116
	4000	1190	2160	610	370	370	125
	5000	1190	2240	645	432	432	186
	6000	1190	2240	645	450	450	210

DATA

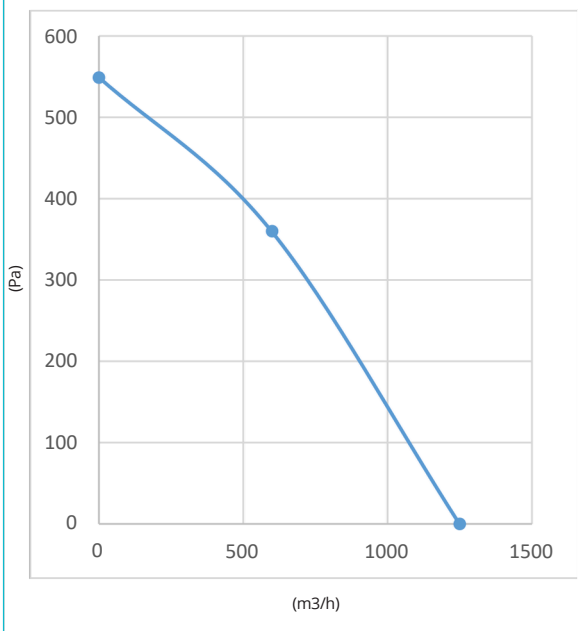
ComX-S 800 / Air Flow Performance



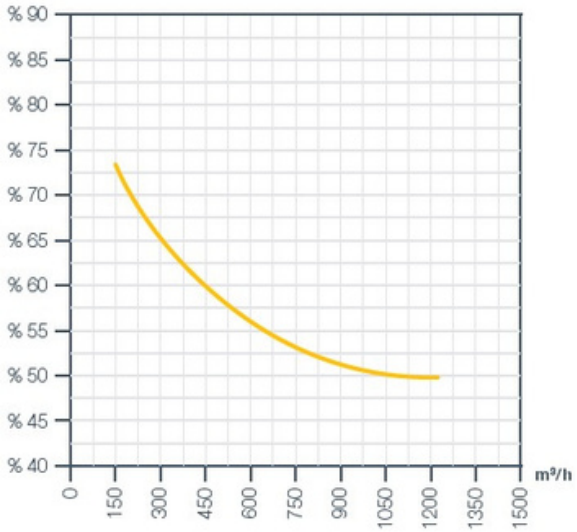
ComX-S 800 / Efficiency



ComX-S 1000 / Air Flow Performance

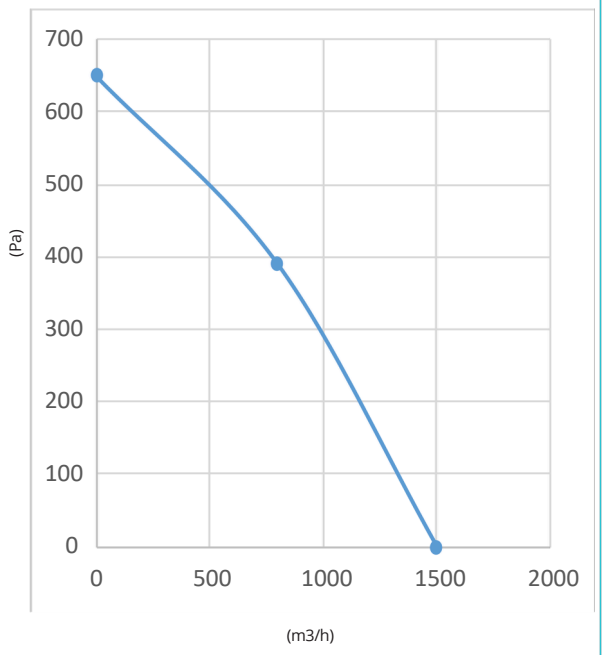


ComX-S 1000 / Efficiency

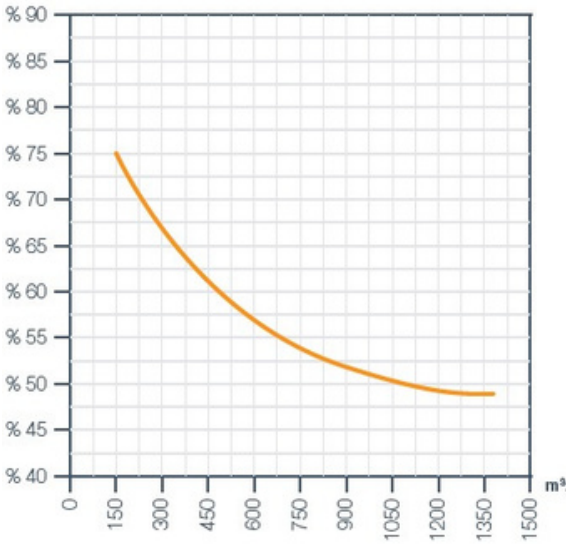


DATA

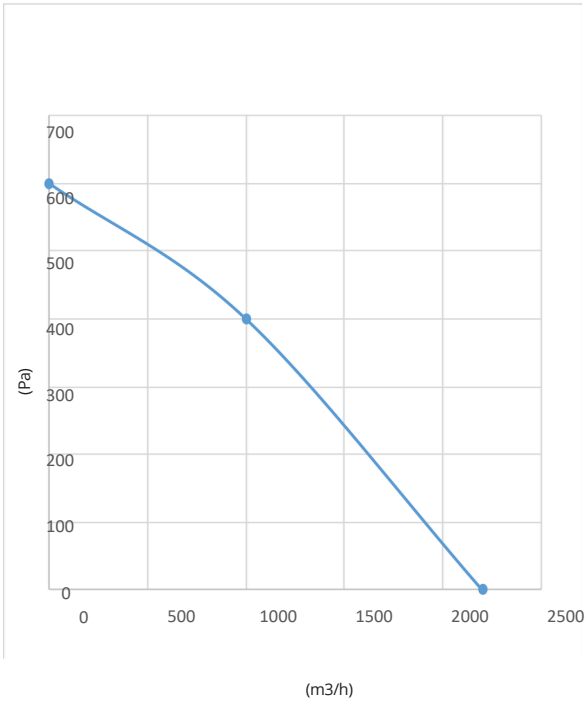
ComX-S 1500 / Air Flow Performance



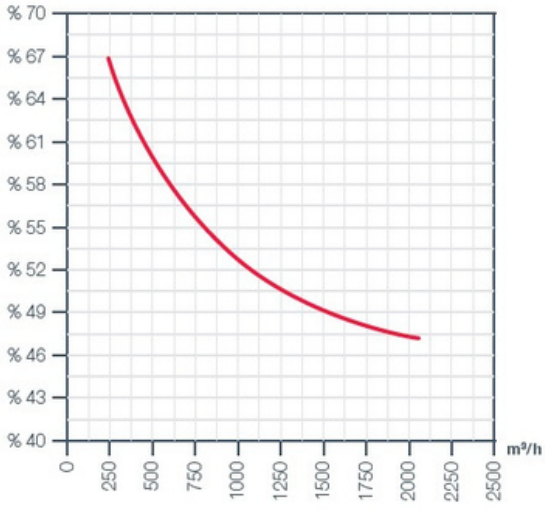
ComX-S 1500 / Efficiency



ComX-S 2000 / Air Flow Performance

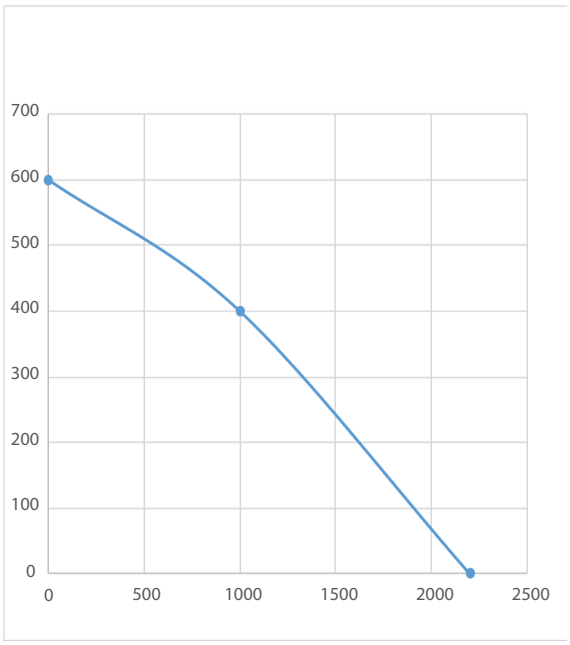


ComX-S 2000 / Efficiency

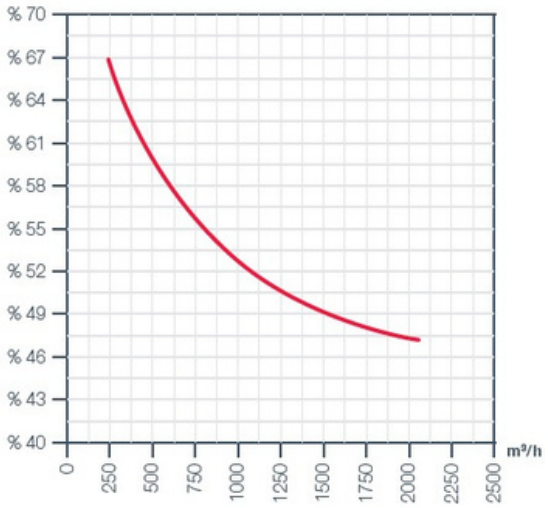


DATA

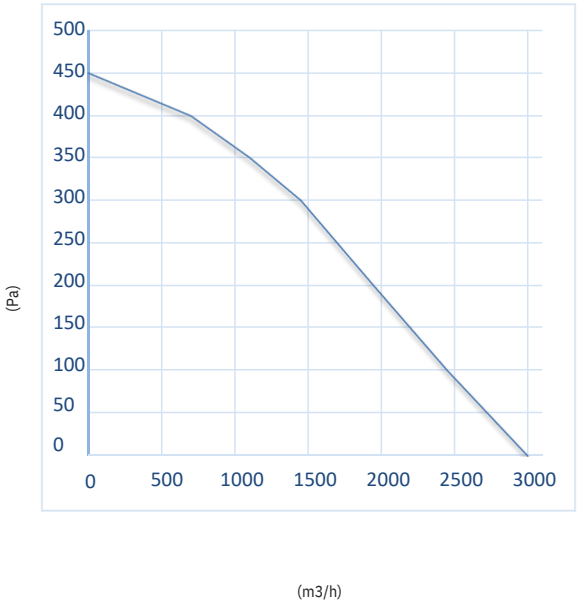
ComX-S 2500 / Air Flow Performance



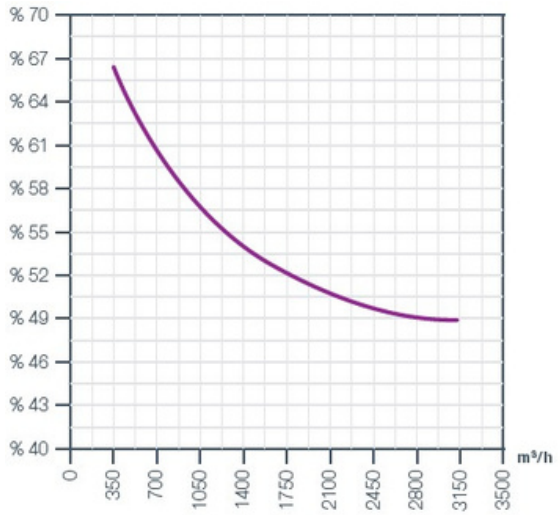
ComX-S 2500 / Efficiency



ComX-S 3000 / Air Flow Performance

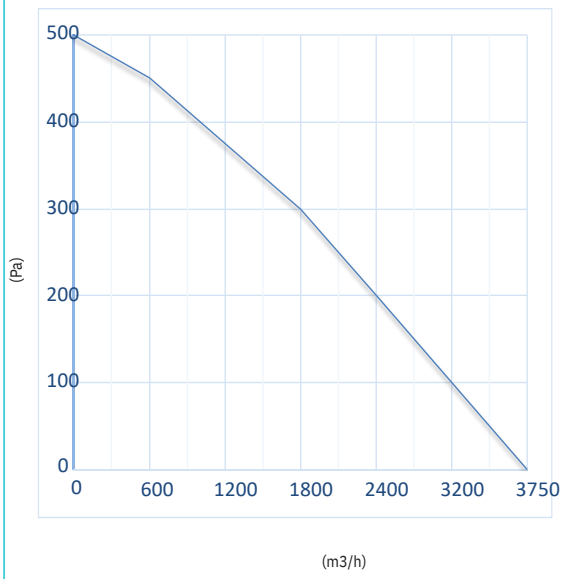


ComX-S 3000 / Efficiency

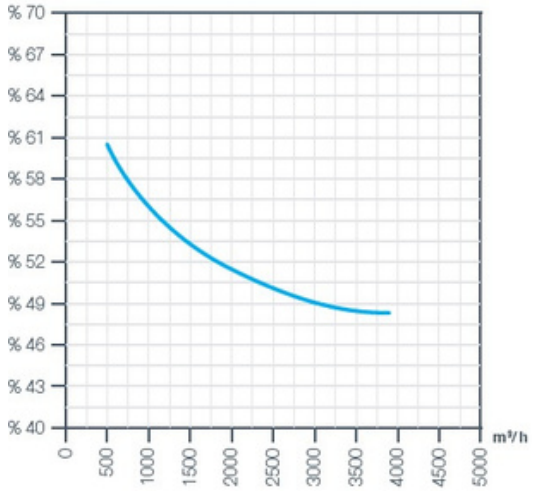


DATA

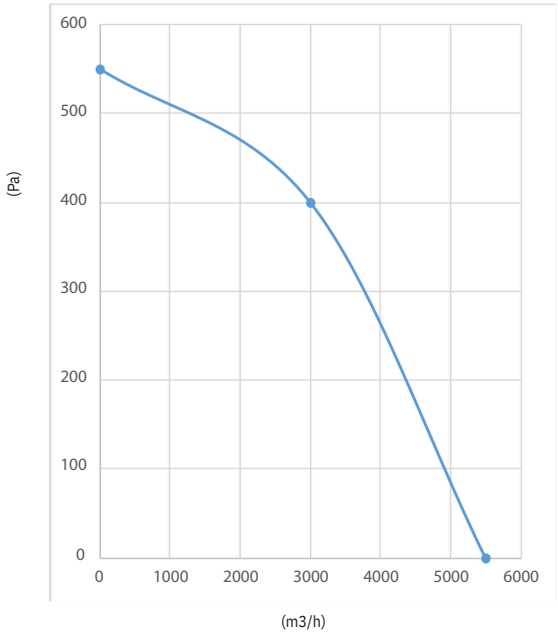
ComX-S 4000 / Air Flow Performance



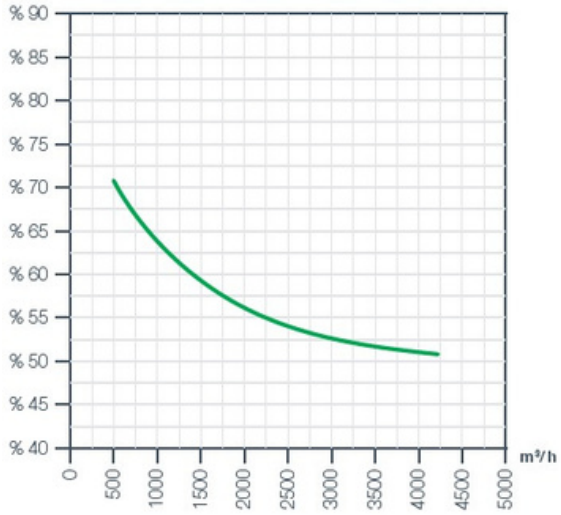
ComX-S 4000 / Efficiency



ComX-S 5000 / Air Flow Performance

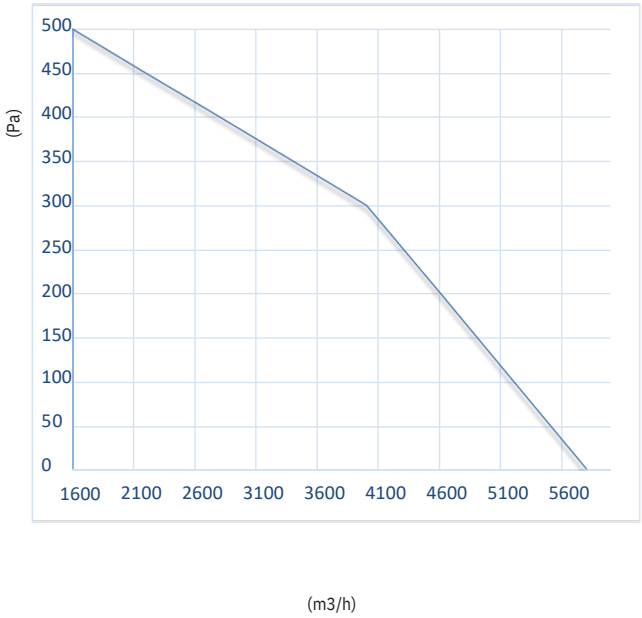


ComX-S 5000 / Efficiency

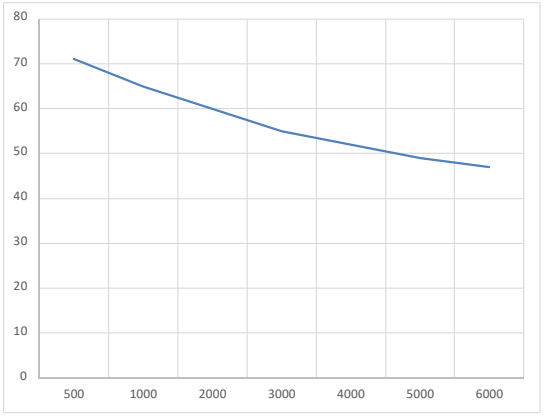


DATA

ComX-S 6000 / Air Flow Performance



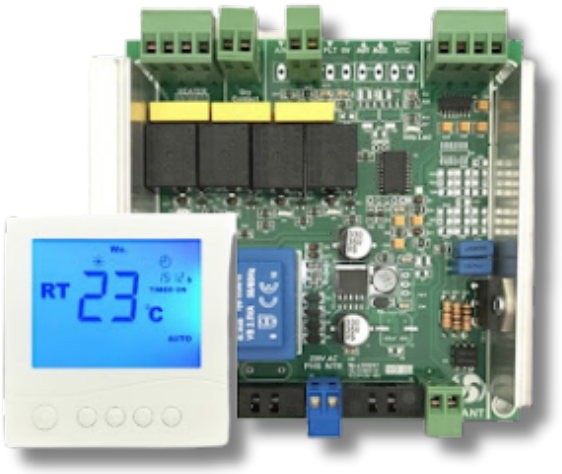
ComX-S 6000 / Efficiency



ACCESSORIES

Digital Room Controller

VEHUM units are supplied with a digital room control panel. It can control air flow while changing the exhaust and fresh air flows individually (L/M/H). All the changes could be followed on LCD screen.
The mode of the unit can be adjusted to winter or summer. In summer mode only the unit works. In winter mode, Unit and electrical heater works.



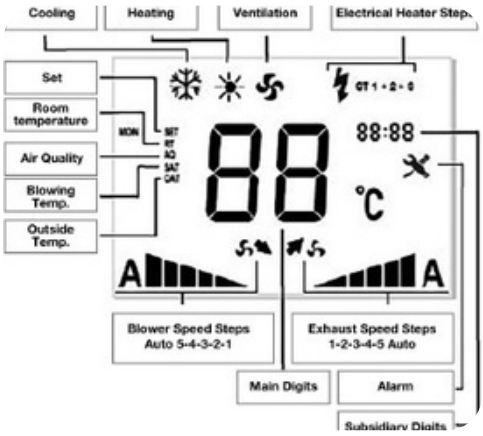
According to the temperature adjusted on the control panel, electrical heater start up automatically. The “off “ button on the control panel stops both electrical heater and unit.

Electrical board comes with the unit, it adopts unit orders coming from room controller.
Components like relay, contactor, capacitor and connector are located in electrical board.
Required electrical power should be supplied to heater and also to unit.

VEHUM Units can connect to Building Automation System via contactor or MODBUS(RS485). Thereby all the features of the unit can be controlled through a centralized system.

Fresh air and return air flows can be adjusted with automation panel. Thus, negative or positive pressure could be obtained.

By using Air Quality or CO2 sensors (optional) Ventilation on demand feature could be started. To use it, either room control panel or building automation panel should be taken to VOD mode.



Advanced Panel Specifications

1. 1. Independent supply and exhaust airflow control
2. Filter service timer and maintenance alarm
3. Motor thermal protection
4. Electric heater integration
5. Water coil integration
6. Heater over-temperature protection
7. Boost mode operation
8. CO_2 sensor compatibility
9. Damper motor control
10. BMS integration
11. Heating and cooling valve control
12. Fire alarm interface
13. Weekly scheduling functionality
14. Supply air temperature monitoring

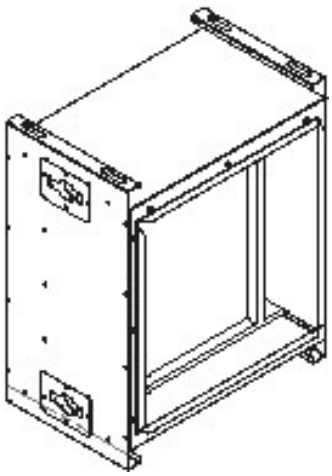
ACCESSORIES



Electrical Heater

- Control board
- Overheat sensor, thermistor
- non-flammable macaron for electrical cables
- Low energy consumption with step control
- Rectangular shape
- Galvanised steel body

Model		Electrical Power	Step
		kW	
ComX-S range	500	2	1
	1000	3	1
	1500	3	1
	2400	7	3
	3000	8	3
	4000	10	3
	5000	13	3
	6000	13	3



Hot Water Coil

VEHUM hot water coils are used at the exit of fresh air duct or inside the duct. They are made up of copper pipe, aluminium wings and brass collectors.

The electrical board starts up the coil on/off according to set temperature with room controller.

They have low pressure drops and can connect to duck system without using additional connection systems.

Air flow	Heating Performance (90/70°C)		pressure drop
	Capacity	Blowing Temparature	
m3/h	kcal/h	°C	kPa
900	4190	34	3
1060	5784	36.5	5.34
1400	9129	40.5	21.5
1600	11070	41.5	31.8
1725	12760	45.5	37
1800	17620	49.5	32.4
1900	20551	55	66.8
2450	25778	54	30.6

VEHUM

www.vehum.com.au

3/12 Lee Street, Emu Plains, NSW 2750