



AIRVENTS

COMPACT UNITS



The new generation
of professional ventilation



Compact units

The updated series of compact commercial air handling units, extended with new sizes and configurations



700 - 20 000 m³/h



- The Compact series of air handling units provides a cost-efficient and space-optimized solution, available in multiple sizes to accommodate a wide range of airflow requirements.
- The suspended version enables easy integration into ceiling voids, even in confined spaces.
- Vertical duct connection allows optimization of air duct arrangement.
- The compact design, along with dividing larger units into sections, facilitates easy transportation to the installation site.

FEATURES

- All units are available with two frameless casing options: AV – 40 mm panel construction and an enhanced 50 mm version with PVC profiles – AVS.
- Units with a 40 mm casing have lower weight and good thermal performance: T3, TB4
- Units with PVC profile casing have minimized heat loss, improved thermal performance (T2, TB2), and reduced noise levels.
- Integrated water and electric heaters in vertical units.
- Hygroscopic rotary heat exchanger as an option.
- Compact height for ceiling-mounted units (from 295 mm) and optimized width (from 800 mm) for the vertical ones.
- Control box mounted on the casing, outside the unit for suspended units.

High performance with optimized costs **T2 / TB2 / L1 / D1**

Technical Specifications According to EN 1886:2009					
Mechanical Strength (mm × m⁻¹)	D1	D2		D3	
	4	10		> 10	
Casing Air Leakage (l × s⁻¹ × m⁻²)	L1 (f400)	L2 (f400)		L3 (f400)	
	0.15	0.44		1.32	
	L1 (f700)	L2 (f700)		L3 (f700)	
	0.22	0.63		1.90	
Filter Bypass Leakage (k in %)	F9	F8	F7	M6	G1-M5
	0.5	1	2	4	6
Thermal Transmittance (W × m⁻² × K⁻¹)	T1	T2	T3	T4	T5
	U < 0.5	0.5 < U ≤ 1.0	1.0 < U ≤ 1.4	1.4 < U ≤ 2.0	2.0 < U
Thermal Bridging Factor	TB1	TB2	TB3	TB4	TB5
	0.75 < k _b < 1.00	0.60 ≤ k _b < 0.75	0.45 ≤ k _b < 0.60	0.30 ≤ k _b < 0.45	k _b < 0.3



AirVents CFH

Floor mounted heat recovery units



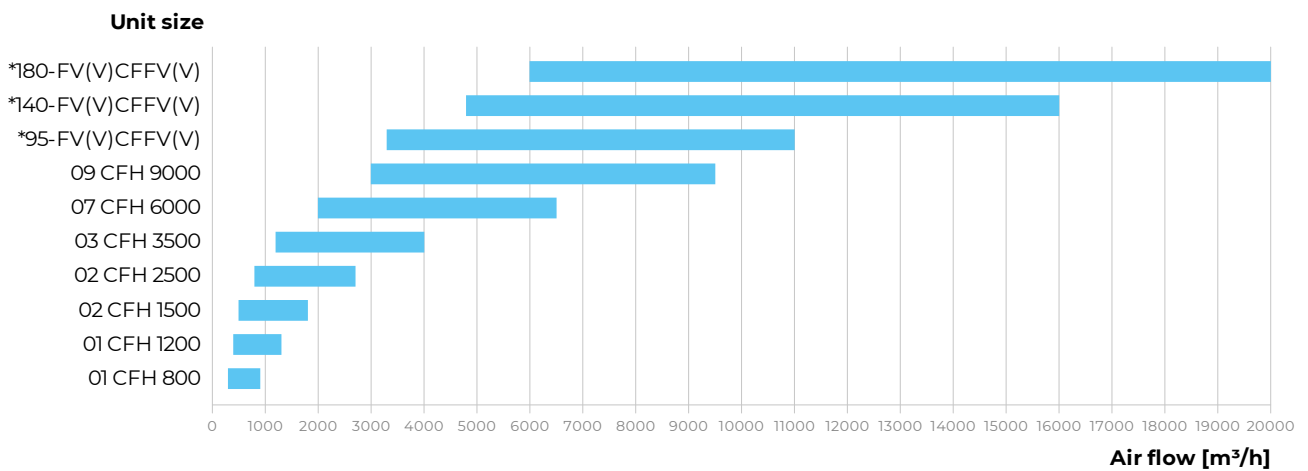
FEATURES



- High-efficient counterflow heat exchanger made of profiled polystyrene plates, packed with elastic heat-resistant sealant. Stainless steel drain pan on both supply and exhaust sides.
- High-efficient EC fans, back ward-curved, external rotor. Integrated plug-and-play controls.
- Automatic bypass. ECO-Design'18 compliant. Polystyrene plate heat exchanger. Panel filters ePM1 70% (ISO 16890)-F7 (EN779). Hinged service doors.
- Web interface, MODBUS, outputs for optional DX or Hydronic cooling / heating.
- Complete set of accessories: silencers, economizers, VAV, CAV, etc. Option operation by RH/CO2/temperature/constant pressure/timer schedule.
- **Best suited for:** a broad range of applications, from private residential buildings to large commercial and public facilities, including offices, educational institutions, public buildings, and facilities with restricted indoor installation areas. Suitable for both indoor and outdoor installation. Outdoor installation available with an optional mounting kit.



Sizes and capacities of AV and AVS Compact units



Connection dimensions [mm]

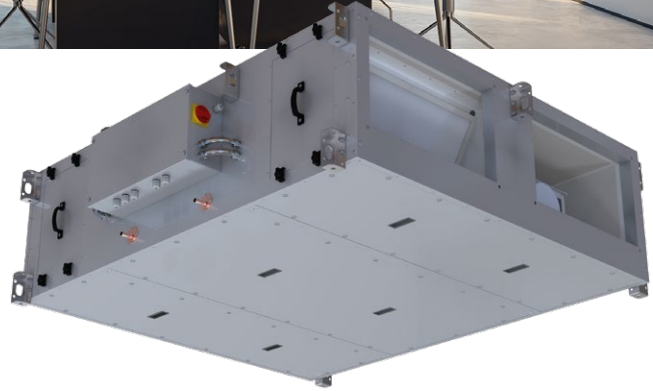
Unit size	01 CFH 800	01 CFH 1200	02 CFH 1500	02 CFH 2500	03 CFH 3500	07 CFH 6000	09 CFH 9000	*95-FV(V) CFFV(V)	*140-FV(V) CFFV(V)	*180-FV(V) CFFV(V)
Width × Height	∅ 315	∅ 315	600×350	600×350	700×400	1000×500	1200×600	1400×600	1800×800	2000×1000

* The units are available in AVS casing only.



AirVents CFP

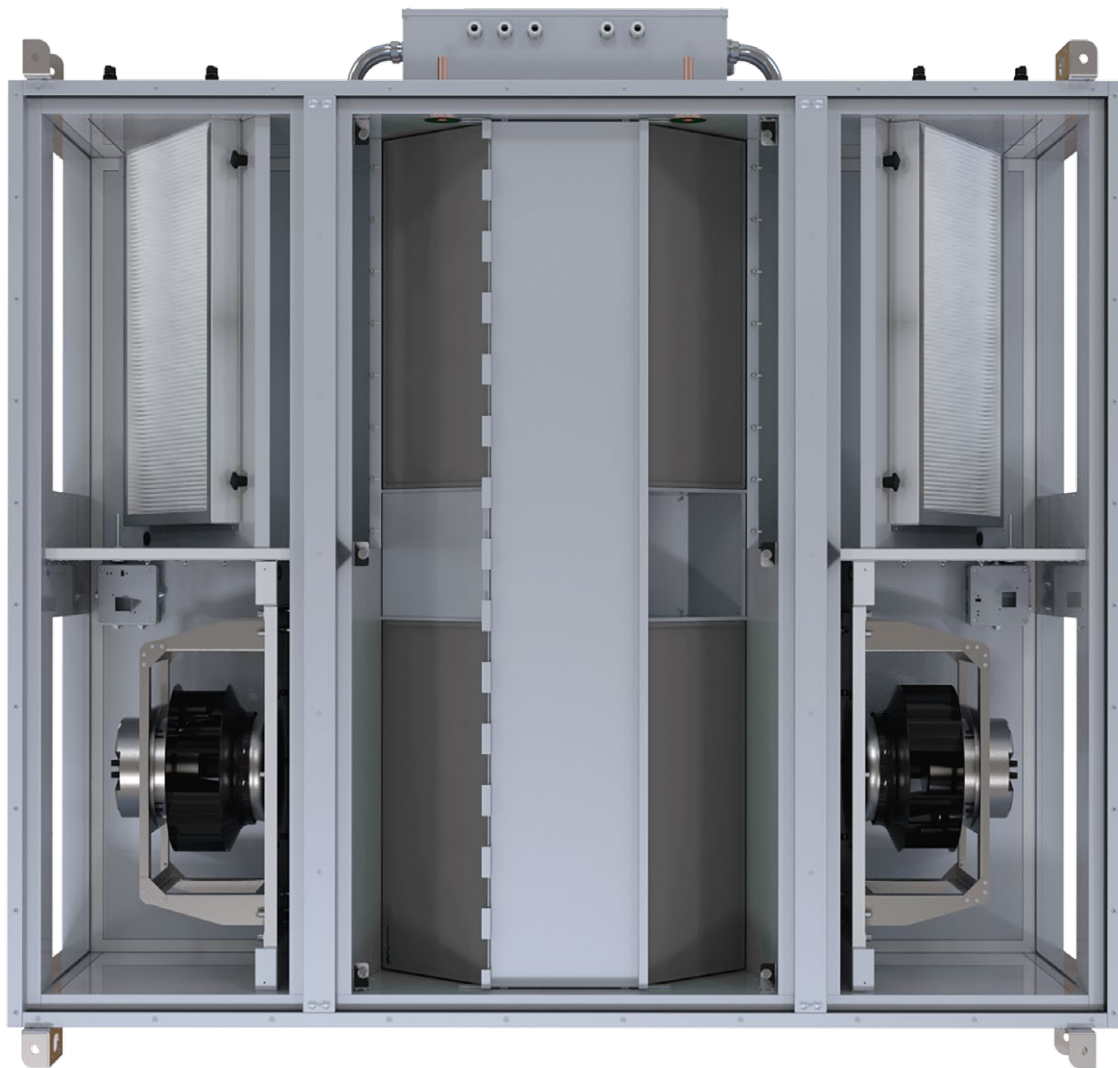
Ceiling mounted heat recovery units



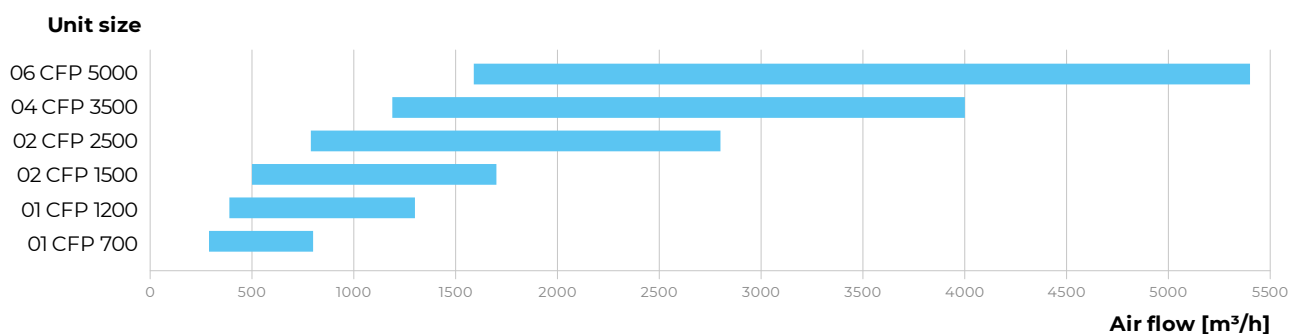
FEATURES



- High-efficient counterflow heat exchanger made of profiled polystyrene plates, packed with elastic heat-resistant sealant. Stainless steel drain pan on both supply and exhaust sides.
- High-efficient EC fans, backward-curved, external rotor. Integrated plug-and-play controls.
- Automatic bypass. ECO-Design'18 compliant. Polystyrene plate heat exchanger. Panel filters ePM1 70% (ISO 16890)-F7 (EN779). Removable service doors.
- Web interface, MODBUS, outputs for optional electric/water heater or water/freon cooler..
- Complete set of accessories: silencers, economizers, VAV, CAV, etc.
- Option operation by RH/CO2/temperature/constant pressure/timer schedule.
- **Best suited for:** small and medium-sized buildings, including residential blocks, educational facilities, offices, and retail spaces. Indoor installation.



Sizes and capacities of AV and AVS Compact units



External pressure drop – 200 Pa

Connection dimensions [mm]

Unit size	01 CFP 700	01 CFP 1200	02 CFP 1500	02 CFP 2500	04 CFP 3500	06 CFP 5000
Width × Height	Ø 250	500×300	600×350	600×350	700×400	900×500



AirVents CFV

Floor mounted heat recovery units



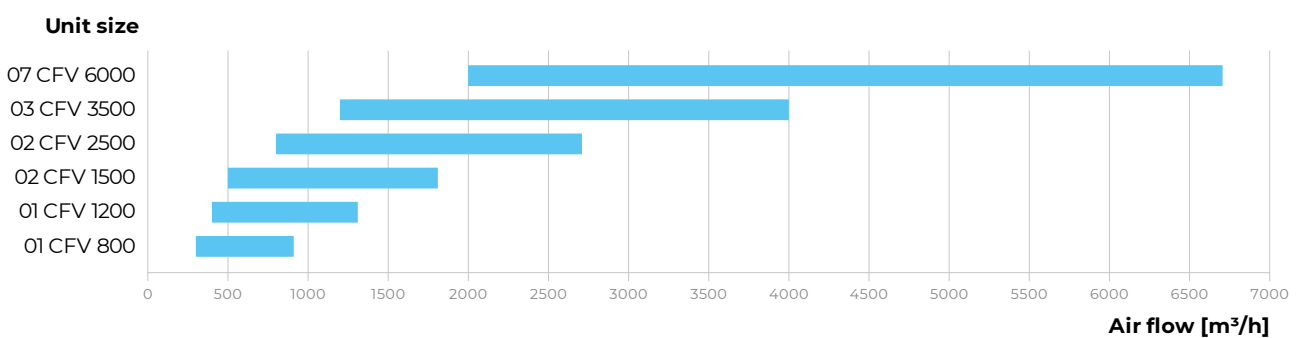
FEATURES



- High-efficient counterflow heat exchanger made of profiled polystyrene plates, packed with elastic heat-resistant sealant. Stainless steel drain pan on both supply and exhaust sides.
- High-efficient EC fans, backward-curved, external rotor. Integrated plug-and-play controls.
- Automatic bypass. ECO-Design'18 compliant. Polystyrene plate heat exchanger. Panel filters ePM1 70% (ISO 16890)-F7 (EN779). Hinged service doors.
- Web interface, MODBUS, outputs for optional water/freon cooler or electric/water heater.
- Complete set of accessories: silencers, economizers, VAV, CAV, etc.
- Option operation by RH/CO₂/temperature/constant pressure/timer schedule.
- **Best suited for:** applications in residential, commercial, and public buildings where outdoor installation is not feasible, including offices, educational institutions, and facilities with restricted installation space. Designed for indoor installation.



Sizes and capacities of AV and AVS Compact units



Connection dimensions [mm]

Unit size	01 CFV 800	01 CFV 1200	02 CFV 1500	02 CFV 2500	03 CFV 3500	07 CFV 6000
Width × Height	Ø 315	Ø 315	600×300	600×300	600×300	1000×400



AirVents RH

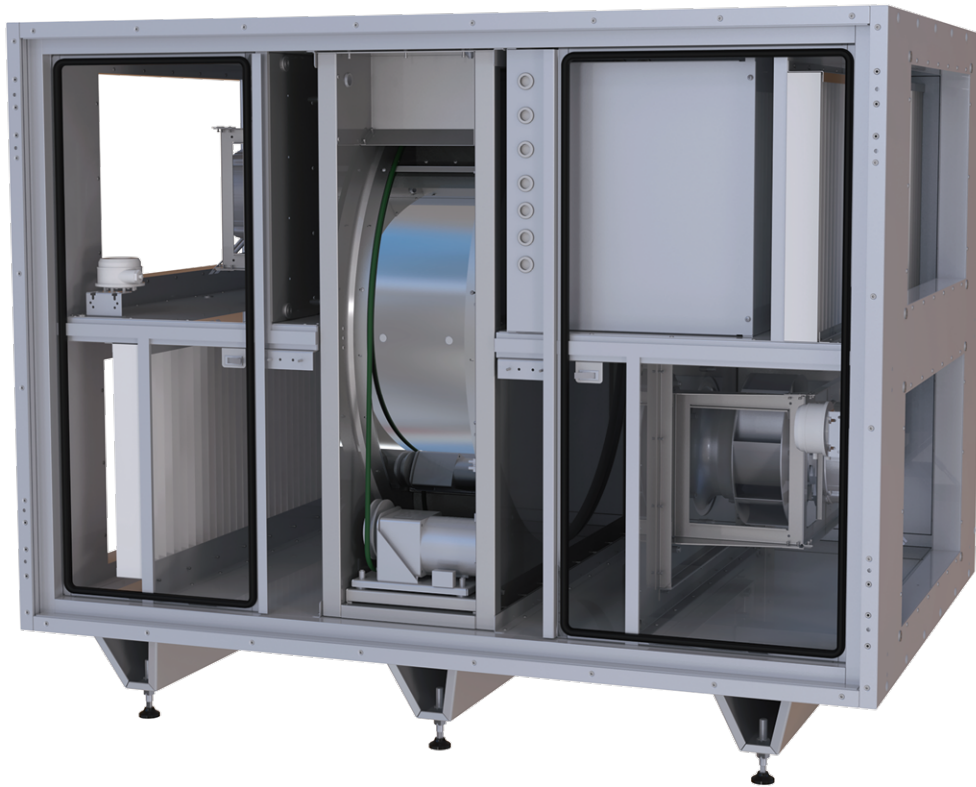
Floor mounted heat recovery units



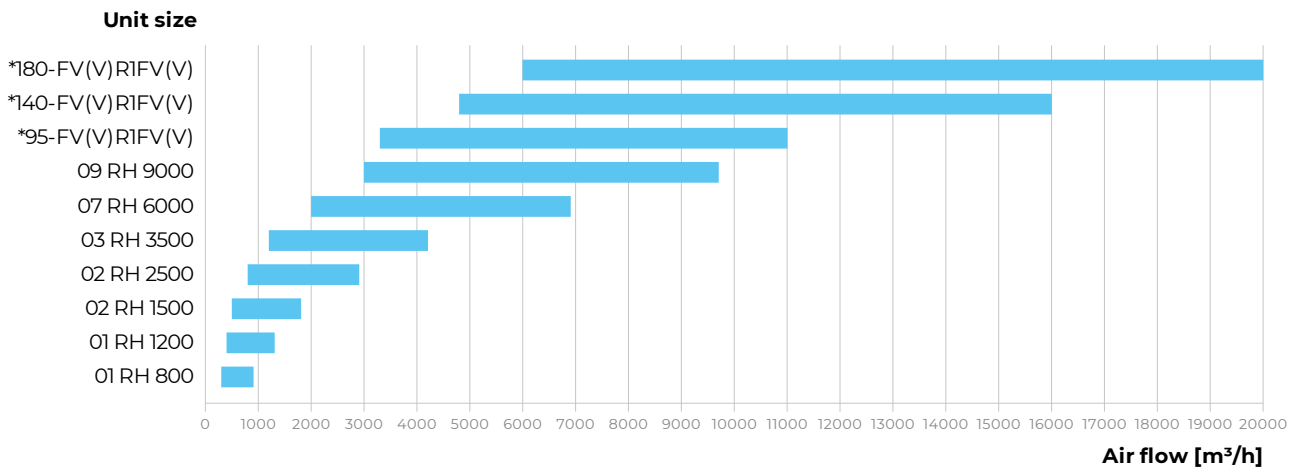
FEATURES



- High-efficiency rotary heat exchanger available in two types: condensing (aluminium) and enthalpy.
- High-efficient EC fans, backward-curved, external rotor. Integrated plug-and-play controls.
- Web interface, MODBUS, outputs for optional electric/water heater or water/freon cooler.
- Complete set of accessories: silencers, economizers, VAV, CAV, etc.
- Option operation by RH/CO₂/temperature/constant pressure/timer schedule.
- **Best suited for:** a broad range of applications, from private residential buildings to large commercial and public facilities, including offices, educational institutions, public buildings, and facilities with restricted indoor installation areas. Suitable for both indoor and outdoor installation. Outdoor installation available with an optional mounting kit.



Sizes and capacities of AV and AVS Compact units



Connection dimensions [mm]

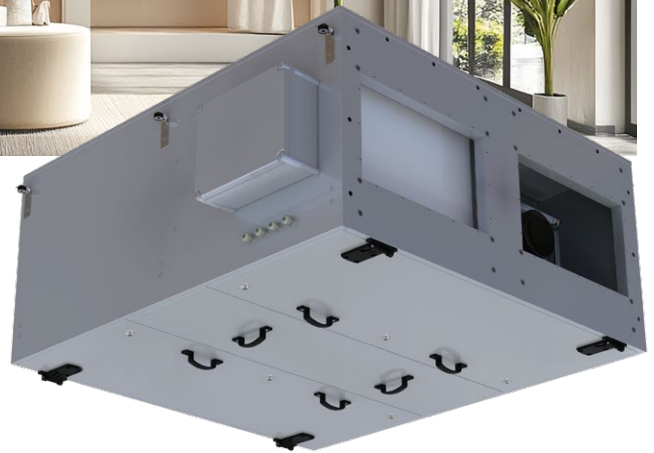
Unit size	01 RH 800	01 RH 1200	02 RH 1500	02 RH 2500	03 RH 3500	07 RH 6000	09 RH 9000	*95-FV(V) R1FV(V)	*140-FV(V) R1FV(V)	*180-FV(V) R1FV(V)
Width × Height	∅ 315	∅ 315	600×350	600×350	700×400	1000×500	1200×600	1400×600	1800×800	2000×1000

* The units are available in AVS casing only.



AirVents RP

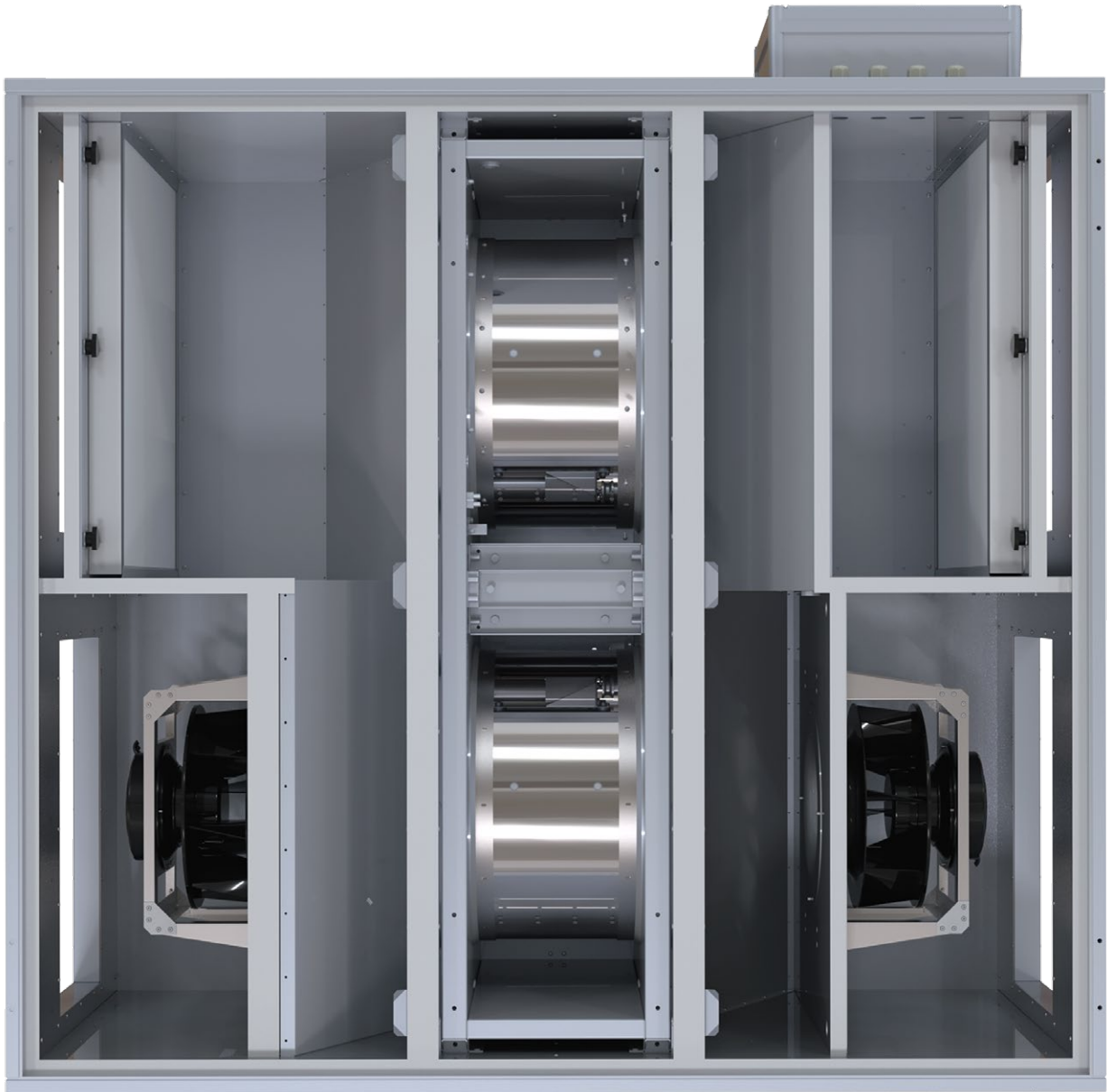
CEILING MOUNTED HEAT RECOVERY UNITS



FEATURES

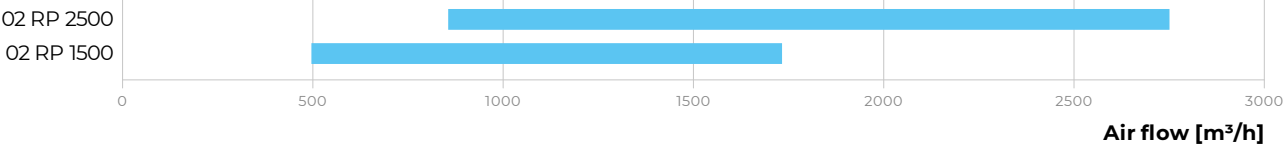


- High-efficiency rotary heat exchanger available in two types: condensing (aluminium) and enthalpy.
- High-efficient EC fans, backward-curved, external rotor. Integrated plug-and-play controls.
- Web interface, MODBUS, outputs for optional electric/water heater or water/freon cooler.
- Complete set of accessories: silencers, economizers, VAV, CAV, etc.
- Option operation by RH/CO2/temperature/constant pressure/timer schedule.
- **Best suited for:** light commercial buildings, educational facilities, offices, and retail spaces. Indoor installation.



Sizes and capacities of AV and AVS Compact units

Unit size



External pressure drop – 200 Pa

Connection dimensions [mm]

Unit size	02 RP 1500	02 RP 2500
Width × Height	500×300	500×300



AirVents RV

Floor mounted heat recovery units



FEATURES

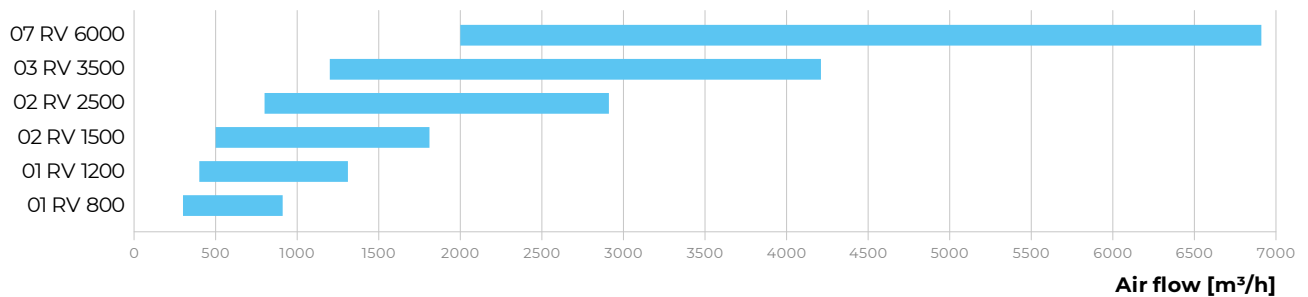


- High-efficiency rotary heat exchanger available in two types: condensing (aluminium) and enthalpy.
- High-efficient EC fans, backward-curved, external rotor. Integrated plug-and-play controls.
- Web interface, MODBUS, outputs for optional electric/water heater or water/freon cooler.
- Complete set of accessories: silencers, economizers, VAV, CAV, etc.
- Option operation by RH/CO2/temperature/constant pressure/timer schedule.
- **Best suited for:** applications in residential, commercial, and public buildings where outdoor installation is not feasible, including offices, educational institutions, and facilities with restricted installation space. Designed for indoor installation



Sizes and capacities of AV and AVS Compact units

Unit size



External pressure drop – 200 Pa

Connection dimensions [mm]

Unit size	01 RV 800	01 RV 1200	02 RV 1500	02 RV 2500	03 RV 3500	07 RV 6000
Width × Height	Ø 250	Ø 250	500×250	500×250	600×300	1000×350

Integrated control system

Plug-and-play unit: full electric wiring

Additional option – full factory electric wiring

includes:

- Installation of air damper actuators. Routing of contacts from actuators to the terminal box.
- Installation of differential pressure switches in filter sections. Installation of a relay actuation threshold to the necessary level (final pressure drop according to the selection).
- Installation of frost protection thermostats in water heating coils sections.
- Optional installation of the VFD in the rotary heat exchanger section.
- Installation of bypass damper actuators in the plate heat exchanger section.
- Routing of all electric contacts in the electric heater sections.
- Routing of all electric contacts in the fan sections.
- Installation and adjustment of all temperature and humidity sensors inside the unit.
- All the electric contacts are routed to the junction box, which is mounted in one of the sections.
- Plug-and-play option implies the possibility of shipment in separate blocks. In this case, joints and connection boxes are installed between the sections.




Building Management Systems

AirVents compact units control system can be easily integrated into building management systems (SCADA, BMS, «smart house»).

All the information processed by a programmable logic controller, is easily accessible via standard communication protocols:

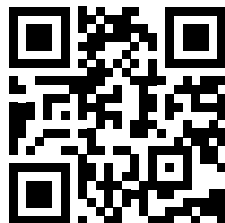
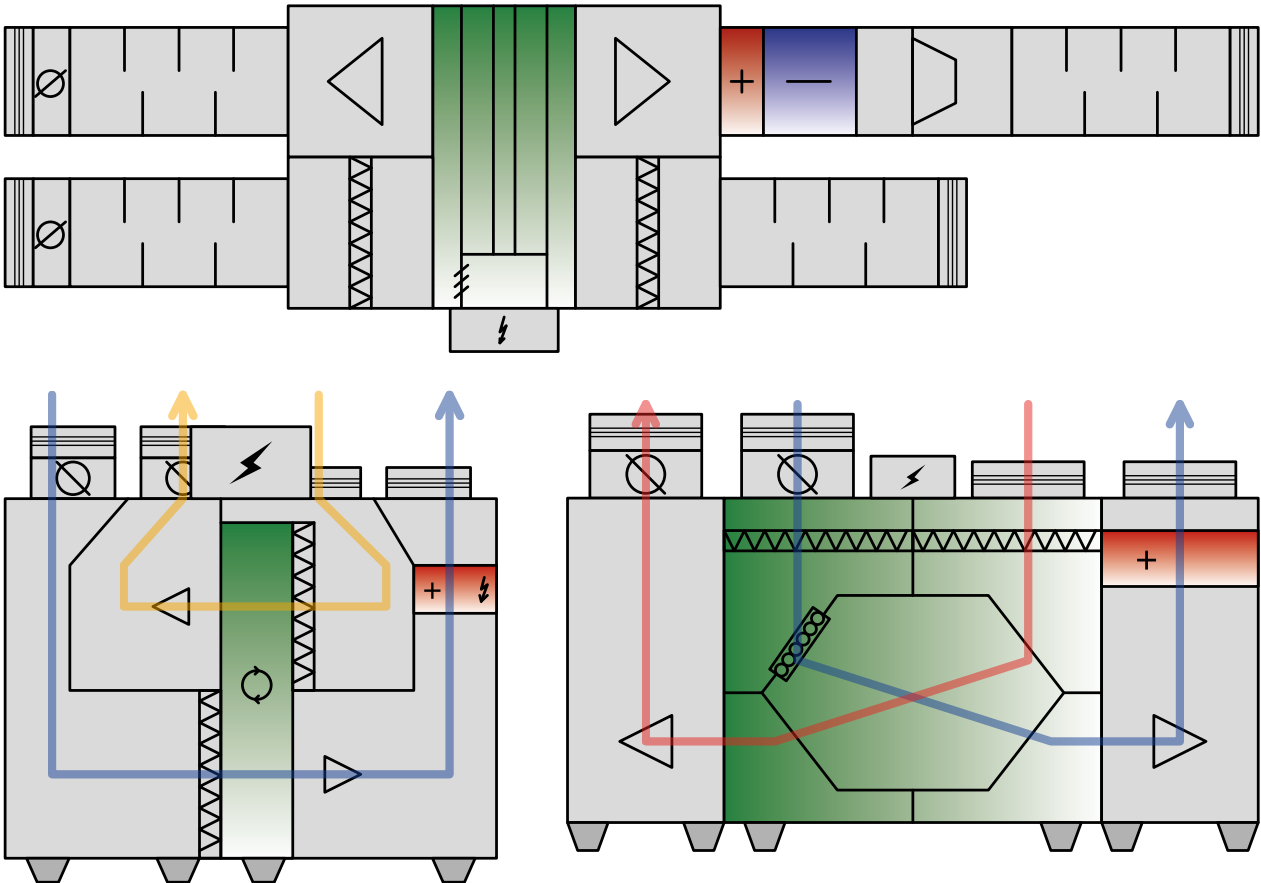


Any other protocol can be used according to customer's choice and project requirements.

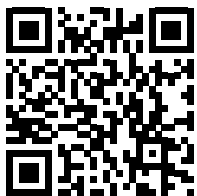
Functions	
Unit control via Wi-Fi using a mobile application	+
Unit control via an extended remote control panel (pGNE) for full engineering adjustment	 A32 control panel (option)
Unit control via a touchscreen remote control panel (pGDxTouch 4.3") for full engineering adjustment	 A29 control panel (option)
Unit control via a simple remote control panel (th-Tune) with basic setting options and a user-friendly interface	 A30 control panel (option)
BMS (Building Management System)	RS-485
	BACnet IP, BACnet MSTP (option)
	Ethernet
	MODBUS (RTU, TCP)
Blauberg Cloud Server service	+
Speed selection	+
Filter replacement indication	by filter timer
	by filter clogging differential pressure switch
Alarm indication	full alarm description
Week-scheduled operation	+
Bypass	automatic
	manual
Timer	+
Freeze protection	through cyclic stops of the supply fan
	through preheating (option)
Reheater connection	option
Cooler connection	option
Minimum supply air temperature control	+
Humidity control	option
CO ₂ control	option
VOC control	option
PM2.5 control	option
Fire alarm sensor connection	option
CAV/VAV control option	option

Selection program of AirVents Compact units

- Easy selection in all browsers
- All selections could be saved in the Dashboard
- Data export to PDF and Excel
- Share your project with your manager in a few steps



AIRVENTS COMPACT UNITS



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