

AIRVENTS



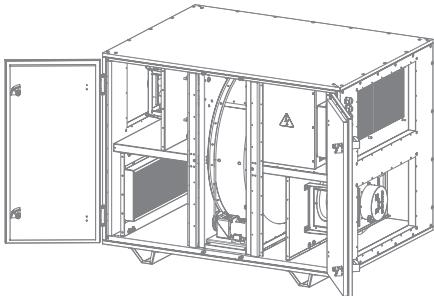
Premium line of commercial
heat recovery air handling units

CONTENTS

HEAT RECOVERY VENTILATION UNIT RH	6
HEAT RECOVERY VENTILATION UNIT RV	10
HEAT RECOVERY VENTILATION UNIT RP	13
HEAT RECOVERY VENTILATION UNIT CFP	16
HEAT RECOVERY VENTILATION UNIT CFH	19
HEAT RECOVERY VENTILATION UNIT CFV	23

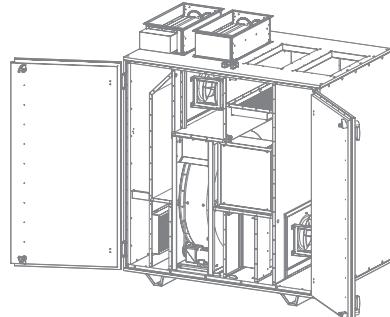
To provide buildings with the best possible balance of energy efficiency, air quality and comfort, VENTS offers standard air handling units with simplified on-site installation and proven, tested performance. Our air handling solutions deal with such issues as temperature, humidity, pressure control, energy recovery and air filtration.

ERV/HRV WITH ROTARY HEAT EXCHANGER



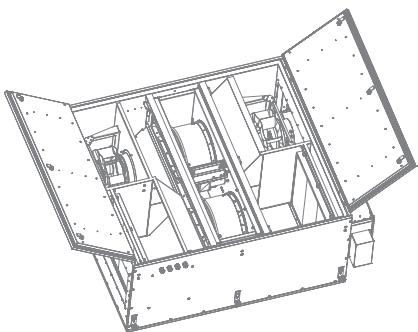
RH

Double-deck units 1500–6000 m³/h



RV

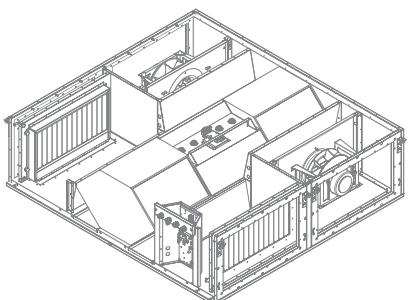
Low-footprint units with vertical outlets 1500–3500 m³/h



RP

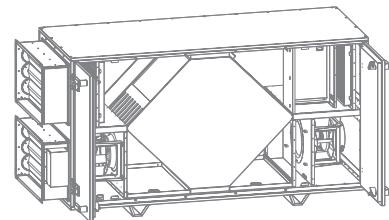
Ceiling-mounted units 1500–2500 m³/h

HRV WITH COUNTER-FLOW PLATE HEAT EXCHANGER



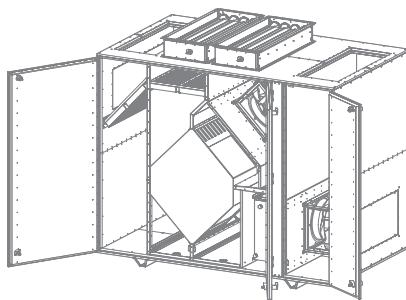
CFP

Ceiling-mounted units 1500–3500 m³/h



CFH

Double-deck units 1500–6000 m³/h



CFV

Low-footprint units with vertical outlets 1500–6000 m³/h

MAIN FEATURES



- Counter-flow aluminum plate heat exchanger or rotary heat exchanger class H1 (DIN EN 13053)
- High-efficiency EC fans, backward-curved, external rotor
- Integrated automatic dampers
- Integrated plug-and-play controls
- Automatic full-size bypass
- Insulated double-skin frameless casing
- ECO-Design'18 compliant
- Web-interface, MODBUS, outputs for optional DX or Hydronic cooling/heating
- Complete set of accessories: silencers, VAV, CAV, etc.
- Operation by RH/CO₂/temperature/constant pressure/timer schedule
- Outdoor installation with outdoor mounting kit (optional)

CONTROLS

CAREL



- Supplied units come with "Plug-&-Play" control system based on Carel programmable controller. Depending on the unit configuration, the system is fitted with 3 temperature sensors: outside, supply, and exhaust air temperature; return water temperature sensor and frost protection relay for water heater configuration; overheating protection relay for electric heater configuration. Standard controller outputs allow to connect various additional sensors. The list of the optional sensors may be found in the accessories section.
- Plug-and-play control system is fitted with Carel th-Tune control panel which ensures basic setting options and has user friendly interface. Carel PGDe extended control panel may be fitted on request and provides more flexibility and sophisticated control adjustments. The compact dimensions and elegant design make both suitable for all types of premises.

Default control system functions and optional features are listed below (th-Tune):



- Operation in comfort, precomfort or economy mode
- Temperature control
- Weekly schedule setting: holiday and special day functions, selection of up to four daily time bands with settings for each operating mode
- Coils and heat exchanger auto protection
- Air pressure control, air flow and humidity control (with optional sensors)
- Air quality control (with optional CO₂/IAQ sensors)
- Freecooling or freeheating mode (according to model)
- Pumps control, overload alarms and anti-blocking for each pump (according to model)
- MODBUS supervisor protocol and user friendly WEB-interface via Ethernet port
- PGDe panel's extended settings:
- Parameters settings divided by level (user, installer or manufacturer) with password-protected access
- 3 adjustable fan speeds
- Priority to temperature or humidity control by room/supply/extract sensors

ROTARY HEAT EXCHANGER (MODELS RH, RV, RP)

Rotary heat exchanger is made of two types of material:

- Sensible type (standard)
- Enthalpy type. Hygroscopic coating is applied on tape, providing additional latent heat transfer from one stream to another. This feature is especially useful when using a rotor in hot and humid areas in conjunction with air conditioning system.

The advantages are: high efficiency, keeping comfortable humidity and low risk of freezing.



COUNTER-FLOW PLATE HEAT EXCHANGER (MODELS CFH, CFV, CFP)

Heat exchanger is made of profiled aluminum plates, packed with elastic heat-resistant sealant. The sealing provides a reliable separation of the supply and exhaust air, eliminating internal flows, and not allowing moisture, dirt, odors and microorganisms transfer between streams.

Bypass channel on heat exchanger with automatic Belimo actuator provides active frost protection, freeheating and freecooling functions.

Drain pan is installed under the heat exchanger on both supply and exhaust sides.



PLUG FANS WITH ELECTRONICALLY COMMUTATED MOTORS (EC MOTORS)

Plug fans with EC motors are used for projects that require high energy efficiency. The advantages of this type of fan are: extremely low power consumption at any speed, no need for external speed control and compact size due to motor with external rotor.



FRAMELESS DESIGN

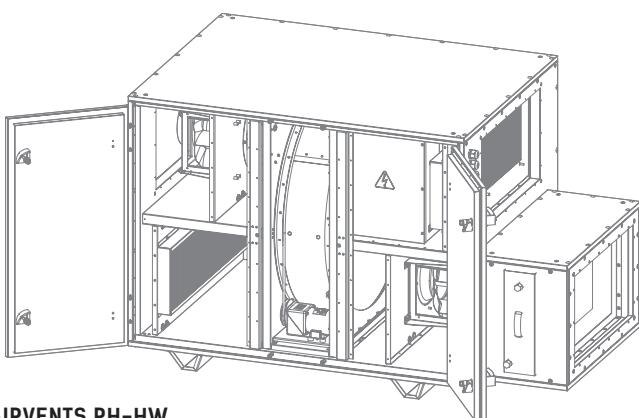
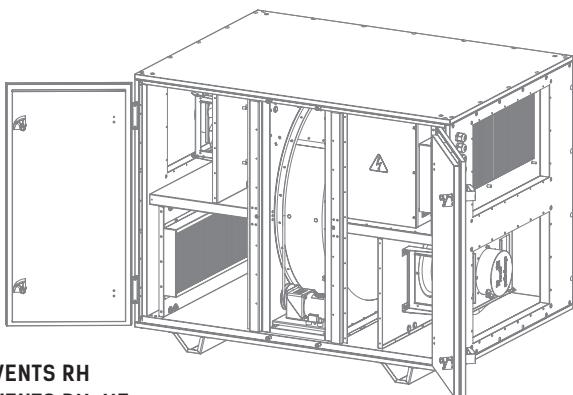
Frameless casing design excludes thermal bridges, usual for aluminum or steel frame. This significantly increases thermal resistance and reduces heat loss, especially for outdoor installation. It also prevents condensation on the surface when air cooling is on. Casing is made of zinc-aluminum coated sheet steel heat- and sound-insulated with 40 mm mineral wool layer.

Benefits of frameless casing:

- Better thermal resistance
- Lower weight of the unit
- No thermal bridges
- Suitable for outdoor installation in cold climate
- High mechanical strength



HEAT RECOVERY VENTILATION UNIT RH



The brand new premium line of commercial heat recovery air handling units for floor mounting with high-efficient heat exchanger. Available in five standard sizes based on the air flow capacity of 1500, 2500, 3500, 5000 and 6000 m³/h. Optionally accomplished with electric heater (RH-HE series) or water heater (RH-HW series) and ready for operation with all necessary control elements.

Main features:

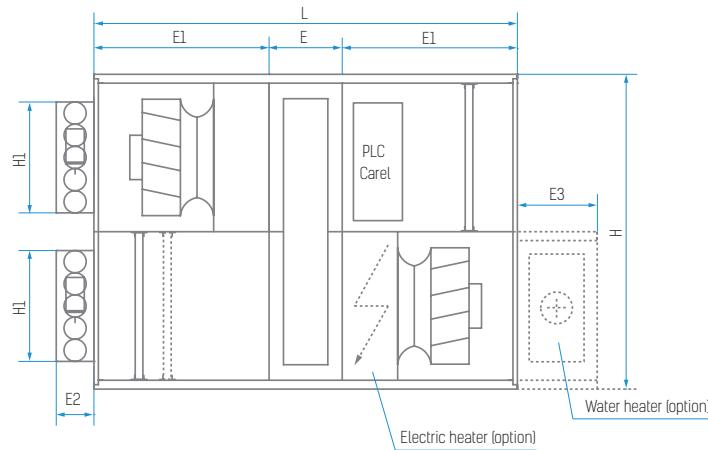
- High-efficient EC fans, backward-curved, external rotor. Low power consumption at any speed, low noise level and stable operation in any climate conditions.
- Integrated plug-and-play controls on the basis of the Carel kVent.controller. Easy connecting via web-interface using the Ethernet-Modbus and BACnet.
- Insulated double-skin frameless casing.
- High-efficient aluminum rotary heat exchanger.
- The casing panels are made of steel with zinc-aluminium coating and internally lined with 40 mm heat- and sound-insulating mineral wool layer. The units have C4 corrosion resistance class in compliance with ISO 12944. Each model is available in left- and right-handed modifications. The units have service access on both sides and on the bottom.
- Washable F7, G4 (optional) panel filters in exhaust and supply air streams.
- Integrated control panels:
 - A30 th-Tune: standard control panel with handy interface ensures basic setup of parameters.
 - A32 pGDe: control panel with expanded functionality ensures complete setup of parameters.
- Integrated automatic external dampers with Belimo actuators.
- ECO-Design'18 compliant.

Technical parameters

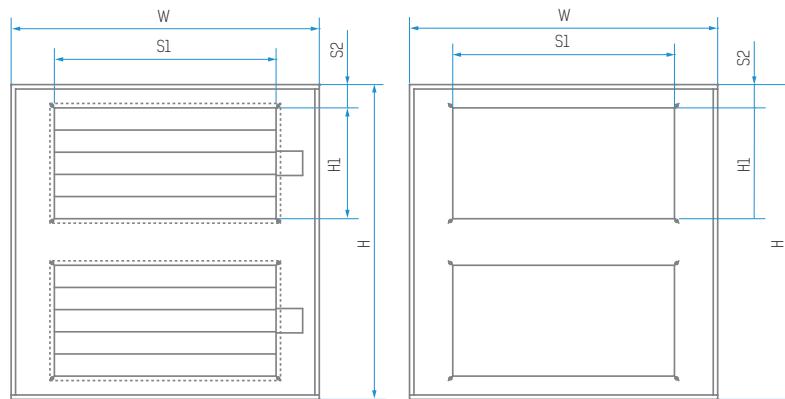
Model	RH 1500	RH 2500	RH 3500	RH 5000	RH 6000
Nominal air flow [m ³ /h]	1500	2500	3500	5000	6000
EC fans	phase/voltage [50–60 Hz/VAC]	~1.200/277		~3.380/480	
	power/current [kW/A]	2x0.46/3.0	2x0.74/3.75	2x1.14/1.8	2x1.32/2.1
	fan speed [min ⁻¹]	2848	2640	2400	1350
	perm. amb. temp. [°C]	-35...+50			
	motor protection	IP54			
	insulation class	F			
	motor sound power level to outlet [dBA]	74	75	76	71
	SFP @ nominal air flow, max. pressure [kW/(m ³ /s)]	2x1.1	2x1.06	2x1.13	2x0.946
Filter class exhaust/supply standard (optional)	F7 (G4)/F7 (G4)				
Weight (net, without packaging) [kg]	280	290	335	580	640
Protection class	IP34				
Sound pressure level @ 0.3 m to environment [dBA]	41	43	44	39	46

HEAT RECOVERY VENTILATION UNIT RH, RH-HE, RH-HW

Service side panel view



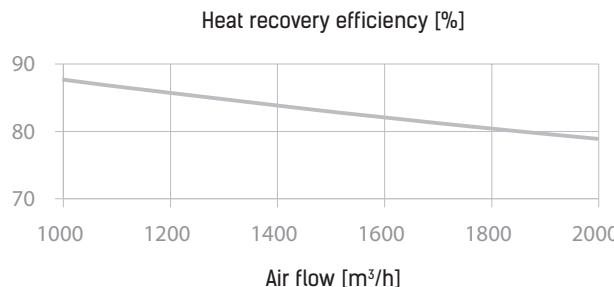
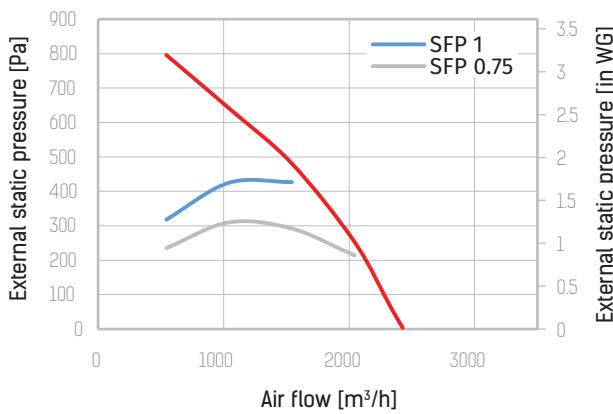
Damper side view



End view

Dimensions [mm]	RH 1500	RH 2500	RH 3500	RH 5000	RH 6000
L	1300	1300	1300	1910	1910
W	960	960	1290	1390	1390
H	960	960	1260	1420	1420
H1	350	350	350	500	500
S1	600	600	600	1000	1000
S2	55	55	205	105	105
E	290	290	290	330	330
E1	505	505	505	790	790
E2	170	170	170	170	170
E3 (optional)	360	360	360	360	360

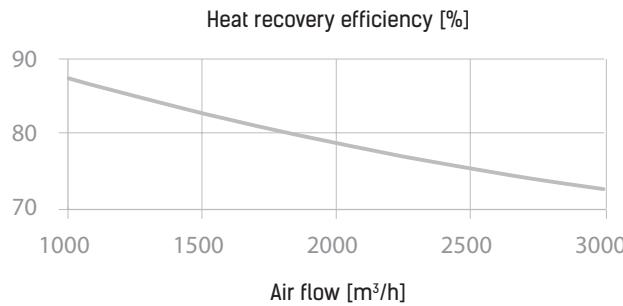
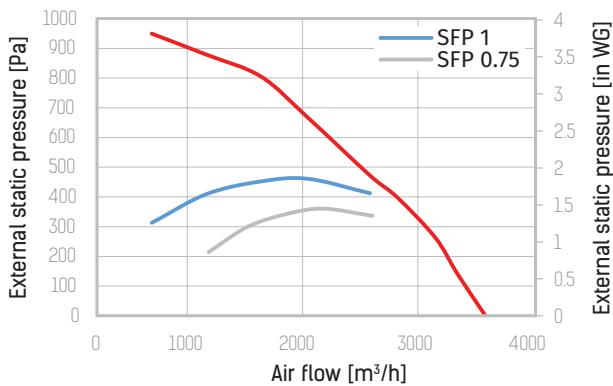
RH 1500



Sound power Lw in dB

Environment	66	65	62	52	33	53	48	51	59
Outlet	68	69	70	68	65	64	61	58	71
Hz	63	125	250	500	1000	2000	4000	8000	LwA

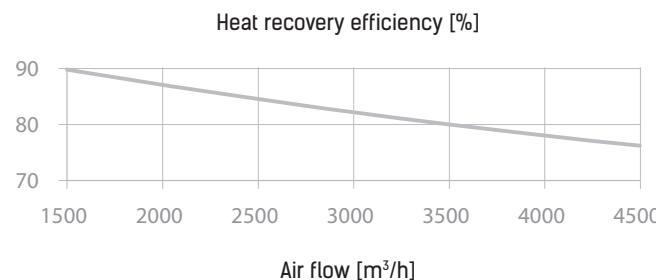
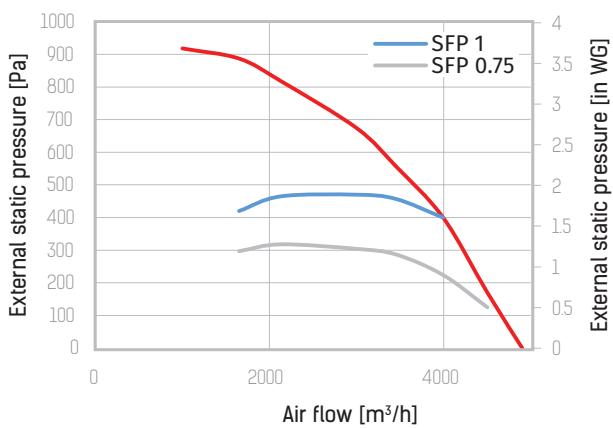
RH 2500



Sound power Lw in dB

Environment	63.6	65.5	64.2	58.2	40.1	57.2	52.2	55.4	63
Outlet	65.6	69.5	72.2	74.2	72.1	68.2	65.2	62.4	76.6
Hz	63	125	250	500	1000	2000	4000	8000	LwA

RH 3500

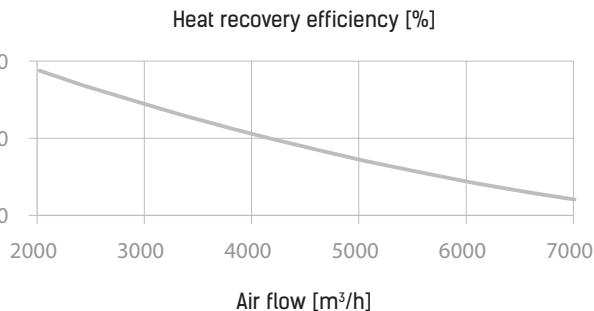
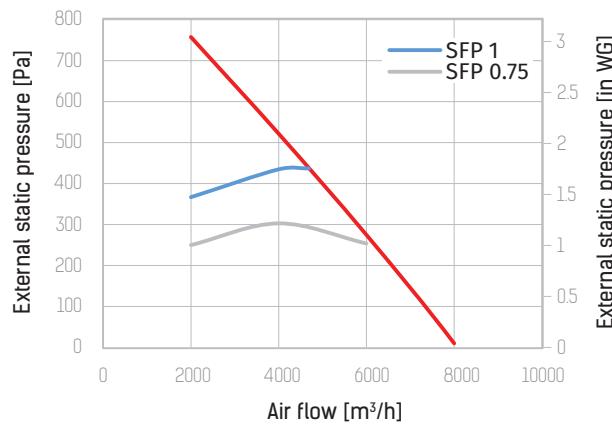


Sound power Lw in dB

Environment	67	64	66	57	37	50	53	57	64
Outlet	69	68	74	73	65	70	66	64	76
Hz	63	125	250	500	1000	2000	4000	8000	LwA

*External SFP for each fan [kW/[m³/s]]

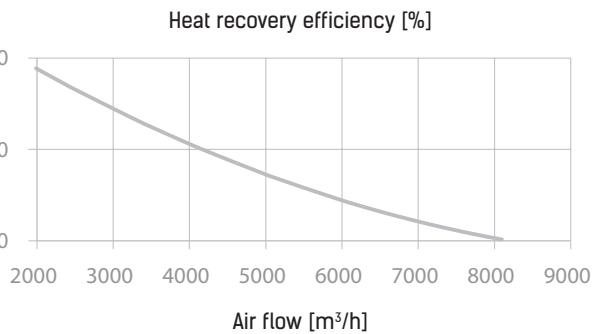
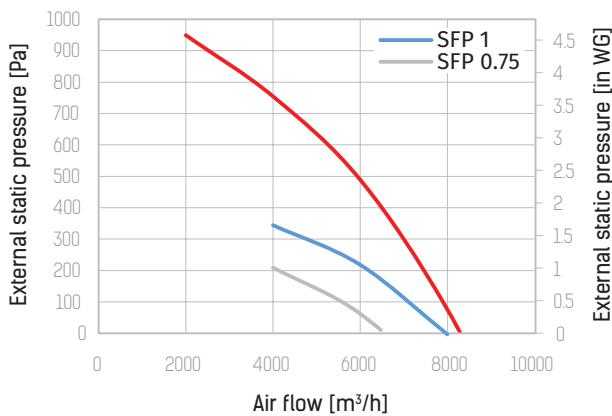
RH 5000



Sound power Lw in dB

Environment	66	65	62	52	33	53	48	51	59
Outlet	68	69	70	68	65	64	61	58	71
Hz	63	125	250	500	1000	2000	4000	8000	LwA

RH 6000



Sound power Lw in dB

Environment	66	65	62	52	33	53	48	51	59
Outlet	68	69	70	68	65	64	61	58	71
Hz	63	125	250	500	1000	2000	4000	8000	LwA

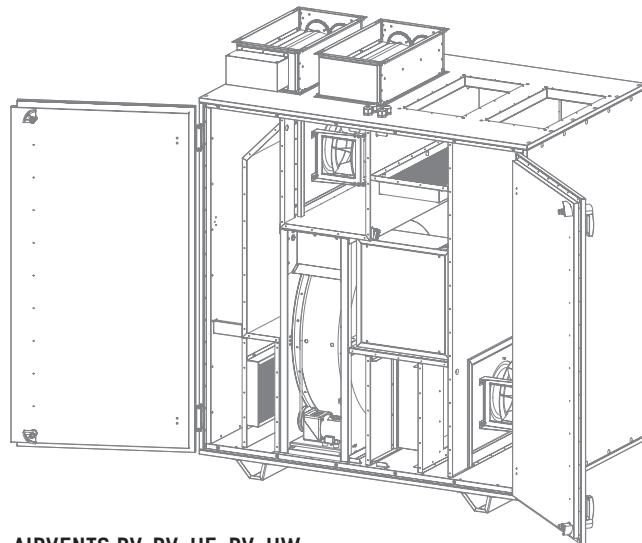
*External SFP for each fan [kW/(m³/s)]

HEAT RECOVERY VENTILATION UNIT RV

The brand new premium line of commercial heat recovery air handling units for floor mounting with high-efficient heat exchanger. Available in three standard sizes based on the air flow capacity of 1500, 2500 and 3500 m³/h. Optionally accomplished with no heater (RV series), electric heater (RV-HE series) or water heater (RV-HW series) and ready for operation with all necessary control elements.

Main features:

- High-efficient EC fans, backward-curved, external rotor. Low power consumption at any speed, low noise level and stable operation in any climate conditions.
- Integrated plug-and-play controls on the basis of the Carel kVent.controller. Easy connecting via web-interface using the Ethernet-Modbus and BACnet.
- Insulated double-skin frameless casing.
- High-efficient aluminum rotary heat exchanger.
- The casing panels are made of steel with zinc-aluminium coating and internally lined with 40 mm heat- and sound-insulating mineral wool layer. The units have C4 corrosion resistance class in compliance with ISO 12944. Each model is available in left- and right-handed modifications. The units have service access on both sides and on the bottom.
- Washable F7, G4 (optional) panel filters in exhaust and supply air streams.
- Integrated control panels:
 - A30 th-Tune: standard control panel with handy interface ensures basic setup of parameters.
 - A32 pGDe: control panel with expanded functionality ensures complete setup of parameters.
- Integrated automatic external dampers with Belimo actuators.
- ECO-Design'18 compliant.

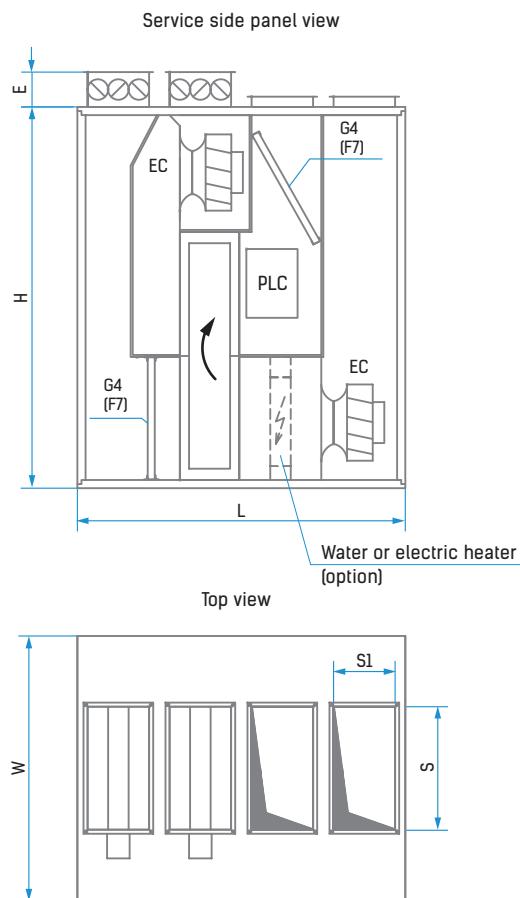


AIRVENTS RV, RV-HE, RV-HW

Technical parameters

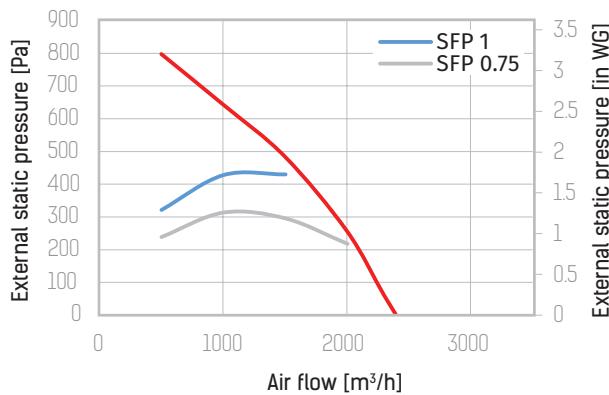
Model		RV 1500	RV 2500	RV 3500
Nominal air flow [m ³ /h]		1500	2500	3500
EC fans	phase/voltage [50–60 Hz/VAC]		~1.200/277	~3.380/480
	power/current [kW/A]	2x0.46/3.0	2x0.74/3.75	2x1.14/1.8
	fan speed [min ⁻¹]	2848	2640	2400
	perm. amb. temp. [°C]		-35...+50	
	motor protection		IP54	
	insulation class		F	
	motor sound power level to outlet [dBA]		74	
	SFP @ nominal air flow, max. pressure [kW/(m ³ /s)]	2x1.1	2x1.06	2x1.13
Filter class exhaust/supply standard (optional)			F7 (G4)/F7 (G4)	
Weight (net, without packaging) [kg]		270	290	330
Protection class			IP34	
Sound pressure level @ 0.3 m to environment [dBA]		41	43	44

HEAT RECOVERY VENTILATION UNIT RV, RV-HE, RV-HW

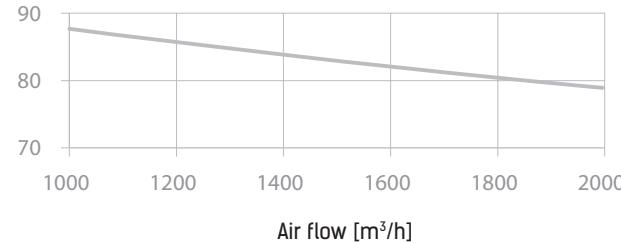


Dimensions [mm]	RV 1500	RV 2500	RV 3500
L	1400	1400	1600
W	960	960	1290
H	1400	1400	1860
S	500	500	600
S1	250	250	350
E	170	170	170

RV 1500



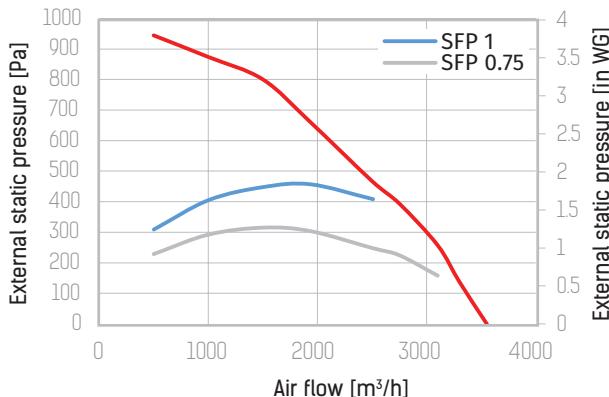
Heat recovery efficiency [%]



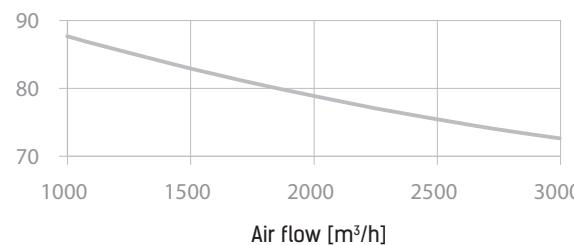
Sound power Lw in dB

Environment	66	65	62	52	33	53	48	51	59
Outlet	68	69	70	68	65	64	61	58	71
Hz	63	125	250	500	1000	2000	4000	8000	LwA

RV 2500



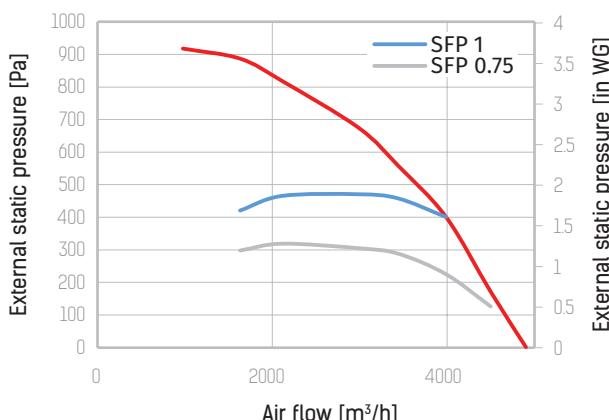
Heat recovery efficiency [%]



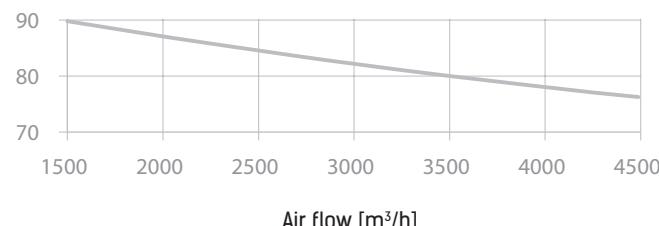
Sound power Lw in dB

Environment	63.6	65.5	64.2	58.2	40.1	57.2	52.2	55.4	59
Outlet	65.6	69.5	72.2	74.2	72.2	68.2	65.2	62.4	76.6
Hz	63	125	250	500	1000	2000	4000	8000	LwA

RV 3500



Heat recovery efficiency [%]



Sound power Lw in dB

Environment	67	64	66	57	37	59	53	57	64
Outlet	69	68	74	73	69	70	66	64	76
Hz	63	125	250	500	1000	2000	4000	8000	LwA

*External SFP for each fan [kW/[m³/s]]

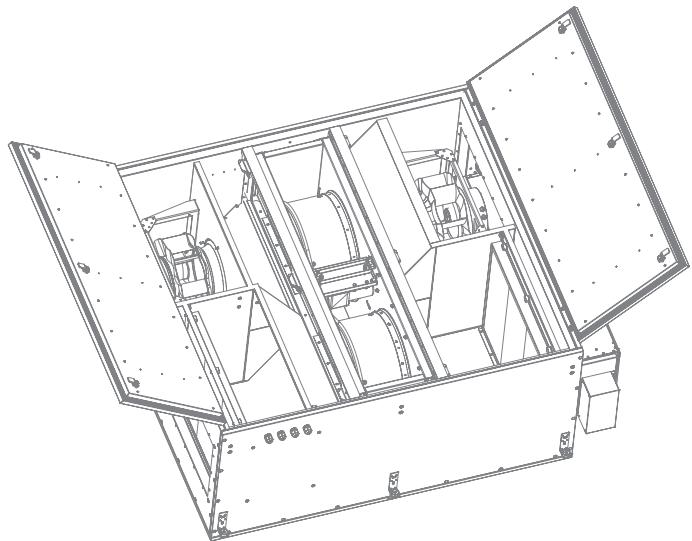
HEAT RECOVERY VENTILATION UNIT RP

The brand new premium line of commercial heat recovery air handling units for ceiling mounting with high-efficient heat exchanger. Available in two standard sizes based on the air flow capacity of 1500 and 2500 m³/h.

Optionally accomplished with electric heater (RP-HE series) or water heater (RP-HW series) and ready for operation with all necessary control elements.

Main features:

- High-efficient EC fans, backward-curved, external rotor. Low power consumption at any speed, low noise level and stable operation in any climate conditions.
- Integrated plug-and-play controls on the basis of the Carel kVent.controller. Easy connecting via web-interface using the Ethernet-Modbus and BACnet.
- Insulated double-skin frameless casing.
- High-efficient aluminum rotary heat exchanger.
- The casing panels are made of steel with zinc-aluminium coating and internally lined with 40 mm heat- and sound-insulating mineral wool layer. The units have C4 corrosion resistance class in compliance with ISO 12944. Each model is available in left- and right-handed modifications. The units have service access on both sides and on the bottom.
- Washable F7, G4 (optional) panel filters in exhaust and supply air streams.
- Integrated control panels:
 - A30 th-Tune: standard control panel with handy interface ensures basic setup of parameters.
 - A32 pGDe: control panel with expanded functionality ensures complete setup of parameters.
- Integrated automatic external dampers with Belimo actuators.
- ECO-Design'18 compliant.



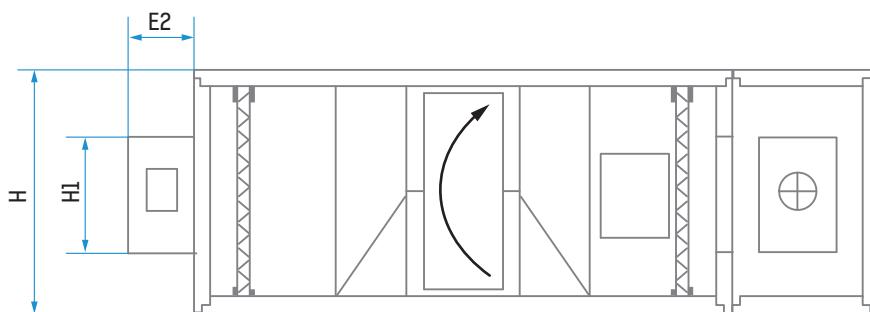
AIRVENTS RP, RP-HE, RP-HW

Technical parameters

Model		RP 1500	RP 2500
Nominal air flow [m ³ /h]		1500	2500
EC fans	phase/voltage [50–60 Hz/VAC]		~1.200/277
	power/current [kW/A]	2x0.46/3.0	2x0.74/3.75
	fan speed [min ⁻¹]	2848	2640
	perm. amb. temp. [°C]		-35...+50
	motor protection		IP54
	insulation class		F
	motor sound power level to outlet [dBA]	74	75
	SFP @ nominal air flow, max. pressure [kW/(m ³ /s)]	2x1.1	2x1.06
Filter class exhaust/supply standard (optional)		F7 (G4)/F7 (G4)	
Weight (net, without packaging) [kg]		280	290
Protection class		IP34	
Sound pressure level @ 0.3 m to environment [dBA]		41	43

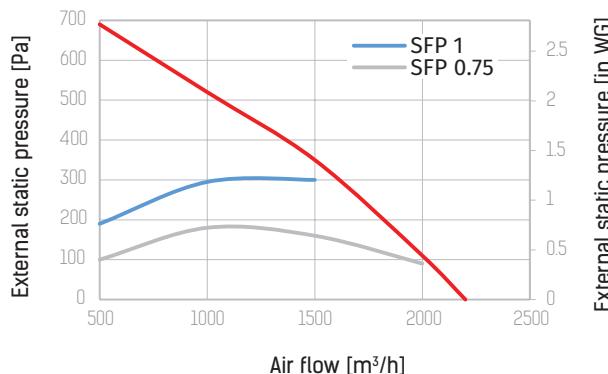
HEAT RECOVERY VENTILATION UNIT RP, RP-HE, RP-HW

Service side panel view

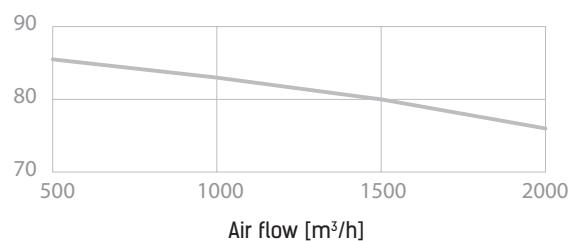


Dimensions [mm]	RP 1500	RP 2500
L		1400
W		1416
H		628
S		501
H1		300
E2		171
S1		505
E1		360

RP 1500



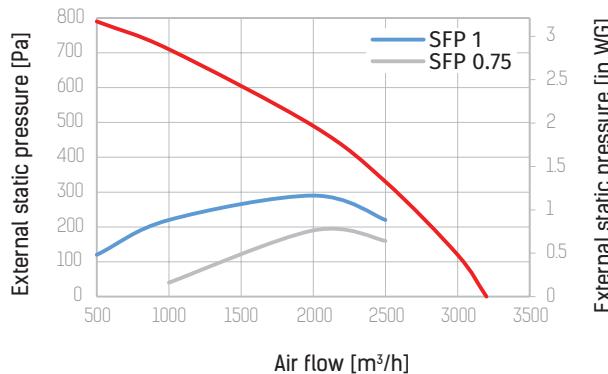
Heat recovery efficiency [%]



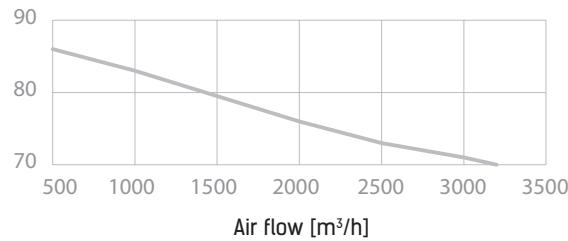
Sound power Lw in dB

Environment	66	65	62	52	33	53	48	51	59
Outlet	68	69	70	68	65	64	61	58	71
Hz	63	125	250	500	1000	2000	4000	8000	LwA

RP 2500



Heat recovery efficiency [%]



Sound power Lw in dB

Environment	63.6	65.5	64.2	58.2	40.1	57.2	52.2	55.4	63
Outlet	65.6	69.5	72.2	74.2	72.1	68.2	65.2	62.4	76.6
Hz	63	125	250	500	1000	2000	4000	8000	LwA

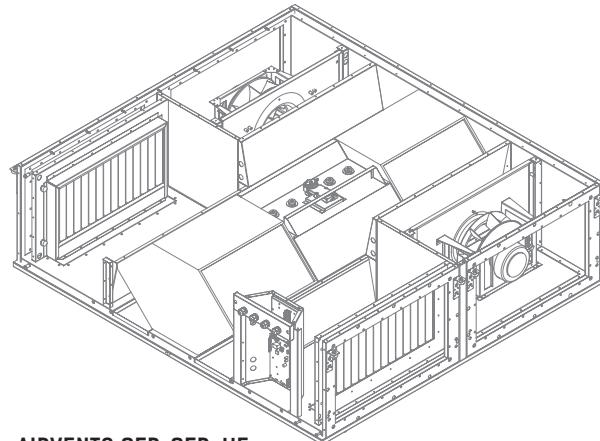
*External SFP for each fan [kW/(m³/s)]

HEAT RECOVERY VENTILATION UNIT CFP

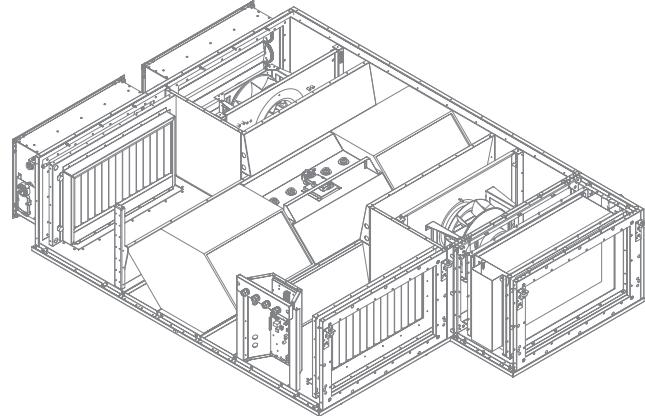
The brand new premium line of commercial heat recovery air handling units for suspended mounting with high-efficient counter-flow heat exchanger. Available in three standard sizes based on the air flow capacity of 1500, 2500 and 3500 m³/h. Optionally accomplished with no heater (CFP series), electric heater (CFP-HE series) or water heater (CFP-HW series) and ready for operation with all necessary control elements.

Main features:

- High-efficient EC fans, backward-curved, external rotor. Low power consumption at any speed, low noise level and stable operation in any climate conditions.
- Integrated plug-and-play controls on the basis of the Carel kVent. controller. Easy connecting via web-interface using the Ethernet-Modbus and BACnet.
- Insulated double-skin frameless casing.
- High-efficient counter-flow heat exchanger is made of profiled aluminium plates and impregnated with elastic heat-resistant sealant.
- The stainless steel drain pan is located on the inlet and outlet sides.
- The casing panels are made of steel with zinc-aluminium coating and internally lined with 40 mm heat- and sound-insulating mineral wool layer. The units have C4 corrosion resistance class in compliance with ISO 12944. Each model is available in left- and right-handed modifications. The units have service access on both sides and on the bottom.
- Washable F7, G4 (optional) panel filters in exhaust and supply air streams.
- Integrated control panels:
 - A30 th-Tune: standard control panel with handy interface ensures basic setup of parameters.
 - A32 pGDe: control panel with expanded functionality ensures complete setup of parameters.
- Integrated 100 % bypass of the heat exchanger with automatic damper and Belimo actuator ensures active freeze protection. Free heating and cooling functions are also available. Built-in automatic external air dampers with Belimo actuators.
- ECO-Design'18 compliant.



AIRVENTS CFP, CFP-HE

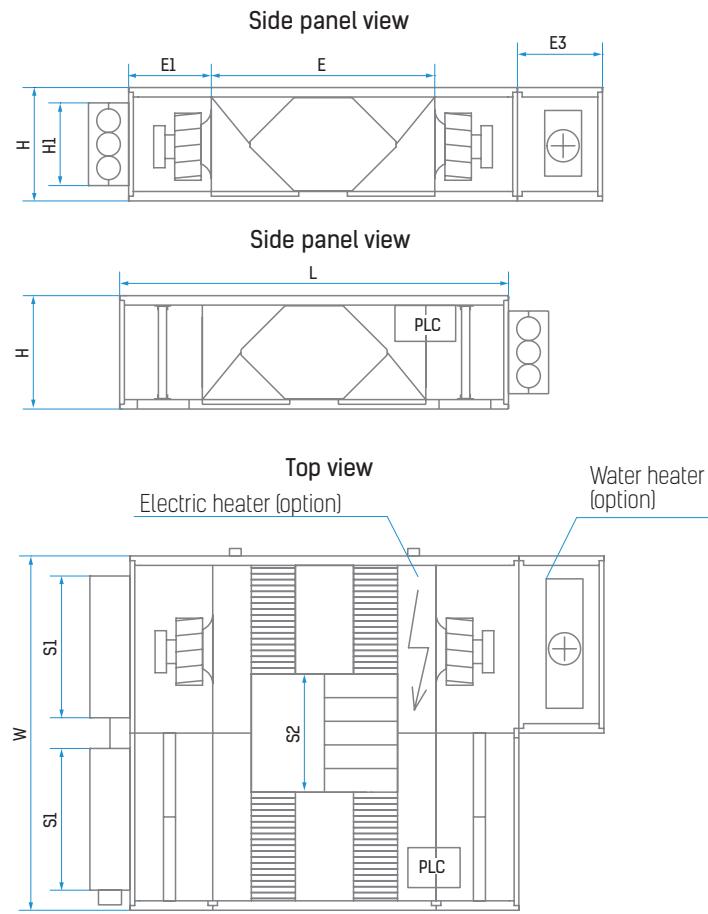


AIRVENTS CFP-HW

Technical parameters

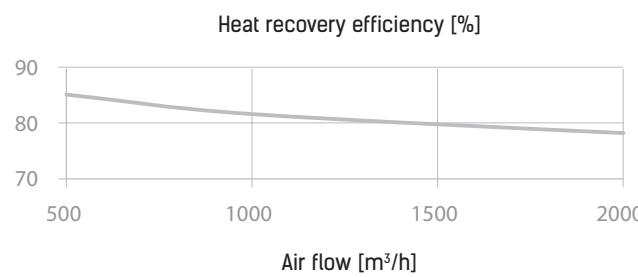
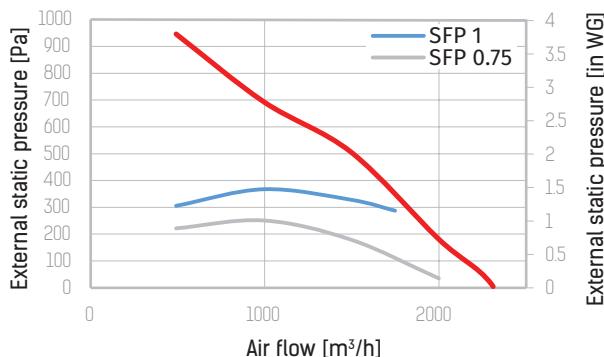
Model		CFP 1500	CFP 2500	CFP 3500
Nominal air flow [m ³ /h]		1500	2500	3500
EC fans	phase/voltage [50–60 Hz/VAC]		~1.200/277	~3.380/480
	power/current [kW/A]	2x0.46/3.0	2x0.74/3.75	2x1.14/1.8
	fan speed [min ⁻¹]	2848	2640	2400
	perm. amb. temp. [°C]		-35...+50	
	motor protection		IP54	
	insulation class		F	
	motor sound power level to outlet [dBA]		74	
	SFP @ nominal air flow, max. pressure [kW/(m ³ /s)]	2x1.1	2x1.06	2x1.13
	Filter class exhaust/supply standard (optional)		F7 (G4)/F7 (G4)	
Filter class exhaust/supply standard (optional)				
Weight (net, without packaging) [kg]		270	290	320
Protection class			IP34	
Sound pressure level @ 0.3 m to environment [dBA]		41	43	44

HEAT RECOVERY VENTILATION UNIT CFP, CFP-HE, CFP-HW



Dimensions [mm]	CFP 1500	CFP 2500	CFP 3500
L	1646	1646	1880
W	1500	1500	1500
H	480	480	630
H1	350	350	350
S1	600	600	600
S2	500	500	220
E	946	946	1440
E1	350	350	360
E3 (option)	360	360	360

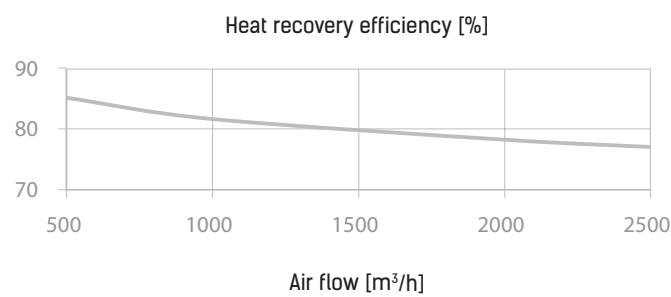
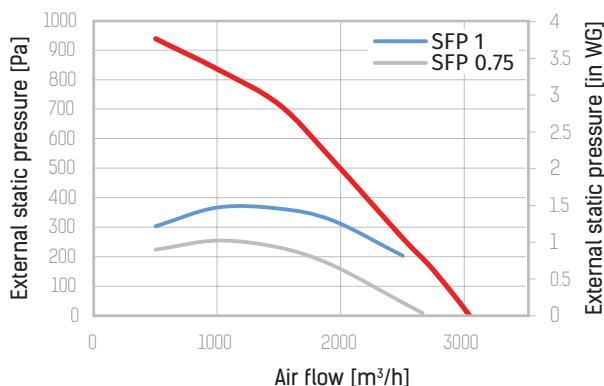
CFP 1500



Sound power Lw in dB

Environment	66	65	62	52	33	53	48	51	59
Outlet	68	69	70	68	65	64	61	58	71
Hz	63	125	250	500	1000	2000	4000	8000	LwA

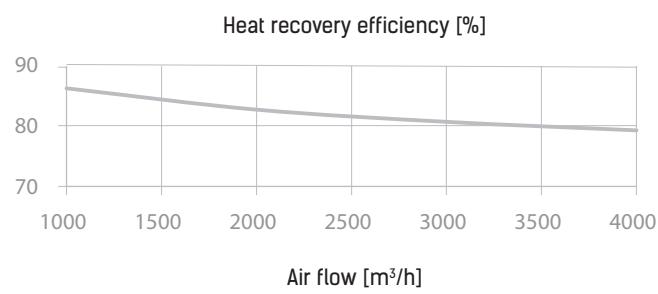
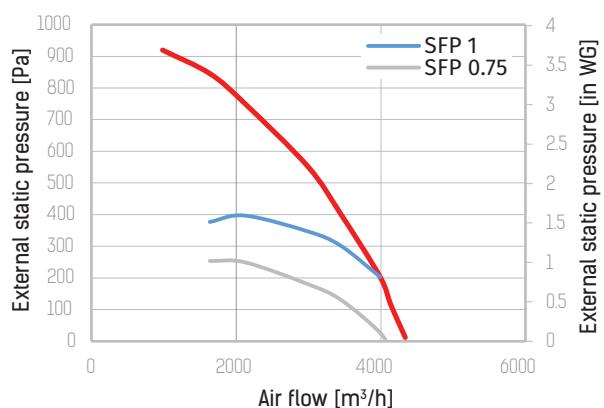
CFP 2500



Sound power Lw in dB

Environment	63.6	65.5	64.2	58.2	40.1	57.2	52.2	55.4	63
Outlet	65.6	69.5	72.2	74.2	72.1	68.2	65.2	62.4	76.6
Hz	63	125	250	500	1000	2000	4000	8000	LwA

CFP 3500

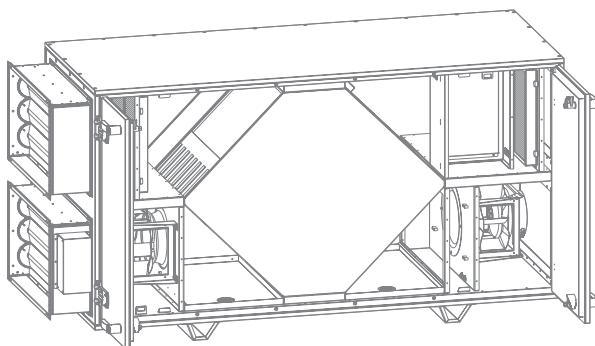


Sound power Lw in dB

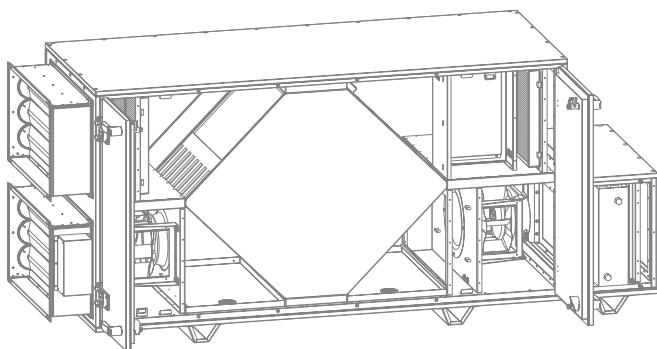
Environment	63.6	65.5	64.2	58.2	40.1	57.2	52.2	55.4	63
Outlet	65.6	69.5	72.2	74.2	72.1	68.2	65.2	62.4	76.6
Hz	63	125	250	500	1000	2000	4000	8000	LwA

*External SFP for each fan [kW/[m³/s]]

HEAT RECOVERY VENTILATION UNIT CFH



AIRVENTS CFH, CFH-HE



AIRVENTS CFH-HW

The brand new premium line of commercial heat recovery air handling units for floor mounting with high-efficient counter-flow heat exchanger. Available in five standard sizes based on the air flow capacity of 1500, 2500, 3500, 5000 and 6000 m³/h.

Optionally accomplished with no heater (CFH series), electric heater (CFH-HE series) or water heater (CFH-HW series) and ready for operation with all necessary control elements.

Main features:

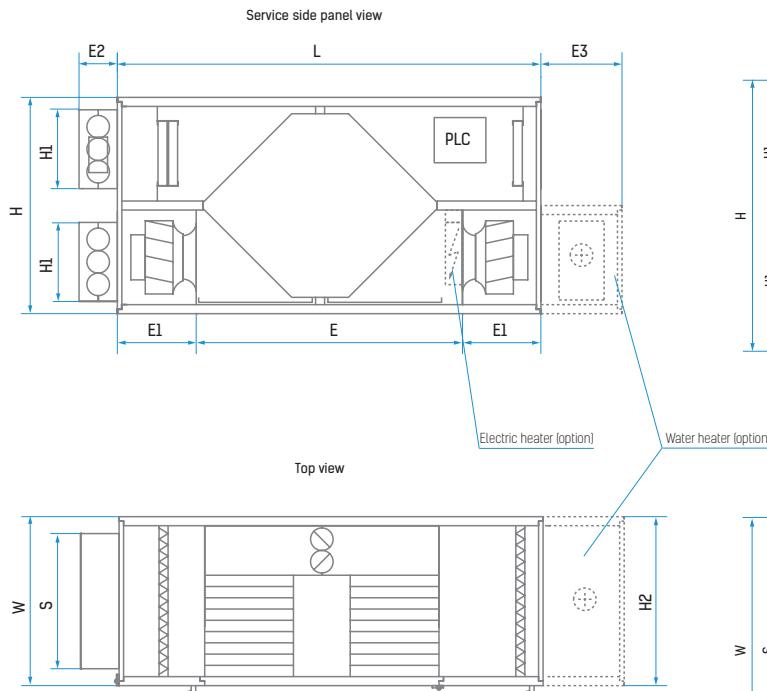
- High-efficient EC fans, backward-curved, external rotor. Low power consumption at any speed, low noise level and stable operation in any climate conditions.
- Integrated plug-and-play controls on the basis of the Carel kVent. controller. Easy connecting via web-interface using the Ethernet-Modbus and BACnet.
- Insulated double-skin frameless casing.
- High-efficient counter-flow heat exchanger is made of profiled aluminium plates and impregnated with elastic heat-resistant sealant.
- The stainless steel drain pan is located on the inlet and outlet sides.
- The casing panels are made of steel with zinc-aluminium coating and internally lined with 40 mm heat- and sound-insulating mineral wool layer. The units have C4 corrosion resistance class in compliance with ISO 12944. Each model is available in left- and right-handed modifications. The units have service access on both sides and on the bottom.
- Washable F7, G4 (optional) panel filters in exhaust and supply air streams.
- Integrated control panels:
 - A30 th-Tune: standard control panel with handy interface ensures basic setup of parameters.
 - A32 pGDe: control panel with expanded functionality ensures complete setup of parameters.
- Integrated 100 % bypass of the heat exchanger with automatic damper and Belimo actuator ensures active freeze protection. Free heating and cooling functions are also available. Built-in automatic external air dampers with Belimo actuators.
- ECO-Design'18 compliant.

Technical parameters

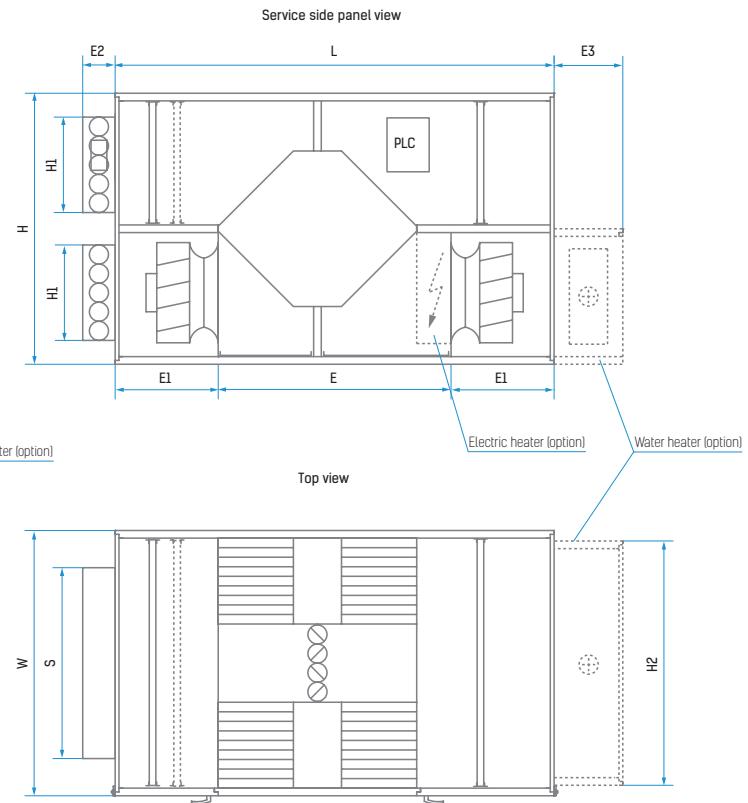
Model	CFH 1500	CFH 2500	CFH 3500	CFH 5000	CFH 6000
Nominal air flow [m ³ /h]	1500	2500	3500	5000	6000
EC fans	phase/voltage [50–60 Hz/VAC]	~1.200/277		~3.380/480	
	power/current [kW/A]	2x0.46/3.0	2x0.74/3.75	2x1.14/1.8	2x1.32/2.1
	fan speed [min ⁻¹]	2848	2640	2400	1350
	perm. amb. temp. [°C]	-35...+50			
	motor protection	IP54			
	insulation class	F			
	motor sound power level to outlet [dBA]	74	75	76	71
	SFP @ nominal air flow, max. pressure [kW/(m ³ /s)]	2x1.1	2x1.06	2x1.13	2x0.946
Filter class exhaust/supply standard (optional)	F7 (G4)/F7 (G4)				
Weight (net, without packaging) [kg]	270	310	360	570	620
Protection class	IP34				
Sound pressure level @ 0.3 m to environment [dBA]	41	43	44	39	46

HEAT RECOVERY VENTILATION UNIT CFH, CFH-HE, CFH-HW

CFH 1500, CFH 2000

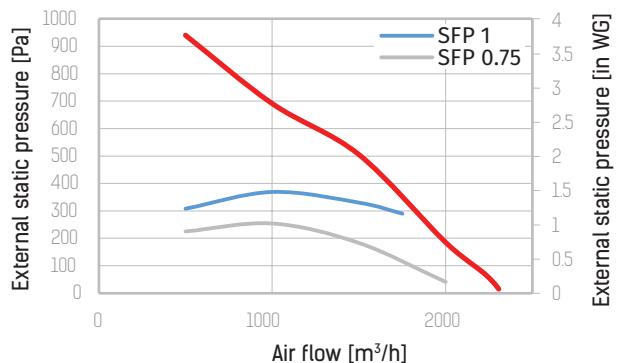


CFH 3500, CFH 5000, CFH 6000

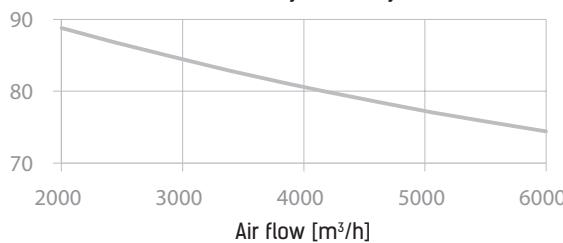


Dimensions [mm]	CFH 1500	CFH 2500	CFH 3500	CFH 5000	CFH 6000
L	1880	1880	2200	2300	2300
W	750	750	890	1390	1390
H	960	960	1290	1420	1420
H1	350	350	350	500	500
H2 (optional)	750	750	890	1280	1280
S	600	600	600	1000	1000
E	1180	1180	1500	1220	1220
E1	350	350	350	540	540
E2	170	170	170	170	170
E3 (optional)	360	360	360	360	360

CFH 1500



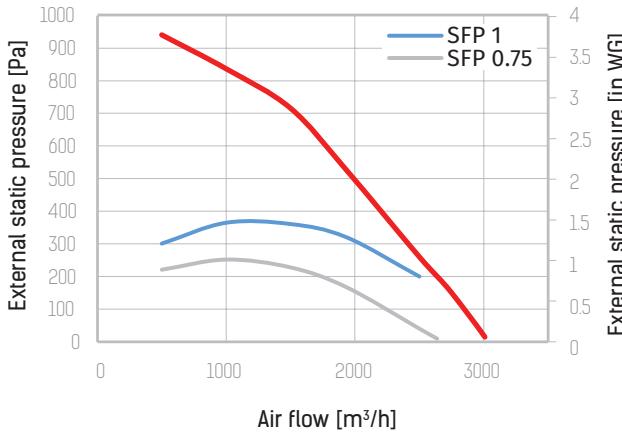
Heat recovery efficiency [%]



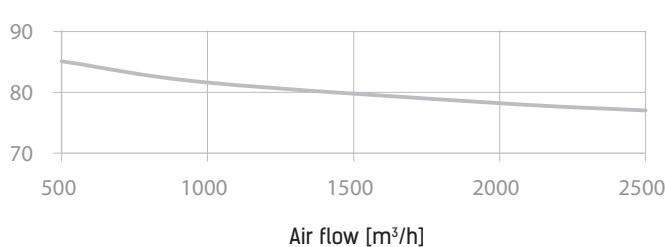
Sound power Lw in dB

Environment	66	65	62	52	33	53	48	51	59
Outlet	68	69	70	68	65	64	61	58	71
Hz	63	125	250	500	1000	2000	4000	8000	LwA

CFH 2500



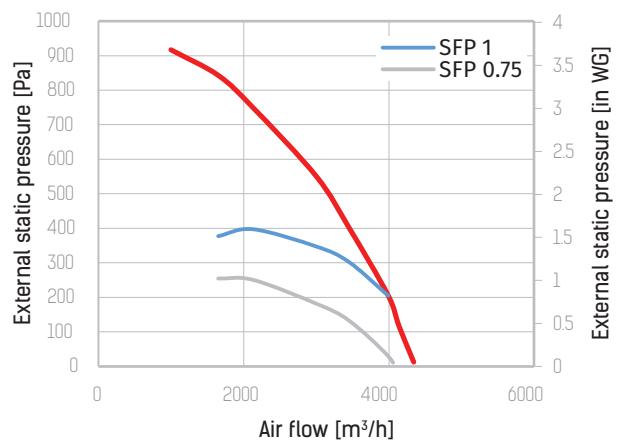
Heat recovery efficiency [%]



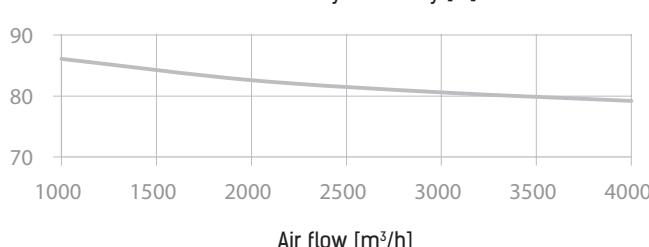
Sound power Lw in dB

Environment	63.6	65.5	64.2	58.2	40.1	57.2	52.2	55.4	63
Outlet	65.6	69.5	72.2	74.2	72.1	68.2	65.2	62.4	76.6
Hz	63	125	250	500	1000	2000	4000	8000	LwA

CFH 3500



Heat recovery efficiency [%]

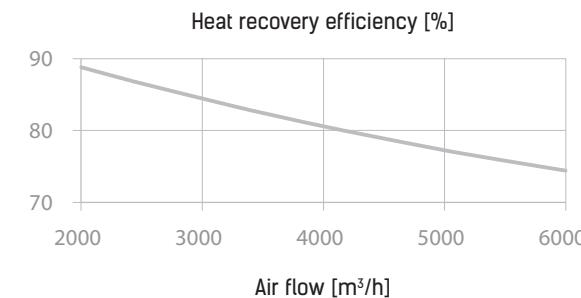
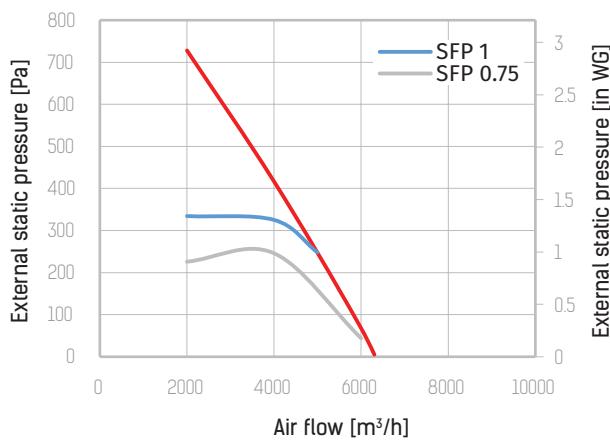


Sound power Lw in dB

Environment	67	64	66	57	37	59	53	57	64
Outlet	69	68	74	73	69	70	66	64	76
Hz	63	125	250	500	1000	2000	4000	8000	LwA

*External SFP for each fan [$\text{kW}/[\text{m}^3/\text{s}]$]

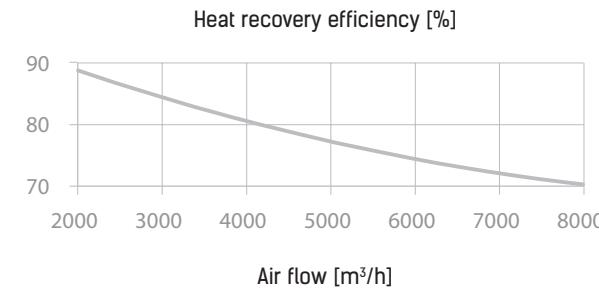
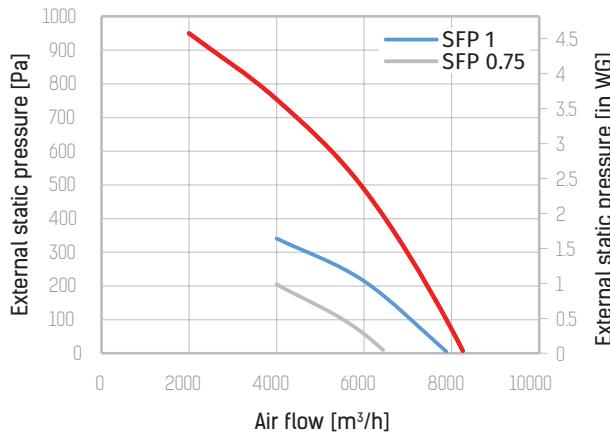
CFH 5000



Sound power Lw in dB

Environment	66	65	62	52	33	53	48	51	59
Outlet	68	69	70	68	65	64	61	58	71
Hz	63	125	250	500	1000	2000	4000	8000	LwA

CFH 6000

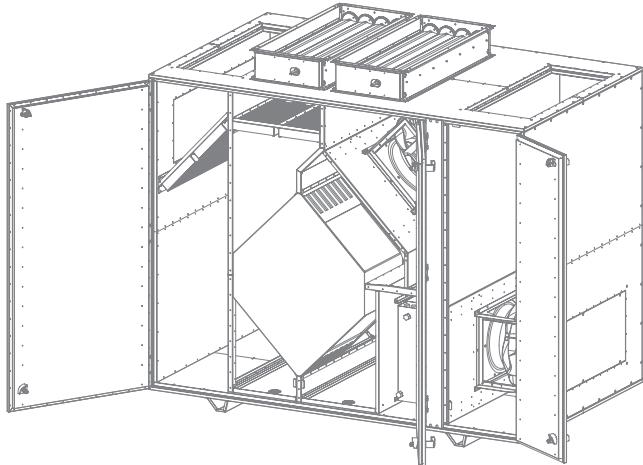


Sound power Lw in dB

Environment	66	65	62	52	33	53	48	51	59
Outlet	68	69	70	68	65	64	61	58	71
Hz	63	125	250	500	1000	2000	4000	8000	LwA

*External SFP for each fan [kW/(m³/s)]

HEAT RECOVERY VENTILATION UNIT CFV



AIRVENTS CFV, CFV-HE, CFV-HW

The brand new premium line of commercial heat recovery air handling units for floor mounting with high-efficient counter-flow heat exchanger. Available in five standard sizes based on the air flow capacity of 1500, 2500, 3500, 5000 and 6000 m³/h.

Optionally accomplished with no heater (CFH series), electric heater (CFH-HE series) or water heater (CFH-HW series) and ready for operation with all necessary control elements.

Main features:

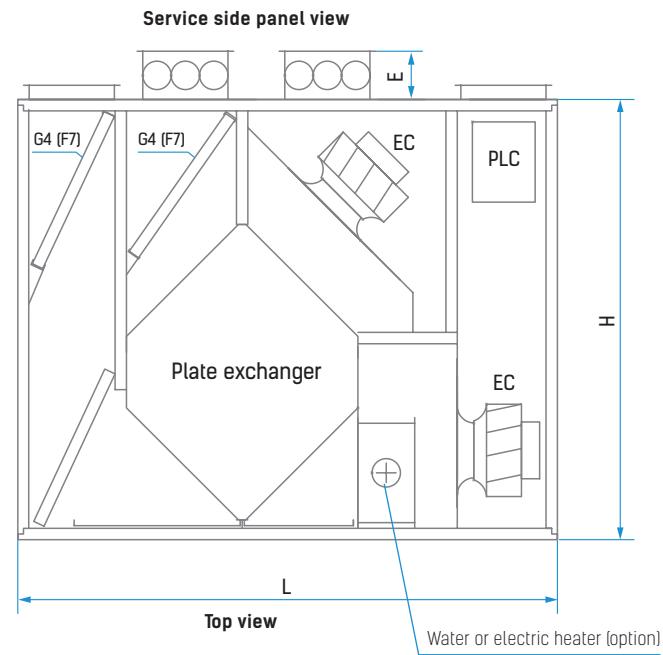
- High-efficient EC fans, backward-curved, external rotor. Low power consumption at any speed, low noise level and stable operation in any climate conditions.
- Integrated plug-and-play controls on the basis of the Carel kVent. controller. Easy connecting via web-interface using the Ethernet-Modbus and BACnet.
- Insulated double-skin frameless casing.
- High-efficient counter-flow heat exchanger is made of profiled aluminium plates and impregnated with elastic heat-resistant sealant.
- The stainless steel drain pan is located on the inlet and outlet sides.
- The casing panels are made of steel with zinc-aluminium coating and internally lined with 40 mm heat- and sound-insulating mineral wool layer. The units have C4 corrosion resistance class in compliance with ISO 12944. Each model is available in left- and right-handed modifications. The units have service access on both sides and on the bottom.
- Washable F7, G4 (optional) panel filters in exhaust and supply air streams.
- Integrated control panels:
 - A30 th-Tune: standard control panel with handy interface ensures basic setup of parameters.
 - A32 pGDe: control panel with expanded functionality ensures complete setup of parameters.
- Integrated 100 % bypass of the heat exchanger with automatic damper and Belimo actuator ensures active freeze protection. Free heating and cooling functions are also available. Built-in automatic external air dampers with Belimo actuators.
- ECO-Design'18 compliant.

Technical parameters

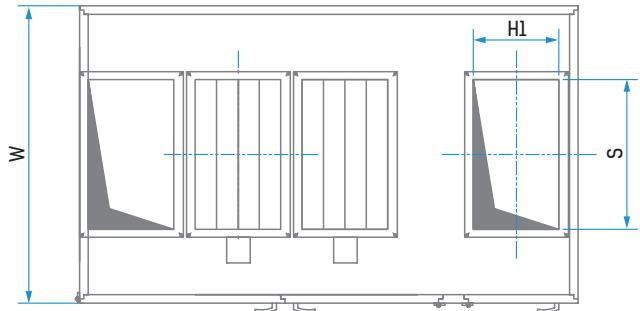
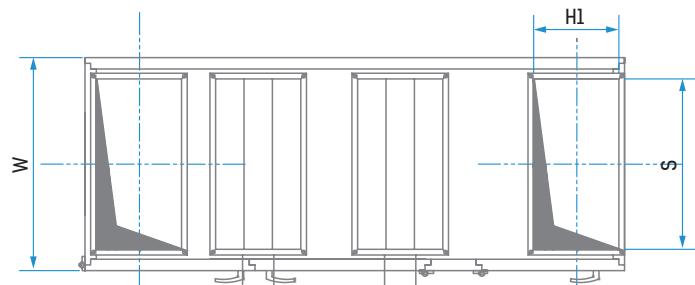
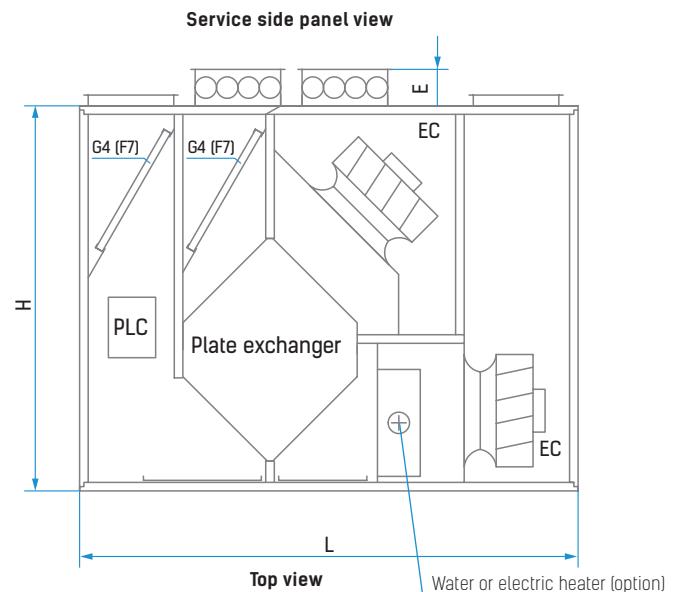
Model	CFV 1500	CFV 2500	CFV 3500	CFV 5000	CFV 6000
Nominal air flow [m ³ /h]	1500	2500	3500	5000	6000
EC fans	phase/voltage [50–60 Hz/VAC]	~1.200/277		~3.380/480	
	power/current [kW/A]	2x0.46/3.0	2x0.74/3.75	2x1.14/1.8	2x1.32/2.1
	fan speed [min ⁻¹]	2848	2640	2400	1350
	perm. amb. temp. [°C]	-35...+50			
	motor protection	IP54			
	insulation class	F			
	motor sound power level to outlet [dBA]	74	75	76	71
SFP @ nominal air flow, max. pressure [kW/(m ³ /s)]	2x1.1	2x1.06	2x1.13	2x0.946	2x1.00
Filter class exhaust/supply standard (optional)	F7 (G4)/F7 (G4)				
Weight (net, without packaging) [kg]	230	250	280	400	530
Protection class	IP34				
Sound pressure level @ 0.3 m to environment [dBA]	41	43	44	39	46

HEAT RECOVERY VENTILATION UNIT CFV, CFV-HE, CFV-HW

CFV 1500, CFV 2000

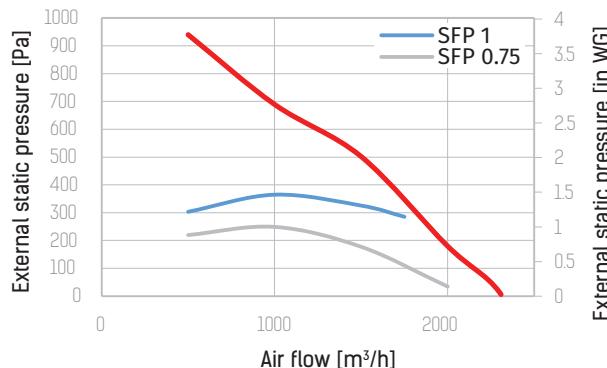


CFV 3500, CFV 5000, CFV 6000

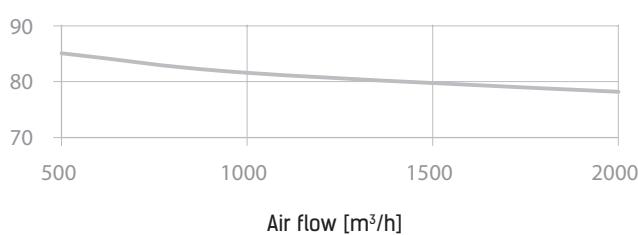


Dimensions [mm]	CFV 1500	CFV 2500	CFV 3500	CFV 5000	CFV 6000
L	1950	1950	2200	2330	2330
W	750	750	890	1390	1390
H	1550	1550	1800	1800	1800
H1	300	300	300	400	400
S	600	600	600	1000	1000
E	170	170	170	170	170

CFV 1500



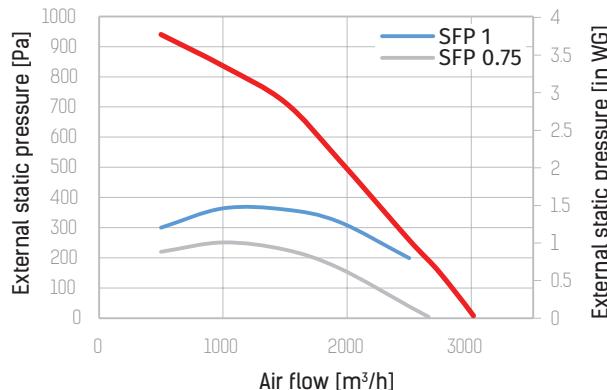
Heat recovery efficiency [%]



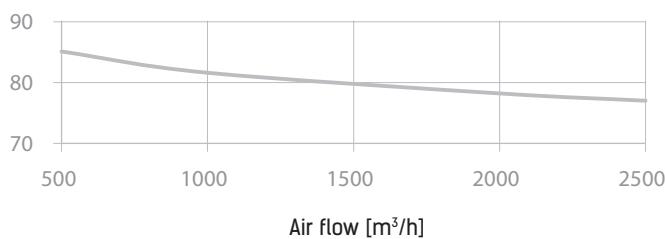
Sound power Lw in dB

Environment	66	65	62	52	33	53	48	51	59
Outlet	68	69	70	68	65	64	61	58	71
Hz	63	125	250	500	1000	2000	4000	8000	LwA

CFV 2500



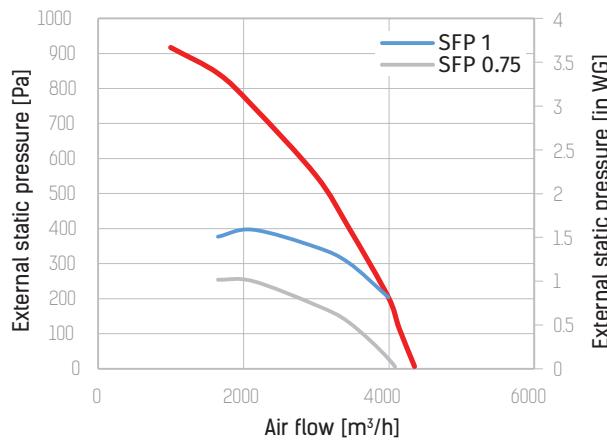
Heat recovery efficiency [%]



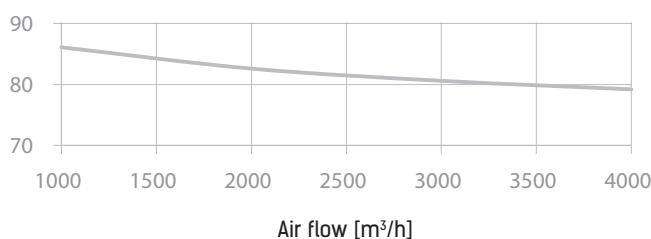
Sound power Lw in dB

Environment	63.6	65.5	64.2	58.2	40.1	57.2	52.2	55.4	63
Outlet	65.6	69.5	72.2	74.2	72.1	68.2	65.2	62.4	76.6
Hz	63	125	250	500	1000	2000	4000	8000	LwA

CFV 3500



Heat recovery efficiency [%]

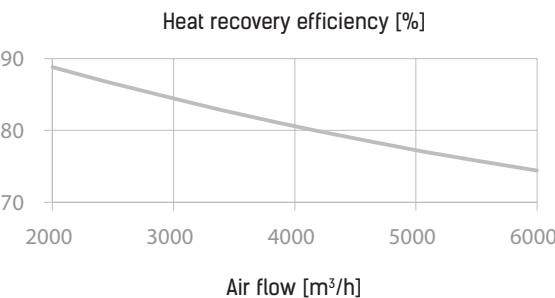
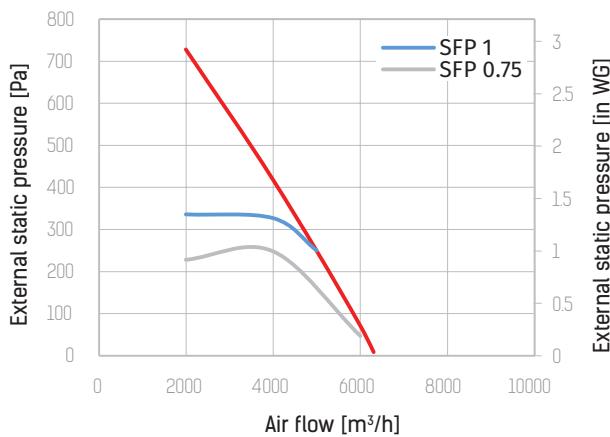


Sound power Lw in dB

Environment	67	64	66	57	37	59	53	57	64
Outlet	69	68	74	73	69	70	66	64	76
Hz	63	125	250	500	1000	2000	4000	8000	LwA

*External SFP for each fan [kW/(m³/s)]

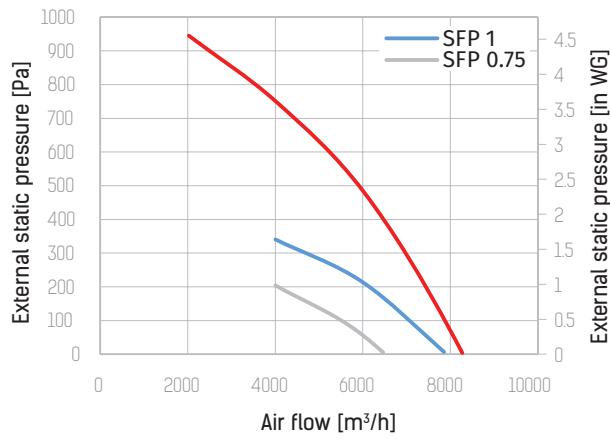
CFV 5000



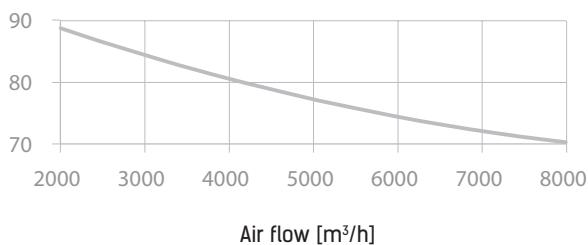
Sound power Lw in dB

Environment	66	65	62	52	33	53	48	51	59
Outlet	68	69	70	68	65	64	61	58	71
Hz	63	125	250	500	1000	2000	4000	8000	LwA

CFV 6000



Heat recovery efficiency [%]



Sound power Lw in dB

Environment	66	65	62	52	33	53	48	51	59
Outlet	68	69	70	68	65	64	61	58	71
Hz	63	125	250	500	1000	2000	4000	8000	LwA

*External SFP for each fan [kW/[m³/s]]

Μιχαήλ Καραολή 19, τκ 143 43, N. Χαλκηδόνα, Αθήνα
Τηλ: 211 - 70.55.500 & 210 - 21.30.051, Fax: 210 - 22.23.283



VENTS reserves the rights to modify any of its products' features, designs, components and specifications at any time and without notice to maintain the development and quality of manufactured goods.

