

 **innova**

2.0 RINNOVA

Thermodynamic
heat recovery
ventilation unit



**Fresh air solution,
easy to install.**

Why is fresh air necessary?



It is necessary to improve the indoor air quality

Especially in crowded environments such as shops, public offices, schools, etc.



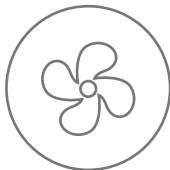
Adopt solutions indicated by reliable sources

AiCARR (Culture and Technique for Energy Man and Environment), REHVA (Federation Of European Heating, Ventilation and Air Conditioning Associations), ASHRAE (organization dedicated to advancing the arts and sciences of heating, ventilation, air conditioning and refrigeration)



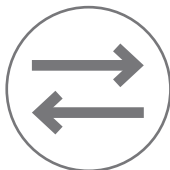
Using outdoor air is the best solution to reduce indoor pollutants

(viruses, cleaning products, dust, VOC, CO₂, etc.)

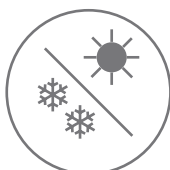


Use a mechanical ventilation system

Simply opening the windows is insufficient and not comfortable



The fresh air that enters must not be polluted by the exhaust air that is extracted



The fresh air that is introduced must be heated or cooled to maintain the correct room temperature

The solution 2.0 RINNOVA

Simple solutions that can be installed quickly, with minimal impact.



Easy to install

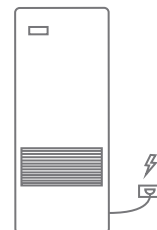


Ø 162mm

Make 2 holes in
the perimeter wall



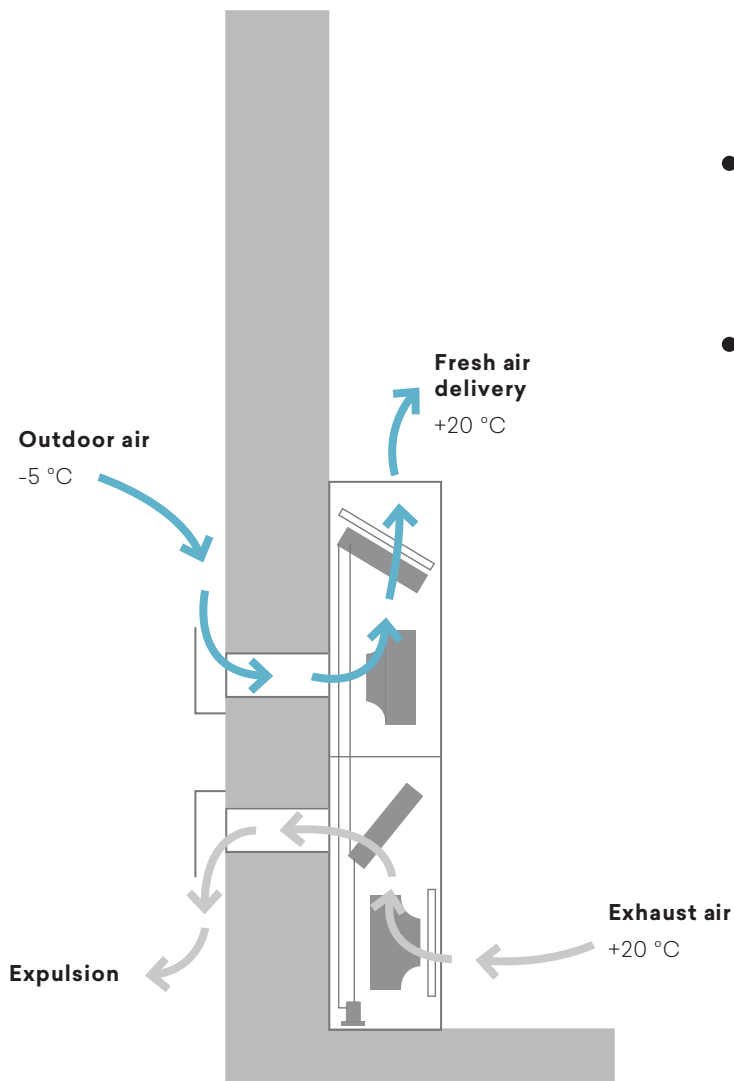
Install the unit



Connect the power
supply



Technology, thermodynamic heat recovery



- Complete and safe separation between the exhaust air and the fresh air.
- Thermodynamic recovery recovers the heat from the exhaust air and transfers it to the fresh air.
- In the most severe conditions (e.g. external T. $-5\text{ }^{\circ}\text{C}$) the fresh air supplied is at the same temperature as the exhaust air, $20\text{ }^{\circ}\text{C}$.
- At better conditions (e.g. external T. $15\text{ }^{\circ}\text{C}$) the fresh air is warmer and contributes to the heating of the room. Similarly, this also occurs for summer cooling.

2.0 RINNOVA

The units for air renewal and purification with thermodynamic heat recovery



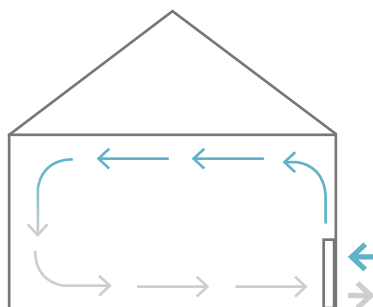
2.0 RINNOVA VERTICAL

320
m³/h

Fresh air flow: 320 m³/h
(booster 380 m³/h)

12

For rooms up to 12 people (25 m³/h per person, example referred to the fresh air flow rate for school environments according to UNI 10339)



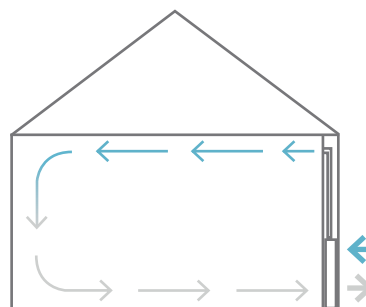
2.0 RINNOVA VERTICAL BUILT IN

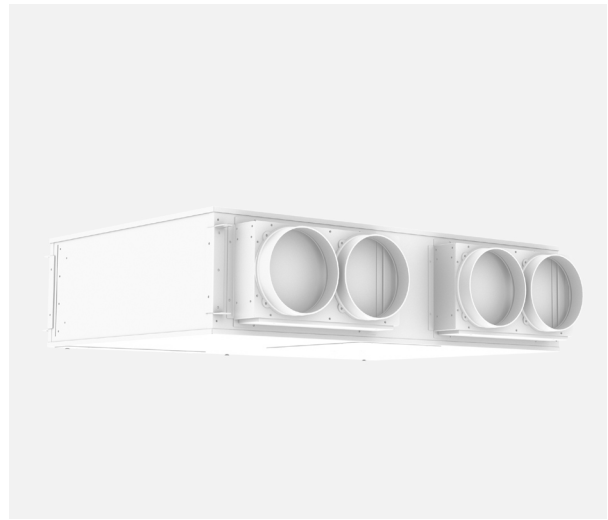
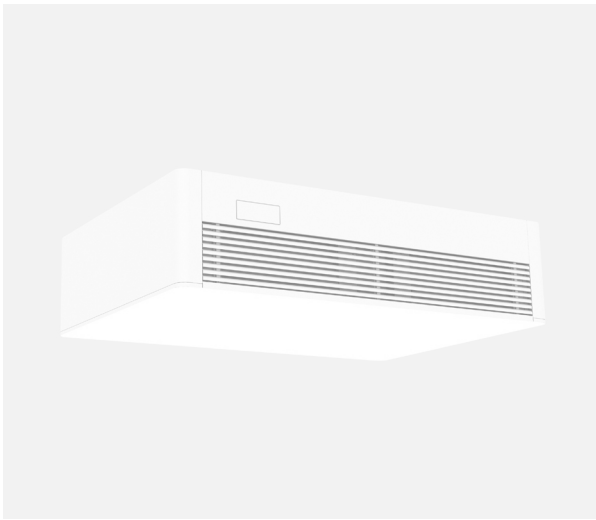
320
m³/h

Fresh air flow: 320 m³/h
(booster 380 m³/h)

12

For rooms up to 12 people (25 m³/h per person, example referred to the fresh air flow rate for school environments according to UNI 10339)





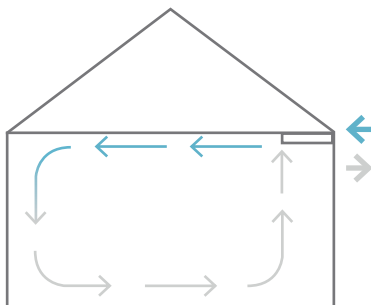
2.0 RINNOVA CEILING

400
m³/h

Fresh air flow: 400 m³/h
(booster 460 m³/h)

16

For rooms up to 16 people (25 m³/h per person, example referred to the fresh air flow rate for school environments according to UNI 10339)



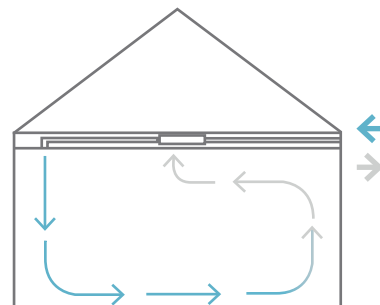
2.0 RINNOVA DUCT

400
m³/h

Fresh air flow: 400 m³/h
(booster 460 m³/h)

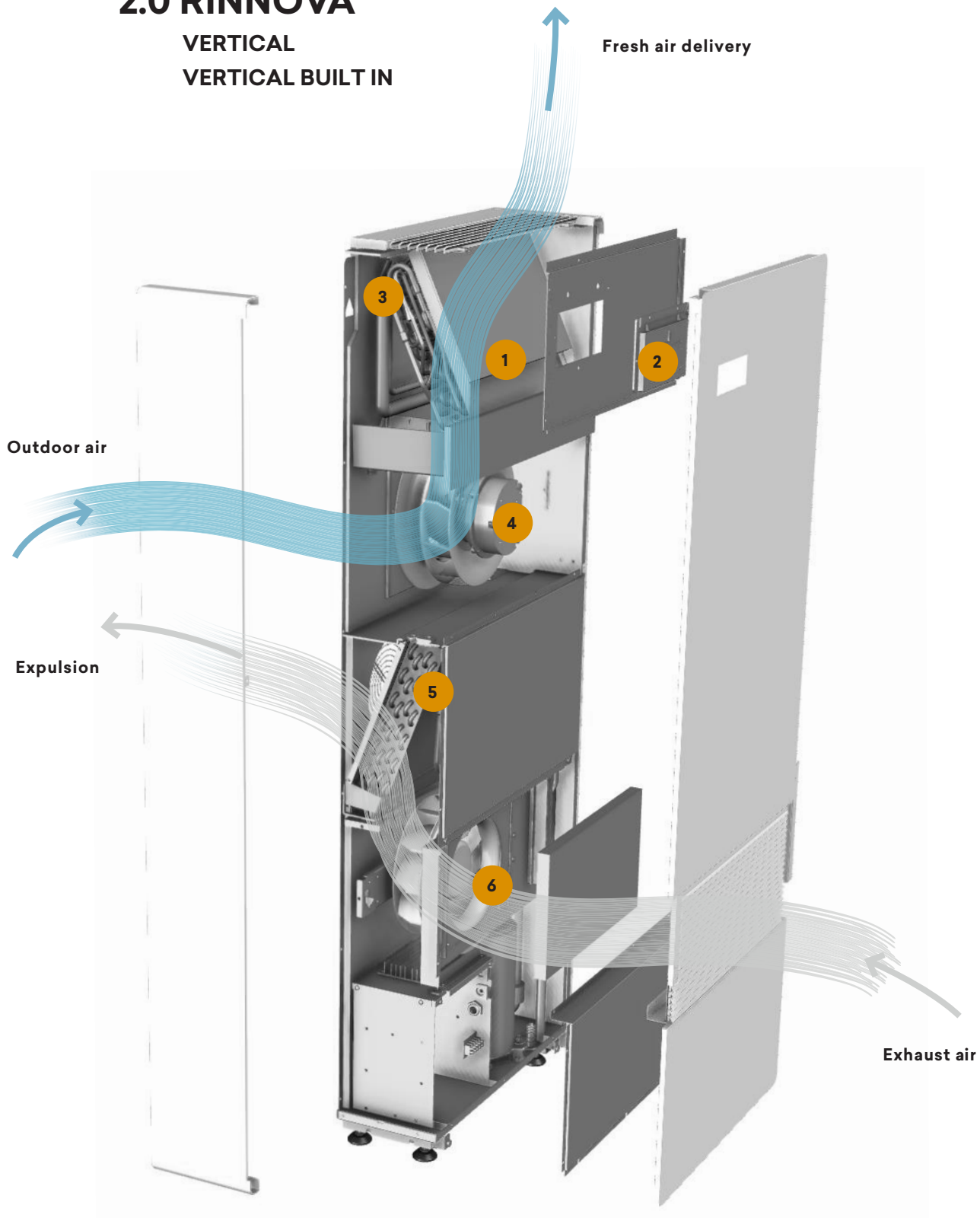
16

For rooms up to 16 people (25 m³/h per person, example referred to the fresh air flow rate for school environments according to UNI 10339)



2.0 RINNOVA

VERTICAL
VERTICAL BUILT IN

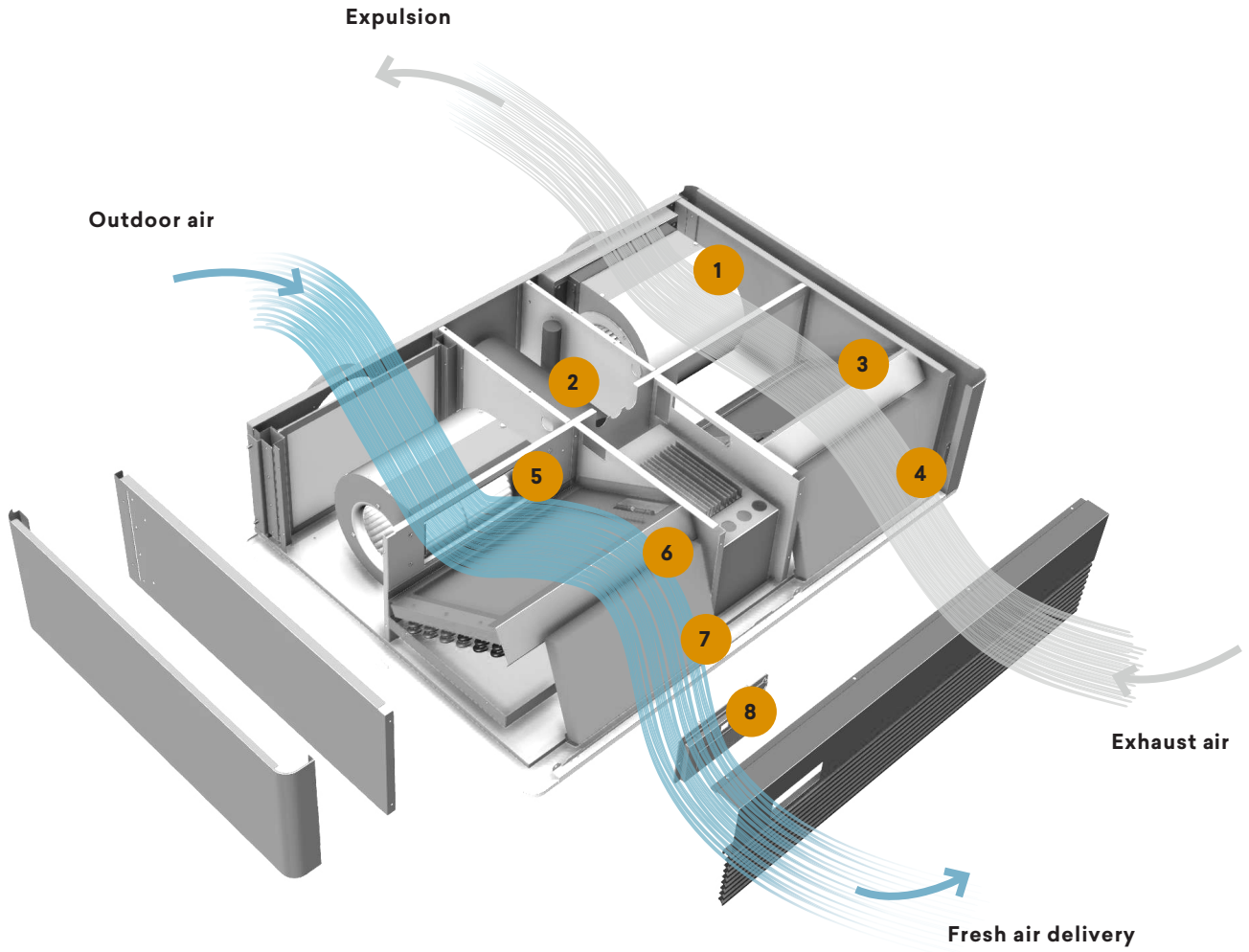


1. 80% ePM1 filter
2. Control display
3. Internal exchanger
4. DC Inverter radial fan
5. External exchanger
6. DC Inverter radial fan
7. ePM1 filter 80%
8. DC Inverter compressor



2.0 RINNOVA

CEILING DUCT



1. DC Inverter centrifugal fan with constant flow
2. DC Inverter compressor
3. External exchanger
4. 80% ePM1 filter
5. DC Inverter centrifugal fan with constant flow
6. Internal exchanger
7. ePM1 filter 80%
8. Display of controls

UV-C LAMP OPTION

UV rays are divided into three bands: UV-A (long waves), UV-B (medium waves) and UV-C (short waves).

- UV-C include the largest portion of the entire UV spectrum and have a strong germicidal effect because they can alter the molecular structure of the DNA. The simpler the structure of a microorganism, the easier it will be to inactivate it through UV radiation.

UV-C is the germicidal belt used to kill microorganisms in hospitals, laboratories, in water treatment, in the production of drinks, in the transformation of food products and in the pharmaceutical field. Thanks to new technologies, UV-C can be used to destroy the contagious diseases that circulate in the air.



Benefits

- **Eliminates mold, bacteria and viruses**
It uses UV-C germicidal irradiation (ultraviolet -C) as an effective method of inactivating mold, bacteria and viruses.
- **It prevents the spread of diseases**
It prevents the spread of infectious diseases caused by bacteria and viruses.
- **It does not harm health**
It does not produce ozone or secondary contaminants, it does not harm the people who occupy the building or the equipment.
- **Keeps the components of the unit clean**
It constantly keeps the battery and the bowl clean to collect condensate drain, plenums and channels, reducing or eliminating cleaning processes and the use of harmful chemical products and disinfectants.
- **2.0 RINNOVA can be produced with the option UV-C lamp**



CONTROLS

Control display on the unit

- Touch interface
- Modulating speed
- Integrated WiFi
- Availability of all mode, temperature and special function settings



Handset remote control

- Ventilation speed control and settings



Smart Touch remote wall controls

- Touch interface
- Modulating speed
- Unit control and setting: seasonal setting, temperature set point, ventilation speed
- Connectivity: WiFi or Modbus



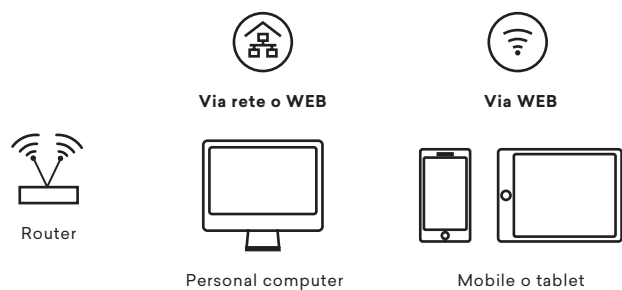
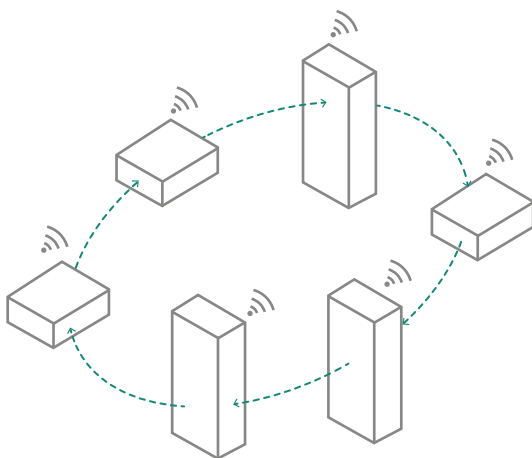
2.0 RINNOVA VERTICAL and CEILING

Control display on board unit and remote control supplied as standard.

2.0 RINNOVA VERTICAL BUILT IN and DUCT

For correct operation, the wall control connected to the unit with a cable is mandatory.

CENTRALIZED MANAGEMENT VIA WIFI



The 2.0 RINNOVA units can be managed from a single location and communicate via WiFi without the need for a cable connection.

2.0 RINNOVA VERTICAL



DC INVERTER COMPRESSOR

Maximum comfort with the lower consumption and quiet operation.



FRESH AND PURIFIED AIR

Renewal air and filtration air, with ePM1 80% filters.



AIR QUALITY CONTROL

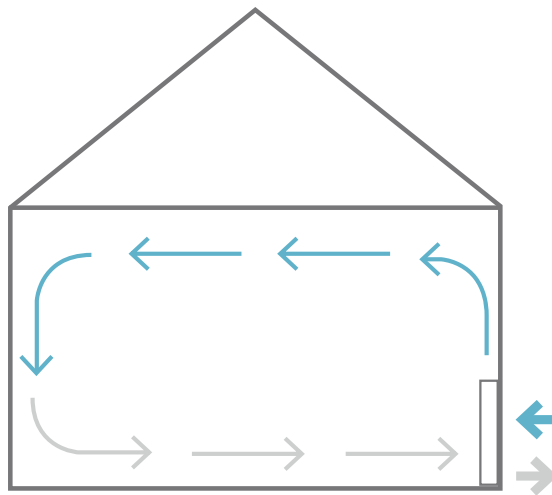
Through the CO₂, VOC, temperature and humidity sensors, it automatically adjusts the operation of the unit.



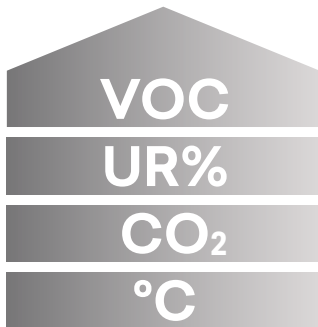
WIFI REMOTE CONTROL

2.0 RINNOVA VERTICAL

CONTINUOUS AIR RENEWAL



INTEGRATED AIR QUALITY, HUMIDITY AND TEMPERATURE SENSORS



SIMPLE AND ADVANCED CONTROLS WITH INTEGRATED WIFI



Integrated touch-screen



Handset control

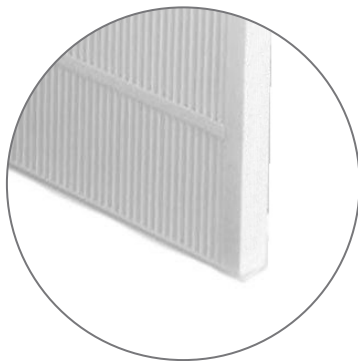


iOS and Android APP



Smart touch WIFI or ModBus remote control (optional)

FILTRATION WITH EFFICIENCY CLASS ePM1 80%





VERTICAL OUTBLOW




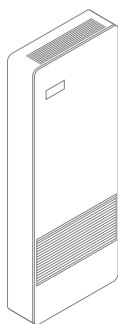
2.0 RINNOVA VERTICAL

Thermodynamic heat recovery ventilation unit

-  Fresh Air flow 320 m³/h

-  Exposed vertical installation

-  DC Inverter Compressor



Width
500 mm



Height
1398 mm



Depth
185 mm

COMV12VC3II	2.0 RINNOVA VERTICAL 30	Nominal fresh air flow 320 m³/h Total heating capacity: 3,10 kW Total cooling capacity: 2,41 kW
--------------------	-------------------------------	---

Standard supply:

- soft touch control display on the unit with integrated WIFI
- handset remote control
- installation template
- wall fixing bracket
- DN 160 external grilles kit, internal flanges and plastic protection film
- external anti bypass covers
- adjustable feet

ACCESSORY DESCRIPTION	CODE
CONTROLS	
Smart touch electronic wall control panel with thermostat and room probe with integrated WiFi module (supplied with 8 m connection cable), color BLACK	ECA031II
Smart touch electronic wall-mounted control panel with thermostat and room probe with integrated WiFi module (supplied with 8 m connection cable), WHITE color	ECB031II
Smart touch electronic wall-mounted control panel with thermostat and room probe with integrated Modbus port (supplied with 8 m connection cable), BLACK color	ECA032II
Smart touch electronic wall-mounted control panel with thermostat and room probe with integrated Modbus port (supplied with 8 m connection cable), WHITE color	ECB032II
AIR STERILIZATION	
Germicidal lamp with UV-C rays with power supply and fixings. The lamp life is estimated at 10,000 operating hours	GB1094II
UV-C lamp spare part	GB1095II
GRILLES AND ACCESSORIES	
Kit n. 2 external grilles with fixed fins DN 160	GB0738II
Kit n. 2 insect protection. Applicable only on fixed grids DN 160	GB0755II
SPARE PARTS FILTERS	
Kit 2 filters ePM1 80% fresh air delivery and exhaust	GR1134II
Outdoor air intake Coarse filter kit	GR1135II
3.0	
Condensate nebulizer To be coupled to eliminate the condensate	COVA00102II



TECHNICAL SPECIFICATIONS

TECHNICAL SPECIFICATIONS		2.0 RINNOVA VERTICAL
Size	u.m.	30
AIR FLOW RATE		
Fresh air flow rate B/3/2/1 (1)	m³/h	380 / 320 / 190 / 130
Static pressure available (2)	Pa	-
HEATING PERFORMANCE		
Total heating capacity (3)	kW	3,1
Space heating capacity without fresh air load (3) (4)	kW	0,38
Total power input (3)	kW	0,71
COP (3)		4,4
COOLING PERFORMANCE		
Total cooling capacity (5)	kW	2,41
Space cooling capacity without fresh air load (5)	kW	0,76
Total power input (5)	kW	0,73
EER (5)		3,3
GENERAL FEATURES		
Fans	int/ext	Radial / Radial
Fans Quantity	Nr	2
Heat recovery		Thermodynamic
Compressor		Rotary Inverter DC
Filters		Flat filters - 2 x ePM1 80%
Sound pressure (6)	dB(A)	41
Refrigerant		R410a
ELECTRICAL DATA		
Max Fans power input	kW	0,1
Max Compressor power input	kW	0,95
Max Total power input	kW	1,05
Max current absorbed	A	4,8
Power supply	V/ph/Hz	230/1/50
DIMENSIONS		
Width	mm	500
Height	mm	1398
Depth	mm	185
Connections diameter	mm	162
Condensate drain	mm	20
Weight	kg	53
OPERATING LIMITS		
Heating - Indoor air min/max	°C	10 / 25
Heating - Outdoor air min/max	°C	-15 / 20
Cooling - Indoor air min/max	°C	18 / 28
Cooling - Outdoor air min/max	°C	15 / 38

(1) B = booster, V3 = nominal flow at maximum speed, V2 = medium speed flow, V1 = flow at minimum speed

(2) The fresh air supply and exhaust air intake are directly in the room

(3) Heating capacity at nominal air flow. Outdoor air temperature -5 °C, relative humidity 80%. Ambient temperature 20 °C; relative humidity 50%, nominal air flow

(4) Space heating capacity = Total heating capacity - Ventilation load

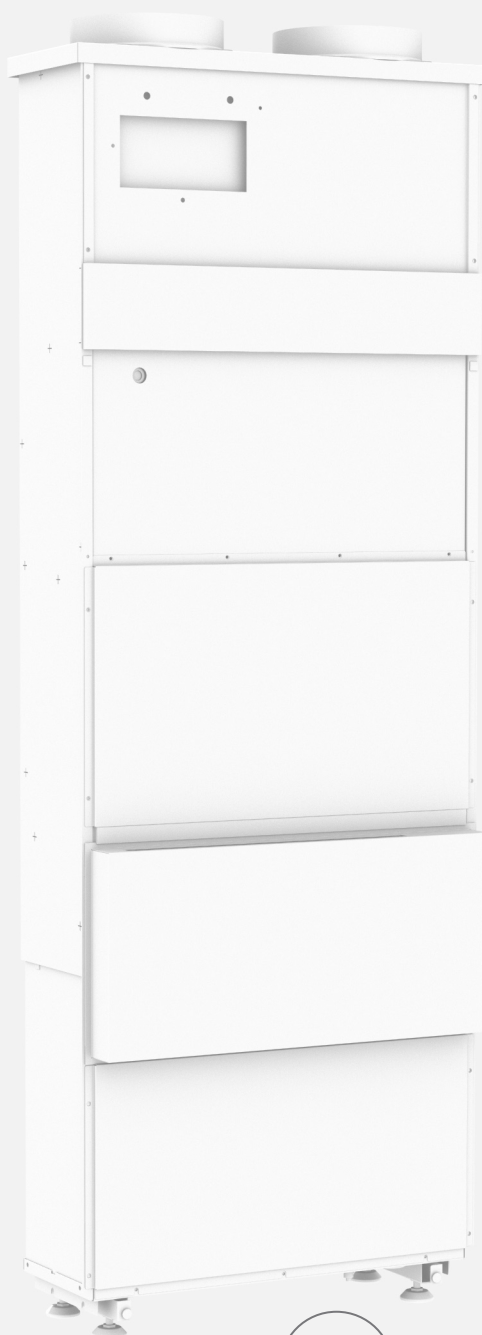
Ventilation load = capacity to heat nominal fresh air flow of the unit from -5°C outdoor air to 20°C indoor air

Example:
 Space heating capacity = Total heating capacity - Fresh air load = 3.1 - (Q x c x DT)
 = 3.1 - (320 x 0.34 x 25 / 1000) = 3.1 - 2.72 = 0.38 kW
 Q = nominal air flow
 DT = delta T = indoor air temp. - outdoor air temp.

(5) Cooling capacity at nominal air flow. Outdoor air temperature 35 °C, relative humidity 50%. Ambient temperature 27 °C; relative humidity 60%, nominal air flow

(6) Sound pressure at nominal flow rate in open field at a distance of 3m according to UNI EN3744

2.0 RINNOVA VERTICAL BUILT IN



DC INVERTER COMPRESSOR

Maximum comfort with the lower consumption and quiet operation.



FRESH AND PURIFIED AIR

Renewal air and filtration air, with ePM1 80% filters.



AIR QUALITY CONTROL

Through the CO2, VOC, temperature and humidity sensors, it automatically adjusts the operation of the unit.

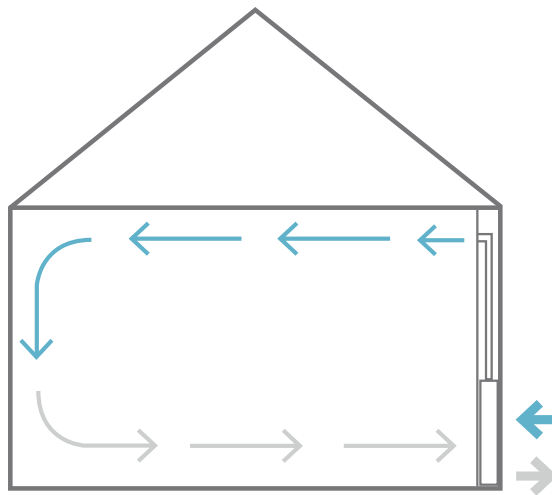


WIFI REMOTE CONTROL

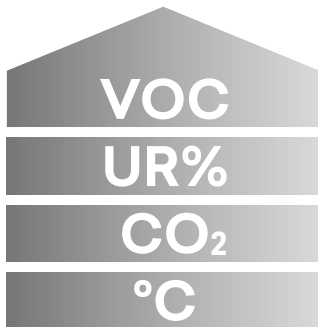


2.0 RINNOVA VERTICAL BUILT IN

CONTINUOUS AIR RENEWAL



INTEGRATED AIR QUALITY, HUMIDITY AND TEMPERATURE SENSORS



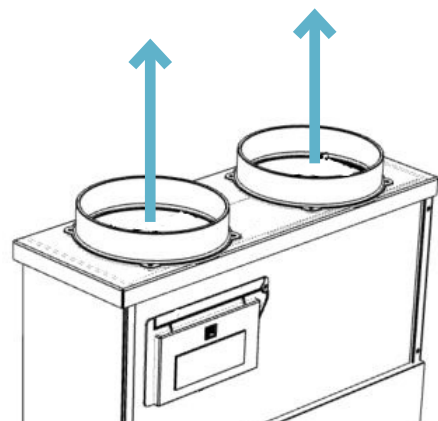
SIMPLE AND ADVANCED CONTROLS
WIFI OR INTEGRATED MODBUS



ALL ELEMENTS FOR STANDARD INSTALLATION,
INCLUDING EXTERNAL GRILLS DN 160





DUCTABLE FRESH AIR FLOW




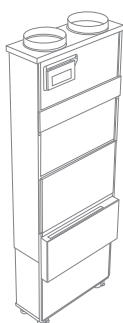
2.0 RINNOVA VERTICAL BUILT IN

Thermodynamic heat recovery ventilation unit

-  Fresh Air flow 320 m³/h

-  Built in vertical installation

-  DC Inverter Compressor



Larghezza
490 mm



Altezza
1430 mm



Profondità
175 mm

COMV12DC3II	2.0 RINNOVA VERTICAL BUILT IN 30	Nominal fresh air flow 320 m³/h Total heating capacity: 3,10 kW Total cooling capacity: 2,41 kW
--------------------	---	---

Note: ECA031II or ECB031II or ECA032II or ECB032II. wall control is mandatory for correct operation.

Standard supply:

- installation template
- wall fixing bracket
- DN 160 external grilles kit, internal flanges and plastic protection film
- external anti bypass covers
- adjustable feet

ACCESSORY DESCRIPTION	CODE
CONTROLS	
Smart touch electronic wall control panel with thermostat and room probe with integrated WiFi module (supplied with 8 m connection cable), color BLACK	ECA031II
Smart touch electronic wall-mounted control panel with thermostat and room probe with integrated WiFi module (supplied with 8 m connection cable), WHITE color	ECB031II
Smart touch electronic wall-mounted control panel with thermostat and room probe with integrated Modbus port (supplied with 8 m connection cable), BLACK color	ECA032II
Smart touch electronic wall-mounted control panel with thermostat and room probe with integrated Modbus port (supplied with 8 m connection cable), WHITE color	ECB032II
AIR STERILIZATION	
Germicidal lamp with UV-C rays with power supply and fixings. The lamp life is estimated at 10,000 operating hours	GB1094II
UV-C lamp spare part	GB1095II
GRILLS AND ACCESSORIES	
Kit n. 2 external grilles with fixed fins DN 160	GB0738II
Kit n. 2 insect protection. Applicable only on fixed grids DN 160	GB0755II
Insulated plenum for supply / intake with 2 connections DN 160 mm, n° 1 DN 160 cap and grille connection. Dimensions: 450x175x175 mm	GR1118II
Supply grille in aluminum with double row of adjustable fins, white color. Dimensions: 450x225 mm	GR1119II
Intake grille in aluminium with removable filter, white color. Dimensions: 450x225 mm	GR1120II
SPARE PARTS FILTERS	
Kit 2 filters ePM1 80% fresh air delivery and exhaust	GR1134II
Outdoor air intake Coarse filter kit	GR1135II
3.0	
Condensate nebulizer To be coupled to eliminate the condensate	COVA00102II



TECHNICAL SPECIFICATIONS

TECHNICAL SPECIFICATIONS		2.0 RINNOVA VERTICAL BUILT IN
Size	u.m.	30
AIR FLOW RATE		
Fresh air flow rate B/3/2/1 (1)	m³/h	380 / 320 / 190 / 130
Static pressure available nominal/max (2)	Pa	60/110
HEATING PERFORMANCE		
Total heating capacity (3)	kW	3,1
Space heating capacity without fresh air load (3) (4)	kW	0,38
Total power input (3)	kW	0,71
COP (3)		4,4
COOLING PERFORMANCE		
Total cooling capacity (5)	kW	2,41
Space cooling capacity without fresh air load (5)	kW	0,76
Total power input (5)	kW	0,73
EER (5)		3,3
GENERAL FEATURES		
Fans	int/ext	Radial / Radial
Fans Quantity	Nr	2
Heat recovery		Thermodynamic
Compressor		Rotary Inverter DC
Filters		Flat filters - 2 x ePM1 80%
Sound pressure (6)	dB(A)	43 / 46
Refrigerant		R410a
ELECTRICAL DATA		
Max Fans power input	kW	0,15
Max Compressor power input	kW	0,95
Max Total power input	kW	1,15
Max current absorbed	A	5
Power supply	V/ph/Hz	230/1/50
DIMENSIONS		
Width	mm	490
Height	mm	1430
Depth	mm	175
Connections diameter	mm	162
Condensate drain	mm	20
Weight	kg	51
OPERATING LIMITS		
Heating - Indoor air min/max	°C	10 / 25
Heating - Outdoor air min/max	°C	-15 / 20
Cooling - Indoor air min/max	°C	18 / 28
Cooling - Outdoor air min/max	°C	15 / 38

(1) B = booster, V3 = nominal flow at maximum speed, V2 = medium speed flow, V1 = flow at minimum speed

(2) Static pressure available on fresh air delivery. It is possible to set the fan at the nominal static pressure available or at the max static pressure available.

(3) Heating capacity at nominal air flow. Outdoor air temperature -5 °, relative humidity 80%. Ambient temperature 20 ° C; relative humidity 50%, nominal air flow

(4) Space heating capacity = Total heating capacity - Ventilation load

Ventilation load = capacity to heat nominal fresh air flow of the unit from -5°C outdoor air to 20°C indoor air

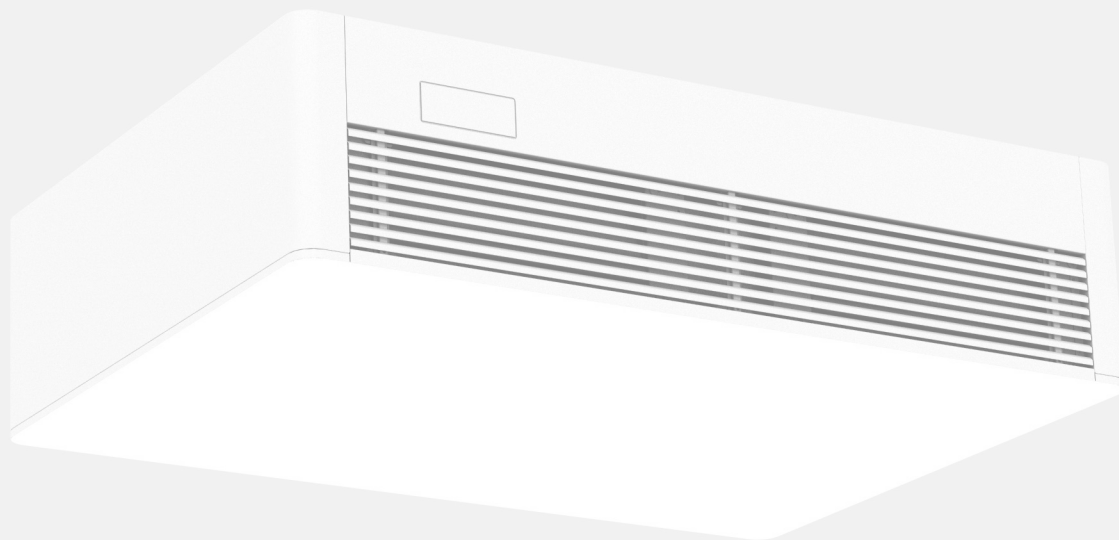
Example:

Space heating capacity = Total heating capacity - Fresh air load = 3.1 - (Q x c x DT)
 = 3.1 - (320 x 0.34 x 25 / 1000) = 3.1 - 2.72 = 0.38 kW
 Q = nominal air flow
 DT = delta T = indoor air temp. - outdoor air temp.

(5) Cooling capacity at nominal air flow. Outdoor air temperature 35 °, relative humidity 50%. Ambient temperature 27 ° C; relative humidity 60%, nominal air flow

(6) Sound pressure at nominal flow rate in open field at a distance of 3m according to UNI EN3744

2.0 RINNOVA CEILING



DC INVERTER COMPRESSOR

Maximum comfort with the lower consumption and quiet operation.



COSTANT AIR FLOW FANS

Centrifugal fans with constant flow that automatically adapt the speed to the pressure drops of the ducts.



AIR QUALITY CONTROL

Through the CO₂, VOC, temperature and humidity sensors, it automatically adjusts the operation of the unit.

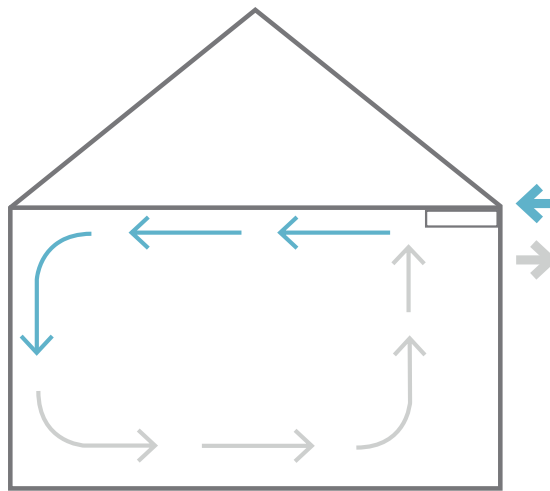


WIFI REMOTE CONTROL

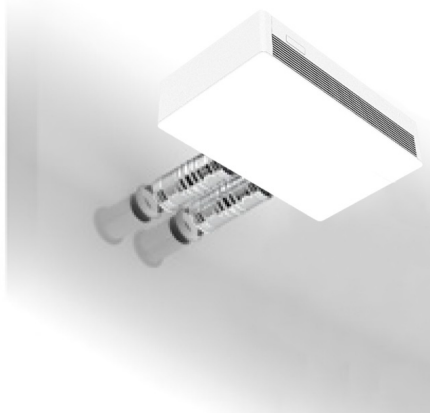


2.0 RINNOVA CEILING

CONTINUOUS AIR RENEWAL



DUCTABLE OUTDOOR AIR CONNECTIONS



COSTANT AIR FLOW DC INVERTER FANS



SIMPLE AND ADVANCED CONTROLS WITH INTEGRATED WIFI



Integrated touch-screen



Handset control

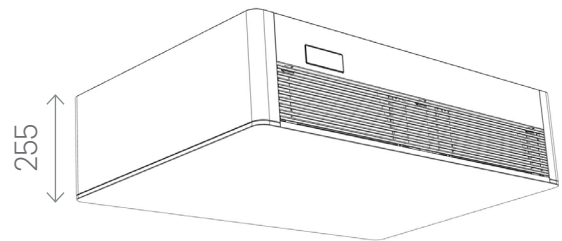


iOS and Android APP




Smart touch WIFI or ModBus remote control (optional)


EXTREMELY THIN




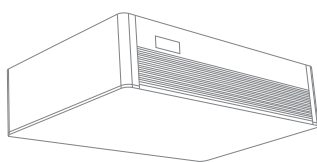
2.0 RINNOVA CEILING

Thermodynamic heat recovery ventilation unit

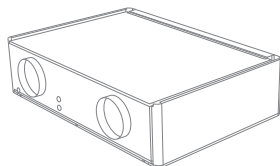
-  Fresh Air flow 400 m³/h

-  Ceiling installation

-  DC Inverter Compressor



Front view



Rear view



Width
1010 mm



Height
255 mm



Depth
690 mm

COMS13VC3II	2.0 RINNOVA CEILING 40	Nominal fresh air flow 400 m³/h Total heating capacity: 3,62 kW Total cooling capacity: 2,77 kW
--------------------	------------------------------	---

Standard supply:

- soft touch control display on the unit with integrated WIFI
- handset remote control
- installation template
- DN 160 external grilles kit, internal flanges and plastic protection film

ACCESSORY DESCRIPTION	CODE
-----------------------	------

CONTROLS

Smart touch electronic wall control panel with thermostat and room probe with integrated WiFi module (supplied with 8 m connection cable), color BLACK	ECA031II
Smart touch electronic wall-mounted control panel with thermostat and room probe with integrated WiFi module (supplied with 8 m connection cable), WHITE color	ECB031II
Smart touch electronic wall-mounted control panel with thermostat and room probe with integrated Modbus port (supplied with 8 m connection cable), BLACK color	ECA032II
Smart touch electronic wall-mounted control panel with thermostat and room probe with integrated Modbus port (supplied with 8 m connection cable), WHITE color	ECB032II

AIR STERILIZATION

Germicidal lamp with UV-C rays with power supply and fixings. The lamp life is estimated at 10,000 operating hours	GB1094II
UV-C lamp spare part	GB1095II

GRILLS AND ACCESSORIES

Kit n. 2 external grilles with fixed fins DN 160	GB0738II
Kit n. 2 external grilles with fixed fins DN 200	GB1091II
Kit n. 2 insect protection. Applicable only on fixed grids DN 160	GB0755II

DUCTING COMPONENTS

DN 160 alufonic insulated flexible hose. Supplied in rolls of 10 meters. Price in € / meter	GR0945II
DN 200 alufonic insulated flexible hose. Supplied in rolls of 10 meters. Price in € / meter	GR0946II
F / M connection DN 160-DN 200. N ° 1 piece	GR1136II

Note: the DN 160 flexible hose is to be used for distances between the unit and the outdoor grille up to 5 meters. For distances up to 10 meters it is mandatory to use the DN 200 flexible hose and to provide 2 F / M connections DN 160-DN 200 and 2 DN200 external grilles kit.

SPARE PARTS FILTERS

Kit 2 filters ePM1 80% fresh air delivery and exhaust	GR1137II
Outdoor air intake Coarse filter kit	GR1138II

3.0

Condensate nebulizer To be coupled to eliminate the condensate	COVA00102II
---	-------------



TECHNICAL SPECIFICATIONS

TECHNICAL SPECIFICATIONS		2.0 RINNOVA CEILING
Size	u.m.	40
AIR FLOW RATE		
Fresh air flow rate B/3/2/1 (1)	m ³ /h	460 / 400 / 240 / 140
Static pressure available nominal/max (2)	Pa	130
HEATING PERFORMANCE		
Total heating capacity (3)	kW	3,62
Space heating capacity without fresh air load (3) (4)	kW	0,22
Total power input (3)	kW	0,84
COP (3)		4,3
COOLING PERFORMANCE		
Total cooling capacity (5)	kW	2,77
Space cooling capacity without fresh air load (5)	kW	0,71
Total power input (5)	kW	0,91
EER (5)		3,0
GENERAL FEATURES		
Fans	int/ext	Costant air flow Centrifugal fan / Costant air flow Centrifugal fan
Fans Quantity	Nr	2
Heat recovery		Thermodynamic
Compressor		Rotary Inverter DC
Filters		Flat filters - 2 x ePM1 80%
Sound pressure (6)	dB(A)	41 / 43
Refrigerant		R410a
ELECTRICAL DATA		
Max Fans power input	kW	0,12
Max Compressor power input	kW	1,15
Max Total power input	kW	1,27
Max current absorbed	A	5,8
Power supply	V/ph/Hz	230/1/50
DIMENSIONS		
Width	mm	1010
Height	mm	255
Depth	mm	690
Connections diameter	mm	162
Condensate drain	mm	20
Weight	kg	74
OPERATING LIMITS		
Heating - Indoor air min/max	°C	10 / 25
Heating - Outdoor air min/max	°C	-15 / 20
Cooling - Indoor air min/max	°C	18 / 28
Cooling - Outdoor air min/max	°C	15 / 38

(1) B = booster, V3 = nominal flow at maximum speed, V2 = medium speed flow, V1 = flow at minimum speed

(2) Static pressure available on fresh air fan (from outdoor grille to indoor delivery grille) and exhaust air fan (from exhaust intake grille to outdoor expulsion grille). The fans maintain the constant air flow between 0 Pa and 130 Pa.

(3) Heating capacity at nominal air flow. Outdoor air temperature -5 °, relative humidity 80%. Ambient temperature 20 ° C; relative humidity 50%, nominal air flow

(4) Space heating capacity = Total heating capacity - Ventilation load

Ventilation load = capacity to heat nominal fresh air flow of the unit from -5°C outdoor air to 20°C indoor air

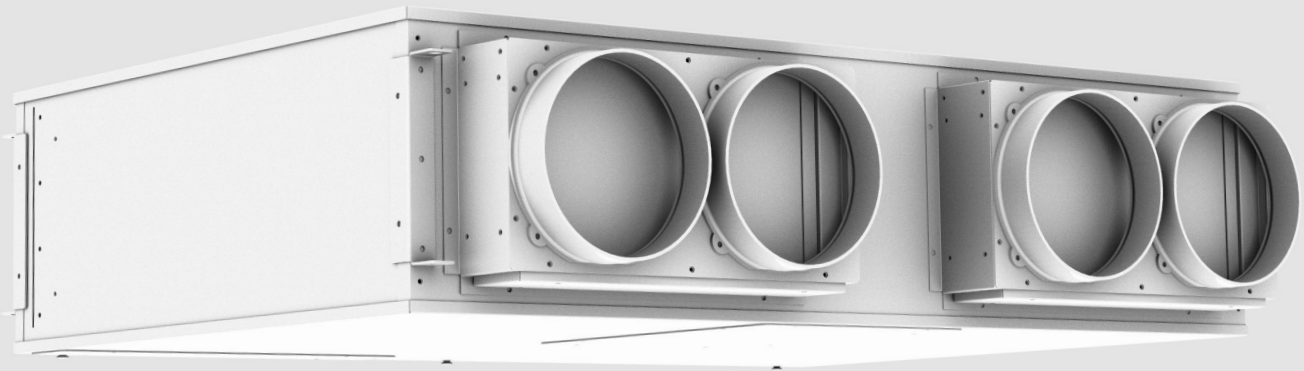
Example:

Space heating capacity = Total heating capacity - Fresh air load = 3.1 - (Q x c x DT)
= 3.1 - (320 x 0.34 x 25 / 1000) = 3.1 - 2.72 = 0.38 kW
Q = nominal air flow
DT = delta T = indoor air temp. - outdoor air temp.

(5) Cooling capacity at nominal air flow. Outdoor air temperature 35 °, relative humidity 50%. Ambient temperature 27 ° C; relative humidity 60%, nominal air flow

(6) Sound pressure at nominal flow rate in open field at a distance of 3m according to UNI EN3744

2.0 RINNOVA DUCT



DC INVERTER COMPRESSOR

Maximum comfort with the lower consumption and quiet operation.



COSTANT AIR FLOW FANS

Centrifugal fans with constant flow that automatically adapt the speed to the pressure drops of the ducts.



AIR QUALITY CONTROL

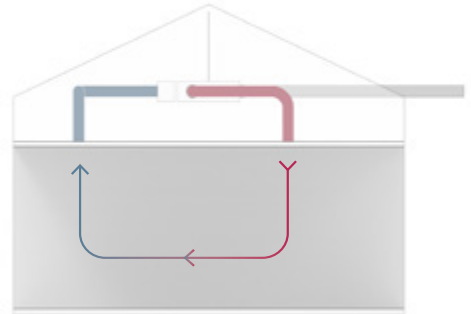
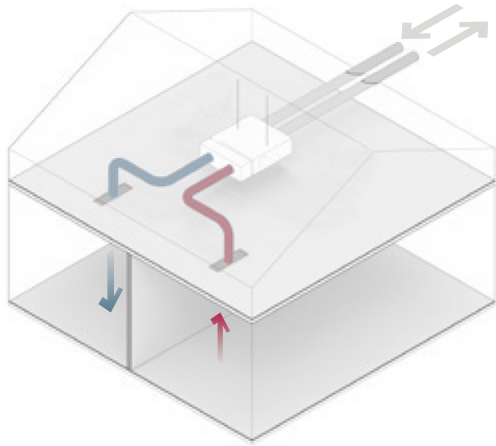
Through the CO₂, VOC, temperature and humidity sensors, it automatically adjusts the operation of the unit.



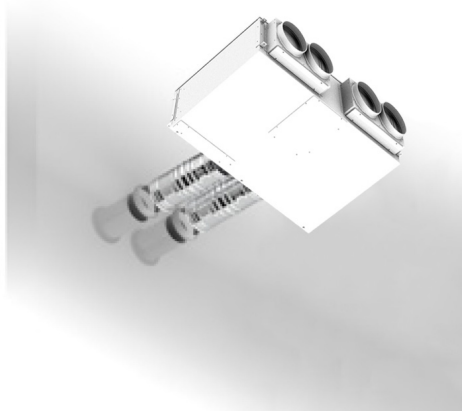
WIFI REMOTE CONTROL

2.0 RINNOVA DUCT

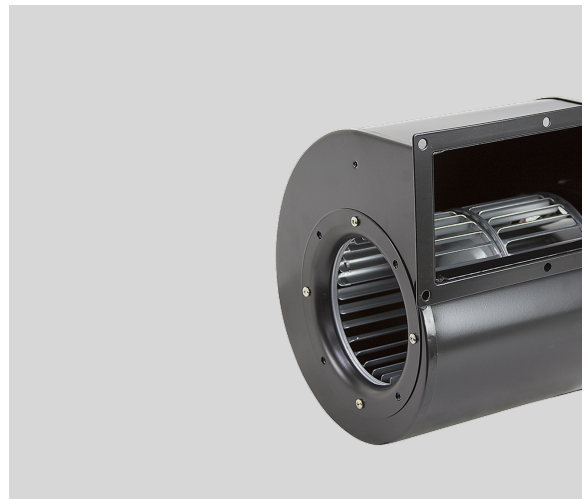
FALSE CEILING INSTALLATION



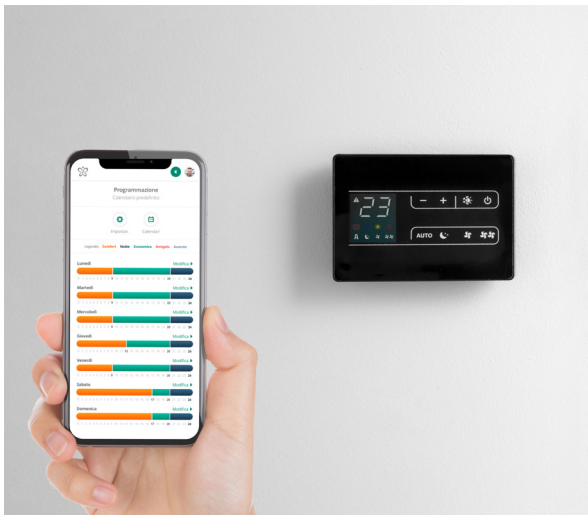
DUCTABLE OUTDOOR AND INDOOR AIR CONNECTIONS



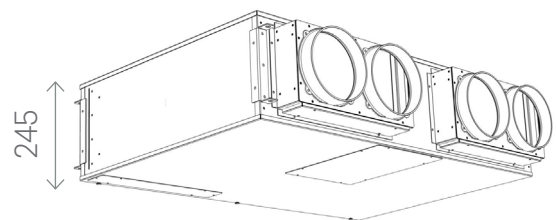
COSTANT AIR FLOW DC INVERTER FANS



SIMPLE AND ADVANCED CONTROLS WIFI OR INTEGRATED MODBUS





EXTREMELY THIN




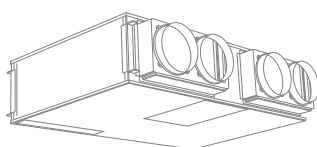
2.0 RINNOVA DUCT

Unità per il ricambio d'aria con recupero termodinamico.

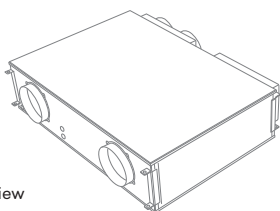
-  Fresh Air flow 400 m³/h

-  False ceiling installation

-  DC Inverter Compressor



Front view



Rear view

Width
950 mmHeight
245 mmDepth
710 mm

Standard supply:

- installation template
- DN 160 external grilles kit, internal flanges and plastic protection film

COMS13DC3II	2.0 RINNOVA DUCT 40	Nominal fresh air flow 400 m³/h Total heating capacity: 3,62 kW Total cooling capacity: 2,77 kW
--------------------	---------------------------	---

Note: ECA031II or ECB031II or ECA032II or ECB032II. wall control is mandatory for correct operation.

ACCESSORY DESCRIPTION	CODE
-----------------------	------

CONTROLS

Smart touch electronic wall control panel with thermostat and room probe with integrated WiFi module (supplied with 8 m connection cable), color BLACK	ECA031II
Smart touch electronic wall-mounted control panel with thermostat and room probe with integrated WiFi module (supplied with 8 m connection cable), WHITE color	ECB031II
Smart touch electronic wall-mounted control panel with thermostat and room probe with integrated Modbus port (supplied with 8 m connection cable), BLACK color	ECA032II
Smart touch electronic wall-mounted control panel with thermostat and room probe with integrated Modbus port (supplied with 8 m connection cable), WHITE color	ECB032II

AIR STERILIZATION

Germicidal lamp with UV-C rays with power supply and fixings. The lamp life is estimated at 10,000 operating hours	GB1094II
UV-C lamp spare part	GB1095II

GRILLS AND ACCESSORIES

Kit n. 2 external grilles with fixed fins DN 160	GB0738II
Kit n. 2 external grilles with fixed fins DN 200	GB1091II
Kit n. 2 insect protection. Applicable only on fixed grids DN 160	GB0755II
Insulated plenum for supply / intake with 2 connections DN 160 mm, n° 1 DN 160 cap and grille connection. Dimensions: 450x175x175 mm	GR1118II
Supply grille in aluminum with double row of adjustable fins, white color. Dimensions: 450x225 mm	GR1119II
Intake grille in aluminium with removable filter, white color. Dimensions: 450x225 mm	GR1120II

DUCTING COMPONENTS

DN 160 alufonic insulated flexible hose. Supplied in rolls of 10 meters. Price in € / meter	GR0945II
DN 200 alufonic insulated flexible hose. Supplied in rolls of 10 meters. Price in € / meter	GR0946II
F / M connection DN 160-DN 200. N° 1 piece	GR1136II

Note: the DN 160 flexible hose is to be used for distances between the outdoor grille - unit - indoor grille up to 5 meters.

For distances up to 10 meters it is mandatory to use:

- from outdoor grilles to the unit, the DN 200 flexible hose and to provide 2 F / M connections DN 160-DN 200 and 2 DN200 external grilles kit.
- from unit to indoor grilles, the two DN 160 flexible hose for fresh air supply and intake exhaust air

SPARE PARTS FILTERS

Kit 2 filters ePM1 80% fresh air delivery and exhaust	GR1137II
Outdoor air intake Coarse filter kit	GR1138II

3.0

Condensate nebulizer To be coupled to eliminate the condensate	COVA00102II
---	-------------



TECHNICAL SPECIFICATIONS

TECHNICAL SPECIFICATIONS		2.0 RINNOVA DUCT
Size	u.m.	40
AIR FLOW RATE		
Fresh air flow rate B/3/2/1 (1)	m ³ /h	460 / 400 / 240 / 140
Static pressure available nominal/max (2)	Pa	130
HEATING PERFORMANCE		
Total heating capacity (3)	kW	3,62
Space heating capacity without fresh air load (3) (4)	kW	0,22
Total power input (3)	kW	0,84
COP (3)		4,3
COOLING PERFORMANCE		
Total cooling capacity (5)	kW	2,77
Space cooling capacity without fresh air load (5)	kW	0,71
Total power input (5)	kW	0,91
EER (5)		3,0
GENERAL FEATURES		
Fans	int/ext	Costant air flow Centrifugal fan / Costant air flow Centrifugal fan
Fans Quantity	Nr	2
Heat recovery		Thermodynamic
Compressor		Rotary Inverter DC
Filters		Flat filters - 2 x ePM1 80%
Sound pressure (6)	dB(A)	45 /47
Refrigerant		R410a
ELECTRICAL DATA		
Max Fans power input	kW	0,24
Max Compressor power input	kW	1,15
Max Total power input	kW	1,37
Max current absorbed	A	6,1
Power supply	V/ph/Hz	230/1/50
DIMENSIONS		
Width	mm	950
Height	mm	245
Depth	mm	710
Connections diameter	mm	162
Condensate drain	mm	20
Weight	kg	72
OPERATING LIMITS		
Heating - Indoor air min/max	°C	10 / 25
Heating - Outdoor air min/max	°C	-15 / 20
Cooling - Indoor air min/max	°C	18 / 28
Cooling - Outdoor air min/max	°C	15 / 38

(1) B = booster, V3 = nominal flow at maximum speed, V2 = medium speed flow, V1 = flow at minimum speed

(2) Static pressure available on fresh air fan (from outdoor grille to indoor delivery grille) and exhaust air fan (from exhaust intake grille to outdoor expulsion grille). The fans maintain the constant air flow between 0 Pa and 130 Pa.

(3) Heating capacity at nominal air flow. Outdoor air temperature -5 °, relative humidity 80%. Ambient temperature 20 ° C; relative humidity 50%, nominal air flow

(4) Space heating capacity = Total heating capacity - Ventilation load

Ventilation load = capacity to heat nominal fresh air flow of the unit from -5°C outdoor air to 20°C indoor air

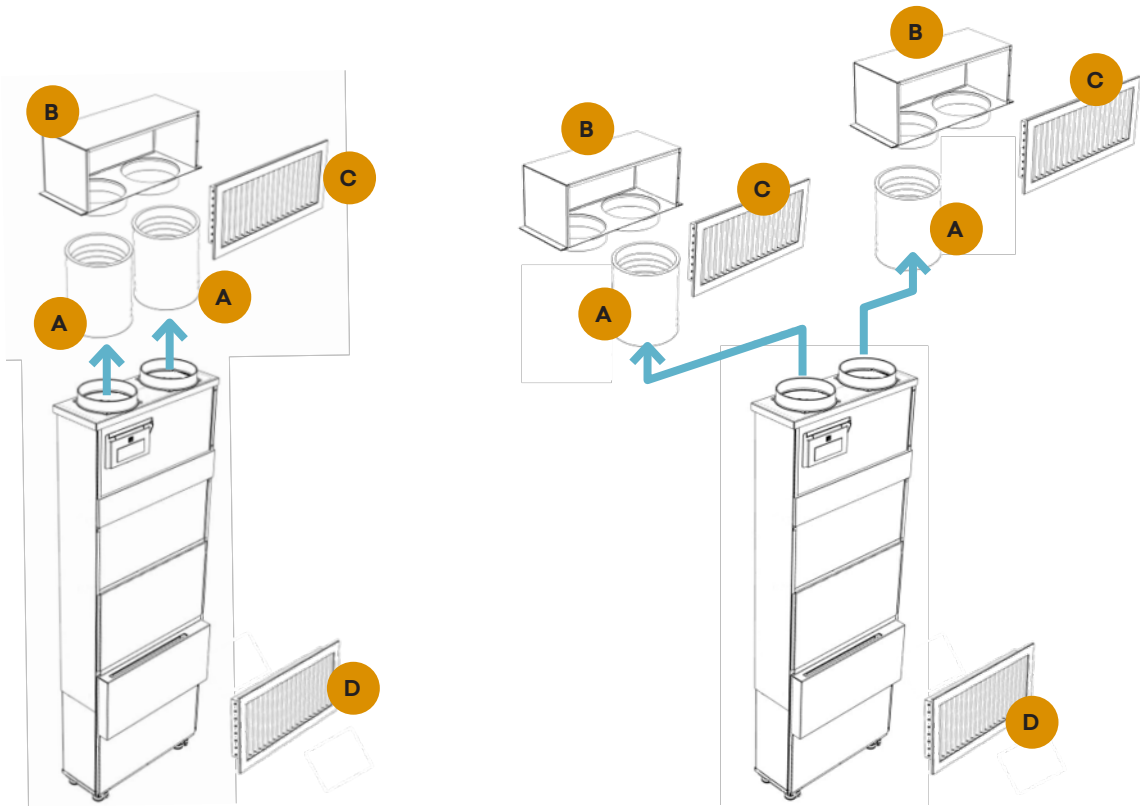
Example:

Space heating capacity = Total heating capacity - Fresh air load = 3.1 - (Q x c x DT)
= 3.1 - (320 x 0.34 x 25 / 1000) = 3.1 - 2.72 = 0.38 kW
Q = nominal air flow
DT = delta T = indoor air temp. - outdoor air temp.

(5) Cooling capacity at nominal air flow. Outdoor air temperature 35 °, relative humidity 50%. Ambient temperature 27 ° C; relative humidity 60%, nominal air flow

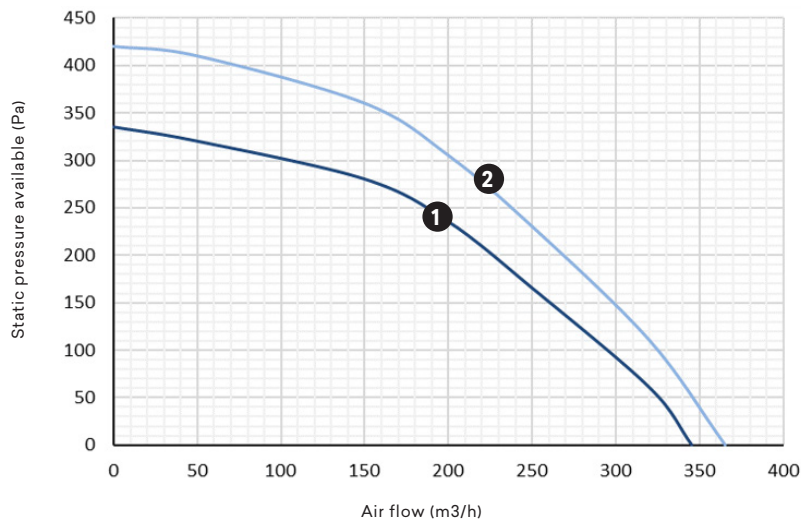
(6) Sound pressure at nominal flow rate in open field at a distance of 3m according to UNI EN3744

2.0 RINNOVA VERTICAL BUILT IN AEREAULIC ACCESSORIES



- A. Insulated flexible hose DN 160
- B. Double connection plenum DN160 + n ° 1 cap
- C. Double row supply grille
- D. Intake grille with removable filter

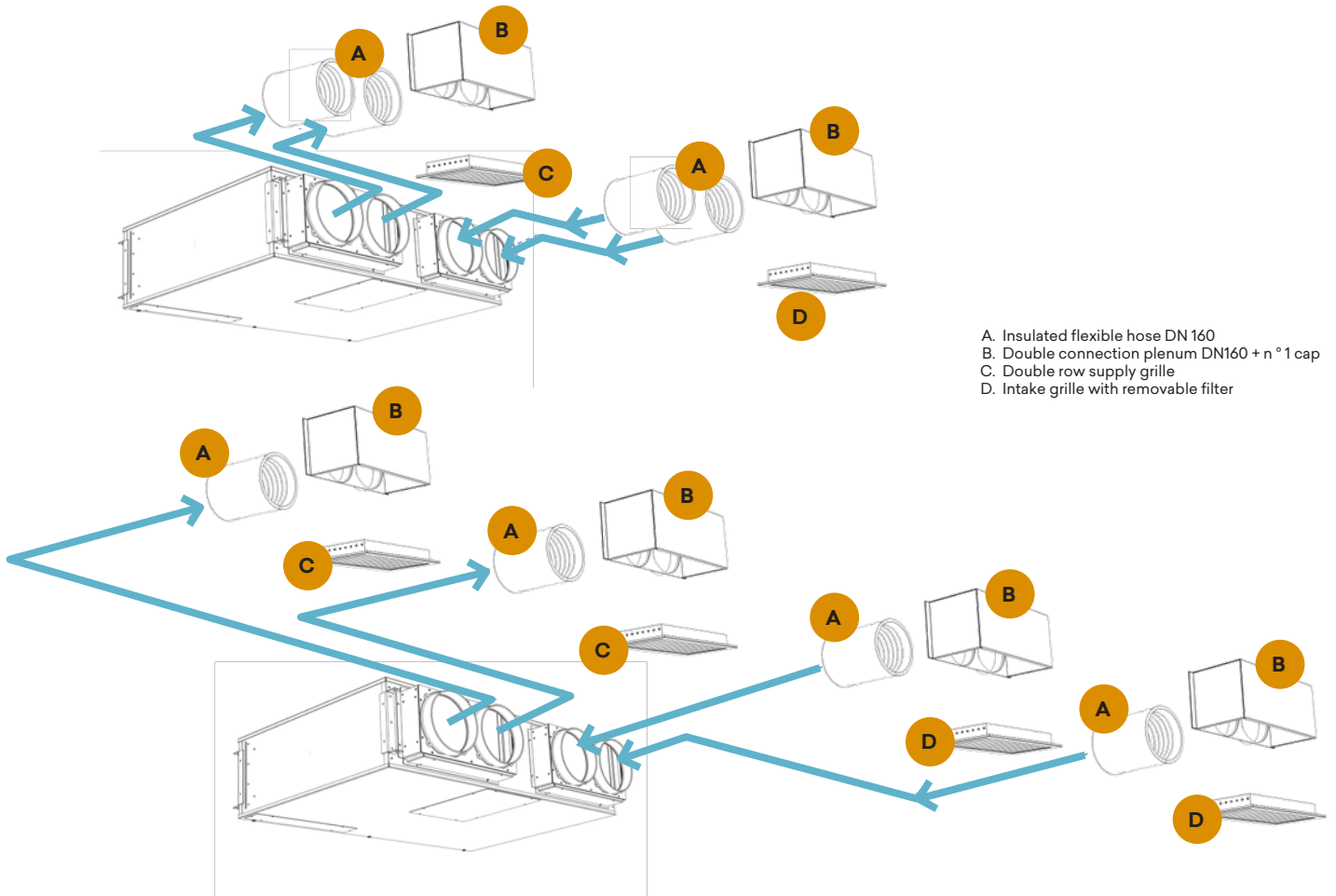
Air flow – Static pressure available fresh air supply fan 2.0 RINNOVA VERTICAL BUILT IN



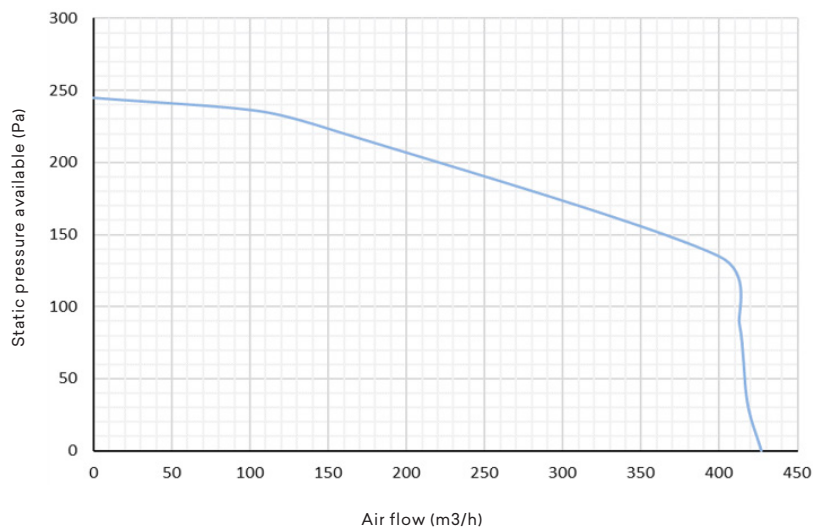
1. Fan set at the nominal static pressure available
2. Fan set at the MAX static pressure available



2.0 RINNOVA DUCT AEREAULIC ACCESSORIES



**Air flow – Static pressure available fresh air supply and intake exhaust air fan
2.0 RINNOVA DUCT**







With our hands
we turn dreams
into reality





INNOVA s.r.l.
Via 1° Maggio, 8
38089 Storo (Tn)
Tel. +39 0465 670104
Fax: +39 0465 674965
info@INNOVAenergie.com

www.INNOVAenergie.com

Edition 2020/2

