## COUNTER-FLOW, HIGH-EFFICIENCY HEAT RECOVERY UNIT **DOMEO 210 Series**





Whole house heat recovery unit with a high-efficiency heat exchanger up to 92% setting and very low consumption EC motor.

Provides a constant supply of fresh tempered air into the living spaces of a house.

Domeo can communicate with home automation system via Modbus or other gateway protocols.

To optimise energy consumption and air quality, it can be conected to a CO<sub>2</sub> or humidity sensor and others. Domeo 210 is fitted with a 100% bypass and it is equipped with F7 or M5 filters at the inlet and with G4 filters at the outlet to protect the heat exchanger. Includes remote control, allowing adjustment of boost (in RD),

by-pass and reset of clogged filters.

#### Versions:

- DOMEO 210 FL 3V EU: Wired remote control. 3 speeds.
- DOMEO 210 RD: Wireless remote control (by radiofrequency). Constant airflow motor.

#### Features

- Counter-flow heat exchanger with up to 92% thermal efficiency
- Low-consumption EC motor
- Centrifugal backward curved impeller
- Modbus communication
- EPP body
- Nozzles Ø125 mm
- 100% automatic or manual bypass
- Manual boost mode (RD models)
- Inlet filter:
  - F7 (ISO ePM1 65%, at 210 m<sup>3</sup>/h). Option, M5 (ISO ePM10 50%, at 210 m<sup>3</sup>/h).
- Extraction filter G4 (ISO coarse 65%, at 210 m<sup>3</sup>/h).













Specific applications





Controller

Remote control included in the product allows regulation of:

- Boost function (RD models)
- By-pass
- Polluted filters alarm
- Unoccupied mode (RD models)



Very compact Minimum width and depth.

Connectair Through the optional SPCM module, the unit can access Connectair, S&P's IoT that provides access to a new way to enjoy your ventilation.

www.solerpalau.com

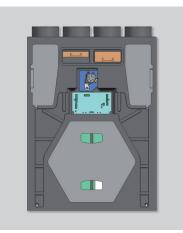
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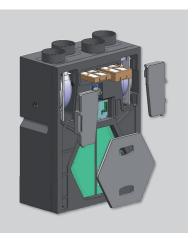


#### EASY MAINTENANCE



Easy access to filters.



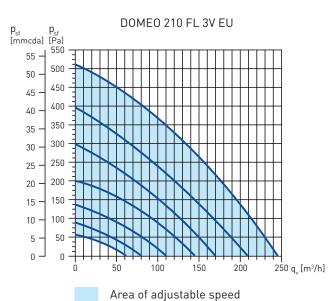


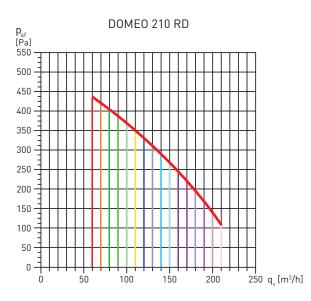
Easy to access: fans, heat exchanger and by-pass.

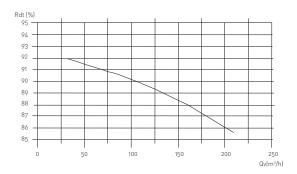
#### **TECHNICAL CHARACTERISTICS**

Model	Efficiency (%)	Voltage (V)	Maximum airflow a 100 Pa (m³/h)	Sound pressure level at 1,5 m (120 m³/h - 70 Pa) (dB(A))	Absorbed power (W)
DOMEO 210 FL 3V EU	92	230	210	38,8	100
DOMEO 210 RD	92	230	210	38,8	100

#### PERFORMANCE CURVES

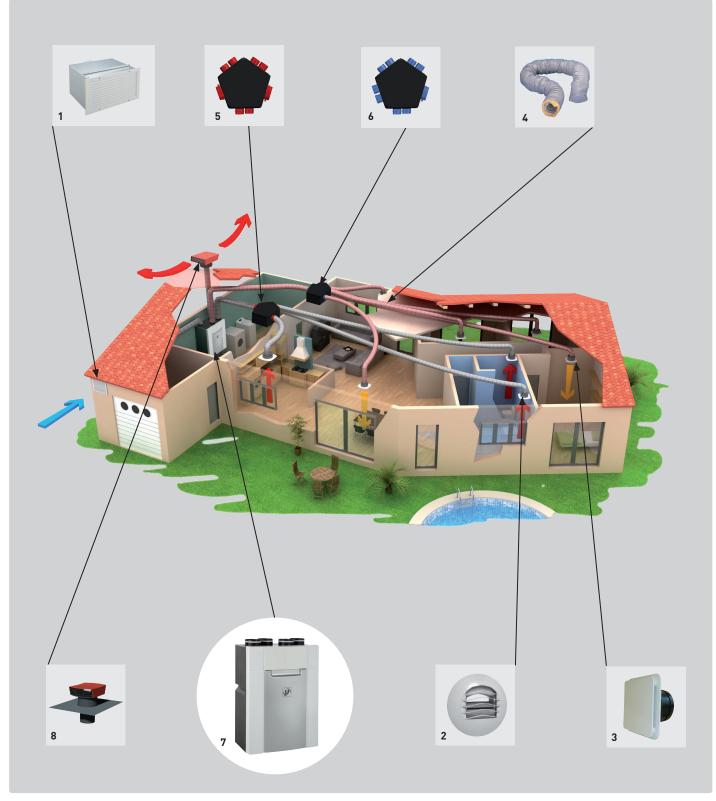








### DOMEO 210 SERIES - CENTRALISED COUNTER-FLOW SYSTEM



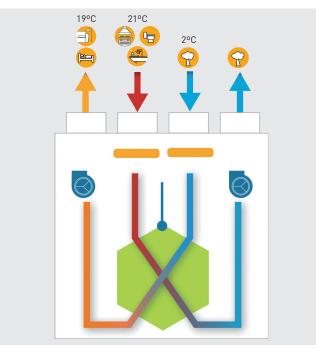
- 1. Air inlet grillle TAP.
- Self-adjusting extraction valve BARJ / BARP.
  Supply and extraction valve BDOP.
  PVC or rectangular plastic ducts.

- 5. Extraction plenum.
  6. Supply plenum.
- 7. DOMEO 210: Counter-flow, high-efficiency heat recovery unit.
- 8. CT Roof termination.

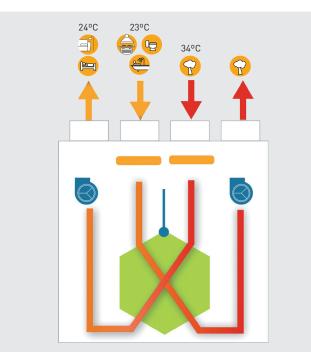
# COUNTER-FLOW, HIGH-EFFICIENCY HEAT RECOVERY UNIT DOMEO 210 Series



### EXAMPLE OF HEAT RECOVERY IN WINTER



#### EXAMPLE OF HEAT RECOVERY IN SUMMER DURING DAYTIME



#### **Operation with bypass**

- Air inside home: 23°C.
- Outdoor air: 34°C.
- New air blown into home: 24°C.

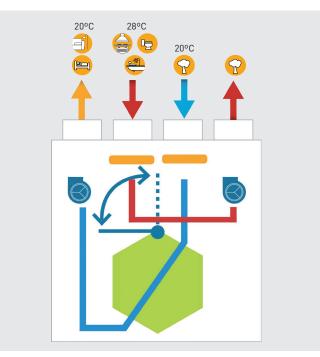
With a mechanical extract ventilation system, the new air would enter at  $34^{\circ}$ C through the air inlets, increasing the temperature inside home. With the energy recovery ventilation systems, the new air would enter at  $24^{\circ}$ C and it will avoid the rising of interior temperature.

#### **Operation without bypass**

- Air inside home: 21°C.
- Outdoor air: 2°C.
- New air blown into home: 19°C.

With a mechanical extract ventilation system, the new air would enter at  $2^{\circ}$ C through the air inlets, decreasing the temperature inside home. With the energy recovery ventilation systems, the new air would enter at  $19^{\circ}$ C.

# EXAMPLE OF HEAT RECOVERY IN SUMMER NIGHTS (FREE COOLING)



#### **Operation with bypass**

- Air inside home: 28°C.
- Outdoor air: 20°C.
- New air blown into home: 20°C.

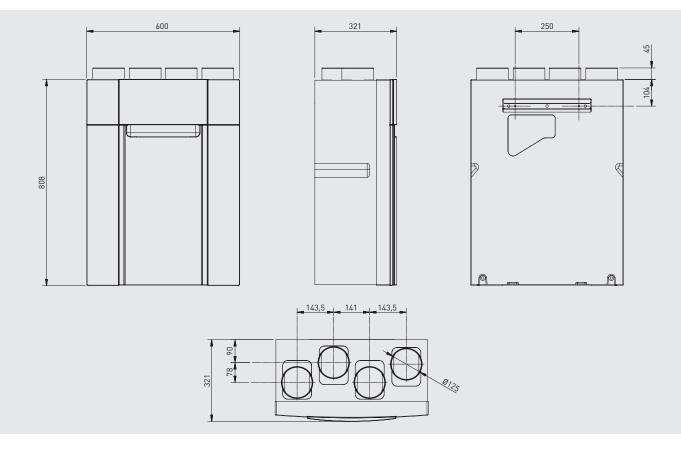
In addition, during summer nights, when outdoor air is colder than indoor air, the bypass is activated automatically so airflows do not cross each other.



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### DIMENSIONS (mm)



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#### MOUNTING ACCESSORIES



KIT M5/G4 DOMEO Pack of M5 and G4 spare filters.

KIT F7/G4 DOMEO Pack of F7 and G4 spare filters.



BDOP Supply and extraction valve.



Side trims

RDR

СТ

Self-adjusting

damper (50-250 Pa)

the duct, maintains

that, fitted inside

constant airflow.





BARJ BARP Self-adjusting calibrated extraction valves.

RD BP

Specific low-pressure (20-100 Pa) and self-adjusting damper with sleeve to fit directly into the duct. 80mm diameter. Airflow: 15 or 30 m<sup>3</sup>/h.



ADRF 100/80 Reduction to connect rigid duct to spigots for flexible ducts.



Specific low-pressure (20-100 Pa) and self-adjusting damper without sleeve to fit directly into the sleeve of the BDOP. 80mm diameter. Airflow: 15 or 30 m<sup>3</sup>/h.

**RD BP SM** 

GPR-ISO Insulated rigid duct.



Roof cowl.

GP GPX **GP-PRO** GP-ISO insulated PVC ducts .

TAP Wall mounted air inlet grillle.





Rectangular ducts in flame-retardant plastic. TUBCIR Circular ducts in

TUBREC

flame-retardant plastic.

PAF Wall outlet grille.

LA Acoustic connections.



TAT Air inlet grille under roof.





PLENUM UNI EXT 6+1 Insulated extraction plenum of 125/ 150-160mm diameter, 1 Kitchen spigot of 125mm diameter

and up to 6 sanitary

spigots of 80mm

diameter.



FLEXIREC FLEXICIR Oblong and circular semi-flexible ducts.



PLENUM UNI IMP 8 Insulated supply plenum of 125/150-. 160 mm diameter and up to 8 spigots for dry areas (living room, dining room, bethrooms) of 80mm diameter.





SPCM WB

#### ELECTRICAL ACCESSORIES



AIRSENS-CO2 AIRSENS-VOC AIRSENS-HR Intelligent IAQ device available in three different versions: CO2 or VOC or RH.



TSP-B Remote control functions: Standby

- Time scheduler
- Speed selectionManual bypass
- Filter alarm
- Remote control via cable





AIRSENS RF Single-phase speed controller.