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







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. It also enables management of a pre-heating or post heating electric battery.

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

To optimise energy consumption and air quality, it can be conected to a  $\mathrm{CO}_2$  or humidity sensor and others.

Domeo 210 is fitted with a 100% bypass and it is equipped with M5 or F7 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 and APP), 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.
- DOMEO 210 APP: Remote Control by smartphone app. 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 and APP models)
- M5 or F7 (optional) inlet filter.
- G4 extract filter





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DOMEO 210 FL 3V

#### Controller.

Remote control included in the product

- Allows regulation of:
   Boost function (RD and APP models)
- By-pass
- Polluted filters alarm
- Unoccupied mode (RD and APP models)



**Very compact.**Minimum width and depth.

#### Specific applications







Multi dwelling

Single dwellings

Heat recovery unit

### COUNTER-FLOW, HIGH-EFFICIENCY HEAT RECOVERY UNIT

#### **DOMEO 210 Series**



#### **EASY MAINTENANCE**



Easy access to filters.





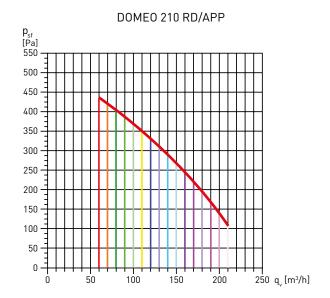
Easy to access: fans, heat exchanger and by-pass.

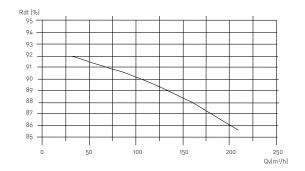
#### **TECHNICAL CHARACTERISTICS**

Model	Efficiency (%)	Voltage (V)	Maximum airflow a 100 Pa (m³/h)	Sound pressure level at 1,5 m (120 m³/h - 70 Pa)	Absorbed power (W)
D0ME0 210 FL 3V EU	92	230	210	38,8	100
DOMEO 210 RD	92	230	210	38,8	100
DOMEO 210 APP	92	230	210	38,8	100

#### PERFORMANCE CURVES





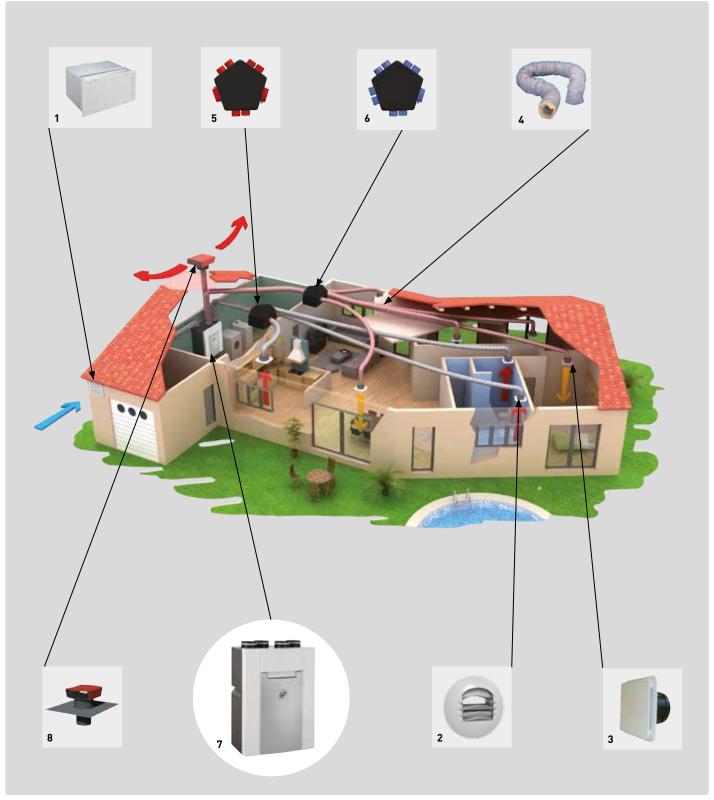


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#### COUNTER-FLOW, HIGH-EFFICIENCY HEAT RECOVERY UNIT **DOMEO 210 Series**



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



- 1. Air inlet grillle TAP.
- Self-adjusting extraction valve BARJ / BARP.
   Supply and extraction valve BDOP.
- 4. PVC or rectangular plastic ducts.5. Extraction plenum.

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

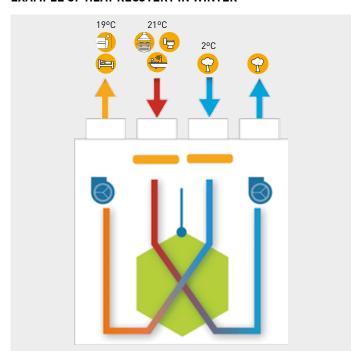
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#### COUNTER-FLOW, HIGH-EFFICIENCY HEAT RECOVERY UNIT

#### **DOMEO 210 Series**



#### **EXAMPLE OF HEAT RECOVERY IN WINTER**

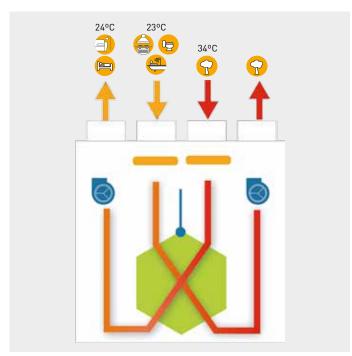


#### Operation without bypass

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

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

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

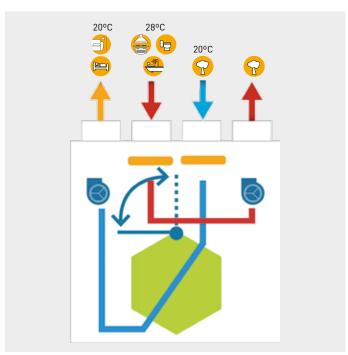


#### Operation with bypass

- Air inside home: 23°C.
- Outdoor air: 34°C.
- $\bullet$  New air heated and blown into home: 24°C.

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

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



#### Operation with bypass

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

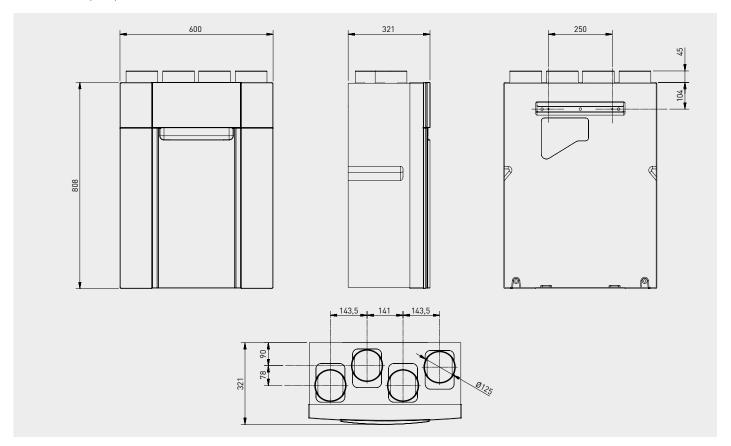
In addition, during summer nights, when outdoor air is colder than indoor air, the bypass is activated automatically so airflows do not cross each other.



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#### **DIMENSIONS (mm)**



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## COUNTER-FLOW, HIGH-EFFICIENCY HEAT RECOVERY UNIT





#### **MOUNTING ACCESSORIES**



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



**BARJ** BARP Self-adjusting calibrated extraction valves.



**BDOP** Supply and extraction valve.



RDR Self-adjusting damper (50-250 Pa) that, fitted inside the duct, maintains constant airflow.



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.



**RD BP SM** 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.



Roof cowl.



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



**GPR-ISO** Insulated rigid duct.



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



TUBPLA V TUBPLA Self-extinguishing rectangular ducts with or without gasket.



TAT Air inlet grille under roof.



TAP Wall mounted air inlet grillle.



Wall outlet grille.



**PLENUM UNI EXT** Insulated extraction plenum of 125/ 150-160mm diameter, 1 Kitchen spigot of 125mm diameter and up to 6 sanitary spigots of 80mm diameter.

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

#### **ELECTRICAL ACCESSORIES**



HIG-2 Humidity sensor.



Air quality sensor.

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