ENERGY EFFICIENT VENTILATION SYSTEM

Thermodynamic water heater, combined with an automatic or humidity-controlled whole house extract unit. The air from bathrooms and kitchen is sent to a high efficient heat pump (Integrated into CETHEO). The system recovers the heat from the exhaust air via the whole house extract unit.The system delivers a very stable and high efficiency, reducing the energy consumption for the production of domestic hot water by up to 75%.

- High COP: 4,2 according to EN 255-3 (150 m3/h), 3.64 EN 16 147 (150 m3/h).
- Thermal and acoustic insulation: 28,4 dB(A) at 2 meters
- Whole House extract unit motor with very low power consumption: 17 W.
- Heat pump maximum power consumption: 400 W.
- Nominal power: 800 W (average).
- Nominal power: 1500W in Boost mode
- Heat pump and filter automatic bypass, reduces the whole house extract unit consumption and increases the life of the filter by up to 60%
- 'Boost' function reduces the time to heat the water.
- Provides hot water 24 hours a day
- Enameled steel tank of 187 liters
- Hot water for up to 6 people
- Volume of water available at +40ºC: 244 liters.
- Absorbed power, within 24 hours, to maintain the set-point temperature.
- Anti-legionella cycle.
- Anti-corrosive system.
- Maximum water temperature, with heat pump, 61,5 °C.
- Maximum water temperature, in Boost and anti-legionella mode, 65 °C.

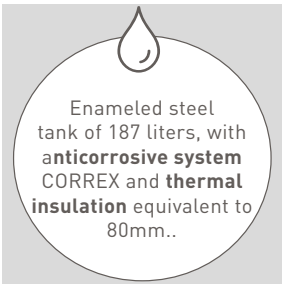
FUNCTIONS

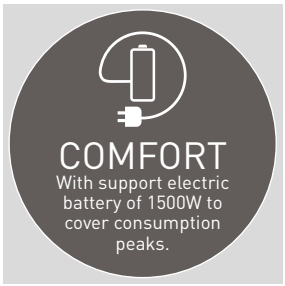
WHOLE HOUSE EXTRACT UNIT SELF-REGULATING OR HUMIDITY-CONTROLLED
+
THERMODYNAMIC DOMESTIC WATER HEATER

Specific applications

Single dwellings

Electrical appliance aesthetics
Its smart design allows installation in any technical room of the dwelling.

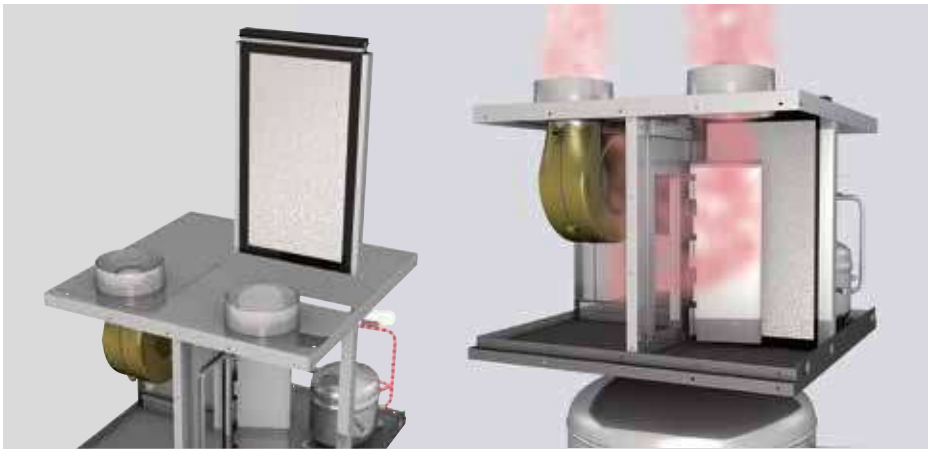




Supply capacity for a 6 people family

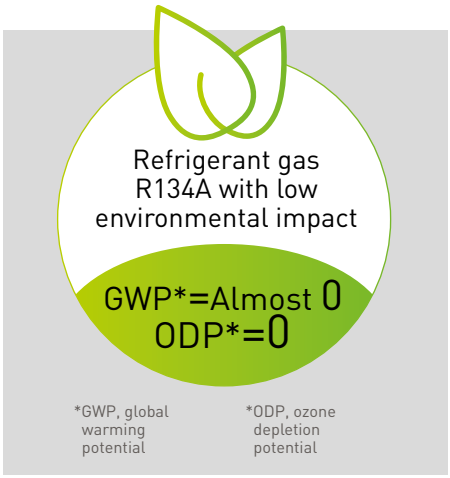
Low noise level
Inferior to 28,4 dB(A) at 2 meters.

Permanent operation
24 hours.
365 days.



Easy access to filters.

Long-lasting filters
Thanks to the patented by-pass system, which avoids the flow of air through the heat-pump when DHW is not produced.



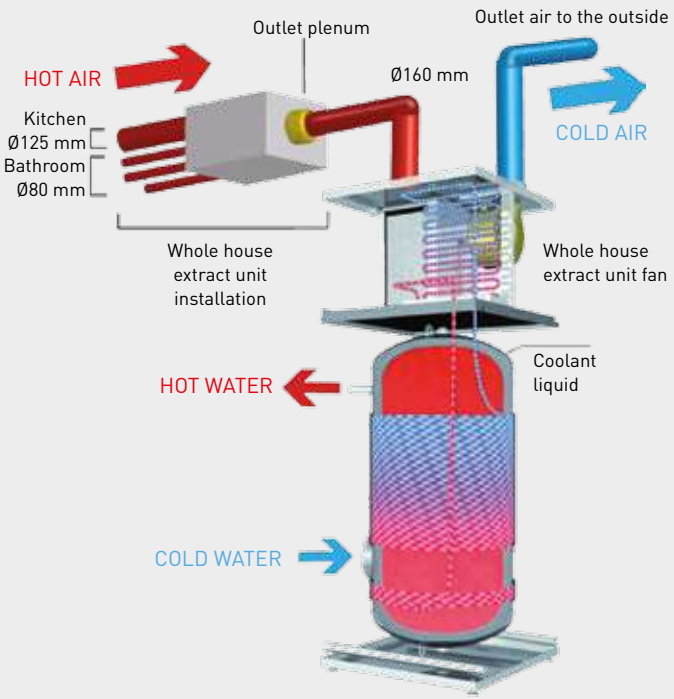
Low environmental impact

PROGRAMMABLE CONTROL

- Function mode (normal or hot domestic water).
- Time scheduling.
- Boost function.
- Domestic hot water temperature.
- Use of the whole house extract unit only with by-pass.
- Anti-legionella cycle

Energy efficient.
It uses a 75% of renewable energy
Discharges less CO_2 into the atmosphere than a traditional solar+ boiler system.

SCHEMATIC DIAGRAM OF OPERATION



TECHNICAL CHARACTERISTICS

Model	Voltage (V)	Airflow (m^3/h)		COP s/EN 255-3 150 m^3/h	COP s/EN 16-147 150 m^3/h	Max. Temperature LPHW		Power (W)			Sound power at 2m (dB(A))	Weight (kg)
		Minimum	Maximum			Heat pump	Electrical	Fan	Heat pump	Electrical		
CETHEO	230	30	265	4,2	3,64	61,5 ºC	65 ºC	40	400	1500	28,4	180

VENTILATION MODE

VENTILATION + HEAT PUMP MODE

The air, extracted by the fan, flows through the filter.

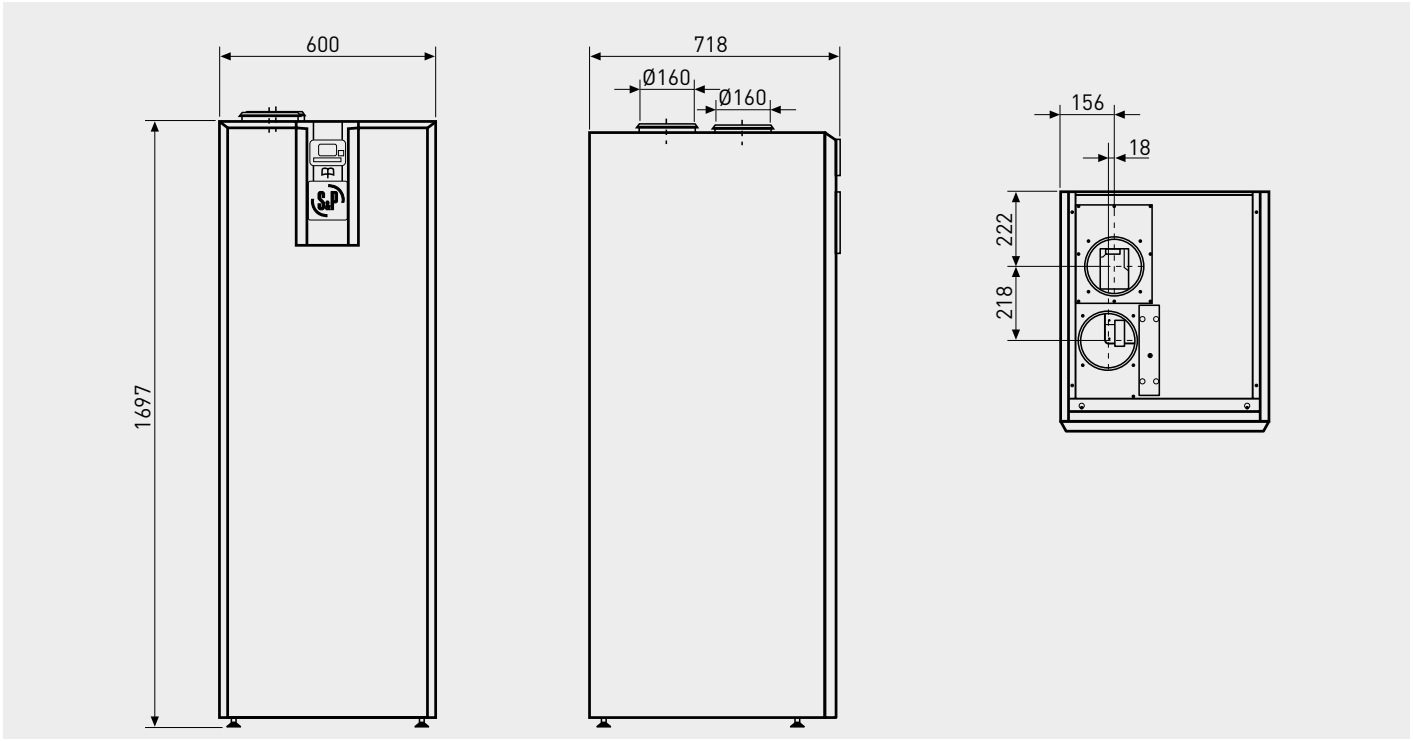
The air flows through the evaporator, giving up its heat energy.

The fan extracts the air to outside.

CETHEO SERIES - CENTRALISED SYSTEM AUTO / HUMIDITY-CONTROLLED + DOMESTIC HOT WATER

1.TAP air intake
2. ECA-HY humidity-controlled air inlet
3.BEH humidity-controlled extract grille
4. PVC or rectangular plastic ducts.
5. Outlet plenum
6. CETHEO: whole house extract unit with heat pump to produce domestic hot water.
7. CT roof cowl.

DIMENSIONS (mm)



ACCESSORIES

BAR
Self-adjusting exhaust valves.

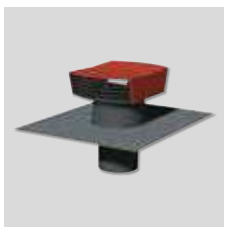
BEHC, BEHS and BEHW
Humidity-controlled exhaust valves.

EC and ECA
Standard and acoustic, self-adjusting air inlets.

EC-HY and ECA-HY
Standard and acoustic humidity-controlled air inlets.

GP ISO
PVC flexible duct. Ø 80, 125, 160.

TUB PLA
Rectangular ducts made of self-extinguishing plastic. 55 x 220 mm and 55 x 110 mm.



CT-160
Roof cowls.
Ø 160 mm.

PAF 160
Circular discharge grille on the wall with a Ø 160 mm connection.

ADRF 100/80
Reduction elements to connect rigid ducts from Ø 100 to Ø 80.

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.