



MASS ENERGY



TFD

C L I M A

DYNAMIC FLOW TECHNOLOGY
CLIMA

VENT 22 H

INTELLIGENT USE OF ENERGY



TFD

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VENT 22 H

DYNAMIC FLOW TECHNOLOGY
CLIMA



Maximum flow rate: 269 m³/h with 100 Pa of useful pressure



Polypropylene, counter-current flow heat recuperator with 90% + efficiency



Energy efficient, EC centrifugal fans with backward-curved blades



Low pressure drop F7 filters (ePM1 70%), for both extraction and fresh air



Pre-painted sheet metal self-supporting structure; 22 mm-thick stone wool thermal/sound insulation



Nominal voltage: 230 V 1F 50-60 Hz



Power input at max flow rate: 1.5 A 173 W



Sound pressure level at 1.5m (L_{pa} in dB(A)): 39 dB(A)



Free-cooling/free-heating built-in bypass (either manual, engine-driven or automatic)



Available with the following controls:

4V board (S4), potentiometer (PT), 3 speed (3V), 3 speed EVO (3E), electronics without remote control (SE), electronics with black LCD (EL), electronics with white LCD (EB), electronics with COLOR-TOUCH display (ET)



Built-in antifreeze protection (versions with electronics only: 3E, SE, EL, EB, ET)

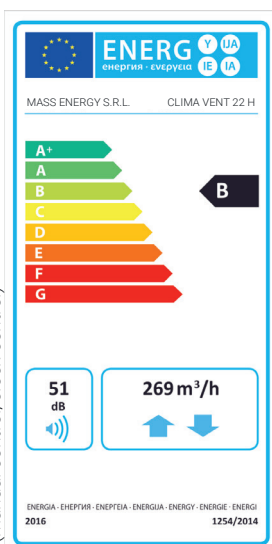


Operating conditions: ambient temperature 0 °C - 45 °C, humidity <80%

Energy label
(central demand control, local demand control)

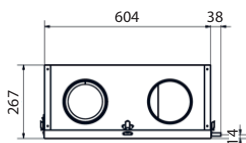
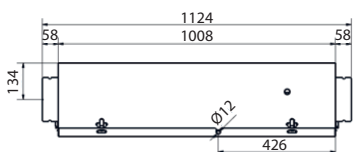


Energy label
(manual control, clock control)





DIMENSIONS



Dimensions, excluding sleeves and condensation drain
(w x d x h):
605x1000x262 mm

Nominal pipes size:
Ø160 mm

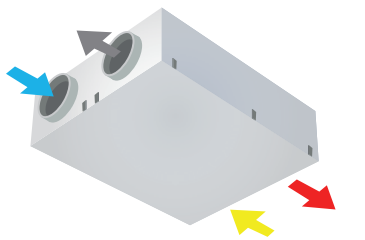
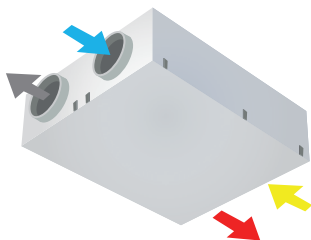
Weight:
42 kg

CONFIGURATIONS

CEILING

HS (standard)

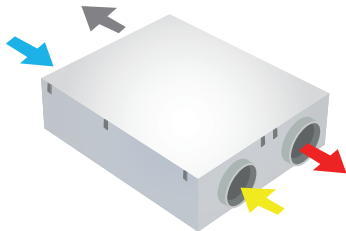
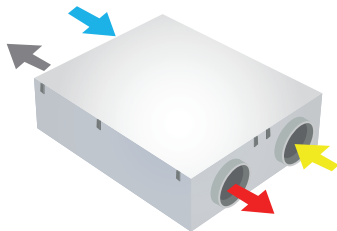
KS



FLOOR

HB

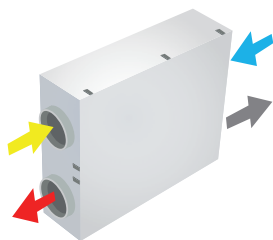
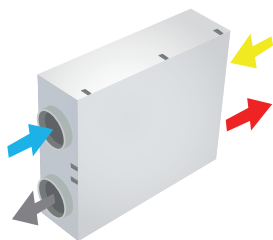
KB



WALL

HP

KP



- FRESH AIR (external air intake)
- EXHAUST AIR (expulsion to the outside)
- RETURN AIR (extraction from the ambient)
- SUPPLY AIR (supplied to ambient)



PRODUCT FICHE

According to Regulations (UE) n° 1253/2014 and n°1254/2014
Data refers to the maximal nominal power
(for the other work's points verify graph of aeraulic performance)



TFD

CLIMA

Supplier's name

MASS ENERGY Srl

Model identification code		CLIMA VENT 22 H S4 CLIMA VENT 22 H 3V CLIMA VENT 22 H PT CLIMA VENT 22 H 3E CLIMA VENT 22 H SE	CLIMA VENT 22 H ET	CLIMA VENT 22 H EL CLIMA VENT 22 H EB CLIMA VENT 22 H + probe ^{*3}	CLIMA VENT 22H with local demand control (external control unit)
Specific energy consumption in kWh/(m ² .a) for each climate zone and SEC class	Cold climate	-69.2 kWh/m ² .a	-70.7 kWh/m ² .a	-73.7 kWh/m ² .a	-78.9 kWh/m ² .a
	Average climate	-32.6 kWh/m ² .a	-33.9 kWh/m ² .a	-36.4 kWh/m ² .a	-40.6 kWh/m ² .a
	Warm climate	-9.0 kWh/m ² .a	-10.2 kWh/m ² .a	-12.4 kWh/m ² .a	-16.1 kWh/m ² .a
Energy class		B	B	A	A
Typology of product		CLIMA VENT bidirectional	CLIMA VENT bidirectional	CLIMA VENT bidirectional	CLIMA VENT bidirectional
Type of drive		Variable speed	Variable speed	Variable speed	Variable speed
Heat recovery system		Counter-current flow	Counter-current flow	Counter-current flow	Counter-current flow
Thermal efficiency of thermal recovery unit*		83.9%	83.9%	83.9%	83.9%
Maximum flow rate (m ³ /h)*		269 m ³ /h	269 m ³ /h	269 m ³ /h	269 m ³ /h
Electric power input at maximum flow rate (W)*		173 W	173 W	173 W	173 W
Sound power level (Lwa in dB(A))		51 dB(A)	51 dB(A)	51 dB(A)	51 dB(A)
Reference flow rate (m ³ /s)*		0.052 m ³ /s	0.052 m ³ /s	0.052 m ³ /s	0.052 m ³ /s
Reference pressure difference (Pa)*		50 Pa	50 Pa	50 Pa	50 Pa
SPI (W/(m ³ /h))		0.35 W/(m ³ /h)	0.35 W/(m ³ /h)	0.35 W/(m ³ /h)	0.35 W/(m ³ /h)
Type of control		manual control	clock control	central demand control	local demand control
Coefficient of control		1.00	0.95	0.85	0.65
Leakage rate (%)	internal	1.4 %	1.4 %	1.4 %	1.4 %
	external	2.2 %	2.2 %	2.2 %	2.2 %
	recycling	not applicable	not applicable	not applicable	not applicable
Mixing rate (%)		not applicable	not applicable	not applicable	not applicable
Position and description of visual filter warning		S4, 3V e PT versions: signal lamp on the unit (possibly remotable) 3E version: LED signal on remote control SE version: remotable allarm contact EL, EB e ET versions: allarm displayed on remote control			
Installation for fresh air inlet		not applicabile	not applicabile	not applicabile	not applicabile
Internet address for preassembly and disassembly instructions		www.massenergy.it	www.massenergy.it	www.massenergy.it	www.massenergy.it
Sensitivity of air flow to pressure variations at + 20Pa e - 20 Pa (%)		not applicable	not applicable	not applicable	not applicable
Air tightness internal/external (m ³ /h)		not applicable	not applicable	not applicable	not applicable
Annual energy consumption (AEC) specific for a 100m ² house (kWh of energy/a)**	cold climate	1015.7 kWh of energy/a	973.5 kWh of energy/a	895.4 kWh of energy/a	765.3 kWh of energy/a
	average climate	478.7 kWh of energy/a	436.5 kWh of energy/a	358.4 kWh of energy/a	228.3 kWh of energy/a
	warm climate	433.7 kWh of energy/a	391.5 kWh of energy/a	313.4 kWh of energy/a	183.3 kWh of energy/a
Annual saving on heating specific for a 100m ² house (kWh of primary energy/a)**	cold climate	8583.3 kWh of prim.en./a	8633.5 kWh of prim.en./a	8733.8 kWh of prim.en./a	8934.4 kWh of prim.en./a
	average climate	4387.6 kWh of prim.en./a	4413.2 kWh of prim.en./a	4464.5 kWh of prim.en./a	4567.1 kWh of prim.en./a
	warm climate	1984.0 kWh of prim.en./a	1995.6 kWh of prim.en./a	2018.8 kWh of prim.en./a	2065.2 kWh of prim.en./a

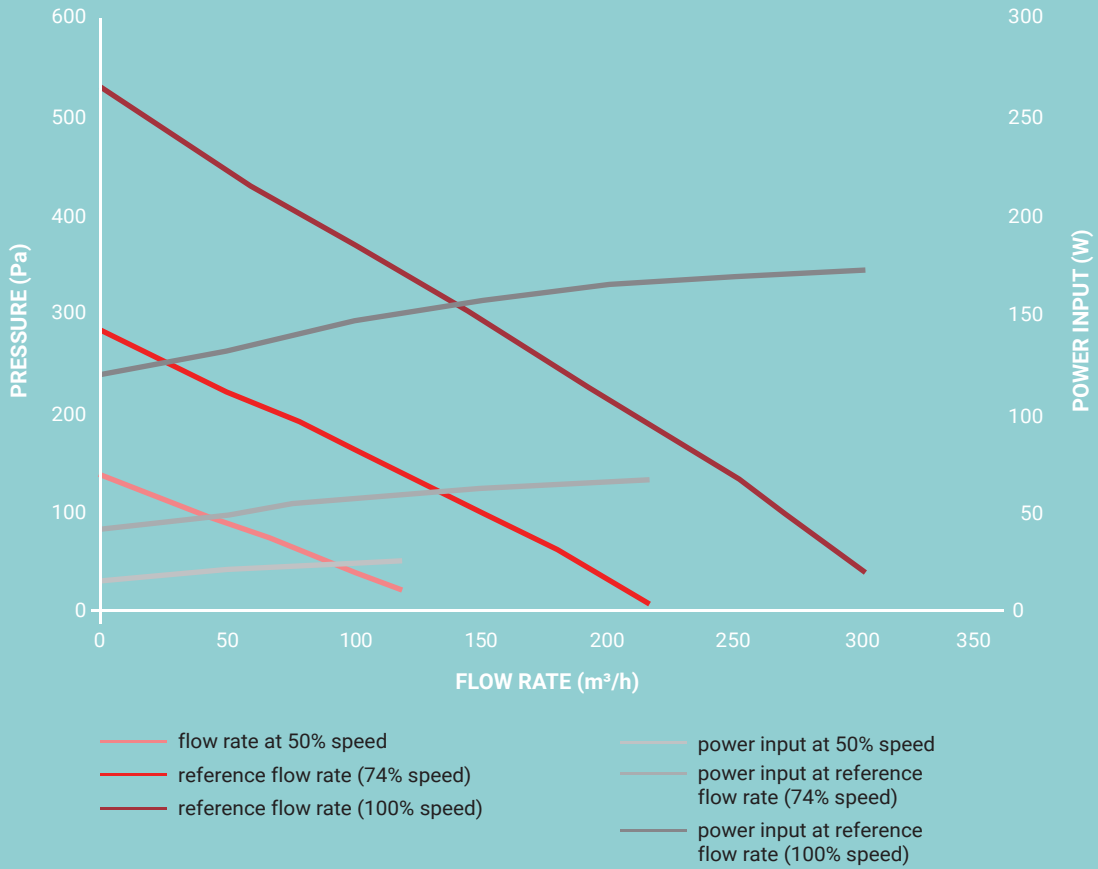
* according to EU regulation no. 1253/2014

** calculated according to EU regulation no. 327/2011

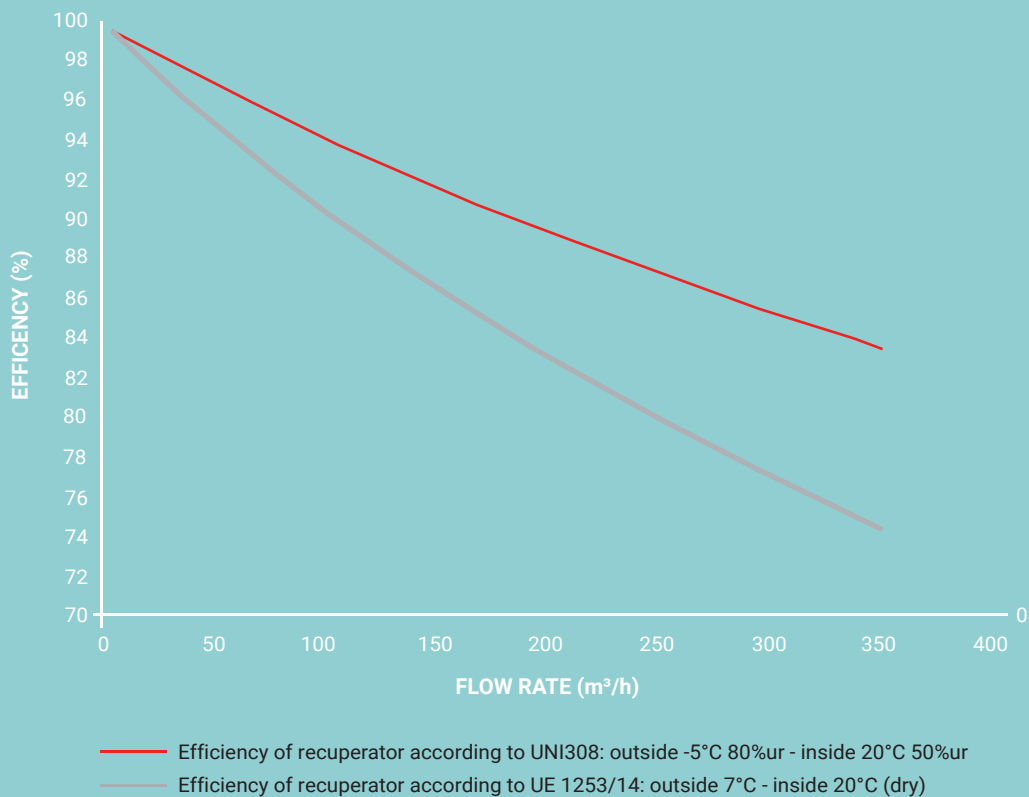
^{*3} umidity, CO2/air quality, presence sensor...



AERAILIC PERFORMANCE



THERMAL EFFICIENCY OF HEAT RECUPERATOR





MASS ENERGY

INTELLIGENT USE OF ENERGY

DESIGN

REALIZATION

SUPPLY

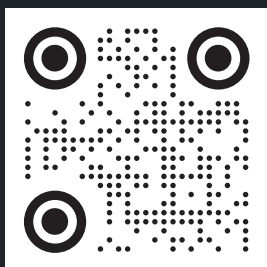
INSTALLATION

TESTING

AFTER SALES SERVICE



TURNKEY SUPPLY
FOR TAILOR-MADE SOLUTIONS



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