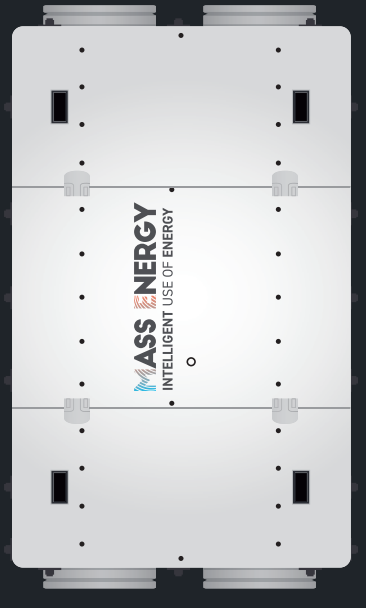
MASS ENERGY



TFD
CLIMA

DYNAMIC FLOW TECHNOLOGY
CLIMA

VENT 220 H

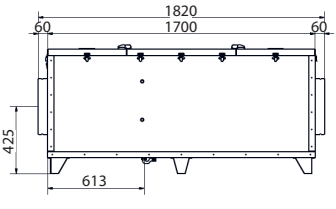
INTELLIGENT USE OF **ENERGY**

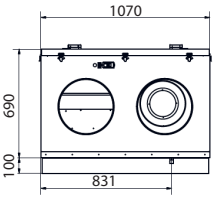
VENT 220 H

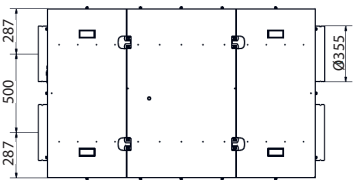
DYNAMIC FLOW TECHNOLOGY
CLIMA

- Maximum flow rate (SFPlimit2018) 1800 m³/h with 260 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 filters: F7 (ePM1 70%) for fresh air and M5 (ePM10 50%) for extraction
- Pre-painted sheet metal self-supporting structure; 40 mm-thick stone wool thermal/sound insulation
- Nominal voltage: 230 V 1F 50-60 Hz
- Power input at max flow rate: 6,6A 1,5 kW
- Sound pressure level at 1,5m (Lpa in dB(A)): 53 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%

DIMENSIONS







Dimensions, excluding sleeves and condensation drain (w x d x h):
1070x1700x690 mm

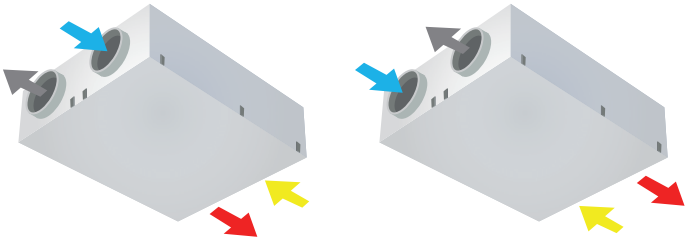
Nominal pipes size:
Ø355 mm

Weight:
210 kg

CONFIGURATIONS

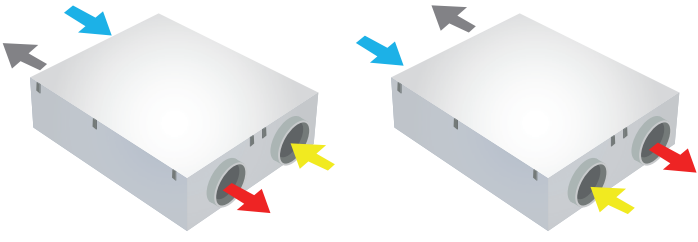
CEILING

HS (standard) **KS**



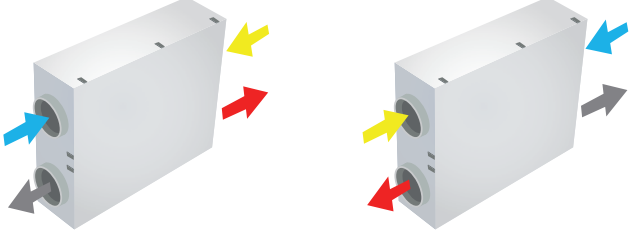
FLOOR

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

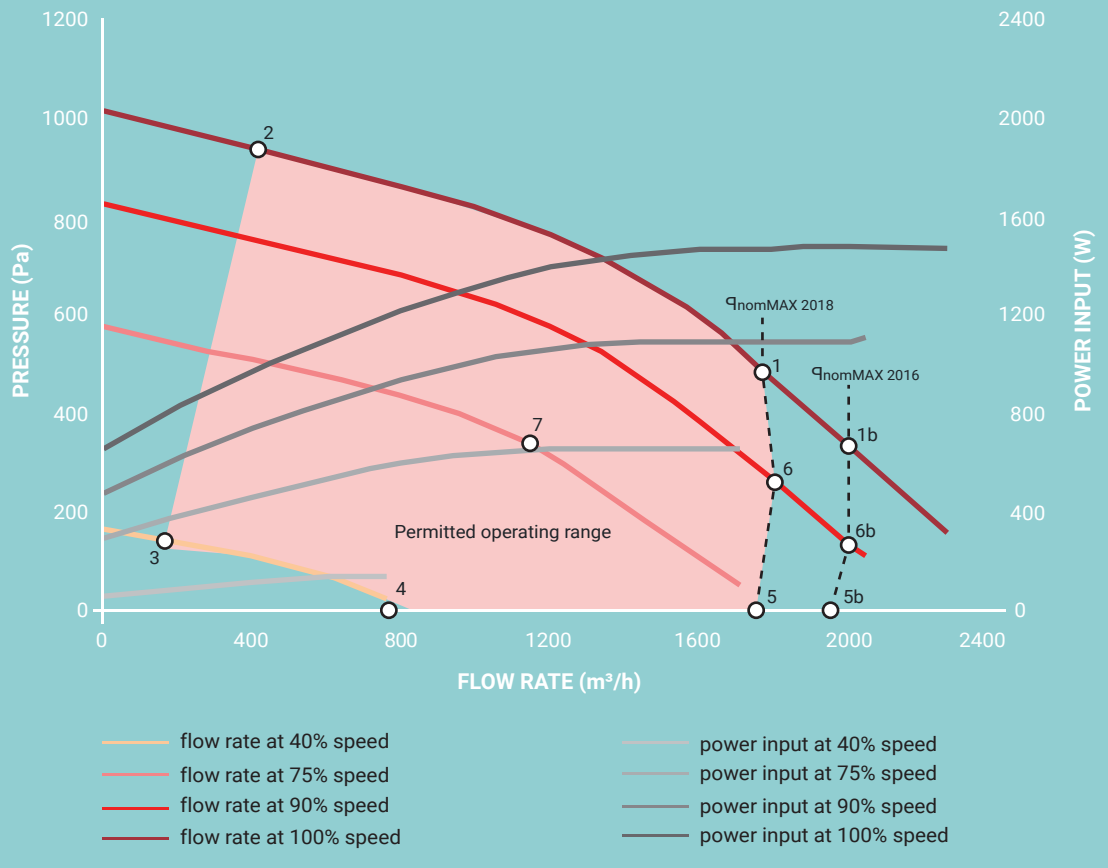
Supplier's name		MASS ENERGY Srl
Model identification code		CLIMA VENT 220 H
Typology of product		CLIMA VENT, bidirectional
Type of drive		Variable speed
Heat recovery system		Counter-current flow
Thermal efficiency of heat recovery*		80.4%
Nominal flow rate (m³/s)		0.500 m³/s
Effective electric power input (kW)		1.090 kW
Specific internal fan power SFPint (W/(m³/s))*		1239 W/(m³/s)
Face velocity at nominal flow rate (m/s)*		2.16 m/s
Nominal External Pressure Δps,ext (Pa)		260 Pa
Internal pressure drop of ventilation components Δps,int (Pa)*		360 Pa
Static efficiency of fans ηs,Fan**		59.8 %
Leakage rate (%)	Cold climate	4.1 %
	Average climate	4.2 %
	Warm climate	not applicable
Classification of air filters		fresh air: F7 (ePM1 70%) extraction: M5 (ePM10 50%)
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: Alarm contact remotable EL, EB and ET versions: Alarm displayed on remote display
Sound power level (Lwa in dB(A))*		65 dB(A)
Internet address for preassembly and disassembly instructions		www.massenergy.it

* according to EU regulation no. 1253/2014
** calculated according to EU regulation no. 327/2011

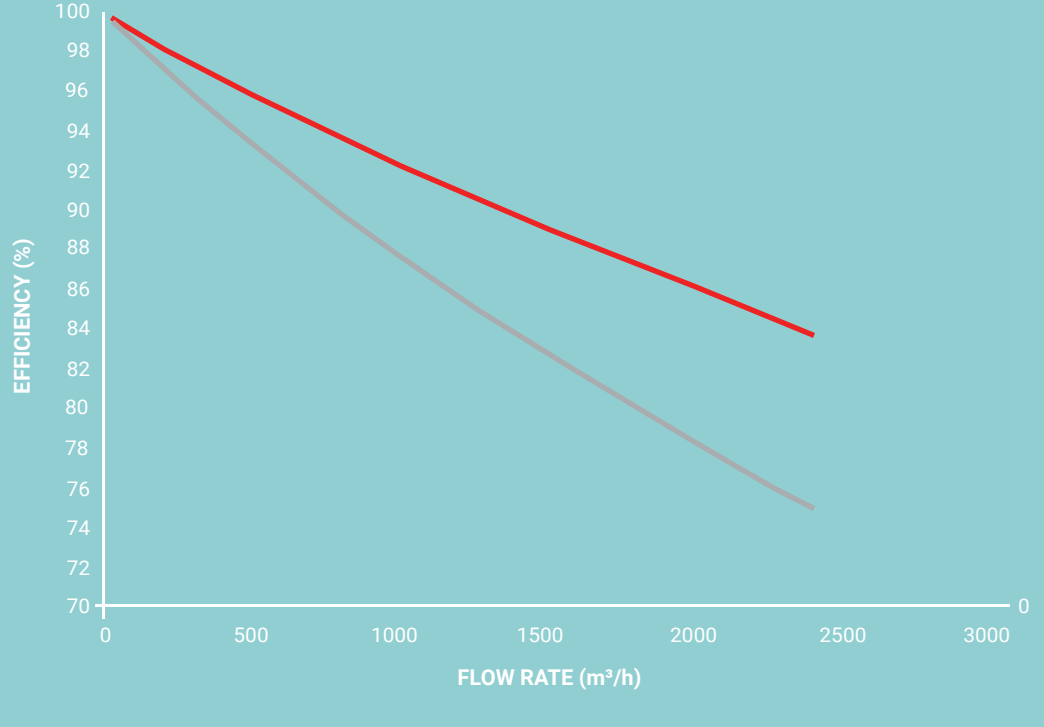
AERAULIC PERFORMANCE

	Nominal Flow Rate (m³/h)	Nominal Flow Rate ϥnom (m³/s)	Fan Efficiency ηs,Fan (%)	Exchanger Efficiency ηt_nrvu (%)	Sound Power Lwa (dB(A))	Internal Specific Power SFPint (W/(m³/s))	Nominal External Pressure Δps,ext (Pa)
1	1770	0.492	59.7	80.6	66	1253.5	480
1b	2000	0.556	59.8	78.7	66	1455.1	330
2	419	0.116	25.7	94.4	73	816.1	930
3	169	0.047	19	97.7	56	287.6	142
4	761	0.211	44.2	90.4	49	504.1	23
5	1760	0.489	55.1	80.7	62	1251	0
5b	1970	0.547	55.4	79	64	1472.1	0
6	1800	0.500	59.8	80.4	64	1246.7	260
6b	2000	0.556	58.2	78.7	65	1458.4	129
7	1150	0.319	55	86.3	61	753.3	332

AERAULIC PERFORMANCE



THERMAL EFFICIENCY OF HEAT RECUPERATOR



MASS ENERGY

INTELLIGENT USE OF **ENERGY**

DESIGN

REALIZATION

SUPPLY

INSTALLATION

TESTING

AFTER SALES SERVICE

TFD SYSTEM

TFD BUILDING

TFD CLIMA

TFD MOLECOLAR

TFD ENERGY

TURNKEY SUPPLY
FOR TAILOR-MADE SOLUTIONS

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