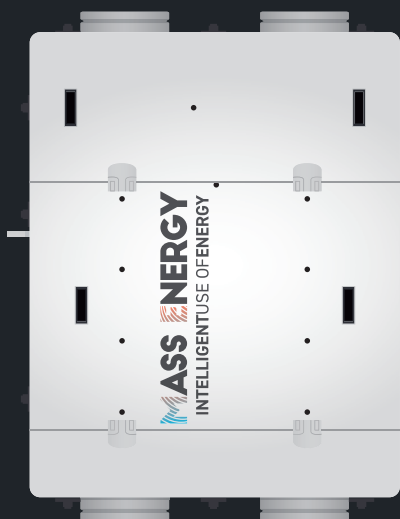




**MASS ENERGY**



**TFD**

CLIMA

DYNAMIC FLOW TECHNOLOGY  
CLIMA

**VENT 80 H**

**INTELLIGENT USE OF ENERGY**




# TFD


C L I M A


## VENT 80 H


DYNAMIC FLOW TECHNOLOGY  
CLIMA

 Maximum flow rate (SFPlimit2018) 900 m<sup>3</sup>/h with 85 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; 22 mm-thick stone wool thermal/sound insulation


 Nominal voltage: 230 V 1F 50-60 Hz


 Power input at max flow rate: 2,9 A 380 W

 Sound pressure level at 1.5m (Lpa in dB(A)): 47 dB(A)

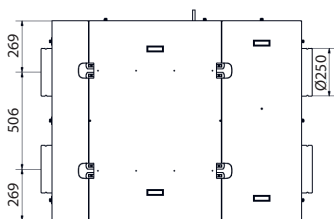
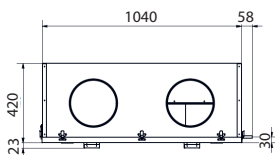
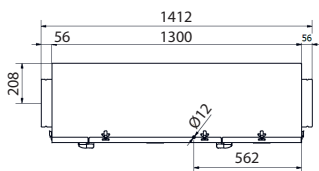
 Free-cooling/free-heating built-in bypass (either manual, engine-driven or automatic)

 **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%

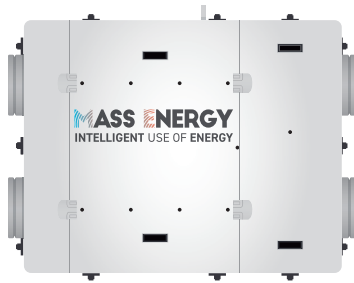
## DIMENSIONS



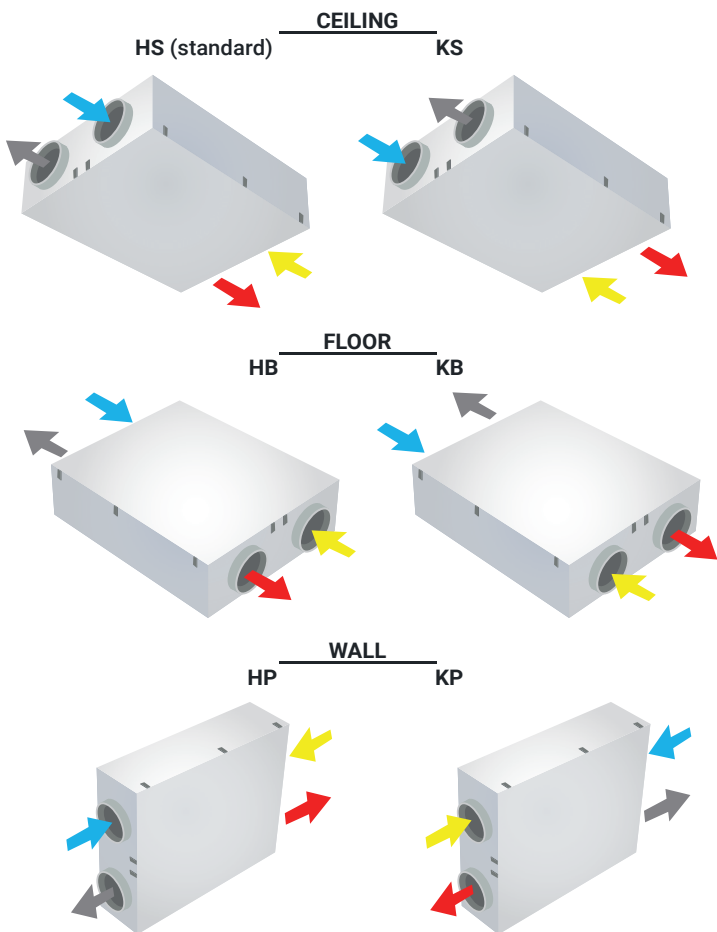
Dimensions, excluding sleeves and condensation drain (w x d x h):  
1040x1300x420 mm

Nominal pipes size:  
Ø250 mm

Weight:  
100 kg



## CONFIGURATIONS



- 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

C L I M A

|  |           |  |  |
|--|-----------|--|--|
| Supplier's name  |           | MASS ENERGY Srl  |  |
| Model identification code                                      |           | CLIMA VENT 80 H  |  |
| Typology of product  |           | CLIMA VENT, bidirectional  |  |
| Type of drive  |           | Variable speed   |  |
| Heat recovery system   |           | Counter-current flow   |  |
| Thermal efficiency of heat recovery*                           |           | 80.1%  |  |
| Nominal flow rate (m <sup>3</sup> /s)                          |           | 0.250 m <sup>3</sup> /s  |  |
| Effective electric power input (kW)                            |           | 0.377 kW   |  |
| Specific internal fan power SFPint (W/(m <sup>3</sup> /s))*    |           | 1155 W/(m <sup>3</sup> /s)   |  |
| Face velocity at nominal flow rate (m/s)*                      |           | 1.67 m/s   |  |
| Nominal External Pressure Δps,ext (Pa)                         |           | 85 Pa  |  |
| Internal pressure drop of ventilation components Δps,int (Pa)* |           | 294 Pa   |  |
| Static efficiency of fans ηs,Fan**                             |           | 52.8 %   |  |
| Leakage rate (%)   | internal  | 3.7 %  |  |
|  | external  | 4.8 %  |  |
|  | recycling | not applicable   |  |
| Classification of air filters                                  |           | fresh air: F7 (ePM1 70%)<br>extraction: M5 (ePM10 50%)   |  |
| Position and description of visual filter warning              |           | S4, 3V e PT versions: signal lamp on the unit (possibly remotable)<br>3E version: LED signal on remote control<br>SE version: Alarm contact remotable<br>EL, EB and ET versions: Alarm displayed on remote display |  |
| Sound power level (Lwa in dB(A))*                              |           | 59 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

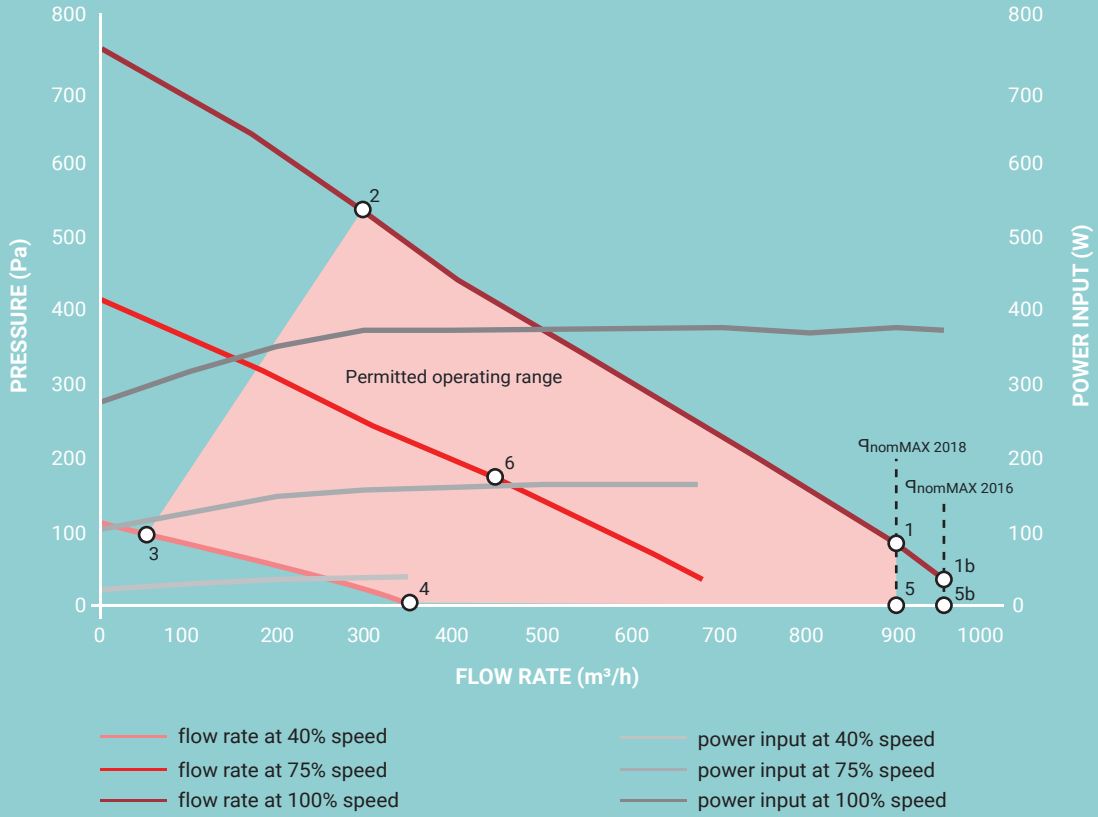


## AERAILIC PERFORMANCE

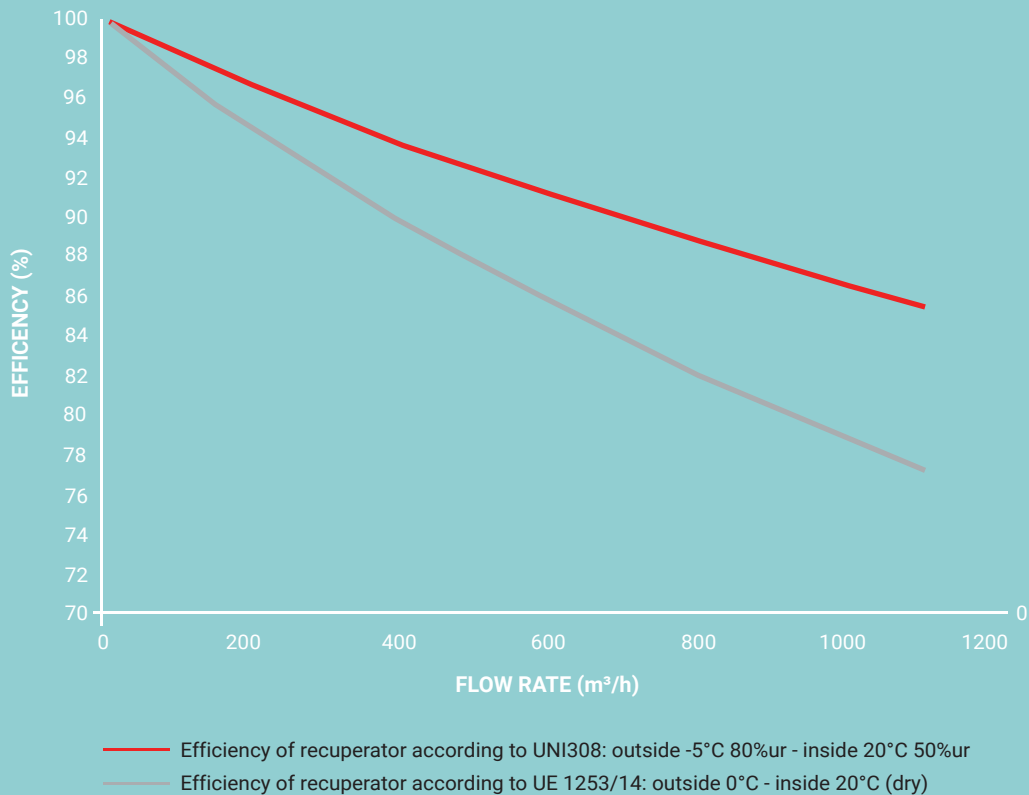
|    | Nominal Flow Rate<br>(m <sup>3</sup> /h) | Nominal Flow Rate<br>Q <sub>nom</sub> (m <sup>3</sup> /s) | Fan Efficiency<br>η <sub>s,Fan</sub> (%) | Exchanger Efficiency<br>η <sub>t,nrvu</sub> (%) | Sound Power<br>Lwa (dB(A)) | Internal Specific Power<br>SFPint (W/(m <sup>3</sup> /s)) | Nominal External Pressure<br>Δps,ext (Pa) |
|----|--|---|--|---|----------------------------|---|---|
| 1  | 900                                      | 0.250   | 52.8                                     | 80.1  | 57                         | 1154.5  | 85  |
| 1b | 950                                      | 0.264   | 51.1                                     | 79.3  | 58                         | 1257.6  | 37  |
| 2  | 298                                      | 0.083   | 32.3                                     | 92.1  | 65                         | 1003.3  | 537                                       |
| 3  | 59                                       | 0.016   | 13.3                                     | 98.3  | 49                         | 203.4   | 96  |
| 4  | 347                                      | 0.096   | 37.1                                     | 90.9  | 42                         | 367   | 5   |
| 5  | 900                                      | 0.250   | 50.7                                     | 80.1  | 57                         | 1142.6  | 0   |
| 5b | 950                                      | 0.264   | 50.6                                     | 79.3  | 58                         | 1244.6  | 0   |
| 6  | 449                                      | 0.125   | 46.3                                     | 88.7  | 56                         | 524   | 170                                       |



## AERAILIC PERFORMANCE



## THERMAL EFFICIENCY OF HEAT RECUPERATOR





# MASS ENERGY

INTELLIGENT USE OF ENERGY

DESIGN

REALIZATION

SUPPLY

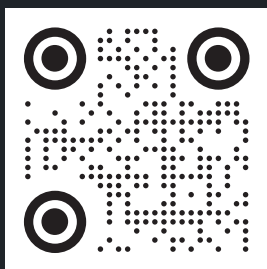
INSTALLATION

TESTING

AFTER SALES SERVICE



TURNKEY SUPPLY  
FOR TAILOR-MADE SOLUTIONS



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