

TWINFRESH STYLE



Power from

**2 W**

Air flow up to

**50 m<sup>3</sup>/h**

Sound pressure level from

**1 dBA\***

\* At a distance of 3 m.



Style is a modern and efficient solution to ensure comfortable microclimate within a room and required air exchange in the renovated rooms, new, just-settled buildings or reconstructed apartments.

TWINFRESH



# MODERN AND SILENT

## FUNCTIONAL

Many units can be connected to one control network.

## EFFICIENT

High heat recovery efficiency of up to 90 % is achieved due to the use of a cellular regenerator.

## USER-FRIENDLY

Unit design allows easy maintenance and mounting.



Noise-insulating material provides noise absorption during the operation of the ventilator.



One ventilator operating in heat recovery or ventilation mode is enough to ensure quality ventilation within a room.



The unit is controlled via a remote control and buttons on the control panel.



# EASY CONTROL



The unit modes are controlled via the sensor control panel located on the casing of the unit or via the remote control.

Operation modes:

- Speed setup I II III
- Operation mode setup
  - Ventilation
  - Regeneration
- Timer setup
  - 4 hours at speed III
  - 8 hours at speed I



Controls are duplicated on the ventilator's casing:

- ventilation with energy recovery
- ventilation
- speed switching and ventilator turning off

It is possible to control all the ventilators simultaneously by connecting them to a single network. In this case, all ventilators (Slaves) will respond to a signal from the Master ventilator only.



# ADVANTAGES



Trendy ventilator design.



High efficiency – 90 %.



Can be mounted inside a prepared hole (from Ø 170 mm) in a wall.



Availability of a humidity sensor.



Connection of the units into one control network.



Connection of an external CO<sub>2</sub> sensor or other external relay sensors.



Automatic drafts shutoff thanks to air damper when the ventilator is off.



Noise at the level of human whisper (from 1 up to 26 dBA at a distance of 3 m).



Ventilation of premises with the area of about 25 m<sup>2</sup> (the area is approximate and depends on the ventilation standards in your country).



Simple mounting and maintenance.



It is recommended to use a pair of ventilators to ensure balanced ventilation.

#### Mounting examples



Wall mounting with standard thickness using the EH-14 hood



Corner mounting using the kit NP 160 white



Mounting in a thin wall using the EH-2 hood

# RETAINS HEAT

In order to save heat within the room, the ventilator operates in the heat recovery mode with two cycles. This allows preserving heat in the room and thus ensuring humidity balance and reducing load on heating system during winter.



## WHEN IT IS COLD OUTSIDE

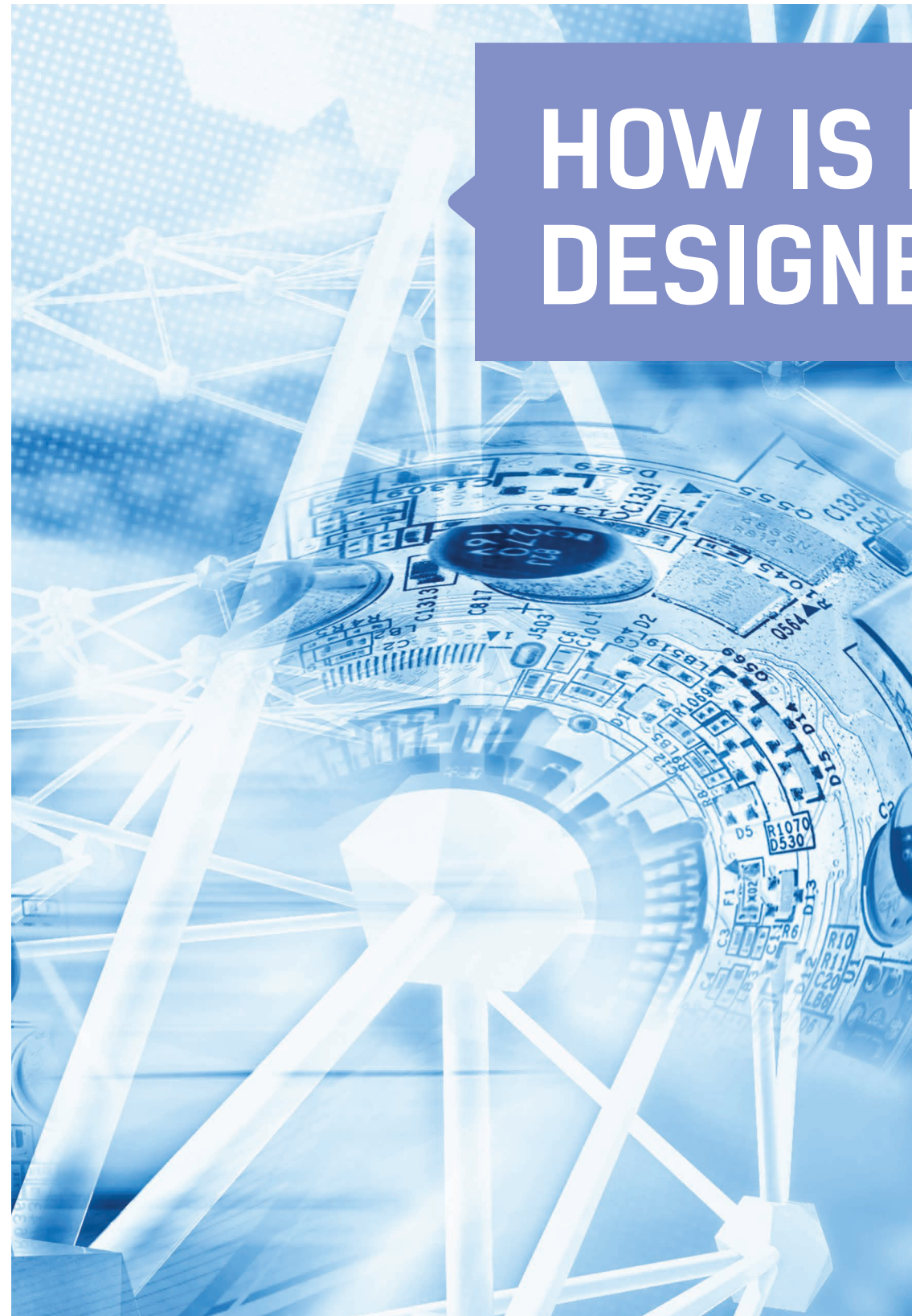


# SAVES ELECTRICAL ENERGY

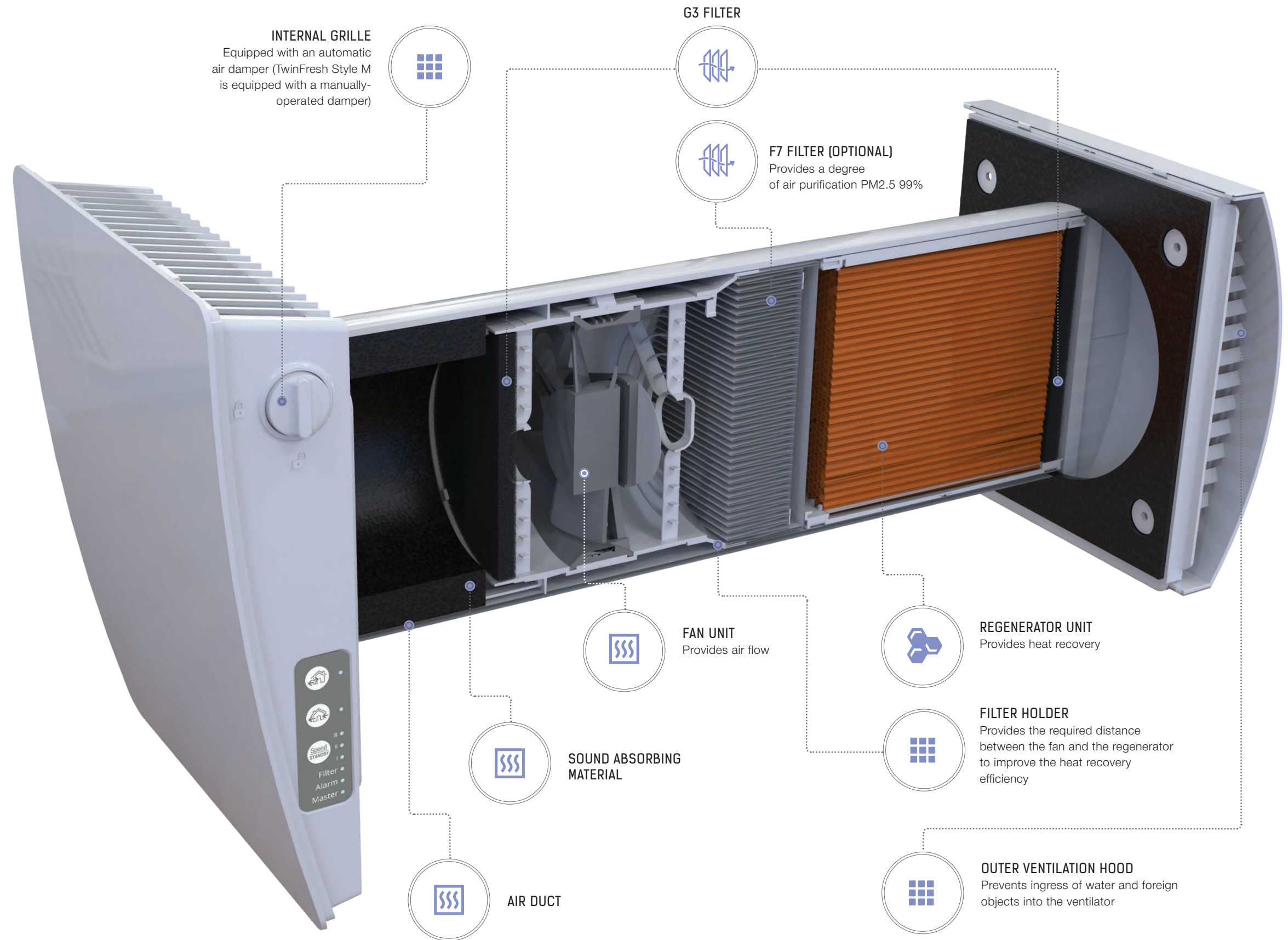
To save energy, the ventilator operates in heat recovery mode with two cycles, which allows reducing load on air conditioning system during summer.

## WHEN IT IS HOT OUTSIDE





# HOW IS IT DESIGNED?

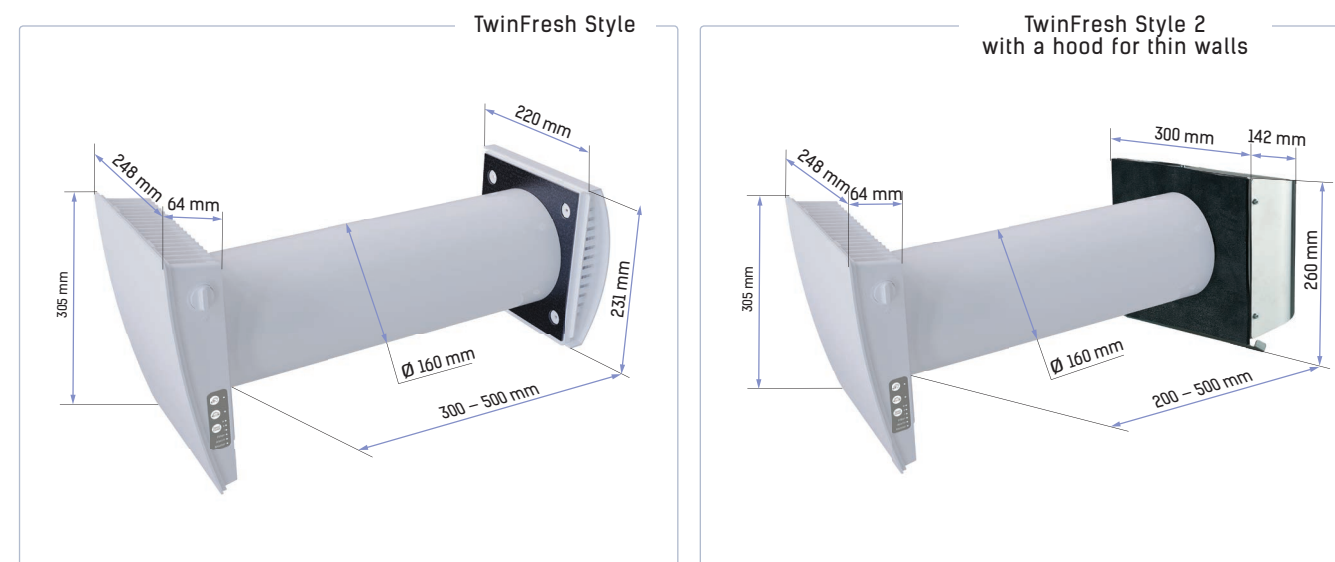


## TECHNICAL DATA

| Speed   | I                      | II     | III    |
|---|------------------------|--------|--------|
| Unit voltage [V/50 (60) Hz]   | 100-240 / 50-60        |        |        |
| Power [W]   | 2.0                    | 3.5    | 5.5    |
| Current [A]   | 0.03                   | 0.03   | 0.06   |
| Air flow in ventilation mode [m³/h (l/s)]                                   | 15(4)                  | 35(10) | 50(14) |
| Air flow in energy recovery mode [m³/h (l/s)]                               | 8(2)                   | 18(5)  | 25(7)  |
| SFP [W/l/s]   | 0.96                   | 0.84   | 0.79   |
| Transported air temperature [°C]  | -20(-30*)...+40        |        |        |
| Sound pressure level at 1 m distance [dBA]                                  | 10                     | 28     | 35     |
| Sound pressure level at 3 m distance [dBA]                                  | 4                      | 19     | 26     |
| Outdoor sound pressure attenuation in accordance with DIN EN 20140 [dBA]    | 40                     |        |        |
| Heat recovery efficiency in accordance with DIBt LÜ-A 20 [%]                | ≤ 90                   |        |        |
| Classification of the indoor/outdoor air tightness, according to EN 13141-8 | D1                     |        |        |
| Filter  | G3 (G4, F7 optional**) |        |        |
| PM2.5 removal efficiency of F7 filter [%]                                   | 99                     |        |        |
| **Air flow with F7 filter applied [m³/h]                                    | 40                     |        |        |

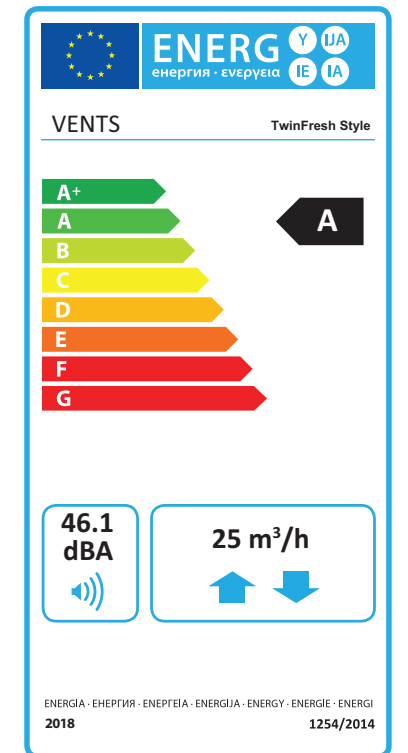
\*When EH-13 hood is used (TwinFresh Style Frost).

## OVERALL DIMENSIONS











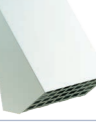






## ECODESIGN

| Specific energy consumption (SEC) [kWh(m².a)]   | Cold  |         | Average |   | Warm  |   |
|---|---|---------|---------|---|-------|---|
|   | -84.3   | A+      | -41.3   | A | -16.7 | E |
| Type of ventilation unit  | Bidirectional   |         |         |   |       |   |
| Type of drive installed   | Three-speed   |         |         |   |       |   |
| Type of heat recovery system  | Regenerative  |         |         |   |       |   |
| Thermal efficiency of heat recovery [%]   | 82.1  |         |         |   |       |   |
| Maximum air flow [m³/h]   | 25  |         |         |   |       |   |
| Power [W]   | 5.5   |         |         |   |       |   |
| Sound power level [dBA]   | 46.1  |         |         |   |       |   |
| Reference flow rate [m³/s]  | 0.005   |         |         |   |       |   |
| Reference pressure difference [Pa]  | 0   |         |         |   |       |   |
| Specific power input (SPI) [W/(m³/h)]   | 0.2   |         |         |   |       |   |
| Control typology  | Local automatic control   |         |         |   |       |   |
| Maximum internal leakage rates [%]  | 2.7   |         |         |   |       |   |
| Maximum external leakage rates [%]  | 0   |         |         |   |       |   |
| Mixing rate of bidirectional units [%]  | 1   |         |         |   |       |   |
| The classification of the airflow sensitivity to pressure variations, according to EN 13141-8 [%] | 37.3  |         |         |   |       |   |
| The classification of the indoor/outdoor air tightness, according to EN 13141-8 [m³/h]            | 0.5   |         |         |   |       |   |
| Internet address  | <a href="http://www.ventilation-system.com">http://www.ventilation-system.com</a> |         |         |   |       |   |
| The annual electricity consumption (AEC) [kWh electricity/a]                                      | Cold  | Average | Warm    |   |       |   |
|   | 144   | 144     | 144     |   |       |   |
| The annual heating saved (AHS) [kWh primary energy/a]   | Cold  | Average | Warm    |   |       |   |
|   | 8789  | 4493    | 2032    |   |       |   |





|               |                  |   |   |   |
|---------------|------------------|---|---|---|
| Hoods         | EH-14 white 160  |    | Plastic hood.<br>Colour options:  |      <br>White    Black    Grey    Terracotta    Brown    Beige |
|               | EH-14 chrome 160 |    | Grey plastic outer hood with a brushed stainless steel cover                        |   |
|               | EH-2 grey 160    |    | Grey painted stainless steel outer hood for thin walls                              |   |
|               | EH-2 chrome 160  |    | Polished stainless steel hood for thin walls  |   |
|               | EH-13 white 160  |    | White painted aluminium outer hood for cold climate                                 |   |
|               | EH-13 chrome 160 |  | Stainless steel ventilation hood for cold climate                                   |   |
|               | MVVM 162 05      |  | Hood for mounting from inside   |   |
|               | Angular mounting | NP white 160  |  | Kit for angular mounting with white colour grille   |
| NP chrome 160 |                  |  | Kit for angular mounting with stainless steel outer grille                          |   |

|                        |                                  |   |   |
|------------------------|----------------------------------|---|---|
| Mounting elements      | Duct 160 -500                    |    | Round air duct with a diameter of 160 mm and a length of 500 mm with a foam plug  |
|                        | Duct 160 -700                    |    | Round air duct with a diameter of 160 mm and a length of 700 mm with a foam plug  |
|                        | T TwinFresh Style                |    | Cardboard template for indoor installation of the unit  |
| For ventilator control | RK1 TwinFresh                    |    | Remote control  |
|                        | CO2-1                            |   | CO <sub>2</sub> sensor with LED indication and sensor buttons   |
|                        | CO2-2                            |  | CO <sub>2</sub> sensor  |
|                        | TRF-220/24-1,6 or TRF-120/24-1,6 |  | Power supply for CO <sub>2</sub> sensors  |
| Filters                | SF2 TwinFresh G3                 |  | G3 filter kit (2 pcs.)  |
|                        | SF2 TwinFresh G4                 |  | Coarse filter G4<br>Contents:<br>• plastic filter holder (1 pc.)<br>• G4 filter (1 pc.)   |
|                        | SF2 TwinFresh F7                 |  | Fine filter F7<br>Contents:<br>• plastic filter holder (1 pc.)<br>• F7 filter (1 pc.)<br>The F7 filter reduces air flow to 40 m <sup>3</sup> /h |