TWINFRESH **STYLE**

Power from

2 W

Air flow up to

50 m³/h

Sound pressure level from

1 dBA*

** At a distance of 3 m.*

ESH

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.

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.

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 Speed STANDBY

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.

EASY CONTROL

ADVANTAGES

- Trendy ventilator design.
- Can be mounted inside a prepared hole (from ∅ 170 mm) in a wall.
- Connection of the units into one control network.
- Automatic drafts shutoff thanks to air damper when the ventilator is off.
- Ventilation of premises with the area of about 25 m^2 (the area is approximate and depends on the ventilation standards in your country).
- High efficiency – 90 %.
- Availability of a humidity sensor.
- Connection of an external CO_2 sensor or other external relay sensors.
- Noise at the level of human whisper (from 1 up to 26 dBA at a distance of 3 m).
- 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

CYCLE I

Stale air extraction

Warm stale extract air is extracted from the room, simultaneously heating up and moisturising the regenerator. The filter prevents contaminants from entering the regenerator.

In 70 seconds the ventilator switches to supply mode automatically.

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

Warm moistened air enters a room and in 70 seconds the ventilator automatically switches to air exhaust mode.

WARM AIR

Fresh but cold and dry intake air from outside flows through the regenerator, absorbs accumulated moisture and is heated due to the accumulated heat.
The filter cleans the air of dust and insects.

COLD AIR

CYCLE II

Clean air supply

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

Cold stale air is extracted from a premise, cooling the regenerator. The filter prevents air contaminants from entering the regenerator.

In 70 seconds the ventilator switches to supply mode automatically.

CYCLE I

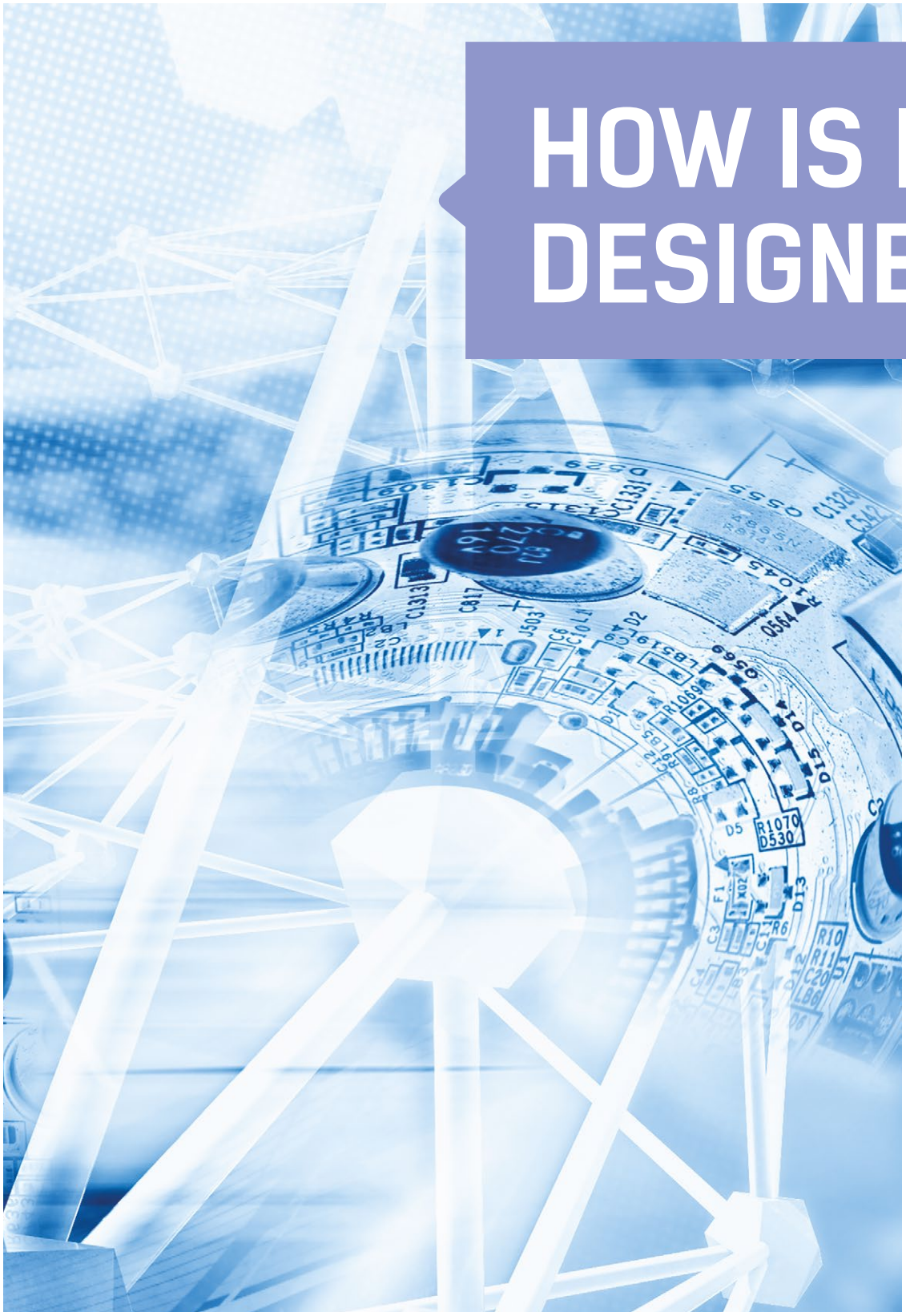
Stale air extraction

Cold air enters a premise, and in 70 seconds the ventilator switches to air exhaust mode.

Fresh warm air from outside flows through the regenerator, and is cooled down due to the cold accumulated in the regenerator. The filter cleans the air of dust and insects.

CYCLE II

Clean air supply



HOW IS IT DESIGNED?

INTERNAL GRILLE
Equipped with an automatic air damper (TwinFresh Style M is equipped with a manually-operated damper)

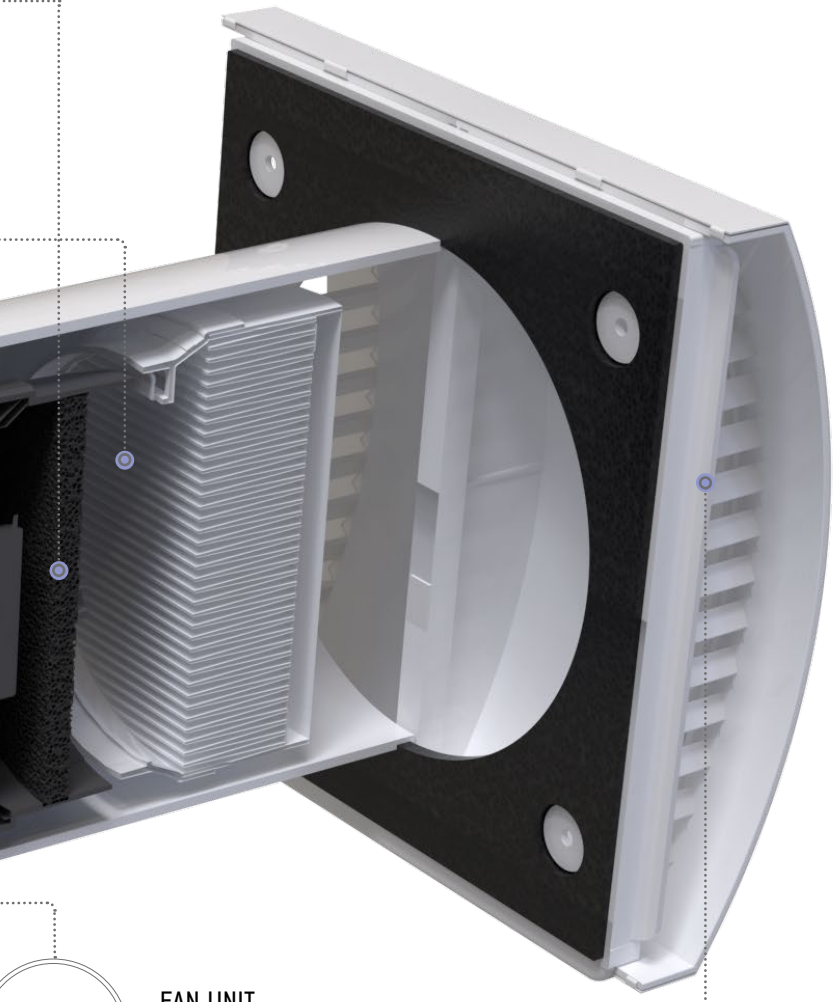
G3 FILTER

F7 FILTER (OPTIONAL)
Provides a degree of air purification PM2.5 99%

REGENERATOR UNIT
Provides heat recovery

SOUND ABSORBING MATERIAL

AIR DUCT



FAN UNIT
Provides air flow

OUTER VENTILATION HOOD
Prevents ingress of water and foreign objects into the ventilator


Speed
STANDBY
III
II
I
Filter
Alarm
Master

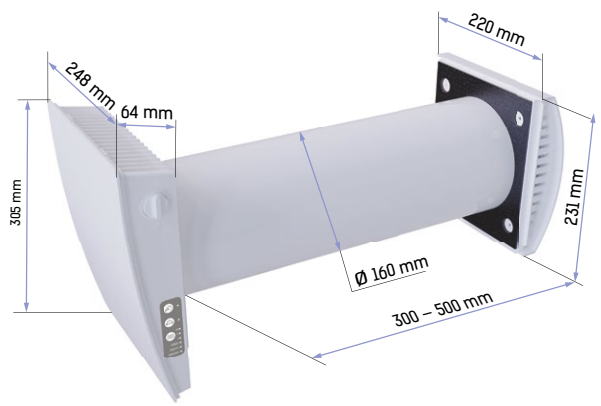
TECHNICAL DATA

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]	1	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		

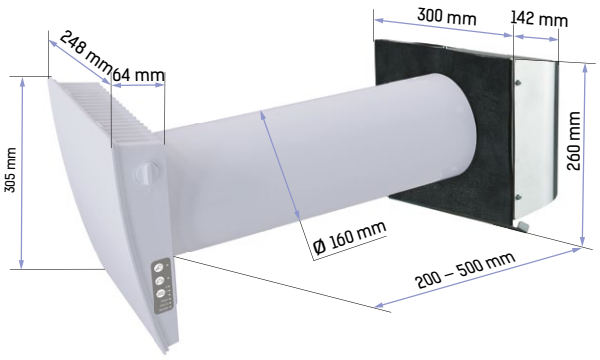
*When EH-13 hood is used (TwinFresh Style Frost).

OVERALL DIMENSIONS

TwinFresh Style

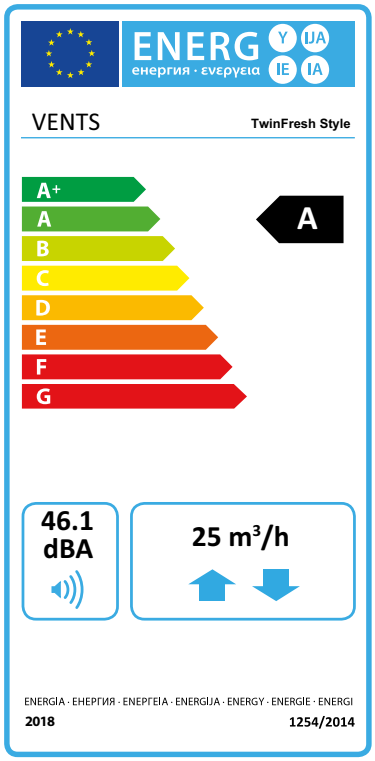


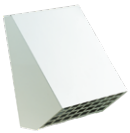
TwinFresh Style 2
with a hood for thin walls



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	http://www.ventilation-system.com					
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. Colour options: 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_2 sensor with LED indication and sensor buttons
	CO2-2		CO_2 sensor
	TRF-220/24-1,6 or TRF-120/24-1,6		Power supply for CO_2 sensors
Filters	SF2 TwinFresh G3		G3 filter kit (2 pcs.)
	SF2 TwinFresh G4		Coarse filter G4 Contents: • plastic filter holder (1 pc.) • G4 filter (1 pc.)
	SF2 TwinFresh F7		Fine filter F7 Contents: • plastic filter holder (1 pc.) • F7 filter (1 pc.) The F7 filter reduces air flow to 40 m^3/h