TWINFRESH
STYLE WiFi

Power from

2 W

Air flow up to

50 m³/h

Sound pressure level from

1 dBA*

At 3 m distance.

ESH

Style WiFi is an up-to-date and efficient solution to create a comfortable indoor climate and air exchange in refurbished premises, recently settled houses or renovated flats.

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

The design of the unit provides easy maintenance and installation.

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

It is enough to have only one ventilator operating in regeneration or ventilation mode to provide ventilation in the room.

The unit can be controlled via remote control and buttons on the control panel. Flexible customisation for each user via an app on the smartphone.

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

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

The control buttons are also duplicated on the ventilator 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 Wi–Fi network.
In this case, all ventilators (Slaves) will respond to a signal from the Master ventilator only. TwinFresh Style WiFi units can be combined into one control circuit.

CO2

EASY CONTROL

ADVANTAGES

Trendy ventilator design.

High efficiency – 90%.

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

A humidity sensor.

Connection of the units into one control network via WiFi.

Connection of an external CO_2 sensor or other external relay sensors.

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

Sound pressure level from 1 to 26 dBA at a distance of 3 m.

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

Simple mounting and maintenance.

It is advisable to use paired units
to ensure balanced ventilation.

Application example

Installation into a wall with a standard thickness
using the EH-14 outer hood

Angular mounting with the NP 160 white
mounting kit

Mounting into a thin wall using the EH-2
outer hood

WARM AIR

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

In 70 seconds the ventilator switches to the supply mode automatically.

CYCLE I

Stale air extraction

COLD AIR

RETAINS HEAT

To preserve indoor heat, the ventilator operates in regeneration mode with two cycles, so that heat is returned to the room, the humidity balance is maintained, and the load on the heating system in winter is reduced.

WHEN IT IS COLD OUTSIDE

Cold air enters a premise, and in 70 seconds the ventilator switches to the 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.
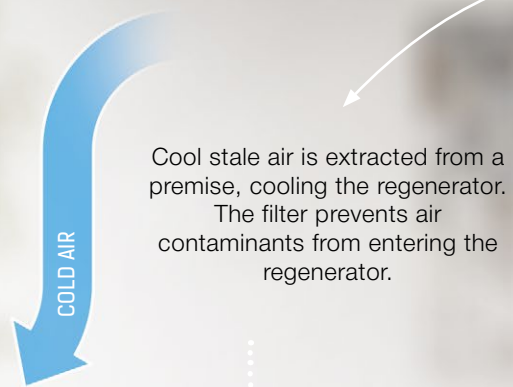
CYCLE II

Clean air supply

COLD AIR

SAVES ENERGY

To ensure energy efficiency, the ventilator operates in energy recovery mode with two cycles, thereby reducing the load on the air conditioning system in summer.

WHEN IT IS HOT OUTSIDE

COLD AIR

Cool 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 the supply mode automatically.

WARM AIR

CYCLE I

Stale air extraction

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

COLD AIR

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
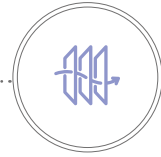
WARM AIR

HOW IS IT DESIGNED?
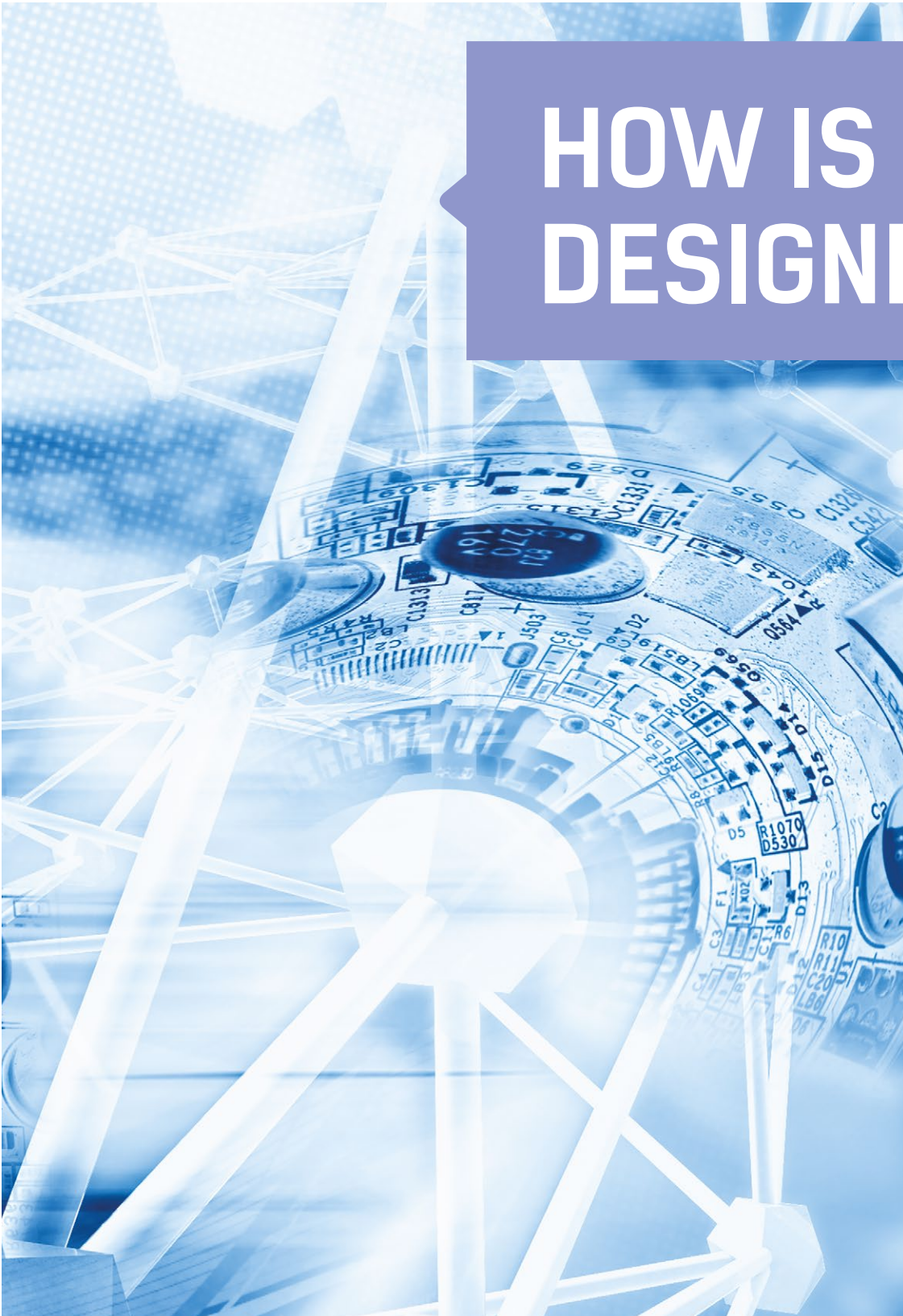
G3 FILTER

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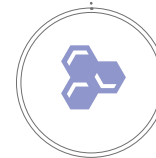Equipped with an automatic air damper (TwinFresh Style WiFi M with a manually-operated damper)

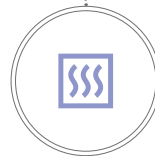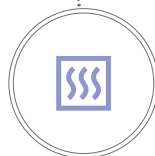## F7 FILTER (OPTIONAL)
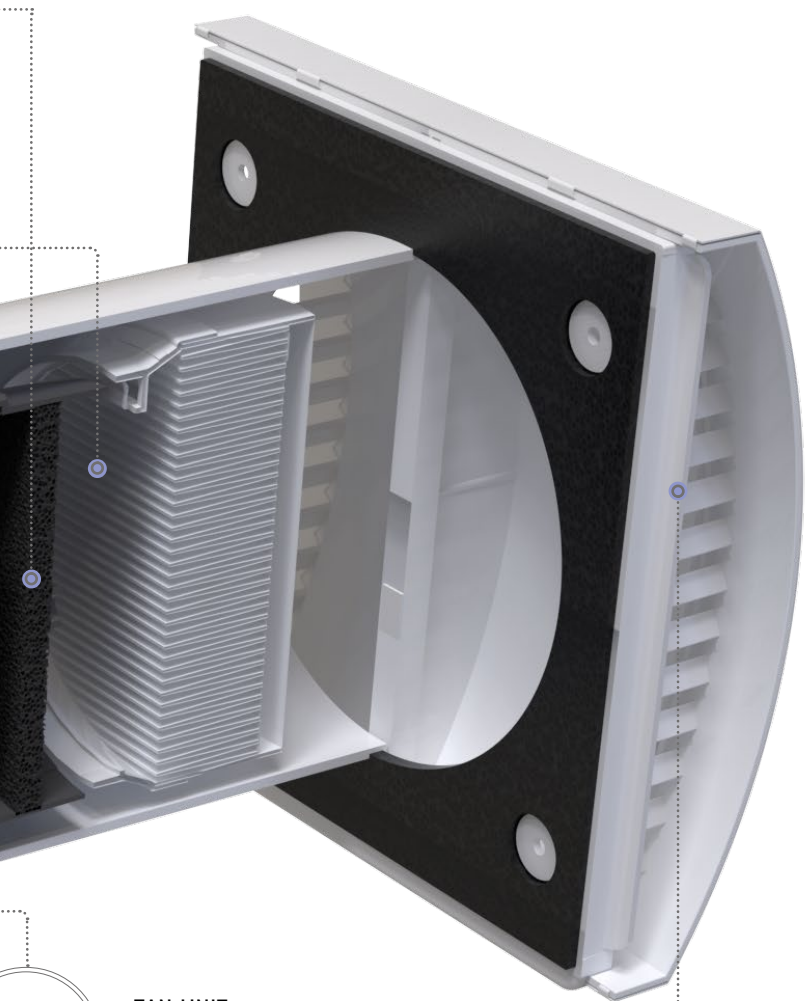Provides a degree of air purification PM2.5 99%

REGENERATOR UNIT
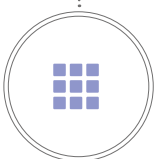Provides heat recovery

SOUND ABSORBING MATERIAL

AIR DUCT

FAN UNIT
Provides air flow

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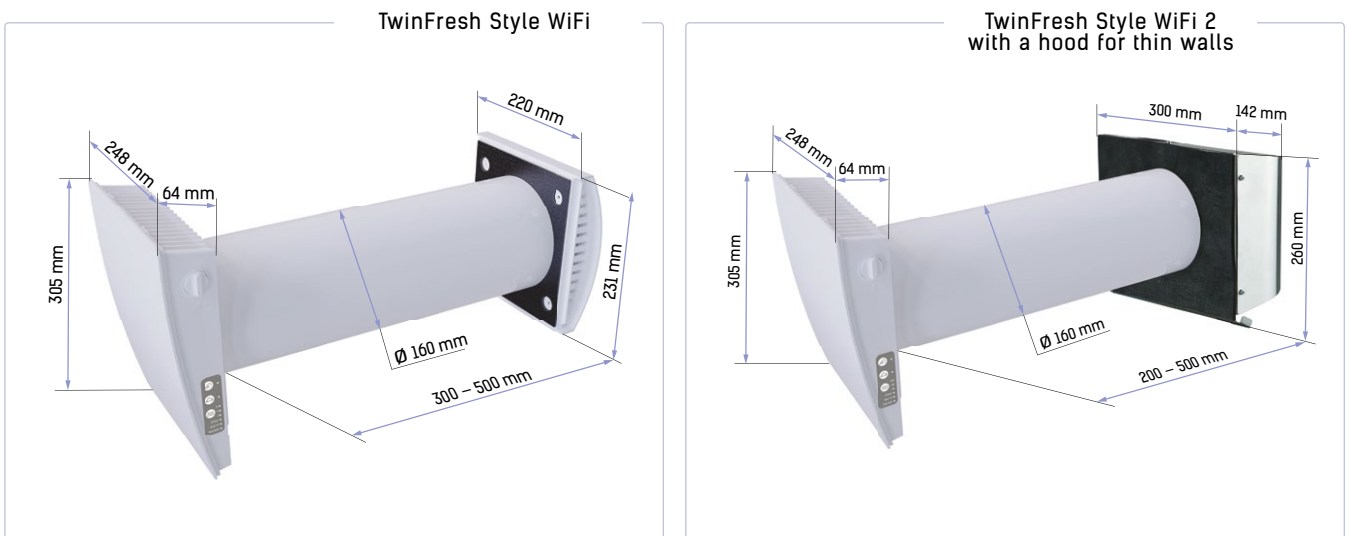Prevents ingress of water and foreign
objects into the ventilator

TECHNICAL DATA

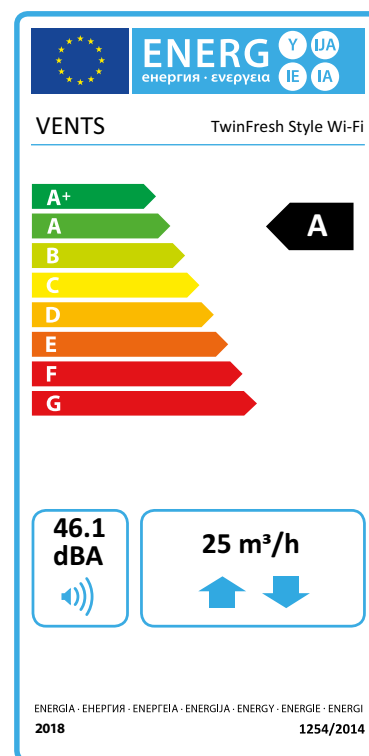| Speed		I	II	III
Voltage [V/Hz]		100-240 / 50-60		
Power [W]		2.0	3.5	5.5
Current [A]		0.03	0.03	0.06
Air flow in ventilation mode [m³/h (l/s)]		15 (4)	35 (10)	50 (14)
Air flow in energy recovery mode [m³/h (l/s)]		8 (2)	18 (5)	25 (7)
SFP [W/l/s]		0.96	0.84	0.79
Transported air temperature [°C]		-20 (-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**)		
Degree of filtration from particles PM2.5 with F7 filter [%]		99		
**Air flow with F7 filter applied [m³/h]		40		

*When using the EH-13 hood (TwinFresh Style Frost).

OVERALL DIMENSIONS

TwinFresh Style WiFi

248 mm
64 mm
220 mm
231 mm
305 mm
Ø 160 mm
300 – 500 mm

TwinFresh Style WiFi 2
with a hood for thin walls

248 mm
64 mm
300 mm
142 mm
305 mm
260 mm
Ø 160 mm
200 – 500 mm
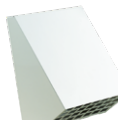
ECODESIGN

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	Stepless fan speed control					
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 demand control					
Maximum internal leakage rates [%]	2.7					
Maximum external leakage rates [%]	0					
Mixing rate of bidirectional units [%]	1					
Classification of the airflow sensitivity to pressure variations, according to EN 13141-8 [%]	37.3					
Classification of the indoor/outdoor air tightness, according to EN 13141-8 [m³/h]	0.5					
Internet address	http://www.ventilation-system.com					
Annual electricity consumption (AEC) [kWh electricity/a]	Cold		Average		Warm	
	144		144		144	
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	160 white		Kit for angular mounting with a white grille
	160 chrome		Kit for angular mounting with a 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
	KV TwinFresh Style		Wi-Fi sensor control panel
	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		Contents: • plastic filter holder (1 pc.) • filter G4 (1 pc.)
	SF2 TwinFresh F7		Contents: • plastic filter holder (1 pc.) • F7 filter (1 pc.) The F7 filter reduces air flow to 40 m³/h