

TWINFRESH  
RA-50-14



TWINFRESH

Power from

**3.5 W**

Air flow up to

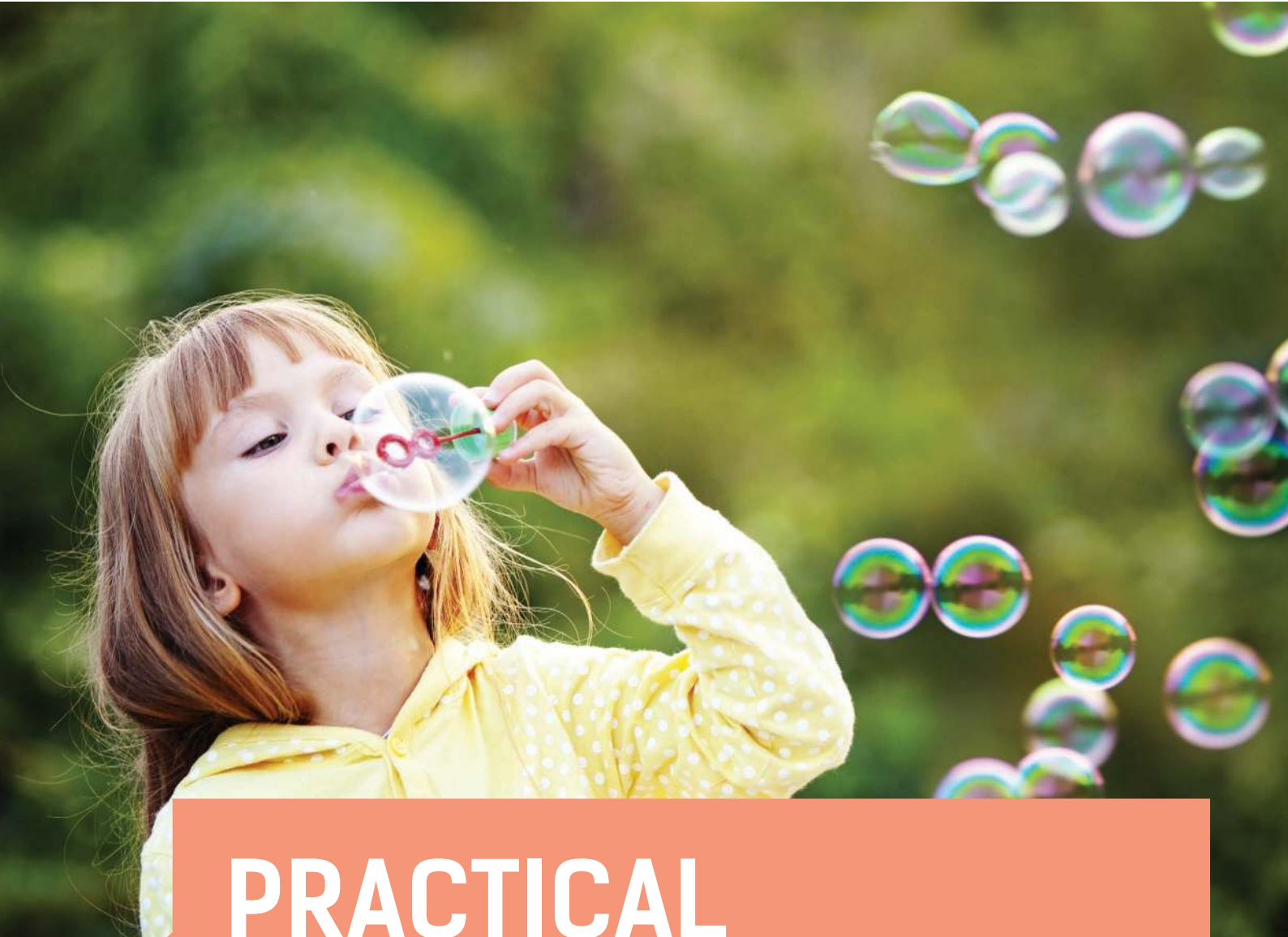
**50 m<sup>3</sup>/h**

Sound pressure level from

**14 dBA**



The TwinFresh RA-50-14 basic model is an effective solution for premises of average size. Easy control and mounting. Many ventilators can be connected to one network.



**PRACTICAL  
AND VERSATILE**



### EASY MOUNTING

The telescopic air duct provides simple installation.

### NO DRAFTS

The protective air shutters prevent backflow.

### RELIABLE PROTECTION

The outer hood protects the ventilator from direct ingress of water and large foreign objects.



Easy manual control.



The filters clean the supply air protecting it from dust and insects.



Several ventilators can be controlled by one control panel.



# EASY CONTROL



The ventilator is operated by the KVR control panel or the KVR-T 12 (230/12) control and power unit.

The KVR-T 12 (230/12) control and power unit with power of 12 W is included in the delivery set of the TwinFresh RA-50-14 ventilator and comprises the KVR control panel and the TRF 220/12-12 transformer under one casing.

The TRF 220/12-12 transformer with power of 12 W can supply power to up to 4 ventilators.

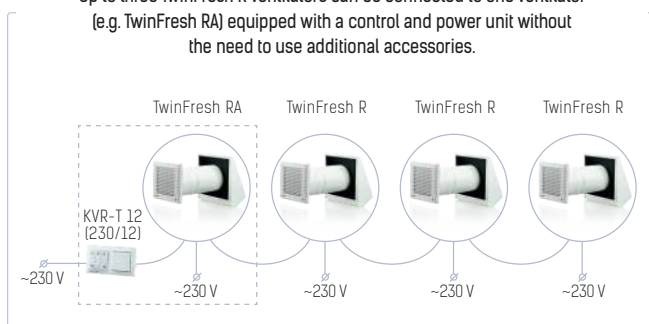
The TRF 220/12-40 transformer with power of 40 W can supply power to up to 11 ventilators.

The KVR panel is not equipped with a power supply unit and is designed for mounting with a TRF transformer.

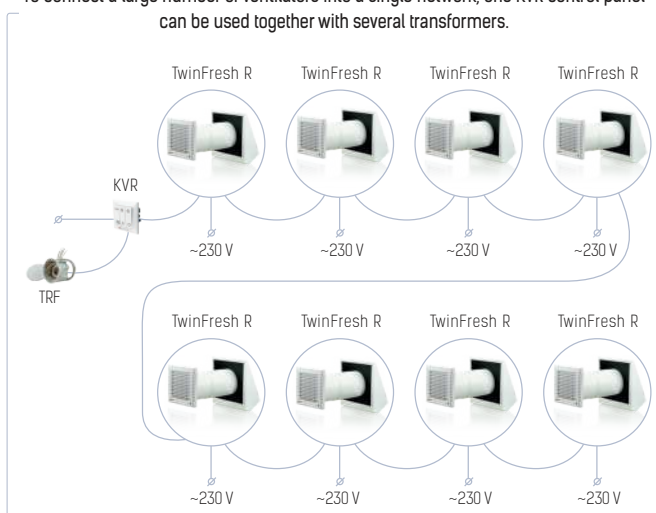
## Operation modes:

- Ventilation mode (extract or supply) at Speed I.
- 2. Ventilation mode (extract or supply) at Speed II.
- 3. Reversible operation mode (regeneration) at Speed I.
- 4. Reversible operation mode (regeneration) at Speed II.

Up to three TwinFresh R ventilators can be connected to one ventilator (e.g. TwinFresh RA) equipped with a control and power unit without the need to use additional accessories.



To connect a large number of ventilators into a single network, one KVR control panel can be used together with several transformers.



# ADVANTAGES



Simple control – by a button switch. No sensors, timers and automation.



Many ventilators can be connected to one network.



Ventilation of premises with the area of about 40 m<sup>2</sup> (the area is approximate and depends on the ventilation standards in your country).



Normal operation at temperatures up to -20 °C.



Noise at the level of human whisper (14-24 dBA).



Automatic drafts shutoff by automatic shutters when the ventilator is off.

# HOW IS IT DESIGNED?



**FILTERS**

The G3 air filter provides supply and extract air filtration.

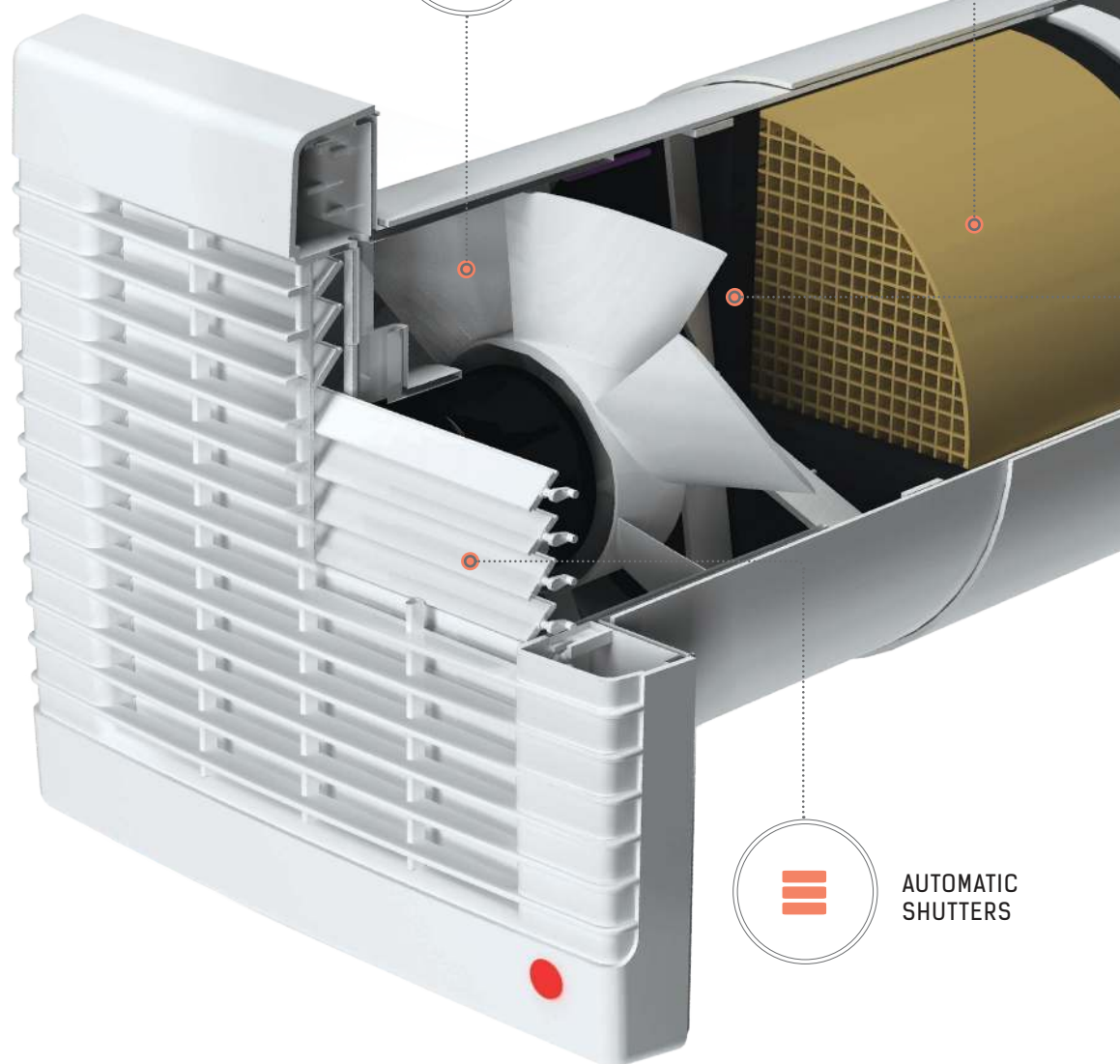
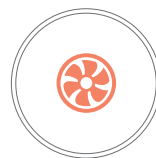
F8 filter is available as an option.

**CERAMIC REGENERATOR**

High-tech ceramic energy regenerator with the regeneration efficiency of up to 90%

**DC FAN**

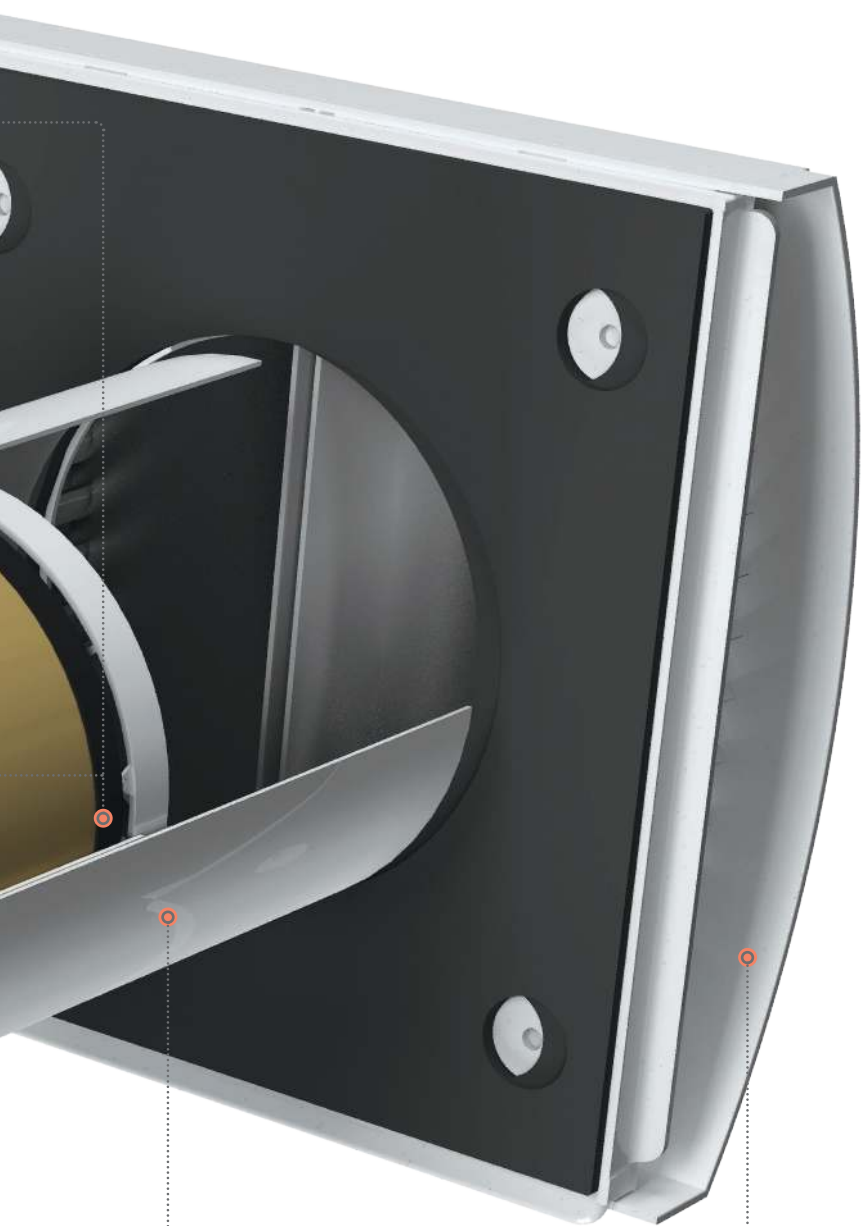
Reversible axial fan with a DC motor and 12V power supply.



**AUTOMATIC SHUTTERS**





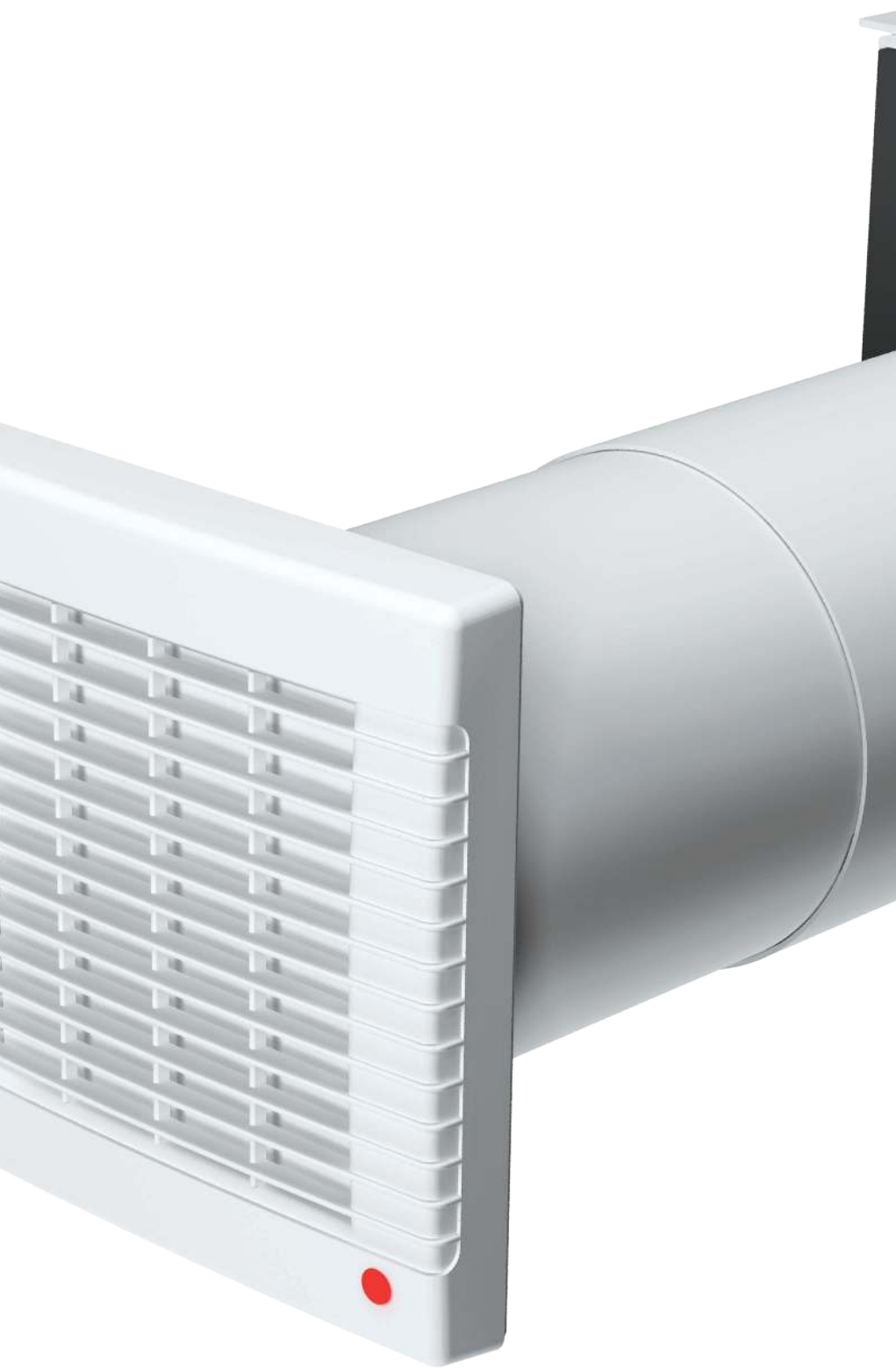


**AIR DUCT**



**OUTER HOOD**

Protects the ventilator from ingress of water and foreign objects

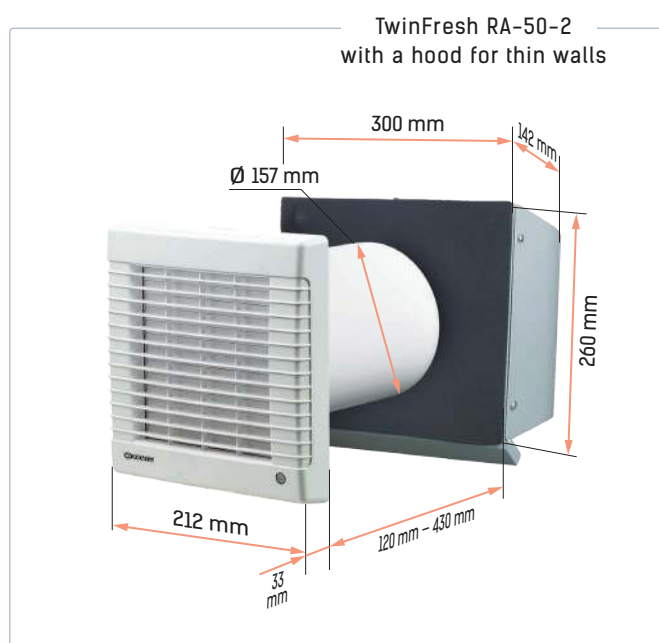
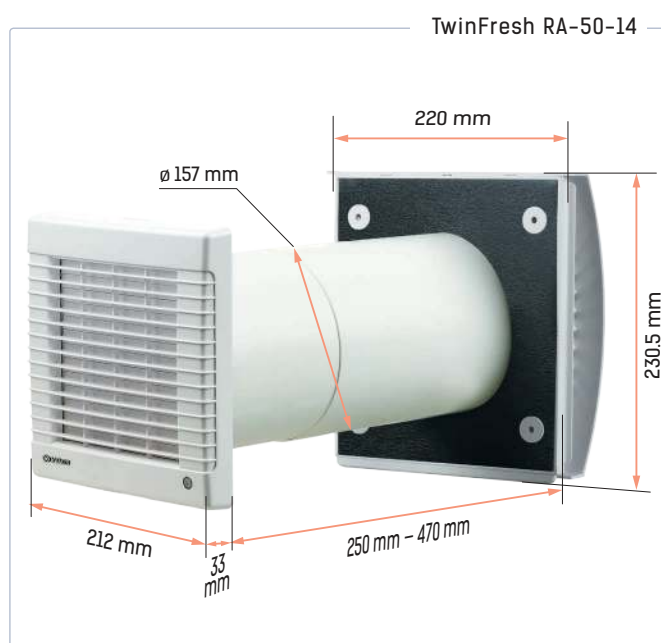


## TECHNICAL DATA

Speed	I	II
Unit voltage [V/50 (60) Hz]	220-240/50-60	
Power [W]	3.5	4.6
Current [A]	0.020	0.025
Air flow in ventilation mode [m³/h (l/s)]	25 (7)	50 (14)
Air flow in energy recovery mode [m³/h (l/s)]	13 (3)	25 (7)
SFP [W/l/s]	1.01	0.66
Transported air temperature [°C]	-20*...+40	
Sound pressure level at 1 m distance [dBA]	24	34
Sound pressure level at 3 m distance [dBA]	14	24
Outdoor sound pressure attenuation in accordance with DIN EN 20140 [dBA]	40	
Heat recovery efficiency in accordance with DIBt LÜ-A 20 [%]	≤ 90	
Filter	G3	
Protection class	IP24	

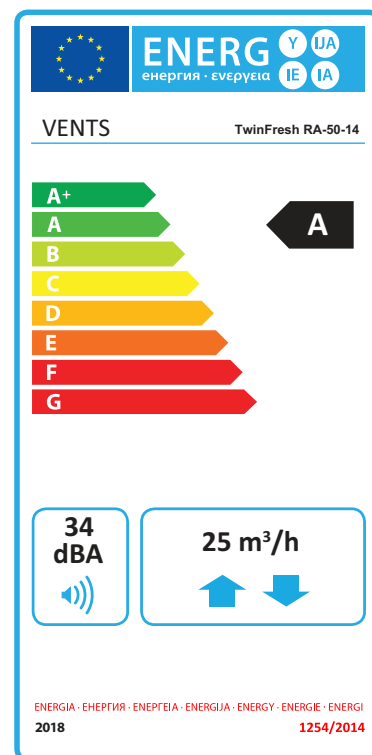
\* -30 °C when the EH-13 hood is applied.

## OVERALL DIMENSIONS

























## ECODESIGN



Specific energy consumption (SEC) [kWh/(m <sup>2</sup> .a)]	Cold		Average		Warm	
	-73	A+	-33	A	-10	E
Type of ventilation unit	Bidirectional					
Type of drive installed	Three-speed					
Type of heat recovery system	Regenerative					
Thermal efficiency of heat recovery [%]	81					
Maximum air flow rate [m <sup>3</sup> /h]	25					
Power [W]	4.6					
Sound power level [dBA]	34					
Reference air flow rate [m <sup>3</sup> /s]	0.003					
Reference pressure difference [Pa]	0					
Specific power input (SPI) [W/(m <sup>3</sup> /h)]	0.28					
Control typology	Manual control					
Maximum internal leakage rate [%]	2.7					
Maximum external leakage rate [%]	0					
Mixing rate of bidirectional units [%]	1					
The classification of the airflow sensitivity to pressure variations, according to EN 13141-8 [%]	-					
The classification of the indoor/outdoor air tightness, according to EN 13141-8 [m <sup>3</sup> /h]	-					
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		
	386	386		386		
The annual heating saved (AHS) [kWh primary energy/a]	Cold	Average		Warm		
	8284	4235		1915		












## ACCESSORIES

Hoods	EH-14 white 160		Plastic hood. Colour options:	     
	EH-14 chrome 160		Grey plastic outer hood with a brushed stainless steel cover	
	EH-17 white 160		Plastic hood. Colour options:	     
	EH-2 grey 160		Grey painted stainless steel outer hood for thin walls	
	EH-2 chrome 160		Brushed 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		Ventilation hood for indoor mounting	
Grilles	MVMO 150 bV1s An		Round metal grille	
	MVM 152 bVs N		Round stainless steel hood	

Angular mounting	NP 60x204-0021		Kit for angular mounting with a white grille
	NP 60x204-0082		Kit for angular mounting with a stainless steel outer grille

Mounting elements	3805		Round telescopic air duct 300-500 mm
	3810		Round telescopic air duct 500-1000 mm

Control	KVR		Control panel
	KVR-T 12 (230/12)		Control unit
	TRF 220/12-12		12 W power supply transformer
	TRF 220/12-40		40 W power supply transformer

Filters	SF TwinFresh R50 G3		G3 filter kit (2 pcs.)
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