

ECO-VENTILATION



SINGLE-ROOM
HEAT REGENERATION
VENTILATORS



TWINFRESH EXPERT RW1-50-2 V.2



SMART HOUSE

Fresh air
in your house!



SINGLE-ROOM HEAT REGENERATION VENTILATORS

■ TwinFresh Expert is a new series of single-room heat regeneration ventilator

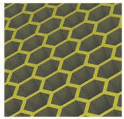
TwinFresh Expert is the most up-to-date and efficient solution to create a comfortable indoor climate and provide required air exchange in new or retrofit premises.

■ Features of TwinFresh Expert RW1-50-2 V.2 ventilators

- ▶ Control with Android- or iOS-based smartphone via a cloud worldwide
- ▶ Data exchange between several ventilators via Wi-Fi enabled coordinated operation
- ▶ Efficient supply and exhaust single-room ventilation with air flow up to 29 CFM
- ▶ High-tech ceramic heat exchanger with regeneration efficiency up to 93 %
- ▶ Reversible EC-fan with low power consumption from 4.45 W and safe voltage 12 V
- ▶ Integrated automation
- ▶ Low-noise operation from 0.3 Sones
- ▶ Easy mounting and servicing
- ▶ Air cleaning with total MERV 5 class filters (optionally MERV 14 filter)
- ▶ Rated for non-stop operation
- ▶ No freezing and condensate formation during operation



■ Ceramic energy accumulator (regenerator)



One of the best regeneration efficiency on the market due to innovative hexagonal structure of the heat exchanger cells.

The high-tech ceramic energy accumulator with regeneration efficiency up to 93 % ensures extract air heat recovery for warming of supply air flow. Due to the cellular structure, the unique regenerator has a large air contact surface and high heat-conducting and heat-accumulating property. The ceramic accumulator is treated with an antibacterial agent, which prevents bacteria growth inside of the regenerator. The antibacterial properties last for 10 years.

■ Decorative front panel



The specially designed front panel provides 100 % air tightness and protection from wind



Easy maintenance. Indoor unit is opened by a light press on the latches on both sides.

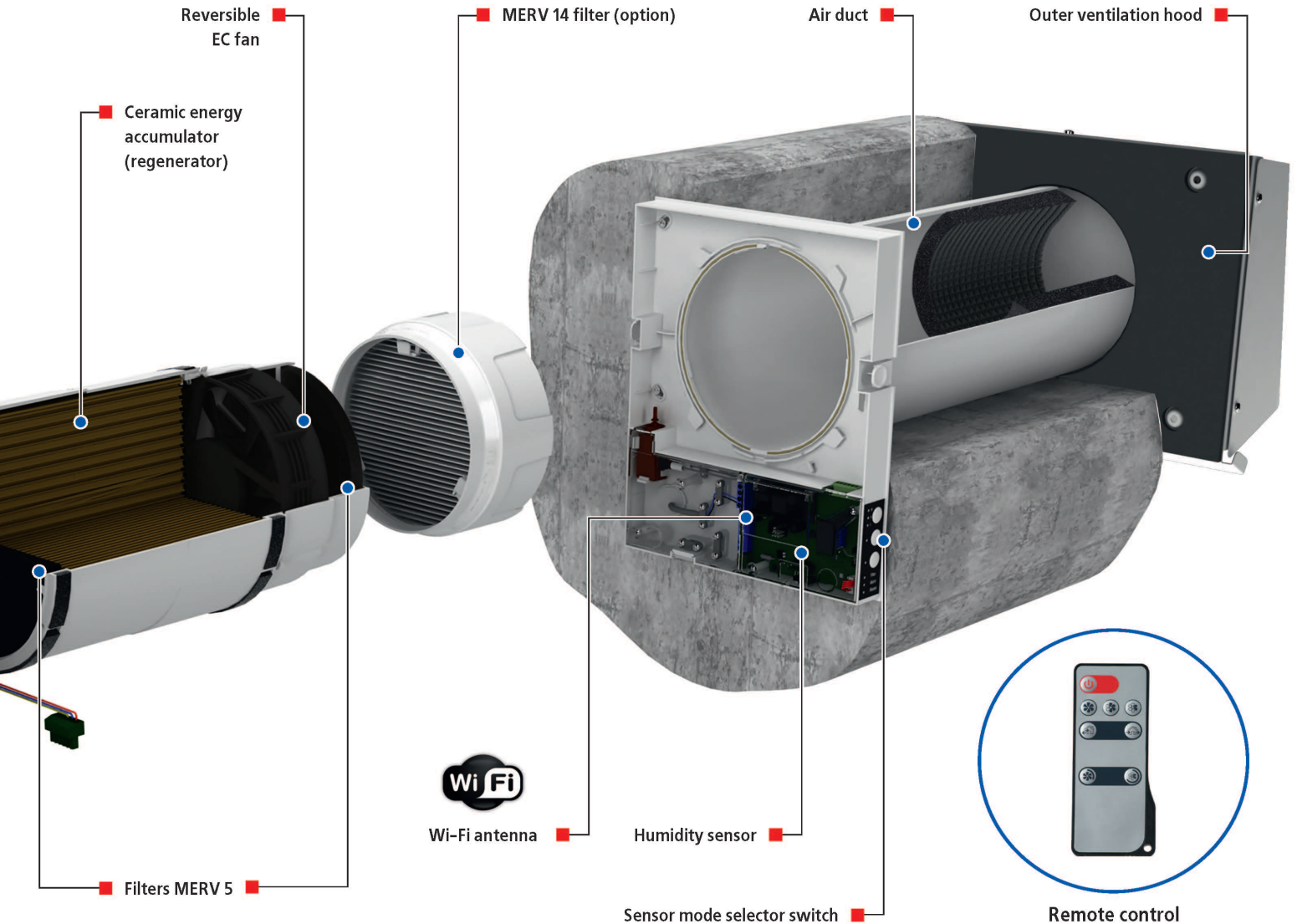


The automatic shutter prevents back-draft



Reversible EC fan

The reversible axial fan with an EC motor serves for air supply and exhaust. Due to the applied EC technology the fan is featured with low power consumption. The fan is supplied with safe 12 V voltage. The motor has integrated thermal overheating protection and ball bearings for long service life.



Air filters

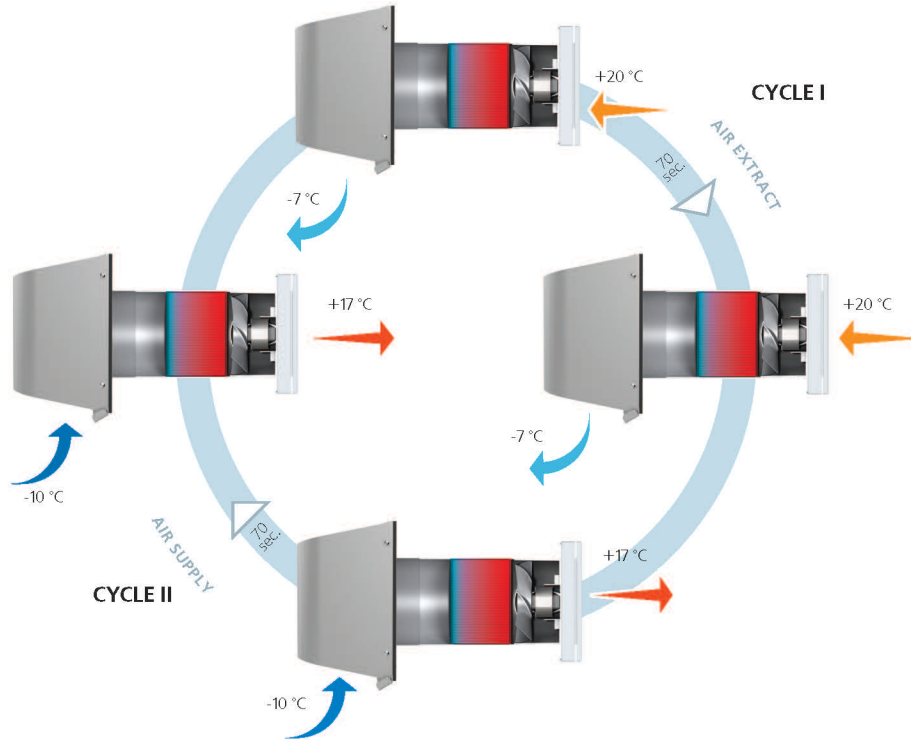
The two integrated air filters with total filtration rate MERV 5 provide supply and extract air filtration. They prevent ingress of dust and insects into the supply air and contamination of the ventilator parts. The filters feature antibacterial treatment. The filter can be vacuumed and it is dishwasher safe. The antibacterial solution is stays intact after cleaning. MERV 14 filter with the filtration class PM2.5 99 % is available as a special ordered accessory, but when installed it reduces the air flow to 24 CFM.

SINGLE-ROOM HEAT REGENERATION VENTILATORS

Operation of TwinFresh ventilators

The ventilator is designed for both extract and supply ventilation with or without energy recovery function

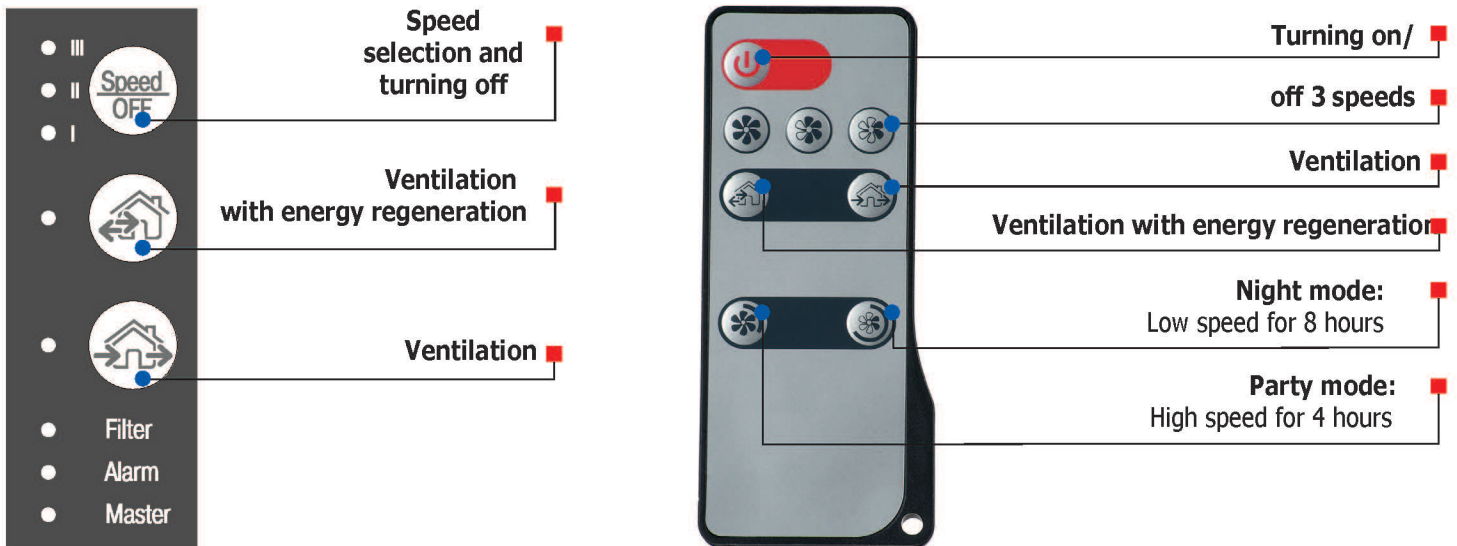
- ▶ **CYCLE I.** While warm, stale air is extracted from a room, it passes through the ceramic energy core where the heat and energy is being accumulated.
- ▶ The ceramic core heats up, the ventilator automatically switches to supply mode after 70 seconds.
- CYCLE II.** As the fresh air from outside passes through the ceramic core it absorbs the accumulated moisture and heat, which warms up the supply air flow. The ventilator changes its operation mode from supply to extract ventilation every 70 seconds.



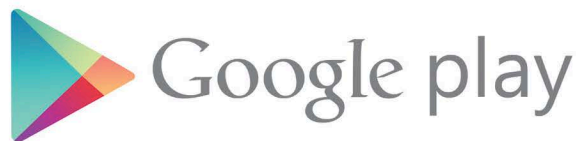
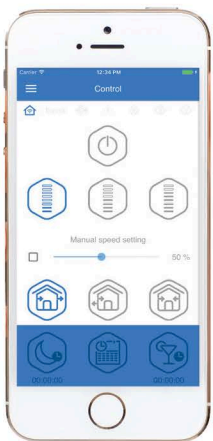
Control

The ventilator is controlled via:

- ▶ Control panel located on the ventilator casing
- ▶ Remote control
- ▶ Smartphone applications
- ▶ Connections to the Smart Home system or the Dispatching System (BMS) via Wi-Fi



- The units can be connected to a single network via Wi-Fi for synchronous operation
- The fans can also be controlled from anywhere in the world via cloud service



The specially developed application Vents TwinFresh V.2 is available for download at Google Play and App Store.

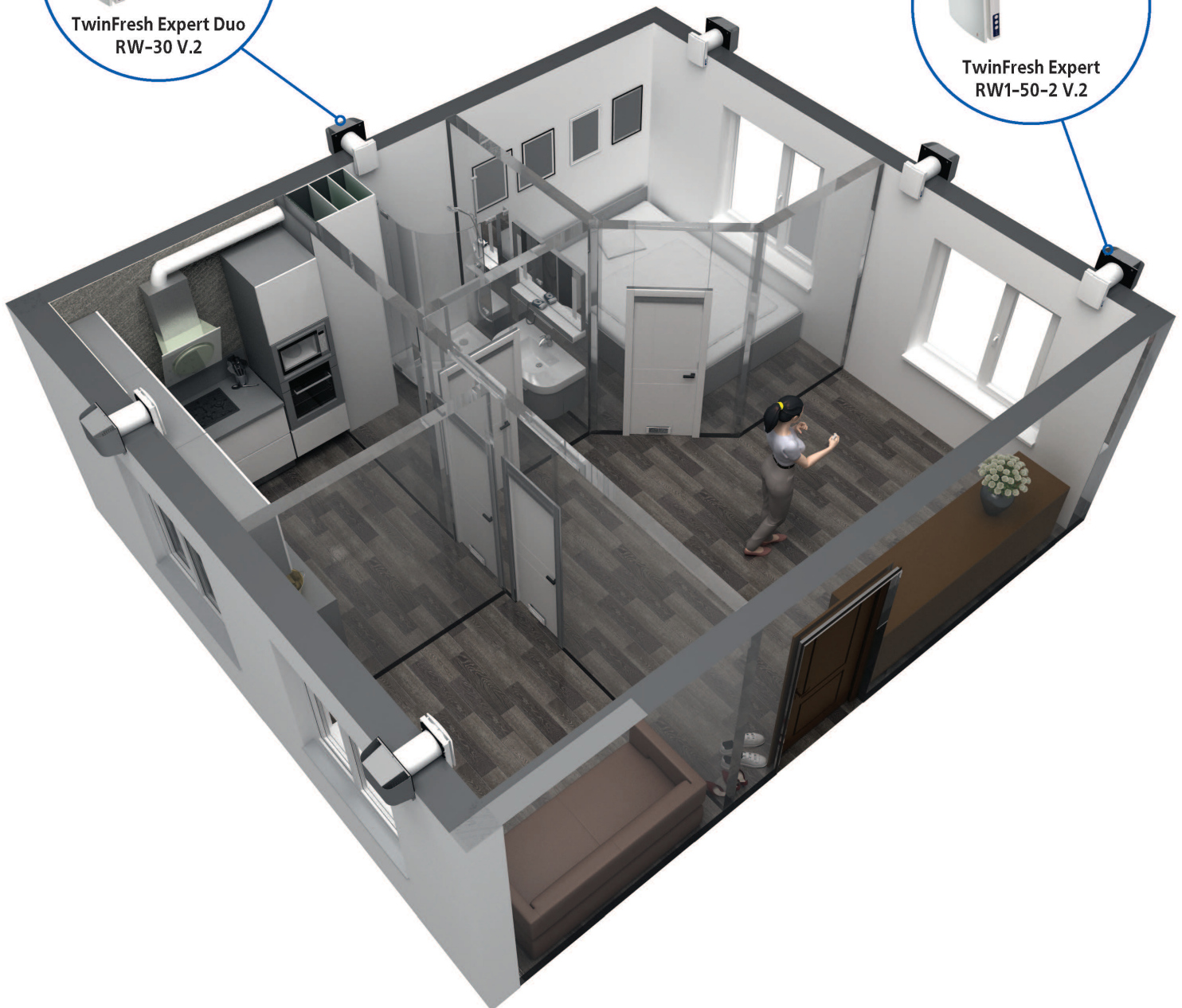


Mounting

The ventilator is designed for through-the-wall mounting and is rated for non-stop operation. The optimum single-room ventilation solution is arranged by installation of a paired number of ventilators and setting them into counter-phase operation. One group of the ventilators provide supply fresh air while the other group of ventilators provide extraction of stale air. This mounting solutions enables the most efficient balanced ventilation.

Installation steps:

1. Prepare a round hole in the outer wall (refer to the manual for exact measurement)
Install the telescopic duct and the mounting plate, seal it.
Install the filter, the ceramic core and the second filter.
Attach the fan to the unit
2. Mount of the outer ventilation hood
3. Plug it in and its ready to go



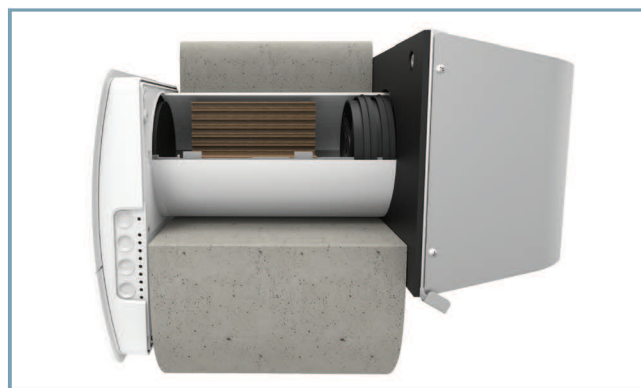
Technical data

Model	TwinFresh Expert RW1-50-2 V.2		
Speed	1	2	3
Voltage / 50 (60) Hz [V]	1~100-240		
Power consumption [W]	4.45	5.08	7.06
Current consumption [A]	0.035	0.040	0.059
Air flow in ventilation mode [CFM]	9	18	29
Air flow in regeneration mode [CFM]	4	9	15
RPM	800	1300	1900
Sound pressure level @ 3 ft [Sones]	0.6	1.0	1.2
Sound pressure level @ 10 ft [Sones]	0.3	0.5	0.6
Outdoor sound pressure attenuation [Sones]	2.5		
Transported air temperature [°F]	from +5 up to +104		
Regeneration efficiency [%]	max. 93		
Regenerator type	Ceramic		
Filter	MERV 5 (option: MERV 14)		
Ingress protection	IP24		

Installation example



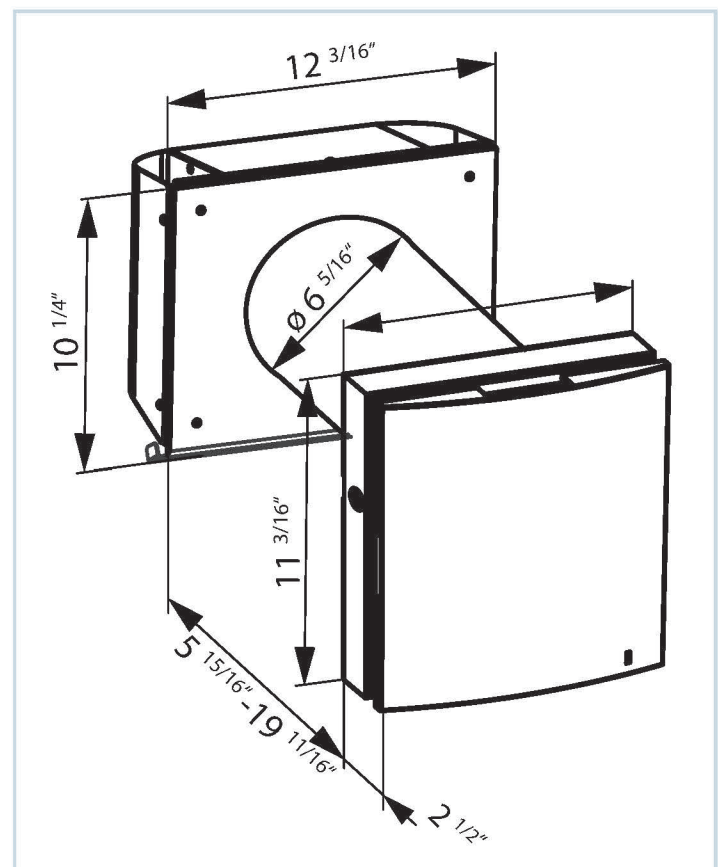
Angular installation with the **NP 100 White/ NP 100 Chrome** mounting kit



Installation into a thin wall using the **EH-2** outer hood

Overall dimensions [inch]

TwinFresh Expert RW1-50-2 V.2




Accessories

Accessory image	Accessory name	Description	Accessory image	Accessory name	Description
	MVVM 162 05	Outer hood for mounting from indoor		NP chrome 160	Angular mounting kit
	EH-2 grey 160	Grey steel outer hood for thin walls		Duct 160-500 Duct 160-700	Air duct 500 mm with a polystyrene plug Air duct 700 mm long with a polystyrene plug
	EH-2 chrome 160	Brushed stainless steel outer hood for thin walls		T TwinFresh Expert R-50	Cardboard template for indoor unit installation
	EH-14 chrome 160	Grey plastic outer hood with a brushed stainless steel cover		CO2-1 CO2-2	CO ₂ sensor with a LED CO ₂ concentration indicator and a touch button to switch the CO ₂ sensor operation mode
	EH-14 white 160	White plastic outer hood		RC1 TwinFresh	Remote control
	EH-13 white 160	White painted aluminium outer hood for cold climate		SF TwinFresh Expert R-50 F8	MERV 14 Filter (1 piece)
	EH-13 chrome 160	Brushed stainless steel outer hood for cold climate		SF TwinFresh Expert R-50 F3	MERV 5 filter set (2 pcs.)
	S3 TwinFresh	Cartridge for cold climate		NP white 160	Angular mounting kit
	KV TwinFresh Expert RW	Wi-Fi controlled control panel		TwinFresh Expert RW1-50 V.2 completion kit:	<ul style="list-style-type: none"> - indoor unit - cartridge with regenerator, fan and two filters - sound-insulating material - remote control

Tel: 888-640-0925
1513-348-3853
Fax: 513-268-4597

Sales@ventsus.com
VentsUS.com
11013 Kenwood Road,
Cincinnati, Ohio 45242

VENTS reserves the rights to modify any of its products' features, designs, components and specifications at any time and without notice to maintain the development and quality of manufactured goods.

10/2018

