15:21 = 0 = 0

Single-room heat recovery ventilation unit with ceramic heat exchanger





TwinFresh Elite Eco heat recovery unit is a modern solution that combines balanced ventilation with heat recovery, an optional built-in electric heater, temperature sensor, as well as a user-friendly interface. With its compact and multi-purpose design, the device provides an effective way to improve indoor air quality without losing valuable heat (or coolness). The unit is designed for through-the-wall installation inside a prepared hole in an outer wall of the building. TwinFresh Elite Eco is a decentralized unit and does not require ducting, therefore it is typically much easier to install. This makes them excellent for retrofitting in flats, houses, cottages, social and commercial indoor areas that have insufficient space to install a centralized system with ducts.

FEATURES:

- Simultaneously supplies and exhausts air through a single hole in the outer wall.
- Separate settings for each EC fan ensure balanced ventilation.
- Reducing heat losses caused by ventilation.
- Efficient ceramic heat exchanger of hexagonal cellular structure with automatic frost protection system.
- Optional electric heater.
- MERV5 supply and exhausts filters.
- Temperature sensor.
- Controlled with an Android or iOS smartphone or tablet.
- $\cdot\,$ House ventilation control via cloud service from anywhere in the world.

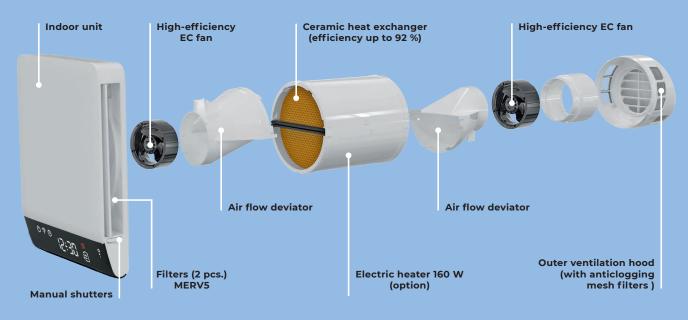
FUNCTIONS



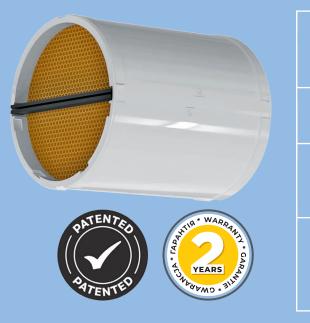
MODES OF OPERATION



- **Heat recovery mode** simultaneously supplies and removes air through one opening in the outer wall with a cyclical change in the direction of air. The defrosting algorithm is activated by a triggered temperature sensor.
- Ventilation mode active operation of both fans, simultaneous supply and exhaust without changing direction.
- **Supply mode** active operation of both fans, simultaneously pumping air into the room. Activation of the electric heater is possible.
- **Exhaust mode** active operation of both fans, simultaneously removing air to the outside. Activation of the electric heater is not possible.



CERAMIC HEAT EXCHANGER



- The process of heat recovery occurs through regeneration with the preservation of moisture, which is very important for the dry winter period.
- No moisture condensation occurs in the heat recovery mode in winter.
- High regeneration efficiency due to the innovative hexagonal structure of the heat exchanger cells.
 Recovers up to 92% of heat from exhausted air.
- The cartridge, which includes the regenerator, is sealed because it is made of ABS plastic, therefore it reduces the accumulation of dirt on the heat exchanger and facilitates cleaning.
 - The regenerator is protected with a hydrophilic layer that prevents the penetration of moisture and the development of fungi and bacteria on its surface.

UNIT OPERATING LOGIC

To increase the efficiency of the TwinFresh Elite Eco, the regenerator is divided into two parts, which are isolated from one another, thus eliminating the transfer of heat and moisture between them.

One of the fans operates in the supply mode: fresh cold intake air from outside flows through the first regenerator, and absorbs accumulated heat and humidity.

Meanwhile, the other fan operates in the exhaust mode: warm stale air is extracted from the room to the outside, and while passing through the other regenerator, it gradually heats the air up and transfers some of the moisture.

After 70 seconds operation the fans change the rotation direction and the opposite processes start.

ALL FUNCTIONS IN YOUR SMARTPHONE

TwinFresh Elite Eco combines compact size and a wide range of functions that are easy to track in a smartphone application.



AND EVEN MORE.

Just say «Hey Google...» or «Alexa...» and test, control and run TwinFresh Elite Eco in English, German, Swedish, Norwegian, Danish, Polish, Dutch, French, Spanish*.



*Important: The feature availability could depend on your country, region and language. Check it for your speaker/smartphone or ask its manufacturer.

DIMENSIONS [inch]

Mar dal	L, inch (mm)	L1, inch (mm)	Possible wall thickness options when cutting	Possible wall thickness options when DNV extension cuff used					
Model				DNV-40	DNV-80	DNV-120	DNV-160	DNV-200	
Elite Eco	21 ^{1/4} "	17 ^{3/8} "	17 ^{516"}	15 ^{3⁄4} "	14 ^{316"}	12 ⁵⁸ "	11"	9 ^{7/6"}	
	(540)	(439)	(440 mm)	(400 mm)	(360 mm)	(320 mm)	(280 mm)	(240 mm)	
Elite Eco L055	25 ^{9/16} "	21 ^{5/8} "	17 ⁵¹⁶ " – 21 ⁵⁸ "	20 ^{1/16} "	18 ¹² "	16 ^{1516"}	15 ³⁸ "	13 ³⁴ "	
	(650)	(550)	(440 – 550 mm)	(510 mm)	(470 mm)	(430 mm)	(390 mm)	(350 mm)	
Elite Eco L07	31 ^{1/2"}	27 ^{9/16"}	17 ^{516"} – 27 ^{916"}	26"	24 ^{7/16"}	22 ¹³¹⁶ "	21 ^{1/4} "	19 ^{11/6} "	
	(800)	(700)	(440 – 700 mm)	(660 mm)	(620 mm)	(580 mm)	(540 mm)	(500 mm)	
Elite Eco L1	43 ^{5/16} "	39 ^{3/8} "	17 ^{576"} - 39 ^{38"}	37 ^{1316"}	36 ¹⁴ "	34 ^{58"}	33 ^{и6"}	31 ^{12"}	
	(1100)	(1000)	(440 - 1000 mm)	(960 mm)	(920 mm)	(880 mm)	(840 mm)	(800 mm)	



TECHNICAL DATA

		TwinFresh Elite Eco			TwinFresh Elite Eco E		
Speed		1	2	3	1	2	3
Voltage / Frequency	V / Hz	120 / 60					
Max. unit power without electric heater	W	3	5	8	3	5	8
Integrated electric heater power	W	-			160		
Max. unit power with electric heater	W	-		163	165	168	
Max. unit current without electric heater	А	0.02	0.03	0.04	0.02	0.03	0.04
Max. unit current with electric heater	А	-		1.85	1.88	1.91	
Air flow	CFM	6	18	28	6	18	28
Sound	Sones	0.4	1.4	3.3	0.4	1.4	3.3
Heat recovery efficiency	%	≤ 92			≤ 90		
Heat exchanger material		Ceramic					
Transported air temperature	°F (° C)	5104 (-15+40)			-13104 (-30+40)		
Filter		MERV5					
Ingress Protection rating	IP	Х4					

ASSORTMENT

Options & functions	TwinFresh Elite Eco	TwinFresh Elite Eco E	
Heat recovery, supply only, exhaust only modes	+	+	
3 speeds with independent adjustment from 10 to 100% for supply and exhaust	+	+	
Temperature sensor	+	+	
Light sensor	+	+	
Electric heater	-	+	
Frost protection by heating the regenerator with exhaust air	+	+	
Filter maintenance indication	+	+	
Remote control using an IR remote control and a smartphone via Wi-Fi	+	+	
Functional smartphone application with voice control, cloud service works with Google Home or Alexa	+	+	
Functional smartphone application with voice control, cloud service and air quality level statistics	+	+	
Main screens in the smartphone application	 Speed (3 speeds) Speed (smooth adjustment) 	- Speed (3 speeds) - Speed (smooth adjustment) - Heater	

ACCESSORIES

	TwinFresh Elite Eco 160(E)
External compensator pad	CPO-40 TwinFresh Elite 160 CPO-80 TwinFresh Elite 160 CPO-120 TwinFresh Elite 160 CPO-160 TwinFresh Elite 160 CPO-200 TwinFresh Elite 160
Rubber decorative cuff for indoor installation	RP TwinFresh Elite 160
MERV5	SF TwinFresh Elite Eco (E) MERV5 (2 pcs.)
MERV8	SF TwinFresh Elite Eco (E) MERV8 (2 pcs.)



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