# ECO 375

- Focus on energy optimisation
   low energy consumption
- Compact installation dimensions
- Built in preheater and water level switch optional



The ECO 375 is a ventilation system for heat recovery with a high-efficiency countercurrent exchanger with a temperature recovery rate of up to 96% and fans with energy-saving EC motors. The ECO 375 is typically used in homes or small businesses where the emphasis is on comfort and low energy consumption.

The ECO 375 is suitable for installation in larger homes or smaller business premises with an area of up to  $350\,\mathrm{m^2}$ . The ECO 375 stands out by being particularly energy-optimised and adapted to the stringent requirements of the BR18 low-energy class. Despite the compact installation dimensions, adapted to a standard  $60x60\,\mathrm{cm}$  module, the performance of the ECO 375 matches systems with a significantly larger footprint. As standard, the ECO 375 is supplied with G4/Coarse filters on the outdoor air intake and on the exhaust air (the F7/ePM1 filter is supplied as an accessory).

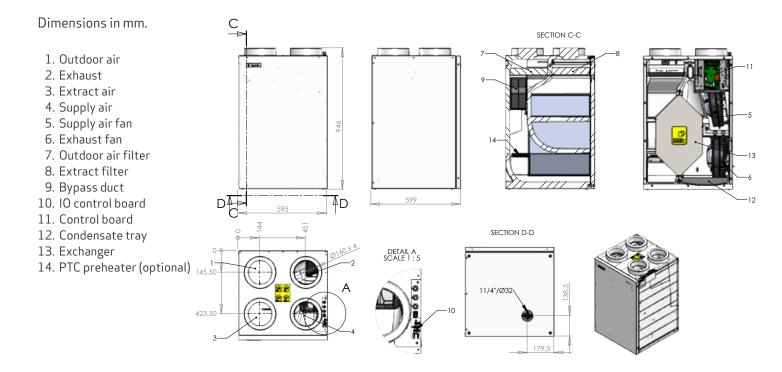
For the ECO 375, a built-in 1200 watt electric preheating surface can be selected as an accessory, ensuring a balanced air supply even in very cold outdoor temperatures and with a minimal energy supply. A built-in condensate water level switch can also be selected, which switches off the ventilation system in the event of problems with the condensate drain and gives an alarm via the display.

## The system comes with an Optima 270 control:

- Passive comfort cooling with fully automatic 100% bypass.
- Reduced energy consumption by means of modulating humidity control and calendar programme.
- Connection of electric preheating or post-heating surface, which adjusts the temperature according to need.
- Can be connected to a BMS system via Modbus communication.
- Integrated RJ45 connection on the control board for cloud connection of the system.
- Can be used without a display or with the option to connect either of two display types (Basic/Touch).
- Built-in data logging and the option of remote monitoring.



## Dimensional sketch



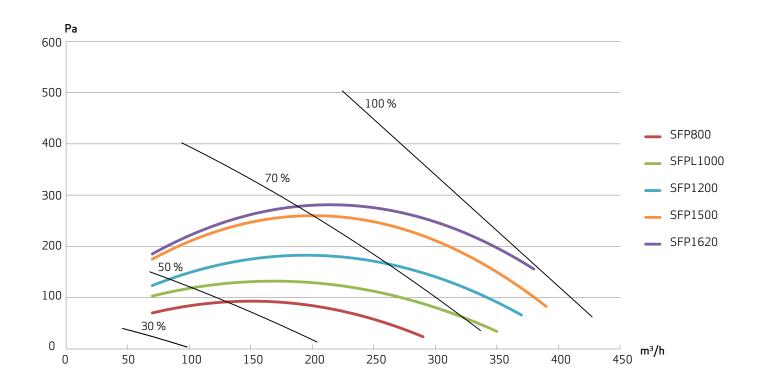
## Technical data

	ECO 375						
Electrical connection	1 x 230V + N + PE 10 A, 50 Hz						
Fans	Ø175 mm backward-curved blades						
Engine	EC motor with integrated electronics						
Insulation class for fan	В						
Fan protection class	IP 54						
Fan speed	3740 rpm						
Recorded power (max. per motor)	85 W						
Power consumption for fan	0.8 A						
Dimensions (h x l x d) excl. connectors	895x595x596 mm						
Cabinet	Exterior: Galvanised steel sheet, 0.7 mm powder-coated Interior: Neoprene/EPS						
Duct connection	Ø160 mm						
Front	Exterior: Galvanised steel sheet, 0.7 mm powder-coated Interior: Neoprene/EPS						
Wall mounting	Wall bracket with 6.5 mm holes						
Countercurrent heat exchanger	Aluminium, PET plastic or enthalpy						
Working range, countercurrent exchanger	-20°C to +50°C						
Condensate drain	32 mm ABS						
Filters	G4/Coarse (outdoor air/exhaust air) - F7/ePM1 (accessory)						
Sound pressure level (Lp) at 1 m.	45 dB(A) @ 229 m3/h, 50 Pa						
Weight	40 kg						
Energy class	А						

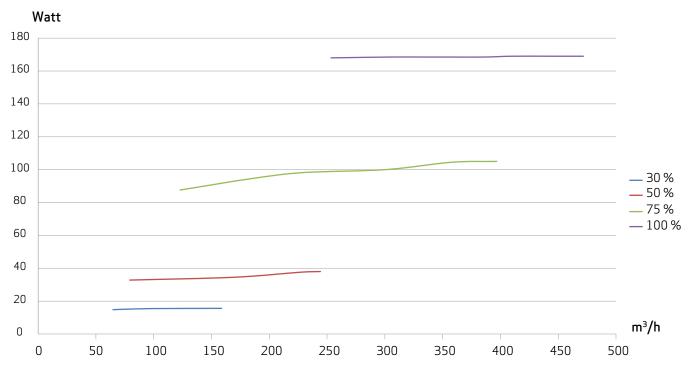
## Capacity

The capacity lines are based on an average value of supply air and exhaust air volumes in a unit. The graphs indicate the average external pressure available at a given air volume. Power consumption for control is not included in the SFP value (approx. 6 watts).

SFP factors ECO 375 - measured according to EN13141-7 (G4/G4:ALU)



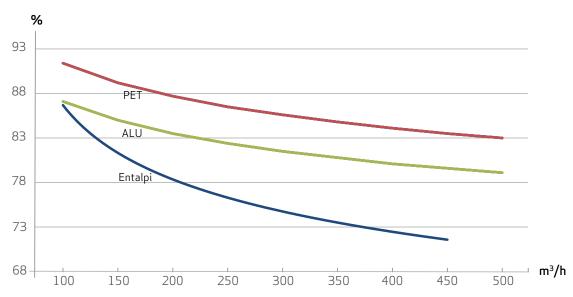
### Power consumption



# Temperature efficiency

"Dry" temperature efficiency at the same air flow on the outdoor air and exhaust air side. No account has been taken of any icing on the heat exchanger at low outdoor temperatures.

## Temperature efficiency according to EN13141-7



# Audio data - ECO 375

Air volume	Pressure			Frequency/Hz									
(m3/h)	(Pa)			63	125	250	500	1000	2000	4000	8000	Total	
126		Sound level Lw dB(A)	Supply air	58.2	63.6	69.2	64.6	60.0	53.4	43.1	28.6	65.6	
	70		Exhaust air	51.7	46.2	45.2	37.8	28.4	23.0	14.0	12.1	39.2	
			Outdoor air	46.8	48.5	44.8	41.3	40.1	32.3	25.1	15.5	39.9	
			Exhaust	56.6	60.6	64.7	61.7	51.6	45.4	36.2	21.7	60.4	
		Sound pressure level Lp dB(A) $@1$ m.	Cabinet									33.5	
	100	Sound level Lw dB(A)	Supply air	59.8	65.4	65.4	64.5	60,5	53.5	44.0	29.9	65.3	
			Exhaust air	52.3	46.6	45.7	39.4	31.5	24.4	15.1	12.1	40.2	
			Outdoor air	50.9	49.7	49.6	46.4	39.7	29.7	20.0	15.9	46.7	
			Exhaust	55.9	58.2	63.0	60.8	54.3	47.9	39.3	23.3	60.3	
		Sound pressure level Lp dB(A) @ 1 m.	Cabinet									34.8	
		Sound level Lw dB(A)	Supply air	57.5	63.8	68.0	65.4	61.6	56.7	47.8	35.0	67.2	
			Exhaust air	52.9	46.3	44.6	36.9	28.4	25.0	14.7	13.9	39.0	
	70		Outdoor air	49.3	47.5	51.5	45.2	37.4	30.3	19.5	12.9	46.0	
			Exhaust	57.0	60.9	66.2	61.4	53.9	48.6	39.1	24.1	61.6	
162		Sound pressure level Lp dB(A) @ 1 m.	Cabinet									34.9	
102	100	Sound level Lw dB(A)	Supply air	56.7	62.1	66.8	64.2	59,9	55.2	46.8	32.6	65.4	
			Exhaust air	53.3	47.5	48.5	39.9	31.9	26.8	18.1	12.2	41.6	
			Outdoor air	50.3	48.7	52.7	47.2	41.1	32.9	23.1	13.1	48.4	
			Exhaust	57.5	58.5	65.5	62.1	56.8	49.2	42.3	27.5	62.6	
		Sound pressure level Lp dB(A) @ 1 m.	Cabinet									35.4	
	70	Sound level Lw dB(A)	Supply air	60.7	65.5	73.0	68.6	64.2	60.8	54.8	41.6	71.3	
216			Exhaust air	50.6	47.5	45.1	40.8	34.2	30.1	20.3	13.0	42.3	
			Outdoor air	50.9	48.2	53.4	48.8	43.8	34.9	26.3	17.0	50.0	
			Exhaust	57.7	62.1	69.8	64.9	57.4	53.8	47.3	32.3	65.5	
		Sound pressure level Lp dB(A) @ 1 m.	Cabinet									36.2	
	100	Sound level Lw dB(A)	Supply air	60.1	66.9	74.2	71.4	66.7	63.5	55.6	42.7	72.7	
			Exhaust air	49.8	48.1	46.0	42.2	36.7	32.2	22.2	12.6	43.3	
			Outdoor air	49.1	50.0	57.1	49.8	40.4	38.5	31.2	20.6	51.7	
			Exhaust	57.5	60,5	66.9	61.9	55.4	51.7	43.2	30.0	63.5	
		Sound pressure level Lp dB(A) @ 1 m.	Cabinet									37.3	
250	150	Sound level Lw dB(A)	Supply air	64.6	68.6	72.3	72.3	68.7	64.1	57.1	46.3	73.8	
			Exhaust air	53.0	51.8	56.1	49.4	45.9	40.1	30.2	16.5	52.2	
			Outdoor air	56.2	54	60.6	58.3	47.7	41.4	32.9	30.2	58.4	
			Exhaust	62.2	63.9	69.2	67.2	61.6	57.6	50.0	38.2	68.2	
		Sound pressure level Lp dB(A) @ 1 m.	Cabinet									42.2	
	200	Sound level Lw dB(A)	Supply air	62.8	69.6	69.7	71.2	67.1	64.4	57.3	47.0	72.2	
			Exhaust air	53.8	51.9	55.1	50.4	46.6	43.2	34.9	20.9	52.9	
			Outdoor air	54.2	52.5	57.4	56.9	50.0	45.4	37.4	24.8	56.8	
			Exhaust	63.7	66.6	69.0	67.1	63.4	59.5	54.1	41.1	69.0	
		Sound pressure level Lp dB(A) @ 1 m.	Cabinet									44.5	

## Automatic control

The ECO 375 comes with the Optima 270 automatic control.

The Optima Control comes with a factory setting, which makes it possible to put the system into operation without first having to configure the system's operating menu.

The factory setting is just a basic setting that can be changed to match your operational desires and requirements for your home.

# The ECO 375 can be supplied with the following accessories:

- Genvex fire and district heating control.
- Water-based post-heating surface, incl. motor valve, or electric heating surface for installation in ventilation duct.
- Brine-based preheating/cooling surface.
- Integrated electric preheating surface.
- Optima Basic or Optima Touch control panel.
- Wireless CO<sub>2</sub> sensors.
- Condensate level switch.

# Control panel - Optima Touch



# So

#### Speed

With this function, it is possible to set the fan speed in steps 0-1-2-3-4.



### Extended operation

With this function, it is possible to set the timer for forced operation for between 0 and 9 hours.



### Lock display

This function locks the display for 5 seconds. Typically used when wiping down the display



### Main menu

With this function, it is possible to enter the main menu, where you will find the following sub-items: calendar, user menu, display, information menu and service menu.



### Information

With this function, it is possible to get a good overview of the system's current operating condition, e.g. temperature, fan setting, relay status/functions, alarm, timer, etc.



#### Temperature

With this function, it is possible to set the desired temperature.

