ECO 300

- Lightweight construction for easier installation
- Compact and energy efficient
- Low heat loss due to high thermal insulation

ECO 300 is a ventilation system with heat recovery with a highly efficient counter flow exchanger that has a temperature recovery rate of up to 94% and fans with energy-saving EC motors. ECO 300 is typically used in homes where the emphasis is on comfort and low energy consumption.

ECO 300 stands out by being particularly energy-optimised. The ventilation system is particularly suitable in unheated rooms such as unused roof spaces due to the high degree of thermal insulation. The system comes with G4/Coarse filters on the outdoor air intake and exhaust as standard (M5/F7 filter available as an add-on accessory).

ECO 300 can be equipped with a heat exchanger made from PET (plastic) or an enthalpy heat exchanger where, in addition to heat recovery, it is also possible to recover moisture from the exhaust air in the home.

The system comes with Optima 270 control:

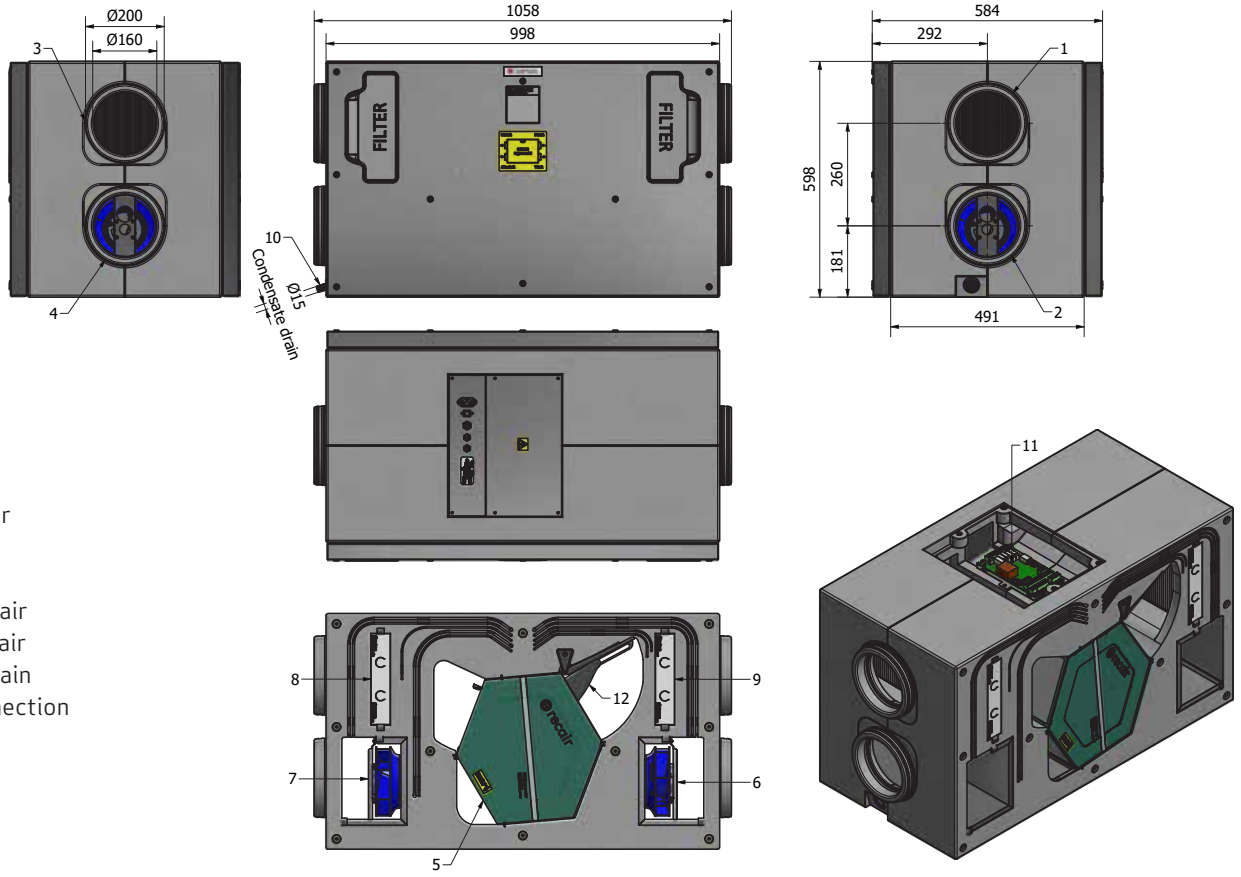
- Passive comfort cooling with fully automatic 100% bypass.
- Reduced energy consumption by means of modulating humidity control and calendar programming.
- Connection of electric preheating or post-heating surface, which adjusts the temperature according to requirements.
- Can be connected to a BMS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

Please note that displays are sold separately.

Dimensional sketch

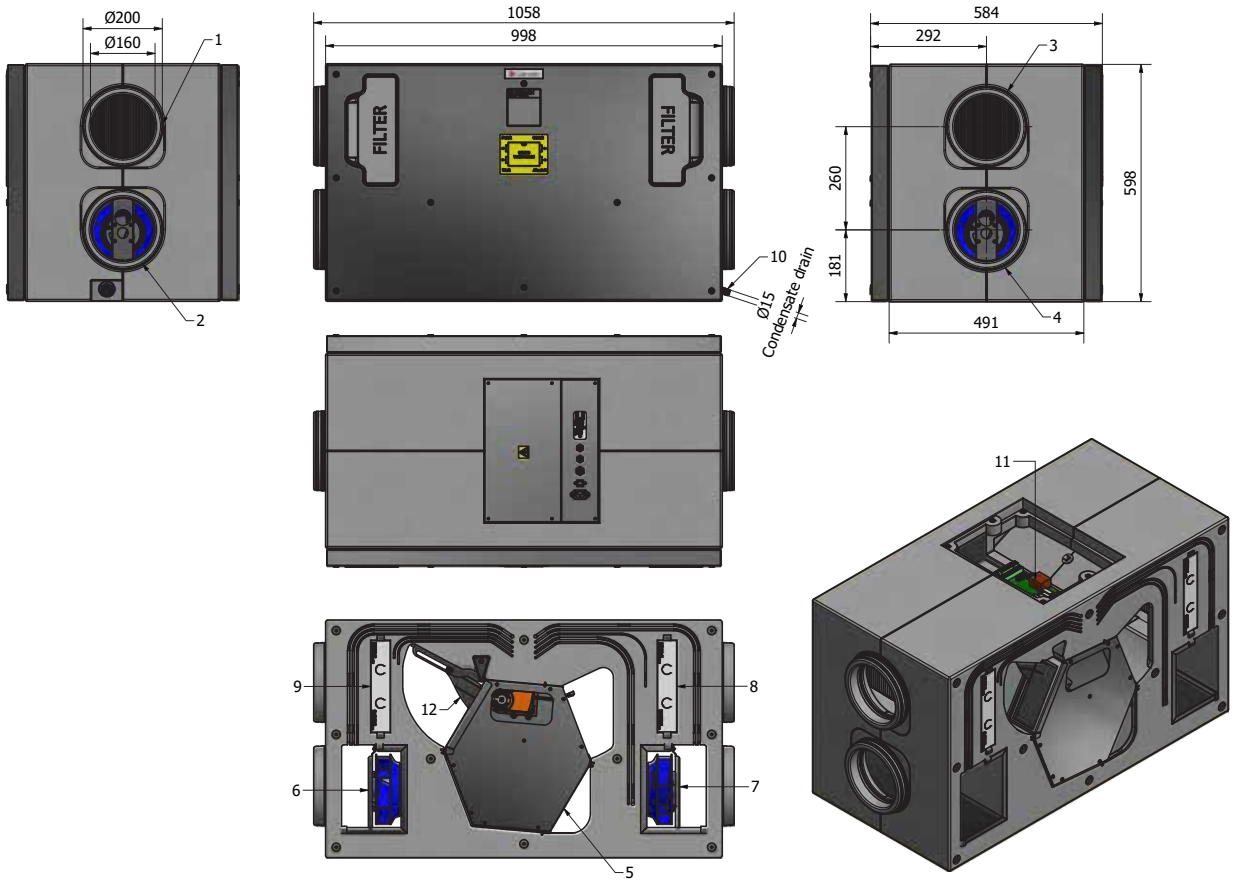
Right-facing

Dimensions in mm



1. Outdoor air
2. Exhaust air
3. Extract air
4. Supply air
5. Heat exchanger
6. Supply air fan
7. Exhaust fan
8. Filter outdoor air
9. Filter exhaust air
10. Condensate drain
11. Electrical connection
12. Bypass

Left-facing



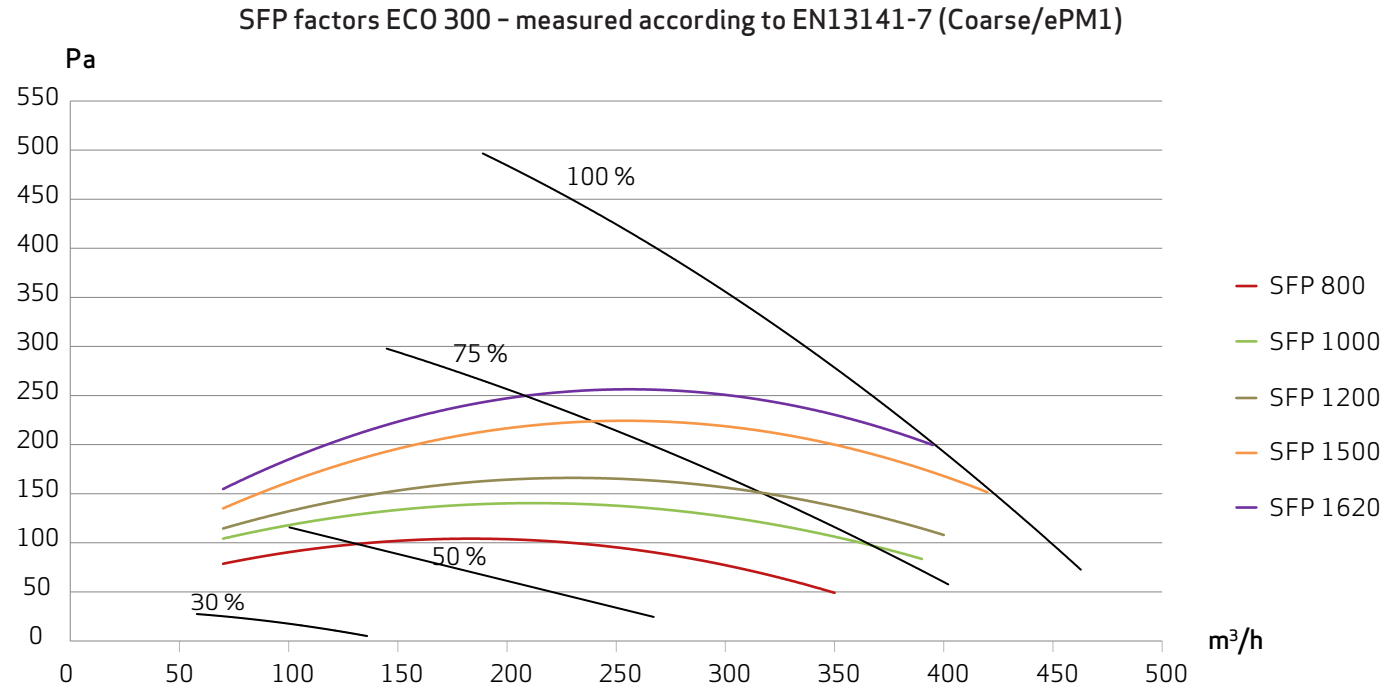
Technical data

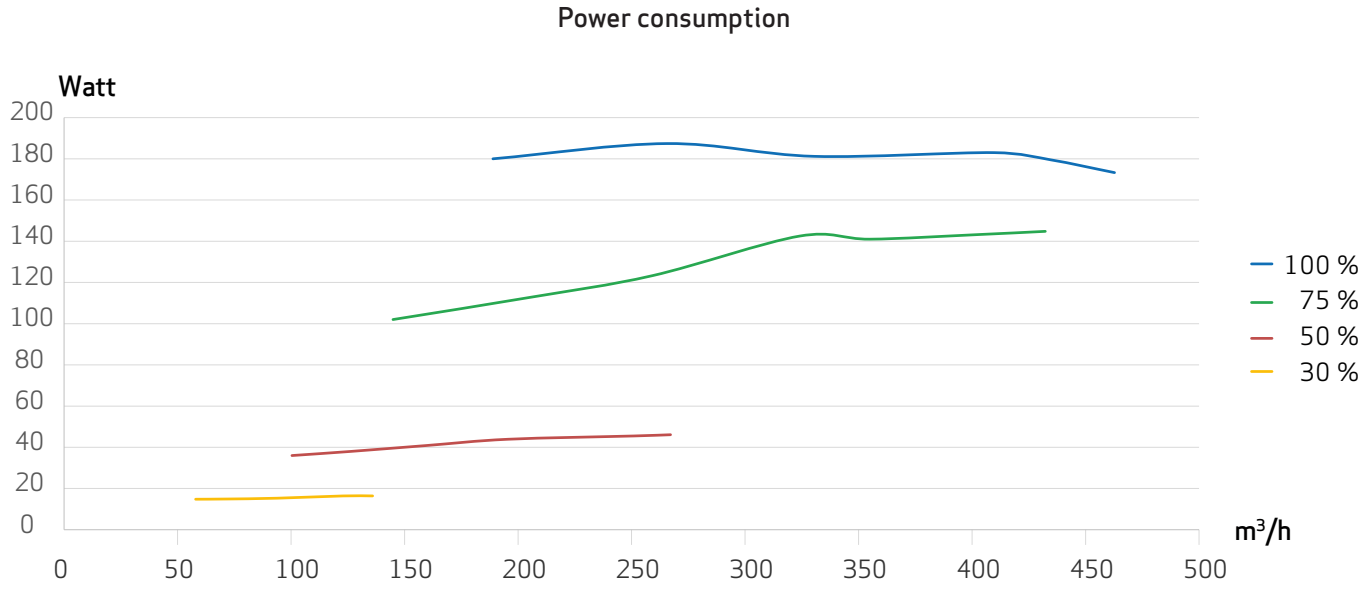
	ECO 300
Electrical connection	1 x 230V + N + PE 10 A, 50 Hz
Fans	Ø180 mm backward curved blades
Motor	EC motor with integrated electronics
Insulation class for fan	B
Fan protection class	IP 44
Fan speed	3,570 RPM
Absorbed power (max. per motor)	90 W
Power consumption for fan	0.9 A
Dimensions (L x W x H) incl. connecting pipes	1058 x 584 x 598 mm
Cabinet	EPP 40 mm
Duct connection	External Ø200/internal Ø160
Front/rear cover	Exterior: Galvanised sheet metal 0.9 mm Interior: EPP 40 mm/PE gasket
Installation	Horizontal installation on the floor – right/left.
Counter flow heat exchanger	PET plastic and enthalpy
Working range, counter flow exchanger	-20°C to +50°C
Condensate drain	15 mm ABS
Filters	G4/Coarse (outdoor air/exhaust air) – F7/ePM1 (accessory)
Sound pressure level (Lp) at 1 m.	55 dB(A) @ 311 m³/h, 100 Pa
Weight	35 kg with front/rear doors and 22 kg without front/rear doors
Degree of thermal insulation	U=0.87 w/m2xK (class T2 according to EN1886)
Energy class	A

Capacity

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

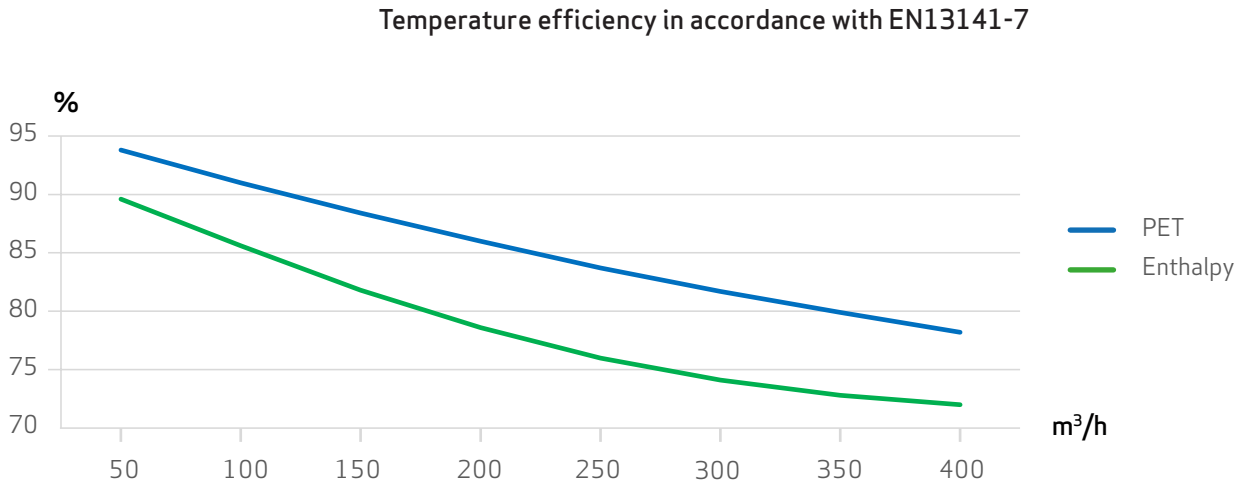
The capacity lines do not change when using an enthalpy heat exchanger instead of a plastic heat exchanger.





Temperature efficiency

"Dry" temperature efficiency in accordance with EN 13141-7 and identical air flow on the outdoor air and exhaust air side. This does not account for any ice that may accumulate on the heat exchanger at low outdoor temperatures.



Sound data

Airflow (m3/h)	Pressure (Pa)			Frequency/Hz								
				63	125	250	500	1000	2000	4000	8000	Total
126	70	Sound power level Lw dB(A)	Supply air	42,8	53,4	55,1	52,2	55,9	55,8	48,3	32,4	62,8
			Exhaust	28,3	42,9	46,1	42,9	40,7	32,5	21,9	18,8	49,6
			Outdoor	24,0	41,7	44,9	42,2	40,0	34,2	23,4	19,4	50,3
			Extract	37,1	48,7	49,6	49,1	53,8	52,4	43,4	27,6	59,7
		Sound pressure level Lp dB(A)@ 1 m.	**Cabinet**									**38,6**
	100	Sound power level Lw dB(A)	Supply air	42,27	55,35	56,73	55,4	58,3	57,8	50,6	35,9	65,1
			Exhaust	26,71	43,46	48,27	45,9	42,8	33,9	22,9	19,5	53,2
			Outdoor	25,26	42,95	49,0	44,6	43,0	36,8	26,3	20,7	53,4
			Extract	39,52	54,55	53,4	53,3	56,6	55,9	47,7	32,0	63,6
		Sound pressure level Lp dB(A)@ 1 m.	**Cabinet**									**40,8**
162	70	Sound power level Lw dB(A)	Supply air	47,8	54,6	57,6	53,0	57,2	57,0	49,3	33,8	64,8
			Exhaust	23,4	39,2	46,6	42,5	40,9	33,2	22,0	18,8	50,8
			Outdoor	24,1	39,6	46,7	41,7	41,4	35,9	25,8	20,7	51,0
			Extract	43,1	50,7	52,8	51,0	56,4	56,2	48,0	31,5	62,9
		Sound pressure level Lp dB(A)@ 1 m.	**Cabinet**									**38,6**
	100	Sound power level Lw dB(A)	Supply air	48,38	52,75	57,06	56,3	59,9	59,9	52,8	38	66,3
			Exhaust	24,89	41,82	48,95	46,2	44,4	36,2	23,8	18,6	53,7
			Outdoor	25,22	40,52	50,19	45,6	44,3	38,2	26,7	19,6	54,2
			Extract	43,17	51,05	53,77	54,3	58,7	58,3	50,8	35	64,9
		Sound pressure level Lp dB(A)@ 1 m.	**Cabinet**									**40,7**
216	70	Sound power level Lw dB(A)	Supply air	53,7	56,3	59,5	55,9	60,7	61,3	54,1	39,4	68,1
			Exhaust	27,5	38,9	50,9	44,8	44,6	37,2	24,7	18,9	54,4
			Outdoor	27,6	38,4	57,0	44,7	44,5	39,5	27,8	19,7	59,3
			Extract	48,6	50,6	53,8	54,0	59,8	60,5	53,3	36,7	66,3
		Sound pressure level Lp dB(A)@ 1 m.	**Cabinet**									**40,8**
	100	Sound power level Lw dB(A)	Supply air	54,47	57,64	66,47	57,9	62,0	62,5	55,7	41,0	71,2
			Exhaust	28,27	39,83	54,13	48,3	46,8	39,2	26,7	19,0	57,5
			Outdoor	32,59	39,89	52,8	46,1	45,8	40,6	29,6	20,7	56,2
			Extract	48,95	51,95	60,55	56,5	62,3	62,5	55,8	39,6	69,1
		Sound pressure level Lp dB(A)@ 1 m.	**Cabinet**									**42,9**
250	150	Sound power level Lw dB(A)	Supply air	57,2	62,0	66,5	63,3	65,6	66,3	60,7	47,0	73,9
			Exhaust	31,4	42,4	54,4	50,8	50,7	43,6	31,5	20,9	58,8
			Outdoor	31,1	41,5	57,1	50,3	50,2	44,9	34,0	21,7	60,4
			Extract	53,9	56,4	61,5	60,3	65,5	66,3	60,5	44,9	72,4
		Sound pressure level Lp dB(A)@ 1 m.	**Cabinet**									**46,6**
	200	Sound power level Lw dB(A)	Supply air	58,44	62,34	67,58	65,0	67,8	68,7	63,3	50,2	75,6
			Exhaust	34,19	43,21	56,7	53,9	53,3	47,9	37,1	24,2	61,5
			Outdoor	31,35	43,48	57,62	53,5	52,8	48,0	37,4	24,0	61,9
			Extract	54,98	58,13	63,04	62,9	67,3	68,3	62,7	47,7	74,4
		Sound pressure level Lp dB(A)@ 1 m.	**Cabinet**									**55,2**

Automatic control

ECO 300 comes with Optima 270 automatic control. The Optima control features a factory setting that makes it possible to put the system into operation without first having to set the system's operating parameters. The factory setting is only a basic setting, which can be changed according to your operational wishes and needs for your home.

ECO 300 can be delivered with the following add-ons:

- Genvex Fire Automation.
- Water-based post-heating surface incl. motor valve for installation in ventilation duct.
- Electric pre-heating surface and electric post-heating surface for installation in ventilation duct (pre-heating surface can be delivered factory-mounted and integrated into the machine).
- Wireless demand control kit that measures individual rooms (CO_2).
- Level switch for condensate.
- Optima Basic or Optima Touch control panel.

Control panel

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.

Contact us

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