

ERV EC D 80

Energy Recovery Ventilator

ERV EC D 80 is a complete whole house ventilation system designed to bring a continuous supply of fresh air into the house while exhausting an equal amount of stale air.
Five year warranty.



Casing

- Steel casing is covered with high-quality multilayer aluminum and zinc alloy to prevent corrosion.
- The casing is equipped with a switch to turn the ventilator off when the service panel is opened.

Filter

- Washable MERV 6 air filters in exhaust and supply air streams.
- Optional supply: anti grease aluminum filter.

Fans

- High efficient electronically commutated motors with external motor and impeller with backward curved blades. EC motors are featured with high performance and total speed controllable range. The electric motors and impellers are dynamically balanced.

Energy Recovery Core

- Enthalpic core provides both heat&humidity recovery. For enthalpic core no drain required.



Defrost System

- To protect the Energy Recovery Core, an antifreeze electronic protection system is applied. It switches the supply fan off according to the temperature sensor settings. Warm extract air defrosts the ERV core then the supply fan switches on and the ventilator continues operating under rated conditions.

Suitable for

- Bathroom / kitchen / apartments / cottages / small offices.

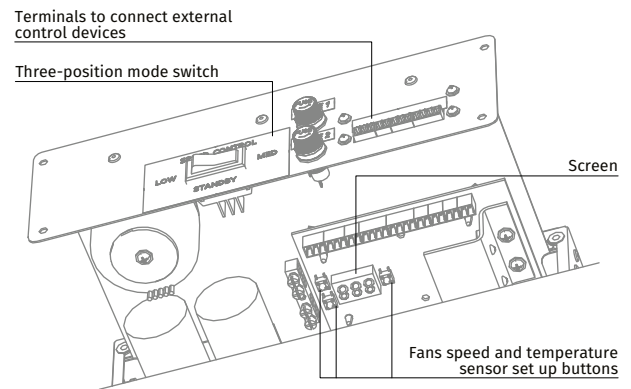
Constant Flow

- ERV EC D 80 CF** has an automatic constant air flow control function to keep the air flow in supply and exhaust air ducts constant even in case of variable air resistance.
- This function is provided with the integrated air flow control units. The electronic sensors convert the actual air flow to the analogue signal that is proportional to the air flow in the air duct. These signals are transmitted to the controller that controls the rotation speed of a respective fan in such a way that the actual rotations speed is equal to the set value.

Manual Balancing

- Manual balancing is a standard balancing system. Fan speed manually adjusted by operating on units controller (built-in control board with independent fan speed adjustment 0 %-100 %).

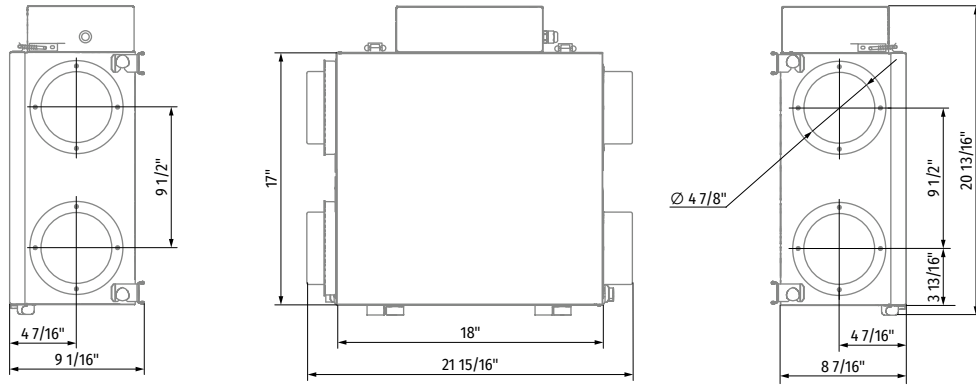
Control Board



- The unit incorporates an integrated control system with following functions:
 - Operation mode switch.
 - Air flow balancing enabled by supply and exhaust fan independent speed adjustment from 0 to 100 % (percentage is displayed on built-in screen).
 - Automatic recovery core frost protection.
 - External control device connection (up to 5 at the same time).

MODEL	QUANTITY	COMMENTS	PROJECT
			location:
			architect:
			engineer:
			contractor:
			submitted by:

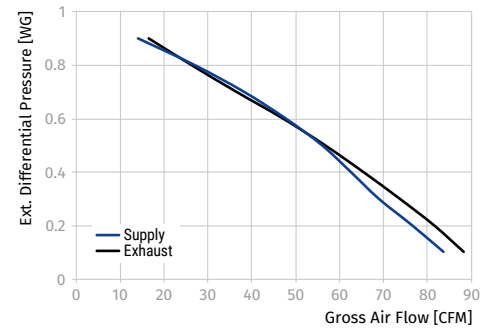
Dimensions



Technical Data

External Static Pressure		Net Supply Air Flow		Gross Air Flow				Power
Pa	in WG	l/s	CFM	Supply		Exhaust		Watts
				l/s	CFM	l/s	CFM	
25	0.1	38	81	40	84	42	88	61
50	0.2	35	74	36	76	38	81	61
75	0.3	32	67	33	69	35	74	61
100	0.4	29	61	30	63	31	65	60
125	0.5	26	54	26	56	27	57	61
150	0.6	22	46	23	48	22	47	60
175	0.7	17	37	18	38	17	36	58
200	0.8	12	26	13	27	12	26	59
225	0.9	8	16	7	14	8	17	55

Note: fan curve performed on high speed



Energy Performance

		Supply Temperature		Net Air Flow		Average Power [Watts]	Sensible Recovery Efficiency	Apparent Sensible Effectiveness	Net Moisture Transfer
		°C	°F	l/s	CFM				
Heating	I	0	32	20	42	25	73	82	0.46
	II	0	32	25	53	38	69	79	0.47
	III	0	32	30	63	49	68	78	0.45
	IV								
	V	-25	-13	20	42				
				**Total Recovery Efficiency					
Cooling	VI	35	95	20	42	25	54.5**	72	0.49

Model	Volts	Max. Watts	Max. Amps
ERV EC D 80	120 V, 60 Hz	61	0.9

** Indicates total recovery efficiency, not sensible recovery efficiency 250 Pa = 1 in of water: 0.472 l/s = 1 CFM

