HRV D 120

Heat Recovery Ventilator

HRV D 120 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

- The unit is equipped with supply and exhaust centrifugal fans with forward curved blades and built-in thermal overheating protection with automatic restart. The electric motors and impellers are dynamically balanced.

Heat Recovery Core

- Polystyrene core ensures efficient heat recovery.

Defrost System

- To protect the Heat 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 HRV core then the supply fan switches on and the ventilator continues operating under rated conditions.

Suitable for

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

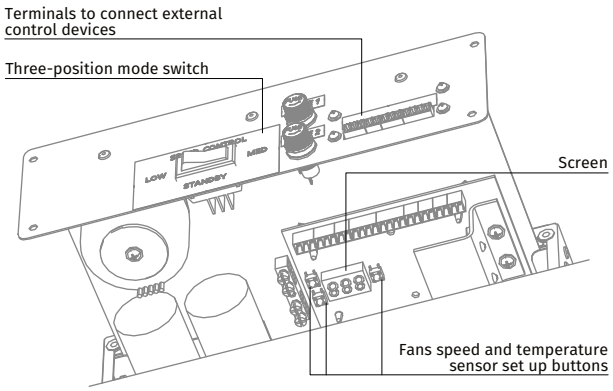
Constant Flow

- **HRV D 120 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 %).

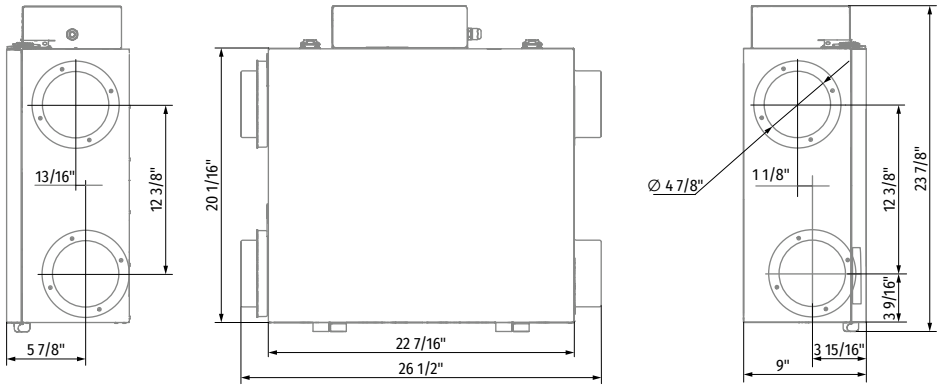
Control Board



- 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:

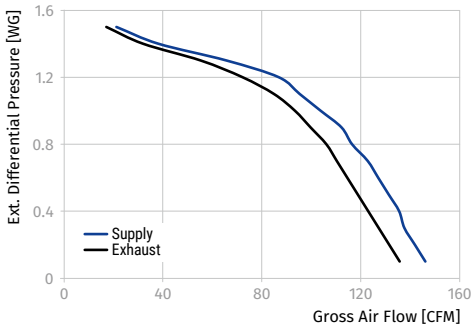
Dimensions



Technical Data

External Static Pressure		Net Supply Air Flow		Gross Air Flow				Power
				Supply		Exhaust		
Pa	in WG	l/s	CFM	l/s	CFM	l/s	CFM	Watts
25	0.1	67	142	69	146	64	136	158
50	0.2	65	138	67	142	62	131	157
75	0.3	63	134	65	138	60	127	156
100	0.4	62	132	64	136	58	123	155
125	0.5	60	127	62	131	56	119	153
150	0.6	58	123	60	127	54	114	152
175	0.7	56	119	58	123	52	110	151
200	0.8	53	113	55	117	50	106	149
225	0.9	51	109	53	112	47	100	148
250	1	48	101	49	104	44	93	146
275	1.1	44	92	45	95	40	85	143
300	1.2	40	84	41	87	34	72	141
325	1.3	30	64	31	66	26	55	135
350	1.4	17	37	18	38	15	32	130
375	1.5	10	21	10	21	8	17	128

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	30	64	86	60	70	0.05
	II	0	32	45	95	114	57	67	0.04
	III	0	32	50	106	126	55	65	0.04
				**Total Recovery Efficiency					
Cooling	VI	35	95	30	64	86	29**	61	0.04

Model	Volts	Max. Watts	Max. Amps
HRV D 120	120 V, 60 Hz	158	1.3

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