ERVXXLHB1210
Performance™ Fresh Air Systems – 210 CFM

Turn to the experts

Product Data

A230316CA

- 65 to 206 CFM [31 to 97 L/s] @ 0.4 in. w.g.
- 65 to 199 CFM [31 to 94 L/s] @ 0.6 in. w.g.

Advanced residential fresh air system, created to offer a universal platform specifically designed for quick and easy installation while delivering constant fresh air to the home.

- Airflow calibration and auto-balancing are achieved quickly and maintained throughout the life of the product
- Select the desired CFM (from 65 to 210 CFM) using the integrated LCD screen. The airflow is then set up automatically
- Integrated electronic airflow measurement device with real time LCD
- Integrated diagnostic tool
- PMSM ECM motors for very low power consumption
- Recirculate air within the dwelling with recirculation mode using a main wall control (use with setup T-1, T-2 and T-3 only)
- Suspended installation (chains included)
  OR
- Wall-mount installation (universal brackets included)
  – installation with 2 brackets or 4 brackets

CORE

- Polypropylene crossflow core with polymeric membrane and aluminum covers, impact resistant, non washable
- Dimensions: 12" x 12" x 13" (30.5 cm x 30.5 cm x 33 cm)

FILTERS

- MERV 8 grade washable standard filter (included)
- Optional MERV13 grade filter part no. SV24300

OPTIONS

- Compatible with the Tandem transition (part no. KVAAC0101HCO) (for units producing up to 110 CFM [52 L/s] only)

UNIT DESCRIPTION

- SRE of 78% at 0°C (81 CFM, 38 L/s), and 65% at -25°C (83 CFM, 39 L/s), and 81% at 0°C (64 CFM, 30 L/s)
- Ports size: 6 in.
- Recirculation Defrost
- Corrosion resistant galvanized cabinet
- One-piece molded insulation shell, no air leakage (expanded polystyrene; UL 94 HF-1 certified)
- Constant airflow and auto-balancing device
- Motorized dampers (no additional backdraft dampers required)
- No drain required
- 120V, 60 Hz, 3.6 A, 270 W with 6 foot power cord

A200636B

CONTROLS

NOTE: Do not connect the Infinity® System Control directly to the ventilator, as that may cause damage. If you have an Infinity® System Control use one of the optional Main Wall Controls.

If you want the Infinity® System Control to control the ventilator, then you must use a NIM (Network Interface Module) P/N SYSTXCCNIM01 and a Translator Board P/N SYSTXXXTRB01 in order for the System Control to communicate properly. If using the Infinity® Zoning Panel P/N SYSTXCC4ZC01 with the ventilators you must use the Translator Board to communicate between the Zoning Panel and the ventilator. See Table 2 for NIM and TRB requirements for newest ERV and HRV models. See the Installation Manual for wiring diagrams.

Please do not connect the Network Interface Module (NIM) or the Infinity® Zoning Panel to the two terminal blocks on the new ventilator. The new ventilator terminals do not match up to the NIM or Infinity® Zoning Panel terminals. Connecting the two controls may cause damage.

A200612CA

There are 4 optional main controls and 1 optional auxiliary control available. Refer to the applicable Wall Control specification sheet for more information.

NOTE: These controls are compatible only with the latest versions of ERV and HRV ventilators. Older controls will not work with the newest ventilators.

Manufacturer reserves the right to change, at any time, specifications and designs without notice and without obligations.

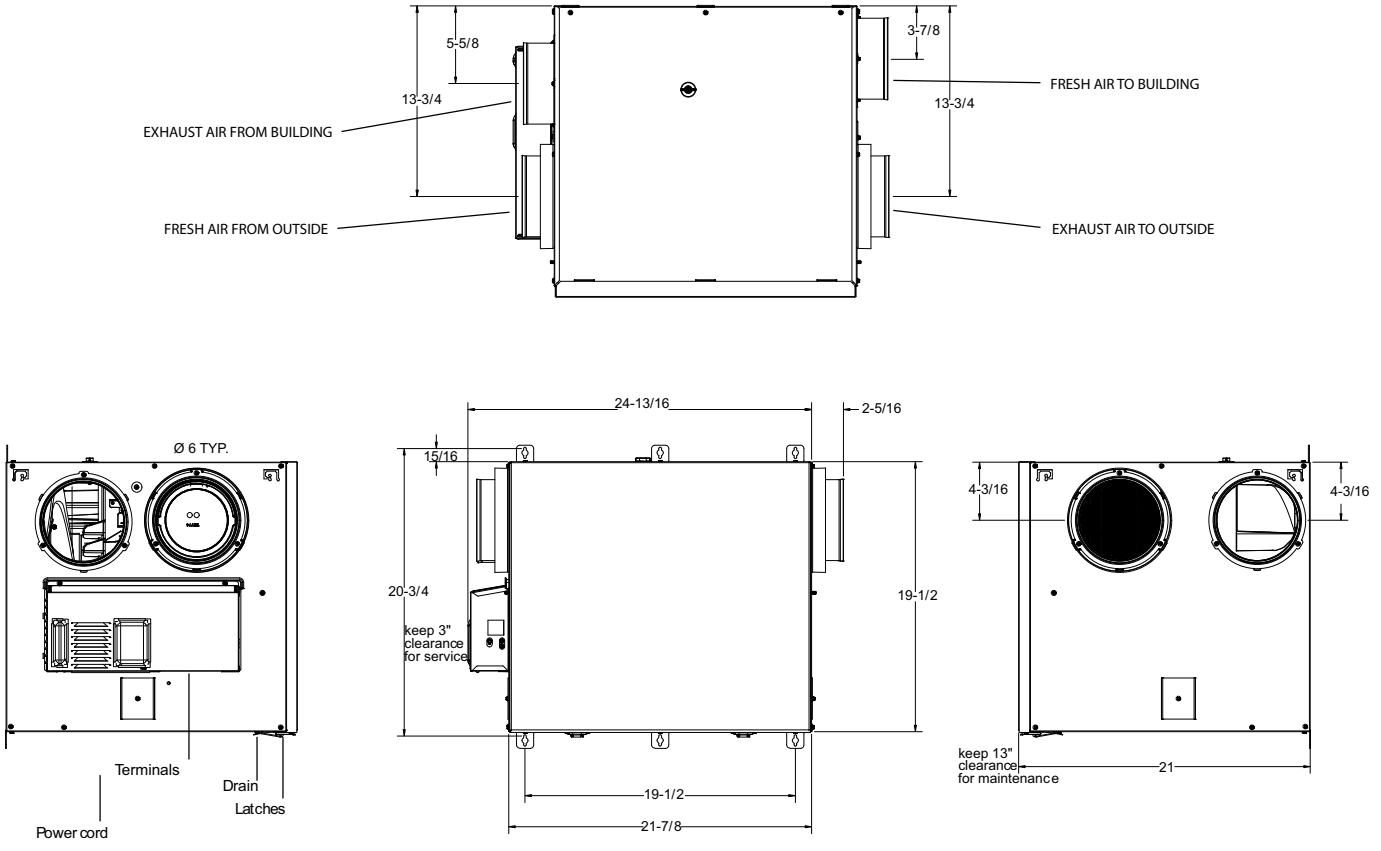
Table 1 – Controls

Control Name	Description of Modes	Model #
Premium	Touch Screen, Auto 2.0 Fully Configurable, Multiple Modes	KVACN0101CPC
Automatic	Auto 1.0, Filter Alert	KVACN0101CAC
Dehumidistat	Humidity Sensor / Selection	KVACN0101CDH
Speed Selector	5 Operating Time Periods	KVACN0101CSS
AuxiliaryBathroom Override	20 - 40 - 60 min. Settings	KVACN0101CBO

Table 2 – NIM and TRB Requirements for Newest ERV/HRV

Infinity® System Control	ERV Product	HRV Product	Network Interface Module SYSTXCCNIM01	Translator Board SYSTXXXTRB01
SYSTXCCITC01-B/C SYSTXCCWIC01-B SYSTXCCICFO1-B SYSTXCCWIF01-B	ERVXXSVA1130	HRVXXSVA1130	Required	Required
	ERVXXSHA1130	HRVXXSHA1130	Required	Required
	ERVXXSVB1145	HRVXXSVA1160	Required	Required
	ERVXXSHB1145	HRVXXSHA1160	Required	Required
	ERVXXSVA1150	HRVXXSVB1160	Required	Required
	ERVXXSHA1150	HRVXXSHB1160	Required	Required
	ERVXXLHB1210	HRVXXLHB1230	Required	Required
Infinity® Zone Panel	**ERV Product**	**HRV Product**	**Network Interface Module SYSTXCCNIM01**	**Translator Board SYSTXXXTRB01**
SYSTXCC4ZC01	ERVXXSVA1130	HRVXXSVA1130	Not Required	Required
	ERVXXSHA1130	HRVXXSHA1130	Not Required	Required
	ERVXXSVB1145	HRVXXSVA1160	Not Required	Required
	ERVXXSHB1145	HRVXXSHA1160	Not Required	Required
	ERVXXSVA1150	HRVXXSVB1160	Not Required	Required
	ERVXXSHA1150	HRVXXSHB1160	Not Required	Required
	ERVXXLHB1210	HRVXXLHB1230	Not Required	Required

DIMENSIONS

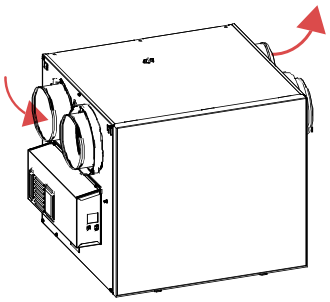


A230239

- Total assembled weight (core included) - approx 47 lb. (21.4 kg)
  Shipping weight - approx 55 lb. (25 kg)

DEFROST SYSTEM

No negative pressure is created by air exhausted to the outdoors since the air is recirculated into the house, helping to prevent any backdraft. Defrost is activated at a temperature of -5°C (23°F) and lower as specified. See Table 3.



A230240

Table 3 – Defrost Settings

FACTORY SETTING	OUTDOOR TEMPERATURE*					
	-5°C TO -15°C 23°F TO 5°F		-15°C TO -27°C 5°F TO -17°F		-27°C AND LESS -17°F AND LESS	
CFM	AIR EXCHANGE IN MINUTES	DEFROST IN MINUTES	AIR EXCHANGE IN MINUTES	DEFROST IN MINUTES	AIR EXCHANGE IN MINUTES	DEFROST IN MINUTES
0 to 59	25	6	14	5	13	7
60 to 104	25	6	15	5	14	7
105 and more	15	6	10	5	9	7
PLUS	**OUTDOOR TEMPERATURE***					
	-5°C TO -15°C 23°F TO 5°F		-15°C TO -27°C 5°F TO -17°F		-27°C AND LESS -17°F AND LESS	
CFM	AIR EXCHANGE IN MINUTES	DEFROST IN MINUTES	AIR EXCHANGE IN MINUTES	DEFROST IN MINUTES	AIR EXCHANGE IN MINUTES	DEFROST IN MINUTES
0 to 59	25	7	14	7	12	8
60 to 104	25	7	15	7	13	8
105 and more	15	7	10	7	9	8
*Outdoor temperature is read by a thermistor located inside the unit, next to fresh air from outdoor port.						

NOTE: There is a 10-minute additional defrost every 5 defrost cycles.

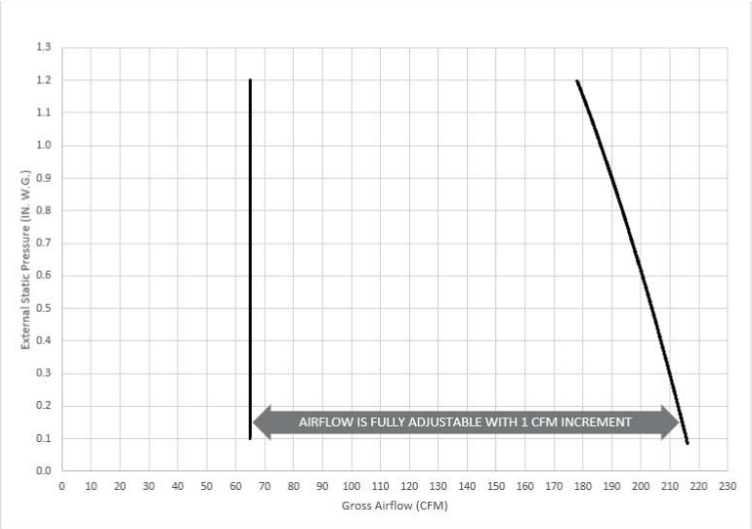
FAN CURVES

Thanks to new technology, no need to balance the unit manually. Both PMSM motors are controlled by an artificial intelligence performing 120 readings per minute then processing this information to maintain the requested airflow.

For typical installation, the software will ensure a balanced ventilation at every selected speed regardless of the weather conditions, the type of connection, the variable speed furnace/AHU, the stack effect, the filter clogging and so on. This results in peace of mind for installers and users knowing that the unit is designed to remain balanced and maintain heat/energy recovery efficiency.

NOTE: Fan curve is not certified by HVI.

Static Pressure (Pa)	Static Pressure (in. w.g.)	Net Supply Airflow (L/s)	Net Supply Airflow (cfm)	Gross Airflow Supply (L/s)	Gross Airflow Supply (cfm)	Gross Airflow Exhaust (L/s)	Gross Airflow Exhaust (cfm)
25	0.1	101	214	102	216	102	216
50	0.2	99	210	100	212	100	212
75	0.3	98	208	99	210	99	210
100	0.4	97	206	98	208	98	208
125	0.5	95	201	96	203	96	203
150	0.6	94	199	95	201	95	201
175	0.7	92	195	93	197	93	197
200	0.8	90	191	91	193	91	193
225	0.9	89	189	90	191	90	191
250	1.0	87	184	88	186	88	186
275	1.1	85	180	86	182	86	182
300	1.2	83	176	84	178	84	178



A230241

ENERGY PERFORMANCE

SUPPLY TEMPERATURE		NET AIR-FLOW		POWER CONSUMED WATTS	SENSIBLE RECOVERY EFFICIENCY	ADJUSTED SENSIBLE RECOVERY EFFICIENCY	APPARENT SENSIBLE EFFECTIVENESS*	TOTAL RECOVERY EFFICIENCY	ADJUSTED TOTAL RECOVERY EFFICIENCY	LATENT PERFORMANCE COEFFICIENT
°C	°F	L/S	CFM							
HEATING										
0	32	30	64	28	81%	83%	84%	–	–	0.64
0	32	38	81	37	78%	81%	82%	–	–	0.62
0	32	76	161	147	72%	77%	78%	–	–	0.53
-25	-13	39	83	75	65%	67%	81%	–	–	0.63
COOLING										
35	95	31	66	31	–	–	76%	67%	69%	0.66
35	95	38	81	38	–	–	74%	64%	66%	0.63
35	95	76	161	155	–	–	65%	52%	56%	0.53

*. Data not certified by HVI

REQUIREMENTS AND STANDARDS

- Meets UL 1812 (safety)
- Meets CSA C22.2 No. 113 (safety)
- Could be installed to CSA F326
- Performance tested in accordance with CSA C439 Standard
- Meets Novoclimat requirements when used in conjunction with Premium wall control
- Meets Prop 65
- This product earned the ENERGY STAR® by meeting strict energy efficiency guidelines set by Natural Resources Canada and the US EPA. This product meets ENERGY STAR requirements only when used in Canada.

© 2023 Carrier. All rights reserved.
Edition Date: 11/23

Catalog No: ERV-200-01PD

Replaces: New

Manufacturer reserves the right to change, at any time, specifications and designs without notice and without obligations.