

HVI TESTED/CERTIFIED

**HEAT RECOVERY
VENTILATORS
AND
ENERGY RECOVERY
VENTILATORS**

(DUCTED HEAT AND ENERGY RECOVERY VENTILATORS)

NOTICE:

HVI has adopted CSA C439-00, *Standard Methods of Test for Rating the Performance of Heat Recovery Ventilators*, as its test standard for determining product performance for certification. ORTECH Laboratories has been approved to perform the testing.

HVI Performance Specification Sheets for certified heat recovery ventilators are available from the manufacturer.

1993 ASHRAE Handbook Fundamentals, SI Edition
Used for conversion factors to convert cubic feet per
minute to Liters per second and inches water gage to
Pascals.



USE OF HVI LABEL

Companies whose products have been certified by HVI shall affix appropriate Labels to those products

EXPLANATION OF CERTIFIED DUCTED HRV AND ERV DESIGN SPECIFICATION SHEET

This sheet is intended primarily for the designer and contains actual results of tests and calculated values from test data. The equipment tested was supplied by the manufacturer who certifies that the equipment tested is representative of the designated model offered for sale.

Definitions and Notes Regarding the Headings Used Follow:

Model: The manufacturer's designation of the unit tested. This designation also appears on the HVI certification label.

VENTILATION PERFORMANCE⁽¹⁾

A note about nomenclature:

"Points" 1 through 4 are referred to. These are standardized as follows:
1 = air from outside. 2 = air from equipment to space.
3 = air from space to equipment. 4 = air from equipment to outside.



External Static Pressure: The total differential measured between points 1 and 2 (supply) or points 3 and 4 (exhaust) in question.

Gross Airflow: The measured airflow rate at points 2 and 3, which may contain recirculation air (from cross-leakage). These values are used only for selecting ductwork.

Net Supply Airflow: The gross supply airflow reduced by measured cross-leakage (EATR). This is the actual amount of outside air supplied by the unit and is used only for sizing the equipment for the required ventilation rate.

Exhaust Air Transfer Ratio (EATR): Ratio of the quantity of exhaust air found in the supply airstream to the gross supply air flow. When multiplied by 100, this ratio can be expressed as a percentage. Gross Supply Airflow x (1-EATR) = Net Supply Airflow.

Low Temperature Ventilation Reduction Factor (LTVRF): The percentage reduction in flow rate of the supply and exhaust air streams at the end of the 72 hour Cold Weather Test (see -13°F supply temp. below) compared with operation under non-frosting conditions. The final flow rate is taken as the average of the last 12 hours of test. This reduction in flow results from frost and ice buildup in the core and shutdown of fans for defrosting.

Low Temperature Imbalance Factor (LTIF): The ratio of Supply Airflow to Exhaust Airflow over the last 12 hours of the 72 hour Cold Weather Test.

Latent Recovery/Moisture Transfer (LRMT): Moisture recovered divided by moisture exhausted and corrected for the effects of cross-leakage. LRMT = 0 indicates that moisture was not transferred (net of cross-leakage) from the exhaust to the supply air. LRMT = 1 would indicate complete transfer of moisture. LRMT is provided for the +32°F and -13°F test conditions as an indication of moisture handling characteristics and may be used to evaluate the moisture removal ability of the equipment at the test condition as well as to confirm the manufacturer's published data.

The moisture removal ability should be considered when the ventilation rate is selected on the basis of moisture control. LRMT may be used to approximate this ability at the 32°F and -13°F test condition by substitution into the following equation.

$$RH_2O = NSA (1-LRMT) (W_3-W_1)$$

Where: RH_2O = Moisture removal rate
 NSA = Net supply airflow
 $LRMT$ = Latent Recovery/Moisture Transfer
 W_3 = Humidity ratio of indoor air
 W_1 = Humidity ratio of outdoor air

NOTE:

- A. That if the factor (1-LRMT is removed from the equation or if LRMT = 0

Footnote⁽¹⁾: All data are given for standard air (0.075 lb./cu. ft.). CFM may be read SCFM.

then the equation becomes $RH_2O = NSA (W_3-W_1)$, or the equivalent of direct outdoor air supply and balanced exhaust at the conditions of test. The factor may therefore be used to evaluate the moisture removal ability of the equipment with respect to that of unmodified outdoor air at the design conditions of test.

B) Test conditions are 71.6° and 40% relative humidity (W_1 0.0066) for indoor air. Outside relative humidity can vary from 50 - 100% giving $0.0019 < W < 0.0038$ for the +32°F condition and $0.0002 < W < 0.0004$ for the -13°F condition.

Some equipment will vary in LRMT with changes in indoor and outdoor conditions. Consult the equipment supplier for performance at conditions other than those described.

ENERGY PERFORMANCE

Values for energy performance are listed for various test points of supply (outside air) temperature and set airflow. Specific conditions of note are given below organized according to supply temperature. The corresponding airflow points are selected for test according to specific pressure for Net Supply Airflow. More or fewer test points may be listed for various units depending on their ability to meet the required Net Supply Airflow test conditions.

It is important to recognize that for comparison of equipment only values at equivalent supply temperature and net airflow should be used.

+32° Supply Temp.: Steady state test at one or both of 50 CFM and 117 CFM, 0.2 in. wg and 0.4 in wg differential. To determine corresponding external static pressure for a specific net airflow to the ventilation performance table. Values of pressure may not be consistent with the 50 CFM and/or 117 CFM net airflow test points as the equipment may have been operated in low speed⁽²⁾.

-13°F Supply Temp.: The test duration is for a fixed 72 hour period at maximum speed of 0.4 in. wg differential. This is often referred to as the "72 hour Cold Weather Test" (see LTVRF and LTIF above). The net supply airflow shown is the average of the last 12 hours of test and must not be reduced by the LTVRF. All other values are also the average of the last 12 hours of test. Note that the "72 hour Cold Weather Test" may be conducted for equipment designed for higher design temperatures. If a value other than -13°F is used, it will be recorded in place of -13°F.

+95°F Supply Temp.: Cooling values for one or both of 50 CFM and 117 CFM will be listed according to the ability of the equipment to meet the test conditions⁽²⁾. Outdoor air conditions are +95°F, 50% R.H., indoor air conditions are +75°F, 50% R.H. Total Recovery Efficiency (see below) is given in place of Sensible Recovery Efficiency (see below) as the latter value is not relevant for cooling load applications.

Watts: The average power consumed during the specific test. **DO NOT USE TO ASCERTAIN REQUIRED ELECTRIC SERVICE.** Refer to the electrical rating information supplied by the manufacturer. The watts shown are those recorded during the test; the equipment may be in high or low speed setting.

Apparent Sensible Effectiveness (ASEF): The measured temperature rise of the supply air stream divided by the difference between the supply temperature (point 1) and exhaust temperature (point 3) and multiplied by the ratio of mass flow rate of the supply divided by the minimum of the mass flow rate of the supply or exhaust streams. This value is useful principally to predict final delivered air temperature at a given flow rate.

Sensible Recovery Efficiency (SRE): The sensible energy recovered minus the supply fan energy and preheat coil energy, divided by the sensible energy exhausted plus the exhaust fan energy. This calculation corrects for the effects of cross-leakage, purchased energy for fan and controls, as well as defrost systems. This value is used principally to predict and compare energy performance.

Total Recovery Efficiency (TRE): The total energy (enthalpy) recovered minus the supply fan energy and the preheat coil energy, divided by the total energy (enthalpy) exhausted plus the exhaust fan energy. This calculation corrects for the effects of cross-leakage and external purchased energy for fans and controls. It is used principally to predict and compare energy performance.

Footnote⁽²⁾: If the equipment produces less than 0.2 in wg at high speed or more than 0.4 in. wg at low(est) speed at the specific net supply airflow, the test will not be conducted.

CERTIFIED HEAT AND ENERGY RECOVERY VENTILATORS

Section 3-1

AEROMATIC

Model: 7260 • Options Installed: none

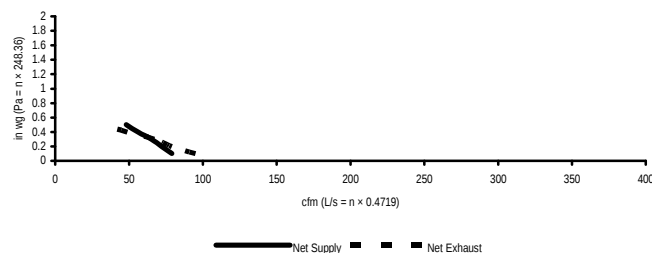
Electrical Requirements: Volts: 120 Amps: 1.6

Exhaust Air Transfer Ratio: .028 @ 100 Pa/0.4 in. wg .024 @ 50 Pa / 0.2 in. wg

Low Temp. Vent Reduction Factor: 20.1% Supply 29.9% Exhaust • Low Temp. Imbalance Factor: 1.12

VENTILATION PERFORMANCE

EXT. STATIC PRESSURE		NET SUPPLY AIR FLOW		GROSS AIR FLOW			
				SUPPLY		EXHAUST	
Pa	in wg	L/s	cfm	L/s	cfm	L/s	cfm
25	0.1	37	79	39	82	45	95
50	0.2	34	72	33	70	37	79
75	0.3	30	65	29	62	31	67
100	0.4	27	56	23	49	23	49
125	0.5	23	48	17	36	16	33



ENERGY PERFORMANCE

	SUPPLY TEMPERATURE		NET AIR FLOW		POWER CONSUMED WATTS	SENSIBLE RECOVERY EFFICIENCY	APPARENT SENSIBLE EFFECTIVENESS	LATENT RECOVERY/MOISTURE TRANSFER
	°C	°F	L/S	CFM				
HEATING	0	+32	25	54	104	56	75	0.01
	0	+32	31	66	114	56	71	0.02
	0	+32	38	81	126	54	71	0.02
	-25	-13	21	46	95	58	83	0.01
COOLING	+35	+95					TOTAL RECOVERY EFFICIENCY Not tested	
	+35	+95						

AEROMATIC

Model: 7290 • Options Installed: none

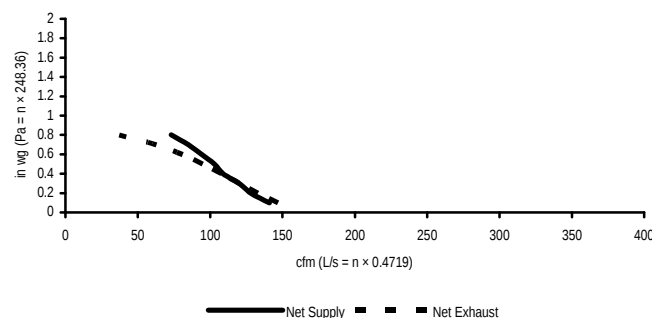
Electrical Requirements: Volts: 120 Amps: 1.8

Exhaust Air Transfer Ratio: 0.0324 @ 100 Pa/0.4 in. wg 0.0322 @ 50 Pa / 0.2 in. wg

Low Temp. Vent Reduction Factor: 15.1% Supply 25.1% Exhaust • Low Temp. Imbalance Factor: 1.07

VENTILATION PERFORMANCE

EXT. STATIC PRESSURE		NET SUPPLY AIR FLOW		GROSS AIR FLOW			
				SUPPLY		EXHAUST	
Pa	in wg	L/s	cfm	L/s	cfm	L/s	cfm
25	0.1	66	141	68	145	69	147
50	0.2	60	128	62	133	62	133
75	0.3	56	120	58	124	56	120
100	0.4	51	109	53	113	51	108
125	0.5	48	103	50	106	45	95
150	0.6	44	94	46	97	38	81
175	0.7	40	85	41	88	29	63
200	0.8	34	73	36	76	17	37



ENERGY PERFORMANCE

	SUPPLY TEMPERATURE		NET AIR FLOW		POWER CONSUMED WATTS	SENSIBLE RECOVERY EFFICIENCY	APPARENT SENSIBLE EFFECTIVENESS	LATENT RECOVERY/MOISTURE TRANSFER
	°C	°F	L/S	CFM				
HEATING	0	+32	31	66	128	65	80	0.01
	0	+32	41	87	152	63	77	0.00
	0	+32	51	109	172	62	75	0.02
	-25	-13	33	70	136	62	82	0.06
COOLING	+35	+95					TOTAL RECOVERY EFFICIENCY Not tested	
	+35	+95						

CERTIFIED HEAT AND ENERGY RECOVERY VENTILATORS

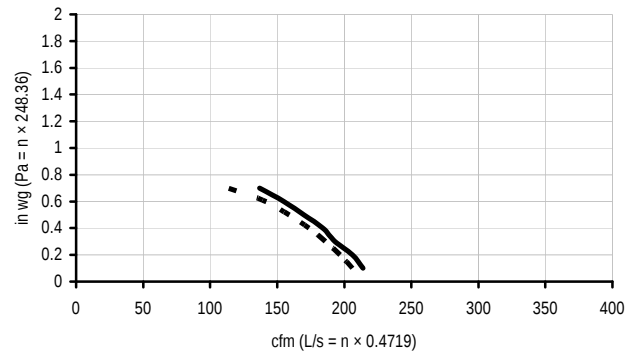
Section 3-3

AIRFLOW

Model: AIR 200-D • Options Installed: None
 Electrical Requirements: Volts: 120 Amps: 1.4
 Exhaust Air Transfer Ratio: 0.01 @100 Pa/0.4 in. wg 0.01 @ 50 Pa / 0.2 in. wg
 Low Temp. Vent Reduction Factor: 1% Supply 2% Exhaust • Low Temp. Imbalance Factor: 0.967

VENTILATION PERFORMANCE

EXT. STATIC PRESSURE		NET SUPPLY AIR FLOW		GROSS AIR FLOW			
				SUPPLY		EXHAUST	
Pa	in wg	L/s	cfm	L/s	cfm	L/s	cfm
25	0.1	101	214	102	216	97	206
50	0.2	97	206	98	208	93	197
75	0.3	91	193	93	197	88	186
100	0.4	87	184	88	186	82	174
125	0.5	80	170	81	172	75	159
150	0.6	73	155	74	157	67	142
175	0.7	65	137	65	138	54	114



— Net Supply - - - Net Exhaust

ENERGY PERFORMANCE

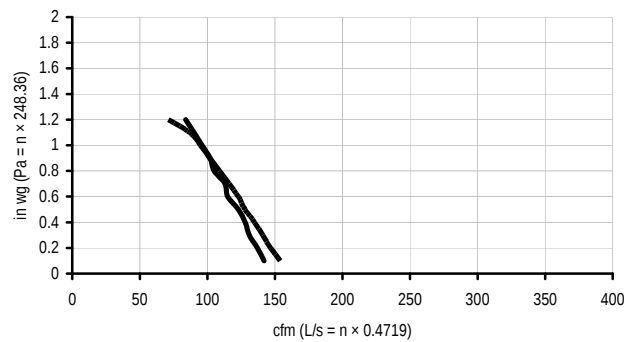
	SUPPLY TEMPERATURE		NET AIR FLOW		POWER CONSUMED WATTS	SENSIBLE RECOVERY EFFICIENCY	APPARENT SENSIBLE EFFECTIVENESS	LATENT RECOVERY/MOISTURE TRANSFER
	°C	°F	L/S	CFM				
HEATING	0	+32	68	144	114	59	66	0
	0	+32	63	133	109	58	66	0
	0	+32	56	119	100	60	67	0
	-25	-13	60	127	100	59	69	0
	-25	-13	55	117		60		

AIRFLOW

Model: 120 AIR-R • Options Installed: None
 Electrical Requirements: Volts: 120 Amps: 1.5
 Exhaust Air Transfer Ratio: 0.10 @100 Pa/0.4 in. wg 0.11 @ 50 Pa / 0.2 in. wg
 Low Temp. Vent Reduction Factor: 3.0% Supply 15.0% Exhaust • Low Temp. Imbalance Factor: 1.01

VENTILATION PERFORMANCE

EXT. STATIC PRESSURE		NET SUPPLY AIR FLOW		GROSS AIR FLOW			
				SUPPLY		EXHAUST	
Pa	in wg	L/s	cfm	L/s	cfm	L/s	cfm
25	0.1	67	142	68	144	72	154
50	0.2	64	137	65	138	69	147
75	0.3	62	131	62	133	66	141
100	0.4	60	128	61	129	64	135
125	0.5	58	123	58	124	60	128
150	0.6	54	115	55	116	58	123
175	0.7	53	113	54	114	55	116
200	0.8	49	105	50	106	51	109
225	0.9	48	102	48	103	48	102
250	1.0	45	96	46	97	45	95
275	1.1	42	90	43	91	41	87
300	1.2	39	84	40	85	33	71



— Net Supply - - - Net Exhaust

ENERGY PERFORMANCE

	SUPPLY TEMPERATURE		NET AIR FLOW		POWER CONSUMED WATTS	SENSIBLE RECOVERY EFFICIENCY	APPARENT SENSIBLE EFFECTIVENESS	LATENT RECOVERY/MOISTURE TRANSFER
	°C	°F	L/S	CFM				
HEATING	0	32	33	70	76	59	68	0.03
	0	32	42	89	94	57	67	0.03
	0	32	56	130	156	52	62	0.03
	-25	-13	32	67	109	56	72	0.01

	SUPPLY TEMPERATURE		NET AIR FLOW		POWER CONSUMED	SENSIBLE RECOVERY EFFICIENCY	APPARENT SENSIBLE EFFECTIVENESS	LATENT RECOVERY/MOISTURE TRANSFER
	°C	°F	L/S	CFM	WATTS			
HEATING	0	+32	30	64	78	64	73	0.00
	0	+32	45	96	104	63	71	0.01
	0	+32	55	117	119	61	69	0.01
	-25	-13	35	74	96	66	78	0.00
COOLING	+35	+95	29	62	77	TOTAL RECOVERY EFFICIENCY		
							17	

CERTIFIED HEAT AND ENERGY RECOVERY VENTILATORS

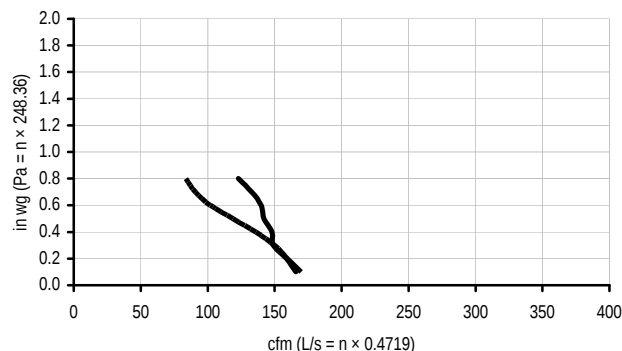
Section 3-5

AIRIA BRANDS INC. (LIFEBREATH®)

Model: 155 ECM • Options Installed: None
 Electrical Requirements: Volts: 120 Amps: 1.4
 Exhaust Air Transfer Ratio: 0.11 @100 Pa/0.4 in. wg 0.13 @ 50 Pa / 0.2 in. wg
 Low Temp. Vent Reduction Factor: 6% Supply 8% Exhaust • Low Temp. Imbalance Factor: 0.92

VENTILATION PERFORMANCE

EXT. STATIC PRESSURE		NET SUPPLY AIR FLOW		GROSS AIR FLOW			
Pa	in wg	L/s	cfm	SUPPLY		EXHAUST	
25	0.1	77	164	78	166	80	170
50	0.2	74	157	75	159	76	160
75	0.3	69	147	70	149	71	150
100	0.4	69	146	70	148	64	136
125	0.5	66	140	67	142	56	119
150	0.6	65	138	66	140	48	102
175	0.7	62	131	63	133	43	91
200	0.8	57	121	58	123	40	84



— Net Supply - - - Net Exhaust

ENERGY PERFORMANCE

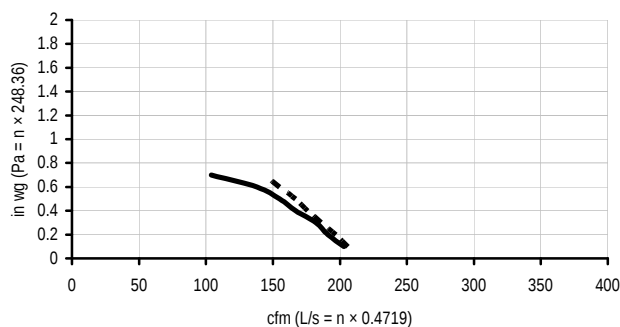
	SUPPLY TEMPERATURE		NET AIR FLOW		POWER CONSUMED WATTS	SENSIBLE RECOVERY EFFICIENCY	APPARENT SENSIBLE EFFECTIVENESS	LATENT RECOVERY/MOISTURE TRANSFER
	°C	°F	L/S	CFM				
HEATING	0	+32	31	66	33	66	72	0.00
	0	+32	46	98	74	63	70	0.00
	0	+32	55	118	67	64	69	0.00
	-25	-13	31	66	36	67	79	0.01
COOLING	+35	+95	31	66	33			
							18	
TOTAL RECOVERY EFFICIENCY							18	

AIRIA BRANDS INC. (LIFEBREATH®)

Model: 195DCS • Options Installed: None
 Electrical Requirements: Volts: 120 Amps: 1.5
 Exhaust Air Transfer Ratio: 0.02 @100 Pa/0.4 in. wg 0.02 @ 50 Pa / 0.2 in. wg
 Low Temp. Vent Reduction Factor: 1% Supply 3% Exhaust • Low Temp. Imbalance Factor: .98

VENTILATION PERFORMANCE

EXT. STATIC PRESSURE		NET SUPPLY AIR FLOW		GROSS AIR FLOW			
Pa	in wg	L/s	cfm	SUPPLY		EXHAUST	
25	0.1	96	203	98	208	97	206
50	0.2	90	191	92	195	93	197
75	0.3	86	182	87	185	88	186
100	0.4	79	167	81	172	83	176
125	0.5	73	155	74	157	79	167
150	0.6	65	138	66	140	73	155
175	0.7	49	104	50	106	68	144



— Net Supply - - - Net Exhaust

ENERGY PERFORMANCE

	SUPPLY TEMPERATURE		NET AIR FLOW		POWER CONSUMED WATTS	SENSIBLE RECOVERY EFFICIENCY	APPARENT SENSIBLE EFFECTIVENESS	LATENT RECOVERY/MOISTURE TRANSFER
	°C	°F	L/S	CFM				
HEATING	0	+32	90	191	161	77	83	--
	0	+32	83	176	155	77	84	--
	0	+32	54	114	116	81	88	--
	0	+32	55	117	117	80	--	--
	-25	-13	56	119	125	77	87	--
	-25	-13	55	117	123	77	--	--
TOTAL RECOVERY EFFICIENCY							24	
COOLING	+35	+95	57	121	121			

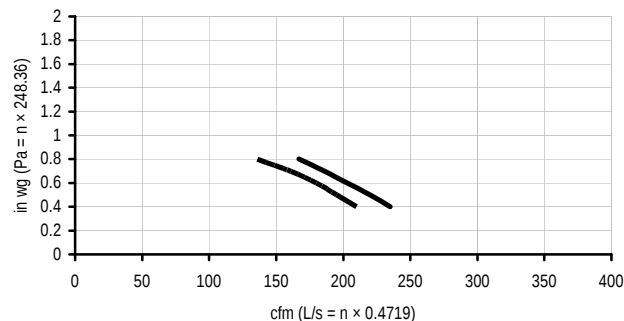
CERTIFIED HEAT AND ENERGY RECOVERY VENTILATORS

Section 3-6

AIRIA BRANDS INC. (LIFEBREATH®)

Model: 300DCS • Options Installed: None
 Electrical Requirements: Volts: 120 Amps: 2.9
 Exhaust Air Transfer Ratio: 0.02 @100 Pa/0.4 in. wg 0.02 @ 50 Pa / 0.2 in. wg
 Low Temp. Vent Reduction Factor: 6% Supply 0% Exhaust • Low Temp. Imbalance Factor: 0.04

VENTILATION PERFORMANCE							
EXT. STATIC PRESSURE		NET SUPPLY AIR FLOW		GROSS AIR FLOW			
				SUPPLY		EXHAUST	
Pa	in wg	L/s	cfm	L/s	cfm	L/s	cfm
100	0.4	111	235	113	239	99	210
125	0.5	104	220	106	225	92	195
150	0.6	96	203	98	208	85	180
175	0.7	88	186	90	191	76	161
200	0.8	79	167	80	170	64	136



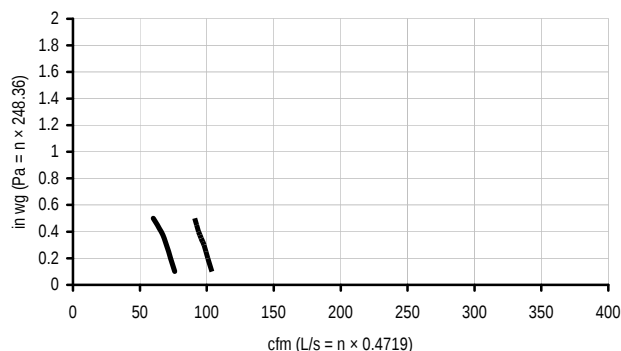
— Net Supply — Net Exhaust

ENERGY PERFORMANCE								
	SUPPLY TEMPERATURE		NET AIR FLOW		POWER CONSUMED WATTS	SENSIBLE RECOVERY EFFICIENCY	APPARENT SENSIBLE EFFECTIVENESS	LATENT RECOVERY/MOISTURE TRANSFER
	°C	°F	L/S	CFM				
HEATING	0	+32	98	208	234	75	84	--
	0	+32	78	165	178	77	87	--
	0	+32	56	119	150	79	90	--
	-25	-13	59	125	156	75	87	--
	-25	-13	55	117	--	75	--	--
						TOTAL RECOVERY EFFICIENCY		
COOLING	+35	+95	57	121	150		33	

AIRIA BRANDS INC. (LIFEBREATH®)

Model: 95MAX • Options Installed: None
 Electrical Requirements: Volts: 120 Amps: 0.90
 Exhaust Air Transfer Ratio: 0.10 @100 Pa/0.4 in. wg 0.08 @ 50 Pa / 0.2 in. wg
 Low Temp. Vent Reduction Factor: 15% Supply, 22% Exhaust Low • Temp. Imbalance Factor: 1.00

VENTILATION PERFORMANCE							
EXT. STATIC PRESSURE		NET SUPPLY AIR FLOW		GROSS AIR FLOW			
				SUPPLY		EXHAUST	
Pa	in wg	L/s	cfm	L/s	cfm	L/s	cfm
25	0.1	36	76	40	84	49	104
50	0.2	34	73	38	81	48	101
75	0.3	33	70	37	78	46	98
100	0.4	31	66	34	73	44	94
125	0.5	29	60	32	67	43	91



— Net Supply — Net Exhaust

ENERGY PERFORMANCE								
	SUPPLY TEMPERATURE		NET AIR FLOW		POWER CONSUMED WATTS	SENSIBLE RECOVERY EFFICIENCY	APPARENT SENSIBLE EFFECTIVENESS	LATENT RECOVERY/MOISTURE TRANSFER
	°C	°F	L/S	CFM				
HEATING	0	+32	28	60	59	75	88	-0.01
	0	+32	33	71	58	73	86	0.03
	0	+32	42	89	89	73	84	0.04
	-25	-13	29	61	76	68	86	0.02

CERTIFIED HEAT AND ENERGY RECOVERY VENTILATORS

Section 3-7

AIRIA BRANDS INC. (LIFEBREATH®)

Model: 150 ERV • Options Installed: None
 Electrical Requirements: Volts: 120 Amps: 1.4
 Exhaust Air Transfer Ratio: 0.04 @100 Pa/0.4 in. wg 0.04 @ 50 Pa / 0.2 in. wg
 Low Temp. Vent Reduction Factor: Supply - NA Exhaust - NA • Low Temp. Imbalance Factor: NA

VENTILATION PERFORMANCE

EXT. STATIC PRESSURE		NET SUPPLY AIR FLOW		GROSS AIR FLOW			
				SUPPLY		EXHAUST	
Pa	in wg	L/s	cfm	L/s	cfm	L/s	cfm
25	0.1	71	151	74	157	73	154
50	0.2	67	141	69	146	69	147
75	0.3	62	132	65	137	67	142
100	0.4	59	124	61	129	61	130
125	0.5	50	107	52	111	54	116
150	0.6	46	98	48	102	48	101
175	0.7	38	81	40	84	41	87
200	0.8	28	60	30	63	29	61

ENERGY PERFORMANCE

	SUPPLY TEMPERATURE		NET AIR FLOW		POWER CONSUMED WATTS	SENSIBLE RECOVERY EFFICIENCY	APPARENT SENSIBLE EFFECTIVENESS	LATENT RECOVERY/MOISTURE TRANSFER
	°C	°F	L/S	CFM				
HEATING	0	+32	30	63	70	69	81	.50
	0	+32	45	96	94	67	76	.42
	0	+32	55	117	108	65	73	.38
	-25	-13						
COOLING	+35	+95	30	65	68		TOTAL RECOVERY EFFICIENCY 47	

AIRIA BRANDS INC. (LIFEBREATH®)

Model: 155 MAX• Options Installed: None
 Electrical Requirements: Volts: 120 Amps: 1.4
 Exhaust Air Transfer Ratio: 0.037 @100 Pa/0.4 in. wg 0.027 @ 50 Pa / 0.2 in. wg
 Low Temp. Vent Reduction Factor: 3.7% Supply 13.8% Exhaust • Low Temp. Imbalance Factor: 1.04

VENTILATION PERFORMANCE

EXT. STATIC PRESSURE		NET SUPPLY AIR FLOW		GROSS AIR FLOW			
				SUPPLY		EXHAUST	
Pa	in wg	L/s	cfm	L/s	cfm	L/s	cfm
25	0.1	68	144	70	149	80	171
50	0.2	63	134	65	139	78	165
75	0.3	59	125	61	129	75	160
100	0.4	53	113	55	117	74	157
125	0.5	43	92	45	95	70	149
150	0.6	34	73	36	76	64	137
175	0.7	28	59	29	61	57	122

ENERGY PERFORMANCE

	SUPPLY TEMPERATURE		NET AIR FLOW		POWER CONSUMED WATTS	SENSIBLE RECOVERY EFFICIENCY	APPARENT SENSIBLE EFFECTIVENESS	LATENT RECOVERY/MOISTURE TRANSFER
	°C	°F	L/S	CFM				
HEATING	0	+32	30	64	78	64	73	0.00
	0	+32	45	96	104	63	71	0.01
	0	+32	55	117	119	61	69	0.01
	-25	-13	35	74	96	66	78	0.00
COOLING	+35	+95	29	62	77		TOTAL RECOVERY EFFICIENCY 17	

CERTIFIED HEAT AND ENERGY RECOVERY VENTILATORS

Section 3-8

AIRIA BRANDS INC. (LIFEBREATH®)

Model: 200 ERV • Options Installed: None
 Electrical Requirements: Volts: 120 Amps: 1.4
 Exhaust Air Transfer Ratio: NA @100 Pa/0.4 in. wg NA @ 50 Pa / 0.2 in. wg
 Low Temp. Vent Reduction Factor: NA% Supply NA% Exhaust • Low Temp. Imbalance Factor: NA

VENTILATION PERFORMANCE

EXT. STATIC PRESSURE		NET SUPPLY AIR FLOW		GROSS AIR FLOW			
		AIR FLOW		SUPPLY		EXHAUST	
Pa	in wg	L/s	cfm	L/s	cfm	L/s	cfm
25	0.1	85	180	89	189	90	191
50	0.2	80	169	83	176	84	179
75	0.3	74	157	77	164	79	167
100	0.4	69	146	72	152	71	150
125	0.5	62	132	65	138	63	134
150	0.6	56	118	58	123	56	119
175	0.7	48	101	50	105	48	102
200	0.8	39	82	41	86	42	89
225	0.9	22	47	24	50	32	68

ENERGY PERFORMANCE

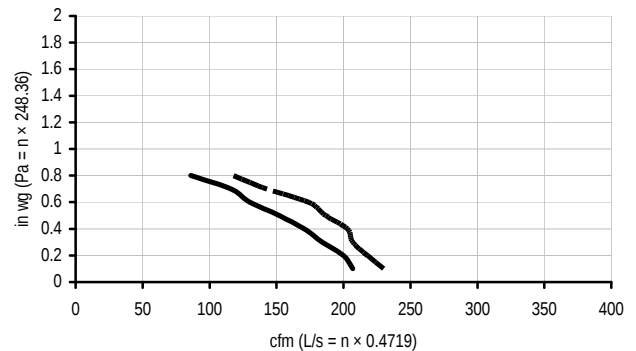
	SUPPLY TEMPERATURE		NET AIR FLOW		POWER CONSUMED	SENSIBLE RECOVERY EFFICIENCY	APPARENT SENSIBLE EFFECTIVENESS	LATENT RECOVERY/MOISTURE TRANSFER
	°C	°F	L/S	CFM	WATTS			
HEATING	0	+32	31	66	68	72	81	.48
	0	+32	55	116	97	69	76	.61
TOTAL RECOVERY EFFICIENCY								
COOLING	+35	+95	30	65	64		47	
	+35	+95	55	117	98		50	

AIRIA BRANDS INC. (LIFEBREATH®)

Model: 200 MAX • Options Installed: None
 Electrical Requirements: Volts: 120 Amps: 1.4
 Exhaust Air Transfer Ratio: 0.04 @100 Pa/0.4 in. wg 0.03 @ 50 Pa / 0.2 in. wg
 Low Temp. Vent Reduction Factor: 2% Supply 11% Exhaust • Low Temp. Imbalance Factor: 1.03

VENTILATION PERFORMANCE

EXT. STATIC PRESSURE		NET SUPPLY AIR FLOW		GROSS AIR FLOW			
		AIR FLOW		SUPPLY		EXHAUST	
Pa	in wg	L/s	cfm	L/s	cfm	L/s	cfm
25	0.1	97	207	100	214	108	230
50	0.2	94	200	97	206	103	218
75	0.3	87	184	90	191	97	207
100	0.4	80	171	84	179	96	203
125	0.5	71	152	76	161	88	187
150	0.6	61	130	66	140	82	174
175	0.7	55	116	60	129	67	143
200	0.8	40	86	46	98	56	118



— Net Supply — Net Exhaust

ENERGY PERFORMANCE

	SUPPLY TEMPERATURE		NET AIR FLOW		POWER CONSUMED	SENSIBLE RECOVERY EFFICIENCY	APPARENT SENSIBLE EFFECTIVENESS	LATENT RECOVERY/MOISTURE TRANSFER
	°C	°F	L/S	CFM	WATTS			
HEATING	0	+32	31	66	81	64	74	0.06
	0	+32	45	96	99	63	71	0.03
	0	+32	55	117	113	61	69	0.03
	-25	-13	51	109	119	62	73	0.01

CERTIFIED HEAT AND ENERGY RECOVERY VENTILATORS

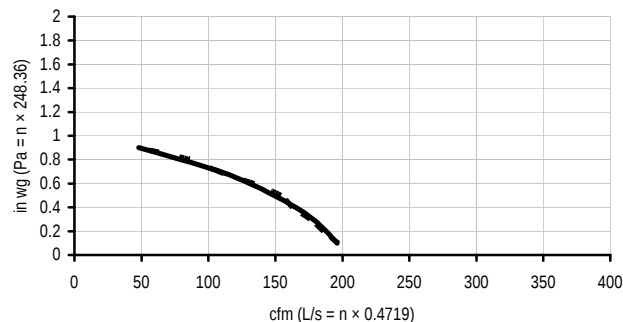
Section 3-9

AIRIA BRANDS INC. (LIFEBREATH®)

Model: MAXTOP • Options Installed: None
 Electrical Requirements: Volts: 120 Amps: 1.4
 Exhaust Air Transfer Ratio: $\frac{---}{---}$ @100 Pa/0.4 in. wg $\frac{0.01}{0.01}$ @ 50 Pa / 0.2 in. wg
 Low Temp. Vent Reduction Factor: 6% Supply 13% Exhaust • Low Temp. Imbalance Factor: 1.03

VENTILATION PERFORMANCE

EXT. STATIC PRESSURE		NET SUPPLY AIR FLOW		GROSS AIR FLOW			
				SUPPLY		EXHAUST	
Pa	in wg	L/s	cfm	L/s	cfm	L/s	cfm
25	0.1	93	196	94	199	93	197
50	0.2	89	188	90	190	88	186
75	0.3	84	178	85	181	83	176
100	0.4	78	165	79	167	77	163
125	0.5	70	149	71	151	73	154
150	0.6	62	131	63	133	63	134
175	0.7	51	109	52	110	51	108
200	0.8	37	79	38	80	41	86
225	0.9	23	48	23	49	22	47



Net Supply Net Exhaust

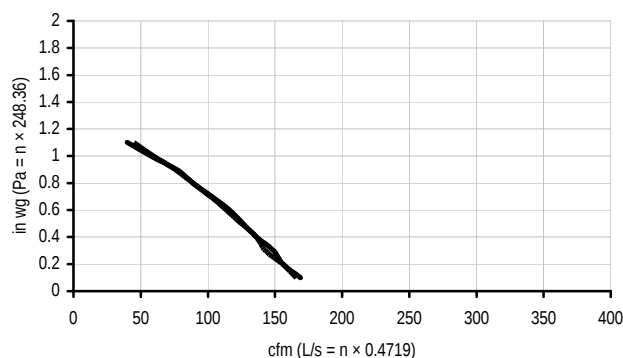
	SUPPLY TEMPERATURE		NET AIR FLOW		POWER CONSUMED WATTS	SENSIBLE RECOVERY EFFICIENCY	APPARENT SENSIBLE EFFECTIVENESS	LATENT RECOVERY/MOISTURE TRANSFER
	°C	°F	L/S	CFM				
HEATING	0	+32	31	65	74	69	80	-0.01
	0	+32	45	96	94	67	75	-0.01
	0	+32	55	117	105	64	72	-0.01
	-25	-13	31	67	84	70	83	0.03
COOLING	+35	+95	30	64	72		TOTAL RECOVERY EFFICIENCY 22	

AIRIA BRANDS INC. (LIFEBREATH®)

Model: RNC5-TPD • Options Installed: None
 Electrical Requirements: Volts: 120 Amps: 1.7
 Exhaust Air Transfer Ratio: $\frac{0.03}{0.03}$ @100 Pa/0.4 in. wg $\frac{0.03}{0.03}$ @ 50 Pa / 0.2 in. wg
 Low Temp. Vent Reduction Factor: .92% Supply • Low Temp. Imbalance Factor: 0.92

VENTILATION PERFORMANCE

EXT. STATIC PRESSURE		NET SUPPLY AIR FLOW		GROSS AIR FLOW			
				SUPPLY		EXHAUST	
Pa	in wg	L/s	cfm	L/s	cfm	L/s	cfm
25	0.1	80	169	82	174	78	166
50	0.2	73	156	76	161	74	156
75	0.3	70	149	72	153	67	143
100	0.4	64	136	66	140	64	136
125	0.5	59	126	61	129	59	125
150	0.6	54	116	56	119	54	114
175	0.7	48	103	50	106	48	102
200	0.8	42	89	43	91	42	89
225	0.9	36	77	37	79	36	76
250	1.0	27	58	28	60	28	60
275	1.1	19	40	19	41	21	45



Net Supply Net Exhaust

	SUPPLY TEMPERATURE		NET AIR FLOW		POWER CONSUMED WATTS	SENSIBLE RECOVERY EFFICIENCY	APPARENT SENSIBLE EFFECTIVENESS	LATENT RECOVERY/MOISTURE TRANSFER
	°C	°F	L/S	CFM				
HEATING	0	+32	31	66	74	61	74	0.01
	0	+32	40	85	86	61	73	0.01
	0	+32	55	117	140	56	69	0.01
	-25	-13	36	76	96	63	78	0.04

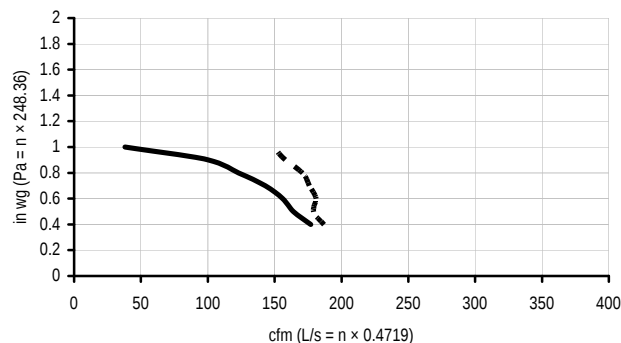
CERTIFIED HEAT AND ENERGY RECOVERY VENTILATORS

Section 3-10

AIRIA BRANDS INC. (LIFEBREATH®)

Model: RNC10 • Options Installed: None
 Electrical Requirements: Volts: 120 Amps: 1.4
 Exhaust Air Transfer Ratio: 0.01 @100 Pa/0.4 in. wg 0.01 @ 50 Pa / 0.2 in. wg
 Low Temp. Vent Reduction Factor: 2% Supply 0% Exhaust • Low Temp. Imbalance Factor: n/a

EXT. STATIC PRESSURE		VENTILATION PERFORMANCE					
		NET SUPPLY		GROSS AIR FLOW			
		AIR FLOW		SUPPLY		EXHAUST	
Pa	in wg	L/s	cfm	L/s	cfm	L/s	cfm
25	0.1	83	177	83	177	88	187
50	0.2	77	164	77	164	84	179
75	0.3	73	156	73	156	85	181
100	0.4	67	143	67	143	83	176
125	0.5	58	123	58	123	81	171
150	0.6	47	100	47	100	74	158
175	0.7	18	38	18	38	70	149



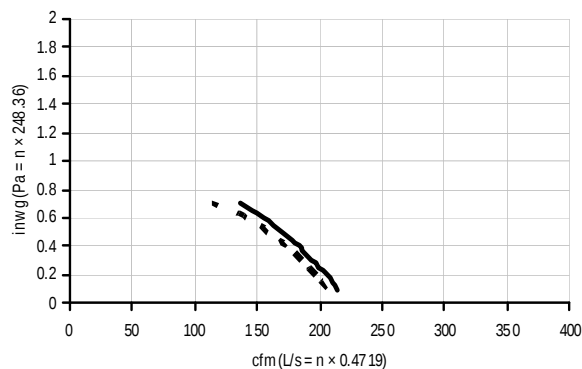
— Net Supply - - - Net Exhaust

ENERGY PERFORMANCE								
SUPPLY TEMPERATURE		NET AIR FLOW		POWER CONSUMED	SENSIBLE RECOVERY EFFICIENCY	APPARENT SENSIBLE EFFECTIVENESS	LATENT RECOVERY/MOISTURE TRANSFER	
HEATING	°C	°F	L/S	CFM	WATTS			
	0	32	32	67	78	66	76	-0.01
	0	32	44	94	95	64	72	-0.20
	0	32	56	118	110	60	68	-0.02
	-25	-13	32	68	82	60	78	0.08
TOTAL RECOVERY EFFICIENCY								
COOLING	35	95	31	66	74	20		

AIRIA BRANDS INC. (LIFEBREATH®)

Model: RNC20 • Options Installed: None
 Electrical Requirements: Volts: 120 Amps: 1.4
 Exhaust Air Transfer Ratio: 0.01 @100 Pa/0.4 in. wg 0.01 @ 50 Pa / 0.2 in. wg
 Low Temp. Vent Reduction Factor: 1% Supply 2% Exhaust • Low Temp. Imbalance Factor: 0.967

EXT. STATIC PRESSURE		VENTILATION PERFORMANCE					
		NET SUPPLY		GROSS AIR FLOW			
		AIR FLOW		SUPPLY		EXHAUST	
Pa	in wg	L/s	cfm	L/s	cfm	L/s	cfm
25	0.1	101	214	102	216	97	206
50	0.2	97	206	98	208	93	197
75	0.3	91	193	93	197	88	186
100	0.4	87	184	88	186	82	174
125	0.5	80	170	81	172	75	159
150	0.6	73	155	74	157	67	142
175	0.7	65	137	65	138	54	114



— Net Supply - - - Net Exhaust

		ENERGY PERFORMANCE						
SUPPLY TEMPERATURE			NET AIR FLOW		POWER CONSUMED	SENSIBLE RECOVERY EFFICIENCY	APPARENT SENSIBLE EFFECTIVENESS	LATENT RECOVERY/MOISTURE TRANSFER
	°C	°F	L/S	CFM	WATTS			
HEATING	0	+32	68	144	114	59	66	0
	0	+32	63	133	109	58	66	0
	0	+32	56	119	100	60	67	0
	-25	-13	60	127	100	59	69	0
	-25	-13	55	117		60		

CERTIFIED HEAT AND ENERGY RECOVERY VENTILATORS

Section 3-11

AIRIA BRANDS INC. (LIFEBREATH®)

Model: RNC95 • Options Installed: None
 Electrical Requirements: Volts: 120 Amps: 0.90
 Exhaust Air Transfer Ratio: 0.10 @100 Pa/0.4 in. wg 0.08 @ 50 Pa / 0.2 in. wg
 Low Temp. Vent Reduction Factor: 15% Supply, 22% Exhaust Low • Temp. Imbalance Factor: 1.00

VENTILATION PERFORMANCE

EXT. STATIC PRESSURE		NET SUPPLY AIR FLOW		GROSS AIR FLOW			
				SUPPLY		EXHAUST	
Pa	in wg	L/s	cfm	L/s	cfm	L/s	cfm
25	0.1	36	76	40	84	49	104
50	0.2	34	73	38	81	48	101
75	0.3	33	70	37	78	46	98
100	0.4	31	66	34	73	44	94
125	0.5	29	60	32	67	43	91

ENERGY PERFORMANCE

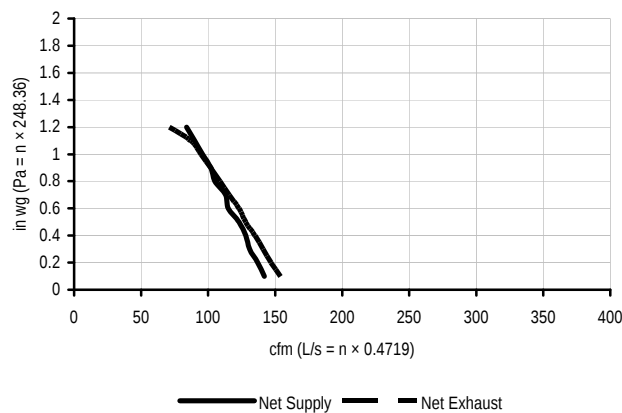
	SUPPLY TEMPERATURE		NET AIR FLOW		POWER CONSUMED WATTS	SENSIBLE RECOVERY EFFICIENCY	APPARENT SENSIBLE EFFECTIVENESS	LATENT RECOVERY/MOISTURE TRANSFER
	°C	°F	L/S	CFM				
HEATING	0	+32	28	60	59	75	88	-0.01
	0	+32	33	71	58	73	86	0.03
	0	+32	42	89	89	73	84	0.04
	-25	-13	29	61	76	68	86	0.02

AIRIA BRANDS INC. (LIFEBREATH®)

Model: RNC120D • Options Installed: None
 Electrical Requirements: Volts: 120 Amps: 1.5
 Exhaust Air Transfer Ratio: 0.10 @100 Pa/0.4 in. wg 0.10 @ 50 Pa / 0.2 in. wg
 Low Temp. Vent Reduction Factor: 2.6% Supply 14.9% Exhaust • Low Temp. Imbalance Factor: 6.5%

VENTILATION PERFORMANCE

EXT. STATIC PRESSURE		NET SUPPLY AIR FLOW		GROSS AIR FLOW			
				SUPPLY		EXHAUST	
Pa	in wg	L/s	cfm	L/s	cfm	L/s	cfm
25	0.1	67	142	68	144	72	154
50	0.2	64	137	65	138	69	147
75	0.3	62	131	62	133	66	141
100	0.4	60	128	61	129	64	135
125	0.5	58	123	58	124	60	128
150	0.6	54	115	55	116	58	123
175	0.7	53	113	54	114	55	116
200	0.8	49	105	50	106	51	109
225	0.9	48	102	48	103	48	102
250	1.0	45	96	46	97	45	95
275	1.1	42	90	43	91	41	87
300	1.2	39	84	40	85	33	71



ENERGY PERFORMANCE

	SUPPLY TEMPERATURE		NET AIR FLOW		POWER CONSUMED WATTS	SENSIBLE RECOVERY EFFICIENCY	APPARENT SENSIBLE EFFECTIVENESS	LATENT RECOVERY/MOISTURE TRANSFER
	°C	°F	L/S	CFM				
HEATING	0	32	33	70	76	59	68	0.03
	0	32	42	89	94	57	67	0.03
	0	32	56	130	156	52	62	0.03
	-25	-13	32	67	109	56	72	0.01

CERTIFIED HEAT AND ENERGY RECOVERY VENTILATORS

Section 3-12

AIRIA BRANDS INC. (LIFEBREATH®)

Model: RNC155 • Options Installed: None
 Electrical Requirements: Volts: 120 Amps: 1.4
 Exhaust Air Transfer Ratio: 0.037 @100 Pa/0.4 in. wg 0.027 @ 50 Pa / 0.2 in. wg
 Low Temp. Vent Reduction Factor: 3.7% Supply 13.8% Exhaust • Low Temp. Imbalance Factor: 1.04

VENTILATION PERFORMANCE

EXT. STATIC PRESSURE		NET SUPPLY AIR FLOW		GROSS AIR FLOW			
				SUPPLY		EXHAUST	
Pa	in wg	L/s	cfm	L/s	cfm	L/s	cfm
25	0.1	68	144	70	149	80	171
50	0.2	63	134	65	139	78	165
75	0.3	59	125	61	129	75	160
100	0.4	53	113	55	117	74	157
125	0.5	43	92	45	95	70	149
150	0.6	34	73	36	76	64	137
175	0.7	28	59	29	61	57	122

ENERGY PERFORMANCE

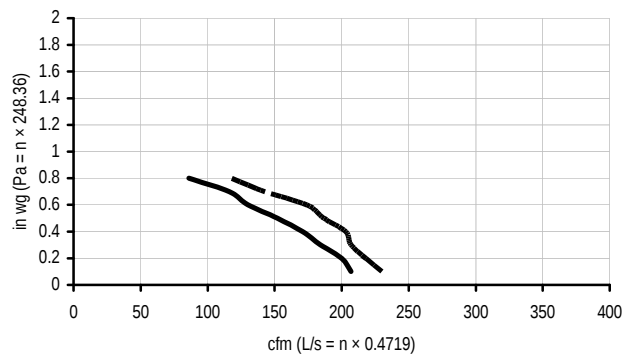
	SUPPLY TEMPERATURE		NET AIR FLOW		POWER CONSUMED WATTS	SENSIBLE RECOVERY EFFICIENCY	APPARENT SENSIBLE EFFECTIVENESS	LATENT RECOVERY/MOISTURE TRANSFER
	°C	°F	L/S	CFM				
HEATING	0	+32	30	64	78	64	73	0.00
	0	+32	45	96	104	63	71	0.01
	0	+32	55	117	119	61	69	0.01
	-25	-13	35	74	96	66	78	0.00
COOLING	+35	+95	29	62	77	TOTAL RECOVERY EFFICIENCY		17

AIRIA BRANDS INC. (LIFEBREATH®)

Model: RNC 200 • Options Installed: None
 Electrical Requirements: Volts: 120 Amps: 1.4
 Exhaust Air Transfer Ratio: 0.04 @100 Pa/0.4 in. wg 0.03 @ 50 Pa / 0.2 in. wg
 Low Temp. Vent Reduction Factor: 2% Supply 11% Exhaust • Low Temp. Imbalance Factor: 1.03

VENTILATION PERFORMANCE

EXT. STATIC PRESSURE		NET SUPPLY AIR FLOW		GROSS AIR FLOW			
				SUPPLY		EXHAUST	
Pa	in wg	L/s	cfm	L/s	cfm	cfm	
25	0.1	97	207	100	214	108	230
50	0.2	94	200	97	206	103	218
75	0.3	87	184	90	191	97	207
100	0.4	80	171	84	179	96	203
125	0.5	71	152	76	161	88	187
150	0.6	61	130	66	140	82	174
175	0.7	55	116	60	129	67	143
200	0.8	40	86	46	98	56	118



— Net Supply — Net Exhaust

ENERGY PERFORMANCE

	SUPPLY TEMPERATURE		NET AIR FLOW		POWER CONSUMED WATTS	SENSIBLE RECOVERY EFFICIENCY	APPARENT SENSIBLE EFFECTIVENESS	LATENT RECOVERY/MOISTURE TRANSFER
	°C	°F	L/S	CFM				
HEATING	0	+32	31	66	81	64	74	0.06
	0	+32	45	96	99	63	71	0.03
	0	+32	55	117	113	61	69	0.03
	-25	-13	51	109	119	62	73	0.01

CERTIFIED HEAT AND ENERGY RECOVERY VENTILATORS

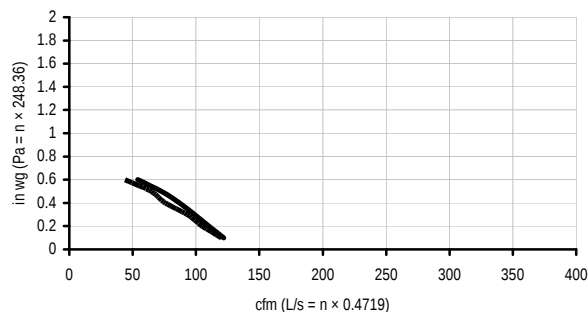
Section 3-13

AIRTECH-107

Model: H-140 • Options Installed: None
 Electrical Requirements: Volts: 120 Amps: 0.9
 Exhaust Air Transfer Ratio: .001 @ 100 Pa / 0.4 in. wg .014 @ 50 Pa / 0.2 in. wg

VENTILATION PERFORMANCE

EXT. STATIC PRESSURE		NET SUPPLY AIR FLOW		GROSS AIR FLOW			
				SUPPLY		EXHAUST	
Pa	in wg	L/s	cfm	L/s	cfm	L/s	cfm
25	0.1	57	122	58	123	56	120
50	0.2	52	110	52	111	49	105
75	0.3	46	99	47	100	44	93
100	0.4	41	87	41	87	36	76
125	0.5	34	73	34	73	31	65
150	0.6	26	54	26	55	21	44



Net Supply Net Exhaust

ENERGY PERFORMANCE

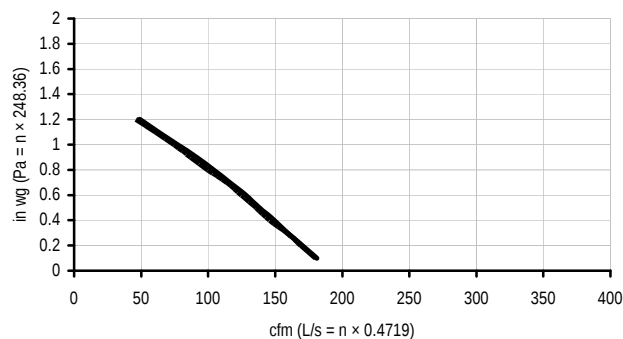
	SUPPLY TEMPERATURE		NET AIR FLOW		POWER CONSUMED	SENSIBLE RECOVERY EFFICIENCY	APPARENT SENSIBLE EFFECTIVENESS	LATENT RECOVERY/MOISTURE TRANSFER
	°C	°F	L/S	CFM	WATTS			
HEATING	0	+32	31	66	52	71	80	0.60
	0	+32	41	88	68	67	76	0.55
	0	+32	48	103	90	65	73	0.53
	-25	-13						
COOLING	+35	+95	30	64	52			
	+35	+95						
TOTAL RECOVERY EFFICIENCY							55	

AMANA BRAND INDOOR AIR QUALITY PRODUCTS

Model: HRV150 • Options Installed: None
 Electrical Requirements: Volts: 120 Amps: 1.3
 Exhaust Air Transfer Ratio: 0.03 @ 100 Pa/0.4 in. wg 0.02 @ 50 Pa / 0.2 in. wg
 Low Temp. Vent Reduction Factor: 5% Supply 0% Exhaust • Low Temp. Imbalance Factor: 0.82

VENTILATION PERFORMANCE

EXT. STATIC PRESSURE		NET SUPPLY AIR FLOW		GROSS AIR FLOW			
				SUPPLY		EXHAUST	
Pa	in wg	L/s	cfm	L/s	cfm	L/s	cfm
25	0.1	85	181	87	184	84	180
50	0.2	80	170	82	174	79	169
75	0.3	75	159	76	162	75	159
100	0.4	70	149	71	151	68	146
125	0.5	65	138	66	141	64	136
150	0.6	60	128	61	130	59	125
175	0.7	55	116	56	119	54	114
200	0.8	49	104	50	106	47	100
225	0.9	43	91	43	92	41	87
250	1.0	36	77	37	79	35	75
275	1.1	30	63	30	64	29	61
300	1.2	23	49	24	50	22	46



Net Supply Net Exhaust

ENERGY PERFORMANCE

	SUPPLY TEMPERATURE		NET AIR FLOW		POWER CONSUMED	SENSIBLE RECOVERY EFFICIENCY	APPARENT SENSIBLE EFFECTIVENESS	LATENT RECOVERY/MOISTURE TRANSFER
	°C	°F	L/S	CFM	WATTS			
HEATING	0	32	31	67	72	60	73	-0.11
	0	32	51	109	98	59	70	0.00
	0	32	76	161	144	55	63	0.00
	-25	-13	32	68	73	56	77	-0.02

CERTIFIED HEAT AND ENERGY RECOVERY VENTILATORS

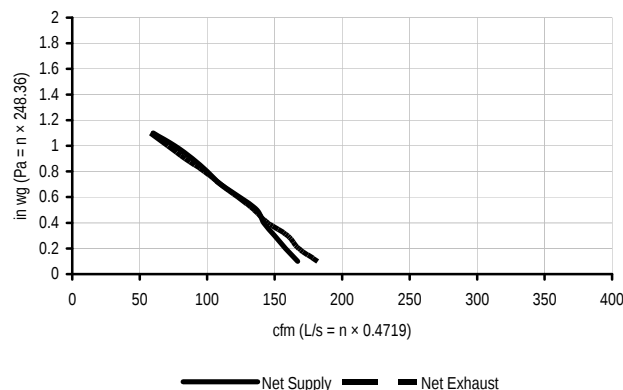
Section 3-14

AMANA BRAND INDOOR AIR QUALITY PRODUCTS

Model: HRV150D • Options Installed: Damper
 Electrical Requirements: Volts: 120 Amps: 1.3
 Exhaust Air Transfer Ratio: 0.02 @100 Pa/0.4 in. wg 0.01 @ 50 Pa / 0.2 in. wg
 Low Temp. Vent Reduction Factor: 12% Supply 14% Exhaust • Low Temp. Imbalance Factor: 0.96

VENTILATION PERFORMANCE

EXT. STATIC PRESSURE		NET SUPPLY AIR FLOW		GROSS AIR FLOW			
				SUPPLY		EXHAUST	
Pa	in wg	L/s	cfm	L/s	cfm	L/s	cfm
25	0.1	78	167	80	169	86	182
50	0.2	74	158	75	160	79	168
75	0.3	71	150	72	152	75	160
100	0.4	67	142	68	144	68	145
125	0.5	65	137	66	140	63	135
150	0.6	58	124	59	126	58	123
175	0.7	52	110	53	112	52	110
200	0.8	47	100	48	101	46	98
225	0.9	42	89	43	91	40	84
250	1.0	36	76	36	77	34	71
275	1.1	28	60	28	60	27	58



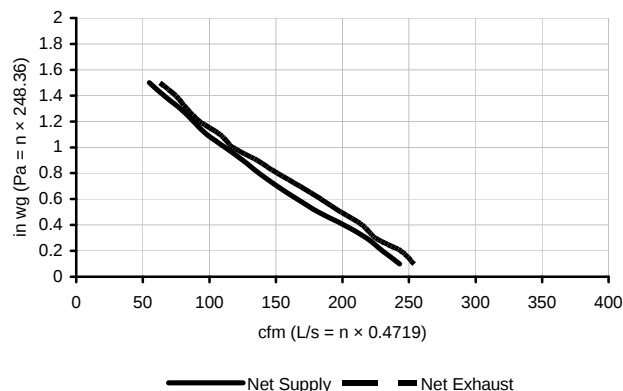
ENERGY PERFORMANCE

	SUPPLY TEMPERATURE		NET AIR FLOW		POWER CONSUMED WATTS	SENSIBLE RECOVERY EFFICIENCY	APPARENT SENSIBLE EFFECTIVENESS	LATENT RECOVERY/MOISTURE TRANSFER
	°C	°F	L/S	CFM				
HEATING	0	+32	31	65	72	59	73	0.01
	0	+32	49	104	102	61	70	0.00
	0	+32	76	161	148	58	66	-0.01
	-25	-13	32	68	96	61	77	0.02

AMANA BRAND INDOOR AIR QUALITY PRODUCTS

Model: HRV200 • Options Installed: None
 Electrical Requirements: Volts: 120 Amps: 2.1
 Exhaust Air Transfer Ratio: 0.02 @100 Pa/0.4 in. wg 0.01 @ 50 Pa / 0.2 in. wg
 Low Temp. Vent Reduction Factor: 8% Supply 0% Exhaust • Low Temp. Imbalance Factor: 0.81

EXT. STATIC PRESSURE		NET SUPPLY AIR FLOW		GROSS AIR FLOW			
				SUPPLY		EXHAUST	
Pa	in wg	L/s	cfm	L/s	cfm	L/s	cfm
25	0.1	114	243	116	246	120	254
50	0.2	109	230	110	233	115	244
75	0.3	103	218	104	221	106	225
100	0.4	95	201	96	204	101	215
125	0.5	86	182	87	185	94	199
150	0.6	78	166	79	168	87	184
175	0.7	71	151	72	154	79	168
200	0.8	65	137	66	139	71	151
225	0.9	59	125	60	127	64	136
250	1.0	53	112	53	113	56	118
275	1.1	46	98	47	99	51	108
300	1.2	42	88	42	90	44	93
325	1.3	37	78	37	79	39	83
350	1.4	31	66	32	67	35	75
375	1.5	26	55	26	56	30	63



ENERGY PERFORMANCE

	SUPPLY TEMPERATURE		NET AIR FLOW		POWER CONSUMED WATTS	SENSIBLE RECOVERY EFFICIENCY	APPARENT SENSIBLE EFFECTIVENESS	LATENT RECOVERY/MOISTURE TRANSFER
	°C	°F	L/S	CFM				
HEATING	0	+32	31	65	108	62	77	0.06
	0	+32	55	117	154	62	74	0.07
	0	+32	90	191	246	60	71	0.00
	-25	-13	61	129	154	59	79	0.00

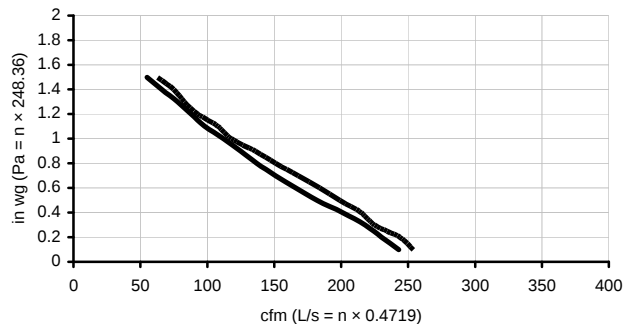
CERTIFIED HEAT AND ENERGY RECOVERY VENTILATORS

Section 3-15

AMANA BRAND INDOOR AIR QUALITY PRODUCTS

Model: HRV200D • Options Installed: None
 Electrical Requirements: Volts: 120 Amps: 2.1
 Exhaust Air Transfer Ratio: 0.02 @100 Pa/0.4 in. wg 0.01 @ 50 Pa / 0.2 in. wg
 Low Temp. Vent Reduction Factor: 8% Supply 18% Exhaust • Low Temp. Imbalance Factor: 1.09

EXT. STATIC PRESSURE		NET SUPPLY AIR FLOW		GROSS AIR FLOW			
Pa	in wg	L/s	cfm	SUPPLY		EXHAUST	
		L/s	cfm	L/s	cfm	L/s	cfm
25	0.1	114	243	116	246	120	254
50	0.2	109	230	110	233	115	244
75	0.3	103	218	104	221	106	225
100	0.4	95	201	96	204	101	215
125	0.5	86	182	87	185	94	199
150	0.6	78	166	79	168	87	184
175	0.7	71	151	72	154	79	168
200	0.8	65	137	66	139	71	151
225	0.9	59	125	60	127	64	136
250	1.0	53	112	53	113	56	118
275	1.1	46	98	47	99	51	108
300	1.2	42	88	42	90	44	93
325	1.3	37	78	37	79	39	83
350	1.4	31	66	32	67	35	75
375	1.5	26	55	26	56	30	63



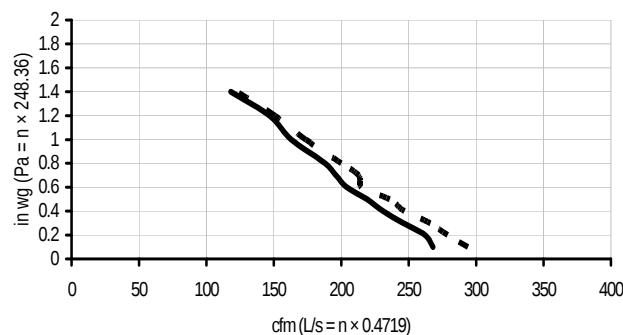
— Net Supply - - - Net Exhaust

SUPPLY TEMPERATURE		NET AIR FLOW		POWER CONSUMED	SENSIBLE RECOVERY EFFICIENCY	APPARENT SENSIBLE EFFECTIVENESS	LATENT RECOVERY/MOISTURE TRANSFER
°C	°F	L/S	CFM	WATTS			
HEATING	0	+32	31	65	108	62	77
	0	+32	55	117	154	62	74
	0	+32	90	191	246	60	71
	-25	-13	59	126	141	64	81
							0.06
							0.07
							0.00
							0.01

AMANA BRAND INDOOR AIR QUALITY PRODUCTS

Model: HRV300D • Options Installed: None
 Electrical Requirements: Volts: 115 Amps: 2.7
 Exhaust Air Transfer Ratio: --- @100 Pa/0.4 in. wg --- @ 50 Pa / 0.2 in. wg
 Low Temp. Vent Reduction Factor: 7% Supply 9% Exhaust • Low Temp. Imbalance Factor: 0.96

VENTILATION PERFORMANCE							
EXT. STATIC PRESSURE		NET SUPPLY AIR FLOW		GROSS AIR FLOW			
Pa	in wg	L/s	cfm	SUPPLY		EXHAUST	
		L/s	cfm	L/s	cfm	L/s	cfm
25	0.1	126	268	131	277	139	294
50	0.2	124	262	127	270	132	279
75	0.3	116	246	119	253	126	266
100	0.4	109	231	112	238	117	247
125	0.5	103	219	107	226	111	236
150	0.6	96	204	100	211	101	215
175	0.7	93	196	95	202	101	213
200	0.8	89	188	92	194	94	200
250	1.0	77	163	79	168	82	174
300	1.2	69	147	71	151	71	151
350	1.4	56	118	57	121	58	123



— Net Supply - - - Net Exhaust

ENERGY PERFORMANCE							
SUPPLY TEMPERATURE		NET AIR FLOW		POWER CONSUMED	SENSIBLE RECOVERY EFFICIENCY	APPARENT SENSIBLE EFFECTIVENESS	LATENT RECOVERY/MOISTURE TRANSFER
°C	°F	L/S	CFM	WATTS			
HEATING	0	+32	30	64	126	76	.02
	0	+32	55	117	212	78	.01
	0	+32	74	157	262	78	-.09
	-25	-13	57	121	224	72	.09
	-25	-13	55	117	220	72	--
						TOTAL RECOVERY EFFICIENCY	
						18	
						17	
COOLING	+35	+95	54	115	206		
	+35	+95	74	159	260		

CERTIFIED HEAT AND ENERGY RECOVERY VENTILATORS

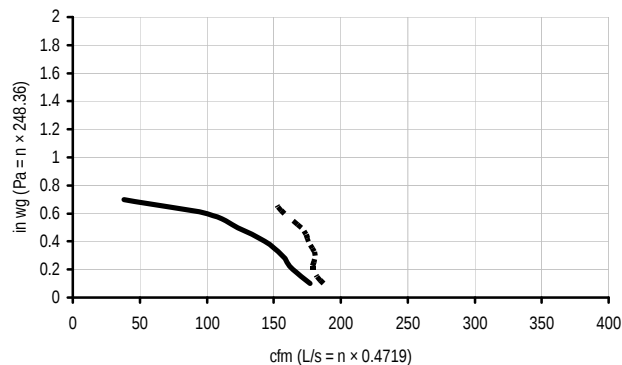
Section 3-16

AMERICAN ALDES VENTILATION CORPORATION

Model: LT15 • Options Installed: None
 Electrical Requirements: Volts: 120 Amps: 1.4
 Exhaust Air Transfer Ratio: 0.01 @100 Pa/0.4 in. wg 0.01 @ 50 Pa / 0.2 in. wg
 Low Temp. Vent Reduction Factor: 2% Supply 0% Exhaust • Low Temp. Imbalance Factor: n/a

VENTILATION PERFORMANCE

EXT. STATIC PRESSURE		NET SUPPLY AIR FLOW		GROSS AIR FLOW			
				SUPPLY		EXHAUST	
Pa	in wg	L/s	cfm	L/s	cfm	L/s	cfm
25	0.1	83	177	83	177	88	187
50	0.2	77	164	77	164	84	179
75	0.3	73	156	73	156	85	181
100	0.4	67	143	67	143	83	176
125	0.5	58	123	58	123	81	171
150	0.6	47	100	47	100	74	158
175	0.7	18	38	18	38	70	149



— Net Supply - - - Net Exhaust

ENERGY PERFORMANCE

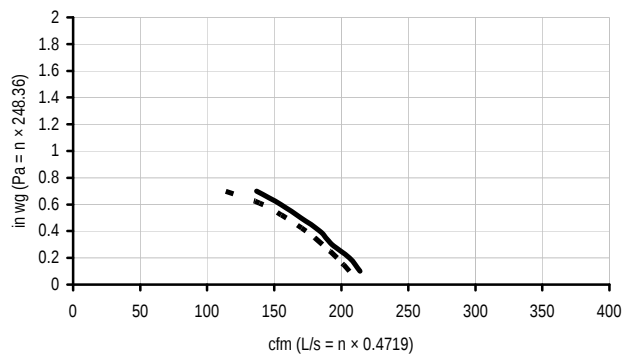
	SUPPLY TEMPERATURE		NET AIR FLOW		POWER CONSUMED	SENSIBLE RECOVERY EFFICIENCY	APPARENT SENSIBLE EFFECTIVENESS	LATENT RECOVERY/MOISTURE TRANSFER
	°C	°F	L/S	CFM	WATTS			
HEATING	0	32	32	67	78	66	76	-0.01
	0	32	44	94	95	64	72	-0.20
	0	32	56	118	110	60	68	-0.02
	-25	-13	32	68	82	60	78	0.08
TOTAL RECOVERY EFFICIENCY							20	
COOLING	35	95	31	66	74			

AMERICAN ALDES VENTILATION CORPORATION

Model: LT20 • Options Installed: None
 Electrical Requirements: Volts: 120 Amps: 1.4
 Exhaust Air Transfer Ratio: 0.01 @100 Pa/0.4 in. wg 0.01 @ 50 Pa / 0.2 in. wg
 Low Temp. Vent Reduction Factor: 1% Supply 2% Exhaust • Low Temp. Imbalance Factor: 0.967

VENTILATION PERFORMANCE

EXT. STATIC PRESSURE		NET SUPPLY AIR FLOW		GROSS AIR FLOW			
				SUPPLY		EXHAUST	
Pa	in wg	L/s	cfm	L/s	cfm	L/s	cfm
25	0.1	101	214	102	216	97	206
50	0.2	97	206	98	208	93	197
75	0.3	91	193	93	197	88	186
100	0.4	87	184	88	186	82	174
125	0.5	80	170	81	172	75	159
150	0.6	73	155	74	157	67	142
175	0.7	65	137	65	138	54	114



— Net Supply - - - Net Exhaust

ENERGY PERFORMANCE

	SUPPLY TEMPERATURE		NET AIR FLOW		POWER CONSUMED	SENSIBLE RECOVERY EFFICIENCY	APPARENT SENSIBLE EFFECTIVENESS	LATENT RECOVERY/MOISTURE TRANSFER
	°C	°F	L/S	CFM	WATTS			
HEATING	0	+32	68	144	114	59	66	0
	0	+32	63	133	109	58	66	0
	0	+32	56	119	100	60	67	0
	-25	-13	60	127	100	59	69	0
	-25	-13	55	117		60		

CERTIFIED HEAT AND ENERGY RECOVERY VENTILATORS

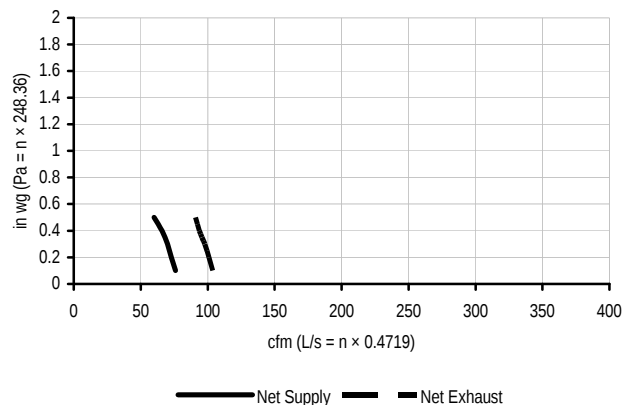
Section 3-17

AMERICAN ALDES VENTILATION CORPORATION

Model: 95 SRD • Options Installed: None
 Electrical Requirements: Volts: 120 Amps: 0.90
 Exhaust Air Transfer Ratio: 0.10 @100 Pa/0.4 in. wg 0.08 @ 50 Pa / 0.2 in. wg
 Low Temp. Vent Reduction Factor: 15% Supply, 22% Exhaust Low • Temp. Imbalance Factor: 1.00

VENTILATION PERFORMANCE

EXT. STATIC PRESSURE		NET SUPPLY AIR FLOW		GROSS AIR FLOW			
				SUPPLY		EXHAUST	
Pa	in wg	L/s	cfm	L/s	cfm	L/s	cfm
25	0.1	36	76	40	84	49	104
50	0.2	34	73	38	81	48	101
75	0.3	33	70	37	78	46	98
100	0.4	31	66	34	73	44	94
125	0.5	29	60	32	67	43	91



ENERGY PERFORMANCE

	SUPPLY TEMPERATURE		NET AIR FLOW		POWER CONSUMED WATTS	SENSIBLE RECOVERY EFFICIENCY	APPARENT SENSIBLE EFFECTIVENESS	LATENT RECOVERY/MOISTURE TRANSFER
	°C	°F	L/S	CFM				
HEATING	0	+32	28	60	59	75	88	-0.01
	0	+32	33	71	58	73	86	0.03
	0	+32	42	89	89	73	84	0.04
	-25	-13	29	61	76	68	86	0.02

AMERICAN ALDES VENTILATION CORPORATION

Model: 120 SRD • Options Installed: None
 Electrical Requirements: Volts: 120 Amps: 1.5
 Exhaust Air Transfer Ratio: 0.01 @100 Pa/0.4 in. wg 0.01 @ 50 Pa / 0.2 in. wg
 Low Temp. Vent Reduction Factor: 2.6% Supply 14.9% Exhaust • Low Temp. Imbalance Factor: .065

VENTILATION PERFORMANCE

EXT. STATIC PRESSURE		NET SUPPLY AIR FLOW		GROSS AIR FLOW			
				SUPPLY		EXHAUST	
Pa	in wg	L/s	cfm	L/s	cfm	L/s	cfm
25	0.1	67	142	68	144	72	154
50	0.2	64	137	65	138	69	147
75	0.3	62	131	62	133	66	141
100	0.4	60	128	61	129	64	135
125	0.5	58	123	58	124	60	128
150	0.6	54	115	55	116	58	123
175	0.7	53	113	54	114	55	116
200	0.8	49	105	50	106	51	109
225	0.9	48	102	48	103	48	102
250	1.0	45	96	46	97	45	95
275	1.1	42	90	43	91	41	87
300	1.2	39	84	40	85	33	71

ENERGY PERFORMANCE

	SUPPLY TEMPERATURE		NET AIR FLOW		POWER CONSUMED WATTS	SENSIBLE RECOVERY EFFICIENCY	APPARENT SENSIBLE EFFECTIVENESS	LATENT RECOVERY/MOISTURE TRANSFER
	°C	°F	L/S	CFM				
HEATING	0	+32	33	70	76	59	68	0.03
	0	+32	42	89	94	57	67	0.03
	0	+32	56	120	156	52	62	0.03
	-25	-13	32	67	109	56	72	0.01

CERTIFIED HEAT AND ENERGY RECOVERY VENTILATORS

Section 3-18

AMERICAN ALDES VENTILATION CORPORATION

Model: 155 SRD • Options Installed: None
 Electrical Requirements: Volts: 120 Amps: 1.4
 Exhaust Air Transfer Ratio: 0.037 @100 Pa/0.4 in. wg 0.027 @ 50 Pa / 0.2 in. wg
 Low Temp. Vent Reduction Factor: 3.7% Supply 13.8% Exhaust • Low Temp. Imbalance Factor: 1.04

VENTILATION PERFORMANCE

EXT. STATIC PRESSURE		NET SUPPLY AIR FLOW		GROSS AIR FLOW			
				SUPPLY		EXHAUST	
Pa	in wg	L/s	cfm	L/s	cfm	L/s	cfm
25	0.1	68	144	70	149	80	171
50	0.2	63	134	65	139	78	165
75	0.3	59	125	61	129	75	160
100	0.4	53	113	55	117	74	157
125	0.5	43	92	45	95	70	149
150	0.6	34	73	36	76	64	137
175	0.7	28	59	29	61	57	122

ENERGY PERFORMANCE

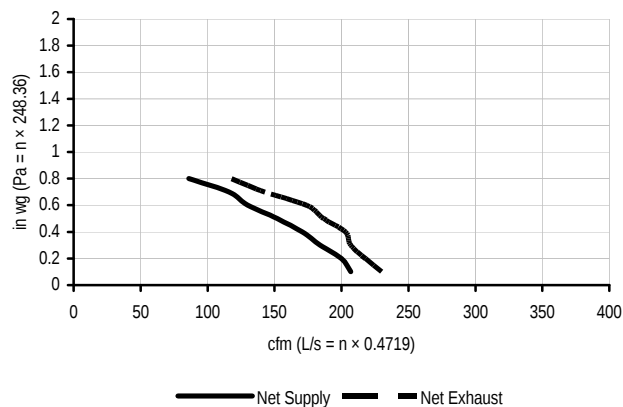
	SUPPLY TEMPERATURE		NET AIR FLOW		POWER CONSUMED WATTS	SENSIBLE RECOVERY EFFICIENCY	APPARENT SENSIBLE EFFECTIVENESS	LATENT RECOVERY/MOISTURE TRANSFER
	°C	°F	L/S	CFM				
HEATING	0	+32	30	64	78	64	73	0.00
	0	+32	45	96	104	63	71	0.01
	0	+32	55	117	119	61	69	0.01
COOLING	-25	-13	35	74	96	66	78	0.00
	+35	+95	29	62	77	TOTAL RECOVERY EFFICIENCY		17

AMERICAN ALDES VENTILATION CORPORATION

Model: 200 SRD • Options Installed: None
 Electrical Requirements: Volts: 120 Amps: 1.4
 Exhaust Air Transfer Ratio: 0.04 @100 Pa/0.4 in. wg 0.03 @ 50 Pa / 0.2 in. wg
 Low Temp. Vent Reduction Factor: 2% Supply 11% Exhaust • Low Temp. Imbalance Factor: 1.03

VENTILATION PERFORMANCE

EXT. STATIC PRESSURE		NET SUPPLY AIR FLOW		GROSS AIR FLOW			
				SUPPLY		EXHAUST	
Pa	in wg	L/s	cfm	L/s	cfm	L/s	cfm
25	0.1	97	207	100	214	108	230
50	0.2	94	200	97	206	103	218
75	0.3	87	184	90	191	97	207
100	0.4	80	171	84	179	96	203
125	0.5	71	152	76	161	88	187
150	0.6	61	130	66	140	82	174
175	0.7	55	116	60	129	67	143
200	0.8	40	86	46	98	56	118



ENERGY PERFORMANCE

	SUPPLY TEMPERATURE		NET AIR FLOW		POWER CONSUMED WATTS	SENSIBLE RECOVERY EFFICIENCY	APPARENT SENSIBLE EFFECTIVENESS	LATENT RECOVERY/MOISTURE TRANSFER
	°C	°F	L/S	CFM				
HEATING	0	+32	31	66	81	64	74	0.06
	0	+32	45	96	99	63	71	0.03
	0	+32	55	117	113	61	69	0.03
	-25	-13	51	109	119	62	73	0.01

ENERGY PERFORMANCE								
SUPPLY TEMPERATURE			NET AIR FLOW		POWER CONSUMED	SENSIBLE RECOVERY EFFICIENCY	APPARENT SENSIBLE EFFECTIVENESS	LATENT RECOVERY/MOISTURE TRANSFER
	°C	°F	L/S	CFM	WATTS			
HEATING	0	+32	58	124	121	72	80	0.55
COOLING	+35	+95	59	126	121		TOTAL RECOVERY EFFICIENCY	
							46	

CERTIFIED HEAT AND ENERGY RECOVERY VENTILATORS

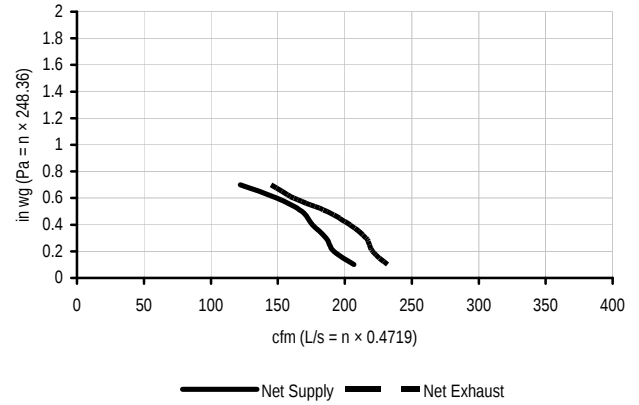
Section 3-20

AMERICAN STANDARD

Model Number: AERVR200A9P00A • Options Installed: None
 Electrical Requirements: Volts: 120 Amps: 1.5
 Exhaust Air Transfer Ratio: 0.03 @ 100 Pa /0.4 in. wg 0.03 @ 50 Pa/0.2 in. wg

VENTILATION PERFORMANCE

EXT. STATIC PRESSURE		NET SUPPLY AIR FLOW		GROSS AIR FLOW			
				SUPPLY		EXHAUST	
Pa	in wg	L/s	cfm	L/s	cfm	L/s	cfm
25	0.1	97	207	100	213	109	232
50	0.2	90	192	93	199	104	221
75	0.3	88	186	90	192	101	216
100	0.4	83	176	85	181	96	204
125	0.5	79	168	81	173	88	187
150	0.6	70	149	72	154	76	162
175	0.7	57	122	59	126	68	145



ENERGY PERFORMANCE

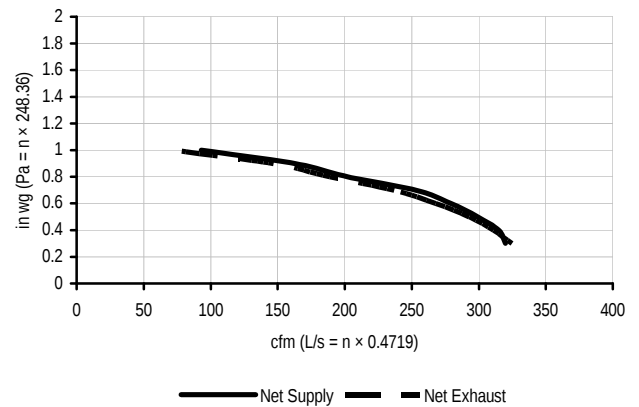
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	°C	°F	L/S	CFM	WATTS			
HEATING	0	+32	85	181	157	78	85	0.62
COOLING	+35	+95	85	180	155		TOTAL RECOVERY EFFICIENCY 52	

AMERICAN STANDARD

Model Number: AERVR300A9P00A • Options Installed: None
 Electrical Requirements: Volts: 120 Amps: 3.3
 Exhaust Air Transfer Ratio: 0.03 @ 100 Pa/0.4 in. wg --- @ 50 Pa/0.2 in. wg

VENTILATION PERFORMANCE

EXT. STATIC PRESSURE		NET SUPPLY AIR FLOW		GROSS AIR FLOW			
				SUPPLY		EXHAUST	
Pa	in wg	L/s	cfm	L/s	cfm	L/s	cfm
75	0.3	150	320	155	330	153	325
100	0.4	148	315	153	325	146	311
125	0.5	141	299	145	309	138	293
150	0.6	131	279	135	287	126	268
175	0.7	119	253	123	261	111	237
200	0.8	95	202	98	209	89	189
225	0.9	77	163	79	169	69	147
250	1.0	44	93	45	96	34	72



ENERGY PERFORMANCE

	SUPPLY TEMPERATURE		NET AIR FLOW		POWER CONSUMED	SENSIBLE RECOVERY EFFICIENCY	APPARENT SENSIBLE EFFECTIVENESS	LATENT RECOVERY/MOISTURE TRANSFER
	°C	°F	L/S	CFM	WATTS			
HEATING	0	+32	139	295	317	70	78	0.51
COOLING	+35	+95	134	285	311		TOTAL RECOVERY EFFICIENCY 43	

CERTIFIED HEAT AND ENERGY RECOVERY VENTILATORS

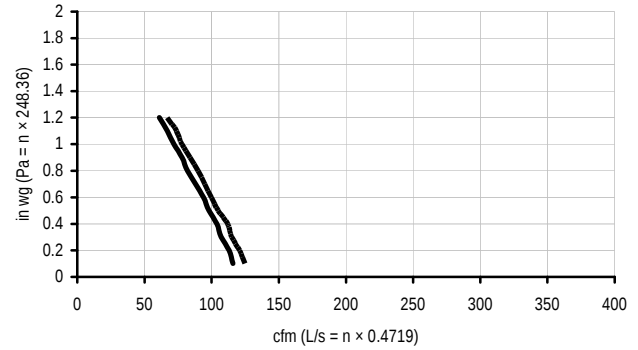
Section 3-21

BROAN – NUTONE LLC

Model: ERV90HCS • Options Installed: None
 Electrical Requirements: Volts: 120 Amps: 1.5
 Exhaust Air Transfer Ratio: 0.03 @100 Pa/0.4 in. wg 0.03 @ 50 Pa / 0.2 in. wg
 Low Temp. Vent Reduction Factor: 27.9% Supply 30.2% Exhaust • Low Temp. Imbalance Factor: 1.13

VENTILATION PERFORMANCE

EXT. STATIC PRESSURE		NET SUPPLY AIR FLOW		GROSS AIR FLOW			
Pa	in wg	L/s	cfm	SUPPLY		EXHAUST	
25	0.1	55	116	56	119	59	125
50	0.2	53	113	55	116	57	121
75	0.3	50	107	52	111	54	115
100	0.4	49	104	50	107	53	112
125	0.5	46	98	48	101	50	105
150	0.6	44	94	46	97	47	100
175	0.7	42	88	43	91	45	95
200	0.8	39	82	40	84	42	90
225	0.9	37	78	38	81	40	84
250	1.0	34	72	35	75	37	78
275	1.1	32	67	33	69	35	74
300	1.2	29	61	30	63	32	67



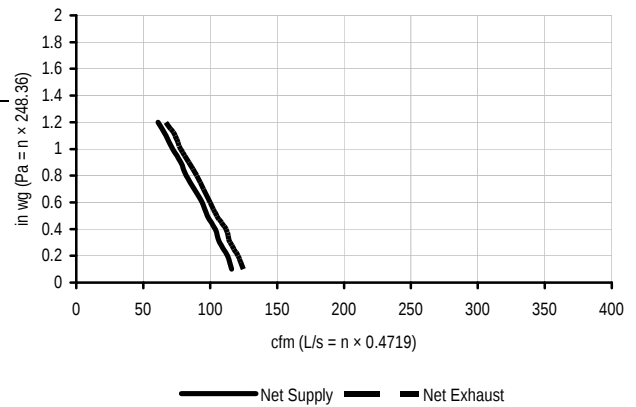
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		°C	°F	L/S	CFM	WATTS			
HEATING	0	+32	13	28		73	69	94	0.68
	0	+32	45	96		137	62	74	0.48
	-25	-13	25	54		102	54	83	0.58
								TOTAL RECOVERY EFFICIENCY	
								54	
COOLING	+35	+95	14	29		70			

BROAN – NUTONE LLC

Model: ERV90HCT • Options Installed: None
 Electrical Requirements: Volts: 120 Amps: 1.5
 Exhaust Air Transfer Ratio: 0.03 @100 Pa/0.4 in. wg 0.03 @ 50 Pa / 0.2 in. wg
 Low Temp. Vent Reduction Factor: 27.9% Supply 30.2% Exhaust • Low Temp. Imbalance Factor: 1.13
 ENERGY PERFORMANCE

VENTILATION PERFORMANCE

EXT. STATIC PRESSURE		NET SUPPLY AIR FLOW		GROSS AIR FLOW			
Pa	in wg	L/s	cfm	SUPPLY		EXHAUST	
25	0.1	55	116	56	119	59	125
50	0.2	53	113	55	116	57	121
75	0.3	50	107	52	111	54	115
100	0.4	49	104	50	107	53	112
125	0.5	46	98	48	101	50	105
150	0.6	44	94	46	97	47	100
175	0.7	42	88	43	91	45	95
200	0.8	39	82	40	84	42	90
225	0.9	37	78	38	81	40	84
250	1.0	34	72	35	75	37	78
275	1.1	32	67	33	69	35	74
300	1.2	29	61	30	63	32	67



		SUPPLY TEMPERATURE		NET AIR FLOW		POWER CONSUMED	SENSIBLE RECOVERY EFFICIENCY	APPARENT SENSIBLE EFFECTIVENESS	LATENT RECOVERY/MOISTURE TRANSFER
		°C	°F	L/S	CFM	WATTS			
HEATING	0	+32	13	28		73	69	94	0.68
	0	+32	45	96		137	62	74	0.48
	-25	-13	25	54		102	54	83	0.58
								TOTAL RECOVERY EFFICIENCY	
								54	
COOLING	+35	+95	14	29		70			

	SUPPLY TEMPERATURE		NET AIR FLOW		POWER CONSUMED	SENSIBLE RECOVERY EFFICIENCY	APPARENT SENSIBLE EFFECTIVENESS	LATENT RECOVERY/MOISTURE TRANSFER
	°C	°F	L/S	CFM	WATTS			
HEATING	0	+32	52	110	93	69	76	0.45
	0	+32	74	157	130	64	71	0.38
	0	+32	96	203	193	60	68	0.30
	-15	5	52	110	122	55	76	0.26
TOTAL RECOVERY EFFICIENCY								
COOLING	+35	+95	50	106	89		41	

CERTIFIED HEAT AND ENERGY RECOVERY VENTILATORS

Section 3-23

BROAN – NUTONE LLC

Model: Guardian Plus HR 2.6 • Options Installed: None

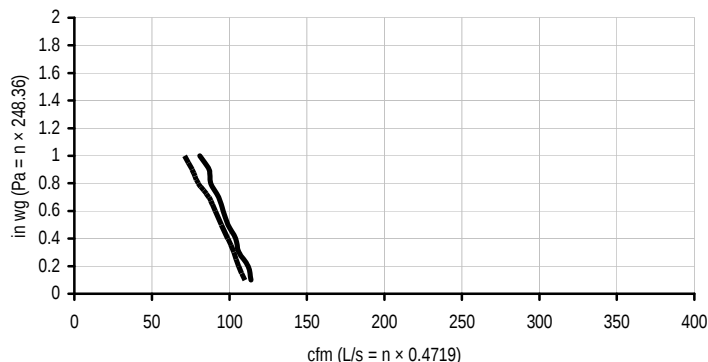
Electrical Requirements: Volts: 120 Amps: 1.6

Exhaust Air Transfer Ratio: 0.05 @100 Pa/0.4 in. wg --- @ 50 Pa / 0.2 in. wg

Low Temp. Vent Reduction Factor: 3.6% Supply 4.2% Exhaust • Low Temp. Imbalance Factor: 1.20

VENTILATION PERFORMANCE

EXT. STATIC PRESSURE		NET SUPPLY AIR FLOW		GROSS AIR FLOW			
				SUPPLY		EXHAUST	
Pa	in wg	L/s	cfm	L/s	cfm	L/s	cfm
25	0.1	54	114	56	119	52	110
50	0.2	53	112	55	117	50	106
75	0.3	50	106	52	111	49	103
100	0.4	49	104	51	109	47	99
125	0.5	47	99	49	103	45	95
150	0.6	45	96	48	101	43	91
175	0.7	44	93	46	98	41	87
200	0.8	42	88	44	93	38	80
225	0.9	41	87	43	91	36	76
250	1.0	38	81	40	85	34	71



ENERGY PERFORMANCE

	SUPPLY TEMPERATURE		NET AIR FLOW		POWER CONSUMED	SENSIBLE RECOVERY EFFICIENCY	APPARENT SENSIBLE EFFECTIVENESS	LATENT RECOVERY/MOISTURE TRANSFER
	°C	°F	L/S	CFM	WATTS			
HEATING	0	+32	24	52	116	63	85	0.02
	0	+32	35	74	147	59	75	0.05
	0	+32	44	94	189	57	75	0.01
	-25	-13	16	35	114	58	95	0.01

BROAN – NUTONE LLC

Model: HRV90HS • Options Installed: None

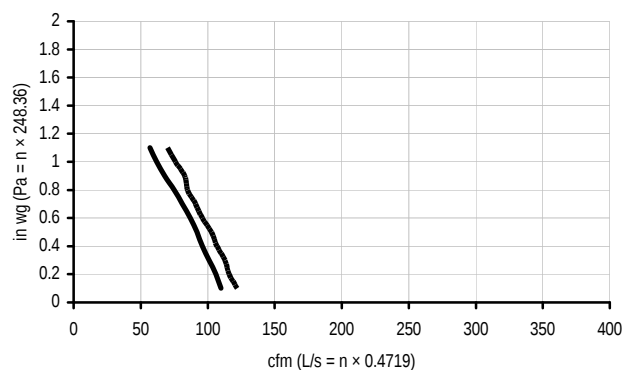
Electrical Requirements: Volts: 120 Amps: 1.5

Exhaust Air Transfer Ratio: 0.02 @100 Pa/0.4 in. wg 0.05 @ 50 Pa / 0.2 in. wg

Low Temp. Vent Reduction Factor: 16.4% Supply 31.3% Exhaust • Low Temp. Imbalance Factor: 1.15

VENTILATION PERFORMANCE

EXT. STATIC PRESSURE		NET SUPPLY AIR FLOW		GROSS AIR FLOW			
				SUPPLY		EXHAUST	
Pa	in wg	L/s	cfm	L/s	cfm	L/s	cfm
25	0.1	52	110	52	110	58	122
50	0.2	50	106	50	106	55	116
75	0.3	48	101	48	102	53	113
100	0.4	45	96	46	97	50	107
125	0.5	43	92	43	92	49	103
150	0.6	41	87	41	87	45	96
175	0.7	38	81	38	81	43	91
200	0.8	35	75	36	76	40	85
225	0.9	32	68	33	69	39	83
250	1.0	29	62	29	62	36	76
275	1.1	27	57	27	58	33	70



ENERGY PERFORMANCE

	SUPPLY TEMPERATURE		NET AIR FLOW		POWER CONSUMED	SENSIBLE RECOVERY EFFICIENCY	APPARENT SENSIBLE EFFECTIVENESS	LATENT RECOVERY/MOISTURE TRANSFER
	°C	°F	L/S	CFM	WATTS			
HEATING	0	+32	23	48	68	66	78	0.07
	0	+32	30	63	82	65	76	0.04
	0	+32	44	93	116	59	68	0.04
	-25	-13	30	63	110	55	81	0.08

CERTIFIED HEAT AND ENERGY RECOVERY VENTILATORS

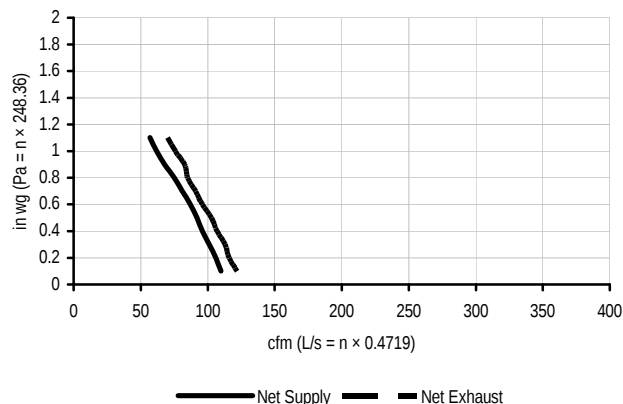
Section 3-24

BROAN – NUTONE LLC

Model: HRV90HT • Options Installed: None
 Electrical Requirements: Volts: 120 Amps: 1.5
 Exhaust Air Transfer Ratio: 0.02 @100 Pa/0.4 in. wg 0.05 @ 50 Pa / 0.2 in. wg
 Low Temp. Vent Reduction Factor: 16.4% Supply 31.3% Exhaust • Low Temp. Imbalance Factor: 1.15

VENTILATION PERFORMANCE

EXT. STATIC PRESSURE		NET SUPPLY AIR FLOW		GROSS AIR FLOW			
				SUPPLY		EXHAUST	
Pa	in wg	L/s	cfm	L/s	cfm	L/s	cfm
25	0.1	52	110	52	110	58	122
50	0.2	50	106	50	106	55	116
75	0.3	48	101	48	102	53	113
100	0.4	45	96	46	97	50	107
125	0.5	43	92	43	92	49	103
150	0.6	41	87	41	87	45	96
175	0.7	38	81	38	81	43	91
200	0.8	35	75	36	76	40	85
225	0.9	32	68	33	69	39	83
250	1.0	29	62	29	62	36	76
275	1.1	27	57	27	58	33	70



ENERGY PERFORMANCE

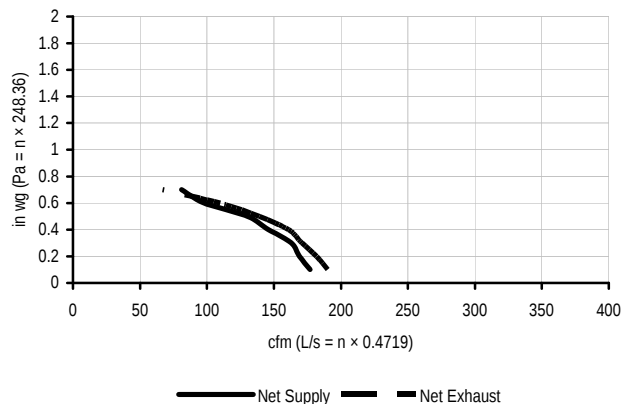
	SUPPLY TEMPERATURE		NET AIR FLOW		POWER CONSUMED	SENSIBLE RECOVERY EFFICIENCY	APPARENT SENSIBLE EFFECTIVENESS	LATENT RECOVERY/MOISTURE TRANSFER
	°C	°F	L/S	CFM	WATTS			
HEATING	0	+32	23	48	68	66	78	0.07
	0	+32	30	63	82	65	76	0.04
	0	+32	44	93	116	59	68	0.04
	-25	-13	30	63	110	55	81	0.08

BROAN – NUTONE LLC

Model: HRV 100H • Options Installed: Defrost
 Electrical Requirements: Volts: 120 Amps: 1.3
 Exhaust Air Transfer Ratio: 0.05 @100 Pa/0.4 in. wg --- @ 50 Pa / 0.2 in. wg
 Low Temp. Vent Reduction Factor: 9% Supply 22% Exhaust • Low Temp. Imbalance Factor: 1.00

VENTILATION PERFORMANCE

EXT. STATIC PRESSURE		NET SUPPLY AIR FLOW		GROSS AIR FLOW			
				SUPPLY		EXHAUST	
Pa	in wg	L/s	cfm	L/s	cfm	L/s	cfm
25	0.1	84	177	88	186	90	190
50	0.2	80	169	84	178	86	182
75	0.3	77	163	81	171	81	171
100	0.4	69	146	72	153	76	161
125	0.5	61	130	65	137	66	139
150	0.6	46	98	49	103	52	110
175	0.7	38	81	40	85	32	67



ENERGY PERFORMANCE

	SUPPLY TEMPERATURE		NET AIR FLOW		POWER CONSUMED	SENSIBLE RECOVERY EFFICIENCY	APPARENT SENSIBLE EFFECTIVENESS	LATENT RECOVERY/MOISTURE TRANSFER
	°C	°F	L/S	CFM	WATTS			
HEATING	0	+32	30	64	54	75	83	-0.03
	0	+32	46	97	78	67	74	0.01
	0	+32	65	138	124	64	72	-0.02
	-25	-13	26	55	62	67	89	0.05

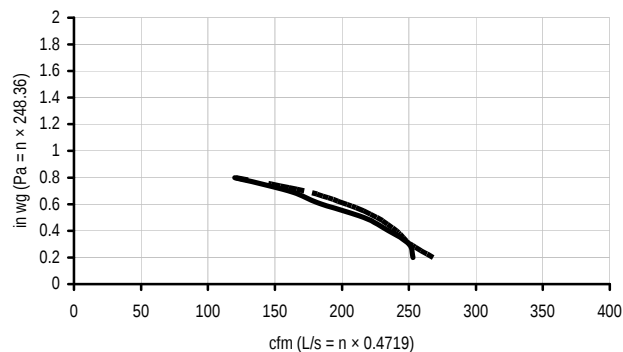
CERTIFIED HEAT AND ENERGY RECOVERY VENTILATORS

Section 3-25

BROAN - NUTONE LLC

Model: HRV 200H • Options Installed: Defrost
 Electrical Requirements: Volts: 120 Amps: 1.9
 Exhaust Air Transfer Ratio: --- @100 Pa/0.4 in. wg 0.04 @ 50 Pa / 0.2 in. wg
 Low Temp. Vent Reduction Factor: 0% Supply 23% Exhaust • Low Temp. Imbalance Factor: 1.00

VENTILATION PERFORMANCE							
EXT. STATIC PRESSURE		NET SUPPLY AIR FLOW		GROSS AIR FLOW			
				SUPPLY		EXHAUST	
Pa	in wg	L/s	cfm	L/s	cfm	L/s	cfm
50	0.2	119	253	125	264	126	268
75	0.3	118	250	124	262	118	251
100	0.4	111	235	116	245	114	241
125	0.5	102	216	106	224	107	226
150	0.6	87	185	91	193	96	204
175	0.7	76	160	79	167	81	172
200	0.8	57	120	59	124	57	121



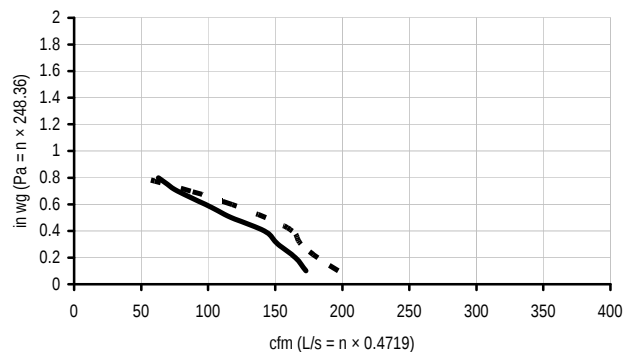
— Net Supply - - - Net Exhaust

ENERGY PERFORMANCE								
	SUPPLY TEMPERATURE		NET AIR FLOW		POWER CONSUMED WATTS	SENSIBLE RECOVERY EFFICIENCY	APPARENT SENSIBLE EFFECTIVENESS	LATENT RECOVERY/MOISTURE TRANSFER
	°C	°F	L/S	CFM				
HEATING	0	+32	51	109	92	70	77	-0.01
	0	+32	73	155	128	65	72	-0.02
	0	+32	102	215	191	62	70	-0.01
	-25	-13	52	110	104	60	94	0.05

BRYANT

Model: ERVBLHU1150-B • Options Installed: Defrost
 Electrical Requirements: Volts: 120 Amps: 1.3
 Exhaust Air Transfer Ratio: --- @100 Pa/0.4 in. wg 0.06 @ 50 Pa / 0.2 in. wg
 Low Temp. Vent Reduction Factor: 0% Supply 0% Exhaust • Low Temp. Imbalance Factor: 0.79

VENTILATION PERFORMANCE							
EXT. STATIC PRESSURE		NET SUPPLY AIR FLOW		GROSS AIR FLOW			
				SUPPLY		EXHAUST	
Pa	in wg	L/s	cfm	L/s	cfm	L/s	cfm
25	0.1	82	173	87	184	93	197
50	0.2	78	165	83	175	86	182
75	0.3	72	152	76	162	80	169
100	0.4	67	142	71	151	77	163
125	0.5	55	117	59	124	67	143
150	0.6	46	98	49	104	56	118
175	0.7	36	77	39	82	41	87
200	0.8	30	63	32	67	24	51



— Net Supply - - - Net Exhaust

ENERGY PERFORMANCE								
	SUPPLY TEMPERATURE		NET AIR FLOW		POWER CONSUMED WATTS	SENSIBLE RECOVERY EFFICIENCY	APPARENT SENSIBLE EFFECTIVENESS	LATENT RECOVERY/MOISTURE TRANSFER
	°C	°F	L/S	CFM				
HEATING	0	+32	29	60	56	71	79	0.52
	0	+32	47	100	80	64	73	0.41
	0	+32	65	137	126	60	68	0.36
	-15	5	31	65	64	56	81	0.41
COOLING	+35	+95	28	59	52	TOTAL RECOVERY EFFICIENCY		45

Low Temp. Vent Reduction Factor: 0% Supply 0% Exhaust • Low Temp. Imbalance Factor: .84

The graph plots $\ln wg$ (where $Pa = n \times 243.36$) on the y-axis against cfm (where $L/s = n \times 0.4719$) on the x-axis. The y-axis scale is from 0 to 2 in increments of 0.2. The x-axis scale is from 0 to 400 in increments of 50. A solid black curve starts at approximately (80, 0.8) and decreases to about (230, 0.15). A dashed black curve starts at approximately (120, 0.8) and increases to about (270, 0.15).

Low Temp. Vent Reduction Factor: 27.9% Supply 30.2% Exhaust • Low Temp. Imbalance Factor: 1.13

	SUPPLY TEMPERATURE		NET AIR FLOW		POWER CONSUMED WATTS	SENSIBLE RECOVERY EFFICIENCY	APPARENT SENSIBLE EFFECTIVENESS	LATENT RECOVERY/MOISTURE TRANSFER
	°C	°F	L/S	CFM				
HEATING	0	+32	13	28	73	69	94	0.68
	0	+32	45	96	137	62	74	0.48
	-25	-13	25	54	102	54	83	0.58
COOLING	+35	+95	14	29	70			
							TOTAL RECOVERY EFFICIENCY	
							54	

CERTIFIED HEAT AND ENERGY RECOVERY VENTILATORS

Section 3-27

BRYANT

Model: ERVBBSVA1100-A • Options Installed: None

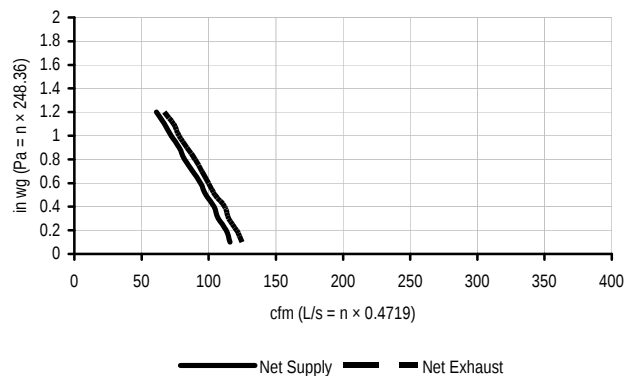
Electrical Requirements: Volts: 120 Amps: 1.5

Exhaust Air Transfer Ratio: 0.03 @100 Pa/0.4 in. wg 0.03 @ 50 Pa / 0.2 in. wg

Low Temp. Vent Reduction Factor: 27.9% Supply 30.2% Exhaust • Low Temp. Imbalance Factor: 1.13

VENTILATION PERFORMANCE

EXT. STATIC PRESSURE		NET SUPPLY AIR FLOW		GROSS AIR FLOW			
				SUPPLY		EXHAUST	
Pa	in wg	L/s	cfm	L/s	cfm	L/s	cfm
25	0.1	55	116	56	119	59	125
50	0.2	53	113	55	116	57	121
75	0.3	50	107	52	111	54	115
100	0.4	49	104	50	107	53	112
125	0.5	46	98	48	101	50	105
150	0.6	44	94	46	97	47	100
175	0.7	42	88	43	91	45	95
200	0.8	39	82	40	84	42	90
225	0.9	37	78	38	81	40	84
250	1.0	34	72	35	75	37	78
275	1.1	32	67	33	69	35	74
300	1.2	29	61	30	63	32	67



ENERGY PERFORMANCE

	SUPPLY TEMPERATURE		NET AIR FLOW		POWER CONSUMED WATTS	SENSIBLE RECOVERY EFFICIENCY	APPARENT SENSIBLE EFFECTIVENESS	LATENT RECOVERY/MOISTURE TRANSFER
	°C	°F	L/S	CFM				
HEATING	0	+32	13	28	73	69	94	0.68
	0	+32	45	96	137	62	74	0.48
	-25	-13	25	54	102	54	83	0.58
COOLING	+35	+95	14	29	70		TOTAL RECOVERY EFFICIENCY	
							54	

BRYANT

Model: HRVBBLHA1150-A • Options Installed: Defrost

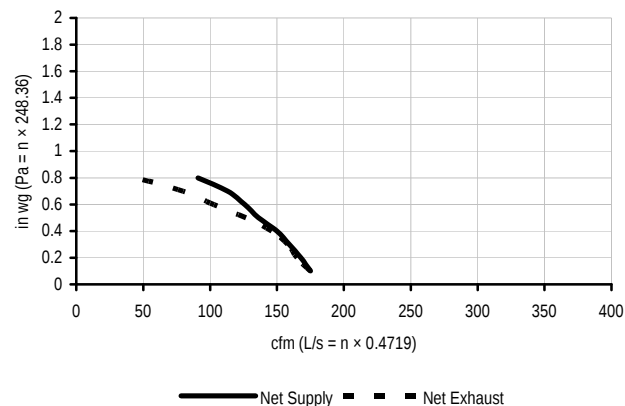
Electrical Requirements: Volts: 120 Amps: 1.3

Exhaust Air Transfer Ratio: 0.01 @100 Pa/0.4 in. wg --- @ 50 Pa / 0.2 in. wg

Low Temp. Vent Reduction Factor: 10% Supply 13% Exhaust • Low Temp. Imbalance Factor: 0.90

VENTILATION PERFORMANCE

EXT. STATIC PRESSURE		NET SUPPLY AIR FLOW		GROSS AIR FLOW			
				SUPPLY		EXHAUST	
Pa	in wg	L/s	cfm	L/s	cfm	L/s	cfm
25	0.1	83	175	83	176	83	175
50	0.2	79	168	80	169	78	165
75	0.3	75	159	75	159	75	158
100	0.4	71	150	71	151	69	146
125	0.5	64	136	64	136	60	127
150	0.6	59	126	60	127	49	103
175	0.7	53	113	53	113	38	80
200	0.8	43	91	43	91	21	45



ENERGY PERFORMANCE

	SUPPLY TEMPERATURE		NET AIR FLOW		POWER CONSUMED WATTS	SENSIBLE RECOVERY EFFICIENCY	APPARENT SENSIBLE EFFECTIVENESS	LATENT RECOVERY/MOISTURE TRANSFER
	°C	°F	L/S	CFM				
HEATING	0	+32	31	66	85	69	81	-0.01
	0	+32	56	119	124	60	70	-0.01
	-25	-13	37	78	114	62	80	0.08

CERTIFIED HEAT AND ENERGY RECOVERY VENTILATORS

Section 3-28

BRYANT

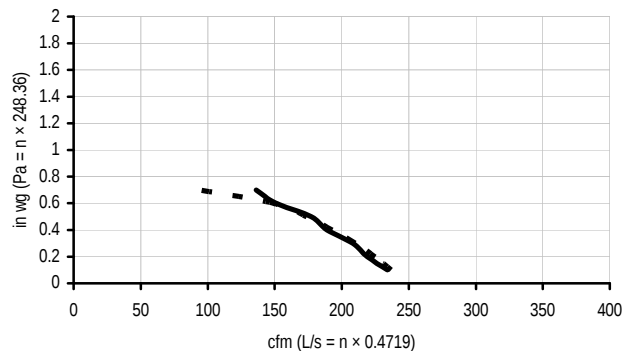
Model: HRVBLHA1250-A • Options Installed: Defrost

Electrical Requirements: Volts: 120 Amps: 2.1

Exhaust Air Transfer Ratio: 0.01 @100 Pa/0.4 in. wg --- @ 50 Pa / 0.2 in. wg

Low Temp. Vent Reduction Factor: 10% Supply 13% Exhaust • Low Temp. Imbalance Factor: 0.90

EXT. STATIC PRESSURE		VENTILATION PERFORMANCE					
		NET SUPPLY		GROSS AIR FLOW			
		AIR FLOW		SUPPLY		EXHAUST	
Pa	in wg	L/s	cfm	L/s	cfm	L/s	cfm
25	0.1	110	234	112	237	112	237
50	0.2	103	219	105	223	106	225
75	0.3	98	208	100	211	99	210
100	0.4	89	189	91	192	91	193
125	0.5	84	177	85	180	82	174
150	0.6	71	151	72	153	70	149
175	0.7	64	136	65	138	44	94



— Net Supply - - - Net Exhaust

ENERGY PERFORMANCE

	SUPPLY TEMPERATURE		NET AIR FLOW		POWER CONSUMED WATTS	SENSIBLE RECOVERY EFFICIENCY	APPARENT SENSIBLE EFFECTIVENESS	LATENT RECOVERY/MOISTURE TRANSFER
	°C	°F	L/S	CFM				
HEATING	0	+32	56	119	124	60	70	-0.01
	0	+32	86	182	197	53	62	-0.01
	-25	-13	37	78	114	62	80	0.08

BRYANT

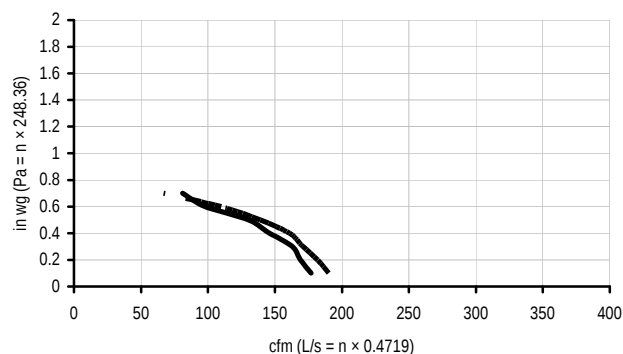
Model: HRVBLHU1150-B • Options Installed: Defrost

Electrical Requirements: Volts: 120 Amps: 1.3

Exhaust Air Transfer Ratio: --- @100 Pa/0.4 in. wg 0.05 @ 50 Pa / 0.2 in. wg

Low Temp. Vent Reduction Factor: 9% Supply 22% Exhaust • Low Temp. Imbalance Factor: 1.0

EXT. STATIC PRESSURE		VENTILATION PERFORMANCE					
		NET SUPPLY		GROSS AIR FLOW			
		AIR FLOW		SUPPLY		EXHAUST	
Pa	in wg	L/s	cfm	L/s	cfm	L/s	cfm
25	0.1	84	177	88	186	90	190
50	0.2	80	169	84	178	86	182
75	0.3	77	163	81	171	81	171
100	0.4	69	146	72	153	76	161
125	0.5	61	130	65	137	66	139
150	0.6	46	98	49	103	52	110
175	0.7	38	81	40	85	32	67



— Net Supply - - - Net Exhaust

ENERGY PERFORMANCE

	SUPPLY TEMPERATURE		NET AIR FLOW		POWER CONSUMED WATTS	SENSIBLE RECOVERY EFFICIENCY	APPARENT SENSIBLE EFFECTIVENESS	LATENT RECOVERY/MOISTURE TRANSFER
	°C	°F	L/S	CFM				
HEATING	0	+32	30	64	54	75	83	-0.03
	0	+32	46	97	78	67	74	0.01
	0	+32	65	138	124	64	72	-0.02
	-25	-13	26	55	62	67	89	0.05

CERTIFIED HEAT AND ENERGY RECOVERY VENTILATORS

Section 3-29

BRYANT

Model: HRVBLHU1250-B • Options Installed: Defrost

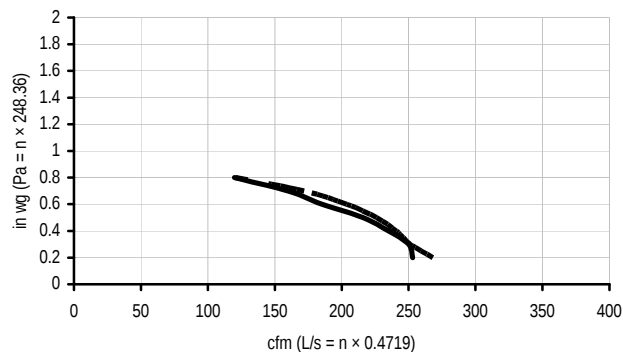
Electrical Requirements: Volts: 120 Amps: 1.9

Exhaust Air Transfer Ratio: --- @100 Pa/0.4 in. wg 0.04 @ 50 Pa / 0.2 in. wg

Low Temp. Vent Reduction Factor: 0% Supply 23% Exhaust • Low Temp. Imbalance Factor: 1.0

VENTILATION PERFORMANCE

EXT. STATIC PRESSURE		NET SUPPLY AIR FLOW		GROSS AIR FLOW			
Pa	in wg	L/s	cfm	SUPPLY		EXHAUST	
		L/s	cfm	L/s	cfm	L/s	cfm
50	0.2	119	253	125	264	126	268
75	0.3	118	250	124	262	118	251
100	0.4	111	235	116	245	114	241
125	0.5	102	216	106	224	107	226
150	0.6	87	185	91	193	96	204
175	0.7	76	160	79	167	81	172
200	0.8	57	120	59	124	57	121



ENERGY PERFORMANCE

SUPPLY TEMPERATURE		NET AIR FLOW		POWER CONSUMED		SENSIBLE RECOVERY EFFICIENCY		APPARENT SENSIBLE EFFECTIVENESS		LATENT RECOVERY/MOISTURE TRANSFER	
	°C	°F	L/S	CFM	WATTS						
HEATING	0	+32	51	109	92	70		77		-0.01	
	0	+32	73	155	128	65		72		-0.02	
	0	+32	102	215	191	62		70		-0.02	
	-25	-13	52	110	104	60		94		0.05	

BRYANT

Model: HRVBLVU1150-B • Options Installed: Defrost

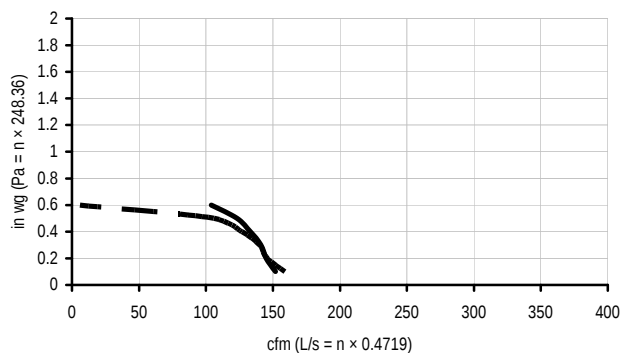
Electrical Requirements: Volts: 120 Amps: 1.2

Exhaust Air Transfer Ratio: --- @100 Pa/0.4 in. wg 0.02 @ 50 Pa / 0.2 in. wg

Low Temp. Vent. Reduction Factor: 11% Supply 20% Exhaust • Low Temp. Imbalance Factor: 1.10

VENTILATION PERFORMANCE

EXT. STATIC PRESSURE		NET SUPPLY AIR FLOW		GROSS AIR FLOW			
Pa	in wg	L/s	cfm	SUPPLY		EXHAUST	
		L/s	cfm	L/s	cfm	L/s	cfm
25	0.1	72	152	73	155	75	159
50	0.2	68	145	70	148	69	146
75	0.3	67	141	68	144	66	140
100	0.4	63	133	64	136	60	127
125	0.5	58	123	59	125	50	106
150	0.6	49	104	50	106	3	6



— Net Supply - - - Net Exhaust

ENERGY PERFORMANCE

SUPPLY TEMPERATURE		NET AIR FLOW		POWER CONSUMED		SENSIBLE RECOVERY EFFICIENCY		APPARENT SENSIBLE EFFECTIVENESS		LATENT RECOVERY/MOISTURE TRANSFER	
	°C	°F	L/S	CFM	WATTS						
HEATING	0	+32	30	64	103	81		92		0.02	
	0	+32	46	99	115	76		85		0.03	
	0	+32	54	106	117	72		80		0.02	
	-25	-13	30	64	110	69		89		0.11	
								TOTAL RECOVERY EFFICIENCY			
COOLING	+35	+95	34	72	105			23			
	+35	+95	50	106	109			26			

CERTIFIED HEAT AND ENERGY RECOVERY VENTILATORS**Section 3-30****BRYANT**

Model: HRVBBLVU1200-B •Options Installed: Defrost

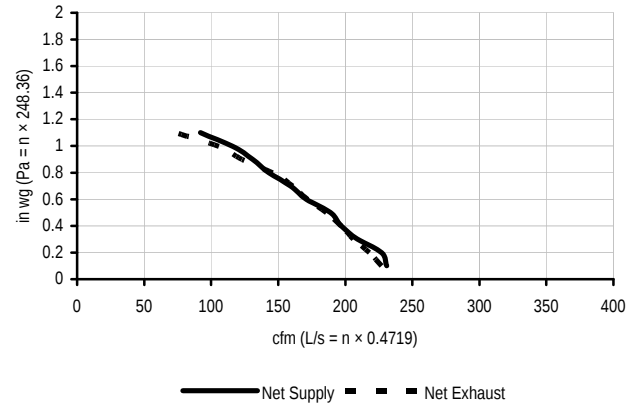
Electrical Requirements: Volts: 120 Amps: 2.2

Exhaust Air Transfer Ratio: --- @100 Pa/0.4 in. wg 0.06 @ 50 Pa / 0.2 in. wg

Low Temp. Vent Reduction Factor: 12.8% Supply 9.4% Exhaust •Low Temp. Imbalance Factor: 0.93

VENTILATION PERFORMANCE

EXT. STATIC PRESSURE		NET SUPPLY		GROSS AIR FLOW			
		AIR FLOW		SUPPLY		EXHAUST	
Pa	in wg	L/s	cfm	L/s	cfm	L/s	cfm
25	0.1	109	231	116	246	107	227
50	0.2	107	227	114	242	103	218
75	0.3	99	209	105	222	97	206
100	0.4	93	197	99	210	93	197
125	0.5	89	189	95	201	88	186
150	0.6	81	171	86	182	81	172
175	0.7	75	159	80	169	76	161
200	0.8	68	143	72	153	69	146
225	0.9	62	131	66	140	58	123
250	1.0	55	116	58	123	50	106
275	1.1	43	92	46	97	35	74

**ENERGY PERFORMANCE**

	SUPPLY TEMPERATURE		NET AIR FLOW		POWER CONSUMED WATTS	SENSIBLE RECOVERY EFFICIENCY	APPARENT SENSIBLE EFFECTIVENESS	LATENT RECOVERY/MOISTURE TRANSFER
	°C	°F	L/S	CFM				
HEATING	0	+32	52	111	158	84	95	0.05
	0	+32	55	117	---	84	---	---
	0	+32	71	151	184	79	90	0.03
	0	+32	84	179	210	79	89	0.12
	-25	-13	57	121	176	72	88	-0.04
COOLING	+35	+95	55	117	160	TOTAL RECOVERY EFFICIENCY		
	+35	+95	76	162	198	13		
						15		

BRYANT

Model: HRVBBLVU1330-B •Options Installed: Defrost

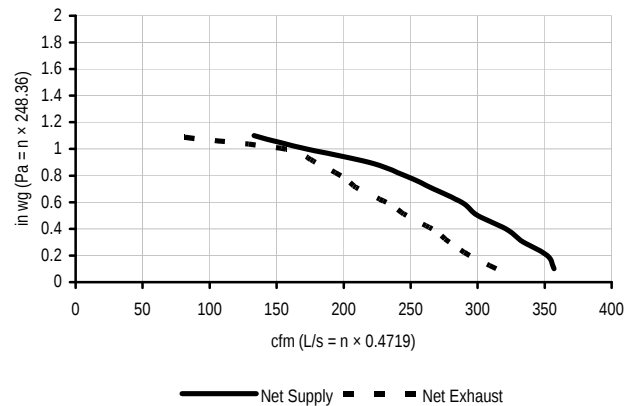
Electrical Requirements: Volts: 120 Amps: 4.6

Exhaust Air Transfer Ratio: --- @100 Pa/0.4 in. wg 0.02 @ 50 Pa / 0.2 in. wg

Low Temp. Vent Reduction Factor: 13.3% Supply 15.8% Exhaust •Low Temp. Imbalance Factor: 0.99

VENTILATION PERFORMANCE

EXT. STATIC PRESSURE		NET SUPPLY		GROSS AIR FLOW			
		AIR FLOW		SUPPLY		EXHAUST	
Pa	in wg	L/s	cfm	L/s	cfm	L/s	cfm
25	0.1	168	357	172	364	148	314
50	0.2	166	352	170	360	139	294
75	0.3	158	334	160	340	132	279
100	0.4	151	321	155	328	126	266
125	0.5	142	300	144	306	117	247
150	0.6	136	288	139	294	109	232
175	0.7	126	267	128	272	100	211
200	0.8	116	246	118	251	93	198
225	0.9	103	219	105	223	84	179
250	1.0	82	173	84	177	74	157
275	1.1	63	133	64	136	33	70

**ENERGY PERFORMANCE**

	SUPPLY TEMPERATURE		NET AIR FLOW		POWER CONSUMED WATTS	SENSIBLE RECOVERY EFFICIENCY	APPARENT SENSIBLE EFFECTIVENESS	LATENT RECOVERY/MOISTURE TRANSFER
	°C	°F	L/S	CFM				
HEATING	0	+32	55	117	219	80	94	0.07
	0	+32	86	183	290	74	86	0.02
	0	+32	117	249	436	70	83	-0.01
	-25	-13	55	117	264	74	89	0.17
						TOTAL RECOVERY EFFICIENCY		
COOLING	+35	+95	85	181	286	12		
	+35	+95	115	245	434	9		

CERTIFIED HEAT AND ENERGY RECOVERY VENTILATORS

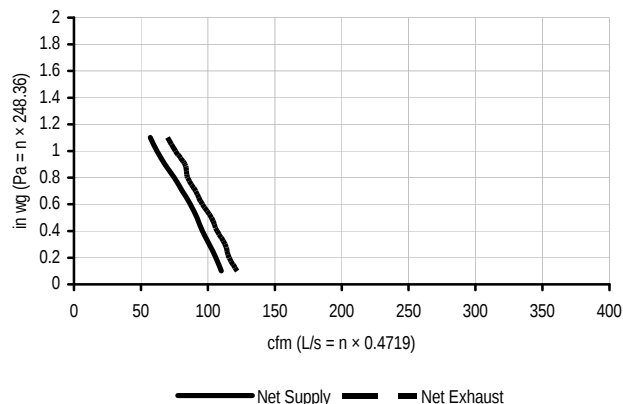
Section 3-31

BRYANT

Model: HRVBBSHA1100-A • Options Installed: None
 Electrical Requirements: Volts: 120 Amps: 1.5
 Exhaust Air Transfer Ratio: 0.02 @100 Pa/0.4 in. wg 0.05 @ 50 Pa / 0.2 in. wg
 Low Temp. Vent Reduction Factor: 16.4% Supply 31.3% Exhaust • Low Temp. Imbalance Factor: 1.15

VENTILATION PERFORMANCE

EXT. STATIC PRESSURE		NET SUPPLY AIR FLOW		GROSS AIR FLOW			
				SUPPLY		EXHAUST	
Pa	in wg	L/s	cfm	L/s	cfm	L/s	cfm
25	0.1	52	110	52	110	58	122
50	0.2	50	106	50	106	55	116
75	0.3	48	101	48	102	53	113
100	0.4	45	96	46	97	50	107
125	0.5	43	92	43	92	49	103
150	0.6	41	87	41	87	45	96
175	0.7	38	81	38	81	43	91
200	0.8	35	75	36	76	40	85
225	0.9	32	68	33	69	39	83
250	1.0	29	62	29	62	36	76
275	1.1	27	57	27	58	33	70



ENERGY PERFORMANCE

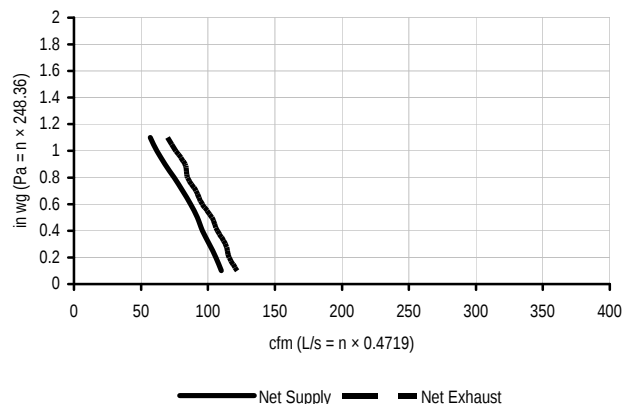
	SUPPLY TEMPERATURE		NET AIR FLOW		POWER CONSUMED	SENSIBLE RECOVERY EFFICIENCY	APPARENT SENSIBLE EFFECTIVENESS	LATENT RECOVERY/MOISTURE TRANSFER
	°C	°F	L/S	CFM	WATTS			
HEATING	0	+32	23	48	68	66	78	0.07
	0	+32	30	63	82	65	76	0.04
	0	+32	44	93	116	59	68	0.04
	-25	-13	30	63	110	55	81	0.08

BRYANT

Model: HRVBBSVA1100-A • Options Installed: None
 Electrical Requirements: Volts: 120 Amps: 1.5
 Exhaust Air Transfer Ratio: 0.02 @100 Pa/0.4 in. wg 0.05 @ 50 Pa / 0.2 in. wg
 Low Temp. Vent Reduction Factor: 16.4% Supply 31.3% Exhaust • Low Temp. Imbalance Factor: 1.15

VENTILATION PERFORMANCE

EXT. STATIC PRESSURE		NET SUPPLY AIR FLOW		GROSS AIR FLOW			
				SUPPLY		EXHAUST	
Pa	in wg	L/s	cfm	L/s	cfm	L/s	cfm
25	0.1	52	110	52	110	58	122
50	0.2	50	106	50	106	55	116
75	0.3	48	101	48	102	53	113
100	0.4	45	96	46	97	50	107
125	0.5	43	92	43	92	49	103
150	0.6	41	87	41	87	45	96
175	0.7	38	81	38	81	43	91
200	0.8	35	75	36	76	40	85
225	0.9	32	68	33	69	39	83
250	1.0	29	62	29	62	36	76
275	1.1	27	57	27	58	33	70



ENERGY PERFORMANCE

	SUPPLY TEMPERATURE		NET AIR FLOW		POWER CONSUMED	SENSIBLE RECOVERY EFFICIENCY	APPARENT SENSIBLE EFFECTIVENESS	LATENT RECOVERY/MOISTURE TRANSFER
	°C	°F	L/S	CFM	WATTS			
HEATING	0	+32	23	48	68	66	78	0.07
	0	+32	30	63	82	65	76	0.04
	0	+32	44	93	116	59	68	0.04
	-25	-13	30	63	110	55	81	0.08

CERTIFIED HEAT AND ENERGY RECOVERY VENTILATORS

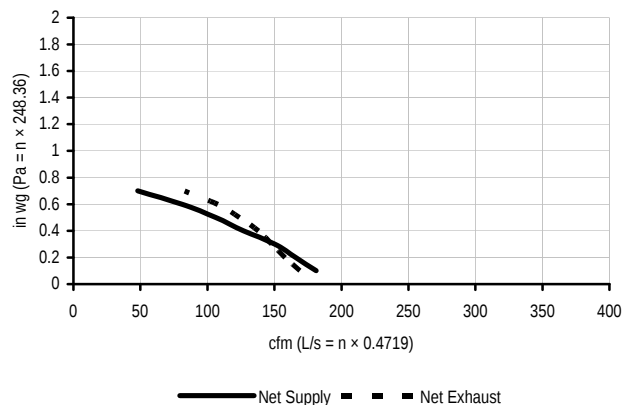
Section 3-32

BRYANT

Model: HRVBBSVU1150-B • Options Installed: Defrost
 Electrical Requirements: Volts: 120 Amps: 1.2
 Exhaust Air Transfer Ratio: --- @100 Pa/0.4 in. wg 0.01 @ 50 Pa / 0.2 in. wg
 Low Temp. Vent Reduction Factor: 6.5% Supply 16.3% Exhaust • Low Temp. Imbalance Factor: 1.08

VENTILATION PERFORMANCE

EXT. STATIC PRESSURE		NET SUPPLY AIR FLOW		GROSS AIR FLOW			
				SUPPLY		EXHAUST	
Pa	in wg	L/s	cfm	L/s	cfm	L/s	cfm
25	0.1	85	181	86	183	80	169
50	0.2	78	166	79	168	75	158
75	0.3	71	150	72	152	70	148
100	0.4	60	127	60	128	65	138
125	0.5	50	106	50	107	59	124
150	0.6	38	81	38	81	51	108
175	0.7	23	48	23	49	39	83



ENERGY PERFORMANCE

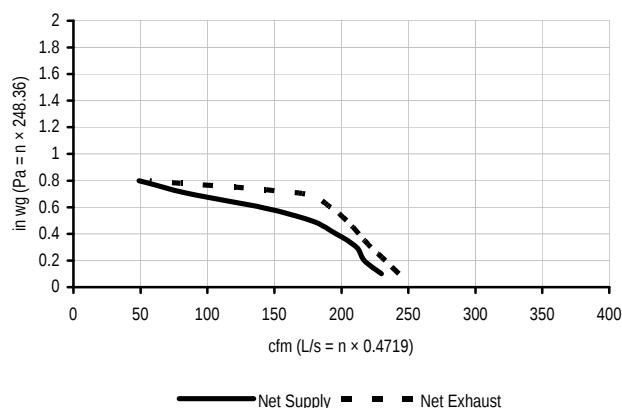
	SUPPLY TEMPERATURE		NET AIR FLOW		POWER CONSUMED WATTS	SENSIBLE RECOVERY EFFICIENCY	APPARENT SENSIBLE EFFECTIVENESS	LATENT RECOVERY/MOISTURE TRANSFER
	°C	°F	L/S	CFM				
HEATING	0	+32	30	64	65	69	76	0.00
	0	+32	42	89	79	65	71	-0.10
	0	+32	54	115	97	61	66	-0.07
	-25	-13	32	68	76	60	78	0.12
	-25	-13	30	64	74	60	--	--
COOLING	+35	+95	32	68	65	TOTAL RECOVERY EFFICIENCY		
	+35	+95	51	109	94	20		
	+35	+95	51	109	94	18		

BRYANT

Model: HRVBBSVU1200-B • Options Installed: Defrost
 Electrical Requirements: Volts: 120 Amps: 1.75
 Exhaust Air Transfer Ratio: --- @100 Pa/0.4 in. wg 0.01 @ 50 Pa / 0.2 in. wg
 Low Temp. Vent Reduction Factor: 13.5% Supply 19.7% Exhaust • Low Temp. Imbalance Factor: 1.04

VENTILATION PERFORMANCE

EXT. STATIC PRESSURE		NET SUPPLY AIR FLOW		GROSS AIR FLOW			
				SUPPLY		EXHAUST	
Pa	in wg	L/s	cfm	L/s	cfm	L/s	cfm
25	0.1	109	230	109	231	115	243
50	0.2	102	217	103	219	110	233
75	0.3	100	211	100	212	105	222
100	0.4	93	196	93	196	101	213
125	0.5	84	177	84	177	96	204
150	0.6	66	140	67	142	91	192
175	0.7	41	87	42	88	82	173
200	0.8	23	49	23	49	27	57



ENERGY PERFORMANCE

	SUPPLY TEMPERATURE		NET AIR FLOW		POWER CONSUMED WATTS	SENSIBLE RECOVERY EFFICIENCY	APPARENT SENSIBLE EFFECTIVENESS	LATENT RECOVERY/MOISTURE TRANSFER
	°C	°F	L/S	CFM				
HEATING	0	+32	56	119	110	77	83	-0.01
	0	+32	75	160	135	73	78	0.00
	0	+32	89	189	152	71	76	-0.03
	-25	-13	56	119	131	67	81	0.20
	-25	-13	55	117	130	67	---	---
COOLING	+35	+95	56	119	108	TOTAL RECOVERY EFFICIENCY		
	+35	+95	75	160	132	21		

CERTIFIED HEAT AND ENERGY RECOVERY VENTILATORS

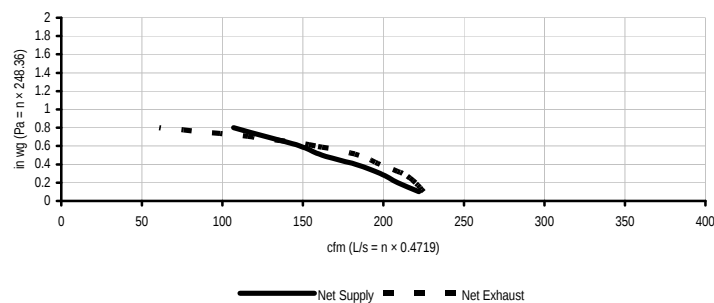
Section 3-33

BRYANT

Model: ERVBLHA1200-A • Options Installed:
 Electrical Requirements: Volts: 120 Amps: 2.1
 Exhaust Air Transfer Ratio: 0.01 @ 100 Pa/0.4 in. wg .01 @ 50 Pa / 0.2 in. wg
 Low Temp. Vent Reduction Factor: 24.8% Supply 43% Exhaust • Low Temp. Imbalance Factor: 1.28

VENTILATION PERFORMANCE

EXT. STATIC PRESSURE		NET SUPPLY AIR FLOW		GROSS AIR FLOW			
				SUPPLY		EXHAUST	
Pa	in wg	L/s	cfm	L/s	cfm	L/s	cfm
25	0.1	105	222	106	225	106	225
50	0.2	99	209	100	212	104	220
75	0.3	93	198	94	200	100	212
100	0.4	86	183	88	186	93	198
125	0.5	76	162	78	165	87	185
150	0.6	70	148	71	150	75	158
175	0.7	60	128	61	130	56	119
200	0.8	50	107	51	108	29	61



ENERGY PERFORMANCE

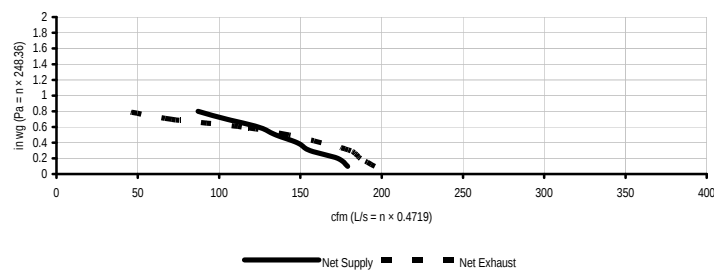
	SUPPLY TEMPERATURE		NET AIR FLOW		POWER CONSUMED WATTS	SENSIBLE RECOVERY EFFICIENCY	APPARENT SENSIBLE EFFECTIVENESS	LATENT RECOVERY/MOISTURE TRANSFER
	°C	°F	L/S	CFM				
HEATING	0	+32	39	80	84	60	72	0.60
	0	+32	54	114	113	58	69	0.53
	0	+32	79	167	169	56	66	0.45
	-25	-13	31	65	116	41	86	0.47
COOLING	+35	+95	39	82	81		TOTAL RECOVERY EFFICIENCY 52	
	+35	+95						

BRYANT

Model: ERVBLHA1150-A • Options Installed:
 Electrical Requirements: Volts: 120 Amps: 1.3
 Exhaust Air Transfer Ratio: 0.02 @ 100 Pa/0.4 in. wg .04 @ 50 Pa / 0.2 in. wg
 Low Temp. Vent Reduction Factor: 28.6% Supply 29.5% Exhaust • Low Temp. Imbalance Factor: 1.05

VENTILATION PERFORMANCE

EXT. STATIC PRESSURE		NET SUPPLY AIR FLOW		GROSS AIR FLOW			
				SUPPLY		EXHAUST	
Pa	in wg	L/s	cfm	L/s	cfm	L/s	cfm
25	0.1	84	179	85	181	92	196
50	0.2	82	173	83	175	88	187
75	0.3	74	156	75	158	85	181
100	0.4	70	148	71	151	77	163
125	0.5	64	135	65	137	67	143
150	0.6	58	124	59	125	54	114
175	0.7	50	105	50	106	33	71
200	0.8	41	87	42	88	20	43



ENERGY PERFORMANCE

	SUPPLY TEMPERATURE		NET AIR FLOW		POWER CONSUMED WATTS	SENSIBLE RECOVERY EFFICIENCY	APPARENT SENSIBLE EFFECTIVENESS	LATENT RECOVERY/MOISTURE TRANSFER
	°C	°F	L/S	CFM				
HEATING	0	+32	30	64	66	61	75	0.62
	0	+32	46	97	77	60	71	0.58
	0	+32	66	141	137	57	69	0.52
	-25	-13	22	47	92	49	80	0.56
COOLING	+35	+95	31	65	63		TOTAL RECOVERY EFFICIENCY 56	

	SUPPLY TEMPERATURE		NET AIR FLOW		POWER CONSUMED	SENSIBLE RECOVERY EFFICIENCY	APPARENT SENSIBLE EFFECTIVENESS	LATENT RECOVERY/MOISTURE TRANSFER
	°C	°F	L/S	CFM	WATTS			
HEATING	0	+32	30	64	66	61	75	0.62
	0	+32	46	97	77	60	71	0.58
	0	+32	66	141	137	57	69	0.52
	-25	-13	22	47	92	49	80	0.56
COOLING	+35	+95	31	65	63		TOTAL RECOVERY EFFICIENCY	
							56	

CERTIFIED HEAT AND ENERGY RECOVERY VENTILATORS

Section 3-35

CARRIER CORPORATION

Model: ERVCCLHU1150-B • Options Installed: Defrost

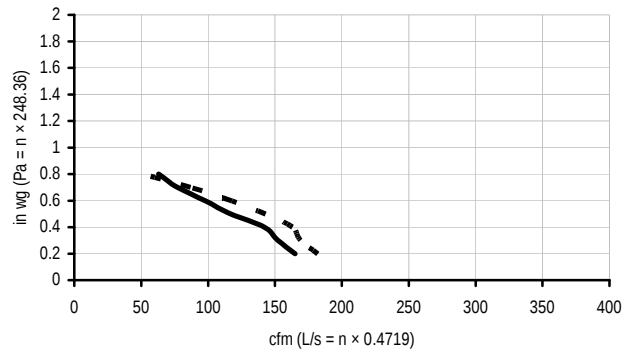
Electrical Requirements: Volts: 120 Amps: 1.3

Exhaust Air Transfer Ratio: --- @100 Pa/0.4 in. wg 0.06 @ 50 Pa / 0.2 in. wg

Low Temp. Vent Reduction Factor: 0% Supply 0% Exhaust • Low Temp. Imbalance Factor: 0.79

VENTILATION PERFORMANCE

EXT. STATIC PRESSURE		NET SUPPLY AIR FLOW		GROSS AIR FLOW			
				SUPPLY		EXHAUST	
Pa	in wg	L/s	cfm	L/s	cfm	L/s	cfm
25	0.1	81	173	87	184	93	197
50	0.2	78	165	83	175	86	182
75	0.3	72	152	76	162	80	169
100	0.4	67	142	71	151	77	163
125	0.5	55	117	59	124	67	143
150	0.6	46	98	49	104	56	118
175	0.7	36	77	39	82	41	87
200	0.8	30	63	32	67	24	51



— Net Supply - - - Net Exhaust

ENERGY PERFORMANCE

	SUPPLY TEMPERATURE		NET AIR FLOW		POWER CONSUMED WATTS	SENSIBLE RECOVERY EFFICIENCY	APPARENT SENSIBLE EFFECTIVENESS	LATENT RECOVERY/MOISTURE TRANSFER
	°C	°F	L/S	CFM				
HEATING	0	+32	29	60	56	71	79	0.52
	0	+32	47	100	80	64	73	0.41
	0	+32	54	137	126	60	68	0.36
	-15	5	31	65	64	56	81	0.41
COOLING	+35	+95	28	59	52	TOTAL RECOVERY EFFICIENCY		
						45		

CERTIFIED HEAT AND ENERGY RECOVERY VENTILATORS

Section 3-36

CARRIER CORPORATION

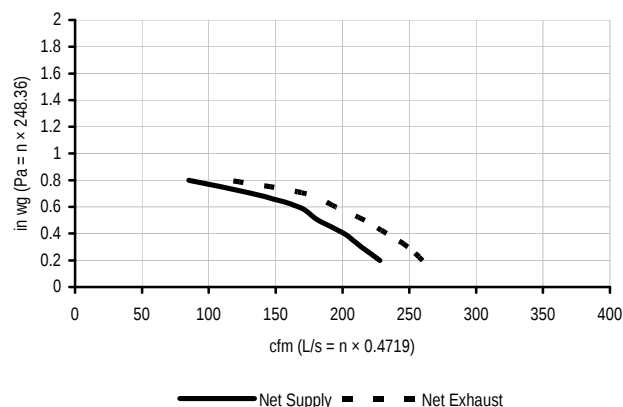
Model: ERVCLHU1200-B • Options Installed: Defrost

Electrical Requirements: Volts: 120 Amps: 1.9

Exhaust Air Transfer Ratio: --- @100 Pa/0.4 in. wg 0.06 @ 50 Pa / 0.2 in. wg

Low Temp. Vent Reduction Factor: 0% Supply 0% Exhaust • Low Temp. Imbalance Factor: 0.84

EXT. STATIC PRESSURE		VENTILATION PERFORMANCE					
		NET SUPPLY		GROSS AIR FLOW			
		AIR FLOW		SUPPLY		EXHAUST	
Pa	in wg	L/s	cfm	L/s	cfm	L/s	cfm
25	0.1	109	231	116	245	128	271
50	0.2	108	228	114	241	123	260
75	0.3	101	214	107	227	118	249
100	0.4	95	201	101	213	110	233
125	0.5	86	182	91	193	102	217
150	0.6	79	167	84	177	92	195
175	0.7	62	132	66	140	81	172
200	0.8	40	85	42	90	55	116



ENERGY PERFORMANCE

	SUPPLY TEMPERATURE		NET AIR FLOW		POWER CONSUMED WATTS	SENSIBLE RECOVERY EFFICIENCY	APPARENT SENSIBLE EFFECTIVENESS	LATENT RECOVERY/MOISTURE TRANSFER
	°C	°F	L/S	CFM				
HEATING	0	+32	52	110	93	69	76	0.45
	0	+32	74	157	130	64	71	-0.38
	0	+32	96	203	193	60	68	-0.30
	-15	5	52	110	122	55	76	0.26
COOLING	+35	+95	50	106	89			
							TOTAL RECOVERY EFFICIENCY 41	

CARRIER CORPORATION

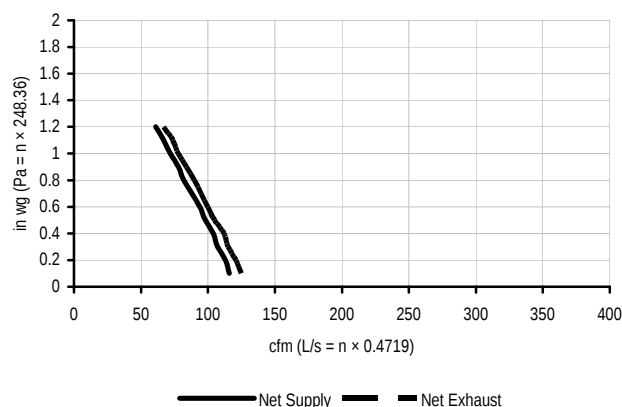
Model: ERVCCSHA1100-A • Options Installed: None

Electrical Requirements: Volts: 120 Amps: 1.5

Exhaust Air Transfer Ratio: 0.03 @100 Pa/0.4 in. wg 0.03 @ 50 Pa / 0.2 in. wg

Low Temp. Vent Reduction Factor: 27.9% Supply 30.2% Exhaust • Low Temp. Imbalance Factor: 1.13

EXT. STATIC PRESSURE		VENTILATION PERFORMANCE					
		NET SUPPLY		GROSS AIR FLOW			
		AIR FLOW		SUPPLY		EXHAUST	
Pa	in wg	L/s	cfm	L/s	cfm	L/s	cfm
25	0.1	55	116	56	119	59	125
50	0.2	53	113	55	116	57	121
75	0.3	50	107	52	111	54	115
100	0.4	49	104	50	107	53	112
125	0.5	46	98	48	101	50	105
150	0.6	44	94	46	97	47	100
175	0.7	42	88	43	91	45	95
200	0.8	39	82	40	84	42	90
225	0.9	37	78	38	81	40	84
250	1.0	34	72	35	75	37	78
275	1.1	32	67	33	69	35	74
300	1.2	29	61	30	63	32	67



ENERGY PERFORMANCE

	SUPPLY TEMPERATURE		NET AIR FLOW		POWER CONSUMED WATTS	SENSIBLE RECOVERY EFFICIENCY	APPARENT SENSIBLE EFFECTIVENESS	LATENT RECOVERY/MOISTURE TRANSFER
	°C	°F	L/S	CFM				
HEATING	0	+32	13	28	73	69	94	0.68
	0	+32	45	96	137	62	74	0.48
	-25	-13	25	54	102	54	83	0.58
COOLING	+35	+95	14	29	70			
							TOTAL RECOVERY EFFICIENCY 54	

CERTIFIED HEAT AND ENERGY RECOVERY VENTILATORS

Section 3-37

CARRIER CORPORATION

Model: ERVCCSVA1100-A • Options Installed: None

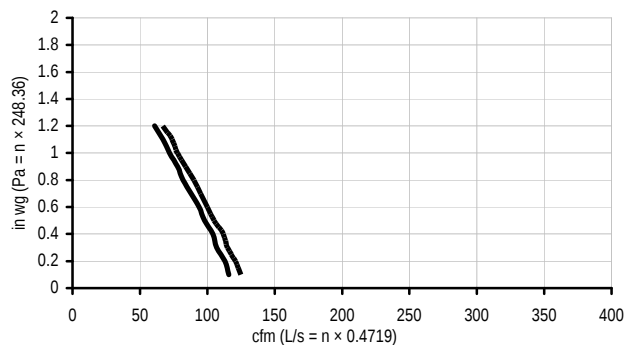
Electrical Requirements: Volts: 120 Amps: 1.5

Exhaust Air Transfer Ratio: 0.03 @100 Pa/0.4 in. wg 0.03 @ 50 Pa / 0.2 in. wg

Low Temp. Vent Reduction Factor: 27.9% Supply 30.2% Exhaust • Low Temp. Imbalance Factor: 1.13

VENTILATION PERFORMANCE

EXT. STATIC PRESSURE		NET SUPPLY AIR FLOW		GROSS AIR FLOW			
				SUPPLY		EXHAUST	
Pa	in wg	L/s	cfm	L/s	cfm	L/s	cfm
25	0.1	55	116	56	119	59	125
50	0.2	53	113	55	116	57	121
75	0.3	50	107	52	111	54	115
100	0.4	49	104	50	107	53	112
125	0.5	46	98	48	101	50	105
150	0.6	44	94	46	97	47	100
175	0.7	42	88	43	91	45	95
200	0.8	39	82	40	84	42	90
225	0.9	37	78	38	81	40	84
250	1.0	34	72	35	75	37	78
275	1.1	32	67	33	69	35	74
300	1.2	29	61	30	63	32	67



— Net Supply - - - Net Exhaust

ENERGY PERFORMANCE

	SUPPLY TEMPERATURE		NET AIR FLOW		POWER CONSUMED	SENSIBLE RECOVERY EFFICIENCY	APPARENT SENSIBLE EFFECTIVENESS	LATENT RECOVERY/MOISTURE TRANSFER
	°C	°F	L/S	CFM	WATTS			
HEATING	0	+32	13	28	73	69	94	0.68
	0	+32	45	96	137	62	74	0.48
	-25	-13	25	54	102	54	83	0.58
TOTAL RECOVERY EFFICIENCY							54	
COOLING	+35	+95	14	29	70			

CARRIER CORPORATION

Model: HRVCLHA1150-A • Options Installed: Defrost

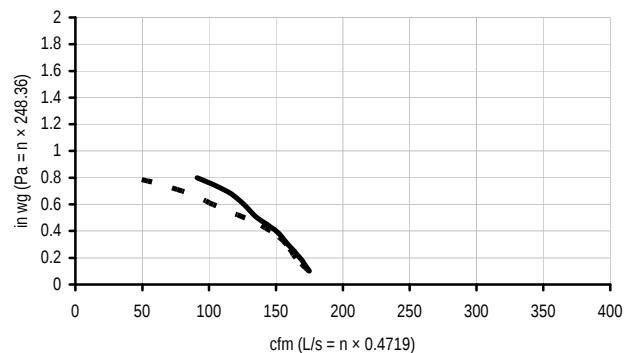
Electrical Requirements: Volts: 120 Amps: 1.3

Exhaust Air Transfer Ratio: 0.01 @100 Pa/0.4 in. wg --- @ 50 Pa / 0.2 in. wg

Low Temp. Vent Reduction Factor: 10% Supply 13% Exhaust • Low Temp. Imbalance Factor: 0.90

VENTILATION PERFORMANCE

EXT. STATIC PRESSURE		NET SUPPLY AIR FLOW		GROSS AIR FLOW			
				SUPPLY		EXHAUST	
Pa	in wg	L/s	cfm	L/s	cfm	L/s	cfm
25	0.1	83	175	83	176	83	175
50	0.2	79	168	80	169	78	165
75	0.3	75	159	75	159	75	158
100	0.4	71	150	71	151	69	146
125	0.5	64	136	64	136	60	127
150	0.6	59	126	60	127	49	103
175	0.7	53	113	53	113	38	80
200	0.8	43	91	43	91	21	45



— Net Supply - - - Net Exhaust

ENERGY PERFORMANCE

	SUPPLY TEMPERATURE		NET AIR FLOW		POWER CONSUMED	SENSIBLE RECOVERY EFFICIENCY	APPARENT SENSIBLE EFFECTIVENESS	LATENT RECOVERY/MOISTURE TRANSFER
	°C	°F	L/S	CFM	WATTS			
HEATING	0	+32	31	66	85	69	81	-0.01
	0	+32	56	119	124	60	70	-0.01
	-25	-13	37	78	114	62	80	0.08

CERTIFIED HEAT AND ENERGY RECOVERY VENTILATORS

Section 3-38

CARRIER CORPORATION

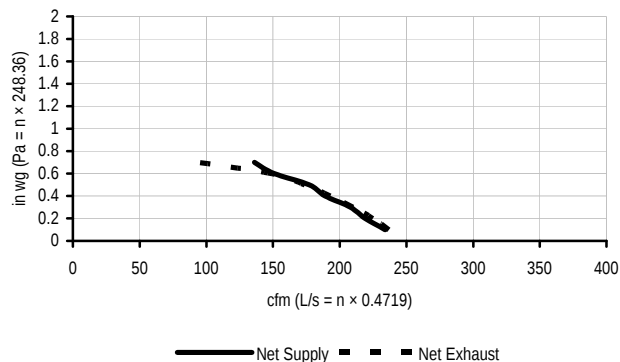
Model: HRVCLHA1250-A • Options Installed: Defrost

Electrical Requirements: Volts: 120 Amps: 2.1

Exhaust Air Transfer Ratio: 0.01 @100 Pa/0.4 in. wg --- @ 50 Pa / 0.2 in. wg

Low Temp. Vent Reduction Factor: 10% Supply 13% Exhaust • Low Temp. Imbalance Factor: 0.90

EXT. STATIC PRESSURE		VENTILATION PERFORMANCE					
		NET SUPPLY		GROSS AIR FLOW			
		AIR FLOW		SUPPLY		EXHAUST	
Pa	in wg	L/s	cfm	L/s	cfm	L/s	cfm
25	0.1	110	234	112	237	112	237
50	0.2	103	219	105	223	106	225
75	0.3	98	208	100	211	99	210
100	0.4	89	189	91	192	91	193
125	0.5	84	177	85	180	82	174
150	0.6	71	151	72	153	70	149
175	0.7	64	136	65	138	44	94



ENERGY PERFORMANCE								
	SUPPLY TEMPERATURE		NET AIR FLOW		POWER CONSUMED WATTS	SENSIBLE RECOVERY EFFICIENCY	APPARENT SENSIBLE EFFECTIVENESS	LATENT RECOVERY/MOISTURE TRANSFER
	°C	°F	L/S	CFM				
HEATING	0	+32	56	119	124	60	70	-0.01
	0	+32	86	182	197	53	62	-0.01
	-25	-13	37	78	114	62	80	0.08

CARRIER CORPORATION

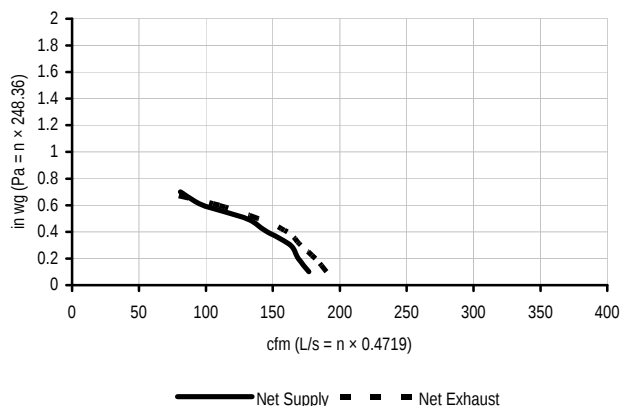
Model: HRVCLHU1150-B • Options Installed: Defrost

Electrical Requirements: Volts: 120 Amps: 1.3

Exhaust Air Transfer Ratio: --- @100 Pa/0.4 in. wg 0.05 @ 50 Pa / 0.2 in. wg

Low Temp. Vent Reduction Factor: 9% Supply 22% Exhaust • Low Temp. Imbalance Factor: 1.0

EXT. STATIC PRESSURE		VENTILATION PERFORMANCE					
		NET SUPPLY		GROSS AIR FLOW			
		AIR FLOW		SUPPLY		EXHAUST	
Pa	in wg	L/s	cfm	L/s	cfm	L/s	cfm
25	0.1	84	177	88	186	90	190
50	0.2	80	169	84	178	86	182
75	0.3	77	163	81	171	81	171
100	0.4	69	146	72	153	76	161
125	0.5	61	130	65	137	66	139
150	0.6	46	98	49	103	52	110
175	0.7	38	81	40	85	32	67



ENERGY PERFORMANCE								
	SUPPLY TEMPERATURE		NET AIR FLOW		POWER CONSUMED WATTS	SENSIBLE RECOVERY EFFICIENCY	APPARENT SENSIBLE EFFECTIVENESS	LATENT RECOVERY/MOISTURE TRANSFER
	°C	°F	L/S	CFM				
HEATING	0	+32	30	64	54	75	83	-0.03
	0	+32	46	97	78	67	74	0.01
	0	+32	65	138	124	64	72	-0.02
	-25	-13	26	55	62	67	89	0.05

CERTIFIED HEAT AND ENERGY RECOVERY VENTILATORS

Section 3-39

CARRIER CORPORATION

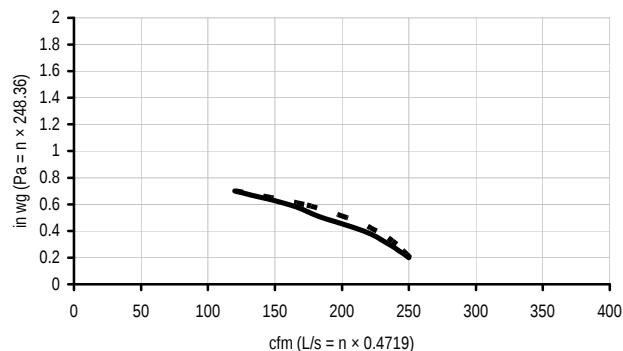
Model: HRVCCLHU1250-B • Options Installed: Defrost

Electrical Requirements: Volts: 120 Amps: 1.9

Exhaust Air Transfer Ratio: --- @100 Pa/0.4 in. wg 0.04 @ 50 Pa / 0.2 in. wg

Low Temp. Vent Reduction Factor: 0% Supply 23% Exhaust • Low Temp. Imbalance Factor: 1.0

EXT. STATIC PRESSURE		VENTILATION PERFORMANCE					
		NET SUPPLY AIR FLOW		GROSS AIR FLOW			
				SUPPLY		EXHAUST	
Pa	in wg	L/s	cfm	L/s	cfm	L/s	cfm
50	0.2	120	253	124	264	126	268
75	0.3	118	250	123	262	118	251
100	0.4	111	235	116	245	114	241
125	0.5	102	216	106	224	107	226
150	0.6	87	185	91	193	96	204
175	0.7	75	160	78	167	81	172
200	0.8	57	120	59	124	57	121



— Net Supply - - - Net Exhaust

ENERGY PERFORMANCE								
	SUPPLY TEMPERATURE		NET AIR FLOW		POWER CONSUMED WATTS	SENSIBLE RECOVERY EFFICIENCY	APPARENT SENSIBLE EFFECTIVENESS	LATENT RECOVERY/MOISTURE TRANSFER
	°C	°F	L/S	CFM				
HEATING	0	+32	51	109	92	70	77	-0.01
	0	+32	73	155	128	65	72	-0.02
	0	+32	102	215	191	62	70	-0.01
	-25	-13	52	110	104	60	94	0.05

CARRIER CORPORATION

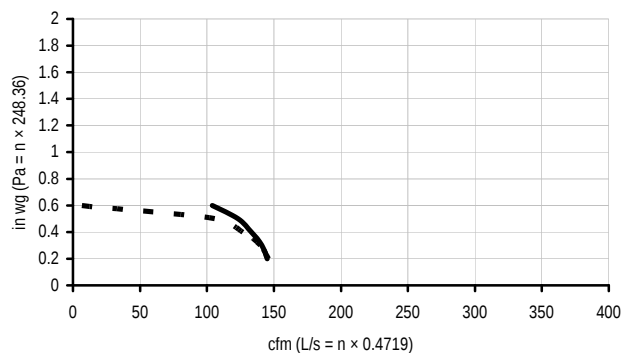
Model: HRVCCLVU1150-B • Options Installed: Defrost

Electrical Requirements: Volts: 120 Amps: 1.2

Exhaust Air Transfer Ratio: --- @100 Pa/0.4 in. wg 0.02 @ 50 Pa / 0.2 in. wg

Low Temp. Vent Reduction Factor: 11% Supply 20% Exhaust • Low Temp. Imbalance Factor: 1.10

EXT. STATIC PRESSURE		VENTILATION PERFORMANCE					
		NET SUPPLY AIR FLOW		GROSS AIR FLOW			
				SUPPLY		EXHAUST	
Pa	in wg	L/s	cfm	L/s	cfm	L/s	cfm
25	0.1	72	152	73	155	75	159
50	0.2	68	145	70	148	69	146
75	0.3	67	141	68	144	66	140
100	0.4	63	133	64	136	60	127
125	0.5	58	123	59	125	50	106
150	0.6	49	104	50	106	3	6



— Net Supply - - - Net Exhaust

ENERGY PERFORMANCE								
	SUPPLY TEMPERATURE		NET AIR FLOW		POWER CONSUMED WATTS	SENSIBLE RECOVERY EFFICIENCY	APPARENT SENSIBLE EFFECTIVENESS	LATENT RECOVERY/MOISTURE TRANSFER
	°C	°F	L/S	CFM				
HEATING	0	+32	30	64	103	81	92	0.02
	0	+32	46	99	115	76	85	0.03
	0	+32	54	106	117	72	80	0.02
	-25	-13	30	64	110	69	89	0.11
COOLING	+35	+95	34	72	105	TOTAL RECOVERY EFFICIENCY		
	+35	+95	50	106	109			

	SUPPLY TEMPERATURE		NET AIR FLOW		POWER CONSUMED	SENSIBLE RECOVERY EFFICIENCY	APPARENT SENSIBLE EFFECTIVENESS	LATENT RECOVERY/MOISTURE TRANSFER
	°C	°F	L/S	CFM	WATTS			
HEATING	0	+32	55	117	219	80	94	-0.07
	0	+32	86	183	290	74	86	0.02
	0	+32	117	249	436	70	83	-0.01
	-25	-13	55	117	264	74	89	0.07
							TOTAL RECOVERY EFFICIENCY	
COOLING	+35	+95	85	181	286		12	
	+35	+95	115	245	434		9	

CERTIFIED HEAT AND ENERGY RECOVERY VENTILATORS

Section 3-41

CARRIER CORPORATION

Model: HRVCCSHA1100-A • Options Installed: None

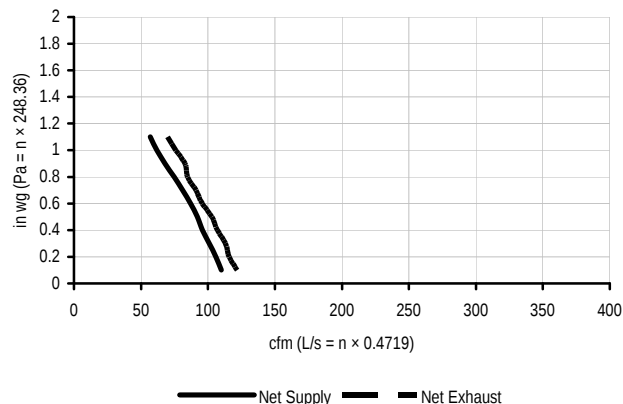
Electrical Requirements: Volts: 120 Amps: 1.5

Exhaust Air Transfer Ratio: 0.02 @100 Pa/0.4 in. wg 0.05 @ 50 Pa / 0.2 in. wg

Low Temp. Vent Reduction Factor: 16.4% Supply 31.3% Exhaust • Low Temp. Imbalance Factor: 1.15

VENTILATION PERFORMANCE

EXT. STATIC PRESSURE		NET SUPPLY AIR FLOW		GROSS AIR FLOW			
				SUPPLY		EXHAUST	
Pa	in wg	L/s	cfm	L/s	cfm	L/s	cfm
25	0.1	52	110	52	110	58	122
50	0.2	50	106	50	106	55	116
75	0.3	48	101	48	102	53	113
100	0.4	45	96	46	97	50	107
125	0.5	43	92	43	92	49	103
150	0.6	41	87	41	87	45	96
175	0.7	38	81	38	81	43	91
200	0.8	35	75	36	76	40	85
225	0.9	32	68	33	69	39	83
250	1.0	29	62	29	62	36	76
275	1.1	27	57	27	58	33	70



ENERGY PERFORMANCE

	SUPPLY TEMPERATURE		NET AIR FLOW		POWER CONSUMED	SENSIBLE RECOVERY EFFICIENCY	APPARENT SENSIBLE EFFECTIVENESS	LATENT RECOVERY/MOISTURE TRANSFER
	°C	°F	L/S	CFM	WATTS			
HEATING	0	+32	23	48	68	66	78	0.07
	0	+32	30	63	82	65	76	0.04
	0	+32	44	93	116	59	68	0.04
	-25	-13	30	63	110	55	81	0.08

CARRIER CORPORATION

Model: HRVCCSVA1100-A • Options Installed: None

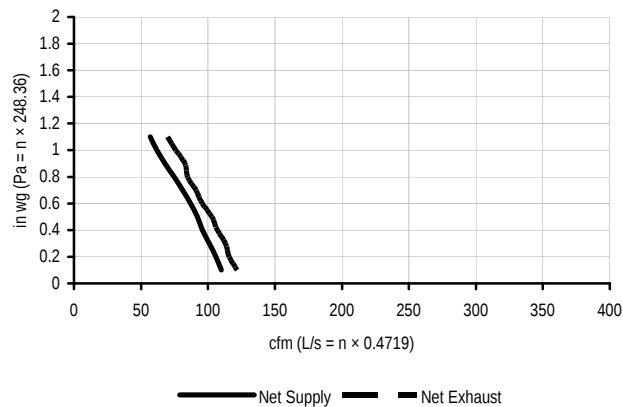
Electrical Requirements: Volts: 120 Amps: 1.5

Exhaust Air Transfer Ratio: 0.02 @100 Pa/0.4 in. wg 0.05 @ 50 Pa / 0.2 in. wg

Low Temp. Vent Reduction Factor: 16.4% Supply 31.3% Exhaust • Low Temp. Imbalance Factor: 1.15

VENTILATION PERFORMANCE

EXT. STATIC PRESSURE		NET SUPPLY AIR FLOW		GROSS AIR FLOW			
				SUPPLY		EXHAUST	
Pa	in wg	L/s	cfm	L/s	cfm	L/s	cfm
25	0.1	52	110	52	110	58	122
50	0.2	50	106	50	106	55	116
75	0.3	48	101	48	102	53	113
100	0.4	45	96	46	97	50	107
125	0.5	43	92	43	92	49	103
150	0.6	41	87	41	87	45	96
175	0.7	38	81	38	81	43	91
200	0.8	35	75	36	76	40	85
225	0.9	32	68	33	69	39	83
250	1.0	29	62	29	62	36	76
275	1.1	27	57	27	58	33	70



ENERGY PERFORMANCE

	SUPPLY TEMPERATURE		NET AIR FLOW		POWER CONSUMED	SENSIBLE RECOVERY EFFICIENCY	APPARENT SENSIBLE EFFECTIVENESS	LATENT RECOVERY/MOISTURE TRANSFER
	°C	°F	L/S	CFM	WATTS			
HEATING	0	+32	23	48	68	66	78	0.07
	0	+32	30	63	82	65	76	0.04
	0	+32	44	93	116	59	68	0.04
	-25	-13	30	63	110	55	81	0.08

CERTIFIED HEAT AND ENERGY RECOVERY VENTILATORS

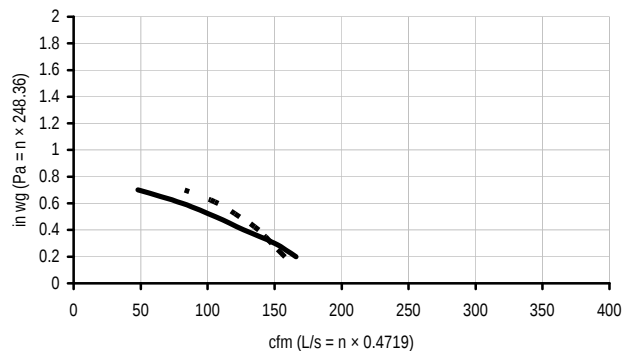
Section 3-42

CARRIER CORPORATION

Model: HRVCCSVU1150-B • Options Installed: Defrost
 Electrical Requirements: Volts: 20 Amps: 1.2
 Exhaust Air Transfer Ratio: --- @100 Pa/0.4 in. wg 0.01 @ 50 Pa / 0.2 in. wg
 Low Temp. Vent Reduction Factor: 6.5% Supply 16.3% Exhaust • Low Temp. Imbalance Factor: 1.08

VENTILATION PERFORMANCE

EXT. STATIC PRESSURE		NET SUPPLY AIR FLOW		GROSS AIR FLOW			
				SUPPLY		EXHAUST	
Pa	in wg	L/s	cfm	L/s	cfm	L/s	cfm
25	0.1	85	181	86	183	80	169
50	0.2	78	166	79	168	75	158
75	0.3	71	150	72	152	70	148
100	0.4	60	127	60	128	65	138
125	0.5	50	106	50	107	59	124
150	0.6	38	81	38	81	51	108
175	0.7	23	48	23	49	39	83



— Net Supply - - - Net Exhaust

ENERGY PERFORMANCE

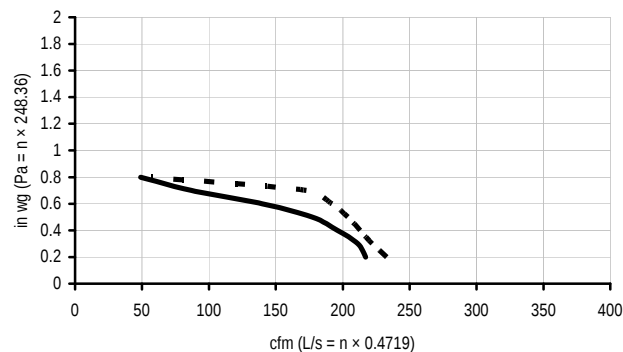
	SUPPLY TEMPERATURE		NET AIR FLOW		POWER CONSUMED WATTS	SENSIBLE RECOVERY EFFICIENCY	APPARENT SENSIBLE EFFECTIVENESS	LATENT RECOVERY/MOISTURE TRANSFER
	°C	°F	L/S	CFM				
HEATING	0	+32	30	64	65	69	76	0.00
	0	+32	42	89	79	65	71	-0.10
	0	+32	54	115	97	61	66	-0.07
	-25	-13	32	68	76	60	78	0.12
	-25	-13	30	64	74	60	---	---
	TOTAL RECOVERY EFFICIENCY							---
COOLING	+35	+95	32	68	65	20	18	
	+35	+95	51	109	94	18		

CARRIER CORPORATION

Model: HRVCCSVU1200-B • Options Installed: Defrost
 Electrical Requirements: Volts: 120 Amps: 1.75
 Exhaust Air Transfer Ratio: --- @100 Pa/0.4 in. wg 0.01 @ 50 Pa / 0.2 in. wg
 Low Temp. Vent Reduction Factor: 13.5% Supply 19.7% Exhaust • Low Temp. Imbalance Factor: 1.04

VENTILATION PERFORMANCE

EXT. STATIC PRESSURE		NET SUPPLY AIR FLOW		GROSS AIR FLOW			
				SUPPLY		EXHAUST	
Pa	in wg	L/s	cfm	L/s	cfm	L/s	cfm
25	0.1	109	230	109	231	115	243
50	0.2	102	217	103	219	110	233
75	0.3	100	211	100	212	105	222
100	0.4	93	196	93	196	101	213
125	0.5	84	177	84	177	96	204
150	0.6	66	140	67	142	91	192
175	0.7	41	87	42	88	82	173
200	0.8	23	49	23	49	27	57



— Net Supply - - - Net Exhaust

ENERGY PERFORMANCE

	SUPPLY TEMPERATURE		NET AIR FLOW		POWER CONSUMED WATTS	SENSIBLE RECOVERY EFFICIENCY	APPARENT SENSIBLE EFFECTIVENESS	LATENT RECOVERY/MOISTURE TRANSFER
	°C	°F	L/S	CFM				
HEATING	0	+32	56	119	110	77	83	-0.01
	0	+32	75	160	135	73	78	0.00
	0	+32	89	189	152	71	76	-0.03
	-25	-13	56	119	131	67	81	0.20
	-25	-13	55	117	130	67	---	---
	TOTAL RECOVERY EFFICIENCY							---
COOLING	+35	+95	56	119	108	21	21	
	+35	+95	75	160	132	21		

CERTIFIED HEAT AND ENERGY RECOVERY VENTILATORS

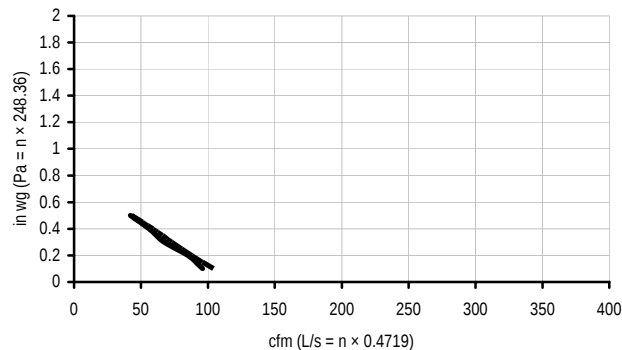
Section 3-43

FANTECH, INC. (FANTECH)

Model: SH704 • Options Installed: None
 Electrical Requirements: Volts: 120 Amps: 0.4
 Exhaust Air Transfer Ratio: 0.04 @100 Pa/0.4 in. wg 0.03 @ 50 Pa / 0.2 in. wg
 Low Temp. Vent Reduction Factor: 7% Supply 9% Exhaust • Low Temp. Imbalance Factor: 0.97

VENTILATION PERFORMANCE

EXT. STATIC PRESSURE		NET SUPPLY AIR FLOW		GROSS AIR FLOW			
				SUPPLY		EXHAUST	
Pa	in wg	L/s	cfm	L/s	cfm	L/s	cfm
25	0.1	45	96	47	100	49	104
50	0.2	40	85	41	88	41	88
75	0.3	32	67	33	70	34	73
100	0.4	26	56	27	58	28	59
125	0.5	20	42	20	43	20	43



— Net Supply — Net Exhaust

ENERGY PERFORMANCE

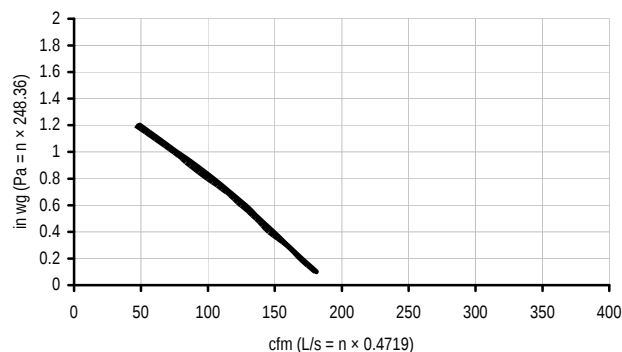
	SUPPLY TEMPERATURE		NET AIR FLOW		POWER CONSUMED	SENSIBLE RECOVERY EFFICIENCY	APPARENT SENSIBLE EFFECTIVENESS	LATENT RECOVERY/MOISTURE TRANSFER
	°C	°F	L/S	CFM	WATTS			
HEATING	0	+32	26	55	36	57	67	0.02
	0	+32	32	67	40	55	63	0.00
	0	+32	39	84	40	54	60	0.00
	-25	-13	34	73	35	53	66	0.01

FANTECH, INC. (FANTECH)

Model: SHR 1504 • Options Installed: None
 Electrical Requirements: Volts: 120 Amps: 1.3
 Exhaust Air Transfer Ratio: 0.03 @ 100 Pa/0.4 in. wg 0.02 @ 50 Pa / 0.2 in. wg
 Low Temp. Vent Reduction Factor: 5% Supply 0% Exhaust • Low Temp. Imbalance Factor: 0.82

VENTILATION PERFORMANCE

EXT. STATIC PRESSURE		NET SUPPLY AIR FLOW		GROSS AIR FLOW			
				SUPPLY		EXHAUST	
Pa	in wg	L/s	cfm	L/s	cfm	L/s	cfm
25	0.1	85	181	87	184	84	180
50	0.2	80	170	82	174	79	169
75	0.3	75	159	76	162	75	159
100	0.4	70	149	71	151	68	146
125	0.5	65	138	66	141	64	136
150	0.6	60	128	61	130	59	125
175	0.7	55	116	56	119	54	114
200	0.8	49	104	50	106	47	100
225	0.9	43	91	43	92	41	87
250	1.0	36	77	37	79	35	75
275	1.1	30	63	30	64	29	61
300	1.2	23	49	24	50	22	46



— Net Supply — Net Exhaust

ENERGY PERFORMANCE

	SUPPLY TEMPERATURE		NET AIR FLOW		POWER CONSUMED	SENSIBLE RECOVERY EFFICIENCY	APPARENT SENSIBLE EFFECTIVENESS	LATENT RECOVERY/MOISTURE TRANSFER
	°C	°F	L/S	CFM	WATTS			
HEATING	0	+32	31	67	72	60	73	-0.11
	0	+32	51	109	98	59	70	0.00
	0	+32	76	161	144	55	63	0.00
	-25	-13	32	68	73	56	77	-0.02

CERTIFIED HEAT AND ENERGY RECOVERY VENTILATORS

Section 3-44

FANTECH, INC. (FANTECH)

Model: SHR 1505R • Options Installed: Damper

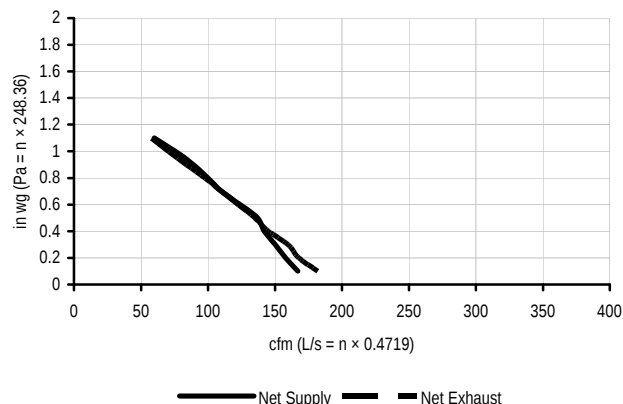
Electrical Requirements: Volts: 120 Amps: 1.3

Exhaust Air Transfer Ratio: 0.02 @100 Pa/0.4 in. wg 0.01 @ 50 Pa / 0.2 in. wg

Low Temp. Vent Reduction Factor: 12% Supply 14% Exhaust • Low Temp. Imbalance Factor: 0.96

VENTILATION PERFORMANCE

EXT. STATIC PRESSURE		NET SUPPLY AIR FLOW		GROSS AIR FLOW			
				SUPPLY		EXHAUST	
Pa	in wg	L/s	cfm	L/s	cfm	L/s	cfm
25	0.1	78	167	80	169	86	182
50	0.2	74	158	75	160	79	168
75	0.3	71	150	72	152	75	160
100	0.4	67	142	68	144	68	145
125	0.5	65	137	66	140	63	135
150	0.6	58	124	59	126	58	123
175	0.7	52	110	53	112	52	110
200	0.8	47	100	48	101	46	98
225	0.9	42	89	43	91	40	84
250	1.0	36	76	36	77	34	71
275	1.1	28	60	28	60	27	58



ENERGY PERFORMANCE

	SUPPLY TEMPERATURE		NET AIR FLOW		POWER CONSUMED WATTS	SENSIBLE RECOVERY EFFICIENCY	APPARENT SENSIBLE EFFECTIVENESS	LATENT RECOVERY/MOISTURE TRANSFER
	°C	°F	L/S	CFM				
HEATING	0	+32	31	65	72	59	73	0.01
	0	+32	49	104	102	61	70	0.00
	0	+32	76	161	148	58	66	-0.01
	-25	-13	32	68	96	61	77	0.02

FANTECH, INC. (FANTECH)

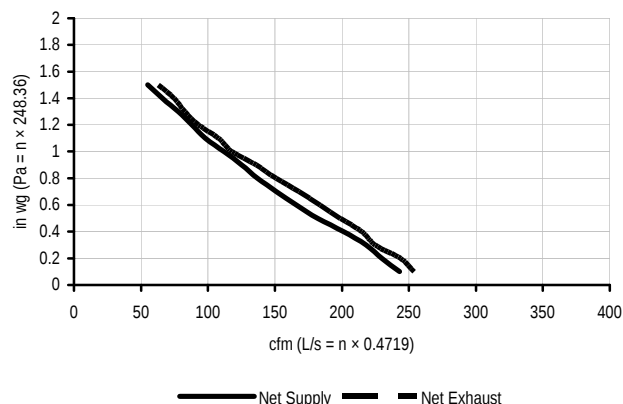
Model: SHR 2004 • Options Installed: None

Electrical Requirements: Volts: 120 Amps: 2.1

Exhaust Air Transfer Ratio: 0.02 @100 Pa/0.4 in. wg 0.01 @ 50 Pa / 0.2 in. wg

Low Temp. Vent Reduction Factor: 8% Supply 0% Exhaust • Low Temp. Imbalance Factor: 0.81

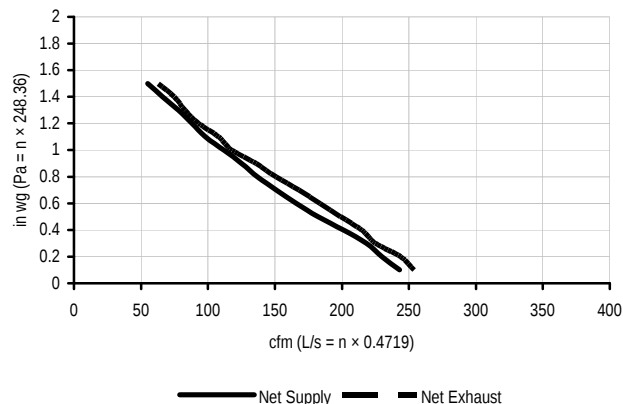
EXT. STATIC PRESSURE		NET SUPPLY AIR FLOW		GROSS AIR FLOW			
				SUPPLY		EXHAUST	
Pa	in wg	L/s	cfm	L/s	cfm	L/s	cfm
25	0.1	114	243	116	246	120	254
50	0.2	109	230	110	233	115	244
75	0.3	103	218	104	221	106	225
100	0.4	95	201	96	204	101	215
125	0.5	86	182	87	185	94	199
150	0.6	78	166	79	168	87	184
175	0.7	71	151	72	154	79	168
200	0.8	65	137	66	139	71	151
225	0.9	59	125	60	127	64	136
250	1.0	53	112	53	113	56	118
275	1.1	46	98	47	99	51	108
300	1.2	42	88	42	90	44	93
325	1.3	37	78	37	79	39	83
350	1.4	31	66	32	67	35	75
375	1.5	26	55	26	56	30	63



ENERGY PERFORMANCE

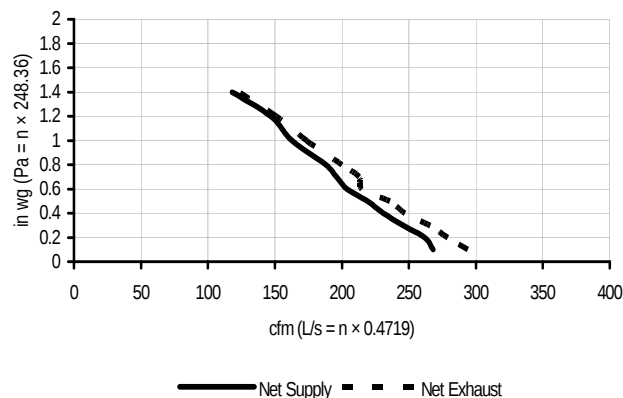
	SUPPLY TEMPERATURE		NET AIR FLOW		POWER CONSUMED WATTS	SENSIBLE RECOVERY EFFICIENCY	APPARENT SENSIBLE EFFECTIVENESS	LATENT RECOVERY/MOISTURE TRANSFER
	°C	°F	L/S	CFM				
HEATING	0	+32	31	65	108	62	77	0.06
	0	+32	55	117	154	62	74	0.07
	0	+32	90	191	246	60	71	0.00
	-25	-13	61	129	154	59	79	0.00

Low Temp. Vent Reduction Factor: 8% Supply 18% Exhaust • Low Temp. Imbalance Factor: 1.09



SUPPLY TEMPERATURE		NET AIR FLOW		ENERGY PERFORMANCE		APPARENT SENSIBLE EFFECTIVENESS	LATENT RECOVERY/MOISTURE TRANSFER	
				POWER CONSUMED	SENSIBLE RECOVERY EFFICIENCY			
	°C	°F	L/S	CFM	WATTS			
HEATING	0	+32	31	65	108	62	77	0.06
	0	+32	55	117	154	62	74	0.07
	0	+32	90	191	246	60	71	0.00
	-25	-13	59	126	141	64	81	0.01

Low Temp. Vent Reduction Factor: 7% Supply 9% Exhaust • Low Temp. Imbalance Factor: 0.96



					ENERGY PERFORMANCE			
SUPPLY TEMPERATURE			NET AIR FLOW		POWER CONSUMED	SENSIBLE RECOVERY EFFICIENCY	APPARENT SENSIBLE EFFECTIVENESS	LATENT RECOVERY/MOISTURE TRANSFER
	°C	°F	L/S	CFM	WATTS			
HEATING	0	+32	30	64	126	76	91	.02
	0	+32	55	117	212	78	92	.01
	0	+32	74	157	262	78	91	-.09
	-25	-13	57	121	224	72	91	.09
	-25	-13	55	117	220	72	--	--
						TOTAL RECOVERY EFFICIENCY		
COOLING	+35	+95	54	115	206		18	
	+35	+95	74	159	260		17	

CERTIFIED HEAT AND ENERGY RECOVERY VENTILATORS

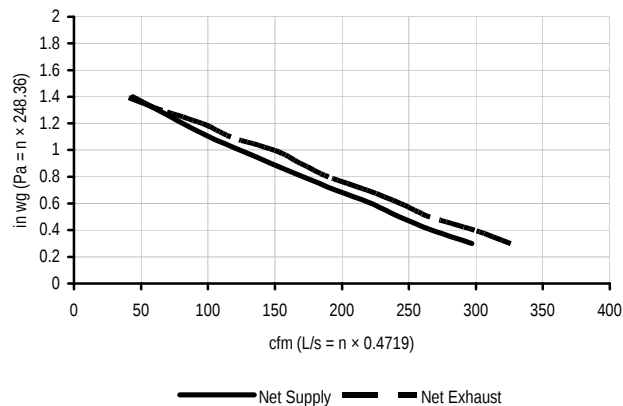
Section 3-46

FANTECH, INC. (FANTECH)

Model: SHR 3205R • Options Installed: None
 Electrical Requirements: Volts: 120 Amps: 2.5
 Exhaust Air Transfer Ratio: 0.03 @100 Pa/0.4 in. wg --- @ 50 Pa / 0.2 in. wg
 Low Temp. Vent Reduction Factor: 11.8% Supply 13.4% Exhaust • Low Temp. Imbalance Factor: 1.00

VENTILATION PERFORMANCE

EXT. STATIC PRESSURE		NET SUPPLY		GROSS AIR FLOW			
		AIR FLOW		SUPPLY		EXHAUST	
Pa	in wg	L/s	cfm	L/s	cfm	L/s	cfm
75	0.3	140	297	144	306	153	326
100	0.4	126	267	129	275	141	299
125	0.5	114	243	117	250	125	266
150	0.6	104	222	108	229	115	244
175	0.7	92	195	94	201	103	219
200	0.8	80	171	83	176	89	190
225	0.9	69	147	71	151	79	169
250	1.0	58	124	60	128	71	150
275	1.1	47	101	49	103	55	117
300	1.2	38	81	39	84	45	96
325	1.3	30	63	30	65	31	66
350	1.4	21	44	21	46	18	39



ENERGY PERFORMANCE

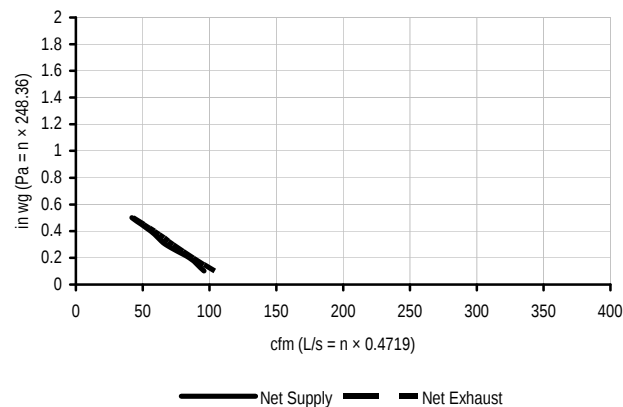
	SUPPLY TEMPERATURE		NET AIR FLOW		POWER CONSUMED WATTS	SENSIBLE RECOVERY EFFICIENCY	APPARENT SENSIBLE EFFECTIVENESS	LATENT RECOVERY/MOISTURE TRANSFER
	°C	°F	L/S	CFM				
HEATING	0	+32	56	118	136	66	77	0.02
	0	+32	76	162	182	66	76	0.02
	0	+32	116	248	272	64	74	0.03
	-25	-13	58	123	168	67	79	0.05

FANTECH, INC. (FANTECH)

Model: VH704 • Options Installed: None
 Electrical Requirements: Volts: 120 Amps: 0.4
 Exhaust Air Transfer Ratio: 0.04 @100 Pa/0.4 in. wg 0.03 @ 50 Pa / 0.2 in. wg
 Low Temp. Vent Reduction Factor: 7% Supply 9% Exhaust • Low Temp. Imbalance Factor: 0.97

VENTILATION PERFORMANCE

EXT. STATIC PRESSURE		NET SUPPLY		GROSS AIR FLOW			
		AIR FLOW		SUPPLY		EXHAUST	
Pa	in wg	L/s	cfm	L/s	cfm	L/s	cfm
25	0.1	45	96	47	100	49	104
50	0.2	40	85	41	88	41	88
75	0.3	32	67	33	70	34	73
100	0.4	26	56	27	58	28	59
125	0.5	20	42	20	43	20	43



ENERGY PERFORMANCE

	SUPPLY TEMPERATURE		NET AIR FLOW		POWER CONSUMED WATTS	SENSIBLE RECOVERY EFFICIENCY	APPARENT SENSIBLE EFFECTIVENESS	LATENT RECOVERY/MOISTURE TRANSFER
	°C	°F	L/S	CFM				
HEATING	0	+32	26	55	36	57	67	0.02
	0	+32	32	67	40	55	63	0.00
	0	+32	39	84	40	54	60	0.00
	-25	-13	34	73	35	53	66	0.01

CERTIFIED HEAT AND ENERGY RECOVERY VENTILATORS

Section 3-47

FANTECH, INC. (FANTECH)

Model: VH704 V09 • Options Installed: None
 Electrical Requirements: Volts: 120 Amps: 0.4
 Exhaust Air Transfer Ratio: 0.03 @100 Pa/0.4 in. wg 0.02 @ 50 Pa / 0.2 in. wg
 Low Temp. Vent Reduction Factor: 15.2% Supply 0 Exhaust • Low Temp. Imbalance Factor: 0.81

VENTILATION PERFORMANCE

EXT. STATIC PRESSURE		NET SUPPLY AIR FLOW		GROSS AIR FLOW			
				SUPPLY		EXHAUST	
Pa	in wg	L/s	cfm	L/s	cfm	L/s	cfm
25	0.1	40	84	41	86	43	91
50	0.2	35	76	36	77	38	81
75	0.3	30	64	31	66	33	70
100	0.4	26	55	26	56	27	58
125	0.5	21	44	21	45	20	43

ENERGY PERFORMANCE

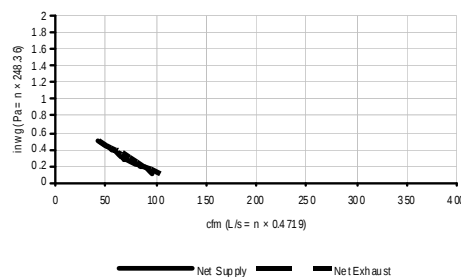
	SUPPLY TEMPERATURE		NET AIR FLOW		POWER CONSUMED WATTS	SENSIBLE RECOVERY EFFICIENCY	APPARENT SENSIBLE EFFECTIVENESS	LATENT RECOVERY/MOISTURE TRANSFER
	°C	°F	L/S	CFM				
HEATING	0	+32	30	64	44	59	67	0.00
	0	+32	35	75	44	59	66	-0.01
	-25	-13	31	66	40	53	72	-0.01

FANTECH, INC. (FANTECH)

Model: VHR704 • Options Installed: None
 Electrical Requirements: Volts: 120 Amps: 0.4
 Exhaust Air Transfer Ratio: 0.04 @100 Pa/0.4 in. wg 0.03 @ 50 Pa / 0.2 in. wg
 Low Temp. Vent Reduction Factor: 7% Supply 9% Exhaust • Low Temp. Imbalance Factor: 0.97

VENTILATION PERFORMANCE

EXT. STATIC PRESSURE		NET SUPPLY AIR FLOW		GROSS AIR FLOW			
				SUPPLY		EXHAUST	
Pa	in wg	L/s	cfm	L/s	cfm	L/s	cfm
25	0.1	45	96	47	100	49	104
50	0.2	40	85	41	88	41	88
75	0.3	32	67	33	70	34	73
100	0.4	26	56	27	58	28	59
125	0.5	20	42	20	43	20	43



ENERGY PERFORMANCE

	SUPPLY TEMPERATURE		NET AIR FLOW		POWER CONSUMED WATTS	SENSIBLE RECOVERY EFFICIENCY	APPARENT SENSIBLE EFFECTIVENESS	LATENT RECOVERY/MOISTURE TRANSFER
	°C	°F	L/S	CFM				
HEATING	0	+32	26	55	36	57	67	0.02
	0	+32	32	67	40	55	63	0.00
	0	+32	39	84	40	54	60	0.00
	-25	-13	34	73	35	53	66	0.01

CERTIFIED HEAT AND ENERGY RECOVERY VENTILATORS

Section 3-48

FANTECH, INC. (FANTECH)

Model: VHR704 V09 • Options Installed: None
 Electrical Requirements: Volts: 120 Amps: 0.4
 Exhaust Air Transfer Ratio: 0.03 @100 Pa/0.4 in. wg 0.02 @ 50 Pa / 0.2 in. wg
 Low Temp. Vent Reduction Factor: 15.2% Supply 0 Exhaust • Low Temp. Imbalance Factor: 0.81

VENTILATION PERFORMANCE

EXT. STATIC PRESSURE		NET SUPPLY AIR FLOW		GROSS AIR FLOW			
				SUPPLY		EXHAUST	
Pa	in wg	L/s	cfm	L/s	cfm	L/s	cfm
25	0.1	40	84	41	86	43	91
50	0.2	35	76	36	77	38	81
75	0.3	30	64	31	66	33	70
100	0.4	26	55	26	56	27	58
125	0.5	21	44	21	45	20	43

ENERGY PERFORMANCE

	SUPPLY TEMPERATURE		NET AIR FLOW		POWER CONSUMED WATTS	SENSIBLE RECOVERY EFFICIENCY	APPARENT SENSIBLE EFFECTIVENESS	LATENT RECOVERY/MOISTURE TRANSFER
	°C	°F	L/S	CFM				
HEATING	0	+32	25	52	34	61	69	-0.01
	0	+32	30	64	44	59	67	0.00
	0	+32	35	75	44	59	66	-0.01
	-25	-13	31	66	40	53	72	-0.01

FANTECH, INC. (FANTECH)

Model: VHR704R • Options Installed: None
 Electrical Requirements: Volts: 120 Amps: 0.4
 Exhaust Air Transfer Ratio: 0.029 @100 Pa/0.4 in. wg 0.018 @ 50 Pa / 0.2 in. wg
 Low Temp. Vent Reduction Factor: 10.6% Supply 13.9% Exhaust • Low Temp. Imbalance Factor: 0.96

VENTILATION PERFORMANCE

EXT. STATIC PRESSURE		NET SUPPLY AIR FLOW		GROSS AIR FLOW			
				SUPPLY		EXHAUST	
Pa	in wg	L/s	cfm	L/s	cfm	L/s	cfm
25	0.1	40	84	41	86	43	91
50	0.2	35	76	36	77	38	81
75	0.3	30	64	31	66	33	70
100	0.4	26	55	26	56	27	58
125	0.5	21	44	21	45	20	43

ENERGY PERFORMANCE

	SUPPLY TEMPERATURE		NET AIR FLOW		POWER CONSUMED WATTS	SENSIBLE RECOVERY EFFICIENCY	APPARENT SENSIBLE EFFECTIVENESS	LATENT RECOVERY/MOISTURE TRANSFER
	°C	°F	L/S	CFM				
HEATING	0	+32	26	55	36	57	67	0.02
	0	+32	32	67	40	55	63	0.00
	0	+32	39	84	40	54	60	0.00
	-25	-13	34	73	35	53	66	0.01

CERTIFIED HEAT AND ENERGY RECOVERY VENTILATORS

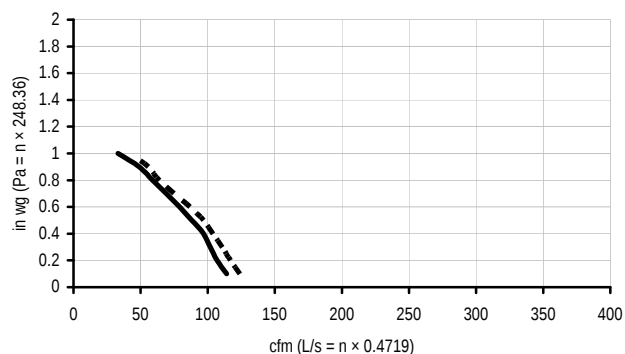
Section 3-49

FANTECH, INC. (FANTECH)

Model: VHR 904 • Options Installed: Damper
 Electrical Requirements: Volts: 120 Amps: 0.4
 Exhaust Air Transfer Ratio: 0.10 @100 Pa/0.4 in. wg 0.10 @ 50 Pa / 0.2 in. wg
 Low Temp. Vent Reduction Factor: 12% Supply 2% Exhaust • Low Temp. Imbalance Factor: 0.88

VENTILATION PERFORMANCE

EXT. STATIC PRESSURE		NET SUPPLY AIR FLOW		GROSS AIR FLOW			
				SUPPLY		EXHAUST	
Pa	in wg	L/s	cfm	L/s	cfm	L/s	cfm
25	0.1	54	114	55	116	59	124
50	0.2	50	107	51	109	55	117
75	0.3	48	102	49	104	52	111
100	0.4	46	97	47	99	49	104
125	0.5	42	88	42	90	46	97
150	0.6	37	79	38	80	41	87
175	0.7	33	69	33	70	35	75



— Net Supply — Net Exhaust

ENERGY PERFORMANCE

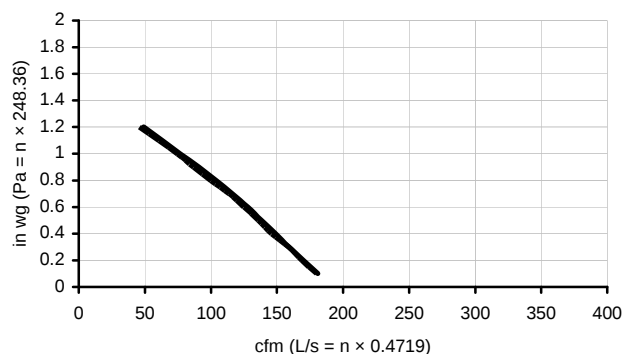
	SUPPLY TEMPERATURE		NET AIR FLOW		POWER CONSUMED WATTS	SENSIBLE RECOVERY EFFICIENCY	APPARENT SENSIBLE EFFECTIVENESS	LATENT RECOVERY/MOISTURE TRANSFER
	°C	°F	L/S	CFM				
HEATING	0	+32	28	60	88	69	81	0.00
	0	+32	41	88	175	62	76	0.02
	0	+32	53	113	180	61	75	0.02

FANTECH, INC. (FANTECH)

Model: VHR 1404 • Options Installed: None
 Electrical Requirements: Volts: 120 Amps: 1.3
 Exhaust Air Transfer Ratio: 0.03 @ 100 Pa/0.4 in. wg 0.02 @ 50 Pa / 0.2 in. wg
 Low Temp. Vent Reduction Factor: 5% Supply 0% Exhaust • Low Temp. Imbalance Factor: 0.82

VENTILATION PERFORMANCE

EXT. STATIC PRESSURE		NET SUPPLY AIR FLOW		GROSS AIR FLOW			
				SUPPLY		EXHAUST	
Pa	in wg	L/s	cfm	L/s	cfm	L/s	cfm
25	0.1	85	181	87	184	84	180
50	0.2	80	170	82	174	79	169
75	0.3	75	159	76	162	75	159
100	0.4	70	149	71	151	68	146
125	0.5	65	138	66	141	64	136
150	0.6	60	128	61	130	59	125
175	0.7	55	116	56	119	54	114
200	0.8	49	104	50	106	47	100
225	0.9	43	91	43	92	41	87
250	1.0	36	77	37	79	35	75
275	1.1	30	63	30	64	29	61
300	1.2	23	49	24	50	22	46



— Net Supply — Net Exhaust

ENERGY PERFORMANCE

	SUPPLY TEMPERATURE		NET AIR FLOW		POWER CONSUMED WATTS	SENSIBLE RECOVERY EFFICIENCY	APPARENT SENSIBLE EFFECTIVENESS	LATENT RECOVERY/MOISTURE TRANSFER
	°C	°F	L/S	CFM				
HEATING	0	+32	31	67	72	60	73	-0.11
	0	+32	51	109	98	59	70	0.00
	0	+32	76	161	144	55	63	0.00
	-25	-13	32	68	73	56	77	-0.02

CERTIFIED HEAT AND ENERGY RECOVERY VENTILATORS

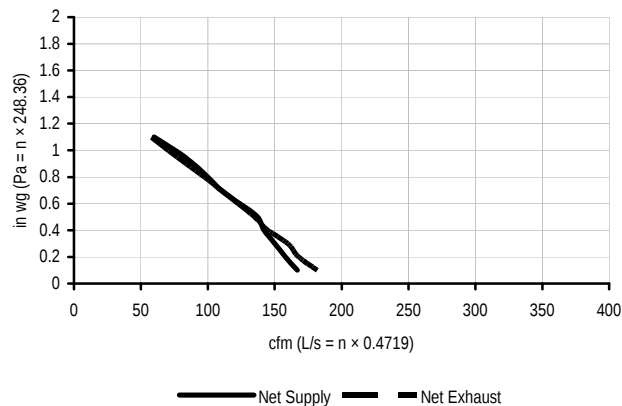
Section 3-50

FANTECH, INC. (FANTECH)

Model: VHR 1405R • Options Installed: Damper
 Electrical Requirements: Volts: 120 Amps: 1.3
 Exhaust Air Transfer Ratio: 0.02 @100 Pa/0.4 in. wg 0.01 @ 50 Pa / 0.2 in. wg
 Low Temp. Vent Reduction Factor: 12% Supply 14% Exhaust • Low Temp. Imbalance Factor: 0.96

VENTILATION PERFORMANCE

EXT. STATIC PRESSURE		NET SUPPLY AIR FLOW		GROSS AIR FLOW			
				SUPPLY		EXHAUST	
Pa	in wg	L/s	cfm	L/s	cfm	L/s	cfm
25	0.1	78	167	80	169	86	182
50	0.2	74	158	75	160	79	168
75	0.3	71	150	72	152	75	160
100	0.4	67	142	68	144	68	145
125	0.5	65	137	66	140	63	135
150	0.6	58	124	59	126	58	123
175	0.7	52	110	53	112	52	110
200	0.8	47	100	48	101	46	98
225	0.9	42	89	43	91	40	84
250	1.0	36	76	36	77	34	71
275	1.1	28	60	28	60	27	58



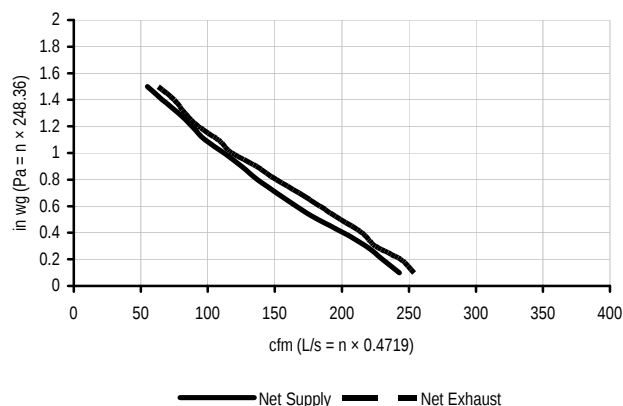
ENERGY PERFORMANCE

	SUPPLY TEMPERATURE		NET AIR FLOW		POWER CONSUMED	SENSIBLE RECOVERY EFFICIENCY	APPARENT SENSIBLE EFFECTIVENESS	LATENT RECOVERY/MOISTURE TRANSFER
	°C	°F	L/S	CFM	WATTS			
HEATING	0	+32	31	65	72	59	73	0.01
	0	+32	49	104	102	61	70	0.00
	0	+32	76	161	148	58	66	-0.01
	-25	-13	32	68	96	61	77	0.02

FANTECH, INC. (FANTECH)

Model: VHR 2004 • Options Installed: None
 Electrical Requirements: Volts: 120 Amps: 2.1
 Exhaust Air Transfer Ratio: 0.02 @100 Pa/0.4 in. wg 0.02 @ 50 Pa / 0.2 in. wg
 Low Temp. Vent Reduction Factor: 8% Supply 0% Exhaust • Low Temp. Imbalance Factor: 0.81

EXT. STATIC PRESSURE		NET SUPPLY AIR FLOW		GROSS AIR FLOW			
				SUPPLY		EXHAUST	
Pa	in wg	L/s	cfm	L/s	cfm	L/s	cfm
25	0.1	114	243	116	246	120	254
50	0.2	109	230	110	233	115	244
75	0.3	103	218	104	221	106	225
100	0.4	95	201	96	204	101	215
125	0.5	86	182	87	185	94	199
150	0.6	78	166	79	168	87	184
175	0.7	71	151	72	154	79	168
200	0.8	65	137	66	139	71	151
225	0.9	59	125	60	127	64	136
250	1.0	53	112	53	113	56	118
275	1.1	46	98	47	99	51	108
300	1.2	42	88	42	90	44	93
325	1.3	37	78	37	79	39	83
350	1.4	31	66	32	67	35	75
375	1.5	26	55	26	56	30	63



ENERGY PERFORMANCE

	SUPPLY TEMPERATURE		NET AIR FLOW		POWER CONSUMED	SENSIBLE RECOVERY EFFICIENCY	APPARENT SENSIBLE EFFECTIVENESS	LATENT RECOVERY/MOISTURE TRANSFER
	°C	°F	L/S	CFM	WATTS			
HEATING	0	+32	31	65	108	62	77	0.06
	0	+32	55	117	154	62	74	0.07
	0	+32	90	191	246	60	71	0.00
	-25	-13	61	129	154	59	79	0.00

CERTIFIED HEAT AND ENERGY RECOVERY VENTILATORS

Section 3-51

FANTECH, INC. (FANTECH)

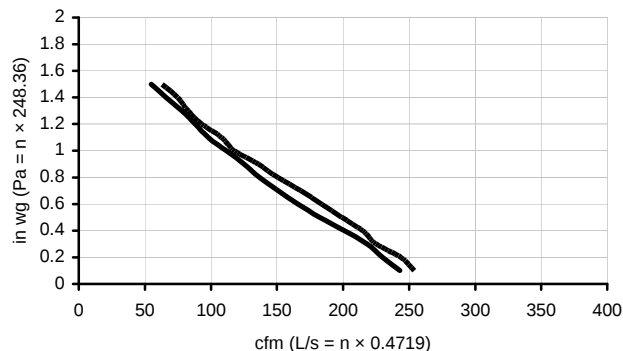
Model: VHR 2005R • Options Installed: None

Electrical Requirements: Volts: 120 Amps: 2.1

Exhaust Air Transfer Ratio: 0.02 @100 Pa/0.4 in. wg 0.01 @ 50 Pa / 0.2 in. wg

Low Temp. Vent Reduction Factor: 8% Supply 18% Exhaust • Low Temp. Imbalance Factor: 1.09

EXT. STATIC PRESSURE		NET SUPPLY AIR FLOW		GROSS AIR FLOW			
Pa	in wg	L/s	cfm	SUPPLY		EXHAUST	
		L/s	cfm	L/s	cfm	L/s	cfm
25	0.1	114	243	116	246	120	254
50	0.2	109	230	110	233	115	244
75	0.3	103	218	104	221	106	225
100	0.4	95	201	96	204	101	215
125	0.5	86	182	87	185	94	199
150	0.6	78	166	79	168	87	184
175	0.7	71	151	72	154	79	168
200	0.8	65	137	66	139	71	151
225	0.9	59	125	60	127	64	136
250	1.0	53	112	53	113	56	118
275	1.1	46	98	47	99	51	108
300	1.2	42	88	42	90	44	93
325	1.3	37	78	37	79	39	83
350	1.4	31	66	32	67	35	75
375	1.5	26	55	26	56	30	63



———— Net Supply - - - - Net Exhaust

ENERGY PERFORMANCE							
	SUPPLY TEMPERATURE		NET AIR FLOW		POWER CONSUMED WATTS	SENSIBLE RECOVERY EFFICIENCY	LATENT RECOVERY/MOISTURE TRANSFER
	°C	°F	L/S	CFM			
HEATING	0	+32	31	65	108	62	0.06
	0	+32	55	117	154	62	0.07
	0	+32	90	191	246	60	0.00
	-25	-13	59	126	141	64	0.01

FANTECH, INC. (SYMPHONY)

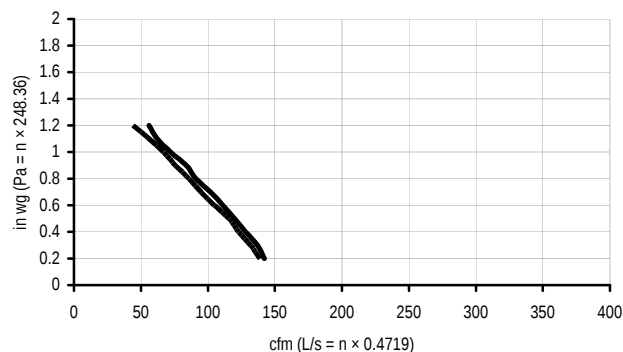
Model: HR-150S • Options Installed: None

Electrical Requirements: Volts: 120 Amps: 1.6

Exhaust Air Transfer Ratio: --- @100 Pa/0.4 in. wg 0.01 @ 50 Pa / 0.2 in. wg

Low Temp. Vent Reduction Factor: 12% Supply 2% Exhaust • Low Temp. Imbalance Factor: 0.88

VENTILATION PERFORMANCE							
EXT. STATIC PRESSURE		NET SUPPLY AIR FLOW		GROSS AIR FLOW			
Pa	in wg	L/s	cfm	SUPPLY		EXHAUST	
		L/s	cfm	L/s	cfm	L/s	cfm
25	0.1	71	151	72	153	68	145
50	0.2	67	142	68	144	66	139
75	0.3	65	137	65	138	62	132
100	0.4	60	128	61	130	58	123
125	0.5	57	120	57	121	55	116
150	0.6	52	111	53	112	50	105
175	0.7	48	102	49	103	45	95
200	0.8	43	91	43	92	41	86
225	0.9	40	84	40	85	36	76
250	1.0	34	72	34	72	32	67
275	1.1	29	62	30	63	26	56
300	1.2	26	56	27	57	21	44



———— Net Supply - - - - Net Exhaust

ENERGY PERFORMANCE							
	SUPPLY TEMPERATURE		NET AIR FLOW		POWER CONSUMED WATTS	SENSIBLE RECOVERY EFFICIENCY	LATENT RECOVERY/MOISTURE TRANSFER
	°C	°F	L/S	CFM			
HEATING	0	+32	30	64	94	61	0.01
	0	+32	39	83	121	59	0.02
	0	+32	57	121	168	56	0.02
	-25	-13	41	87	119	56	0.05
	-25	-13	30	64	86	55	---
COOLING	+35	+95	30	64	96	TOTAL RECOVERY EFFICIENCY	
	+35	+95	53	113	163		

CERTIFIED HEAT AND ENERGY RECOVERY VENTILATORS

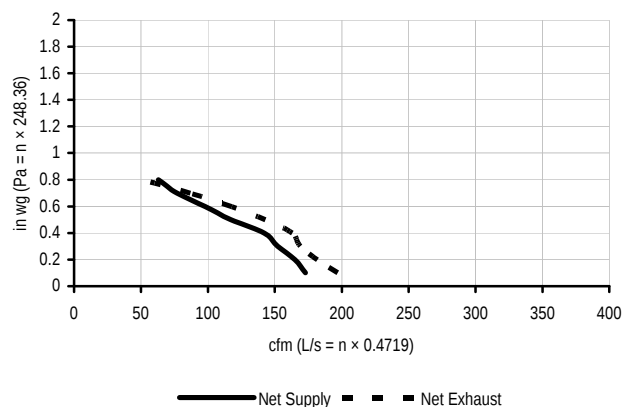
Section 3-52

FRIGIDAIRE

Model: ERV-150 • Options Installed: Defrost
 Electrical Requirements: Volts: 120 Amps: 1.3
 Exhaust Air Transfer Ratio: --- @100 Pa/0.4 in. wg 0.06 @ 50 Pa / 0.2 in. wg
 Low Temp. Vent Reduction Factor: 0% Supply 0% Exhaust • Low Temp. Imbalance Factor: 0.79

VENTILATION PERFORMANCE

EXT. STATIC PRESSURE		NET SUPPLY AIR FLOW		GROSS AIR FLOW			
				SUPPLY		EXHAUST	
Pa	in wg	L/s	cfm	L/s	cfm	L/s	cfm
25	0.1	82	173	87	184	93	197
50	0.2	78	165	83	175	86	182
75	0.3	72	152	76	162	80	169
100	0.4	67	142	71	151	77	163
125	0.5	55	117	59	124	67	143
150	0.6	46	98	49	104	56	118
175	0.7	36	77	39	82	41	87
200	0.8	30	63	32	67	24	51



ENERGY PERFORMANCE

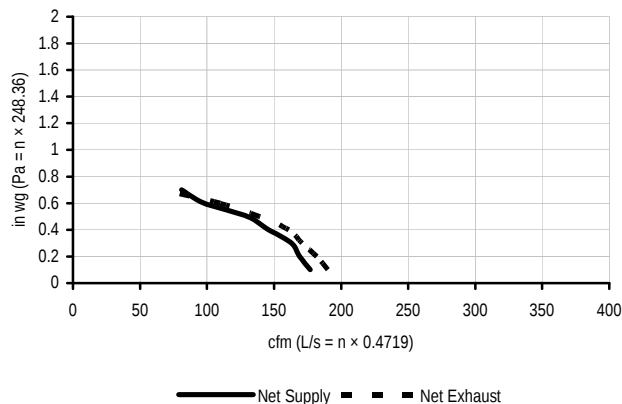
	SUPPLY TEMPERATURE		NET AIR FLOW		POWER CONSUMED WATTS	SENSIBLE RECOVERY EFFICIENCY	APPARENT SENSIBLE EFFECTIVENESS	LATENT RECOVERY/MOISTURE TRANSFER
	°C	°F	L/S	CFM				
HEATING	0	+32	29	60	56	71	79	0.52
	0	+32	47	100	80	64	73	0.41
	0	+32	65	137	126	60	68	0.36
	-15	5	31	65	64	56	81	0.41
COOLING	+35	+95	28	59	52		TOTAL RECOVERY EFFICIENCY 45	

FRIGIDAIRE

Model: HRV-150 • Options Installed: Defrost
 Electrical Requirements: Volts: 120 Amps: 1.3
 Exhaust Air Transfer Ratio: --- @100 Pa/0.4 in. wg 0.05 @ 50 Pa / 0.2 in. wg
 Low Temp. Vent Reduction Factor: 9% Supply 22%Exhaust • Low Temp. Imbalance Factor: 1.0

VENTILATION PERFORMANCE

EXT. STATIC PRESSURE		NET SUPPLY AIR FLOW		GROSS AIR FLOW			
				SUPPLY		EXHAUST	
Pa	in wg	L/s	cfm	L/s	cfm	L/s	cfm
25	0.1	84	177	88	186	90	190
50	0.2	80	169	84	178	86	182
75	0.3	77	163	81	171	81	171
100	0.4	69	146	72	153	76	161
125	0.5	61	130	65	137	66	139
150	0.6	46	98	49	103	52	110
175	0.7	38	81	40	85	32	67



ENERGY PERFORMANCE

	SUPPLY TEMPERATURE		NET AIR FLOW		POWER CONSUMED WATTS	SENSIBLE RECOVERY EFFICIENCY	APPARENT SENSIBLE EFFECTIVENESS	LATENT RECOVERY/MOISTURE TRANSFER
	°C	°F	L/S	CFM				
HEATING	0	+32	30	64	54	75	83	-0.03
	0	+32	46	97	78	67	74	0.01
	0	+32	65	138	124	64	72	-0.02
	-25	-13	26	55	62	67	89	0.05

CERTIFIED HEAT AND ENERGY RECOVERY VENTILATORS

Section 3-53

FRIGIDAIRE

Model: ERV-210 • Options Installed: Defrost

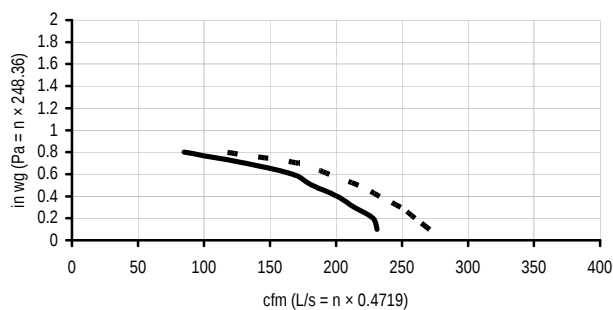
Electrical Requirements: Volts: 120 Amps: 1.9

Exhaust Air Transfer Ratio: --- @ 100 Pa/0.4 in. wg 0.06 @ 50 Pa / 0.2 in. wg

Low Temp. Vent Reduction Factor: 0% Supply 0% Exhaust • Low Temp. Imbalance Factor: 0.84

VENTILATION PERFORMANCE

EXT. STATIC PRESSURE		NET SUPPLY AIR FLOW		GROSS AIR FLOW			
		L/s	cfm	SUPPLY		EXHAUST	
Pa	in wg			L/s	cfm	L/s	cfm
25	0.1	109	231	116	245	128	271
50	0.2	108	228	114	241	123	260
75	0.3	101	214	107	227	118	249
100	0.4	95	201	101	213	110	233
125	0.5	86	182	91	193	102	217
150	0.6	79	167	84	177	92	195
175	0.7	62	132	66	140	81	172
200	0.8	40	85	42	90	55	116



— Net Supply - - - Net Exhaust

ENERGY PERFORMANCE

	SUPPLY TEMPERATURE		NET AIR FLOW		POWER CONSUMED WATTS	SENSIBLE RECOVERY EFFICIENCY	APPARENT SENSIBLE EFFECTIVENESS	LATENT RECOVERY/MOISTURE TRANSFER
	°C	°F	L/S	CFM				
HEATING	0	+32	52	110	93	69	76	0.45
	0	+32	74	157	130	64	71	0.38
	0	+32	96	203	193	60	68	0.30
	-15	5	52	110	122	55	76	0.26
TOTAL RECOVERY EFFICIENCY								41
COOLING	+35	+95	50	106	89			

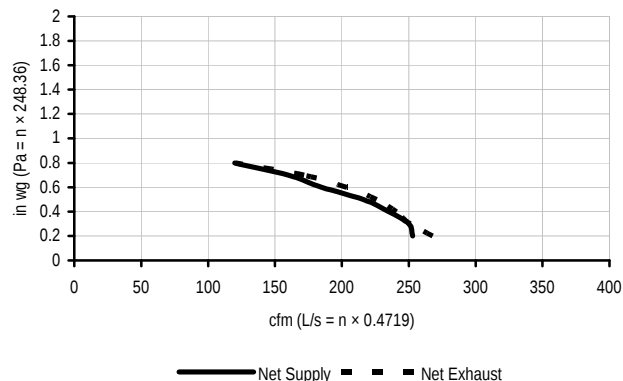
CERTIFIED HEAT AND ENERGY RECOVERY VENTILATORS

Section 3-54

FRIGIDAIRE

Model: HRV-210 • Options Installed: Defrost
 Electrical Requirements: Volts: 120 Amps: 1.9
 Exhaust Air Transfer Ratio: --- @100 Pa/0.4 in. wg 0.04 @ 50 Pa / 0.2 in. wg
 Low Temp. Vent Reduction Factor: 0% Supply 23% Exhaust • Low Temp. Imbalance Factor: 1.0

EXT. STATIC PRESSURE		VENTILATION PERFORMANCE							
		NET SUPPLY				GROSS AIR FLOW			
		AIR FLOW		SUPPLY		EXHAUST			
Pa	in wg	L/s	cfm	L/s	cfm	L/s	cfm		
50	0.2	119	253	125	264	126	268		
75	0.3	118	250	124	262	118	251		
100	0.4	111	235	116	245	114	241		
125	0.5	102	216	106	224	107	226		
150	0.6	87	185	91	193	96	204		
175	0.7	76	160	79	167	81	172		
200	0.8	57	120	59	124	57	121		

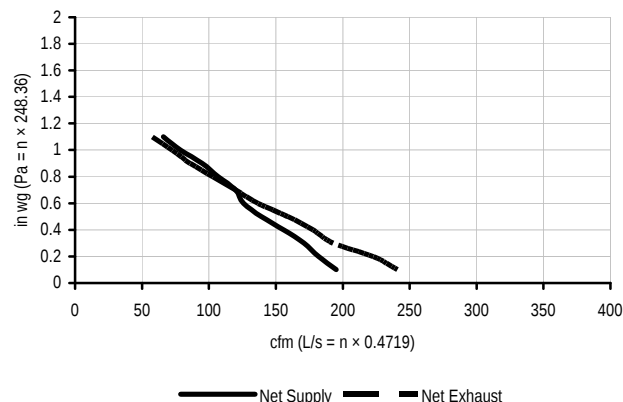


ENERGY PERFORMANCE								
	SUPPLY TEMPERATURE		NET AIR FLOW		POWER CONSUMED WATTS	SENSIBLE RECOVERY EFFICIENCY	APPARENT SENSIBLE EFFECTIVENESS	LATENT RECOVERY/MOISTURE TRANSFER
	°C	°F	L/S	CFM				
HEATING	0	+32	51	109	92	70	77	-0.01
	0	+32	73	155	128	65	72	-0.02
	0	+32	102	215	191	62	70	-0.01
	-25	-13	52	110	104	60	94	0.05

GENERAL FILTERS, INC. (GENERAL AIRE)

Model: 8160 • Options Installed: None
 Electrical Requirements: Volts: 120 Amps: 1.5
 Exhaust Air Transfer Ratio: 0.01 @100 Pa/0.4 in. wg 0.01 @ 50 Pa / 0.2 in. wg
 Low Temp. Vent Reduction Factor: 17.8% Supply 13.8% Exhaust • Low Temp. Imbalance Factor: 0.88

EXT. STATIC PRESSURE		VENTILATION PERFORMANCE							
		NET SUPPLY				GROSS AIR FLOW			
		AIR FLOW		SUPPLY		EXHAUST			
Pa	in wg	L/s	cfm	L/s	cfm	L/s	cfm		
25	0.1	92	195	92	196	113	241		
50	0.2	85	182	86	183	105	223		
75	0.3	80	171	81	172	91	193		
100	0.4	73	156	74	157	84	178		
125	0.5	65	139	66	140	75	159		
150	0.6	59	126	60	127	65	137		
175	0.7	56	120	57	120	57	120		
200	0.8	50	107	50	107	48	103		
225	0.9	45	95	45	96	40	86		
250	1.0	37	79	38	80	34	73		
275	1.1	31	66	31	67	27	58		



ENERGY PERFORMANCE								
	SUPPLY TEMPERATURE		NET AIR FLOW		POWER CONSUMED WATTS	SENSIBLE RECOVERY EFFICIENCY	APPARENT SENSIBLE EFFECTIVENESS	LATENT RECOVERY/MOISTURE TRANSFER
	°C	°F	L/S	CFM				
HEATING	0	+32	31	66	88	66	78	0.00
	0	+32	42	89	104	64	76	0.00
	0	+32	56	119	114	63	72	0.00
	-25	-13	32	67	86	59	77	0.02

CERTIFIED HEAT AND ENERGY RECOVERY VENTILATORS

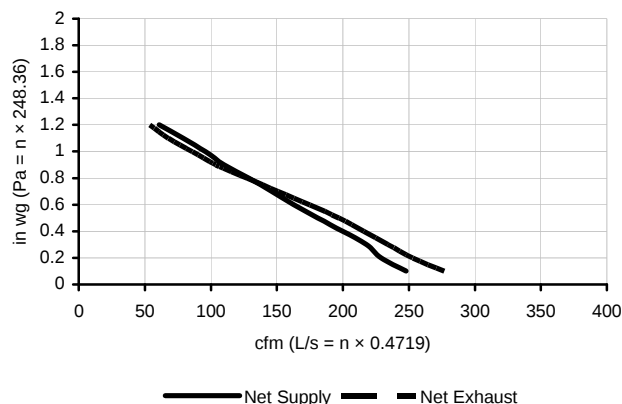
Section 3-55

GENERAL FILTERS, INC. (GENERAL AIRE)

Model: 8220 • Options Installed: None
 Electrical Requirements: Volts: 120 Amps: 1.5
 Exhaust Air Transfer Ratio: 0.01 @100 Pa/0.4 in. wg 0.10 @ 50 Pa / 0.2 in. wg
 Low Temp. Vent Reduction Factor: 2.3% Supply 0.2% Exhaust • Low Temp. Imbalance Factor: 0.91

VENTILATION PERFORMANCE

EXT. STATIC PRESSURE		NET SUPPLY AIR FLOW		GROSS AIR FLOW			
				SUPPLY		EXHAUST	
Pa	in wg	L/s	cfm	L/s	cfm	L/s	cfm
25	0.1	117	248	118	250	130	277
50	0.2	108	229	109	231	119	253
75	0.3	102	218	103	220	110	234
100	0.4	94	200	95	202	101	216
125	0.5	85	181	86	183	92	197
150	0.6	77	163	78	165	82	175
175	0.7	69	146	70	148	71	151
200	0.8	61	129	61	131	60	128
225	0.9	52	110	52	111	49	104
250	1.0	45	96	46	97	40	86
275	1.1	37	79	38	80	32	68
300	1.2	29	61	29	62	26	54



ENERGY PERFORMANCE

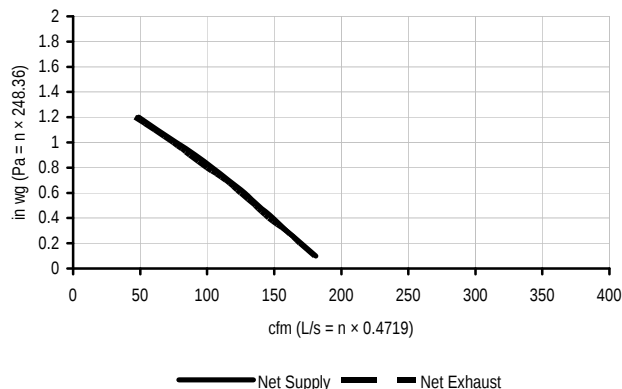
	SUPPLY TEMPERATURE		NET AIR FLOW		POWER CONSUMED	SENSIBLE RECOVERY EFFICIENCY	APPARENT SENSIBLE EFFECTIVENESS	LATENT RECOVERY/MOISTURE TRANSFER
	°C	°F	L/S	CFM	WATTS			
HEATING	0	+32	55	118	106	61	71	0.00
	0	+32	75	160	132	58	65	0.00
	0	+32	87	185	150	55	62	0.00
	-25	-13	57	120	105	58	72	0.01

GOODMAN INDOOR AIR QUALITY PRODUCTS

Model: HRV150 • Options Installed: None
 Electrical Requirements: Volts: 120 Amps: 1.3
 Exhaust Air Transfer Ratio: 0.03 @100 Pa/0.4 in. wg 0.02 @ 50 Pa / 0.2 in. wg
 Low Temp. Vent Reduction Factor: 5% Supply 0% Exhaust • Low Temp. Imbalance Factor: 0.82

VENTILATION PERFORMANCE

EXT. STATIC PRESSURE		NET SUPPLY AIR FLOW		GROSS AIR FLOW			
				SUPPLY		EXHAUST	
Pa	in wg	L/s	cfm	L/s	cfm	L/s	cfm
25	0.1	85	181	87	184	84	180
50	0.2	80	170	82	174	79	169
75	0.3	75	159	76	162	75	159
100	0.4	70	149	71	151	68	146
125	0.5	65	138	66	141	64	136
150	0.6	60	128	61	130	59	125
175	0.7	55	116	56	119	54	114
200	0.8	49	104	50	106	47	100
225	0.9	43	91	43	92	41	87
250	1.0	36	77	37	79	35	75
275	1.1	30	63	30	64	29	61
300	1.2	23	49	24	50	22	46



ENERGY PERFORMANCE

	SUPPLY TEMPERATURE		NET AIR FLOW		POWER CONSUMED	SENSIBLE RECOVERY EFFICIENCY	APPARENT SENSIBLE EFFECTIVENESS	LATENT RECOVERY/MOISTURE TRANSFER
	°C	°F	L/S	CFM	WATTS			
HEATING	0	32	31	67	72	60	73	-0.11
	0	32	51	109	98	59	70	0.00
	0	32	76	161	144	55	63	0.00
	-25	-13	32	68	73	56	77	-0.02

CERTIFIED HEAT AND ENERGY RECOVERY VENTILATORS

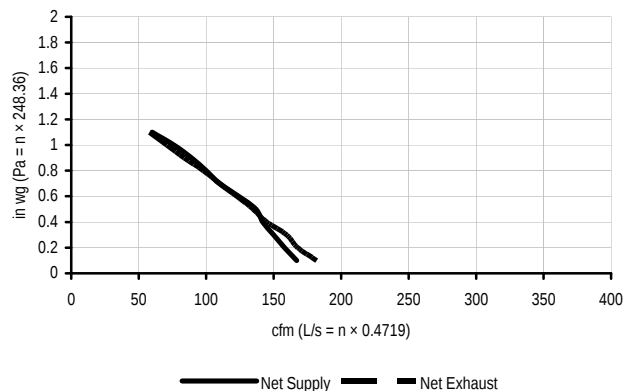
Section 3-56

GOODMAN INDOOR AIR QUALITY PRODUCTS

Model: HRV150D • Options Installed: Damper
 Electrical Requirements: Volts: 120 Amps: 1.3
 Exhaust Air Transfer Ratio: 0.02 @100 Pa/0.4 in. wg 0.01 @ 50 Pa / 0.2 in. wg
 Low Temp. Vent Reduction Factor: 12% Supply 14% Exhaust • Low Temp. Imbalance Factor: 0.96

VENTILATION PERFORMANCE

EXT. STATIC PRESSURE		NET SUPPLY AIR FLOW		GROSS AIR FLOW			
				SUPPLY		EXHAUST	
Pa	in wg	L/s	cfm	L/s	cfm	L/s	cfm
25	0.1	78	167	80	169	86	182
50	0.2	74	158	75	160	79	168
75	0.3	71	150	72	152	75	160
100	0.4	67	142	68	144	68	145
125	0.5	65	137	66	140	63	135
150	0.6	58	124	59	126	58	123
175	0.7	52	110	53	112	52	110
200	0.8	47	100	48	101	46	98
225	0.9	42	89	43	91	40	84
250	1.0	36	76	36	77	34	71
275	1.1	28	60	28	60	27	58



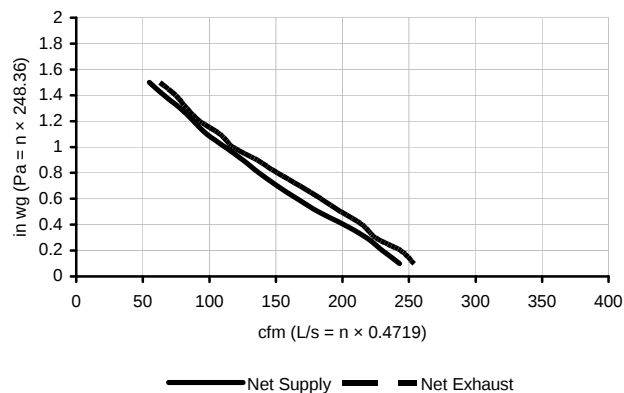
ENERGY PERFORMANCE

	SUPPLY TEMPERATURE		NET AIR FLOW		POWER CONSUMED	SENSIBLE RECOVERY EFFICIENCY	APPARENT SENSIBLE EFFECTIVENESS	LATENT RECOVERY/MOISTURE TRANSFER
	°C	°F	L/S	CFM	WATTS			
HEATING	0	+32	31	65	72	59	73	0.01
	0	+32	49	104	102	61	70	0.00
	0	+32	76	161	148	58	66	-0.01
	-25	-13	32	68	96	61	77	0.02

GOODMAN INDOOR AIR QUALITY PRODUCTS

Model: HRV200 • Options Installed: None
 Electrical Requirements: Volts: 120 Amps: 2.1
 Exhaust Air Transfer Ratio: 0.02 @100 Pa/0.4 in. wg 0.01 @ 50 Pa / 0.2 in. wg
 Low Temp. Vent Reduction Factor: 8% Supply 0% Exhaust • Low Temp. Imbalance Factor: 0.81

EXT. STATIC PRESSURE		NET SUPPLY AIR FLOW		GROSS AIR FLOW			
				SUPPLY		EXHAUST	
Pa	in wg	L/s	cfm	L/s	cfm	L/s	cfm
25	0.1	114	243	116	246	120	254
50	0.2	109	230	110	233	115	244
75	0.3	103	218	104	221	106	225
100	0.4	95	201	96	204	101	215
125	0.5	86	182	87	185	94	199
150	0.6	78	166	79	168	87	184
175	0.7	71	151	72	154	79	168
200	0.8	65	137	66	139	71	151
225	0.9	59	125	60	127	64	136
250	1.0	53	112	53	113	56	118
275	1.1	46	98	47	99	51	108
300	1.2	42	88	42	90	44	93
325	1.3	37	78	37	79	39	83
350	1.4	31	66	32	67	35	75
375	1.5	26	55	26	56	30	63



ENERGY PERFORMANCE

	SUPPLY TEMPERATURE		NET AIR FLOW		POWER CONSUMED	SENSIBLE RECOVERY EFFICIENCY	APPARENT SENSIBLE EFFECTIVENESS	LATENT RECOVERY/MOISTURE TRANSFER
	°C	°F	L/S	CFM	WATTS			
HEATING	0	+32	31	65	108	62	77	0.06
	0	+32	55	117	154	62	74	0.07
	0	+32	90	191	246	60	71	0.00
	-25	-13	61	129	154	59	79	0.00

CERTIFIED HEAT AND ENERGY RECOVERY VENTILATORS

Section 3-57

GOODMAN INDOOR AIR QUALITY PRODUCTS

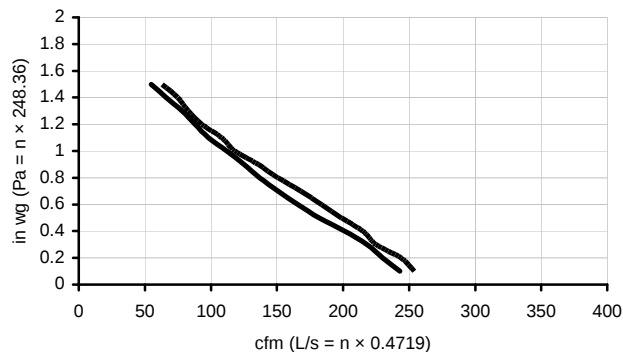
Model: HRV200D • Options Installed: None

Electrical Requirements: Volts: 120 Amps: 2.1

Exhaust Air Transfer Ratio: 0.02 @100 Pa/0.4 in. wg 0.01 @ 50 Pa / 0.2 in. wg

Low Temp. Vent Reduction Factor: 8% Supply 18% Exhaust • Low Temp. Imbalance Factor: 1.09

EXT. STATIC PRESSURE		NET SUPPLY AIR FLOW		GROSS AIR FLOW			
				SUPPLY		EXHAUST	
Pa	in wg	L/s	cfm	L/s	cfm	L/s	cfm
25	0.1	114	243	116	246	120	254
50	0.2	109	230	110	233	115	244
75	0.3	103	218	104	221	106	225
100	0.4	95	201	96	204	101	215
125	0.5	86	182	87	185	94	199
150	0.6	78	166	79	168	87	184
175	0.7	71	151	72	154	79	168
200	0.8	65	137	66	139	71	151
225	0.9	59	125	60	127	64	136
250	1.0	53	112	53	113	56	118
275	1.1	46	98	47	99	51	108
300	1.2	42	88	42	90	44	93
325	1.3	37	78	37	79	39	83
350	1.4	31	66	32	67	35	75
375	1.5	26	55	26	56	30	63



— Net Supply - - - Net Exhaust

SUPPLY TEMPERATURE		NET AIR FLOW		ENERGY PERFORMANCE		APPARENT SENSIBLE EFFECTIVENESS	LATENT RECOVERY/MOISTURE TRANSFER
				POWER CONSUMED	SENSIBLE RECOVERY EFFICIENCY		
	°C	°F	L/S	CFM	WATTS		
HEATING	0	+32	31	65	108	62	77
	0	+32	55	117	154	62	74
	0	+32	90	191	246	60	71
	-25	-13	59	126	141	64	81

GOODMAN INDOOR AIR QUALITY PRODUCTS

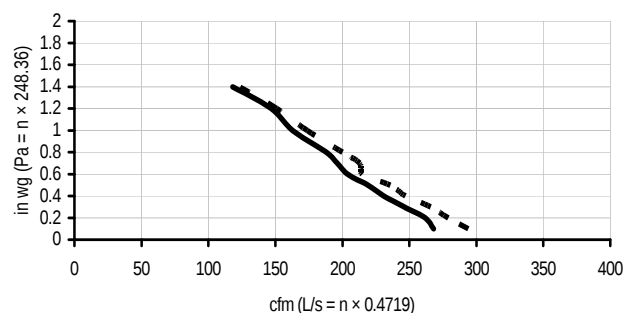
Model: HRV300D • Options Installed: None

Electrical Requirements: Volts: 115 Amps: 2.7

Exhaust Air Transfer Ratio: --- @100 Pa/0.4 in. wg --- @ 50 Pa / 0.2 in. wg

Low Temp. Vent Reduction Factor: 7% Supply 9% Exhaust • Low Temp. Imbalance Factor: 0.96

		NET SUPPLY AIR FLOW		GROSS AIR FLOW			
EXT. STATIC PRESSURE				SUPPLY		EXHAUST	
Pa	in wg	L/s	cfm	L/s	cfm	L/s	cfm
25	0.1	126	268	131	277	139	294
50	0.2	124	262	127	270	132	279
75	0.3	116	246	119	253	126	266
100	0.4	109	231	112	238	117	247
125	0.5	103	219	107	226	111	236
150	0.6	96	204	100	211	101	215
175	0.7	93	196	95	202	101	213
200	0.8	89	188	92	194	94	200
250	1.0	77	163	79	168	82	174
300	1.2	69	147	71	151	71	151
350	1.4	56	118	57	121	58	123



— Net Supply - - - Net Exhaust

ENERGY PERFORMANCE

	SUPPLY TEMPERATURE		NET AIR FLOW		POWER CONSUMED	SENSIBLE RECOVERY EFFICIENCY	APPARENT SENSIBLE EFFECTIVENESS	LATENT RECOVERY/MOISTURE TRANSFER
	°C	°F	L/S	CFM	WATTS			
HEATING	0	+32	30	64	126	76	91	.02
	0	+32	55	117	212	78	92	.01
	0	+32	74	157	262	78	91	-.09
	-25	-13	57	121	224	72	91	.09
	-25	-13	55	117	220	72	--	--
TOTAL RECOVERY EFFICIENCY								
COOLING	+35	+95	54	115	206		18	
	+35	+95	74	159	260		17	

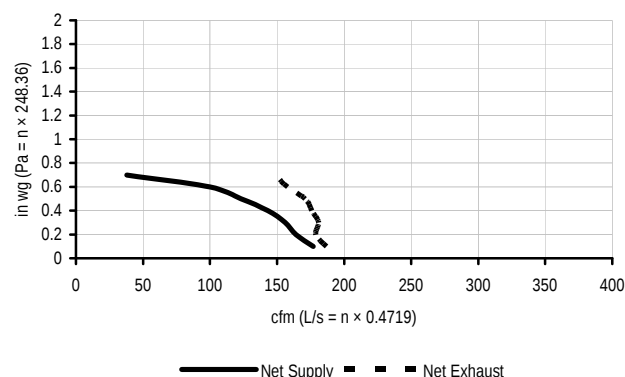
CERTIFIED HEAT AND ENERGY RECOVERY VENTILATORS

Section 3-58

HONEYWELL, INC.

Model: HR150 • Installed: None
 Electrical Requirements: Volts: 120 Amps: 1.4
 Exhaust Air Transfer Ratio: 0.01 @100 Pa/0.4 in. wg 0.01 @ 50 Pa / 0.2 in. wg
 Low Temp. Vent Reduction Factor: 2% Supply 0% Exhaust • Low Temp. Imbalance Factor: n/a

VENTILATION PERFORMANCE							
EXT. STATIC PRESSURE		NET SUPPLY AIR FLOW		GROSS AIR FLOW			
				SUPPLY		EXHAUST	
Pa	in wg	L/s	cfm	L/s	cfm	L/s	cfm
25	0.1	83	177	83	177	88	187
50	0.2	77	164	77	164	84	179
75	0.3	73	156	73	156	85	181
100	0.4	67	143	67	143	83	176
125	0.5	58	123	58	123	81	171
150	0.6	47	100	47	100	74	158
175	0.7	18	38	18	38	70	149

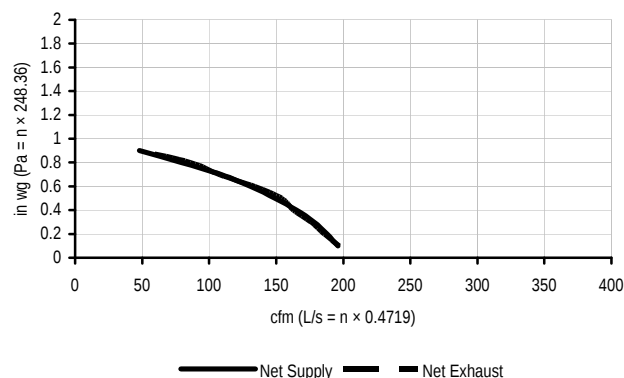


ENERGY PERFORMANCE								
	SUPPLY TEMPERATURE		NET AIR FLOW		POWER CONSUMED WATTS	SENSIBLE RECOVERY EFFICIENCY	APPARENT SENSIBLE EFFECTIVENESS	LATENT RECOVERY/MOISTURE TRANSFER
	°C	°F	L/S	CFM				
HEATING	0	32	32	67	78	66	76	-0.01
	0	32	44	94	95	64	72	-0.02
	0	32	56	118	110	60	68	-0.02
	-25	-13	32	68	82	60	78	0.08
COOLING	35	95	31	66	74			
							TOTAL RECOVERY EFFICIENCY 20	

HONEYWELL, INC.

Model: HR200 • Installed: None
 Electrical Requirements: Volts: 120 Amps: 1.4
 Exhaust Air Transfer Ratio: 0.01 @100 Pa/0.4 in. wg 0.01 @ 50 Pa / 0.2 in. wg
 Low Temp. Vent Reduction Factor: 1% Supply 2% Exhaust • Low Temp. Imbalance Factor: 0.967

VENTILATION PERFORMANCE							
EXT. STATIC PRESSURE		NET SUPPLY AIR FLOW		GROSS AIR FLOW			
				SUPPLY		EXHAUST	
Pa	in wg	L/s	cfm	L/s	cfm	L/s	cfm
25	0.1	101	214	102	216	97	206
50	0.2	97	206	98	208	93	197
75	0.3	91	193	93	197	88	186
100	0.4	87	184	88	186	82	174
125	0.5	80	170	81	172	75	159
150	0.6	73	155	74	157	67	142
175	0.7	65	137	65	138	54	114



ENERGY PERFORMANCE								
	SUPPLY TEMPERATURE		NET AIR FLOW		POWER CONSUMED WATTS	SENSIBLE RECOVERY EFFICIENCY	APPARENT SENSIBLE EFFECTIVENESS	LATENT RECOVERY/MOISTURE TRANSFER
	°C	°F	L/S	CFM				
HEATING	0	+32	68	144	114	59	66	0
	0	+32	63	133	109	58	66	0
	0	+32	56	119	100	60	67	0
	-25	-13	60	127	100	59	69	0
COOLING	-25	-13	55	117		60		

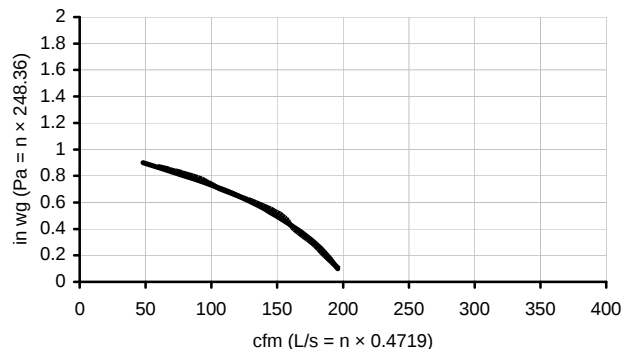
CERTIFIED HEAT AND ENERGY RECOVERY VENTILATORS

Section 3-59

HONEYWELL, INC.

Model: HR205 • Installed: None
 Electrical Requirements: Volts: 120 Amps: 1.4
 Exhaust Air Transfer Ratio: --- @100 Pa/0.4 in. wg 0.01 @ 50 Pa / 0.2 in. wg
 Low Temp. Vent Reduction Factor: 6.0% Supply 13.0% Exhaust • Low Temp. Imbalance Factor: 1.03

VENTILATION PERFORMANCE							
EXT. STATIC PRESSURE		NET SUPPLY AIR FLOW		GROSS AIR FLOW			
Pa	in wg	L/s	cfm	SUPPLY L/s	cfm	EXHAUST L/s	cfm
25	0.1	93	196	94	199	93	197
50	0.2	89	188	90	190	88	186
75	0.3	84	178	85	181	83	176
100	0.4	78	165	79	167	77	163
125	0.5	70	149	71	151	73	154
150	0.6	62	131	63	133	63	134
175	0.7	51	109	52	110	51	108
200	0.8	37	79	38	80	41	86
225	0.9	23	48	23	49	22	47



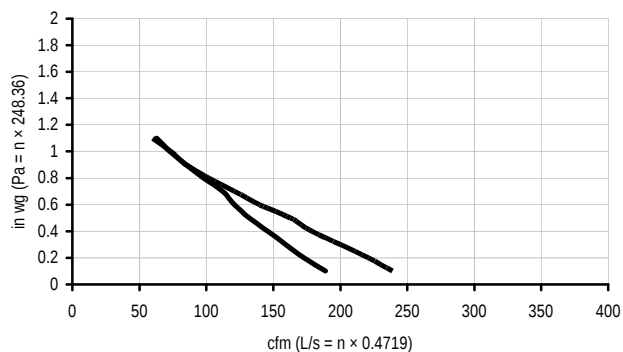
Net Supply Net Exhaust

ENERGY PERFORMANCE								
	SUPPLY TEMPERATURE		NET AIR FLOW		POWER CONSUMED WATTS	SENSIBLE RECOVERY EFFICIENCY	APPARENT SENSIBLE EFFECTIVENESS	LATENT RECOVERY/MOISTURE TRANSFER
	°C	°F	L/S	CFM				
HEATING	0	+32	31	65	74	69	80	-0.01
	0	+32	45	96	94	67	75	-0.01
	0	+32	55	117	105	64	72	-0.01
	-25	-13	31	67	84	70	83	0.03
COOLING	+35	+95	30	64	72	TOTAL RECOVERY EFFICIENCY		22

IMPERIAL AIR TECHNOLOGIES, INC. (GREENTEK)

Model: DH 7.15 • Options Installed: None
 Electrical Requirements: Volts: 120 Amps: 1.5
 Exhaust Air Transfer Ratio: 0.01 @100 Pa/0.4 in. wg 0.01 @ 50 Pa / 0.2 in. wg
 Low Temp. Vent Reduction Factor: 9.4% Supply 9.6% Exhaust • Low Temp. Imbalance Factor: 0.94

VENTILATION PERFORMANCE							
EXT. STATIC PRESSURE		NET SUPPLY AIR FLOW		GROSS AIR FLOW			
Pa	in wg	L/s	cfm	SUPPLY L/s	cfm	EXHAUST L/s	cfm
25	0.1	89	189	90	191	113	239
50	0.2	81	173	82	174	104	221
75	0.3	75	159	75	160	94	200
100	0.4	69	146	69	148	84	179
125	0.5	62	132	63	133	77	163
150	0.6	57	121	58	122	66	140
175	0.7	53	112	53	113	57	121
200	0.8	46	98	47	99	48	102
225	0.9	40	85	40	86	40	85
250	1.0	34	73	35	74	35	74
275	1.1	30	63	30	64	28	60



Net Supply Net Exhaust

ENERGY PERFORMANCE								
	SUPPLY TEMPERATURE		NET AIR FLOW		POWER CONSUMED WATTS	SENSIBLE RECOVERY EFFICIENCY	APPARENT SENSIBLE EFFECTIVENESS	LATENT RECOVERY/MOISTURE TRANSFER
	°C	°F	L/S	CFM				
HEATING	0	+32	32	68	90	68	82	0.01
	0	+32	43	92	104	67	78	0.01
	0	+32	56	119	114	65	75	0.01
	-25	-13	32	67	92	64	84	0.04

CERTIFIED HEAT AND ENERGY RECOVERY VENTILATORS

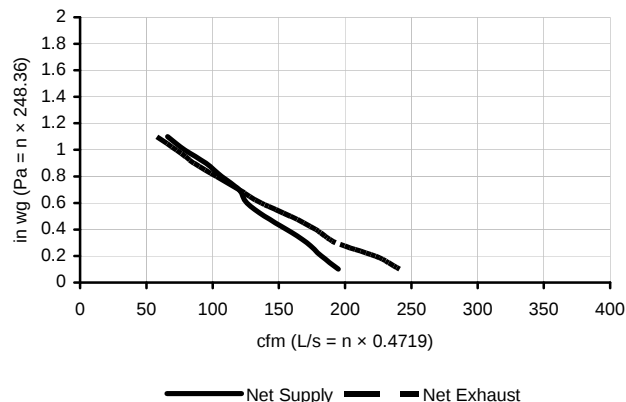
Section 3-60

IMPERIAL AIR TECHNOLOGIES, INC. (GREENTEK)

Model: PH 7.15 • Options Installed: None
 Electrical Requirements: Volts: 120 Amps: 1.5
 Exhaust Air Transfer Ratio: 0.01 @100 Pa/0.4 in. wg 0.01 @ 50 Pa / 0.2 in. wg
 Low Temp. Vent Reduction Factor: 17.8% Supply 13.8% Exhaust • Low Temp. Imbalance Factor: 0.88

VENTILATION PERFORMANCE

EXT. STATIC PRESSURE		NET SUPPLY AIR FLOW		GROSS AIR FLOW			
				SUPPLY		EXHAUST	
Pa	in wg	L/s	cfm	L/s	cfm	L/s	cfm
25	0.1	92	195	92	196	113	241
50	0.2	85	182	86	183	105	223
75	0.3	80	171	81	172	91	193
100	0.4	73	156	74	157	84	178
125	0.5	65	139	66	140	75	159
150	0.6	59	126	60	127	65	137
175	0.7	56	120	57	120	57	120
200	0.8	50	107	50	107	48	103
225	0.9	45	95	45	96	40	86
250	1.0	37	79	38	80	34	73
275	1.1	31	66	31	67	27	58



ENERGY PERFORMANCE

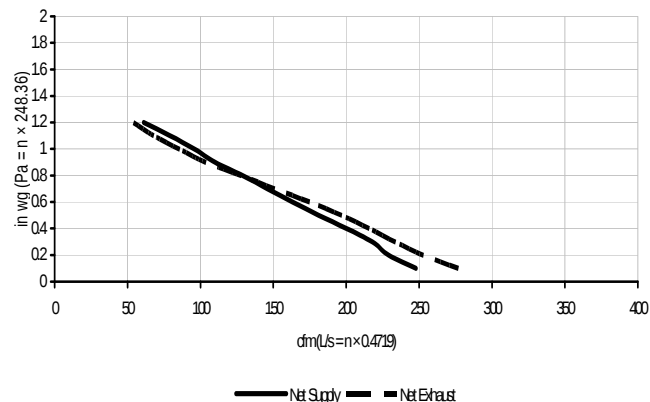
	SUPPLY TEMPERATURE		NET AIR FLOW		POWER CONSUMED WATTS	SENSIBLE RECOVERY EFFICIENCY	APPARENT SENSIBLE EFFECTIVENESS	LATENT RECOVERY/MOISTURE TRANSFER
	°C	°F	L/S	CFM				
HEATING	0	+32	31	66	88	66	78	0.00
	0	+32	42	89	104	64	76	0.00
	0	+32	56	119	114	63	72	0.00
	-25	-13	32	67	86	59	77	0.02

IMPERIAL AIR TECHNOLOGIES, INC. (GREENTEK)

Model: PH 10.22 • Options Installed: None
 Electrical Requirements: Volts: 120 Amps: 1.5
 Exhaust Air Transfer Ratio: 0.01 @100 Pa/0.4 in. wg 0.10 @ 50 Pa / 0.2 in. wg
 Low Temp. Vent Reduction Factor: 2.3% Supply 0.2% Exhaust • Low Temp. Imbalance Factor: 0.91

VENTILATION PERFORMANCE

EXT. STATIC PRESSURE		NET SUPPLY AIR FLOW		GROSS AIR FLOW			
				SUPPLY		EXHAUST	
Pa	in wg	L/s	cfm	L/s	cfm	L/s	cfm
25	0.1	117	248	118	250	130	277
50	0.2	108	229	109	231	119	253
75	0.3	102	218	103	220	110	234
100	0.4	94	200	95	202	101	216
125	0.5	85	181	86	183	92	197
150	0.6	77	163	78	165	82	175
175	0.7	69	146	70	148	71	151
200	0.8	61	129	61	131	60	128
225	0.9	52	110	52	111	49	104
250	1.0	45	96	46	97	40	86
275	1.1	37	79	38	80	32	68
300	1.2	29	61	29	62	26	54



ENERGY PERFORMANCE

	SUPPLY TEMPERATURE		NET AIR FLOW		POWER CONSUMED WATTS	SENSIBLE RECOVERY EFFICIENCY	APPARENT SENSIBLE EFFECTIVENESS	LATENT RECOVERY/MOISTURE TRANSFER
	°C	°F	L/S	CFM				
HEATING	0	+32	55	118	106	61	71	0.00
	0	+32	75	160	132	58	65	0.00
	0	+32	87	185	150	55	62	0.00
	-25	-13	57	120	105	58	72	0.01

	SUPPLY TEMPERATURE		NET AIR FLOW		POWER CONSUMED	SENSIBLE RECOVERY EFFICIENCY	APPARENT SENSIBLE EFFECTIVENESS	LATENT RECOVERY/MOISTURE TRANSFER
	°C	°F	L/S	CFM	WATTS			
HEATING	0	+32	30	64	90	59	72	0.00
	0	+32	44	94	118	56	66	0.00
	0	+32	54	115	134	54	64	0.00
	-25	-13	30	63	97	59	75	0.03
COOLING	+35	+95					TOTAL RECOVERY EFFICIENCY	
	+35	+95						

CERTIFIED HEAT AND ENERGY RECOVERY VENTILATORS

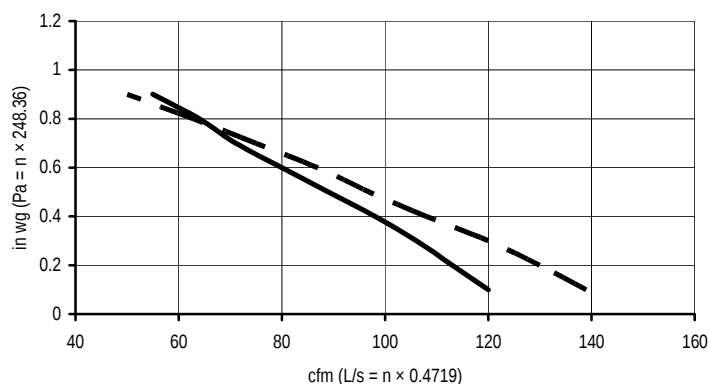
Section 3-62

IMPERIAL AIR TECHNOLOGIES, INC. (GREENTEK)

Model: SS 3.12 FSD (SP) • Options Installed: None
 Electrical Requirements: Volts: 120 Amps: 1.5
 Exhaust Air Transfer Ratio: 0.013 @100 Pa/0.4 in. wg 0.013 @ 50 Pa / 0.2 in. wg
 Low Temp. Vent Reduction Factor: 16.3% Supply 16.3% Exhaust • Low Temp. Imbalance Factor: 1.03

VENTILATION PERFORMANCE

EXT. STATIC PRESSURE		NET SUPPLY AIR FLOW		GROSS AIR FLOW			
				SUPPLY		EXHAUST	
Pa	in wg	L/s	cfm	L/s	cfm	L/s	cfm
25	0.1	56	120	57	121	65	139
50	0.2	53	113	54	114	61	130
75	0.3	50	106	51	107	56	120
100	0.4	46	98	47	99	51	108
125	0.5	42	89	42	90	46	97
150	0.6	38	80	38	81	41	87
175	0.7	34	71	34	72	35	75
200	0.8	30	64	30	65	30	63
225	0.9	26	55	26	55	23	50



— Net Supply - - - Net Exhaust

ENERGY PERFORMANCE

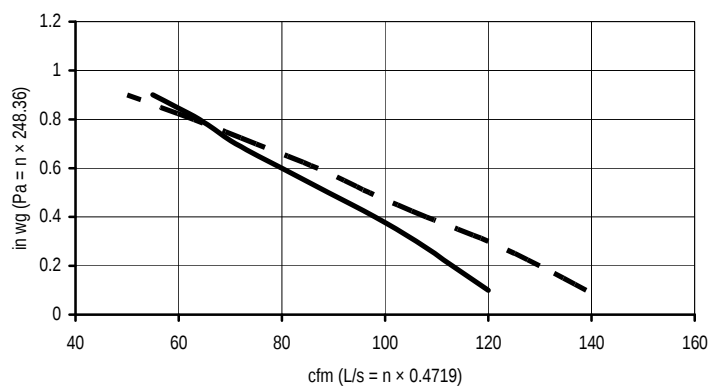
	SUPPLY TEMPERATURE		NET AIR FLOW		POWER CONSUMED WATTS	SENSIBLE RECOVERY EFFICIENCY	APPARENT SENSIBLE EFFECTIVENESS	LATENT RECOVERY/MOISTURE TRANSFER
	°C	°F	L/S	CFM				
HEATING	0	+32	30	64	90	59	72	0.00
	0	+32	44	94	118	56	66	0.00
	0	+32	54	115	134	54	64	0.00
	-25	-13	33	71	94	54	74	0.01
TOTAL RECOVERY EFFICIENCY								
COOLING	+35	+95						
	+35	+95						

IMPERIAL AIR TECHNOLOGIES, INC. (GREENTEK)

Model: SS 3.12 FSD (TP) • Options Installed: None
 Electrical Requirements: Volts: 120 Amps: 1.5
 Exhaust Air Transfer Ratio: 0.013 @100 Pa/0.4 in. wg 0.013 @ 50 Pa / 0.2 in. wg
 Low Temp. Vent Reduction Factor: 16.3% Supply 16.3% Exhaust • Low Temp. Imbalance Factor: 1.03

VENTILATION PERFORMANCE

EXT. STATIC PRESSURE		NET SUPPLY AIR FLOW		GROSS AIR FLOW			
				SUPPLY		EXHAUST	
Pa	in wg	L/s	cfm	L/s	cfm	L/s	cfm
25	0.1	56	120	57	121	65	139
50	0.2	53	113	54	114	61	130
75	0.3	50	106	51	107	56	120
100	0.4	46	98	47	99	51	108
125	0.5	42	89	42	90	46	97
150	0.6	38	80	38	81	41	87
175	0.7	34	71	34	72	35	75
200	0.8	30	64	30	65	30	63
225	0.9	26	55	26	55	23	50



— Net Supply - - - Net Exhaust

ENERGY PERFORMANCE

	SUPPLY TEMPERATURE		NET AIR FLOW		POWER CONSUMED WATTS	SENSIBLE RECOVERY EFFICIENCY	APPARENT SENSIBLE EFFECTIVENESS	LATENT RECOVERY/MOISTURE TRANSFER
	°C	°F	L/S	CFM				
HEATING	0	+32	30	64	90	59	72	0.00
	0	+32	44	94	118	56	66	0.00
	0	+32	54	115	134	54	64	0.00
	-25	-13	33	71	94	54	74	0.01
TOTAL RECOVERY EFFICIENCY								
COOLING	+35	+95						
	+35	+95						

CERTIFIED HEAT AND ENERGY RECOVERY VENTILATORS

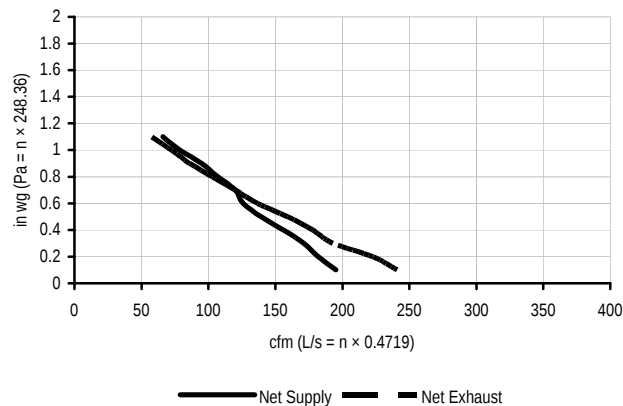
Section 3-63

IMPERIAL AIR TECHNOLOGIES, INC. (GREENTEK)

Model: TPH 7.15 • Options Installed: None
 Electrical Requirements: Volts: 120 Amps: 1.5
 Exhaust Air Transfer Ratio: 0.01 @100 Pa/0.4 in. wg 0.01 @ 50 Pa / 0.2 in. wg
 Low Temp. Vent Reduction Factor: 17.8% Supply 13.8% Exhaust • Low Temp. Imbalance Factor: 0.88

VENTILATION PERFORMANCE

EXT. STATIC PRESSURE		NET SUPPLY AIR FLOW		GROSS AIR FLOW			
				SUPPLY		EXHAUST	
Pa	in wg	L/s	cfm	L/s	cfm	L/s	cfm
25	0.1	92	195	92	196	113	241
50	0.2	85	182	86	183	105	223
75	0.3	80	171	81	172	91	193
100	0.4	73	156	74	157	84	178
125	0.5	65	139	66	140	75	159
150	0.6	59	126	60	127	65	137
175	0.7	56	120	57	120	57	120
200	0.8	50	107	50	107	48	103
225	0.9	45	95	45	96	40	86
250	1.0	37	79	38	80	34	73
275	1.1	31	66	31	67	27	58



ENERGY PERFORMANCE

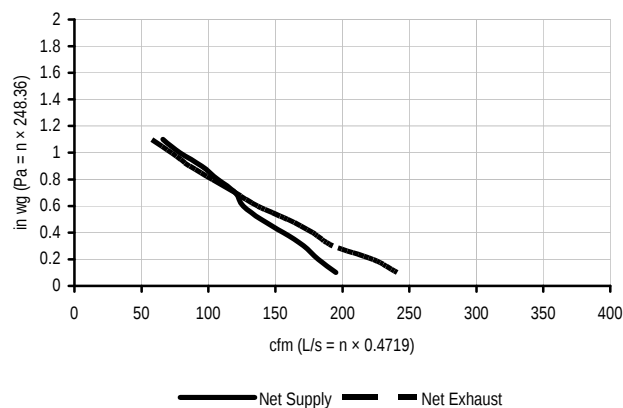
	SUPPLY TEMPERATURE		NET AIR FLOW		POWER CONSUMED WATTS	SENSIBLE RECOVERY EFFICIENCY	APPARENT SENSIBLE EFFECTIVENESS	LATENT RECOVERY/MOISTURE TRANSFER
	°C	°F	L/S	CFM				
HEATING	0	+32	31	66	88	66	78	0.00
	0	+32	42	89	104	64	76	0.00
	0	+32	56	119	114	63	72	0.00
	-25	-13	32	67	86	59	77	0.02

IMPERIAL AIR TECHNOLOGIES, INC. (IMPERIAL)

Model: RNC 1.5 • Options Installed: None
 Electrical Requirements: Volts: 120 Amps: 1.5
 Exhaust Air Transfer Ratio: 0.01 @100 Pa/0.4 in. wg 0.01 @ 50 Pa / 0.2 in. wg
 Low Temp. Vent Reduction Factor: 17.8% Supply 13.8% Exhaust • Low Temp. Imbalance Factor: 0.88

VENTILATION PERFORMANCE

EXT. STATIC PRESSURE		NET SUPPLY AIR FLOW		GROSS AIR FLOW			
				SUPPLY		EXHAUST	
Pa	in wg	L/s	cfm	L/s	cfm	L/s	cfm
25	0.1	92	195	92	196	113	241
50	0.2	85	182	86	183	105	223
75	0.3	80	171	81	172	91	193
100	0.4	73	156	74	157	84	178
125	0.5	65	139	66	140	75	159
150	0.6	59	126	60	127	65	137
175	0.7	56	120	57	120	57	120
200	0.8	50	107	50	107	48	103
225	0.9	45	95	45	96	40	86
250	1.0	37	79	38	80	34	73
275	1.1	31	66	31	67	27	58



ENERGY PERFORMANCE

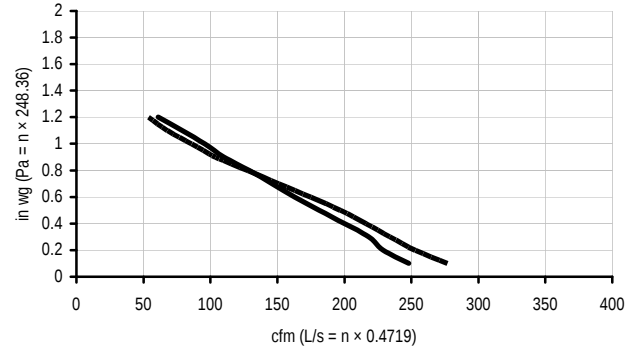
	SUPPLY TEMPERATURE		NET AIR FLOW		POWER CONSUMED WATTS	SENSIBLE RECOVERY EFFICIENCY	APPARENT SENSIBLE EFFECTIVENESS	LATENT RECOVERY/MOISTURE TRANSFER
	°C	°F	L/S	CFM				
HEATING	0	+32	31	66	88	66	78	0.00
	0	+32	42	89	104	64	76	0.00
	0	+32	56	119	114	63	72	0.00
	-25	-13	32	67	86	59	77	0.02

CERTIFIED HEAT AND ENERGY RECOVERY VENTILATORS**Section 3-64****IMPERIAL AIR TECHNOLOGIES, INC. (IMPERIAL)**

Model: RNC 2.0 • Options Installed: None
 Electrical Requirements: Volts: 120 Amps: 1.5
 Exhaust Air Transfer Ratio: 0.01 @100 Pa/0.4 in. wg 0.10 @ 50 Pa / 0.2 in. wg
 Low Temp. Vent Reduction Factor: 2.3% Supply 0.2% Exhaust • Low Temp. Imbalance Factor: 0.91

VENTILATION PERFORMANCE

EXT. STATIC PRESSURE		NET SUPPLY AIR FLOW		GROSS AIR FLOW			
				SUPPLY		EXHAUST	
Pa	in wg	L/s	cfm	L/s	cfm	L/s	cfm
25	0.1	117	248	118	250	130	277
50	0.2	108	229	109	231	119	253
75	0.3	102	218	103	220	110	234
100	0.4	94	200	95	202	101	216
125	0.5	85	181	86	183	92	197
150	0.6	77	163	78	165	82	175
175	0.7	69	146	70	148	71	151
200	0.8	61	129	61	131	60	128
225	0.9	52	110	52	111	49	104
250	1.0	45	96	46	97	40	86
275	1.1	37	79	38	80	32	68
300	1.2	29	61	29	62	26	54



— Net Supply — Net Exhaust

ENERGY PERFORMANCE

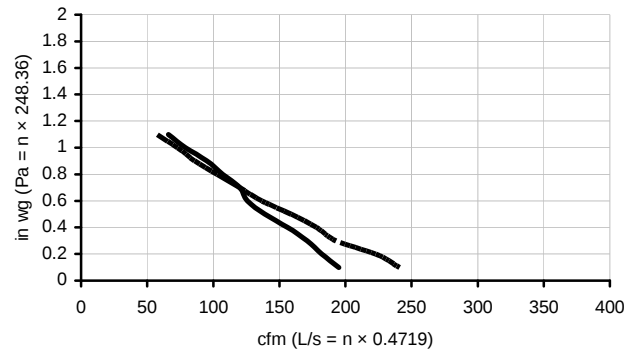
	SUPPLY TEMPERATURE		NET AIR FLOW		POWER CONSUMED WATTS	SENSIBLE RECOVERY EFFICIENCY	APPARENT SENSIBLE EFFECTIVENESS	LATENT RECOVERY/MOISTURE TRANSFER
	°C	°F	L/S	CFM				
HEATING	0	+32	55	118	106	61	71	0.00
	0	+32	75	160	132	58	65	0.00
	0	+32	87	185	150	55	62	0.00
	-25	-13	57	120	105	58	72	0.01

IMPERIAL AIR TECHNOLOGIES, INC. (IMPERIAL)

Model: TSD160 • Options Installed: None
 Electrical Requirements: Volts: 120 Amps: 1.5
 Exhaust Air Transfer Ratio: 0.01 @100 Pa/0.4 in. wg 0.01 @ 50 Pa / 0.2 in. wg
 Low Temp. Vent Reduction Factor: 17.8% Supply 13.8% Exhaust • Low Temp. Imbalance Factor: 0.88

VENTILATION PERFORMANCE

EXT. STATIC PRESSURE		NET SUPPLY AIR FLOW		GROSS AIR FLOW			
				SUPPLY		EXHAUST	
Pa	in wg	L/s	cfm	L/s	cfm	L/s	cfm
25	0.1	92	195	92	196	113	241
50	0.2	85	182	86	183	105	223
75	0.3	80	171	81	172	91	193
100	0.4	73	156	74	157	84	178
125	0.5	65	139	66	140	75	159
150	0.6	59	126	60	127	65	137
175	0.7	56	120	57	120	57	120
200	0.8	50	107	50	107	48	103
225	0.9	45	95	45	96	40	86
250	1.0	37	79	38	80	34	73
275	1.1	31	66	31	67	27	58



— Net Supply — Net Exhaust

ENERGY PERFORMANCE

	SUPPLY TEMPERATURE		NET AIR FLOW		POWER CONSUMED WATTS	SENSIBLE RECOVERY EFFICIENCY	APPARENT SENSIBLE EFFECTIVENESS	LATENT RECOVERY/MOISTURE TRANSFER
	°C	°F	L/S	CFM				
HEATING	0	+32	31	66	88	66	78	0.00
	0	+32	42	89	104	64	76	0.00
	0	+32	56	119	114	63	72	0.00
	-25	-13	32	67	86	59	77	0.02

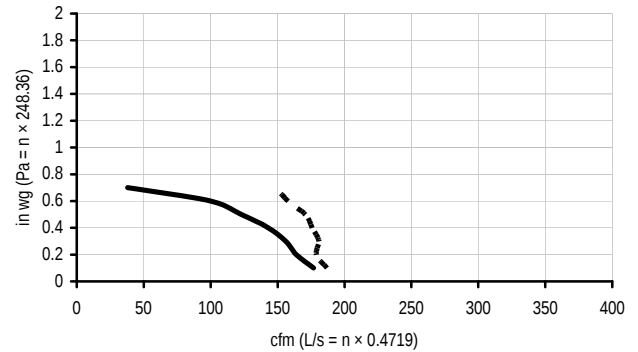
CERTIFIED HEAT AND ENERGY RECOVERY VENTILATORS

Section 3-65

LENNOX

Model: HRV1-150 • Options Installed: None
 Electrical Requirements: Volts: 120 Amps: 1.4
 Exhaust Air Transfer Ratio: 0.01 @100 Pa/0.4 in. wg 0.01 @ 50 Pa / 0.2 in. wg
 Low Temp. Vent Reduction Factor: 2% Supply 0% Exhaust • Low Temp. Imbalance Factor: n/a

EXT. STATIC PRESSURE		VENTILATION PERFORMANCE		GROSS AIR FLOW			
		NET SUPPLY AIR FLOW		SUPPLY		EXHAUST	
Pa	in wg	L/s	cfm	L/s	cfm	L/s	cfm
25	0.1	83	177	83	177	88	187
50	0.2	77	164	77	164	84	179
75	0.3	73	156	73	156	85	181
100	0.4	67	143	67	143	83	176
125	0.5	58	123	58	123	81	171
150	0.6	47	100	47	100	74	158
175	0.7	18	38	18	38	70	149



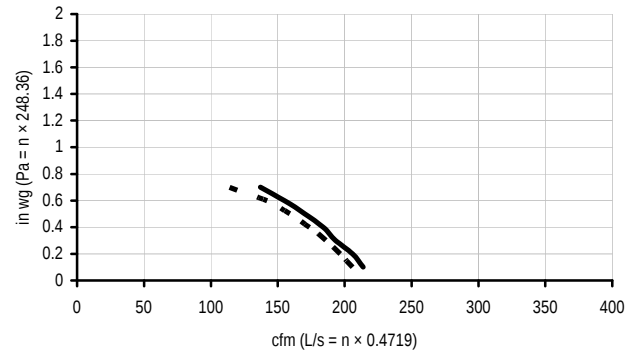
— Net Supply - - - Net Exhaust

		ENERGY PERFORMANCE						
SUPPLY TEMPERATURE			NET AIR FLOW		POWER CONSUMED WATTS	SENSIBLE RECOVERY EFFICIENCY	APPARENT SENSIBLE EFFECTIVENESS	LATENT RECOVERY/MOISTURE TRANSFER
	°C	°F	L/S	CFM				
HEATING	0	32	32	67	78	66	76	-0.01
	0	32	44	94	95	64	72	-0.20
	0	32	56	118	110	60	68	-0.02
	-25	-13	32	68	82	60	78	0.08
						TOTAL RECOVERY EFFICIENCY		
COOLING	35	95	31	66	74	20		

LENNOX

Model: HRV1-200 • Options Installed: None
 Electrical Requirements: Volts: 120 Amps: 1.4
 Exhaust Air Transfer Ratio: 0.01 @100 Pa/0.4 in. wg 0.01 @ 50 Pa / 0.2 in. wg
 Low Temp. Vent Reduction Factor: 1% Supply 2% Exhaust • Low Temp. Imbalance Factor: 0.967

EXT. STATIC PRESSURE		VENTILATION PERFORMANCE		GROSS AIR FLOW			
		NET SUPPLY AIR FLOW		SUPPLY		EXHAUST	
Pa	in wg	L/s	cfm	L/s	cfm	L/s	cfm
25	0.1	101	214	102	216	97	206
50	0.2	97	206	98	208	93	197
75	0.3	91	193	93	197	88	186
100	0.4	87	184	88	186	82	174
125	0.5	80	170	81	172	75	159
150	0.6	73	155	74	157	67	142
175	0.7	64	137	65	138	54	114



— Net Supply - - - Net Exhaust

		ENERGY PERFORMANCE						
SUPPLY TEMPERATURE			NET AIR FLOW		POWER CONSUMED	SENSIBLE RECOVERY EFFICIENCY	APPARENT SENSIBLE EFFECTIVENESS	LATENT RECOVERY/MOISTURE TRANSFER
	°C	°F	L/S	CFM	WATTS			
HEATING	0	+32	68	144	114	59	66	0
	0	+32	63	133	109	58	66	0
	0	+32	56	119	100	60	67	0
	-25	-13	60	127	100	59	69	0
	-25	-13	55	117		60		

	SUPPLY TEMPERATURE		NET AIR FLOW		POWER CONSUMED	SENSIBLE RECOVERY EFFICIENCY	APPARENT SENSIBLE EFFECTIVENESS	LATENT RECOVERY/MOISTURE TRANSFER
	°C	°F	L/S	CFM	WATTS			
HEATING	0	32	32	67	78	66	76	-0.01
	0	32	44	94	95	64	72	-0.20
	0	32	56	118	110	60	68	-0.02
	-25	-13	32	68	82	60	78	0.08
						TOTAL RECOVERY EFFICIENCY		
COOLING	35	95	31	66	74		20	

CERTIFIED HEAT AND ENERGY RECOVERY VENTILATORS

Section 3-67

LENNOX

Model: HRV2-195DDP • Options Installed: None

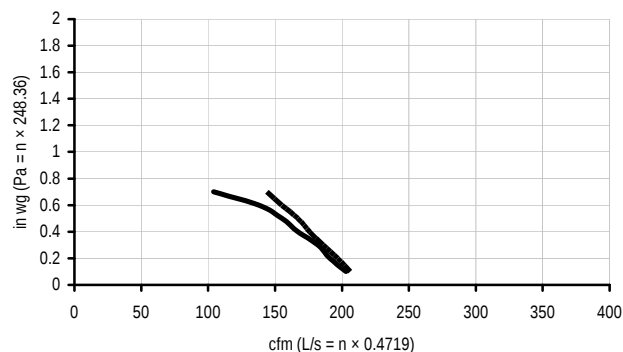
Electrical Requirements: Volts: 120 Amps: 1.5

Exhaust Air Transfer Ratio: 0.02 @100 Pa/0.4 in. wg 0.02 @ 50 Pa / 0.2 in. wg

Low Temp. Vent Reduction Factor: 1% Supply 3% Exhaust • Low Temp. Imbalance Factor: 0.98

VENTILATION PERFORMANCE

EXT. STATIC PRESSURE		NET SUPPLY AIR FLOW		GROSS AIR FLOW			
				SUPPLY		EXHAUST	
Pa	in wg	L/s	cfm	L/s	cfm	L/s	cfm
25	0.1	96	203	98	208	97	206
50	0.2	90	191	92	195	93	197
75	0.3	86	182	87	185	88	186
100	0.4	79	167	81	172	83	176
125	0.5	73	155	74	157	79	167
150	0.6	65	138	66	140	73	155
175	0.7	49	104	50	106	68	144



— Net Supply - - - Net Exhaust

ENERGY PERFORMANCE

	SUPPLY TEMPERATURE		NET AIR FLOW		POWER CONSUMED WATTS	SENSIBLE RECOVERY EFFICIENCY	APPARENT SENSIBLE EFFECTIVENESS	LATENT RECOVERY/MOISTURE TRANSFER
	°C	°F	L/S	CFM				
HEATING	0	+32	90	191	161	77	83	---
	0	+32	83	176	155	77	84	---
	0	+32	54	114	116	81	88	---
	0	+32	55	117	117	80	---	---
	-25	-13	56	119	125	77	87	---
	-25	-13	55	117	123	77	---	---
TOTAL RECOVERY EFFICIENCY							24	
COOLING	+35	+95	57	121	121			

CERTIFIED HEAT AND ENERGY RECOVERY VENTILATORS

Section 3-68

LENNOX

Model: ERV3-150 • Options Installed: None
 Electrical Requirements: Volts: 120 Amps: 1.4
 Exhaust Air Transfer Ratio: 0.04 @100 Pa/0.4 in. wg 0.04 @ 50 Pa / 0.2 in. wg
 Low Temp. Vent Reduction Factor: Supply - NA Exhaust - NA • Low Temp. Imbalance Factor: NA

VENTILATION PERFORMANCE

EXT. STATIC PRESSURE		NET SUPPLY AIR FLOW		GROSS AIR FLOW			
				SUPPLY		EXHAUST	
Pa	in wg	L/s	cfm	L/s	cfm	L/s	cfm
25	0.1	71	151	74	157	73	154
50	0.2	67	141	69	146	69	147
75	0.3	62	132	65	137	67	142
100	0.4	59	124	61	129	61	130
125	0.5	50	107	52	111	54	116
150	0.6	46	98	48	102	48	101
175	0.7	38	81	40	84	41	87
200	0.8	28	60	30	63	29	61

ENERGY PERFORMANCE

	SUPPLY TEMPERATURE		NET AIR FLOW		POWER CONSUMED WATTS	SENSIBLE RECOVERY EFFICIENCY	APPARENT SENSIBLE EFFECTIVENESS	LATENT RECOVERY/MOISTURE TRANSFER
	°C	°F	L/S	CFM				
HEATING	0	+32	30	63	70	69	81	.50
	0	+32	45	96	94	67	76	.42
	0	+32	55	117	108	65	73	.38
	-25	-13						
COOLING	+35	+95	30	65	68		TOTAL RECOVERY EFFICIENCY 47	

LENNOX

Model: ERV3-200 • Options Installed: None
 Electrical Requirements: Volts: 120 Amps: 1.4
 Exhaust Air Transfer Ratio: NA @100 Pa/0.4 in. wg NA @ 50 Pa / 0.2 in. wg
 Low Temp. Vent Reduction Factor: NA% Supply NA% Exhaust • Low Temp. Imbalance Factor: NA

VENTILATION PERFORMANCE

EXT. STATIC PRESSURE		NET SUPPLY AIR FLOW		GROSS AIR FLOW			
				SUPPLY		EXHAUST	
Pa	in wg	L/s	cfm	L/s	cfm	L/s	cfm
25	0.1	85	180	89	189	90	191
50	0.2	80	169	83	176	84	179
75	0.3	74	157	77	164	79	167
100	0.4	69	146	72	152	71	150
125	0.5	62	132	65	138	63	134
150	0.6	56	118	58	123	56	119
175	0.7	48	101	50	105	48	102
200	0.8	39	82	41	86	42	89
225	0.9	22	47	24	50	32	68

ENERGY PERFORMANCE

	SUPPLY TEMPERATURE		NET AIR FLOW		POWER CONSUMED WATTS	SENSIBLE RECOVERY EFFICIENCY	APPARENT SENSIBLE EFFECTIVENESS	LATENT RECOVERY/MOISTURE TRANSFER
	°C	°F	L/S	CFM				
HEATING	0	+32	31	66	68	72	81	.48
	0	+32	55	116	97	69	76	.61
							TOTAL RECOVERY EFFICIENCY	
COOLING	+35	+95	30	65	64		47	
	+35	+95	55	117	98		50	

Low Temp. Vent Reduction Factor : 1% Supply 2.0% Exhaust • Low Temp. Imbalance Factor: .967

Low Temp. Vent Reduction Factor: 6% Supply 0% Exhaust • Low Temp. Imbalance Factor: 0.04

	SUPPLY TEMPERATURE		NET AIR FLOW		POWER CONSUMED WATTS	SENSIBLE RECOVERY EFFICIENCY	APPARENT SENSIBLE EFFECTIVENESS	LATENT RECOVERY/MOISTURE TRANSFER
	°C	°F	L/S	CFM				
HEATING	0	+32	98	208	234	75	84	---
	0	+32	78	165	178	77	87	---
	0	+32	56	119	150	79	90	---
	-25	-13	59	125	156	75	87	---
	-25	-13	55	117	---	75	---	---
COOLING	+35	+95	57	121	150	TOTAL RECOVERY EFFICIENCY		
							33	

CERTIFIED HEAT AND ENERGY RECOVERY VENTILATORS

Section 3-70

LENNOX

Model: HRV2-200SRPTOP • Options Installed: None

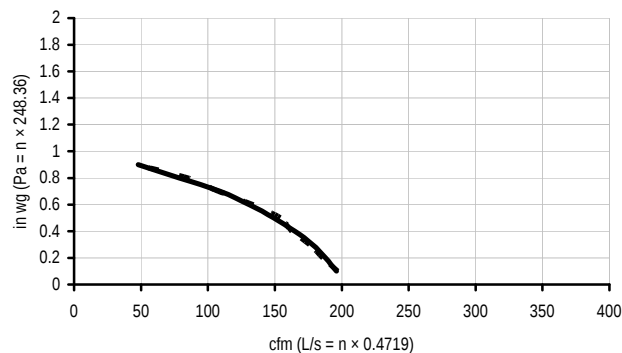
Electrical Requirements: Volts: 120 Amps: 1.4

Exhaust Air Transfer Ratio: --- @100 Pa/0.4 in. wg 0.01 @ 50 Pa / 0.2 in. wg

Low Temp. Vent Reduction Factor: 1% Supply 0% Exhaust • Low Temp. Imbalance Factor: 1.03

VENTILATION PERFORMANCE

EXT. STATIC PRESSURE		NET SUPPLY AIR FLOW		GROSS AIR FLOW			
				SUPPLY		EXHAUST	
Pa	in wg	L/s	cfm	L/s	cfm	L/s	cfm
25	0.1	93	196	94	199	93	197
50	0.2	89	188	90	190	88	186
75	0.3	84	178	85	181	83	176
100	0.4	78	165	79	167	77	163
125	0.5	70	149	71	151	73	154
150	0.6	62	131	63	133	63	134
175	0.7	51	109	52	110	51	108
200	0.8	37	79	38	80	41	86
225	0.9	23	48	23	49	22	47



— Net Supply — Net Exhaust

ENERGY PERFORMANCE

	°C	°F	NET AIR FLOW		POWER CONSUMED	SENSIBLE RECOVERY EFFICIENCY	APPARENT SENSIBLE EFFECTIVENESS	LATENT RECOVERY/MOISTURE TRANSFER
			L/S	CFM	WATTS			
HEATING	0	+32	31	65	74	69	80	-0.01
	0	+32	45	96	94	67	75	-0.01
	0	+32	55	117	105	64	72	-0.01
	-25	-13	31	67	84	70	83	0.03
COOLING	+35	+95	30	64	72			
							TOTAL RECOVERY EFFICIENCY	
							22	

LENNOX

Model: HRV3-095 • Options Installed: None

Electrical Requirements: Volts: 120 Amps: .9

Exhaust Air Transfer Ratio: 10% @100 Pa/0.4 in. wg 8% @ 50 Pa / 0.2 in. wg

Low Temp. Vent Reduction Factor: 14.5% Supply 22.1% Exhaust • Low Temp. Imbalance Factor: 1.0

VENTILATION PERFORMANCE

EXT. STATIC PRESSURE		NET SUPPLY AIR FLOW		GROSS AIR FLOW			
				SUPPLY		EXHAUST	
Pa	in wg	L/s	cfm	L/s	cfm	L/s	cfm
25	0.1	32	69	36	76	41	87
50	0.2	31	66	34	73	40	84
75	0.3	30	64	33	70	39	82
100	0.4	28	60	31	66	37	79
125	0.5	26	55	29	60	36	76

ENERGY PERFORMANCE

	°C	°F	NET AIR FLOW		POWER CONSUMED	SENSIBLE RECOVERY EFFICIENCY	APPARENT SENSIBLE EFFECTIVENESS	LATENT RECOVERY/MOISTURE TRANSFER
			L/S	CFM	WATTS			
HEATING	0	+32	28	60	59	75	88	-0.01
	0	+32	33	71	58	73	86	.03
	0	+32	42	89	89	73	84	.04
	-25	-13	29	61	76	68	86	.02

CERTIFIED HEAT AND ENERGY RECOVERY VENTILATORS

Section 3-71

LENNOX

Model: HRV3-150 • Options Installed: None
 Electrical Requirements: Volts: 120 Amps: 1.4
 Exhaust Air Transfer Ratio: 0.037 @100 Pa/0.4 in. wg 0.027 @ 50 Pa / 0.2 in. wg
 Low Temp. Vent Reduction Factor: 3.7% Supply 13.8% Exhaust • Low Temp. Imbalance Factor: 1.04

VENTILATION PERFORMANCE

EXT. STATIC PRESSURE		NET SUPPLY AIR FLOW		GROSS AIR FLOW			
				SUPPLY		EXHAUST	
Pa	in wg	L/s	cfm	L/s	cfm	L/s	cfm
25	0.1	68	144	70	149	80	171
50	0.2	63	134	65	139	78	165
75	0.3	59	125	61	129	75	160
100	0.4	53	113	55	117	74	157
125	0.5	43	92	45	95	70	149
150	0.6	34	73	36	76	64	137
175	0.7	28	59	29	61	57	122

ENERGY PERFORMANCE

		°C	°F	NET AIR FLOW		POWER CONSUMED WATTS	SENSIBLE RECOVERY EFFICIENCY	APPARENT SENSIBLE EFFECTIVENESS	LATENT RECOVERY/MOISTURE TRANSFER
				L/S	CFM				
HEATING	0	+32		30	64	78	64	73	0.00
	0	+32		45	96	104	63	71	0.01
	0	+32		55	117	119	61	69	0.01
	-25	-13		35	74	96	66	78	0.00
COOLING	+35	+95		29	62	77			
								TOTAL RECOVERY EFFICIENCY 17	

LENNOX

Model: HRV3-200 • Options Installed: None
 Electrical Requirements: Volts: 120 Amps: 1.4
 Exhaust Air Transfer Ratio: 0.04 @100 Pa/0.4 in. wg 0.03 @ 50 Pa / 0.2 in. wg
 Low Temp. Vent Reduction Factor: 2.2% Supply 10.8% Exhaust • Low Temp. Imbalance Factor: 1.03

VENTILATION PERFORMANCE

EXT. STATIC PRESSURE		NET SUPPLY AIR FLOW		GROSS AIR FLOW			
				SUPPLY		EXHAUST	
Pa	in wg	L/s	cfm	L/s	cfm	L/s	cfm
25	0.1	97	207	100	214	108	230
50	0.2	94	200	97	206	103	218
75	0.3	87	184	90	191	97	207
100	0.4	80	171	84	179	96	203
125	0.5	71	152	76	161	88	187
150	0.6	61	130	66	140	82	174
175	0.7	55	116	60	129	67	143
200	0.8	40	86	46	98	56	118

ENERGY PERFORMANCE

		°C	°F	NET AIR FLOW		POWER CONSUMED WATTS	SENSIBLE RECOVERY EFFICIENCY	APPARENT SENSIBLE EFFECTIVENESS	LATENT RECOVERY/MOISTURE TRANSFER
				L/S	CFM				
HEATING	0	+32		31	66	81	64	74	0.06
	0	+32		45	96	99	63	71	0.03
	0	+32		55	117	113	61	69	0.03
	-25	-13		51	109	119	62	73	0.01

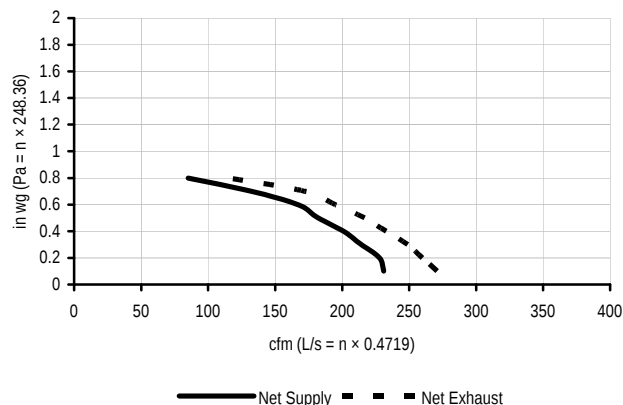
CERTIFIED HEAT AND ENERGY RECOVERY VENTILATORS

Section 3-72

MAYTAG

Model: ERV-150 • Options Installed: Defrost
 Electrical Requirements: Volts: 120 Amps: 1.3
 Exhaust Air Transfer Ratio: --- @100 Pa/0.4 in. wg 0.06 @ 50 Pa / 0.2 in. wg
 Low Temp. Vent Reduction Factor: 0% Supply 0% Exhaust • Low Temp. Imbalance Factor: 0.79

EXT. STATIC PRESSURE		VENTILATION PERFORMANCE					
		NET SUPPLY AIR FLOW		GROSS AIR FLOW			
Pa	in wg	L/s	cfm	SUPPLY		EXHAUST	
				L/s	cfm	L/s	cfm
25	0.1	82	173	87	184	93	197
50	0.2	78	165	83	175	86	182
75	0.3	72	152	76	162	80	169
100	0.4	67	142	71	151	77	163
125	0.5	55	117	59	124	67	143
150	0.6	46	98	49	104	56	118
175	0.7	36	77	39	82	41	87
200	0.8	30	63	32	67	24	51

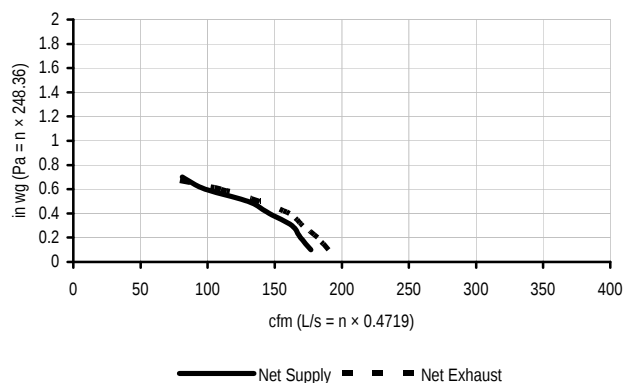


ENERGY PERFORMANCE								
	SUPPLY TEMPERATURE		NET AIR FLOW		POWER CONSUMED WATTS	SENSIBLE RECOVERY EFFICIENCY	APPARENT SENSIBLE EFFECTIVENESS	LATENT RECOVERY/MOISTURE TRANSFER
	°C	°F	L/S	CFM				
HEATING	0	+32	29	60	56	71	79	0.52
	0	+32	47	100	80	64	73	0.41
	0	+32	65	137	126	60	68	0.36
	-15	5	31	65	64	56	81	0.41
COOLING	+35	+95	28	59	52		TOTAL RECOVERY EFFICIENCY 45	

MAYTAG

Model: HRV-150 • Options Installed: Defrost
 Electrical Requirements: Volts: 120 Amps: 1.3
 Exhaust Air Transfer Ratio: --- @100 Pa/0.4 in. wg 0.05 @ 50 Pa / 0.2 in. wg
 Low Temp. Vent Reduction Factor: 9% Supply 22%Exhaust • Low Temp. Imbalance Factor: 1.0

EXT. STATIC PRESSURE		VENTILATION PERFORMANCE					
		NET SUPPLY AIR FLOW		GROSS AIR FLOW			
Pa	in wg	L/s	cfm	SUPPLY		EXHAUST	
				L/s	cfm	L/s	cfm
25	0.1	84	177	88	186	90	190
50	0.2	80	169	84	178	86	182
75	0.3	77	163	81	171	81	171
100	0.4	69	146	72	153	76	161
125	0.5	61	130	65	137	66	139
150	0.6	46	98	49	103	52	110
175	0.7	38	81	40	85	32	67



ENERGY PERFORMANCE								
	SUPPLY TEMPERATURE		NET AIR FLOW		POWER CONSUMED WATTS	SENSIBLE RECOVERY EFFICIENCY	APPARENT SENSIBLE EFFECTIVENESS	LATENT RECOVERY/MOISTURE TRANSFER
	°C	°F	L/S	CFM				
HEATING	0	+32	30	64	54	75	83	-0.03
	0	+32	46	97	78	67	74	0.01
	0	+32	65	138	124	64	72	-0.02
	-25	-13	26	55	62	67	89	0.05

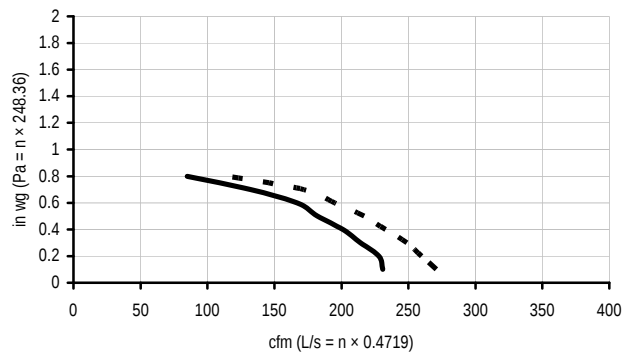
CERTIFIED HEAT AND ENERGY RECOVERY VENTILATORS

Section 3-73

MAYTAG

Model: ERV-210 • Options Installed: Defrost
 Electrical Requirements: Volts: 120 Amps: 1.9
 Exhaust Air Transfer Ratio: --- @100 Pa/0.4 in. wg 0.06 @ 50 Pa / 0.2 in. wg
 Low Temp. Vent Reduction Factor: 0% Supply 0% Exhaust • Low Temp. Imbalance Factor: 0.84

EXT. STATIC PRESSURE		VENTILATION PERFORMANCE					
		NET SUPPLY		GROSS AIR FLOW			
		AIR FLOW		SUPPLY		EXHAUST	
Pa	in wg	L/s	cfm	L/s	cfm	L/s	cfm
25	0.1	109	231	116	245	128	271
50	0.2	108	228	114	241	123	260
75	0.3	101	214	107	227	118	249
100	0.4	95	201	101	213	110	233
125	0.5	86	182	91	193	102	217
150	0.6	79	167	84	177	92	195
175	0.7	62	132	66	140	81	172
200	0.8	40	85	42	90	55	116



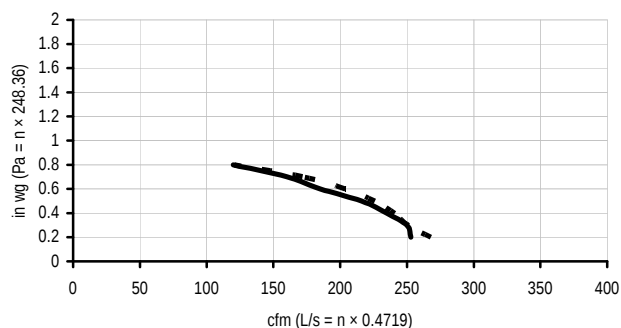
— Net Supply - - - Net Exhaust

ENERGY PERFORMANCE								
	SUPPLY TEMPERATURE		NET AIR FLOW		POWER CONSUMED WATTS	SENSIBLE RECOVERY EFFICIENCY	APPARENT SENSIBLE EFFECTIVENESS	LATENT RECOVERY/MOISTURE TRANSFER
	°C	°F	L/S	CFM				
HEATING	0	+32	52	110	93	69	76	0.45
	0	+32	74	157	130	64	71	0.38
	0	+32	96	203	193	60	68	0.30
	-15	5	52	110	122	55	76	0.26
COOLING	+35	+95	50	106	89			
							TOTAL RECOVERY EFFICIENCY 41	

MAYTAG

Model: HRV-210 • Options Installed: Defrost
 Electrical Requirements: Volts: 120 Amps: 1.9
 Exhaust Air Transfer Ratio: --- @100 Pa/0.4 in. wg 0.04 @ 50 Pa / 0.2 in. wg
 Low Temp. Vent Reduction Factor: 0% Supply 23% Exhaust • Low Temp. Imbalance Factor: 1.0

EXT. STATIC PRESSURE		VENTILATION PERFORMANCE					
		NET SUPPLY		GROSS AIR FLOW			
		AIR FLOW		SUPPLY		EXHAUST	
Pa	in wg	L/s	cfm	L/s	cfm	L/s	cfm
50	0.2	119	253	125	264	126	268
75	0.3	118	250	124	262	118	251
100	0.4	111	235	116	245	114	241
125	0.5	102	216	106	224	107	226
150	0.6	87	185	91	193	96	204
175	0.7	76	160	79	167	81	172
200	0.8	57	120	59	124	57	121



— Net Supply - - - Net Exhaust

ENERGY PERFORMANCE								
	SUPPLY TEMPERATURE		NET AIR FLOW		POWER CONSUMED WATTS	SENSIBLE RECOVERY EFFICIENCY	APPARENT SENSIBLE EFFECTIVENESS	LATENT RECOVERY/MOISTURE TRANSFER
	°C	°F	L/S	CFM				
HEATING	0	+32	51	109	92	70	77	-0.01
	0	+32	73	155	128	65	72	-0.02
	0	+32	102	215	191	62	70	-0.01
	-25	-13	52	110	104	60	94	0.05

CERTIFIED HEAT AND ENERGY RECOVERY VENTILATORS

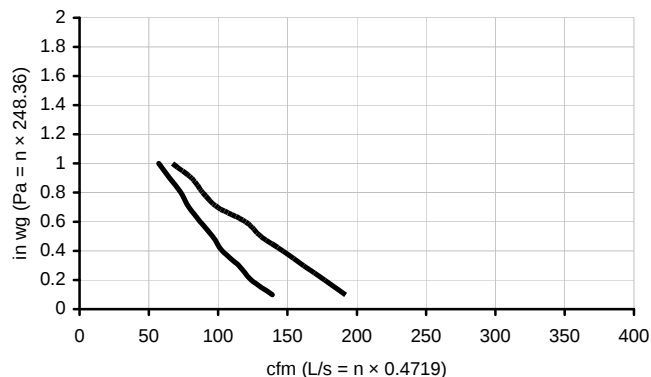
Section 3-74

NU-AIR VENTILATION SYSTEMS, INC.

Model: A7045 • Options Installed: None
 Electrical Requirements: Volts: 120 Amps: 1.5
 Exhaust Air Transfer Ratio: 0.02 @100 Pa/0.4 in. wg 0.02 @ 50 Pa / 0.2 in. wg

VENTILATION PERFORMANCE

EXT. STATIC PRESSURE		NET SUPPLY AIR FLOW		GROSS AIR FLOW			
Pa	in wg	L/s	cfm	SUPPLY		EXHAUST	
25	0.1	66	139	67	143	90	192
50	0.2	58	124	60	127	83	177
75	0.3	54	115	55	117	76	162
100	0.4	49	103	50	106	69	147
125	0.5	45	96	46	98	62	131
150	0.6	41	87	42	89	57	120
175	0.7	37	79	38	81	47	100
200	0.8	34	73	35	74	42	89
225	0.9	31	65	32	67	38	81
250	1.0	27	57	27	58	32	67



— Net Supply — Net Exhaust

ENERGY PERFORMANCE

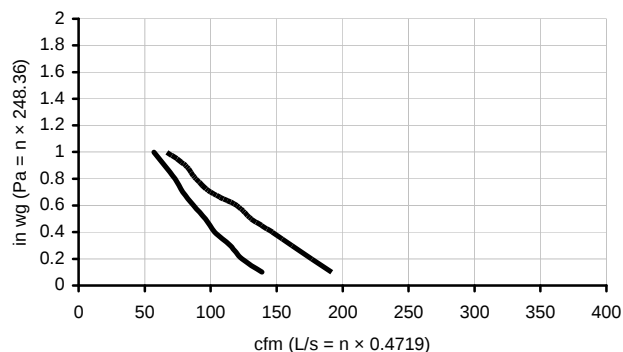
	SUPPLY TEMPERATURE		NET AIR FLOW		POWER CONSUMED WATTS	SENSIBLE RECOVERY EFFICIENCY	APPARENT SENSIBLE EFFECTIVENESS	LATENT RECOVERY/MOISTURE TRANSFER
	°C	°F	L/S	CFM				
HEATING	0	+32	30	65	120	61	78	0.04
	0	+32	46	97	164	55	69	0.05
	0	+32	56	118	170	53	64	0.02

NU-AIR VENTILATION SYSTEMS, INC.

Model: NU-145DP • Options Installed: None
 Electrical Requirements: Volts: 120 Amps: 1.5
 Exhaust Air Transfer Ratio: 0.02 @100 Pa/0.4 in. wg 0.02 @ 50 Pa / 0.2 in. wg

VENTILATION PERFORMANCE

EXT. STATIC PRESSURE		NET SUPPLY AIR FLOW		GROSS AIR FLOW			
Pa	in wg	L/s	cfm	SUPPLY		EXHAUST	
25	0.1	66	139	67	143	90	192
50	0.2	58	124	60	127	83	177
75	0.3	54	115	55	117	76	162
100	0.4	49	103	50	106	69	147
125	0.5	45	96	46	98	62	131
150	0.6	41	87	42	89	57	120
175	0.7	37	79	38	81	47	100
200	0.8	34	73	35	74	42	89
225	0.9	31	65	32	67	38	81
250	1.0	27	57	27	58	32	67



— Net Supply — Net Exhaust

ENERGY PERFORMANCE

	SUPPLY TEMPERATURE		NET AIR FLOW		POWER CONSUMED WATTS	SENSIBLE RECOVERY EFFICIENCY	APPARENT SENSIBLE EFFECTIVENESS	LATENT RECOVERY/MOISTURE TRANSFER
	°C	°F	L/S	CFM				
HEATING	0	+32	30	65	120	61	78	0.04
	0	+32	46	97	164	55	69	0.05
	0	+32	56	118	170	53	64	0.02

CERTIFIED HEAT AND ENERGY RECOVERY VENTILATORS

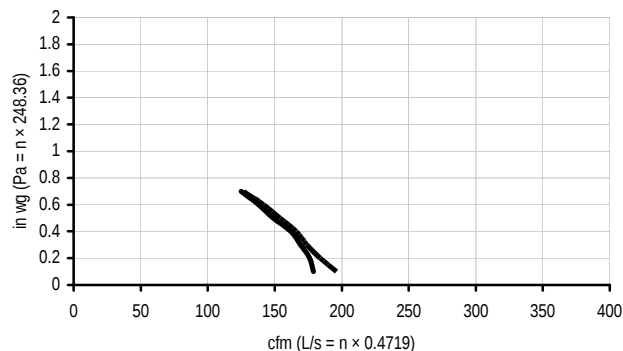
Section 3-75

NU-AIR VENTILATION SYSTEMS, INC.

Model: CEA20-D • Options Installed: None
 Electrical Requirements: Volts: 120 Amps: 1.5
 Exhaust Air Transfer Ratio: 0.02 @100 Pa/0.4 in. wg 0.02 @ 50 Pa / 0.2 in. wg
 Low Temp. Vent Reduction Factor: 8% Supply 6%Exhaust • Low Temp. Imbalance Factor: 0.87

VENTILATION PERFORMANCE

EXT. STATIC PRESSURE		NET SUPPLY AIR FLOW		GROSS AIR FLOW			
				SUPPLY		EXHAUST	
Pa	in wg	L/s	cfm	L/s	cfm	L/s	cfm
25	0.1	84	179	86	183	92	196
50	0.2	83	176	85	180	87	184
75	0.3	79	169	81	173	82	174
100	0.4	76	162	78	165	78	166
125	0.5	70	149	72	153	72	154
150	0.6	65	138	66	141	67	142
175	0.7	59	125	60	128	60	127



— Net Supply — Net Exhaust

ENERGY PERFORMANCE

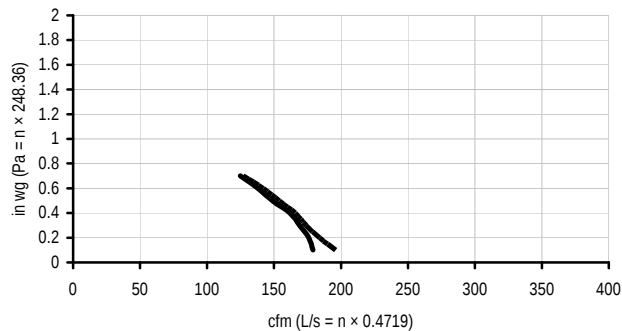
	SUPPLY TEMPERATURE		NET AIR FLOW		POWER CONSUMED WATTS	SENSIBLE RECOVERY EFFICIENCY	APPARENT SENSIBLE EFFECTIVENESS	LATENT RECOVERY/MOISTURE TRANSFER
	°C	°F	L/S	CFM				
HEATING	0	+32	40	86	140	60	72	0.02
	0	+32	54	116	158	59	69	0.02
	0	+32	64	135	178	59	70	0.03
	-25	-13	56	118	176	57	73	0.03
TOTAL RECOVERY EFFICIENCY							24	
COOLING	+35	+95	54	114	156			

NU-AIR VENTILATION SYSTEMS, INC.

Model: NU-165 • Options Installed: None
 Electrical Requirements: Volts: 120 Amps: 1.5
 Exhaust Air Transfer Ratio: 0.02 @100 Pa/0.4 in. wg 0.02 @ 50 Pa / 0.2 in. wg
 Low Temp. Vent Reduction Factor: 8% Supply 6%Exhaust • Low Temp. Imbalance Factor: 0.87

VENTILATION PERFORMANCE

EXT. STATIC PRESSURE		NET SUPPLY AIR FLOW		GROSS AIR FLOW			
				SUPPLY		EXHAUST	
Pa	in wg	L/s	cfm	L/s	cfm	L/s	cfm
25	0.1	84	179	86	183	92	196
50	0.2	83	176	85	180	87	184
75	0.3	79	169	81	173	82	174
100	0.4	76	162	78	165	78	166
125	0.5	70	149	72	153	72	154
150	0.6	65	138	66	141	67	142
175	0.7	59	125	60	128	60	127



— Net Supply — Net Exhaust

ENERGY PERFORMANCE

	SUPPLY TEMPERATURE		NET AIR FLOW		POWER CONSUMED WATTS	SENSIBLE RECOVERY EFFICIENCY	APPARENT SENSIBLE EFFECTIVENESS	LATENT RECOVERY/MOISTURE TRANSFER
	°C	°F	L/S	CFM				
HEATING	0	+32	40	86	140	60	72	0.02
	0	+32	54	116	158	59	69	0.02
	0	+32	64	135	178	59	70	0.03
	-25	-13	56	118	176	57	73	0.03
TOTAL RECOVERY EFFICIENCY							24	
COOLING	+35	+95	54	114	156			

CERTIFIED HEAT AND ENERGY RECOVERY VENTILATORS

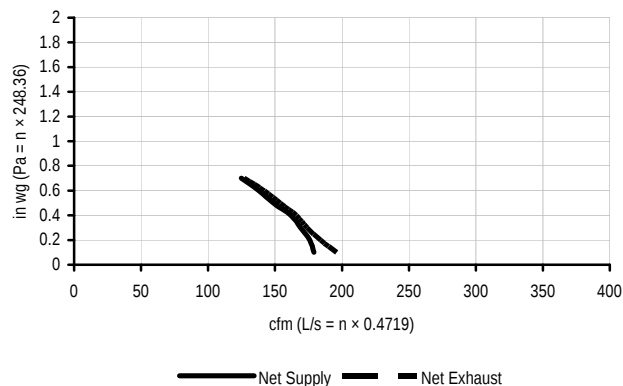
Section 3-76

NU-AIR VENTILATION SYSTEMS, INC.

Model: NU-175 • Options Installed: None
 Electrical Requirements: Volts: 120 Amps: 1.5
 Exhaust Air Transfer Ratio: 0.02 @100 Pa/0.4 in. wg 0.02 @ 50 Pa / 0.2 in. wg
 Low Temp. Vent Reduction Factor: 8% Supply 6%Exhaust • Low Temp. Imbalance Factor: 0.87

VENTILATION PERFORMANCE

EXT. STATIC PRESSURE		NET SUPPLY AIR FLOW		GROSS AIR FLOW			
				SUPPLY		EXHAUST	
Pa	in wg	L/s	cfm	L/s	cfm	L/s	cfm
25	0.1	84	179	86	183	92	196
50	0.2	83	176	85	180	87	184
75	0.3	79	169	81	173	82	174
100	0.4	76	162	78	165	78	166
125	0.5	70	149	72	153	72	154
150	0.6	65	138	66	141	67	142
175	0.7	59	125	60	128	60	127



ENERGY PERFORMANCE

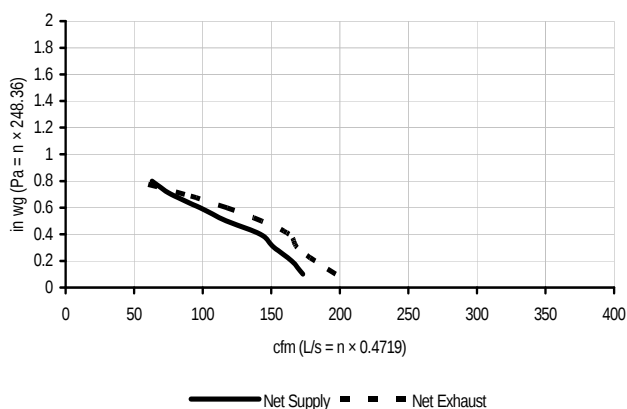
	SUPPLY TEMPERATURE		NET AIR FLOW		POWER CONSUMED WATTS	SENSIBLE RECOVERY EFFICIENCY	APPARENT SENSIBLE EFFECTIVENESS	LATENT RECOVERY/MOISTURE TRANSFER
	°C	°F	L/S	CFM				
HEATING	0	+32	40	86	140	60	72	0.02
	0	+32	54	116	158	59	69	0.02
	0	+32	64	135	178	59	70	0.03
	-25	-13	56	118	176	57	73	0.03
TOTAL RECOVERY EFFICIENCY							24	
COOLING	+35	+95	54	114	156			

PARTNERS CHOICE

Model: ERV-150 • Options Installed: Defrost
 Electrical Requirements: Volts: 120 Amps: 1.3
 Exhaust Air Transfer Ratio: --- @100 Pa/0.4 in. wg 0.06 @ 50 Pa / 0.2 in. wg
 Low Temp. Vent Reduction Factor: 0% Supply 0% Exhaust • Low Temp. Imbalance Factor: 0.79

VENTILATION PERFORMANCE

EXT. STATIC PRESSURE		NET SUPPLY AIR FLOW		GROSS AIR FLOW			
				SUPPLY		EXHAUST	
Pa	in wg	L/s	cfm	L/s	cfm	L/s	cfm
25	0.1	82	173	87	184	93	197
50	0.2	78	165	83	175	86	182
75	0.3	72	152	76	162	80	169
100	0.4	67	142	71	151	77	163
125	0.5	55	117	59	124	67	143
150	0.6	46	98	49	104	56	118
175	0.7	36	77	39	82	41	87
200	0.8	30	63	32	67	24	51



ENERGY PERFORMANCE

	SUPPLY TEMPERATURE		NET AIR FLOW		POWER CONSUMED WATTS	SENSIBLE RECOVERY EFFICIENCY	APPARENT SENSIBLE EFFECTIVENESS	LATENT RECOVERY/MOISTURE TRANSFER
	°C	°F	L/S	CFM				
HEATING	0	+32	29	60	56	71	79	0.52
	0	+32	47	100	80	64	73	0.41
	0	+32	65	137	126	60	68	0.36
	-15	5	31	65	64	56	81	0.41
TOTAL RECOVERY EFFICIENCY							45	
COOLING	+35	+95	28	59	52			

CERTIFIED HEAT AND ENERGY RECOVERY VENTILATORS

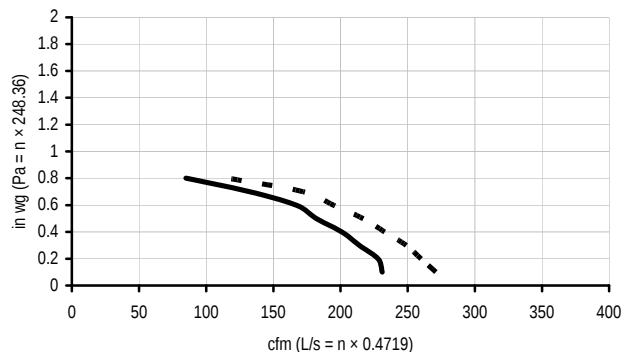
Section 3-77

PARTNERS CHOICE

Model: ERV-210 • Options Installed: Defrost
 Electrical Requirements: Volts: 120 Amps: 1.9
 Exhaust Air Transfer Ratio: --- @100 Pa/0.4 in. wg 0.06 @ 50 Pa / 0.2 in. wg
 Low Temp. Vent Reduction Factor: 0% Supply 0% Exhaust • Low Temp. Imbalance Factor: 0.84

VENTILATION PERFORMANCE

EXT. STATIC PRESSURE		NET SUPPLY AIR FLOW		GROSS AIR FLOW			
				SUPPLY		EXHAUST	
Pa	in wg	L/s	cfm	L/s	cfm	L/s	cfm
25	0.1	109	231	116	245	128	271
50	0.2	108	228	114	241	123	260
75	0.3	101	214	107	227	118	249
100	0.4	95	201	101	213	110	233
125	0.5	86	182	91	193	102	217
150	0.6	79	167	84	177	92	195
175	0.7	62	132	66	140	81	172
200	0.8	40	85	42	90	55	116



— Net Supply - - - Net Exhaust

ENERGY PERFORMANCE

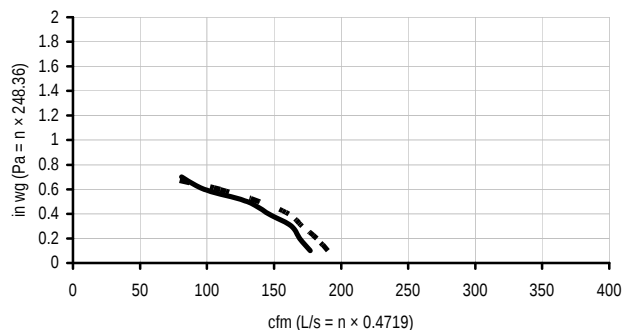
	SUPPLY TEMPERATURE		NET AIR FLOW		POWER CONSUMED WATTS	SENSIBLE RECOVERY EFFICIENCY	APPARENT SENSIBLE EFFECTIVENESS	LATENT RECOVERY/MOISTURE TRANSFER
	°C	°F	L/S	CFM				
HEATING	0	+32	52	110	93	69	76	0.45
	0	+32	74	157	130	64	71	0.38
	0	+32	96	203	193	60	68	0.30
	-15	5	52	110	122	55	76	0.26
COOLING	+35	+95	50	106	89			
							TOTAL RECOVERY EFFICIENCY 41	

PARTNERS CHOICE

Model: HRV-150 • Options Installed: Defrost
 Electrical Requirements: Volts: 120 Amps: 1.3
 Exhaust Air Transfer Ratio: --- @100 Pa/0.4 in. wg 0.05 @ 50 Pa / 0.2 in. wg
 Low Temp. Vent Reduction Factor: 9% Supply 22% Exhaust • Low Temp. Imbalance Factor: 1.0

VENTILATION PERFORMANCE

EXT. STATIC PRESSURE		NET SUPPLY AIR FLOW		GROSS AIR FLOW			
				SUPPLY		EXHAUST	
Pa	in wg	L/s	cfm	L/s	cfm	L/s	cfm
25	0.1	84	177	88	186	90	190
50	0.2	80	169	84	178	86	182
75	0.3	77	163	81	171	81	171
100	0.4	69	146	72	153	76	161
125	0.5	61	130	65	137	66	139
150	0.6	46	98	49	103	52	110
175	0.7	38	81	40	85	32	67



— Net Supply - - - Net Exhaust

ENERGY PERFORMANCE

	SUPPLY TEMPERATURE		NET AIR FLOW		POWER CONSUMED WATTS	SENSIBLE RECOVERY EFFICIENCY	APPARENT SENSIBLE EFFECTIVENESS	LATENT RECOVERY/MOISTURE TRANSFER
	°C	°F	L/S	CFM				
HEATING	0	+32	30	64	54	75	83	-0.03
	0	+32	46	97	78	67	74	0.01
	0	+32	65	138	124	64	72	-0.02
	-25	-13	26	55	62	67	89	0.05

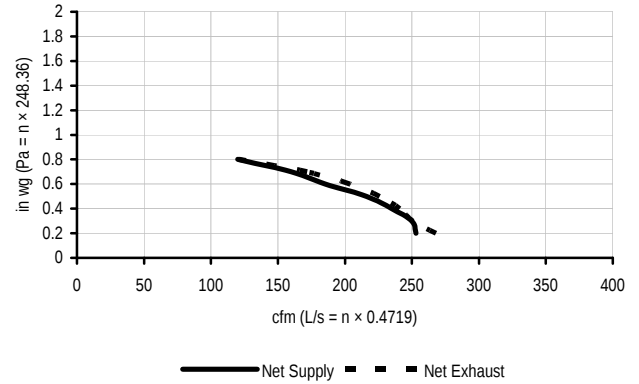
CERTIFIED HEAT AND ENERGY RECOVERY VENTILATORS

Section 3-78

PARTNERS CHOICE

Model: HRV-210 • Options Installed: Defrost
 Electrical Requirements: Volts: 120 Amps: 1.9
 Exhaust Air Transfer Ratio: --- @100 Pa/0.4 in. wg 0.04 @ 50 Pa / 0.2 in. wg
 Low Temp. Vent Reduction Factor: 0% Supply 23% Exhaust • Low Temp. Imbalance Factor: 1.0

EXT. STATIC PRESSURE		VENTILATION PERFORMANCE					
		NET SUPPLY AIR FLOW		GROSS AIR FLOW			
				SUPPLY		EXHAUST	
Pa	in wg	L/s	cfm	L/s	cfm	L/s	cfm
50	0.2	119	253	125	264	126	268
75	0.3	118	250	124	262	118	251
100	0.4	111	235	116	245	114	241
125	0.5	102	216	106	224	107	226
150	0.6	87	185	91	193	96	204
175	0.7	76	160	79	167	81	172
200	0.8	57	120	59	124	57	121

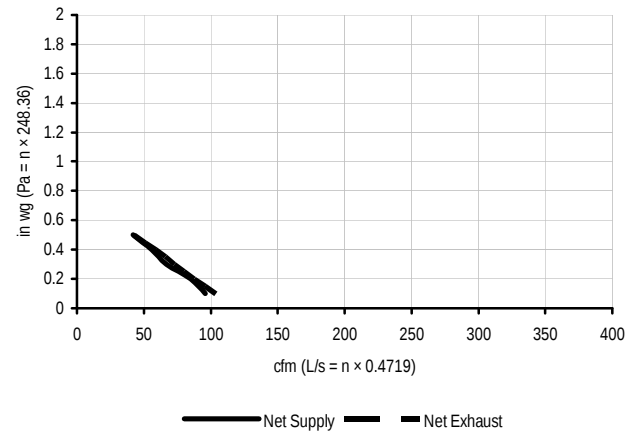


ENERGY PERFORMANCE								
	SUPPLY TEMPERATURE		NET AIR FLOW		POWER CONSUMED WATTS	SENSIBLE RECOVERY EFFICIENCY	APPARENT SENSIBLE EFFECTIVENESS	LATENT RECOVERY/MOISTURE TRANSFER
	°C	°F	L/S	CFM				
HEATING	0	+32	26	55	36	57	67	0.02
	0	+32	32	67	40	55	63	0.00
	0	+32	39	84	40	54	60	0.00
	-25	-13	34	73	35	53	66	0.01

POWRMATIC OF CANADA, LTD. (DIRECT AIR)

Model: PHRV96 • Options Installed: None
 Electrical Requirements: Volts: 120 Amps: 0.4
 Exhaust Air Transfer Ratio: 0.04 @100 Pa/0.4 in. wg 0.03 @ 50 Pa / 0.2 in. wg
 Low Temp. Vent Reduction Factor: 7% Supply 9% Exhaust • Low Temp. Imbalance Factor: 0.97

EXT. STATIC PRESSURE		VENTILATION PERFORMANCE					
		NET SUPPLY AIR FLOW		GROSS AIR FLOW			
				SUPPLY		EXHAUST	
Pa	in wg	L/s	cfm	L/s	cfm	L/s	cfm
25	0.1	45	96	47	100	49	104
50	0.2	40	85	41	88	41	88
75	0.3	32	67	33	70	34	73
100	0.4	26	56	27	58	28	59
125	0.5	20	42	20	43	20	43



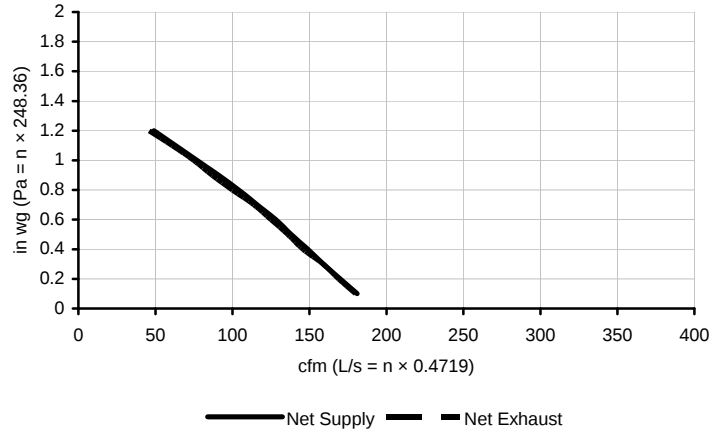
ENERGY PERFORMANCE								
	SUPPLY TEMPERATURE		NET AIR FLOW		POWER CONSUMED WATTS	SENSIBLE RECOVERY EFFICIENCY	APPARENT SENSIBLE EFFECTIVENESS	LATENT RECOVERY/MOISTURE TRANSFER
	°C	°F	L/S	CFM				
HEATING	0	+32	26	55	36	57	67	0.02
	0	+32	32	67	40	55	63	0.00
	0	+32	39	84	40	54	60	0.00
	-25	-13	34	73	35	53	66	0.01

CERTIFIED HEAT AND ENERGY RECOVERY VENTILATORS**Section 3-79****POWRMATIC OF CANADA, LTD. (DIRECT AIR)**

Model: PHRV 140 • Options Installed: None
 Electrical Requirements: Volts: 120 Amps: 1.3
 Exhaust Air Transfer Ratio: 0.03 @ 100 Pa/0.4 in. wg 0.02 @ 50 Pa / 0.2 in. wg
 Low Temp. Vent Reduction Factor: 5% Supply 0% Exhaust • Low Temp. Imbalance Factor: 0.82

VENTILATION PERFORMANCE

EXT. STATIC PRESSURE		NET SUPPLY AIR FLOW		GROSS AIR FLOW			
				SUPPLY		EXHAUST	
Pa	in wg	L/s	cfm	L/s	cfm	L/s	cfm
25	0.1	85	181	87	184	84	180
50	0.2	80	170	82	174	79	169
75	0.3	75	159	76	162	75	159
100	0.4	70	149	71	151	68	146
125	0.5	65	138	66	141	64	136
150	0.6	60	128	61	130	59	125
175	0.7	55	116	56	119	54	114
200	0.8	49	104	50	106	47	100
225	0.9	43	91	43	92	41	87
250	1.0	36	77	37	79	35	75
275	1.1	30	63	30	64	29	61
300	1.2	23	49	24	50	22	46



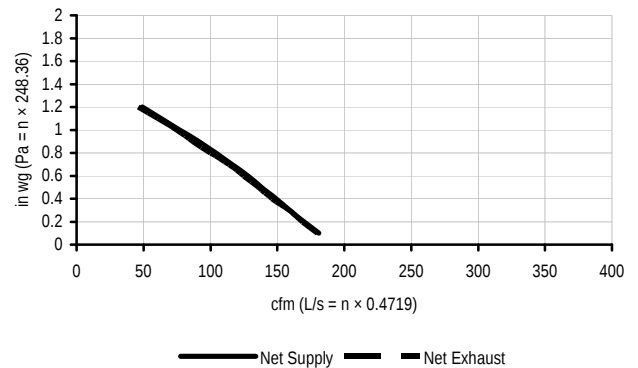
SUPPLY TEMPERATURE		NET AIR FLOW		ENERGY PERFORMANCE		APPARENT SENSIBLE EFFECTIVENESS	LATENT RECOVERY/MOISTURE TRANSFER
				POWER CONSUMED	SENSIBLE RECOVERY EFFICIENCY		
	°C	°F	L/S	CFM	WATTS		
HEATING	0	+32	31	67	72	60	73
	0	+32	51	109	98	59	70
	0	+32	76	161	144	55	63
	-25	-13	32	68	73	56	77

POWRMATIC OF CANADA, LTD. (DIRECT AIR)

Model: PHRV 150 • Options Installed: None
 Electrical Requirements: Volts: 120 Amps: 1.3
 Exhaust Air Transfer Ratio: 0.03 @ 100 Pa/0.4 in. wg 0.02 @ 50 Pa / 0.2 in. wg
 Low Temp. Vent Reduction Factor: 5% Supply 0% Exhaust • Low Temp. Imbalance Factor: 0.82

VENTILATION PERFORMANCE

EXT. STATIC PRESSURE		NET SUPPLY AIR FLOW		GROSS AIR FLOW			
				SUPPLY		EXHAUST	
Pa	in wg	L/s	cfm	L/s	cfm	L/s	cfm
25	0.1	85	181	87	184	84	180
50	0.2	80	170	82	174	79	169
75	0.3	75	159	76	162	75	159
100	0.4	70	149	71	151	68	146
125	0.5	65	138	66	141	64	136
150	0.6	60	128	61	130	59	125
175	0.7	55	116	56	119	54	114
200	0.8	49	104	50	106	47	100
225	0.9	43	91	43	92	41	87
250	1.0	36	77	37	79	35	75
275	1.1	30	63	30	64	29	61
300	1.2	23	49	24	50	22	46



SUPPLY TEMPERATURE		NET AIR FLOW		ENERGY PERFORMANCE		APPARENT SENSIBLE EFFECTIVENESS	LATENT RECOVERY/MOISTURE TRANSFER
				POWER CONSUMED	SENSIBLE RECOVERY EFFICIENCY		
	°C	°F	L/S	CFM	WATTS		
HEATING	0	+32	31	67	72	60	73
	0	+32	51	109	98	59	70
	0	+32	76	161	144	55	63
	-25	-13	32	68	73	56	77

CERTIFIED HEAT AND ENERGY RECOVERY VENTILATORS

Section 3-80

POWRMATIC OF CANADA, LTD. (DIRECT AIR)

Model: Powrmatic PHRV200 • Options Installed: None

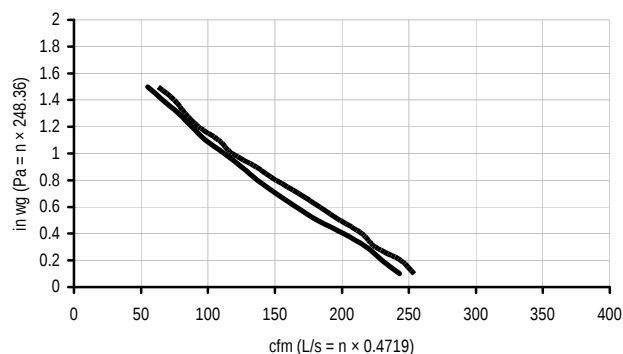
Electrical Requirements: Volts: 120 Amps: 2.1

Exhaust Air Transfer Ratio: 0.02 @100 Pa/0.4 in. wg 0.01 @ 50 Pa / 0.2 in. wg

Low Temp. Vent Reduction Factor: 8% Supply 0% Exhaust • Low Temp. Imbalance Factor: 0.81

VENTILATION PERFORMANCE

EXT. STATIC PRESSURE		NET SUPPLY AIR FLOW		GROSS AIR FLOW			
Pa in wg		L/s cfm		SUPPLY L/s cfm		EXHAUST L/s cfm	
25	0.1	114	243	116	246	120	254
50	0.2	109	230	110	233	115	244
75	0.3	103	218	104	221	106	225
100	0.4	95	201	96	204	101	215
125	0.5	86	182	87	185	94	199
150	0.6	78	166	79	168	87	184
175	0.7	71	151	72	154	79	168
200	0.8	65	137	66	139	71	151
225	0.9	59	125	60	127	64	136
250	1.0	53	112	53	113	56	118
275	1.1	46	98	47	99	51	108
300	1.2	42	88	42	90	44	93
325	1.3	37	78	37	79	39	83
350	1.4	31	66	32	67	35	75



— Net Supply - - - Net Exhaust

SUPPLY TEMPERATURE		NET AIR FLOW		ENERGY PERFORMANCE		APPARENT SENSIBLE EFFECTIVENESS	LATENT RECOVERY/MOISTURE TRANSFER	
				POWER CONSUMED	SENSIBLE RECOVERY EFFICIENCY			
°C	°F	L/S	CFM	WATTS				
HEATING	0	+32	31	65	108	62	77	0.06
	0	+32	55	117	154	62	74	0.07
	0	+32	90	191	246	60	71	0.00
	-25	-13	61	129	154	59	79	0.00

POWRMATIC OF CANADA, LTD. (DIRECT AIR)

Model: Powrmatic PHRV 96 • Options Installed: None

Electrical Requirements: Volts: 120 Amps: .4

Exhaust Air Transfer Ratio: 2.9 @100 Pa/0.4 in. wg 1.8 @ 50 Pa / 0.2 in. wg

Low Temp. Vent Reduction Factor: 10.6% Supply 13.9% Exhaust • Low Temp. Imbalance Factor: 0.96

VENTILATION PERFORMANCE

EXT. STATIC PRESSURE		NET SUPPLY AIR FLOW		GROSS AIR FLOW			
Pa in wg		L/s cfm		SUPPLY L/s cfm		EXHAUST L/s cfm	
25	0.1	40	84	41	86	43	91
50	0.2	35	76	36	77	38	81
75	0.3	30	64	31	66	33	70
100	0.4	26	55	26	56	27	58
125	0.5	21	44	21	45	20	43

SUPPLY TEMPERATURE		NET AIR FLOW		ENERGY PERFORMANCE		APPARENT SENSIBLE EFFECTIVENESS	LATENT RECOVERY/MOISTURE TRANSFER
				POWER CONSUMED	SENSIBLE RECOVERY EFFICIENCY		
	°C	°F	L/S	CFM	WATTS		
HEATING	0	+32	25	52	34	61	69
	0	+32	30	64	44	59	67
	0	+32	35	75	44	59	66
	-25	-13	30	63	42	61	73

CERTIFIED HEAT AND ENERGY RECOVERY VENTILATORS

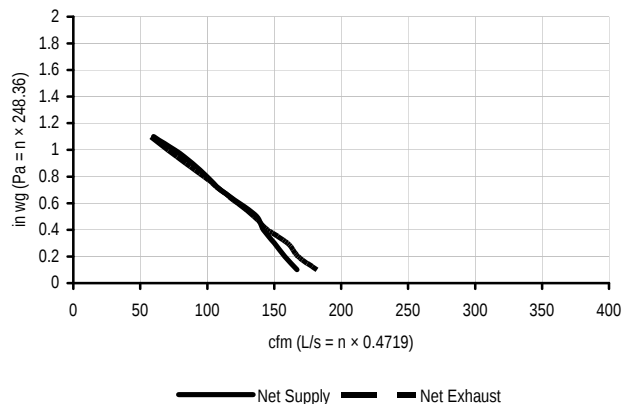
Section 3-81

POWRMATIC OF CANADA, LTD. (DIRECT AIR)

Model: Powrmatic PHRVR 155 • Options Installed: Damper
 Electrical Requirements: Volts: 120 Amps: 1.3
 Exhaust Air Transfer Ratio: 0.02 @100 Pa/0.4 in. wg 0.01 @ 50 Pa / 0.2 in. wg
 Low Temp. Vent Reduction Factor: 12% Supply 14% Exhaust • Low Temp. Imbalance Factor: 0.96

VENTILATION PERFORMANCE

EXT. STATIC PRESSURE		NET SUPPLY AIR FLOW		GROSS AIR FLOW			
				SUPPLY		EXHAUST	
Pa	in wg	L/s	cfm	L/s	cfm	L/s	cfm
25	0.1	78	167	80	169	86	182
50	0.2	74	158	75	160	79	168
75	0.3	71	150	72	152	75	160
100	0.4	67	142	68	144	68	145
125	0.5	65	137	66	140	63	135
150	0.6	58	124	59	126	58	123
175	0.7	52	110	53	112	52	110
200	0.8	47	100	48	101	46	98
225	0.9	42	89	43	91	40	84
250	1.0	36	76	36	77	34	71
275	1.1	28	60	28	60	27	58



ENERGY PERFORMANCE

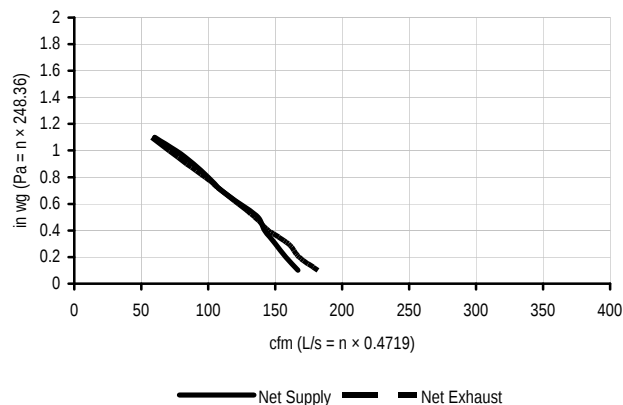
	SUPPLY TEMPERATURE		NET AIR FLOW		POWER CONSUMED	SENSIBLE RECOVERY EFFICIENCY	APPARENT SENSIBLE EFFECTIVENESS	LATENT RECOVERY/MOISTURE TRANSFER
	°C	°F	L/S	CFM	WATTS			
HEATING	0	+32	31	65	72	59	73	0.01
	0	+32	49	104	102	61	70	0.00
	0	+32	76	161	148	58	66	-0.01
	-25	-13	32	68	96	61	77	0.02

POWRMATIC OF CANADA, LTD. (DIRECT AIR)

Model: Powrmatic PHRVR 160 • Options Installed: Damper
 Electrical Requirements: Volts: 120 Amps: 1.3
 Exhaust Air Transfer Ratio: 0.02 @100 Pa/0.4 in. wg 0.01 @ 50 Pa / 0.2 in. wg
 Low Temp. Vent Reduction Factor: 12% Supply 14% Exhaust • Low Temp. Imbalance Factor: 0.96

VENTILATION PERFORMANCE

EXT. STATIC PRESSURE		NET SUPPLY AIR FLOW		GROSS AIR FLOW			
				SUPPLY		EXHAUST	
Pa	in wg	L/s	cfm	L/s	cfm	L/s	cfm
25	0.1	78	167	80	169	86	182
50	0.2	74	158	75	160	79	168
75	0.3	71	150	72	152	75	160
100	0.4	67	142	68	144	68	145
125	0.5	65	137	66	140	63	135
150	0.6	58	124	59	126	58	123
175	0.7	52	110	53	112	52	110
200	0.8	47	100	48	101	46	98
225	0.9	42	89	43	91	40	84
250	1.0	36	76	36	77	34	71
275	1.1	28	60	28	60	27	58



ENERGY PERFORMANCE

	SUPPLY TEMPERATURE		NET AIR FLOW		POWER CONSUMED	SENSIBLE RECOVERY EFFICIENCY	APPARENT SENSIBLE EFFECTIVENESS	LATENT RECOVERY/MOISTURE TRANSFER
	°C	°F	L/S	CFM	WATTS			
HEATING	0	+32	31	65	72	59	73	0.01
	0	+32	49	104	102	61	70	0.00
	0	+32	76	161	148	58	66	-0.01
	-25	-13	32	68	96	61	77	0.02

CERTIFIED HEAT AND ENERGY RECOVERY VENTILATORS**Section 3-82****POWRMATIC OF CANADA, LTD. (DIRECT AIR)**

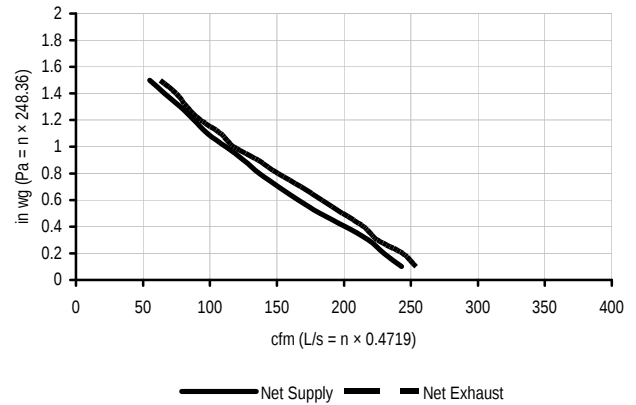
Model: Powrmatic PHRVR 205 • Options Installed: None

Electrical Requirements: Volts: 120 Amps: 2.1

Exhaust Air Transfer Ratio: 0.02 @100 Pa/0.4 in. wg 0.01 @ 50 Pa / 0.2 in. wg

Low Temp. Vent Reduction Factor: 8% Supply 18% Exhaust • Low Temp. Imbalance Factor: 1.09

EXT. STATIC PRESSURE		NET SUPPLY AIR FLOW		GROSS AIR FLOW			
				SUPPLY		EXHAUST	
Pa	in wg	L/s	cfm	L/s	cfm	L/s	cfm
25	0.1	114	243	116	246	120	254
50	0.2	109	230	110	233	115	244
75	0.3	103	218	104	221	106	225
100	0.4	95	201	96	204	101	215
125	0.5	86	182	87	185	94	199
150	0.6	78	166	79	168	87	184
175	0.7	71	151	72	154	79	168
200	0.8	65	137	66	139	71	151
225	0.9	59	125	60	127	64	136
250	1.0	53	112	53	113	56	118
275	1.1	46	98	47	99	51	108
300	1.2	42	88	42	90	44	93
325	1.3	37	78	37	79	39	83
350	1.4	31	66	32	67	35	75
375	1.5	26	55	26	56	30	63

**ENERGY PERFORMANCE**

	SUPPLY TEMPERATURE		NET AIR FLOW		POWER CONSUMED WATTS	SENSIBLE RECOVERY EFFICIENCY	APPARENT SENSIBLE EFFECTIVENESS	LATENT RECOVERY/MOISTURE TRANSFER
	°C	°F	L/S	CFM				
HEATING	0	+32	31	65	108	62	77	0.06
	0	+32	55	117	154	62	74	0.07
	0	+32	90	191	246	60	71	0.00
	-25	-13	59	126	141	64	81	0.01

POWRMATIC OF CANADA, LTD. (DIRECT AIR)

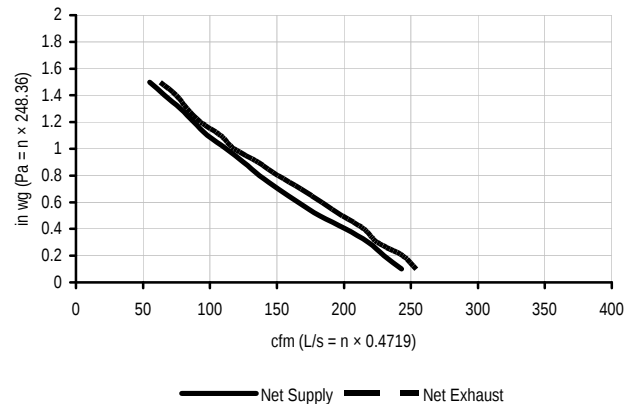
Model: PHRVR210 • Options Installed: None

Electrical Requirements: Volts: 120 Amps: 2.1

Exhaust Air Transfer Ratio: 0.01 @100 Pa/0.4 in. wg 0.02 @ 50 Pa / 0.2 in. wg

Low Temp. Vent Reduction Factor: 8% Supply 18% Exhaust • Low Temp. Imbalance Factor: 1.09

EXT. STATIC PRESSURE		NET SUPPLY AIR FLOW		GROSS AIR FLOW			
				SUPPLY		EXHAUST	
Pa	in wg	L/s	cfm	L/s	cfm	L/s	cfm
25	0.1	114	243	116	246	120	254
50	0.2	109	230	110	233	115	244
75	0.3	103	218	104	221	106	225
100	0.4	95	201	96	204	101	215
125	0.5	86	182	87	185	94	199
150	0.6	78	166	79	168	87	184
175	0.7	71	151	72	154	79	168
200	0.8	65	137	66	139	71	151
225	0.9	59	125	60	127	64	136
250	1.0	53	112	53	113	56	118
275	1.1	46	98	47	99	51	108
300	1.2	42	88	42	90	44	93
325	1.3	37	78	37	79	39	83
350	1.4	31	66	32	67	35	75
375	1.5	26	55	26	56	30	63

**ENERGY PERFORMANCE**

	SUPPLY TEMPERATURE		NET AIR FLOW		POWER CONSUMED WATTS	SENSIBLE RECOVERY EFFICIENCY	APPARENT SENSIBLE EFFECTIVENESS	LATENT RECOVERY/MOISTURE TRANSFER
	°C	°F	L/S	CFM				
HEATING	0	+32	31	65	108	62	77	0.06
	0	+32	55	117	154	62	74	0.07
	0	+32	90	191	246	60	71	0.00
	-25	-13	59	126	141	64	81	0.01

CERTIFIED HEAT AND ENERGY RECOVERY VENTILATORS

Section 3-83

POWRMATIC OF CANADA, LTD. (DIRECT AIR)

Model: Powrmatic PHRVR 305 • Options Installed: None

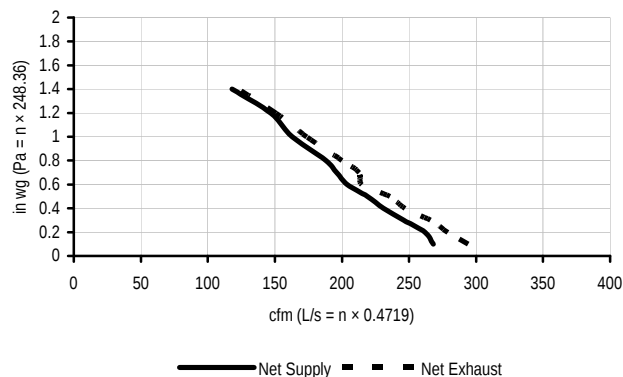
Electrical Requirements: Volts: 115 Amps: 2.7

Exhaust Air Transfer Ratio: --- @100 Pa/0.4 in. wg --- @ 50 Pa / 0.2 in. wg

Low Temp. Vent Reduction Factor: 7% Supply 9% Exhaust • Low Temp. Imbalance Factor: 0.96

VENTILATION PERFORMANCE

EXT. STATIC PRESSURE		NET SUPPLY AIR FLOW		GROSS AIR FLOW			
				SUPPLY		EXHAUST	
Pa	in wg	L/s	cfm	L/s	cfm	L/s	cfm
25	0.1	126	268	131	277	139	294
50	0.2	124	262	127	270	132	279
75	0.3	116	246	119	253	126	266
100	0.4	109	231	112	238	117	247
125	0.5	103	219	107	226	111	236
150	0.6	96	204	100	211	101	215
175	0.7	93	196	95	202	101	213
200	0.8	89	188	92	194	94	200
250	1.0	77	163	79	168	82	174
300	1.2	69	147	71	151	71	151
350	1.4	56	118	57	121	58	123



ENERGY PERFORMANCE

	SUPPLY TEMPERATURE		NET AIR FLOW		POWER CONSUMED	SENSIBLE RECOVERY EFFICIENCY	APPARENT SENSIBLE EFFECTIVENESS	LATENT RECOVERY/MOISTURE TRANSFER
	°C	°F	L/S	CFM	WATTS			
HEATING	0	+32	30	64	126	76	91	0.02
	0	+32	55	117	212	78	92	0.01
	0	+32	74	157	262	78	91	-0.09
	-25	-13	57	121	224	72	91	0.09
	-25	-13	55	117	220	72	—	---
							TOTAL RECOVERY EFFICIENCY	
COOLING	+35	+95	54	115	206		18	
	+35	+95	74	159	260		17	

POWRMATIC OF CANADA, LTD. (DIRECT AIR)

Model: Powrmatic PW150 • Options Installed: None

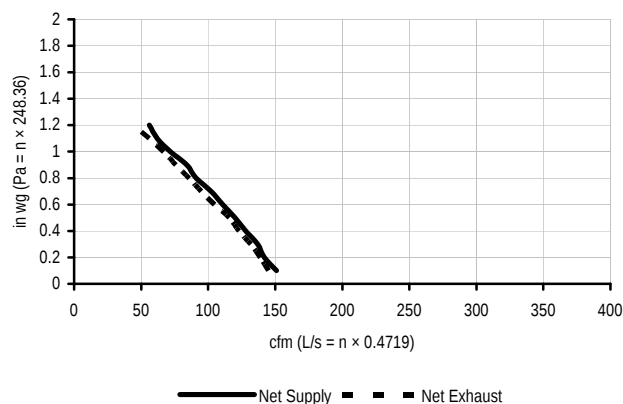
Electrical Requirements: Volts: 120 Amps: 1.6

Exhaust Air Transfer Ratio: 0.10 @100 Pa/0.4 in. wg 0.10 @ 50 Pa / 0.2 in. wg

Low Temp. Vent Reduction Factor: 12% Supply 2% Exhaust • Low Temp. Imbalance Factor: 0.88

VENTILATION PERFORMANCE

EXT. STATIC PRESSURE		NET SUPPLY AIR FLOW		GROSS AIR FLOW			
				SUPPLY		EXHAUST	
Pa	in wg	L/s	cfm	L/s	cfm	L/s	cfm
25	0.1	71	151	72	153	68	145
50	0.2	67	142	68	144	66	139
75	0.3	65	137	65	138	62	132
100	0.4	60	128	61	130	58	123
125	0.5	57	120	57	121	55	116
150	0.6	52	111	53	112	50	105
175	0.7	48	102	49	103	45	95
200	0.8	43	91	43	92	41	86
225	0.9	40	84	40	85	36	76
250	1.0	34	72	34	72	32	67
275	1.1	29	62	30	63	26	56
300	1.2	26	56	27	57	21	44



ENERGY PERFORMANCE

	SUPPLY TEMPERATURE		NET AIR FLOW		POWER CONSUMED	SENSIBLE RECOVERY EFFICIENCY	APPARENT SENSIBLE EFFECTIVENESS	LATENT RECOVERY/MOISTURE TRANSFER
	°C	°F	L/S	CFM	WATTS			
HEATING	0	+32	30	64	94	61	72	0.01
	0	+32	39	83	121	59	70	0.02
	0	+32	57	121	168	56	66	0.02
	-25	-13	41	87	119	56	69	0.05
	-25	-13	30	64	86	55	---	---
							TOTAL RECOVERY EFFICIENCY	
COOLING	+35	+95	30	64	96		14	
	+35	+95	53	113	163		12	

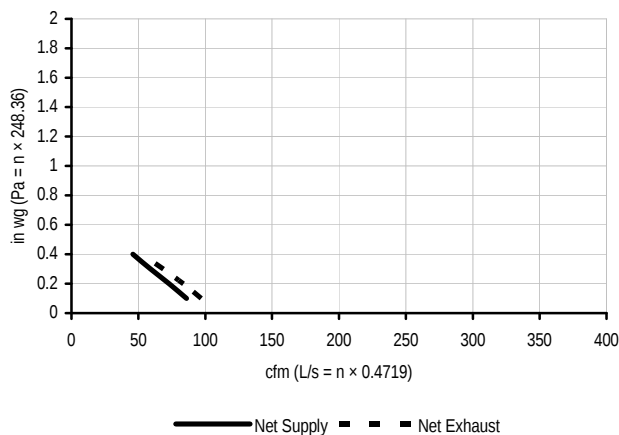
CERTIFIED HEAT AND ENERGY RECOVERY VENTILATORS

Section 3-84

RENEWAIRE LLC

Model Number: BR70 • Options Installed: None
 Electrical Requirements: Volts: 120 Amps: 1.0
 Exhaust Air Transfer Ratio: 0.03 @ 100 Pa/0.4 in. wg 0.04 @ 50 Pa / 0.2 in wg

VENTILATION PERFORMANCE							
EXT. STATIC PRESSURE		NET SUPPLY AIR FLOW		GROSS AIR FLOW			
				SUPPLY		EXHAUST	
Pa	in wg	L/s	cfm	L/s	cfm	L/s	cfm
25	0.1	41	86	42	89	46	97
50	0.2	34	73	35	75	39	84
75	0.3	28	59	29	61	32	69
100	0.4	21	46	22	47	25	53

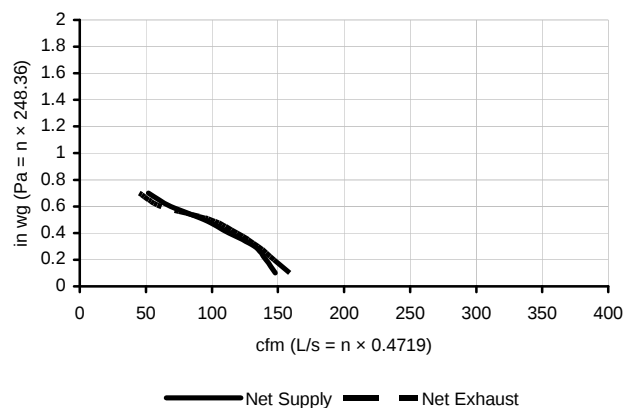


ENERGY PERFORMANCE							
SUPPLY TEMPERATURE		NET AIR FLOW		POWER CONSUMED WATTS	SENSIBLE RECOVERY EFFICIENCY	APPARENT SENSIBLE EFFECTIVENESS	LATENT RECOVERY/MOISTURE TRANSFER
HEATING	°C °F	L/S	CFM				
	0 +32	32	69	94	66	77	0.53
COOLING	+35 +95	30	64	94		TOTAL RECOVERY EFFICIENCY 42	

RENEWAIRE LLC

Model Number: BR130 • Options Installed: None
 Electrical Requirements: Volts: 120 Amps: 1.3
 Exhaust Air Transfer Ratio: 0.02 @ 100 Pa/0.4 in. wg 0.02 @ 50 Pa/0.2 in. wg

VENTILATION PERFORMANCE							
EXT. STATIC PRESSURE		NET SUPPLY AIR FLOW		GROSS AIR FLOW			
				SUPPLY		EXHAUST	
Pa	in wg	L/s	cfm	L/s	cfm	L/s	cfm
25	0.1	70	148	71	151	75	159
50	0.2	66	141	67	143	69	147
75	0.3	62	132	63	134	64	135
100	0.4	53	113	54	115	56	119
125	0.5	44	94	45	96	47	99
150	0.6	32	69	33	70	29	62
175	0.7	24	52	25	53	21	45



ENERGY PERFORMANCE							
SUPPLY TEMPERATURE		NET AIR FLOW		POWER CONSUMED WATTS	SENSIBLE RECOVERY EFFICIENCY	APPARENT SENSIBLE EFFECTIVENESS	LATENT RECOVERY/MOISTURE TRANSFER
HEATING	°C °F	L/S	CFM				
	0 +32	58	124	121	72	80	0.55
COOLING	+35 +95	59	126	121		TOTAL RECOVERY EFFICIENCY 46	

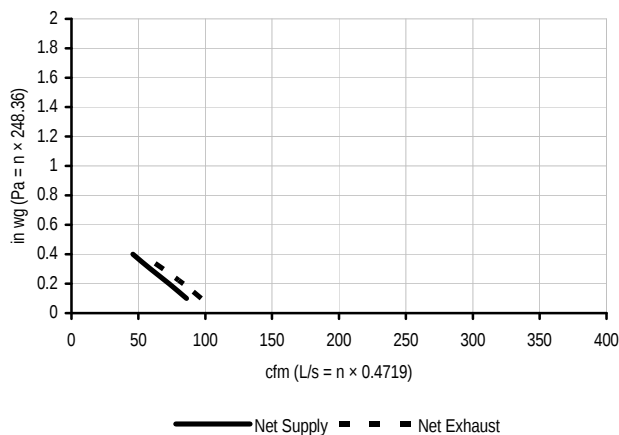
CERTIFIED HEAT AND ENERGY RECOVERY VENTILATORS

Section 3-85

RENEWAIRE LLC

Model Number: EV70 • Options Installed: None
 Electrical Requirements: Volts: 120 Amps: 1.0
 Exhaust Air Transfer Ratio: 0.03 @ 100 Pa/0.4 in. wg 0.04 @ 50 Pa / 0.2 in wg

VENTILATION PERFORMANCE							
EXT. STATIC PRESSURE		NET SUPPLY AIR FLOW		GROSS AIR FLOW			
Pa	in wg	L/s	cfm	L/s	cfm	L/s	cfm
25	0.1	41	86	42	89	46	97
50	0.2	34	73	35	75	39	84
75	0.3	28	59	29	61	32	69
100	0.4	21	46	22	47	25	53

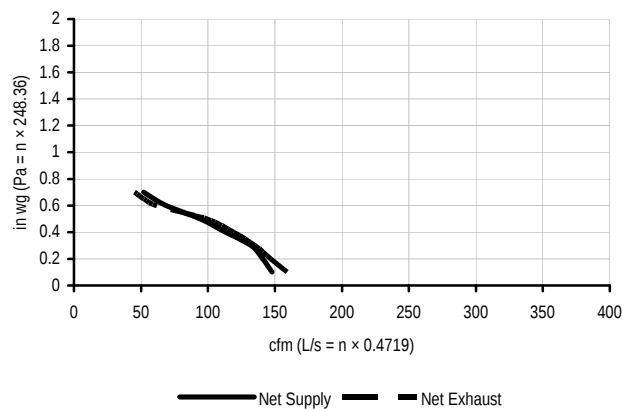


ENERGY PERFORMANCE							
SUPPLY TEMPERATURE		NET AIR FLOW		POWER CONSUMED WATTS	SENSIBLE RECOVERY EFFICIENCY	APPARENT SENSIBLE EFFECTIVENESS	LATENT RECOVERY/MOISTURE TRANSFER
HEATING	°C °F	L/S	CFM				
	0 +32	32	69	94	66	77	0.53
COOLING	+35 +95	30	64	94		42	

RENEWAIRE LLC

Model Number: EV130 • Options Installed: None
 Electrical Requirements: Volts: 120 Amps: 1.3
 Exhaust Air Transfer Ratio: 0.02 @ 100 Pa/0.4 in. wg 0.02 @ 50 Pa/0.2 in. wg

VENTILATION PERFORMANCE							
EXT. STATIC PRESSURE		NET SUPPLY AIR FLOW		GROSS AIR FLOW			
Pa	in wg	L/s	cfm	L/s	cfm	L/s	cfm
25	0.1	70	148	71	151	75	159
50	0.2	66	141	67	143	69	147
75	0.3	62	132	63	134	64	135
100	0.4	53	113	54	115	56	119
125	0.5	44	94	45	96	47	99
150	0.6	32	69	33	70	29	62
175	0.7	24	52	25	53	21	45



ENERGY PERFORMANCE							
SUPPLY TEMPERATURE		NET AIR FLOW		POWER CONSUMED WATTS	SENSIBLE RECOVERY EFFICIENCY	APPARENT SENSIBLE EFFECTIVENESS	LATENT RECOVERY/MOISTURE TRANSFER
HEATING	°C °F	L/S	CFM				
	0 +32	58	124	121	72	80	0.55
COOLING	+35 +95	59	126	121		46	

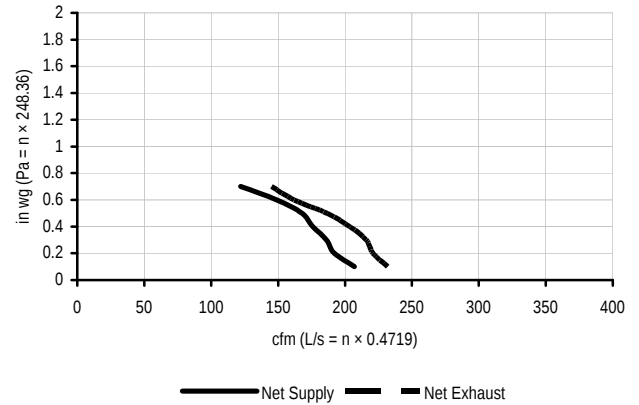
CERTIFIED HEAT AND ENERGY RECOVERY VENTILATORS

Section 3-86

RENEWAIRE LLC

Model Number: EV200 • Options Installed: None
 Electrical Requirements: Volts: 120 Amps: 1.5
 Exhaust Air Transfer Ratio: 0.03 @ 100 Pa /0.4 in. wg 0.03 @ 50 Pa/0.2 in. wg

EXT. STATIC PRESSURE		VENTILATION PERFORMANCE					
		NET SUPPLY AIR FLOW		GROSS AIR FLOW			
		L/s	cfm	SUPPLY		EXHAUST	
Pa	in wg			L/s	cfm	L/s	cfm
25	0.1	97	207	100	213	109	232
50	0.2	90	192	93	199	104	221
75	0.3	88	186	90	192	101	216
100	0.4	83	176	85	181	96	204
125	0.5	79	168	81	173	88	187
150	0.6	70	149	72	154	76	162
175	0.7	57	122	59	126	68	145

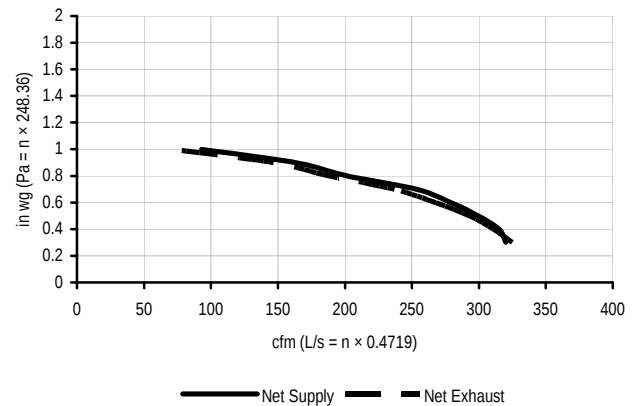


ENERGY PERFORMANCE							
SUPPLY TEMPERATURE		NET AIR FLOW		POWER CONSUMED	SENSIBLE RECOVERY EFFICIENCY	APPARENT SENSIBLE EFFECTIVENESS	LATENT RECOVERY/MOISTURE TRANSFER
°C	°F	L/S	CFM	WATTS			
HEATING	0 +32	85	181	157	78	85	0.62
COOLING	+35 +95	85	180	155		52	
					TOTAL RECOVERY EFFICIENCY		
					52		

RENEWAIRE LLC

Model Number: EV300 • Options Installed: None
 Electrical Requirements: Volts: 120 Amps: 3.3
 Exhaust Air Transfer Ratio: 0.03 @ 100 Pa/0.4 in. wg --- @ 50 Pa/0.2 in. wg

EXT. STATIC PRESSURE		VENTILATION PERFORMANCE					
		NET SUPPLY AIR FLOW		GROSS AIR FLOW			
		L/s	cfm	SUPPLY		EXHAUST	
Pa	in wg			L/s	cfm	L/s	cfm
75	0.3	150	320	155	330	153	325
100	0.4	148	315	153	325	146	311
125	0.5	141	299	145	309	138	293
150	0.6	131	279	135	287	126	268
175	0.7	119	253	123	261	111	237
200	0.8	95	202	98	209	89	189
225	0.9	77	163	79	169	69	147
250	1.0	44	93	45	96	34	72



ENERGY PERFORMANCE							
SUPPLY TEMPERATURE		NET AIR FLOW		POWER CONSUMED	SENSIBLE RECOVERY EFFICIENCY	APPARENT SENSIBLE EFFECTIVENESS	LATENT RECOVERY/MOISTURE TRANSFER
°C	°F	L/S	CFM	WATTS			
HEATING	0 +32	139	295	317	70	78	0.51
COOLING	+35 +95	134	285	311		43	
					TOTAL RECOVERY EFFICIENCY		
					43		

CERTIFIED HEAT AND ENERGY RECOVERY VENTILATORS

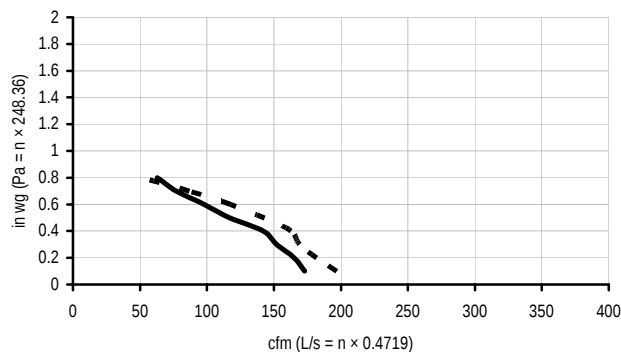
Section 3-87

RHEEM

Model: 84-ERV-100 • Options Installed: None
 Electrical Requirements: Volts: 120 Amps: 1.3
 Exhaust Air Transfer Ratio: --- @ 100 Pa / 0.4 in. wg 0.06 @ 50 Pa/0.2 in. wg
 Low Temp. Vent Reduction Factor: 0 % Supply 0 % Exhaust • Low Temp. Imbalance Factor: 0.79

VENTILATION PERFORMANCE

EXT. STATIC PRESSURE		NET SUPPLY AIR FLOW		GROSS AIR FLOW			
				SUPPLY		EXHAUST	
Pa	in wg	L/s	cfm	L/s	cfm	L/s	cfm
25	0.1	82	173	87	184	93	197
50	0.2	78	165	83	175	86	182
75	0.3	72	152	76	162	80	169
100	0.4	67	142	71	151	77	163
125	0.5	55	117	59	124	67	143
150	0.6	46	98	49	104	56	118
175	0.7	36	77	39	82	41	87
200	0.8	30	63	32	67	24	51



— Net Supply - - - Net Exhaust

ENERGY PERFORMANCE

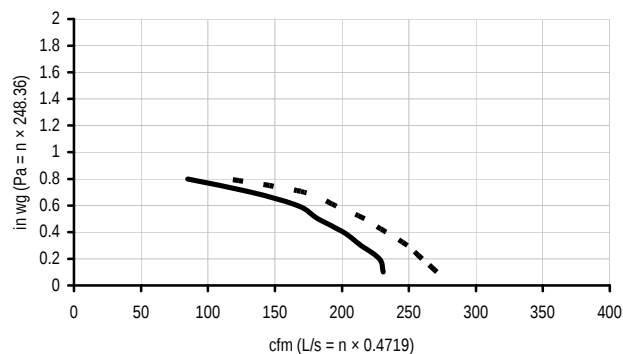
	SUPPLY TEMPERATURE		NET AIR FLOW		POWER CONSUMED WATTS	SENSIBLE RECOVERY EFFICIENCY	APPARENT SENSIBLE EFFECTIVENESS	LATENT RECOVERY/MOISTURE TRANSFER
	°C	°F	L/S	CFM				
HEATING	0	32	29	60	56	71	79	0.52
	0	32	47	100	80	64	73	0.41
	0	32	65	137	126	60	68	0.36
	-15	5	31	65	64	56	81	0.41
COOLING	+35	+95	28	59	52			
							TOTAL RECOVERY EFFICIENCY 45	

RHEEM

Model: 84-ERV-200 • Options Installed: None
 Electrical Requirements: Volts: 120 Amps: 1.9
 Exhaust Air Transfer Ratio: --- @ 100 Pa / 0.4 in. wg 0.06 @ 50 Pa/0.2 in. wg
 Low Temp. Vent Reduction Factor: 0 % Supply 0 % Exhaust • Low Temp. Imbalance Factor: 0.84

VENTILATION PERFORMANCE

EXT. STATIC PRESSURE		NET SUPPLY AIR FLOW		GROSS AIR FLOW			
				SUPPLY		EXHAUST	
Pa	in wg	L/s	cfm	L/s	cfm	L/s	cfm
25	0.1	109	231	116	245	128	271
50	0.2	108	228	114	241	123	260
75	0.3	101	214	107	227	118	249
100	0.4	95	201	101	213	110	233
125	0.5	86	182	91	193	102	217
150	0.6	79	167	84	177	92	195
175	0.7	62	132	66	140	81	172
200	0.8	40	85	42	90	55	116



— Net Supply - - - Net Exhaust

ENERGY PERFORMANCE

	SUPPLY TEMPERATURE		NET AIR FLOW		POWER CONSUMED WATTS	SENSIBLE RECOVERY EFFICIENCY	APPARENT SENSIBLE EFFECTIVENESS	LATENT RECOVERY/MOISTURE TRANSFER
	°C	°F	L/S	CFM				
HEATING	0	+32	52	110	93	69	76	0.45
	0	+32	74	157	130	64	71	0.38
	-15	+32	96	203	193	60	68	0.30
	-25	-5	52	110	122	55	76	0.26
COOLING	+35	+95	50	106	89			
							TOTAL RECOVERY EFFICIENCY 41	

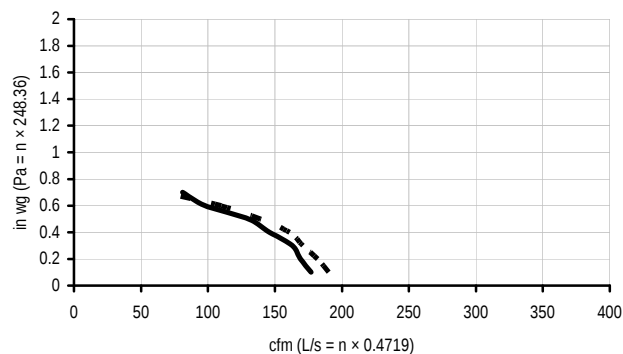
CERTIFIED HEAT AND ENERGY RECOVERY VENTILATORS

Section 3-88

RHEEM

Model: 84-HRV-100 • Options Installed: None
 Electrical Requirements: Volts: 120 Amps: 1.3
 Exhaust Air Transfer Ratio: --- @ 100 Pa/0.4 in. wg 0.05 @ 50 Pa/0.2 in. wg
 Low Temp. Vent Reduction Factor: 9% Supply 22% Exhaust • Low Temp. Imbalance Factor: 1.0

VENTILATION PERFORMANCE							
EXT. STATIC PRESSURE		NET SUPPLY AIR FLOW		GROSS AIR FLOW			
				SUPPLY		EXHAUST	
Pa	in wg	L/s	cfm	L/s	cfm	L/s	cfm
25	0.1	84	177	88	186	90	190
50	0.2	80	169	84	178	86	182
75	0.3	77	163	81	171	81	171
100	0.4	69	146	72	153	76	161
125	0.5	61	130	65	137	66	139
150	0.6	46	98	49	103	52	110
175	0.7	38	81	40	85	32	67



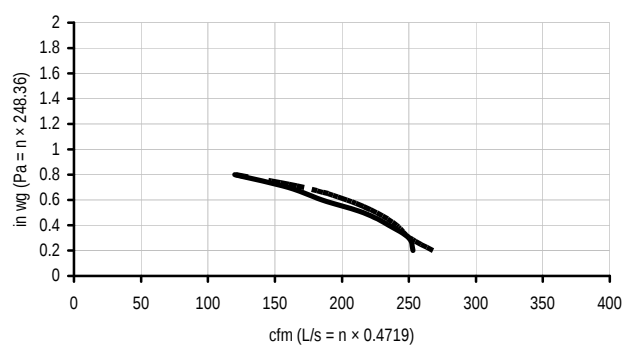
— Net Supply - - - Net Exhaust

ENERGY PERFORMANCE								
	SUPPLY TEMPERATURE		NET AIR FLOW		POWER CONSUMED WATTS	SENSIBLE RECOVERY EFFICIENCY	APPARENT SENSIBLE EFFECTIVENESS	LATENT RECOVERY/MOISTURE TRANSFER
	°C	°F	L/S	CFM				
HEATING	0	+32	30	64	54	75	83	-0.03
	0	+32	46	97	78	67	74	0.01
	0	+32	65	138	124	64	72	-0.02
	-25	-13	26	55	62	67	89	0.05

RHEEM

Model: 84-HRV-200 • Options Installed: Defrost
 Electrical Requirements: Volts: 120 Amps: 1.9
 Exhaust Air Transfer Ratio: --- @ 100 Pa/0.4 in. wg 0.04 @ 50 Pa/0.2 in. wg
 Low Temp. Vent Reduction Factor: 0% Supply 23% Exhaust • Low Temp. Imbalance Factor: 1.0

VENTILATION PERFORMANCE							
EXT. STATIC PRESSURE		NET SUPPLY AIR FLOW		GROSS AIR FLOW			
				SUPPLY		EXHAUST	
Pa	in wg	L/s	cfm	L/s	cfm	L/s	cfm
50	0.2	119	253	125	264	126	268
75	0.3	118	250	124	262	118	251
100	0.4	111	235	116	245	114	241
125	0.5	102	216	106	224	107	226
150	0.6	87	185	91	193	96	204
175	0.7	76	160	79	167	81	172
200	0.8	57	120	59	124	57	121

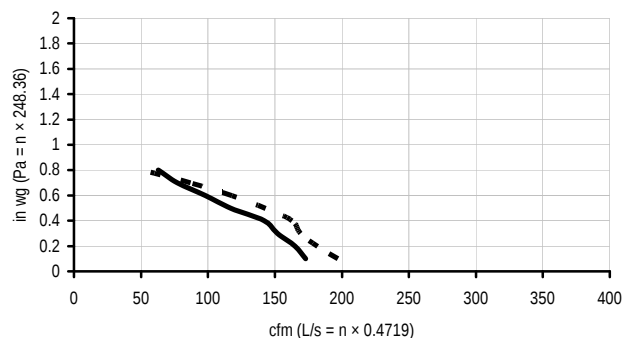


— Net Supply - - - Net Exhaust

ENERGY PERFORMANCE								
	SUPPLY TEMPERATURE		NET AIR FLOW		POWER CONSUMED WATTS	SENSIBLE RECOVERY EFFICIENCY	APPARENT SENSIBLE EFFECTIVENESS	LATENT RECOVERY/MOISTURE TRANSFER
	°C	°F	L/S	CFM				
HEATING	0	+32	51	109	92	70	77	-0.01
	0	+32	73	155	128	65	72	-0.02
	0	+32	102	215	191	62	70	-0.01
	-25	-13	52	110	104	60	94	0.05

Model: 84-ERV-100 • Options Installed: None
Electrical Requirements: Volts: 120 Amps: 1.3
Exhaust Air Transfer Ratio: --- @ 100 Pa / 0.4 in. wg 0.06 @50 Pa/0.2 in. wg
Low Temp. Vent Reduction Factor: 0 % Supply 0 % Exhaust • Low Temp. Imbalance Factor: 0.79

EXT. STATIC PRESSURE		NET SUPPLY AIR FLOW		GROSS AIR FLOW			
				SUPPLY		EXHAUST	
Pa	in wg	L/s	cfm	L/s	cfm	L/s	cfm
25	0.1	82	173	87	184	93	197
50	0.2	78	165	83	175	86	182
75	0.3	72	152	76	162	80	169
100	0.4	67	142	71	151	77	163
125	0.5	55	117	59	124	67	143
150	0.6	46	98	49	104	56	118
175	0.7	36	77	39	82	41	87
200	0.8	30	63	32	67	24	51



———— Net Supply ■ ■ ■ Net Exhaust

SUPPLY TEMPERATURE		NET AIR FLOW		POWER CONSUMED	SENSIBLE RECOVERY EFFICIENCY	APPARENT SENSIBLE EFFECTIVENESS	LATENT RECOVERY/MOISTURE TRANSFER
	°C	°F	L/S	CFM	WATTS		
HEATING	0	32	29	60	56	71	0.52
	0	32	47	100	80	64	0.41
	0	32	65	137	126	60	0.36
	-15	5	31	65	64	56	81
TOTAL RECOVERY EFFICIENCY							0.41
COOLING	+35	+95	28	59	52	45	

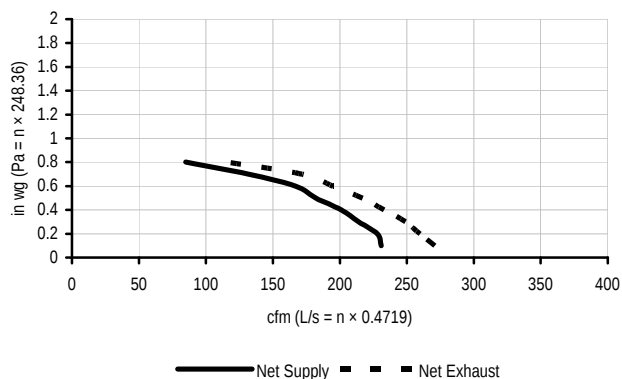
CERTIFIED HEAT AND ENERGY RECOVERY VENTILATORS

Section 3-90

RUUD

Model: 84-ERV-200 • Options Installed: None
 Electrical Requirements: Volts: 120 Amps: 1.9
 Exhaust Air Transfer Ratio: --- @ 100 Pa / 0.4 in. wg 0.06 @ 50 Pa/0.2 in. wg
 Low Temp. Vent Reduction Factor: 0% Supply 0% Exhaust • Low Temp. Imbalance Factor: 0.84

EXT. STATIC PRESSURE		VENTILATION PERFORMANCE					
		NET SUPPLY		GROSS AIR FLOW			
		AIR FLOW		SUPPLY		EXHAUST	
Pa	in wg	L/s	cfm	L/s	cfm	L/s	cfm
25	0.1	109	231	116	245	128	271
50	0.2	108	228	114	241	123	260
75	0.3	101	214	107	227	118	249
100	0.4	95	201	101	213	110	233
125	0.5	86	182	91	193	102	217
150	0.6	79	167	84	177	92	195
175	0.7	62	132	66	140	81	172
200	0.8	40	85	42	90	55	116

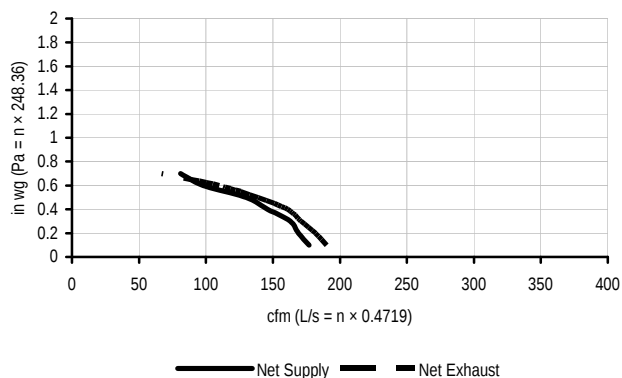


ENERGY PERFORMANCE								
	SUPPLY TEMPERATURE		NET AIR FLOW		POWER CONSUMED WATTS	SENSIBLE RECOVERY EFFICIENCY	APPARENT SENSIBLE EFFECTIVENESS	LATENT RECOVERY/MOISTURE TRANSFER
	°C	°F	L/S	CFM				
HEATING	0	+32	52	110	93	69	76	0.45
	0	+32	74	157	130	64	71	0.38
	0	+32	96	203	193	60	68	0.30
	-15	5	52	110	122	55	76	0.26
TOTAL RECOVERY EFFICIENCY							41	
COOLING	+35	+95	50	106	89			

RUUD

Model: 84-HRV-100 • Options Installed: None
 Electrical Requirements: Volts: 120 Amps: 1.3
 Exhaust Air Transfer Ratio: 0.05 @ 50 Pa/0.2 in. wg --- @ 100 Pa / 0.4 in. wg
 Low Temp. Vent Reduction Factor: 9% Supply 22% Exhaust • Low Temp. Imbalance Factor: 1.0

EXT. STATIC PRESSURE		VENTILATION PERFORMANCE					
		NET SUPPLY		GROSS AIR FLOW			
		AIR FLOW		SUPPLY		EXHAUST	
Pa	in wg	L/s	cfm	L/s	cfm	L/s	cfm
25	0.1	84	177	88	186	90	190
50	0.2	80	169	84	178	86	182
75	0.3	77	163	81	171	81	171
100	0.4	69	146	72	153	76	161
125	0.5	61	130	65	137	66	139
150	0.6	46	98	49	103	52	110
175	0.7	38	81	40	85	32	67



ENERGY PERFORMANCE								
	SUPPLY TEMPERATURE		NET AIR FLOW		POWER CONSUMED WATTS	SENSIBLE RECOVERY EFFICIENCY	APPARENT SENSIBLE EFFECTIVENESS	LATENT RECOVERY/MOISTURE TRANSFER
	°C	°F	L/S	CFM				
HEATING	0	+32	30	64	54	75	83	-0.03
	0	+32	46	97	78	67	74	0.01
	0	+32	65	138	124	64	72	-0.02
	-25	-13	26	55	62	67	89	0.05

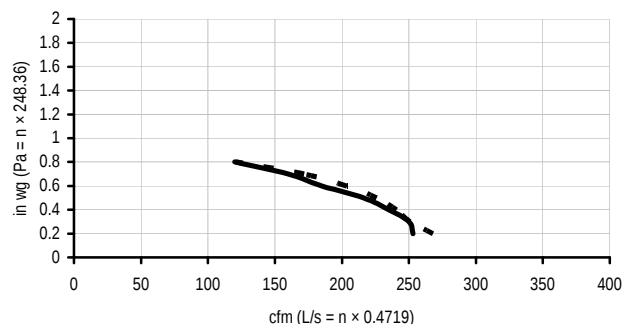
CERTIFIED HEAT AND ENERGY RECOVERY VENTILATORS

Section 3-91

RUUD

Model: 84-HRV-200 • Options Installed: Defrost
 Electrical Requirements: Volts: 120 Amps: 1.9
 Exhaust Air Transfer Ratio: 0.04 @50 Pa/0.2 in. wg --- @ 100 Pa / 0.4 in. wg
 Low Temp. Vent Reduction Factor: 0% Supply 23% Exhaust • Low Temp. Imbalance Factor: 1.0

EXT. STATIC PRESSURE		VENTILATION PERFORMANCE					
		NET SUPPLY		GROSS AIR FLOW			
		AIR FLOW		SUPPLY		EXHAUST	
Pa	in wg	L/s	cfm	L/s	cfm	L/s	cfm
50	0.2	119	253	125	264	126	268
75	0.3	118	250	124	262	118	251
100	0.4	111	235	116	245	114	241
125	0.5	102	216	106	224	107	226
150	0.6	87	185	91	193	96	204
175	0.7	76	160	79	167	81	172
200	0.8	57	120	59	124	57	121



— Net Supply - - - Net Exhaust

ENERGY PERFORMANCE								
	SUPPLY TEMPERATURE		NET AIR FLOW		POWER CONSUMED WATTS	SENSIBLE RECOVERY EFFICIENCY	APPARENT SENSIBLE EFFECTIVENESS	LATENT RECOVERY/MOISTURE TRANSFER
	°C	°F	L/S	CFM				
HEATING	0	+32	51	109	92	70	77	-0.01
	0	+32	73	155	128	65	72	-0.02
	0	+32	102	215	191	62	70	-0.01
	-25	-13	52	110	104	60	94	0.05

SEARS INDOOR CLEAN AIR SERVICES

Model: Sears155 • Options Installed: None
 Electrical Requirements: Volts: 120 Amps: 1.4
 Exhaust Air Transfer Ratio: 0.037 @100 Pa/0.4 in. wg 0.027 @ 50 Pa / 0.2 in. wg
 Low Temp. Vent Reduction Factor: 3.7% Supply 13.8% Exhaust • Low Temp. Imbalance Factor: 1.04

EXT. STATIC PRESSURE		VENTILATION PERFORMANCE					
		NET SUPPLY		GROSS AIR FLOW			
		AIR FLOW		SUPPLY		EXHAUST	
Pa	in wg	L/s	cfm	L/s	cfm	L/s	cfm
25	0.1	68	144	70	149	80	171
50	0.2	63	134	65	139	78	165
75	0.3	59	125	61	129	75	160
100	0.4	53	113	55	117	74	157
125	0.5	43	92	45	95	70	149
150	0.6	34	73	36	76	64	137
175	0.7	28	59	29	61	57	122

ENERGY PERFORMANCE								
	SUPPLY TEMPERATURE		NET AIR FLOW		POWER CONSUMED WATTS	SENSIBLE RECOVERY EFFICIENCY	APPARENT SENSIBLE EFFECTIVENESS	LATENT RECOVERY/MOISTURE TRANSFER
	°C	°F	L/S	CFM				
HEATING	0	+32	30	64	78	64	73	0.00
	0	+32	45	96	104	63	71	0.01
	0	+32	55	117	119	61	69	0.01
	-25	-13	35	74	96	66	78	0.00
COOLING	+35	+95	29	62	77	TOTAL RECOVERY EFFICIENCY		17

CERTIFIED HEAT AND ENERGY RECOVERY VENTILATORS

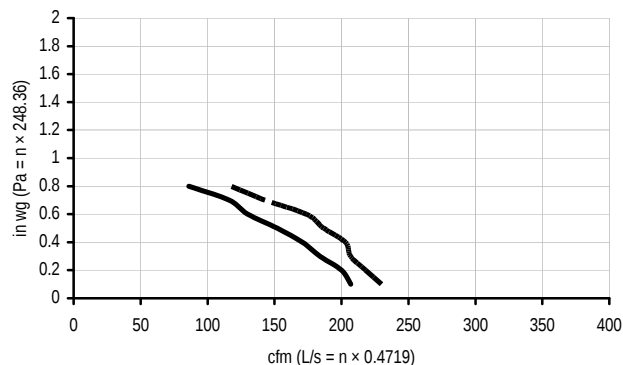
Section 3-92

SEARS INDOOR CLEAN AIR SERVICES

Model: Sears200 • Options Installed: None
 Electrical Requirements: Volts: 120 Amps: 1.4
 Exhaust Air Transfer Ratio: 0.04 @100 Pa/0.4 in. wg 0.03 @ 50 Pa / 0.2 in. wg
 Low Temp. Vent Reduction Factor: 2% Supply 11% Exhaust • Low Temp. Imbalance Factor: 1.03

VENTILATION PERFORMANCE

EXT. STATIC PRESSURE		NET SUPPLY AIR FLOW		GROSS AIR FLOW			
				SUPPLY		EXHAUST	
Pa	in wg	L/s	cfm	L/s	cfm	L/s	cfm
25	0.1	97	207	100	214	108	230
50	0.2	94	200	97	206	103	218
75	0.3	87	184	90	191	97	207
100	0.4	80	171	84	179	96	203
125	0.5	71	152	76	161	88	187
150	0.6	61	130	66	140	82	174
175	0.7	55	116	60	129	67	143
200	0.8	40	86	46	98	56	118



— Net Supply - - - Net Exhaust

ENERGY PERFORMANCE

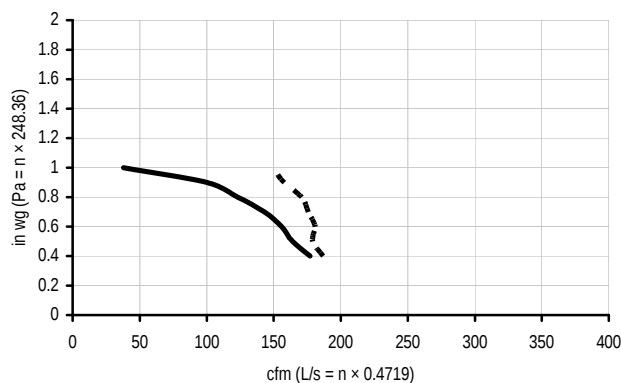
SUPPLY TEMPERATURE		NET AIR FLOW		POWER CONSUMED	SENSIBLE RECOVERY EFFICIENCY	APPARENT SENSIBLE EFFECTIVENESS	LATENT RECOVERY/MOISTURE TRANSFER
		°C	°F	L/S	CFM	WATTS	
HEATING	0	+32	31	66	81	81	0.06
	0	+32	45	96	99	63	0.03
	0	+32	55	117	113	61	0.03
	-25	-13	51	109	119	62	0.01

STANDEX AIR DISTRIBUTION PRODUCTS

Model: ERV150SC • Options Installed: None
 Electrical Requirements: Volts: 120 Amps: 1.4
 Exhaust Air Transfer Ratio: 0.01 @100 Pa/0.4 in. wg 0.01 @ 50 Pa / 0.2 in. wg
 Low Temp. Vent Reduction Factor: 2% Supply 0% Exhaust • Low Temp. Imbalance Factor: n/a

VENTILATION PERFORMANCE

EXT. STATIC PRESSURE		NET SUPPLY AIR FLOW		GROSS AIR FLOW			
				SUPPLY		EXHAUST	
Pa	in wg	L/s	cfm	L/s	cfm	L/s	cfm
25	0.1	83	177	83	177	88	187
50	0.2	77	164	77	164	84	179
75	0.3	73	156	73	156	85	181
100	0.4	67	143	67	143	83	176
125	0.5	58	123	58	123	81	171
150	0.6	47	100	47	100	74	158
175	0.7	18	38	18	38	70	149



— Net Supply - - - Net Exhaust

ENERGY PERFORMANCE

SUPPLY TEMPERATURE		NET AIR FLOW		POWER CONSUMED	SENSIBLE RECOVERY EFFICIENCY	APPARENT SENSIBLE EFFECTIVENESS	LATENT RECOVERY/MOISTURE TRANSFER
		°C	°F	L/S	CFM	WATTS	
HEATING	0	32	32	67	78	66	-0.01
	0	32	44	94	95	64	-0.20
	0	32	56	118	110	60	-0.02
	-25	-13	32	68	82	60	0.08
						TOTAL RECOVERY EFFICIENCY	
						20	
COOLING		35	95	31	66	74	

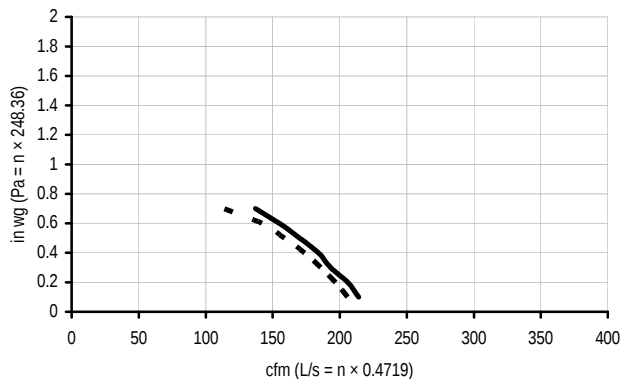
CERTIFIED HEAT AND ENERGY RECOVERY VENTILATORS

Section 3-93

STANDEX AIR DISTRIBUTION PRODUCTS

Model: ERV200SC • Options Installed: None
 Electrical Requirements: Volts: 120 Amps: 1.4
 Exhaust Air Transfer Ratio: 0.01 @100 Pa/0.4 in. wg 0.01 @ 50 Pa / 0.2 in. wg
 Low Temp. Vent Reduction Factor: 1% Supply 2% Exhaust • Low Temp. Imbalance Factor: 0.967

EXT. STATIC PRESSURE		VENTILATION PERFORMANCE					
		NET SUPPLY		GROSS AIR FLOW			
		AIR FLOW		SUPPLY		EXHAUST	
Pa	in wg	L/s	cfm	L/s	cfm	L/s	cfm
25	0.1	101	214	102	216	97	206
50	0.2	97	206	98	208	93	197
75	0.3	91	193	93	197	88	186
100	0.4	87	184	88	186	82	174
125	0.5	80	170	81	172	75	159
150	0.6	73	155	74	157	67	142
175	0.7	65	137	65	138	54	114



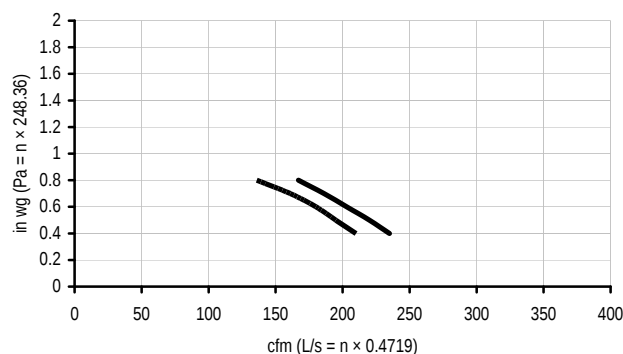
— Net Supply - - - Net Exhaust

ENERGY PERFORMANCE								
	SUPPLY TEMPERATURE		NET AIR FLOW		POWER CONSUMED WATTS	SENSIBLE RECOVERY EFFICIENCY	APPARENT SENSIBLE EFFECTIVENESS	LATENT RECOVERY/MOISTURE TRANSFER
	°C	°F	L/S	CFM				
HEATING	0	+32	68	144	114	59	66	0
	0	+32	63	133	109	58	66	0
	0	+32	56	119	100	60	67	0
	-25	-13	60	127	100	59	69	0
	-25	-13	55	117		60		

STANDEX AIR DISTRIBUTION PRODUCTS

Model: ERV300DC • Options Installed: None
 Electrical Requirements: Volts: 120 Amps: 2.9
 Exhaust Air Transfer Ratio: 0.02 @100 Pa/0.4 in. wg 0.02 @ 50 Pa / 0.2 in. wg
 Low Temp. Vent Reduction Factor: 6% Supply 0% Exhaust • Low Temp. Imbalance Factor: 0.04

EXT. STATIC PRESSURE		VENTILATION PERFORMANCE					
		NET SUPPLY		GROSS AIR FLOW			
		AIR FLOW		SUPPLY		EXHAUST	
Pa	in wg	L/s	cfm	L/s	cfm	L/s	cfm
100	0.4	111	235	113	239	99	210
125	0.5	104	220	106	225	92	195
150	0.6	96	203	98	208	85	180
175	0.7	88	186	90	191	76	161
200	0.8	79	167	80	170	64	136



— Net Supply - - - Net Exhaust

ENERGY PERFORMANCE								
	SUPPLY TEMPERATURE		NET AIR FLOW		POWER CONSUMED WATTS	SENSIBLE RECOVERY EFFICIENCY	APPARENT SENSIBLE EFFECTIVENESS	LATENT RECOVERY/MOISTURE TRANSFER
	°C	°F	L/S	CFM				
HEATING	0	+32	98	208	234	75	84	---
	0	+32	78	165	178	77	87	---
	0	+32	56	119	150	79	90	---
	-25	-13	59	125	156	75	87	---
	-25	-13	55	117	---	75		
COOLING	+35	+95	57	121	150			
						TOTAL RECOVERY EFFICIENCY		
						33		

CERTIFIED HEAT AND ENERGY RECOVERY VENTILATORS

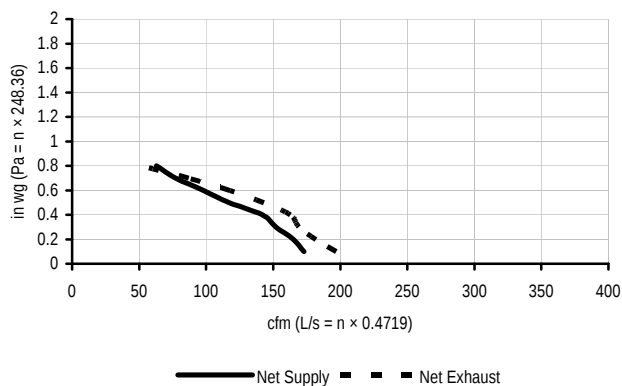
Section 3-94

TAPPAN

Model: ERV-150 • Options Installed: Defrost
 Electrical Requirements: Volts: 120 Amps: 1.3
 Exhaust Air Transfer Ratio: --- @100 Pa/0.4 in. wg 0.06 @ 50 Pa / 0.2 in. wg
 Low Temp. Vent Reduction Factor: 0% Supply 0% Exhaust • Low Temp. Imbalance Factor: 0.79

VENTILATION PERFORMANCE

EXT. STATIC PRESSURE		NET SUPPLY AIR FLOW		GROSS AIR FLOW			
				SUPPLY		EXHAUST	
Pa	in wg	L/s	cfm	L/s	cfm	L/s	cfm
25	0.1	82	173	87	184	93	197
50	0.2	78	165	83	175	86	182
75	0.3	72	152	76	162	80	169
100	0.4	67	142	71	151	77	163
125	0.5	55	117	59	124	67	143
150	0.6	46	98	49	104	56	118
175	0.7	36	77	39	82	41	87
200	0.8	30	63	32	67	24	51



ENERGY PERFORMANCE

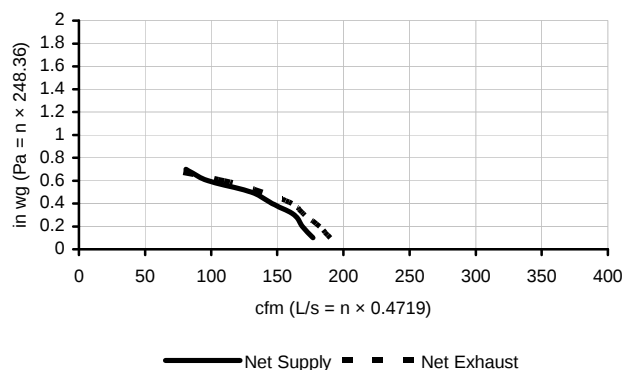
	SUPPLY TEMPERATURE		NET AIR FLOW		POWER CONSUMED WATTS	SENSIBLE RECOVERY EFFICIENCY	APPARENT SENSIBLE EFFECTIVENESS	LATENT RECOVERY/MOISTURE TRANSFER
	°C	°F	L/S	CFM				
HEATING	0	+32	29	60	56	71	79	0.52
	0	+32	47	100	80	64	73	0.41
	0	+32	65	137	126	60	68	0.36
	-15	5	31	65	64	56	81	0.41
COOLING	+35	+95	28	59	52		TOTAL RECOVERY EFFICIENCY	
							45	

TAPPAN

Model: HRV-150 • Options Installed: Defrost
 Electrical Requirements: Volts: 120 Amps: 1.3
 Exhaust Air Transfer Ratio: --- @100 Pa/0.4 in. wg 0.05 @ 50 Pa / 0.2 in. wg
 Low Temp. Vent Reduction Factor: 9% Supply 22%Exhaust • Low Temp. Imbalance Factor: 1.0

VENTILATION PERFORMANCE

EXT. STATIC PRESSURE		NET SUPPLY AIR FLOW		GROSS AIR FLOW			
				SUPPLY		EXHAUST	
Pa	in wg	L/s	cfm	L/s	cfm	L/s	cfm
25	0.1	84	177	88	186	90	190
50	0.2	80	169	84	178	86	182
75	0.3	77	163	81	171	81	171
100	0.4	69	146	72	153	76	161
125	0.5	61	130	65	137	66	139
150	0.6	46	98	49	103	52	110
175	0.7	38	81	40	85	32	67



ENERGY PERFORMANCE

	SUPPLY TEMPERATURE		NET AIR FLOW		POWER CONSUMED WATTS	SENSIBLE RECOVERY EFFICIENCY	APPARENT SENSIBLE EFFECTIVENESS	LATENT RECOVERY/MOISTURE TRANSFER
	°C	°F	L/S	CFM				
HEATING	0	+32	30	64	54	75	83	-0.03
	0	+32	46	97	78	67	74	0.01
	0	+32	65	138	124	64	72	-0.02
	-25	-13	26	55	62	67	89	0.05

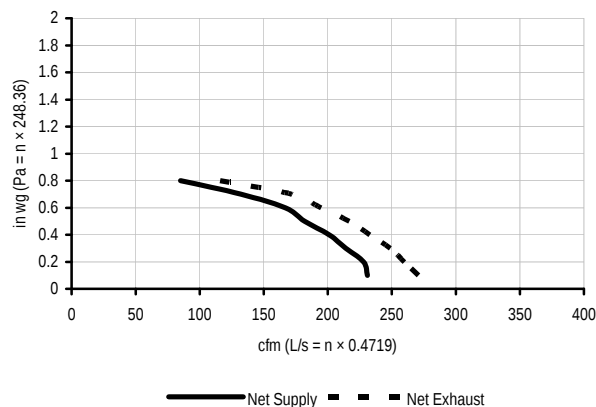
CERTIFIED HEAT AND ENERGY RECOVERY VENTILATORS

Section 3-95

TAPPAN

Model: ERV-210 • Options Installed: Defrost
 Electrical Requirements: Volts: 120 Amps: 1.9
 Exhaust Air Transfer Ratio: --- @100 Pa/0.4 in. wg 0.06 @ 50 Pa / 0.2 in. wg
 Low Temp. Vent Reduction Factor: 0% Supply 0% Exhaust • Low Temp. Imbalance Factor: 0.84

EXT. STATIC PRESSURE		NET SUPPLY AIR FLOW		GROSS AIR FLOW			
				SUPPLY		EXHAUST	
Pa	in wg	L/s	cfm	L/s	cfm	L/s	cfm
25	0.1	109	231	116	245	128	271
50	0.2	108	228	114	241	123	260
75	0.3	101	214	107	227	118	249
100	0.4	95	201	101	213	110	233
125	0.5	86	182	91	193	102	217
150	0.6	79	167	84	177	92	195
175	0.7	62	132	66	140	81	172
200	0.8	40	85	42	90	55	116

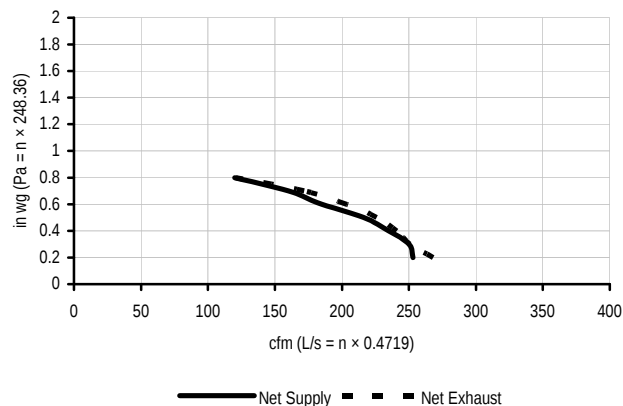


ENERGY PERFORMANCE								
	SUPPLY TEMPERATURE		NET AIR FLOW		POWER CONSUMED WATTS	SENSIBLE RECOVERY EFFICIENCY	APPARENT SENSIBLE EFFECTIVENESS	LATENT RECOVERY/MOISTURE TRANSFER
	°C	°F	L/S	CFM				
HEATING	0	+32	52	110	93	69	76	0.45
	0	+32	74	157	130	64	71	0.38
	0	+32	96	203	193	60	68	0.30
	-15	5	52	110	122	55	76	0.26
COOLING	+35	+95	50	106	89			
							TOTAL RECOVERY EFFICIENCY 41	

TAPPAN

Model: HRV-210 • Options Installed: Defrost
 Electrical Requirements: Volts: 120 Amps: 1.9
 Exhaust Air Transfer Ratio: --- @100 Pa/0.4 in. wg 0.04 @ 50 Pa / 0.2 in. wg
 Low Temp. Vent Reduction Factor: 0% Supply 23% Exhaust • Low Temp. Imbalance Factor: 1.0

EXT. STATIC PRESSURE		NET SUPPLY AIR FLOW		GROSS AIR FLOW			
				SUPPLY		EXHAUST	
Pa	in wg	L/s	cfm	L/s	cfm	L/s	cfm
50	0.2	119	253	125	264	126	268
75	0.3	118	250	124	262	118	251
100	0.4	111	235	116	245	114	241
125	0.5	102	216	106	224	107	226
150	0.6	87	185	91	193	96	204
175	0.7	76	160	79	167	81	172
200	0.8	57	120	59	124	57	121



ENERGY PERFORMANCE								
	SUPPLY TEMPERATURE		NET AIR FLOW		POWER CONSUMED WATTS	SENSIBLE RECOVERY EFFICIENCY	APPARENT SENSIBLE EFFECTIVENESS	LATENT RECOVERY/MOISTURE TRANSFER
	°C	°F	L/S	CFM				
HEATING	0	+32	51	109	92	70	77	-0.01
	0	+32	73	155	128	65	72	-0.02
	0	+32	102	215	191	62	70	-0.01
	-25	-13	52	110	104	60	94	0.05

CERTIFIED HEAT AND ENERGY RECOVERY VENTILATORS

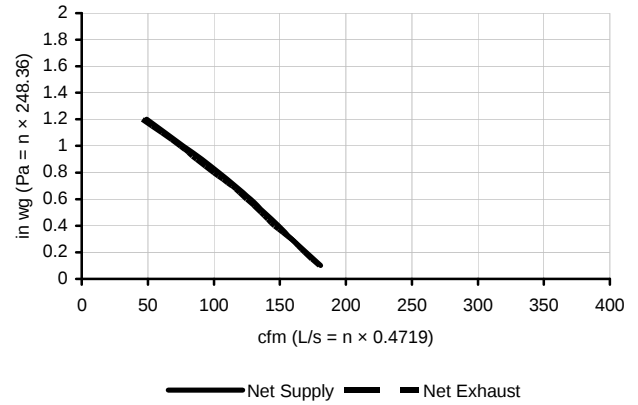
Section 3-96

TOTALINE (TOTALINE)

Model: P707-SHR1504 • Options Installed: None
 Electrical Requirements: Volts: 120 Amps: 1.3
 Exhaust Air Transfer Ratio: 0.03 @ 100 Pa/0.4 in. wg 0.02 @ 50 Pa / 0.2 in. wg
 Low Temp. Vent Reduction Factor: 5% Supply 0% Exhaust • Low Temp. Imbalance Factor: 0.82

VENTILATION PERFORMANCE

EXT. STATIC PRESSURE		NET SUPPLY AIR FLOW		GROSS AIR FLOW			
Pa		L/s		SUPPLY		EXHAUST	
in wg		L/s		cfm		L/s	
25	0.1	85	181	87	184	84	180
50	0.2	80	170	82	174	79	169
75	0.3	75	159	76	162	75	159
100	0.4	70	149	71	151	68	146
125	0.5	65	138	66	141	64	136
150	0.6	60	128	61	130	59	125
175	0.7	55	116	56	119	54	114
200	0.8	49	104	50	106	47	100
225	0.9	43	91	43	92	41	87
250	1.0	36	77	37	79	35	75
275	1.1	30	63	30	64	29	61
300	1.2	23	49	24	50	22	46

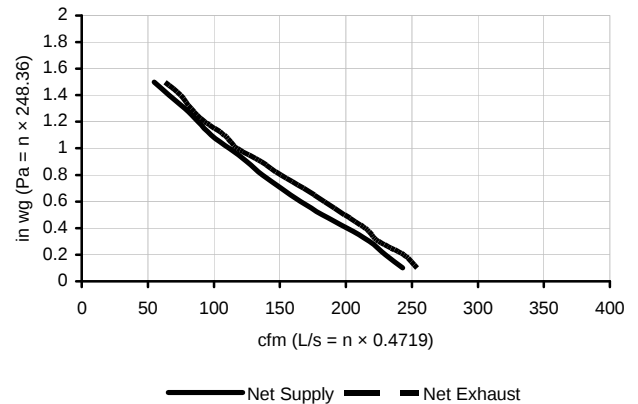


		SUPPLY TEMPERATURE		NET AIR FLOW		POWER CONSUMED		SENSIBLE RECOVERY EFFICIENCY		APPARENT SENSIBLE EFFECTIVENESS		LATENT RECOVERY/MOISTURE TRANSFER	
		°C	°F	L/S	CFM	WATTS							
HEATING	0	+32	31	67	72	60	73	-0.11					
	0	+32	51	109	98	59	70	0.00					
	0	+32	76	161	144	55	63	0.00					
	-25	-13	32	68	73	56	77	-0.02					

TOTALINE (TOTALINE)

Model: P707-SHR2004 • Options Installed: None
 Electrical Requirements: Volts: 120 Amps: 2.1
 Exhaust Air Transfer Ratio: 0.02 @100 Pa/0.4 in. wg 0.01 @ 50 Pa / 0.2 in. wg
 Low Temp. Vent Reduction Factor: 8% Supply 0% Exhaust • Low Temp. Imbalance Factor: 0.81

EXT. STATIC PRESSURE		NET SUPPLY AIR FLOW		GROSS AIR FLOW			
Pa		L/s		SUPPLY		EXHAUST	
in wg		L/s		cfm		L/s	
25	0.1	114	243	116	246	120	254
50	0.2	109	230	110	233	115	244
75	0.3	103	218	104	221	106	225
100	0.4	95	201	96	204	101	215
125	0.5	86	182	87	185	94	199
150	0.6	78	166	79	168	87	184
175	0.7	71	151	72	154	79	168
200	0.8	65	137	66	139	71	151
225	0.9	59	125	60	127	64	136
250	1.0	53	112	53	113	56	118
275	1.1	46	98	47	99	51	108
300	1.2	42	88	42	90	44	93
325	1.3	37	78	37	79	39	83
350	1.4	31	66	32	67	35	75
375	1.5	26	55	26	56	30	63



		SUPPLY TEMPERATURE		NET AIR FLOW		POWER CONSUMED		SENSIBLE RECOVERY EFFICIENCY		APPARENT SENSIBLE EFFECTIVENESS		LATENT RECOVERY/MOISTURE TRANSFER	
		°C	°F	L/S	CFM	WATTS							
HEATING	0	+32	31	65	108	62	77	0.06					
	0	+32	55	117	154	62	74	0.07					
	0	+32	90	191	246	60	71	0.00					
	-25	-13	61	129	154	59	79	0.00					

CERTIFIED HEAT AND ENERGY RECOVERY VENTILATORS

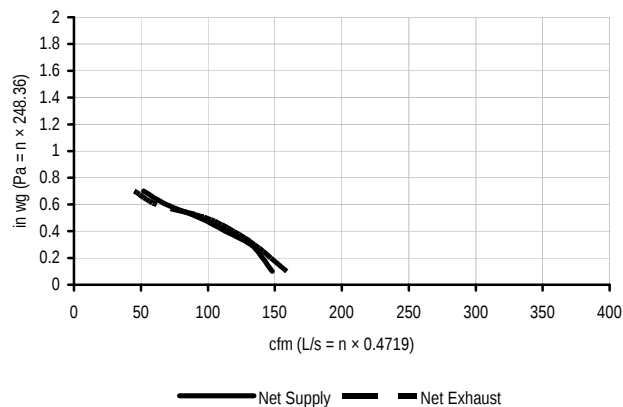
Section 3-97

TRANE

Model Number: TERVR100A9P00A • Options Installed: None
 Electrical Requirements: Volts: 120 Amps: 1.3
 Exhaust Air Transfer Ratio: 0.02 @ 100 Pa/0.4 in. wg 0.02 @ 50 Pa/0.2 in. wg

VENTILATION PERFORMANCE

EXT. STATIC PRESSURE		NET SUPPLY AIR FLOW		GROSS AIR FLOW			
				SUPPLY		EXHAUST	
Pa	in wg	L/s	cfm	L/s	cfm	L/s	cfm
25	0.1	70	148	71	151	75	159
50	0.2	66	141	67	143	69	147
75	0.3	62	132	63	134	64	135
100	0.4	53	113	54	115	56	119
125	0.5	44	94	45	96	47	99
150	0.6	32	69	33	70	29	62
175	0.7	24	52	25	53	21	45



ENERGY PERFORMANCE

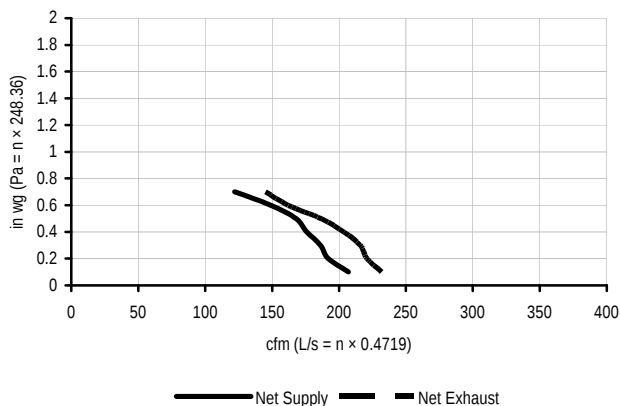
	SUPPLY TEMPERATURE		NET AIR FLOW		POWER CONSUMED	SENSIBLE RECOVERY EFFICIENCY	APPARENT SENSIBLE EFFECTIVENESS	LATENT RECOVERY/MOISTURE TRANSFER
	°C	°F	L/S	CFM	WATTS			
HEATING	0	+32	58	124	121	72	80	0.55
COOLING	+35	+95	59	126	121		TOTAL RECOVERY EFFICIENCY 46	

TRANE

Model Number: TERVR200A9P00A • Options Installed: None
 Electrical Requirements: Volts: 120 Amps: 1.5
 Exhaust Air Transfer Ratio: 0.03 @ 100 Pa /0.4 in. wg 0.03 @ 50 Pa/0.2 in. wg

VENTILATION PERFORMANCE

EXT. STATIC PRESSURE		NET SUPPLY AIR FLOW		GROSS AIR FLOW			
				SUPPLY		EXHAUST	
Pa	in wg	L/s	cfm	L/s	cfm	L/s	cfm
25	0.1	97	207	100	213	109	232
50	0.2	90	192	93	199	104	221
75	0.3	88	186	90	192	101	216
100	0.4	83	176	85	181	96	204
125	0.5	79	168	81	173	88	187
150	0.6	70	149	72	154	76	162
175	0.7	57	122	59	126	68	145



ENERGY PERFORMANCE

	SUPPLY TEMPERATURE		NET AIR FLOW		POWER CONSUMED	SENSIBLE RECOVERY EFFICIENCY	APPARENT SENSIBLE EFFECTIVENESS	LATENT RECOVERY/MOISTURE TRANSFER
	°C	°F	L/S	CFM	WATTS			
HEATING	0	+32	85	181	157	78	85	0.62
COOLING	+35	+95	85	180	155		TOTAL RECOVERY EFFICIENCY 52	

CERTIFIED HEAT AND ENERGY RECOVERY VENTILATORS

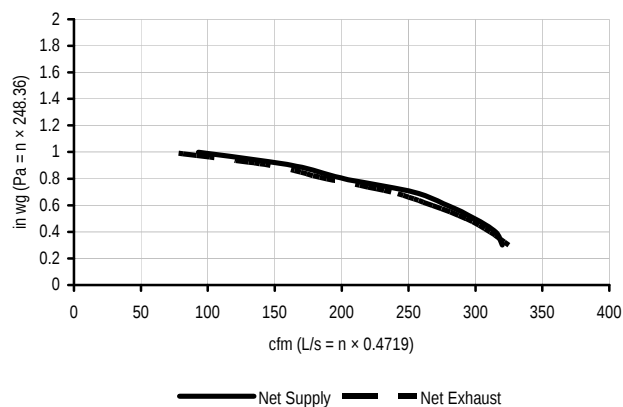
Section 3-98

TRANE

Model Number: TERVR300A9P00A • Options Installed: None
 Electrical Requirements: Volts: 120 Amps: 3.3
 Exhaust Air Transfer Ratio: 0.03 @ 100 Pa/0.4 in. wg --- @ 50 Pa/0.2 in. wg

VENTILATION PERFORMANCE

EXT. STATIC PRESSURE		NET SUPPLY AIR FLOW		GROSS AIR FLOW			
				SUPPLY		EXHAUST	
Pa	in wg	L/s	cfm	L/s	cfm	L/s	cfm
75	0.3	150	320	155	330	153	325
100	0.4	148	315	153	325	146	311
125	0.5	141	299	145	309	138	293
150	0.6	131	279	135	287	126	268
175	0.7	119	253	123	261	111	237
200	0.8	95	202	98	209	89	189
225	0.9	77	163	79	169	69	147
250	1.0	44	93	45	96	34	72



ENERGY PERFORMANCE

	SUPPLY TEMPERATURE		NET AIR FLOW		POWER CONSUMED WATTS	SENSIBLE RECOVERY EFFICIENCY	APPARENT SENSIBLE EFFECTIVENESS	LATENT RECOVERY/MOISTURE TRANSFER
	°C	°F	L/S	CFM				
HEATING	0	+32	139	295	317	70	78	0.51
COOLING	+35	+95	134	285	311	TOTAL RECOVERY EFFICIENCY 43		

CERTIFIED HEAT AND ENERGY RECOVERY VENTILATORS

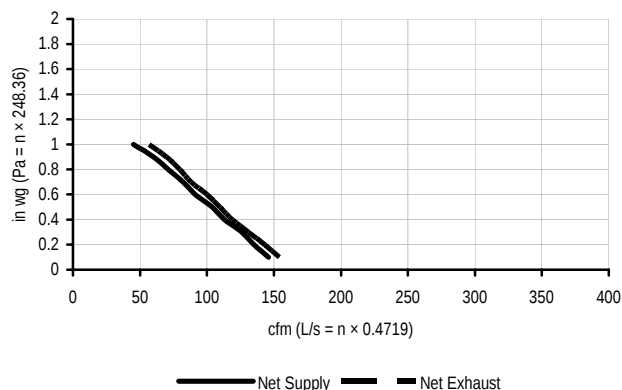
Section 3-99

TRENT METALS, LTD.

Model: Summeraire SERV110 • Options Installed: None
 Electrical Requirements: Volts: 120 Amps: 1.1
 Exhaust Air Transfer Ratio: 0.04 @100 Pa/0.4 in. wg 0.04 @ 50 Pa / 0.2 in. wg

VENTILATION PERFORMANCE

EXT. STATIC PRESSURE		NET SUPPLY AIR FLOW		GROSS AIR FLOW			
				SUPPLY		EXHAUST	
Pa	in wg	L/s	cfm	L/s	cfm	L/s	cfm
25	0.1	69	146	72	152	73	154
50	0.2	63	135	66	140	67	143
75	0.3	59	126	61	131	62	131
100	0.4	53	113	55	117	56	119
125	0.5	49	104	51	108	52	110
150	0.6	43	91	44	94	47	100
175	0.7	39	82	40	85	42	88
200	0.8	33	71	35	74	38	80
225	0.9	28	60	29	62	33	70
250	1.0	21	45	22	46	27	57



ENERGY PERFORMANCE

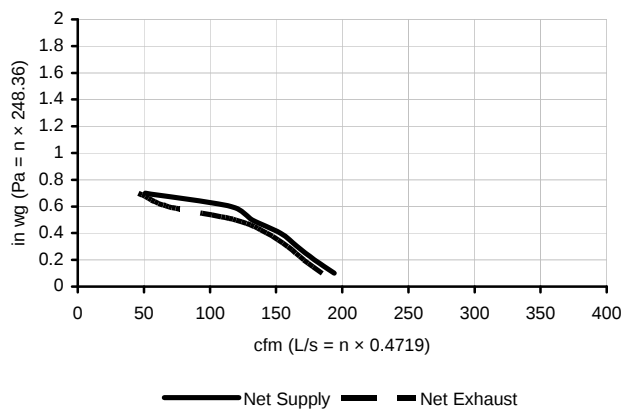
	SUPPLY TEMPERATURE		NET AIR FLOW		POWER CONSUMED WATTS	SENSIBLE RECOVERY EFFICIENCY	APPARENT SENSIBLE EFFECTIVENESS	LATENT RECOVERY/MOISTURE TRANSFER
	°C	°F	L/S	CFM				
HEATING	0	+32	31	65	68	68	80	0.48
	0	+32	45	97	92	66	76	0.40
	0	+32	56	119	114	63	73	0.35
TOTAL RECOVERY EFFICIENCY							45	
COOLING	+35	+95	31	66	70			

TRENT METALS, LTD.

Model: Summeraire SERV130 • Options Installed: None
 Electrical Requirements: Volts: 120 Amps: 1.3
 Exhaust Air Transfer Ratio: --- @ 100 Pa/0.4 in. wg 0.05 @ 50 Pa / 0.2 in. wg

VENTILATION PERFORMANCE

EXT. STATIC PRESSURE		NET SUPPLY AIR FLOW		GROSS AIR FLOW			
				SUPPLY		EXHAUST	
Pa	in wg	L/s	cfm	L/s	cfm	L/s	cfm
25	0.1	91	194	96	204	87	185
50	0.2	84	179	88	188	81	171
75	0.3	78	166	82	175	75	159
100	0.4	72	153	76	161	67	143
125	0.5	62	132	65	139	57	120
150	0.6	54	116	57	122	33	69
175	0.7	24	51	25	54	22	46



ENERGY PERFORMANCE

	SUPPLY TEMPERATURE		NET AIR FLOW		POWER CONSUMED WATTS	SENSIBLE RECOVERY EFFICIENCY	APPARENT SENSIBLE EFFECTIVENESS	LATENT RECOVERY/MOISTURE TRANSFER
	°C	°F	L/S	CFM				
HEATING	0	+32	30	65	60	68	77	0.44
	0	+32	46	97	79	65	73	0.37
	0	+32	60	128	92	63	70	0.39
TOTAL RECOVERY EFFICIENCY								
COOLING	+35	+95	30	64	57		33	
	+35	+95	45	95	75		29	
	+35	+95	60	128	93		28	

CERTIFIED HEAT AND ENERGY RECOVERY VENTILATORS

Section 3-100

TRENT METALS, LTD.

Model: Summaire SHR115RD • Options Installed: None

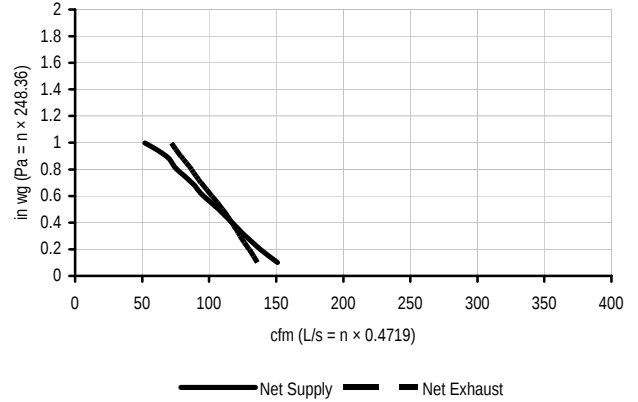
Electrical Requirements: Volts: 120 Amps: 1.2

Exhaust Air Transfer Ratio: 0.05 @100 Pa/0.4 in. wg 0.03 @ 50 Pa / 0.2 in. wg

Low Temp. Vent Reduction Factor: 17.8% Supply 13.8% Exhaust • Low Temp. Imbalance Factor: 0.86

VENTILATION PERFORMANCE

EXT. STATIC PRESSURE		NET SUPPLY AIR FLOW		GROSS AIR FLOW			
				SUPPLY		EXHAUST	
Pa	in wg	L/s	cfm	L/s	cfm	L/s	cfm
25	0.1	71	151	74	157	64	136
50	0.2	65	138	68	144	61	130
75	0.3	60	127	62	133	58	123
100	0.4	55	117	57	122	55	117
125	0.5	50	107	52	111	52	110
150	0.6	45	96	47	100	48	102
175	0.7	41	87	43	90	44	94
200	0.8	36	76	37	79	41	87
225	0.9	32	68	33	70	37	79
250	1.0	24	52	26	54	34	72



ENERGY PERFORMANCE

	SUPPLY TEMPERATURE		NET AIR FLOW		POWER CONSUMED WATTS	SENSIBLE RECOVERY EFFICIENCY	APPARENT SENSIBLE EFFECTIVENESS	LATENT RECOVERY/MOISTURE TRANSFER
	°C	°F	L/S	CFM				
HEATING	0	+32	30	63	80	68	82	0.01
	0	+32	46	98	118	63	74	0.02
	0	+32	55	118	136	61	71	0.02
	-25	-13	32	69	102	59	82	0.04

TRENT METALS, LTD.

Model: Summaire SHR120ED • Options Installed: None

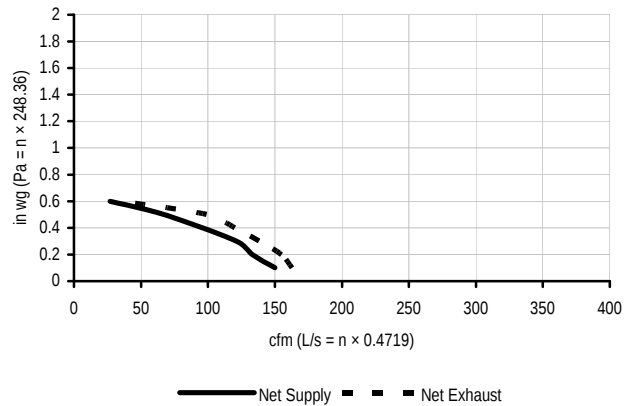
Electrical Requirements: Volts: 120 Amps: 2

Exhaust Air Transfer Ratio: 0.03 @100 Pa/0.4 in. wg 0.03 @ 50 Pa / 0.2 in. wg

Low Temp. Vent Reduction Factor: 18% Supply 11% Exhaust • Low Temp. Imbalance Factor: 0.92

VENTILATION PERFORMANCE

EXT. STATIC PRESSURE		NET SUPPLY AIR FLOW		GROSS AIR FLOW			
				SUPPLY		EXHAUST	
Pa	in wg	L/s	cfm	L/s	cfm	L/s	cfm
25	0.1	70	150	73	155	77	163
50	0.2	62	133	67	142	73	155
75	0.3	57	121	60	129	65	138
100	0.4	49	105*	52	111	57	120
125	0.5	31	67	33	71	47	99
150	0.6	12	27	13	29	16	35



ENERGY PERFORMANCE

	SUPPLY TEMPERATURE		NET AIR FLOW		POWER CONSUMED WATTS	SENSIBLE RECOVERY EFFICIENCY	APPARENT SENSIBLE EFFECTIVENESS	LATENT RECOVERY/MOISTURE TRANSFER
	°C	°F	L/S	CFM				
HEATING	0	+32	55	117	100	54	63	0.02
	0	+32	43	91	76	57	66	0.08
	0	+32	31	66	65	62	74	0.08
	-25	-13	30	64	69	56	73	0.01
						TOTAL RECOVERY EFFICIENCY		
COOLING	+35	+95	45	95	94	11		

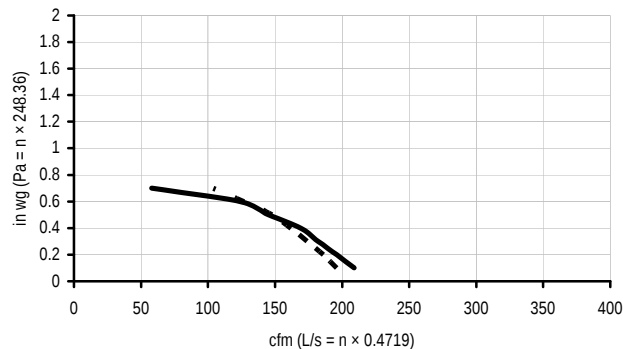
CERTIFIED HEAT AND ENERGY RECOVERY VENTILATORS

Section 3-101

TRENT METALS, LTD.

Model: Summeraire SHR130RD • Options Installed: None
 Electrical Requirements: Volts: 120 Amps: 1.3
 Exhaust Air Transfer Ratio: 0.02 @ 100 Pa/0.4 in. wg 0.02 @ 50 Pa / 0.2 in. wg
 Low Temp. Vent Reduction Factor: 20.2% Supply 20.6% Exhaust • Low Temp. Imbalance Factor: 0.93

EXT. STATIC PRESSURE		VENTILATION PERFORMANCE					
		NET SUPPLY		GROSS AIR FLOW			
		AIR FLOW		SUPPLY		EXHAUST	
Pa	in wg	L/s	cfm	L/s	cfm	L/s	cfm
25	0.1	98	209	100	213	92	196
50	0.2	92	196	94	199	87	186
75	0.3	86	182	87	186	82	174
100	0.4	79	169	81	172	76	162
125	0.5	68	145	70	148	70	148
150	0.6	58	124	59	126	60	127
175	0.7	27	58	28	59	49	104



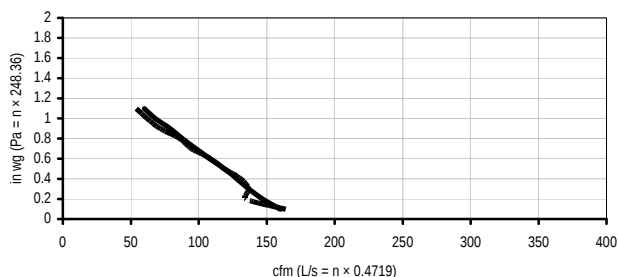
— Net Supply - - - Net Exhaust

ENERGY PERFORMANCE								
	SUPPLY TEMPERATURE		NET AIR FLOW		POWER CONSUMED WATTS	SENSIBLE RECOVERY EFFICIENCY	APPARENT SENSIBLE EFFECTIVENESS	LATENT RECOVERY/MOISTURE TRANSFER
	°C	°F	L/S	CFM				
HEATING	0	+32	30	64	83	71	82	0.01
	0	+32	46	97	104	67	77	0.00
	0	+32	61	129	117	66	73	0.00
	-25	-13	31	66	95	58	79	0.03
COOLING	+35	+95	31	65	83	TOTAL RECOVERY EFFICIENCY		18

TRENT METALS, LTD.

Model: Summeraire SHR150DM • Options Installed: None
 Electrical Requirements: Volts: 120 Amps: 1.5
 Exhaust Air Transfer Ratio: 1.5% @ 100 Pa/0.4 in. wg 1.3% @ 50 Pa / 0.2 in. wg
 Low Temp. Vent Reduction Factor: 18.4% Supply 21.9% Exhaust • Low Temp. Imbalance Factor: 1.0

EXT. STATIC PRESSURE		VENTILATION PERFORMANCE					
		NET SUPPLY		GROSS AIR FLOW			
		AIR FLOW		SUPPLY		EXHAUST	
Pa	in wg	L/s	cfm	L/s	cfm	L/s	cfm
25	0.1	75	160	77	163	77	164
50	0.2	69	147	70	149	72	135
75	0.3	64	137	65	139	67	137
100	0.4	60	128	61	130	62	131
125	0.5	56	119	57	121	56	119
150	0.6	51	108	52	110	51	109
175	0.7	46	98	47	99	45	95
200	0.8	41	88	42	89	40	86
225	0.9	37	79	38	80	34	72
250	1.0	32	68	32	69	29	62
275	1.1	28	60	29	61	25	54



— Net Supply - - - Net Exhaust

ENERGY PERFORMANCE								
	SUPPLY TEMPERATURE		NET AIR FLOW		POWER CONSUMED WATTS	SENSIBLE RECOVERY EFFICIENCY	APPARENT SENSIBLE EFFECTIVENESS	LATENT RECOVERY/MOISTURE TRANSFER
	°C	°F	L/S	CFM				
HEATING	0	+32	31	65	102	64	78	-0.01
	0	+32	45	96	120	61	72	-0.03
	0	+32	58	123	134	57	66	-0.09
	-25	-13	30	63	125	57	77	-0.09
COOLING	+35	+95	TOTAL RECOVERY EFFICIENCY					
	+35	+95						

	SUPPLY TEMPERATURE		NET AIR FLOW		POWER CONSUMED WATTS	SENSIBLE RECOVERY EFFICIENCY	APPARENT SENSIBLE RECOVERY EFFECTIVENESS	LATENT RECOVERY/MOISTURE TRANSFER
	°C	°F	L/S	CFM				
HEATING	0	+32	40	84	103	68	77	0.01
	0	+32	66	140	132	62	68	0.00
	0	+32	86	182	158	58	64	0.00
	-25	-13	34	72	116	61	79	0.03
	TOTAL RECOVERY EFFICIENCY							
COOLING	+35	+95	42	89	104		29	

SUPPLY TEMPERATURE		ENERGY PERFORMANCE						
		NET AIR FLOW		POWER CONSUMED	SENSIBLE RECOVERY EFFICIENCY	APPARENT SENSIBLE EFFECTIVENESS	LATENT RECOVERY/MOISTURE TRANSFER	
		°C	°F	L/S	CFM	WATTS		
HEATING	0	+32	31	65	78	73	86	0.02
	0	+32	45	96	98	72	83	0.00
	0	+32	55	117	124	68	78	0.01
	-25	-13	32	68	101	64	91	0.04
COOLING	+35	+95					TOTAL RECOVERY EFFICIENCY	
							Not tested	

CERTIFIED HEAT AND ENERGY RECOVERY VENTILATORS

Section 3-104

Ultimate Air by Stirling Technology, Inc.

Model: RecoupAerator 200DX • Options Installed: None

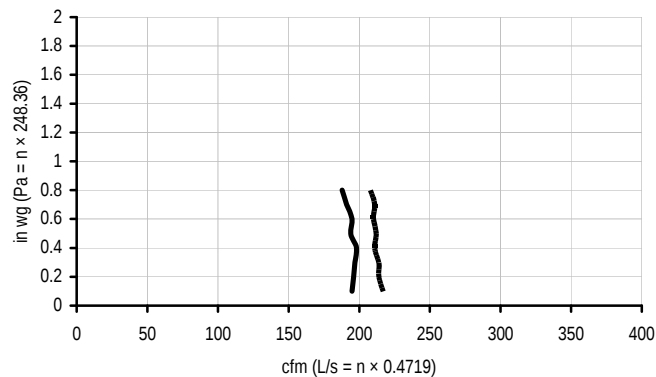
Electrical Requirements: Volts: 120 Amps: 1.3

Exhaust Air Transfer Ratio: 0.096 @100 Pa/0.4 in. wg 0.097 @ 50 Pa / 0.2 in. wg

Low Temp. Vent Reduction Factor: N/A Supply N/A Exhaust • Low Temp. Imbalance Factor: N/A

VENTILATION PERFORMANCE

EXT. STATIC PRESSURE		NET SUPPLY AIR FLOW		GROSS AIR FLOW			
				SUPPLY		EXHAUST	
Pa	in wg	L/s	cfm	L/s	cfm	L/s	cfm
25	0.1	92	195	102	216	102	217
50	0.2	92	196	102	217	100	214
75	0.3	93	197	103	218	100	214
100	0.4	93	198	103	219	99	211
125	0.5	91	194	101	215	100	212
150	0.6	92	195	102	216	99	210
175	0.7	90	191	99	211	99	211
200	0.8	88	188	98	208	98	208



— Net Supply — Net Exhaust

ENERGY PERFORMANCE

	SUPPLY TEMPERATURE		NET AIR FLOW		POWER CONSUMED WATTS	SENSIBLE RECOVERY EFFICIENCY	APPARENT SENSIBLE EFFECTIVENESS	LATENT RECOVERY/MOISTURE TRANSFER
	°C	°F	L/S	CFM				
HEATING	0	+32	30	65	48	83	96	0.69
	0	+32	48	101	73	83	94	0.64
	0	+32	97	205	260	81	93	0.55
							TOTAL RECOVERY EFFICIENCY	
COOLING	+35	+95	30	64	50		53	
	+35	+95	63	134	121		44	

vanEE

Model: ERV60H (SP) • Options Installed: Defrost

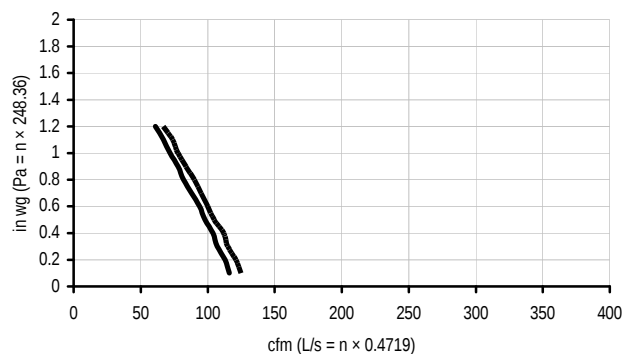
Electrical Requirements: Volts: 120 Amps: 1.5

Exhaust Air Transfer Ratio: 0.03 @100 Pa/0.4 in. wg 0.03 @ 50 Pa / 0.2 in. wg

Low Temp. Vent Reduction Factor: 27.9% Supply 30.2% Exhaust • Low Temp. Imbalance Factor: 1.13

VENTILATION PERFORMANCE

EXT. STATIC PRESSURE		NET SUPPLY AIR FLOW		GROSS AIR FLOW			
				SUPPLY		EXHAUST	
Pa	in wg	L/s	cfm	L/s	cfm	L/s	cfm
25	0.1	55	116	56	119	59	125
50	0.2	53	113	55	116	57	121
75	0.3	50	107	52	111	54	115
100	0.4	49	104	50	107	53	112
125	0.5	46	98	48	101	50	105
150	0.6	44	94	46	97	47	100
175	0.7	42	88	43	91	45	95
200	0.8	39	82	40	84	42	90
225	0.9	37	78	38	81	40	84
250	1.0	34	72	35	75	37	78
275	1.1	32	67	33	69	35	74
300	1.2	29	61	30	63	32	67



— Net Supply — Net Exhaust

ENERGY PERFORMANCE

	SUPPLY TEMPERATURE		NET AIR FLOW		POWER CONSUMED WATTS	SENSIBLE RECOVERY EFFICIENCY	APPARENT SENSIBLE EFFECTIVENESS	LATENT RECOVERY/MOISTURE TRANSFER
	°C	°F	L/S	CFM				
HEATING	0	+32	13	28	73	69	94	0.68
	0	+32	45	96	137	62	74	0.48
	-25	-13	25	54	102	54	83	0.58
							TOTAL RECOVERY EFFICIENCY	
COOLING	+35	+95	14	29	70		54	

CERTIFIED HEAT AND ENERGY RECOVERY VENTILATORS

Section 3-105

vanEE

Model: ERV60H (SP) • Options Installed: Defrost

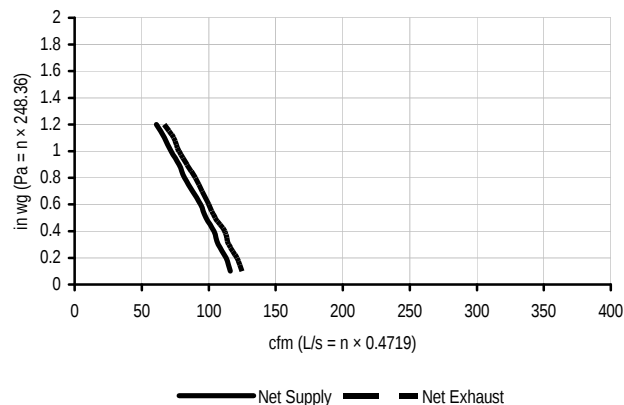
Electrical Requirements: Volts: 120 Amps: 1.5

Exhaust Air Transfer Ratio: 0.03 @100 Pa/0.4 in. wg 0.03 @ 50 Pa / 0.2 in. wg

Low Temp. Vent Reduction Factor: 27.9% Supply 30.2% Exhaust • Low Temp. Imbalance Factor: 1.13

VENTILATION PERFORMANCE

EXT. STATIC PRESSURE		NET SUPPLY AIR FLOW		GROSS AIR FLOW			
				SUPPLY		EXHAUST	
Pa	in wg	L/s	cfm	L/s	cfm	L/s	cfm
25	0.1	55	116	56	119	59	125
50	0.2	53	113	55	116	57	121
75	0.3	50	107	52	111	54	115
100	0.4	49	104	50	107	53	112
125	0.5	46	98	48	101	50	105
150	0.6	44	94	46	97	47	100
175	0.7	42	88	43	91	45	95
200	0.8	39	82	40	84	42	90
225	0.9	37	78	38	81	40	84
250	1.0	34	72	35	75	37	78
275	1.1	32	67	33	69	35	74
300	1.2	29	61	30	63	32	67



ENERGY PERFORMANCE

	SUPPLY TEMPERATURE		NET AIR FLOW		POWER CONSUMED	SENSIBLE RECOVERY EFFICIENCY	APPARENT SENSIBLE EFFECTIVENESS	LATENT RECOVERY/MOISTURE TRANSFER
	°C	°F	L/S	CFM	WATTS			
HEATING	0	+32	13	28	73	69	94	0.68
	0	+32	45	96	137	62	74	0.48
	-25	-13	25	54	102	54	83	0.58
COOLING	+35	+95	14	29	70		TOTAL RECOVERY EFFICIENCY	
							54	

vanEE

Model: HRV 60H (TP) • Options Installed: None

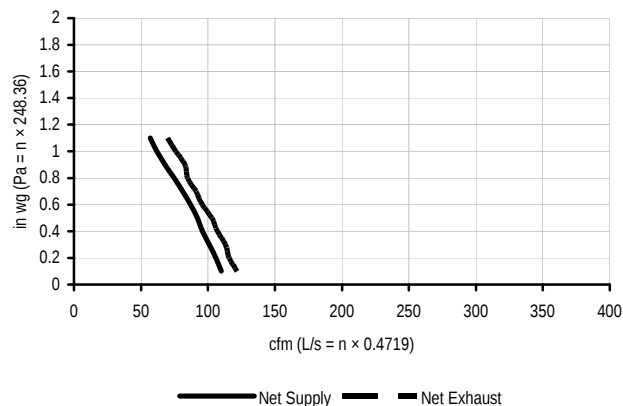
Electrical Requirements: Volts: 120 Amps: 1.5

Exhaust Air Transfer Ratio: 0.02 @100 Pa/0.4 in. wg 0.05 @ 50 Pa / 0.2 in. wg

Low Temp. Vent Reduction Factor: 16.4% Supply 31.3% Exhaust • Low Temp. Imbalance Factor: 1.15

VENTILATION PERFORMANCE

EXT. STATIC PRESSURE		NET SUPPLY AIR FLOW		GROSS AIR FLOW			
				SUPPLY		EXHAUST	
Pa	in wg	L/s	cfm	L/s	cfm	L/s	cfm
25	0.1	52	110	52	110	58	122
50	0.2	50	106	50	106	55	116
75	0.3	48	101	48	102	53	113
100	0.4	45	96	46	97	50	107
125	0.5	43	92	43	92	49	103
150	0.6	41	87	41	87	45	96
175	0.7	38	81	38	81	43	91
200	0.8	35	75	36	76	40	85
225	0.9	32	68	33	69	39	83
250	1.0	29	62	29	62	36	76
275	1.1	27	57	27	58	33	70



ENERGY PERFORMANCE

	SUPPLY TEMPERATURE		NET AIR FLOW		POWER CONSUMED	SENSIBLE RECOVERY EFFICIENCY	APPARENT SENSIBLE EFFECTIVENESS	LATENT RECOVERY/MOISTURE TRANSFER
	°C	°F	L/S	CFM	WATTS			
HEATING	0	+32	23	48	68	66	78	0.07
	0	+32	30	63	82	65	76	0.04
	0	+32	44	93	116	59	68	0.04
	-25	-13	30	63	110	55	81	0.08

CERTIFIED HEAT AND ENERGY RECOVERY VENTILATORS

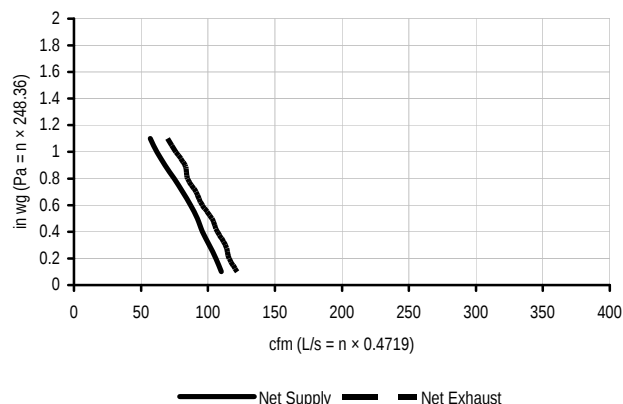
Section 3-106

vanEE

Model: HRV 60H (TP) • Options Installed: None
 Electrical Requirements: Volts: 120 Amps: 1.5
 Exhaust Air Transfer Ratio: 0.02 @100 Pa/0.4 in. wg 0.05 @ 50 Pa / 0.2 in. wg
 Low Temp. Vent Reduction Factor: 16.4% Supply 31.3% Exhaust • Low Temp. Imbalance Factor: 1.15

VENTILATION PERFORMANCE

EXT. STATIC PRESSURE		NET SUPPLY AIR FLOW		GROSS AIR FLOW			
Pa	in wg	L/s	cfm	SUPPLY		EXHAUST	
		L/s	cfm	L/s	cfm	L/s	cfm
25	0.1	52	110	52	110	58	122
50	0.2	50	106	50	106	55	116
75	0.3	48	101	48	102	53	113
100	0.4	45	96	46	97	50	107
125	0.5	43	92	43	92	49	103
150	0.6	41	87	41	87	45	96
175	0.7	38	81	38	81	43	91
200	0.8	35	75	36	76	40	85
225	0.9	32	68	33	69	39	83
250	1.0	29	62	29	62	36	76
275	1.1	27	57	27	58	33	70



ENERGY PERFORMANCE

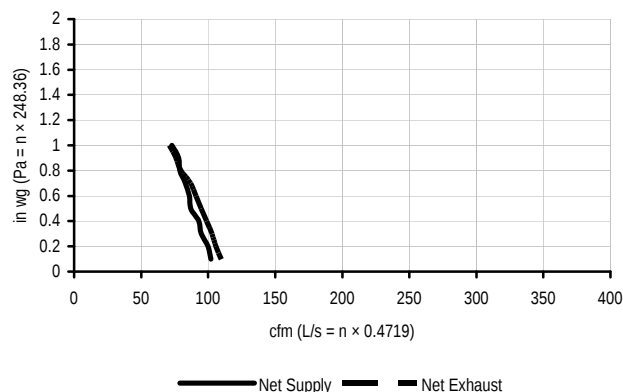
	SUPPLY TEMPERATURE		NET AIR FLOW		POWER CONSUMED	SENSIBLE RECOVERY EFFICIENCY	APPARENT SENSIBLE EFFECTIVENESS	LATENT RECOVERY/MOISTURE TRANSFER
	°C	°F	L/S	CFM	WATTS			
HEATING	0	+32	23	48	68	66	78	0.07
	0	+32	30	63	82	65	76	0.04
	0	+32	44	93	116	59	68	0.04
	-25	-13	30	63	110	55	81	0.08

vanEE

Model: THH 1.0 • Options Installed: None
 Electrical Requirements: Volts: 120 Amps: 1.6
 Exhaust Air Transfer Ratio: 0.05 @100 Pa/0.4 in. wg --- @ 50 Pa / 0.2 in. wg
 Low Temp. Vent Reduction Factor: 3.6% Supply 4.2% Exhaust • Low Temp. Imbalance Factor: 1.20

VENTILATION PERFORMANCE

EXT. STATIC PRESSURE		NET SUPPLY AIR FLOW		GROSS AIR FLOW			
Pa	in wg	L/s	cfm	SUPPLY		EXHAUST	
		L/s	cfm	L/s	cfm	L/s	cfm
25	0.1	48	102	51	107	52	110
50	0.2	47	100	50	105	50	106
75	0.3	45	95	47	99	48	103
100	0.4	44	93	46	98	46	99
125	0.5	41	87	43	92	45	95
150	0.6	41	86	42	90	43	91
175	0.7	39	83	41	88	41	87
200	0.8	37	79	39	83	38	80
225	0.9	37	78	38	81	36	76
250	1.0	34	73	36	76	33	71



ENERGY PERFORMANCE

	SUPPLY TEMPERATURE		NET AIR FLOW		POWER CONSUMED	SENSIBLE RECOVERY EFFICIENCY	APPARENT SENSIBLE EFFECTIVENESS	LATENT RECOVERY/MOISTURE TRANSFER
	°C	°F	L/S	CFM	WATTS			
HEATING	0	+32	24	52	116	63	85	0.02
	0	+32	35	74	147	59	75	0.05
	0	+32	44	94	189	57	75	0.01
	-25	-13	16	35	114	58	95	0.01

CERTIFIED HEAT AND ENERGY RECOVERY VENTILATORS

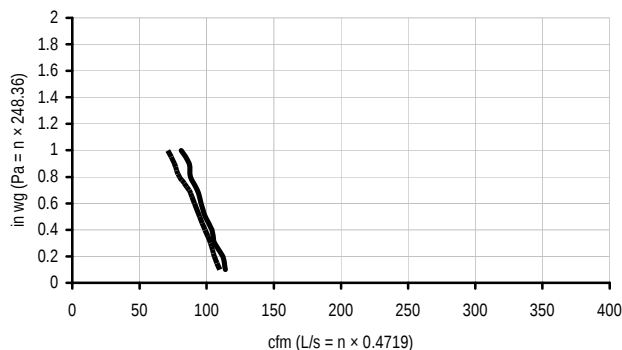
Section 3-107

vanEE

Model: THSF 104 • Options Installed: None
 Electrical Requirements: Volts: 120 Amps: 1.6
 Exhaust Air Transfer Ratio: 0.05 @100 Pa/0.4 in. wg -- @ 50 Pa / 0.2 in. wg
 Low Temp. Vent Reduction Factor: 3.6% Supply 4.2% Exhaust • Low Temp. Imbalance Factor: 1.20

VENTILATION PERFORMANCE

EXT. STATIC PRESSURE		NET SUPPLY AIR FLOW		GROSS AIR FLOW			
				SUPPLY		EXHAUST	
Pa	in wg	L/s	cfm	L/s	cfm	L/s	cfm
25	0.1	53	114	56	119	52	110
50	0.2	53	112	55	117	50	106
75	0.3	50	106	52	111	48	103
100	0.4	49	104	51	109	46	99
125	0.5	46	99	49	103	45	95
150	0.6	45	96	48	101	43	91
175	0.7	44	93	46	98	41	87
200	0.8	42	88	44	93	38	80
225	0.9	41	87	43	91	36	76
250	1.0	38	81	40	85	33	71



— Net Supply - - - Net Exhaust

ENERGY PERFORMANCE

	SUPPLY TEMPERATURE		NET AIR FLOW		POWER CONSUMED WATTS	SENSIBLE RECOVERY EFFICIENCY	APPARENT SENSIBLE EFFECTIVENESS	LATENT RECOVERY/MOISTURE TRANSFER
	°C	°F	L/S	CFM				
HEATING	0	+32	24	52	116	63	85	0.02
	0	+32	35	74	147	59	75	0.05
	0	+32	44	94	189	57	75	0.01
	-25	-13	16	35	114	58	95	0.01

vanEE

Model: 60H NOVO+ • Options Installed: Defrost
 Electrical Requirements: Volts: 120 Amps: 0.9
 Exhaust Air Transfer Ratio: 0.8 @100 Pa/0.4 in. wg 0.7 @ 50 Pa / 0.2 in. wg
 Low Temp. Vent Reduction Factor: 19.2% Supply 28.0% Exhaust • Low Temp. Imbalance Factor: 1.05

VENTILATION PERFORMANCE

EXT. STATIC PRESSURE		NET SUPPLY AIR FLOW		GROSS AIR FLOW			
				SUPPLY		EXHAUST	
Pa	in wg	L/s	cfm	L/s	cfm	L/s	cfm
25	0.1	72	152	72	153	72	153
50	0.2	63	134	63	135	64	136
75	0.3	56	120	57	120	57	122
100	0.4	49	104	49	105	51	109
125	0.5	44	94	44	94	45	96
150	0.6	37	79	37	79	41	87
175	0.7	32	68	32	69	35	74
200	0.8	26	54	26	55	28	59

ENERGY PERFORMANCE

	SUPPLY TEMPERATURE		NET AIR FLOW		POWER CONSUMED WATTS	SENSIBLE RECOVERY EFFICIENCY	APPARENT SENSIBLE EFFECTIVENESS	LATENT RECOVERY/MOISTURE TRANSFER
	°C	°F	L/S	CFM				
HEATING	0	+32	25	54	46	73	81	0.00
	0	+32	33	70	54	70	78	0.00
	0	+32	48	102	84	65	73	0.00
	-25	-13	26	54	61	64	84	0.02

CERTIFIED HEAT AND ENERGY RECOVERY VENTILATORS

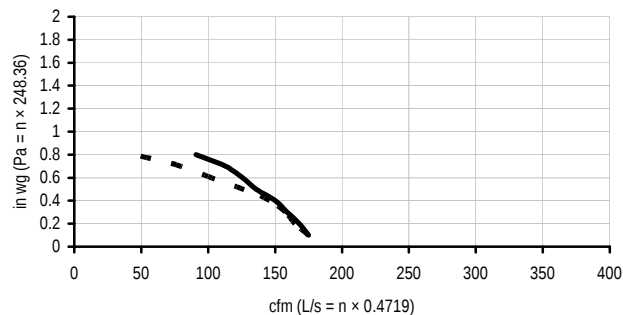
Section 3-108

vanEE

Model: 90H • Options Installed: Defrost
 Electrical Requirements: Volts: 120 Amps: 1.3
 Exhaust Air Transfer Ratio: 0.01 @100 Pa/0.4 in. wg --- @ 50 Pa / 0.2 in. wg
 Low Temp. Vent Reduction Factor: 10% Supply 13% Exhaust • Low Temp. Imbalance Factor: 0.90

VENTILATION PERFORMANCE

EXT. STATIC PRESSURE		NET SUPPLY AIR FLOW		GROSS AIR FLOW			
Pa	in wg	L/s	cfm	SUPPLY		EXHAUST	
25	0.1	83	175	83	176	83	175
50	0.2	79	168	80	169	78	165
75	0.3	75	159	75	159	75	158
100	0.4	71	150	71	151	69	146
125	0.5	64	136	64	136	60	127
150	0.6	59	126	60	127	49	103
175	0.7	53	113	53	113	38	80
200	0.8	43	91	43	91	21	45



— Net Supply - - - Net Exhaust

ENERGY PERFORMANCE

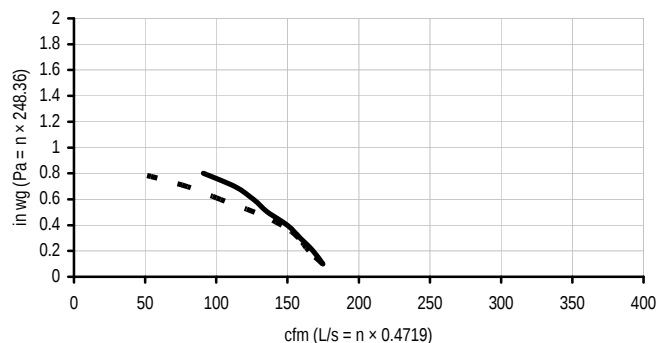
	SUPPLY TEMPERATURE		NET AIR FLOW		POWER CONSUMED WATTS	SENSIBLE RECOVERY EFFICIENCY	APPARENT SENSIBLE EFFECTIVENESS	LATENT RECOVERY/MOISTURE TRANSFER
	°C	°F	L/S	CFM				
HEATING	0	+32	31	66	85	69	81	-0.01
	0	+32	56	119	124	60	70	-0.01
	-25	-13	37	78	114	62	80	0.08

vanEE

Model: 90H NOVO+ • Options Installed: Defrost
 Electrical Requirements: Volts: 120 Amps: 1.3
 Exhaust Air Transfer Ratio: 0.01 @100 Pa/0.4 in. wg --- @ 50 Pa / 0.2 in. wg
 Low Temp. Vent Reduction Factor: 10% Supply 13% Exhaust • Low Temp. Imbalance Factor: 0.90

VENTILATION PERFORMANCE

EXT. STATIC PRESSURE		NET SUPPLY AIR FLOW		GROSS AIR FLOW			
Pa	in wg	L/s	cfm	SUPPLY		EXHAUST	
25	0.1	83	175	83	176	83	175
50	0.2	79	168	80	169	78	165
75	0.3	75	159	75	159	75	158
100	0.4	71	150	71	151	69	146
125	0.5	64	136	64	136	60	127
150	0.6	59	126	60	127	49	103
175	0.7	53	113	53	113	38	80
200	0.8	43	91	43	91	21	45



— Net Supply - - - Net Exhaust

ENERGY PERFORMANCE

	SUPPLY TEMPERATURE		NET AIR FLOW		POWER CONSUMED WATTS	SENSIBLE RECOVERY EFFICIENCY	APPARENT SENSIBLE EFFECTIVENESS	LATENT RECOVERY/MOISTURE TRANSFER
	°C	°F	L/S	CFM				
HEATING	0	+32	31	66	85	69	81	-0.01
	0	+32	56	119	124	60	70	-0.01
	-25	-13	37	78	114	62	80	0.08

CERTIFIED HEAT AND ENERGY RECOVERY VENTILATORS

Section 3-109

vanEE

Model: 90H-V • Options Installed: Dampers Defrost
 Electrical Requirements: Volts: 120 Amps: 1.0
 Exhaust Air Transfer Ratio: 0.6 @100 Pa/0.4 in. wg 0.7 @ 50 Pa / 0.2 in. wg
 Low Temp. Vent Reduction Factor: 20.8% Supply 30.6% Exhaust • Low Temp. Imbalance Factor: 1.06

VENTILATION PERFORMANCE

EXT. STATIC PRESSURE		NET SUPPLY AIR FLOW		GROSS AIR FLOW			
				SUPPLY		EXHAUST	
Pa	in wg	L/s	cfm	L/s	cfm	L/s	cfm
25	0.1	91	193	92	195	91	194
50	0.2	86	182	86	183	86	182
75	0.3	80	170	81	171	80	169
100	0.4	74	157	74	158	74	157
125	0.5	67	142	67	143	69	147
150	0.6	62	132	62	133	63	133
175	0.7	55	117	56	118	57	120
200	0.8	47	101	48	101	49	104
225	0.9	40	86	41	87	43	92
250	1.0	33	71	34	71	35	74

ENERGY PERFORMANCE

	SUPPLY TEMPERATURE		NET AIR FLOW		POWER CONSUMED	SENSIBLE RECOVERY EFFICIENCY	APPARENT SENSIBLE EFFECTIVENESS	LATENT RECOVERY/MOISTURE TRANSFER
	°C	°F	L/S	CFM	WATTS			
HEATING	0	+32	32	67	56	70	78	0.00
	0	+32	40	86	64	68	75	0.01
	0	+32	56	120	86	64	70	0.01
	-25	-13	30	63	79	61	83	0.01
	-25	-13	30	63	79	61	83	0.01

vanEE

Model: 90H-V ECM • Options Installed: Dampers Defrost
 Electrical Requirements: Volts: 120 Amps: 1.3
 Exhaust Air Transfer Ratio: 0.7 @100 Pa/0.4 in. wg 0.7 @ 50 Pa / 0.2 in. wg
 Low Temp. Vent Reduction Factor: 22.6% Supply 35.6% Exhaust • Low Temp. Imbalance Factor: 1.10

VENTILATION PERFORMANCE

EXT. STATIC PRESSURE		NET SUPPLY AIR FLOW		GROSS AIR FLOW			
				SUPPLY		EXHAUST	
Pa	in wg	L/s	cfm	L/s	cfm	L/s	cfm
25	0.1	89	189	89	190	87	185
50	0.2	83	177	84	179	83	177
75	0.3	79	167	79	169	79	167
100	0.4	74	156	74	158	73	155
125	0.5	69	147	69	148	68	146
150	0.6	64	136	64	137	63	133
175	0.7	59	126	60	127	58	123
200	0.8	54	115	54	116	51	108
225	0.9	47	100	47	101	45	96
250	1.0	40	86	41	87	38	80
275	1.1	35	74	35	75	31	65

ENERGY PERFORMANCE

	SUPPLY TEMPERATURE		NET AIR FLOW		POWER CONSUMED	SENSIBLE RECOVERY EFFICIENCY	APPARENT SENSIBLE EFFECTIVENESS	LATENT RECOVERY/MOISTURE TRANSFER
	°C	°F	L/S	CFM	WATTS			
HEATING	0	+32	23	49	24	75	83	0.01
	0	+32	30	64	26	74	80	0.01
	0	+32	38	81	32	73	78	0.01
	0	+32	57	122	54	67	72	0.01
	-25	-13	29	61	40	64	89	0.02

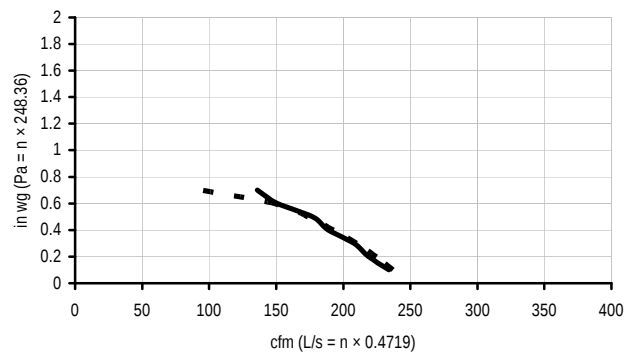
CERTIFIED HEAT AND ENERGY RECOVERY VENTILATORS

Section 3-110

vanEE

Model: 190H • Options Installed: Defrost
 Electrical Requirements: Volts: 120 Amps: 2.1
 Exhaust Air Transfer Ratio: 0.01 @100 Pa/0.4 in. wg --- @ 50 Pa / 0.2 in. wg
 Low Temp. Vent Reduction Factor: 10% Supply 13% Exhaust • Low Temp. Imbalance Factor: 0.90

EXT. STATIC PRESSURE		VENTILATION PERFORMANCE					
		NET SUPPLY		GROSS AIR FLOW			
		AIR FLOW		SUPPLY		EXHAUST	
Pa	in wg	L/s	cfm	L/s	cfm	L/s	cfm
25	0.1	110	234	112	237	112	237
50	0.2	103	219	105	223	106	225
75	0.3	98	208	100	211	99	210
100	0.4	89	189	91	192	91	193
125	0.5	84	177	85	180	82	174
150	0.6	71	151	72	153	70	149
175	0.7	64	136	65	138	44	94



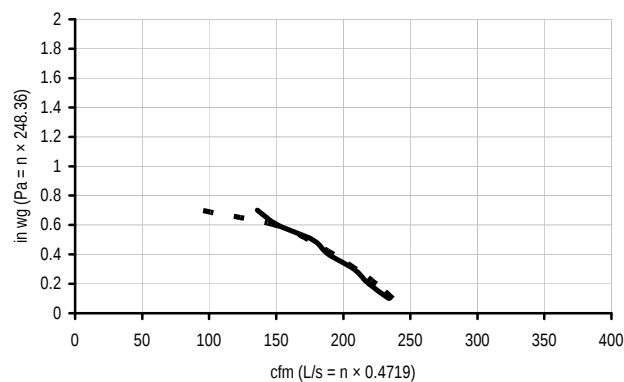
— Net Supply - - - Net Exhaust

ENERGY PERFORMANCE								
	SUPPLY TEMPERATURE		NET AIR FLOW		POWER CONSUMED WATTS	SENSIBLE RECOVERY EFFICIENCY	APPARENT SENSIBLE EFFECTIVENESS	LATENT RECOVERY/MOISTURE TRANSFER
	°C	°F	L/S	CFM				
HEATING	0	+32	56	119	124	60	70	-0.01
	0	+32	86	182	197	53	62	-0.01
	-25	-13	37	78	114	62	80	0.08

vanEE

Model: 190H NOVO+ • Options Installed: Defrost
 Electrical Requirements: Volts: 120 Amps: 2.1
 Exhaust Air Transfer Ratio: 0.01 @100 Pa/0.4 in. wg --- @ 50 Pa / 0.2 in. wg
 Low Temp. Vent Reduction Factor: 10% Supply 13% Exhaust • Low Temp. Imbalance Factor: 0.90

EXT. STATIC PRESSURE		VENTILATION PERFORMANCE					
		NET SUPPLY		GROSS AIR FLOW			
		AIR FLOW		SUPPLY		EXHAUST	
Pa	in wg	L/s	cfm	L/s	cfm	L/s	cfm
25	0.1	110	234	112	237	112	237
50	0.2	103	219	105	223	106	225
75	0.3	98	208	100	211	99	210
100	0.4	89	189	91	192	91	193
125	0.5	84	177	85	180	82	174
150	0.6	71	151	72	153	70	149
175	0.7	64	136	65	138	44	94



— Net Supply - - - Net Exhaust

ENERGY PERFORMANCE								
	SUPPLY TEMPERATURE		NET AIR FLOW		POWER CONSUMED WATTS	SENSIBLE RECOVERY EFFICIENCY	APPARENT SENSIBLE EFFECTIVENESS	LATENT RECOVERY/MOISTURE TRANSFER
	°C	°F	L/S	CFM				
HEATING	0	+32	56	119	124	60	70	-0.01
	0	+32	86	182	197	53	62	-0.01
	-25	-13	37	78	114	62	80	0.08

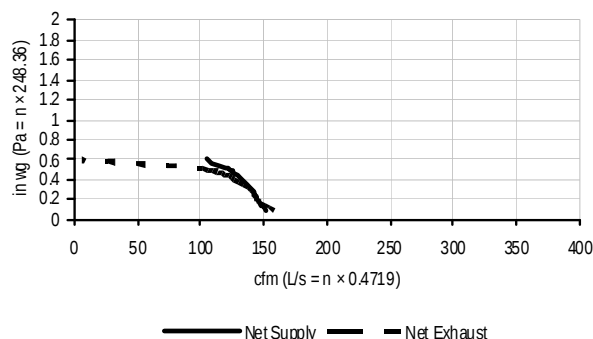
CERTIFIED HEAT AND ENERGY RECOVERY VENTILATORS

Section 3-111

vanEE

Model: 1000HE • Options Installed: Defrost
 Electrical Requirements: Volts: 120 Amps: 1.2
 Exhaust Air Transfer Ratio: --- @100 Pa/0.4 in. wg 0.02 @ 50 Pa / 0.2 in. wg
 Low Temp. Vent Reduction Factor: 11% Supply 20% Exhaust • Low Temp. Imbalance Factor: 1.10

VENTILATION PERFORMANCE							
EXT. STATIC PRESSURE		NET SUPPLY AIR FLOW		GROSS AIR FLOW			
		AIR FLOW		SUPPLY		EXHAUST	
Pa	in wg	L/s	cfm	L/s	cfm	L/s	cfm
25	0.1	72	152	73	155	75	159
50	0.2	68	145	70	148	68	145
75	0.3	67	141	68	144	66	140
100	0.4	63	133	64	136	60	127
125	0.5	58	123	59	125	50	106
150	0.6	49	104	50	106	3	6

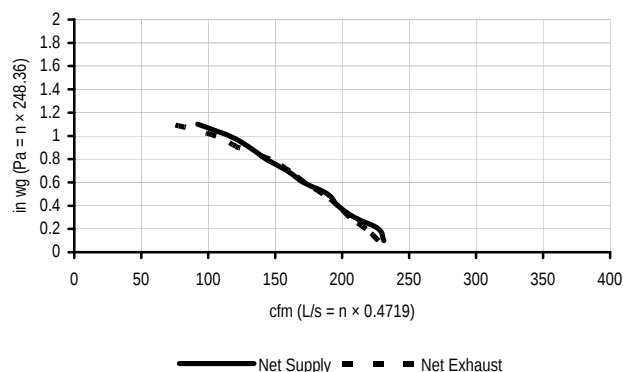


ENERGY PERFORMANCE								
	SUPPLY TEMPERATURE		NET AIR FLOW		POWER CONSUMED WATTS	SENSIBLE RECOVERY EFFICIENCY	APPARENT SENSIBLE EFFECTIVENESS	LATENT RECOVERY/MOISTURE TRANSFER
	°C	°F	L/S	CFM				
HEATING	0	+32	30	64	103	81	92	0.02
	0	+32	46	99	115	76	85	0.03
	0	+32	54	106	117	72	80	0.02
	-25	-13	30	64	110	69	89	0.11
TOTAL RECOVERY EFFICIENCY								
COOLING	+35	+95	34	72	105		23	
	+35	+95	50	106	109		26	

vanEE

Model: 2000HE • Options Installed: Defrost
 Electrical Requirements: Volts: 120 Amps: 2.2
 Exhaust Air Transfer Ratio: --- @100 Pa/0.4 in. wg 0.06 @ 50 Pa / 0.2 in. wg
 Low Temp. Vent Reduction Factor: 12.8% Supply 9.4% Exhaust • Low Temp. Imbalance Factor: 0.93

VENTILATION PERFORMANCE							
EXT. STATIC PRESSURE		NET SUPPLY AIR FLOW		GROSS AIR FLOW			
		AIR FLOW		SUPPLY		EXHAUST	
Pa	in wg	L/s	cfm	L/s	cfm	L/s	cfm
25	0.1	109	231	116	246	107	227
50	0.2	107	227	114	242	103	218
75	0.3	99	209	105	222	97	206
100	0.4	93	197	99	210	93	197
125	0.5	89	189	95	201	88	186
150	0.6	81	171	86	182	81	172
175	0.7	75	159	80	169	76	161
200	0.8	67	143	72	153	69	146
225	0.9	62	131	66	140	58	123
250	1.0	55	116	58	123	50	106
27	1.1	43	92	46	97	35	74



ENERGY PERFORMANCE								
	SUPPLY TEMPERATURE		NET AIR FLOW		POWER CONSUMED WATTS	SENSIBLE RECOVERY EFFICIENCY	APPARENT SENSIBLE EFFECTIVENESS	LATENT RECOVERY/MOISTURE TRANSFER
	°C	°F	L/S	CFM				
HEATING	0	+32	52	111	158	84	95	0.05
	0	+32	55	117	---	84	---	---
	0	+32	71	151	184	79	90	0.03
	0	+32	84	179	210	79	89	0.12
	-25	-13	57	121	176	72	88	-0.04
TOTAL RECOVERY EFFICIENCY								
COOLING	+35	+95	55	117	160		13	
	+35	+95	76	162	198		15	

CERTIFIED HEAT AND ENERGY RECOVERY VENTILATORS

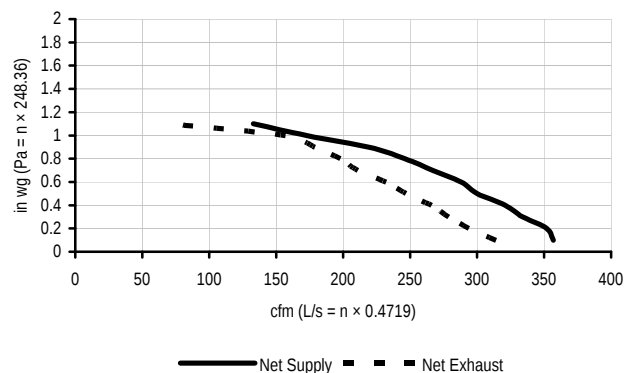
Section 3-112

vanEE

Model: 3000 HE • Options Installed: Defrost
 Electrical Requirements: Volts: 120 Amps: 4.6
 Exhaust Air Transfer Ratio: --- @100 Pa/0.4 in. wg 0.02 @ 55 Pa / 0.2 in. wg
 Low Temp. Vent Reduction Factor: 13.3% Supply 15.8% Exhaust • Low Temp. Imbalance Factor: 0.99

VENTILATION PERFORMANCE

EXT. STATIC PRESSURE		NET SUPPLY AIR FLOW		GROSS AIR FLOW			
				SUPPLY		EXHAUST	
Pa	in wg	L/s	cfm	L/s	cfm	L/s	cfm
25	0.1	168	357	172	364	148	314
50	0.2	166	352	170	360	139	294
75	0.3	158	334	160	340	132	279
100	0.4	151	321	155	328	126	266
125	0.5	142	300	144	306	117	247
150	0.6	136	288	139	294	109	232
175	0.7	126	267	128	272	100	211
200	0.8	116	246	118	251	93	198
225	0.9	103	219	105	223	84	179
250	1.0	82	173	84	177	74	157
275	1.1	63	133	64	136	33	70



ENERGY PERFORMANCE

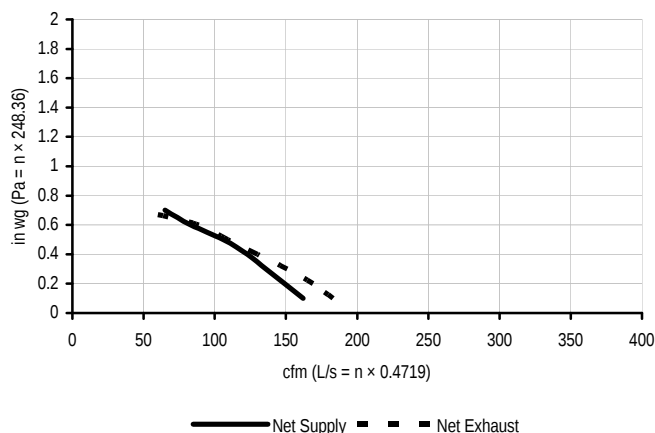
	SUPPLY TEMPERATURE		NET AIR FLOW		POWER CONSUMED WATTS	SENSIBLE RECOVERY EFFICIENCY	APPARENT SENSIBLE EFFECTIVENESS	LATENT RECOVERY/MOISTURE TRANSFER
	°C	°F	L/S	CFM				
HEATING	0	+32	55	117	219	80	94	-0.07
	0	+32	86	183	290	74	86	0.02
	0	+32	117	249	436	70	83	-0.01
	-25	-13	55	117	264	74	89	0.07
COOLING	+35	+95	85	181	286	TOTAL RECOVERY EFFICIENCY		
	+35	+95	115	245	434			

vanEE

Model: 1001 ERV • Options Installed: Defrost
 Electrical Requirements: Volts: 120 Amps: 1.3
 Exhaust Air Transfer Ratio: --- @100 Pa/0.4 in. wg 0.07 @ 50 Pa / 0.2 in. wg
 Low Temp. Vent Reduction Factor: 22.6% Supply 25.2% Exhaust • Low Temp. Imbalance Factor: 1.08

VENTILATION PERFORMANCE

EXT. STATIC PRESSURE		NET SUPPLY AIR FLOW		GROSS AIR FLOW			
				SUPPLY		EXHAUST	
Pa	in wg	L/s	cfm	L/s	cfm	L/s	cfm
25	0.1	76	162	81	171	86	183
50	0.2	70	149	74	157	79	169
75	0.3	64	136	68	144	71	151
100	0.4	58	123	61	130	61	130
125	0.5	50	106	53	113	51	109
150	0.6	39	83	41	88	42	89
175	0.7	31	65	32	69	22	47



ENERGY PERFORMANCE

	SUPPLY TEMPERATURE		NET AIR FLOW		POWER CONSUMED WATTS	SENSIBLE RECOVERY EFFICIENCY	APPARENT SENSIBLE EFFECTIVENESS	LATENT RECOVERY/MOISTURE TRANSFER
	°C	°F	L/S	CFM				
HEATING	0	+32	30	64	62	68	80	0.53
	0	+32	45	96	82	67	77	0.42
	0	+32	61	131	124	64	73	0.37
	-25	-13	37	78	100	55	78	0.60
COOLING	+35	+95	30	64	60	TOTAL RECOVERY EFFICIENCY		

