

Specification Sheet

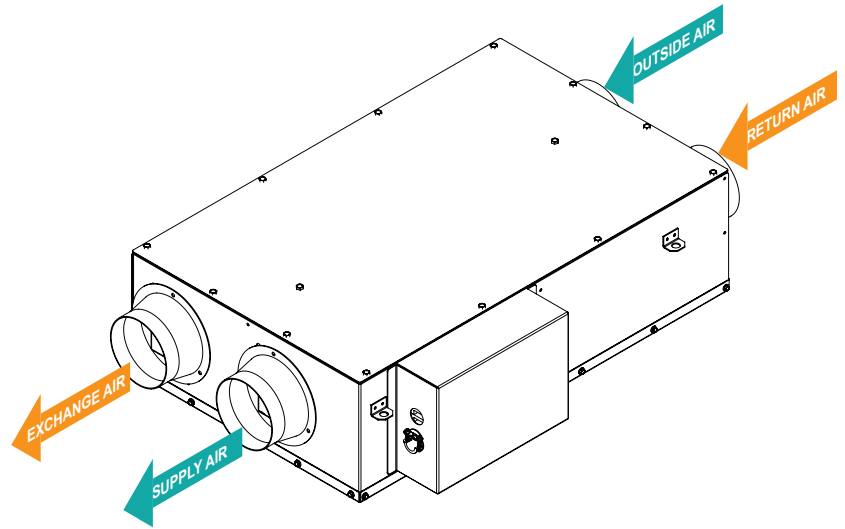
Energy Recovery Ventilator

Description

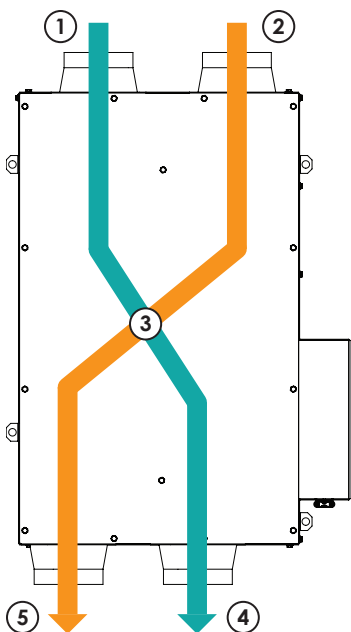
Indoor Air Quality (IAQ) is becoming a growing concern, as modern construction practices adapt to meet more stringent building energy codes. As building envelopes become tighter to improve energy efficiency, the unfortunate consequence is less air ventilation that promotes poor IAQ.

AirFixture Energy Recovery Ventilator systems not only increase ventilation to the occupied space and improve IAQ, they also optimize the efficiency of HVAC systems through a process called...

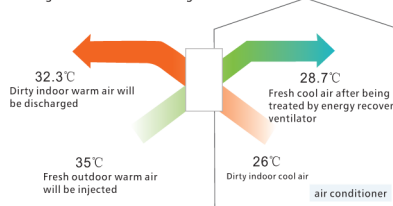
Sensible (dry air) or Latent (dry and humid air) heat exchange.



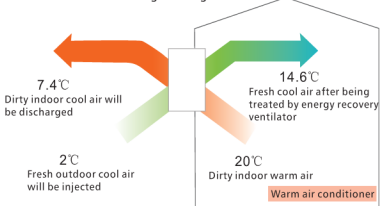
Concept of Energy Recovery



During air conditioner cooling in summer



Winter air conditioning heating time



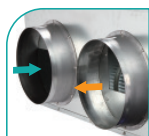
1. Outside Air (OA): Fresh unconditioned air enters ERV core where temperature and humidity are altered.
2. Return Air (RA): Heat and moisture are recovered from stale indoor/return air through Total Heat Exchange prior to being discharged to the outside air.
3. Total Energy Exchange (ERV): Stale indoor air is replenished with fresh, conditioned and filtered outdoor air presenting high quality supply air to the occupied space through sensible or latent energy exchange. Airstreams and air pollutants do not intermingle between static plates.
4. Supply Air (SA): Fresh conditioned supply air enters the occupied space through air ducts.
5. Exchange Air (EA): Polluted indoor air is discharged to the outdoors through air ducts.

Specification Sheet

Energy Recovery Ventilator

Features

- Power rating: 110V/60Hz
- Two-way equivalent ventilation
- Sensible / latent energy recovery core
- Air flow: 40–115 cfm (68–196 m³/hr) (3-speed)
- Auto Defrost function
- Double primary filters
- Options for direct BMS or FEC control
- Meets all ETL standards and building code requirements
- Simple ceiling installation
- Simple maintenance
- 20 gauge galvanized steel casing, pre-painted black
- “Bathroom Light Switch” full ventilation control (24 VAC)



Two-way equipment ventilation filters outdoor fresh air to the inside, while discharging indoor dirty air to the outside



High performance polymer membrane enthalpy cross flow core



Primary filter captures hair, foreign bodies, and other large debris and particulates

Performance

IMPERIAL														
VOLTAGE	FREQUENCY	POWER	MCA	MOP	AIR FLOW (CFM)			STATIC PRESSURE	SENSIBLE HEAT EFFICIENCY (%)		ENTHALPY EFFICIENCY (%)		NOISE	DUCT DIAMETER
(V)	(Hz)	(W)	(A)	(A)	High	Med	Low	(in wc)	Cooling Load	Heating Load	Cooling Load	Heating Load	(dB)	(in)
110	60	240	1.75	5	115	65	40	.23	76.2	76.2	57.2	57.2	38	4

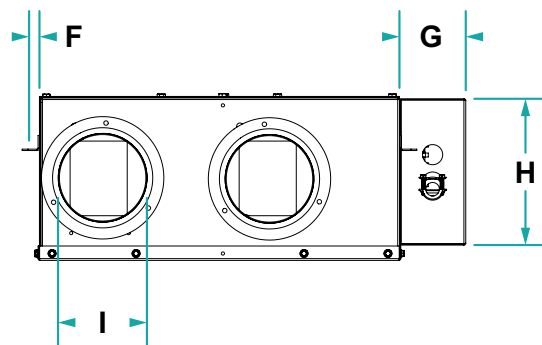
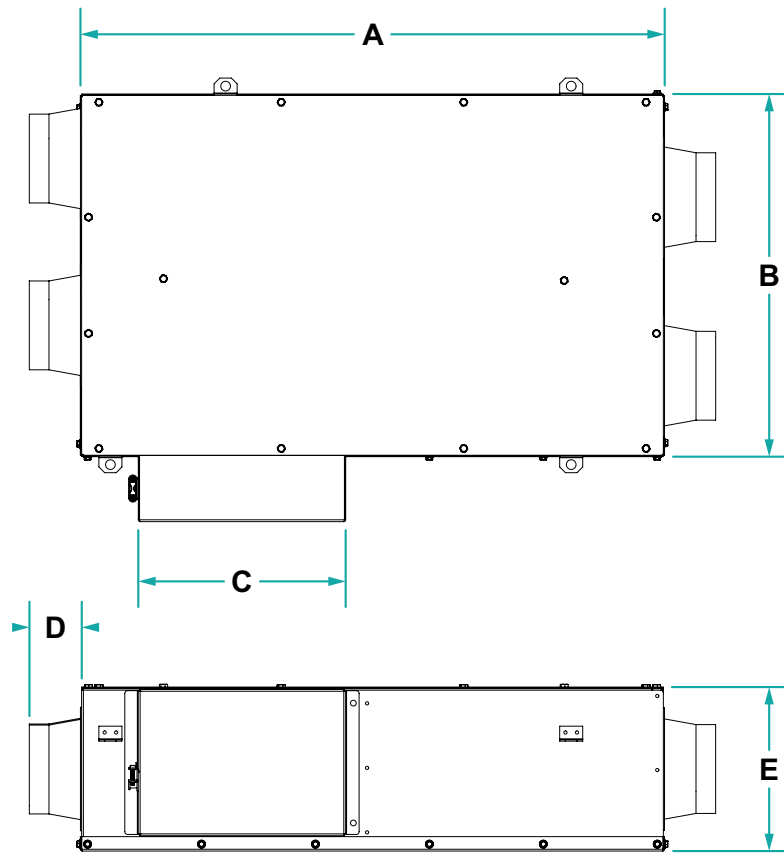
METRIC														
VOLTAGE	FREQUENCY	POWER	MCA	MOP	AIR FLOW (CMH)			STATIC PRESSURE	SENSIBLE HEAT EFFICIENCY (%)		ENTHALPY EFFICIENCY (%)		NOISE	DUCT DIAMETER
(V)	(Hz)	(W)	(A)	(A)	High	Med	Low	(Pa)	Cooling Load	Heating Load	Cooling Load	Heating Load	(dB)	(mm)
110	60	240	1.75	5	196	111	68	57.3	76.2	76.2	57.2	57.2	38	101.6

NOTE: Performance based on design parameters of 65 cfm @ 0.23 in. w.c. (111 m³/hr @ 57.3 Pa) static pressure drop.

Specification Sheet

Energy Recovery Ventilator

Dimensions

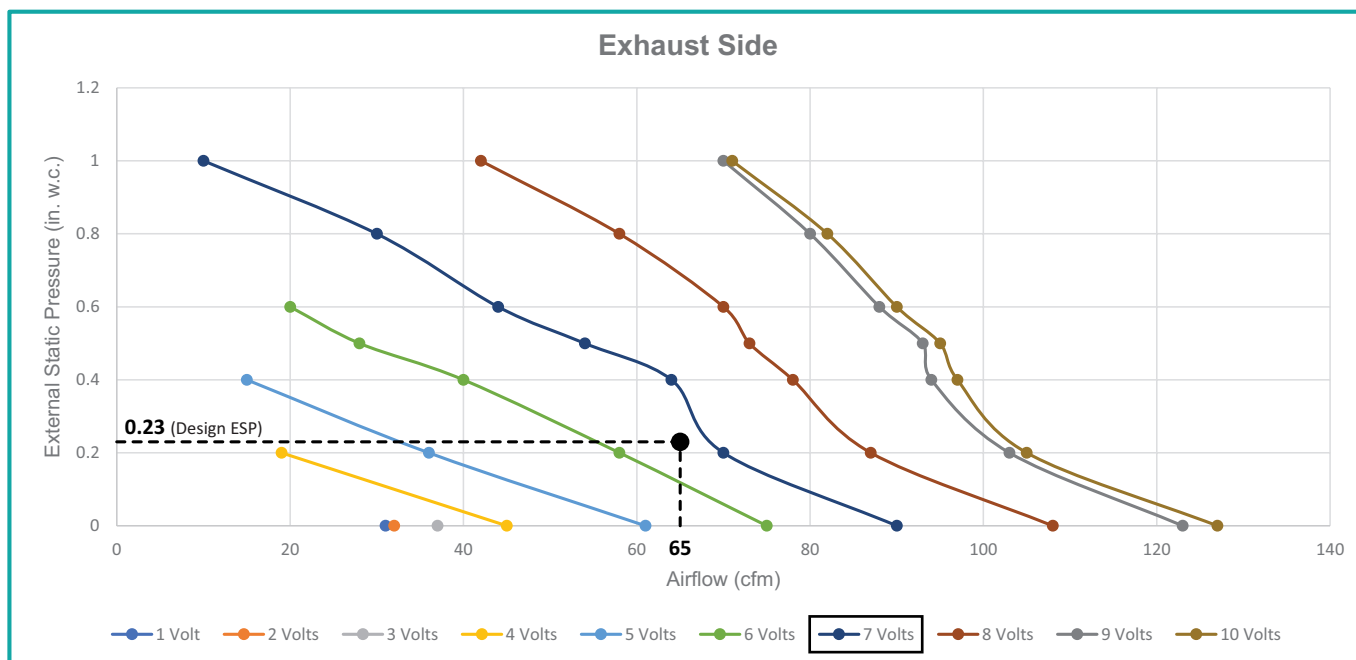
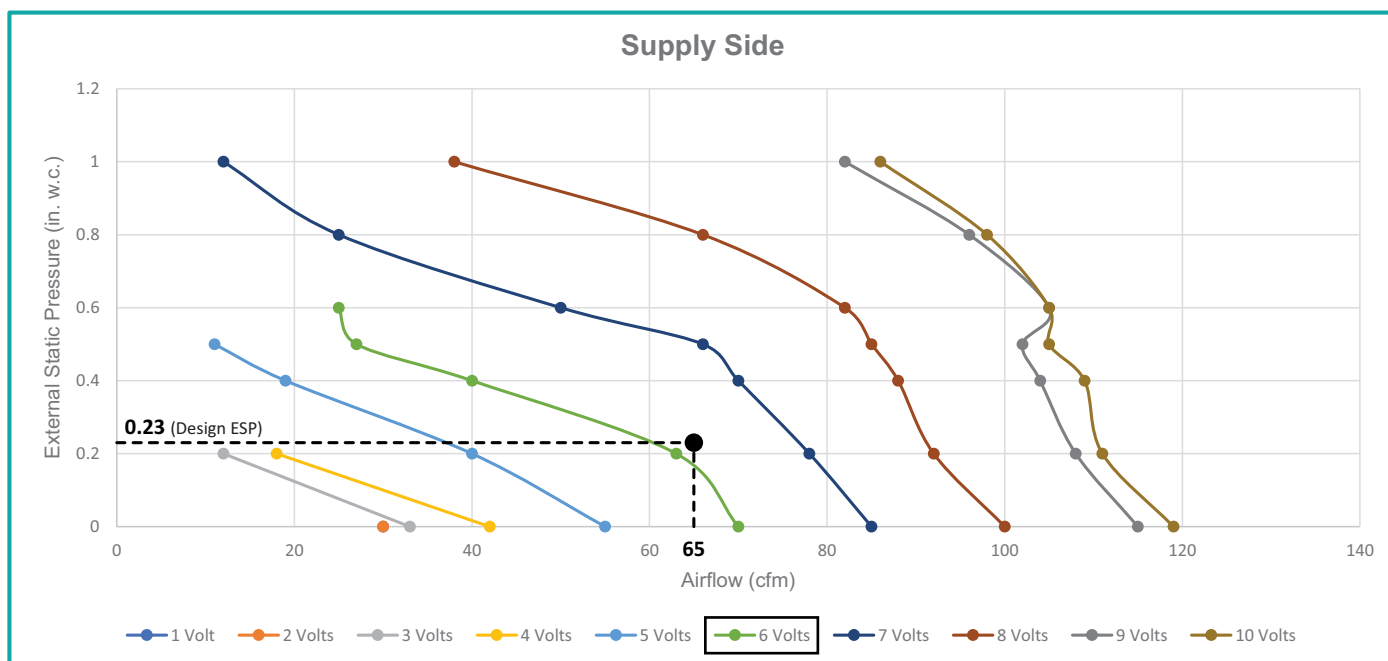


Unit	in	mm
A	25.4	645.2
B	15.7	398.8
C	9.0	228.6
D	2.3	58.4
E	7.1	180.3
F	0.75	19.1
G	2.9	73.7
H	6.4	162.6
I	Ø4.0	Ø101.6

Specification Sheet

Energy Recovery Ventilator

Air Flow Performance



Specification Sheet

Energy Recovery Ventilator

Recovery Specifications | 65 cfm (111 m³/hr)

Core Part Number: 3000.1000.07



Certified in accordance with the AHRI ERV Certification Program, which is based on AHRI Standard 1060. Certified units may be found in the AHRI Directory at www.ahridirectory.org.

General Information

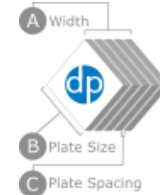
Model:	Residential, M-Series	Elevation:	0 Ft.	Weight:	3.75 lb
Frame Type:	Plastic, Coroplast L Frame	Pressure:	1013 mbar	Tag:	0 C-65 CFM

Design Conditions

	Summer		Winter		
	Outdoor	Return	Outdoor	Return	
Standard Airflow	65	65	65	65	CFM
Dry Bulb Temp	95	75	32	70	°F
Wet Bulb Temp	78.8	63	30.5	53	°F
Relative Humidity	48.6	51.2	84.4	29.6	%

Product Dimensions

A-Width:	7 in.
B-Plate Size:	9.8
C-Plate Spacing:	2 mm
D-Diagonal:	13.9 in.
G-Number of Sections:	1



	Summer		Winter	
	Outdoor (OA)	Return (RA)	Outdoor (OA)	Return (RA)
Airflow CFM	65	65	65	65
Dry Bulb Temp °F	95	75	32	70
Wet Bulb Temp °F	78.8	63	30.5	53
Enthalpy (H) BTU/lb	42.17	28.46	11.13	21.93
Moisture Ratio (MR) grains/lb	122.65	66.7	22.29	32.65
Energy (Q) Btuh	12576	8489	3319	6540

	Exhaust (EA)		Supply (SA)	
	Exhaust (EA)	Supply (SA)	Exhaust (EA)	Supply (SA)
Airflow CFM	65	65	65	65
Dry Bulb Temp °F	90.4	79.8	41.1	61
Wet Bulb Temp °F	73.8	69.3	37.3	47.8
Enthalpy (H) BTU/lb	37.25	33.38	14.01	19.05
Moisture Ratio (MR) grains/lb	98.71	90.64	26.72	28.22
Energy (Q) Btuh	11110	9954	4178	5680

	Summer	Winter
Supply pressure drop (PD) in.wg	0.23	0.23
Exhaust pressure drop (PD) in.wg	0.28	0.28
Sensible effectiveness %:	76.2	76.2
Latent effectiveness %:	57.2	57.2
Total effectiveness %:	64.1	73.3
Energy Recover Ratio %:	64.1	73.3
Supply air face velocity SFPM	111.43	111.43
Exhaust air face velocity SFPM	111.43	111.43
Moisture removed lb/h	1.36	0.25
Total energy saved Btuh	2622	2361
Energy balance %:	76.2	76.2
Water balance %:	57.2	57.2

Specification Sheet

Energy Recovery Ventilator

Recovery Specifications | 115 cfm (196 m³/hr)

Core Part Number: 3000.1000.07



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General Information

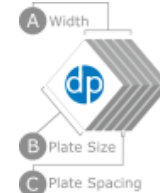
Model:	Residential, M-Series	Elevation:	0 Ft.	Weight:	3.75 lb
Frame Type:	Plastic, Coroplast L Frame	Pressure:	1013 mbar	Tag:	0 C-65 CFM

Design Conditions

	Summer		Winter		
	Outdoor	Return	Outdoor	Return	
Standard Airflow	115	115	115	115	CFM
Dry Bulb Temp	95	75	32	70	°F
Wet Bulb Temp	78.8	63	30.5	53	°F
Relative Humidity	48.6	51.2	84.4	29.6	%

Product Dimensions

A-Width:	7 in.
B-Plate Size:	9.8
C-Plate Spacing:	2 mm
D-Diagonal:	13.9 in.
G-Number of Sections:	1



	Summer		Winter	
	Outdoor (OA)	Return (RA)	Outdoor (OA)	Return (RA)
Airflow CFM	115	115	115	115
Dry Bulb Temp °F	95	75	32	70
Wet Bulb Temp °F	78.8	63	30.5	53
Enthalpy (H) BTU/lb	42.17	28.46	11.13	21.93
Moisture Ratio (MR) grains/lb	122.65	66.7	22.29	32.65
Energy (Q) Btuh	22249	15018	5872	11570

	Exhaust (EA)		Supply (SA)	
	Exhaust (EA)	Supply (SA)	Exhaust (EA)	Supply (SA)
Airflow CFM	115	115	115	115
Dry Bulb Temp °F	89.6	80.5	42.5	59.5
Wet Bulb Temp °F	72.8	70.3	38.4	46.9
Enthalpy (H) BTU/lb	36.38	34.25	14.48	18.57
Moisture Ratio (MR) grains/lb	94.29	95.06	27.54	27.4
Energy (Q) Btuh	19194	18074	7642	9801

	Summer	Winter
Supply pressure drop (PD) in.wg	0.42	0.42
Exhaust pressure drop (PD) in.wg	0.51	0.51
Sensible effectiveness %:	72.4	72.4
Latent effectiveness %:	49.3	49.3
Total effectiveness %:	57.7	68.9
Energy Recover Ratio %:	57.7	68.9
Supply air face velocity SFPM	197.14	197.14
Exhaust air face velocity SFPM	197.14	197.14
Moisture removed lb/h	2.08	0.38
Total energy saved Btuh	4175	3928
Energy balance %:	72.4	72.4
Water balance %:	49.3	49.3