

HE 3XINV

INDOOR UNIT

Energy Recovery Ventilator Standard with Bypass Economizer



Download specification at:
renewaire.com/specifications

SPECIFICATIONS

- Ventilation Type:**
Static plate, heat and humidity transfer

- Typical Airflow Range:** 750-3,300 CFM

- AHRI 1060 Certified Core:** Three L125-G5

- Standard Features:**
TEFC Premium efficiency motors
Motor starters
Non-fused disconnect
24 VAC transformer/relay package
Cross-core differential pressure ports

- Filters:**
Total qty. 6, MERV 8: 20" x 20" x 2"

- Unit Dimensions & Weight:**
50 3/4" L x 61 1/2" W x 62" H
590-999 lbs., varies by option(s)

- Max. Shipping Dimensions & Weight (on pallet):**
60" L x 90" W x 70" H
1,094 lbs.

- Motor(s):**
Qty. 2, Belt drive blower/standard motor packages with adjustable sheaves (see table below)

- Options:**
Onboard variable frequency drives (VFDs) - one or both airstreams
Shaft grounding ring on motors with VFDs
Fused disconnect
Integrated programmable controls - enhanced, premium
Bypass economizer damper (see bypass DIM drawing) - dry-bulb temperature controls (standard), enthalpy controls (option)
Class 1 low leakage motorized isolation dampers - OA, RA or both airstreams
Qty. 2, Factory mounted filter alarms - both airstreams
Double wall construction
Exterior paint - white, custom colors

- Accessories:**
Filters - MERV 13, 2" (shipped loose)
Digital time clock - wall mount (TC7D-W), in exterior enclosure (TC7D-E)
Carbon dioxide sensor/control - wall mount (CO2-W), duct mount (CO2-D)
IAQ sensor - wall mount (IAQ-W), duct mount (IAQ-D)
Motion occupancy sensor/control - ceiling mount (MC-C), wall mount (MC-W)
Smoke Detector - duct mount (SD-D)
Electric duct heater - EK series (1-175 kW)
Indirect gas-fired duct furnace - GH series (50-400 MBH), installed downstream of any fans

AIRFLOW PERFORMANCE

Motor HP	Blower RPM	Sheave Adj. Turns Open	External Static Pressure (in. w.g.)													
			0.00		0.25		0.50		0.75		1.00		1.25		1.50	
			SCFM	BHP	SCFM	BHP	SCFM	BHP	SCFM	BHP	SCFM	BHP	SCFM	BHP	SCFM	BHP
2.0	1195	4	2185	0.8	2000	0.7	1725	0.5	1210	0.4						
	1355	2	2440	1.1	2270	0.9	2060	0.8	1715	0.6	1210	0.5				
	1476	0	2700	1.5	2550	1.3	2380	1.2	2150	1.0	1750	0.8	1300	0.6		
3.0	1536	2.5	2810	2.1	2700	2.1	2560	1.9	2370	1.8	2140	1.6	1840	1.5	1420	1.1
	1632	1.5	2985	2.5	2880	2.4	2760	2.3	2590	2.2	2400	2.0	2145	1.8	1855	1.6
	1696	0.5	3100	2.8	3000	2.7	2900	2.7	2735	2.5	2505	2.3	2335	2.1	2065	1.9
	1728	0	3160	3.0	3055	2.9	2960	2.8	2800	2.6	2635	2.5	2425	2.3	2165	2.1
5.0	1749	2	3300	3.3	3200	3.1	3020	2.8	2860	2.6	2660	2.3	2440	2.1	2200	1.8
	1801	1			3300	3.4	3140	3.1	2980	2.8	2800	2.6	2585	2.8	2350	2.1
	1853	0					3245	3.4	3090	3.1	2920	2.9	2715	2.6	2500	2.4

Note: Brake Horse Power (BHP) is for one blower motor package only. Operation in this zone outside of core airflow limits.

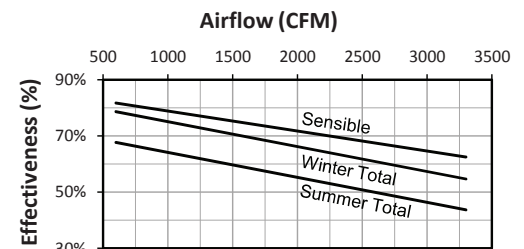
Note: Airflow performance includes effect of clean, standard filter supplied with unit.

ELECTRICAL DATA

Standard Electrical Specifications							Optional Factory Installed VFD Electrical Specifications		
HP	Volts	HZ	Phase	FLA per motor	Min. Cir. Amps	Max. Overcurrent Protection Device	FLA per motor	Min. Cir. Amps	Max. Overcurrent Protection Device
2.0	120	60	Single	20.0	45.0	60			
2.0	208-230	60	Single	10.8-10.0	24.3	35	6.6-5.8	16.3	30
	208-230	60	Three	6.6-5.8	14.9	20	6.6-5.8	28.3	20
	460	60	Three	2.9	6.5	15	2.9	7.2	15
	575	60	Three	2.4	5.4	15	2.4	5.9	15
3.0	208-230	60	Single	14.7-14	33.1	40	9.4-8.5	40.2	45
	208-230	60	Three	9.4-8.5	21.1	25	9.4-8.5	23.2	25
	460	60	Three	4.2	9.5	15	4.2	10.5	15
	575	60	Three	3.3	7.4	15	3.3	8.2	15
5.0	208-230	60	Three	14.5-13.4	32.6	45	14.5-13.4	35.9	45
	460	60	Three	6.7	15.1	20	6.7	16.6	20
	575	60	Three	5.3	11.9	15	5.3	13.1	15

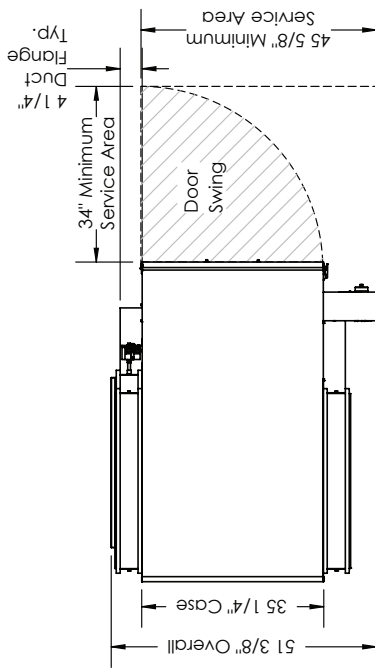
Specifications may be subject to change without notice.

CORE PERFORMANCE

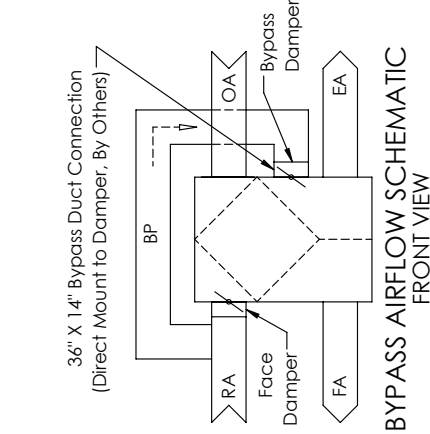


At AHRI 1060 standard conditions.
See all AHRI certified ratings at www.ahrinet.org.

HE3XINV Energy Recovery Ventilator Standard with Bypass Economizer



TOP VIEW

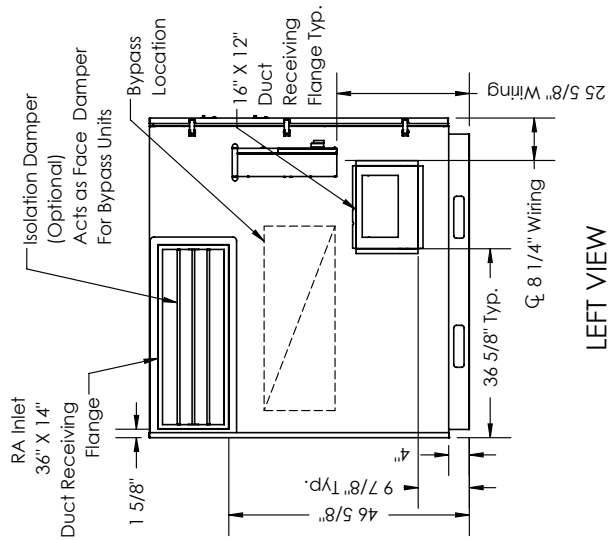


BYPASS AIRFLOW SCHEMATIC FRONT VIEW

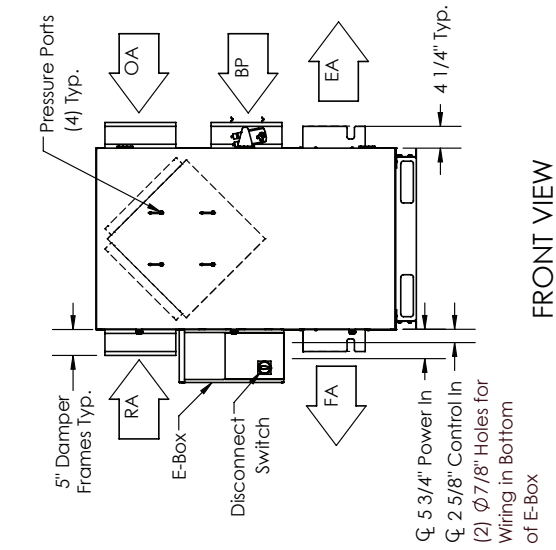
ABBREVIATIONS
 EA: Exhaust Air to outside
 OA: Outside Air Intake
 RA: Room Air to be exhausted
 FA: Fresh Air to inside
 BP: Bypass Air Intake

INSTALLATION ORIENTATION
 Unit must be installed in orientation shown.

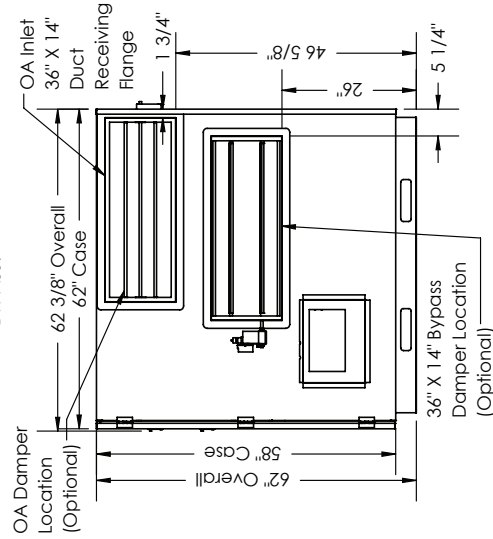
- NOTE**
 1. UNLESS OTHERWISE SPECIFIED, DIMENSIONS ARE ROUNDED TO THE NEAREST EIGHTH OF AN INCH.
 2. SPECIFICATIONS MAY BE SUBJECT TO CHANGE WITHOUT NOTICE.
 3. MIN. DUCT CLEARANCE FROM DAMPER BLADE WHEN FULLY OPENED TO BE 2". SMACNA RULES APPLY.
 4. UNITS WITH BYPASS WILL REQUIRE ADDITIONAL SPACE FOR THE CONNECTION OF THE BYPASS DUCT (BY OTHERS).
 5. FOR INSTALLATION DETAILS, REFER TO I&O MANUAL SUPPLEMENT FOR BYPASS.



LEFT VIEW



FRONT VIEW



RIGHT VIEW

AIRFLOW CONFIGURATION
 Available as shown in dimension drawing.

UNIT MOUNTING & APPLICATION
 Must be mounted as shown. Airstreams can not be switched.