

# HE 3XINH

## ENERGY RECOVERY VENTILATOR



### INDOOR UNIT



Energy recovery core is AHRI Certified®



### SPECIFICATIONS

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

**Airflow Range:** 750–3,300 CFM

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

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

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

**Unit Weight:**  
628–934 lbs., varies by option(s)

**Max. Shipping Dimensions & Weight (on pallet):**  
80" L x 70" W x 50" H  
1,029 lbs.

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

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

**Accessories:**  
Filters: MERV 13, 2" (shipped loose)  
Automatic balancing damper: 4", 5", 6"  
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)  
Indoor 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 (Inches Water Column)													
			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	1189	4	2185	1.0	2095	0.9	1900	0.8	1580	0.6	800	0.4				
	1329	2	2440	1.4	2360	1.3	2220	1.2	2020	1.0	1640	0.8	850	0.4		
	1470	0	2700	1.9	2640	1.8	2520	1.6	2360	1.5	2150	1.8	1770	1.0	1110	0.6
3.0	1496	3	2905	2.4	2815	2.3	2675	2.1	2505	1.9	2340	1.8	2220	1.6	1655	1.2
	1560	2	3030	2.7	2945	2.6	2825	2.5	2655	2.3	2445	2.1	2325	1.9	1990	1.6
	1656	0.5					3040	3.0	2875	2.8	2720	2.6	2575	2.4	2380	2.2
	1688	0							2950	2.9	2800	2.8	2650	2.6	2490	3.0
5.0	1686	3	3300	3.5	3225	3.4	3015	3.2	2855	3.0	2800	2.8	2645	2.6	2470	2.4
	1764	1.5					3290	3.8	3145	3.5	2995	3.3	2850	3.1	2705	2.9
	1843	0							3300	4.1	3175	3.8	3040	3.6	2900	3.4

Operation in this zone will likely exceed FLA limits. Operation in this zone outside of core airflow limits.

Note: Brake horsepower (BHP) is for one blower motor package only. Airflow performance includes effect of clean, standard filter supplied with unit.

### ELECTRICAL DATA

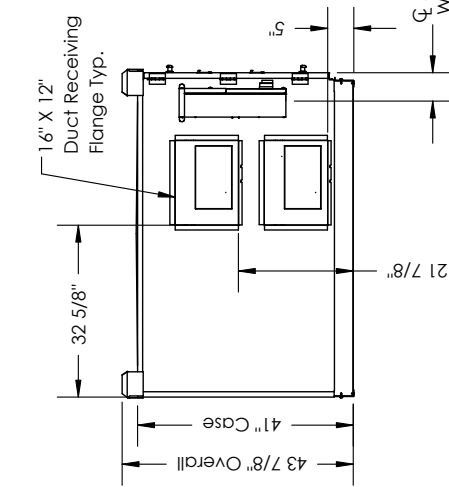
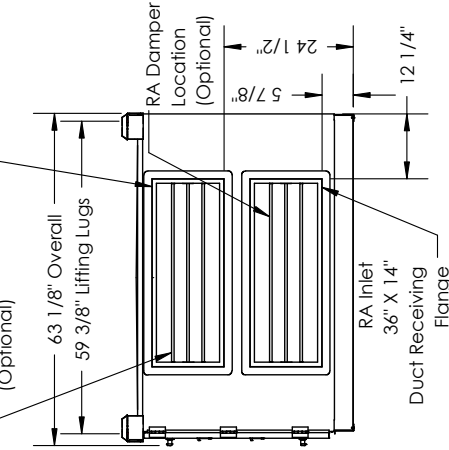
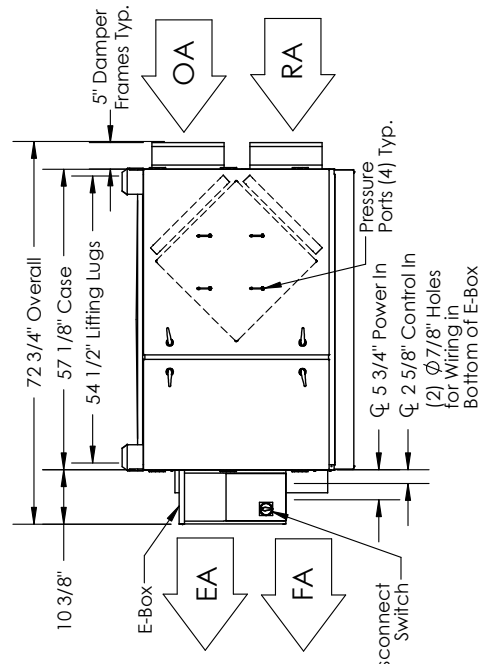
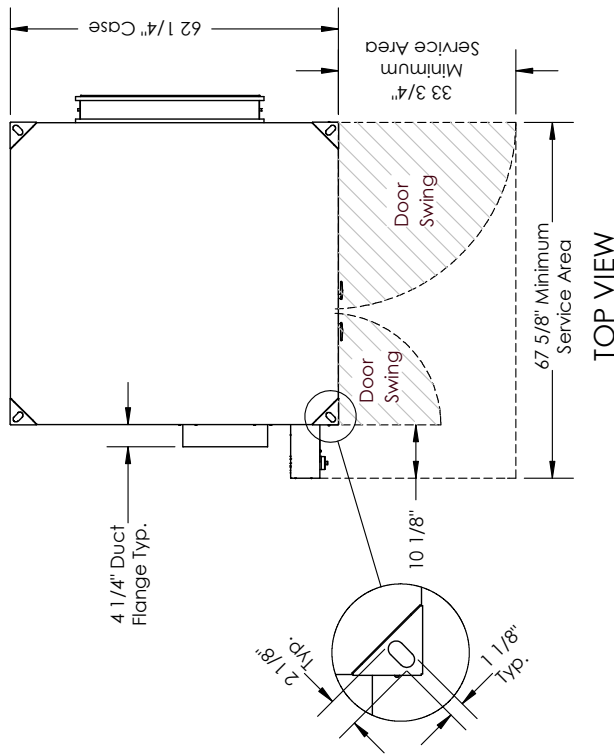
Standard Electrical Specifications							Optional Factory Installed VFD Electrical Specifications		
HP	Volts	Hz	Phase	FLA per motor	Min. Cir. Amps	Max. Overcurrent Protection Device	FLA per motor	Min. Cir. Amps	Max. Overcurrent Protection Device
2.0	120	60	Single	20.0	45.0	60.0			
	208–230	60	Single	10.8–10.0	24.3	35.0	6.6–5.8	28.3	30.0
	208–230	60	Three	6.6–5.8	14.9	20.0	6.6–5.8	16.3	20.0
	460	60	Three	2.9	6.5	15.0	2.9	7.2	15.0
3.0	575	60	Three	2.4	5.4	15.0	2.4	5.9	15.0
	208–230	60	Single	14.7–14	33.1	40.0	9.4–8.5	40.2	45.0
	208–230	60	Three	9.4–8.5	21.1	25.0	9.4–8.5	23.2	25.0
	460	60	Three	4.24	9.5	15.0	4.24	10.5	15.0
5.0	575	60	Three	3.3	7.4	15.0	3.3	8.2	15.0
	208–230	60	Three	14.5–13.4	32.6	45.0	14.5–13.4	35.9	45.0
	460	60	Three	6.7	15.1	20.0	6.7	16.6	20.0
	575	60	Three	5.3	11.9	15.0	5.3	13.1	15.0

**HE3XINH ENERGY RECOVERY VENTILATOR**

**ABBREVIATIONS**  
 EA: Exhaust Air to outside  
 OA: Outside Air intake  
 RA: Room Air to be exhausted  
 FA: Fresh Air to inside

**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 BLADES WHEN FULLY OPENED TO BE 2". SMACNA RULES APPLY.



RIGHT VIEW

FRONT VIEW

LEFT VIEW

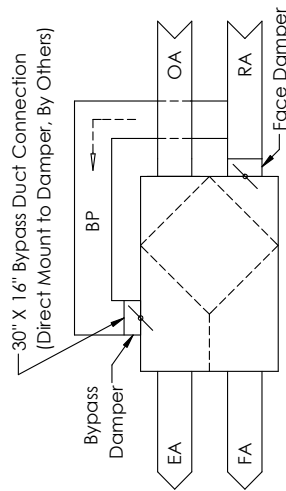
**UNIT MOUNTING & APPLICATION**  
 Must be mounted as shown. RA/EA airstream can be switched with OA/FA airstream unless certain options are selected.



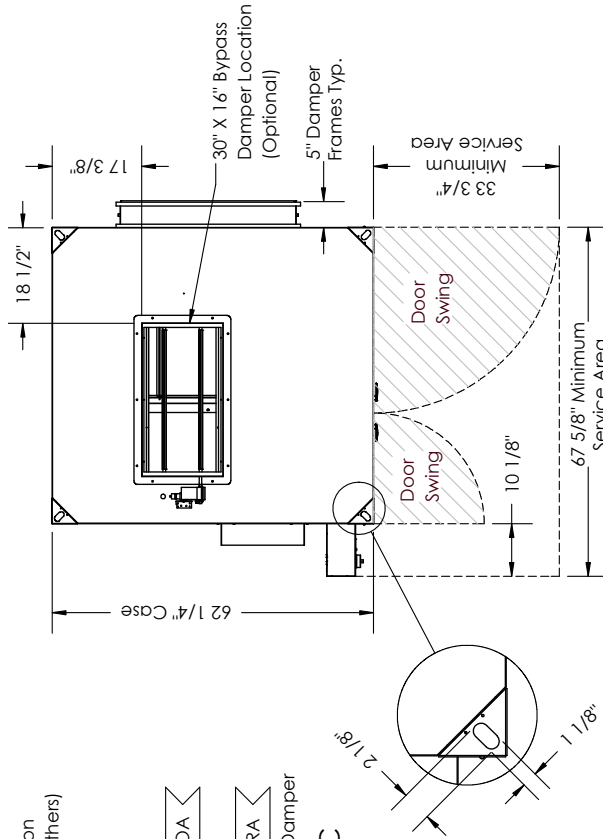
**AIRFLOW ORIENTATION**  
 Available as shown in dimension drawing.



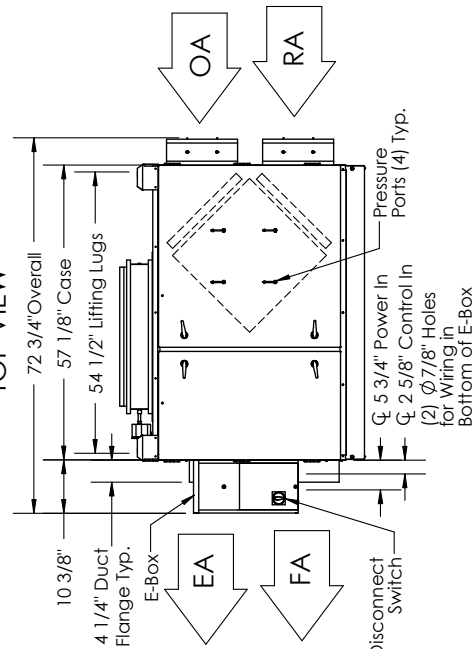
**HE3XINH ENERGY RECOVERY VENTILATOR WITH BYPASS ECONOMIZER**



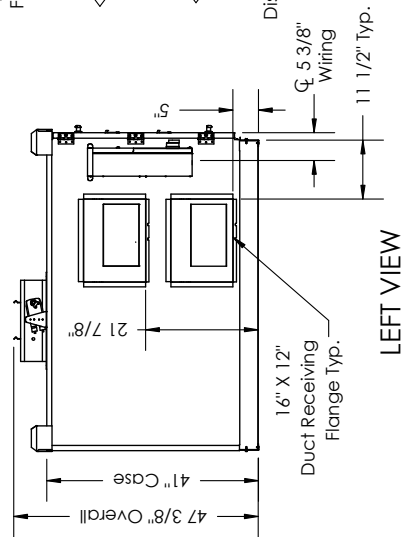
**BYPASS AIRFLOW SCHEMATIC FRONT VIEW**



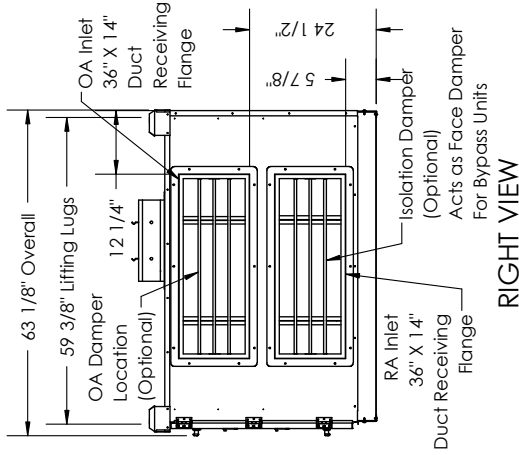
**TOP VIEW**



**FRONT VIEW**



**LEFT VIEW**



**RIGHT 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.

**AIRFLOW ORIENTATION**

Available as shown in dimension drawing.



**UNIT MOUNTING & APPLICATION**

Must be mounted as shown. Airstreams cannot be switched.