



INDOOR UNIT



Energy recovery core is AHRI Certified®



ENERGY RECOVERY VENTILATOR



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:

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:

Ultra premium efficiency (IE5+) motors with variable frequency drive (VFDs): both airstreams
Onboard 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)
BACnet fan control: wall mount (BACNETFC-W)
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	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

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.



3XINV

ENERGY RECOVERY VENTILATOR



ELECTRICAL DATA

Electrical Specifications				Motor Starters (Standard)			Optional IE3 Efficiency Motor with VFDs			Optional IE5+ Efficiency Motor with VFDs		
HP	Volts	HZ	Phase	FLA per motor	Min. Cir. Amps	Max. Overcurrent Protection Device	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	45.0	60						
2.0	208-230	60	Single	10.8-10	24.3	35	6.6-5.8	25.7	35	4.5-4.5	17.5	25
	208-230	60	Three	6.6-5.8	14.9	20	6.6-5.8	14.9	20	4.5-4.5	10.1	15
	460	60	Three	2.9	6.5	15	2.9	6.5	15	2.3	5.2	15
	575	60	Three	2.3	5.2	15	2.3	5.2	15			
3.0	208-230	60	Single	14.6-14	32.9	45	9-8.4	35.1	50	7.3-7.3	28.4	40
	208-230	60	Three	9-8.4	20.3	25	9-8.4	20.3	25	7.3-7.3	16.4	20
	460	60	Three	4.2	9.5	15	4.2	9.5	15	3.7	8.3	15
	575	60	Three	3.3	7.4	15	3.3	7.4	15			
5.0	208-230	60	Three	13.9-13.4	31.3	45	13.9-13.4	31.3	45	10.5-10.5	23.6	30
	460	60	Three	6.7	15.1	20	6.7	15.1	20	5.3	11.9	15
	575	60	Three	5.3	11.9	15	5.3	11.9	15			

HE3XINV ENERGY RECOVERY VENTILATOR

ABBREVIATION

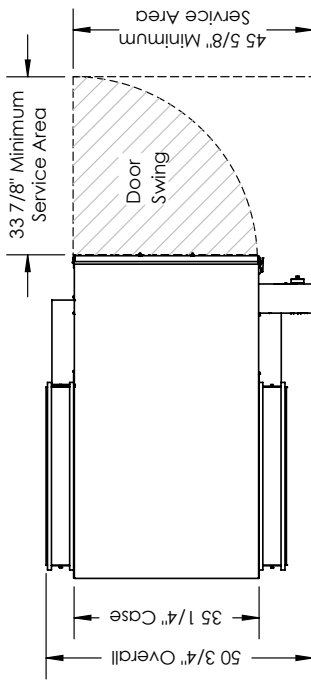
EA: Exhaust Air to outside
OA: Outside Air Intake
RA: Room Air to be exhausted
FA: Fresh Air to inside

INSTALLATION ORIENTATION

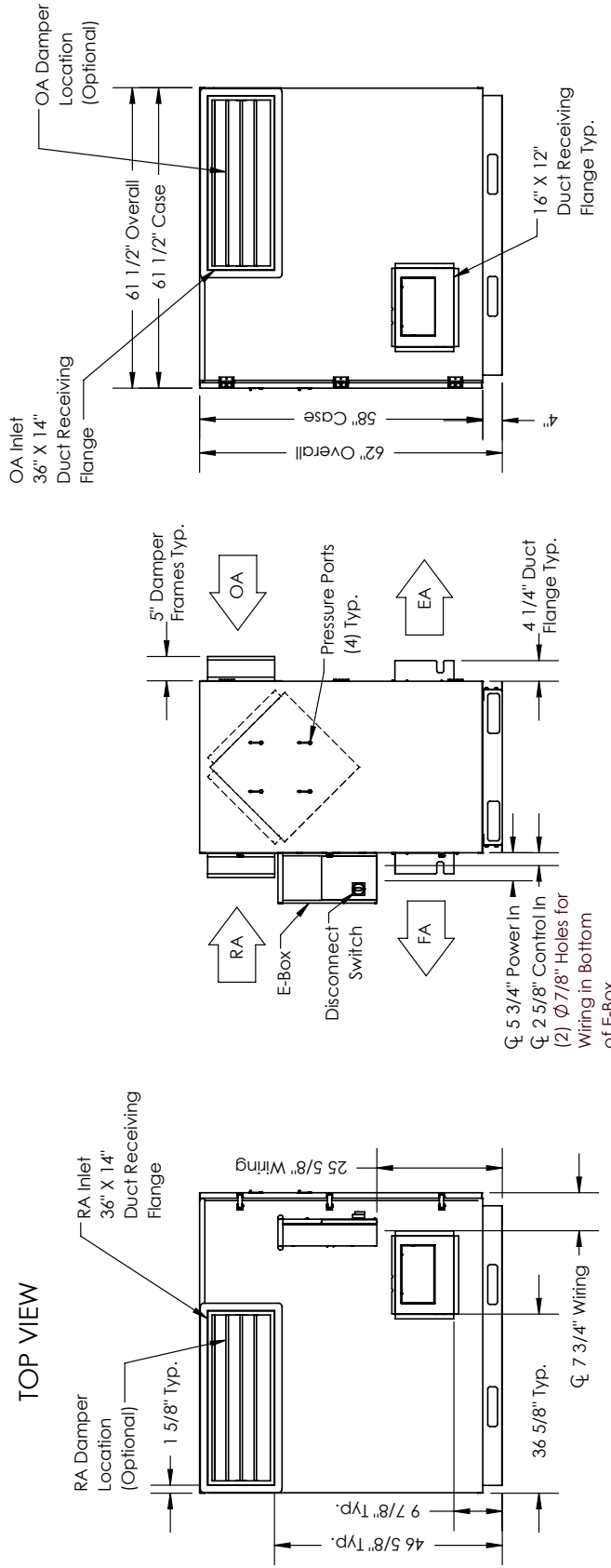
Unit must be installed in orientation shown.

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.



TOP VIEW



FRONT VIEW

RIGHT VIEW

LEFT VIEW

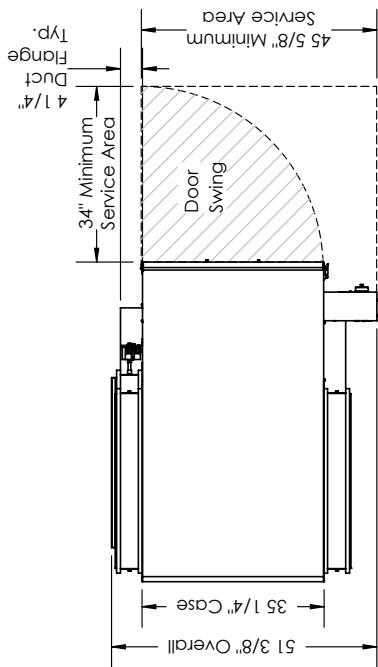
AIRFLOW ORIENTATION

Available as shown in dimension drawing.

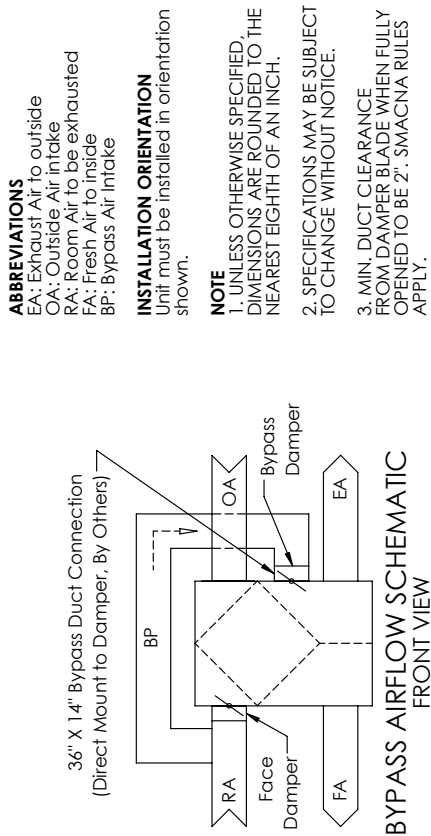
UNIT MOUNTING & APPLICATION

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





TOP VIEW



BYPASS AIRFLOW SCHEMATIC
FRONT VIEW

ABBREVIATIONS

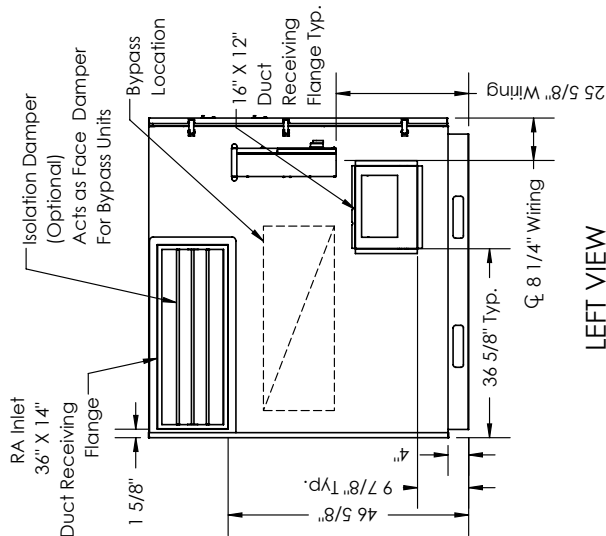
EA: Exhaust Air to outside
OA: Outside Air Intake
RA: Room Air to be exhausted
BP: Bypass Air Intake

INSTALLATION ORIENTATION

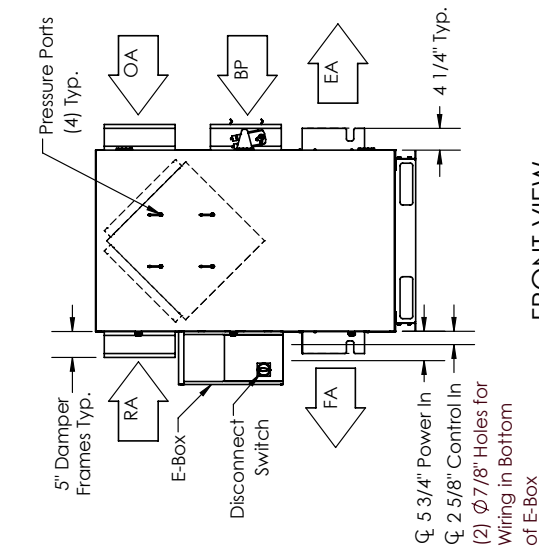
Unit must be installed in orientation shown.

NOTE

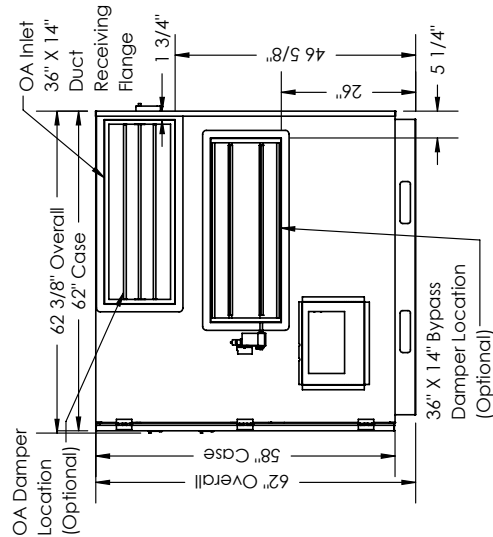
1. UNLESS OTHERWISE SPECIFIED, DIMENSIONS ARE ROUNDED TO THE NEAREST EIGHTH OF AN INCH.
2. SPECIFICATIONS MAY BE SUBJECT TO CHANGE WITHOUT NOTICE.
3. MIN. DUCT CLEARANCE FROM DAMPER BLADE WHEN FULLY OPENED TO BE 2". SMAGNA RULES APPLY.
4. UNITS WITH BYPASS WILL REQUIRE ADDITIONAL SPACE FOR THE CONNECTION 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 ORIENTATION

Available as shown in dimension drawing.

UNIT MOUNTING & APPLICATION

Must be mounted as shown. Airstreams cannot be switched.

