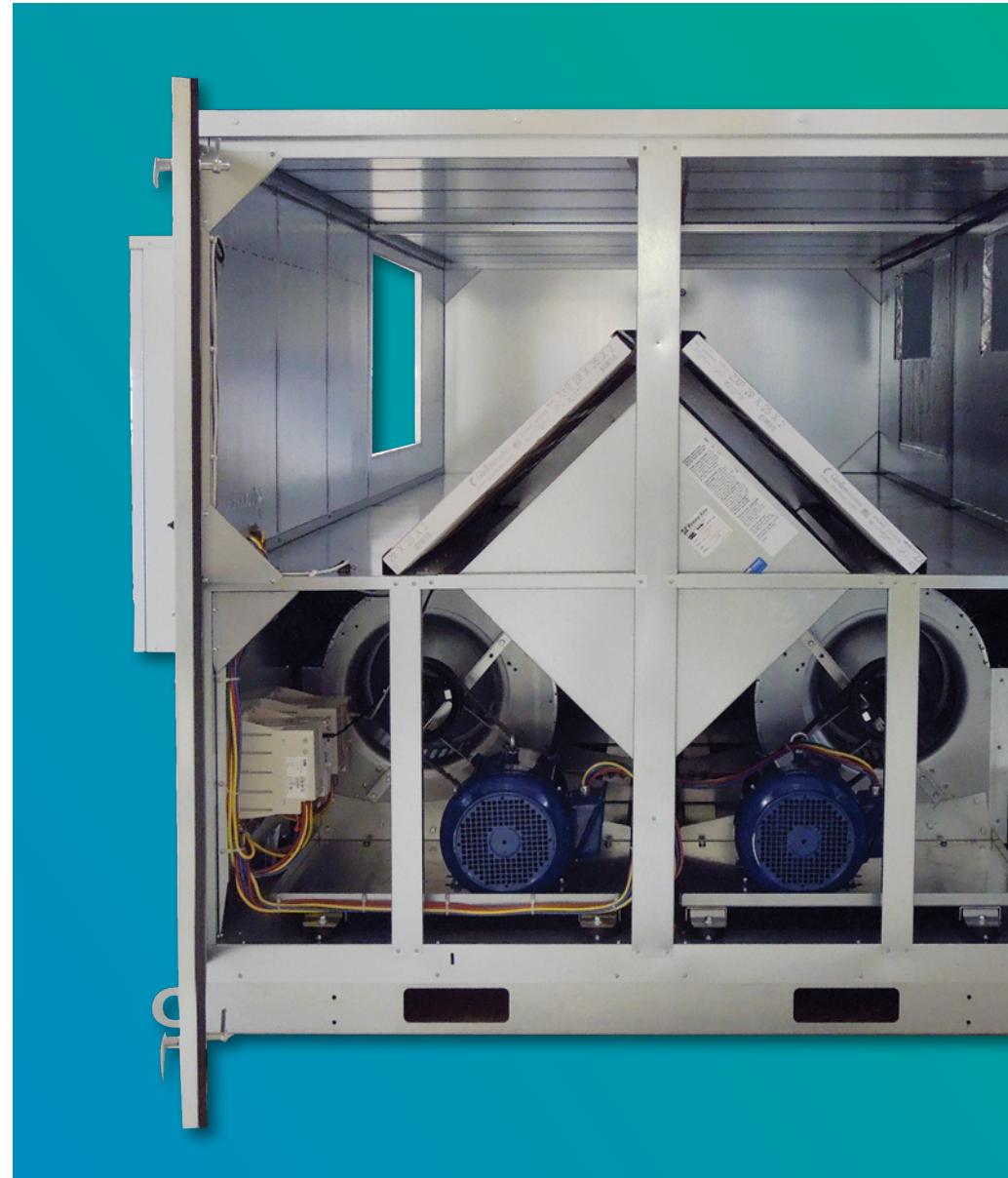




RENEWAIRE



## LE SERIES

### COMMERCIAL ERV CATALOG

**AUGUST 2021**  
RENEWAIRE.COM | 800.627.4499

# BECAUSE INDOOR AIR QUALITY MATTERS

As buildings become more airtight due to better construction methodologies, the need for increased and balanced ventilation is critical. Without it, internally generated contaminants accumulate and cause **deficient indoor air quality** (IAQ), which leads to significant health and cognitive problems for occupants. Industry standards are changing to combat deficient IAQ, and codes that adopt these new standards are driving the

application of Energy Recovery in ventilation strategies.

Deficient IAQ is a serious problem, especially considering:

- ◆ On average, Americans spend 90% of their time indoors
- ◆ The EPA found that indoor air may be 2-5 times—and occasionally greater than 100 times—more polluted than outdoor air
- ◆ The EPA ranks indoor air pollutants as a top-five environmental health risk to occupants



**HEALTH MATTERS**



**PRODUCTIVITY MATTERS**



**LEARNING MATTERS**

## ADVERSE EFFECTS OF DEFICIENT IAQ

Deficient IAQ has numerous adverse effects on the health and cognitive function of building occupants.



**Health problems:** Acute allergies, headaches, coughs, asthma, skin irritations and breathing difficulties, as well as chronic illnesses such as cancer, liver disease, kidney damage and nervous-system failure.



**Cognitive impairment:** Studies by the Harvard School of Public Health and the Lawrence Berkeley National Laboratory found that carbon dioxide (CO<sub>2</sub>)—an indoor air contaminant—negatively impacted thinking and decision-making at levels commonly found inside homes and buildings.

## ABOUT RENEWAIRE

For over 30 years, **RenewAire has been a pioneer in enhancing IAQ** in commercial and residential buildings of every size. This is achieved while maximizing sustainability through our fifth-generation, enthalpic-core, static-plate Energy Recovery Ventilators (ERVs) & Dedicated Outdoor Air Systems (DOAS) that **optimize energy efficiency**, lower capital costs and **decrease operational expenses** by reducing HVAC loads therefore minimizing equipment needs, resulting in significant energy savings. Our ERVs/DOAS are competitively priced, simple to install, easy to use and maintain, have a quick payback and enjoy the industry's best warranty with the lowest claims due to long-term reliability. In 2010, RenewAire joined the Soler & Palau (S&P) Ventilation Group, providing direct access to the latest in energy-efficient air-moving technologies. For more information, visit: [renewaire.com](http://renewaire.com).

# TABLE OF CONTENTS

## LE SERIES - Commercial Unitary ERV

MODEL	TYPE	CFM RANGE	PAGE
LE6XINH - STANDARD	Indoor	1,500-6,600 CFM	4-5
LE6XINV - STANDARD	Indoor	1,500-6,600 CFM	6-7
LE6XRT - STANDARD	Rooftop	1,500-6,600 CFM	8-10
LE8XINH - STANDARD	Indoor	2,000-8,800 CFM	12-13
LE8XINV - STANDARD	Indoor	2,000-8,800 CFM	14-15
LE8XRT - STANDARD	Rooftop	2,000-8,800 CFM	16-18
LE10XINH - STANDARD	Indoor	2,500-11,000 CFM	20-21
LE10XINV - STANDARD	Indoor	2,500-11,000 CFM	22-23
LE10XRT - STANDARD	Rooftop	2,500-11,000 CFM	24-26

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# RENEWAIRE ERVs ACHIEVE SUSTAINABLE IAQ

RenewAire is a **pioneer in enhancing IAQ** while maximizing sustainability through enthalpic-core, static-plate Energy Recovery Ventilators (ERVs) that **optimize energy efficiency, lower costs by reducing HVAC loads and therefore reduce environmental footprints**. Our ERV technology preconditions incoming air with the otherwise-wasted energy (heat and humidity) of the exhaust air going out—all while the airstreams are kept physically separate as certified by the Air-Conditioning, Heating, and Refrigeration Institute (AHRI) for low-to-zero Exhaust Air Transfer Ratio (EATR) at typical static pressure differentials. As the pioneer of static-plate core technology in North America, RenewAire is the largest ERV producer in the USA.

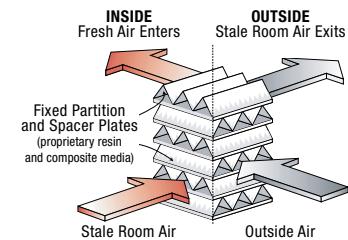
## OPTIMIZING ENERGY EFFICIENCY

Energy efficiency is optimized by preconditioning the outside air coming in with the **otherwise-wasted heat and humidity** of the exhaust air going out. This exchange of energy moderates temperatures and moisture, decreases HVAC equipment needs, drives operational efficiencies and conserves energy.



## REDUCING HVAC LOADS

RenewAire technology reduces **HVAC loads** during both winter and summer. In turn, HVAC equipment capacities can be decreased, thus furnaces and air conditioners can be smaller. This process ensures efficient operations and keeps both energy use and costs low, while maintaining high-level IAQ.



## MINIMIZING ENVIRONMENTAL IMPACT

The combination of less energy used and HVAC loads being reduced conserves resources. Further, our Madison, WI plant is 100% powered by renewable wind energy, and is one of the few buildings worldwide to be LEED® Gold and Green Globes certified, as well as having achieved ENERGY STAR Building status. This commitment to sustainable manufacturing minimizes our overall production and distribution environmental footprint.



# WHY RENEWAIRE IS PREFERRED



## BEST VALUE

- Priced competitively against other energy recovery ventilation technology
- Due to competitive pricing and decreased costs, payback is short and ROI is maximized
- Contractors and OEMs can pass these significant savings along to their customers
- End users can benefit from a significantly reduced operating cost



## RELIABLE OPERATION

- Built-to-last ERVs have lifespans of 25+ years and operate consistently year-round in every extreme, including frost-free performance in all but the most severe winter climates
- High-efficiency core operates dry in all conditions, meaning no condensate pans
- An industry-leading ten-year warranty for the static-plate core, two-year warranty for commercial products and a five-year warranty for residential products
- Superior product quality results in paramount reliability and longevity



## HIGHEST-QUALITY INDOOR AIR

- Stale indoor air is replaced with fresh, conditioned and filtered air from the outside, resulting in Enhanced IAQ by removing harmful contaminants
- Airstreams do not mix and pollutants are not transferred across partition plates
- No biocide used; material does not promote biological growth
- Moderated temperatures and humidity maintain a comfortable indoor environment



## OPTIMIZED ENERGY EFFICIENCY

- Efficient heat and humidity transfer recaptures up to 70-80% of the energy exhausted in the airstream
- Energy that's otherwise wasted by conventional ventilation systems (such as bath fans) is reused, thus dramatically reducing monthly operation costs
- Energy-efficient operation decreases HVAC loads, which cuts down on energy use and costs
- The hotter or colder the climate, the more energy is recovered



## HIGHLY CERTIFIED

- RenewAire products are highly certified. See individual catalog submittal for certification details:
  - UL
  - cUL
  - ETL
  - HVI
  - AHRI





## INDOOR UNIT



LE6XINV shown

Energy Recovery Core is AHRI Certified®



## AIRFLOW PERFORMANCE

Airflow CFM	External Static Pressure (in.w.g.)																		
	0.00		0.25		0.50		0.75		1.00		1.25		1.50		1.75		2.00		
	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	
1500									0.9	820	1.1	900	1.3	960	1.4	1020	1.6	1080	
2000									1.1	850	1.3	930	1.5	990	1.7	1050	1.9	1100	
2500									1.1	770	1.3	870	1.5	950	1.7	1010	1.9	1060	
3000									1.4	800	1.6	890	1.8	960	2.0	1020	2.2	1080	
3500									1.7	840	1.9	910	2.1	980	2.4	1040	2.6	1090	
3750									1.7	780	1.9	860	2.1	920	2.3	990	2.6	1040	
4000									1.9	810	2.1	880	2.3	940	2.6	1000	2.8	1050	
4250									2.0	780	2.2	840	2.3	900	2.6	960	2.8	1010	
4500	3 HP LOW SPEED	2.1	770	2.2	820	2.4	870	2.6	920	2.8	970	3.1	1030	3.3	1080	3.6	1130	3.9	1180
4750		2.4	810	2.5	850	2.7	900	2.9	950	3.1	990	3.3	1040	3.6	1090	3.9	1140	4.2	1190
5000		2.7	850	2.8	890	3.0	930	3.2	970	3.4	1010	3.7	1060	3.9	1110	4.2	1150	4.5	1210
5250		3.0	880	3.2	920	3.4	960	3.5	990	3.8	1030	4.0	1080	4.3	1120	4.6	1170	4.9	1220
5500	5 HP LOW SPEED	3.4	910	3.5	950	3.7	980	3.9	1020	4.1	1060	4.4	1100	4.7	1140	5.0	1190	5.4	1240
5750		3.8	950	3.9	980	4.1	1010	4.3	1040	4.5	1080	4.8	1120	5.1	1160	5.4	1200	5.8	1260
6000		4.2	980	4.3	1000	4.5	1030	4.7	1070	5.0	1100	5.2	1140	5.5	1180	5.9	1220	6.3	1270
6250		4.6	1000	4.8	1030	5.0	1060	5.2	1090	5.4	1120	5.7	1160	6.0	1190	6.3	1240	6.8	1290
6500		5.1	1030	5.2	1060	5.4	1080	5.6	1110	5.9	1140	6.2	1170	6.5	1210	6.8	1250	7.3	1300
6600		5.3	1040	5.4	1070	5.6	1090	5.8	1120	6.1	1150	6.4	1180	6.7	1220	7.0	1260	7.5	1310
7.5 HP LOW SPEED												7.5 HP MED SPEED							

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	
3.0	208-230	60	Single	14.7-14	33.1	40	9.38-8.48	40.2	45	
3.0	208-230	60	Three	9.38-8.48	21.1	25	9.38-8.48	23.2	25	
	460	60	Three	4.24	9.5	15	4.24	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	
7.5	208-230	60	Three	21.0-19.0	47.3	60	21.0-19.0	52.0	60	
	460	60	Three	9.5	21.4	25	9.5	23.5	25	
	575	60	Three	7.6	17.1	20	7.6	18.8	20	

Energy Recovery Ventilator  
Standard

## SPECIFICATIONS

## Ventilation Type:

Static plate, heat and humidity transfer

## Typical Airflow Range:

1,500-6,600 CFM

## AHRI 1060 Certified Core:

Six 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. 12, MERV 8: 20" x 25" x 2"

## Options:

Spring vibration isolators

Onboard variable frequency drives (VFDs) - both airstreams

Shaft grounding ring on motors with VFDs

Fused disconnect

Integrated programmable controls - enhanced, premium

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" or 4"; MERV 8, 4" (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)

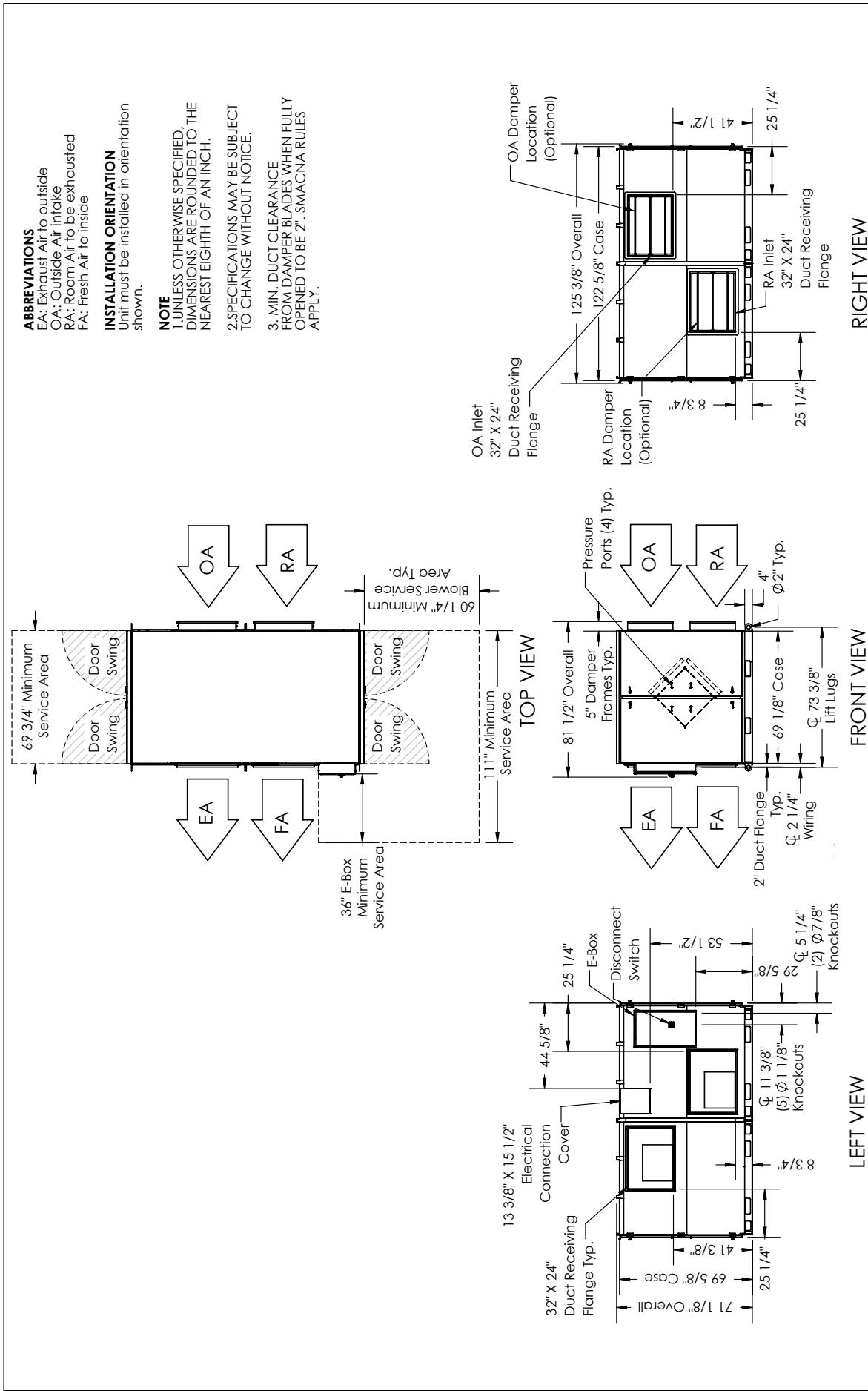
Motion occupancy sensor/control - ceiling mount (MC-C), wall mount (MC-W)

Smoke Detector - duct mount (SD-D)

Electric duct heater - EK series (1-175 kW)

Indirect gas-fired duct furnace - GH series (50-400 MBH), installed downstream of any fans

(50-400 MBH), installed downstream of any fans



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



## INDOOR UNIT



Energy Recovery Core is AHRI Certified®

Energy Recovery Ventilator  
Standard

## SPECIFICATIONS

**Ventilation Type:**

Static plate, heat and humidity transfer

**Typical Airflow Range:** 1,500-6,600 CFM**AHRI 1060 Certified Core:** Six 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. 12, MERV 8: 20" x 25" x 2"**Unit Weight:**Modular (per module) 715-1,622 lbs., varies by option(s)  
Assembled (1-piece) 1,984-2,640 lbs., varies by option(s)**Max. Shipping Dimensions & Weight (on pallet):**Modular (2-modules) 80" L x 90" W x 78" H  
Module 1 - 1,763 lbs., Module 2 - 1,159 lbs.  
Assembled (1-piece) 160" L x 90" W x 78" H -  
2,922 lbs.**Motor(s):**Qty. 2, Belt drive blower/standard motor packages  
with choice of adjustable sheaves for low,  
medium or high blower speed (see table below)**Options:**

Spring vibration isolators

Onboard variable frequency drives (VFDs) -  
both airstreams

Shaft grounding ring on motors with VFDs

Fused disconnect

Integrated programmable controls -  
enhanced, premiumClass 1 low leakage motorized isolation dampers -  
OA, RA or both airstreamsQty. 2, Factory mounted filter alarms -  
both airstreams

Double wall construction

Exterior paint - white, custom colors

**Accessories:**

Filters - MERV 13, 2" or 4"; MERV 8, 4" (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)

Electric duct heater - EK series (1-175 kW)

Indirect gas-fired duct furnace - GH series  
(50-400 MBH), installed downstream of any fans

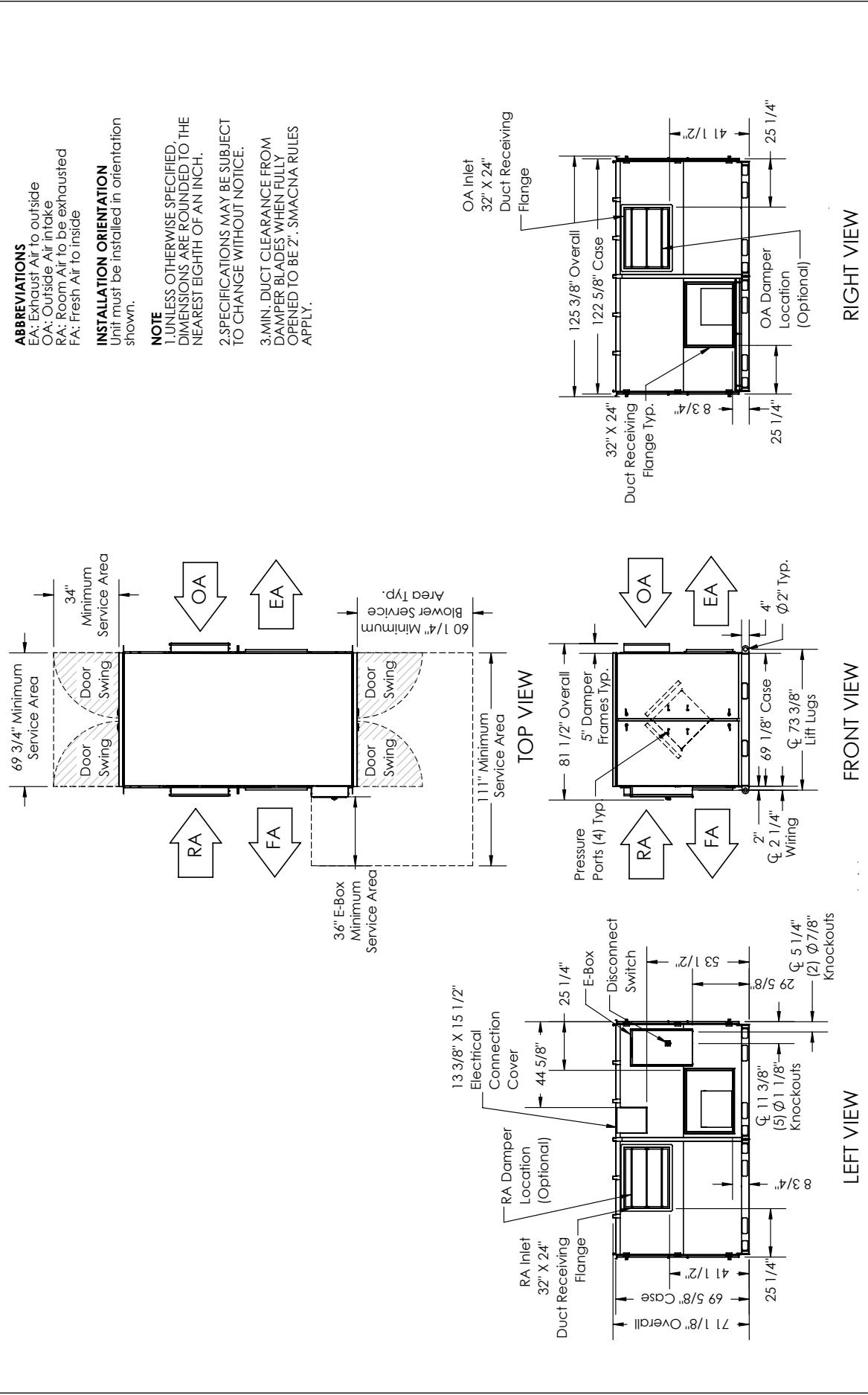
## AIRFLOW PERFORMANCE

Airflow CFM	External Static Pressure (in.w.g.)																	
	0.00		0.25		0.50		0.75		1.00		1.25		1.50		1.75		2.00	
	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM
1500																		
2000																		
2500																		
3000																		
3500																		
3750																		
4000																		
4250																		
4500	2.1	770	2.2	820	2.4	870	2.6	920	2.8	970	3.1	1030	3.3	1080	3.6	1130	3.9	1180
4750	2.4	810	2.5	850	2.7	900	2.9	950	3.1	990	3.3	1040	3.6	1090	3.9	1140	4.2	1190
5000	2.7	850	2.8	890	3.0	930	3.2	970	3.4	1010	3.7	1060	3.9	1110	4.2	1150	4.5	1210
5250	3.0	880	3.2	920	3.4	960	3.5	990	3.8	1030	4.0	1080	4.3	1120	4.6	1170	4.9	1220
5500	3.4	910	3.5	950	3.7	980	3.9	1020	4.1	1060	4.4	1100	4.7	1140	5.0	1190	5.4	1240
5750	3.8	950	3.9	980	4.1	1010	4.3	1040	4.5	1080	4.8	1120	5.1	1160	5.4	1200	5.8	1260
6000	4.2	980	4.3	1000	4.5	1030	4.7	1070	5.0	1100	5.2	1140	5.5	1180	5.9	1220	6.3	1270
6250	4.6	1000	4.8	1030	5.0	1060	5.2	1090	5.4	1120	5.7	1160	6.0	1190	6.3	1240	6.8	1290
6500	5.1	1030	5.2	1060	5.4	1080	5.6	1110	5.9	1140	6.2	1170	6.5	1210	6.8	1250	7.3	1300
6600	5.3	1040	5.4	1070	5.6	1090	5.8	1120	6.1	1150	6.4	1180	6.7	1220	7.0	1260	7.5	1310
	7.5 HP LOW SPEED																7.5 HP MED SPEED	

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

## ELECTRICAL DATA

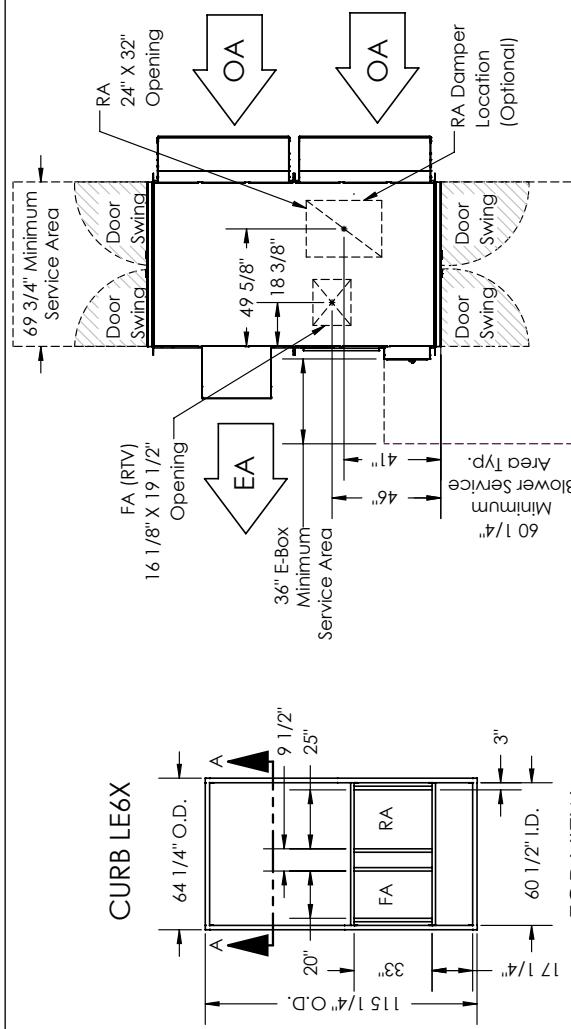
Standard Electrical Specifications							Optional Factory Installed VFD Electrical Specifications			
HP	Volts	Hz	Phase	FLA per motor	Min. Cir. Amps	Max. Overcurrent Protection Device	FLA per motor	Min. Cir. Amps	Max. Overcurrent Protection Device	
3.0	208-230	60	Single	14.7-14	33.1	40	9.38-8.48	40.2	45	
3.0	208-230	60	Three	9.38-8.48	21.1	25	9.38-8.48	23.2	25	
	460	60	Three	4.24	9.5	15	4.24	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	
7.5	208-230	60	Three	21.0-19.0	47.3	60	21.0-19.0	52.0	60	
	460	60	Three	9.5	21.4	25	9.5	23.5	25	
	575	60	Three	7.6	17.1	20	7.6	18.8	20	



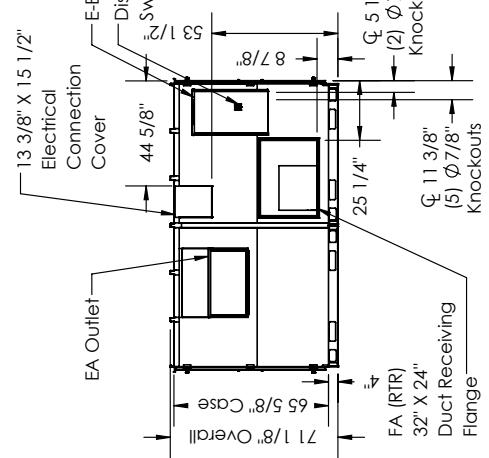


# LE6XRT (RTV/RTR) Energy Recovery Ventilator Standard

## Energy Recovery Ventilator Standard



TOP VIEW

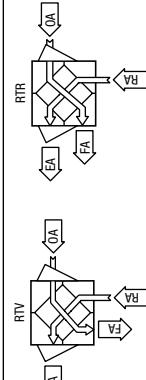


LEFT VIEW

**AIRFLOW ORIENTATION**  
Available as shown:



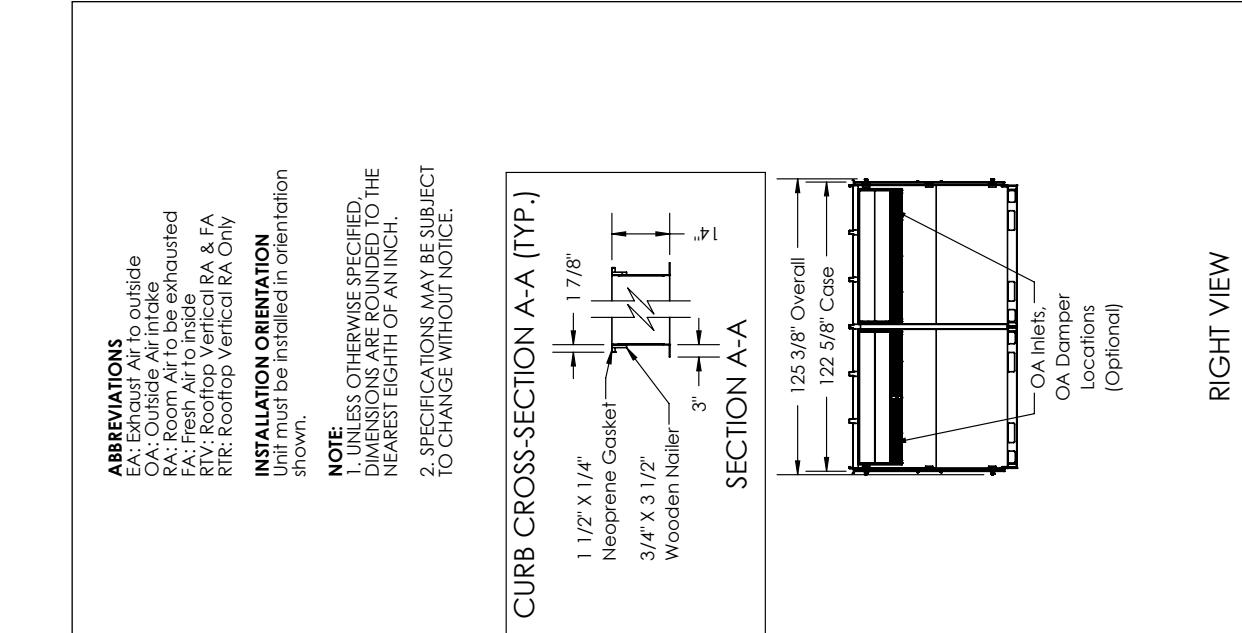
FRONT VIEW



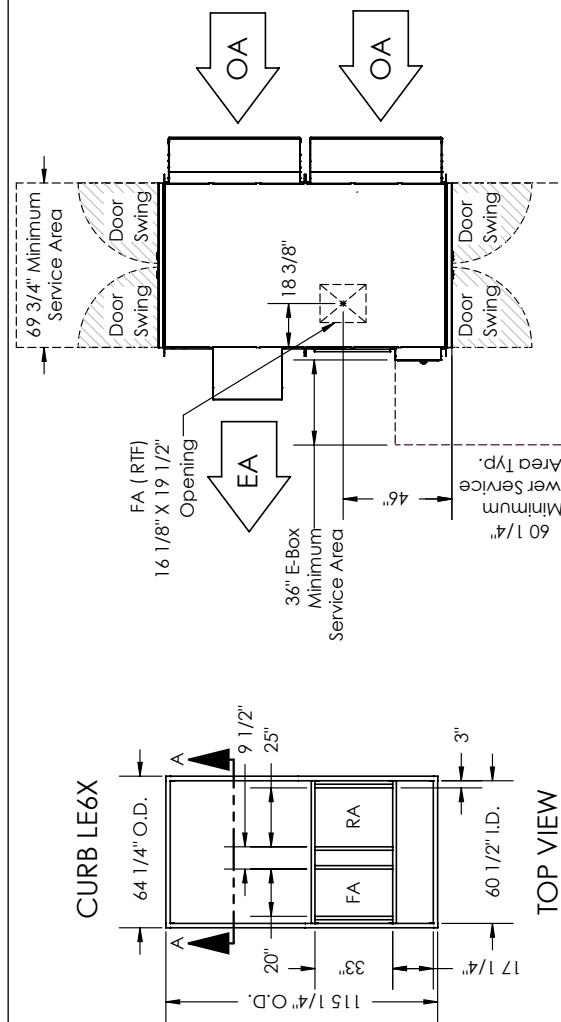
RIGHT VIEW



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



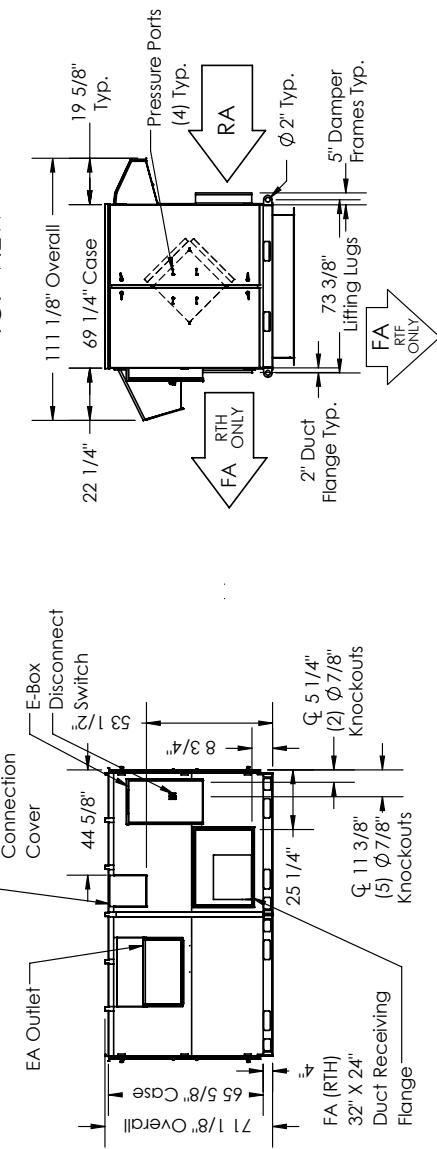
# LE6XRT (RTH/RTF) Energy Recovery Ventilator Standard



TOP VIEW

69 3/4" Minimum Service Area  
16 1/8" X 19 1/2"  
FA (RTH) Opening  
36" E-Box Minimum Service Area  
60 1/4" Minimum Service Area  
Blower Service Area Typ.  
111" Minimum Service Area  
Door Swing  
Door Swing  
Door Swing  
Door Swing  
9 1/2"  
25"  
46"  
18 3/8"  
111" Minimum Service Area  
Door Swing  
Door Swing  
Door Swing  
Door Swing  
64 1/4" O.D.  
25"  
17 1/4"  
60 1/2" I.D.  
3"  
13 3/8" X 15 1/2" Electrical Connection Cover  
EA Outlet

TOP VIEW

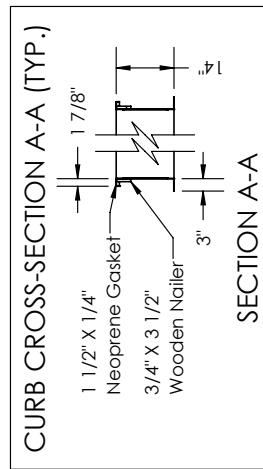
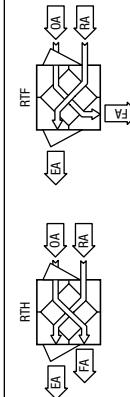


LEFT VIEW

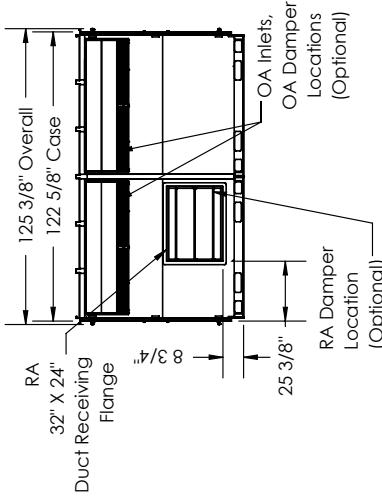
AIRFLOW ORIENTATION  
Available as shown:



FRONT VIEW



SECTION A-A



RIGHT VIEW



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## INDOOR UNIT



LE8XINV shown

Energy Recovery Core is AHRI Certified®



## AIRFLOW PERFORMANCE

Airflow CFM	External Static Pressure (in.w.g.)																	
	0.00		0.25		0.50		0.75		1.00		1.25		1.50		1.75		2.00	
	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM
3 HP LOW SPEED																		
2000					1.0	680	1.3	790	1.5	870	1.8	940	2.0	1000	2.2	1060		
3000					1.4	740	1.7	820	2.0	890	2.3	960	2.6	1020	2.9	1070		
4000					1.6	710	1.9	790	2.2	860	2.6	920	2.9	990	3.2	1040	3.6	1100
4500					1.5	660	1.8	740	2.2	810	2.5	880	2.9	940	3.2	1000	3.6	1060
5000					1.7	690	2.1	770	2.5	840	2.8	900	3.2	960	3.6	1020	4.0	1070
5500					2.8	860	3.2	930	3.6	980	4.0	1040	4.5	1090	4.9	1140		5 HP HIGH SPEED
6000					1.9	690	2.3	760	2.7	830	3.1	890	3.6	950	4.0	1010	4.5	1060
6250					2.1	710	2.5	780	2.9	840	3.3	910	3.8	960	4.3	1020	4.7	1070
6500					2.3	720	2.7	790	3.1	860	3.6	920	4.0	980	4.5	1030	5.0	1080
6750					2.4	740	2.9	810	3.3	870	3.8	930	4.3	990	4.8	1040	5.3	1100
7000					2.6	760	3.1	830	3.5	890	4.0	950	4.5	1000	5.0	1060	5.6	1110
7250					2.8	780	3.3	850	3.7	910	4.3	960	4.8	1020	5.3	1070	5.8	1140
7500					3.0	800	3.5	860	4.0	920	4.5	980	5.0	1030	5.6	1080	6.2	1130
7750					3.2	820	3.7	880	4.2	940	4.8	990	5.3	1050	5.9	1100	6.5	1140
8000					3.5	840	4.0	900	4.5	960	5.1	1010	5.6	1060	6.2	1110	6.8	1160
8250					3.7	860	4.2	920	4.8	970	5.4	1030	5.9	1080	6.5	1120	7.1	1170
8500					4.0	880	4.5	930	5.1	990	5.7	1040	6.3	1090	6.9	1140	7.5	1180
8800					4.3	900	4.9	960	5.5	1010	6.1	1060	6.7	1110	7.3	1150		
					5 HP MED SPEED		7.5 HP LOW SPEED				7.5 HP MED SPEED							

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
3.0	208-230	60	Single	14.7-14	33.1	40	9.38-8.48	40.2	45
3.0	208-230	60	Three	9.38-8.48	21.1	25	9.38-8.48	23.2	25
	460	60	Three	4.24	9.5	15	4.24	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
7.5	208-230	60	Three	21.0-19.0	47.3	60	21.0-19.0	52.0	60
	460	60	Three	9.5	21.4	25	9.5	23.5	25
	575	60	Three	7.6	17.1	20	7.6	18.8	20

## Energy Recovery Ventilator Standard



## SPECIFICATIONS

## Ventilation Type:

Static plate, heat and humidity transfer

## Typical Airflow Range:

2,000-8,800 CFM

## AHRI 1060 Certified Core:

Eight 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. 16, MERV 8: 20" x 25" x 2"

## Options:

Spring vibration isolators

Onboard variable frequency drives (VFDs) - both airstreams

Shaft grounding ring on motors with VFDs

Fused disconnect

Integrated programmable controls - enhanced, premium

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" or 4"; MERV 8, 4" (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)

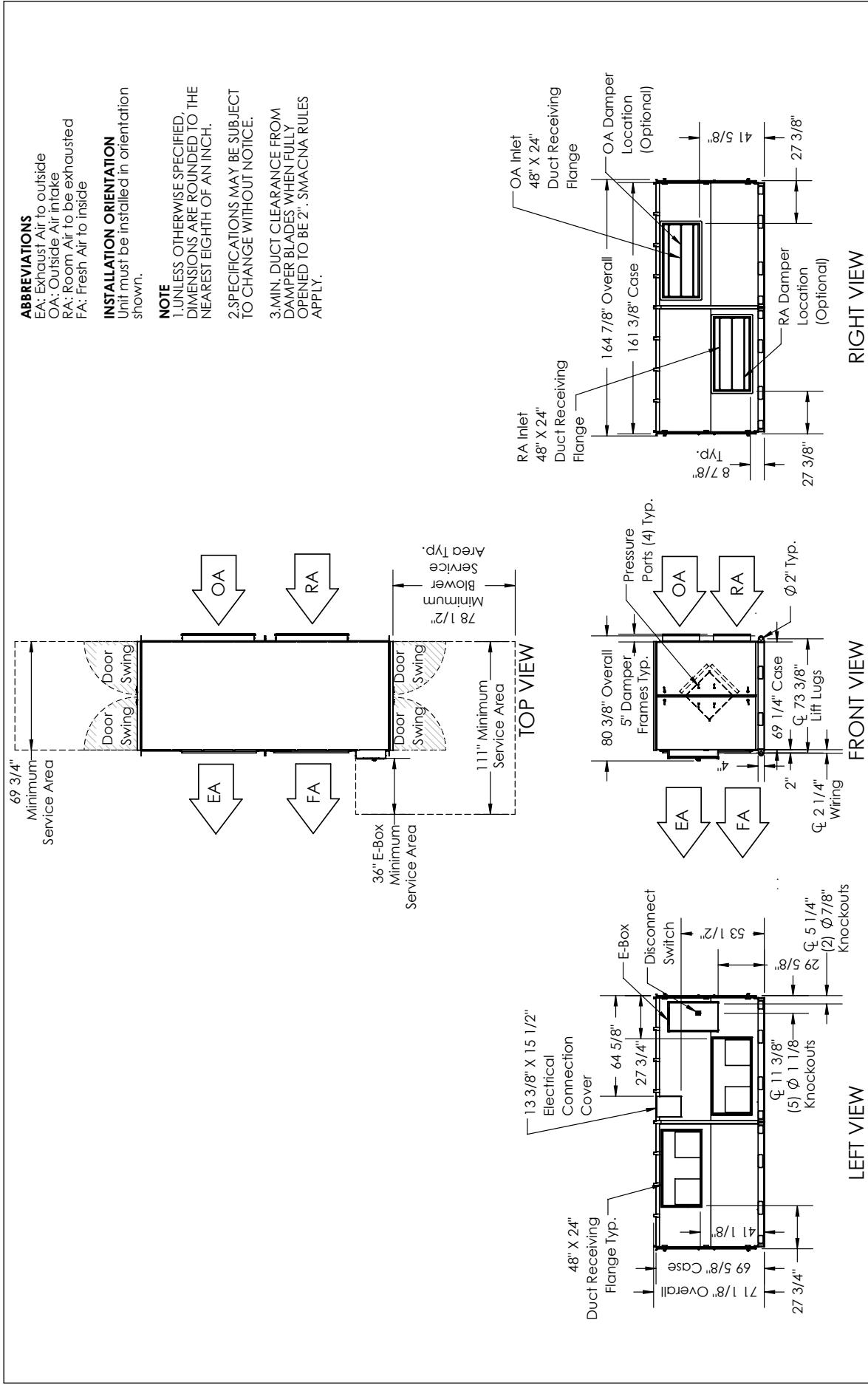
IAQ sensor - wall mount (IAQ-W), duct mount (IAQ-D)

Motion occupancy sensor/control - ceiling mount (MC-C), wall mount (MC-W)

Smoke Detector - duct mount (SD-D)

Electric duct heater - EK series (1-175 kW)

Indirect gas-fired duct furnace - GH series (50-400 MBH), installed downstream of any fans

**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.





## INDOOR UNIT



Energy Recovery Core is AHRI Certified®



## AIRFLOW PERFORMANCE

Airflow CFM	External Static Pressure (in.w.g.)																			
	0.00		0.25		0.50		0.75		1.00		1.25		1.50		1.75		2.00			
	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM		
2000							1.0	680	1.3	790	1.5	870	1.8	940	2.0	1000	2.2	1060		
3000							1.1	640	1.4	740	1.7	820	2.0	890	2.3	960	2.6	1020	2.9	1070
4000							1.6	710	1.9	790	2.2	860	2.6	920	2.9	990	3.2	1040	3.6	1100
4500							1.5	660	1.8	740	2.2	810	2.5	880	2.9	940	3.2	1000	3.6	1060
5000							1.7	690	2.1	770	2.5	840	2.8	900	3.2	960	3.6	1020	4.0	1070
5500							1.7	650	2.0	730	2.4	800	2.8	860	3.2	930	3.6	980	4.0	1040
6000							1.9	690	2.3	760	2.7	830	3.1	890	3.6	950	4.0	1010	4.5	1060
6250							2.1	710	2.5	780	2.9	840	3.3	910	3.8	960	4.3	1020	4.7	1070
6500							2.3	720	2.7	790	3.1	860	3.6	920	4.0	980	4.5	1030	5.0	1080
6750							2.4	740	2.9	810	3.3	870	3.8	930	4.3	990	4.8	1040	5.3	1100
7000							2.6	760	3.1	830	3.5	890	4.0	950	4.5	1000	5.0	1060	5.6	1110
7250							2.8	780	3.3	850	3.7	910	4.3	960	4.8	1020	5.3	1070	5.8	1120
7500							3.0	800	3.5	860	4.0	920	4.5	980	5.0	1030	5.6	1080	6.2	1130
7750							3.2	820	3.7	880	4.2	940	4.8	990	5.3	1050	5.9	1100	6.5	1140
8000							3.5	840	4.0	900	4.5	960	5.1	1010	5.6	1060	6.2	1110	6.8	1160
8250							3.7	860	4.2	920	4.8	970	5.4	1030	5.9	1080	6.5	1120	7.1	1170
8500							4.0	880	4.5	930	5.1	990	5.7	1040	6.3	1090	6.9	1140	7.5	1180
8800							4.3	900	4.9	960	5.5	1010	6.1	1060	6.7	1110	7.3	1150	7.5	1180
							5 HP MED SPEED		7.5 HP LOW SPEED		7.5 HP MED SPEED									

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
3.0	208-230	60	Single	14.7-14	33.1	40	9.38-8.48	40.2	45
3.0	208-230	60	Three	9.38-8.48	21.1	25	9.38-8.48	23.2	25
	460	60	Three	4.24	9.5	15	4.24	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
7.5	208-230	60	Three	21.0-19.0	47.3	60	21.0-19.0	52.0	60
	460	60	Three	9.5	21.4	25	9.5	23.5	25
	575	60	Three	7.6	17.1	20	7.6	18.8	20

Energy Recovery Ventilator  
Standard

## SPECIFICATIONS

## Ventilation Type:

Static plate, heat and humidity transfer

## Typical Airflow Range:

2,000-8,800 CFM

## AHRI 1060 Certified Core:

Eight 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. 16, MERV 8: 20" x 25" x 2"

## Options:

Spring vibration isolators

Onboard variable frequency drives (VFDs) - both airstreams

Shaft grounding ring on motors with VFDs

Fused disconnect

Integrated programmable controls - enhanced, premium

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" or 4"; MERV 8, 4" (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)

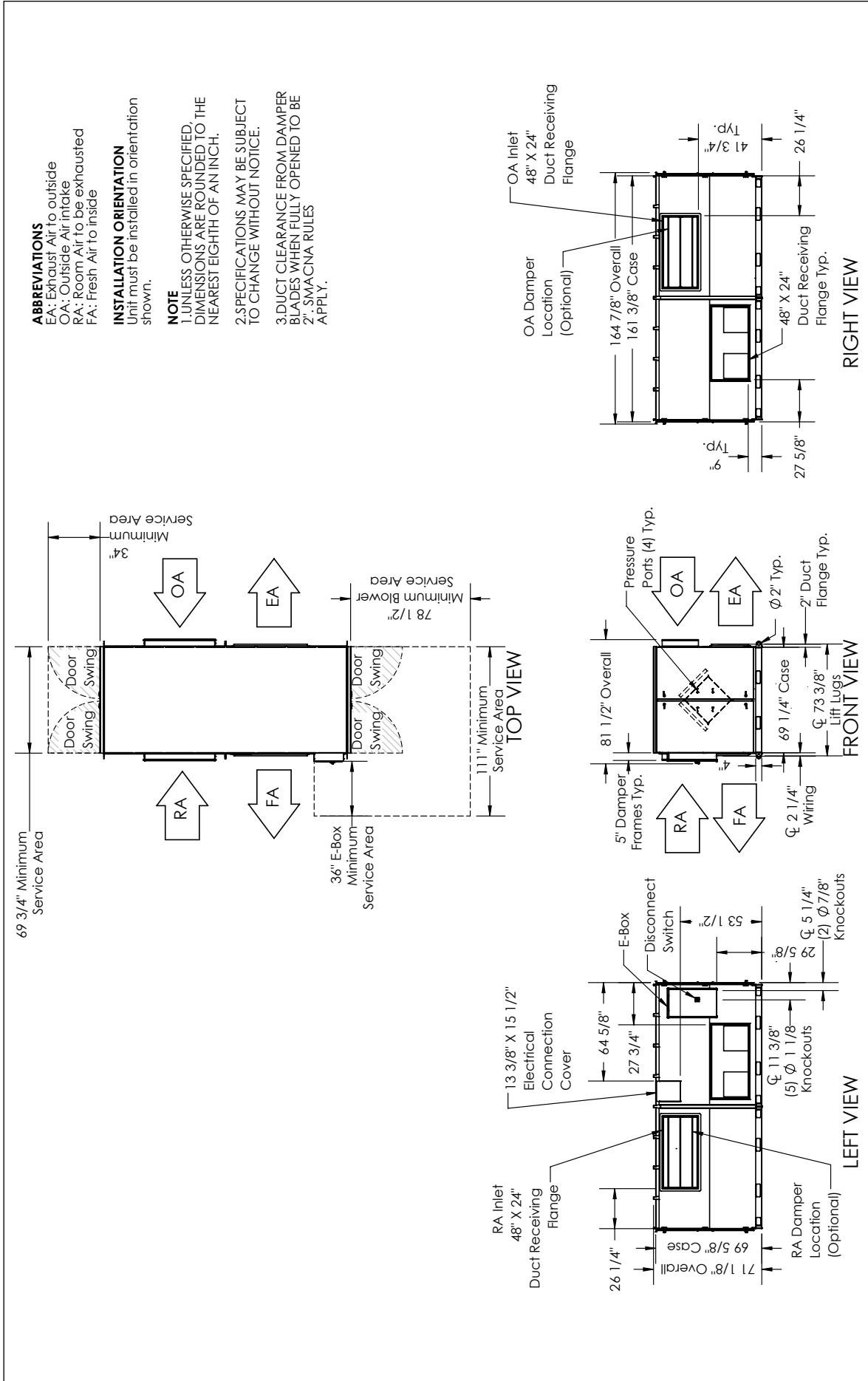
IAQ sensor - wall mount (IAQ-W), duct mount (IAQ-D)

Motion occupancy sensor/control - ceiling mount (MC-C), wall mount (MC-W)

Smoke Detector - duct mount (SD-D)

Electric duct heater - EK series (1-175 kW)

Indirect gas-fired duct furnace - GH series (50-400 MBH), installed downstream of any fans



**UNIT MOUNTING & APPLICATION**

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





## ROOFTOP UNIT



LE10XRT shown

Energy Recovery Core is AHRI Certified®

Energy Recovery Ventilator  
Standard

## SPECIFICATIONS

## Ventilation Type:

Static plate, heat and humidity transfer

**Typical Airflow Range:** 2,000-8,800 CFM**AHRI 1060 Certified Core:** Eight 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. 16, MERV 8: 20" x 25" x 2"

## Options:

Spring vibration isolators

Onboard variable frequency drives (VFDs) - both airstreams

Shaft grounding ring on motors with VFDs

Fused disconnect

Integrated programmable controls - enhanced, premium

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" or 4"; MERV 8, 4" (shipped loose)

Automatic balancing damper - 4", 5", 6"

Roof Curb - Standard 14"

Curb wind clip

Engineered combo curb for Carrier RTU

Engineered combo curb for Trane RTU

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); designed for indoor ductwork installation only

Indirect gas-fired duct furnace - GH series (50-400 MBH), installed downstream of any fans

## AIRFLOW PERFORMANCE

Airflow CFM	External Static Pressure (in.w.g.)																							
	0.00				0.25				0.50				0.75		1.00		1.25		1.50		1.75		2.00	
	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM		
3 HP LOW SPEED																								
2000			1.3	640	1.3	730	1.4	810	1.6	890	1.9	960	2.4	1030	2.9	1100								
3000			1.5	700	1.6	780	1.9	860	2.2	930	2.7	1000	3.1	1060	3.7	1130	5 HP HIGH SPEED							
4000			1.6	680	1.9	760	2.2	840	2.6	910	3.0	980	3.5	1040	4.0	1100	4.5	1120	5.1	1170				
4500			1.8	710	2.1	800	2.5	870	3.0	940	3.5	1010	4.0	1060	4.5	1100	5.1	1140	5.6	1190				
5000			1.7	660	2.1	750	2.5	830	3.0	910	3.5	970	4.0	1030	4.5	1090	7.5 HP HIGH SPEED							
5500			2.0	710	2.4	790	2.9	870	3.4	940	4.0	1000	4.5	1060	5.1	1110	5.6	1160	6.2	1210				
6000			2.4	750	2.9	840	3.4	910	4.0	970	4.5	1030	5.1	1090	5.7	1140	6.2	1190	6.8	1230				
6250			2.6	780	3.1	860	3.7	930	4.2	990	4.8	1050	5.4	1100	6.0	1150	6.5	1200	7.1	1240				
6500			2.8	800	3.4	880	4.0	950	4.5	1010	5.1	1060	5.7	1110	6.3	1160	6.8	1210	7.4	1250				
6750			3.1	820	3.7	900	4.3	960	4.8	1020	5.4	1080	6.0	1130	6.6	1180	7.2	1220						
7000			3.3	850	4.0	920	4.6	980	5.2	1040	5.8	1090	6.3	1140	6.9	1190	7.5	1230						
7250			3.6	870	4.3	940	4.9	1000	5.5	1060	6.1	1110	6.7	1160	7.2	1200								
7500			3.9	900	4.6	960	5.2	1020	5.8	1080	6.4	1120	7.0	1170	7.4	1180								
7750			4.3	920	4.9	980	5.6	1040	6.2	1090	6.8	1140	7.4	1180										
8000			4.6	940	5.3	1000	5.9	1060	6.5	1110	7.1	1160												
8250			5.0	970	5.7	1020	6.3	1080	6.9	1130	7.5	1170												
8500			5.4	990	6.0	1050	6.7	1100	7.3	1140														
8800			5.9	1020	6.5	1070	7.1	1120																
7.5 HP LOW SPEED				7.5 HP MED SPEED																				

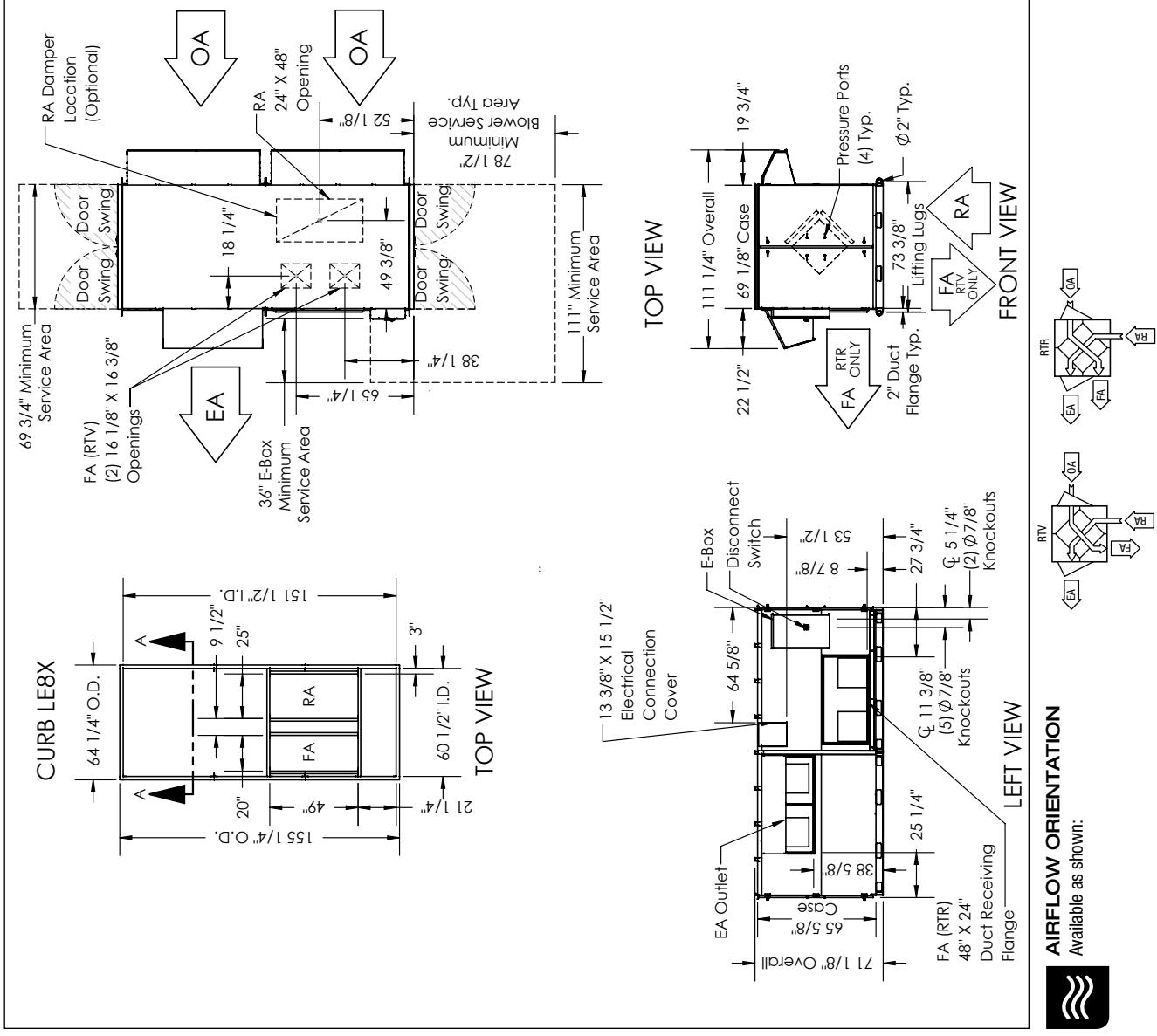
Note: Airflow performance includes effect of clean, standard filter supplied with unit.

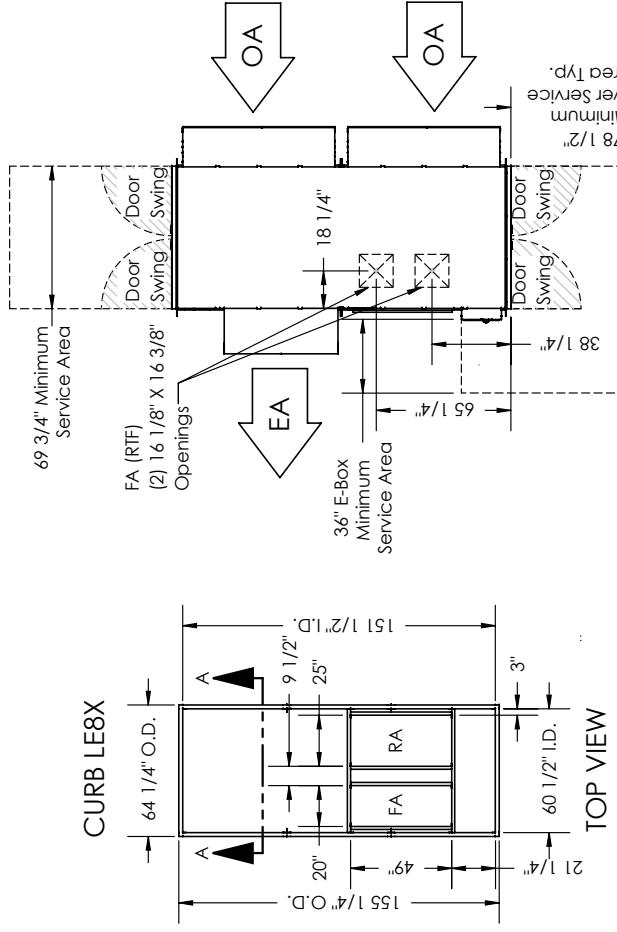
## ELECTRICAL DATA

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
3.0	208-230	60	Single	14.7-14	33.1	40	9.38-8.48	40.2	45
3.0	208-230	60	Three	9.38-8.48	21.1	25	9.38-8.48	23.2	25
	460	60	Three	4.24	9.5	15	4.24	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
7.5	208-230	60	Three	21.0-19.0	47.3	60	21.0-19.0	52.0	60
	460	60	Three	9.5	21.4	25	9.5	23.5	25
	575	60	Three	7.6	17.1	20	7.6	18.8	20

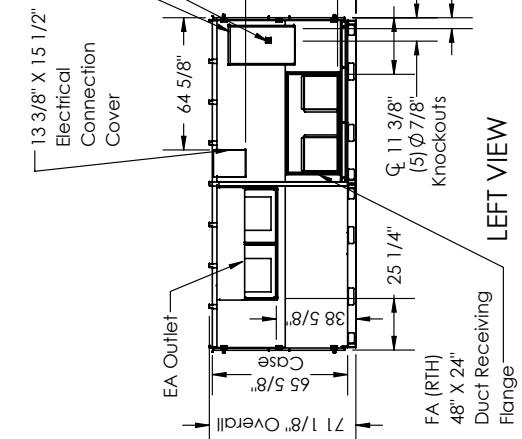
# LE8XRT (RTV/RTR) Energy Recovery Ventilator Standard

## Energy Recovery Ventilator Standard



**LE8XRT (RTH/RTF)** Energy Recovery Ventilator Standard

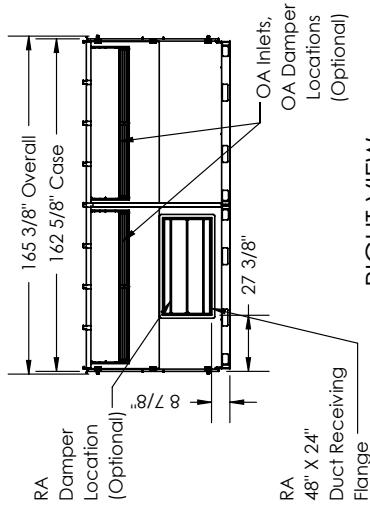
TOP VIEW



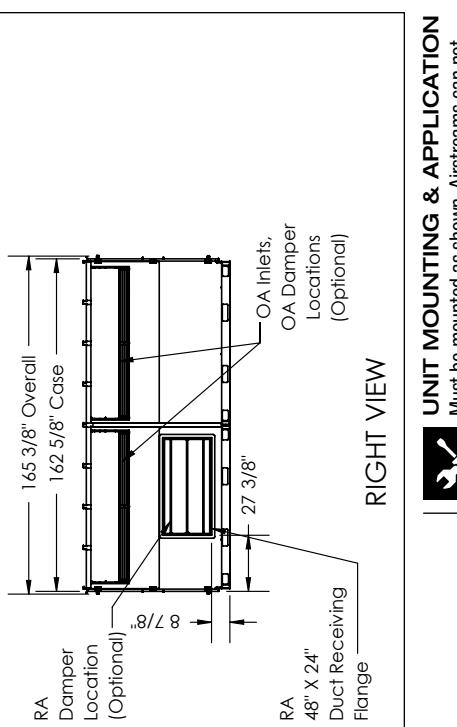
LEFT VIEW



FRONT VIEW



SECTION A-A



AIRFLOW ORIENTATION



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## INDOOR UNIT



LE10XINV shown

Energy Recovery Core is AHRI Certified®

Energy Recovery Ventilator  
Standard

## SPECIFICATIONS

## Ventilation Type:

Static plate, heat and humidity transfer

**Typical Airflow Range:** 2,500-11,000 CFM**AHRI 1060 Certified Core:** Ten L125-G5

## Standard Features:

TEFC Premium efficiency motors

Motor starters

Non-fused disconnect

24 VAC transformer/relay package

Rubber vibration isolators

Cross-core differential pressure ports

**Filters:** Total qty. 20, MERV 8: 20" x 25" x 2"

## Unit Weight:

Modular (per module) 1,423-1,912 lbs., varies by option(s)

Assembled (1-piece) 2,858-3,799 lbs., varies by option(s)

## Max. Shipping Dimensions &amp; Weight (on pallet):

Modular (2-modules) 120" L x 90" W x 78" H

Module 1 - 2,132 lbs., Module 2 - 2,107 lbs.

Assembled (1-piece) 240" L x 90" W x 78" H - 4,239 lbs.

## Motor(s):

Qty. 2, Belt drive blower/standard motor packages with choice of adjustable sheaves for low, medium or high blower speed. (see table below)

## Options:

Spring vibration isolators

Onboard variable frequency drives (VFDs) - both airstreams

Shaft grounding ring on motors with VFDs

Fused disconnect

Integrated programmable controls - enhanced, premium

Class 1 low leakage motorized isolation dampers - OA, RA or both

Qty. 2, Factory mounted filter alarms - both airstreams

Double wall construction

Exterior paint - white, custom colors

## Accessories:

Filters - MERV 13, 2" or 4"; MERV 8, 4" (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)

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

Airflow CFM	External Static Pressure (in.w.g.)											
	0.00		0.25		0.50		0.75		1.00		1.25	
	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM
3 HP LOW SPEED												
2500			1.0	640	1.3	730	1.5	810	1.8	880	2.0	950
3000			1.2	660	1.4	750	1.7	830	2.0	900	2.3	960
3500			1.4	680	1.6	770	1.9	840	2.2	910	2.5	980
4000			1.6	710	1.9	790	2.2	860	2.5	930	2.8	990
4500			1.6	670	1.9	740	2.1	810	2.5	880	2.8	940
5000	1.6	640	1.9	710	2.2	770	2.5	840	2.8	900	3.1	960
5500	2.0	690	2.2	750	2.5	810	2.8	870	3.1	920	3.5	1020
6000	2.4	740	2.6	790	2.9	850	3.2	900	3.6	950	3.9	1040
6500	2.8	790	3.1	830	3.4	880	3.7	930	4.0	980	4.3	1060
7000	3.3	830	3.6	880	3.9	920	4.2	970	4.6	1010	4.8	1080
7500	3.9	880	4.2	920	4.5	960	4.8	1000	5.1	1040	5.3	1100
8000	4.5	930	4.8	960	5.1	1000	5.4	1030	5.8	1070	6.1	1140
8500	5.2	970	5.5	1000	5.8	1030	6.1	1060	6.4	1100	6.7	1160
9000	5.9	1010	6.2	1040	6.5	1060	6.8	1090	7.1	1120	7.4	1180
9500	6.7	1040	7.0	1070	7.3	1090	7.6	1120	7.9	1140	8.2	1210
10000	7.5	1080	7.8	1100	8.1	1120	8.4	1140	8.7	1160	9.0	1220
10500	8.4	1100	8.6	1120	8.9	1140	9.2	1160	9.5	1180	9.8	1240
11000												
10 HP MED SPEED												
10 HP HIGH SPEED												

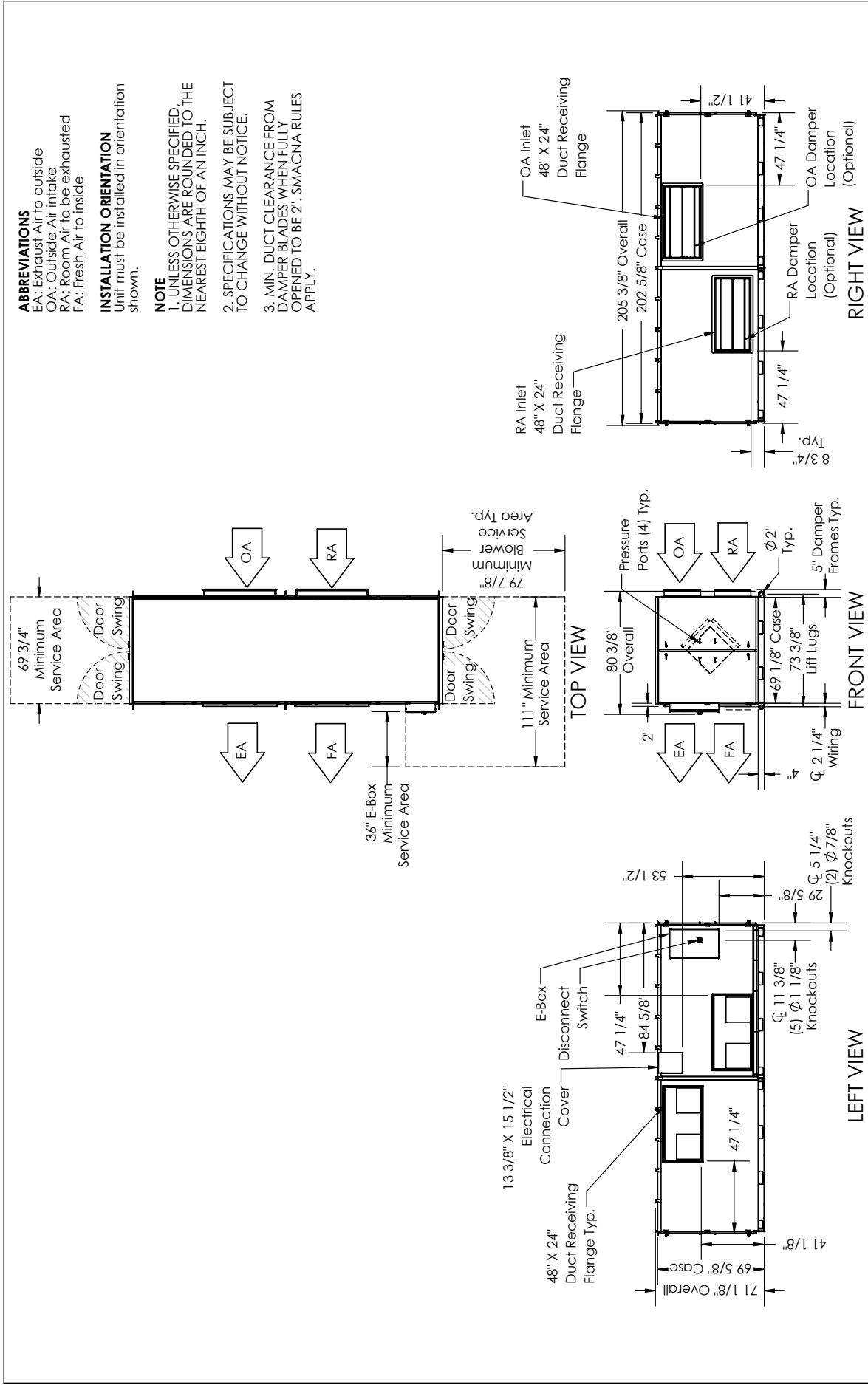
Note: Airflow performance includes effect of clean, standard filter supplied with unit.

## 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
3.0	208-230	60	Single	14.7-14	33.1	40	9.38-8.48	40.2	45
3.0	208-230	60	Three	9.38-8.48	21.1	25	9.38-8.48	23.2	25
3.0	460	60	Three	4.24	9.5	15	4.24	10.5	15
3.0	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
5.0	460	60	Three	6.7	15.1	20	6.7	16.6	20
5.0	575	60	Three	5.3	11.9	15	5.3	13.1	15
7.5	208-230	60	Three	21.0-19.0	47.3	60	21.0-19.0	52.0	60
7.5	460	60	Three	9.5	21.4	25	9.5	23.5	25
7.5	575	60	Three	7.6	17.1	20	7.6	18.8	20
10.0	208-230	60	Three	27.0-24.4	60.8	80	27.0-24.4	66.8	80
10.0	460	60	Three	12.2	27.5	35	12.2	30.2	35
10.0	575	60	Three	9.76	22.0	30	9.76	24.2	30

# LE10XINH

Energy Recovery Ventilator Standard



## 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

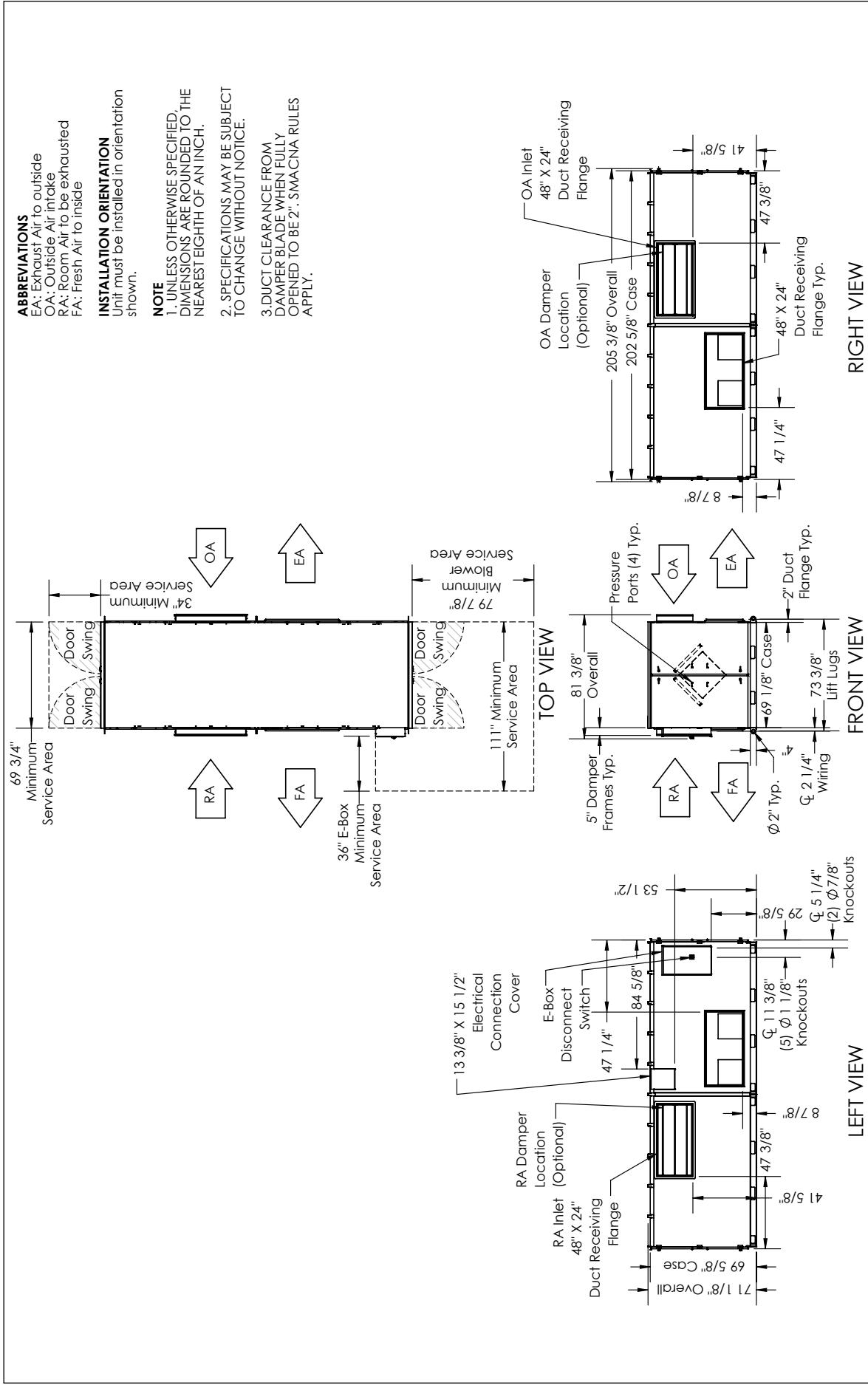
Available as shown in dimension drawing.





# LE10XINV

Energy Recovery Ventilator Standard





## ROOFTOP UNIT



Energy Recovery Core is AHRI Certified®



## AIRFLOW PERFORMANCE

Airflow CFM		External Static Pressure (in.w.g.)																							
		0.00				0.25				0.50				0.75				1.00				1.25			
		BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM				
2500																									
3000																									
3500																									
4000																									
4500																									
5000																									
5500	3 HP LOW SPEED	1.7	650	2.0	720	2.4	800	2.7	870	3.1	930	3.5	990	3.9	1050	4.4	1110	4.8	1170	5 HP HIGH SPEED					
6000		2.1	690	2.4	760	2.8	830	3.1	890	3.5	960	4.0	1020	4.4	1080	4.8	1130	5.3	1190						
6500		2.5	740	2.8	800	3.2	870	3.6	930	4.0	980	4.4	1040	4.9	1100	5.3	1160	5.8	1210						
7000		3.0	790	3.3	850	3.7	900	4.1	960	4.5	1010	5.0	1070	5.4	1120	5.9	1180	6.4	1230						
7500	5 HP LOW SPEED	3.5	840	3.9	890	4.3	940	4.7	990	5.1	1040	5.5	1100	6.0	1150	6.4	1200	6.9	1250	7.5 HP HIGH SPEED					
8000		4.1	880	4.5	930	4.9	980	5.3	1030	5.7	1070	6.1	1120	6.6	1170	7.0	1220	7.5	1270						
8500	5 HP MED SPEED	4.8	930	5.2	970	5.5	1010	5.9	1060	6.3	1100	6.8	1150	7.2	1200	7.7	1240	8.1	1290	10 HP HIGH SPEED					
9000	7.5 HP LOW SPEED	5.5	970	5.9	1010	6.2	1050	6.6	1090	7.0	1130	7.4	1170	7.8	1220	8.3	1260	8.7	1300						
9500		6.2	1010	6.6	1050	6.9	1080	7.3	1120	7.7	1160	8.1	1200	8.5	1240	8.9	1280	9.3	1310						
10000	7.5 HP MED SPEED	7.0	1050	7.3	1080	7.7	1110	8.0	1150	8.4	1180	8.7	1220	9.1	1250	9.5	1290	9.9	1320						
10500		7.8	1080	8.1	1110	8.4	1140	8.7	1170	9.1	1200	9.4	1230	9.7	1260										
11000		8.6	1110	8.9	1140	9.2	1160	9.4	1190	9.7	1220														
		10 HP MED SPEED								10 HP HIGH SPEED								<b>Note:</b> 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	
3.0	208-230	60	Single	14.7-14	33.1	40	9.38-8.48	40.2	45	
3.0	208-230	60	Three	9.38-8.48	21.1	25	9.38-8.48	23.2	25	
3.0	460	60	Three	4.24	9.5	15	4.24	10.5	15	
3.0	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	
5.0	460	60	Three	6.7	15.1	20	6.7	16.6	20	
5.0	575	60	Three	5.3	11.9	15	5.3	13.1	15	
7.5	208-230	60	Three	21.0-19.0	47.3	60	21.0-19.0	52.0	60	
7.5	460	60	Three	9.5	21.4	25	9.5	23.5	25	
7.5	575	60	Three	7.6	17.1	20	7.6	18.8	20	
10.0	208-230	60	Three	27.0-24.4	60.8	80	27.0-24.4	66.8	80	
10.0	460	60	Three	12.2	27.5	35	12.2	30.2	35	
10.0	575	60	Three	9.76	22.0	30	9.76	24.2	30	

## Energy Recovery Ventilator Standard



## SPECIFICATIONS

## Ventilation Type:

Static plate, heat and humidity transfer

## Typical Airflow Range:

2,500-11,000 CFM

## AHRI 1060 Certified Core:

Ten L125-G5

## Standard Features:

TEFC Premium efficiency motors

Motor starters

Non-fused disconnect

24 VAC transformer/relay package

Rubber vibration isolators

Cross-core differential pressure ports

## Filters:

Total qty. 20, MERV 8: 20" x 25" x 2"

## Unit Weight:

Modular (per module) 1,493-2,057 lbs., varies by option(s)

Assembled (1-piece) 3,032-3,993 lbs., varies by option(s)

## Max. Shipping Dimensions &amp; Weight (on pallet):

Modular (2-modules) 120" L x 90" W x 78" H

Module 1 - 2,277 lbs., Module 2 - 2,245 lbs.

Assembled (1-piece) 240" L x 90" W x 78" H - 4,433 lbs.

## Motor(s):

Qty. 2, Belt drive blower/standard motor packages  
with choice of adjustable sheaves for low,  
medium or high blower speed. (see table below)

## Options:

Spring vibration isolators

Onboard variable frequency drives (VFDs) - both airstreams

Shaft grounding ring on motors with VFDs

Fused disconnect

Integrated programmable controls - enhanced, premium

Class 1 low leakage motorized isolation dampers - OA, RA or both

Qty. 2, Factory mounted filter alarms - both airstreams

Double wall construction

Exterior paint - white, custom colors

## Accessories:

Filters - MERV 13, 2" or 4"; MERV 8, 4" (shipped loose)

Automatic balancing damper - 4", 5", 6"

Roof curb - standard 14"

Curb wind clip

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)

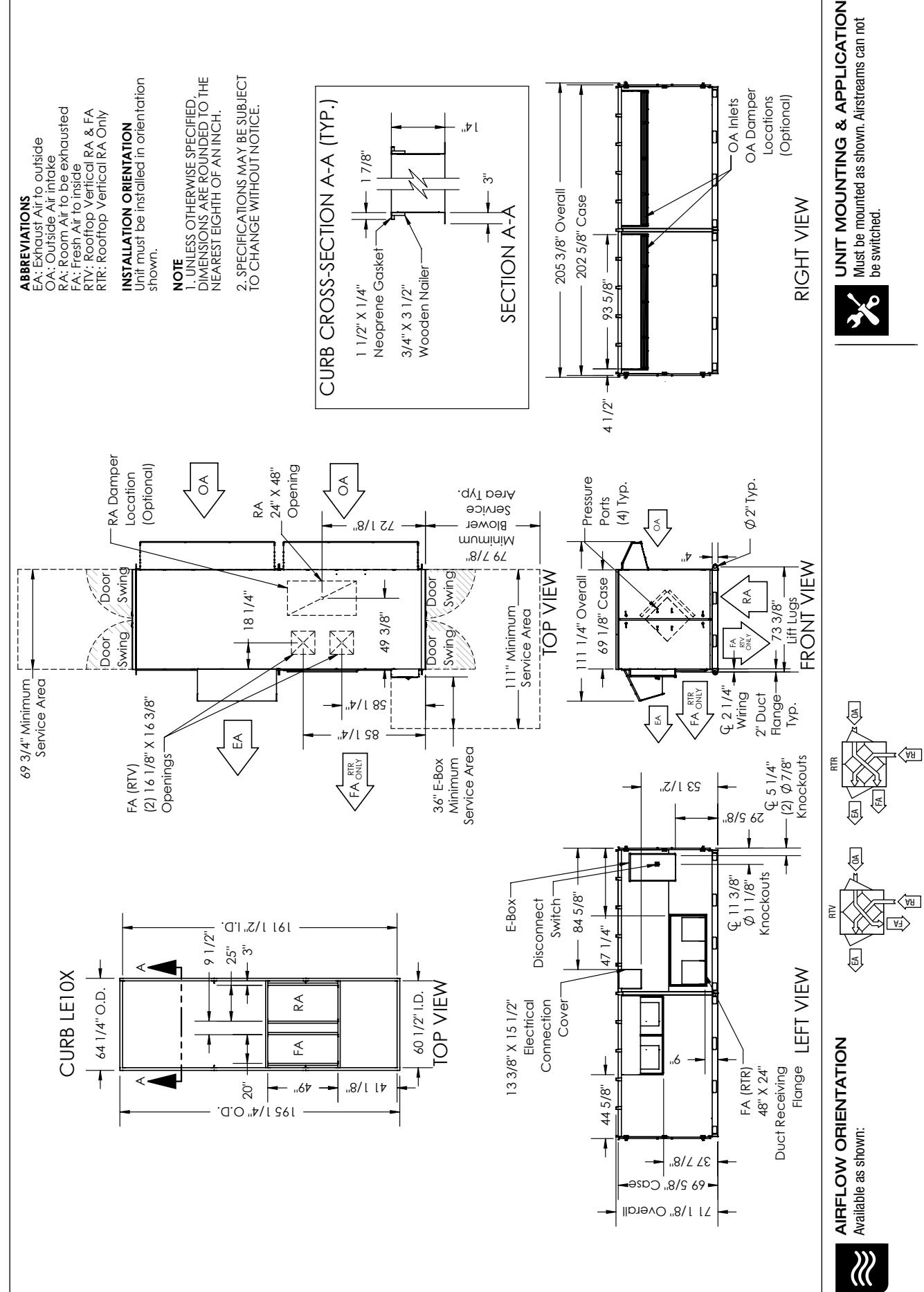
Smoke Detector - duct mount (SD-D)

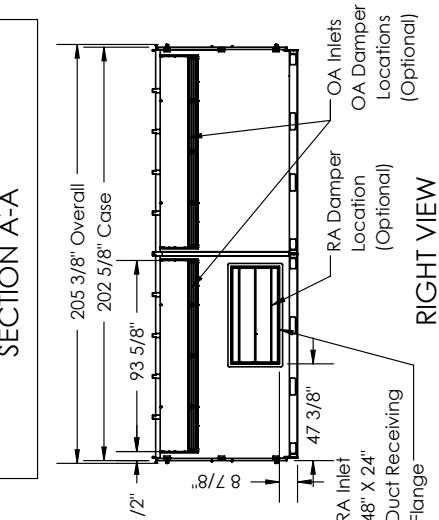
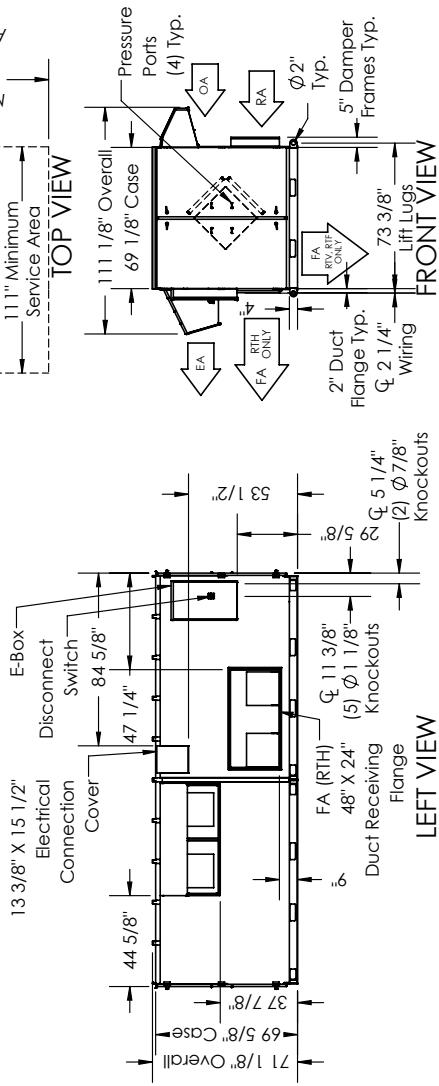
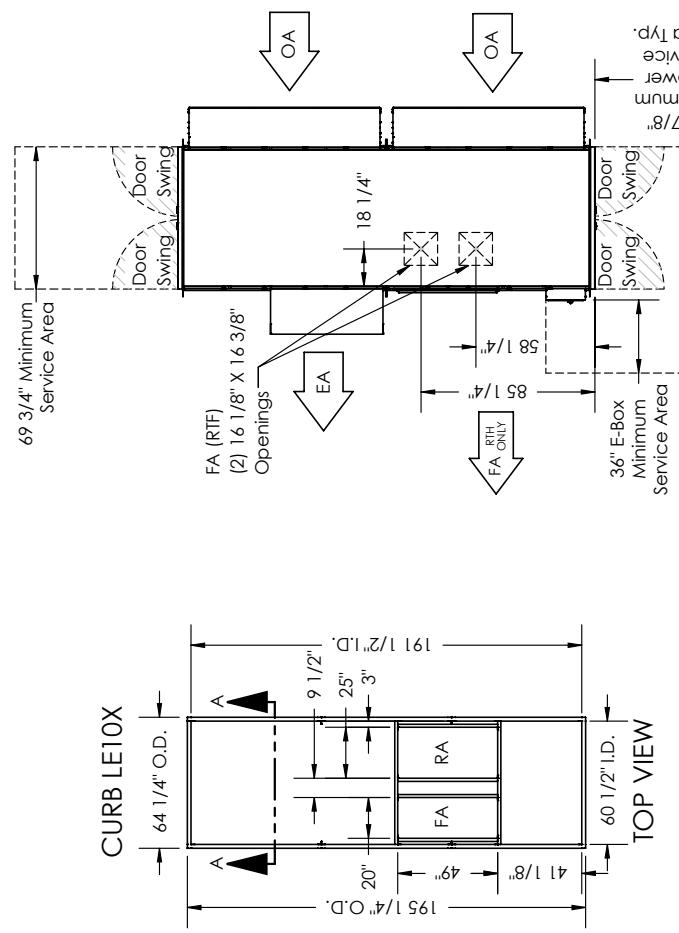
Electric duct heater - EK series (1-175 kW); designed for indoor ductwork installation only

Indirect gas-fired duct furnace - GH series (50-400 MBH), installed downstream of any fans

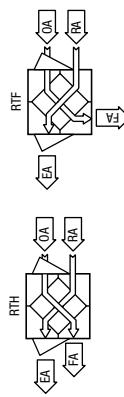
# LE10XRT (RTV/RTR) Energy Recovery Ventilator Standard

## Energy Recovery Ventilator Standard



**LE10XRT (RTH/RTF) Energy Recovery Ventilator Standard**

**AIRFLOW ORIENTATION**  
Available as shown:



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

# OPTIONS

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See individual submittal pages for availability by model.

## ELECTRICAL

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- Disconnect fuses and motor starters



VFD all voltage except 575V



VFD 575V only

## MOTORIZED ISOLATION DAMPERS

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- Class 1, low leakage
- Robust, reliable actuators for highest dependability
- Automatic operation with spring return in event of power loss
- Damper(s) are factory mounted and wired



## FILTER ALARM

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- Factory mounted airflow switches
  - one for each airstream
- Allows for remote indication of loaded (dirty) filter



## EXTERIOR PAINT

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- White and custom colors available



# OPTIONS

## Integrated Programmable Controls

### RenewAire's INTEGRATED PROGRAMMABLE

**CONTROLS** optimize the usability and performance of our commercial ERVs by improving functionality, enabling intelligent controls, streamlining operations and boosting efficiencies. This is accomplished via sophisticated factory-installed microprocessor controls and sensors that provide stand-alone ERVs with Direct Digital Control (DDC) and/or Building Management System (BMS) control interface.



### KEY BENEFITS

#### Optimize usability:

- Maximize ERV functionality and intelligent control via remote Ethernet accessibility and BMS connectivity without third-party interface.
- Streamline operations by easily managing and changing ERV control parameters via an advanced user interface.
- Increase uptime reliability through constant system monitoring.
- Achieve cleaner and healthier indoor air via IAQ-based ERV control.

#### Improve performance:

- Support effective and efficient ERV performance with real-time data trending and logging capabilities.
- Enhance ERV control via access to real-time airflow rates, airstream temperature and airstream humidity.
- Facilitate fast and easy ERV upkeep and maintenance with real-time fan, filter and bypass status.

#### Increase capabilities:

- Expand ERV connectivity via access to a wide range of open standard protocols, including BACnet and Modbus.
- Broaden ERV interoperability by connecting to third-party equipment and receiving third-party signals for unit control.
- Expand ERV-application scope by meeting new code requirements and the needs of institutional customers requiring DDC controls in mechanical equipment.

#### Simplify operations:

- Achieve easier ERV setup, commissioning and balancing via simple-to-install controls.
- Improve operational efficiencies by easily communicating ERV status, airflows, temperatures and humidity.
- Allow for more flexible installations by enabling ERVs to be interconnected with a BMS, operated independently or run in concert with other ERVs.

### ACCESSORIES AVAILABLE WITH INTEGRATED PROGRAMMABLE CONTROLS

	ENHANCED CONTROLS	PREMIUM CONTROLS
CO2 sensor (wall or duct mount)*		◆
IAQ sensor (wall or duct mount)*		◆
Occupancy sensor (ceiling or wall mount)		◆
Smoke detector (duct mount)	◆	◆
BACnet factory activation (MS/TP or TCP/IP)	◆	◆
Remote display (handheld or wall mount)	◆	◆
Room Pressure Sensor (with or without display)		◆
Duct Static Pressure Sensor (with or without display)		◆
Temperature Sensor Kit (wall or duct mount)**		◆

#### NOTES

\*Sensor output is 0-10 VDC, for use as on/off or modulating control with VFD or ECM.

\*\*Temperature Sensor Kit is for use with non-integrated heating.

# OPTIONS

## Controls

### MODELS

#### STANDARD CONTROLS

##### via dry contact and relays

Our ERV units are provided with a dry contact that can be used to control the unit with a variety of low-voltage (24 VAC) control devices such as remote switches or relays. In addition, third-party analog output can be used to operate the ERV.

#### INTEGRATED PROGRAMMABLE CONTROLS

#### ENHANCED CONTROLS

##### Carel [c.pCOMini] with or without BACnet

Enhanced controls offer automated control, including temperature and humidity control with data trending via microprocessor controls and sensors that enable BMS connectivity.

#### PREMIUM CONTROLS

##### Carel [c.pCOMini] with expansion module with or without BACnet

Premium controls include all functionality of Enhanced-controls capabilities, as well as airflow and IAQ monitoring, demand control, electric or gas heating options, as well as RD-Series cooling and heating control.

*It is not necessary that RenewAire controls be used to operate RenewAire units. A wide range of controls or building automation systems may be used.*

### FEATURE COMPARISON

	STANDARD CONTROLS	ENHANCED CONTROLS	PREMIUM CONTROLS
Ability to automatically enable and disable unit	◆	◆	◆
Enable the exhaust fan only (See note 1)	◆	◆	◆
Filter alarm for both sets of filters (See note 2)	◆	◆	◆
Control isolation dampers (See note 3)	◆	◆	◆
Supply fan only modulation for VFD/EC Motor units (See note 4 and 5)	◆	◆	◆
Exhaust fan only modulation for VFD/EC Motor units (See note 4 and 5)	◆	◆	◆
Internal time clock (See note 6)	◆	◆	◆
Defrost controls - Canada only	◆	◆	◆
Smoke detection - sensor required (See note 7)	◆	◆	◆
Demand control ventilation using CO <sub>2</sub> - sensor required	◆		◆
Occupancy-based ventilation - sensor required	◆		◆
IAQ control ventilation using VOC - sensor required	◆		◆
Microprocessor controller		◆	◆
Provide supply and exhaust air temperatures		◆	◆
Provide outside and return air temperature and humidity		◆	◆
Fan status on both fans		◆	◆
Enable the supply fan only	◆	◆	◆
Enable the exhaust fan only	◆	◆	◆
Micro USB port		◆	◆
Fieldbus port		◆	◆
BACnet MS/TP or BACnet TCP/IP - activation required	◆	◆	
Modbus		◆	◆
Data trending		◆	◆
Outside airflow rate control			◆
Exhaust airflow rate control			◆
Space pressure control sensor required			◆
Duct pressure control sensor required			◆
Unit supply air temp sensor required			◆
Heating enable			◆
Heating modulation - staged or modulating			◆

#### NOTES FOR STANDARD CONTROLS ONLY

1. Relays and terminal block (option).
2. Differential pressure sensing tube and pressure switch with manual trip point adjustment (option), wiring to switch and alarm indication provided by others.
3. 24V transformer contactors and relays (option).
4. VFD (option). Factory installed and wired.
5. EC Motor (option) Potentiometer control factory wired.
6. Independent time clock (option).
7. External smoke detector (option), field installed in series to shut off unit in adverse conditions.

# ACCESSORIES

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## Controls Continued

\*Compatible with Standard or Integrated Programmable Controls.

\*\*Only Compatible with Integrated Programmable Controls.

### DIGITAL TIME CLOCK\*

- Up to 8 on/off cycles per day or 56 per week
- 24 VAC power requirement
- Battery back-up
- Wall mount or outdoor enclosure options
- Wall mount fits any 4" x 4" electrical box



TC7D-W  
Wall Mount



TC7D-E Control In NEMA  
3R Enclosures

### IAQ SENSORS\*

- Measures TVOC
- Direct correlation to CO<sub>2</sub> levels
- 0-2000 ppm CO<sub>2</sub> equivalent output signal
- Digital display on wall mount
- Selectable 0-5 or 0-10V dc signal
- 24 VAC power required
- Internal menu for easy set-up



IAQ-W  
Wall Mount



IAQ-D  
Duct Mount

### CO<sub>2</sub> SENSORS\*

- Adjustable control from 400-2000 PPM
- Digital display
- 24 VAC power requirement
- Computer/BAS interface for information and control
- Self calibrates during periods of low occupancy
- Wall mount or add duct mount accessory



CO2-W  
Wall Mount



CO2-D  
Duct Mount

### SMOKE DETECTOR\*

- Photoelectric type detector
- Plug-in sensor
- Round, square or rectangular duct mounting options
- Easy access test/reset button and LED display
- For 100-4000 fpm duct air velocity applications
- 24 VAC power requirement
- Interconnect feature for multi-fan shutdown
- Built-in short circuit protection



SD-D  
Duct Mount

### MOTION OCCUPANCY SENSORS\*

- Passive infrared sensor
- Adjustable time-off delay to 30 minutes
- 24 VAC power requirement
- Ceiling mount or directable wall mount
- Coverage floor space
  - Ceiling mount: 1500 sq. ft.
  - Wall mount: 2500 sq. ft.
- Major motion area
  - Ceiling mount: 50 ft. diameter
  - Wall mount: 68 x 50 ft.



MC-C  
Ceiling Mount



MC-W  
Wall Mount

### REMOTE DISPLAY\*\*

- Hand held or wall mount
- LED display
- Keypad for easy programming



RD-M  
Handheld or Wall Mount

# ACCESSORIES

## Controls Continued

### PRESSURE SENSORS (ROOM PRESSURE/DUCT STATIC PRESSURE)\*\*

- With or without display
- Differential pressure transmitter
- 4-20 mA or field selectable 0-10 or 0.5V output signal
- Integral barbed tubing connections that fit 1/8" and 3/16" ID tubing



RPS-WOD/DPS-WOD  
Wall/Duct Mount  
without Display



RPS-WD/DPS-WD  
Wall/Duct Mount  
with Display

### BACNET FACTORY ACTIVATION\*\*

- Allows for communication to a BAS via BACnet MS/TP
- Factory programmed and tested



## Dampers

### 4", 5" & 6" AUTOMATIC BALANCING (ABV-4, ABV-5 & ABV-6)

- Adaptability
- Steri-Balance™
- Sealed tight
- Bi-directional
- Total control
- UL classified

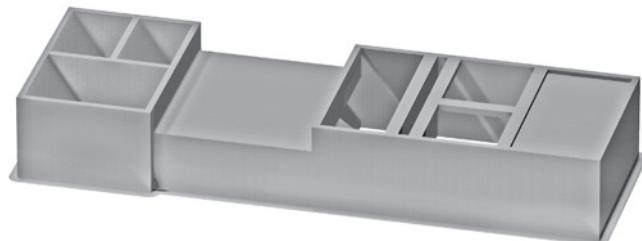


## Engineered Combo Curbs

Exclusively designed for select Trane (Voyager and Precedent) and Carrier (WeatherExpert, WeatherMaster, and WeatherMaker) models, RenewAire's engineered combo curb makes it easy to combine standard Air Handling Unit (AHU) rooftop applications with the benefits of RenewAire energy recovery ventilation.

They eliminate the need for transitional ductwork between the RTU and the ERV, reducing the time and costs of installation. Simply install the curb, run the return and supply duct to the curb openings, then install the AHU and RenewAire units onto the

curb. Additionally, the curbs allow the AHU unit to function in its standard operation as well as full-flow economizer modes.



### Standard Construction

- Prime G-90, 18-gauge galvanized steel
- Fully welded and mitered corners (single piece curb lift)
- Base flange attachments for securing to the building structure
- 1 1/2" 3 lb. density fiberglass insulation
- Reinforced with cross channel supports on center
- Conforms to ASTM A653/A653M (standard specification for sheet metal)

### Available Options (Special Order)

- Seismic and/or wind load applications
- Pitched roof applications
- High vibration applications
- Custom curb heights
- Heavier metal gauges
- Aluminum liners

# ACCESSORIES

## EK Series Electric Duct Heater

AVAILABLE ON ALL COMMERCIAL UNITS (SOME EXCEPTIONS APPLY)

RenewAire offers the highest-efficiency energy recovery ventilators (ERVs) on the market. However, during winter conditions, supply air from the ERV may be less than optimal for space conditions. By adding

**CONFIGURABLE ELECTRIC DUCT HEATERS** as an accessory to our commercial ERVs, RenewAire can now heat supply air during cooler months to enhance indoor comfort, all via one package for ERVs and heaters from a single source.



**FLIPPABLE**  
EK SERIES  
SHOWN

### KEY BENEFITS

- **A single-source responsibility reduces time and costs:** A single information source, a single purchase point and a single approval package for ERVs and heaters reduces design time and costs, and streamlines logistics for design engineers and contractors.
- **More flexibility:** RenewAire offers design engineers the capability to specify ERVs with a matching heater to boost flexibility and provide heated air to a single space or multiple spaces.
- **Easy installation:** A ZERO clearance rating to combustibles allows designers and contractors to apply RenewAire heaters with less restrictions onsite.
- **Ultimate reliability:** RenewAire heaters come with our two-year warranty and unmatched reliability. Single-source responsibility offers contractors and end users peace of mind and a single call location for technical, start-up and commissioning questions.
- **Highly certified:** UL Listed (UL1996 Standard) and CSA certified.



# EK SERIES

## ELECTRIC DUCT HEATER



### Electric Duct Heater (1-175 kW) Accessory

#### SPECIFICATIONS

**Heater Type:**

Electric Duct Heater

**Typical KW Range:**

1-175 kW

**Standard Features:**

- A disconnecting magnetic control contactor per stage or each 48 Amp circuit within a stage
- Open-coil element
- Staged on/off
- Control terminal board
- Grounding lugs
- Automatic limit switch for primary over-temperature protection
- Manual reset limit switch for secondary over-temperature protection
- Non-adjustable airflow switch
- Standard control transformer - 24 VAC
- Disconnect switch
- Duct thermostat with sensor for on/off control
- 60-20-20 (Ni/Cr/Fe) C Grade element wire with nickel-plated terminals
- Slip-in mount
- No left/right hand
- Vertical up/down flow

**Voltages & Phase:**

Single phase - 120, 208, 240, 277

Three phase - 208, 240, 480, 600

**Control Voltage:**

24 VAC

**Dimensions:**

Minimum - 8" x 8" (W x H)

Maximum - 99" x 99" (W x H)

**Options:**

Flange mount  
80-20 (Ni/Cr) A Grade element wire with stainless steel terminals

Recessed control box 1"

Gasketed cover - dust tight

Power fusing, standard for heaters drawing more than 48 Amps

2-stage

Electronic step controller (4-stage)

SCR (up to 96 Amps)

SCR Vernier (over 96 Amps)

Pilot light

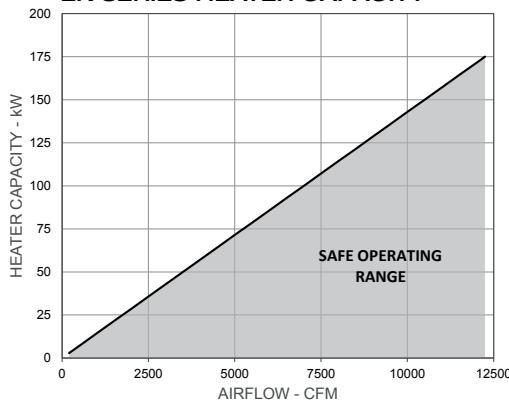
**Accessory:**

Room thermostat

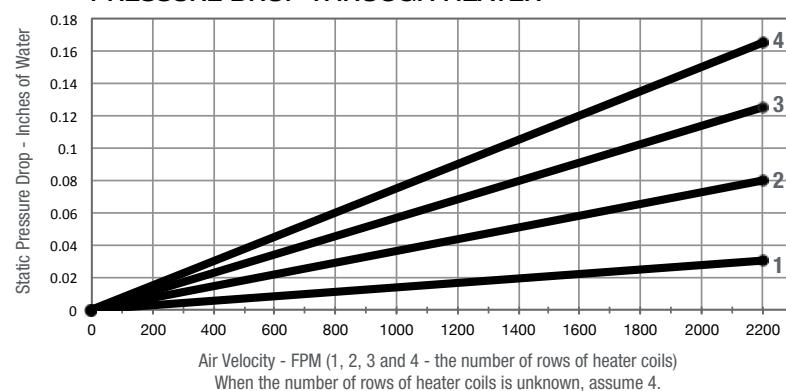
Room/duct thermostat-sensor kit for SCR control

**Note:** Electric duct heater designed for indoor ductwork installation only.

#### EK SERIES HEATER CAPACITY

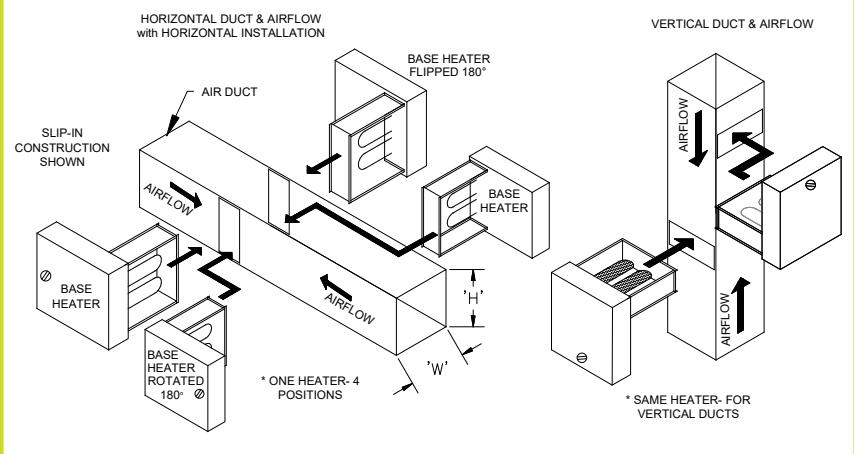


#### PRESSURE DROP THROUGH HEATER



#### FLIPPABLE CAPABILITIES

Unique to the EK series, this unit has the ability to flip 180°. Additionally, EK heaters features both vertical up and vertical down airflow.



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# ACCESSORIES

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## Indirect Gas-Fired Duct Furnace

AVAILABLE ON ALL COMMERCIAL UNITS (SOME EXCEPTIONS APPLY)

RenewAire offers some of the highest-efficiency energy recovery ventilators (ERVs) on the market. However, during winter conditions, supply air from the ERV may be less than optimal for space conditions. By providing an indoor and outdoor **INDIRECT GAS-FIRED DUCT FURNACE** as an accessory for our commercial ERVs, in addition to the Electric Duct Heater, RenewAire ERVs now have increased flexibility for controlling supply-air temperature during cooler months. This enhances indoor comfort, makes ERV installations easier and is possible via a single source for ERVs and furnaces.



### KEY BENEFITS

- **A single source for your ERV and furnace reduces time and costs:** A single information source, a single purchase point and a single approval package for ERVs and heaters reduces design time and costs, as well as streamlines logistics for design engineers and contractors.
- **Increased capabilities and flexibility:** RenewAire offers design engineers the capability to specify ERVs with a matching indoor or outdoor gas-fired furnace to increase ERV capabilities and flexibility for providing a single space or multiple spaces with tempered air conditions to equal wintertime loads.
- **More and easier applications:** The addition of the indoor and outdoor indirect gas-fired duct furnace as an accessory ensures that RenewAire ERVs can be easily specified on more applications that require gas heating of the recovered air.
- **Expert guidance:** The RenewAire customer-support team will provide detailed and expert guidance for how best to install the indoor and outdoor gas-fired duct furnace with an ERV.
- **Ultimate reliability:** RenewAire furnaces come with our two-year warranty and unmatched reliability. Single-source responsibility offers contractors and end users peace of mind and a single call location for technical, start-up and commissioning questions.
- **Highly certified:** ETL-listed to the requirements of ANSI Z83.8/CSA 2.6.



## Indirect Gas-Fired Duct Furnace Accessory



### INDOOR

Indirect Gas-Fired Duct Furnace



Indoor IN-KI shown

### SPECIFICATIONS

#### Heater Type:

Indirect Gas-Fired Duct Furnace

#### Typical Input Capacity (MBH):

50, 75, 100, 125, 150, 175,  
200, 250, 300, 350, 400

#### Standard Features:

- Tubular heaters
- Indirect natural gas fired
- Indoor installation
- 81% thermal efficiency
- Horizontal airflow
- Rated for elevations from 0–2,000 ft.
- 409 stainless steel heat exchanger
- 409 stainless steel burners
- Flue/combustion air: indoor models
  - Vertical (separated indoor)
  - Vertical top exhaust with louvered intake
- Direct spark ignition
- 1-stage/2-stage gas controls
- Induced draft venting
- Terminal block for power and control wiring
- Automatic high limit safety shut-off
- Auxiliary manual high limit switch
- Combustion air pressure switch
- Air proving switch
- Combination gas valve with shutoff

#### Standard Features (continued):

- Flame rollout switch
- Manual shut off valve
- 3/8" condensate drain connection

#### Voltages & Phase:

Single phase: 120V, 208V, 230V

#### Control Voltage:

24VAC

#### Dimensions:

See table 2

#### Shipping:

Shipped loose with base unit and installed in the field

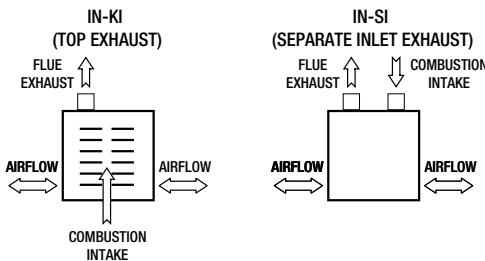
#### Options:

- Indirect propane fired fuel
- Elevation correction for elevation > 2,000 ft.
- 304 stainless steel heat exchanger
- 5:1 continuous electronic modulation for all furnaces
- 10:1 continuous electronic modulation for furnaces 200 MBH and larger
- Duct thermostat for modulation control
- Disconnect switch
- Power fusing

#### Accessory:

- Duct thermostat for 1-stage/2-stage control
- Duct thermostat for modulation control

### FLUE AND COMBUSTION AIR CONFIGURATION



**Note:** The total equivalent length of vent pipe must not exceed 50 feet. If equivalent length exceeds 50 feet refer to IOM for recommendations.

**Caution:** All indirect gas-fired duct furnaces to be installed downstream of the ERV and on the positive side of the supply fan.

### TEMPERATURE RISE AND PRESSURE DROP

FIGURE 1 GAS FURNACE 50–200 MBH

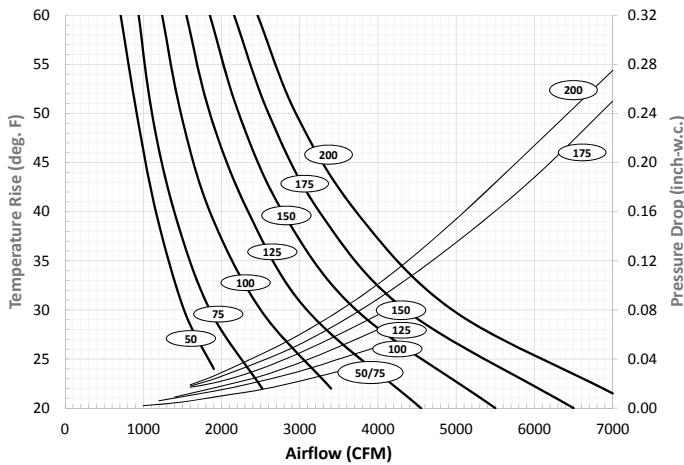
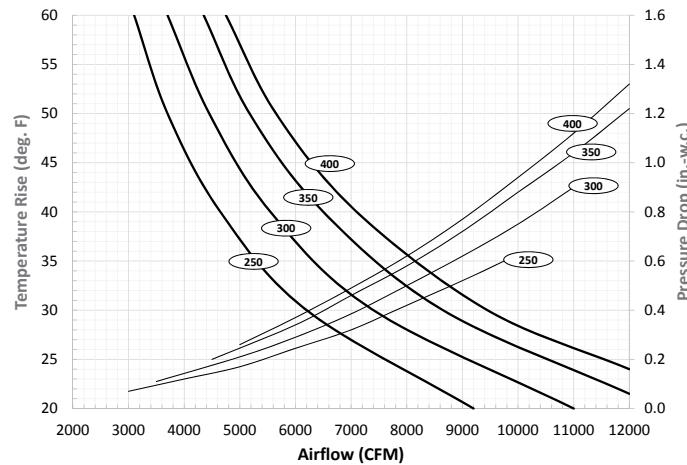
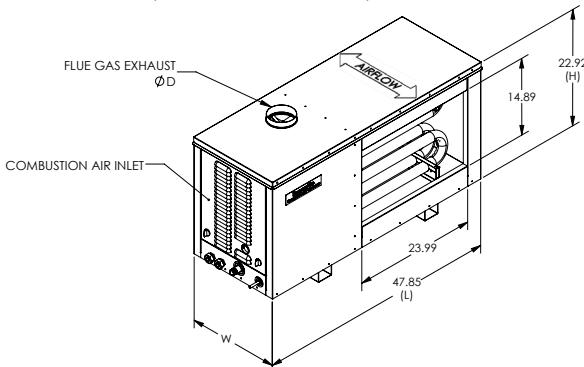
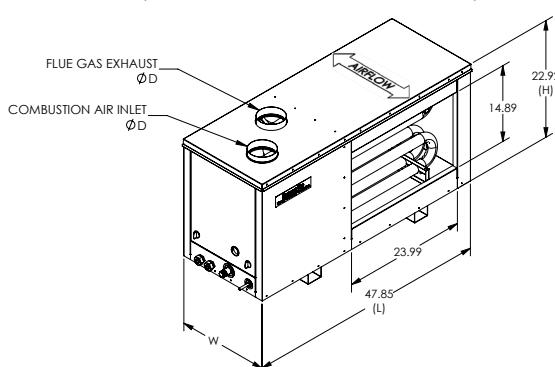


FIGURE 2 GAS FURNACE 250–400 MBH



**DUCT FURNACE DIMENSIONS****FIGURE 3 IN-KI (TOP EXHAUST INDOOR)****FIGURE 4 IN-SI (SEPARATE INLET EXHAUST INDOOR)****TABLE 2**

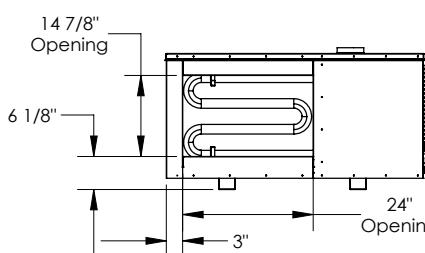
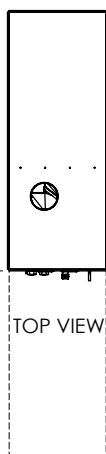
Size	Tubes	Input Rate	Output	Min/Max Temperature Rise through Furnace (°F)										Vent Locations				Unit Weight	Shipping Weight
				20	25	30	35	40	45	50	55	60	IN-KI, IN-SI		Diameter				
				W	L	H	D												
MBH	Qty.	BTUh	BTUh	Nom. Duct Opening Airflow (CFM)										inch	inch	inch	inch	lb	lb
50	3	50,000	40,000	1852	1481	1235	1058	926	823	741	673	617	15.7	47.8	22.9	5	127	207	
75	3	75,000	60,000	2778	2222	1852	1587	1389	1235	1111	1010	926	15.7				127	207	
100	4	100,000	80,000	3704	2963	2469	2116	1852	1646	1481	1347	1235	18.4				142	222	
125	5	125,000	100,000	4630	3704	3086	2646	2315	2058	1852	1684	1543	21.2				169	249	
150	6	150,000	120,000	5556	4444	3704	3175	2778	2469	2222	2020	1852	23.9				160	240	
175	7	175,000	140,000	6481	5185	4321	3704	3241	2881	2593	2357	2160	26.7				180	260	
200	8	200,000	160,000	7407	5926	4938	4233	3704	3292	2963	2694	2469	29.4				196	276	
250	10	250,000	200,000	9259	7407	6173	5291	4630	4115	3704	3367	3086	34.9	6	22.9	6	245	325	
300	12	300,000	240,000	11111	8889	7407	6349	5556	4938	4444	4040	3704	40.4				279	384	
350	14	350,000	280,000	12963	10370	8642	7407	6481	5761	5185	4714	4321	45.9				324	429	
400	15	400,000	320,000	14815	11852	9877	8466	7407	6584	5926	5387	4938	48.7				394	499	

Note: For a single furnace, 20° F minimum temperature rise, 60° F maximum temperature rise.

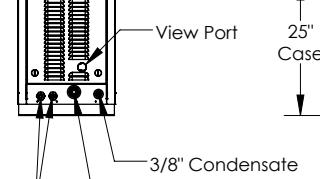
**INDIRECT GAS-FIRED DUCT FURNACE DIMENSIONS**

**UNIT DIMENSIONS WILL BE CHANGING  
STARTING JUNE 2023.**

**NEW DIMENSION DRAWINGS WILL  
BE CREATED AT TIME OF ORDER.**



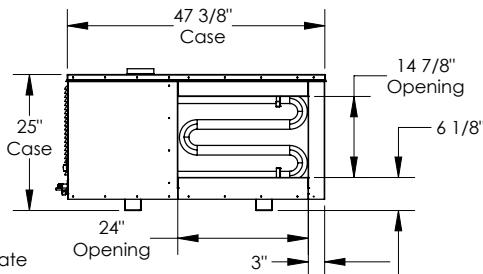
Power Wiring and Control Wiring Inlet Fittings



FRONT VIEW

**NOTES**

1. UNLESS OTHERWISE SPECIFIED, DIMENSIONS ARE ROUNDED TO THE NEAREST EIGHTH OF AN INCH.
2. SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE.



RIGHT VIEW


**Indirect Gas-Fired Duct Furnace Accessory**
**ROOFTOP**

Indirect Gas-Fired Duct Furnace



Rooftop RT-NO shown

**SPECIFICATIONS**

**Heater Type:**  
Indirect Gas-Fired Duct Furnace

**Typical Input Capacity (MBH):**  
50, 75, 100, 125, 150, 175,  
200, 250, 300, 350, 400

**Standard Features:**  
Tubular heaters  
Indirect natural gas fired  
Outdoor installation  
81% thermal efficiency  
Horizontal airflow  
Rated for elevations from 0–2,000 ft.  
409 stainless steel heat exchanger  
409 stainless steel burners  
Flue/combustion air: outdoor models  
Horizontal separated outdoor with hoods  
Vertical top exhaust with intake hood  
Direct spark ignition  
1-stage/2-stage gas controls  
Induced draft venting  
Terminal block for power and control wiring  
Automatic high limit safety shut-off  
Auxiliary manual high limit switch  
Combustion air pressure switch  
Air proving switch

**Standard Features (continued):**  
Combination gas valve with shutoff  
Flame rollout switch  
Manual shut off valve  
3/8" condensate drain connection

**Voltages & Phase:**  
Single phase: 120V, 208V, 230V

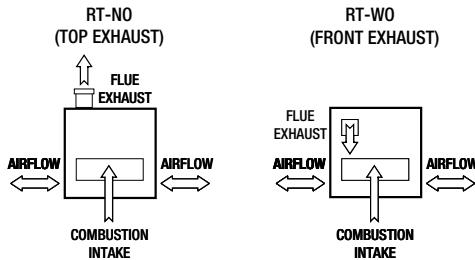
**Control Voltage:**  
24VAC

**Dimensions:**  
See table 1

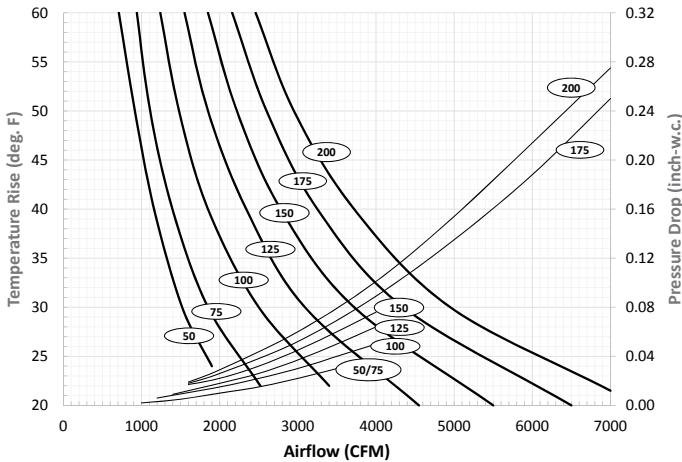
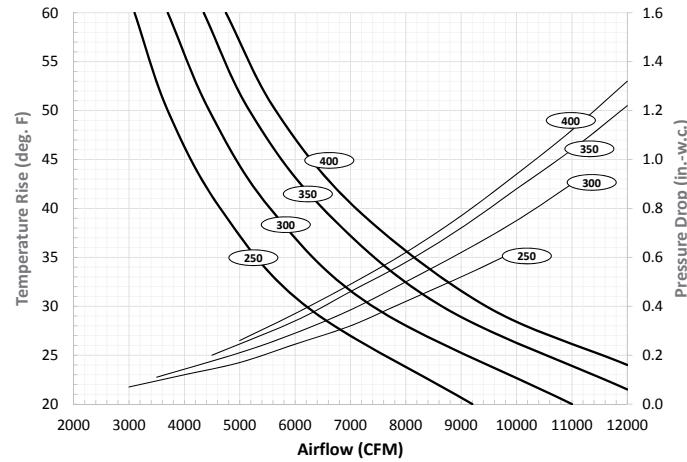
**Shipping:**  
Shipped loose with base unit and installed in the field

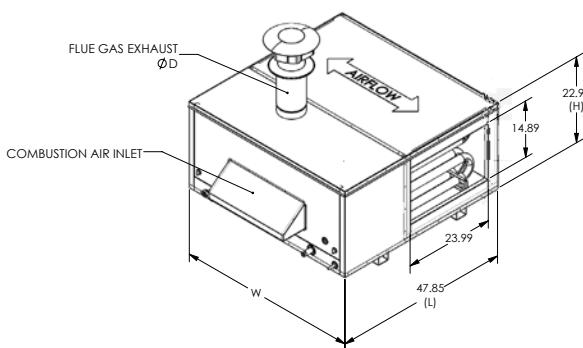
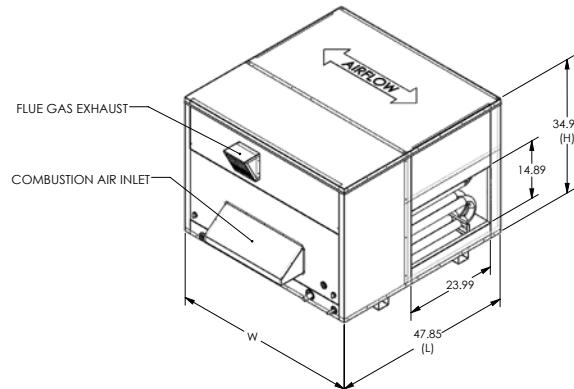
**Options:**  
Indirect propane fired fuel  
Elevation correction for elevation > 2,000 ft.  
304 stainless steel heat exchanger  
5:1 continuous electronic modulation for all furnaces  
10:1 continuous electronic modulation for furnaces  
200 MBH and larger  
Duct thermostat for modulation control  
Disconnect switch  
Power fusing

**Accessory:**  
Duct thermostat for 2-stage control  
Duct thermostat for modulation control  
Duct curb

**FLUE AND COMBUSTION AIR CONFIGURATION**

**Caution:** All indirect gas-fired duct furnaces to be installed downstream of the ERV and on the positive side of the supply fan.

**TEMPERATURE RISE AND PRESSURE DROP****FIGURE 1 GAS FURNACE 50–200 MBH****FIGURE 2 GAS FURNACE 250–400 MBH**

**DUCT FURNACE DIMENSIONS****FIGURE 3 RT-NO (TOP EXHAUST OUTDOOR)****FIGURE 4 RT-WO (FRONT EXHAUST OUTDOOR)****TABLE 1**

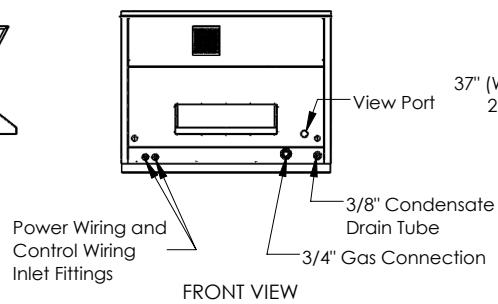
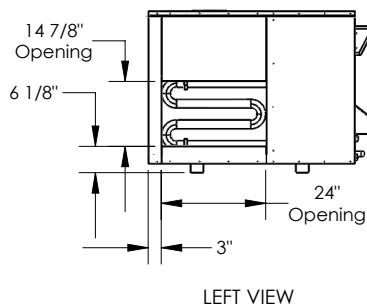
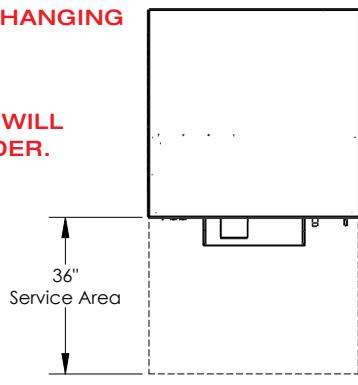
Size	Tubes	Input Rate	Output	Min/Max Temperature Rise through Furnace (°F)									Vent Locations					Unit Weight	Shipping Weight
				20	25	30	35	40	45	50	55	60	RT-NO	RT-WO	RT-NO	RT-WO	Diameter		
MBH	Qty.	BTUh	BTUh	Nom. Duct Opening Airflow (CFM)									inch	inch	inch	inch	inch	lb	lb
50	3	50,000	40,000	1852	1481	1235	1058	926	823	741	673	617	15.7					127	207
75	3	75,000	60,000	2778	2222	1852	1587	1389	1235	1111	1010	926	15.7					127	207
100	4	100,000	80,000	3704	2963	2469	2116	1852	1646	1481	1347	1235	18.4					142	222
125	5	125,000	100,000	4630	3704	3086	2646	2315	2058	1852	1684	1543	21.2					169	249
150	6	150,000	120,000	5556	4444	3704	3175	2778	2469	2222	2020	1852	23.9					160	240
175	7	175,000	140,000	6481	5185	4321	3704	3241	2881	2593	2357	2160	26.7	47.8	22.9	34.9		180	260
200	8	200,000	160,000	7407	5926	4938	4233	3704	3292	2963	2694	2469	29.4					196	276
250	10	250,000	200,000	9259	7407	6173	5291	4630	4115	3704	3367	3086	34.9					245	325
300	12	300,000	240,000	11111	8889	7407	6349	5556	4938	4444	4040	3704	40.4					279	384
350	14	350,000	280,000	12963	10370	8642	7407	6481	5761	5185	4714	4321	45.9					324	429
400	15	400,000	320,000	14815	11852	9877	8466	7407	6584	5926	5387	4938	48.7					394	499

**Note:** For a single furnace, 20° F minimum temperature rise, 60° F maximum temperature rise.

**INDIRECT GAS-FIRED DUCT FURNACE DIMENSIONS**

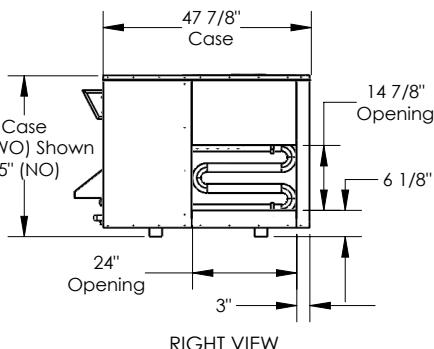
**UNIT DIMENSIONS WILL BE CHANGING  
STARTING JUNE 2023.**

**NEW DIMENSION DRAWINGS WILL  
BE CREATED AT TIME OF ORDER.**



**NOTES**

1. UNLESS OTHERWISE SPECIFIED, DIMENSIONS ARE ROUNDED TO THE NEAREST EIGHTH OF AN INCH.
2. SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE.



# LE SERIES MODEL

## CONFIGURATION GUIDE

Note: Not all options are available on every model.

MODEL NUMBER	L	E			J										-	-									
DIGIT NUMBER	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25

Digits 1-5:	Model
"LE-6X"	
"LE-8X"	
"LE10X"	

Digit 18:	Flow Control
"-"	= No Isolation Damper
"D"	= Motorized Damper both Airstreams
"E"	= Motorized Damper EA or RA Airstream
"F"	= Motorized Damper FA or OA Airstream

Digits 7-8:	Location
"IN"	= Indoor
"RT"	= Rooftop

Digit 19:	Unit Control (see Restrictions 6 & 7)
"A"	= Standard Unit Control Wiring
"V"	= Onboard VFD Both Airstreams

Digit 9:	Orientation
"V", "H" (Indoor Units)	
"V", "H", "R", "F" (Rooftop Units)	

Digit 20:	Disconnect
"N"	= Non-Fused (Standard)
"F"	= Fused

Digit 10:	Vibration Isolation
"N"	= Neoprene Isolators
"S"	= Spring Isolators

Digit 21:	Unit Control Enhancements
"T"	= Transformer with Isolation Relay (Standard)
"1"	= Enhanced Controls
"2"	= Premium Controls
"3"	= Enhanced Controls with BACnet License
"4"	= Premium Controls with BACnet License

Digit 12:	Phase (See Restriction 2)
"1"	= Single Phase
"3"	= Three Phase

Digit 22:	Filter Options (see Restriction 8)
"-	= None (Standard)
"F"	= Filter Monitor Both Airstreams

Digit 13:	Voltage (see Restriction 1)
"4"	= 460V
"5"	= 208-230V
"8"	= 575V

Digit 23:	Flexible Packaging
"A"	= Assembled (single piece flat bed)
"M"	= Modular (two pieces for enclosed trailer)

Digit 14:	FA Horsepower (see Restrictions 2, 3 & 4)
"D"	= 3 HP Low Speed
"F"	= 3 HP Medium Speed
"G"	= 3 HP High Speed
"J"	= 5 HP Low Speed
"K"	= 5 HP Medium Speed
"L"	= 5 HP High Speed
"M"	= 7.5 HP Low Speed
"N"	= 7.5 HP Medium Speed
"P"	= 7.5 HP High Speed
"Q"	= 10 HP Medium Speed
"R"	= 10 HP High Speed

Digit 24:	Paint and Customization
"-	= None
"W"	= White Paint
"C"	= Custom Paint
"X"	= Custom Unit

Digit 15:	EA Horsepower (see Restrictions 2, 3 & 4)
"D"	= 3 HP Low Speed
"F"	= 3 HP Medium Speed
"G"	= 3 HP High Speed
"J"	= 5 HP Low Speed
"K"	= 5 HP Medium Speed
"L"	= 5 HP High Speed
"M"	= 7.5 HP Low Speed
"N"	= 7.5 HP Medium Speed
"P"	= 7.5 HP High Speed
"Q"	= 10 HP Medium Speed
"R"	= 10 HP High Speed

Digit 25:	Safety Listing (see Restriction 5)
"L"	= Listed
"N"	= Non-Listed

\*NOTES:

Digit 6 "J" = G5 Core Type. Digits 16 and 17 are not used in these models.

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# LE SERIES MODEL

## CONFIGURATION GUIDE

Note: Not all options are available on every model.

MODEL NUMBER	L	E			J								-	-											
DIGIT NUMBER	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25

**Restrictions:**

- 1: Voltage Codes "4" & "8" only available with Phase Code "3" (Three-Phase).
- 2: Phase Code "1" only available in Motor Codes "D", "F", & "G".
- 3: Motor Code "P" (7.5 HP High Speed) not available in LE-6X.
- 4: Motor Codes "Q" and "R" (all 10 HP Speeds) not available in LE-6X & LE-8X.
- 5: Some units with Customization Code "X" are not safety listed.
- 6: Unit Control Code "V" only available with Motor Codes "G", "L", & "N" in LE-6X.
- 7: Unit Control Code "V" only available with Motor Codes "G", "L", "P", & "R" in LE-8X & LE10X.
- 8: Filter Code "F" not available with Unit Control Enhancements Codes "1", "2", "3", & "4". Filter Monitor is provided with those options.

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# EK SERIES ELECTRIC DUCT HEATER CONFIGURATION GUIDE

Note: Not all options are available on every model.

MODEL NUMBER	E	K	-								C						S	-							
DIGIT NUMBER	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25

Digits 1-2:	Heater Type "EK" = Electric Heater (Standard)	Digit 18:	Voltage (see Restrictions 7 & 8) "1" = 120V "2" = 208V "3" = 240V "4" = 480V "8" = 600V "9" = 277V
Digits 4-5:	Width in Inches (see Restriction 1) 08-99	Digit 19:	Phase "1" = Single-Phase "3" = Three-Phase
Digits 6-7:	Height in Inches (see Restriction 2) 08-99	Digit 20:	Power Fusing (see Restriction 9) "-" = None "2" = Fusing
Digits 8-10:	Capacity in kW (see Restrictions 3, 4, & 5) 001-175	Digit 21:	Element Material "1" = Single (Standard) "2" = 2-Stage "4" = 4-Stage
Digit 11:	Mount "S" = Slip In (Standard) "F" = Flanged	Digit 22:	Control Voltage "S" = 24VAC
Digit 12:	Element Style "C" = Open Coil (Standard)	Digit 23:	Control Type (see Restrictions 10, 11, & 12) "D" = Staged with Thermostat and Sensor (Standard) "E" = Electronic Step Control with Thermostat and Sensor "S" = SCR (control by others) "V" = SCR with Thermostat and Sensor
Digit 13:	Element Material "C" = 60-20-20 Ni-Cr-Fe with Nickel Plate Terminal Pins (Standard) "A" = 80-20 Ni-Cr with Stainless Steel Terminal Pins	Digit 25:	Pilot Light (See Restriction 13) "N" = None (Standard) "L" = Light
Digit 14:	Airflow Orientation "H" = Horizontal (Standard) "V" = Vertical		
Digit 15:	Control Box Offset "L" = Left Hand (Standard) "R" = Right Hand		
Digit 16:	Control Box Recessed "-" = None (Standard) "R" = Recessed 1"		
Digit 17:	Control Box Dust Tight "-" = None (Standard) "D" = Dust Tight		

\*NOTES:

Digits 3 and 24 are not used in this model.

All heaters come with standard features: Disconnect Switch, Air Flow Switch (non adjustable), Control Transformer

Descriptions of feature and options are found in the installation and operation manual.

<b>Restrictions:</b>
1: Width inches entered as a whole number.
2: Height inches entered as a whole number.
3: Heater density should be less than 30kW/ft <sup>2</sup> . DENSITY = HEATER CAPACITY (kW) < 30 (W" x H") / 144
4: Heater capacity kW entered as a whole number.
5: Formulas for calculating kW and temperature rise: $kW = \frac{CFM \times \Delta T}{3150}$ $\Delta T = \frac{kW \times 3150}{CFM}$
7: Voltage Codes "1" & "9" only available with Phase Code "1" (Single-Phase).
8: Voltage Codes "4" & "8" only available with Phase Code "3" (Three-Phase).
9: Power Fusing Code "F" required when amperage is > 48A. (based on kW and voltage)
10: Control Type Code "D" only available with Stage Code "1" & "2".
11: Control Type Code "E" only available with Stage Code "4".
12: Control Type Code "S" & "V" only available with Stage Code "1", unless amperage is greater than or equal to 96A, then Stage Code "4" is automatically selected.
13: Pilot Light Code "L" only available with Control Type Code "D".
3. Power Fusing Code "F" only available with Disconnect Switch Code "D". Power Fusing Code "F" always selected when Disconnect Switch Code "D" is selected.

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# GH SERIES INDIRECT GAS-FIRED DUCT FURNACE CONFIGURATION GUIDE

Note: Not all options are available on every model.

MODEL NUMBER	G	H	-												H	T			1	-	S	-	-		
DIGIT NUMBER	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25

Digits 1-2:	Model
"GH" = Gas Furnace 50–400 MBH	

Digit 17:	Disconnect Switch
"N" = None (Standard)	
"D" = Disconnect Switch	

Digits 4-5:	Location
"IN" = Indoor	
"RT" = Rooftop	

Digit 18:	System/Inducer Voltage (see Restriction 2)
"1" = 115V	
"2" = 208V	
"3" = 230V	

Digits 6-7:	Vent Location
"SI" = Separated Top Indoor	
"KI" = Top Exhaust Indoor	
"WO" = Front Exhaust Outdoor	
"NO" = Top Exhaust Outdoor	

Digit 19:	Phase
"1" = Single Phase	

Digits 8-10:	Input Capacity in MBH
"050", "075", "100", "125", "150", "175", "200", "250", "300", "350", "400"	

Digit 20:	Power Fusing (see Restriction 3)
"N" = None	
"F" = Fusing	

Digit 11:	Fuel Type
"N" = Natural Gas (Standard)	
"P" = Propane	

Digit 22:	Control Voltage
"S" = 24VAC	

Digits 12-13:	Tube Material
"SS" = 409 Stainless Steel (Standard)	
"CS" = 304 Stainless Steel	

Digit 23:	Control Type (see Restriction 1)
"T" = Two Stage High/Low with Thermostat (Standard)	
"S" = Single Stage On/Off with Thermostat	
"E" = Modulating 5:1 (Natural Gas)/3:1 (Propane) with Thermostat	
"W" = Modulating 10:1 (Natural Gas)/6:1 (Propane) with Thermostat	
"Z" = Two Stage High/Low without Thermostat	
"I" = Single Stage On/Off without Thermostat	
"M" = Modulating 5:1 (Natural Gas)/3:1 (Propane) without Thermostat	
"V" = Modulating 10:1 (Natural Gas)/6:1 (Propane) without Thermostat	

Digit 14:	Airflow Orientation
"H" = Horizontal	

Digit 15:	Thermal Efficiency
"T" = 81%	

Digit 16:	Elevation
"S" = 0–2000' (Standard)	
"2" = 2001'–3000'	
"3" = 3001'–4000'	
"4" = 4001'–5000'	
"5" = 5001'–6000'	
"6" = 6001'–7000'	
"Y" = 7001' and above	

\*NOTES:

Digits 3, 21, 24, & 25 are not used in this model.

All heaters come with standard features: Air Proving Switch, Auxiliary High Temperature Limit Switch

Descriptions of feature and options are found in the installation and operation manual.

Restrictions:	
1: Control Type Code "V" & "W" not available with Input Capacity in MBH Codes "050", "075", "100", "125", "150", & "175".	
2: System/Inducer Voltage Code "2" not available with Input Capacity in MBH Codes "050", "075", "100", "125", "150", "175" & "200".	
3. Power Fusing Code "F" only available with Disconnect Switch Code "D". Power Fusing Code "F" always selected when Disconnect Switch Code "D" is selected.	

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**— INDOOR AIR QUALITY MATTERS —**

- ◆ Deficient IAQ is an EPA top-five health risk
- ◆ People spend 90% of their time indoors
- ◆ Indoor air can be 2-5 times and up to 100 times more polluted than outdoor air

**BENEFITS OF INCREASED VENTILATION**BETTER  
HEALTHIMPROVED  
COGNITIVE  
FUNCTIONINCREASED  
PRODUCTIVITY**TECHNICAL/APPLICATIONS SUPPORT**

The goal of our technical-support team is to provide the **BEST CUSTOMER SERVICE** in the HVAC industry. You can count on our knowledgeable and seasoned staff for all your technical, application and service needs, and we'll respond quickly and effectively to answer any of your questions.

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**Renewaire®**  
Energy Recovery Ventilation

# RELEVANT EVERYWHERE

## EVERY GEOGRAPHIC REGION

Our ERVs excel in every geographic region.

## EVERY CLIMATE

Our ERVs operate in every climate—from Alaska to Florida, and everywhere in between.

## EVERY PROJECT

From massive skyscrapers to cozy residential homes, our ERVs can be used in every size project and in every code jurisdiction.

## RENEWAIRE TEMPERS THE AIR



Our **ERVs moderate the extremes of outdoor supply-air temperature and humidity year-round**, providing a sustainable solution for fresh air that feels like a perfect spring day.

# APPLIED EVERYWHERE

When indoor occupants breathe in unclean air, this harms their health and causes cognitive impairment. Our ERVs can provide cleaner and healthier indoor air for every type of building in the world, thus improving occupants' wellbeing, while also reducing energy costs.

## RESIDENTIAL

The increased airtightness of newer and remodeled homes is causing deficient IAQ, resulting in more health problems for indoor occupants.

## COMMERCIAL

As commercial buildings become more airtight, deficient IAQ is increasing and causing sickness, absenteeism and decreased productivity.

## HEALTHCARE

The high occupant density of hospitals, nursing homes and other healthcare facilities results in deficient IAQ and ensuing health problems for patients and staff alike.

## RESTAURANTS/COFFEE SHOPS

The large volume of indoor occupants in restaurants and coffee shops causes deficient IAQ and subsequent health problems.

## RETAIL

The high level of foot traffic in retail stores leads to deficient IAQ and the potential sickness of shoppers, which can negatively impact sales.

## DAYCARE

Crowded daycare facilities breed deficient IAQ, thus causing health problems for everyone—especially children who are more vulnerable.

## EDUCATION (LOWER AND HIGHER)

With students and teachers packed into tight classrooms, instances of deficient IAQ go up, resulting in academic performance and test scores going down.

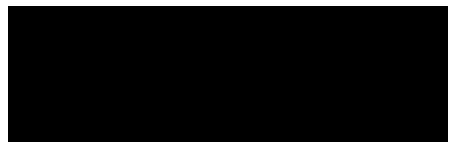
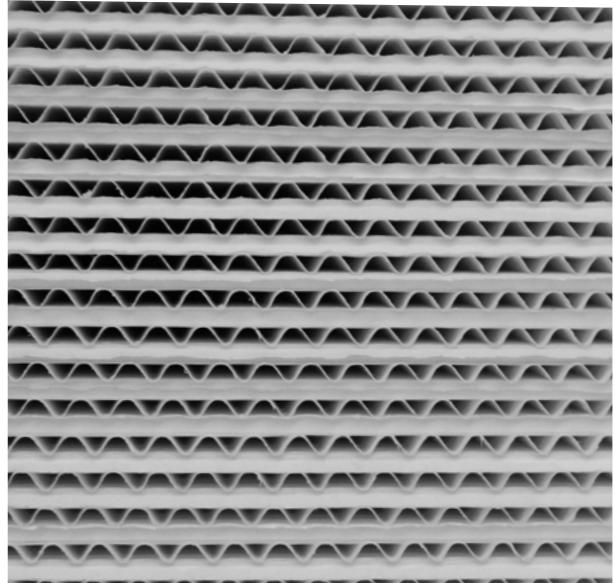
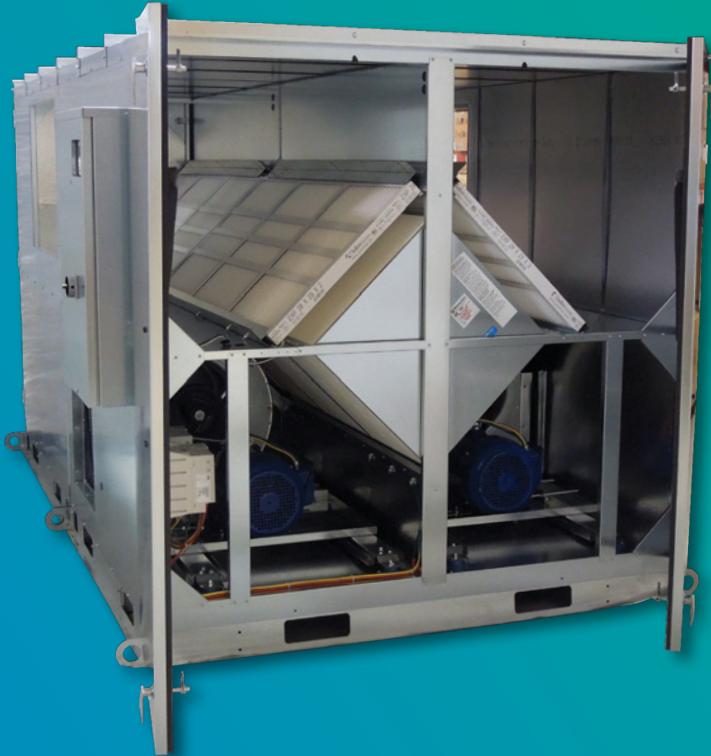
## GOVERNMENT

Aging and crowded government buildings result in deficient IAQ, which can impair worker performance and productivity.

## EVERY TYPE OF BUILDING

Every type of building can benefit from the enhanced IAQ generated by RenewAire ERVs, including veterinary clinics, nail salons and manufacturing facilities, among others.





## — RENEWAIRE EVERYWHERE —

RenewAire ERVs can be applied everywhere across all commercial, educational, institutional, light industrial and residential buildings. Our technology excels in every geographic region, every climate and every size project.

