

**Model: ES160E (ERV)**

VENTILATION PERFORMANCE				ENERGY PERFORMANCE					
EXT. STATIC PRESSURE	NET SUPPLY AIR FLOW	GROSS AIR FLOW		SUPPLY TEMP.	NET AIR FLOW	POWER CONSUMED	SENSIBLE RECOVERY EFFICIENCY	APPARENT SENSIBLE EFFECTIVENESS	NET MOISTURE TRANSFER
in wg (Pa)	cfm (l/s)	SUPPLY cfm (l/s)	EXHAUST cfm (l/s)	°F (°C)	cfm (l/s)	Watts			
0.1 (25)	153 (72)	159 (75)	153 (72)						
0.2 (50)	140 (66)	145 (69)	143 (68)	+32 (0)	63 (30)	60	74	84	0.74
0.3 (75)	126 (60)	132 (62)	132 (62)	+32 (0)	114 (54)	100	68	77	0.70
0.4 (100)	113 (53)	118 (55)	120 (57)						
0.5 (125)	98 (46)	102 (48)	108 (51)						
0.6 (150)	81 (38)	85 (40)	97 (46)	95 (35)	65 (31)	60	48*	72	0.45
0.7 (175)	62 (29)	64 (30)	89 (42)						
0.8 (200)	38 (18)	40 (19)	83 (39)						

\*Total Recovery Efficiency (TRE)

**CABINET/CORE:** Collar size: 6-inch (152.4 mm). The case is constructed of 0.032 painted aluminum with a white enamel finish. The cabinet is fully insulated with 1-inch polyurethane. The unit is equipped with an enthalpy cross-flow heat exchange core.



**CERTIFICATION:** cUS, CSA, HVI. Meets ASHRAE 62.2 requirements.

**ELECTRICAL:** 120V/1/60 Hz. 127W, 1.0 A

**BLOWERS:** Two backward curve impellers using PSC motors and permanently sealed bearings.

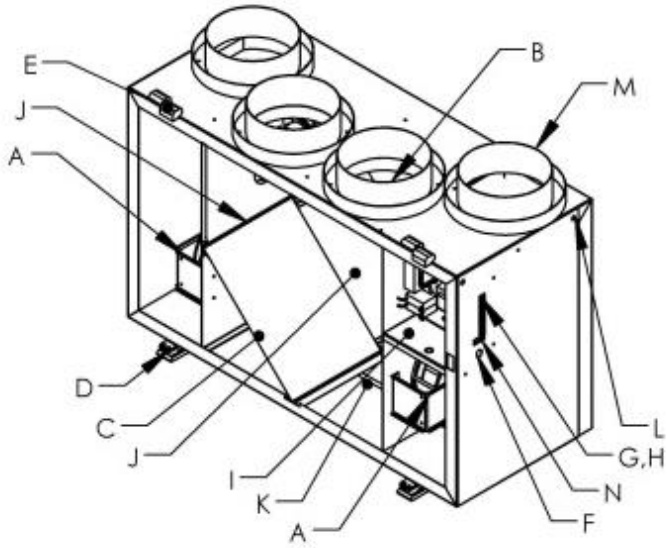
**ADDITIONAL FEATURES:**

- Furnace interlock options: commands furnace blower when HRV is on or only on high speed.
- Intelligent Defrost: duration and interval adjust to outdoor conditions below -5° C (23° F).
- **In defrost and recirculation modes, this unit will not induce indoor negative pressure nor recycle exhaust air; rather, it will redistribute ambient room air.**
- Balancing: differential pressure ports on doors allow air measurements without flow grid in ductwork. Independent speed adjustment of either supply or exhaust motor in BOTH high and low speed.
- 24 V circuit protection with self resetting fuse.
- Drain, hanger kit featuring buckle-fitted adjustable poly straps, polyester air filters included.
- 12 VDC or 24 V remote control options with the following Nu-Air controls:

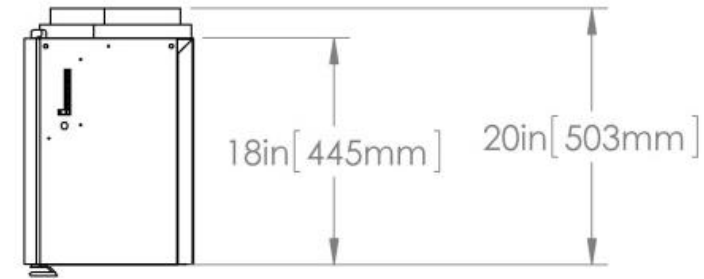
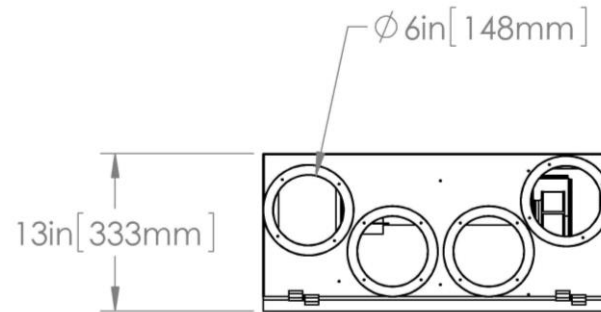
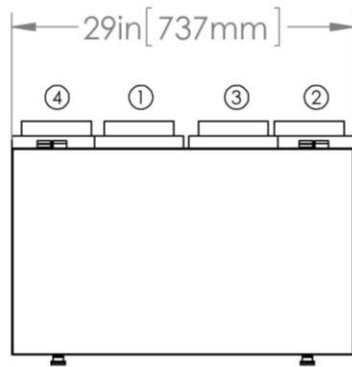
ES Series (12 VDC): Unlimited numbers. Series or parallel.	WINDSOR Series (24 V)
<b>ES-M1:</b> Off/ Stby/ Lo/ Hi <b>ES-M2:</b> Off/ Stby/ Lo/ 20 Lo—40 Stby <b>ES-M3:</b> Off/ Stby/ Lo/ 20 Lo—40 Recirculation <b>ES-M4:</b> Off/ Stby/ Lo/ Recirculation <b>ES-T1:</b> 20-40-60-minute timer <b>ES Lumina (NAV-561):</b> Low speed, high speed, intermittent, recirculation, 20/40 standby/lo, 20/40 recirculation, 20-40-60-minute timer, filter alert	<b>DSTAT-1:</b> Humidity control <b>Win-1:</b> Humidity control/ OFF/ STBY/ Continuous/ Intermittent/ Full-time high speed <b>*WIN-20:</b> 20-minute timer (up to 6), <b>*WIN-20 Gang:</b> for multi-switch gang box <b>Also: Any 24 V, two-wire switch.</b>  *Compatible with 12 VDC options.

**Defrost:** When outdoor temperature falls to -5° C (23° F), an automatic timed defrost cycle is initiated. The exhaust air motor will go to high speed and the fresh air motor will turn off. A damper will shut off the cold exhaust port, directing ambient air through the core for defrosting. Normal operation resumes for a fixed duration, then the processor will read outdoor temperature and initiate defrost as necessary. Defrost varies with outdoor temperature.

**Warranty:** There is a 5-year warranty on all internal components. The heat recovery core has a 5-year warranty.



NOTES	
A	BACKWARD CURVE, DUAL INLET IMPELLER (2)
B	PROPORTIONAL DEFROST
C	HEAT EXCHANGE CORE - TOTAL
D	LATCH (2)
E	HINGE (2)
F	ELECTRICAL CONNECTION – CORD
G	REMOVABLE CONTROL TERMINALS
H	FURNACE INTERLOCK
I	ELECTRICAL BOX
J	FILTERS (2)
K	5/8" DRAIN (1)
L	HANGER MOUNTS (4)
M	DUCT COLLARS 6"
N	INDEPENDENT ELECTRONIC SPEED CONTROL HIGH AND LOW



PORT DESIGNATIONS	
1	OUTSIDE AIR / FRESH AIR FROM OUTSIDE
2	SUPPLY AIR / FRESH AIR TO SPACE
3	RETURN AIR / EXHAUST AIR FROM SPACE
4	EXHAUST AIR / EXHAUST AIR TO OUTSIDE