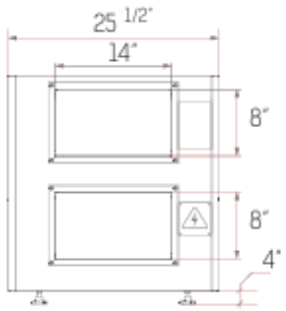
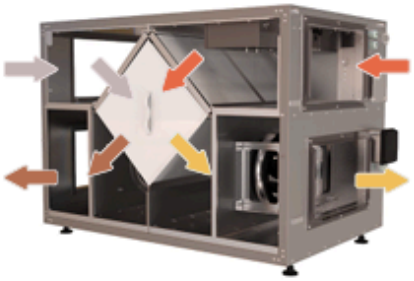
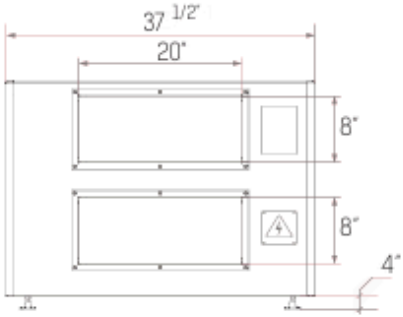
AZL-ERV 5, 8,13,17 & 25 -EC

Air Zoe EC Motor energy recovery ventilators are available in five sizes. Units are specially designed for commercial applications

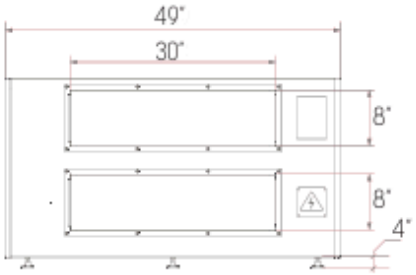


ERV 5 EC, ERV 8 EC





ERV 13 EC, ERV 17 EC



ERV 25 EC

CASING

Steel casing is covered with high quality multilayer aluminium and zinc alloy to prevent corrosion. The casing is equipped with a switch to turn the ventilator off when the service panel is opened. Service access from both left and right side. For outdoor installation the roof is necessary (optional).

ENERGY RECOVERY CORE

Unique enthalpy heat exchanger provides high-efficient heat & humidity recovery. No drain pan required.

FANS

The unit is equipped with supply and exhaust centrifugal fans featuring backward-curved blades and advanced EC (Electronically Commutated) motor technology. These fans deliver superior energy efficiency and precise speed control. They come with built-in thermal overheating protection and an automatic restart function, ensuring consistent and reliable performance. Additionally, both the electric motors and impellers are dynamically balanced to minimise noise and vibration, providing smooth and efficient operation.

DEFROST SYSTEM

Fan stop defrost system is activated when the outdoor temperature falls below 23° F (-5° C).

FILTER

Washable MERV 6 air filters in exhaust and supply air streams. Filters MERV 8, MERV 13 optional.

CONTROL

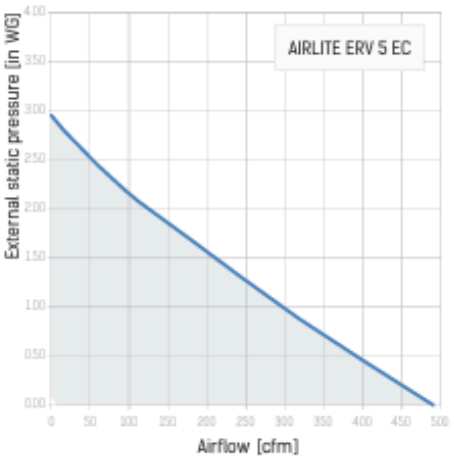
The unit incorporates an integrated automation and control system with following functions:

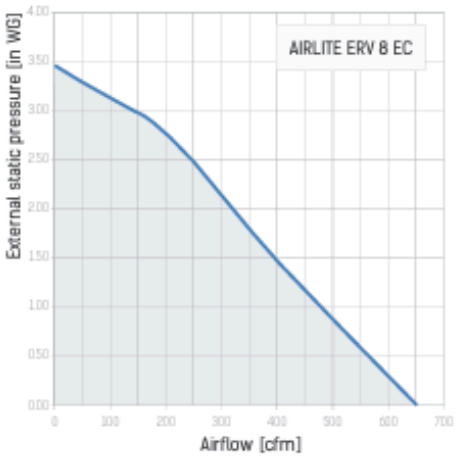
- Operation mode switch.
- Airflow balancing by supply and exhaust fan independent speed adjustment.
- Automatic recovery core frost protection.
- External control device connection.

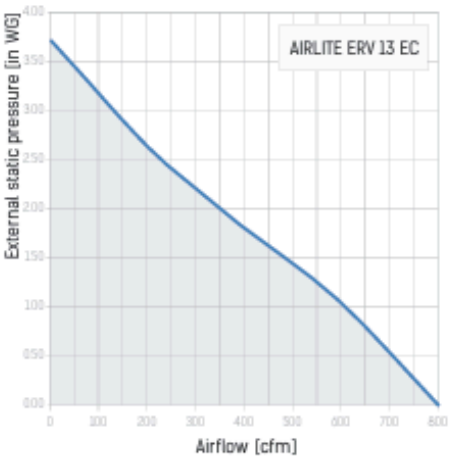
www.airzoe.com Tel: 516 256-3131 engineering@dvachvac.com

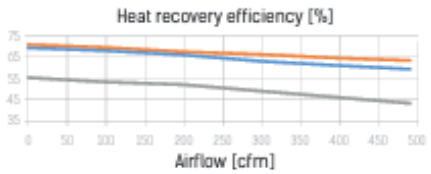
AZL-ERV 5, 8,& 13 -EC

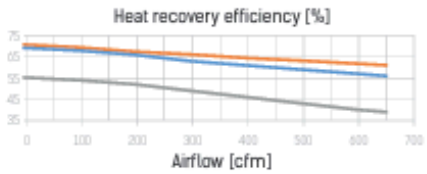
Parameters	AIRLITE ERV 5 EC	AIRLITE ERV 8 EC	AIRLITE ERV 13 EC
Voltage [V / 60 Hz]	1 ~ 208	1 ~ 208	1 ~ 208
Unit power [W]	330	480	650
Unit current [A]	2.4	3.4	4.5
Minimum circuit Amps [MCA]	3.0	4.3	5.7
Maximum over current protection [MOP]	3.9	5.6	6.0
Sensible effectiveness @ max airflow [%]	63	65	63
Air flow @ ESP 0.4" WG [cfm]	400	580	730
Air flow max [cfm]	490	650	800
Transported air temperature [F]	-35 up to +140	-35 up to +140	-35 up to +140
Outer skin casing material	21 gauge galvanized steel	21 gauge galvanized steel	21 gauge galvanized steel
Insulation	1" mineral wool	1" mineral wool	1" mineral wool
Connected air duct size [in]	8×14	8×14	8×20

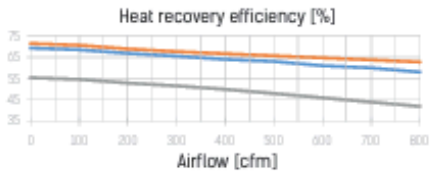








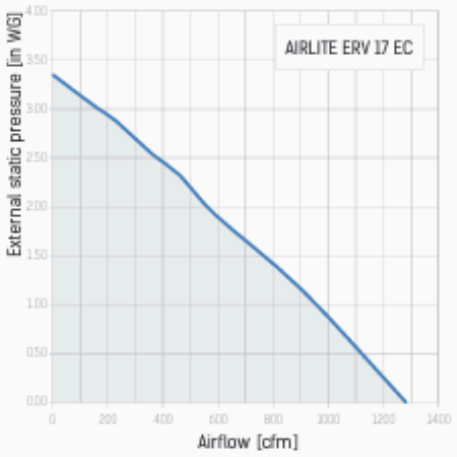


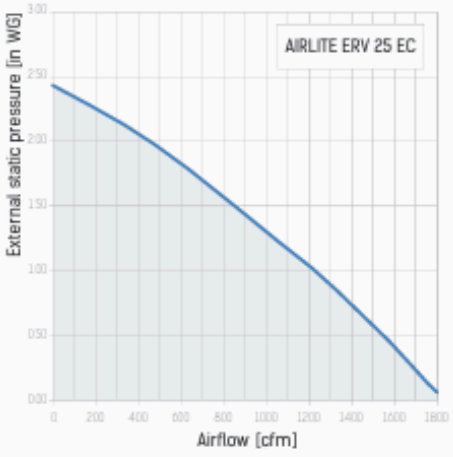


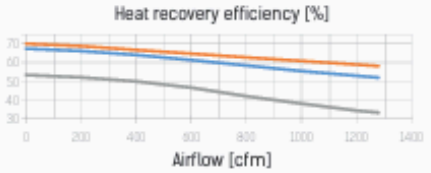
Sensible winter & summer
Winter total
Summer total

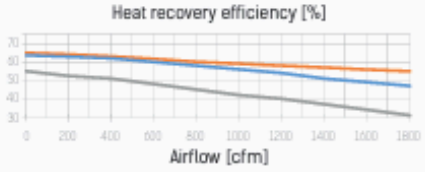
AZL-ERV 17 & 25 -EC

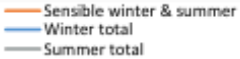
Parameters	AIRLITE ERV 17 EC	AIRLITE ERV 25 EC
Voltage [V / 60 Hz]	1 ~ 208	1 ~ 208
Unit power [W]	940	1385
Unit current [A]	10.5	13.4
Minimum circuit Amps [MCA]	13.2	16.8
Maximum over current protection [MOP]	13.8	16.2
Sensible effectiveness @ max airflow [%]	58	55
Air flow @ ESP 0.4" WG [cfm]	1140	1600
Air flow max [cfm]	1280	1800
Transported air temperature [F]	-35 up to +140	-35 up to +140
Outer skin casing material	21 gauge galvanized steel	21 gauge galvanized steel
Insulation	1" mineral wool	1" mineral wool
Connected air duct size [in]	8×20	8×30











AZL-ERV-EC Controls

AZ-R1-010 - Analog Speed Control

APPLICATIONS

- Applied for smooth speed control of EC motors with the control input 0-10 V.

DESIGN AND CONTROL

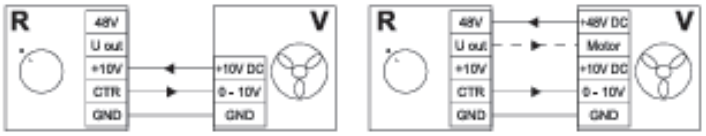
- The controller casing is made of plastic. Switching ON/OFF is effected by means of control knob rotation. The control range starts from the minimum possible value and includes the maximum possible values.

MOUNTING

- The controller is designed for indoor mounting into special surface mounting (MKN-3) or flush mounting (MKV-4) junction box (under separate order) or into standard round electric junction boxes.

AZ-AC208EM2+LP
Wall Control with Temperature

Controller wiring diagram



Designation key
V – fan;
R – controller R-1/010

DESCRIPTION

Created to optimize both product performance and homeowner comfort.
Offers simplified sensor control for ease of use.
Equipped with a temperature indicator.

MODES

The control panel provides the following operating modes:

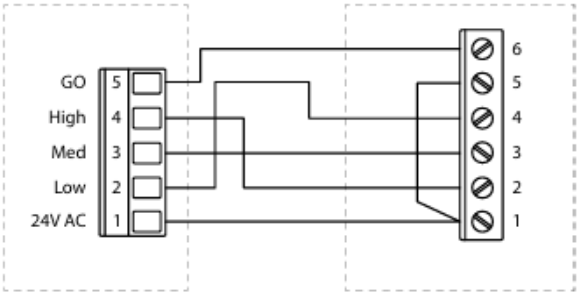
- Turning unit on/off
- Minimum speed
- Medium speed
- Maximum speed

COMPATIBILITY

Compatible with all Frigate HRV/ERV models.

WIRING DIAGRAM

HRV/ERV External terminal — AC208EM2+LP



AZ-P3-1-300
Off-Low-Med-Hi Wall Control

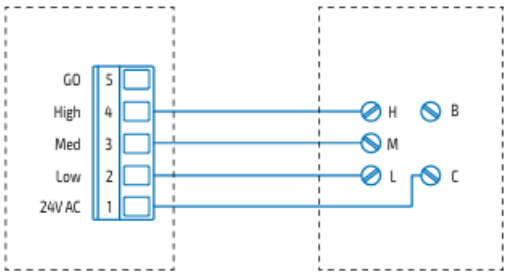
MODES

The control panel provides the following operating modes:

- Turning unit off
- Minimum speed
- Medium speed
- Maximum speed

WIRING DIAGRAM

HRV/ERV External terminal — P3-1-300



Need a custom control system with CO2 Sensors
See our **AZP-BAC-XXX**

www.airzoe.com Tel: 516 256-3131 engineering@dvachvac.com