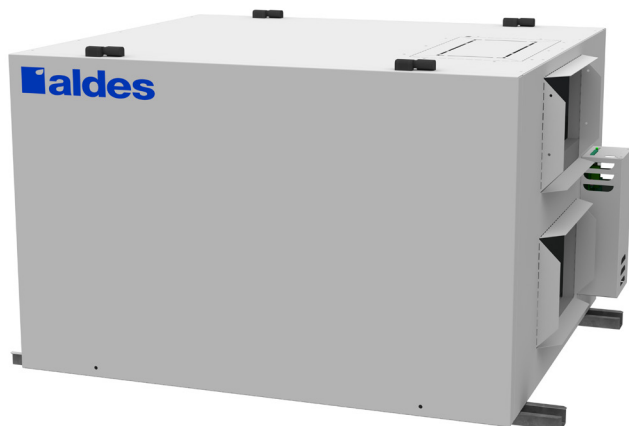




# LIGHT COMMERCIAL E650L-Fi-EC & E650L-Ri-EC Energy Recovery Ventilator 200-680 CFM Range

PRODUCT  
SPECIFICATIONS  
& TECHNICAL  
DATA



## E650L-Fi-EC & E650L-Ri-EC

The E650L-Fi-EC and E650L-Ri-EC energy recovery ventilators provide up to 680 CFM of fresh outdoor air while exhausting stale indoor air. The units make use of Aldes' AHRI Certified High Latent Transfer enthalpic cores that deliver superior moisture transfer and can be used in any climate zone. The highly efficient and quiet EC motors use onaverage 50-75% less electricity than typical PSC motors, significantly increasing return on investment.

The E650L-Fi-EC and E650L-Ri-EC is recommended for smaller non-residential spaces or dedicated zones within larger buildings, such as classrooms, common areas of residential complexes and indoor parking garages.

Designed for versatile indoor installation, Aldes light commercial ventilators can fit almost anywhere and still provide easy access to the internal components with removable access doors on both sides. The units also offer a choice of five continuous operation speeds and ademand-controlled high-speed exchange mode.

## CASING

Material: Painted galvanized steel  
Insulation: 1" R4 rated  
Drain Connection: Ø 1/2" (Ø 13 mm)  
Duct Connections: 14" x 8" (356 mm x 203 mm)  
Width: 36-1/4" (921 mm)  
Height: 23-7/8" (606 mm)  
Depth: 32-1/8" (816 mm)  
Unit Weight: 136 lbs (62 kg); 146 lbs (66 kg) with recirculation  
Shipping Weight: 189 lbs (86 kg)  
199 lbs (90 kg) with recirculation

## PLATE EXCHANGER

Standard: High Latent Transfer  
(sensible and latent heat transfer)

Quantity: 2  
Pitch: 0.10" (2.5 mm)  
Dimensions: 12" x 12" x 15" (305 mm x 305 mm x 381 mm)



## MOUNTING

Supplied with base rails. Support rod by others.

## BLOWERS

Quantity: 2  
Type: Backward-inclined motorized impeller, direct-drive EC, Motors, variable speed, external rotor

## FILTERS

Number: 4  
Type: Aluminum (P/N: 683901)  
Optional: MERV 8 (P/N: 683902), Carbon (P/N: 683903), or High Efficiency/MERV13 Equivalent (P/N: 683904)

Additional Air Pressure Drop with Optional Filters				
Filter Type	Airflow CFM (m³/h)			
	300 (510)	500 (850)	700 (1190)	900 (1530)
MERV 8	0.04	0.08	0.15	0.22
Carbon	0.04	0.08	0.15	0.22
High Efficiency	0.22	0.35	0.48	0.63

## ELECTRICAL REQUIREMENTS

208-230 VAC, 60 Hz, 2.8 A  
Supplied with 6' power cord with NEMA 6-15 plug

## FROST CONTROL

Cycles controlled by a temperature sensor when outdoor temperatures fall below 14°F (-10°C).

- Standard: Exhaust Defrost (E650L-Fi-EC)
- Optional: Recirculation Defrost (E650L-Ri-EC)

## CONTROLS

24 VAC, 10 VA output for supply and exhaust dampers  
Low-voltage dry contact (24 VAC, 20 VA) for:

- Occupancy Control (start/stop)
- Fan Interlock (NO and NC)
- Speed Selection
- Exhaust/Recirculation (with E650L-Ri-EC)

Compatible With:

- Digital Multifunction Control (P/N: 611242FC)
- Mode Control (exchange or recirculation) (P/N: 611230)
- Humidity Control (P/N: 611224)
- Speed Control (Low/Intermittent/High) (P/N: 611229)
- 20/40/60 Minute Timer (P/N: 611228)

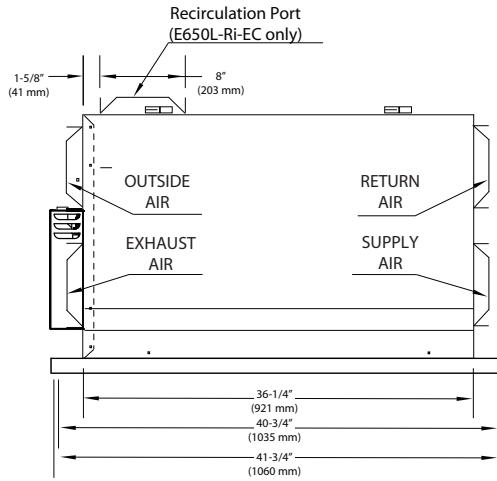
## APPROVALS

Meets Standards:  
• UL 1812 and C22.2 no113

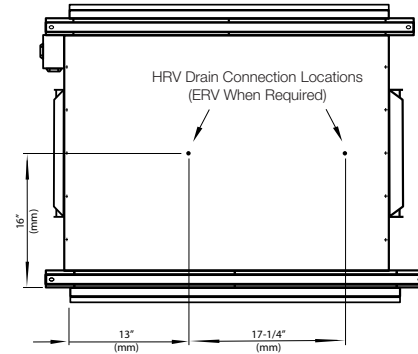
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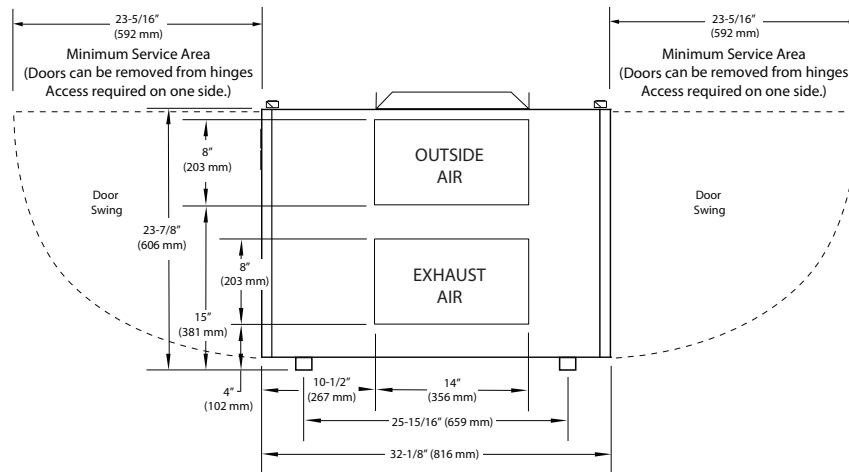
# Dimensions



FRONT VIEW



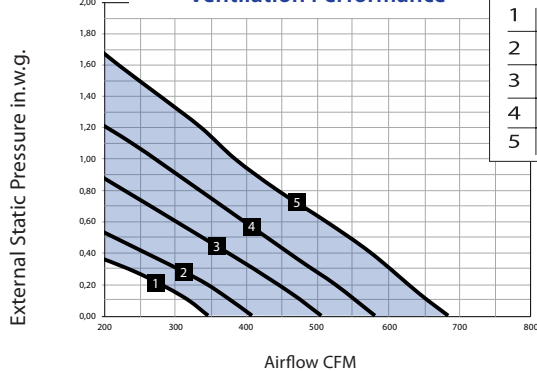
BOTTOM VIEW



SIDE VIEW

# Performance

E650L-Fi-EC & E650L-Ri-EC  
Ventilation Performance



- 1 High speed (Max) 340W
- 2 Med speed (Max) 198W
- 3 Low speed (Max) 133W
- 4 Reduced med speed 81W
- 5 Reduced low speed 53W

	Sensible Recovery %	Latent Recovery %	Total Recovery %
100 % Air Flow Cooling	70%	60%	67%
75 % Air Flow Cooling	74%	65%	71%
100% Air Flow Heating	70%	47%	56%
75 % Air Flow Heating	74%	52%	60%
AHRI Core Reference Number	10346213		

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