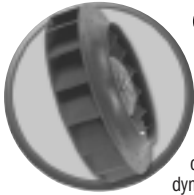


## LIGHT COMMERCIAL HEAT RECOVERY VENTILATOR



Solutions worthy of nature...™



### German Engineered motors

All products are designed with high-performance and reliable motors for your comfort and peace of mind. Factory sealed and dynamically balanced, our motors are maintenance-free for years to come.



### DuoTrol™ balancing system (Patent Pending)

Silent and economical... By reducing motor speed to balance the unit, you avoid the noise that would be produced by balancing dampers. In addition, with this technology the unit will consume less energy.



### Proportional Defrost operation system

The defrost energy is controlled by the outdoor air temperature. The motor speed essentially increases as outdoor temperature drops to provide increased defrost capacity. For instance, at -5°C/23°F the defrost mode will function at low speed. This technology reduces energy usage by eliminating unnecessary defrost energy during milder days and offers a more silent operation.

## model *LCH 30.700*™

LIGHT COMMERCIAL (300 to 700 cfm)



**WARRANTY** Limited 2 year on all components  
Limited 15 year on the aluminum core

### SPECIFICATIONS

- 20 gauge pre-painted galvanized steel casing.
- Thermal 1" foil faced insulation.
- DuoTrol™ balancing system (patented)
- Two german-engineered variable speed motorized impellers thermally protected maintenance-free.
- Fan shut down defrost sequence (-5°C/23°F).
- Integrated 24V interlok connection, 24V/40A transformer, 24 VAC, 10-15A; UL/CSA relay.
- Synthetic cleanable filters (4).
- Dual removable access door.
- Integrated U channels that can be hung by threaded rod or curb mounting install.  
**Note:** rods and vibration isolators not included.
- Modular (2 section) cross-flow core.
- Duct connections: (4) 8" x 14" (203 mm x 355 mm)

### OPTIONS

#### Cores

- Polypropylene cross-flow core (2) (HRV) with limited 15 year warranty (residential application only)
- Enthalpy cross-flow core (2) (ERV) with limited 3 year warranty (Ideal for warm humid climates)

#### Controls

*For optimal performance of your HRV/ERV system.*

The entire range of "GreenThinker model™" controls is offered with features making your ventilation system simple, easy to operate and backed by a 2-year limited warranty.

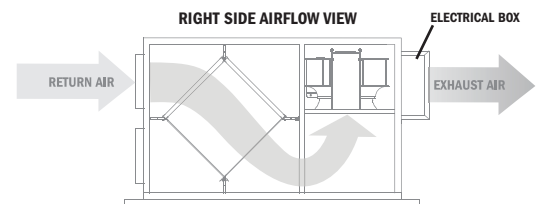
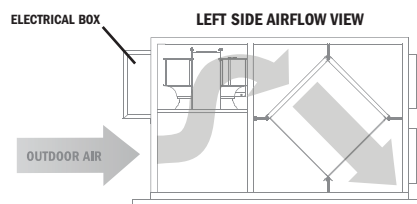
- RD-1 dehumidistat remotely installed (2 wires)
- RD-2, RD-3P, RD-4P multi-function wall control remotely installed (4 wires)
- T-3 (20/40/60 minutes) remotely installed timer (3 wires)

**GreenThinker model™**

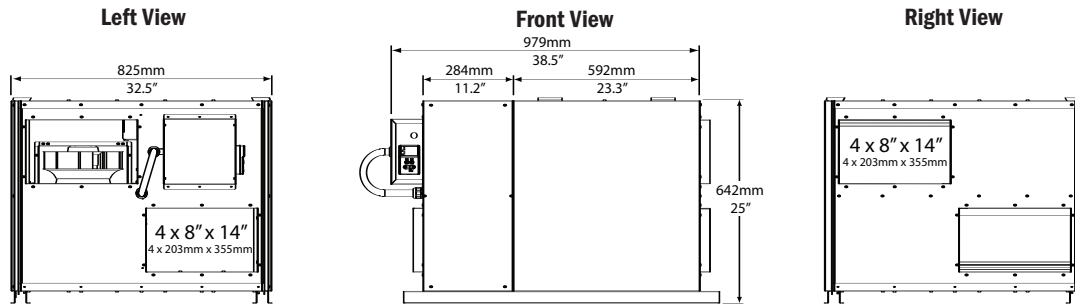


**USER-FRIENDLY CONTROLS**  
RD-4P and T-3 models shown above

## Push-Pull Airflow Design



## DIMENSIONS LCH 30.700 Series



## SPECIFICATIONS & VENTILATION PERFORMANCE LCH 30.700-A

Model	LCH 30.700 Series
<b>CFM: Rated Air flow</b>	
- Low Speed	300
- Medium Speed	500
- High Speed	700
<b>SHIPPING WEIGHT</b>	
- LCH30.700-A	204 lbs / 92 kg
- LCH30.700-B	195 lbs / 88 kg
- LCH30.700-C	205 lbs / 93 kg
<b>ELECTRICAL</b>	120 V/60Hz / 5A
Filter Size	10" x 15" (4)
Outer Casing	20 gauge pre-painted galv.
Heat Exchange Matrix	Cross-flow (2)
Core Surface Area	228ft <sup>2</sup>
Motor Type	German Engineered
Defrost Sequence	Evacuation

External Static Pressure	Net Supply Air Flow		Gross Air Flow Supply		Exhaust		
	Pa	in W.C	L/s	CFM	L/s	CFM	L/s
25	0.1	346	732	347	735	369	782
50	0.2	332	703	333	706	354	749
75	0.3	318	673	319	676	338	717
100	0.4	303	643	304	644	323	685
125	0.5	289	613	290	614	308	652
150	0.6	275	583	276	585	293	620
175	0.7	261	554	232	555	277	588
200	0.8	247	524	247	523	262	555
225	0.9	233	494	233	494	247	523
250	1.0	219	464	220	466	232	491

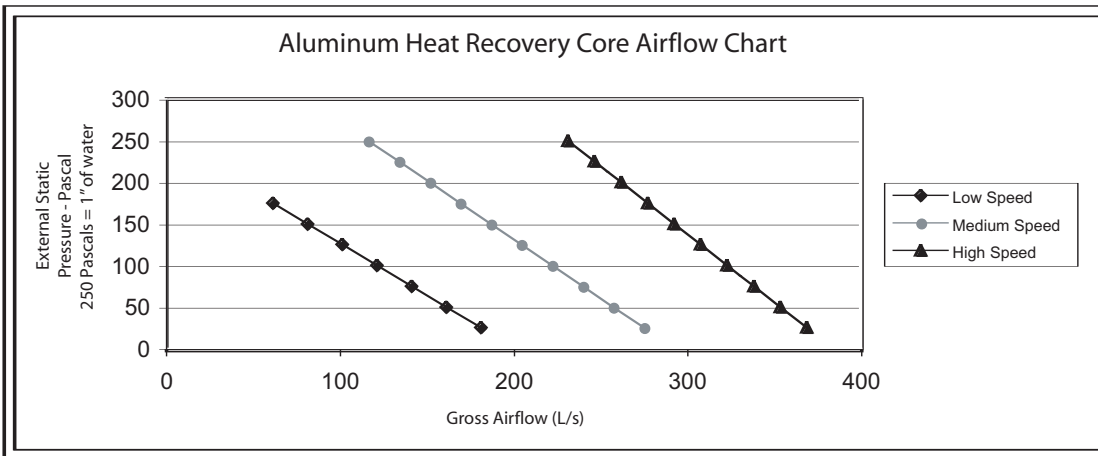
**NOTE** Fan curve was done at HRV maximum speed:  
250 pascals = 1" of water: 0.47 L/s = 1 cfm

### IMPORTANT INFORMATION

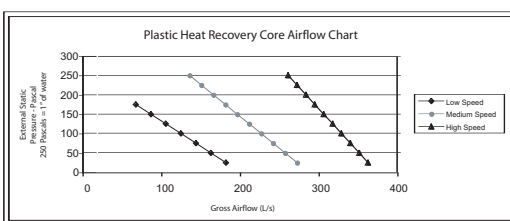
- All LCH HRVs are backed by a 2 year limited warranty.
- Imperial Air Technologies Inc. reserves the right to modify a product, without prior notice, whether in design, colour or specifications, in order to offer at all times a quality product that is highly competitive.
- Please consult local authorities to find out whether the installation of electrical products requires the services of a certified technician or electrician.

Imperial Light Commercial HRVs can be used for different types of application and can meet your specific needs.

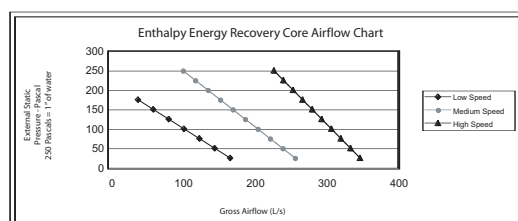
### LCH 30.700-A Airflow Chart



### LCH 30.700-B Airflow Chart



### LCH 30.700-C Airflow Chart



### Types of Applications

- Classrooms
- Locker rooms
- Restrooms
- Large homes
- Conference rooms
- Restaurants, Bar & Grills
- Office buildings

### Specialty Shops

- Beauty salons
- Barber shops
- Floral shops
- Veterinary hospitals
- Pet shops

**Note:** For outdoor air ventilation requirements on the above applications, please refer to the ASHRAE standards 62-1999 when sizing projects.

[www.imperialgroup.ca](http://www.imperialgroup.ca)

