



Energy
Conservation
Systems
Inc.

Manufactured by Thybar Corporation

Dependable Energy Recovery for Affordable Clean Air



ECSI is proud to offer a new product for an economical solution for light commercial applications. It is available in (2) models of 300-700 cfm & 700-1,200 cfm Both units are available in either a

- Polyproplene ERC-**
- Aluminum ERC-**

or

- Enthalpic ERC**

Energy Conservation Systems Inc.
www.ecsithybar.com



REDEFINING INDOOR AIR QUALITY

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-A™

LIGHT COMMERCIAL (LCH 30-700-A)



SPECIFICATIONS

- 20 gauge pre-painted galvanized steel casing. Thermally 1" insulated 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) (residential application only)
- Enthalpy cross-flow core (2) (ERV) (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.

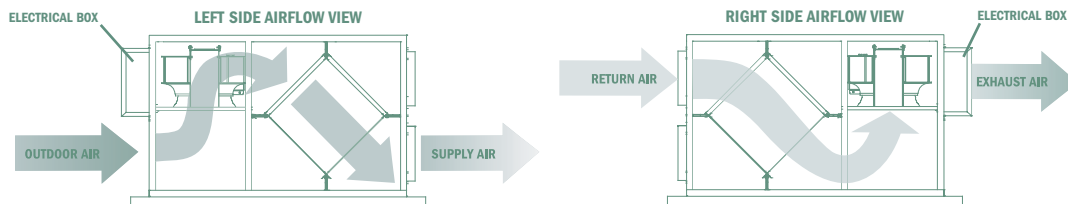
- RD-1 dehumidistat remotely installed (2 wires)
- RD-2, RD-3P, RD-4P multi-function wall control remotely installed (4 wires)
- T-3 (20/40/60 minutes) remotely installed timer (3 wires)

GreenThinker model™

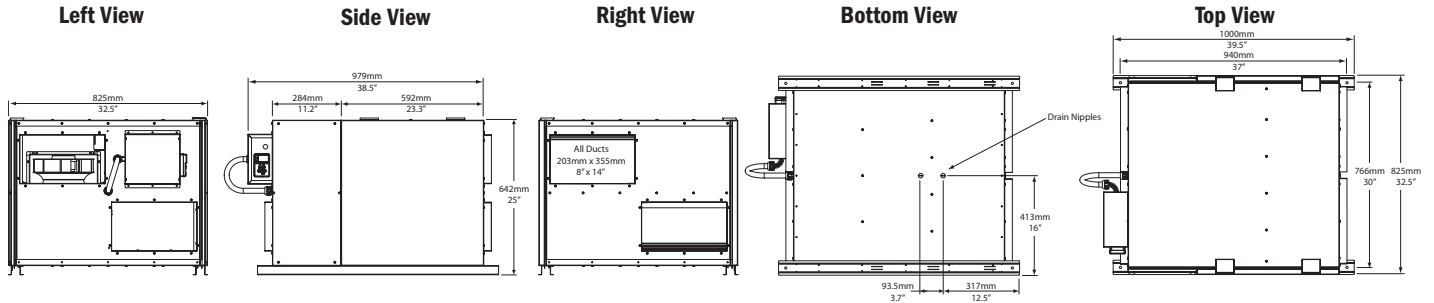


USER-FRIENDLY CONTROLS RD-4P and T-3 models shown above

Push-Pull Airflow Design



DIMENSIONS LCH 30-700 Series



SPECIFICATIONS & VENTILATION PERFORMANCE LCH 30-700-A

Model	LCH 30.700 Series
CFM: Rated Air flow	
- Low Speed	300
- Medium Speed	500
- High Speed	700
SHIPPING WEIGHT	
- LCH30.700-A	204 lbs / 92 kg
- LCH30.700-B	195 lbs / 88 kg
- LCH30.700-C	205 lbs / 93 kg
ELECTRICAL	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 ²
Motor Type	German Engineered
Condensate Drain Fittings	1/2" (3)

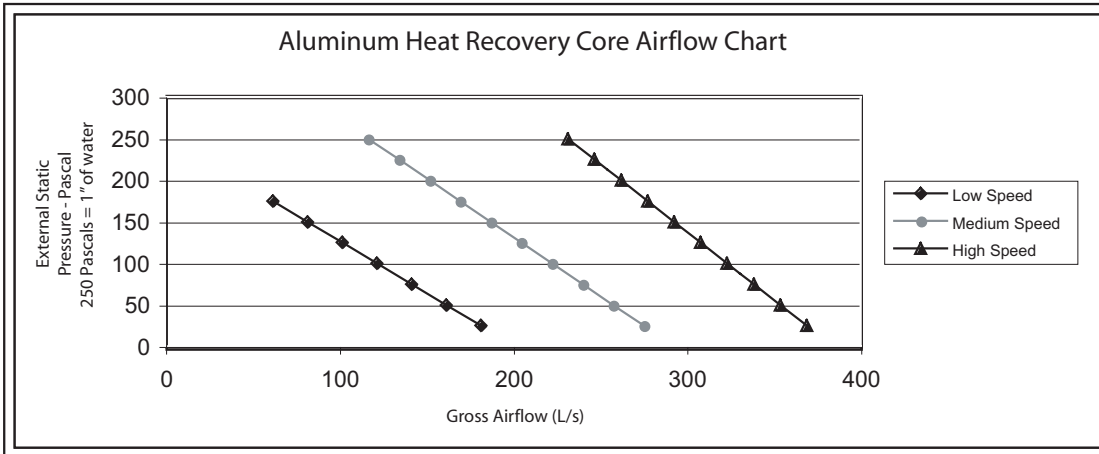
External Static Pressure	Net Supply Air Flow		Gross Air Flow Supply		Exhaust		
	Pa	in W.C	L/s	CFM	L/s	CFM	L/s
25	0.1	346	732	347	735	369	782
50	0.2	332	703	333	706	354	749
75	0.3	318	673	319	676	338	717
100	0.4	303	643	304	644	323	685
125	0.5	289	613	290	614	308	652
150	0.6	275	583	276	585	293	620
175	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

IMPORTANT INFORMATION

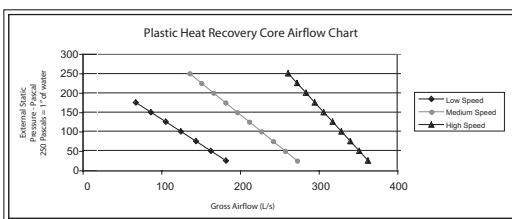
- All LCH HRVs are backed by a 2 year limited warranty.
- We reserves the right to modify a product, without prior notice, whether in design, colour or specifications, in order to offer at all times a quality product that is highly competitive.
- Please consult local authorities to find out whether the 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.

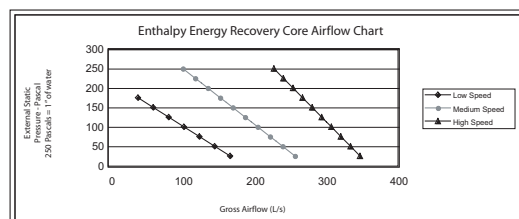
LCH 30-700-A Airflow Chart



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.

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Contact us at:

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Proportional Defrost operation system

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model *LCH 70.1200-A*™

LIGHT COMMERCIAL (LCH 70.1200-A)



SPECIFICATIONS

- 20 gauge pre-painted galvanized steel casing. Thermally 1" insulated 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 (6).
- 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 (3 section) cross-flow core.
- Duct connections: (4) 8" x 20" (203 mm x 508 mm)

OPTIONS

Cores

- Polypropylene cross-flow core (3) (HRV) (residential application only)
- Enthalpy cross-flow core (3) (ERV) (Ideal for warm humid climates)

Controls

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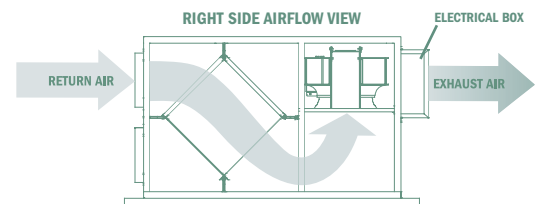
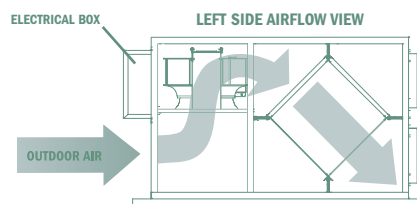
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- T-3 (20/40/60 minutes) remotely installed timer (3 wires)

GreenThinker model™

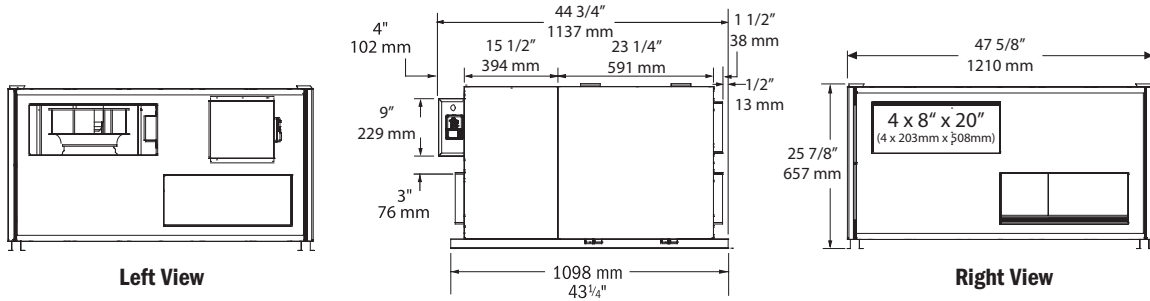


USER-FRIENDLY CONTROLS
RD-4P and T-3 models shown above

Push-Pull Airflow Design



DIMENSIONS LCH 70.1200 Series



SPECIFICATIONS & VENTILATION PERFORMANCE LCH 70.1200-A

Model	LCH 70.1200 Series
CFM: Rated Air flow	
- Low Speed	700
- Medium Speed	800
- High Speed	1200
SHIPPING WEIGHT	
- LCH70.1200-A	306 lbs / 139 kg
- LCH70.1200-B	292 lbs / 132 kg
- LCH70.1200-C	308 lbs / 140 kg
ELECTRICAL	120 V/60Hz / 5A
Filter Size	10" x 15" (6)
Outer Casing	20 gauge pre-painted galv.
Heat Exchange Matrix	Cross-flow (2)
Core Surface Area	342ft ²
Motor Type	German Engineered
Condensate Drain Fittings	1/2" (3)

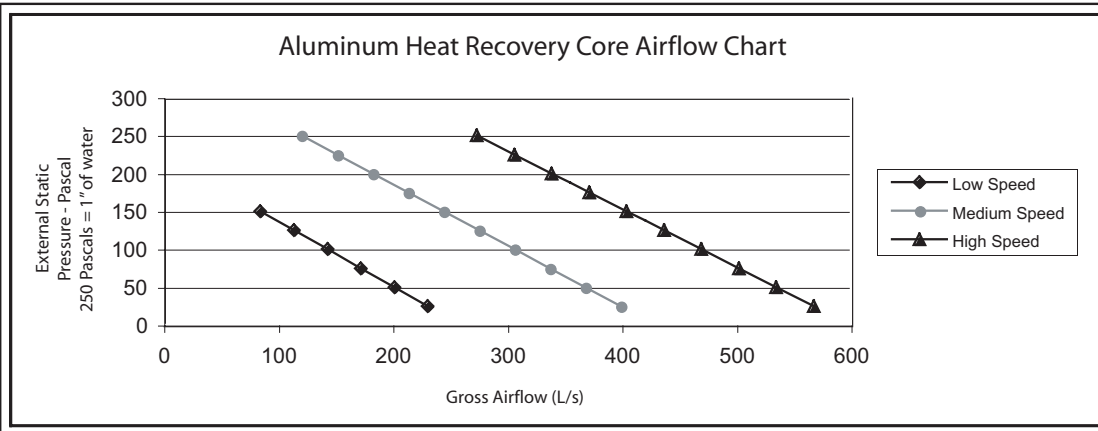
External Static Pressure	Net Supply Air Flow		Gross Air Flow Supply		Gross Air Flow Exhaust		
	Pa	in W.C	L/s	CFM	L/s	CFM	L/s
25	0.1	544	1153	545	1155	567	1202
50	0.2	518	1097	519	1100	535	1133
75	0.3	491	1041	492	1043	502	1064
100	0.4	465	985	466	987	469	995
125	0.5	439	929	440	932	437	925
150	0.6	412	873	413	875	404	856
175	0.7	386	817	387	820	372	787
200	0.8	359	761	360	763	339	718
225	0.9	333	705	334	708	306	649
250	1.0	306	649	307	651	274	579

IMPORTANT INFORMATION

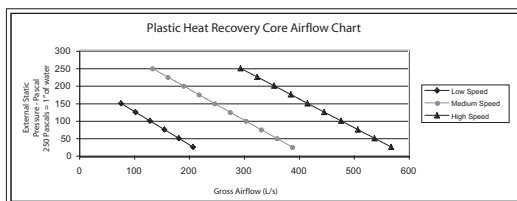
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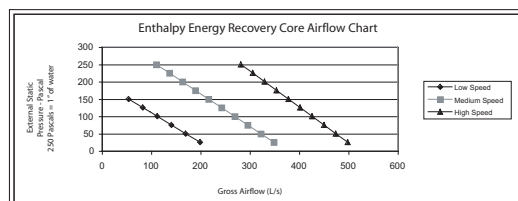
LCH 70.1200-A Airflow Chart



LCH 70.1200-B Airflow Chart



LCH 70.1200-C Airflow Chart



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