

ENGINEERING DATA

LCH 30.700C ERV

Energy Recovery Ventilator

300 CFM (142 L/s) to 700 CFM (330 L/s)

Item No. 101369 (LCH 30.700C)



FEATURES

- 3 operating modes (Intermittent, Continuous & High)
- 100% variable speed
- Proportional defrost sequence
- Permanent lubrication of PSC motors

APPLICABLE REQUIREMENTS

- CSA C439 Standard - Packaged heat/energy recovery ventilators (HRV/ERV)
- CSA Standard CSA 22.2 N^o.113-10 - Fans and ventilators
- UL Standard 1812 2nd Ed. Ducted heat/energy recovery ventilators (HRV/ERV)

CABINET

- 20 gauge galvanized pre-painted steel corrosion resistant

ELECTRONIC COMPONENTS

- Electrical Input Voltage: 120 VAC/60Hz / 1-Phase
- Electrical Input Current: 5 Amps Max
- Circuit output voltage: 5 VDC nominal
- Integrated auxiliary furnace interlock relay
- Integrated 24V connection
- 24V/40A transformer, 24 VAC 10-15A UL/CSA relay
- RoHs compliant

MOTORS

- Two permanent sealed, lubricated variable speed PSC Motors. (Maintenance free)
- Maximum RPM 2760/Horsepower; ½ HP, Class F, thermally protected
- CSA 22.2 #113-10, clause 8.3.5
– Backup protection – totally enclosed motor

dpoint ERV CORE

- Dimensions (2) 12" x12" x15" depth (304.8 mm x 304.8 mm x 381 mm)
- Corrugated aluminum layers, combined with advanced polymer membrane, UL94 HF-1
- Cross-flow that transfers both sensible & latent heat.
- Endure harsh temperatures; effective in warm and cold climates
- Water washable
- Meets ASHRAE 90.1

BALANCING THE SYSTEM

- The system is balanced by adjusting each motor independently
- No balancing dampers required
- Connection terminals for optional wall controls
- Quiet and energy efficient

DEFROST

- Advanced Proportional supply fan shut down defrost sequence
- Defrost type: Evacuation
Activated automatically at -5°C (23°F)

DUCT CONNECTIONS

- (4) 8" x 14" (203 mm x 355 mm)

MOUNTING

- Saddle installation
- Suspended installation with threaded rod (not included)

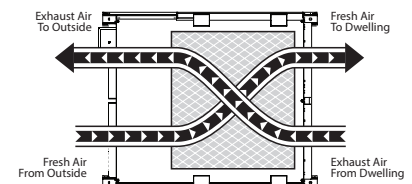
FILTERS

- Four (4) Fiberbond washable - 11½" x 15" x ½" (295.3 mm x 381 mm x 15.9 mm)
- UL Class 2 rated

WARRANTY

- 2 year limited warranty on motors
- 2 year limited warranty on parts
- 3 year limited warranty on Heat Recovery Core

AIRFLOW (Top View)



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ENGINEERING DATA LCH 30.700C ERV

SPECIFICATIONS LCH 30.700C ERV

Dimensions	34.4" x 30" x 25.3" (874.7 mm x 762.5 mm x 641.9 mm)
Duct Connections	Four (4) 8" x 14" (203 mm x 355 mm)
Airflow Rates	300 CFM (142 L/s) to 700 CFM (330 L/s)
Motor	Two (2) PSC variable speed backward curved
Voltage	120 VAC @ 60 Hz / 1 Phase
Amperage	5A / 490 Watts
Type of heat exchanger	(2) dpoint Cross-flow (Enthalpic Polymer Membrane)
Exchange surface	254 ft ² (23.6 m ²)
Defrost type	Evacuation
Filters	Four (4) Fiberbond washable
Drain Connection	Two (2) 1/2" (12.7 mm)
Actual Weight	142 lbs (64.4 Kg)
Shipping Weight	205 lbs (93 Kg)
Certification	cCSA US, CSA 22.2 N ^o .113 Complies with UL 1812

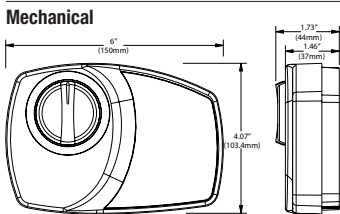
TEST DATA CONDITIONS

Outside Temperature Data	0°C (32°F)
Outside Relative Humidity	60% RH
Inside Temperature Data	22°C (72°F)
Inside Relative Humidity	40% RH

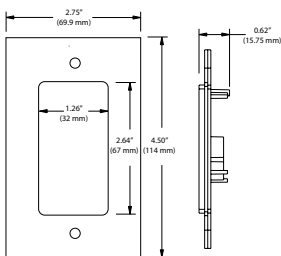
OPTIONAL WALL CONTROLS

Mechanical	RD-1, RD-2, RD-3P and RD-4P
Timers	T3 (20, 40, 60 minutes)

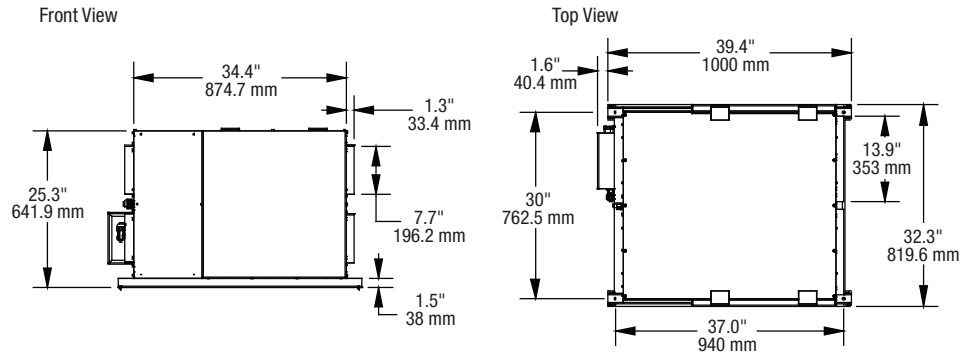
WALL CONTROL DIMENSIONS



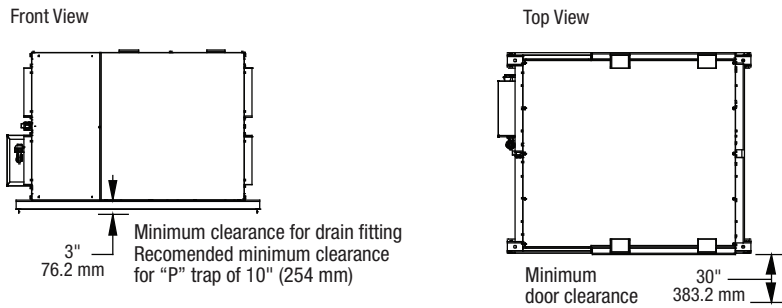
T3 Timer



DIMENSIONS DATA

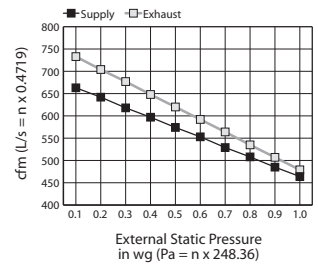


MINIMUM CLEARANCE DATA



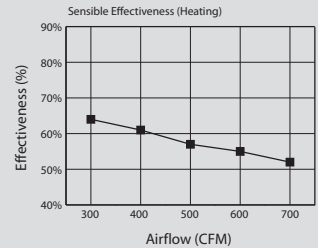
VENTILATION PERFORMANCE

External Static Pressure	Net Supply Air Flow		Gross Air Flow Supply		Gross Air Flow Exhaust		
	Pa	in. wg	L/s	CFM	L/s	CFM	
25	0.1	312	662	313	663	346	733
50	0.2	302	639	303	642	332	704
75	0.3	291	617	292	618	319	677
100	0.4	280	595	282	597	306	648
125	0.5	270	573	271	574	292	620
150	0.6	260	550	261	553	279	592
175	0.7	249	528	250	529	266	564
200	0.8	239	506	240	508	252	535
225	0.9	228	484	229	485	239	507
250	1.0	218	462	219	464	226	479



ENERGY PERFORMANCE CORE*

	Net Air Flow		Enthalpic Effectiveness		
	L/s	CFM	Sensible	Latent	Total
	HEATING	142	300	64	36
	189	400	61	32	51
	236	500	57	29	48
	284	600	55	26	45
	330	700	52	24	43



*Actual performance may vary pending conditions

Quoted by:	Date:
Project:	Remarks:
Quantity:	
Model:	
Site:	
Architect:	
Engineer:	
Contractor:	