ENGINEERING DATA

LCH 70.1200C ERV

Energy Recovery Ventilator
700 CFM (330 L/s) to 1200 CFM (566 L/s)

Item No. 101508 (LCH 70.1200C)

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

APPLICABLE REQUIREMENTS
- CSA C439 Standard - Packaged heat/energy recovery ventilators (HRV/ERV)
- CSA Standard CSA 22.2 N^{0}.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 Imput Current: 5 Amps Max
- Circuit output voltage: 5 VDC nominal
- Integrated auxiliary furnace interlock relay
- Intergrated 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 3065/Horsepower; ⅓ HP, Class F, thermally protected
- CSA 22.2 #113-10, clause 8.3.5 – Backup protection – totally enclosed motor

dpoint ERV CORE
- Dimensions (3) 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 indipendently
- 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)

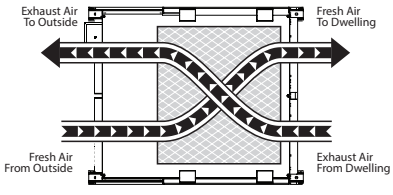
DUCT CONNECTIONS
- (4) 8"x 20" (203 mm x 508 mm)

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

FILTERS
- Six (6) Fiberbond washable - 11⅝" x 15" x ⅝" (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
- 15 year limited warranty on Heat Recovery Core

AIRFLOW (Top View)



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ENGINEERING DATA LCH 70.1200C ERV

SPECIFICATIONS	LCH 70.1200C ERV
Dimensions	47.4" x 38.8" x 25.3" (1204 mm x 986 mm x 642.9 mm)
Duct Connections	Four (4) 8"x 20" (203 mm x 508 mm)
Airflow Rates	700 CFM (330 L/s) to 1200 CFM (566 L/s)
Motor	Two (2) PSC variable speed backword curved
Voltage	120 VAC @ 60 Hz / 1 Phase
Amperage	5A / 490 Watts
Type of heat exchanger	(3) dpoint Cross-flow (Enthalpic Polymer Membrane)
Exchange surface	381 ft^2 (35.4 m^2)
Defrost type	Evacuation
Filters	Six (6) Fiberbond washable
Drain Connection	Two (2) ½" (12.7 mm)
Actual Weight	235 lbs (107 Kg)
Shipping Weight	308 lbs (140 Kg)
Certification	$_{C}CSA_{US}$, CSA 22.2 Nº.113 Complies with UL 1812

TEST DATA CONDITIONS

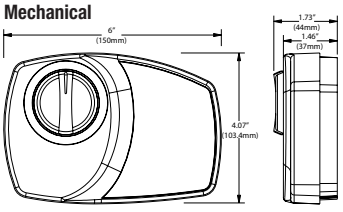
Outside Temperature Data	**0**°C (32°F)
Outside Relative Humidity	60% RH
Inside Temperature Data	22°C (72°F)
Inside Relative Humidity	40% RH

OPTIONAL WALL CONTROLS

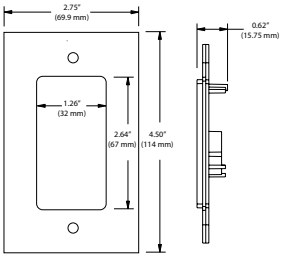
Mechanical	RD-1, RD-2, RD-3P and RD-4P
Timers	T3 (20, 40, 60 minutes)

WALL CONTROL DIMENSIONS

Mechanical

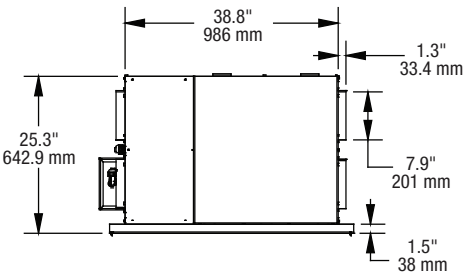


T3 Timer

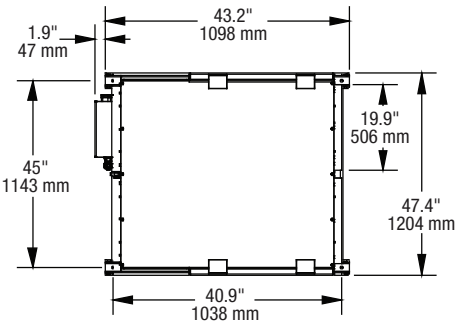


DIMENSIONS DATA

Front View

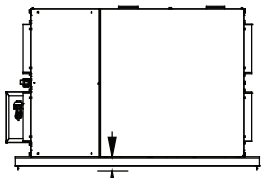


Top View



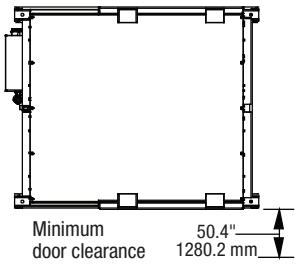
MINIMUM CLEARANCE DATA

Front View



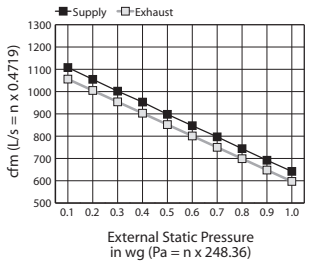
Minimum clearance for drain fitting
Recomended minimum clearance
for "P" trap of 10" (254 mm)

Top View



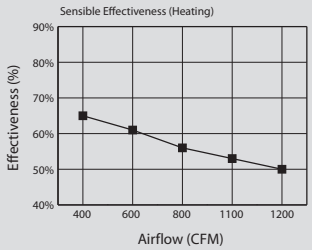
VENTILATION PERFORMANCE

External Static Pressure		Net Supply Air Flow		Gross Air Flow Supply		Gross Air Flow Exhaust	
Pa	in. wg	L/s	CFM	L/s	CFM	L/s	CFM
25	0.1	521	1104	523	1108	498	1056
50	0.2	497	1052	498	1055	474	1005
75	0.3	472	1001	473	1002	450	954
100	0.4	448	949	450	953	426	903
125	0.5	423	897	424	898	402	852
150	0.6	399	846	400	847	378	801
175	0.7	375	794	376	797	354	750
200	0.8	350	742	351	744	330	699
225	0.9	326	691	327	692	306	648
250	1.0	302	639	303	642	282	597



ENERGY PERFORMANCE CORE*

	Net Air Flow		Enthalpic Effectiveness		
	L/s	CFM	Sensible	Latent	Total
HEATING	189	400	65	38	56
	283	600	61	32	51
	378	800	56	28	47
	472	1000	53	25	44
	566	1200	50	23	41



*Actual performance may vary pending conditions

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