# **ENGINEERING DATA**



# Model FC200ERV

Energy Recovery Ventilator 70 CFM (33 L/s) to 220 CFM (104 L/s)

Part No. 60510007200





#### **FEATURES**

- 3 operating modes (Intermittent, Continuous & High)
- 100% variable speed
- ISF™ 6" (152.5 mm) dia. collar system
- · Proportional defrost sequence
- SPM<sup>™</sup> Single Person Mounting system
- · Permanent lubrification of PSC motors

#### **APPLICABLE REQUIREMENTS**

- HVI Certified
- CSA C439 Standard Packaged Heat/Energy Recovery Ventilators (HRV/ERV)
- CSA Standard CSA 22.2 Nº.113-10 Fans and ventilators
- UL Standard 1812 2<sup>nd</sup> Ed. Ducted Heat/Energy Recovery Ventilators (HRV/ERV)

#### **OPTIONAL ACCESSORIES**

- MERV 8 Inline 6" (152.5 mm) filter box
- R-2 Style high performance supply & exhaust ventilation hoods

#### CABINET

- 20 gauge galvanized pre-painted steel corrosion resistant
- Cabinet liner: Molded Expanded Polystyrene (EPS)
  Rated UL94 HF-1

#### **ELECTRONIC COMPONENTS**

- Electrical Input Voltage: 120 VAC/60Hz / 1-Phase.
- Electrical Input Current: 1.5 Amps Max
- Circuit output voltage: 5VDC nominal
- Integrated auxiliary furnace interlock relay
- RoHs compliant

#### **MOTORS**

- Two permanent sealed, lubricated variable speed PSC Motors. (Maintenance free)
- Maximum RPM 2695 / Horsepower; 3/32 HP. Class F, thermally protected
- CSA 22.2 #113-10, clause 8.3.5 — Backup protection — totally enclosed motor

#### **dpoint ERV CORE**

- Dimensions 12"x 12"x 15" depth (304.8 mm x 304.8 mm x 381 mm)
- Corrugated aluminum layers combined with advanced polymer membrane, Recognized UL94 HB
- Cross-flow that transfers both sensible & latent heat
- Endure harsh temperatures; effective in warm and cold climates
- Water washable
- Meets ASHRAE 90.1

#### **DUOTROL™ BALANCING 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**

- Insert Slide & Fix (ISF™), removable collars system
- Four (4) 6" (152.5 mm) dia. round double collar.

#### MOUNTING

· Adjustable mounting strap system

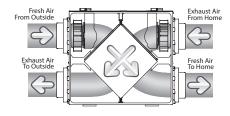
#### FILTERS

- Two (2) Fiberbond washable 1111/16"x 143/4"x 5/6" (297 mm x 375 mm x 15.9 mm)
- UL Class 2

#### WARRANTY

- 5 year limited warranty
- Visit fieldcontrols.com/warranty for complete warranty statement

#### **AIRFLOW**





Field Controls 2630 Airport Road Kinston, NC 28504

Customer Service: 252 522-3031 Fax: 1 (800) 367-7942

Visit us at: www.fieldcontrols.com







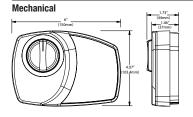
# **ENGINEERING DATA FC200ERV**

<b>SPECIFICATIONS</b>	FC200ERV
Dimensions	29½" x 22½" x 16½" (749.3 mm x 571.5 mm x 419.1 mm)
Duct Connections	Four (4) 6" (152.5 mm) dia. ISF double collar system
Airflow Rates	70 CFM (33 L/s) to 220 CFM (104 L/s)
Motor	Two (2) PSC variable speed backward curved
Voltage	120 VAC @ 60 Hz / 1 Phase
Amperage	1.5 A / 142 watts
Type of heat exchanger	dpoint cross-flow (Enthalpic Polymer Membrane)
Exchange surface	127 ft² (11.8 m²)
Defrost type	Evacuation
Filters	Two (2) Fiberbond washable
Drain Connection	½" (12.7 mm)
DuoTrol	Integrated Balancing System
Actual Weight	50 lbs (22.7 Kg)
Shipping Weight	57.5 lbs (26.1 Kg)
Certification	HVI, <sub>C</sub> CSA <sub>US</sub> , CSA 22.2 Nº.113 Complies with UL 1812

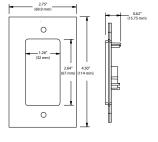
## **OPTIONAL WALL CONTROLS**

Mechanical	RD1 Part # 60510010030 RD4P Part # 60510010031
Timers	T3 Part # 60510010050 (20, 40, 60 minutes)

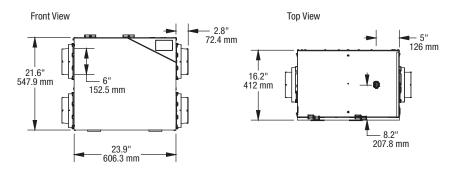
## **WALL CONTROL DIMENSIONS**



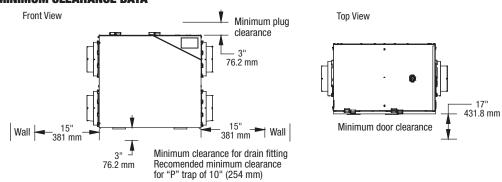
## T3 Timer



# **DIMENSIONS DATA**



#### **MINIMUM CLEARANCE DATA**



Pressure      Air Flow      Supply      Exhaust        Pa      in. wg      L/s      CFM      L/s      CFM        25      0.1      115      244      116      247      108      230        50      0.2      106      225      107      228      101      215        75      0.3      98      208      99      210      95      202        100      0.4      88      188      89      190      83      177      100 <th colspan="2">External Static</th> <th colspan="2">Net Supply</th> <th colspan="2">Gross Air Flow</th> <th colspan="2">Gross Air Flow</th> <th colspan="4">-<b>■</b>-Supply =□-Exhaust</th> <th></th>	External Static		Net Supply		Gross Air Flow		Gross Air Flow		- <b>■</b> -Supply =□-Exhaust						
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175 0.7 65 139 66 140 60 127	150	0.6	71	150	71	152	67	142							
	175	0.7	65	139	66	140	60	127		0,	0.1 0.	2 0.3	0.4	0.5	0.6

	Supply T	Supply Temperature		ir Flow	Power Consumed	Sensible Recovery	Apparent Sensible	Latent Recovery
	°C	°F	L/s	CFM	Watts	Efficiency	Effectiveness	Moisture Transfer
5	0	32	37	78	74	71	81	0.44
	0	32	50	107	80	72	79	0.41
1	0	32	71	150	102	69	77	0.35
	-15	5	36	75	65	58	82	0.27
5							Total recovery Efficiency	
5 🗆	35	95	35	75	72	_	48	

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