# **ENGINEERING DATA**



# **Model FC150ERV**

Energy Recovery Ventilator 30 CFM (14 L/s) to 160 CFM (76 L/s)

Part No. 60510007160





#### **FEATURES**

- 3 operating modes (Intermittent, Continuous & High)
- 100% variable speed
- ISF™ 6" (152.5 mm) dia. collar system
- · Proportional defrost sequence
- SPM™ 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 10" depth (304.8 mm x 304.8 mm x 254 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

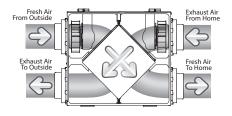
#### **FILTERS**

- Two (2) Fiberbond washable 1111/16"x 93/4"x 5/8" (297 mm x 248 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







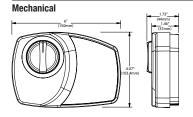
# **ENGINEERING DATA FC150ERV**

<b>SPECIFICATIONS</b>	FC150ERV					
Dimensions	29½" x 22½" x 11¾" (749.3 mm x 571.5 mm x 289 mm)					
Duct Connections	Four (4) 6" (152.5 mm) dia. ISF double collar system					
Airflow Rates	30 CFM (14 L/s) to 160 CFM (76 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	85 ft <sup>2</sup> (7.9 m <sup>2</sup> )					
Defrost type	Evacuation					
Filters	Two (2) Fiberbond washable					
Drain Connection	½" (12.7 mm)					
DuoTrol	Integrated Balancing System					
Actual Weight	42 lbs (19 Kg)					
Shipping Weight	47.5 lbs (21.5 Kg)					
Certification	HVI, <sub>C</sub> CSA <sub>US</sub> , CSA 22.2 Nº.113 Complies with UL 1812					

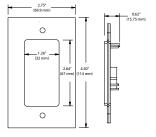
# **OPTIONAL WALL CONTROLS**

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

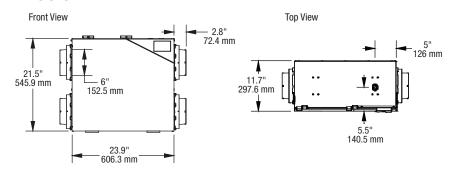
# **WALL CONTROL DIMENSIONS**



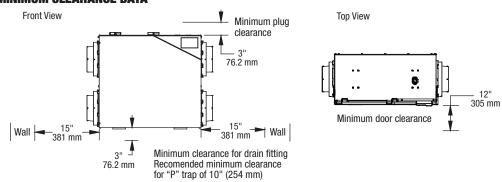
# T3 Timer



# **DIMENSIONS DATA**



# **MINIMUM CLEARANCE DATA**



External Static Pressure		Net Supply Air Flow		Gross Air Flow Supply		Gross Air Flow Exhaust		-≣-Supply -□-Exhaust						
Pa	in. wg	L/s	CFM	L/s	CFM	L/s	CFM	. (61,	200					
25	0.1	97	207	99	210	99	211	×0.4719)	450					
50	0.2	89	189	91	193	91	193	_	150				-	
75	0.3	88	187	84	179	84	178	, =	100		$\vdash$			_
100	0.4	75	159	76	162	76	162	cfm (L/s :						
125	0.5	70	148	71	150	69	147	Ę.	50	+		$\dashv$	-	_
150	0.6	62	131	63	133	62	131							
175	0.7	55	116	55	118	55	117		0.1	0.2	0.3 0.4	0.5	0.6	0.

	Supply Temperature		Net Air Flow		Power Consumed	Sensible Recovery	Apparent Sensible	Latent Recovery		
	°C	°F L/s CFM		Watts	Efficiency	Effectiveness	Moisture Transfer			
5	0	32	24	51	58	65	76	0.32		
	0	32	38	80	76	65	73	0.29		
	0	32	56	118	96	62	70	0.26		
	-15	5	26	55	59	52	78	0.26		
							Total recovery Efficiency			
5	35	95	30	64	66	_	34			

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