# Intelli-Balance

# **Energy Recovery Ventilator**

# FV-20VEC1

# Specification Submittal Data / Panasonic ERV

## Description

Ceiling, wall or or floor mount Energy Recovery Ventilator (ERV) provides a tempered air supply, humidity control, and a balanced amount of exhaust to help maintain balanced, positive or negative pressure throughout the home. The Panasonic Intelli-Balance ERV is engineered for use in any North America climate zone. Incorporates an Occupant Controlled Boost Capability. Built-in ASHRAE 62.2 Timing function helps ensure code compliance.

# Motor/Blower:

- Occupant Controlled Boost Capability
- Two (2) enclosed ECM brushless motors rated for continuous run.
- ERV Supply and Exhaust ventilation rates shall be manually adjustable for
- 60-80-100-120-140-160-180-200 CFM. • Power rating shall be 120 volts and 60 Hz.
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  Motor equipped with thermal cut-off fuse control.
- Removable, permanently lubricated, plug-in
- motor.

## Housing:

- 22 gauge powder coated steel body.
- Four 6" intake and exhaust ducts.
- Adjustable supply and return air adapters provide greater installation flexibility
- Built in dampers on outside exhaust air and supply ducts for defrost and recirculation cycling.
- Filters on supply and exhaust air extend the life of the ERV core.
   (1) Pressure ports allow for apply sinflaw.
- (4) Pressure ports allow for easy airflow documentation.
- Pre-drilled mounting bracket can accommodate 16", 19", or 24" stud bays.

#### Maintenance:

- MERV 13 filter included; MERV 13 (FV-FL1320VE1), MERV 8 (FV-FL0820VE1) and HEPA (FV-FLHP20VE1) filter replacements available.
- Unobtrusive alarm notifies owner for filter check and maintenance.

#### Warranty:

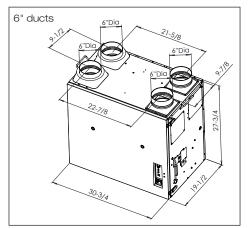
- ECM Motors: 6 years from original purchase date
- All Parts: 3 Years from original purchase date.

#### **Architectural Specifications:**

ERV shall be ceiling, wall or floor mount type with built-in speed selectors for both Supply and Exhaust air. Select from 60-80-100-120-140-160-180-200 CFM. ERV shall have 200 Net CFM on the exhaust ports and 200 Net CFM on the supply ports as tested in accordance with CSA-C439 standards at 0.4 static pressure in inches water gauge. ERV shall have Occupant Controlled Boost Capability. Power consumption shall be no greater than 129 watts at 0.4" w.g. static pressure. Apparent Sensible Effectiveness for heating shall be no less than 86% at 67 CFM net air flow at 32°F (0°C). Sensible Recovery Efficiency for heating shall be no less than 67% at 66 CFM net air flow at -13°F (-25°C). Total Recovery Efficiency for cooling shall be no less than 61% at 135 CFM net air flow at 95°F (35°C). The defrost cycle function shall activate when outdoor temperatures drop to 14°F (-10°C). The (2) motors shall be totally enclosed ECM brushless motors rated for continuous run. ECM motor speed shall automatically increase when the fan senses static pressure to maintain selected CFM. ERV shall incorporate an ASHRAE 62.2 intermittent and continuous timing function for code compliance. Power rating shall be 120v/60Hz. Duct diameters shall be no less than 6". ERV must include adjustable vertical to horizontal supply and return air adapters. Can be used to comply with ASHRAE 62.2, Ontario, ENERGY STAR®\* and Novoclimat requirements; LEED, IAP, California Title-24, and WA Energy Code Credits.

# **ERV Core Technology:**

- Indoor and outdoor air passes through Panasonic's capillary core technology. This process tempers supply air while transferring moisture and energy.
- Built in Frost Prevention Mode prevents the core from freezing. Frost Prevention Mode is intuitive and operates without homeowner intervention.
- Core material permeated with anti-mold treatment.



FV-20VEC1



## **ECM Motor Technology**

When the ERV senses static pressure, its speed is automatically increased to ensure that the desired CFM is not compromised.

For complete Installation Instructions visit **us.panasonic.com/ventfans** 

Model	Quantity	Comments	Project:
			Location:
			Architect:
			Engineer:
			Contractor:
			Submitted by:
			Date:

Panasonic Life Solutions Company of America IAQ Division Two Riverfront Plaza Newark, NJ 07102

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\*This product meets strict energy efficiency guidelines set by Natural Resources Canada and is ENERGY STAR<sup>®</sup> certified for the Canadian market only.





**Energy Recovery Ventilator** 

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(Continued)

# **ERV Wall Control Panel**

The all-new LCD Wall Control puts total control and monitoring of Intelli-Balance 200 at your fingertips. Easy operation from nine push buttons and an LCD display gives homeowners instant access to custom ventilation control settings and real-time air flow and temperature monitoring.

#### Functions & Settings

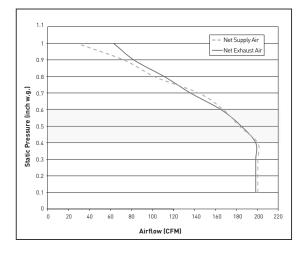
- Power on/off
- Air volume for supply and exhaust
- ASHRAE intermittent timer and air volume
- BOOST mode control
  - Sets supply and exhaust air to constant 200 CFM
- Timer for BOOST activation adjustable from
- 10-60 minutes
- Reset filter maintenance reminder

## **Display Information**

- Indoor/outdoor temperature and humidity
- Filter maintenance reminder
- ASHRAE air volume and boost timer
- Defrost mode indicator
- · Supply and exhaust air volume
- System fault codes



# FV-20VEC1 200 CFM 6" Ducts



Intelli-Balance™ 200	FV-20VEC1			
Characteristics	COLD/TEMPERATE CLIMATE			
Static pressure in inches w.g.	0.4			
Net Exhaust Air Volume (CFM)	200			
Net Supply Air Volume (CFM)	200			
Power Consumption (Watts)	129			
Power Rating (V/Hz)	120/60			
ENERGY STAR <sup>®</sup> Certified	Yes*			

Energy Performance												
MODE	Supply Temperature		Net Air Flow		Power Consumed	Sensible Recovery	Apparent Sensible	Net Moisture				
	°F	°C	L/S	CFM	(Watts)	Efficiency	Effectiveness	Transfer				
Heating	32	0	32	67	22	83%	86%	81%				
	32	0	59	124	46	77%	79%	73%				
	32	0	80	170	92	73%	77%	78%				
	-13	-25	31	66	46	67%	69%	70%				
	-13	-25	50	107	104	61%	64%	64%				
Cooling				Total Recovery Efficiency								
	95	35	34	71	25	70%						
	95	35	64	135	56	61%						

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