

Intelli-Balance® Elite and Elite Plus Energy Recovery Ventilator

Intelli-Balance®



Elite Plus Plug-in/Hardwired/Mirror:

FV-15ESC1 (Any Climate)

FV-12ESC1 (Any Climate)

Elite Plug-in/Hardwired/Mirror:

FV-14ES1 (Temperate Climate)

FV-11ES1 (Temperate Climate)



COMFORT STARTS WITH CLEAN AIR

True Flow ratings at **0.4"** static pressure provide powerful airflow to assure code-compliance homes

- High energy recovery performance achieves 90% SRE
- Intelli-Balance® Elite and Elite Plus ERVs can be used with the attached cord or converted to a hardwired application (kit included). Standard or mirrored (reverse) configuration for installation
- For mirror installation, dampers are switched from one side to the other (left-to-right or right-to-left)
- Occupant-controllable boost function increases the fan speed to high when activated
- Designed for multi-family and new home construction built to meet energy efficiency standards
- Two (2) powerful ECM motors with Smart Flow® technology ensure optimum airflow by overcoming static pressure to effectively remove contaminated air and replace it with fresh air
- Multi-speed selector provides customizable airflow to create balanced, positive or negative pressure within the residential spaces

Elite Plus

30-150 CFM (FV-15ESC1)

30-120CFM (FV-12ESC1)

Elite

30-140 CFM (FV-14ES1)

30-110 CFM (FV-11ES1)

- Mold-resistant core material for long-lasting performance
- Built-in ASHRAE 62.2 timing function and Fault Indicator Display (FID) helps ensure code compliance and simplifies the installation process
- Two (2) MERV 13 filters included - return and supply; optional MERV 6 (washable) filter available separately
- Can be used to meet Green Building Code standards and contribute to better HERS/ERI scores

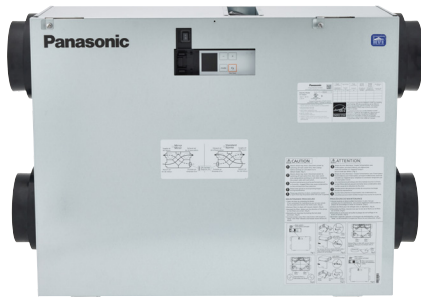
ADDITIONAL BENEFITS

- High efficiency exchange core balances heat and moisture, inside to outside
- Three mounting options - wall, ceiling or floor
- Separate control of supply and exhaust airflow. Four integrated 6" duct adapters (2 exhaust, 2 supply)
- Models comply with ASHRAE 62.2, LEED, Indoor airPLUS, CALGreen (Title 24), and 2021 Washington State Residential Energy Code
- Elite Plus FV-15ESC1 and FV-12ESC1 comply with Ontario Building Code, ENERGY STAR®* and Novoclimat requirements
- Meets strict energy efficiency guidelines set by Natural Resources Canada and is ENERGY STAR® certified for the Canadian market only.* There are no ENERGY STAR® ratings for ERVs in the US market
- 6-Year Warranty on ECM motor, 3 Years on all other parts



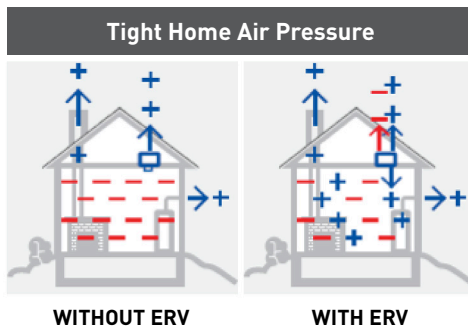
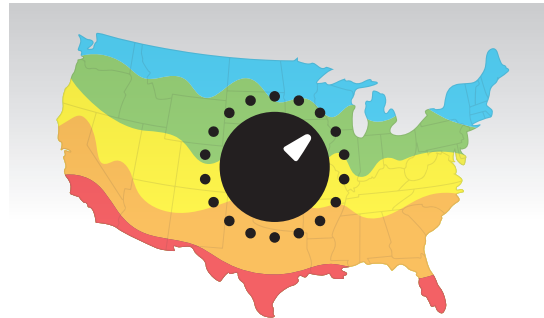
Exceptional performance powered by exclusive SmartFlow® sensing technology

Intelli-Balance®



COST EFFECTIVE, CODE COMPLIANT ERV FOR TEMPERATE / ANY CLIMATE ZONE

Intelli-Balance® Energy Recovery Ventilators have a powerful, high-performance, high-efficiency design to help meet ASHRAE 62.2 requirements. The Elite and Elite Plus ERVs were engineered for cost effectiveness, versatility and installation flexibility. Built-in controls minimize the time it takes to set desired airflow and maintain performance. Intelli-Balance® ERVs enable builders to simply design and specify the ventilation system requirements, improve IAQ and reduce ventilation costs.



BALANCED VENTILATION

In tightly built homes and buildings, using exhaust-only fans can create negative pressure. Panasonic Intelli-Balance® ERVs prevent this by supplying fresh air to replace exhausted air, maintaining balanced indoor air pressure. Each unit is designed with four dedicated 6" duct connections: one draws in fresh air from outside, one delivers that fresh air into the living space, one pulls stale indoor air back into the unit, and one exhausts that stale air outside. Operating continuously at a low rate, Intelli-Balance® ERVs remove stale air while introducing clean, fresh air. With flexible installation options—ceiling, floor, or wall mounted—they can work independently or in conjunction with an HVAC system, making them ideal for placement throughout the home to meet IAQ and comfort requirements.



ECM MOTOR TECHNOLOGY

Intelli-Balance® Elite and Elite Plus ERVs use two (2) ECM brushless motors with built-in SmartFlow® technology for precision ventilation. When the ERV motors sense static pressure, speed is adjusted to ensure optimal CFM output, regardless of a duct configuration. This feature provides peace-of-mind, as the installer doesn't have to worry about compromising the ERV's performance. Both ECM motors are rated for continuous run and are totally enclosed to ensure long-life and continuous, quiet operation. Each motor is equipped with a thermal cutoff fuse.

MULTI-SPEED SELECTOR

Intelli-Balance® Elite and Elite Plus ERVs feature a built-in, digital, multi-speed selector on the control panel, allowing precise selection of both supply and exhaust airflow. For added convenience, an optional Wi-Fi module or touch-screen wall control (sold separately) can also be used to adjust settings. This fully customizable airflow capability enables balanced, positive, or negative pressure within the home.



(Optional - Wi-Fi modules (WP100PBA) and Touch Screen Wall Control (FV-SCVE2) available separately.)

Elite Plus

30-150 CFM (FV-15ESC1)
30-120CFM (FV-12ESC1)

Elite

30-140 CFM (FV-14ES1)
30-110 CFM (FV-11ES1)



Control Terminals:

Intelli-Balance® ERVs can turn on the air handler when the ERV is running. The dry contact switch can be used to activate stand-by mode, and close outside dampers. Optional Low Voltage Timer Switch (FV-SWL1060) can activate boost mode for increased ventilation.

ASHRAE 62.2 INTERMITTENT TIMING FUNCTION

The adjustable intermittent timing function allows the user to set the number of minutes per hour the ERV should run. This gives scalability of air flow relative to property size; from the smallest multi-family to new home construction. This ensures consistent and controlled ventilation throughout the day for compliance with ASHRAE 62.2.

FILTERS & MAINTENANCE

Intelli-Balance® Elite and Elite Plus ERVs include two filters that clean the exhaust and supply air before passing through the ERV core, extending the life of the core. A hinged access panel allows for quick and easy product maintenance and filter checks. Convenient light indicator and unobtrusive alarm signal on the control panel let homeowners know when it's time to check and clean the filters. Both filters should be vacuumed with a soft brush attachment every 2-3 months or as needed, and the supply air filter should be inspected every 90 days and replaced when dirty to maintain the ERV's peak performance.

HYGROSCOPIC TRANSFER CORE

Indoor and outdoor air pass through Panasonic's capillary core designed to transfer heat and moisture. This process tempers supply air while balancing moisture levels inside to outside. The core's high latent energy (moisture) transfer makes Intelli-Balance® ERVs ideal for use in most climate zones, as they help expel moisture during incidences of high relative humidity (RH) and help return moisture back inside during the winter for a more comfortable living environment. Core material with anti-mold treatment helps prevent mold.

WHOLE HOUSE ERV

Intelli-Balance® Elite and Elite Plus ERVs are ceiling, wall or floor mount. They are ideal for meeting whole house ventilation requirements under ASHRAE 62.2. Intelli-Balance® ERVs are an ideal choice for delivering fresh, balanced air with energy recovery, whether used independently or paired with an air handler, making them a highly affordable, cost-effective IAQ solution.

Ideal for: Multi-Family Homes / Condominiums / Apartments / Housing Authority Properties / Hotels / Studio apartments / Single-Family Homes.

ASHRAE 62.2 STANDARD

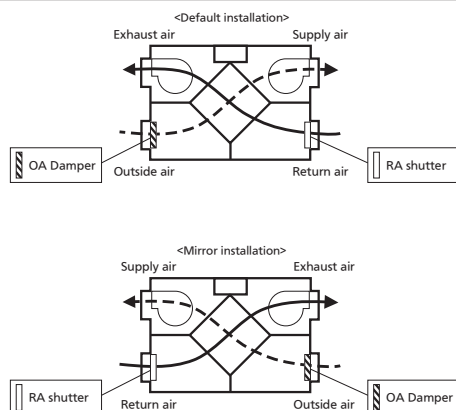
The American Society of Heating, Refrigerating and Air Conditioning Engineers (ASHRAE) sets standards for whole house ventilation, requiring continuous mechanical ventilation. Intelli-Balance® ERVs are an affordable, efficient way to meet ASHRAE 62.2 standards. Please check with the local jurisdiction to determine which ventilation standard applies.

OPERATION

FV-15ESC1 / FV-12ESC1 Recommended for areas where temperatures can drop as low as -22°F (-30°C). When the outdoor temperature drops, the unit enters a frost prevention cycle. The Elite Plus models have two options for frost prevention: (1) recirculation or (2) exhaust only.

FV-14ES1 / FV-11ES1 Two temperate models are recommended for areas where temperatures do not often fall below 14°F (-10°C). Below this temperature, the outside damper closes and the unit goes into a standby mode to prevent freezing of the core.

Mirrored Installation: Damper is moved for Mirrored Airflow



INSTALLATION

Mounting: Can easily be mounted in the ceiling, floor or on a wall and can also be chain mounted for suspension. Included: mounting brackets and screws.
Not included: chains

Mirror Installation: Dampers can be switched from one side to the other (left-to-right or right-to-left) for mirror installation.

Wiring: Comes equipped with standard appliance cord and includes hardwired adaptor.

Duct: Insulated 6" duct is recommended

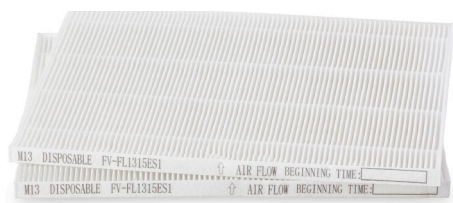
Accessory Kits

Model No.	Description	Inlet Grille	Backdraft Damper	Clamp	Y-Adapter
FV-NLF04G	4" Inlet Grille + Metal Plate	1 [4"]	-	-	-
FV-NLF06G	6" Inlet Grille + Metal Plate	1 [6"]	-	-	-
PC-NLF04S	4" Single Inlet Kit	1 [4"]	1 [4"]	6	-
PC-NLF06S	6" Single Inlet Kit	1 [6"]	1 [6"]	6	-
PC-NLF04D	4" Double Inlet Kit	2 [4"]	2 [4"]	12	1 [4"- 4" x 2]
PC-NLF06D	6" Double Inlet Kit	2 [6"]	2 [6"]	12	1 [6"- 6" x 2]
PC-NLF64D	6" - 4" Double Inlet Kit	2 [4"]	2 [4"]	12	1 [6"- 4" x 2]
PC-NLF86Y	8" - 6" Y-Adapter	-	-	-	1 [8"- 6" x 2]
FV-NLF46RES	Recessed Inlet integrated dual 4" or 6" duct adaptor	-	-	-	-
EZSV14	Soffit Termination System	-	-	-	-

Accessories:

FV-FL1315ES1: MERV 13 Filters x2 included

FV-FL0615ES1: MERV 6 Filter (washable) sold separately

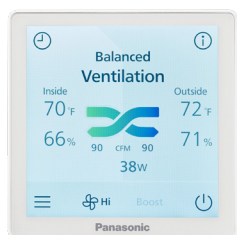


Supply Air Filter (SA)

(MERV 13 included, MERV 6 Optional)



Hygroscopic Transfer Core



Touch Screen Wall Control* FV-SCVE2



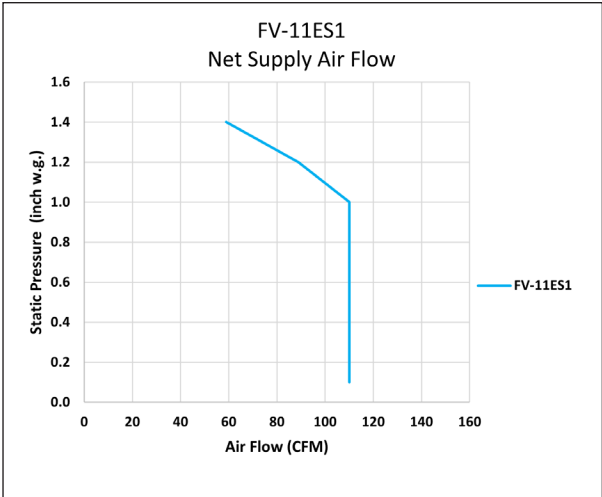
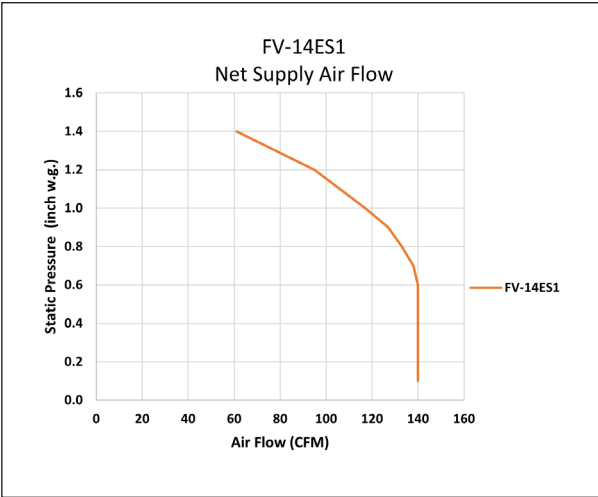
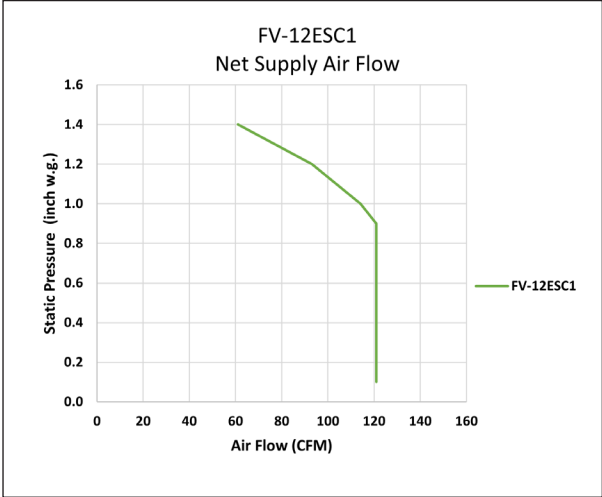
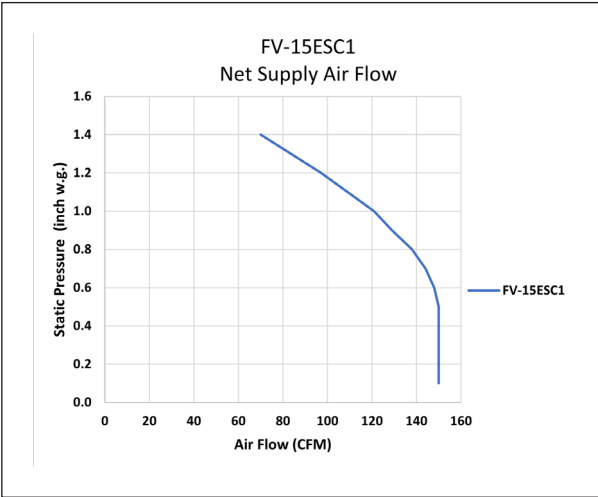
Low Voltage Timer Switch FV-SWL1060



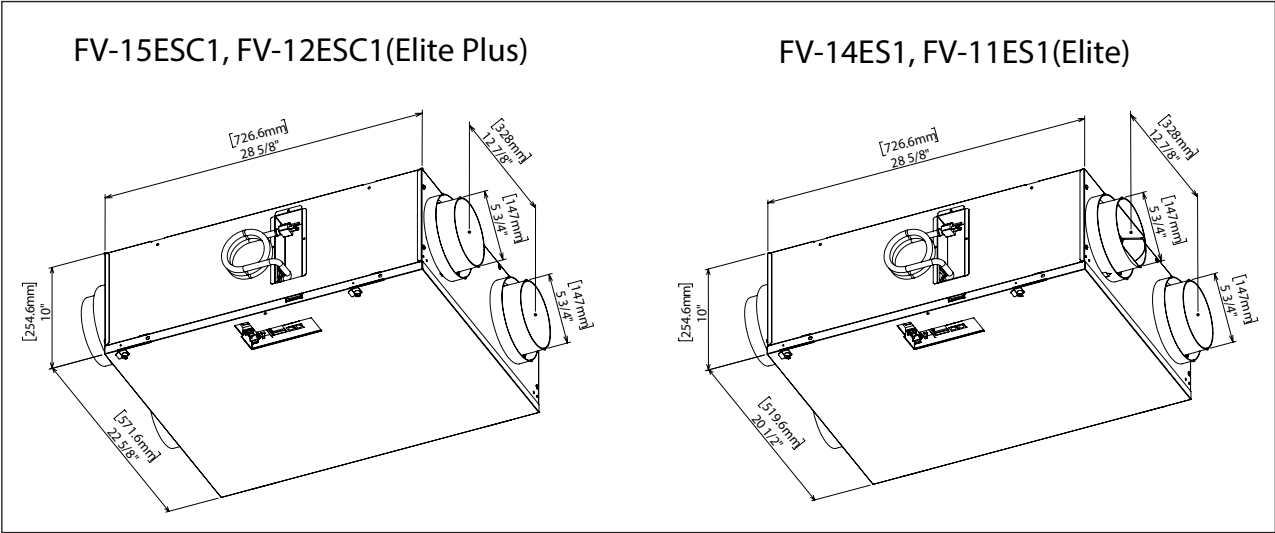
Wi-Fi Module WP100PBA

* Satisfies California requirement for Fault Indicator Display (FID).

Intelli-Balance® Airflow Performance Curves



Intelli-Balance® Elite and Elite Plus Dimensions



Intelli-Balance® Elite and Elite Plus Specifications

FV-15ESC1												
Energy Performance												
Mode	Outdoor Temperature		Net Air Flow		Power consumed [Watt]	Sensible Recovery Efficiency	Adjusted Sensible Recovery Efficiency	Latent Recovery / Moisture Transfer	Apparent Sensible Effectiveness (NOT HVI Certified)	Total Recovery Efficiency	Adjusted Total Recovery Efficiency	CFM/W
	°C	°F	L/S	CFM								
Heating	0	32	17	36	21	90	94	0.94	97	---	---	1.7
	0	32	31	66	32	84	87	0.85	89	---	---	2.0
	0	32	52	110	61	77	81	0.77	82	---	---	1.8
	0	32	71	150	107	72	77	0.72	78	---	---	1.4
-25°C	-25	-13	31	66	80	68	71	0.74	85	---	---	0.8
Cooling	35	95	17	36	21	---	---	0.91	91	84	86	1.7
	35	95	31	66	33	---	---	0.82	84	77	80	2.0
	35	95	52	110	64	---	---	0.72	76	66	69	1.7
	35	95	71	150	115	---	---	0.66	72	60	63	1.3

FV-12ESC1												
Energy Performance												
Mode	Outdoor Temperature		Net Air Flow		Power consumed [Watt]	Sensible Recovery Efficiency	Adjusted Sensible Recovery Efficiency	Latent Recovery / Moisture Transfer	Apparent Sensible Effectiveness (NOT HVI Certified)	Total Recovery Efficiency	Adjusted Total Recovery Efficiency	CFM/W
	°C	°F	L/S	CFM								
Heating	0	32	17	36	21	89	93	0.92	95	---	---	1.7
	0	32	31	66	33	83	86	0.83	87	---	---	2.0
	0	32	52	110	62	75	79	0.75	80	---	---	1.7
-25°C	-25	-13	31	66	83	67	70	0.73	84	---	---	0.7
Cooling	35	95	17	36	22	---	---	0.89	89	83	85	1.6
	35	95	31	66	34	---	---	0.80	82	76	79	1.9
	35	95	52	110	64	---	---	0.70	74	64	67	1.7

FV-14ES1												
Energy Performance												
Mode	Outdoor Temperature		Net Air Flow		Power consumed [Watt]	Sensible Recovery Efficiency	Adjusted Sensible Recovery Efficiency	Latent Recovery / Moisture Transfer	Apparent Sensible Effectiveness (NOT HVI Certified)	Total Recovery Efficiency	Adjusted Total Recovery Efficiency	CFM/W
	°C	°F	L/S	CFM								
Heating	0	32	17	36	21	89	93	0.89	96	---	---	1.7
	0	32	30	64	32	84	87	0.80	88	---	---	2.0
	0	32	52	110	61	76	80	0.73	81	---	---	1.8
Cooling	35	95	17	36	21	---	---	0.90	90	83	85	1.7
	35	95	30	64	33	---	---	0.81	83	77	80	1.9
	35	95	52	110	64	---	---	0.71	75	65	68	1.7

FV-11ES1												
Energy Performance												
Mode	Outdoor Temperature		Net Air Flow		Power consumed [Watt]	Sensible Recovery Efficiency	Adjusted Sensible Recovery Efficiency	Latent Recovery / Moisture Transfer	Apparent Sensible Effectiveness (NOT HVI Certified)	Total Recovery Efficiency	Adjusted Total Recovery Efficiency	CFM/W
	°C	°F	L/S	CFM								
Heating	0	32	17	36	21	88	92	0.87	94	---	---	1.7
	0	32	30	64	33	83	86	0.78	86	---	---	1.9
	0	32	52	110	62	75	79	0.71	79	---	---	1.7
Cooling	35	95	17	36	22	---	---	0.88	88	82	84	1.6
	35	95	30	64	34	---	---	0.79	81	76	79	1.8
	35	95	52	110	64	---	---	0.69	73	64	67	1.7



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