

### Specification Submittal Data / Panasonic Ventilation Fan

#### Description

Customizable ceiling mount ventilating fan, low sone and rated for continuous operation. ENERGY STAR® rated and certified by the Home Ventilating Institute (HVI). Evaluated by the Underwriters Laboratories and conforms to both UL and cUL standards.

#### Motor/Blower:

- Enclosed brushless ECM smart motor technology rated for continuous operation
- Adjustable ventilation rates at 50 – 80 – 110 CFM
- Power rating of 120 volts and 60 Hz
- UL and cUL listed for tub/shower enclosure when GFCI protected
- Motor equipped with thermal cutoff fuse
- Removable permanently lubricated plug-in motor

#### Housing:

- Environmentally friendly 26 gauge housing using Zinc-Aluminum-Magnesium (ZAM) coating
- Integrated dual 4" or 6" diameter duct adapter
- Built-in damper reduces back draft and helps with blower door testing
- Built-in metal flange provides blocking for penetrations through drywall as an Air Barrier, and assists with the decrease in leakage in the Building Envelope during blower door testing
- Suitable for installation in ceilings insulated up to R60
- Articulating and expandable installation bracket up to 24"

#### Grille:

- Attractive design using Poly Pro material
- Attaches directly to housing with torsion springs
- Includes a motion sensor cap for use as a cover when motion sensor Plug 'n Play™ module has not been selected

#### Warranty:

- ECM Motor: 6 Years from original purchase date
- ALL Parts: 3 Years from original purchase date

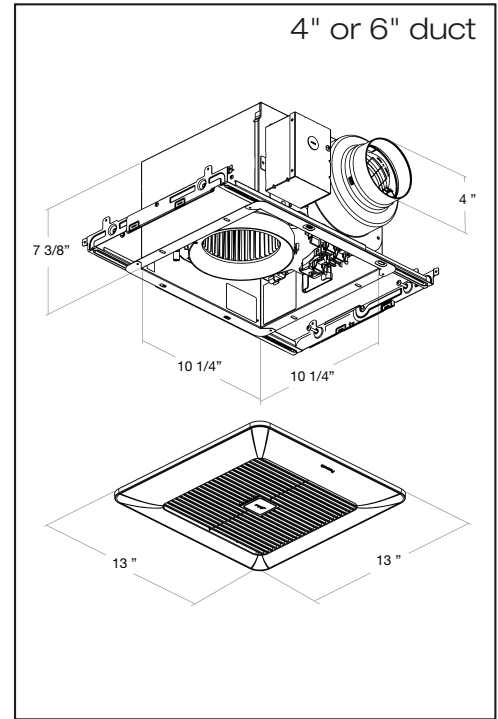
#### Architectural Specifications:

Customizable ceiling mount ventilation fan, ENERGY STAR® rated with built-in speed selector. Select from 50/80/110 CFM with <0.3 sone as certified by the Home Ventilating Institute (HVI) at 0.1 w.g. with 51/80/110 CFM and no more than 0.4/0.5/0.8 sones at 0.25 w.g. and 51/79/108 CFM at 0.375 w.g. Power Consumption shall be no greater than 9.9/7.9/6.5 watts at 0.1 w.g. and 15.4/13.1/11.2 watts at 0.25 w.g. and 9.6/13.4/20.0 watts at 0.375 w.g. ENERGY STAR® rated with efficiency of no less than 16.2/15.7/11.1 CFM/watt at 0.1 w.g. and 8.3/8.3/7.1 CFM/watt at 0.25 w.g. and 5.3/5.9/5.4 CFM/watt at 0.375 w.g. The motor shall be enclosed with brushless ECM motor engineered to run continuously. ECM motor speed shall automatically increase when the fan senses static pressure to maintain selected CFM. Power rating shall be 120v/60Hz. Duct diameter shall be no less than 4", inclusive of an integrated dual 4" or 6" duct adapter. **Plug 'N Play™ modules** provide up to three additional features. Select from Multi-Speed with Time Delay, Condensation Sensor, and Motion Sensor. Fan shall be RoHS Compliant and UL and cUL listed for tub/shower enclosure when GFCI protected. Also suitable for installation in ceilings insulated up to R60. Fan can be used to comply with ASHRAE 62.2, LEED, ENERGY STAR® IAP, EarthCraft, California Title-24 and WA Ventilation Code.

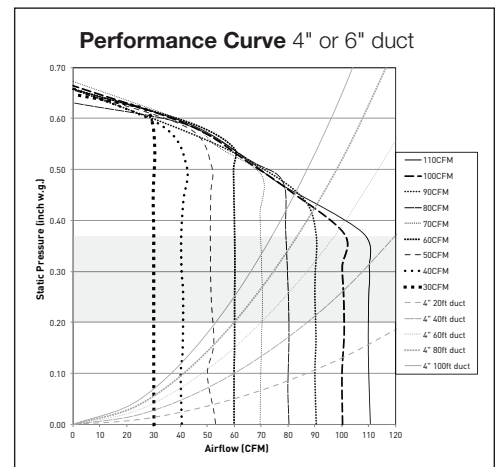


#### ECM Motor Technology:

When fan senses static pressure, its speed is automatically increased to ensure that the desired CFM is not compromised, which allows the fan to perform as rated.



FV-0511VK2



\*Industry research indicates static pressure in typical installations ranges from 0.20" to 0.375"

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

For complete Installation Instructions visit [us.panasonic.com/ventfans](http://us.panasonic.com/ventfans)

### Specification Submittal Data / Panasonic Ventilation Fan/Light

#### Description

Customizable ceiling mount ventilating fan, low sone and rated for continuous operation. ENERGY STAR® rated and certified by the Home Ventilating Institute (HVI). Evaluated by the Underwriters Laboratories and conforms to both UL and cUL standards.

#### Motor/Blower:

- Enclosed brushless ECM smart motor technology rated for continuous operation
- Adjustable ventilation rates at 50 – 80 – 110 CFM
- Power rating of 120 volts and 60 Hz
- UL and cUL listed for tub/shower enclosure when GFCI protected
- Motor equipped with thermal cutoff fuse
- Removable permanently lubricated plug-in motor

#### Housing:

- Environmentally friendly 26 gauge housing using Zinc-Aluminum-Magnesium (ZAM) coating
- Integrated dual 4" or 6" diameter duct adapter
- Built-in damper reduces back draft and helps with blower door testing
- Built-in metal flange provides blocking for penetrations through drywall as an Air Barrier, and assists with the decrease in leakage in the Building Envelope during blower door testing
- Suitable for installation in ceilings insulated up to R60
- Articulating and expandable installation bracket up to 24"

#### Grille:

- Attractive design using Poly Pro material
- Attaches directly to housing with torsion springs
- Includes a motion sensor cap for use as a cover when the motion sensor Plug 'n Play™ module has not been selected

#### Warranty:

- ECM Motor: 6 Years from original purchase date
- LED Panel: 5 Years from original purchase date
- ALL Parts: 3 Years from original purchase date

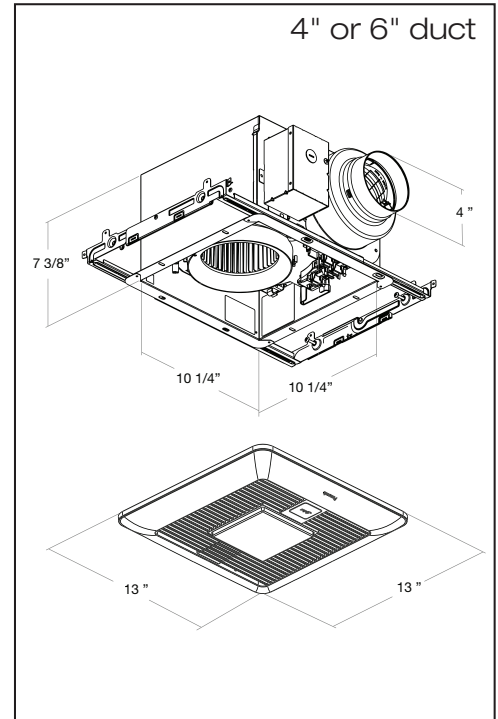
#### Architectural Specifications:

Customizable ceiling mount ventilation fan with light, ENERGY STAR® rated with built-in speed selector. Select from 50/80/110 CFM with <0.3/<0.3/0.4 sone as certified by the Home Ventilating Institute (HVI) at 0.1 w.g. with 50/80/110 CFM and no more than 0.4/0.5/0.9 sones at 0.25 w.g. and 50/78/103 CFM at 0.375 w.g. Power Consumption shall be no greater than 3.2/5.3/10.5 watts at 0.1 w.g. and 6.2/9.9/15.8 watts at 0.25 w.g. and 9.9/13.8/19.4 watts at 0.375 w.g. ENERGY STAR® rated with efficiency of no less than 15.7/15.3/10.5 CFM/watt at 0.1 w.g. and 8.1/8.2/6.9 CFM/watt at 0.25 w.g. and 5.1/5.6/5.2 CFM/watt at 0.375 w.g. The motor shall be enclosed with brushless ECM motor engineered to run continuously. ECM motor speed shall automatically increase when the fan senses static pressure to maintain selected CFM. Power rating shall be 120v/60Hz. Duct diameter shall be no less than 4", inclusive of an integrated dual 4" or 6" duct adapter.

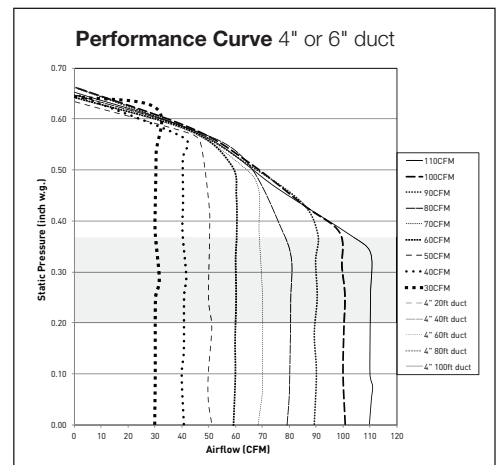
**Plug 'N Play™** modules provide up to three additional features. Select from Multi-Speed with Time Delay, Condensation Sensor, and Motion Sensor. LED dimmable type lamp with (1) 10W ENERGY STAR® 2.0 certified, JA-8 compliant for CA Title 24, LED chip panel that maintains 50,000 hours rated average life and incorporates a <1W LED night light. Fan shall be RoHS Compliant and UL and cUL listed for tub/shower enclosure when GFCI protected. Also suitable for installation in ceilings insulated up to R60. Fan can be used to comply with ASHRAE 62.2, LEED, ENERGY STAR® IAP, EarthCraft, California Title-24 and WA Ventilation Code.



Includes 10 Watt Dimmable LED chip panel/3000 Kelvin Warm White/90CRI/700 lumens/70 LPW/ENERGY STAR 2.0 certified/JA-8 compliant for CA Title 24/50,000 hours rated average life /<1W one LED night light included.



FV-0511VKL2



\*Industry research indicates static pressure in typical installations ranges from 0.20" to 0.375"



#### ECM Motor Technology:

When fan senses static pressure, its speed is automatically increased to ensure that the desired CFM is not compromised, which allows the fan to perform as rated.

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

For complete Installation Instructions visit [us.panasonic.com/ventfans](http://us.panasonic.com/ventfans)

## Plug 'N Play™ Modules

Plug 'N Play™ modules provide up to three additional features. Select from Multi-Speed with Time Delay, Motion Sensor, Condensation Sensor and Chip LED light.



### FV-VS15VK1: Multi-Speed with Time Delay

Allows you to select the proper CFM settings to satisfy ASHRAE 62.2 continuous ventilation requirements. The fan runs continuously at a pre-set lower level (0, 30-100 CFM, in 10 CFM increments), then elevates to a maximum level of operation (50-80-110 CFM) when the wall switch is turned on, or when the motion sensor or Condensation Sensor module is activated. A High/Low delay timer returns the fan to the pre-set CFM level after a period of time set by the user.



### FV-MSVK1: Motion Sensor

Automatically activates when someone enters the room. Once the settings have been applied, the fan becomes truly automatic. This module also activates a 20 minute delay off timer for the fan.



### FV-CSVK1: Condensation Sensor

Helps control bathroom condensation to prevent mold and mildew. Sensor technology detects relative humidity and temperature to anticipate dew point, automatically turning the fan on to control humidity. Built-in Relative Humidity (RH) sensitivity adjustment enables fine tuning for moist conditions and for satisfying CalGreen requirements. When the condensation sensor is used in conjunction with multi-speed functionality, the fan will kick up to high speed when the condensation sensor detects moisture in the room. This module also activates a 20 minute delay off timer for the fan.

Fan Specifications	WhisperGreen Select™: FV-0511VKL2								
	0.1	0.25	0.375	0.1	0.25	0.375	0.1	0.25	0.375
Static Pressure in inches w.g.	0.1	0.25	0.375	0.1	0.25	0.375	0.1	0.25	0.375
Air Volume (CFM)	110	110	103	80	80	78	50	50	50
Noise (sones)	0.4	0.9	-	<0.3	0.5	-	<0.3	0.4	-
Power Consumption (watts)	10.5	15.8	19.4	5.3	9.9	13.8	3.2	6.2	9.9
Energy Efficiency (CFM/Watt)	10.5	6.9	5.2	15.3	8.2	5.6	15.7	8.1	5.1
Speed (RPM)	958	1203	1375	811	1127	1341	730	1066	1281
Current (amps)	0.11	0.16	0.19	0.06	0.10	0.14	0.04	0.07	0.10
MAX. Current(amps)	0.19								
Power Rating (V/Hz)	120/60								
ENERGY STAR rated	Yes								

\*Industry research indicates static pressure in typical installations ranges from 0.20" to 0.375"

**Specification Submittal Data / Panasonic Ventilation Fan**

**Description**

Customizable ceiling mount ventilating fan, low sone and rated for continuous operation. ENERGY STAR® rated and certified by the Home Ventilating Institute (HVI). Evaluated by the Underwriters Laboratories and conforms to both UL and cUL standards.

**Motor/Blower:**

- Enclosed brushless ECM smart motor technology rated for continuous operation
- Adjustable ventilation rates at 50 – 80 – 110 CFM
- Power rating of 120 volts and 60 Hz
- UL and cUL listed for tub/shower enclosure when GFCI protected.
- Motor equipped with thermal cutoff fuse
- Removable permanently lubricated plug-in motor

**Housing:**

- Environmentally friendly 26 gauge housing using Zinc-Aluminum-Magnesium (ZAM) coating
- Integrated dual 4" or 6" diameter duct adapter
- Built-in damper reduces back draft and helps with blower door testing
- Built-in metal flange provides blocking for penetrations through drywall as an Air Barrier, and assists with the decrease in leakage in the Building Envelope during blower door testing
- Suitable for installation in ceilings insulated up to R60
- Articulating and expandable installation bracket up to 24"

**Grille:**

- Attractive design using Poly Pro material
- Attaches directly to housing with torsion springs
- Includes a motion sensor cap for use as a cover when the motion sensor Plug 'n Play™ module has not been selected

**Warranty:**

- ECM Motor: 6 Years from original purchase date
- ALL Parts: 3 Years from original purchase date

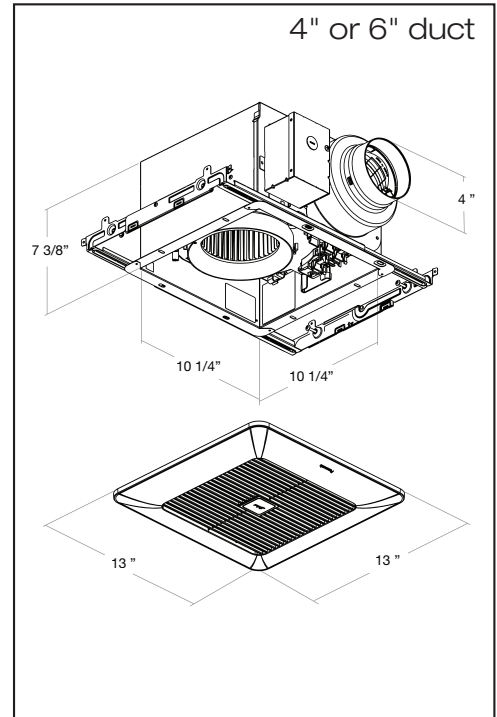
**Architectural Specifications:**

Customizable ceiling mount ventilation fan, ENERGY STAR® rated with multi-speed control (0, 30-100 CFM, in 10 CFM increments) and a built-in high/low adjustable time delay activated by a wall switch, SmartAction Motion Sensor Plug 'N Play™ module or Condensation Sensor Plug 'N Play™ module. Features a built-in speed selector. Select from 50/80/110 CFM with <0.3 sone as certified by the Home Ventilating Institute (HVI) at 0.1 w.g. with 51/80/110 CFM and no more than 0.4/0.5/0.8 sones at 0.25 w.g. and 51/79/108 CFM at 0.375 w.g. Power Consumption shall be no greater than 3.1/5.1/9.9 watts at 0.1 w.g. and 6.2/9.6/15.4 watts at 0.25 w.g. and 9.6/13.4/20.0 watts at 0.375 w.g. ENERGY STAR® rated with efficiency of no less than 16.2/15.7/11.1 CFM/watt at 0.1 w.g. and 8.3/8.3/7.1 CFM/watt at 0.25 w.g. and 5.3/5.9/5.4 CFM/watt at 0.375 w.g. The motor shall be enclosed with brushless ECM motor engineered to run continuously. ECM motor speed shall automatically increase when the fan senses static pressure to maintain selected CFM. Power rating shall be 120v/60Hz. Duct diameter shall be no less than 4", inclusive of an integrated dual 4" or 6" duct adapter. **Plug 'N Play™ modules** provide up to two additional features. Select from Condensation Sensor, and SmartAction Motion Sensor. Fan shall be RoHS Compliant and UL and cUL listed for tub/shower enclosure when GFCI protected. Also suitable for installation in ceilings insulated up to R60. Fan can be used to comply with ASHRAE 62.2, LEED, ENERGY STAR®, IAP, EarthCraft, California Title-24 and WA Ventilation Code.

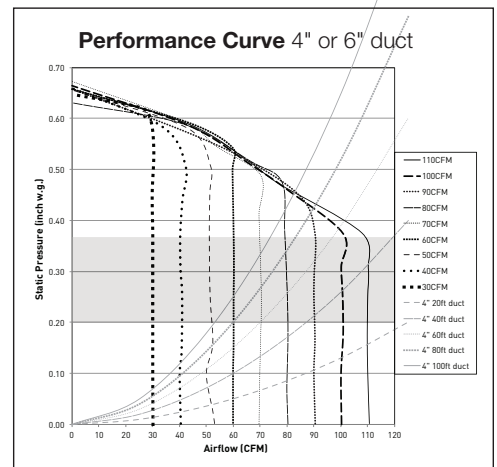


**ECM Motor Technology:**

When fan senses static pressure, its speed is automatically increased to ensure that the desired CFM is not compromised, which allows the fan to perform as rated.



FV-0511VKS2



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

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## Plug 'N Play™ Modules

Plug 'N Play™ modules provide up to **two** additional features (multi-speed is already built-in to FV-0511VKS2). Select from Motion Sensor and Condensation Sensor.



### FV-VS15VK1: Multi-Speed with Time Delay - N/A for this Fan, already built-in.

Allows you to select the proper CFM settings to satisfy ASHRAE 62.2 continuous ventilation requirements. The fan runs continuously at a pre-set lower level (0, 30-100 CFM, in 10 CFM increments), then elevates to a maximum level of operation (50-80-110 CFM) when the wall switch is turned on, or when the motion sensor or Condensation Sensor module is activated. A High/Low delay timer returns the fan to the pre-set CFM level after a period of time set by the user.



### FV-MSVK1: Motion Sensor

Automatically activates when someone enters the room. Once the settings have been applied, the fan becomes truly automatic. This module also activates a 20 minute delay off timer for the fan.



### FV-CSVK1: Condensation Sensor

Helps control bathroom condensation to prevent mold and mildew. Sensor technology detects relative humidity and temperature to anticipate dew point, automatically turning the fan on to control humidity. Built-in Relative Humidity (RH) sensitivity adjustment enables fine tuning for moist conditions and for satisfying CalGreen requirements. When the condensation sensor is used in conjunction with multi-speed functionality, the fan will kick up to high speed when the condensation sensor detects moisture in the room. This module also activates a 20 minute delay off timer for the fan.

Fan Specifications	WhisperGreen Select™: FV-0511VKS2													
Static Pressure in inches w.g.	0.1	0.25	0.375	0.1	0.25	0.375	0.1	0.25	0.375	0.1	0.25	0.375	0.1	0.25
Air Volume (CFM)	110	110	108	100	101	101	90	90	90	80	80	79	70	71
Noise (sones)	<0.3	0.8	-	<0.3	0.7	-	<0.3	0.6	-	<0.3	0.5	-	<0.3	0.5
Power Consumption (watts)	9.9	15.4	20.0	7.9	13.1	17.8	6.5	11.2	16.0	5.1	9.6	13.4	4.3	8.5
Energy Efficiency (CFM/Watt)	11.1	7.1	5.4	12.7	7.7	5.7	13.9	8.0	5.6	15.7	8.3	5.9	16.7	8.5
Speed (RPM)	920	1182	1356	889	1164	1356	839	1135	1351	795	1113	1315	760	1112
Current (amps)	0.10	0.16	0.20	0.09	0.14	0.18	0.07	0.12	0.16	0.06	0.10	0.14	0.05	0.09
MAX. Current (amps)	0.20													
Power Rating (V/Hz)	120/60													
ENERGY STAR rated	Yes													

\*Industry research indicates static pressure in typical installations ranges from 0.20" to 0.375"

### Specification Submittal Data / Panasonic Ventilation Fan/Light

#### Description

Customizable ceiling mount ventilating fan, low sone and rated for continuous operation. ENERGY STAR® rated and certified by the Home Ventilating Institute (HVI). Evaluated by the Underwriters Laboratories and conforms to both UL and cUL standards.

#### Motor/Blower:

- Enclosed brushless ECM smart motor technology rated for continuous operation
- Adjustable ventilation rates at 50 – 80 – 110 CFM
- Power rating of 120 volts and 60 Hz
- UL and cUL listed for tub/shower enclosure when GFCI protected
- Motor equipped with thermal cutoff fuse
- Removable permanently lubricated plug-in motor

#### Housing:

- Environmentally friendly 26 gauge housing using Zinc-Aluminum-Magnesium (ZAM) coating
- Integrated dual 4" or 6" diameter duct adapter
- Built-in damper reduces back draft and helps with blower door testing
- Built-in metal flange provides blocking for penetrations through drywall as an Air Barrier, and assists with the decrease in leakage in the Building Envelope during blower door testing
- Suitable for installation in ceilings insulated up to R60
- Articulating and expandable installation bracket up to 24"

#### Grille:

- Attractive design using Poly Pro material
- Attaches directly to housing with torsion springs
- Includes a motion sensor cap for use as a cover when the motion sensor Plug 'n Play™ module has not been selected

#### Warranty:

- ECM Motor: 6 Years from original purchase date
- LED Panel: 5 Years from original purchase date
- ALL Parts: 3 Years from original purchase date



Includes 10 Watt Dimmable LED chip panel/3000 Kelvin Warm White/90CRI/700 lumens/70 LPW/ENERGY STAR 2.0 certified/JA-8 compliant for CA Title 24/50,000 hours rated average life /<1W one LED night light included.

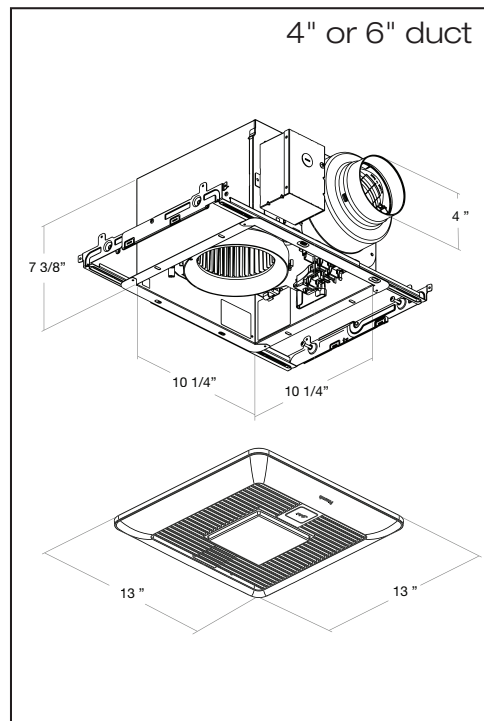
#### Architectural Specifications:

Customizable ceiling mount ventilation fan, ENERGY STAR® rated with multi-speed control (0, 30-100 CFM, in 10 CFM increments) and a built-in high/low adjustable time delay activated by a wall switch, SmartAction Motion Sensor Plug 'N Play™ module or Condensation Sensor Plug 'N Play™ module. Features a built-in speed selector. Select from 50/80/110 CFM with no more than <0.3/<0.3/0.4 sone as certified by the Home Ventilating Institute (HVI) at 0.1 w.g. with 50/80/110 CFM and no more than 0.4/0.5/0.8 sones at 0.25 w.g. and 50/78/103 CFM at 0.375 w.g. Power Consumption shall be no greater than 3.2/5.3/10.5 watts at 0.1 w.g. and 6.2/9.9/15.8 watts at 0.25 w.g. and 9.9/13.8/19.4 watts at 0.375 w.g. ENERGY STAR® rated with efficiency of no less than 15.7/15.3/10.5 CFM/watt at 0.1 w.g. and 8.1/8.2/6.9 CFM/watt at 0.25 w.g. and 5.1/5.6/5.2 CFM/watt at 0.375 w.g. The motor shall be enclosed with brushless ECM motor engineered to run continuously. ECM motor speed shall automatically increase when the fan senses static pressure to maintain selected CFM. Power rating shall be 120v/60Hz. Duct diameter shall be no less than 4", inclusive of an integrated dual 4" or 6" duct adapter. **Plug 'N Play™ modules** provide up to two additional features. Select from Condensation Sensor, and SmartAction Motion Sensor. LED dimmable type lamp with (1) 10W ENERGY STAR® 2.0 certified, JA-8 compliant for CA Title 24, LED chip panel that maintains 50,000 hours rated average life and incorporates a <1W LED night light. Fan shall be RoHS Compliant and UL and cUL listed for tub/shower enclosure when GFCI protected. Also suitable for installation in ceilings insulated up to R60. Fan can be used to comply with ASHRAE 62.2, LEED, ENERGY STAR®, IAP, EarthCraft, California Title-24 and WA Ventilation Code.

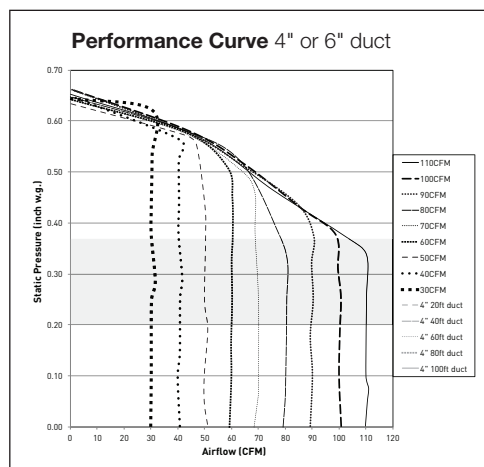


#### ECM Motor Technology:

When fan senses static pressure, its speed is automatically increased to ensure that the desired CFM is not compromised, which allows the fan to perform as rated.



FV-0511VKSL2



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

For complete Installation Instructions visit [us.panasonic.com/ventfans](http://us.panasonic.com/ventfans)

## Plug 'N Play™ Modules

Plug 'N Play™ modules provide up to **two** features (multi-speed is already built-in to FV-0511VKSL2). Select from Motion Sensor and Condensation Sensor.



### FV-VS15VK1: Multi-Speed with Time Delay - N/A for this Fan, already built-in.

Allows you to select the proper CFM settings to satisfy ASHRAE 62.2 continuous ventilation requirements. The fan runs continuously at a pre-set lower level (0, 30-100 CFM, in 10 CFM increments), then elevates to a maximum level of operation (50-80-110 CFM) when the wall switch is turned on, or when the motion sensor or Condensation Sensor module is activated. A High/Low delay timer returns the fan to the pre-set CFM level after a period of time set by the user.



### FV-MSVK1: Motion Sensor

Automatically activates when someone enters the room. Once the settings have been applied, the fan becomes truly automatic. This module also activates a 20 minute delay off timer for the fan.



### FV-CSVK1: Condensation Sensor

Helps control bathroom condensation to prevent mold and mildew. Sensor technology detects relative humidity and temperature to anticipate dew point, automatically turning the fan on to control humidity. Built-in Relative Humidity (RH) sensitivity adjustment enables fine tuning for moist conditions and for satisfying CalGreen requirements. When the condensation sensor is used in conjunction with multi-speed functionality, the fan will kick up to high speed when the condensation sensor detects moisture in the room. This module also activates a 20 minute delay off timer for the fan.

Fan Specifications	WhisperGreen Select™: FV-0511VKSL2																										
Static Pressure in inches w.g.	0.1	0.25	0.375	0.1	0.25	0.375	0.1	0.25	0.375	0.1	0.25	0.375	0.1	0.25	0.375	0.1	0.25	0.375	0.1	0.25	0.375	0.1	0.25	0.375	0.1	0.25	0.375
Air Volume (CFM)	110	110	103	100	101	99	90	90	90	80	80	78	70	70	69	60	60	60	50	50	50	40	41	40	30	30	30
Noise (sones)	0.4	0.8	-	<0.3	0.8	-	<0.3	0.6	-	<0.3	0.5	-	<0.3	0.5	-	<0.3	0.4	-	<0.3	0.4	-	<0.3	0.4	-	<0.3	0.4	-
Power Consumption (watts)	10.5	15.8	19.4	8.2	13.6	18.0	6.7	11.6	15.9	5.3	9.9	13.8	4.6	8.7	12.3	3.7	7.2	10.4	3.2	6.2	9.9	2.7	5.5	8.1	2.5	4.8	7.0
Energy Efficiency (CFM/Watt)	10.5	6.9	5.2	12.2	7.4	5.5	13.5	7.8	5.7	15.3	8.2	5.6	15.8	8.4	5.8	16.2	8.4	5.8	15.7	8.1	5.1	14.8	7.4	4.9	12.0	6.3	4.3
Speed (RPM)	958	1203	1375	908	1194	1372	868	1160	1357	811	1127	1341	785	1118	1321	750	1082	1282	730	1066	1281	710	1062	1275	720	1067	1272
Current (amps)	0.11	0.16	0.19	0.09	0.14	0.18	0.08	0.12	0.16	0.06	0.10	0.14	0.06	0.10	0.13	0.05	0.08	0.11	0.04	0.07	0.10	0.04	0.07	0.09	0.04	0.06	0.08
MAX. Current (amps)	0.19																										
Power Rating (V/Hz)	120/60																										
ENERGY STAR rated	Yes																										

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### Specification Submittal Data / Panasonic Ventilation Fan

#### Description

Customizable ceiling mount ventilating fan, low sone and rated for continuous operation. ENERGY STAR® rated and certified by the Home Ventilating Institute (HVI). Evaluated by the Underwriters Laboratories and conforms to both UL and cUL standards.

#### Motor/Blower:

- Enclosed brushless ECM smart motor technology rated for continuous operation
- Adjustable ventilation rates at 110 – 130 – 150 CFM
- Power rating of 120 volts and 60 Hz
- UL and cUL listed for tub/shower enclosure when GFCI protected
- Motor equipped with thermal cutoff fuse
- Removable permanently lubricated plug-in motor

#### Housing:

- Environmentally friendly 26 gauge housing using Zinc-Aluminum-Magnesium (ZAM) coating
- Integrated 6" diameter duct adapter
- Built-in damper reduces back draft and helps with blower door testing
- Built-in metal flange provides blocking for penetrations through drywall as an Air Barrier, and assists with the decrease in leakage in the Building Envelope during blower door testing
- Suitable for installation in ceilings insulated up to R60
- Articulating and expandable installation bracket up to 24"

#### Grille:

- Attractive design using Poly Pro material
- Attaches directly to housing with torsion springs
- Includes a motion sensor cap for use as a cover when the motion sensor Plug 'n Play™ module has not been selected

#### Warranty:

- ECM Motor: 6 Years from original purchase date
- ALL Parts: 3 Years from original purchase date

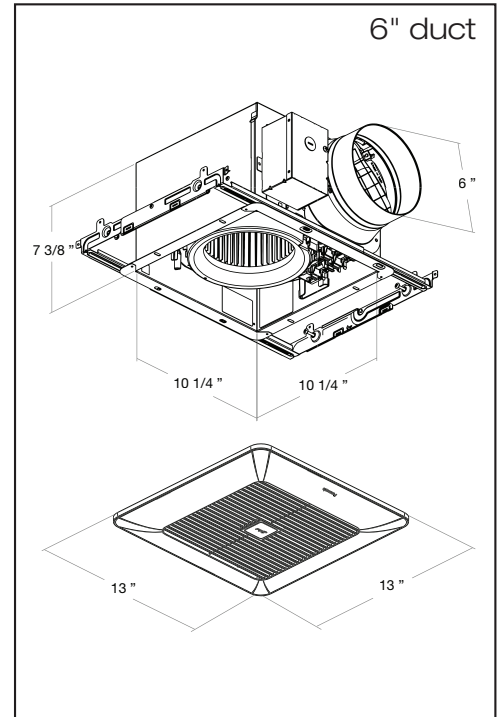
#### Architectural Specifications:

Customizable ceiling mount ventilation fan, ENERGY STAR® rated with built-in speed selector. Select from 110/130/150 CFM with <0.3 sone as certified by the Home Ventilating Institute (HVI) at 0.1 w.g. with 112/130/151 CFM and no more than 0.3/0.4/0.7 sones at 0.25 w.g. and 105/124/132 CFM at 0.375 w.g. Power Consumption shall be no greater than 6.9/9.2/12.9 watts at 0.1 w.g. and 12.8/16.5/22.0 watts at 0.25 w.g. and 17.9/22.1/24.4 watts at 0.375 w.g. ENERGY STAR® rated with efficiency of no less than 16.0/14.2/11.7 CFM/watt at 0.1 w.g. and 8.7/7.9/6.8 CFM/watt at 0.25 w.g. and 5.8/5.6/5.4 CFM/watt at 0.375 w.g. The motor shall be enclosed with brushless ECM motor engineered to run continuously. ECM motor speed shall automatically increase when the fan senses static pressure to maintain selected CFM. Power rating shall be 120v/60Hz. Duct diameter shall be no less than 6". **Plug 'N Play™** modules provide up to three additional features. Select from Multi-Speed with Time Delay, Condensation Sensor, and SmartAction Motion Sensor. Fan shall be RoHS Compliant and UL and cUL listed for tub/shower enclosure when GFCI protected. Also suitable for installation in ceilings insulated up to R60.. Fan can be used to comply with ASHRAE 62.2, LEED, ENERGY STAR® IAP, EarthCraft, California Title-24 and WA Ventilation Code.

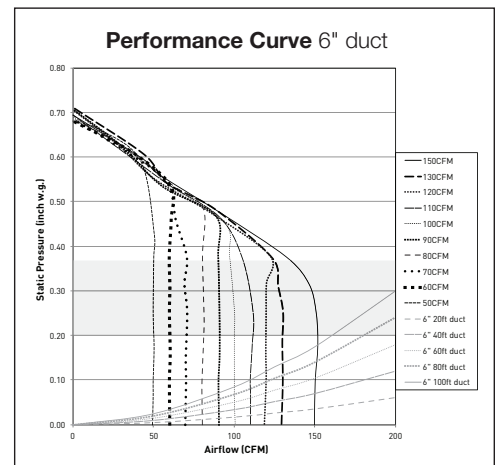


#### ECM Motor Technology:

When fan senses static pressure, its speed is automatically increased to ensure that the desired CFM is not compromised, which allows the fan to perform as rated.



FV-1115VK2



\*Industry research indicates static pressure in typical installations ranges from 0.20" to 0.375"

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

For complete Installation Instructions visit [us.panasonic.com/ventfans](http://us.panasonic.com/ventfans)



## Plug 'N Play™ Modules

Plug 'N Play™ modules provide up to three additional features. Select from Multi-Speed with Time Delay, Motion Sensor, and Condensation Sensor.



### FV-VS15VK1: Multi-Speed with Time Delay

Allows you to select the proper CFM settings to satisfy ASHRAE 62.2 continuous ventilation requirements. The fan runs continuously at a pre-set lower level (0, 50-120 CFM, in 10 CFM increments), then elevates to a maximum level of operation (110-130-150 CFM) when the wall switch is turned on, or when the motion sensor or Condensation Sensor module is activated. A High/Low delay timer returns the fan to the pre-set CFM level after a period of time set by the user.



### FV-MSVK1: Motion Sensor

Automatically activates when someone enters the room. Once the settings have been applied, the fan becomes truly automatic. This module also activates a 20 minute delay off timer for the fan.



### FV-CSVK1: Condensation Sensor

Helps control bathroom condensation to prevent mold and mildew. Sensor technology detects relative humidity and temperature to anticipate dew point, automatically turning the fan on to control humidity. Built-in Relative Humidity (RH) sensitivity adjustment enables fine tuning for moist conditions and for satisfying CalGreen requirements. When the condensation sensor is used in conjunction with multi-speed functionality, the fan will kick up to high speed when the condensation sensor detects moisture in the room. This module also activates a 20 minute delay off timer for the fan.

Fan Specifications	WhisperGreen Select™: FV-1115VK2								
Static Pressure in inches w.g.	0.1	0.25	0.375	0.1	0.25	0.375	0.1	0.25	0.375
Air Volume (CFM)	150	151	132	130	130	124	110	112	105
Noise (sones)	<0.3	0.7	-	<0.3	0.4	-	<0.3	0.3	-
Power Consumption (watts)	12.9	22.0	24.4	9.2	16.5	22.1	6.9	12.8	17.9
Energy Efficiency (CFM/Watt)	11.7	6.8	5.4	14.2	7.9	5.6	16.0	8.7	5.8
Speed (RPM)	684	916	1084	645	900	1080	625	894	1083
Current (amps)	0.14	0.22	0.24	0.10	0.17	0.22	0.08	0.13	0.18
MAX. Current (amps)	0.24								
Power Rating (V/Hz)	120/60								
ENERGY STAR rated	Yes								

\*Industry research indicates static pressure in typical installations ranges from 0.20" to 0.375"

Fan Specifications	FV-1115VK2 + FV-VS15VK1 (Multi Speed Plug 'N Play™ module)																													
Static Pressure in inches w.g.	0.1	0.25	0.375	0.1	0.25	0.375	0.1	0.25	0.375	0.1	0.25	0.375	0.1	0.25	0.375	0.1	0.25	0.375	0.1	0.25	0.375	0.1	0.25	0.375						
Air Volume (CFM)	150	151	132	130	130	124	120	120	122	110	112	105	100	100	97	90	91	90	80	81	80	70	71	70	60	60	60	50	50	50
Noise (sones)	<0.3	0.7	-	<0.3	0.4	-	<0.3	0.3	-	<0.3	0.3	-	<0.3	0.2	-	<0.3	0.3	-	<0.3	0.3	-	<0.3	0.4	-	<0.3	0.4	-	<0.3	0.5	-
Power Consumption (watts)	12.9	22.0	24.4	9.2	16.5	22.1	7.7	14.0	20.5	6.9	12.8	17.9	5.5	11.0	16.0	4.7	9.7	15.0	4.2	9.0	13.9	3.7	8.1	12.2	3.3	7.2	11.2	3.0	6.4	10.2
Energy Efficiency (CFM/Watt)	11.7	6.8	5.4	14.2	7.9	5.6	15.7	8.6	6.0	16.0	8.7	5.8	18.2	9.1	6.0	19.1	9.3	6.0	19.0	9.0	5.7	19.2	8.8	5.8	18.2	8.3	5.3	17.3	8.1	5.1
Speed (RPM)	684	916	1084	645	900	1080	633	895	1086	625	894	1083	615	898	1093	602	900	1099	608	912	1104	591	914	1109	608	913	1117	609	910	1116
Current (amps)	0.14	0.22	0.24	0.10	0.17	0.22	0.09	0.15	0.21	0.08	0.13	0.18	0.07	0.12	0.16	0.06	0.10	0.15	0.05	0.10	0.14	0.05	0.09	0.13	0.04	0.08	0.12	0.04	0.07	0.11
MAX. Current (amps)	0.33																													
Power Rating (V/Hz)	120/60																													
ENERGY STAR rated	Yes																													

\*Industry research indicates static pressure in typical installations ranges from 0.20" to 0.375"

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

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### Specification Submittal Data / Panasonic Ventilation Fan/Light

#### Description

Customizable ceiling mount ventilating fan, low sone and rated for continuous operation. ENERGY STAR® rated and certified by the Home Ventilating Institute (HVI). Evaluated by the Underwriters Laboratories and conforms to both UL and cUL standards.

#### Motor/Blower:

- Enclosed brushless ECM smart motor technology rated for continuous operation
- Adjustable ventilation rates at 110 – 130 – 150 CFM
- Power rating of 120 volts and 60 Hz
- UL and cUL listed for tub/shower enclosure when GFCI protected
- Motor equipped with thermal cutoff fuse
- Removable permanently lubricated plug-in motor

#### Housing:

- Environmentally friendly 26 gauge housing using Zinc-Aluminum-Magnesium (ZAM) coating
- Integrated 6" diameter duct adapter
- Built-in damper reduces back draft and helps with blower door testing
- Built-in metal flange provides blocking for penetrations through drywall as an Air Barrier, and assists with the decrease in leakage in the Building Envelope during blower door testing
- Suitable for installation in ceilings insulated up to R60
- Articulating and expandable installation bracket up to 24"

#### Grille:

- Attractive design using Poly Pro material
- Attaches directly to housing with torsion springs
- Includes a motion sensor cap for use as a cover when the motion sensor Plug 'n Play™ module has not been selected

#### Warranty:

- ECM Motor: 6 Years from original purchase date
- LED Panel: 5 Years from original purchase date
- ALL Parts: 3 Years from original purchase date



Includes 10 Watt Dimmable LED chip panel/3000 Kelvin Warm White/90CRI/700 lumens/70 LPW/ENERGY STAR 2.0 certified/JA-8 compliant for CA Title 24/50,000 hours rated average life /<1W one LED night light included.

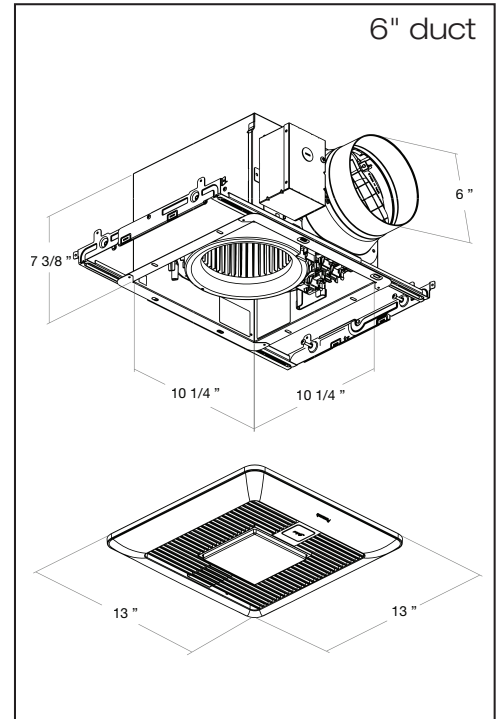
#### Architectural Specifications:

Customizable ceiling mount ventilation fan with light, ENERGY STAR® rated with built-in speed selector. Select from 110/130/150 CFM with <0.3/<0.3/0.4 sone as certified by the Home Ventilating Institute (HVI) at 0.1 w.g. with 110/130/150 CFM and no more than 0.3/0.5/0.8 sones at 0.25 w.g. and 107/131/127 CFM at 0.375 w.g. Power Consumption shall be no greater than 7.5/10.4/14.9 watts at 0.1 w.g. and 13.4/17.9/22.5 watts at 0.25 w.g. and 18.8/25.4/23.8 watts at 0.375 w.g. ENERGY STAR® rated with efficiency of no less than 14.6/12.5/10.1 CFM/watt at 0.1 w.g. and 8.2/7.2/6.7 CFM/watt at 0.25 w.g. and 5.7/5.1/5.3 CFM/watt at 0.375 w.g. The motor shall be enclosed with brushless ECM motor engineered to run continuously. ECM motor speed shall automatically increase when the fan senses static pressure to maintain selected CFM. Power rating shall be 120v/60Hz. Duct diameter shall be no less than 6". **Plug 'N Play™ modules** provide up to three additional features. Select from Multi-Speed with Time Delay, Condensation Sensor, and SmartAction Motion Sensor. LED dimmable type lamp with (1) 10W ENERGY STAR®2.0 certified, JA-8 compliant for CA Title 24, LED chip panel that maintains 50,000 hours rated average life and incorporates a <1W LED night light. Fan shall be RoHS Compliant and UL and cUL listed for tub/shower enclosure when GFCI protected. Also suitable for installation in ceilings insulated up to R60. Fan can be used to comply with ASHRAE 62.2, LEED, ENERGY STAR® IAP, EarthCraft, California Title-24 and WA Ventilation Code.

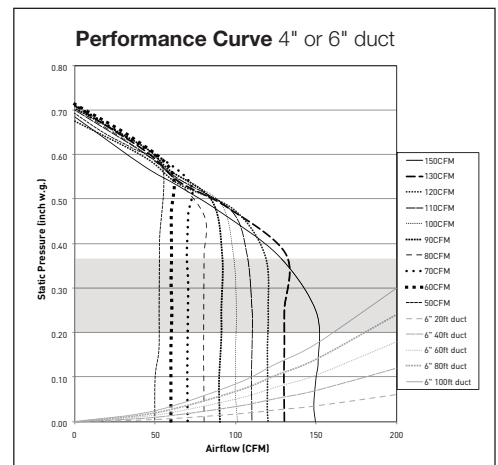


#### ECM Motor Technology:

When fan senses static pressure, its speed is automatically increased to ensure that the desired CFM is not compromised, which allows the fan to perform as rated.



FV-1115VKL2



\*Industry research indicates static pressure in typical installations ranges from 0.20" to 0.375"

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

For complete Installation Instructions visit [us.panasonic.com/ventfans](http://us.panasonic.com/ventfans)

# Plug 'N Play™ Modules

Plug 'N Play™ modules provide up to **three** additional features. Select from Multi-Speed with Time Delay, Motion Sensor and Condensation Sensor.



## FV-VS15VK1: Multi-Speed with Time Delay

Allows you to select the proper CFM settings to satisfy ASHRAE 62.2 continuous ventilation requirements. The fan runs continuously at a pre-set lower level (0, 50-120 CFM, in 10 CFM increments), then elevates to a maximum level of operation (110-130-150) when the wall switch is turned on, or when the motion sensor or Condensation Sensor module is activated. A High/Low delay timer returns the fan to the pre-set CFM level after a period of time set by the user.



## FV-MSVK1: Motion Sensor

Automatically activates when someone enters the room. Once the settings have been applied, the fan becomes truly automatic. This module also activates a 20 minute delay off timer for the fan.



## FV-CSVK1: Condensation Sensor

Helps control bathroom condensation to prevent mold and mildew. Sensor technology detects relative humidity and temperature to anticipate dew point, automatically turning the fan on to control humidity. Built-in Relative Humidity (RH) sensitivity adjustment enables fine tuning for moist conditions and for satisfying CalGreen requirements. When the condensation sensor is used in conjunction with multi-speed functionality, the fan will kick up to high speed when the condensation sensor detects moisture in the room. This module also activates a 20 minute delay off timer for the fan.

Fan Specifications	WhisperGreen™ Select: FV-1115VKL2								
Static Pressure in inches w.g.	0.1	0.25	0.375	0.1	0.25	0.375	0.1	0.25	0.375
Air Volume (CFM)	150	150	127	130	130	131	110	110	107
Noise (sones)	0.4	0.8	-	<0.3	0.5	-	<0.3	0.3	-
Power Consumption (watts)	14.9	22.5	23.8	10.4	17.9	25.4	7.5	13.4	18.8
Energy Efficiency (CFM/Watt)	10.1	6.7	5.3	12.5	7.2	5.1	14.6	8.2	5.7
Speed (RPM)	722	951	1105	682	932	1113	648	916	1108
Current (amps)	0.15	0.22	0.23	0.11	0.18	0.25	0.08	0.14	0.19
MAX. Current (amps)	0.23								
Power Rating (V/Hz)	120/60								
ENERGY STAR rated	Yes								

\*Industry research indicates static pressure in typical installations ranges from 0.20" to 0.375"

Fan Specifications	WhisperGreen™ Select: FV-1115VKL2 + FV-VS15VK1 (Multi Speed Plug 'N Play™ module)																													
Static Pressure in inches w.g.	0.1	0.25	0.375	0.1	0.25	0.375	0.1	0.25	0.375	0.1	0.25	0.375	0.1	0.25	0.375	0.1	0.25	0.375	0.1	0.25	0.375	0.1	0.25	0.375	0.1	0.25	0.375			
Air Volume (CFM)	150	150	127	130	130	131	120	120	118	110	110	107	100	100	99	90	91	92	80	80	80	70	70	70	60	61	60	50	52	53
Noise (sones)	0.4	0.8	-	<0.3	0.5	-	<0.3	0.4	-	<0.3	0.3	-	<0.3	0.3	-	<0.3	0.3	-	<0.3	0.3	-	<0.3	0.4	-	<0.3	0.4	-	<0.3	0.5	-
Power Consumption (watts)	14.9	22.5	23.8	10.4	17.9	25.4	8.4	15.3	21.9	7.5	13.4	18.8	6.0	11.4	16.5	5.0	10.0	15.3	4.6	9.0	13.7	3.8	8.2	12.2	3.3	7.1	11.7	3.1	6.6	10.3
Energy Efficiency (CFM/Watt)	10.1	6.7	5.3	12.5	7.2	5.1	14.2	7.8	5.4	14.6	8.2	5.7	16.7	8.8	6.0	18.2	9.2	6.0	17.4	8.9	5.8	18.5	8.6	5.7	18.2	8.5	5.1	16.7	7.9	5.1
Speed (RPM)	722	951	1105	682	932	1113	670	922	1106	648	916	1108	636	917	1105	627	914	1102	625	910	1107	613	920	1113	610	912	1126	621	922	1109
Current (amps)	0.15	0.22	0.23	0.11	0.18	0.25	0.09	0.16	0.21	0.08	0.14	0.19	0.07	0.12	0.17	0.06	0.11	0.16	0.06	0.10	0.14	0.05	0.09	0.13	0.04	0.08	0.13	0.04	0.08	0.11
MAX. Current (amps)	0.23																													
Power Rating (V/Hz)	120/60																													
ENERGY STAR rated	Yes																													

\*Industry research indicates static pressure in typical installations ranges from 0.20" to 0.375"

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

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## Plug 'N Play™ Modules

Plug 'N Play™ modules provide up to three additional features. Select from Multi-Speed with Time Delay, Motion Sensor, and Condensation Sensor.



### FV-VS15VK1: Multi-Speed with Time Delay

Allows you to select the proper CFM settings to satisfy ASHRAE 62.2 continuous ventilation requirements. The fan runs continuously at a pre-set lower level (0, 30-100 CFM, in 10 CFM increments), then elevates to a maximum level of operation (50-80-110 CFM) when the wall switch is turned on, or when the motion sensor or Condensation Sensor module is activated. A High/Low delay timer returns the fan to the pre-set CFM level after a period of time set by the user.



### FV-MSVK1: Motion Sensor

Automatically activates when someone enters the room. Once the settings have been applied, the fan becomes truly automatic. This module also activates a 20 minute delay off timer for the fan.



### FV-CSVK1: Condensation Sensor

Helps control bathroom condensation to prevent mold and mildew. Sensor technology detects relative humidity and temperature to anticipate dew point, automatically turning the fan on to control humidity. Built-in Relative Humidity (RH) sensitivity adjustment enables fine tuning for moist conditions and for satisfying CalGreen requirements. When the condensation sensor is used in conjunction with multi-speed functionality, the fan will kick up to high speed when the condensation sensor detects moisture in the room. This module also activates a 20 minute delay off timer for the fan.

Fan Specifications	WhisperGreen Select™ FV-0511VK2								
Static Pressure in inches w.g.	0.1	0.25	0.375	0.1	0.25	0.375	0.1	0.25	0.375
Air Volume (CFM)	110	110	108	80	80	79	50	51	51
Noise (sones)	<0.3	0.8	-	<0.3	0.5	-	<0.3	0.4	-
Power Consumption (watts)	9.9	15.4	20.0	5.1	9.6	13.4	3.1	6.2	9.6
Energy Efficiency (CFM/Watt)	11.1	7.1	5.4	15.7	8.3	5.9	16.2	8.3	5.3
Speed (RPM)	920	1182	1356	795	1113	1315	722	1054	1266
Current (amps)	0.10	0.16	0.20	0.06	0.10	0.14	0.04	0.07	0.10
MAX. Current(amps)	0.20								
Power Rating (V/Hz)	120/60								
ENERGY STAR rated	Yes								

\*Industry research indicates static pressure in typical installations ranges from 0.20" to 0.375"

Fan Specifications	WhisperGreen Select™: FV-0511VK2 + FV-VS15VK1 (Multi Speed Plug 'N Play™ Module)																										
Static Pressure in inches w.g.	0.1	0.25	0.375	0.1	0.25	0.375	0.1	0.25	0.375	0.1	0.25	0.375	0.1	0.25	0.375	0.1	0.25	0.375	0.1	0.25	0.375	0.1	0.25	0.375	0.1	0.25	0.375
Air Volume (CFM)	110	110	108	100	101	101	90	90	90	80	80	79	70	71	70	60	60	60	50	51	51	40	41	40	30	30	30
Noise (sones)	<0.3	0.8	-	<0.3	0.7	-	<0.3	0.6	-	<0.3	0.5	-	<0.3	0.5	-	<0.3	0.4	-	<0.3	0.4	-	<0.3	0.3	-	<0.3	0.3	-
Power Consumption (watts)	9.9	15.4	20.0	7.9	13.1	17.8	6.5	11.2	16.0	5.1	9.6	13.4	4.3	8.5	12.1	3.7	6.9	10.5	3.1	6.2	9.6	2.7	5.5	7.8	2.4	4.6	6.8
Energy Efficiency (CFM/Watt)	11.1	7.1	5.4	12.7	7.7	5.7	13.9	8.0	5.6	15.7	8.3	5.9	16.7	8.5	5.9	16.3	8.7	5.7	16.2	8.3	5.3	14.8	7.4	5.1	12.6	6.6	4.4
Speed (RPM)	920	1182	1356	889	1164	1356	839	1135	1351	795	1113	1315	760	1112	1309	751	1061	1287	722	1054	1266	707	1057	1251	711	1039	1259
Current (amps)	0.10	0.16	0.20	0.09	0.14	0.18	0.07	0.12	0.16	0.06	0.10	0.14	0.05	0.09	0.13	0.05	0.08	0.11	0.04	0.07	0.10	0.04	0.07	0.09	0.04	0.06	0.08
MAX. Current(amps)	0.20																										
Power Rating (V/Hz)	120/60																										
ENERGY STAR rated	Yes																										

\*Industry research indicates static pressure in typical installations ranges from 0.20" to 0.375"

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