



Residential Ventilation Products

Soler & Palau North American Group

S&P has direct presence in over 60 countries, including:

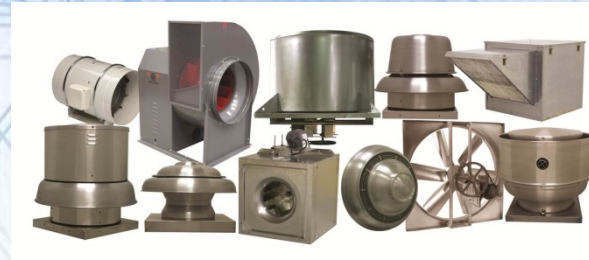
- Australia
- Austria
- Belgium
- Brazil
- Canada
- Chile
- China
- Columbia
- France
- Germany
- Guatemala
- Holland
- Hong Kong
- India
- Indonesia
- Italy
- Latvia
- Malaysia
- Mexico
- Norway
- Philippines
- Portugal
- Romania
- Spain
- Taiwan
- Thailand
- United Kingdom
- USA

North American Products & Brands



We have the right product for all customer's market needs.

- Commercial Applications
- Residential Applications
- Industrial Applications



North American Brands



Ventilation for Residential/Light Commercial Markets



Balanced Ventilation Systems

Bathroom Ventilation



Clothes Dryer Exhaust



Range Hood Exhaust



Radon Mitigation



Garage Ventilation



Features

- Inline Duct Centrifugal Fans
- S&P engineered and manufactured motorized impeller.
- Exceptional airflow performances against high static pressure
- S&P is the ONLY manufacturer to make every component in our fans.
- Our manufacturing advantage allows us to offer The Lowest Price in the industry!



Features

- Same powerful motor found in PV series fans
- Low profile aesthetic design
- Fully speed controllable
- Built-in backdraft damper
- Extended opening exhaust grille for easy passing of lint and other clogging materials



Fantech RVF



CFM EXT





Features

When ducting from a dryer to the outlet is long and/or complicated the dryer cannot overcome the static pressure thus reducing efficiency and causing increased or poor drying time.

The IRC Code Specifies:

1. The dryer exhaust **MUST** terminate to the outside
2. The MAX. length of the [dryer] exhaust duct is 35 feet from the connection of the outlet terminal

Problem Created by Code:

1. What if the dryer is **NOT** located close to the outlet terminal?
2. What if the duct is longer than 35 feet so elbows are necessary creating complicated duct work?

Clothes Dryer Boosting



Featuring PV-100X Fans with Class F insulated motor



- **DBF-100XC**
- **PV-100X with Current Sensor**
- **S&P's Preferred Choice**



- **PV100XPS**
- **Integrated Pressure Switch**
- **The Most Popular Option**

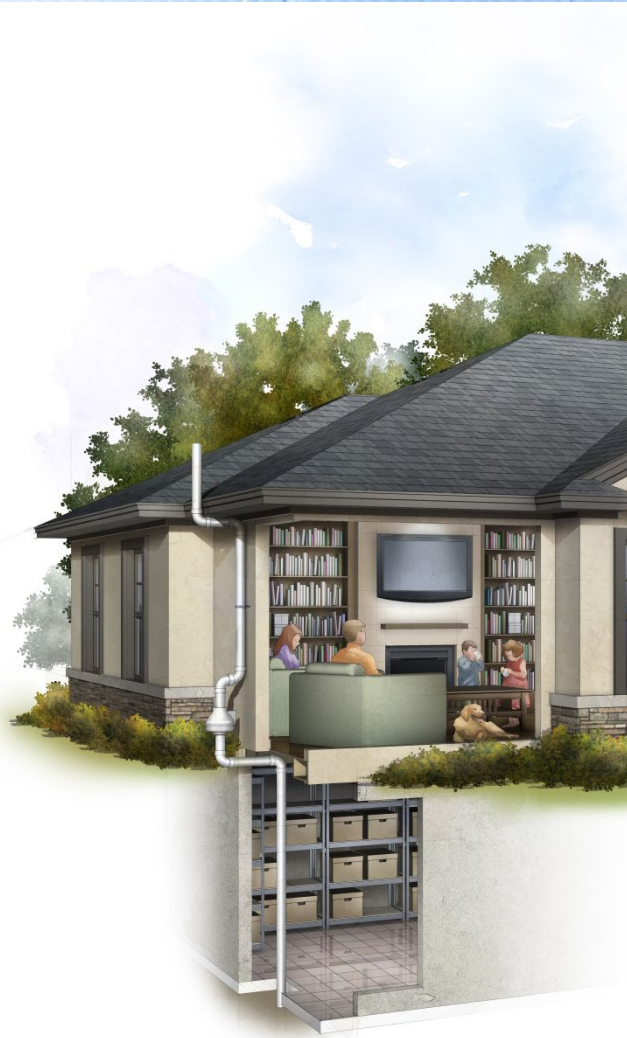


- **SWF-100X**
- **When space is limited**
- **Pressure/Current Sensors, or Interlocks**



- **IL-Kits**
- **PV-100X with Interlock**
- **True Fail-Safe Option**

Radon Mitigation



- 4 & 6" Sizes
- Duct lips sized for easy fit with standard PVC couplings
- Fully sealed, high quality plastic housing
- Large, easily accessible, watertight electrical box for unobstructed wiring process
- HVI Certified Performance
- cETLus certified
- 5-year warranty

PRF – Radon Mitigation Fan Performance



Model	Size	Electrical	Power (W)	Current (A)	CFM @ SP				RPM
					0.00	0.25	0.50	1.00	
PRF-100	4"	1/60/120V	91	0.77	169	147	126	82	3080
PRF-150	6"	1/60/120V	135	1.15	321	287	254	193	2890

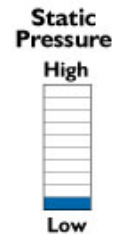
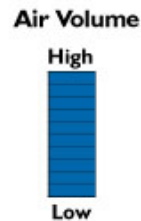
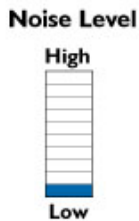
TD Mixvent Series



Mixed Flow Fans vs. Axial and Centrifugal Fans

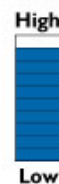
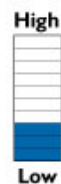
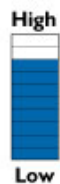
Axial Fans

- Low noise levels
- High air volumes
- Very little static pressure capability*



Centrifugal Fans

- Higher noise levels
- Lower air volumes
- Very high static pressure capability*



Mixed Flow Fans**

- Low noise levels
- High air volumes
- Significant static pressure capability*



- S&P's best selling product worldwide!
- Combines best features of centrifugal and axial fans
- Low Profile, requires minimum space
- Integral mounting bracket
- Multiple mounting options for more pressure or more airflow

The Most Economical Way to Move Air Through Round Duct.



Model	Sones
TD-125XS	.6
TD-150S	.5
TD-200S	.5

- Extremely Quiet, low-profile mixed-flow fans
- S&P is the ONLY manufacturer
- All the benefits ease of installation and maintenance of the TD-Mixvent
- Sound waves are directed through the perforated inner skin and absorbed by a layer of sound-absorbent insulation.

The Quietest

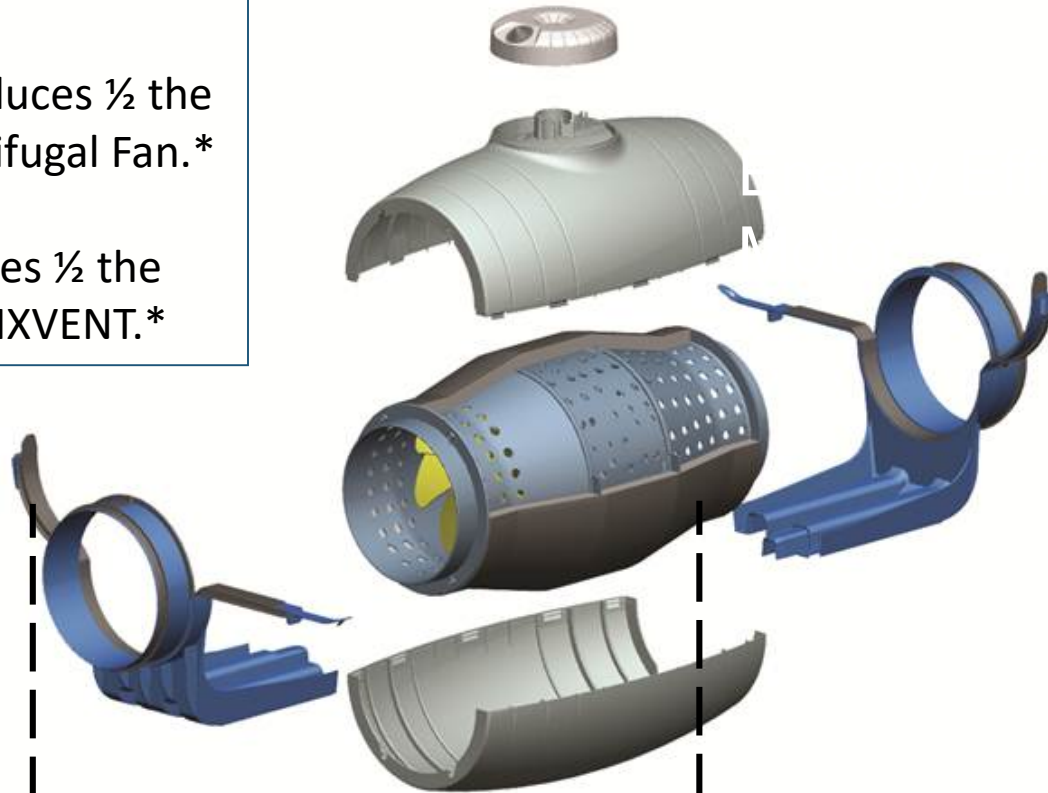
TD-SILENT Sound Attenuating Features



Sound Statistics:

The TD-MIXVENT produces $\frac{1}{2}$ the sound level of a Centrifugal Fan.*

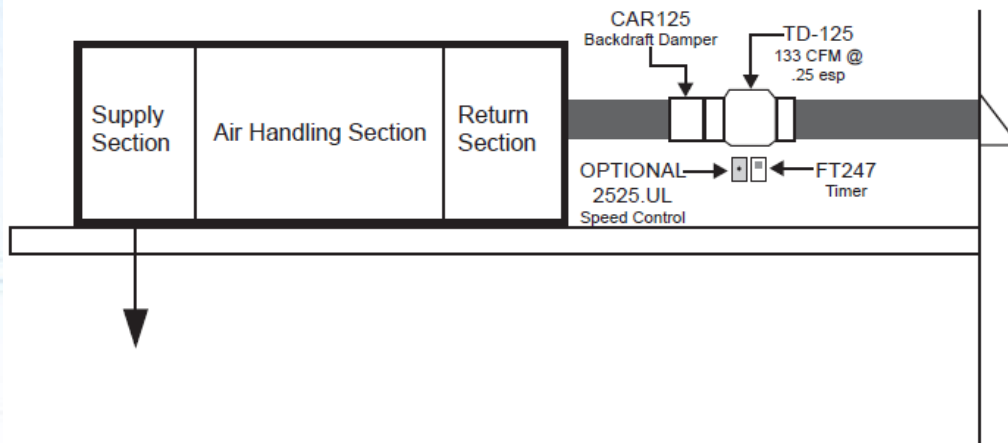
The TD-SILENT produces $\frac{1}{2}$ the sound level of a TD-MIXVENT.*



Rubber Gaskets: On inlet & outlet to absorb vibrations

Perforated Inner Skin & Sound-Absorbent Insulation: Sound waves are directed through the skin and absorbed by the insulation.

*Based on tests where the sound pressure level is radiated at 3 meters in a free field condition, with rigid ducts at the inlet and outlet.



The simplest, most economical way to meet outside air requirements!

Outside Air Codes

- All inclusive kit OSAK-125
 - TD-125
 - CAR125
 - FT247
- Meet IECC 2015 codes (ASHRAE 62.2)



The Code Specifies:

1. Makeup air is required when system is capable of exhausting 400+ CFM
 1. Rate of makeup air must be (approx.) equal to the exhaust air

Why You Need S&P:

Simple...**Makeup Air!**

S&P's Solutions:

1. TD-MIXVENT (Mixed Flow Fan)
2. TD-SILENT (Mixed Flow Fan)

[See product video here.](#)



reFresh Series



These “all-in-one” units can introduce fresh air from outside into inside of homes. Our reFresh fans have been specifically engineered to meet today's outside air codes and the ASHRAE 62.2 Whole-House Ventilation Requirement. Some of the exciting features are:

- Economical and efficient solution to bring in fresh air
- Can be independent or integral to the HVAC system
- Compact housing, designed to fit in most locations
- Excellent option to meet IRC, IMC, IECC, and more



[reFresh Video](#)

RF8 – Low Profile Model



- Low profile, galvanized, 26 ga., insulated housing
- Models with and without ES24V control
- 6" round duct connectors
- Test port for easy air flow measurement
- 2" wide filter slot for optional 8 x 8 x 2" filters
- Integral mounting tabs allow mounting in any orientation
- Backward inclined wheel
- Speed controllable, AC or EC motor, 115/120V, 60 Hz
- 4 pole, permanently lubricated, thermally protected motor
- Internally mounted speed control to set required intake with high, medium, and low set points
- 6' power cord
- EC motor models are ENERGY STAR qualified
- HVI Certified performance with and without optional MERV13 Filters
- cULus 705 Listed



reFresh Series



RF10 – Standard Size Models

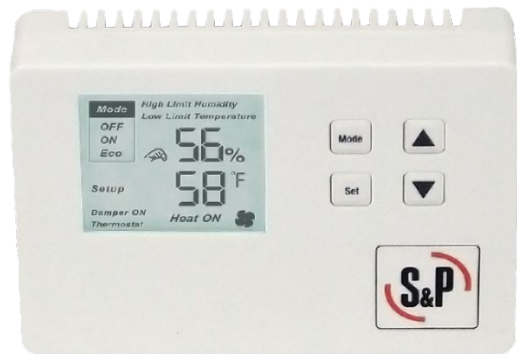


**Most Efficient
2019**
www.energystar.gov

- Galvanized, 26 ga., insulated housing
- Models with and without ES24V control
- 6" round duct connectors
- Integral backdraft damper
- Test port for easy air flow measurement
- 2" wide filter slot for optional 10 x 10 x 2" filters
- Integral mounting tabs allow mounting in any orientation
- Backward inclined wheel
- Speed controllable, AC or EC motor, 115/120V, 60 Hz
- 4 pole, permanently lubricated, thermally protected motor
- Internally mounted speed control to set required intake with high, medium, and low set points
- Models with and without 6' power cord
- AMCA Air and Sound Licensed
- HVI Certified performance with and without optional MERV13 Filters
- cULus 705 Listed
- Models with UL 2043 rating
- EC motor models are ENERGY STAR qualified
- **RF10-160EC, RF10-160EC-ES24V, RF10-160EC-P, and RF10-160EC-P-ES24V models are recognized as the Most Efficient of ENERGY STAR® 2019**



ES24V – Envirosense Ventilation Control



- 3 Modes
 - Off
 - On
 - Eco-Mode
- “Off” allows for manual override as required by the code
- “On” allows for continuous operation
- “Eco-Mode” allows homeowner to set humidity and/or temperature minimum and maximums. When min and max are sensed the fan will not bring in outside air. When the outside air is within the min and max range the fan will operate at the set time limit or continuously to meet the code requirements, i.e. 15 minutes every 4-hours
- Control is installed on the out side of RF8 units that end in “-ES24V”.
- Control is installed inside the housing of RF10 units that end in “-ES24V”
- Compatible with TD-MIXVENT, TD-SILENT, PV-POWERVENT, SWF-SIDEWALL, and all TR ERVs.
 - Transformer and relay are available for 120V compatibility.

reFresh Air Fan - VALUE

Model: RFV8-120AC-ES24V

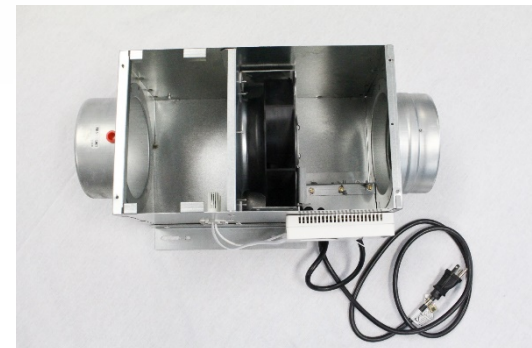
Series: reFresh

Description: Stripped down model, with the following modifications:

- No insulation
- No speed control
- No impeller guard
- No filter brackets
- New 1 piece lid w/ 4 screws (no latch)
- With backdraft damper
- With 6' power cord
- With mount/wired ES24V control/relay.

Certifications: cULus 507 only. No UL 2043 heat and smoke, no HVI, no Energy Star, no AMCA

Competition: Aprilaire 8142



reFresh Series



The New

MD6-ES24VK

Outside Air Motorized Damper Kit



The MD6-ES24VK from S&P allows fresh air to enter dwellings to meet building code and ventilation standards requirements through a 6" motorized damper controlled by a 24V temperature/humidity monitoring control. The control can command the central HVAC blower to help distribute fresh air through the existing duct work if necessary.

NEW FRESH AIR CONTROL + MOTORIZED DAMPER KIT

Part ID	Description
ES24V	ENVIROSENSE VENTILATION CONTROL - 24V
MD6	MOTORIZED DAMPER 6IN 24V
MD6-ES24VK	MD6 & ES24VK KIT
T120-24*	120V TO 24V TRANSFORMER, CLASS 2 40VA

*Optional Accessory not included with MD6-ES24VK Kit

Codes and Standards

- ASHRAE 62.2-2010 & 2013
- IRC 2012 & 2015

Cross Reference

Company		S&P USA	Honeywell	Aprilaire
Model		MD6-ES24V Kit	Y8150 Fresh Air Ventilation System with TrueZONE damper	8126 Ventilation System
FEATURES	Meets IAQ ventilation standards and building code	X	X	X
	Simple control with easy digital user interface	X	-	-
	Can be integrated with:	fresh air fan	X	-
		motorized damper	X	X
		duct heater	-	-
		central HVAC blower	X	X
	Can be set to limit the following to ensure high IAQ:	Temperature	X (Indoor or Outdoor)	-
		Humidity	X (Indoor or Outdoor)	X (Indoor Only)
	Wide range of user set temperature/humidity limits	X	-	-
	UL Safety Listed	X	-	-
24VAC Control		X	X	X
24VAC Motorized Damper		X	X	X



[Envirosense Ventilation Control Video Part 1 – Product Overview](#)



[Envirosense Ventilation Control Video Part 2 - Product Wiring](#)

Premium Choice (PC) Series

Ceiling Mounted Bathroom Fans



PC



PCV – Value Series



PCD with DC Motor



PCLP – Low Profile



PCRL

S&P was the first to offer Plug-&Play options and the ONLY with AC motor Plug-&Play!

The PC Difference



Long Life

- Engineered for trouble-free continuous
- Robust steel housings and
- Attractive, sturdy grilles



Energy Efficient

- All 80 CFM and above models are ENERGY STAR® qualified
- High efficiency motors and lighting to reduce energy consumption



Ease of Installation

- Adjustable hanger bars.
- In-room or outside wiring.
- Dust-guard packaging to prevent over-spray of paint or ceiling materials



Plug-&-Play Design

- One fan can be modified to be the exact fan needed

IAQ Sense

- Exclusive, award winning IAQ Sense



Longest Warranty

- AC models have a 5-year warranty
- DC models have a 6-year warranty



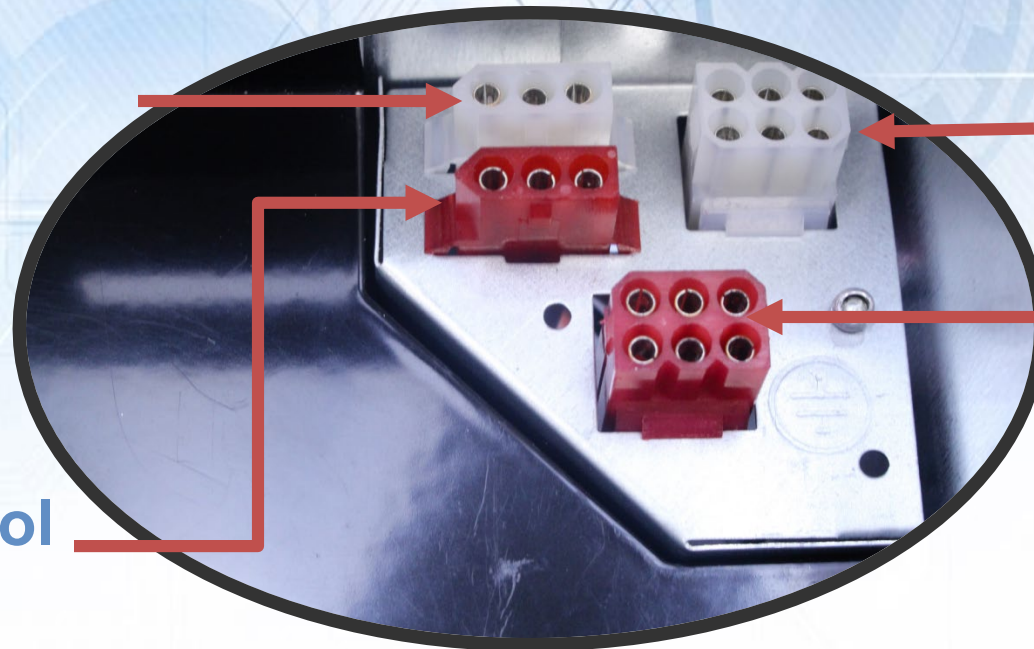
Most Economical

- Lease expensive premium bath fans on the market

**Motor
Receptacle**

**Grille
Receptacle**

**VOC/
Humidity
Sensor
Receptacle**



**Speed Control
or
Humidity Sensor
Receptacle**

[View PC Plug-&-Play Video](#)

Plug-&-Play Grilles



Lighted

- ▶ CFL or LED lights
- ▶ Available for PC, PCD, PCLP, and PCV



Motion Sensing

- ▶ Available for PC & standard on PCD110M & PCD110MH



Lighted Motion Sensing

- ▶ CFL lights
- ▶ Available for PC and PCD

PCHS – Humidity Sensor



- Easy Plug-&-Play design
- Senses humidity at ceiling level
- 5-60 minute adjustable timer
- Factory set, field adjustable humidity sensitivity
- Can be added on after initial installation

PCSC – Speed Control



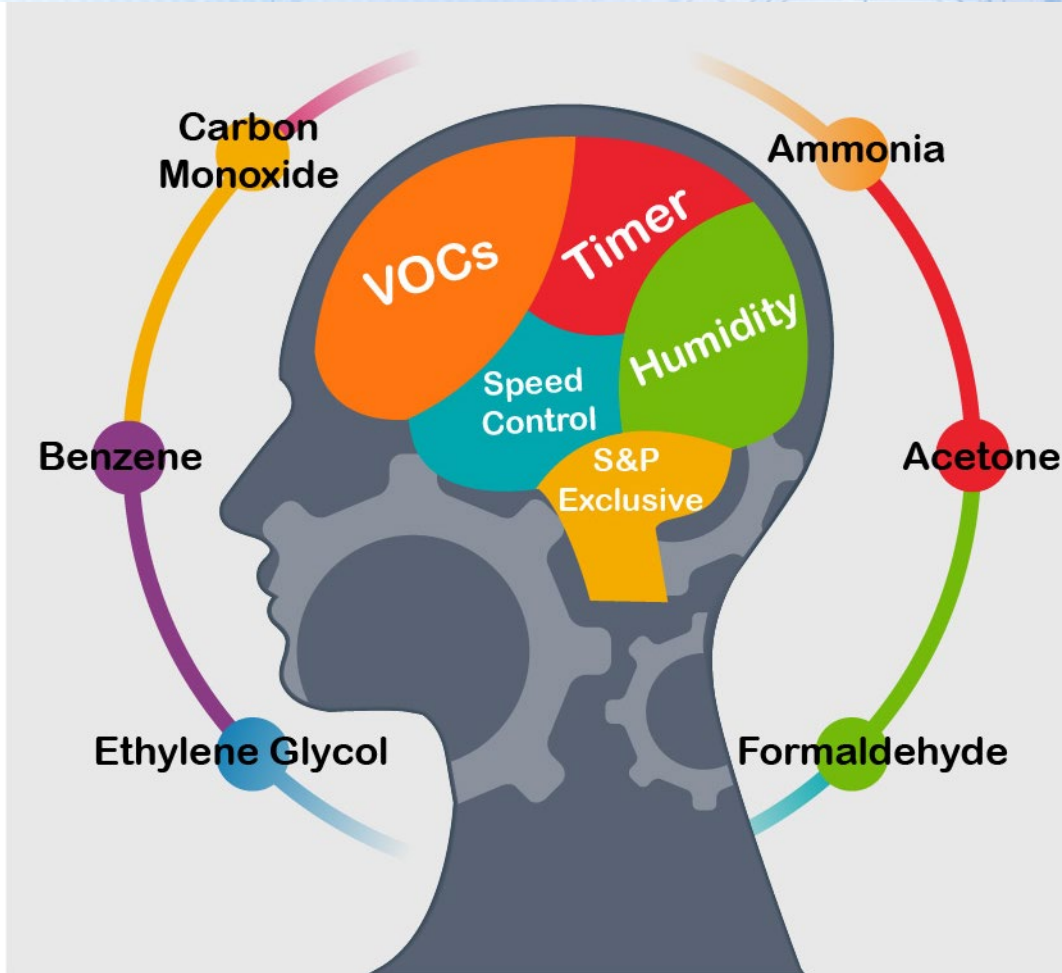
- Easy Plug-&-Play design
- Adjustable continuous speed or intermittent reduced speed
- Can be added on after initial installation

PCBTS – Bluetooth Speaker



- Easy Plug-&-Play design
- Volume controlled by mobile device
- Can be added on after initial installation

The first and only thinking bath fan!





The fan is always on when you need it, and never on when you don't!

The industry's first Smart Bath Fan

- Ideal for the following applications:
 - Kid's bathrooms
 - Garage ventilation (meet code)
 - Chemical storage closets
 - Nail salons
 - Any application where VOC's or Humidity is present

PC CHOICES: Radiation Damper and Metal Grille



Radiation Dampers



PCMG – Metal Grille



- The ONLY AC models available with Plug-&-Play
- 4 single speed models (PC50, 80X, 110x, 150)
- 1 two-speed model
- HVI Certified
- ETL Listed
- PC80X, 110X & 150 are ENERGY STAR Qualified
- 5-year warranty

HVI Certified Performance (Single Speed)

Model	Duct Size	CFM	Static Pressure (in W.G.)	Energy Efficiency (CFM/Watts)	Watts	Power (V/Hz)	Sones*	Amps
PC50	4"	50/31	0.1/0.25	3.1	16	120/60	0.6	.13
PC80X	4"	80/58	0.1/0.25	3.0	32	120/60	0.4	.27
	6"	80/63					<0.3	
PC110X	4"	96/70	0.1/0.25	3.2	36	120/60	1.1	.30
	6"	110/87					0.9	
PC150	6"	150/110	0.1/0.25	3.8	41	120/60	1.1	.34

HVI Certified Performance (2-Speed)

Model	Duct Size	CFM (HS)		CFM (LS)	Energy Efficiency (CFM/Watts)	Watts	Power (V/Hz)	Sones		Amps
		0.1" SP	0.25" SP	0.1" SP				HS	LS	
PC110X-2S	4"	100	88	40	3.3	33	120/60	1.2	0.3	0.4
	6"	110	100	50				0.9	0.3	



PC Contractor Packs



- 4 Packs with Housing and with Motor & Grille
- Accessories can be ordered separately.





Premium Choice Value Series (PCV)

- Lower Cost, Low Sone Models
- PCV50 rated at 2.0 Sones
- PCV80 rated at 1.7 Sones
- Designed for applications with smaller space requirements (housing height is 5 3/4")
- Priced to compete with mid-range Broan & Air King Models
- Same unique Plug-&-Play features as other Premium CHOICE models
- Contractor packs available

Model	CFM	SP	Sone s	Watts
PCV50	50	.1	2.0	60
PCV80	80	.1	1.7	24



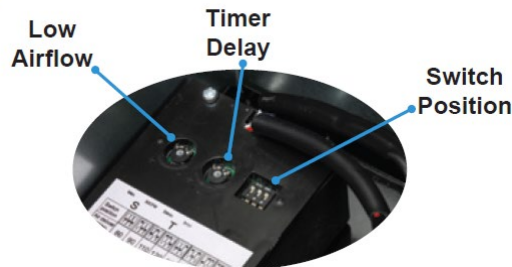
PCD110X with DC Motor



Features & Construction

- Extremely quiet operation 0.5 Sones
- Brushless DC motor for long life
- Motor rated for 60,000 hours continuous on
- High/Low speed delay timer
- Built-in backdraft damper
- ETL Listed
- ENERGY STAR® qualified
- HVI Certified
- 6-year warranty
- Available models:
 - PCD110X
 - PCD110XH
 - PCD110XM
 - PCD110XMH
 - PCD110XIAQS

Integrated Controls



PCD80XH with DC Motor



**NOW
AVAILABLE!**



Model	List Price	Net Price at .50
PCD80XH	\$120	\$60



Features & Construction

- Quiet Operation 0.7 to 1.5 Sones
- Integral humidity sensor & Hi/Lo speeds
- 80 CFM at high speed; 40 CFM at low speed
- 4" duct connector with build-in backdraft damper
- Housing size: 9" x 9" x 5-3/4"
- Robust steel housing
- Attractive, sturdy grille
- Thermally protected motor
- Detects rapid rise in humidity
- Senses humidity at ceiling level
- Adjustable Time Delay shut-off from 5 to 60 minutes
- Field adjustable humidity sensitivity with 50-100% range. Factory setting is 75%.
- cETLus Listed
- HVI certified
- ENERGY STAR qualified
- 5-year warranty

PCD200 with DC Motor



Features & Construction

- Brushless DC Motor
- 200 CFM at 0.1" static pressure
- 6" duct connector
- 2.4 Sones
- ENERGY STAR qualified
- HVI certified performance
- ETL listed

The PCD200 can accept the
PCHS module



PCLP – PC Low Profile for Ceiling or Sidewall



Available Plug-&-Play options:

- LED Grille (PCLPLEDK)
- Speed Control (PCLPSC)
- Humidity Sensor (PCLPHS)

Features & Construction

- Ultra low profile housing design (height = 3-3/4")
- Suitable for wall and ceiling installations
- Quiet operation <0.4 to 2.0 sones
- Totally enclosed condenser motor for long life
- Motor rated for 30,000 hours continuous on
- Built-in backdraft damper
- Robust steel housing
- Attractive, sturdy grille
- ETL Listed
- ENERGY STAR® qualified
- HVI Certified
- 5-year warranty
- 80 & 100 CFM contractor packs available

PCRL80 & PCRL80F



The PCRLs can accept the
PCHS or PCSC modules



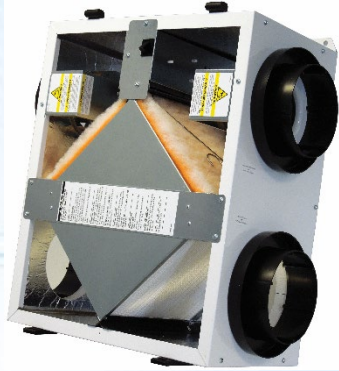
- PCRL80
 - Bulb not included
 - E26 bulb base
- PCRL80F
 - CFL spiral bulb included
 - GU24 bulb base
- 80 CFM at 0.1" static pressure
- 4 & 5" duct connector
- 0.9 Sones
- ENERGY STAR qualified
- HVI certified performance
- ETL listed

S&P ERV Difference



- Among the highest efficiency ratings of all ERVs
- Longest core warranty (10-years)
- Easiest ERV to install
- Least expensive ERV to install
- On HVI certified ERVs manufactured in the U.S.

TR Unit Sizes and Sizing



All are HVI Certified

All are UL Listed

All are AHRI rated for Residential or Light Commercial use

10-year warranty on the core

5-year warranty on balance of the unit

Size Range:

TR90 or TR90G: 50-70 cfm

TR130: 50-140 cfm

TR200: 100-200 cfm

TR300: 150-300 cfm

Unit Sizing for Houses:

- Up to 1500 Sq. Ft. = **TR90(G)**
- Up to 2700 Sq. Ft. = **TR130**
- Up to 4000 Sq. Ft. = **TR200**
- Up to 6000 Sq. Ft. = **TR300**

TRC Unit Sizes and Sizing



Size Range:

- TRC500: 200-540 cfm
- TRC800: 250-925 cfm
- TRC1200: 375-1575 cfm
- TRC1600: 650-2000 cfm



All are AHRI Certified

All are UL Listed

10-year warranty on the core

2-year warranty on balance of the unit

TRLPe – Total Recovery Low Profile



New
Product!

Features

- Compact models to fit tight spaces
- HVI and cETLus Certified
- Unit can be mounted in any orientation
- High-efficiency core operates dry in all conditions - no condensate drain pans
- Indoor Air Quality is increased by removing stale indoor air and replacing with fresh, filtered air from the outside



THANK YOU!

www.spvg-northamerica.com

