EDMONDS
Technologies for a Sustainable Future

EcoPower® Data Catalogue

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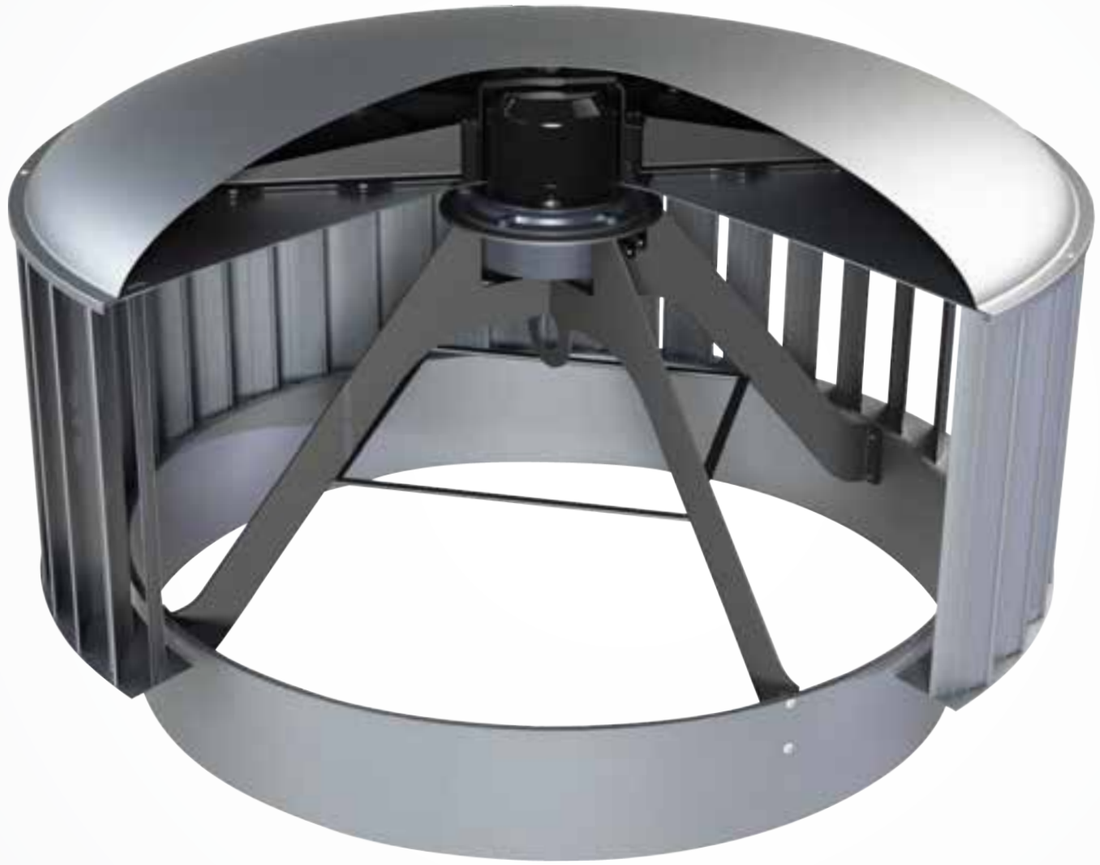
CSR

HYBRID VENTILATION TECHNOLOGY

EcoPower®

PRODUCT OVERVIEW

The EcoPower® incorporates Australian-engineered hybrid patented ventilation technology. This design is an innovative combination of natural ventilation and efficient mechanical ventilation and operates in either natural mode, power mode, or both modes simultaneously.



FEATURES & BENEFITS

- Low energy consumption of only 1.89x10^{-5} kW/(m^3/hr) or 3.21x10^{-5} kW/CFM for EP900.
- Patented hybrid ventilator design that enables an open throat to improve airflow performance.
- Reliable ventilation available when required through power mode.
- Virtually inaudible from typical background sound pressures of 55.9 dB(A) @1.5m for EP900, even in power mode.
- Hybrid design eliminates potential air back-drafting.
- Can be utilised to drive an economiser system when conditions permit.
- Lightweight aluminium construction for ease of installation and minimal roof loading.
- Efficient EC motors directly connect to AC mains with single phase power input.
- Large Input voltage range of 200-277 VAC and 50-60 Hz.

UL705 versions available on request

National Export Award for Edmonds Business

HVAC Achiever award for EcoPower®

Quality Management standard for Edmonds Seven Hills facility

Note: Image of EP900 and is for illustrative purposes only.

CONTENTS

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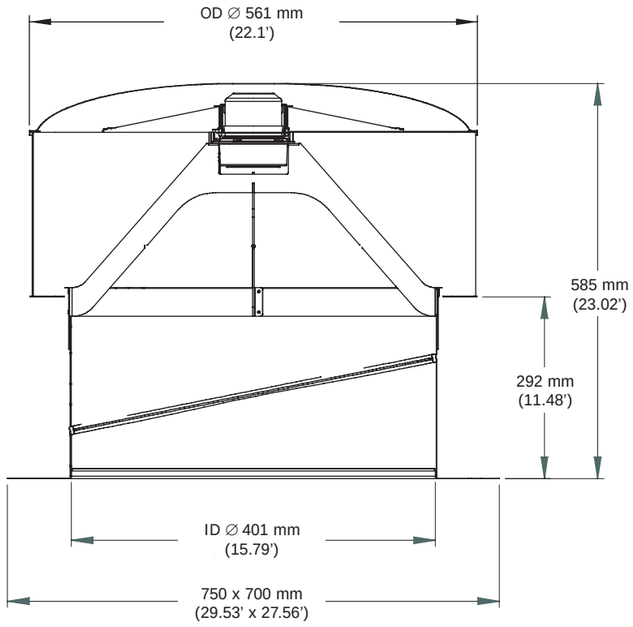
PRODUCT DIMENSIONS & WEIGHTS

Model EP400

Turbine, Varipitch and Flashing

Product information

Voltage [V]	200 - 277
Frequency [Hz]	50 - 60
Pmax [kW]	0.0592
Imax [A]	0.55
Roof Opening Diameter (mm)	400
Roof Opening Diameter (')	5.75
Weight [kg]	9.42
Weight [lbs]	20.8
Max Amb. Temp [°C]	60
Max Amb. Temp (°F)	140



Performance Data

		Static Pressure (Pa)			
		0	14	22	27
RPM		344	334	334	337
Flow Rate @ no wind	CFM	1 462	1 165	865	720
	m³/hr	2 484	1 980	1 476	1 224
kW		0.057	0.059	0.057	0.056
Sones		5.3	3.5	2.9	3.4
LwA (dB)		65	56	52	52

* Tolerance is within
+/- 5mm and +/- 0.5 kgs
+/- 0.2 inches and +/- 1.1 Lbs

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CONFIGURABLE PRODUCT
WATER INGRESS PROTECTED
SUITABLE FOR HIGH WINDSPEED
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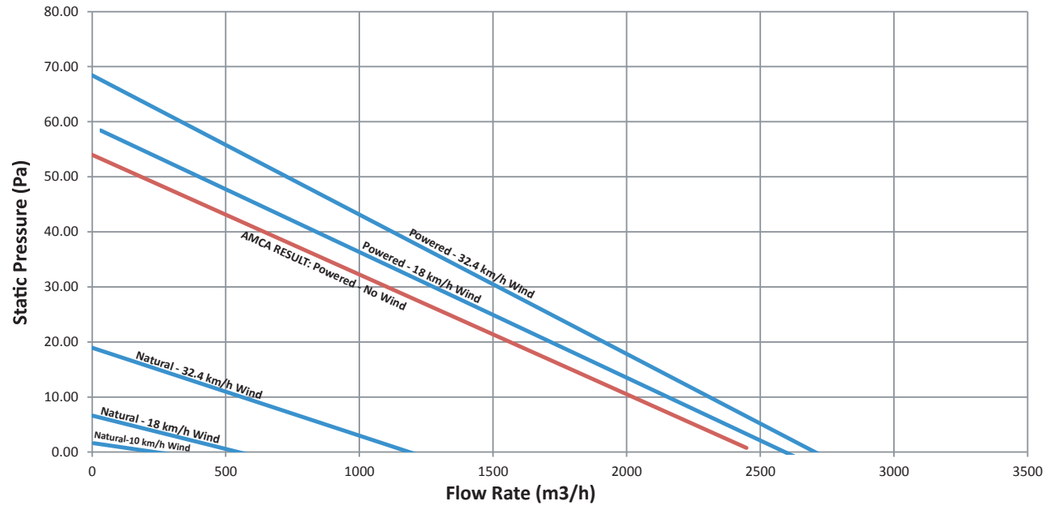
TECHNICAL DATA SHEET

PERFORMANCE DATA

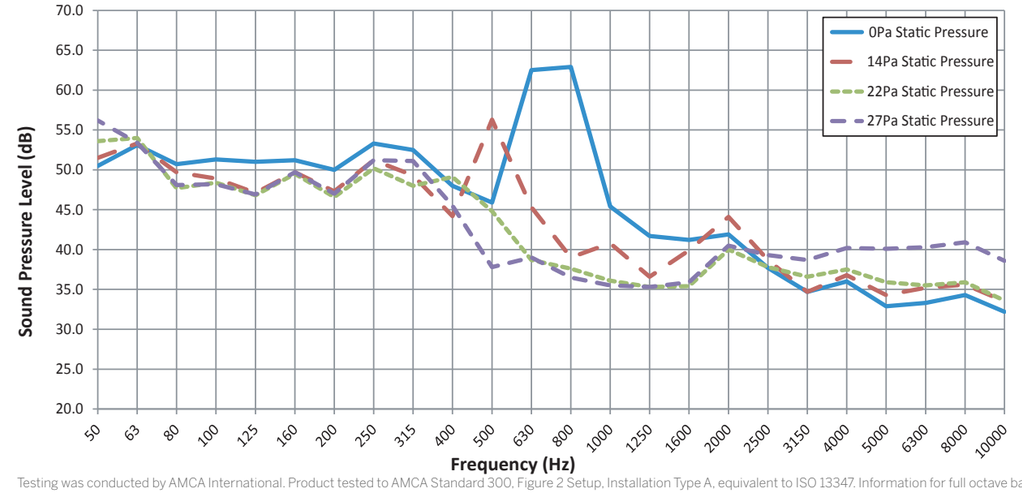
Model EP400

EP400 Tested characteristic curves: Powered and natural



Airflow rates are tested by AMCA in accordance with ISO5801, equivalent to AMCA Standard 210. Natural performance and wind assissted data is tested as per ISO5801 with an external wind source providing a constant source of wind across the specimen. Wind assissted tests performed by Edmonds on Edmonds in house test equipment. Wind assissted performance testing is outside the scope of AMCA's test standards.

EP400 Tested sound pressure level : One-third octave



Testing was conducted by AMCA International. Product tested to AMCA Standard 300, Figure 2 Setup, Installation Type A, equivalent to ISO 13347. Information for full octave band analysis is avaliable on request.

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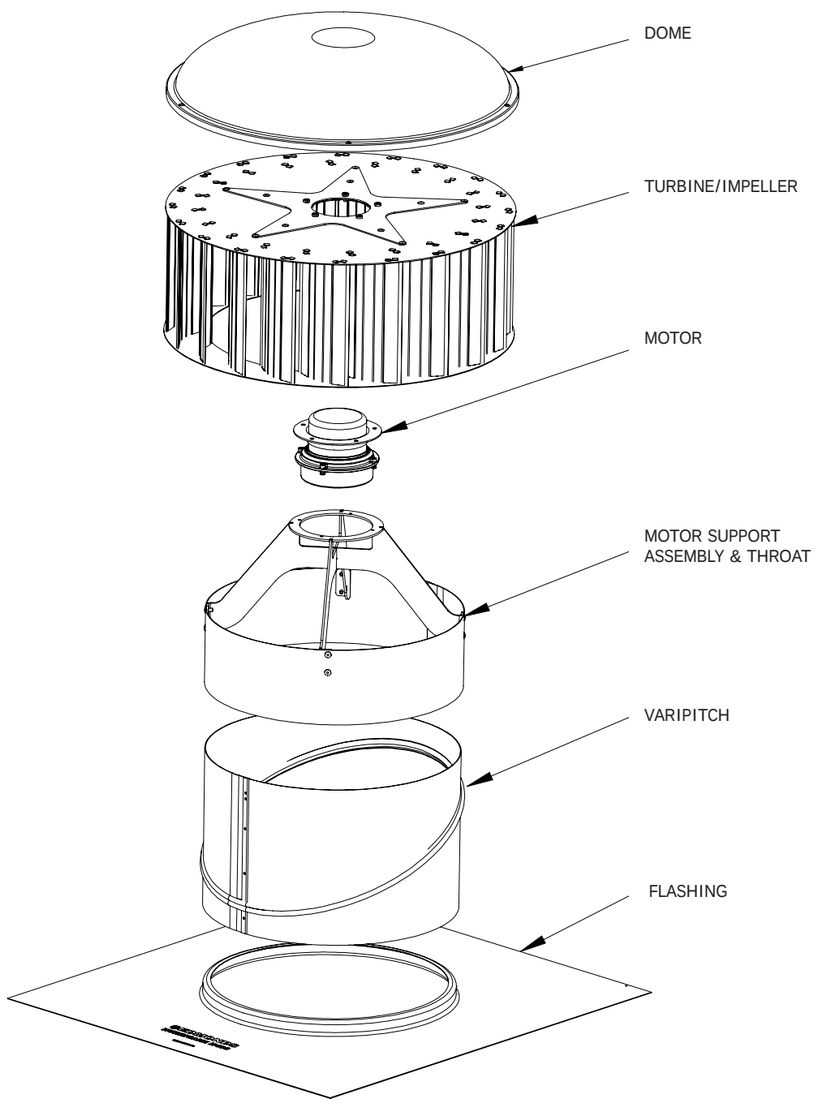
EXPLODED VIEW

Model EP400



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DESIGN SPECIFICATIONS

Model EP400

PERFORMANCE

Roof mounted ventilator shall be EP400. Ventilator air flow performance shall be tested in accordance with ISO5801, equivalent to ANSI / AMCA standard 210-07, figure 15 setup, installation type A. Fan sound performance shall be tested and stated in accordance to AMCA standard 300-08, figure 2 setup, installation type A. Noise must be less than or equal to 64.8dB(A) @1.5m with max power consumption at 60W or better.

OPEN THROAT

The hybrid ventilator shall incorporate an open throat design. This design improves air flow rates by eliminating the need for a separate axial fan.

DRIVE ASSEMBLY

The ventilator shall use a direct drive centrifugal design where the bearing system of the motor functions as the bearing system of the ventilator. This means the vent can be free spinning under wind load and/or power activated as conditions require.

MOTOR

The hybrid ventilator shall use a high efficiency single phase Electronic Commutation (EC) motor.

CONSTRUCTION

Ventilator shall be constructed with high quality engineering materials:

- Dome, turbine and throat shall be made of aluminium.
- The brackets shall be powder coated or polyolefin mild steel.
- Support arms and motor housing shall be glass reinforced Nylon 6.
- Available in a range of colours upon request.

ACCESSORIES

When specified, accessories such as manual damper, electric damper, EC damper grilles, and special bases (spigot, square to round and ex base) are available upon request.

WARRANTY

CSR Building Products Limited ABN 55 008 631 356 T/A Edmonds (“Edmonds”) warrants from the date of purchase, for a period of TWO (2) YEARS that the Electronic Commutating Motor and for a period of TEN (10) YEARS that the Turbine Body of the Edmonds EcoPower® Hybrid Ventilator will retain its performance characteristics and be free from faulty materials and workmanship on the condition that the vent is installed in accordance to the installation instructions. Please refer to Warranty Document on edmonds.com.au for full details.

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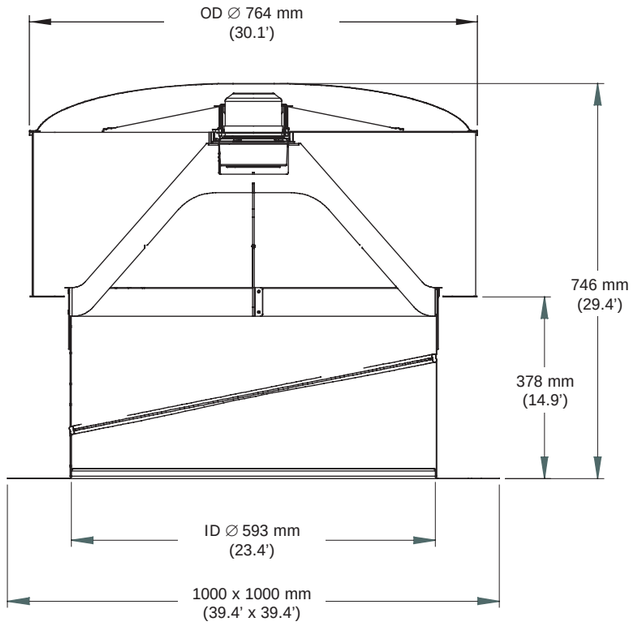
PRODUCT DIMENSIONS & WEIGHTS

Model EP600

Turbine, Varipitch and Flashing

Product information

Voltage [V]	200 - 277
Frequency [Hz]	50 - 60
Pmax [kW]	0.0988
Imax [A]	0.71
Roof Opening Diameter (mm)	600
Roof Opening Diameter (')	23.62
Weight [kg]	18.14
Weight [lbs]	40
Max Amb. Temp [°C]	50
Max Amb. Temp (°F)	122



Performance Data

		Static Pressure (Pa)			
		0	8	16	23
RPM		235	230	232	251
Flow Rate @ no wind	CFM	2 563	2 055	1 525	1 017
	m³/hr	4356	3492	2592	1728
kW		0.0969	0.0988	0.0971	0.0896
Sones		3.2	3.6	3.8	4.3
LwA (dB)		54	55	55	57

* Tolerance is within
+/- 5mm and +/- 0.5 kgs
+/- 0.2 inches and +/- 1.1 Lbs

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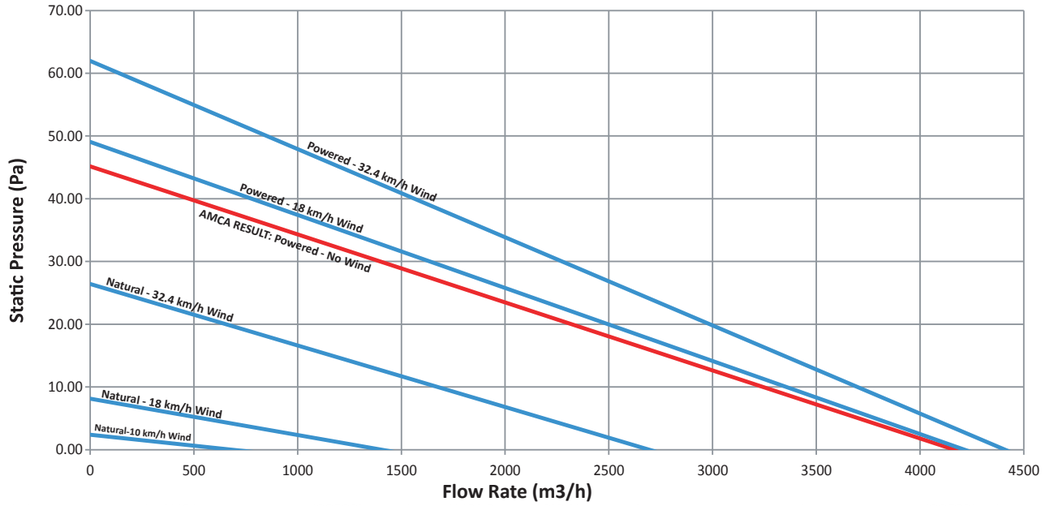
PERFORMANCE DATA

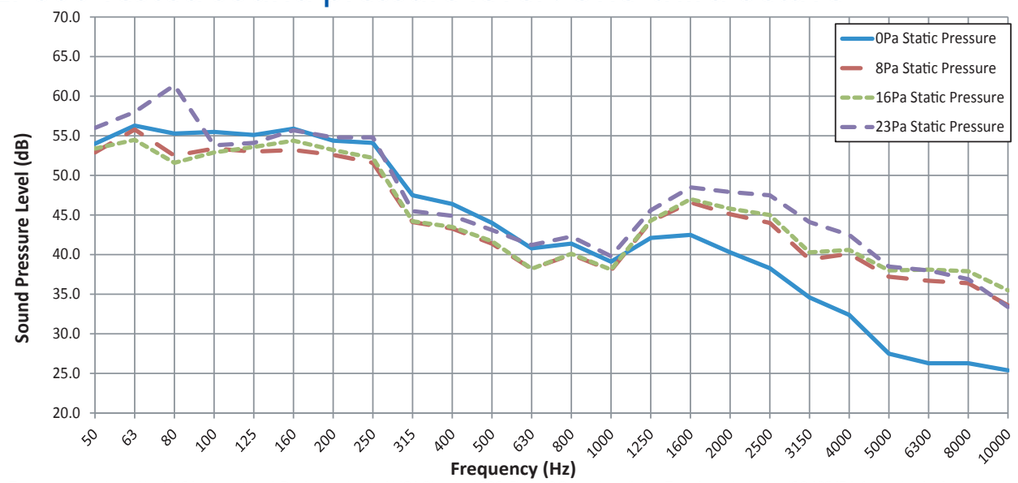
Model EP600

EP600 Tested characteristic curves: Powered and natural



Airflow rates are tested by AMCA in accordance with ISO5801, equivalent to AMCA Standard 210. Natural performance and wind assisssted data is tested as per ISO5801 with an external wind source providing a constant source of wind across the specimen. Wind assisssted tests performed by Edmonds on Edmonds in house test equipment. Wind assissted performance testing is outside the scope of AMCA's test standards.

EP600 Tested sound pressure level : One-third octave



Testing was conducted by AMCA International. Product tested to AMCA Standard 300, Figure 2 Setup, Installation Type A, equivalent to ISO 13347. Information for full octave band analysis is avaliable on request.

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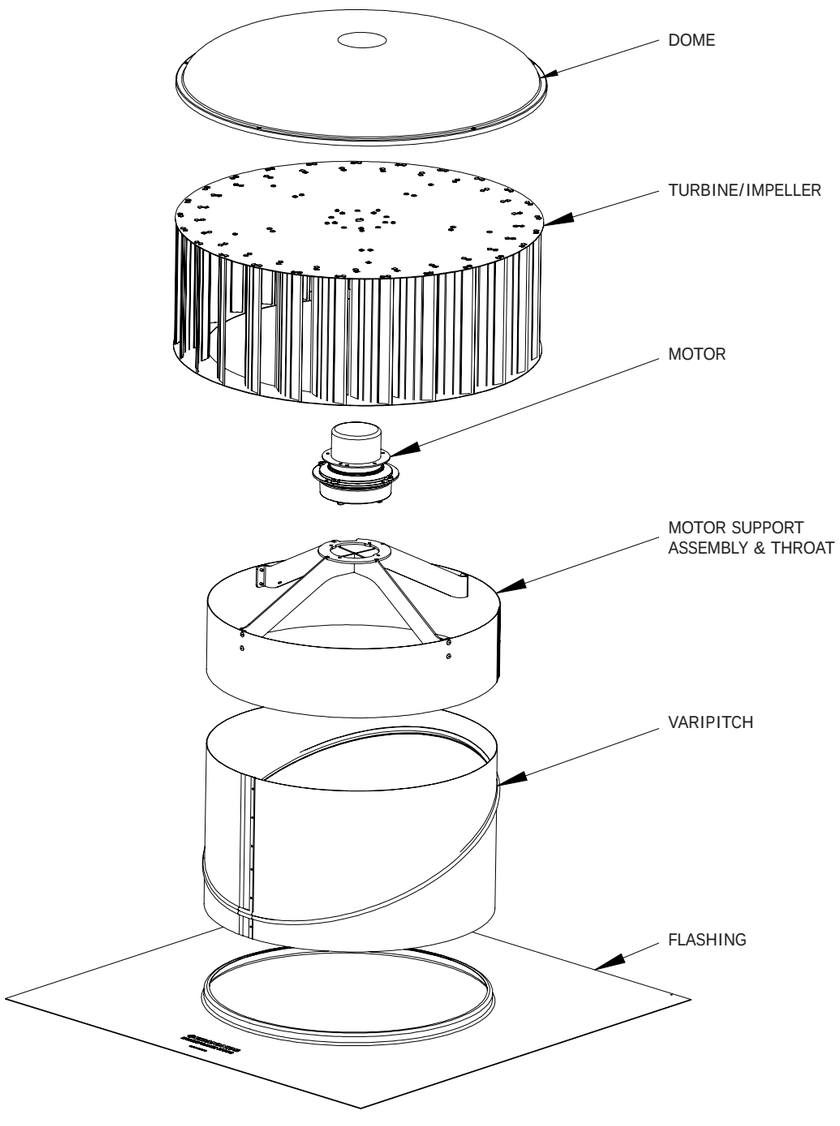
EXPLODED VIEW

Model EP600



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DESIGN SPECIFICATIONS

Model EP600

PERFORMANCE

Roof mounted ventilator shall be EP600. Ventilator air flow performance shall be tested in accordance with ISO5801, equivalent to ANSI / AMCA standard 210-07, figure 15 setup, installation type A. Fan sound performance shall be tested and stated in accordance to AMCA standard 300-08, figure 2 setup, installation type A. Noise must be less than or equal to 57.2dB(A) @1.5m with max power consumption at 98.8W or better.

OPEN THROAT

The hybrid ventilator shall incorporate an open throat design. This design improves air flow rates by eliminating the need for a separate axial fan.

DRIVE ASSEMBLY

The ventilator shall use a direct drive centrifugal design where the bearing system of the motor functions as the bearing system of the ventilator. This means the vent can be free spinning under wind load and/or power activated as conditions require.

MOTOR

The hybrid ventilator shall use a high efficiency single phase Electronic Commutation (EC) motor.

CONSTRUCTION

Ventilator shall be constructed with high quality engineering materials:

- Dome, turbine and throat shall be made of aluminium.
- The brackets shall be powder coated or polyolefin mild steel.
- Support arms and motor housing shall be glass reinforced Nylon 6.
- Available in a range of colours upon request.

ACCESSORIES

When specified, accessories such as manual damper, electric damper, EC damper grilles, and special bases (spigot, square to round and ex base) are available upon request.

WARRANTY

CSR Building Products Limited ABN 55 008 631 356 T/A Edmonds (“Edmonds”) warrants from the date of purchase, for a period of TWO (2) YEARS that the Electronic Commutating Motor and for a period of TEN (10) YEARS that the Turbine Body of the Edmonds EcoPower® Hybrid Ventilator will retain its performance characteristics and be free from faulty materials and workmanship on the condition that the vent is installed in accordance to the installation instructions. Please refer to Warranty Document on edmonds.com.au for full details.

PRODUCT DIMENSIONS & WEIGHTS

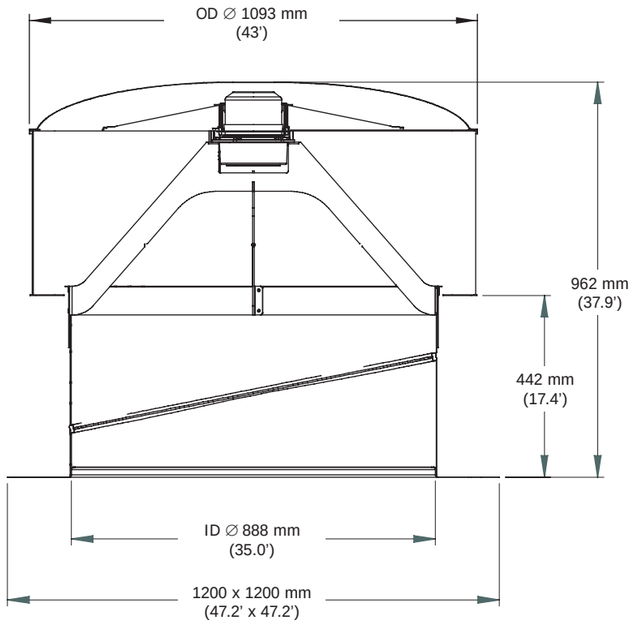
Model EP900

Variable speed and fixed speed model available

Turbine, Varipitch and Flashing

Product information

Voltage [V]	200 - 277
Frequency [Hz]	50 - 60
Pmax [kW]	0.212
Imax [A]	0.904
Roof Opening Diameter (mm)	900
Roof Opening Diameter (')	35.43
Weight [kg]	36
Weight [lbs]	79.4
Max Amb. Temp [°C]	60
Max Amb. Temp (°F)	140



Performance Data

		Static Pressure (Pa)			
		0	11	18	27
RPM		168	168	170	189
Flow Rate @10 V - no wind	CFM	6 074	4 869	3 597	2 418
	m³/hr	10321	8272	6112	3650
kW		0.204	0.212	0.207	0.172
Sones		3.4	3.6	4.9	4.2
LwA (dB)		54	54	56	55

* Tolerance is within
+/- 5mm and +/- 0.5 kgs
+/- 0.2 inches and +/- 1.1 Lbs

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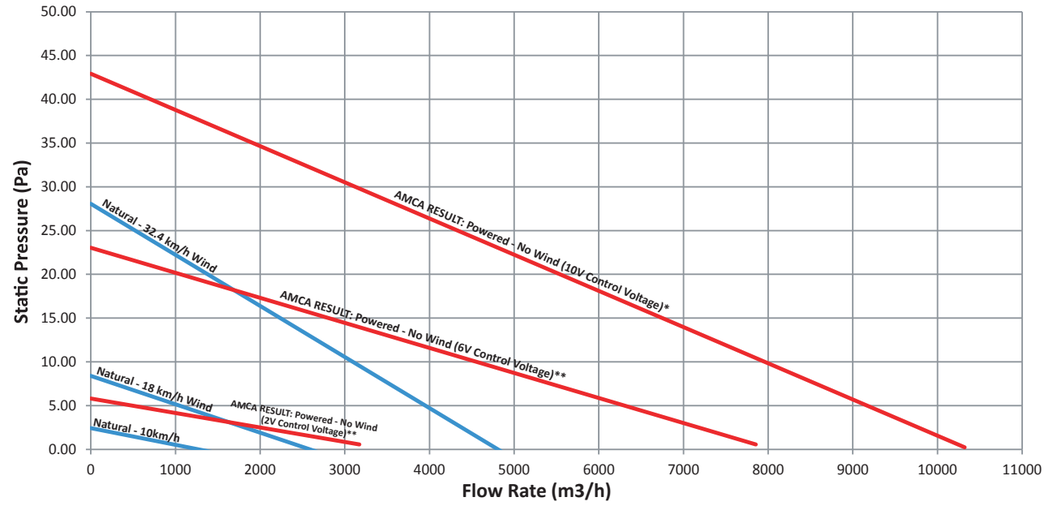
PERFORMANCE DATA

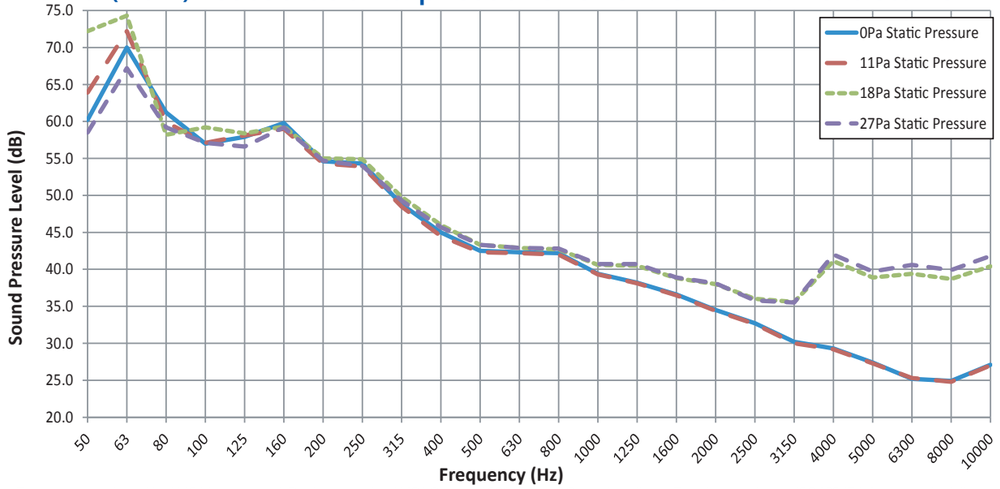
Model EP900

EP900 Tested characteristic curves: Powered and natural



Airflow rates are tested by AMCA in accordance with ISO5801, equivalent to AMCA Standard 210. Natural performance and wind assissted data is tested as per ISO5801 with an external wind source providing a constant source of wind across the specimen. Wind assissted tests performed by Edmonds on Edmonds in house test equipment. Wind assissted performance testing is outside the scope of AMCA's test standards. *Standard fixed speed EP900 operates at 10V. **2V and 6V curves only applicable if EP900 0-10V variable speed is optioned.

EP900 (10V)Tested sound pressure level : One - third octave



Testing was conducted by AMCA International. Product tested to AMCA Standard 300, Figure 2 Setup, Installation Type A, equivalent to ISO 13347. Information for full octave band analysis is avaliable on request.

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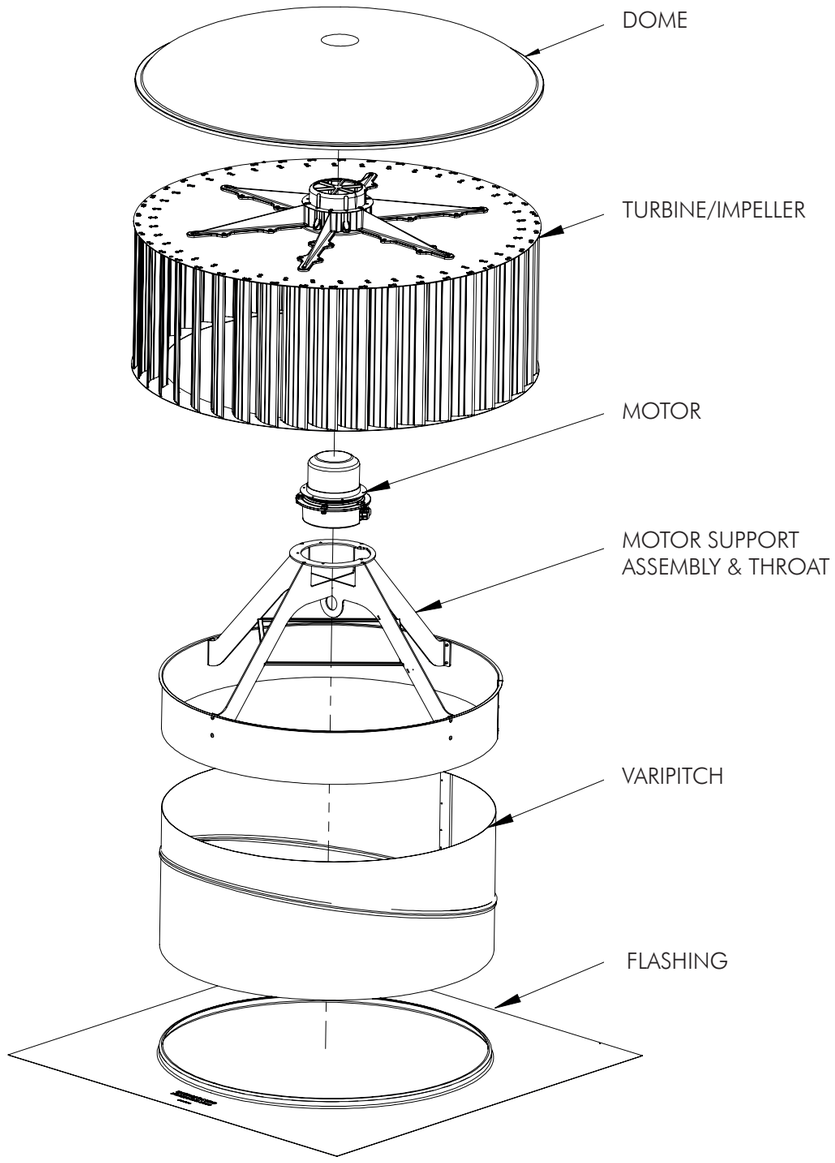
EXPLODED VIEW

Model EP900



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DESIGN SPECIFICATIONS

Model EP900

PERFORMANCE

Roof mounted ventilator shall be EP900. Ventilator air flow performance shall be tested in accordance with ISO5801, equivalent to ANSI / AMCA standard 210-07, figure 15 setup, installation type A. Fan sound performance shall be tested and stated in accordance to AMCA standard 300-08, figure 2 setup, installation type A. Noise must be less than or equal to 55.9dB(A) @1.5m with max power consumption at 212W or better.

OPEN THROAT

The hybrid ventilator shall incorporate an open throat design. This design improves air flow rates by eliminating the need for a separate axial fan.

DRIVE ASSEMBLY

The ventilator shall use a direct drive centrifugal design where the bearing system of the motor functions as the bearing system of the ventilator. This means the vent can be free spinning under wind load and/or power activated as conditions require.

MOTOR

The hybrid ventilator shall use a high efficiency single phase Electronic Commutation (EC) motor.

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EDMONDS

Technologies for a Sustainable Future

Established in 1934, Edmonds is a pioneer in home, commercial and industrial ventilation solutions in Australia as well as across the globe.

Edmonds is passionate about delivering superior comfort and performance whilst reducing its impact on the environment. It is this vision of a 'sustainable future' which has resulted in the design and development of many energy efficient innovations. These include passive, wind-driven; hybrid and turbine ventilation technology.

Regarded as a leading industry innovator, Edmonds ventilation products are engineered and manufactured as its ISO9001 accredited facility in Seven Hills, Australia. Edmonds was awarded the AIRAH Excellence in Sustainability Award in 2013 and Achiever Award in 2008. It was also recognised with a Good Design Award at the 2013 Australian International Design Awards and Master Builders Australia 2012 National Export Award. In 2016 Edmonds' EcoPower Hybrid Ventilator won the MEP Services Category in The Big 5 Gaia Awards.

With strong synergies between insulation and ventilation in the built environment, Edmonds was acquired by CSR Building Products Limited in 2005. Its vision remains to create Technologies for a Sustainable Future.

1300 858 674
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CSR Edmonds.
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