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14 July, 2015

Refer: 5703-2.1L

Attention: Mr John Brodie

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AIRIUS AIR PEAR THERMAL EQUALISER SOUND POWER LEVEL COMPARISONS

We are pleased to advise that we have reviewed the acoustical data for Airius Air Pear Thermal Equaliser Models A-45P4, A-45P2, A-60P4 and A-100EC.

1.0 AIRIUS FANS A-45P4, A-45P2, A-60P4 AND A-100EC

The Airius fans circulate air to evenly distribute air throughout a large space. The fans are designed to hang from the ceiling and distribute air from heights as follows:

- A-45P4 – 6 to 12 metres
- A-45P2 – 12.5 to 14 metres
- A-60P4 – 10 to 18 metres
- A-100EC – 15 to 31 metres

Tested noise data for the Airius Air Pear Thermal Equalisers have been provided by the manufacturer. The datasheets for the four fans are attached as Appendix A. The calculated sound power levels from linear third octave band sound pressure levels is tabulated as follows:

Table 1 Airius Fans

Fan	Sound Power Level (dBA)	RPM
A-100EC	80	1690
A-60P4	73	1390
A-45P2	78	2450
A-45P4	66	1400



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• ENVIRONMENTAL NOISE IMPACT INVESTIGATION AND CONTROL
• OCCUPATIONAL NOISE INVESTIGATION • QUIET PRODUCT DEVELOPMENT



SOUND POWER LEVEL COMPARISONS**2.0 AUSTRALIAN STANDARD AS2107:2000****2.1 Recommended Internal Noise Levels**

Australian Standard AS 2107:2000 *Recommended design sound levels and reverberation times for building interiors* recommend the following internal noise levels for industrial buildings and sports halls:

Table 2 Recommended Internal Noise Levels

Type of occupancy/activity	Recommended design sound level, L_{Aeq} , dB(A)	
	Satisfactory	Maximum
Industrial Buildings -		
Assembly Lines -		
Light machinery	55	70
Packaging and delivery	55	60
Control rooms	50	60
Foreman's offices	45	50
Laboratories or test areas	40	50
Lunch rooms	40	55
Precision assemblies	40	50
Sick bays	40	50
Indoor Sports Buildings -		
Billiard and snooker rooms	40	45
All other indoor sports -		
With coaching	45	50
Without coaching	50	55



SOUND POWER LEVEL COMPARISONS**2.2 Sound Pressure Levels of Fans**

Given the sound power levels in Table 1 above, the following sound pressure levels are calculated at distances outlined in the Table below:

Table 3 Sound Pressure Level of Fans

Fan	Sound Pressure Level from Discharge (dBA)				
	1 metre	3 metres	5 metres	10 metres	20 metres
A-100EC	72	62	58	52	46
A-60P4	65	55	51	45	39
A-45P2	70	60	56	50	44
A-45P4	58	48	44	38	32

The above calculated sound pressure levels appear to be suitable for use in industrial buildings when compared against the recommended internal noise levels outlined in Australian Standard AS2107:2000, provided suitable distance from the fan is maintained.

We recommend that the installation of the fans be assessed on a case by case basis as the acoustic environment and installation may change depending on the use of the space.

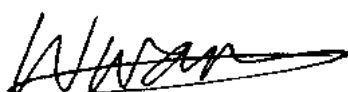


SOUND POWER LEVEL COMPARISONS**3.0 CONCLUSION**

Day Design was engaged to investigate the sound power levels of fans from Airius.

The sound pressure levels of the Airius fans have been determined at various distances for comparison against Australian Standard 2107:2000 *Recommended design sound levels and reverberation times for building interiors* to determine suitability.

We recommend that the installation of the fans be assessed on a case by case basis as the acoustic environment may change depending on the use of the space.



William Wang, BE (Mechatronics), MIEAust, MAAS

Senior Acoustical Engineer

for and on behalf of Day Design Pty Ltd

AAAC MEMBERSHIP

Day Design Pty Ltd is a member company of the Association of Australian Acoustical Consultants, and the work herein reported has been performed in accordance with the terms of membership.



The undersigned hereby certifies that this Report has been checked and approved in accordance with our Quality Management System.



Date: 14/7/15

Attachments:

- Appendix A – Airius Fans A-45P4, A-45P2, A-60P4, A-100EC Datasheets
- Appendix B – Airius Test Data



MODEL 45 DIMENSIONS



MODEL 45 PROPERTIES

UNIT SIZE	Standard	
	Weight:	6.4 kgs
	Height to Rim:	457 mm
	Total Height:	610 mm
	Diameter:	380 mm

45/PS-4 MOTOR	230V	
	Watts* @ 50 htz:	42
	RPM* @ 50 htz:	1400
	L/S* @ 50 htz (m3/hr):	280 (1010)
	AMPS* @ 50 htz:	.19

*Motor data provided by motor manufacturer and is subject to change at anytime

COVERAGE

- Floor area
45/PS-4 = 111m²
- Diameter
45/PS-4 = 12m
- Ceiling Height
45/PS-4 = 8.5m - 12m

MOTOR

- Single Phase
- 45/PS-4 Motor = 1400 rpm @ 50hz
- PSC - Permanent Split Capacitor motor
- All model 45 motors are sourced by EBM PAPST

OPERATING TEMPERATURES

- Min start temp (approx.) = - 10° C
- Min running temp = - 20° C
- Shut off = 135° C
- Reset = 125° C

COLOUR

- Cool gray 2C - Off white as standard
- Can be tailor painted to your colour specifications

INGRESS PROTECTION

- IP44 Rated

NOISE LEVELS

- Sound Power Level 66 dB(A)
- Sound Pressure Level @ 3 Mts 48 dB(A)
- Sound Pressure Level @ 5 Mts 44 dB(A)

Note: A typical free field environment over a reflecting plane.

* All acoustic testing undertaken at the EBM- Papst Acoustic Laboratories in Connecticut USA during August 2014

Please contact Airius for full Noise Testing Report

ACCESSORIES & OPTIONS

- Airius suspended ceiling kit - Allows Model 45 Airius unit to be mounted in a suspended ceiling grid
- Airius Transformer type speed controller 1 and 5 Amp available. 0-100% in 5 steps
- Airius speed control - TRIAC speed control to adjust top end RPM
- PHI kit - Photohydroionization - Advanced oxidation technology - Used to mitigate air contaminants

WARRANTY

- 5 years full manufacturers replacement from date of despatch. Subsequent 5 year 'half new price' rebuild cover

MODEL 45 PLACEMENT

PREPARATION

- Install electrical circuit(s) and outlet(s) in accordance with national and local electric codes
- Outlets should generally be mounted vertically unless a "twist/locking" type is being used
- Wall switch may be installed in circuit to disable power and prevent electrical hazards when servicing
- Confirm electrical continuity of Airius unit on the ground before permanently mounting in the ceiling

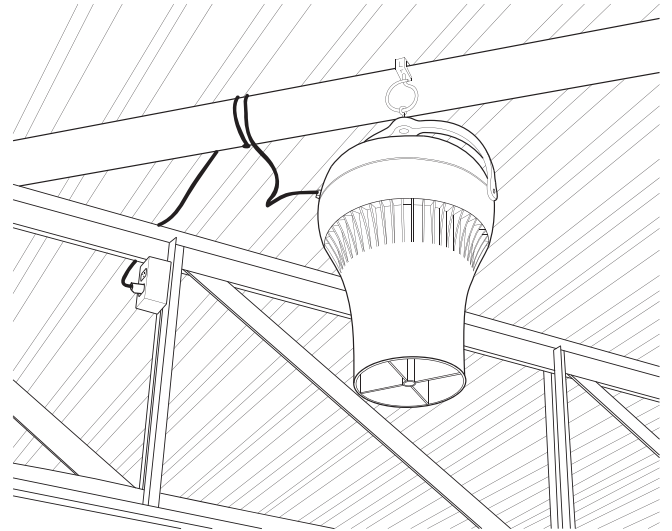
INSTALLATION

- Hang vertically as high in the ceiling as possible
Typically 300 – 450 mm from the roof deck to intake
- The Airius unit performs best when air column from the nozzle is unimpeded to the floor
- Use professionally installed hardware, capable of supporting a minimum of five times the weight
- Hardware to hang the unit includes but is not restricted to: Hooks, chains, cables, carabiners, bridle rings, beam clamps and bolts
- Density of the placement is directly related to the effectiveness, performance and savings
- Mount out of reach from people and animals
- Floor plans, mezzanines, office locations, machinery, people placement, plumbing, lighting, duct work, electrical systems, natural light/air systems, cranes, doors, windows, ventilation and fire suppression systems are all factors in properly locating the Airius system within the ceiling

NOTE:- Air Pears must not be installed directly to structure if they are to be angled. In this case a small length of cable or wire must be used between the handle and the structure to reduce compound twisting torque on the handle.

OPERATION

- Designed to operate 24 hours-a-day, 7 days-a-week to maintain thermal equalization/humidity equalization
- Use optional speed control to fine tune RPM if needed



MAINTENANCE

- Frequency of cleaning will vary by application and environment
- You may clean the plastic housing with a damp warm cloth, using mild household detergents
- Do not use petroleum products, thinners or solvents to clean any part of the Airius unit
- If the Airius unit fails, contact manufacturer

MATERIALS & PROPERTIES

- Constructed from recyclable materials
- The outer shell, stator and fan blades are fire rated 5VA materials
- Power cord is a 3 wire 1.02 mm diameter 300VAC rated electrical cord - CE/EU compliance rated as HO5VV
- Motor is thermally protected. Shutoff is at 135°C & reset is at 125°C
- 45/PS-4 = 0 - 66 dB(A) Sound Power Level at 50 htz
- No lubrication required. Bearings are sealed



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MODEL 45 DIMENSIONS



MODEL 45 PROPERTIES

UNIT SIZE	Standard	
	Weight:	6.4 kgs
	Height to Rim:	457 mm
	Total Height:	610 mm
	Diameter:	380 mm

45/PS-2 MOTOR	230V	
	Watts* @ 50 htz:	125
	RPM* @ 50 htz:	2450
	L/S* @ 50 htz (m3/hr):	505 (1821)
	AMPS* @ 50 htz:	0.54

*Motor data provided by motor manufacturer and is subject to change at anytime

COVERAGE

- Floor area
45/PS-2 = 139m²
- Diameter
45/PS-2 = 13m
- Ceiling Height
45/PS-2 = 12.5m - 14m

MOTOR

- Single Phase
- 45/PS-2 Motor = 2450 rpm @ 50hz
- PSC - Permanent Split Capacitor motor
- All model 45 motors are sourced by EBM PAPST

OPERATING TEMPERATURES

- Min start temp (approx.) = - 10° C
- Min running temp = - 20° C
- Shut off = 135° C
- Reset = 125° C

COLOUR

- Cool gray 2C - Off white as standard
- Can be tailor painted to your colour specifications

INGRESS PROTECTION

- IP44 Rated

NOISE LEVELS

- Sound Power Level 78 dB(A)
- Sound Pressure Level @ 8 Mts 52 dB(A)
- Sound Pressure Level @ 12 Mts 48 dB(A)

Note: A typical free field environment over a reflecting plane.

* All acoustic testing undertaken at the EBM- Papst Acoustic Laboratories in Connecticut USA during August 2014

Please contact Airius for full Noise Testing Report

ACCESSORIES & OPTIONS

- Airius suspended ceiling kit - Allows Model 45 Airius unit to be mounted in a suspended ceiling grid
- Airius Transformer type speed controller 1 and 5 Amp available. 0-100% in 5 steps
- Airius speed control - TRIAC speed control to adjust top end RPM
- PHI kit - Photohydroionization - Advanced oxidation technology - Used to mitigate air contaminants

WARRANTY

- 5 years full manufacturers replacement from date of despatch. Subsequent 5 year 'half new price' rebuild cover

MODEL 45 PLACEMENT

PREPARATION

- Install electrical circuit(s) and outlet(s) in accordance with national and local electric codes
- Outlets should generally be mounted vertically unless a "twist/locking" type is being used
- Wall switch may be installed in circuit to disable power and prevent electrical hazards when servicing
- Confirm electrical continuity of Airius unit on the ground before permanently mounting in the ceiling

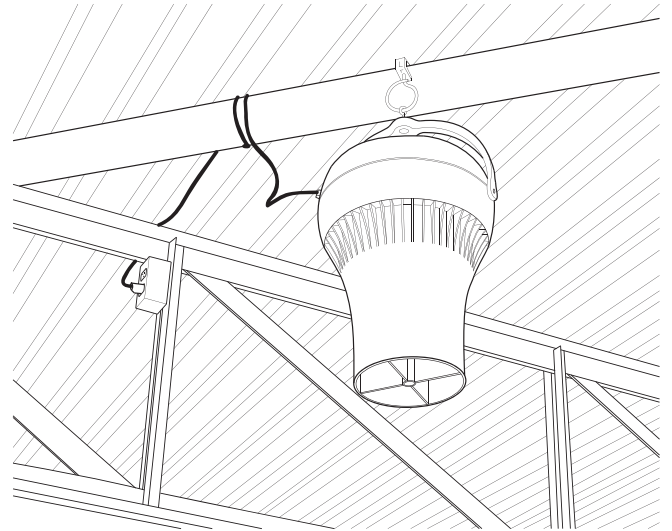
INSTALLATION

- Hang vertically as high in the ceiling as possible
Typically 300 – 450 mm from the roof deck to intake
- The Airius unit performs best when air column from the nozzle is unimpeded to the floor
- Use professionally installed hardware, capable of supporting a minimum of five times the weight
- Hardware to hang the unit includes but is not restricted to: Hooks, chains, cables, carabiners, bridle rings, beam clamps and bolts
- Density of the placement is directly related to the effectiveness, performance and savings
- Mount out of reach from people and animals
- Floor plans, mezzanines, office locations, machinery, people placement, plumbing, lighting, duct work, electrical systems, natural light/air systems, cranes, doors, windows, ventilation and fire suppression systems are all factors in properly locating the Airius system within the ceiling

NOTE:- Air Pears must not be installed directly to structure if they are to be angled. In this case a small length of cable or wire must be used between the handle and the structure to reduce compound twisting torque on the handle.

OPERATION

- Designed to operate 24 hours-a-day, 7 days-a-week to maintain thermal equalization/humidity equalization
- Use optional speed control to fine tune RPM if needed



MAINTENANCE

- Frequency of cleaning will vary by application and environment
- You may clean the plastic housing with a damp warm cloth, using mild household detergents
- Do not use petroleum products, thinners or solvents to clean any part of the Airius unit
- If the Airius unit fails, contact manufacturer

MATERIALS & PROPERTIES

- Constructed from recyclable materials
- The outer shell, stator and fan blades are fire rated 5VA materials
- Power cord is a 3 wire 1.02 mm diameter 300VAC rated electrical cord - CE/EU compliance rated as HO5VV
- Motor is thermally protected. Shutoff is at 135°C & reset is at 125°C
- 78 dB(A) Sound Power Level at 50 htz
- No lubrication required. Bearings are sealed



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MODEL 60 DIMENSIONS



MODEL 60 PROPERTIES

UNIT SIZE	Standard	
	Weight:	10 kgs
	Height to Rim:	610 mm
	Total Height:	813 mm
	Diameter:	464 mm

MOTOR	230V	
	Watts* @ 50 htz:	120
	RPM* @ 50 htz:	1390
	L/S* @ 50 htz (m3/hr):	786 (2832)
	AMPS* @ 50 htz:	.57

*Motor data provided by motor manufacturer and is subject to change at anytime

COVERAGE

- Floor area = 186m²
- Diameter = 15m
- Ceiling Height = 15m - 18m

MOTOR

- Single Phase
- 1390 rpm @ 50hz
- PSC - Permanent Split Capacitor motor
- All model 60 motors are sourced by EBM PAPST

OPERATING TEMPERATURES

- Min start temp (approx.) = - 10° C
- Min running temp = - 20° C
- Shut off = 135° C
- Reset = 125° C

NOISE LEVELS

- Sound Power Level 73 dB(A)
- Sound Pressure Level @ 8 Mts 47 dB(A)
- Sound Pressure Level @ 12 Mts 43 dB(A)

Note: A typical free field environment over a reflecting plane.

* All acoustic testing undertaken at the EBM- Papst Acoustic Laboratories in Connecticut USA during August 2014

Please contact Airius for full Noise Testing Report

INGRESS PROTECTION

- IP44 Rated

COLOUR

- Cool gray 2C - Off white as standard
- Can be tailor painted to your colour specifications

ACCESSORIES & OPTIONS

- Airius suspended ceiling kit - Allows model 60 Airius unit to be mounted in a suspended ceiling grid
- Airius Transformer type speed controller 1 and 5 Amp available. 0-100% in 5 steps
- Airius speed control - TRIAC speed control to adjust top end RPM
- PHI kit - Photohydroionization - Advanced oxidation technology - Used to mitigate air contaminants

WARRANTY

- 5 years full manufacturers replacement from date of despatch. Subsequent 5 year 'half new price' rebuild cover

MODEL 60 PLACEMENT

PREPARATION

- Install electrical circuit(s) and outlet(s) in accordance with national and local electric codes
- Outlets should generally be mounted vertically unless a "twist/locking" type is being used
- Wall switch may be installed in circuit to disable power and prevent electrical hazards when servicing
- Confirm electrical continuity of Airius unit on the ground before permanently mounting in the ceiling

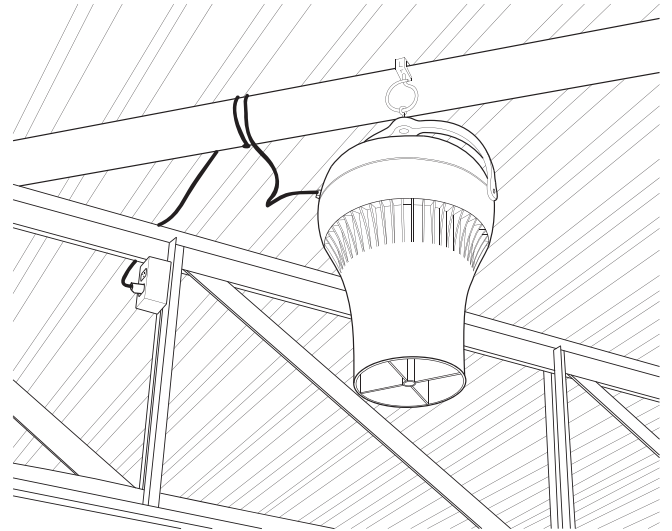
INSTALLATION

- Hang vertically as high in the ceiling as possible
Typically 300 – 450 mm from the roof deck to intake
- The Airius unit performs best when air column from the nozzle is unimpeded to the floor
- Use professionally installed hardware, capable of supporting a minimum of five times the weight
- Hardware to hang the unit includes but is not restricted to: Hooks, chains, cables, carabiners, bridle rings, beam clamps and bolts
- Density of the placement is directly related to the effectiveness, performance and savings
- Mount out of reach from people and animals
- Floor plans, mezzanines, office locations, machinery, people placement, plumbing, lighting, duct work, electrical systems, natural light/air systems, cranes, doors, windows, ventilation and fire suppression systems are all factors in properly locating the Airius system within the ceiling

NOTE:- Air Pears must not be installed directly to structure if they are to be angled. In this case a small length of cable or wire must be used between the handle and the structure to reduce compound twisting torque on the handle.

OPERATION

- Designed to operate 24 hours-a-day, 7 days-a-week to maintain thermal equalization/humidity equalization
- Use optional speed control to fine tune RPM if needed



MAINTENANCE

- Frequency of cleaning will vary by application and environment
- You may clean the plastic housing with a damp warm cloth, using mild household detergents
- Do not use petroleum products, thinners or solvents to clean any part of the Airius unit
- If the Airius unit fails, contact manufacturer

MATERIALS & PROPERTIES

- Constructed from recyclable materials
- The outer shell, stator and fan blades are fire rated 5VA materials
- Power cord is a 3 wire 1.02 mm diameter 300VAC rated electrical cord - CE/EU compliance rated as HO5VV
- Motor is thermally protected. Shutoff is at 135°C & reset is at 125°C
- 0-73 dB(A) Sound Power Level at 50 htz
- No lubrication required. Bearings are sealed



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MODEL 100 DIMENSIONS



MODEL 100 PROPERTIES

UNIT SIZE	Standard	
	Weight:	20.5 kgs
	Height to Rim:	845 mm
	Total Height:	N/A
Diameter:		495 mm

MOTOR	230V	
	Watts* @ 50 htz:	390
	RPM* @ 50 htz:	1690
	L/S* @ 50 htz (m3/hr):	1584 (5705)
	AMPS* @ 50 htz:	2.5

*Motor data provided by motor manufacturer and is subject to change at anytime

COVERAGE

- Floor area = 232m²
- Ceiling Height = 20m - 31m
- Diameter = 17m

MOTOR

- Single Phase
- 1690 rpm @ 50htz
- EC - Electrically Commutated, 92% efficient motor
- All model 100 motors are sourced by EBM PAPST

OPERATING TEMPERATURES

- Min start temp (approx.) = - 10° C
- Min running temp = - 20° C
- Shut off = 135° C
- Reset = 125° C

NOISE LEVELS

- Sound Power Level 80 dB(A)
- Sound Pressure Level @ 10 Mts 52 dB(A)
- Sound Pressure Level @ 30 Mts 42 dB(A)

Note: A typical free field environment over a reflecting plane.

* All acoustic testing undertaken at the EBM- Papst Acoustic Laboratories in Connecticut USA during August 2014

Please contact Airius for full Noise Testing Report

INGRESS PROTECTION

- IP54 Rated

COLOUR

- Cool gray 2C - Off white as standard
- Can be tailor painted to your colour specifications

ACCESSORIES & OPTIONS

- Airius speed control - Potentiometer to alter 0-10VDC control (EC)
- Building management systems can vary speed of EC based on a 0-10VDC

WARRANTY

- 5 years full manufacturers replacement from date of despatch. Subsequent 5 year 'half new price' rebuild cover

MODEL 100 PLACEMENT

PREPARATION

- Install electrical circuit(s) and outlet(s) in accordance with national and local electric codes
- Outlets should generally be mounted vertically unless a "twist/locking" type is being used
- Wall switch may be installed in circuit to disable power and prevent electrical hazards when servicing
- Confirm electrical continuity of Airius unit on the ground before permanently mounting in the ceiling

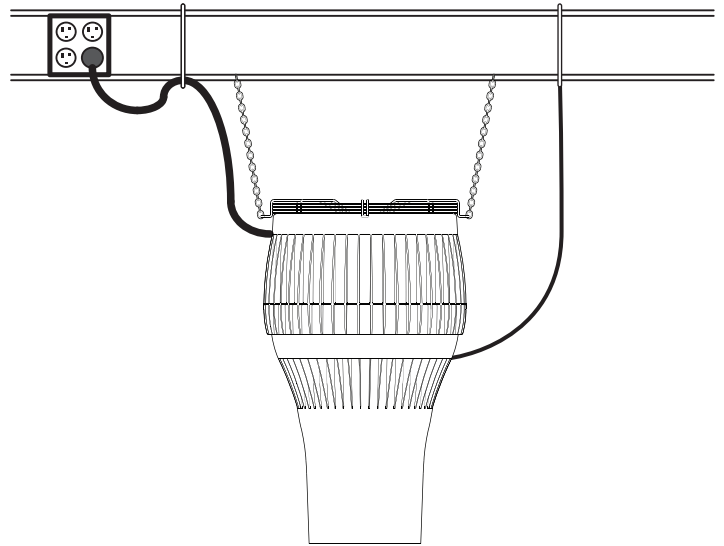
INSTALLATION

- Hang vertically as high in the ceiling as possible
Typically 300 – 450 mm from the roof deck to intake
- The Airius unit performs best when air column from the nozzle is unimpeded to the floor
- Use professionally installed hardware, capable of supporting a minimum of five times the weight
- Hardware to hang the unit includes but is not restricted to: Hooks, chains, cables, carabiners, bridle rings, beam clamps and bolts
- Density of the placement is directly related to the effectiveness, performance and savings
- Mount out of reach from people and animals
- Floor plans, mezzanines, office locations, machinery, people placement, plumbing, lighting, duct work, electrical systems, natural light/air systems, cranes, doors, windows, ventilation and fire suppression systems are all factors in properly locating the Airius system within the ceiling.

NOTE:- Air Pears must not be installed directly to structure if they are to be angled. In this case a small length of cable or wire must be used between the handle and the structure to reduce compound twisting torque on the handle.

OPERATION

- Designed to operate 24 hours-a-day, 7 days-a-week to maintain thermal equalization/humidity equalization
- Use optional speed control to fine tune RPM if needed



MAINTENANCE

- Frequency of cleaning will vary by application and environment
- You may clean the plastic housing with a damp warm cloth, using mild household detergents
- Do not use petroleum products, thinners or solvents to clean any part of the Airius unit
- If the Airius unit fails, contact manufacturer

MATERIALS & PROPERTIES

- Constructed from recyclable materials
- The outer shell, stator and fan blades are fire rated 5VA materials
- Power cord is a 3 wire 1.02 mm diameter 300VAC rated electrical cord - CE/EU compliance rated as HO5VV
- EC - Electrically Commutated, 92% efficient motor
- Motor is thermally protected. Shutoff is at 135°C & reset is at 125°C
- 80 dB(A)* Sound Level Power at 50 htz
- No lubrication required. Bearings are sealed



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Airius Air Pear Fans Updated Acoustic Test Results 29.10.14

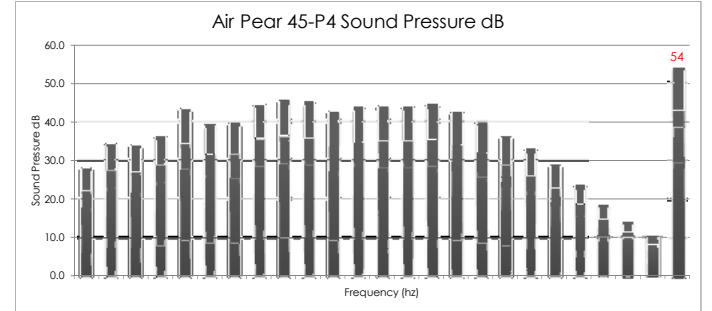
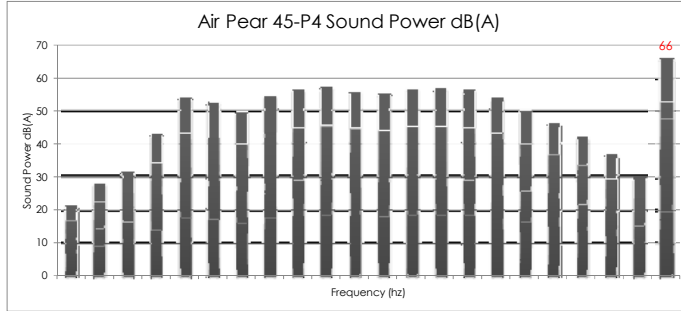
The fans were all tested at the Ebm-papst Farmington, CT, USA facility: 100 Hyde Rd, Farmington, CT 06032 during August 2014. The chamber is built to AMCA standards. All noise levels are measured in conformity to DIN 45635 and ISO 3744/3745 according to precision class 2 and specified A-weighted. Sound pressure level is measured 1 meter from the exhaust side of the fan. The sound power level is measured using 10 microphones distributed over the exhaust side of the fan. **NOTES** • The "A" weighing is not always just related to the overall sound level. In our sound power test the dBA readings covered the complete frequency range, including the overall result.
 • For the sound pressure test the dBA only was for the overall result and the frequency range was not "A" weighted.

A-45-P4-STD-120-W Sound Power

Frequency (hz)	Power [dB(A)]
100	21.52
125	28.34
160	31.89
200	42.92
250	54.14
315	52.61
400	49.82
500	54.63
630	56.42
800	57.14
1000	55.85
1250	55.35
1600	56.75
2000	56.81
2500	56.49
3150	53.96
4000	50.35
5000	46.31
6300	42.21
8000	37
10000	29.89
Overall	66.39

A-45-P4-STD-120-W Sound Pressure

Frequency (hz)	Pressure (db)
100	28.0
125	34.5
160	34.0
200	36.4
250	43.3
315	39.3
400	39.6
500	44.5
630	45.5
800	44.9
1000	42.6
1250	43.5
1600	43.9
2000	43.9
2500	44.2
3150	42.5
4000	40.0
5000	36.1
6300	32.9
8000	28.8
10000	23.4
12500	18.4
16000	14.0
20000	10.2
Overall dB(A)	54.1

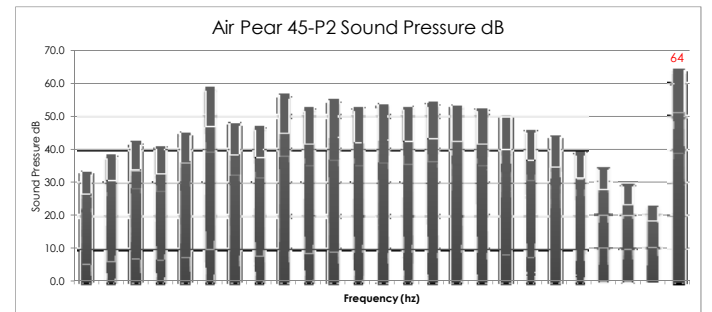
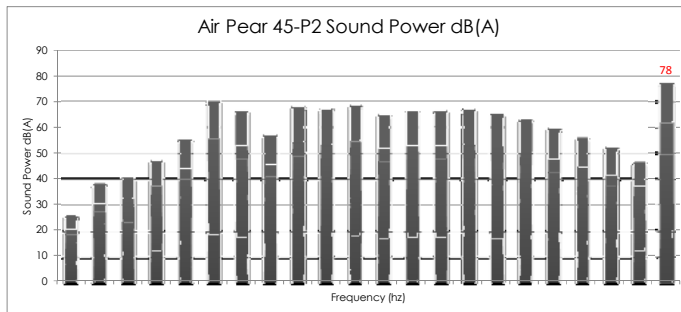


A-45-P2-STD-120-W Sound Power

Frequency (hz)	Power [dB(A)]
100	26.04
125	38.3
160	40.6
200	47.3
250	55.55
315	69.77
400	66.44
500	57.05
630	68.08
800	67.06
1000	68.51
1250	64.93
1600	66.29
2000	66.44
2500	66.96
3150	65.53
4000	63.13
5000	59.64
6300	55.86
8000	52.23
10000	46.59
Overall	77.58

A-45-P2-STD-120-W Sound Pressure

Frequency (hz)	Pressure (db)
100	33.5
125	38.5
160	42.5
200	41.1
250	45.4
315	58.8
400	48.1
500	47.1
630	56.5
800	52.7
1000	55.0
1250	52.7
1600	53.8
2000	53.2
2500	54.2
3150	54.4
4000	52.6
5000	50.0
6300	46.1
8000	43.9
10000	39.3
12500	34.6
16000	29.4
20000	22.8
Overall dB(A)	64.5

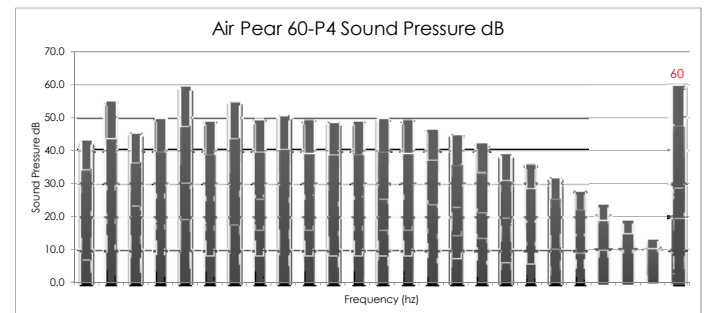
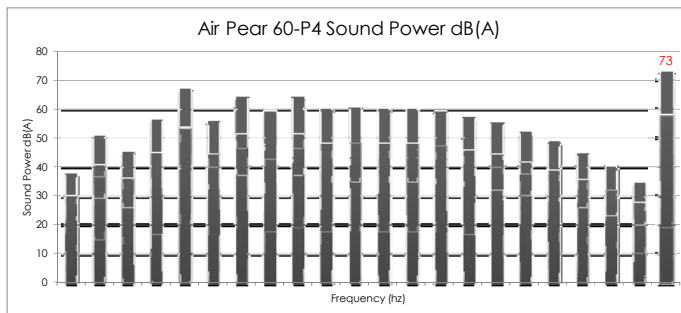


A-60-P4-STD-120-W Sound Power

Frequency (hz)	Power [dB(A)]
100	37.96
125	51.16
160	45.42
200	56.59
250	67.09
315	56.13
400	64.59
500	59.83
630	64.76
800	60.23
1000	60.6
1250	60.23
1600	60.27
2000	59.46
2500	57.69
3150	55.75
4000	52.34
5000	48.92
6300	45.2
8000	40.47
10000	34.98
Overall	72.89

A-60-P4-STD-120-W Sound Pressure

Frequency (hz)	Pressure (db)
100	42.7
125	54.8
160	45.5
200	50.0
250	59.2
315	48.8
400	54.6
500	49.5
630	50.5
800	49.1
1000	48.6
1250	48.9
1600	49.7
2000	49.1
2500	46.5
3150	44.9
4000	41.9
5000	38.7
6300	35.8
8000	32.0
10000	28.0
12500	23.4
16000	18.6
20000	12.7
Overall dB(A)	59.6



A-100-EC-STD-100-130-W Sound Power

Frequency (hz)	Power [dB(A)]
100	46.7
125	62.78
160	64.5
200	62.93
250	66.3
315	64.25
400	70.55
500	67.75
630	74.65
800	67.04
1000	67.53
1250	66.99
1600	65.79
2000	65.74
2500	65.04
3150	63.65
4000	61.24
5000	57.92
6300	54.38
8000	49.85
10000	45.45
Overall	79.6

A-100-EC-STD-100-130-W Sound Pressure

Frequency (hz)	Pressure (db)
100	46.9
125	60.7
160	59.8
200	54.6
250	58.9
315	54.2
400	61.0
500	54.9
630	60.4
800	54.2
1000	53.7
1250	54.9
1600	55.5
2000	54.2
2500	54.0
3150	53.1
4000	50.3
5000	48.3
6300	46.1
8000	42.6
10000	39.9
12500	37.8
16000	39.9
20000	30.7
Overall dB(A)	65.9

