

RYDAIR B SERIES

Electrostatic Air Cleaner



Electrostatic Air Cleaner Features of the ESP



UV ozone injection to remove and oxidise cooking odours efficiently.

2

RY-2500B

Electrostatic Air Cleaner with UV Ozone





Without UV optional

Specifications

Unit:	H: 540mm, W: 620mm, L: 694mm
Cabinet:	1.4mm/16 Gauge Galvanised Stee
Finishing:	Weatherproof powder coated, Dar
Weight:	55 kg
Air Volume:	700 Ľ/s
LED Operating Indicators:	Green LED (ON) Red LED (OFF) Bl on unit's panel
Static Pressure Required:	40 Pascal
Power & Voltage:	230 Volts 1PH – 3 pin cord plug, 5
C C	Amps without UV, 1.25 Amps with
Ionising Voltage:	High Voltage 12KVdc, Low Voltage
Airflow Direction:	Right to Left or Left or Right
Power Supply:	High frequency solid state and sel
Particle Size:	0.01 microns – 10 microns
Efficiency:	Single pass 95%, Double pass 99. Calculated
MERV Ratings:	Meets MERV 15 at velocity of 2.5n
Pre-Filter:	Stainless Steel mesh, 1x Washable
Electrostatic Cell Size:	H: 472mm, W: 340mm, L: 550mm
Number of Cells / Weight:	1/16.5 kg per cell
Number of Plates:	61
Total Collection Area:	6.07 Sq metres
Installation:	Ceiling Suspended, Wall or frame Stacked multiple units
No. of Lamps:	1
Lamp Wattage:	65 Watts
Ozone Output:	6 grams/hour
Lamp Life:	13000 Hours
Application:	Odour Control
Certified To:	AS 1668.1 and AS 1668.2, certified BCA performance requirements, c for alternative solution compliance AHRAE 52.2 2017 Method of Te Ventilation Air-Cleaning Devices fo Efficiency by Particle Size Australian and New Zealand Electro

ge Galvanised Steel owder coated, Dark blue I) Red LED (OFF) Blue (UV Ozone) - 3 pin cord plug, 50 Hz, 0.45 JV, 1.25 Amps with UV 2KVdc, Low Voltage 6KVdc Left or Right solid state and self-regulating 10 microns %, Double pass 99.9% ASHRAE 5 at velocity of 2.5m/s to 3.8m/s mesh, 1x Washable 340mm, L: 550mm ell ded, Wall or frame mounted, le units

AS 1668.2, certified to the nce requirements, can be utilised solution compliance, 017 -- Method of Testing General Cleaning Devices for Removal article Size New Zealand Electrical certified AS/NZ 60335.1 AS/NZS60335.1:2011+A1, A2, A3 NATA Accredited Laboratory Number: 676









RY-2500B-V

Electrostatic Air Cleaner with UV Ozone





Without UV optional

Specifications

Unit:	H: 485mm, W: 64
Cabinet:	1.4mm/16 Gauge
Finishing:	Weatherproof po
Weight:	50 kg
Air Volume:	700 L/s
LED Operating Indicators:	Green LED (ON) on unit's panel
Static Pressure Required:	40 Pascal
Power & Voltage:	230 Volts 1PH – Amps without UV
Ionising Voltage:	High Voltage 12k
Airflow Direction:	Vertical only
Power Supply:	High frequency s
Particle Size:	0.01 microns – 1
Efficiency:	Single pass 95% Calculated
MERV Ratings:	Meets MERV 15
Pre-Filter:	Stainless Steel n
Electrostatic Cell Size:	H: 472mm, W: 34
Number of Cells / Weight:	1/16.5 kg per ce
Number of Plates:	61
Total Collection Area:	6.07 Sq metres
Installation:	Ceiling Suspend Stacked multiple
No. of Lamps:	1
Lamp Wattage:	65 Watts
Ozone Output:	6 grams/hour
Lamp Life:	13000 Hours
Application:	Odour Control
Certified To:	AS 1668.1 and A BCA performanc for alternative so AHRAE 52.2 201 Ventilation Air-Cl
	Australian and N

45mm, L: 684mm e Galvanised Steel wder coated, Dark blue Red LED (OFF) Blue (UV Ozone) 3 pin cord plug, 50 Hz, 0.45 V, 1.25 Amps with UV KVdc, Low Voltage 6KVdc solid state and self-regulating 0 microns 5, Double pass 99.9% ASHRAE at velocity of 2.5m/s to 3.8m/s nesh, 1x Washable 40mm, L: 550mm II ed, Wall or frame mounted, units S 1668.2, certified to the e requirements, can be utilised olution compliance,

AHRAE 52.2 2017 -- Method of Testing General Ventilation Air-Cleaning Devices for Removal Efficiency by Particle Size Australian and New Zealand Electrical certified AS/NZ 60335.1 AS/NZS60335.1:2011+A1, A2, A3 NATA Accredited Laboratory Number: 676









RY-5000B

Electrostatic Air Cleaner with UV Ozone





Without UV optional

Specifications

Unit:	H: 540mm, W: 620mm, L: 1243mm
Cabinet:	1.4mm/16 Gauge Galvanised Steel
Finishing:	Weatherproof powder coated, Dark blue
Weight:	90 kg
Air Volume:	1400 L/s
LED Operating Indicators:	Green LED (ON) Red LED (OFF) Blue (UV Ozone)
	on unit's panel
Static Pressure Required:	40 Pascal
Power & Voltage:	230 Volts 1PH – 3 pin cord plug, 50 Hz, 0.72
	Amps without UV, 1.50 Amps with UV
Ionising Voltage:	High Voltage 12KVdc, Low Voltage 6KVdc
Airflow Direction:	Right to Left or Left or Right
Power Supply:	High frequency solid state and self-regulating
Particle Size:	0.01 microns – 10 microns
Efficiency:	Single pass 95%, Double pass 99.9% ASHRAE
	Calculated
MERV Ratings:	Meets MERV 15 at velocity of 2.5m/s to 3.8m/s
Pre-Filter:	Stainless Steel mesh, 2x Washable
Electrostatic Cell Size:	H: 472mm, W: 340mm, L: 550mm
Number of Cells / Weight:	2/16.5 kg per cell
Number of Plates:	61
Total Collection Area:	12.14 Sq metres
Installation:	Ceiling Suspended, Wall or frame mounted,
N 61	Stacked multiple units
No. of Lamps:	2
Lamp Wattage:	150 Watts
Ozone Output:	14 grams/nour
	13000 Hours
Application:	AC 1000 1 and AC 1000 0, partition to the
Certified Io:	AS 1668.1 and AS 1668.2, certified to the
	for alternative solution compliance
	Δ HBAE 52.2 2017 Method of Testing General
	Ventilation Air-Cleaning Devices for Removal
	Efficiency by Particle Size
	Australian and New Zealand Electrical certified
	AS/NZ 60335.1 AS/NZS60335.1:2011+A1, A2,
	A3 NATA Accredited Laboratory Number: 676









RY-7500B

Electrostatic Air Cleaner with UV Ozone





Without UV optional

Specifications

Unit:	H: 540mm, W: 620mm, L: 1790mm
Cabinet:	1.4mm/16 Gauge Galvanised Steel
Finishing:	Weatherproof powder coated, Dark blue
Weight:	122 kg
Air Volume:	2100 L/s
LED Operating Indicators:	Green LED (ON) Red LED (OFF) Blue (UV Ozone)
	on unit's panel
Static Pressure Required:	40 Pascal
Power & Voltage:	230 Volts 1PH – 3 pin cord plug, 50 Hz, 0.90
C C	Amps without UV, 1.70 Amps with UV
Ionising Voltage:	High Voltage 12KVdc, Low Voltage 6KVdc
Airflow Direction:	Right to Left or Left or Right
Power Supply:	High frequency solid state and self-regulating
Particle Size:	0.01 microns – 10 microns
Efficiency:	Single pass 95%, Double pass 99.9% ASHRAE
	Calculated
MERV Ratings:	Meets MERV 15 at velocity of 2.5m/s to 3.8m/s
Pre-Filter:	Stainless Steel mesh, 3x Washable
Electrostatic Cell Size:	H: 472mm, W: 340mm, L: 550mm
Number of Cells / Weight:	3/16.5 kg per cell
Number of Plates:	61
Total Collection Area:	18.21 Sq metres
Installation:	Ceiling Suspended, Wall or frame mounted,
	Stacked multiple units
No. of Lamps:	2
Lamp Wattage:	180 Watts
Ozone Output:	16 grams/hour
Lamp Life:	13000 Hours
Application:	Odour Control
Certified To:	AS 1668.1 and AS 1668.2, certified to the
	BCA performance requirements, can be utilised
	AHRAE 52 2 2017 Method of Testing General
	Ventilation Air-Cleaning Devices for Removal
	Efficiency by Particle Size
	Australian and New Zealand Electrical certified
	AS/NZ 60335.1 AS/NZS60335.1:2011+A1, A2,
	A3 NATA Accredited Laboratory Number: 676









RY-10000B

Electrostatic Air Cleaner with UV Ozone



Specifications

LED

Unit:	H: 540mm, W: 620mm, L: 2338mm
Cabinet:	1.4 mm/16 Gauge Galvanised Steel
Finishing:	Weatherproof powder coated, Dark blue
Weight:	122 kg
Air Volume:	2800 L/s
LED Operating Indicators:	Green LED (ON) Red LED (OFF) Blue (UV Ozone) on unit's panel
Static Pressure Required:	40 Pascal
Power & Voltage:	230 Volts 1PH – 3 pin cord plug, 50 Hz, 0.95 Amps without UV, 1.70 Amps with UV
Ionising Voltage:	High Voltage 12KVdc, Low Voltage 6KVdc
Airflow Direction:	Right to Left or Left or Right
Power Supply:	High frequency solid state and self-regulating
Particle Size:	0.01 microns – 10 microns
Efficiency:	Single pass 95%, Double pass 99.9% ASHRAE Calculated
MERV Ratings:	Meets MERV 15 at velocity of 2.5m/s to 3.8m/s
Pre-Filter:	Stainless Steel mesh, 4x Washable
Electrostatic Cell Size:	H: 472mm, W: 340mm, L: 550mm
Number of Cells / Weight:	4/16.5Kg per cell
Number of Plates:	61
Iotal Collection Area:	24.28 Sq metres
Installation:	Stacked multiple units
No. of Lamps:	2
Lamp Wattage:	180 Watts
Ozone Output:	16 grams/hour
Lamp Life:	13000 Hours
Application:	Value Control
Certified Io:	AS 1668.1 and AS 1668.2, certified to the BCA performance requirements, can be utilised for alternative solution compliance,
	AHRAE 52.2 2017 Method of Testing General Ventilation Air-Cleaning Devices for Removal Efficiency by Particle Size
	Australian and New Zealand Electrical certified AS/NZ 60335.1 AS/NZS60335.1:2011+A1, A2, A3 NATA Accredited Laboratory Number: 676













How Electrostatic Air Cleaners Work

Electrostatic air cleaners use electricity to remove smoke, grease and oil particles in the kitchen ventilation system before discharging the exhaust air into the atmosphere. The larger grease particles are captured by the pre-filter and the smaller particles received a positive charger by the ioniser on the cell. The collection plates with the grease and oil particles receive a positive charge on the electrostatic cell. As the electrostatic cell collects grease and oil over time, it will require a periodic clean and servicing exchange set of pre filters and electrostatic cells are recommended for each ESP unit.

Electrostatic Air Cleaner Features and Benefits

- Control panel recessed into the unit.
- 2 Built in oil tray.
- 3 Advanced gasket door systems, which stops the leaking of grease.
- 4 Stainless steel rails which makes it easy to slide cells and pre-filters to slide out for maintenance.
- 5 Advanced gasket door systems, which stops the leaking of grease.
- Compression switch on the filters which therefore means no springs on the cells.
- High efficiency, low maintenance and replacement costs and optional UV ozone in all RY series electrostatic air cleaners.
- 8 Heavy duty collection cells durable and long lasting.
- 9 Weatherproof powder coated finish and built from 1.4 mm galvanised steel.



Single pass Electrostatic Efficiency



Double pass Electrostatic Efficiency

Workflows AS 1668 Solutions



Street Level Discharge

A street level discharge is required where there is no means of ventilation through a mechanical riser and the only way to discharge the kitchen exhaust air is horizontally on street level, better known as a street level discharge.

5 Retrofit Kitchen Exhaust Filtration System

AOS kitchen exhaust filtration system can be retrofitted on site into any existing kitchen exhaust applications. If a restaurant owner has any issues that may arise due to smoke, grease and odours associated during the cooking process.



Alternative Solution Filtration System

AOS Alternative Solution Filtration System will allow for a performance-based solution to satisfy requirements of AS1668 parts 1 & 2 and BCA performance requirements.

2 Low Level Discharge

When discharge smoke, grease, odours at a low level, a combination of kitchen exhaust treatment technologies is often employed to achieve the most cost effective outcome. The factors that must be considered include having to be close to the boundaries, windows and air intakes or natural ventilation devices.

Recycled Kitchen Exhaust Filtration System

The AOS Kitchen Exhaust Filtration can utilise a recycled kitchen exhaust system in combination with electrostatic air cleaners, odour control system and carbon filtration.

	Plant Room	
9	Filtration System	

Plant rooms have a large amount of exhaust air distributed through the building. The AOS electrostatic and carbon filtration system can be installed in the plant room to remove smoke and odours from the cooking process. The filtration units are modular in design and can be stacked on top of each other and bolted together. This will increase the kitchen exhaust airflow requirements.

3 Solid Fuel Kitchen Exhaust Filtration System

This filtration system technique can remove particles through a cooling effect. They are specifically designed for solid fuel applications including wood fire ovens and charcoal applications which utilise solid fuel such as hot coals and woods for cooking.

Low Velocity High Efficiency Filtration System

AOS low-velocity high-efficiency filtration system allows to utilise the Envirohood and combining electrostatic filtration to achieve clean air discharge.



A tenancy lease agreement would indicate kitchen exhaust filtration system to be installed in the premises as a condition of the lease. Usually duct connection is installed in the tenancy and the owner must maintain and have full responsibility of the kitchen exhaust filtration system issues may arise with residential tenancies which live above the retail precinct. The local the council who protect the local residence are becoming less tolerant of offensive smoke and odour from ventilation systems.



For more AS1688 solutions please visit: www.aosaus.com.au/solutions

Push your air and odour **workflow further** with ESP accessories.



Electrostatic filter

Contains 61 collection plates per electrostatic cell for higher collection efficiency.



Power pack

Supplies low voltage and high voltage power to the two stages of the electrostatic unit.



Pre-filter Stops and collects larger grease particles entering onto the electrostatic cell.



Rain cover Protects the electrical components for outdoor installations.



Remote Monitor Indicates remote status of the electrostatic filter with UV ozone output control.



BMS (Building management system) BMS allows for real time electrostatic filtration status information.

Configurations and efficiency Electrostatic Air Cleaners

(Front view)



Single Pass (95% efficiency)

Double Pass (99.9% efficiency)

Triple Pass (99.9% efficiency)

Stacked (95% efficiency)

Stacked Double Pass (99.9% efficiency)







Aus / NZ distributors of:





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