



Airstream®

RELIANT

Class II Type A2 Biological Safety Cabinets

The Leading Energy Efficient, Robust, Quiet, and Ergonomic Biosafety Cabinet



Airstream Reliant Class II Type A2
Biosafety Cabinet, Model AR2-459



ESCO
SCIENTIFIC



Adjustable UV Timer

- Easily adjustable to desired minutes or hours
- Prolongs UV lamp life, for not turning it ON overnight



Rocker Switches and Pressure Gauge

- Easy to use switches
- Displays filter loading status
- Manually adjustable UV timer



Single-Piece Wall

- Easy to reach service fixture and outlets
- Large radius for easy cleaning



Single-piece Work Tray

- Recessed to contain spillage
- Sloped perimeter that's easy to wipe



Raised Arm Rest

- Helps prevent grille blocking
- Comfortable working posture



Removable Paper Catch

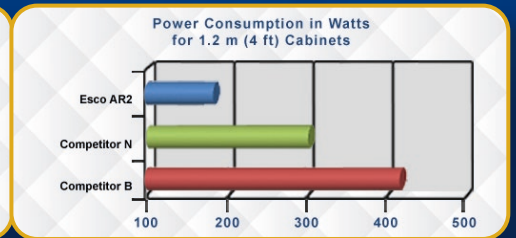
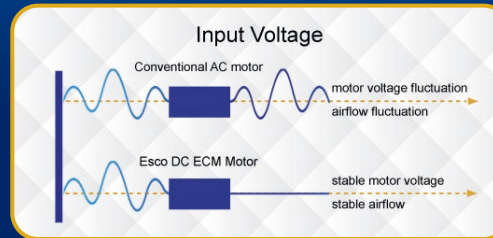
- Easy to clean
- Optional pre-filter can be fitted



Available in 1.2 and 1.8 meter width (4' and 6')

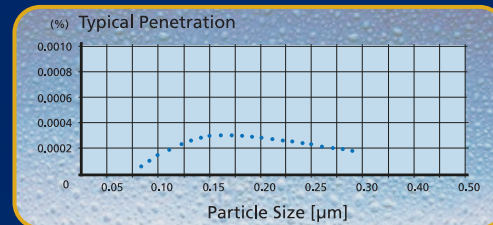
Energy Efficient DC ECM Motor

- The leading energy efficient Class II Type A2 Biosafety Cabinet in the world with 70% Energy savings compared to AC motor
- Stable airflow, despite building voltage fluctuations & filter loading
- Night Setback mode to further reduce power consumption by 60%



ULPA Filter

- 10x Filtration efficiency of HEPA filter
- Creates ISO Class 3 work zone instead of industry-standard ISO Class 5



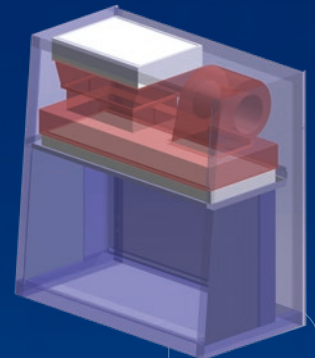
Esco cabinets use ULPA filters (per IEST-RP-CC001.3) / H14 per EN 1822 instead of H13 HEPA filters used on many BSCs in the market.

HEPA filters only offer 99.99% typical efficiency at 0.3 micron, while ULPA filters provide 99.999% typical efficiency for particle sizes of 0.1 to 0.3 micron.

Dynamic Chamber

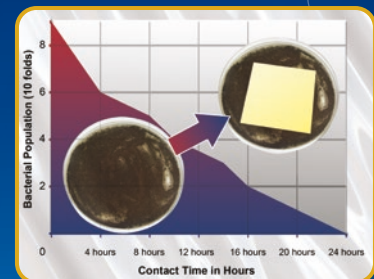
- Blower plenum and side walls are surrounded by negative pressure
- Prevent contaminants from escaping outside

■ Positive pressure
■ Negative pressure



ISOCIDE™ Powder Coat

- Silver-ion impregnated powder coat
- Inhibit microbial growth to improve safety



Certification

	Biosafety Cabinets	Air Quality	Filtration	Electrical Safety
Standards Compliance	NSF / ANSI 49 NSF*	ISO 14644.1, Class 3, Worldwide JIS B9920, Class 3, Japan JIS B55295, Class 3, Japan US Fed Std 209E, Class 1 USA	EN-1822 (H14), Europe IEST-RP-CC001.3, USA IEST-RP-CC007, USA IEST-RP-CC034.1, USA	UL-61010A-1, USA CSA22.2, No.1010-192, Canada EN-61010-1, Europe IEC61010-1, Worldwide

* The NSF / ANSI 49 certified models are: AR2-4S9 and AR2-6S9

TECHNICAL SPECIFICATIONS OF AR2

Model		AR2-459	AR2-659
External Dimensions (W x D x H) mm		1340 x 753 x 1400 (52.75" x 29.5" x 54.7")	1950 x 753 x 1400 (76.75" x 29.5" x 54.7")
Gross Internal Dimensions (W x D x H) mm		1220 x 580 x 660 (48" x 22.75" x 26")	1830 x 580 x 660 (72" x 22.75" x 26")
Usable Work Area		0.56 m ² (6.1 ft ²)	0.86 m ² (9.2 ft ²)
Tested Opening		203 mm (8")	
Working Opening		218 mm (8.5")	
Average Inflow Velocity		0.53 m/s (105 fpm)	
Average Downflow Velocity		0.30 m/s (60 fpm)	
Airflow Volume	Inflow	473 cmh (280 cfm)	709 cmh (417 cfm)
	Downflow	738 cmh (434 cfm)	1107 cmh (652 cfm)
	Exhaust	473 cmh (280 cfm)	709 cmh (417 cfm)
	Required Exhaust With Optional Thimble Exhaust Collar	736 cmh (433 cfm)	1124 cmh (662 cfm)
	Static Pressure For Optional Thimble Exhaust Collar	45 Pa / 0.18 in H ₂ O	65 Pa / 0.26 in H ₂ O
ULPA Filter Typical Efficiency		>99.999% at 0.1 to 0.3 micron, ULPA as per IEST-RP-CC001.3 USA >99.999% at MPPS, H14 as per EN 1822 EU	
Sound Emission per NSF / ANSI 49*		57.5 dBA	60.5 dBA
Fluorescent Lamp Intensity (lux)		1025 lux (95 ft-cd)	1035 lux (96 ft-cd)
Cabinet Construction	Main body	1.2 mm (0.08") / 18 gauge EG Steel With Isocide Oven-Baked Epoxy-Polyester Powder Coating	
	Work Zone	1.5 mm (0.06") / 16 gauge, SS 304, 4B finish	
	Side Walls	1.5 mm (0.06") / 16 gauge, SS 304, 4B finish	
Electrical	Cabinet Full Load Amps (FLA)	11	15
	Heat Load (BTU / Hr)	628	1003
Nominal Power Consumption		200 W	294 W
Net Weight **		230 Kg (507 lbs)	346 Kg (763 lbs)
Shipping Weight **		285 Kg (628 lbs)	428 Kg (944 lbs)
Shipping Dimensions, Maximum (W x D x H)**		1450 x 820 x 1760 mm (57" x 32" x 69")	2050 x 820 x 1760 mm (57" x 32" x 69")
Shipping Volume, Maximum **		2.09 m ³ (74 ft ³)	2.96 m ³ (105 ft ³)

Specifications are subject to change without notice.

* Noise reading in open field condition / anechoic chamber. Noise reading in normal room varies by room size, layout, and background noise, but may reach roughly 3-4 dBA above these values.

** Cabinet only, excludes optional stand.



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