# Airstream® RELIANT

# **Class II Type A2 Biological Safety Cabinets**

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



ESCO

··· iii 0 ()

NSF c Uus

UL 61010 Airstream Reliant Class II Type A2 Biosafety Cabinet, Model AR2-4S9

NSF 49

NEW



## **Adjustable UV Timer**

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

ESCO.

ESCO.

### **Rocker Switches and Pressure Gauge**

169999331

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



2

#### **Single-Piece Wall**

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

# Single-piece Work Tray

Recessed to contain spillage

**Raised Arm Rest** 

Helps prevent grille blocking
 Comfortable working posture

Sloped perimeter that's easy to wipe





#### **Removable Paper Catch**

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



Available in 1.2 and 1.8 meter width (4' an

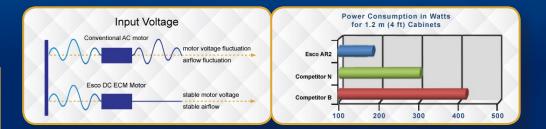
ESCO

Airstream<sup>®</sup>•RELIANT Class II Type A2 • Biological Safety Cabinets

#### **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%



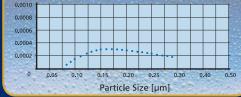


### **ULPA Filter**

Airstream•RELIANT,

A

- = 10x Filtration efficiency of HEPA filter
- Creates ISO Class 3 work zone instead of industry-standard ISO Class 5
  (%) Typical Penetration
  Esco cabinets use ULPA filters (per



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.

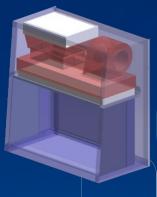
HEPA filters only offer 99.99% typical efficiency at 0.3 micron, while ULPA filters provide 99.999% typical efficiency for particle sizes of 0.1 to 0.3 micron.

## **Dynamic Chamber**

 Blower plenum and side walls are surrounded by negative pressure

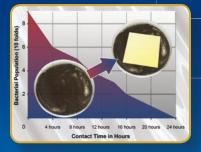
Prevent contaminants from escaping outside





#### **ISOCIDE**<sup>™</sup> 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 BS5295, 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	



З

#### **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 m2 (6.1 ft <sup>2</sup> )	0.86 m2 (9.2 ft²)			
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 <sub>2</sub> O	65 Pa / 0.26 in H <sub>2</sub> 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)		1700 lux (158 foot candles)	1647 lux (153 foot candles)			
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 m³(74 ft³)	2.96 m <sup>3</sup> (105 ft <sup>3</sup> )			

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.



LIFESCIENCES GROUP

Esco Micro Pte. Ltd. • 21 Changi South Street 1 • Singapore 486 777 Tel +65 6542 0833 • Fax +65 6542 6920 • mail@escolifesciences.com www.escolifesciences.com

Esco Technologies, Inc. • 903 Sheehy Drive, Suite F, Horsham, PA 19044, USA Tel: +1 215-441-9661 • Fax 484-698-7757 eti.admin@escolifesciences.com

Esco Lifesciences Group Offices: Bangladesh | China | Denmark | Germany | Hong Kong | India | Indonesia | Italy | Japan | Lithuania | Malaysia | Myanmar | Philippines | Russia | Singapore | South Africa | South Korea | Taiwan | Thailand | UAE | UK | USA | Vietnam