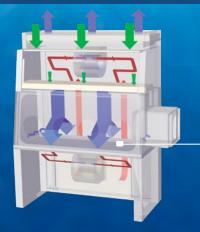


# **Class III, Biological Safety Cabinets**







# **Cabinet Filtration System**

Dynamic air barrier, inflow and forward-directed downflow air converge

ESCO

- Ambient air is pulled into the cabinet through a disposable pre-filter, trapping larger particles and prolonging the life of main filter. Air is then passed through the downflow ULPA filter into the work zone as a vertical laminar flow air stream, bathing the work surface in clean air.
- The uniform non-turbulent air stream protects against cross contamination within and throughout the work area.
- Near the work surface, the downflow air stream splits and exits the chamber through perforations around the perimeter of the work zone.
- ULPA-filtered air
- Unfiltered / potentially contaminated air
- Room air / inflow air
- Air from work zone passes through the first ULPA exhaust filter below the work surface, before traveling through internal ducting and exhausting to the laboratory environment after passing through the second ULPA exhaust filter located above the cabinet's main chamber.

Airstream



# Sentinel™ Silver Microprocessor Controller

- Supervises all cabinet functions
- Easy-to-use soft keys for menu, blower, light, UV, electrical outlet, etc
- Large display which monitors the operational parameters



## Magnehelic\* pressure gauge

Mounted in the rear of the work zone for at-a-glance monitoring of work zone negative pressure

\*Registered trademark of Dwyer Instruments, Inc.



### Pass Box -

Equipped with interlocking doors that permits materials transfer without risk of environmental contamination



## Glove ports -

For easy and safe glove changing



**ISOCIDE™** 



# **Neoprene™ Synthetic Arm-length Gauntlets**

 Single piece, leak-tested assembly guarantees maximum protection and flame and abrasion resistant

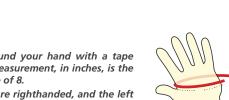
#### **Glove Sizes**

- To find out your glove size, measure (in inches) around your hand with a tape measure at the place indicated on the diagram. This measurement, in inches, is the closest to your glove size, i.e. 8" is equal to a glove size of 8.
- You should use your dominant hand, the right if you are righthanded, and the left if you are left-handed.
- Standard glove sizes available are 7, 8 (standard size) and 9. Specify when ordering.



	Biosafety Cabinets	For Air Quality	For Filtration	For Electrical Safety
Standards Compliance	EN 12469, Europe	ISO 14644.1 Class 3, Worldwide IEST-G-CC1001, USA IEST-G-CC1002, USA	IEST-RP-CC034.1, Worldwide IEST-RP-CC007.1, Worldwide IEST-RP-CC001.3, Worldwide EN 1822 (H14), Europe	IEC 61010-1, Worldwide EN 61010-1, Europe UL 61010-1, USA CAN/CSA-22.2, No. 61010-1

2

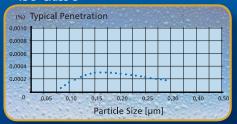


# **Air-tight Built**

Completely welded construction to ensure absolute containment for operator and environmental safety

# **Dual Exhaust ULPA FILTER**

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

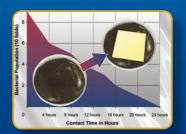


# **Angled Front**

■ To optimize user comfort, reduce glare and maximize reach into the work area

# ISOCIDE™ Powder Coat

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



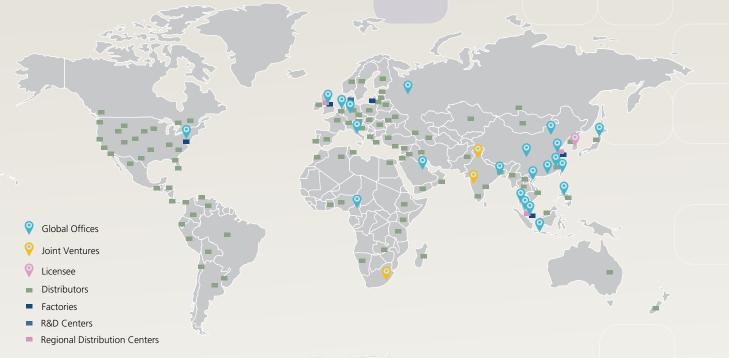
## General Specifications, Airstream Class III, Biological Safety Cabinets

Note to customer: Insert electrical voltage number into last model number digits _ when ordering					
Model		AC3-4B	AC3-5B	AC3-6B	
Nominal Size		1.2 meter (4')	1.5 meter (5')	1.8 meter (6')	
External Dimensions (W x D x H)		1665 x 850 x 2250 mm 65.6" x 33.5" x 88.6"	1970 x 850 x 2250 mm 77.6" x 33.5" x 88.6"	2275 x 850 x 2250 mm 89.6" x 33.5" x 88.6"	
Internal Work Area, Dimensions (W x D x H)		1340 x 560 x 650 mm 52.8" x 22.0" x 25.6"	1645 x 560 x 650 mm 64.8" x 22.0" x 25.6"	1950 x 560 x 650 mm 76.8" x 22.0" x 25.6"	
Internal Work Area, Space		0.75 m <sup>2</sup> (8.1 sq.ft)	0.92 m <sup>2</sup> (9.9 sq.ft)	1.09 m <sup>2</sup> (11.7 sq.ft)	
Number of Gloves Ports		2 ports	4 ports	4 ports	
Glove Type & Sizes Available		Neoprene™ polychloroprene synthetic rubber gauntlets. Available in sizes 7, 8 (standard size) and 9			
Initial Airflow Volume		603 m³/h ( 355 cfm)	756 m³/h ( 445 cfm)	902 m³/h (531 cfm)	
Negative Work Zone Pressure		-275 Pa (-1.1" Wg)			
Pre-Filter		Disposable and non-washable polyester fibers with 85% arrestance / EU3 rated			
ULPA Filter Typical (Downflow, 1st Exh		Туг	pical: 99.999% at 0.1 to 0.3 µm and MP	PS	
Sound	NSF 49	<54 dBA	<55 dBA	<56 dBA	
Emission (Typical)*	EN 12469	<51 dBA	<52 dBA	<53 dBA	
Fluorescent Light I Ambient	ntensity At Zero	>2000 Lux (>186 foot candles)	>1800 Lux (>167 foot candles)	>2000 Lux (>186 foot candles)	
Cabinet Main Body		1.5 mm (0.06") 16 gauge electro-galvanized steel with white oven-baked epoxy-polyester ISOCIDE™ antimicrobial powder coated finish			
Construction	Work Zone	1.2 mm (0.05") 18 gauge stainless steel, type 304, with 4B finish			
	220-240V, AC, 50Hz, 1Ø	AC3-4B1	AC3-5B1	AC3-6B1	
	Cabinet Full Load Amps (FLA)	3 A	3 A	3 A	
	Cabinet Full Load Amps (FLA) Optional Outlets FLA	3 A 5 A	3 A 5 A	3 A 5 A	
		· ·			
Flectrical**	Optional Outlets FLA	5 A	5 A	5 A	
Electrical**	Optional Outlets FLA  Cabinet Nominal Power	5 A 361 W	5 A 430 W	5 A 455 W	
Electrical**	Optional Outlets FLA Cabinet Nominal Power Cabinet BTU	5 A 361 W 1232	5 A 430 W 1467	5 A 455 W 1553	
Electrical**	Optional Outlets FLA Cabinet Nominal Power Cabinet BTU 110-120V, AC, 60Hz, 1Ø	5 A 361 W 1232 AC3-4B2	5 A 430 W 1467 AC3-5B2	5 A 455 W 1553 AC3-682	
Electrical**	Optional Outlets FLA  Cabinet Nominal Power  Cabinet BTU  110-120V, AC, 60Hz, 1Ø  Cabinet Full Load Amps (FLA)	5 A 361 W 1232 AC3-4B2 10 A	5 A 430 W 1467 AC3-5B2 11.5 A	5 A 455 W 1553 AC3-6B2 11.5 A	
Electrical**	Optional Outlets FLA Cabinet Nominal Power Cabinet BTU 110-120V, AC, 60Hz, 1Ø Cabinet Full Load Amps (FLA) Optional Outlets FLA	5 A 361 W 1232 AC3-4B2 10 A 5 A	5 A 430 W 1467 AC3-5B2 11.5 A 5 A	5 A 455 W 1553 AC3-6B2 11.5 A 5 A	
Electrical**  Net Weight	Optional Outlets FLA Cabinet Nominal Power Cabinet BTU 110-120V, AC, 60Hz, 1Ø Cabinet Full Load Amps (FLA) Optional Outlets FLA Cabinet Nominal Power	5 A 361 W 1232 AC3-4B2 10 A 5 A 536 W	5 A 430 W 1467 AC3-5B2 11.5 A 5 A 586 W	5 A 455 W 1553 AC3-6B2 11.5 A 5 A 620.5 W	
	Optional Outlets FLA Cabinet Nominal Power Cabinet BTU 110-120V, AC, 60Hz, 1Ø Cabinet Full Load Amps (FLA) Optional Outlets FLA Cabinet Nominal Power	5 A 361 W 1232 AC3-4B2 10 A 5 A 536 W 1829	5 A 430 W 1467 AC3-582 11.5 A 5 A 586 W 2000	5 A 455 W 1553 AC3-6B2 11.5 A 5 A 620.5 W	
Net Weight	Optional Outlets FLA Cabinet Nominal Power Cabinet BTU 110-120V, AC, 60Hz, 1Ø Cabinet Full Load Amps (FLA) Optional Outlets FLA Cabinet Nominal Power Cabinet BTU	5 A  361 W  1232  AC3-4B2  10 A  5 A  536 W  1829  498 kg (1096 lbs)	5 A 430 W 1467 AC3-5B2 11.5 A 5 A 586 W 2000 598 kg (1316 lbs)	5 A 455 W 1553 AC3-6B2 11.5 A 5 A 620.5 W 2117 676 kg (1487 lbs)	
Net Weight Shipping Weight Shipping Dimension	Optional Outlets FLA Cabinet Nominal Power Cabinet BTU 110-120V, AC, 60Hz, 1Ø Cabinet Full Load Amps (FLA) Optional Outlets FLA Cabinet Nominal Power Cabinet BTU	5 A  361 W  1232  AC3-4B2  10 A  5 A  536 W  1829  498 kg (1096 lbs)  606.5 kg / 1337 lbs  2600 x 1950 x 1320 mm	5 A  430 W  1467  AC3-5B2  11.5 A  5 A  586 W  2000  598 kg (1316 lbs)  615 kg / 1356 lbs  2600 x 2150 x 1320 mm	5 A  455 W  1553  AC3-6B2  11.5 A  5 A  620.5 W  2117  676 kg (1487 lbs)  720 kg / 1587 lbs  2600 x 2150 x 1320 mm	
Net Weight Shipping Weight Shipping Dimension Maximum (W x D x	Optional Outlets FLA Cabinet Nominal Power Cabinet BTU 110-120V, AC, 60Hz, 1Ø Cabinet Full Load Amps (FLA) Optional Outlets FLA Cabinet Nominal Power Cabinet BTU	5 A  361 W  1232  AC3-4B2  10 A  5 A  536 W  1829  498 kg (1096 lbs)  606.5 kg / 1337 lbs  2600 x 1950 x 1320 mm 102.4" x 76.8" x 52.0"	5 A  430 W  1467  AC3-5B2  11.5 A  5 A  586 W  2000  598 kg (1316 lbs)  615 kg / 1356 lbs  2600 x 2150 x 1320 mm 102.4" x 84.6" x 52.0"  7.38 m³ (261 cu.ft.)	5 A 455 W 1553 AC3-6B2 11.5 A 5 A 620.5 W 2117 676 kg (1487 lbs) 720 kg / 1587 lbs 2600 x 2150 x 1320 mm 102.4" x 84.6" x 52.0"	
Net Weight Shipping Weight Shipping Dimension Maximum (W x D x	Optional Outlets FLA Cabinet Nominal Power Cabinet BTU 110-120V, AC, 60Hz, 1Ø Cabinet Full Load Amps (FLA) Optional Outlets FLA Cabinet Nominal Power Cabinet BTU	5 A  361 W  1232  AC3-4B2  10 A  5 A  536 W  1829  498 kg (1096 lbs)  606.5 kg / 1337 lbs  2600 x 1950 x 1320 mm 102.4" x 76.8" x 52.0"  6.69 m³ (236 cu.ft.)	5 A  430 W  1467  AC3-5B2  11.5 A  5 A  586 W  2000  598 kg (1316 lbs)  615 kg / 1356 lbs  2600 x 2150 x 1320 mm 102.4" x 84.6" x 52.0"  7.38 m³ (261 cu.ft.)	5 A 455 W 1553 AC3-6B2 11.5 A 5 A 620.5 W 2117 676 kg (1487 lbs) 720 kg / 1587 lbs 2600 x 2150 x 1320 mm 102.4" x 84.6" x 52.0"	
Net Weight Shipping Weight Shipping Dimensior Maximum (W x D x Shipping Volume, N	Optional Outlets FLA Cabinet Nominal Power Cabinet BTU 110-120V, AC, 60Hz, 1Ø Cabinet Full Load Amps (FLA) Optional Outlets FLA Cabinet Nominal Power Cabinet BTU	5 A  361 W  1232  AC3-4B2  10 A  5 A  536 W  1829  498 kg (1096 lbs)  606.5 kg / 1337 lbs  2600 x 1950 x 1320 mm 102.4" x 76.8" x 52.0"  6.69 m³ (236 cu.ft.)  cessories for AC3 Biological	5 A  430 W  1467  AC3-5B2  11.5 A  5 A  586 W  2000  598 kg (1316 lbs)  615 kg / 1356 lbs  2600 x 2150 x 1320 mm 102.4" x 84.6" x 52.0"  7.38 m³ (261 cu.ft.)  Safety Cabinets	5 A  455 W  1553  AC3-6B2  11.5 A  5 A  620.5 W  2117  676 kg (1487 lbs)  720 kg / 1587 lbs  2600 x 2150 x 1320 mm 102.4" x 84.6" x 52.0"  7.38 m³ (261 cu.ft.)	
Net Weight Shipping Weight Shipping Dimensior Maximum (W x D x Shipping Volume, N	Optional Outlets FLA Cabinet Nominal Power Cabinet BTU 110-120V, AC, 60Hz, 1Ø Cabinet Full Load Amps (FLA) Optional Outlets FLA Cabinet Nominal Power Cabinet BTU	5 A  361 W  1232  AC3-4B2  10 A  5 A  536 W  1829  498 kg (1096 lbs)  606.5 kg / 1337 lbs  2600 x 1950 x 1320 mm 102.4" x 76.8" x 52.0"  6.69 m³ (236 cu.ft.)  cessories for AC3 Biological	5 A  430 W  1467  AC3-5B2  11.5 A  5 A  586 W  2000  598 kg (1316 lbs)  615 kg / 1356 lbs  2600 x 2130 mm 102.4" x 84.6" x 52.0"  7.38 m³ (261 cu.ft.)  Safety Cabinets  AC3-5B1 (2010207)	5 A  455 W  1553  AC3-6B2  11.5 A  5 A  620.5 W  2117  676 kg (1487 lbs)  720 kg / 1587 lbs  2600 x 2150 x 1320 mm 102.4" x 84.6" x 52.0"  7.38 m³ (261 cu.ft.)	
Net Weight Shipping Weight Shipping Dimensior Maximum (W x D x Shipping Volume, N	Optional Outlets FLA Cabinet Nominal Power Cabinet BTU 110-120V, AC, 60Hz, 1Ø Cabinet Full Load Amps (FLA) Optional Outlets FLA Cabinet Nominal Power Cabinet BTU  115, H) Aaximum AC Stainless Steel Side Wall Anti-blowback Valve	5 A  361 W  1232  AC3-4B2  10 A  5 A  536 W  1829  498 kg (1096 lbs)  606.5 kg / 1337 lbs  2600 x 1950 x 1320 mm 102.4" x 76.8" x 52.0"  6.69 m³ (236 cu.ft.)  cessories for AC3 Biological  AC3-4B1 (2010204)	5 A  430 W  1467  AC3-5B2  11.5 A  5 A  586 W  2000  598 kg (1316 lbs)  615 kg / 1356 lbs  2600 x 2150 x 1320 mm 102.4" x 84.6" x 52.0"  7.38 m³ (261 cu.ft.)  Safety Cabinets  AC3-5B1 (2010207)  ABBV-10P (5170352)	5 A  455 W  1553  AC3-6B2  11.5 A  5 A  620.5 W  2117  676 kg (1487 lbs)  720 kg / 1587 lbs  2600 x 2150 x 1320 mm 102.4" x 84.6" x 52.0"  7.38 m³ (261 cu.ft.)  AC3-6B1 (2010210)	
Net Weight Shipping Weight Shipping Dimensior Maximum (W x D x Shipping Volume, N	Optional Outlets FLA Cabinet Nominal Power Cabinet BTU 110-120V, AC, 60Hz, 1Ø Cabinet Full Load Amps (FLA) Optional Outlets FLA Cabinet Nominal Power Cabinet BTU  115, H) Maximum AC Stainless Steel Side Wall Anti-blowback Valve Exhaust Collar 10' dm	5 A  361 W  1232  AC3-4B2  10 A  5 A  536 W  1829  498 kg (1096 lbs)  606.5 kg / 1337 lbs  2600 x 1950 x 1320 mm 102.4" x 76.8" x 52.0"  6.69 m³ (236 cu.ft.)  cessories for AC3 Biological  AC3-4B1 (2010204)	5 A  430 W  1467  AC3-5B2  11.5 A  5 A  586 W  2000  598 kg (1316 lbs)  615 kg / 1356 lbs  2600 x 2150 x 1320 mm 102.4" x 84.6" x 52.0"  7.38 m³ (261 cu.ft.)  Safety Cabinets  AC3-5B1 (2010207)  ABBV-10P (5170352)  ECO-AC35B (5170088)	5 A  455 W  1553  AC3-6B2  11.5 A  5 A  620.5 W  2117  676 kg (1487 lbs)  720 kg / 1587 lbs  2600 x 2150 x 1320 mm 102.4" x 84.6" x 52.0"  7.38 m³ (261 cu.ft.)  AC3-6B1 (2010210)  ECO-AC36B (5170139)	

<sup>\*</sup> Noise reading in open field condition/ anechoic chamber. \*\* Additional voltages may be available; contact Esco for ordering information.

## **ESCO GLOBAL NETWORK**

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