



# Biological Safety Cabinet

Class II, Type A2

4 ft | 1.2 m | 218 kg

## Optimum protection of personnel, product and environment

Our Class II, Type A2 Biological Safety Cabinet offers a combination of cabinet design, airflow and filtration systems to protect personnel, the product and the environment from biological particulates. True laminar airflow with a constant inflow velocity prevents contamination.

### High Performance Airflow

The design regulates air velocity through HEPA filters and distributes the downflow air across the work surface to create a containment zone. The unit is designed to capture airborne contaminants before they can enter the work area.

### Ergonomic Design & Ease of Use

The ergonomically sloped profile of the front cabinet places work in close proximity to the user. This improves comfort and minimises the stress of repetitive movements. Uniform interior lighting and a glare-resistant front window enhance visibility.

### High Capacity Filtration

The front-access supply and exhaust HEPA filters are designed to capture particulates with 99.995% efficiency for 0.3 microns. A closed-cell peripheral gasket surrounds the filter housing to prevent particulate bypass and escape to the environment.



### Total Protection

The specialised airflow system evenly disperses air over the supply and exhaust HEPA filters. This minimises vibration transfer and eliminates potential leaks.



### Simplified Controls

The microprocessor controller provides continuous supervision of all cabinet functions. Universal icon touchpad buttons simplify operation and control.

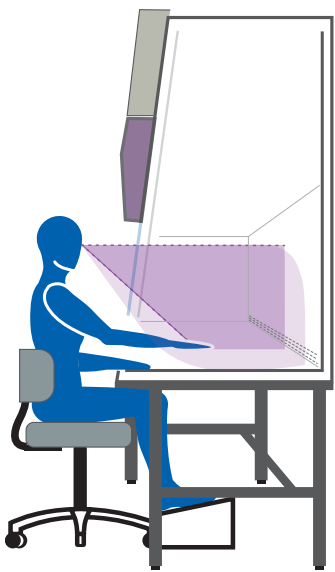


### Low Cost of Ownership

The supply air plenum design and electronically commutated motor, with automatic feedback control, work together to extend filter life.

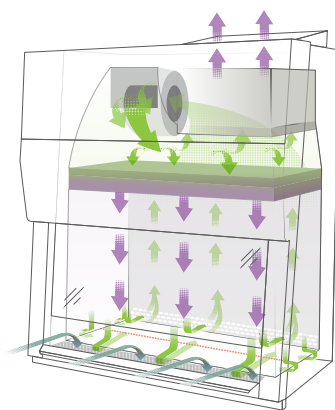
# Biological Safety Cabinet

## 4-foot Class II, Type A2



### Design Features Optimise Workspace

An ergonomic arm rest in front of a recessed airfoil ensures operator safety and eliminates turbulent airflow at the cabinet's front opening. The recessed interior tray expands the work surface safe zone to bring work closer to the user. A spacious, frameless, sliding window (533mm high) extends the users field of vision. The cabinet base is adjustable to 673 mm or 826 mm for standard sitting or bench work, depending upon preference. The base stand offers plenty of knee-room in a seated position.



HEPA Filtered Air  
Contaminated Worksurface Air  
Contaminated Room Air  
Air Split

### Airflow

The cabinet's high-efficiency motor and fan combination captures inflowing air, passes re-circulated air through the HEPA supply filter and distributes 30% of the air for safe, energy-efficient removal to the environment, via the HEPA exhaust filter.

Model Number		MHE-N400A2-PP 4 foot (1.2 m)
External Dimensions (W x D x H) <sup>1)</sup>	mm	1362 x 799 x 1572
Internal Dimensions (W x D x H) <sup>2)</sup>	mm	1178 x 654 x 724
Net Weight	kg	218
Crated Shipping Weight <sup>3)</sup>	kg	240
Performance		
Personal Protection		EN 12469
Product Protection		EN 12469
Classification		Class II, Type A2
Construction		
Style of Cabinet		Benchtop/console with base stand/ storage cabinet
Cabinet Construction		All welded stainless steel 16/18 gauge, Type 304 pressure tight design
Cabinet Depth with Armrest Removed	mm	799
Minimum Cabinet Height for Transport	mm	1499
Work Access Opening (standard height)	mm	254
Standard Inflow Velocity <sup>2)</sup>	m/s	0.53
Diffuser for Air Supply (Non-flammable, Metal)		Included
HEPA Supply Filter		99.995% effective on 0.3 microns, neoprene gasket, type H14
Double HEPA Exhaust Filter		99.995% effective on 0.3 microns, neoprene gasket, type H14
Gas Valve / Service Coupling (3/8" NPT)		1 right sidewall
Service Coupling (3/8" NPT)		1 right sidewall, 2 left sidewall
Power Socket		2 backwall
Ultraviolet Light (included)		1 backwall
Viewing Window Opening Range: (tempered safety plate sliding glass)	mm	533 open
Exhaust Opening	mm	254
Required Exhaust, Canopy Variable Flow Thimble (MHE-NAC11)	CFM   CMH	363-588   617-1000
Required Exhaust, Canopy Fixed Flow Thimble (MHE-NAC07)	CFM   CMH	426   724
Duct Static Pressure	mm H <sub>2</sub> O	1.27-2.54
Heat Rejected, non-vented	BTU/hour	1140
Heat Rejected, vented	BTU/hour	157
Electrical and Noise Level		
Power Supply	V	230
Frequency	Hz	50
+Amps: Blower/Lights		2.9
Amps: Outlet		3
Amps: Rated		10
Power Cord		3.7 m, 14 gauge - 3 Wire, 15A
Sound pressure level per ISO 4871 <sup>4)</sup>	dB (A)	not to exceed 56
Options		
Adjustable Electrical Base Stand		MHE-NAC00-134-PE

Appearance and specifications are subject to change without notice.

<sup>1)</sup>Depth is measured with armrest removed and takes into account the control panel. Height includes exhaust grill in the final measurement.

<sup>2)</sup>Measured at 254 mm window height.

<sup>3)</sup>Crated shipping weight does not include weight for accessories or options.

<sup>4)</sup>Measurement performed per ISO 11201 in normal running mode.



PHC Europe B.V.  
Nijverheidsweg 120 | 4879 AZ Etten-Leur | Netherlands  
T: +31 (0) 76 543 3839 | F: +31 (0) 76 541 3732  
[www.phchd.com/eu/biomedical](http://www.phchd.com/eu/biomedical)

