



# S@fe<sup>3</sup> Class III MICROBIOLOGICAL SAFETY CABINETS

## Safety you can afford

#### **Technical Specifications**

- Manufactured in accordance with EN12469:2000 standard
- State of the art microprocessor control system
- Main switch with removable key
- Soft touch keyboard
- Bar graph for exhaust air flow conditions; permanent display
- Alarms for low air flow
- Sloped front for the most comfortable access
- Front and side access for filter maintenance and service
- C-shaped support stand for easy *one man installation* procedure
- Transfer hatch with interlocked doors (right or left positioned)
- Class III cabinet with exclusive three filter design and Class 100 inner chamber.

BioAir Class III microbiological safety cabinets are supplied in two comfortable sizes (1.2mt and 1.8mt)





### Main specifications

- Controls comfortably located at eye level
- Fan speed and aeraulic controlled by Microprocessor
- Three operating modes: normal, stand-by, calibration
- High speed rinse at start up
- Self calibration and internal Watch-dog cycle before "SAFE" condition is reached
- Visual display of "SAFE" conditions and "UNSAFE" conditions (LED and bar graph)
- Elapsed time meter
- Microprocessor control with following specifications:
  - o Multilevel alarms, with redundancy functions.
  - o Permanent display of working conditions.
  - High air flow stability both in case of transitional disturbances or to progressive filter clogging
  - Power failure alarm
- Volt-free contact for remote monitoring of exhaust fan.
- Automatic reset of initial conditions in case of power failure
- C-shaped support stand for easy one man installation procedure
- Anti blow back valve (optional) for ducted configuration
- Magnehelic Gauge for internal chamber pressure constant monitoring
- One (1) Electrical Socket (1.2), two (2) Electrical Socket (1.8 size) as standard option.
- UV-Light installed on top (standard option)

#### Mechanical and functional specifications

- Sloped front design for the highest operational comfort.
- Stainless Steel internal surfaces with 2B finishing
- Liquid retaining work surface (Stainless Steel 2B finishing)
- Total visibility air and aerosol-tight front window equipped with robust gloves (Class III) for the safest operation when working with Risk Group 4 pathogens.
- Class III: Exclusive four filter design for the highest safety of the environment and the operator (Risk Group 4 pathogens): one (1) prefilter, one (1) HEPA H14 In-Let, two (2) HEPA H14 Exhaust Filters.



- H14 class High Efficiency Particulate Air filters with 99.995% efficiency on MPPS (most penetrating particle size) (EN1822-1 and EN 13091:1999 tested and certified)
- Filter change and maintenance from the front of the cabinet.
- Exhaust transitions easily installable.
- Anti-blow-back valve available as add-on option
- Key operated. The key can be removed when the unit is in SAFE mode, in order to avoid unwanted operation. In case of power failure, the cabinet is re-set to original working conditions.
- Self calibration cycle performed when cabinet is switched on.
- High speed rinse and set up cycle performed, before reaching the SAFE operating mode.
- Visual display of SAFE conditions. Pre-warning before actual alarm conditions are reached (visual and acoustic alarms)
- Soft touch control with keys for standard service utilities. Interconnected UV and fluorescent lights.



- 100% air exhaust.
- Light intensity on work surface > 1000 lux.
- Noise level ≤58 dB(A) [1.2 size]
- Work surface displacement (vibration) <0.005mm RMS between 20Hz and 20,000Hz (ISO 5349 tested and certified)
- 230V, 50Hz (230V,60Hz also available)
- Max power (for each power point): 3Amps.
- Microprocessor equipped with analogical watch-dog.
- Leakage tested in agreement with EN 12469 and ISO10648.2
- CE certification according to Machinery Directive 2006/42/CEE

# Technical Features S@fe Class III Cabinet

| Model                               | 1.2               | 1.8           |
|-------------------------------------|-------------------|---------------|
| Order number                        | LT20000           | LT40000       |
| Overall size (wxdxh) mm             | 2015 x 822 x 1300 | 2565x822x1300 |
| Work Chamber size (wxdxh) mm        | 1200 x 660 x 700  | 1750x660x700  |
| N° of glove ports                   | 2                 | 4             |
| Exhaust air flow rate (m3/h)        | > 180 m3/h        | > 180 m3/h    |
| Internal Differential pressure (Pa) | < -220            | < -220        |
| Weight (kg)                         | 210               | 270           |
| Power Supply                        | 220/240V 50Hz     | 220/240V 50Hz |
| Power (W)                           | 500 W             | 1000 W        |
| Noise level                         | < 58dB(A)         | < 58dB(A)     |
| Lighting lux                        | >1000             | >1000         |

These Microbiological Safety Cabinets, are manufactured according to EN12469:2000

**EUROCLONE S.p.A**