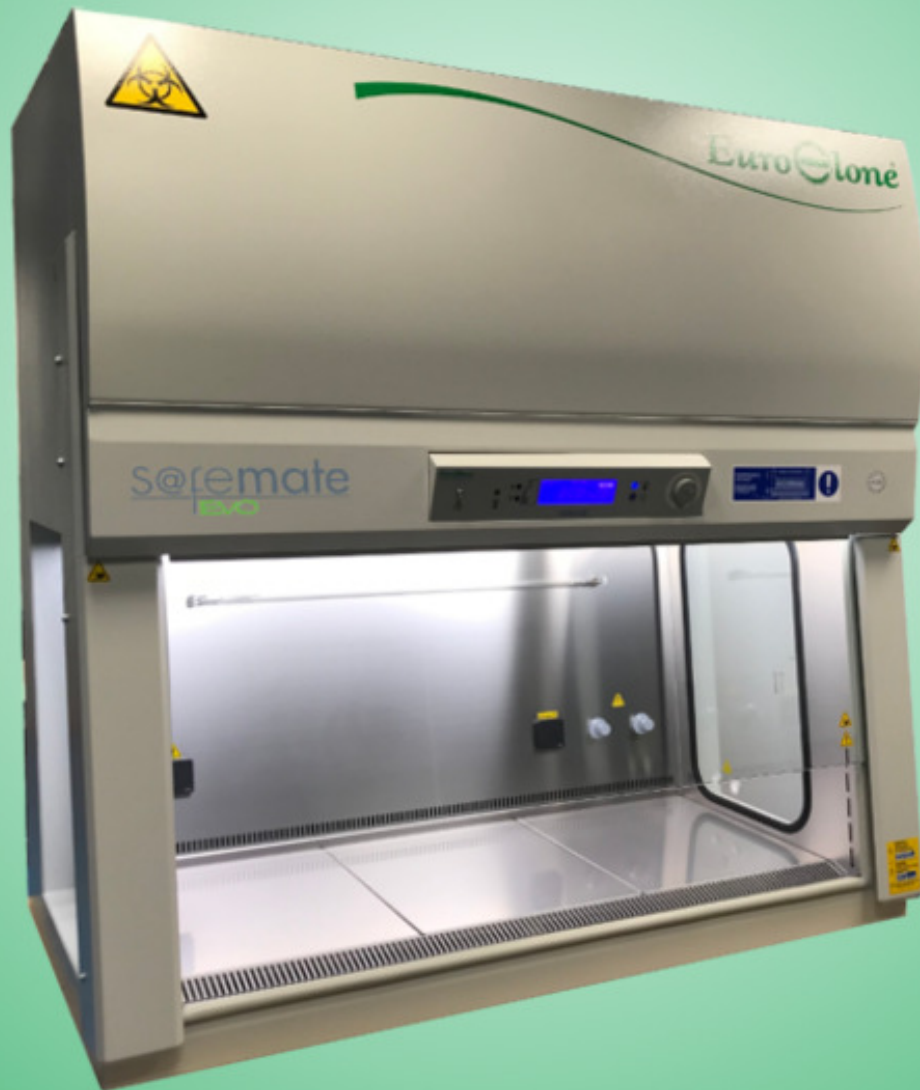


EuroClone®

s@femate
EVO

Microbiological
Safety
Cabinet



EuroClone®
serving science through innovation

The evolution of microbiological safety

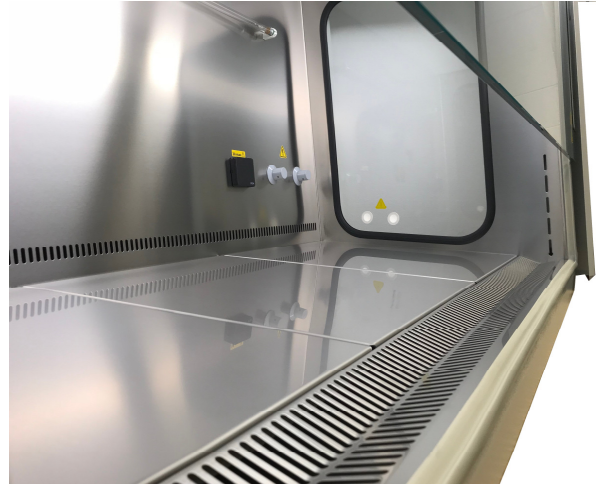
The new Safemate EVO Series is the culmination of Euroclone's more than 30 years of experience in designing and manufacturing microbiological safety cabinets.

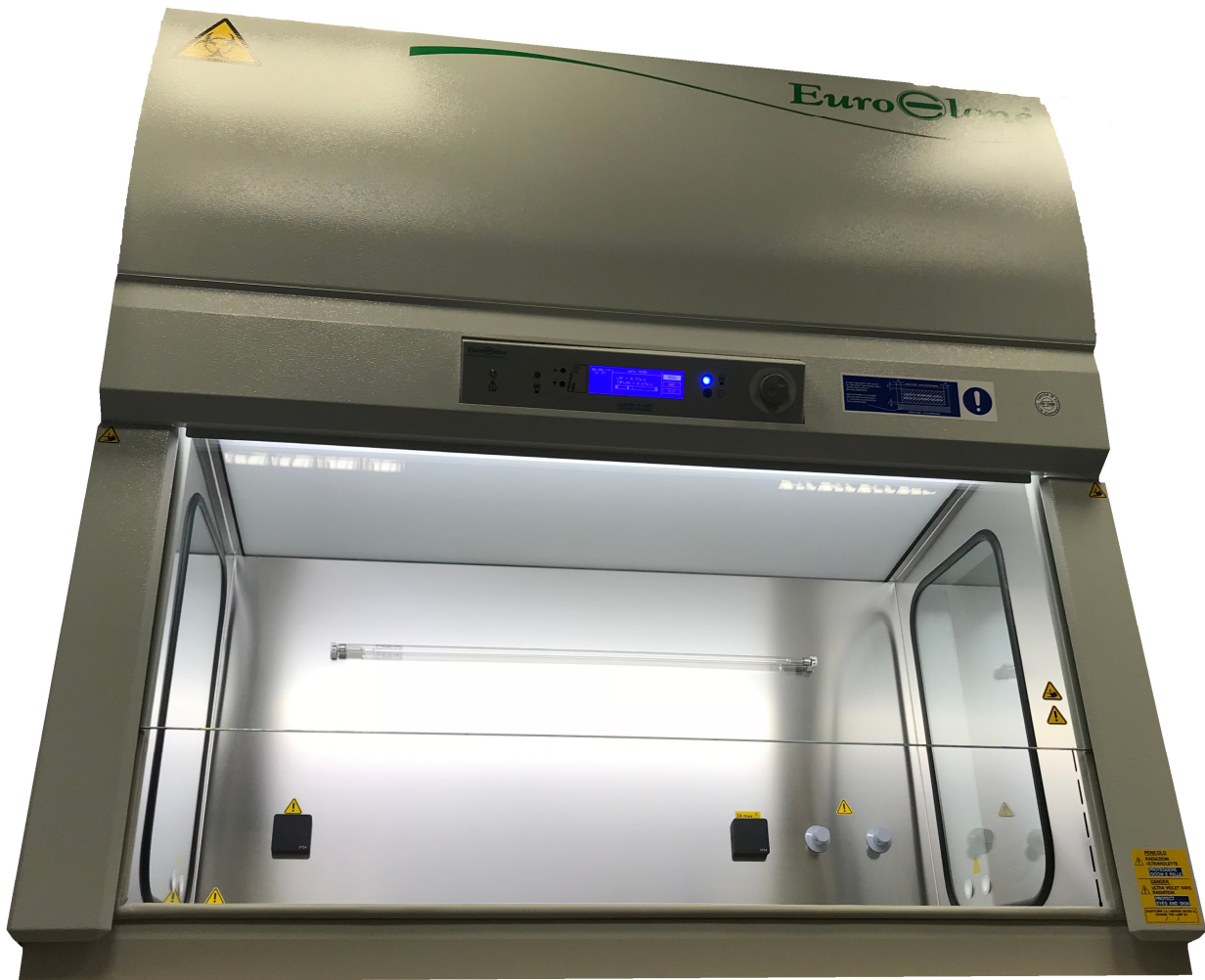
Inheriting its predecessors safety features and longstanding reliability and expanding them with new and improved functionalities, the Safemate EVO Series of Class II (type A2) microbiological safety cabinets embodies once more our company motto:

Your Safety is our Commitment

No compromise for Operator, Product and Environment.

Protection guaranteed as required by EN12469:2000 standard.





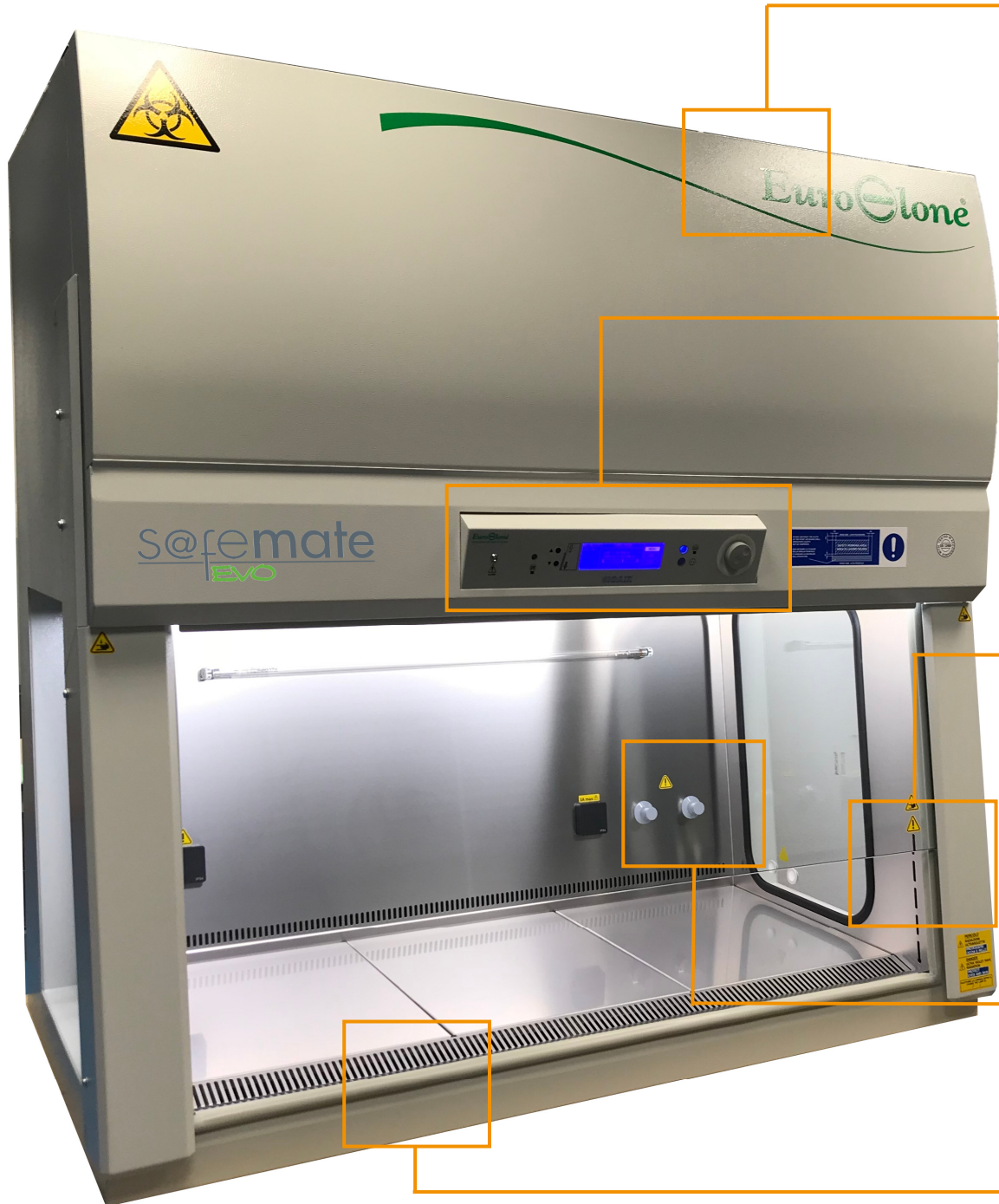
Technology evolved!

New plenum system: the improved textile plenum system allows Safemate EVO cabinet to obtain an extremely uniform and stable airflow, reduce noise and also improve the life of the HEPA filters.

Partial double skin with lateral windows: for the first time in the Safemate series the double skin feature from Safeflow cabinets makes its appearance: enjoy the improved safety of the front barrier without sacrificing the large side-windows' ergonomics.

The most complete range of models: with four single-blower models and two dual-blower models, the Safemate EVO series provides the right choice for every customer in every lab.

Italian Design & Technology



Our cabinet are completely made in Italy using components of italian or european origins. We use only the best for our cabinets.

Plenum Plus: the enhanced textile plenum provides

- Noise reduction
- Unparalleled airflow uniformity
- Longer HEPA filters life-span

One knob control system: control easily all the functions of the cabinet and the menus with a single knob.



New partial double skin with lateral windows
Added security thanks to lateral double skin,
more comfort thanks to lateral side windows:
why choosing one if you can have both?



Removable taps:

Stop wasting space for taps you don't need.

And if you change your mind you can easily fit them with our fast-plug system: no need to call for service support!

V-shaped front grill: improve ergonomics and comfort by keeping you safe without the need for armrests.



Our quality has been certified by the most prestigious body in Europe. All of our cabinets have been tested according to the most rigorous requirements to provide the best performance possible.

Main Specifications

Microprocessor controlled EC motorblower enhances energy efficiency, reducing operating costs.

- Fully compliant with the EN 12469 safety standard as independently tested and certified by TUV Nord – the leading testing agency in Europe.
- Air and aerosol tight electrical sliding sash with unique “YZY” movement.
- Back wall installed UV light for disinfection.
- Innovative Lower Edge Tilting System for safe cleaning of the front glass
- Double skin with windows for increased protection and comfort.
- ECO Mode to reduce power consumption
- Improved textile plenum: less noise, better flow stability and longer filters lifespan
- Keyless operation: login with your numeric password to unlock and operate the cabinet
- Easy fit holes for tubings: use the four holes in the side windows to let tubings reach in the working area without disturbing the front barrier



Features for Unbeaten Safety, Quality & Usability

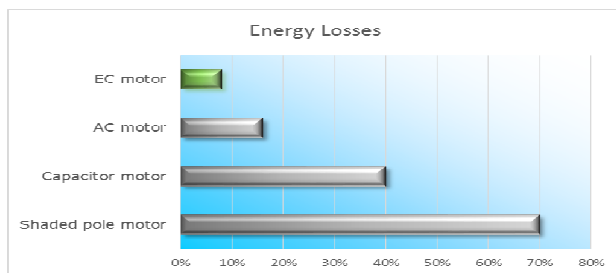
- Air and aerosol tight electrical sliding sash system with unique “YZY” movement ensures the containment of aerosol within the chamber when the front window is fully closed. The sash can be rapidly closed in an emergency situation.
- Continuous monitoring of the front barrier airflow for the highest operator safety.
- Permanent monitoring of HEPA filters life span.
- Multilevel alarm system.
- One-knob control panel
- Stainless steel internal surfaces with full access to exposed surfaces for ease of cleaning.
- Sloping front aperture and rear chamber lining for optimal downflow air distribution across the work surface.
- Self calibration cycle performed each time the cabinet is switched on.
- Removable stainless steel three part work surface for easy steam sterilisation in an autoclave.
- Safety grid in the backwall to prevent filter clogging.
- Interconnected UV and fluorescent lights.
- Side windows for maximum illumination of the working area.

Sustainable Technology

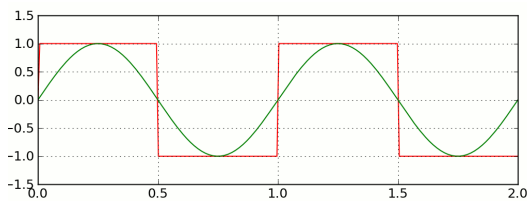
The new Safemate EVO follows the philosophy we started with the SafeMate ECO series, by sporting low power consumption motorblowers. This, along with the new "ECO Mode", contributes to the reduction of CO2 emissions and running costs!

Advantages of ECM motors

- **Reduced running costs:** energy consumption is reduced by about 30% with comparison to standard single-phase triac-controlled motors
- **Reduced heat output:** helps reducing the overall air conditioning costs



- **Stepless speed regulation:** extremely efficient and precise regulation of airflows
- **Reduced sound level:** thanks to the sinusoidal waveform, ECM motors are more silent than conventional single-phase AC motors



- **External electronics:** the inverter is not in the contaminated area allowing for easier maintenance than with DC motors
- **Long life:** reduce maintenance costs!

ECO Mode

By selecting this mode the Safemate EVO will partially lower the front glass in order to reduce the inward air speed at the front, while keeping both the work area and the operator perfectly safe, and saving energy! This is perfect when leaving the cabinet on during incubations or when switching between different users.

Safe Always!

The Safemate EVO has been designed to keep you always safe, even during routine maintenance operations like cleaning the front glass. Enters the new Lower Edge Tilting System: the front glass **tilts forward** allowing the access for cleaning purposes from above, **eliminating the risk of exposure to detergent or contaminants!**

OLD



Drops of detergent and contaminants can fall outside the cabinet toward floor or operator!

NEW

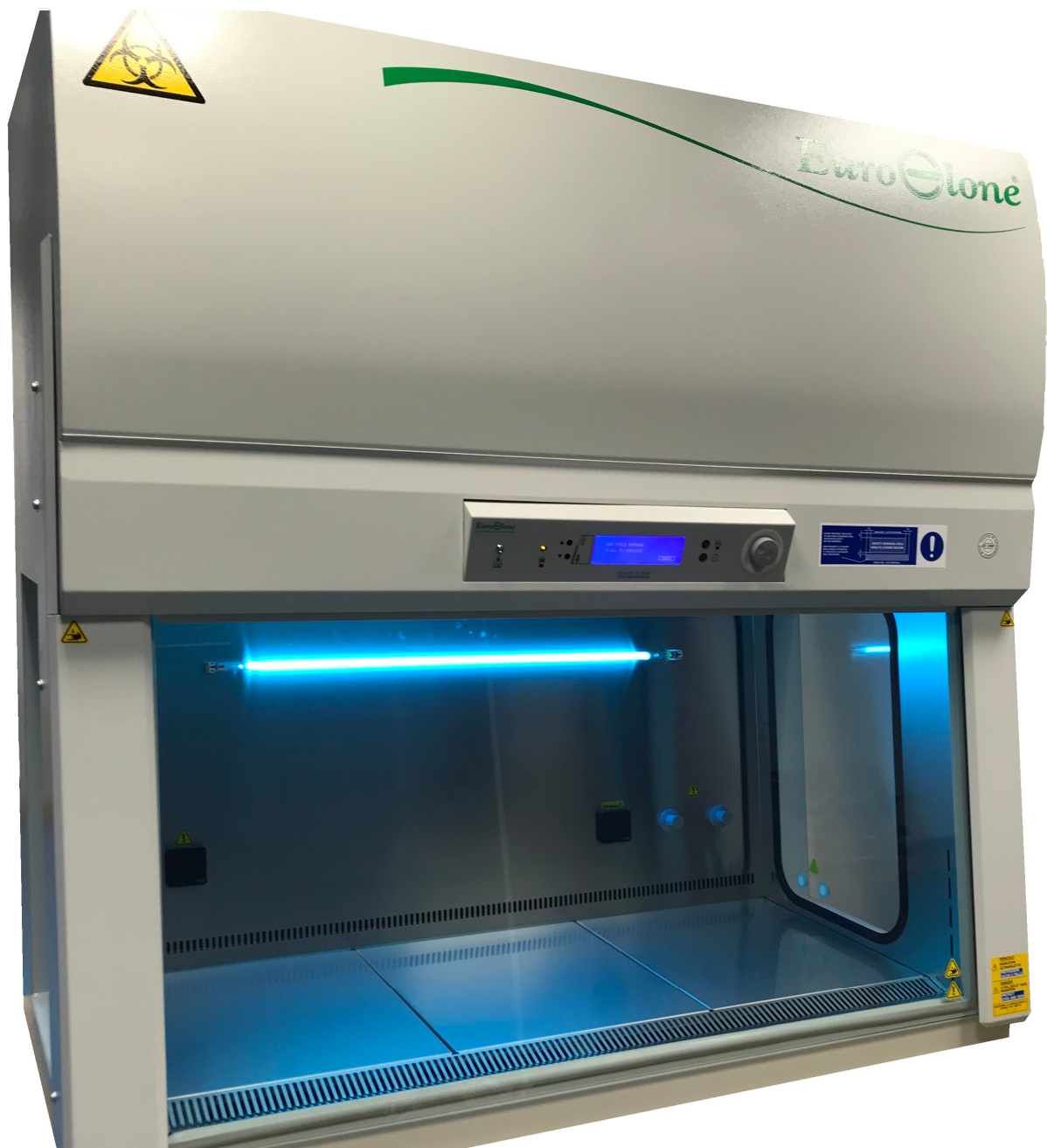


Nothing can fall from the contaminated surface outside of the cabinet!

Moreover during the procedure the motorblower stays on providing high level of containment and avoiding unnecessary exposure!

Standard utilities

| STANDARD ELECTRICAL EQUIPMENT | SIZE 0.9 | SIZE 1.2 | SIZE 1.5 | SIZE 1.8 |
|---|----------|----------|----------|----------|
| Automatic electronic airflow velocity control PCB | ✓ | ✓ | ✓ | ✓ |
| Motorblower (fan) | ✓ | ✓ | ✓ | ✓ |
| 2 nd motorblower (fan) | NO | Optional | NO | Optional |
| Inverter | ✓ | ✓ | ✓ | ✓ |
| Fluorescent lamps | ✓ | ✓ | ✓ | ✓ |
| UVC Lamp (backwall mounted) | ✓ | ✓ | ✓ | ✓ |
| Sliding window electric motor | ✓ | ✓ | ✓ | ✓ |
| Combustible gas solenoid valve. | ✓ | ✓ | ✓ | ✓ |
| STANDARD UTILITIES | | | | |
| Tap for combustible gas line | ✓ | ✓ | ✓ | ✓ |
| Tap for inert fluids/vacuum line | ✓ | ✓ | ✓ | ✓ |
| Auxiliary electrical service socket | ✓ | ✓ | ✓ | ✓ |
| 2 nd auxiliary electrical service socket | ✓ | ✓ | ✓ | ✓ |
| UVC lamp socket | ✓ | ✓ | ✓ | ✓ |
| Alarm mute connector (for service personnel only) | ✓ | ✓ | ✓ | ✓ |



Technical Data

| DESCRIPTION | SIZE 0.9 | SIZE 1.2 | SIZE 1.5 | SIZE 1.8 |
|--|---|----------------------------|----------------------------|----------------------------|
| Part No. (without work surface) | LDL320N | LDL420N | LDL520N | LDL620N |
| Part No. (solid work surface) | AZ9L030 | AZ9L040 | AZ9L050 | AZ9L060 |
| Part No. (perforated work surface) | AZ9L031 | AZ9L041 | AZ9L051 | AZ9L061 |
| SPECIFICATIONS | | | | |
| Reference Standards: | IEC 61010-1:2010 / EN 61010-1:2010 IEC 61326-1:2012 / EN 61236-1:2013 EN 12469:2000 | | | |
| Electrical insulating/protection class [IEC 61140]: | I | | | |
| Mains supply voltage: | 220-240 V~ 50/60 Hz | | | |
| Required power line (W): (700 W service socket included) | 1250 | 1350 | 1500 | 1600 |
| Absorbed power (W): (*) (fan and light on only) | 260 | 355 | 470 | 580 |
| Window glass UVC radiations retention (%): | 98 | | | |
| Combustible gas fixture max pressure (mbar): | 20 | | | |
| Inert fluids/vacuum fixture max pressure (bar): | 4 | | | |
| Electrical service socket max current (A): | 3 | | | |
| WEIGHT AND SIZE | | | | |
| Net Weight (kg): | 210 | 250 | 290 | 340 |
| Overall size L x D x H (mm): (without support stand) | 1115 x 830 (795) x 1403 | 1425 x 830 (795) x 1403 | 1735 x 830 (795) x 1403 | 2015 x 830 (795) x 1403 |
| Front aperture size L x H (mm): | 900 x 210 | 1200 x 210 | 1500 x 210 | 1800 x 210 |
| Working space size L x D x H (mm): | 932 x 585 x 690-650 | 1210 x 585 x 690 - 650 | 1530 x 585 x 690 - 650 | 1830 x 585 x 690 - 650 |
| MATERIALS | | | | |
| Main structure: | cold rolled steel, stove enamel coated RAL 7035 | | | |
| Working space surface: | stainless steel AISI 304 - 2B or SB finishing | | | |
| Front and side walls windows: | laminated safety glass | | | |
| PERFORMANCES | | | | |
| Laminar Air Flow mean velocity [EN 12469](m/s): | 0,35 ÷ 0,40 | | | |
| Inflow Air Barrier mean velocity [EN 12469](m/s): | 0,57 ±10% | | | |
| Exhaust Air flow rate (m3/h): | 380 ±10% | 520 ±10% | 650 ±10% | 770 ±10% |
| Apf - Aperture Protection Factor [EN 12469]: (Retention efficiency at front aperture) | ≥1,0 x 10 ⁵ | | | |
| Working space air cleanliness class [EN 14644-1]: | ISO 5 | | | |
| Illuminance [EN 12469] (lux): | >750 | | | |
| Sound level [EN ISO 3744] (dB[A]): (**) | <49 | <50 | <54 | <58 |
| Vibration [EN 12469] (mm RMS): | <0,005 | | | |
| Max increase inside cabinet [EN 12469] (°C): | <5 over ambient temperature | | | |
| FILTERS | | | | |
| Filters efficiency class [EN 1822-1]: | H14 (***) | | | |
| Filters global MPPS efficiency [EN 1822-1](%): | 99,995 | | | |
| MPPS diameter [EN1822-1](µm): | 0,1 ÷ 0,3 | | | |

* Motorblower on, lights on (flow 0.28m/s, LED lights)

** Measured in operating conditions. Actual values at customer site may be different due to room structure

*** Efficiency higher than ULPA (Class F) as per IESP-RP-CC001

More than 40 years of experience

The experience of EuroClone® in manufacturing Biohazard and Laminar Air Flow cabinets goes back to the early 70s', when the brand *Gelaire*® became the "gold standard" for airborne contamination control in many laboratories throughout the world.

A family of Recirculating Fume Hoods, based on the adsorption of toxic vapors by means of charcoal filters, was successfully introduced a few years later, thus characterizing the Company as the only one really focused on the protection of the operators and inspired by its motto.

This unique know-how was cherished and brought to an even higher level of quality twenty-five years later, when under the name of BioAir®, the entire range was completely re-designed to meet the growing requirements of the laboratory staff and the most stringent regulations.

At the top of the range, particularly noteworthy are the Biohazard (or Microbiological Safety) Cabinets, representing the sum of the Company's know-how certified to European standards (EN12469:2000) and complying with the Australian regulations; in other words, they are designed to provide the technicians with the maximum level of safety, when they are used according to GLP/GMP in their respective environments.

Today, in a plant occupying more than 2.800 square meters, EuroClone® manufactures a *complete range of microbiological safety cabinets, laminar flow cabinets and fume cupboards*, encompassing more than 15 models, with many of them available in different sizes; customized models and/or designed for specific applications can be produced thanks to the competence of a team of skilled engineers and dedicated workers.

The experience deriving from decades of sales and support to Cell Biologists, allowed EuroClone® to bring into the market an *extremely innovative CO₂ Incubator*, the Safegrow 188, which is the result of a deep knowledge of the best conditions required by the most critical tissue culture methods, supported by the suggestions received from the scientists involved in growing cells *in vitro*.

The core business of the recently established **BioAir® Industrial Team** is the design, manufacturing and validation of customized equipment for the protection of the operator and of the product within *pharmaceutical and healthcare production facilities*.

This dedicated team will take advantage of the long experience and the production capacity acquired through laboratory LAF applications, to offer dedicated and complex equipment, ranging from **dispensing/sampling Downflow Booths** and **Clean Rooms**, to **RABS** and **Isolators** for Regenerative Medicine and Advanced Cell Therapy.





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Quality Management Systems certified according to ISO 9001 and ISO 13485 international standards