DATASHEET

Safemate EVO
Class II Microbiological Safety cabinet

- Low energy consumption EC motorblower
- Fully EN12469 certified by Tüv
- State of the art microprocessor control system.
- Large digital display, high resolution
- Air and aerosol-tight sliding sash, electrically operated by finger touch
- Alarms for low air flow and wrong front window position
- Sloped front and back wall for the most comfortable access
- Lateral windows
- Front access for filter maintenance and service
- C-shaped support stand for the easiest *one man installation* procedure
- Easy retrofit option kits
- Fully automated fumigation cycle

The new **Safemate EVO** Series is the culmination of BioAir'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 cabinets embodies once more our company motto. **S@femate EVO** cabinets are certified according to EN12469:2000 by TUV Nord (Germany).

MAIN FEATURES

- Power efficient EC Motorblower with digital inverter
- TUV Nord Certification & GS Quality Mark
- Double skin side walls to improve front barrier
- One-Knob control system
- Textile *PlenumPlus* technology to improve airflow uniformity and reduce noise
- Advanced front glass cleaning system
- 4 capped passthrough holes in the side glasses to let cables/tubing in the working area
- Electrically operated front glass
- Tight seal closure system
- Front window presses on the gasket when in closed position to ensure no leakages.
- Maximum height of front aperture: mm 440.
- Front grid with "V" shape to avoid obstructing it with the arms. No need to use armrests.
- Filter replacement and electric/electronic components maintenance from front side.
- External surface in epoxy-painted steel.

BioAir S.p.A. - Tel.: +39 0382 6672.1 www.bioair.it - info@bioair.it
Numero REA MI – 2577880 Partita IVA e C. Fiscale: 11078210967 - Cap. Soc. Euro 1.000.000 i.v.
Sede Amministrativa: Via Figino, 20/22 – 20016 – Pero (MI) Italy
Sede legale: Via Spezia, 1 - 20142 – Milano - Italy
Sede Produttiva: Via Lombardia 12 – 27010 Siziano (PV) Italy

- Working chamber and work surface fully realized in stainless steel AISI304 with SB finishing. Easy to clean as required by EN12469:2000.
- Work surface divided in sectors, available both solid or perforated.
- Front sash and lateral windows in stratified safety glass, 6mm.
- Air decontamination provided by HEPA H14 filters, with efficiency > 99.995% (test MPPS according to EN1822.1).
- ISO 3 (ISO14644-1) internal cleanliness
- DOP test port for easy check of HEPA filters integrity.
- Combustible gas tap with safety solenoid valve.
- Internal sockets with IP55 protection level.
- Constant monitoring of the following parameters:
  - Laminar flow speed;
  - Inflow speed;
  - Optical/acoustic alarm for insufficient inflow barrier;
  - Optical/acoustic alarm for insufficient laminar flow;
  - Operating hours visualization for: cabinet, HEPA filters, UV.
- Volt-free contact for remote blower control or connection to a remote alarm system.

STANDARD UTILITIES

Utilities are located on the back wall of the working area. Connectors for the utilities are located on the top of the cabinet towards the back.

Removable Vacuum tap. On the back wall, right side.
Removable Gas tap with safety solenoid valve. On the back wall, right side.
Electrical sockets. On the back wall.
Mobile UV Kit socket. On the back wall, right side.
DOP sampling port. Below the work surface, left side.

OPTIONALS ACCESSORIES

Description	Part No.
Stand for S@femate EVO 1.2	AS1L410
Combustible gas tap	AZ5L421
Vacuum/Inert gas tap	AZ5L432
LED Illumination kit	AP2L004
Castor kit	AZ1L010
2 Drawers file cabinet	AC10000

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TECHNICAL SPECIFICATIONS

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:	20 mbar			
Inert fluids/vacuum fixture max pressure:	4 bar			
Electrical service socket max current :	3 A			
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)*	$\geq 1,0 \times 10^5$			
Working space air cleanliness class [EN 14644-1]:	ISO 3			
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 in temperature from thevambient [EN 12469] (°C):	<5			
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			

* Measured in operating conditions. Power requirements with lights off at minimum airflow speeds (as per EN12469:2000), are about 35% less than those shown in table.
** 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

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