

# S@femate™ Series MICROBIOLOGICAL SAFETY CABINETS: Safety you can trust

## Technical Specifications

- Fully EN12469 certified by Tüv Hamburg
- 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
- Front access for filter maintenance and service
- C-shaped support stand for the easiest *one man installation* procedure
- Easy retrofit option kits



S@femate™ Cabinets are supplied in three different sizes (1.2mt, 1.5mt and 1.8mt).

These last generation Microbiological Safety Cabinets Class II type A2, have been certified according to the most stringent safety standards (EN12469-2000).

The internal design, the air flow aerodynamics and monitoring, the built-in safety devices and the very accurate manufacturing, guarantees the highest performances at the most stringent safety levels, as specified by EN12469 standard and have been certified by the most prestigious European certification bodies for Safety Cabinets.

Certified intrinsic biological safety, combined with impressively competitive prices, gives the end user a state of the art cabinet accessible to every budget, that only experienced European design and accurate quality manufacturing, can provide.

## Main specifications

- Fully EN12469 certified by Tüv Hamburg
- Microprocessor controlled motor blower, with volumetric sensor for exhausted air flow monitoring
- State of the art Microprocessor control system offering:
  - Large screen monitor.
  - Automatic control of preset airflow volumes.
  - Sliding sash window with smart control.
  - Permanent monitoring of HEPA filters life span.
  - Alarms. Multilevel alarms, with redundancy functions.
  - Permanent display of working conditions.
  - Highest air flow stability both in case of transitional disturbances or to progressive filter clogging
  - Semi-automatic fumigation cycle (EN12297 tested and certified)
  - Continuous monitoring of front barrier air flow for the highest operator safety
  - Low barrier alarm
  - 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 the easiest *one man installation* procedure

## Mechanical and functional specifications

- Sloped front design for the highest operational comfort. Sloped back side of the working chamber for the best down flow distribution (cabinet carcass EN12298 tested and certified for air tightness)
- Utilities inlets from the top of the cabinet.
- Stainless Steel internal surfaces with 2B finishing (including spillage tray). Solid work surface (3 sections) and special designed front grill.
- Electrically operated sliding multilayer safety glass window (max opening at 120°)
- Comfortable 200mm front opening
- Easy to install retrofit options through lateral sides.
- Exposed exhaust Hepa filter for easy visual integrity check.
- H14 class High Efficiency Particulate Air filters with 99.999% efficiency on .3micron particles (most penetrating particle diameter) (EN1822-1 and EN 13091:1999 tested and certified)
- Both exhaust and Main Filters are equipped with a micromesh membrane located downstream which acts as airspeed equalizer expansion plenum, as well as a clear indicator of filter damages.
- Filter change and maintenance from the front of the cabinet.
- Exhaust transitions easily installable.
- 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.
- Exhaust and recirculating flow rates ensure 25 air changes/min in the working area (30% 70% split)
- Front barrier air speed  $\geq 0.5\text{m/s}$
- Aperture protection Factor (Apf)  $\geq 1.5 \times 10^5$
- Cleanability Index CC grade.(EN 12296 tested and certified)
- Light intensity on work surface  $> 900\text{ lux}$ .
- Noise level  $\leq 56\text{dB(A)}$  1.2 mt Model (ISO 11201, ISO 4871 and ISO EN 3744 tested and certified)

- Work surface displacement (vibration) <0.005mm RMS between 20Hz and 20,000Hz (ISO 5349 tested and certified)
- 230V, 50Hz
- Max power (for each power point) 3Amps.
- Microprocessor equipped with analogical watch dog.
- CE certification according to Machinery Directive 89/392/EEC, 91/368/EEC, 93/44/EEC 93/68/EEC.

### Technical Features S@femate™ Series

Model	1.2	1.5	1.8
Code number	LDE0000	LDF0000	LDG0000
Overall dimensions (lxwxh) mm	1380x840x1450	1685x840x1450	1990x840x1450
Usefull dimensions (lxwxh) mm	1230x580x700	1530x580x700	1840x580x700
Weight kg	190	230	300
Front aperture mm	200	200	200
Noise level	< 56dB(A)	< 59dB(A)	< 59dB(A)

### Options

#### Stands and UV

AS1A000	Stand for S@femate 1.2
AS1B000	Stand for S@femate 1.5
AS1C000	Stand for S@femate 1.8
AKC0000	Mobile UV light kit for S@femate 1.2, 1.5 1.8
*TBA	Kit for UV light, rear wall mounted, for S@femate 1.2, 1.5, 1.8 (not installed)
*TBA	UV light on rear side for S@femate 1.2, 1.5, 1.8 (Installed)

#### Transition Adapters

AZ1A200	Passive transition adapter kit for S@femate 1.2 with exhaust enhancement grill (not installed). For ducts length up to 18 mt.
AZ1B200	Passive transition adapter kit for S@femate 1.5 with exhaust enhancement grill (not installed). For ducts length up to 18 mt.
AZ1C200	Passive transition adapter kit for S@femate 1.8 with exhaust enhancement grill (not installed). For ducts length up to 18 mt.
AZ1A300	Extraction open hood ("thimble" no fan) for S@femate 1.2
AZ1B300	Extraction open hood ("thimble" no fan) for S@femate 1.5
AZ1C300	Extraction open hood ("thimble" no fan) for S@femate 1.8
AZ1A100	Motorised extraction kit for secondary exhaust HEPA filter or charcoal filter (filter excluded: see below "Other options") For S@femate 1.2
AZ1B100	Motorised extraction kit for secondary exhaust HEPA filter or charcoal filter (filter excluded: see below "Other options") For S@femate 1.5
AZ1C100	Motorised extraction kit for secondary exhaust HEPA filter or charcoal filter (filter excluded: see below "Other options") For S@femate 1.8
AZ10000	Motorised remote extraction kit for all models (to be ordered in conjunction with

Passive transition adapter) for ducts length >18 meters. Can be equipped with HEPA or Charcoal filters (see below "Other options" filter size for 1,2 meter cabinet)

**Optional utilities**

AZZ5000	Retrofit Additional Vacuum tap Kit for all models, not installed.
AP50000	Installed Additional Vacuum tap for all models
AZZ6000	Retrofit Additional power point kit for all models, not installed (Max 3 per cabinet)
AP60000	Installed Additional power point for all models (Max 3 per cabinet)

**Other options**

AZ33000	Formalin vapourizer for all models
80010035	Secondary Exhaust HEPA filter for S@femate 1.2 to fit on item AZ1A100
80010040	Secondary Exhaust HEPA filter for S@femate 1.5 to fit on item AZ1B100
80010039	Secondary Exhaust HEPA filter for S@femate 1.8 to fit on item AZ1C100
CP21000	Secondary Exhaust General Purpose Charcoal filter for S@femate 1.2 to fit on item AZ1A100
*TBA	Secondary Exhaust General Purpose Charcoal filter for S@femate 1.5 to fit on item AZ1B100
*TBA	Secondary Exhaust General Purpose Charcoal filter for S@femate 1.8 to fit on item AZ1C100
AC10000	2- drawers file cabinet for all S@femate models

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\*TBA = To Be Advised; Please for further information contact:

Elisa Marchini  
Customer Service  
Euroclone S.p.A.  
Bioair Division  
Via Lombardia 12  
I-27010 Siziano (PV)  
Italy  
Tel: +39 02 38195538  
Fax: +39 02 38195230  
E-mail:emarchini@euroclone.net  
Internet:www.bioair.net www.euroclone.net