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|  | MANUAL PROCEDURE BIO SAFETY CABINET | | |
| | Laboratory of Biotechnology | | |
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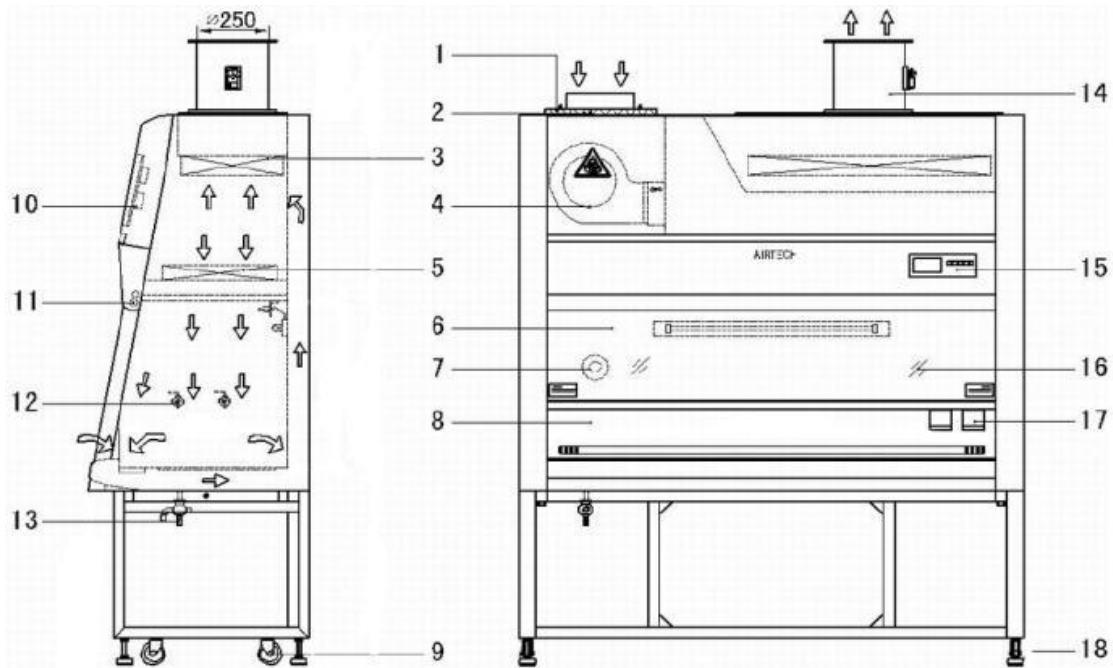
I. Model and Specification

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| Model | : BSC-1303 II A2 BIO. SAFETY CABINET |
| Downflow Velocity nominal value | : 0.36 m/s |
| Inflow Velocity nominal value | : 0.55 m/s |
| Vibration | : $\leq 5 \mu\text{m}$ |
| Illumination | : $\geq 750 \text{ Lx}$ |
| Noise | : $\leq 65\text{dB(A)}$ |
| Supply Power | : AC220~240V 50/60Hz |
| Work Dimension (W*D*H) | : 1270 x 600 x 620 (mm) |
| Overall Dimension (W*D*H) | : 1500 x 790 x 2050 (mm) |
| Sliding sash opening height nominal value | : 200 mm |
| Alarm system | : Sliding sash opening Height, Fan & Filter Failure |
| Size and Qty. of Air Supply HEPA filter | : Composition: HEPA Filter media and aluminium alloy frame 1220 mm x 400mm x 68mm |
| Size and Qty. of Air Exhaust HEPA filter | : Composition: HEPA Filter media and aluminium alloy frame 680 x 340 x 106(mm) |
| Size and Qty. of Light | : 31W |
| On-duty lighting (optional) | : 30W |

II. Application and Function

BSC-1303 II A2 Bio. Safety Cabinet is a personal safety and protection facilities which shall control the polluted air emission through the special filter unit to keep the operator, product and working environment away from hazards.

III. Basic Instrument and Overview



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|----------------------|-----------------------|--------------------------------|--------------------|
| 1. Pre. Filter | 2. Power Switch | 3. Exhaust HEPA | 4. Fan |
| 5. Supply HEPA | 6. UV Lamp | 7. Differential Pressure Gauge | 8. SS Working Area |
| 9. Universal Wheel | 10. Electrical Box | 11. Light | 12. Water/Gas Tap |
| 13. Wash Water Valve | 14. Air Exhaust Valve | 15. Control Panel | 16. Sliding Door |
| 17. Spare Sockets | 18. Adjustable Leg | | |

IV. Operating Instruction

1) Setting of Control Panel

- FAN : Control Fan to run/stop
- LIGHT : Control Light on/off
- On-duty lighting : Control On-duty lighting on/of
- PLUG : Control the power supply on/off
- MUTE : Stop the sound alarm for a short period

While running, LCD window will dynamically display the running state and fault information.

2) Operation Procedure

Working in formal condition:

- a. Press “Light 1” button and light is on
- b. Sliding the sash to the safety line of 200mm
- c. Bio Safety Cabinet is ready for working

Caution:

- *Please pay more attention not to move the sliding sash to the safe height (200mm) when the cabinet is working*
- *There are two spare sockets prepared for auxiliary equipment and overload protection in the chamber of the cabinet*
- *Before plugging in auxiliary equipment and pulling out the plug, must make sure the spare socket power is off by press “socket” button. Need to press the “socket” button again to turn on the power of the spare socket for auxiliary equipment working*
- *The consumption of auxiliary equipment shall not exceed the max. load of the spare socket (AC220~240V,2A)*

Operation finished:

- a. The fan shall be kept working for 10 minutes after the work is finished
- b. Then press FAN button for 3 seconds to turn off the fan

Caution:

Please pay attention: after operation, stop the fan first, and cut off the power switch of the cabinet until the fan stop running.

V. Trouble Shooting and Remedies

| Trouble Shooting | Remedy: Cause and measures |
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| The pilot light is out of order when press any button on the panel | <ul style="list-style-type: none">➤ Check power supply, turn on power switch, the sign of the company trade mark shall be displayed in lighting.➤ Check the wiring and voltage between the panel and Power Transformer, change the damage one if necessary. |
| The lighting cannot be on the press the “Light 1 ” button | <ul style="list-style-type: none">➤ Check the power of the “Light 1” button. Make sure the pilot light is on when press it.➤ Open the light box, check the whether the light wire connection is solid, replace LED tube to check whether light tube is in good order, if light is still not on after LED tube replacement, check the DC Power Supply and light wire, replace new one if it is out of order. |
| The on-duty lighting cannot be on when press the “Light 2” | <ul style="list-style-type: none">➤ Ensure the on-duty lighting was turned on under the interlock, viz. not turn on light until the sliding |

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| | <p>slash is closed fully and the lighting was turned off. The cabinet will also turn the on-duty lighting off automatically once the sash is opened or the light is turned on in the course of disinfect.</p> <ul style="list-style-type: none"> ➤ Under interlock, press “Light 2” button and the pilot light is on, but the light is not on, check the wiring of the on-duty lighting as well as tube rectifier are in good order, if not, replace with new one. ➤ Make sure the lamp base is reliably connected. Check the tube and replace with a new one to make sure if the tube is in failure. If the light is still off, please check the ballast and circuit. |
| <p>The fan cannot be on when press the “FAN” button</p> | <ul style="list-style-type: none"> ➤ Check the transducer to read the running indication and make sure it is in good order. ➤ When the fan is running in over loading, the transducer overload protection will automatically work to stop fan running and display overload failure. Check the fan and make sure it is in good order |