

# SEDRA

## MICROBIOLOGICAL SAFETY CABINET BIOHAZARD Class II



BH-120DG

BH-150DG

Vertical laminar air flow

Has been designed as a Class II Biohazard cabinet according to EN-12469. Designed for the situation where is requested the operator, product and environmental protection from dangerous effects due to uncontrolled diffusion of air-transported contaminants and in the same time, to avoid any biological interference from the environmental to the product during its handling.

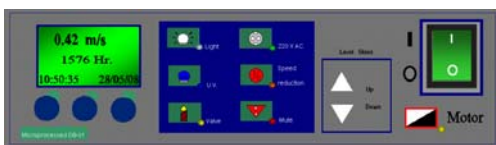
# SEDRA



## APPLICATIONS

**BH-120DG & BH-150DG** Safety cabinets are used for containment and removal of toxic vapors and aerosols, providing operator safety in a wide range of disciplines. Application for Laminar may be found in many laboratories, including those in clinical diagnostic testing, biological and medical research, analytical chemistry, Q.C, biotechnology.

## DESIGN FEATURES



Each Laminar air Flow contains an IP44 centrifugal motorfan, capable of maintaining a constant air flow by compensating which occurs during normal operation.

- \* Microprocessor based monitoring system.
- \* Microprocessor based system audible and visual alarm alert the operator if the cabinet does not operate in complete safety.
- \* The cabinet is made from sheet steel that is coated with epoxy.
- \* The fan system assures that no part of the cabinet is under positive contaminated pressure to the laboratory, thus preserving the environment and personnel from bio-contaminated risk.

## SPECIFICATIONS

**1.Construction :** Epoxy coated steel for improved strength and resistance to corrosion and atmospheric agents.

**2.Work Surface:** Stainless steel AISI-316, AISI-304 ( can be selected ), completely perforated to ensure flow laminarity and air recycling at the work surface level.

**3.Front window:** The frontage is fixed by 6 mm safety glass and UV. Protection. Electrical controlled

**4.Filter:** Main HEPA filter and Exhaust HEPA filter, 0.3 micron, their efficiency 99.995%

**5.Motor-Blower:** centrifugal fan, direct driven motor. The filtration system is designed to provide a barrier of air with minimum average speed over 0.40 m/s. Microprocessor controlled and timer on-off

**6.Microprocessor monitoring system:**

- display laminar air flow velocity
- display service hour of cabinet
- display lifetime of U.V.& HEPA Filter
- display U.V.lamp inlet
- display time & date

**7.Alarm System:**

- out of range air velocity(sound&monitor)
- door position (sound&monitor)
- HEPA filter expired (monitor)
- U.V. expired (monitor)

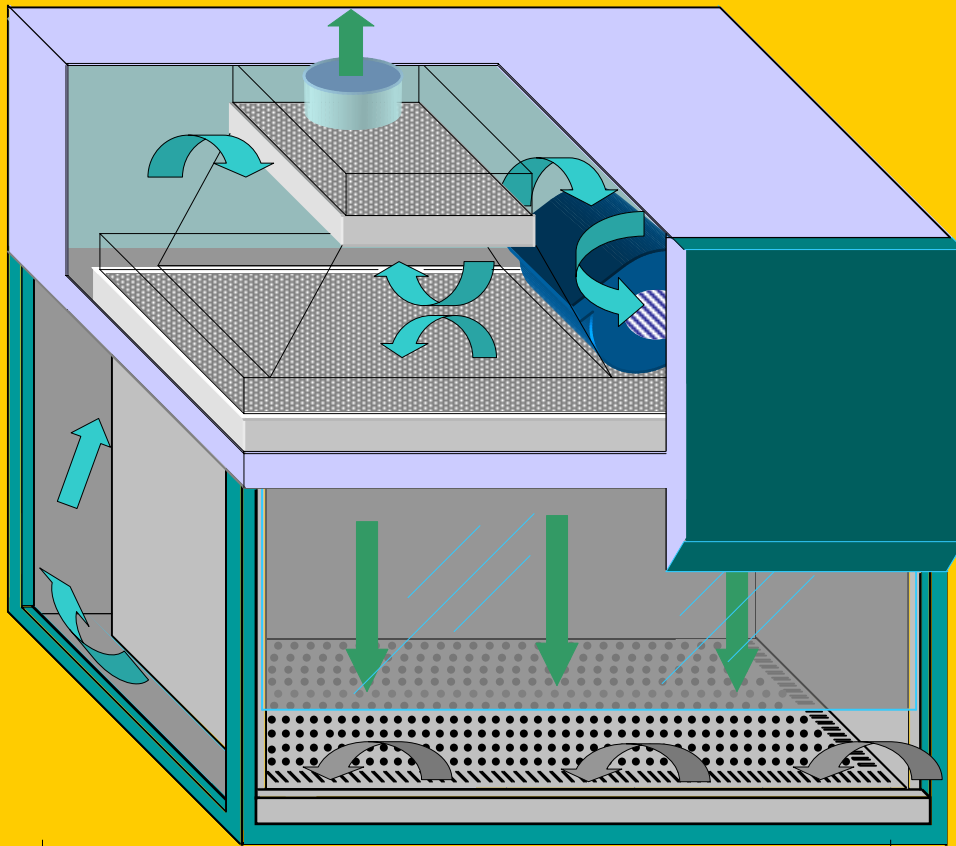
**8.Light & UV. Lamp:**

The intensity of the illumination in working area is not less 1,000 lux. There are U.V. lamp 30 watts (wave length 254 nm.).For stop bacteria growth and timer on-off.

**9.Option features:**

- Electrical Socket 220V/50Hz/ 5A
- Two gas connection, one with manual tap, the other with solenoid valve.

## OPERATION PRINCIPLES



Air flow Direction



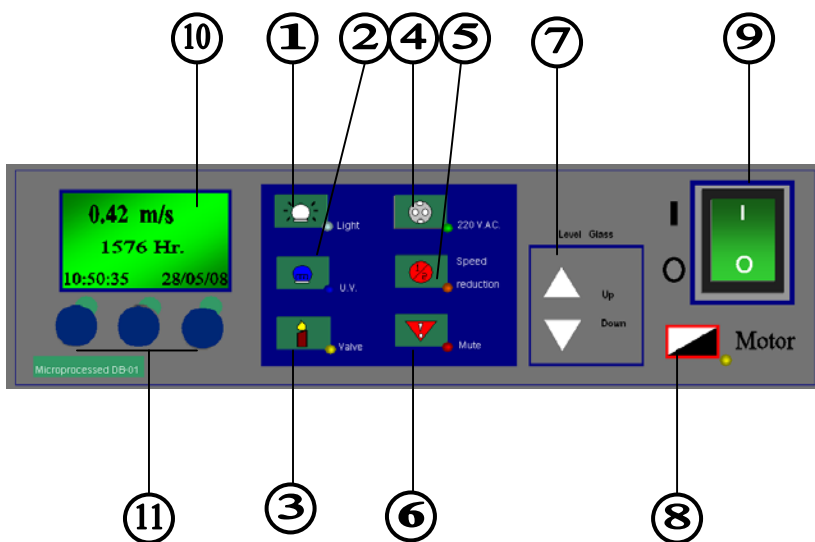
external air



sterile air



recirculated air



1. Light switch
2. U.V. Lamp switch
3. Solenoid valve switch
4. Electrical socket switch
5. Speed reduction
6. Mute
7. Up-down level Glass
8. Motor on-off
9. Main switch
10. Graphic LCD (Back light)
11. Key setup

## TECHNICAL SPECIFICATIONS

	BH-120DG	BH-150DG																								
<b>AIRFLOW</b> Air Velocity (m/sec) Recirculated flow rate (m3/hr)	0.40 (+/-0.05) 1,050	0.40 (+/-0.05) 1,250																								
<b>ELECTRICAL</b> Voltage/Power Lighting U.V. lamp & U.V. Internal Power Socket ( 220 VAC )	220-240V/50-60Hz > 1,000 LUX 2 X 30 Watts 2	220-240V/50-60Hz > 1,100 LUX 2 X 30 Watts 4																								
<b>CONSTRUCTION</b> Base Section Working Surface Work Chamber	Epoxy coated Painted steel Stainless steel AISI 316 Stainless steel AISI 304																									
<b>FAN MOTOR</b> Noise Level	Centrifugal Fan , 1/2 HP , 220V/50Hz < 59 dB(A) ( Operation Position )																									
<b>FILTER</b> Main Filter Exhaust-Filter	1 1																									
<b>DIMENSIONS(mm)</b> Overall Dimension Useful Dimensions Exhaust Duct (diameter)	<table border="1"> <thead> <tr> <th>D</th> <th>W</th> <th>H</th> </tr> </thead> <tbody> <tr> <td>790</td> <td>1,350</td> <td>1,470</td> </tr> <tr> <td>580</td> <td>1,180</td> <td>655</td> </tr> <tr> <td></td> <td>200</td> <td></td> </tr> </tbody> </table>	D	W	H	790	1,350	1,470	580	1,180	655		200		<table border="1"> <thead> <tr> <th>D</th> <th>W</th> <th>H</th> </tr> </thead> <tbody> <tr> <td>790</td> <td>1,750</td> <td>1,470</td> </tr> <tr> <td>580</td> <td>1,148</td> <td>655</td> </tr> <tr> <td></td> <td>200</td> <td></td> </tr> </tbody> </table>	D	W	H	790	1,750	1,470	580	1,148	655		200	
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<b>VACUUM AIR LINE</b> Manual tap Electrical Control	1 1																									
<b>CONTROLS PANEL</b>	Soft touch panel microprocessor control system																									