B SCIENCE

Biological Safety Cabinet
Class II A2
B-SAFE Serie

MADE IN DENMARK
Construction design
- Robust Cabinet construction
- External material is powder coated galvanized steel
- Internal material is stainless steel AISI 304

Work trays
- Work trays in separate pieces
- Easy to lift and clean
- Optional work trays in one piece

Airflow Sensor
- Constant measuring airflow velocities for safety
- Alert the user if airflow is insufficient

UV Lamp
- 2 factory installed UV Lamps
- Each UV light has a lifespan of approx. 3,000 hours

Motorized front window
- Motorized front sash
- Safety switch
- Adjustable height
- Pre-set working position 18 mm according to EN 12469

Side windows
- Front and side windows for more natural light
- Front and side windows are 6 mm laminated tempered glass

Test Entry for D.O.P.
- The Cabinet has test entry for D.O.P. (Dispersed Oil Particulate) / DEHS.
HEPA H14 / Optional ULPA U15 Filters
- H14 filters with efficiency of 99.995% MPPS
- Creates ISO CLASS 2 air clean work zone instead of ISO CLASS 5 according to EN ISO 14644-1
- A design that provides an easy procedure for filter replacement
- Optional ULPA U15 filter with efficiency of 99.9999% MPPS

Controller with Touch Screen display
- Displays all safety information
- Angled downwards for easy viewing and reach
- Starts at automatic mode downflow 0.45 m/sec.

LED Light
- Brighter than fluorescent light
- Last 4 times longer than fluorescent light
- Energy efficient

Shuko Outlets
- 2 Factory installed shuko outlets with protective covers 230 V, 50/60 Hz

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<th>Standard Compliance</th>
<th>Biological safety Cabinet</th>
<th>Air quality</th>
<th>Filtration</th>
<th>Electrical Safety</th>
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<tr>
<td>DIN EN 12469</td>
<td>ISO 14644, ISO Class 2</td>
<td>EN 1822 (H14)</td>
<td>EN 61010-1</td>
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<tr>
<td>Europe</td>
<td>Worldwide</td>
<td>Europe</td>
<td>Europe</td>
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The cabinet air filtration system

Air from the ambient room pulled through the front grill to create inflow, without entering the work surface. This inflow air together with part of the downflow air creates a fine air curtain. All the combined air stream is travelling through the back-air column and up to the blower.

30% of the common air is exhausted through the HEPA H14 filter back to the ambient room or out through an exhaust connection. The 70% remaining air goes back through the downflow H14 filter and in to the cabinet again. This is also the same recycled air that goes down to the working surface as vertical laminar airflow and creates ISO Class 2 working environment, where most BSC manufacture in the world only creates ISO Class 5 or higher. The B Science Global ISO Class 2 prevents gross contamination better that ISO Class 5 or higher.

Near the work surface, the downflow splits. About half goes to the front grille and half goes to the back grille. A small portion goes to the side capture zones to prevent dead air corners.

The design was optimized to give large performance development, that provides the environment, operator and product protection.
Display

- Humidity and °C degrees Indicator
- Shows downflow and exhaust flow
- Working period mode
- UV Lifetime indicator
- HEPA filter penetration rate % indicates the percentage of permeability rate of HEPA 14 filter.
- Display settings
- Door settings
- Time and Date

Design Construction

- High quality material
- Solid construction
- Designed in compliance to EN 12469
- Designed and manufactured in Denmark

3 working Modes + Eco Mode

- P1 Mode with a Downflow 0,33 m/sec
- P2 Mode with a Downflow 0,40 m/sec
- P3 Mode with a Downflow 0,45 m/sec
- ECO Mode with a Downflow 0,25 m/sec

Safety Features

- HEPA H14 main and exhaust filter (EN 1822)
- Visual and acoustic alarm
- UV Lamp turns off if front sash is opened
- All glass is made of 6 mm laminated tempered glass
- Constant measurement of the airflow velocities
- User Password

Easy Cleaning

- Easy cleanable frameless front glass
- Smooth surface without any bolts, nuts or screws
- Bottom sink with round corners made of SS AISI 304
Performance Testing at B Science

Every biological safety cabinet (B-safe Line) manufactured by B Science are individually tested, documented with a serial number and validated with the following test methods according to EN 12469:

- Downflow Velocity Profile Test
- Inflow Velocity Test
- Airflow Smoke Patterns
- HEPA Filter Leak Test
- Vibration Test
- Noise Level Test
- Lighting Intensity Test
# TECHNICAL SPECIFICATIONS

<table>
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<tr>
<th>MODEL TYPE</th>
<th>CLASS</th>
<th>BSC90A</th>
<th>BSC120A</th>
<th>BSC150A</th>
<th>BSC180A</th>
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<tbody>
<tr>
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<td>TYPE</td>
<td>A2</td>
<td>A2</td>
<td>A2</td>
<td>A2</td>
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## EXTERNAL DIMENSION (mm)

| Width (X) | 1060 | 1370 | 1680 | 1990 |
| Depth (Y) | 830  | 830  | 830  | 830  |
| Height (Z)| 1450 | 1450 | 1550 | 1550 |

## INTERNAL DIMENSION (mm)

| Width (W) | 930  | 1240 | 1550 | 1860 |
| Depth (D) | 650  | 650  | 650  | 650  |
| Height (H)| 650  | 650  | 650  | 650  |

## BASESTAND DIMENSION (mm)

| Width (X) | 1030 | 1330 | 1640 | 1940 |
| Depth (Y) | 720  | 720  | 720  | 720  |
| Height (Z)| 620 - 890 | 620 - 890 | 620 - 890 | 620 - 890 |

## MAIN HEPA FILTER (H14)

| Main Filter | 99.995% MMPS | 99.995% MMPS | 99.995% MMPS | 99.995% MMPS |
| Main Filter Size (mm) | 915x610x78 | 1220x610x78 | 1525x610x78 | 1830x610x78 |

## EXHAUST HEPA FILTER (H14)

| Exhaust Filter | 99.995% MMPS | 99.995% MMPS | 99.995% MMPS | 99.995% MMPS |
| Exhaust Filter Size (mm) | 305x305x78 | 305x305x78 | 610x305x78 | 610x305x78 |

## AIR VOLUME RECIRCULATION (m³/h)

| 874 | 1166 | 1458 | 1749 |

## AIR VOLUME EXHAUST (m³/h)

| 306 | 408 | 510 | 612 |

## TOTAL AIR VOLUME

| 1180 | 1574 | 1968 | 2361 |

## DOWNFLOW (m/sec.)(min - max)

| 30 - 50 ±5 | 30 - 50 ±5 | 30 - 50 ±5 | 30 - 50 ±5 |

## LED LIGHT (lux)

| 790 | 790 | 790 | 790 |

## VOLTAGE

| 230 V 50 - 60HZ | 230 V 50 - 60HZ | 230 V 50 - 60HZ | 230 V 50 - 60HZ |

## POWER (Watt)

| 700 max. | 700 max. | 730 max. | 730 max. |

## WEIGHT (KG)

| 228 | 285 | 323 | 383 |

## SHIPPING WEIGHT (KG)

| 270 | 328 | 373 | 464 |

* Transport height are below 2000mm

We reserve the right to change specifications without notice. Subject to confirmation, availability and errors.