

# SBV 1200 – AIR CIRCULATION MODULE

FOR THE REDUCTION OF VIRUSES,  
GERMS AND BACTERIA

# ROOM AIR FILTERS ARE EFFECTIVE – SBV 1200 IN USE AGAINST CORONA

## THE SBV 1200 AIR CIRCULATION MODULE



Reliably filter virulent aerosol clouds from indoor air and create breathable clean air.

Depending on the season and temperature, the air literally stagnates in the room – even with the presence of a ventilation system. In addition, the air we breathe is polluted by invisible pathogens such as viruses and bacteria, which mainly colonize the respiratory tract or the throat, multiply there and are released into the ambient air via tiny saliva droplets when we speak, cough or sneeze. Such conditions are a health risk for employees, customers and guests – also for the immune system, not to mention the risk of infection with corona viruses via airborne aerosol particles.

The scientifically tested air circulation module **SBV 1200**, developed from Schulz & Berger, is designed for public spaces with a high volume of people, such as supermarkets, restaurants, schools or trade fairs. It is capable of removing 99.995% of the viruses, germs and bacteria in the air.

### Applications:

- Bacteria & Virus Free Air in Restaurants and Canteens 
- Bacteria & Virus Free Air in Day-Care Centers and Schools 
- Bacteria & Virus Free Air in Clubs and Discotheques 
- Bacteria & Virus Free Air in Medical and Therapy Facilities 
- Bacteria & Virus Free Air in Supermarkets 
- Bacteria & Virus Free Air in Public Spaces 

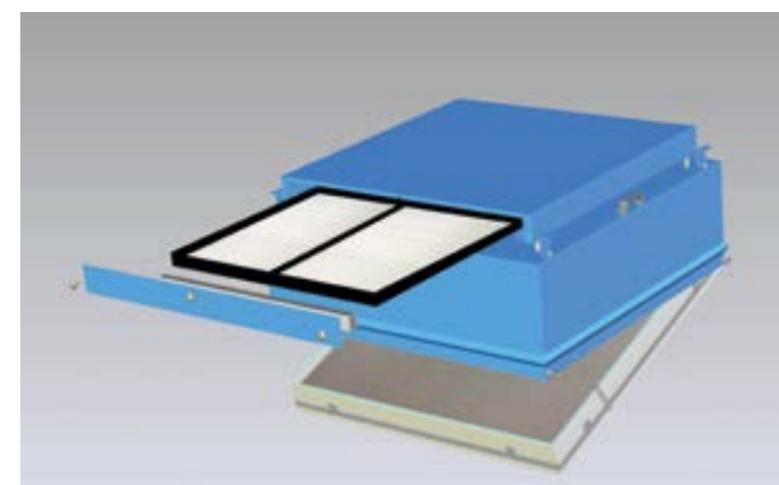
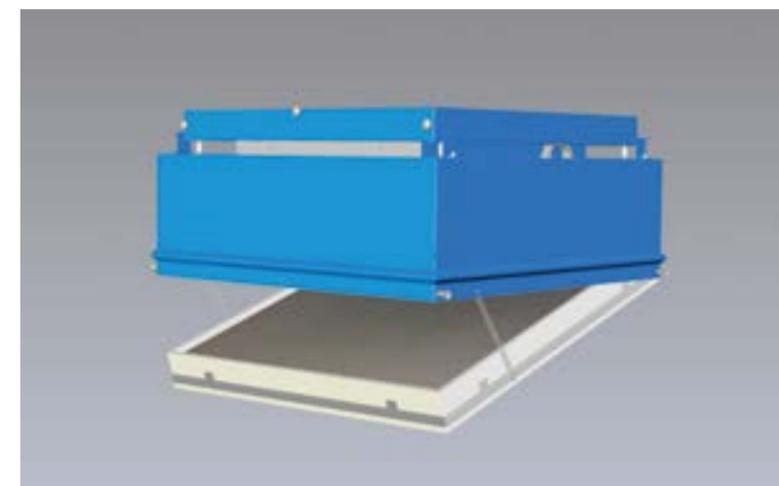
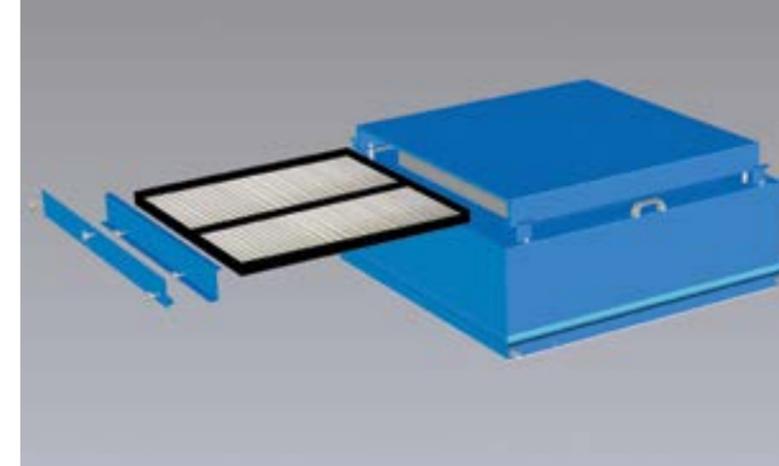
# THE RELIABLE WARRIOR IN THE FIGHT AGAINST CORONA

As the world's only mobile air purifier, the **SBV 1200** was developed specifically for virus filtering and its effectiveness was tested by several scientific studies. Extensive studies confirm the virucidal effectiveness of the **SBV 1200** with its unique HEPA H14 filter system and as a result they explicitly require this filter technology for effective virus filtration.



## THE ADVANTAGES AT A GLANCE

- High air volume flow max. 3,000 m<sup>3</sup>/h
- Innovative design "Made in Germany"
- Intuitive operation via touch display and remote control
- Simple installation and commissioning
- Reliable HEPA filter (H14) against viruses, germs and bacteria with a large filter surface [long service life]
- All filters and fans are permanently monitored to ensure trouble-free operation
- Quiet Laminar airflow
- Easy filter replacement
- Immediate capture of aerosols in the ceiling area to minimize dwell time in the room



# EXPERT REPORTS

- Hygienic air tests in frequented indoor rooms to prove the effectiveness of the **SBV 1200** air purification system
- Air purification performance evaluation against the spread of bacteria and virus contaminated sneeze and cough aerosols
- Testing of a reduction of the infection risk of CORONA viruses

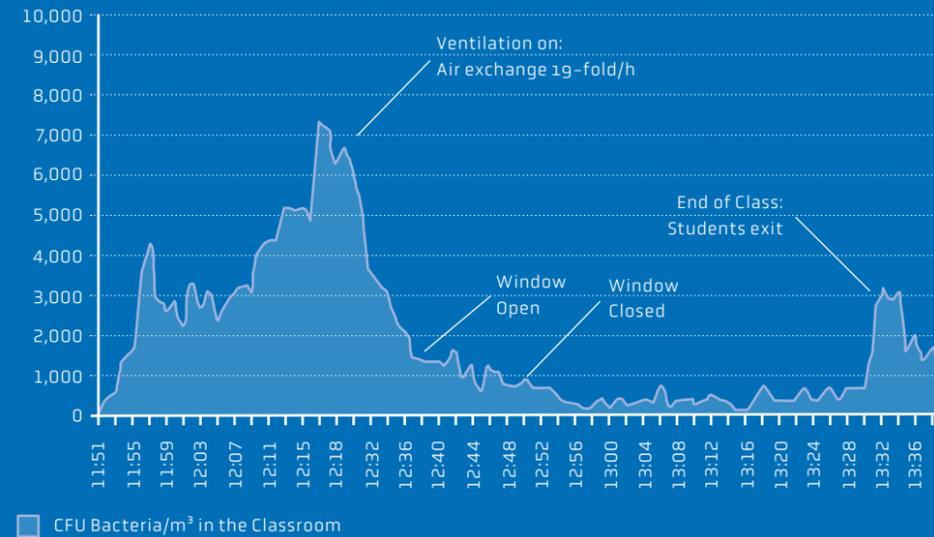
# SUMMARY

The **SBV1200** has clearly shown a measurable reduction in the number of airborne bacteria in classrooms. A ten fold reduction of the bacterial load within 10 minutes at an air exchange rate of 19/h and reasonably constant ambient conditions (Constant number of persons + ventilation flow). This provides a comparable effectiveness against bacteria and viruses in indoor air like a FFP2 mask.

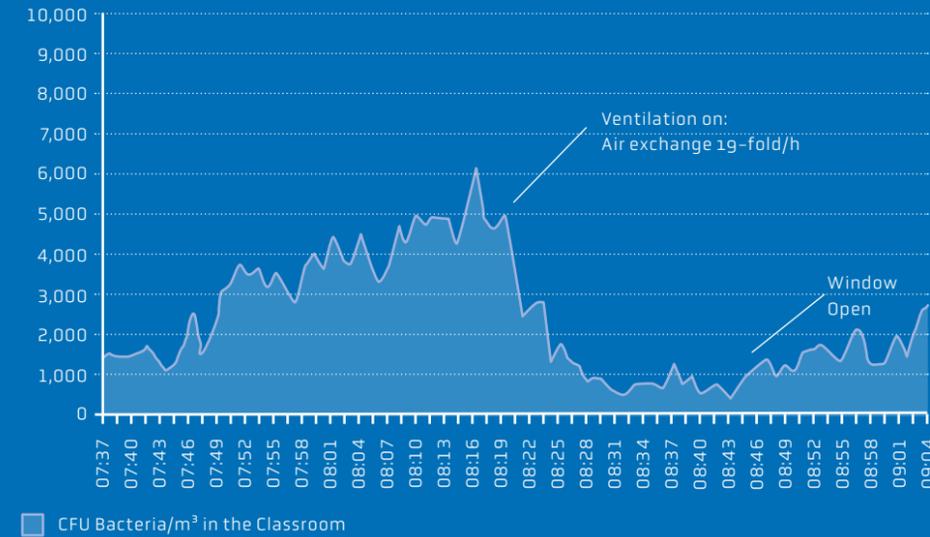
1. Reduction of bacteria concentration with continuous addition of new bacteria: 90%.
2. Reduction of "total germs" (fungi and yeasts): 99 %.
3. Clean airflow below the supply air element within a very short time
4. Ventilation + cleaning of the room air using a **SBV 1200** provides optimal protection

## Bacteria Concentration Curve

Curve of bacteria concentrations in the classroom on the first day of the experiment. The half-life of the bacteria in the room air after starting the air purifiers is about 5 minutes. (6,000 CFU/m<sup>3</sup> → 3,000 CFU/m<sup>3</sup>)



Curve of bacteria concentrations in the classroom on the first day of the experiment. The bacterial load in the room air after starting the air purifiers reduced to 1/10 within about 10 minutes. (5,000 CFU/m<sup>3</sup> → 500 CFU/m<sup>3</sup>)



Result	Conclusions
Germs reduced to 1%	Degree of protection corresponds to wearing a FFP2/FFP3 mask.
CO <sub>2</sub> value is not related to the particle and bacterial load in the classroom	CO <sub>2</sub> meters are good to check the air quality of oxygen content. They do not provide any information about the virus load in the room.
People standing under the supply air element: bacteria, particles, and germs drop to 1 % directly after activation	Very strong protection against infection from viruses and bacteria: Degree of protection is better than FFP3 mask.
Airflow pattern confirmation	Exhaled air is warm and always rises to the ceiling, the aerosols are captured and cleaned directly there.
Reduction of total load within 10 minutes of activation	Air exchange can be reduced to approx. 8 times per hour for continuous operation.
Particles reduced to 3%	Effective cleaning of air within shortest time from aerosol sized particles: Degree of protection corresponds to wearing a FFP2/FFP3 mask.
Bacteria reduced to 5 % to 10 % within 10 minutes	Despite continual inclusion of new bacteria: Degree of protection corresponds to wearing a FFP2/FFP3 mask.
Very rapid increase in bacterial concentration from students and teachers	A risk of infection by aerosols remains high if permanent air cleaning of the classroom is not carried out.
Opening windows achieves a significantly lower reduction of the bacterial load	Virus protection concept of schools by opening windows every 20 minutes is not sufficient. Only the mixing of the air occurs.

# WORLD'S FIRST! THE COMFORT MODULE WITH THE PATENTED AIR CURTAIN

The air curtain protects employees at cash registers and reception desks.

The special patented feature of the **SBV 1200** is the air curtain at the front of the module. Via an additional fan, a partial airflow of the total air volume is used to generate a barrier veil. This is done via a blowing nozzle, in which the partial airflow is bundled and forced outwards via the H14 filter at a speed of 4-6 m/s.

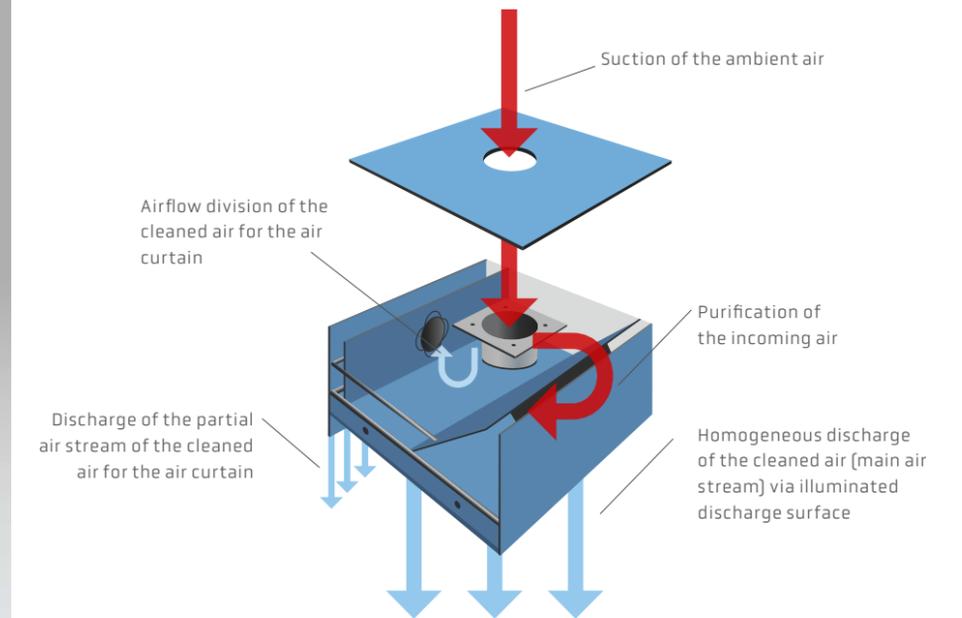
This air curtain additionally shields the person under the module and has been proven to prevent droplet infection.



## THE CONCEPT

During operation, the ambient air is drawn in from all sides in the upper area and cleaned of coarse dust and fibers via a large-area pre-filter. The decisive step in air purification takes place using a 1,220 x 1,220 mm H14 HEPA filter. This large filter area makes it possible to purify a high volume of air while achieving a long filter life.

A completely uniform discharge velocity under the recirculation module is ensured by a laminarizer. The complete control system is secured by a specially developed circuit board. All filters and fans are permanently monitored.



## FEATURES

	Basic Module	Comfort Module	Air Curtain
Price	5,550.00 €*	6,680.00 €*	7,580.00 €*
G5 Pre-filter	●	●	●
H14 HEPA filter	●	●	●
Aluminum Housing	●	●	●
Touch Display	●	●	●
Remote Control on/off/brightness	●	●	●
Filter Replacement Indicator	●	●	●
Air Volume Control	●	●	●
Optical Error Indicator	●	●	●
Electric Heating Module (up to 4 K)		●	●
Flat LED Illumination	○	●	●
Air Curtain for cash registers/workstations			●
Water Exchanger heating/cooling		○	○
Individual advertising	○	○	○
Fresh air supply	○	○	○
Mobile steel rack/wall mount	○	○	○
CO <sup>2</sup> Indicator	○	○	○

\* as of 01/2021; plus packing and shipping

○ against a surcharge



## TECHNICAL DATA

Air Volume	Basic Module	Comfort Module	Air Curtain
Air volume flow in m <sup>3</sup> /h Operationally	500 - 2,500	500 - 2,500	500 - 2,500
Air volume flow in m <sup>3</sup> /h max.	3,000	3,000	3,000

### Sound Rating

at 1,000 m <sup>3</sup> /h	~ 38 dB	~ 40 dB	~ 44 dB
bei 1,400 m <sup>3</sup> /h	~ 42 dB	~ 44 dB	~ 48 dB
bei 1,800 m <sup>3</sup> /h	~ 48 dB	~ 50 dB	~ 54 dB

### Electrical Values

Mains connection	230 V / 50 Hz	230 V / 50 Hz	230 V / 50 Hz	
Power consumption	∅	300 W	Dependent on Consumption	
	max.	0,5 kW	2,0 kW	2,2 kW
Rated current consumption max.	3.0 A	9.0 A	9.5 A	

### Dimensions

Length (without packaging)	1,250 mm	1,250 mm	1,250 mm
Width (without packaging)	1,250 mm	1,250 mm	1,250 mm
Height (without packaging)	500 mm	580 mm	620 mm
Filter area G5	2.81 m <sup>2</sup>	2.81 m <sup>2</sup>	2.81 m <sup>2</sup>
Filter area H14	42.72 m <sup>2</sup>	42.72 m <sup>2</sup>	42.72 m <sup>2</sup>

### Weight

without Filter / with Filter	~ 60 kg / ~ 80 kg	~ 70 kg / ~ 90 kg	~ 75 kg / ~ 95 kg
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The background of the left half of the page is a photograph of an industrial factory interior, featuring complex machinery, pipes, and walkways. The entire image is overlaid with a semi-transparent blue filter. The text 'WE CREATE, WHAT MATTERS MOST.' is centered in the lower half of this image in a white, bold, sans-serif font.

**WE CREATE, WHAT  
MATTERS MOST.**

## **THE COMPANY SCHULZ & BERGER GMBH**

### **INNOVATION MADE IN GERMANY**

In recent years, we have become a sought-after supplier for industrial and trade companies and have satisfied more than 1000 customers with our services. Our customers include individual companies as well as medium-sized enterprises or large corporations from various branches and industries at home and abroad.

We are always looking for new technical solutions for the requirements of our customers. Therefore research and development play an important role in our daily work. A number of patents testify to the efficiency of our innovative engineers.



## PLANNING

We develop and plan new plants and also optimize existing plants. We use modern server, EDP technology and software, enabling us to effectively plan and design plants exactly to your wishes.



## MANUFACTURING

The know-how of our employees and the constant expansion of our machinery and production capacities form the basis for the quality of our products, as well as, our comprehensive constantly growing services profile.



## INSTALLATION

Our qualified and committed installers travel the world to professionally install, assemble and commission the complete systems at the customer's site.



## SERVICE & MAINTENANCE

We are also available for you as a competent partner and are always available for you. Our maintenance contracts ensure the functionality and efficiency of your systems. All maintenance and repair work can be gladly taken over by us.

You can find our products in 132 cities distributed in 31 countries around the world. Here you can get an overview of how widespread Schulz and Berger is:





# Schulz & Berger Luft- und Verfahrenstechnik GmbH

## HEADQUARTERS ALTENBURG

Zschernitzscher Straße 74  
04600 Altenburg

Tel.: +49 3447 51084-0  
Fax: +49 3447 51084-40  
Mail: [info@schulz-berger-gmbh.de](mailto:info@schulz-berger-gmbh.de)

## BRANCH OFFICE HOHENMÖLSEN

Wuschlauber Straße 1  
06679 Hohenmölsen

Tel.: +49 34441 482-0  
Fax: +49 34441 22127  
Mail: [info@schulz-berger-gmbh.de](mailto:info@schulz-berger-gmbh.de)