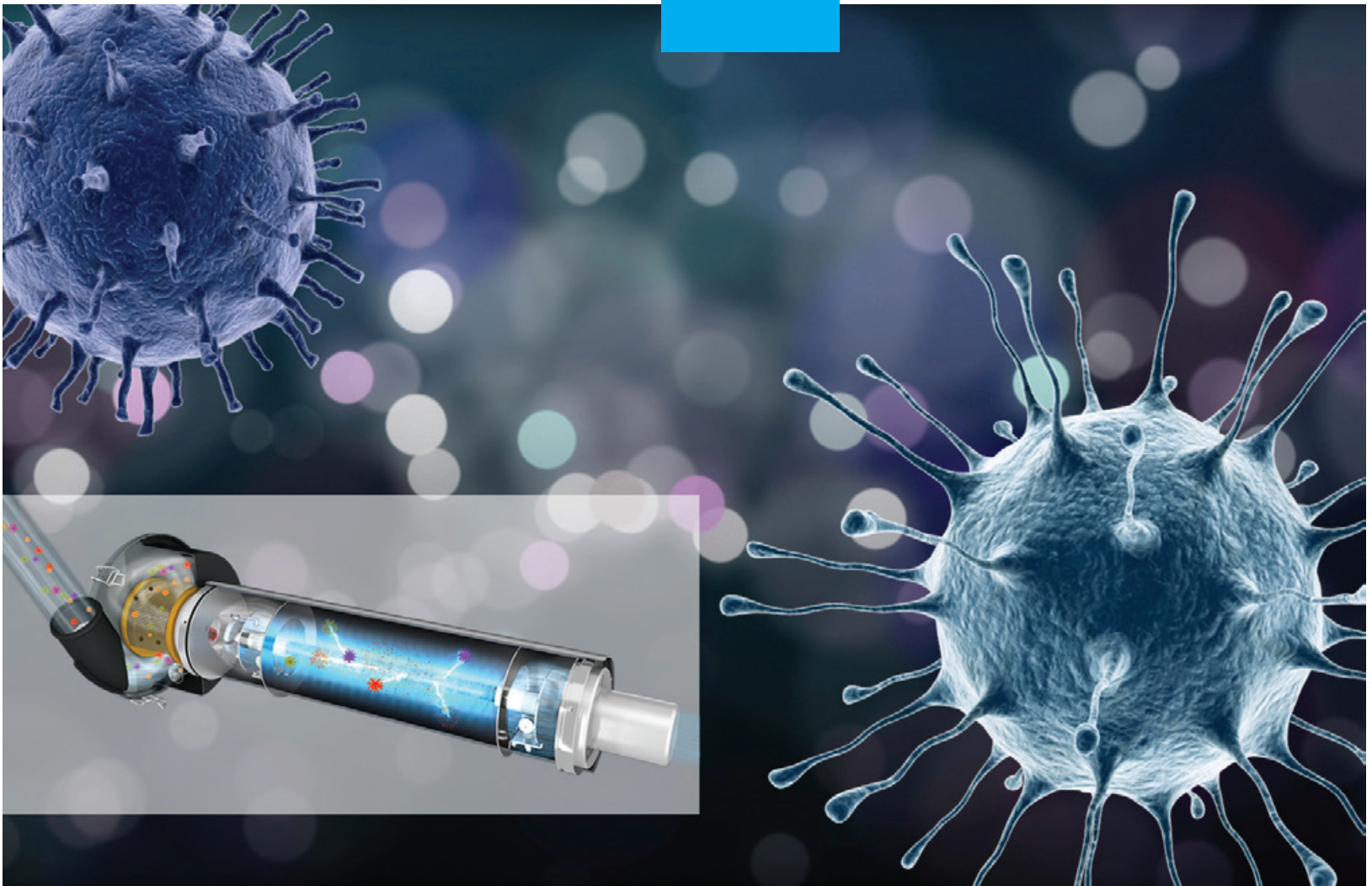


## B-VIRUS FREE

REMOVES VIRUSES, BACTERIA, MOULDS AND  
POLLEN FROM BREATHING AIR



## VIRUSES, BACTERIA, MOULD – THE INVISIBLE FOES

### WHY ABSOLUTELY PURE BREATHING AIR IS SO VITAL TODAY

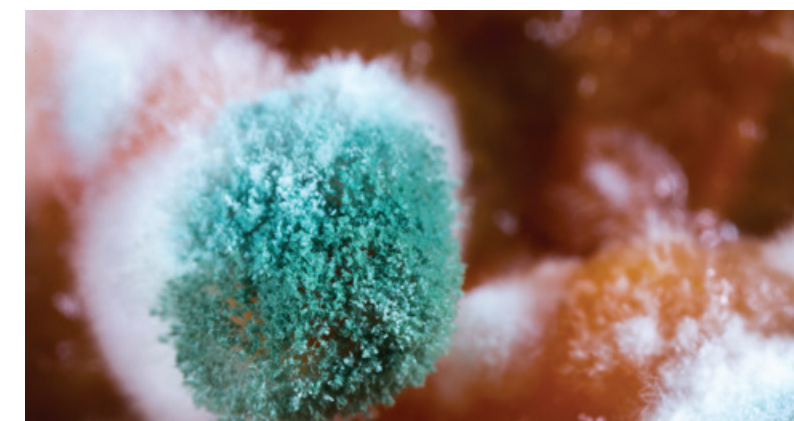
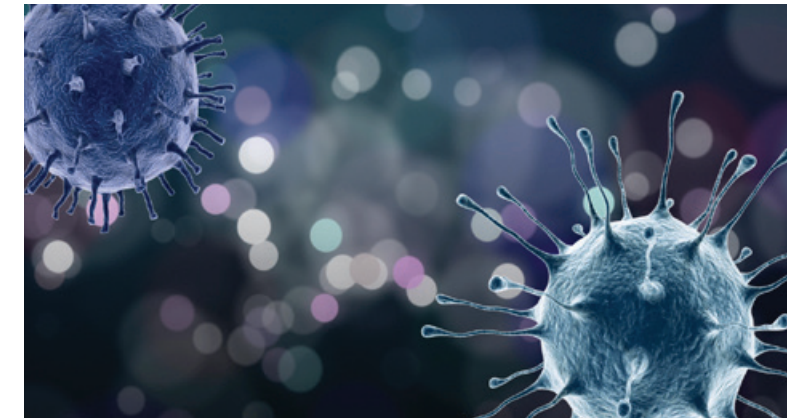
The B-DETECTION PLUS online gas measurement system already provides accurate measurements of the commonest hazardous substances associated with breathing air – such as CO, CO<sub>2</sub>, moisture and oil<sup>1</sup> – to minimize the occurrence of risks.

However, a new threat now lurks in the form of viruses like SARS-CoV-2, as well as bacteria and moulds. These new dangers are particularly insidious because they are invisible and highly communicable – and cannot be measured by sensors. They can spread at lightning speed by contact or droplet infection. In addition, unlike many other infectious diseases they do not even need physical contact to infect their hosts. Even breathing air contaminated with the viruses is enough to cause infection. This explains why colds and influenza – or “normal” flu-viruses are so highly infectious.

Viruses in ambient air can pass through any commercially available standard purification system. Even the high temperatures and pressure levels of the compression process have little effect on them because of the shortness of the process.

To protect firefighters, disaster teams and medical staff from these hazards whenever they require respiratory equipment for their daily operations, BAUER KOMPRESSOREN has developed a solution that eliminates viruses at the air intake stage!

The new B-VIRUS FREE protective filter system reliably neutralizes coronaviruses, bacteria and moulds - from SARS-CoV-2 to as yet unknown pathogens of the future.<sup>2</sup>



# POLLEN

# BACTERIA

# VIRUSES

# MOULDS

<sup>1</sup> Measurement of volatile organic compounds (VOCs)

<sup>2</sup> The B-VIRUS FREE filter eliminates up to 99.9% of coronaviruses, bacteria and certain moulds from intake air.



## B-VIRUS FREE – FOR SAFETY WITHOUT COMPROMISE

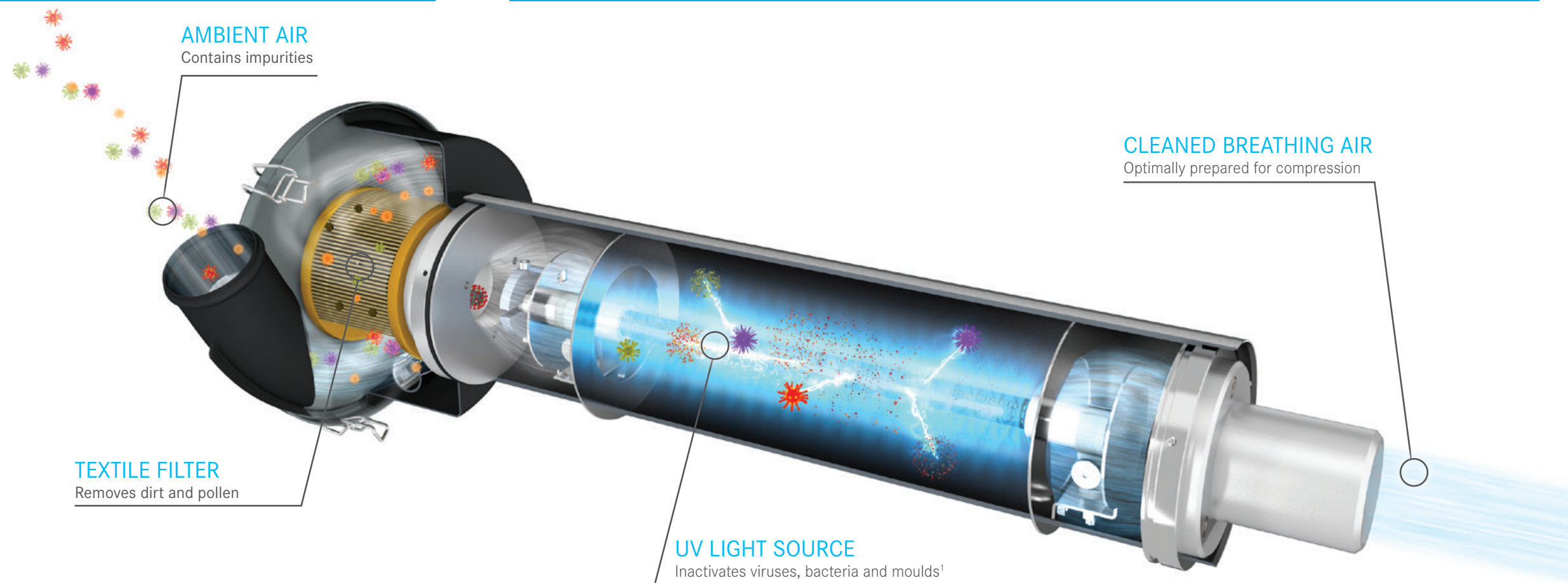
### THE SMART FILTER THAT BANISHES PATHOGENS

Using a special UV light source, the wholly effective chemical- and ozone-free technology of the patent-pending B-VIRUS FREE system destroys all pathogens in the intake air flow before they can reach the compressor.

The highly effective 200 to 300-nm UV wavelength is absorbed by the DNA of viruses, bacteria and mould spores, where the photons destroy the bonds between the pathogens' DNA strands. This effectively stops the pathogens from reproducing, and eliminates the danger of infection from microorganisms like viruses, bacteria, yeasts and moulds in a fraction of a second. The pathogens stand no chance against this high-energy short-wave radiation. According to the current state of the art, they are also unable to develop resistance to it – either now or in the future.

B-VIRUS FREE naturally applies the formidable quality standards that are the hallmark of BAUER KOMPRESSOREN. The short-wave UV radiation is produced by a high-quality light source and is ozone-free. The UV light technology eliminates all need for the use of chemicals. The system causes no unpleasant odour or taste.

The compressor can thus be used even in pathogen-contaminated environments, enabling respiratory equipment users to breathe easy and perform their vital activities without concern. B-VIRUS FREE delivers effective protection against contamination for patients receiving pressure chamber treatment and divers on operations.



#### CONNECTION

The B-VIRUS FREE protective filter system is ready for use in an instant. Simply mount it on a wall or existing system and connect to a 220/230 V (optional: 110V) power supply. After a few seconds of warm-up, the system is fully functional and ready to go.



#### INTAKE FILTER

Underpressure in the compressor draws in air through the intake filter opening. Normal dust particles and even pollen are removed from the air by the intake filter.



#### RADIATION SOURCE

The special UV light source emits high-energy UVC radiation that destroys the molecular bonds in the DNA of bacteria and moulds and in the RNA of viruses. This prevents the pathogens from reproducing.



#### CONTROL AND DISPLAY

The control unit of the B-VIRUS FREE protective filter system monitors functions and controls the UV light source. Operational status information is provided by visual (LED) and acoustic signals.



#### CONNECTION TO COMPRESSOR

The B-VIRUS FREE protective filter system is connected to a specially sealed intake hose, which eliminates any potential new contamination from leaks between the protective filter and the compressor block.

<sup>1</sup> B-VIRUS FREE removes up to 99.9 % of coronaviruses, bacteria and special moulds out of the intake air.

# FOR ALL BAUER BREATHING AIR COMPRESSOR SYSTEMS – ALSO EASY TO RETROFIT

B-VIRUS FREE can be ordered alongside any new breathing air system.

Long maintenance intervals keep operating costs down. The filter does not require replaceable filter cartridges. The UVC light source has an extremely long service life of approx. 2,000 hours and is easy to replace.



The filter can be retrofitted to existing BAUER systems fast and easily. Adapters provide the perfect fit to connect the filter to any system.

The control unit reliably displays up-to-date information on filter functions and includes visual and acoustic signals for the event of a malfunction.

A standard 220/230V power outlet is all that is needed for operation. A suitable version is also available for regions with 110V power supply.

The filter is designed for flexible mounting to a wall or existing system and has a compact footprint for extra ease of handling and convenience.

The overall system filters out normal dust and pollen particulates and reliably destroys coronaviruses, bacteria and moulds.<sup>1</sup> B-VIRUS FREE enables safe, pure breathing air for emergency teams, medical patients, athletes and allergy sufferers.

<sup>1</sup> The B-VIRUS FREE filter eliminates up to 99.9% of coronaviruses, bacteria and certain moulds from intake air.

## TECHNICAL DATA

B-VIRUS FREE		
	Units	Values
APPLICATION		
Pressure range	bar	atmospheric
Permissible compressor FAD	l/min	100 - 850
FUNCTIONS		
Required warm-up	s	60
Visual signal	-	Fault warning lamp
Acoustic signal	-	Beeps in case of fault
TECHNICAL DATA		
Permissible operating temperature range	°C	+5 ... +40
Operating voltage	V	220 - 240; optional: 110
UV lamp service life	-	2,000 h or every 2 years
Weight filter unit	kg	approx. 6 (Sizes S, M); approx. 7 (Sizes L, XL)
Weight control box	kg	approx. 5
Dimensions W x D x H	mm	665x250x450 (Sizes S, M); 905x250x450 (Sizes L, XL)





## INTERESTED IN OUR PRODUCTS?

**CONTACT US -  
WE ARE HAPPY TO PROVIDE INFORMA-  
TION AND ASSISTANCE.**

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### **B-VIRUS FREE EN**

N45062

05.2020

Subject to technical change without notice