Documentation

Overpressure/Vacuum pump ÜVP/VP 218

Read the instructions prior to commencing any work
As of 07/2026
Art. No.: 605 642

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1. General

1.1 Marking of the product

The ÜVP/VP 218 is marked with a CE sticker.

1.2 Unpacking

There may be pieces of metal on the packaging; therefore, always wear protective gloves. Lift the overpressure/vacuum pump manually with the help of another person and check whether the overpressure/vacuum pump is complete and free of damage.

1.3 Erection

Always erect the pump with clearance of **at least 50 cm** to any obstruction that could obstruct the flow of air and thus hinder the cooling process.

1.4 Disposal

Keep the packaging for possible transport for at least the duration of the warranty period.

Dispose of both the packaging material and the overpressure/vacuum pump, including its parts in a professional manner.

2. Safety

In case of improper use or misuse that does not correspond to the instructions for use, the manufacturer cannot be made liable for any damage.

2.1 Intended Use

Familiarize yourself with the device, e.g. how to stop the overpressure/vacuum pump and how to use all the controls.

Make sure that you have re-installed all parts correctly after maintenance work.

Keep children and animals away from the operating area.

If you use the overpressure/vacuum pump for an extended period and remain close to it in the process, it is advisable to use ear plugs.

2.2 Responsibility of the user

Do not touch the head, cylinders, cooling fins and supply line as they reach very high temperatures during operation and remain hot for a certain period of time even after the device has stopped.

Do not place flammable materials near and/or on the overpressure/vacuum pump.

Do not use the overpressure/vacuum pump if the mains cable is faulty or if the power connection is not established correctly.

Do not allow anyone to use the overpressure/vacuum pump without having been adequately instructed in its use beforehand.

Never aim the jet of compressed air at people or animals.

Do not strike the flywheel or the fans with blunt or metal objects. This could cause them to break all at once during operation.

Do not put the overpressure/vacuum pump into operation without the condensate trap and liquid stop valve.

When working with the overpressure/vacuum pump, make sure that no pressures are produced which might damage the tank, pipe or their monitoring chambers.

The device must not be used in a potentially explosive atmosphere. <u>UNDER NO CIRCUMSTANCES</u> should potentially explosive vapor and air mixtures be suctioned.

Do not use the overpressure/vacuum pump at temperatures lower than 0°C (temperature range: +5° to +45°C).

2.3 Motor protection

The overpressure/vacuum pump is equipped with a motor protection which breaks the power supply automatically in case of an overload. In this case, switch off the power supply and wait for a few minutes before you reset the motor protection switch (fig. 2) and re-start the device. If the circuit breaker triggers again, disconnect the power supply and contact an authorized customer service agent.

3. Application of the overpressure/vacuum pump

3.1 Installation

Check whether the mains voltage corresponds to the voltage stated on the CE mark.

The overpressure/vacuum pump is equipped with a type CEE 7 plug connector. If necessary, only have it replaced by specialized staff.

Always check whether the on/off switch is in the 0/OFF position before you connect the plug connector (fig. 1).

3.2 Switching on/off

Plug in the plug connector and start the device with the on/off switch.

Always and exclusively use the switch (set to “OFF”) to stop the overpressure/vacuum pump.

3.3 Operation of the pump

As a vacuum pump:

- A hose can be coupled on the pressure side, but it doesn't have to be. (Both options work).
- If there is a vacuum on the suction side of the pump, do not pull off the hose while the pump is running – there is a possibility that the liquid stop valve float will be sucked in.
  But this can be seen on the pressure gauge in the suction line.

As a pressure pump:

- Disconnect the suction and pressure hose and switch on the pump.
- After the pump has started up, connect the pressure side and insert a dry filter on the suction side.

3.4 Technical Data

Power supply		230 V
Max. overpressure		5 bar
Max. vacuum		-850 mbar
Volume flow with free suction		6000 l/h
Volume flow at 5 bar		2000 l/h
Duty cycle	Vacuum	100 %
	Pressure < 1 bar	100 %
	Pressure ~ 5 bar	25 %

4. Maintenance

Before you perform any maintenance work, switch off the overpressure/vacuum pump and disconnect the pump from the power supply.

According to §15 BetrSichV, a plant in need of monitoring may only be started after it has been subjected to a test before the startup. Furthermore, recurring checks according to § 16 BetrSichV must be performed. Such tests shall be carried out by an approved monitoring body or a qualified person. For more details, see BetrSichV.

Condensation: Drain the condensation by opening the condensation drain tap. Place the container so that the opening of the drain tap is facing downwards. Close the tap as soon as air only begins to flow out.

5. Troubleshooting

Malfunction	Remedy
1. The overpressure/vacuum pump stops and will not re-start.	**1.** Switch off the power and after a few minutes press the switch for the motor circuit breaker. If the motor circuit breaker triggers again after restarting, please contact technical customer service department. **1.1** The motor coil has burned through; please contact a customer service agent.
2. The overpressure/vacuum pump heats up excessively.	**2.** The cylinder head seal or a valve is damaged. Stop the overpressure/vacuum pump immediately and contact the technical customer service department.
3. The overpressure/vacuum pump is very loud and emits rhythmic, metallic blows.	**3.** The slide bush or the bearing bush has seized up. Stop the overpressure/vacuum pump immediately and contact the technical customer service department.
4. The vacuum pump VP 218 does not build up any negative pressure on the monitoring chamber.	**4.** Liquid has been suctioned and the liquid stop valve has closed. Empty the condensate trap and return the liquid stop valve back into the initial position (passage). **4.1** Open shut-off valve (Fig. 1).
5. The overpressure pump ÜVP 218 does not build up any overpressure in the monitoring chamber.	**5.** The liquid stop valve in the suction line has closed. Bring the liquid stop valve back into its initial position (passage). **5.1** The pressure regulator at the pressure outlet is completely closed. Open the pressure regulator.

6. Figures (Figures similar)

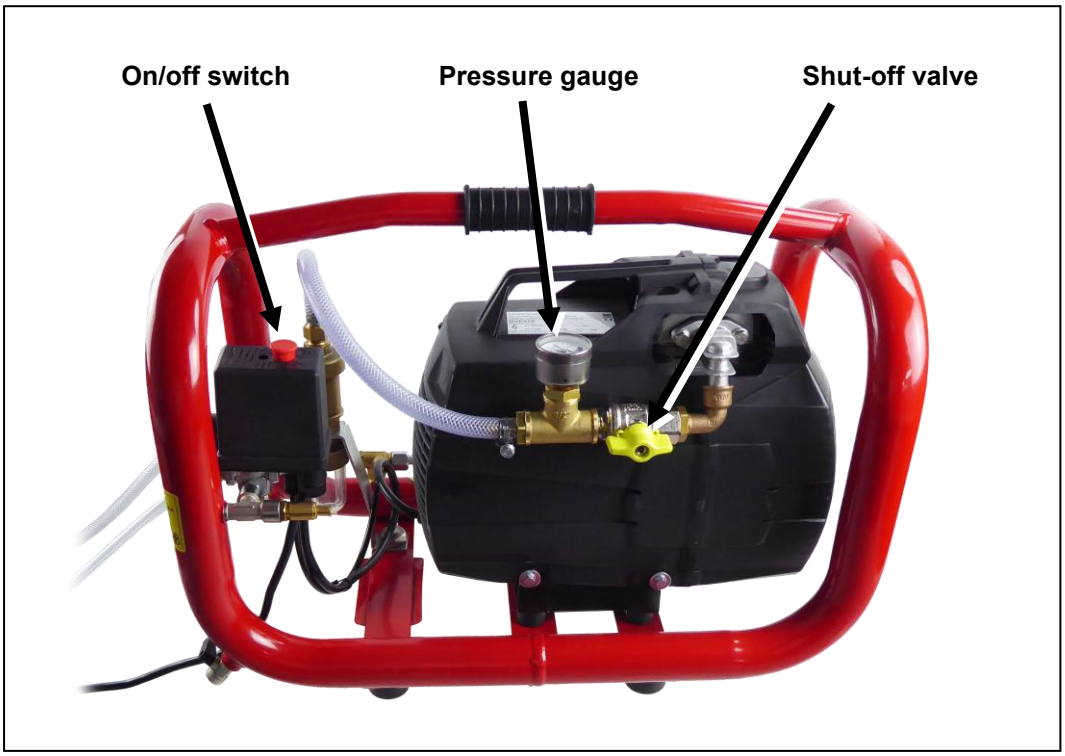

Figure 1 (applies to ÜVP 218 and VP 218)

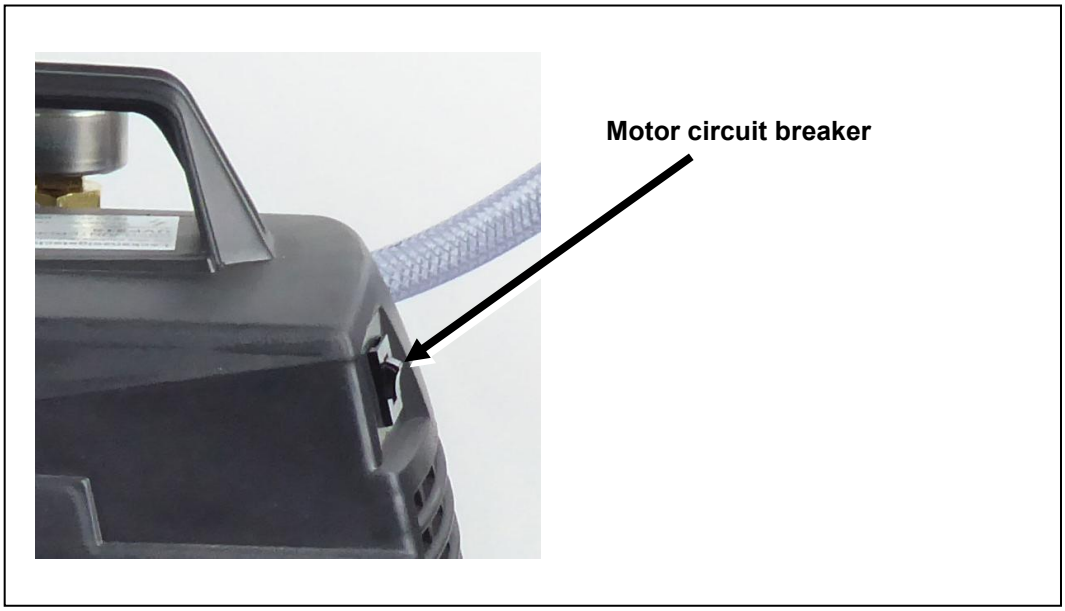

Figure 2 (applies to ÜVP 218 and VP 218)

Connections ÜVP 218

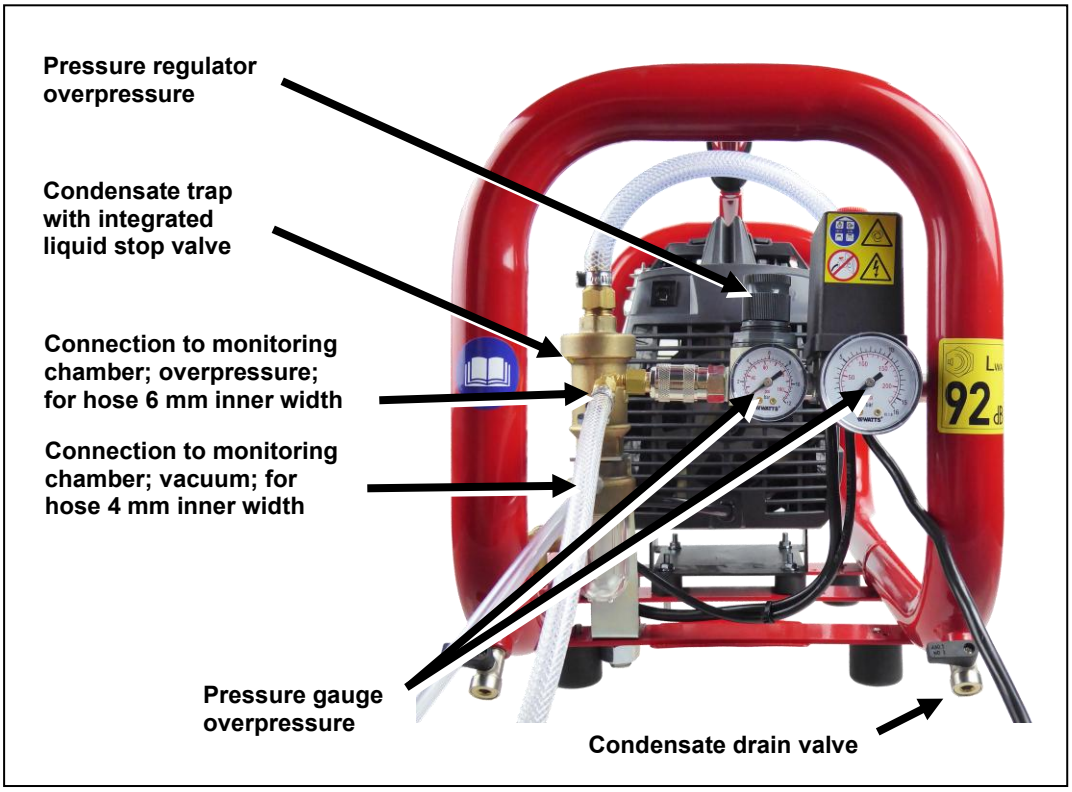

Figure 3

Connections VP 218

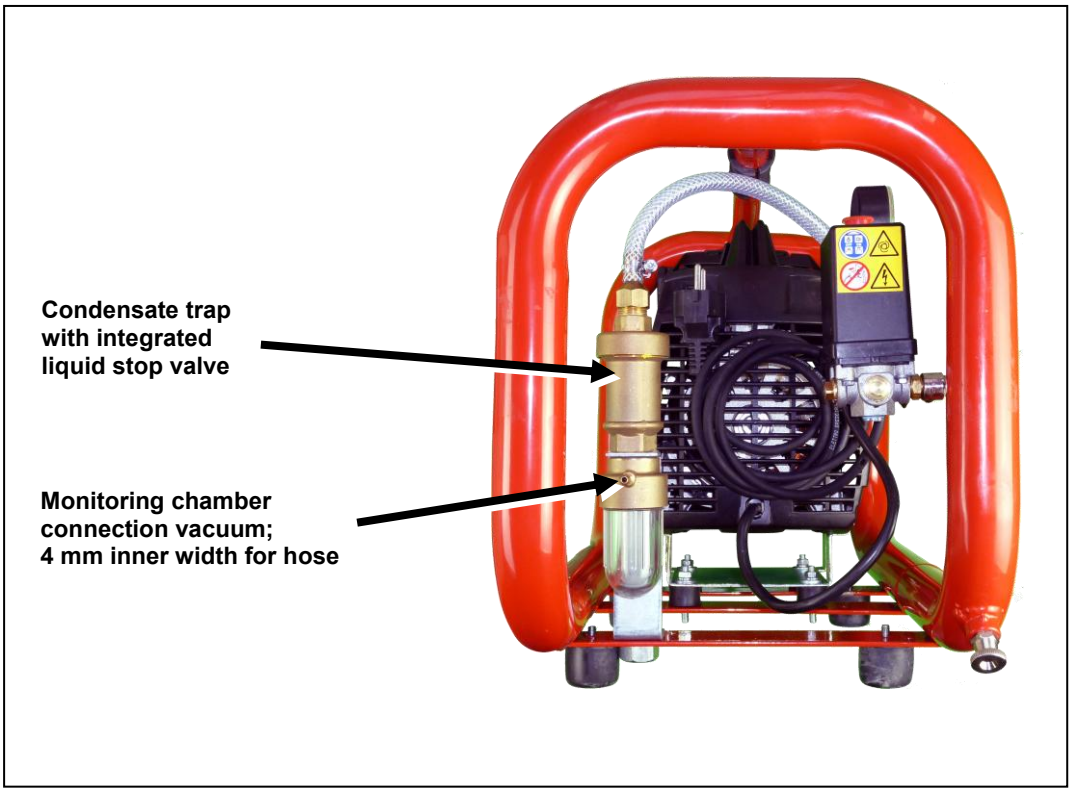

Figure 4

7. Declaration of Conformity

We,

SGB GmbH

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57076 Siegen

hereby declare, under sole responsibility, that the overpressure/vacuum pump

ÜVP/VP 218

compiles with the basic requirements of the EG directives listed below.

This declaration will become null and void in case of any change to the device not approved by us.

Directive	**Meaning**
98/37/EC (until December 28, 2009)	Machinery Directive
2006/42/EC (from December 29, 2009)	Machinery Directive
2000/14/EU	Noise emissions in the environment
2006/95/EU	Low-Voltage Directive
2004/108/EU	EMC Directive
2009/105/EC (formerly 87/404/EEA)	Simple Pressure Vessels Directive
EN1012-1	Compressors and vacuum pumps – Safety requirements – Part1: Air compressors; German version EN1012-1:2010
EN60204-1	Safety of machinery – Electrical equipment of machines – Part 1: General requirements
EN60335-1	Safety of electrical equipment for domestic use and similar purposes Part 1: General requirements
EN61000-6-3/4	EMC generic standard, EN61000-6-3 Emission standard for residential, commercial and light-industrial environments EN61000-6-4 Emission standard for industrial environments

Compliance is declared by

Martin Hücking
(Technical Director)

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