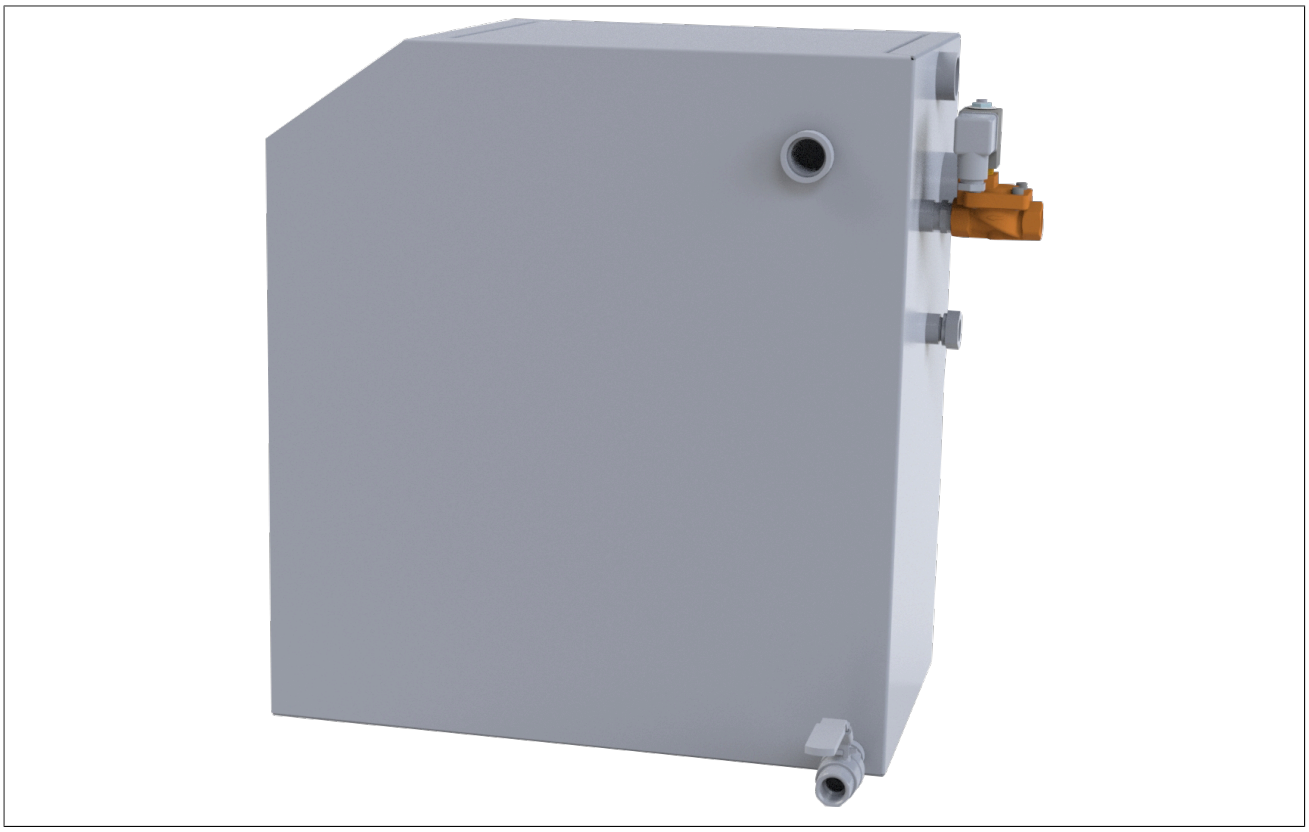
MOUNTING AND OPERATING INSTRUCTIONS

EB 3979 EN

Translation of original instructions



Type 7125 Mobile Blowdown Vessel
for Type 7121 Electric Steam Generator · Systems and Modules

Edition July 2025

Note on these mounting and operating instructions

These mounting and operating instructions (EB) assist you in mounting and operating the device safely. The instructions are binding for handling SAMSON devices. The images shown in this document are for illustration purposes only. The actual product may vary.

⇨ For the safe and proper use of these instructions, read them carefully and keep them for later reference.

⇨ If you have any additional questions not related to the contents of this document, contact SAMSON's After-sales Service (aftersalesservice@samsongroup.com).

Documents relating to the device, such as the mounting and operating instructions, are available on our website:
▶ https://www.samsongroup.com/en/downloads/documentation

Definition of signal words

⚠ DANGER

Hazardous situations which, if not avoided, will result in death or serious injury

⚠ WARNING

Hazardous situations which, if not avoided, could result in death or serious injury

NOTICE

Property damage message or malfunction

Note

Additional information

Tip

Recommended action

1 Safety instructions and measures

Intended use

The SAMSON Type 7125 Mobile Blowdown Vessel is suitable for the blowdown and drainage of the Type 7121 Electric Steam Generator. The mobile blowdown vessel is delivered as a ready-assembled unit.

The mobile blowdown vessel is used in applications in mechanical and plant engineering as well as general process engineering.

The mobile blowdown vessel is designed to operate under exactly defined conditions (e.g. operating pressure, process medium, temperature). Therefore, operators must ensure that the mobile blowdown vessel is only used in operating conditions that meet the specifications used for sizing it at the ordering stage. In case operators intend to use the mobile blowdown vessel in applications or conditions other than those specified, contact SAMSON. SAMSON does not assume any liability for damage resulting from the failure to use the device for its intended purpose or for damage caused by external forces or any other external factors.

⇨ Refer to the technical data and nameplate for limits and fields of application as well as possible uses.

Reasonably foreseeable misuse

The mobile blowdown vessel is not suitable for the following applications:

- Use outside the limits defined during sizing and by the technical data
- Use outside the limits defined by the accessories connected to the device

Furthermore, the following activities do not comply with the intended use:

- Use of non-original spare parts
- Performing service and repair work not described

Qualifications of operating personnel

The mobile blowdown vessel must be mounted, started up, serviced and repaired by fully trained and qualified personnel only; the accepted industry codes and practices must be observed.

According to these mounting and operating instructions, trained personnel refers to individuals who are able to judge the work they are assigned to and recognize possible hazards due to their specialized training, their knowledge and experience as well as their knowledge of the applicable standards.

Personal protective equipment

SAMSON recommends checking the hazards posed by the process medium being used (e.g. ▶ GESTIS hazardous substances database.

Depending on the process medium and/or the activity, the protective equipment required includes:

- Protective clothing, gloves, eye protection and respiratory protection in applications with hot, cold and/or corrosive media
- Wear hearing protection when working on the device. Follow the instructions given by the plant operator.
- Hard hat
- Safety harness, e.g. when working at height
- Safety footwear, if applicable ESD (electrostatic discharge) footwear

⇨ Check with the plant operator for details on further protective equipment.

Revisions and other modifications

Revisions, conversions or other modifications of the product are not authorized by SAMSON. They are performed at the user's own risk and may lead to safety hazards, for example. Furthermore, the product may no longer meet the requirements for its intended use.

Warning against residual hazards

To avoid personal injury or property damage, plant operators and operating personnel must prevent hazards that could be caused in the mobile blowdown vessel by the process medium, the operating pressure or by moving parts by taking appropriate precautions. Plant operators and operating personnel must observe all hazard statements, warnings and caution notes in these mounting and operating instructions.

Hazards resulting from the special working conditions at the installation site of the mobile blowdown vessel must be identified in a risk assessment and prevented through the corresponding standard operating procedures drawn up by the operator.

SAMSON also recommends checking the hazards posed by the process medium being used (e.g. ▶ GESTIS hazardous substances database).

⇨ Observe safety measures for handling the device as well as fire prevention and explosion protection measures.

These mounting and operating instructions deal with the standard version of the mobile blowdown vessel. Components of the mobile blowdown vessel that differ to those used for the standard version described in this document can be exchanged with other certain SAMSON components. The residual hazards of these components are described in the associated mounting and operating instructions (see section 'Referenced documents' in this chapter).

Safety features

There is no special emergency stop mechanism for Type 7125.

Responsibilities of the operator

Operators are responsible for proper use and compliance with the safety regulations. Operators are obliged to provide these mounting and operating instructions as well as the referenced documents to the operating personnel and to instruct them in proper operation. Furthermore, operators must ensure that operating personnel or third parties are not exposed to any danger.

Operators are additionally responsible for ensuring that the limits for the mobile blowdown vessel defined in the technical data are observed. This also applies to the start-up and shutdown procedures. Start-up and shutdown procedures fall within the scope of the operator's duties and, as such, are not part of these mounting and operating instructions. SAMSON is unable to make any statements about these procedures since the operative details (e.g. differential pressures and temperatures) vary in each individual case and are only known to the operator.

Responsibilities of operating personnel

Operating personnel must read and understand these mounting and operating instructions as well as the referenced documents and observe the specified hazard statements, warnings and caution notes. Furthermore, operating personnel must be familiar with the applicable health, safety and accident prevention regulations and comply with them.

Referenced standards, directives and regulations

The mobile blowdown vessel complies with the requirements of the European EMC Directive 2014/30/EU, the European RoHS Directive 2011/65/EU, the European Low-voltage Directive 2014/35/EU.

Chapter 14 contains this declaration of conformity.

Referenced documents

The following documents apply in addition to these mounting and operating instructions:

- Data sheets for …
  - e.g. **Type 7121-1 and Type 7121-2 Mobile Electric Steam Generators** ▶ T 3977
  - e.g. **Type 7121-0 Electric Steam Generator** ▶ T 3976
- Mounting and operating instructions as well as data sheets for additional fittings (e.g. shut-off valves, pressure gauges etc.).

1.1 Notes on possible severe personal injury

⚠ DANGER

Risk of fatal injury due to electric shock.

Before starting up the mobile blowdown vessel, electrical installation work must be performed. An electric shock due to incorrect work practices may cause death.

⇨ Before connecting the wiring, performing any work on the device or opening the device, disconnect the supply voltage and protect it against unintentional reconnection.

⇨ Only use protective equipment that can be protected against unintentional reconnection of the power supply.

⇨ Do not remove any covers to perform adjustment work on live parts.

⇨ Avoid sprays and jets of water.

⚠ DANGER

Risk of injury as a result of opening electrical equipment incorrectly.

The Type 7125 Mobile Blowdown Vessel is an electric device which can cause serious injury or even death if handled incorrectly.
Before working on the mobile blowdown vessel:

⇨ De-energize the device.

⇨ Wear personal protective equipment.

⚠ DANGER

Risk of fatal injury due to the formation of an explosive atmosphere.

Incorrect installation, operation or maintenance of the mobile blowdown vessel in potentially explosive atmospheres may lead to ignition of the atmosphere and ultimately to death.

⇨ The following regulations apply to installation in hazardous areas: DIN EN 60079-14 (VDE 165, Part 1).

⇨ Installation, operation or maintenance of the mobile blowdown vessel is to be performed only by personnel who has undergone special training or instructions or who is authorized to work on explosion-protected devices in hazardous areas.

⚠ DANGER

Risk of personal injury due to the operating medium being released.

⇨ Before starting any work on the mobile blowdown vessel, depressurize all plant sections and components affected.

⇨ Do not start up the mobile blowdown vessel until all parts have been mounted.

⇨ Wear personal protective equipment.

⚠ DANGER

Danger due to suspended loads falling.

⇨ Stay clear of suspended or moving loads.

⇨ Close off and secure the transport paths.

⇨ Wear personal protective equipment.

1.2 Notes on possible personal injury

⚠ WARNING

Damage to health relating to the REACH regulation.

If a SAMSON device contains a substance listed as a substance of very high concern on the candidate list of the REACH regulation, this is indicated on the SAMSON delivery note.

⇨ Observe information on safe use of the part affected ▶ www.samsongroup.com > About SAMSON > Environment, Social & Governance > Material Compliance > REACH.

⇨ Wear eye protection when working in close proximity to the system.

⚠ WARNING

Risk of lifting equipment tipping over and risk of damage to lifting accessories due to exceeding the rated lifting capacity.

Only use approved lifting equipment and accessories whose minimum lifting capacity is higher than the weight of the mobile blowdown vessel.

⇨ Refer to Chapter 3.1 for weights.

⚠ WARNING

Risk of burn injuries due to hot or cold components and pipelines.

Depending on the process medium, the device components and pipelines may get very hot or cold and cause burn injuries.

⇨ Allow components and pipelines to cool down or warm up to the ambient temperature.

⇨ Wear protective clothing and safety gloves.

⚠ WARNING

Risk of personal injury due to incorrect operation, use or installation as a result of information on the mobile blowdown vessel being illegible.

Over time, markings, labels and nameplates on the mobile blowdown vessel may become covered with dirt or become illegible in some other way. As a result, hazards may go unnoticed and the necessary instructions not followed. There is a risk of personal injury.

⇨ Keep all relevant markings and inscriptions on the mobile blowdown vessel in a constantly legible state.

⇨ Immediately renew damaged, missing or incorrect nameplates or labels.

⚠ WARNING

Risk of injury due to incorrect lifting without the use of lifting equipment.

Lifting the mobile blowdown vessel without the use of lifting equipment may lead to injuries (back injuries in particular) depending on its weight.

⇨ Observe the guideline weight for manual handling: 15 to max. 55 kg taking into account age, gender and physical fitness.

⇨ Observe the occupational health and safety regulations valid in the country of use.

⚠ WARNING

Risk of personal injury due to pressurized components and the operating medium being released.

⇨ Wear goggles when working near the system. Follow the instructions given by the plant operator.

1.3 Notes on possible property damage

NOTICE

Risk of damage due to unsuitable medium properties.

The device is designed for a process medium with defined properties.

⇨ Only use the process medium specified for sizing the equipment.

NOTICE

Risk of damage due to the use of unsuitable lubricants.

The lubricants to be used depend on the material of the device. Unsuitable lubricants may corrode and damage surfaces.

⇨ Only use lubricants approved by SAMSON. When in doubt, consult SAMSON.

NOTICE

Risk of damage due to the use of unsuitable tools.

Certain tools are required to work on the device.

⇨ Only use tools approved by SAMSON. When in doubt, consult SAMSON.

NOTICE

Risk of damage due to incorrect service or repair work.

Do not perform any repair work on your own.

⇨ Contact SAMSON's After-sales Service for service and repair work.

NOTICE

Risk of damage due to improper storage.

⇨ Observe the storage instructions.

⇨ Avoid longer storage periods.

⇨ Contact SAMSON in case of different storage conditions or longer storage times.

NOTICE

Risk of damage or leakage due to over- or under-torquing.

Observe the specified torques when tightening components. Over-torquing leads to parts wearing out more quickly. Under-torquing may cause leakage.

⇨ Observe the specified tightening torques (see Chapter 15.1).

NOTICE

Possible malfunction and damage due to adverse weather conditions (temperature, humidity).

NOTICE

Risk of the process medium being contaminated through the use of unsuitable lubricants and/or contaminated tools and components.

⇨ If necessary, keep Type 7125 and the tools used free from solvents and grease.

⇨ Make sure that only suitable lubricants are used.

NOTICE

Notes on the use of an RFID tag

The RFID tag is subject to certain restrictions due to its application range (technical specifications).

⇨ Observe the explosion protection certificates of the RFID tag when it is to be used on devices installed in potentially explosive atmospheres.

⇨ Do not expose the RFID tag to strong electric fields.

⇨ Avoid electrostatic charging.

⇨ Observe the application range (technical specifications) of the RFID tag.

2 Markings on the device

A nameplate is affixed to Type 7125. The nameplate shown was up to date at the time of publication of this document. The nameplate on the device may differ from the one shown.

2.1 Nameplate

SAMSON AG
Weismüllerstraße 3
60314 Frankfurt am Main
Telefon: +49 69 4009 - 0

Modell:	①				
Baujahr	②				
Inhalt	③	ltr.			
Betriebstemperatur max.:	④	°C			
Spannung Volt / Hz	⑤	VAC	⑥	Hz	
Leistung / Strom	⑦	W	⑧	A	
Fabrik-Nr.:	⑨				

CE

Fig. 1: *Nameplate of Type 7125*

1 Model
2 Year of manufacture
3 Tank capacity
4 Maximum operating temperature
5 Voltage
6 Frequency
7 Rating
8 Current
9 Serial number

2.2 Location of the nameplate

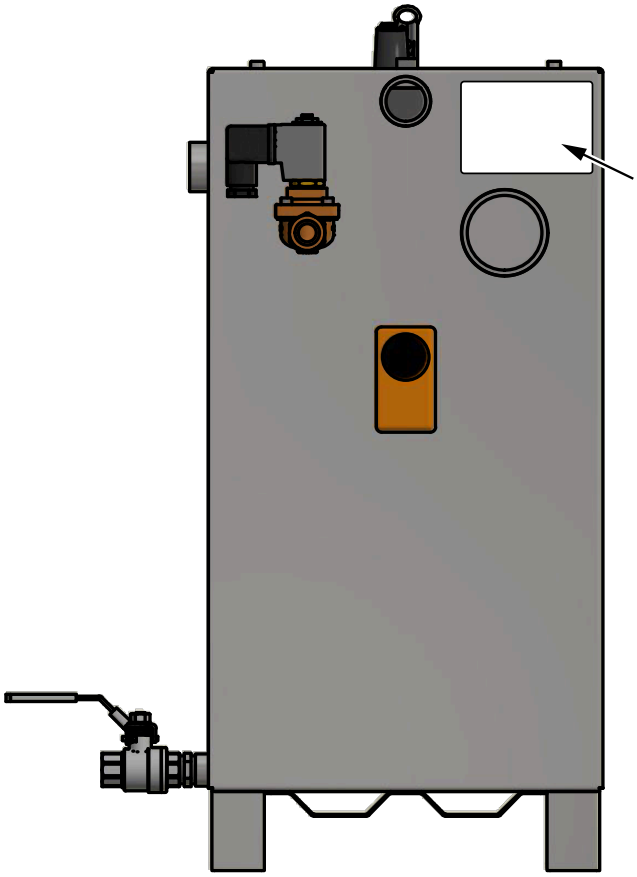


Fig. 2: *Location of the nameplate*

Tip

Chapter 2.1 shows the nameplate and inscriptions. It lists all possible characteristics and options that may appear on a nameplate. Only the inscriptions relevant to the ordered Type 7125 actually appear on the nameplate.

3 Design and principle of operation

⇨ See Fig. 3.

The mobile blowdown vessel is suitable for the cooling and dilution of condensate in the Type 7121 Electric Steam Generator.

The steam/hot water mixture with entrained dirt particles (salt, silicates etc.) enters at the inlet **E1** into the blowdown vessel. Any steam in the blowdown vessel is discharged at the outlet A1 and vented to the atmosphere.

A temperature switch **TS** monitors the water temperature in the blowdown vessel. The cold water shut-off valve **E2** opens as soon as the water temperature exceeds the adjusted temperature limit. Cold water is fed into the vessel until the temperature of the mixture reaches ≤50 °C. The temperature-regulated water flows out through the overflow **ÜK** into the wastewater system.

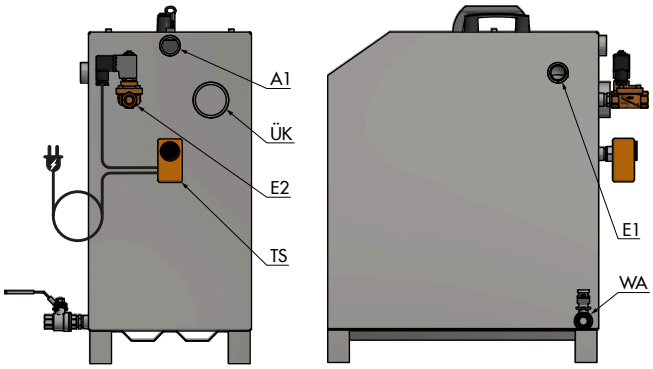


Fig. 3: *Connections of the Type 7125 Mobile Blowdown Vessel*

E1 Inlet for steam/hot water G ¾
E2 Inlet for cold water G ½
A1 Outlet for steam G ¾
ÜK Overflow with connection to wastewater system G 2
WA Water drain G ½
TS Temperature switch

3.1 Technical data

The nameplate on the mobile blowdown vessel contains information on the version (see Chapter 2).

i ***Note***

More information is available in Data Sheet ▶ T 3979.

Conformity

Type 7125 bears the CE mark of conformity.

CE

The Type 7125 Mobile Blowdown Vessel is used for the blowdown of the Type 7121 Electric Steam Generator. Cold water is added to the hot blowdown water before it is piped into the wastewater system.

– For **blowdown** of the Type 7121 Electric Steam Generator

Temperature range

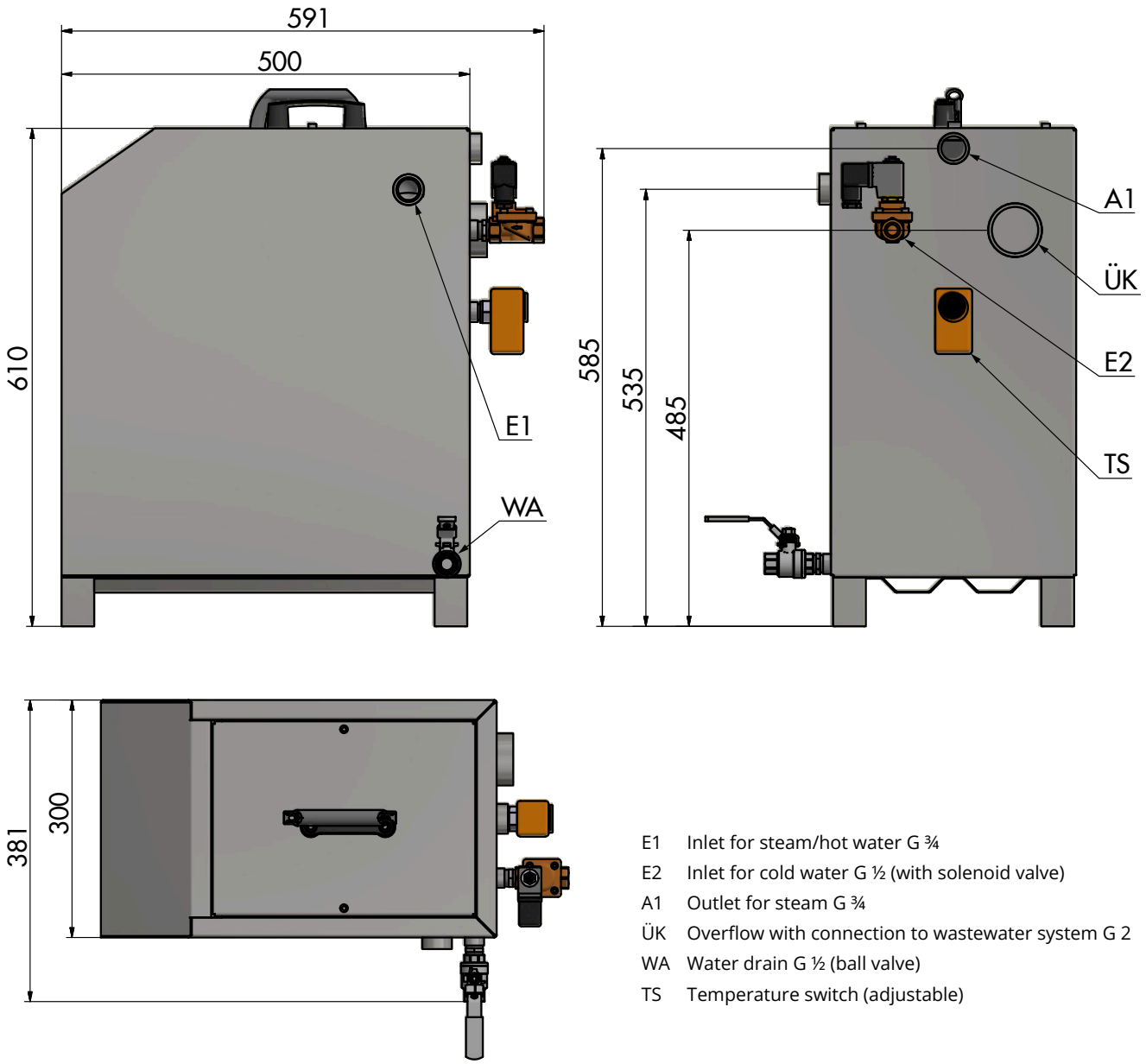
Depending on how the mobile blowdown vessel is configured, it can be used up to temperatures of 60 °C (see Table 1).

Dimensions and weights

Table 1 provides a summary of the weights. The lengths and heights are shown in Fig. 4.

Table 1: *Technical data*

Mobile Blowdown Vessel		Type 7125
Capacity		Approx. 60 l
Power supply connection	Voltage	230 VDC/50 Hz
	Current	0.1 A
Max. permissible temperature		10 to 60 °C
Temperature sensor		Adjusted to 40 °C (adjustable between 0 and 90 °C)
Operating pressure		1 bar(a)
Material		Stainless steel
Weight		Approx. 20 kg



E1 Inlet for steam/hot water G ¾
E2 Inlet for cold water G ½ (with solenoid valve)
A1 Outlet for steam G ¾
ÜK Overflow with connection to wastewater system G 2
WA Water drain G ½ (ball valve)
TS Temperature switch (adjustable)

Fig. 4: *Dimensions and connections of the Type 7125 Mobile Blowdown Vessel · All dimensions in mm*

4 Shipment and on-site transport

The work described in this chapter is to be performed only by personnel appropriately qualified to carry out such tasks.

4.1 Accepting the delivered goods

After receiving the shipment, proceed as follows:

1. Check the scope of delivery. Check that the specifications on the nameplate of Type 7125 match the specifications in the delivery note. See Chapter 2 for more details on the nameplate.
2. Check the shipment for transportation damage. Report any damage to SAMSON and the forwarding agent (refer to delivery note).
3. Determine the weight and dimensions of the units to be lifted and transported in order to select the appropriate lifting equipment and lifting accessories. Refer to the transport documents and Chapter .

4.2 Removing the packaging from the device

The mobile blowdown vessel is delivered as an assembled unit.

Proceed as follows to lift and install the mobile blowdown vessel:

⇨ Leave Type 7125 on the pallet to transport it on site.

⇨ Dispose and recycle the packaging in accordance with the local regulations.

4.3 Transporting and lifting the device

⚠ WARNING

Risk of injury due to incorrect lifting without the use of lifting equipment.

Lifting the mobile blowdown vessel without the use of lifting equipment may lead to injuries (back injuries in particular) depending on its weight.

⇨ *Observe the guideline weight for manual handling: 15 to max. 55 kg taking into account age, gender and physical fitness.*

⇨ *Observe the occupational health and safety regulations valid in the country of use.*

Tip

Our after-sales service can provide more detailed transport and lifting instructions on request.

4.3.1 Transporting the device

Type 7125 can be transported using lifting equipment (e.g. crane or forklift).

⇨ Leave Type 7125 on the pallet to transport it.

⇨ Observe the transport instructions.

Transport instructions

⇨ Protect Type 7125 against external influences (e.g. impact).

⇨ Do not damage the corrosion protection (paint, surface coatings). Repair any damage immediately.

⇨ Protect the piping and any mounted valve accessories against damage.

⇨ Protect Type 7125 against moisture and dirt.

⇨ The permissible ambient temperature of the standard version of Type 7125 is –20 to +60 °C.

4.3.2 Lifting the device

To set the mobile blowdown vessel upright, use lifting equipment (e.g. crane or forklift) to lift it.

Lifting

1. Carefully lift Type 7125.
2. Install Type 7125 (see Chapter 5).
3. After installation: Check whether Type 7125 is properly installed.

4.4 Storing the device

NOTICE

Risk of damage due to improper storage.

⇨ *Observe the storage instructions.*

⇨ *Avoid longer storage periods.*

⇨ *Contact SAMSON in case of different storage conditions or longer storage times.*

Note

SAMSON recommends to regularly check Type 7125 and the prevailing storage conditions during long storage periods.

Storage instructions

⇨ Protect Type 7125 against external influences (e.g. impact).

⇨ Secure Type 7125 in the stored position against slipping or tipping over.

⇨ Do not damage the corrosion protection (paint, surface coatings). Repair any damage immediately.

⇨ Protect Type 7125 against moisture and dirt. Store it at a relative humidity of less than 75 %. In damp spaces, prevent condensation. If necessary, use a drying agent or heating.

⇨ Make sure that the ambient air is free of acids or other corrosive media.

⇨ The permissible storage temperature of the standard version of Type 7125 is –20 to +60 °C.

⇨ Do not place any objects on Type 7125.

Tip

Our after-sales service can provide more detailed storage instructions on request.

5 Installation

The work described in this chapter is to be performed only by personnel appropriately qualified to carry out such tasks.

⚠ DANGER

Risk of fatal injury due to electric shock.

Before starting up the mobile blowdown vessel, electrical installation work must be performed. An electric shock due to incorrect work practices may cause death.

⇨ *Before connecting the wiring, performing any work on the device or opening the device, disconnect the supply voltage and protect it against unintentional reconnection.*

⇨ *Only use protective equipment that can be protected against unintentional reconnection of the power supply.*

⇨ *Do not remove any covers to perform adjustment work on live parts.*

⇨ *Avoid sprays and jets of water.*

⚠ DANGER

Risk of personal injury due to the operating medium being released.

⇨ *Before starting any work on the mobile blowdown vessel, depressurize all plant sections and components affected.*

⇨ *Do not start up the mobile blowdown vessel until all parts have been mounted.*

⇨ *Wear personal protective equipment.*

⚠ WARNING

Risk of burn injuries due to hot or cold components and pipelines.

Depending on the process medium, the device components and pipelines may get very hot or cold and cause burn injuries.

⇨ *Allow components and pipelines to cool down or warm up to the ambient temperature.*

⇨ *Wear protective clothing and safety gloves.*

i *Note*

The Type 7125 Blowdown Vessel must only be used in combination with the Type 7121 Electric Steam Generator.

5.1 Installation conditions

Work position

The work position for Type 7125 is the front view onto all operating controls (including any additional fittings) seen from the position of operating personnel. Plant operators must ensure that, after installation of the device, the operating personnel can perform all necessary work safely and easily access the device from the work position.

Mounting position

To ensure that the mobile blowdown vessel functions properly, proceed as follows:

1. Only indoor installation is permitted.
2. Set the mobile blowdown vessel in the upright position on a level and firm surface.
3. Leave sufficient space at the back of the device for all connections (at least one meter away from a wall).
4. Contact SAMSON if the mounting position is not as specified above.

i *Note*

Make sure that Type 7125 remains freely accessible after the plant has been completed.

⇨ *Allow sufficient space to remove any components.*

5.2 Preparation for installation

Before installation, make sure that the following conditions are met:

– Type 7125 is clean.
– None of the components of Type 7125 are damaged.
– The requested or required additional pipe fittings have been installed or prepared as necessary.
– All data on the nameplate (type designation, nominal size, material, pressure rating and temperature range) match the plant conditions. See Chapter 2 for more details on the nameplate.

Proceed as follows:

⇨ Lay out the necessary material and tools to have them ready during installation work.

5.3 Installation

Type 7125 is delivered by SAMSON as ready-assembled and tested unit. The activities listed below are necessary to install the device and before it can be started up.

NOTICE

Risk of damage or leakage due to over- or under-torquing.

Observe the specified torques when tightening components. Over-torquing leads to parts wearing out more quickly. Under-torquing may cause leakage.

⇨ *Observe the specified tightening torques (see Chapter 15.1).*

5.3.1 Installing the device

Installation

⇨ Connect all required supply lines only in the de-energized state (see connections in Fig. 5).

Pipe connections

Proceed as follows:

1. Lift the mobile blowdown vessel to the site of installation. Make sure that the surface is level and compact.
2. Connect **E1** (blowdown inlet) to steam generator.
3. Connect pipeline to **A1** (steam outlet) for venting to the atmosphere.
4. Connect **E2** (cooling water inlet) to cold water supply.
5. Connect pipeline to **ÜK** (overflow) and wastewater system.
6. Connect **WA** (water drain) during maintenance work.

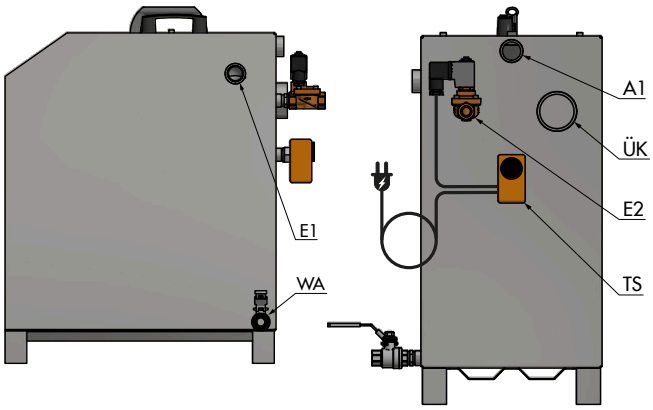


Fig. 5: *Connections of the Type 7125 Mobile Blowdown Vessel*

E1 Inlet for steam/hot water G ¾
E2 Inlet for cold water G ½
A1 Outlet for steam G ¾
ÜK Overflow with connection to wastewater system G 2
WA Water drain G ½
TS Temperature switch

Electrical connection

A power cable with a CEE 7/4 plug is wired to the device for connection to the mains supply.

Proceed as follows:

1. Insert the plug into a matching socket outlet.

5.4 Testing the device

Type 7125 is delivered by SAMSON ready for use. To test the equipment functioning before start-up or putting back it into operation, perform the following tests:

5.4.1 Leak test

The plant operator is responsible for performing the leak test and selecting the test method. The leak test must comply with the requirements of the national and international standards that apply at the site of installation.

Tip

SAMSON's After-sales Service can support you to plan and perform a leak test for your plant.

1. Slowly open the cold water line upstream of the mobile blowdown vessel.
2. Check the mobile blowdown vessel for leakage to the atmosphere.

3. If necessary, shut off the cold water line upstream of the mobile blowdown vessel.
4. Rework any parts that leak and repeat the leak test.

Before start-up of the mobile blowdown vessel, check all the components and lines to make sure that they are connected correctly, do not leak and function properly.

6 Start-up

The work described in this chapter is to be performed only by personnel appropriately qualified to carry out such tasks.

⚠ DANGER

Risk of fatal injury due to electric shock.

Before starting up the mobile blowdown vessel, electrical installation work must be performed. An electric shock due to incorrect work practices may cause death.

⇨ *Before connecting the wiring, performing any work on the device or opening the device, disconnect the supply voltage and protect it against unintentional reconnection.*

⇨ *Only use protective equipment that can be protected against unintentional reconnection of the power supply.*

⇨ *Do not remove any covers to perform adjustment work on live parts.*

⇨ *Avoid sprays and jets of water.*

⚠ DANGER

Risk of personal injury due to the operating medium being released.

⇨ *Before starting any work on the mobile blowdown vessel, depressurize all plant sections and components affected.*

⇨ *Do not start up the mobile blowdown vessel until all parts have been mounted.*

⇨ *Wear personal protective equipment.*

⚠ WARNING

Risk of burn injuries due to hot or cold components and pipelines.

Depending on the process medium, the device components and pipelines may get very hot or cold and cause burn injuries.

⇨ *Allow components and pipelines to cool down or warm up to the ambient temperature.*

⇨ *Wear protective clothing and safety gloves.*

⚠ WARNING

Risk of personal injury due to pressurized components and the operating medium being released.

⇨ *Wear goggles when working near the system. Follow the instructions given by the plant operator.*

Before start-up or putting the device back into service, make sure the following conditions are met:

- The mobile blowdown vessel is properly installed (see Chapter 5).
- The leak and function tests have been completed successfully (see Chapter 5).
- The prevailing conditions in the plant section affected meet the sizing requirements for the mobile blowdown vessel (see Chapter 1).

6.1 Start-up and putting the device back into operation

Before starting up the plant, make sure the following conditions are met:

- Piping and supply lines are open and correctly connected.

7 Operation

Immediately after completing start-up or putting the device back into operation, Type 7125 is ready for use.

The mobile blowdown vessel is operated on site using the operating controls on the back of the device.

⚠ DANGER

Risk of fatal injury due to electric shock.

Before starting up the mobile blowdown vessel, electrical installation work must be performed. An electric shock due to incorrect work practices may cause death.

⇨ *Before connecting the wiring, performing any work on the device or opening the device, disconnect the supply voltage and protect it against unintentional reconnection.*

⇨ *Only use protective equipment that can be protected against unintentional reconnection of the power supply.*

⇨ *Do not remove any covers to perform adjustment work on live parts.*

⇨ *Avoid sprays and jets of water.*

⚠ DANGER

Risk of injury as a result of opening electrical equipment incorrectly.

The Type 7125 Mobile Blowdown Vessel is an electric device which can cause serious injury or even death if handled incorrectly.
Before working on the mobile blowdown vessel:

⇨ *De-energize the device.*

⇨ *Wear personal protective equipment.*

⚠ DANGER

Risk of personal injury due to the operating medium being released.

⇨ *Before starting any work on the mobile blowdown vessel, depressurize all plant sections and components affected.*

⇨ *Do not start up the mobile blowdown vessel until all parts have been mounted.*

⇨ *Wear personal protective equipment.*

⚠ WARNING

Risk of burn injuries due to hot or cold components and pipelines.

Depending on the process medium, the device components and pipelines may get very hot or cold and cause burn injuries.

⇨ *Allow components and pipelines to cool down or warm up to the ambient temperature.*

⇨ *Wear protective clothing and safety gloves.*

7.1 Operating the plant

Observe the following procedure:

⇨ Avoid pressure surges.

1. All piping and the supply line are correctly connected and open.
2. Fill the vessel with cold water up to the temperature sensor.
   The inspection cover must be removed beforehand (this step is only required before starting up for the first time or putting the device back into operation).
3. Replace the cover and refasten the screws.
4. Start up the steam generator and allow the operating pressure to reach at least 3 bar. Switch off the steam generator after this pressure is reached.
5. Fully open the ball valve at the blowdown outlet of the steam generator.
6. The superheated steam of the steam generator starts to mix with the cooler water in the blowdown vessel.
7. When the water temperature in the blowdown vessel rises above 40 °C (measurement at the temperature switch), the solenoid valve of the cold water supply **E2** opens to allow cold water to enter.
8. When the temperature at the temperature switch falls below 40 °C, the solenoid valve closes again (hysteresis approx. 2 °C).
9. The water level rises up to the overflow. The excess water flows through the overflow **ÜK** into the wastewater system.

8 Malfunctions

Note

Contact SAMSON's After-sales Service for malfunctions not listed in the table.

The malfunctions listed in this chapter are caused by mechanical faults and incorrect sizing. In the simplest case, the functioning can be restored following the recommended action. Special tools may be required to rectify the fault.

Tip

SAMSON's After-sales Service can support you in drawing up an inspection and test plan for your plant.

8.1 Troubleshooting

Malfunction	Possible reasons	Recommended action
Water flows out at the water drain WA	Water drain valve is open	⇨ Close the drain valve.
	Water drain valve leaks	⇨ Contact SAMSON's After-sales Service if components are damaged.
No make-up water supply (despite high water temperature in vessel)	No make-up water available at E2	⇨ Check make-up water connection and ensure it is connected correctly at E2.
	Solenoid valve does not function	⇨ Check supply voltage supplied to the solenoid valve. ⇨ Contact SAMSON's After-sales Service if components are damaged.
	Temperature switch does not function	⇨ Check supply voltage supplied to the temperature switch. ⇨ Contact SAMSON's After-sales Service if components are damaged.
Blowdown vessel overflows (cover)	Overflow ÜK or connected pipe clogged up	⇨ Check overflow ÜK and connected pipe for blockage. Clean them, if necessary.
	Pipe connected to the overflow ÜK has not been installed with a downward slope	⇨ Install pipe connected to the overflow ÜK with a downward slope.

8.2 Emergency action

Plant operators are responsible for emergency action to be taken in the plant.

1. Perform troubleshooting (see Chapter 8.1).
2. Rectify those malfunctions that can be remedied following the information given in this document. Contact SAMSON's After-sales Service in all other cases.

Putting the device back into operation after a malfunction

⇨ See Chapter 6.

9 Servicing

The mobile blowdown vessel does not require much maintenance. Nevertheless, it is subject to natural wear. Depending on the operating conditions, check the mobile blowdown vessel at regular intervals to avoid possible malfunctions.

Plant operators are responsible for drawing up an inspection and test plan. Details on faults and how to remedy them can be found in Chapter 8.

The work described in this chapter is to be performed only by personnel appropriately qualified to carry out such tasks.

⚠ DANGER

Risk of fatal injury due to electric shock.

Before starting up the mobile blowdown vessel, electrical installation work must be performed. An electric shock due to incorrect work practices may cause death.

⇨ *Before connecting the wiring, performing any work on the device or opening the device, disconnect the supply voltage and protect it against unintentional reconnection.*

⇨ *Only use protective equipment that can be protected against unintentional reconnection of the power supply.*

⇨ *Do not remove any covers to perform adjustment work on live parts.*

⇨ *Avoid sprays and jets of water.*

⚠ DANGER

Risk of personal injury due to the operating medium being released.

⇨ *Before starting any work on the mobile blowdown vessel, depressurize all plant sections and components affected.*

⇨ *Do not start up the mobile blowdown vessel until all parts have been mounted.*

⇨ *Wear personal protective equipment.*

⚠ WARNING

Risk of burn injuries due to hot or cold components and pipelines.

Depending on the process medium, the device components and pipelines may get very hot or cold and cause burn injuries.

⇨ *Allow components and pipelines to cool down or warm up to the ambient temperature.*

⇨ *Wear protective clothing and safety gloves.*

NOTICE

Risk of damage due to the use of unsuitable tools.

Certain tools are required to work on the device.

⇨ *Only use tools approved by SAMSON. When in doubt, consult SAMSON.*

Note

The device was checked by SAMSON before it left the factory.

– *Certain test results certified by SAMSON lose their validity when the components of Type 7125 are opened. Such testing includes leak tests.*
– *The product warranty becomes void if service or repair work not described in these instructions is performed without prior agreement by SAMSON's After-sales Service.*
– *Only use original spare parts by SAMSON, which comply with the original specifications.*

9.1 Service work preparations

1. Lay out the necessary material and tools to have them ready for the service work.
2. Put the mobile blowdown vessel out of operation (see Chapter 8 and Chapter 10).

The following service work can be performed after preparation is completed:

9.2 Service work

⇨ Before performing any service work, preparations must be made to the mobile blowdown vessel (see Chapter 9.1).

Maintenance

1. Open the top cover once a month and check the vessel for sludge.
2. If any sludge exists, manually open the drain valve **WA** and drain off the dirty water into a suitable container.
3. Remove sludge (without chemical cleaning agents).
4. After cleaning, close the ball valve **WA** and fill the blowdown vessel with water up to the temperature sensor (see Chapter 9.2.1).

⇨ After all service work is completed, check the mobile blowdown vessel before putting it back into operation (see Chapter 5.4).

9.2.1 Putting the system back into operation after service work

⇨ Put the mobile blowdown vessel back into operation (see Chapter 6). Make sure the requirements and conditions for start-up or putting the device back into operation are met.

9.3 Ordering spare parts and operating supplies

Contact your nearest SAMSON subsidiary or SAMSON's After-sales Service for information on spare parts, lubricants and tools.

10 Decommissioning

The work described in this chapter is to be performed only by personnel appropriately qualified to carry out such tasks.

⚠ DANGER

Risk of fatal injury due to electric shock.

Before starting up the mobile blowdown vessel, electrical installation work must be performed. An electric shock due to incorrect work practices may cause death.

⇨ *Before connecting the wiring, performing any work on the device or opening the device, disconnect the supply voltage and protect it against unintentional reconnection.*

⇨ *Only use protective equipment that can be protected against unintentional reconnection of the power supply.*

⇨ *Do not remove any covers to perform adjustment work on live parts.*

⇨ *Avoid sprays and jets of water.*

⚠ DANGER

Risk of personal injury due to the operating medium being released.

⇨ *Before starting any work on the mobile blowdown vessel, depressurize all plant sections and components affected.*

⇨ *Do not start up the mobile blowdown vessel until all parts have been mounted.*

⇨ *Wear personal protective equipment.*

⚠ WARNING

Risk of personal injury due to pressurized components and the operating medium being released.

⇨ *Wear goggles when working near the system. Follow the instructions given by the plant operator.*

To put the mobile blowdown vessel out of operation before removing it, proceed as follows:

1. Shut off or disconnect all the supply lines.
2. Depressurize the plant.
3. Allow the pipeline and components to cool down or warm up to ambient temperature, if necessary.
4. Drain off any water.

11 Removal

The work described in this chapter is to be performed only by personnel appropriately qualified to carry out such tasks.

Before removing, make sure that the following conditions are met:

– The mobile blowdown vessel is put out of operation (see Chapter 10).

11.1 Removing the device

1. Remove all supply lines.

12 Repairs

If the mobile blowdown vessel does not function properly according to how it was originally sized or does not function at all, it is defective and must be repaired or exchanged.

NOTICE

Risk of damage due to incorrect service or repair work.

Do not perform any repair work on your own.

⇨ *Contact SAMSON's After-sales Service for service and repair work.*

12.1 Returning devices to SAMSON

Defective devices can be returned to SAMSON for repair. Proceed as follows to return devices to SAMSON:

1. Put the mobile blowdown vessel out of operation (see Chapter 10).
2. Proceed as described on our website at ▶ www.samsongroup.com > SERVICE > After-sales Service > Returning goods .

13 Disposal

SAMSON is a producer registered in Europe, agency in charge
▶ www.samsongroup.com > About SAMSON > Environment, Social & Governance > Material Compliance > Waste electrical and electronic equipment (WEEE)
WEEE reg. no.: DE 62194439

Information on substances listed as substances of very high concern (SVHC) on the candidate list of the REACH regulation can be found in the document “Additional Information on Your Inquiry/Order”, which is added to the order documents, if applicable. This document includes the SCIP number assigned to the devices concerned. This number can be entered into the database on the European Chemicals Agency (ECHA) website (▶ https://www.echa.europa.eu/scip-database) to find out more information on the SVHC contained in the device.

Note

SAMSON can provide you with a recycling passport on request. Simply e-mail us at aftersalesservice@samsongroup.com giving details of your company address.

Tip

On request, SAMSON can appoint a service provider to dismantle and recycle the product as part of a distributor take-back scheme.

⇨ Observe local, national and international refuse regulations.

⇨ Do not dispose of components, lubricants and hazardous substances together with your other household waste.

14 Certificates

The following certificates are included on the next pages:

– EU declaration of conformity for Type 7125

EU KONFORMITÄTSERKLÄRUNG

EU DECLARATION OF CONFORMITY

Die alleinige Verantwortung für die Ausstellung dieser Konformitätserklärung trägt der Hersteller / *This declaration of conformity is issued under the sole responsibility of the manufacturer*

Für das folgende Produkt / *For the following product*

Produkt Typ 7125 / *Product Type 7125*

wird die Konformität mit den einschlägigen Harmonisierungsrechtsvorschriften der Union bestätigt: / *conformity with the relevant Union harmonisation legislation is declared with*:

für Ausführung… *for version…*	EU-Richtlinie / *EU-directive*	Harmonisierte Norm / *harmonised standard*
alle Ausführungen *all versions*	RoHS/*RoHS* 2011/65/EU 2015/863/EU	EN IEC 63000:2018
	EMV/*EMC* 2014/30/EU	EN 61326-1:2013 EN 61326-2-3:2013
	NSR/*LVD* 2014/35/EU	EN 60204-1:2006/AC:2010

Hersteller / *manufacturer*:

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Frankfurt am Main, den 28.03.2025

ppa. F. Schulz

ppa. Friedrich Schulz
Director Modular Systems & Solutions

Revision 00

15 Appendix

15.1 Tightening torques

Table 2: *Tightening torques*

Part	Width across flats	Nominal size	Tightening torque in Nm
Inlet E1	–	G ¾	45
Inlet E2	–	G ½	45
Outlet A1	–	G ¾	45
Overflow ÜK	–	G 2	45
Cable gland	A/F 24	–	5

15.2 Tools

SAMSON's After-sales Service can support you concerning tools approved by SAMSON.

15.3 Accessories

No accessories are available for the Type 7125 Mobile Blowdown Vessel.

15.4 Spare parts

Contact your nearest SAMSON subsidiary or SAMSON's After-sales Service for information on spare parts, lubricants and tools.

15.5 After-sales service

Contact SAMSON's After-sales Service for support concerning service or repair work or when malfunctions or defects arise.

E-mail contact

You can reach our after-sales service at ▶ aftersalesservice@samsongroup.com.

Addresses of SAMSON AG and its subsidiaries

The addresses of SAMSON AG, its subsidiaries, representatives and service facilities worldwide can be found on our website at ▶ www.samsongroup.com or in SAMSON product catalogs.

Required specifications

Please submit the following details:

- Device type and nominal size
- Model number or material number
- Installation drawing with all the additionally installed components

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