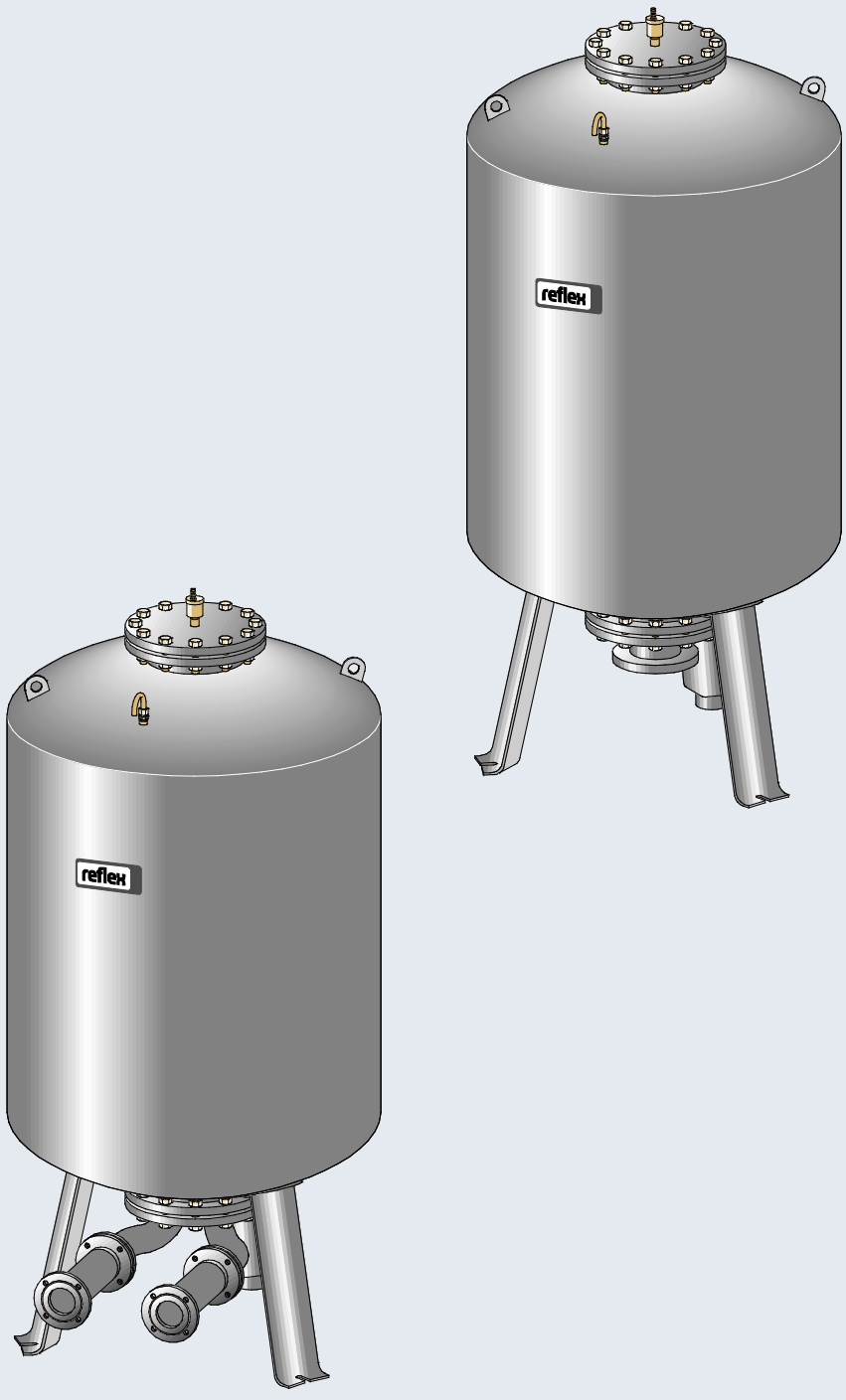
reflex

Thinking solutions.

Tanks for Variomat Giga

GB Installation Manual



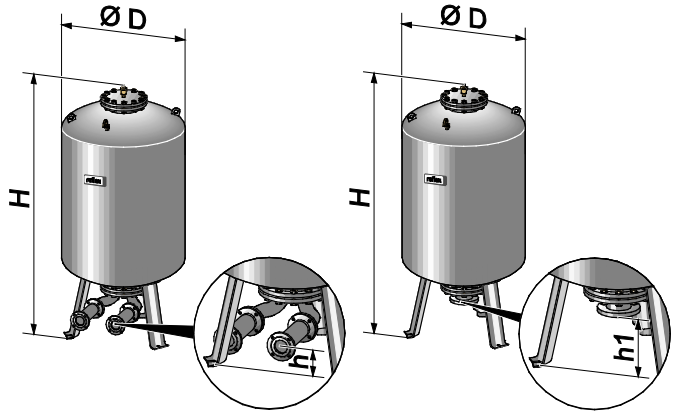
1 Instructions for the installation manual

This manual describes the installation of the primary tank and any optional secondary tanks of the Variomat Giga system.
The tanks can be only used in combination with the Variomat Giga unit.

Note!
Further information on the tanks can be found in the operating manual. It is supplied with the Variomat Giga control unit.

2 Technical data

The tanks are manufactured from steel with exterior coating. A diaphragm prevents the direct contact of the expansion water with the inner tank wall.



Primary tank Secondary tank

Type	1000	1500	2000	3000	4000	5000
Diameter Ø "D"	1000 mm	1200 mm	1200 mm	1500 mm	1500 mm	1500 mm
Height "H"	2130 mm	2130 mm	2590 mm	2590 mm	3160 mm	3695 mm
Height "h"	285 mm	285 mm	285 mm	314 mm	314 mm	314 mm
Height "h1"	305 mm	305 mm	305 mm	335 mm	335 mm	335 mm
Weight	330 kg	465 kg	565 kg	795 kg	1080 kg	1115 kg
Connection	DN 65 / PN 6	DN 65 / PN 6	DN 65 / PN 6	DN 65 / PN 6	DN 65 / PN 6	DN 65 / PN 6
Diaphragm to DIN 4807 T3	Exchangeable	Exchangeable	Exchangeable	Exchangeable	Exchangeable	Exchangeable

3 Installation

Caution – risk of injury!

- If installation, removal or maintenance work is not carried out correctly, there is a risk of burns and other injuries at the connection points, if pressurised hot water or hot steam suddenly escapes.
  - Ensure proper installation, removal or maintenance work.
  - Ensure that the system is de-pressurised before performing installation, removal or maintenance work at the connection points.

Caution – risk of burning!

- Excessively hot surfaces in heating systems can cause burns on the skin.
  - Wear protective gloves.
  - Please place appropriate warning signs in the vicinity of the device.

Caution – Risk of injury due to falls or bumps!

- Bruising from falls or bumps at system components during installation.
  - Wear personal protective equipment (helmet, protective clothing, gloves, safety boots).

Warning – large weight!

- The tanks are heavy. Consequently, there is a risk of physical injury and accidents.
  - Use suitable lifting equipment for transportation and installation.

3.1 Installation conditions

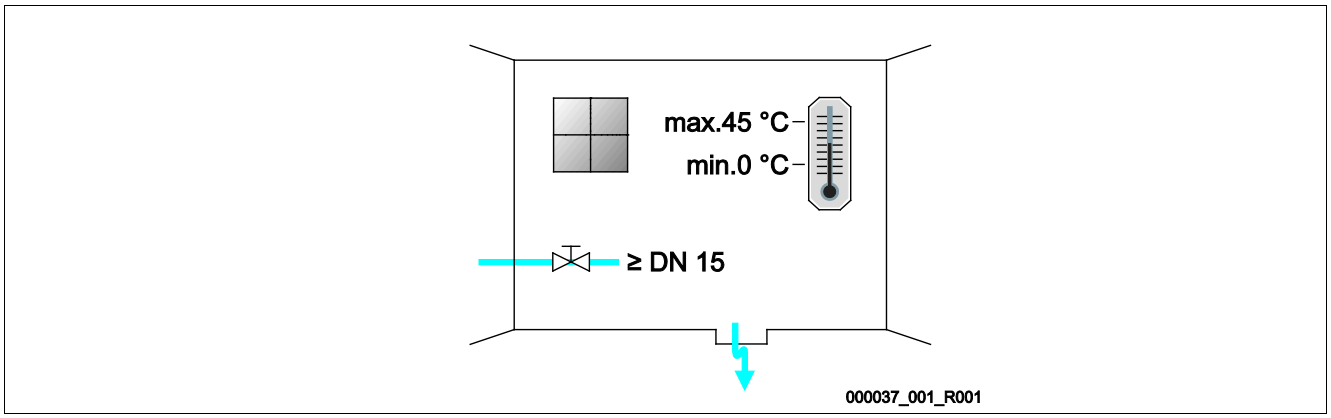
3.1.1 Incoming inspection

Prior to shipping, the tanks were carefully inspected and packed. Damages during transport cannot be excluded.
Proceed as follows:

1. Upon receipt of the goods, check the shipment for
   - completeness and
   - possible transport damage.
2. Document any damage.
3. Contact the forwarding agent to register a complaint accordingly.

3.2 Preparatory work

Installation location for the tanks



Preparing the tank installation:

- Frost-free, well-ventilated room.
  - Room temperature range: 0 °C to 45 °C.
- Level, stable flooring.
  - Ensure sufficient bearing strength of the flooring before filling the tanks.
  - Ensure that the control unit and the tanks are installed on the same level.
- Filling and dewatering option.
  - Provide a DN 15 filling connection according to DIN 1988 T 4.
  - Provide an optional cold water inlet.
  - Prepare a drain for the drain water.
- Usage of approved transport and lifting equipment only.
  - The load fastening points at the tanks must be used only as installation resources.

3.3 Execution

Attention! – Damage due to improper installation

Avoid additional mechanical loads on the tanks caused by the connections to the control unit.

- Ensure that all connections to the control unit are free from stresses.

Proceed as follows for the installation:

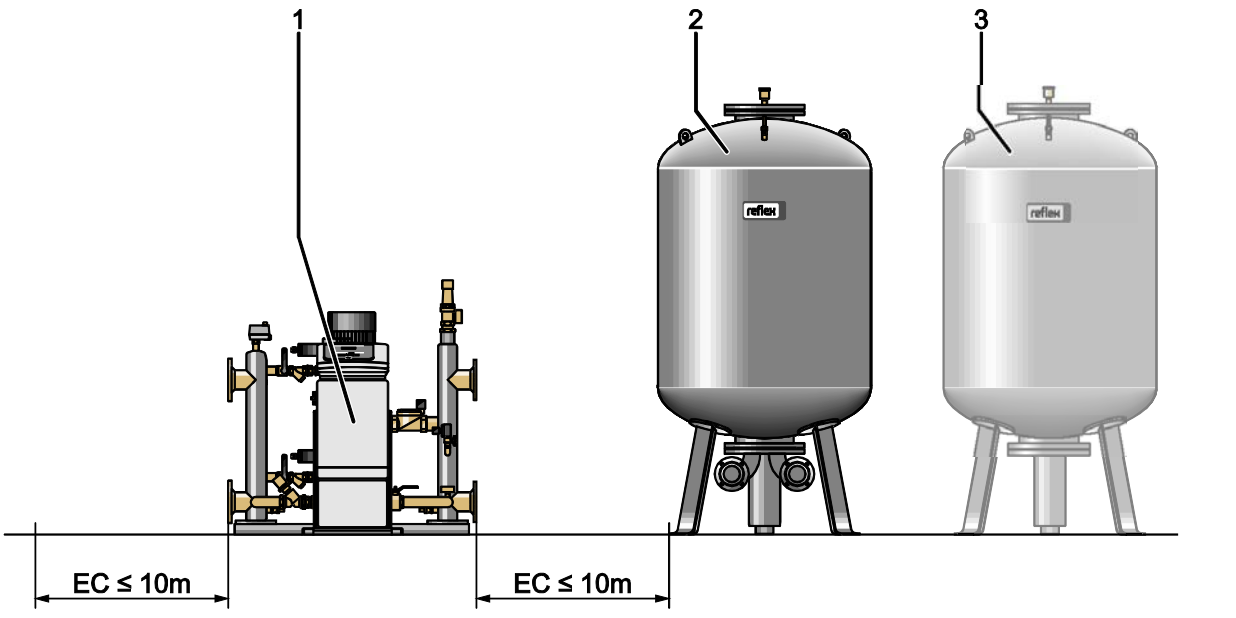
- Position the tanks.
- Complete the primary tank and the optional secondary tanks.
- Create the water-side connections of the primary tank to the control unit.
- Connect the water-side connections of the optional secondary tanks with the primary tank.

Note!

During installation, pay attention to the operability of the valves and the inlet options for the connecting lines.

3.3.1 Positioning

Determine the position of the tanks. Position the tanks at the same level as the control unit.



1	Control unit
2	Primary tank

3	Secondary tank (optional)
EC	Connection line

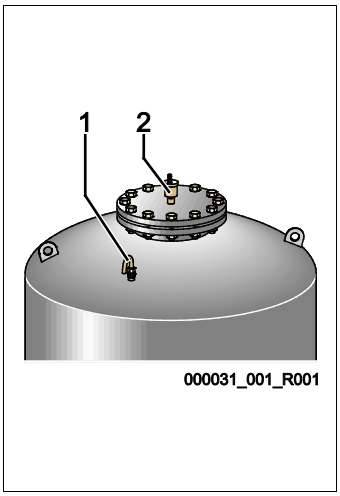
Note!

- Do not exceed the maximum length of 10 metres for the "EC" connecting lines.
- Ensure a continuously rising "EC" connecting line between the pump connection of the control unit to the primary tank.

3.3.2 Installation of add-on components for the tanks

The add-on components are packed in the tank mounts:

- "DV" degassing valve (2) with reducing sleeve
- "VE" equalisation elbow (1)
- "LIS" pressure pick-up



For add-on components, proceed as follows:

1. Seal the "DV" degassing valve and the reducing sleeve.
2. Connect the degassing valve with the reducing sleeve.
3. Install the degassing valve at the connection of the corresponding tank.
4. Remove the protective cap from the "DV" degassing valve.
5. Use the clamping ring screw connection to install the "VE" equalisation elbow for aeration and ventilation at the tanks.

The add-on components are installed.

Note!

Install the "LIS" pressure pick-up only after finalising the installation of the primary tank.

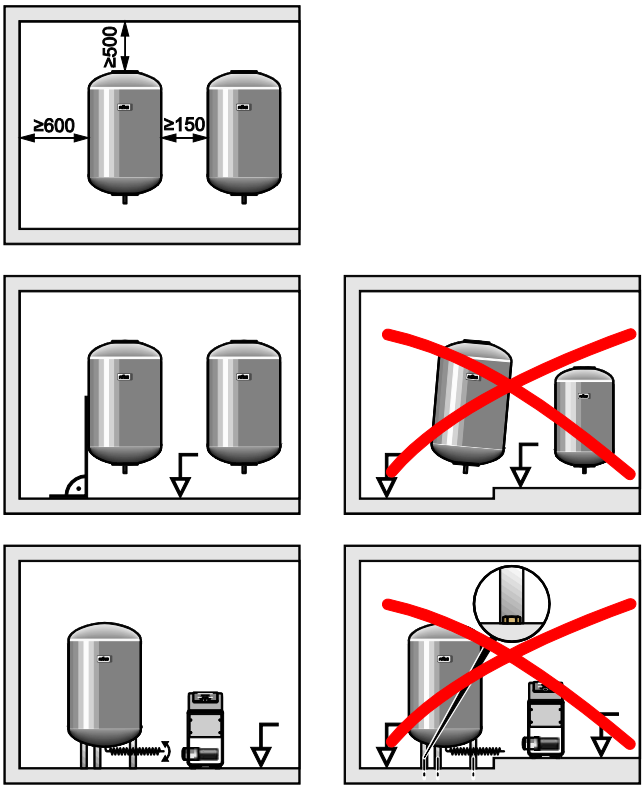
Note!

Do not seal off the "VE" aeration and ventilation to ensure fault-free operation.

3.3.3 Tank installation

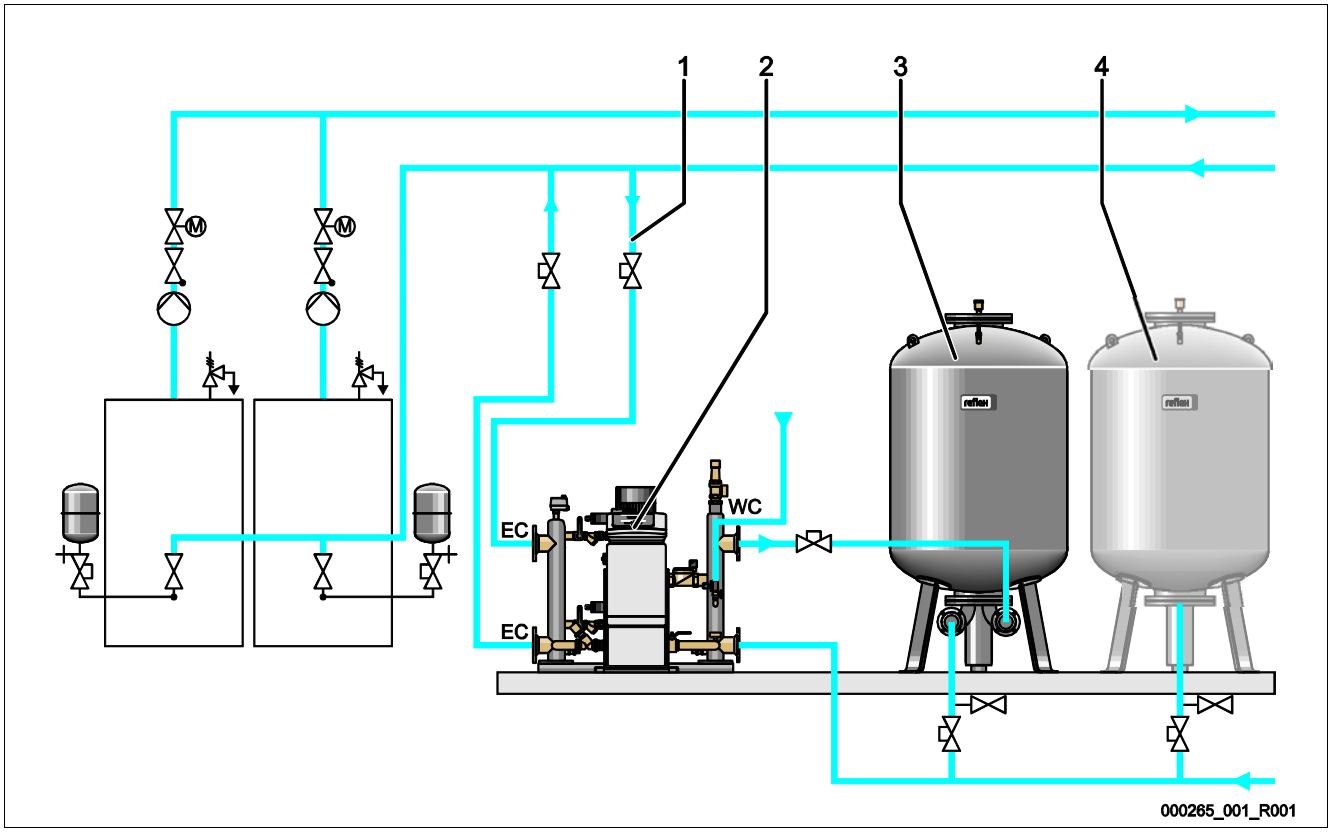
Comply with the following notes regarding the installation of the primary tank and the secondary tanks:

- All flange openings at the tanks are viewing and maintenance openings.
  - Place the tanks with sufficient distances to sides and ceiling.
- Install the tanks on a level surface.
- Ensure rectangular and free-standing position of the tanks.
- Use only tanks of the same type and dimensions when using secondary tanks.
- Ensure proper functioning of the "LIS" level sensor.
  - Do not attach the tanks to the floor.
- Install the control unit on the same level as the tanks.



3.3.4 Hydraulic connection

Schematic connection representation:



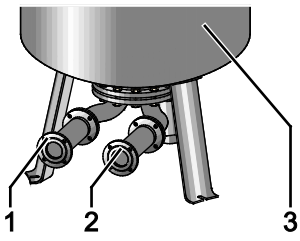
1	Expansion line for gas-rich water
2	Variomat Giga control unit
3	Primary tank

4	Secondary tank (optional)
EC	Expansion line connections • Gas-rich water inlet • Degassed water outlet
WC	Make-up line

The primary tank (3) is used for degassing and features two connections:

- Connection to the overflow line (2).
- Connection to the pump suction line (1).

The connection pieces at the primary tank are flexibly pre-installed to ensure the proper functioning of the "LIS" level sensor.

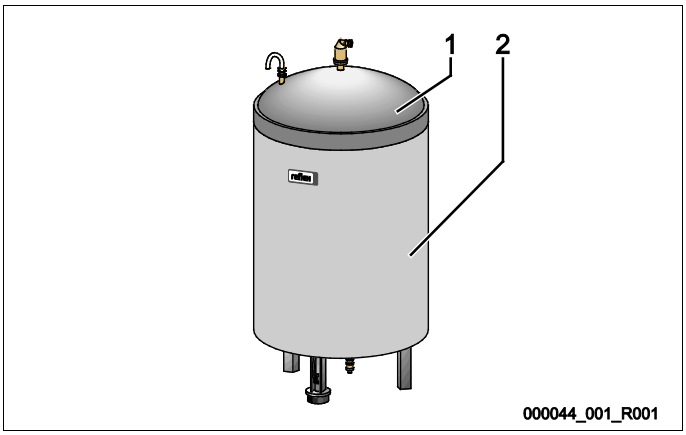


Note!

The variants and line dimensions for the connection to the control unit are provided in the operating manual. The operating manual is provided with the control unit.

3.3.5 Fitting the thermal insulation

Install the thermal insulation (2) around the primary tank (1) and close the insulation with the zip fastener.



Note!

For heating systems, insulate the primary tank and the "EC" expansion lines against heat loss. The cover of the primary tank does not require insulation, as there is space between the diaphragms and the tank wall. The secondary tanks do not require insulation either.

Note!

Condensate formation requires insulation by the user.

4 Annex

4.1 Reflex Customer Service

Central customer service

Switchboard: Telephone number: +49 (0)2382 7069 - 0
Customer Service extension: +49 (0)2382 7069 - 9505
Fax: +49 (0)2382 7069 - 523
E-mail: service@reflex.de

Technical hotline

For questions about our products
Telephone number: +49 (0)2382 7069-9546
Monday to Friday, 8:00 a.m. – 4:30 p.m.

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