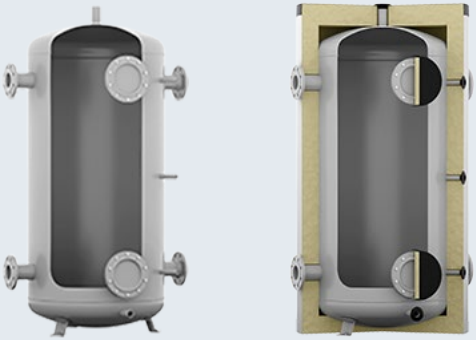
reflex

Thinking solutions.

Storatherm

Storatherm Heat
HF .../R2; H .../R2

GB Operating manual



1 Information concerning the operating manual 4

2 Safety 4

2.1 Personnel requirements 4
2.2 Intended use 4
2.3 Impermissible operating conditions 4
2.4 Personal protective equipment 5

3 Description 5

3.1 Identification 5
3.2 Regulations 5

4 Technical data 5

5 Installation 8

5.1 Transport 8
5.2 Installation location 8
5.3 Tank assembly 9
5.3.1 Installation 9
5.3.2 Heating system connection 9

6 Commissioning 9

6.1 Filling the tank 9

7 Removal from service 10

8 Maintenance 10

8.1 Draining 10
8.2 Recommissioning 10

9 Recycling 11

10 Appendix 11

10.1 Reflex Customer Service 11
10.2 Warranty 11

1 Information concerning the operating manual

This operating manual is an important aid for ensuring the safe and reliable functioning of the tank. Reflex Winkelmann GmbH accepts no liability for any damage resulting from failure to observe the information in this operating manual. In addition national statutory regulations and provisions in the country of installation must also be complied with (concerning accident prevention, environment protection, safe and professional work practices, etc.).

2 Safety

2.1 Personnel requirements

The assembly of, connection of and structural alteration work to the tank must be carried out by an authorised specialist company in accordance with all applicable national and local regulations.

2.2 Intended use

The buffer tank must only be used in closed heating and/or chilling systems.
Intended use comprises the following points:

- Only static and fixed installation
- Adherence to the installation, operating and maintenance conditions
- Not to be installed outside
- Filling of the buffer tank must take place using heating water according to VDI Guideline 2035 Sheet 1 and 2.
- The glycol fraction in the water must be between 25 % and 50 %.
  The manufacturer's information in respect of the dosing quantity must be observed when dosing additives, especially concerning corrosion.

2.3 Impermissible operating conditions

The tank is not suitable for the following conditions:

- Operation below the dew point as the insulation is not diffusion-tight. In this case the tank must be insulated so that it is diffusion-tight.
- Operation outside the maximum operating conditions.
- Ensure that the connections are made in a zero-volts state.
- Implement suitable measures to prevent frost damage.

2.4 Personal protective equipment

Use the prescribed personal protective equipment as required (e.g. ear protection, eye protection, safety shoes, helmet, protective clothing, protective gloves) when working on the system in which the tank is installed. Information on personal protective equipment requirements is set out in the relevant national regulations of the respective country of operation.

3 Description

The buffer tank acts as an intermediate store for heating water for further transport to the heating circuit.

3.1 Identification

The nameplate provides information on manufacturer, year of manufacture, part number and technical data. The nameplate is located on the tank or the tank insulation.

3.2 Regulations

All applicable national and local regulations and directives must be adhered to during installation, operation and maintenance.

4 Technical data

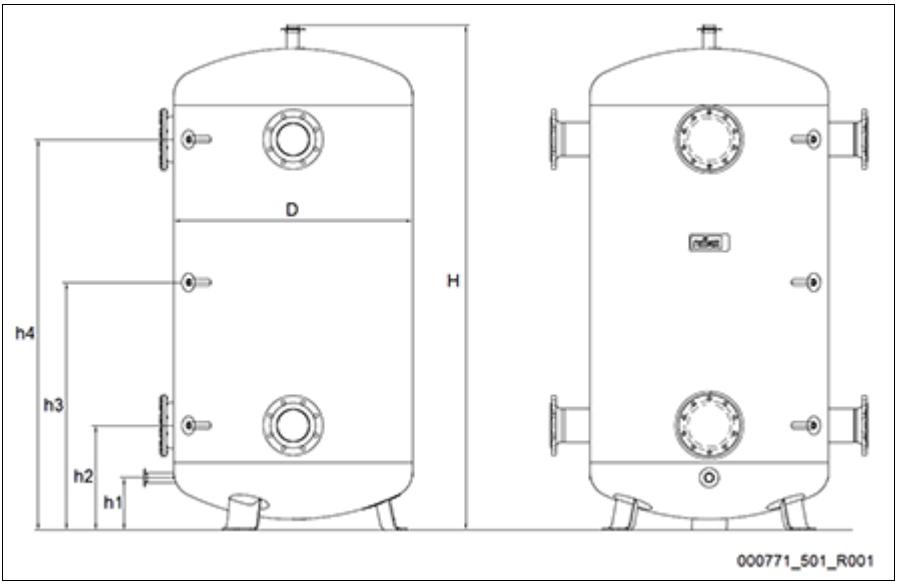
Note!

The following values apply for all buffer tanks:

• Manufacturing or serial number	See nameplate
• Year of manufacturing	See nameplate
• Nominal tank volume in litres	See nameplate
• Maximum working pressure	10 bar
• Height in mm	See technical data
• Diameter in mm	See technical data
• Blanking flange in DN	See technical data
• Max. tank operating temperature	95°C
• Number of system connections	4
• Number of sensors, emptying connections	2

HF 500/R2 - HF 1500/R2

- Buffer tank
- Fleece insulation with foil jacket (HF …/R2)
- Energy efficiency according to ErP: C
- Material class DIN 4102-1: B2



Type	Ø D (mm)	Weight (kg)	Heat retention losses W
HF 500/R2	797	128	106
HF 800/R2	990	216	132
HF 1000/R2	990	231	141
HF 1500/R2	1240	240	167
H 500/R2	597	118	---
H 800/R2	790	207	---
H 1000/R2	790	218	---
H 1500/R2	1000	228	---

Type	Contents (l)	Height H (mm)	Flange size
HF 500/R2; H 500/R2	475	1951	DN180
HF 800/R2; H 800/R2	778	1854	DN180
HF 1000/R2; H 1000/R2	921	2117	DN180
HF 1500/R2; H 1500/R2	1500	2119	DN180

Type	Sensor connection					
	h2		h3		h4	
	(mm)	Rp	(mm)	Rp	(mm)	Rp
HF 500/R2; H 500/R2	315	½"	947	½"	1578	½"
HF 800/R2; H 800/R2	325	1 ½"	866	1 ½"	1407	1 ½"
HF 1000/R2; H 1000/R2	325	1 ½"	1011	1 ½"	1697	1 ½"
HF 1500/R2; H 1500/R2	439	1 ½"	1039	1 ½"	1639	1 ½"

Type	Heating source connection			
	h2		h4	
	(mm)	DN/PN	(mm)	DN/PN
HF 500/R2; H 500/R2	315	DN80/PN16	1578	DN80/PN16
HF 800/R2; H 800/R2	325	DN80/PN16	1407	DN80/PN16
HF 1000/R2; H 1000/R2	325	DN125/PN16	1697	DN125/PN16
HF 1500/R2; H 1500/R2	439	DN125/PN16	1639	DN125/PN16

Type	Thermometer connection	
	h1	
	(mm)	Rp
HF 500/R2; H 500/R2	120	1"
HF 800/R2; H 800/R2	108	1"
HF 1000/R2; H 1000/R2	108	1"
HF 1500/R2; H 1500/R2	220	1"

5 Installation

⚠ WARNING

Risk of injury due to heavy weight

The tanks are heavy. Consequently, there is a risk of physical injury and accidents.

- Use suitable lifting equipment for transportation and installation.

⚠ CAUTION

Risk of scalding

Scalding of the skin and eyes caused by escaping hot water.

- Wear personal protective equipment: Protective gloves, protective clothing, safety goggles.

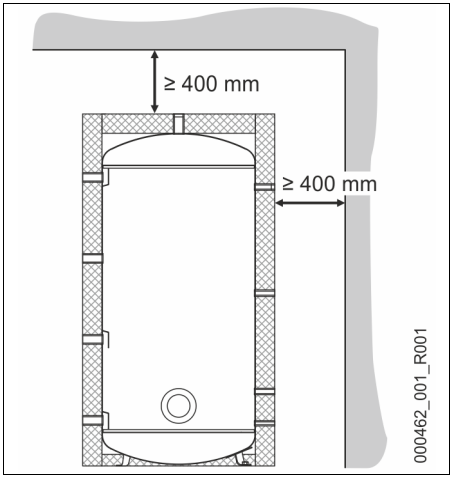
5.1 Transport

The tank insulation can be removed for transport.

5.2 Installation location

Ensure the following conditions are fulfilled for the installation location:

- Connections must be freely accessible.
- Freedom from frost must be ensured.
- The ground must be load bearing and horizontal.



5.3 Tank assembly

5.3.1 Installation

Remove the outer packaging and undo the screws with which the tank is screwed to the pallet.
Position the tank.

⚠ WARNING

Risk of injury due to tipping over of the device
Risk of bruising or crushing caused by tipping over of the device
- Ensure sufficient stability of the device.

5.3.2 Heating system connection

ATTENTION

Device damage from overheating
Incorrect positioning of the safety valve will cause damage to the pipe connections.
- Fit the safety valve between tank and non-return valve.
- Do not close the safety valve vent.

6 Commissioning

The responsible installer must explain to the operator how the tank functions and how it is to be used. He/She must draw attention to maintenance work that has to be carried out at regular intervals. The service life and correct functioning of the tank are dependent on this. The tank must be emptied if there is a risk of frost, or prior to its being removed from service.

6.1 Filling the tank

Proceed as follows when filling the tank:
1. Connection to the heating system.
2. Filling of the tank and system.
3. Venting of the tank and system.
4. Checking of the leak-tightness.

7 Removal from service

Remove the tank from service, if malfunctions or leaks occur.

8 Maintenance

⚠ CAUTION

Risk of scalding

Scalding of the skin and eyes caused by escaping hot water.

- Wear personal protective equipment: Protective gloves, protective clothing, safety goggles.

8.1 Draining

Prior to maintenance, repair or removal from service, disconnect the tank from the heat distribution system and drain.

Proceed as follows:

1. Disconnect the tank from the heat distribution system
2. Depressurise the tank
3. Drain the tank

8.2 Recommissioning

Rinse the tank thoroughly with water after cleaning or after maintenance. Vent the individual water circuits.

9 Recycling

The intentional or unintentional reuse of used components can result in a hazard for persons, the environment and the system.
Therefore, please observe the following points:

- The operating company is responsible for proper disposal.
- Only to be disposed of by specialist personnel.
- Drain operating liquids and consumables into suitable collection containers and dispose of correctly.
- Upon conclusion of the useful life, strip the system down into different separable materials and deliver to a specialist company for recycling.

Remove the insulation and dispose of the insulation and basic steel tank separately.

10 Appendix

10.1 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 - 9523
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.

10.2 Warranty

The respective statutory warranty regulations apply.

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