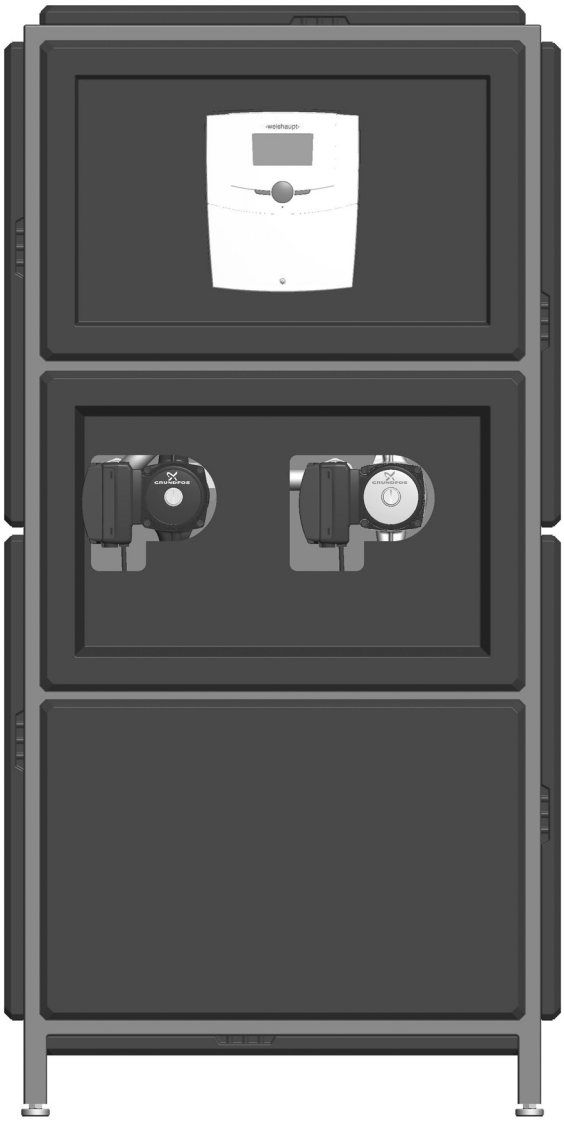
–weishaupt–

manual

Mounting and operating instructions



Loading station WHI load-H 320 #2

83290602 · 1/2020-02

1 Information for the user

These installation and operation instructions form part of the device and must be stored at the place of use.

Carefully read these instructions before installation and commissioning.

1.1 User guidance

1.1.1 Symbols

 DANGER	Immediate danger of high risk. Non-observance will result in serious injuries or death.
 WARNING	Danger of medium risk. Non-observance can lead to environmental damage, severe physical injuries or death.
 CAUTION	Danger of low risk. Non-observance may result in material damage or slight to moderate injuries.
NOTICE	Important information.

1.1.2 Target group

This installation and operation manual is addressed to operators and qualified skilled personnel. It must be observed by anyone working on the machine.

Work on the machine may only be performed by persons that have received the required training or instruction.

Persons with restricted physical, sensory or mental abilities may work on the machine if supervised or instructed by an authorised person.

Children may not play with the machine.

1.2 Warranty and liability

Warranty and liability claims for personal and material damage are void if they are due to one or several of the following causes:
Use of the machine contrary to its designated use,
Non-observance of the installation and operation instructions,
Operation of the machine with non-operational safety or protective devices,
Continued use despite the presence of a defect,
Improper assembly, commissioning, operation and maintenance of the machine,
Unauthorised modification of the machine,
Installation of additional components that were not tested together with the machine,
Repairs carried out incorrectly,
Failure to use Weishaupt original parts,
Defects in the supply lines,
Force majeure.

2 Safety

2.1 Designated use

The loading station must only be installed as a transfer station between the heating circuit and the domestic water circuit. Due to its construction, it must only be installed and operated in a vertical position. The technical limit values specified in these instructions must be heeded.

Use only original accessories in connection with the loading station.

Using the loading station contrary to its designated use will invalidate all liability claims.

The packaging materials are made of recyclable materials that can be recycled by standard recycling operations.

2.2 Safety instructions

The following must be observed during installation and commissioning:

- Relevant local and national regulations
- Accident prevention regulations of the employers' liability insurance association
- Instructions and safety instructions mentioned in these instructions

 CAUTION	**Risk of burns!** The valves and fittings and the pumps can become heated up to more than 95 °C during operation. ➢ The shell must remain closed during operation.
NOTICE	**Material damage due to mineral oils!** Mineral oil products cause permanent damage in the material, resulting in its sealing characteristics getting lost. We cannot be held liable for damage caused by seals thus damaged, nor will we offer a replacement under warranty. ➢ It is imperative to prevent the EPDM from making contact with substances containing mineral oils. ➢ Use a silicone- or polyalkylene-based lubricant free of mineral oil such as Unisilikon L250L and Syntheso Glep 1 from Klüber or a silicone spray.
NOTICE	**Malfunctions!** ➢ The loading station must be integrated into the potential equalisation of the electrical installation. If this is not guaranteed by the connected pipeline network, a proper potential equalisation connection to the main potential connection must be established.

2.3 Safety measures

Immediately eliminate safety-relevant defects and replace safety-relevant components when they have reached the end of their service life due to their construction.

2.4 Electrical connection

When performing any work on live parts:
Observe the accident prevention regulations BGV A3 and local regulations,
Use tools according to EN 60900.

2.5 Structural modifications

Conversion measures are only allowed after prior approval in writing by the Max Weishaupt GmbH.
Additional components may only be installed if they were tested together with the machine.
Use only Weishaupt original parts.

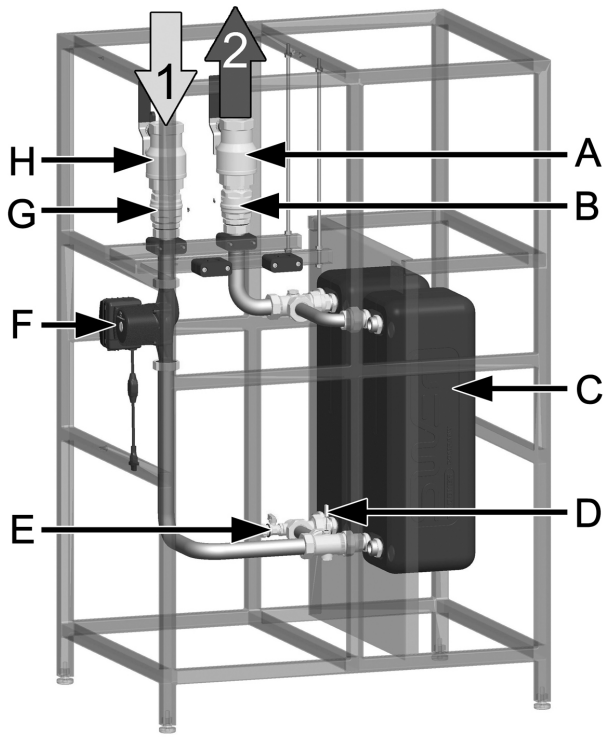
2.6 Disposal

Dispose of the materials used properly and in an environmentally compatible manner. In doing so, observe local regulations.

3 Product description

The loading station is a pre-assembled group of valves and fittings checked for leaks for transferring the heat between the heat generator in the heating circuit and the domestic water tank.
It contains a preset controller and important valves and fittings for operating the system:

- Ball valves in the primary circuit
- Piston valves in the secondary circuit
- Check valves in the primary and secondary circuits
- Safety valve in the secondary circuit
- Pre-assembled controller
- Temperature sensor at the heating flow
- Temperature sensor at the hot domestic water outlet
- Fill and drain valve for draining the heat exchanger in the primary and secondary circuits
- Secondary vent valve for venting the heat exchanger

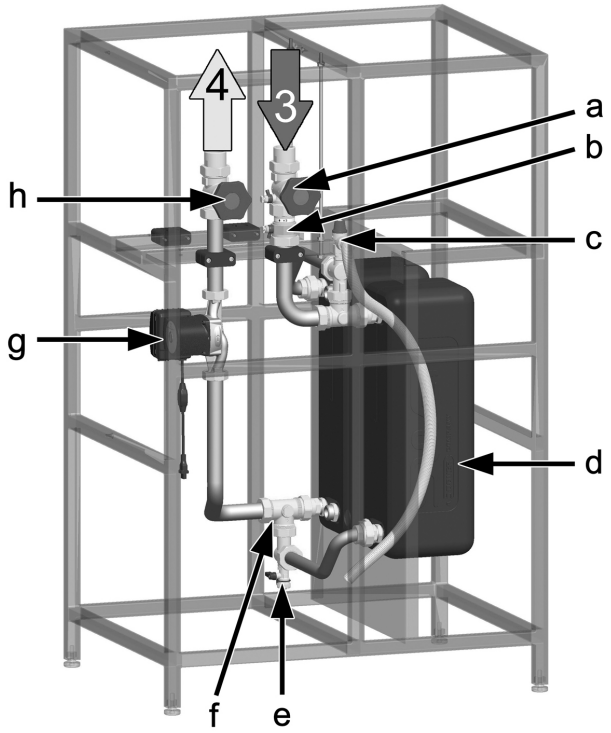


Connections of the primary circuit

1	Flow from heat generator (hot)
2	Return to heat generator (cold)

Equipment of the primary circuit

A	Return ball valve
B	Check valve
C	Heat exchanger
D	Temperature sensor NTC 5 K
E	Drain valve
F	Primary pump
G	Check valve
H	Flow ball valve



Connections of the secondary circuit

3	Cold water inlet (storage tank at the bottom)
4	Hot water outlet (storage tank at the top)

Equipment of the secondary circuit

a	Piston valve cold water inlet
b	Non-return valve
c	Safety valve 10 bars, suitable for domestic water (Only for securing the station. Does not replace the safety valve that must be installed on site.)
d	Heat exchanger
e	Drain valve
f	Temperature sensor NTC 5 K
g	Secondary pump
h	Piston valve hot water outlet

3.1 Function

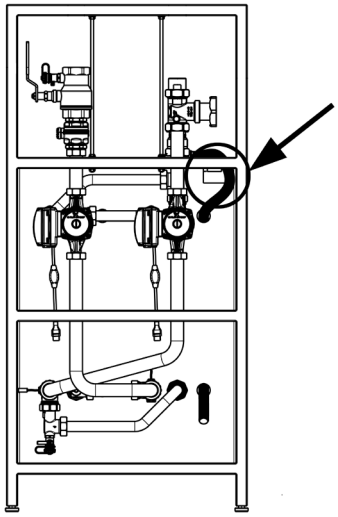
The WHI load-H loading stations are used to transfer the heat between the heat generator in the heating circuit and the domestic water tank.

The integrated plate heat exchangers allow a high transfer capacity.
In contrast to a heat exchanger integrated into a tank, this allows quick cooling and high efficiency to be achieved. In combination with a high boiler output, the installation of a small standby storage tank is possible.

A pre-heating tank coupled to a solar system can also be connected.

The integrated closed-loop control controls the intelligent setting of the pump revolution speeds and, where required, activates the heat generator via a contact.

3.2 Serial number



The serial number on the type plate clearly identifies each product. The serial number is necessary for the Weishaupt after-sales service. In case of a complaint, please send us the serial number of the product concerned and the completed commissioning report (see page 27). The serial number is placed in the upper right corner of the support sheet of the station.

Serial number: _____

3.3 Technical data Loading station

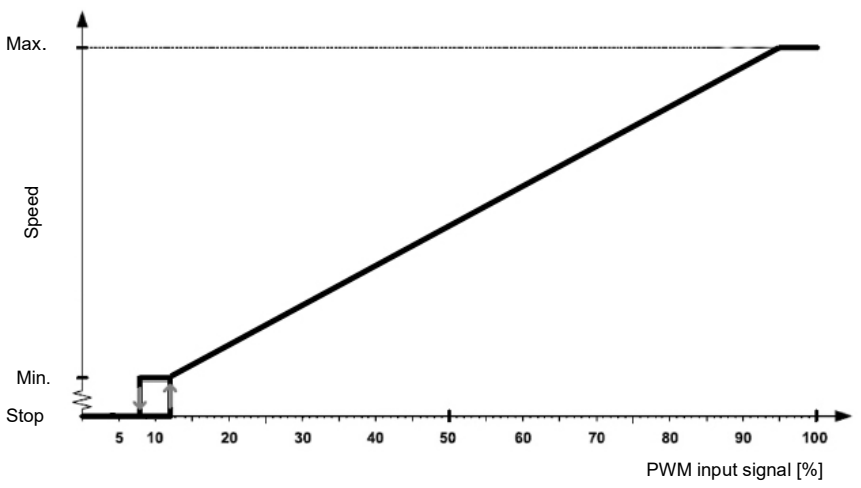
Dimensions	WHI load-H 320 #2
Height (with insulation)	1430 mm + adjustment of the rack legs approx. 15 mm
Width (with insulation)	710 mm
Depth (with insulation)	920 mm
Centre distance, primary circuit	158 mm
Centre distance, secondary circuit	158 mm
Primary pipe connection (heating circuit)	1½" female thread
Secondary pipe connection (domestic water circuit)	1¾" male thread, flat sealing, with transition screw connection to 1½" male thread, flat sealing
Safety valve outlet	G ¾" female thread
Operating data	
Max. admissible pressure	primary: 6 bars, secondary: 10 bars
Operating temperature	2 – 95°C
Max. power Q_{max}	320 kW at $Flow_{prim.}$ 70 °C / $DHW_{sec.}$ 60 °C / $DCW_{sec.}$ 10 °C
Flow rate at Q_{max}	primary: 5780 l/h, secondary: 5500 l/h
Operating temperature sensors	-25 °C to +120 °C
Equipment	
Safety valve	secondary: 10 bars, suitable for domestic water
Primary pump and secondary pump	High-efficiency pump with PWM control, 3-180 W
Heat exchanger	2 x 60 plates
Temperature sensors	primary / secondary: 1 x NTC 5 K each
Check valves	primary: 2 x 250 mm wc, can be opened secondary: 1 x 150 mm wc
Material	
Valves and fittings	Brass
O-rings	EPDM
Flat seals	AFM 34/2, free of asbestos
Check valves	Brass, plastic
Pipes	1.4401 (AISI 316)
Shell, station	EPP, λ = 0.039 W/(m K), fire class B2
Shell, heat exchanger	EPP, λ = 0.035 W/(m K), fire class B2
Heat exchanger	Plates + connecting pieces: 1.4401 (AISI 316) Solder: 99.99% pure copper
Admissible medium	primary: heating water according to VDI 2035 / Ö-Norm H 5195-1 secondary: domestic water with a max. chloride content: < 80 ppm

3.4 Technical data Pumps

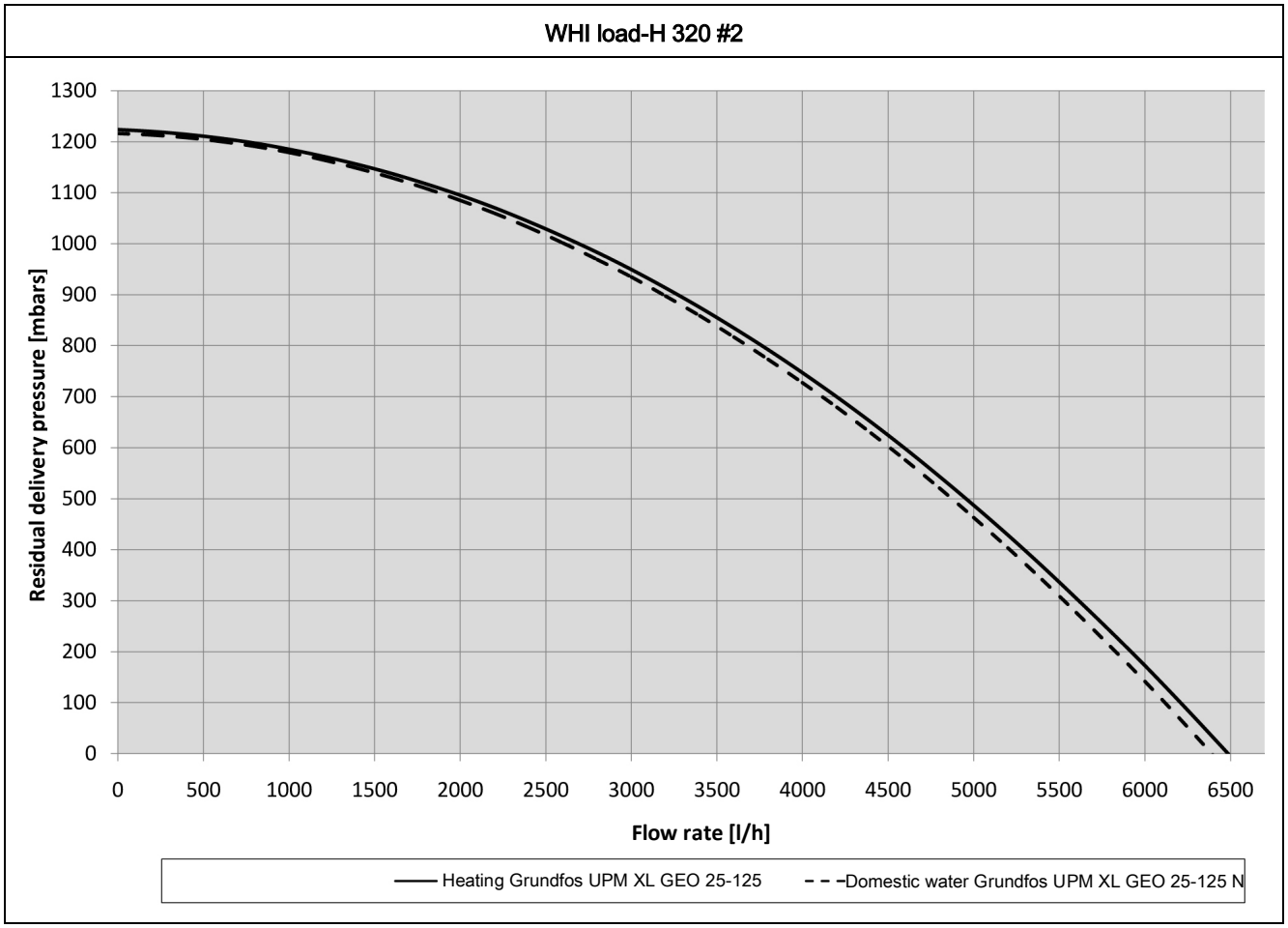
	Grundfos UPM XL GEO 25-125	Grundfos UPM XL GEO 25-125 N
Length	180 mm	
Connections	1½" male thread	
Protection class	IPX2D	
Max pressure	1.0 MPa (= 10 bars)	
Max. temperature	95 °C TF 95	
I (1/1)	0.06-1.4 A	
P1	3-180 W	
Use in:		
WHI load-H 320 #2	Primary	Secondary

3.5 PWM input signal (solar profile)

PWM input signal [%]	Pump status
< 7	Standby
7-12	Hysteresis
12	Min. speed
12-95	Linear increase in speed from rpm min. to rpm max.
95-100	Max. speed



3.6 Hydraulilc performance data



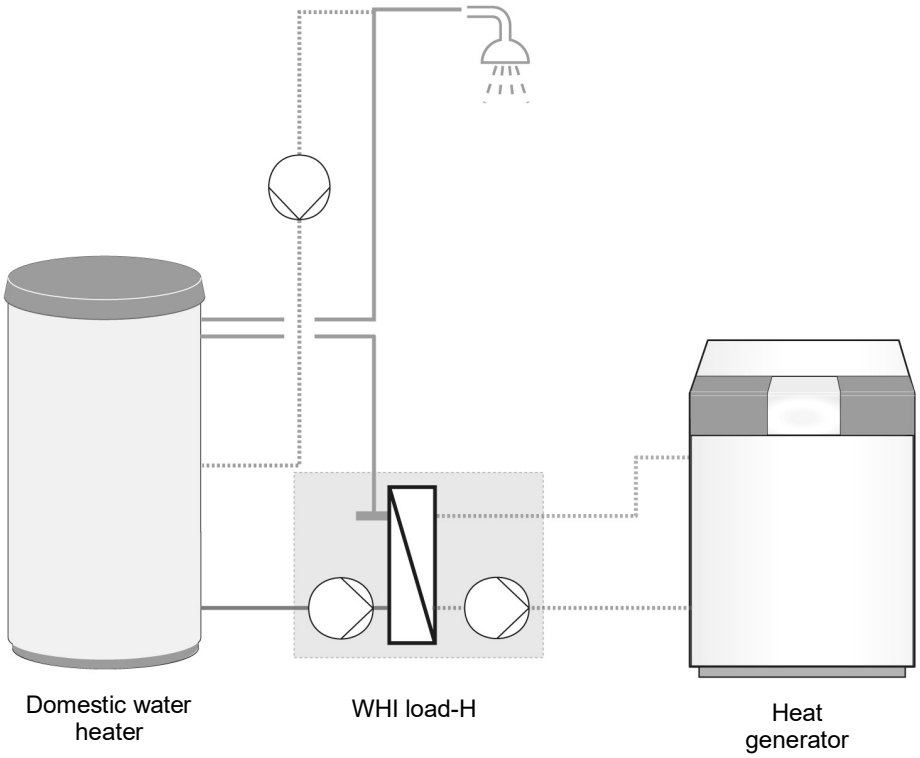
4 Dimensioning and Planning

The WHI load-H is a loading station for transferring the heat between the heat generator in the heating circuit and the domestic water tank.

For the perfect function of the loading station, the system must fulfil certain requirements. Take a little time for planning before assembly.

The WHI load-H allows two different control strategies. A detailed description of the control strategies can be found in the enclosed controller manual.

Assembly example



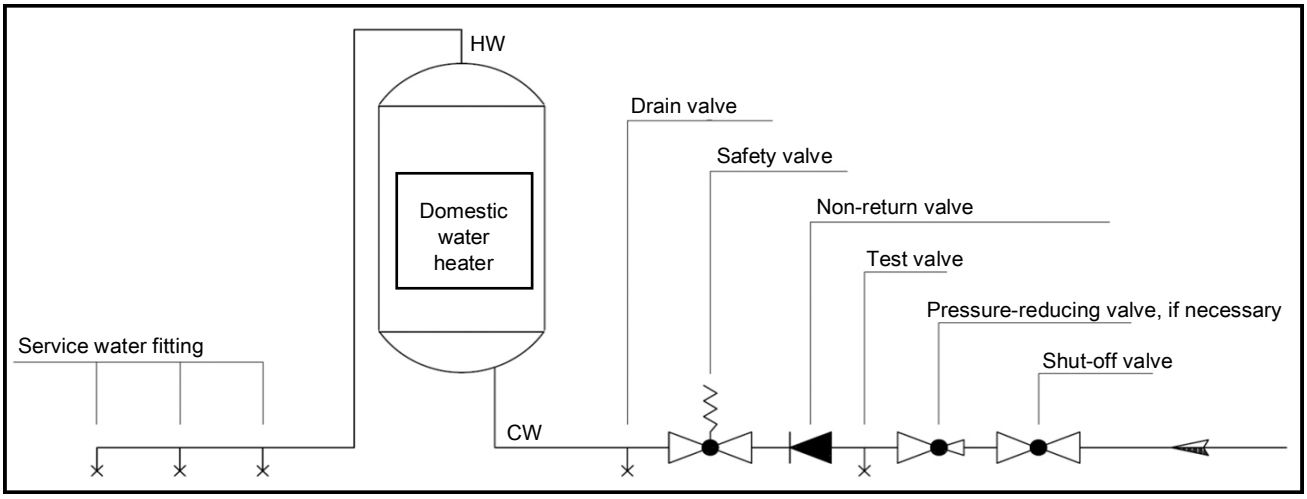
Please observe:
Due to their construction, the WHI load modules reduce the precipitation of scale in the heat exchanger. For systems with a high total domestic water hardness and/or high temperatures, a water treatment is recommended, in order to prevent scale formation.

The choice of the heat exchanger depends on the requirements of the installation location. Depending on the chemical composition of the water on the installation location, an appropriate plate heat exchanger must be chosen.
Please observe the following table:

	Heat exchanger with copper soldering
Maximum chloride content in potable water	≤ 80 ppm
pH value	7.0 - 9.0
Zinc-galvanised piping	Unsuitable
Maximum pressure at 95 °C	17 bars
Plate material	1.4401 (AISI 316)

5 Installation

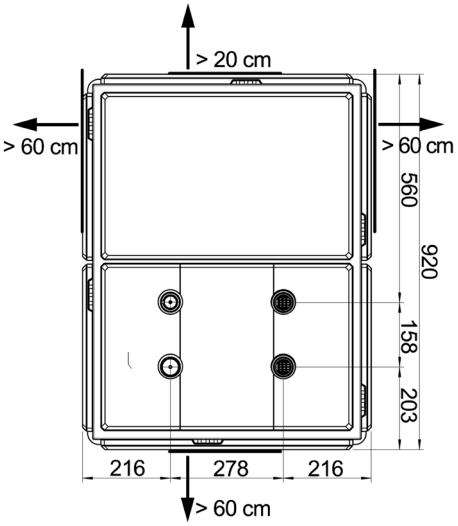
The domestic water connection must be carried out according to the relevant standards (e.g., DIN 1988)!



NOTICE	**Material damage!**
	➢ The safety valve integrated into the station does not replace the safety equipment of the domestic water connection according to DIN 1988. ➢ The safety valve merely protects the station from excess pressures when maintenance is required. ➢ The discharge lines of the pressure relief valves must be conducted into appropriate collecting containers. The corresponding norms must be respected.

5.1 Assembly

 WARNING	**Risk to life and limb due to electric shock!** ➢ Prior to performing electrical work on the controller, de-energise the system. For more information, see enclosed installation and operation instructions of the station controller. ➢ Connect the loading station to the power supply system (230 V, 50 Hz) only after completing all installation tasks, filling and flushing. This avoids an unintentional start of the motors.
NOTICE	**Material damage!** ➢ In order to avoid damaging the system, the installation site must be dry, structurally safe, frost-free and protected against ultraviolet radiation. ➢ Furthermore, access to the closed-loop control and safety equipment must be guaranteed at all times during operation! ➢ If tapping points in which pressure surges are possible (e.g., flush valves, washing machines or dishwashers) are connected to the same network as the loading station, we recommend the installation of water hammer dampers near the device causing the pressure surges.

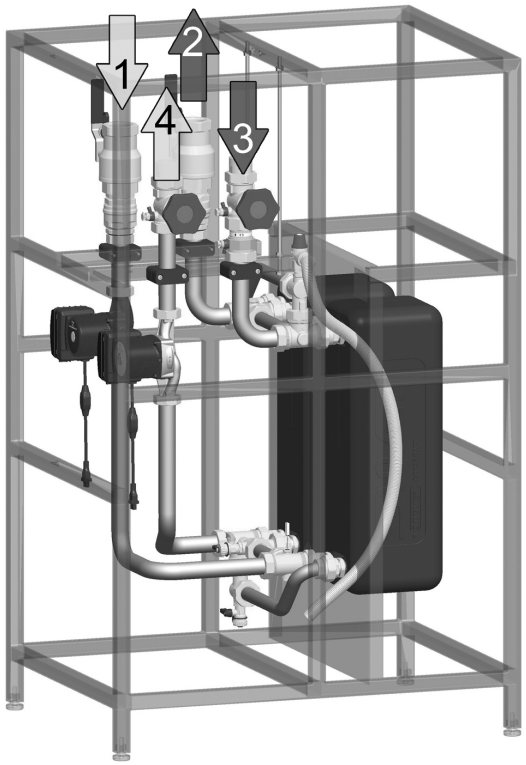


Top view

1. Place the installation site of the loading station near the heat generator. With long connecting lines, the transfer capacity is reduced due to higher pressure drops.
2. Remove the station from the packaging.
3. Take the station from the pallet and place it at the installation site.
4. Mount the enclosed rack legs to compensate for unevenness of the floor.
5. The station can be placed against the wall on two sides. If you want to take off the insulation, a clearance of approx. 20 cm must be left clear to the wall (see illustration).
6. For operating the hydraulics and for later maintenance, you require a clearance of at least 60 cm to the front panel (controller) and to one side (see illustration).

5.2 Connection

Pipe the loading station with the system according to the illustration below. As-delivered, the ball valves and piston valves are closed, to prevent the station from becoming dirty. Before connecting the pipework, make sure that the connections are free of dirt.



1 **Primary side: flow from heat generator (hot)**

Connection: 1½" female thread, flat sealing

Piping:

min. DN 50, 54 x 1.5 mm,

Make sure to vent the station at the highest point!

2 **Primary side: return to heat generator (cold)**

Connection: 1½" female thread

Piping:

min. DN 50, 54 x 1.5 mm,

Make sure to vent the station at the highest point!

3 **Secondary side: cold water inlet**

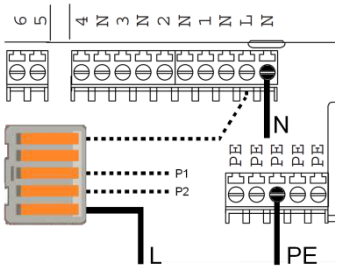
Connection: 1½" male thread, flat sealing

4 **Secondary side: hot water outlet**

Connection: 1½" male thread, flat sealing

5.3 Controller connection

WARNING	**Risk to life and limb due to electric shock!** ➢ Prior to performing electrical work on the controller, de-energise the system. For more information, see enclosed installation and operation instructions of the station controller. ➢ Connect the loading station to the power supply system (230 V, 50 Hz) only after completing all installation tasks, filling and flushing. This avoids an unintentional start of the motors. ➢ The plug-in pump lines are permanently supplied with a mains voltage of 230 V and cannot be switched off via the controller.



1. Connect the neutral conductor (N) and the protective earth (PE) using the screw terminals shown in the controller manual and in the illustration opposite.
2. Connect the outer conductor (L) to the bus bar in the controller housing.
   To do so, lift the lower lever and clamp the line by pressing the lever down.
   Next check whether the line is firmly clamped.
3. The bus bar has already been connected to the screw terminal (L) of the controller and the pump lines for constant power supply. Due to the high power consumption of the pumps, the latter are not supplied with 230 V via relays, but permanently connected to the mains supply.
   The speed control (0-100%) of the pumps is effected via the PWM control signal.

5.4 Electrical connection of the solar controller WRSol2.1

Terminal	Acronym	Description	Execution
L/N	230V	Mains connection 230V	on site
L/N	PWP	Primary circuit pump	prewired
L/N	PWS	Secondary circuit pump	prewired
12/⊥	TSV	Secondary circuit flow sensor	prewired
13/⊥	TU1	Temperature, storage tank bottom	on site
14/⊥	TO1	Temperature, storage tank top	on site
17/⊥	PWM2	PWM control signal for secondary pump	prewired
18/⊥	PWM1	PWM control signal for primary pump	prewired
20/⊥	TPV	Primary circuit flow sensor	prewired

6 Operation

A detailed description of the operation of the controller can be found in the enclosed controller manual.

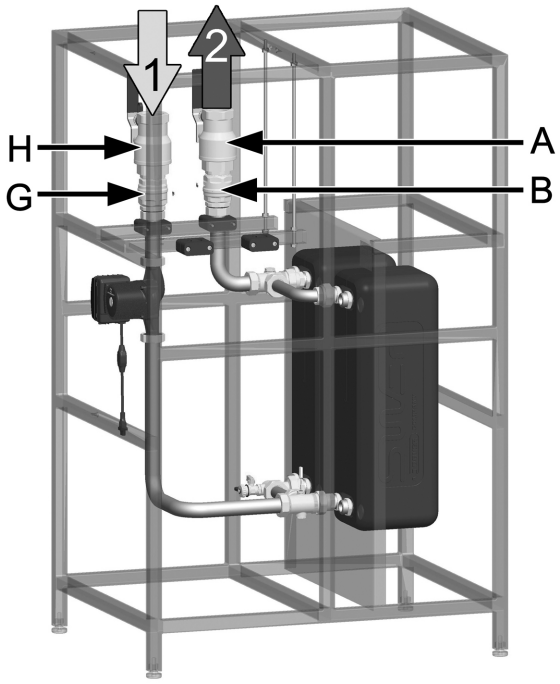
Solar controller WRSol2.1 pre-settings

- Hydraulic version 41
- eBUS address 5

7 Commissioning

Observe the following safety instructions regarding the commissioning of the station:

NOTICE	**Note!** Open the valves in the lines and in the module **slowly** in order to avoid pressure surges.



Function of the check valve

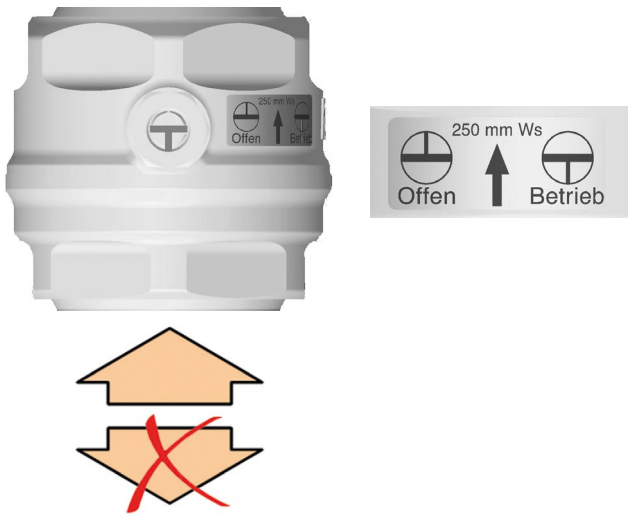
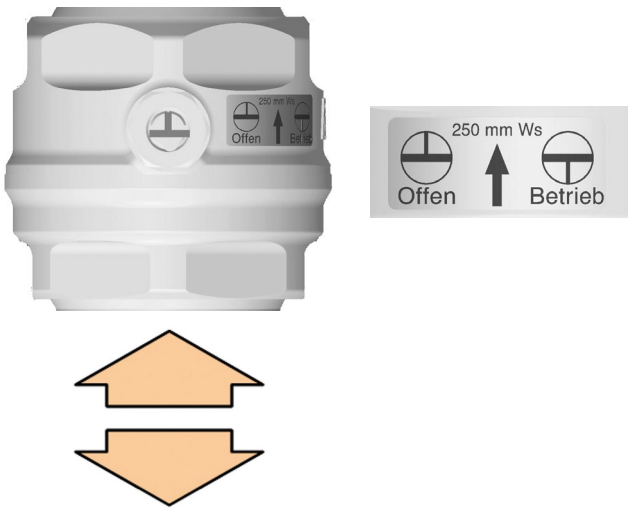
The ball valves (A) and (H) in the primary circuit are equipped with check valves (B) and (G) in order to prevent undesired gravity circulation.

The check valves must be open for venting and flushing the system.
Turn the opening bolts on the check valves to the **180°** position.
The check valve is not in operation.

All ball valves and valves must be **completely** open and the check valves must be closed again for operating the system (**0°** position).

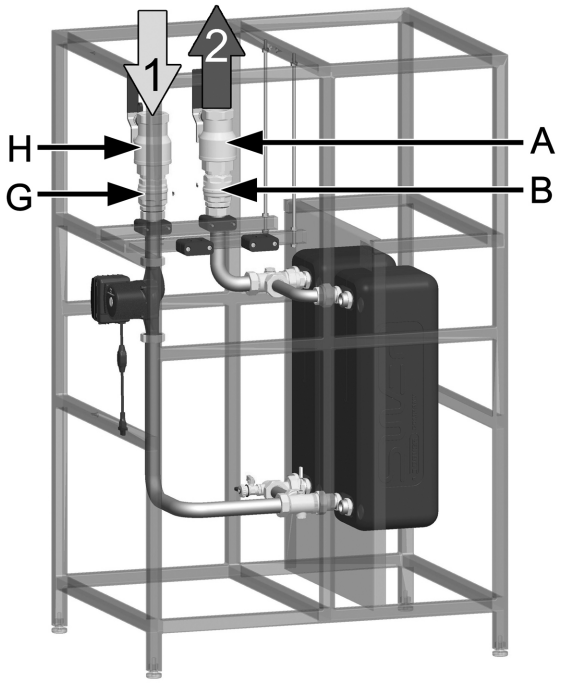
Ball valve with mounted check valve

(Normal direction of flow in the picture: upstream)

	
0° position Check valve in operation, **through-flow in flow direction only.**	**180° position** Check valve not in operation, **through-flow in both directions.**

7.1 Filling the primary circuit

WARNING	**Risk of scalding from hot water!** The system is under pressure. When opening the safety valve, up to 90 °C hot water may escape at the safety valve, which could lead to personal injury. ➢ Open the safety valve slowly and at a safe distance.



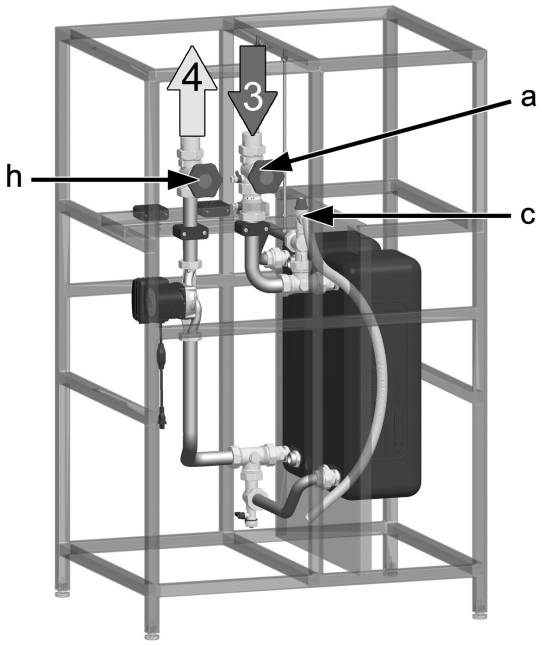
Primary circuit

With (partially) filled system on the primary side

1. Open ball valves (A) and (H) slowly.
2. Turn the opening bolts on the check valves to the **180°** position (see page 18). The check valve is not in operation.
3. Using the filling valves and fittings installed on site, fill the system on the primary side until it has reached an operating pressure of approx. 1.5 bars*. Use heating water according to VDI 2035 / ÖNorm H5195-1.
4. Vent the pipeline system at the places provided on site for this purpose.
5. After venting, check the operating pressure of the system on the primary side and, if necessary, increase the pressure.
6. Bring the check valves (B) und (G) into an operating position (0° position, see page 18).

*1.5 bars in the primary circuit = recommended minimum value. Decisive factors for the pressure are also the design-related system pressures and the heating system components!

7.2 Filling the secondary circuit

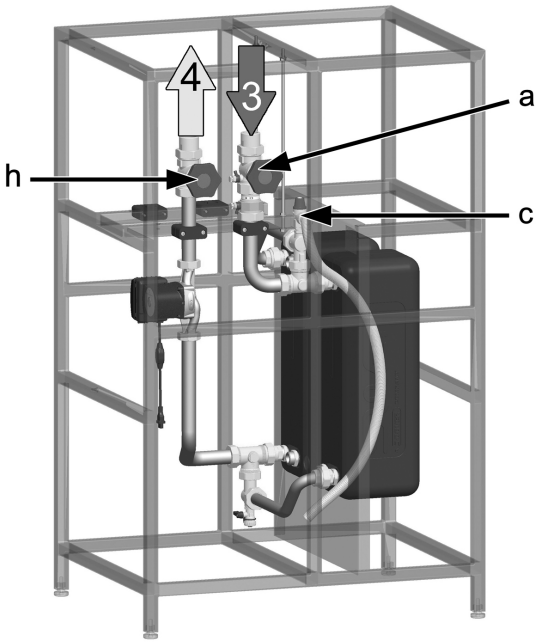


With (partially) filled tank

1. Slowly open the piston valves (a) and (h) on the secondary side.
2. Open the domestic hot water tapping point (e.g., tap) at a flow rate of at least 10 l/min and allow the water to run for approx. 2 minutes in order to vent the secondary circuit. Then close all tapping points in the secondary circuit.
3. To vent the heat exchanger, the safety (c) valve can be actuated.
4. Check the station for leaks.
5. This completes the filling of the system.

7.3 Commissioning the controller

WARNING	**Risk to life and limb due to electric shock!** ➢ Check whether the sensors and pumps have been connected to the controller and the controller housing is closed. Do not apply voltage to the controller before that.



Secondary circuit

1. Make sure that the loading station has been integrated correctly into the potential equalisation of the system.
2. Make sure that the correct connection of the sensors installed on site has been established (see controller manual).
3. Connect the loading station to the power supply system (230 V, 50 Hz).
4. Select the manual mode in the selection menu of the controller. Switch on the PWM signal of the secondary pump ("100 %").
5. Allow the pump to run for a few minutes to vent the loading station.
6. If you can still hear air noises after that, carefully open the safety valve (c) while the pump is still running and allow the air to escape.
7. If you cannot hear any air noises anymore, set the pump to automatic mode.
8. In order to vent the primary circuit, repeat steps 4. - 8. in the primary circuit.
   In doing so, also observe the instructions of the heat generator manufacturer.
9. Check the station for leaks.
10. Set the desired domestic hot water temperature on the controller (see below).
11. The WHI load-H 320 #2 loading station is now ready for operation.

7.4 Setting the temperature

The desired (maximum) domestic hot water temperature is set on the controller.

WARNING	**Risk of scalding from hot water!** ➢ In order to prevent scalding at the tap, the maximum hot water temperature should not exceed 60 °C.

A detailed description of the operation of the controller can be found in the enclosed controller manual.

8 Maintenance

The WHI load modules are low in maintenance. However, as part of the annual inspection of the domestic water system, the following items should be checked/observed:

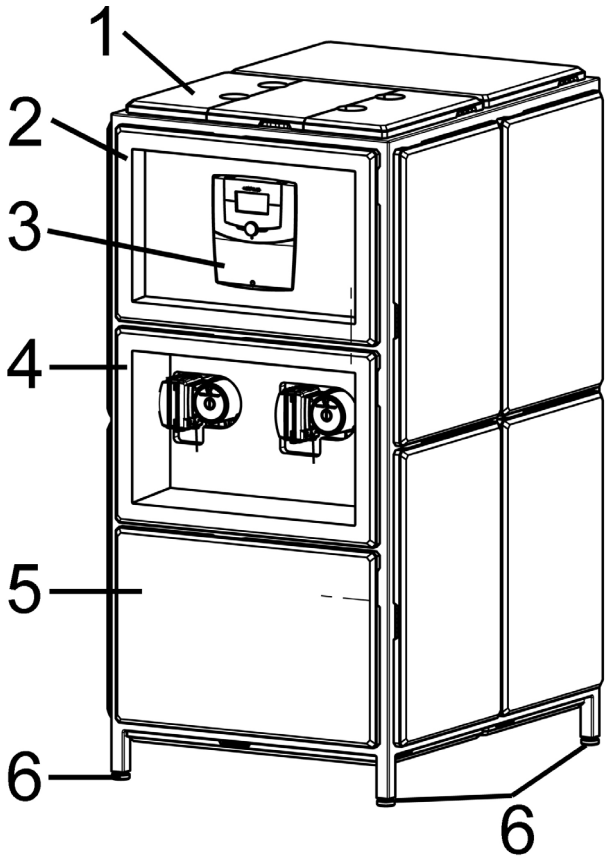
- Check all connections for leaks
- Check the safety equipment
- Perform a functional check and check the setting parameters
- Plausibility check of the control parameters and nominal values
- Check the heat exchanger for dirt and functioning

We recommend concluding a maintenance agreement.

9 Spare parts

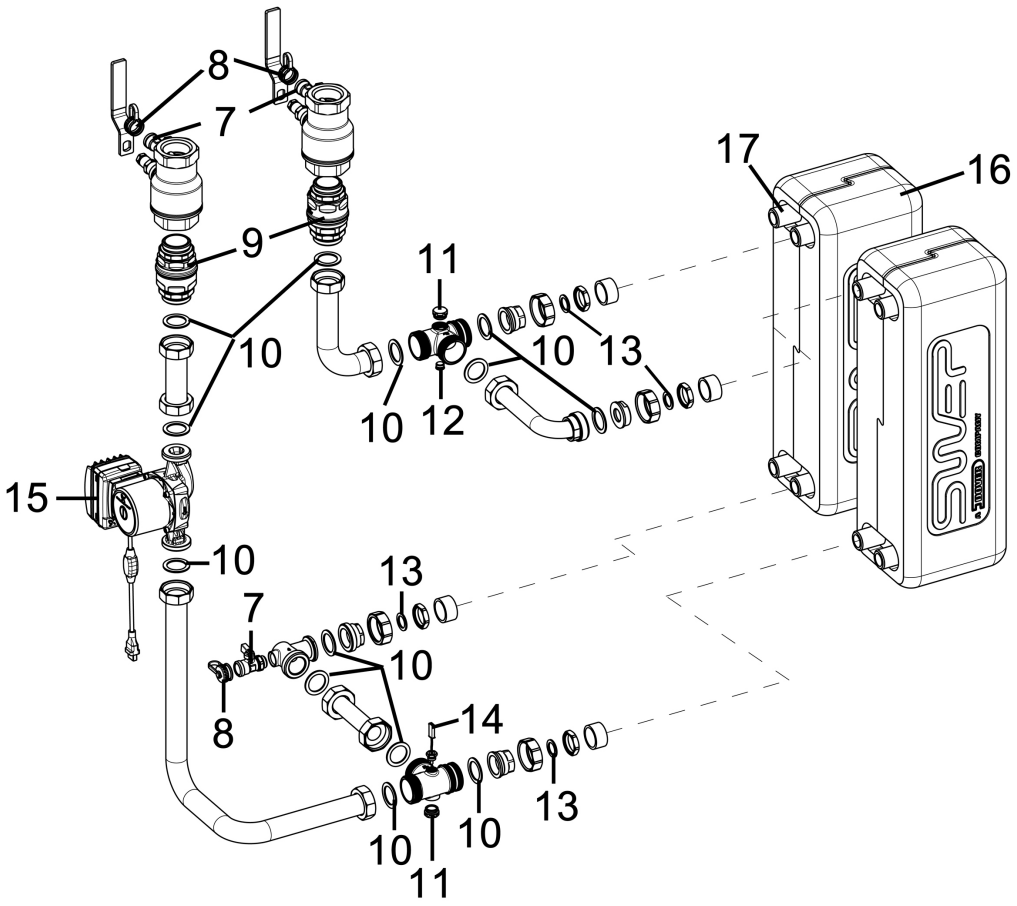
9.1 Spare parts list Control and insulation:

WHI load-H 320 #2 (40900015442)



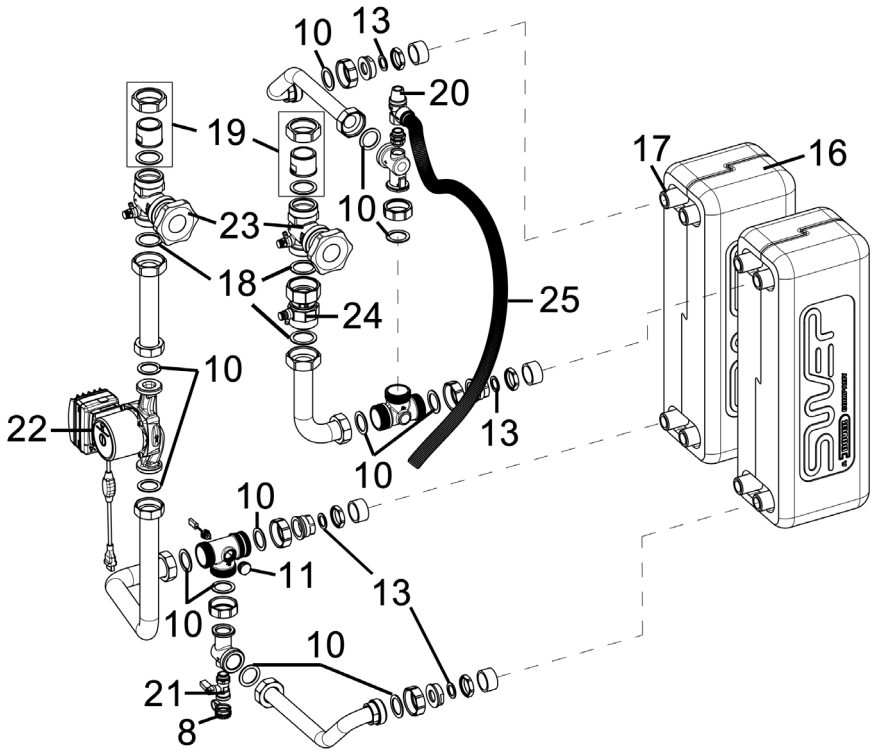
Position number	Spare part	-w- Part number
1	Station insulation EPP line connections	40900015747
2	Station insulation EPP for cut-out - controller	40900015737
3	Solar controller WRSol 2.1	660327
4	Station insulation EPP for cut-out - pumps	40900015717
5	Station insulation module plate EPP	40900015727
6	Unit foot M10	48210102177
Not shown on drawing	Temperature sensor NTC 5K STF 222.2	660228

9.2 Spare parts list Hydraulics: primary circuit



Position number	Spare part	-w- Part number
7	Inlet and outlet valve G½" with hex. nut	48002002667
8	Cap for inlet and outlet valve	48002002677
9	Gravity brake DN 40 2 x 1½" male thread, 250 mm wc with o-ring	40900019297
10	Seal 32 x 44 x 2 (1½") AFM-34/2	40900021147
11	Cover screw G½A	40900015257
12	Sealing plug G¼A	40900015107
13	Seal 21 x 30 x 2 (1") AFM-34/2	40900021117
14	Temperature sensor NTC5K G¼A	40900015027
15	Circulation pump UPMXL GEO 25-125	40900019222
16	Heat insulation PWT Swep IC25T/60	40900015757
17	Plate heat exchanger Swep IC25T/60	40900015207
Not shown on drawing	Plug cable for temperature sensor NTC5K 2500 mm	40900015037
	Connection cable PWM 2500 mm	48002002617
	Pump cable 3 x 0.75 2500 mm 3 pole Molex	48002002607
	Hose clamp with nut ¾"	40900015867

9.3 Spare parts list Hydraulics: secondary circuit



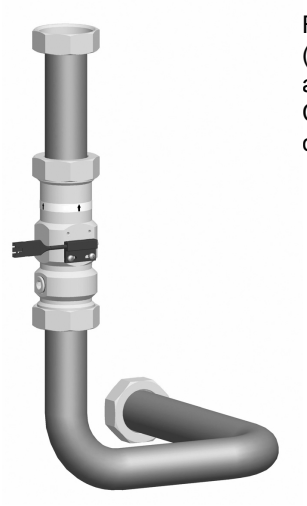
Position number	Spare part	-w- Part number
8	Cap for inlet and outlet valve	48002002677
10	Seal 32 x 44 x 2 (1½") AFM-34/2	40900021147
11	Cover screw G½A	40900015257
13	Seal 21 x 30 x 2 (1") AFM-34/2	40900021117
14	Temperature sensor NTC5K G¼A	40900015027
16	Heat insulation PWT Swep IC25T/60	40900015757
17	Plate heat exchanger Swep IC25T/60	40900015207
18	Seal 38 x 50 x 2 (1¾") AFM-34/2	40900021157
19	Adapter set	40900015762
20	Safety valve 10 bar ½" for domestic water	40900015057
21	Inlet and outlet valve G½" with hex. nut, suitable for domestic water	40900015857
22	Circulation pump UPMXL GEO 25-125 N	40900019292
23	Piston valve DN 40 G1¾"A with outlet tap	40900015112
24	Non-return valve DN 40	40900015517
25	Outlet hose G¾ X 1000 with o-ring	51150202422
Not shown on drawing	Plug cable for temperature sensor NTC 5K 2500 mm	40900015037
	Connection cable PWM 2500 mm	48002002617
	Pump cable 3 x 0.75 2500 mm 3 pole Molex	48002002607
	Outlet valve with o-ring G¼A	40900015097
	Hose clamp with nut ¾"	40900015867

10 Accessories

10.1 Withdrawal valve

Withdrawal valve (-w-item no. 40900015017) on WHI load-H optionally available as accessory:
Inflammable valves for germ-free sampling of water samples according to German Drinking Water Ordinance.
Mounted laterally on the piston valves.

10.2 Flow meter



Flow meter for WHI load-H 320
(-w-item no. 40900015542) optionally available as an accessory:
Conversion kit for recording the heat flow (in the primary circuit) in combination with the station controller.

11 Commissioning log

System operator				
System site				
Serial numbers:				
WHI load-H 320 #2				
Controller				
Software version				
Primary pipeline	⌀ =	mm	l =	m
Secondary pipeline	⌀ =	mm	l =	m
Other built-in components	☐			

Have both circuits been correctly flushed and vented? (No air sounds in the pump)	☐	Vented
Are all shut-off valves and fittings in the cold water line open?	☐	Open
Is there a minimum pressure of 1.5 bars available on the primary side?	☐	Checked
Is there a minimum pressure of 2.5 bars available on the secondary side?	☐	Checked
Is a fault message shown on the display?	☐	No message

Installation company

Date, Signature

–weishaupt–

Max Weishaupt GmbH · 88475 Schwendi

Weishaupt close by? Addresses, telephone numbers etc. can be found at www.weishaupt.de

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The compact burners, proven millions of times over, are economical and reliable. Available as gas, oil and dual fuel burners for domestic and commercial applications.
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These legendary industrial burners are durable and versatile.
Numerous variations of oil, gas and dual fuel burners meet a wide range of applications and capacity requirements.

WKmono 80 Burners **up to 17,000 kW**

The WKmono 80 burners are the most powerful monoblock burners from Weishaupt. They are available as oil, gas or dual fuel burners and are designed for tough industrial application.

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These industrial burners of modular construction are adaptable, robust and powerful.
Even on the toughest industrial applications these oil, gas and dual fuel burners operate reliably.

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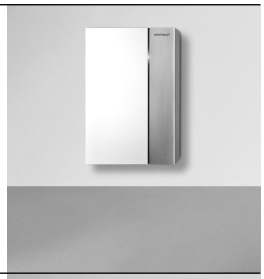
From control panels to complete building management systems - at Weishaupt you can find the entire spectrum of modern control technology. Future orientated, economical and flexible.

Service

Weishaupt customers can be assured that specialist knowledge and tools are available whenever they are needed. Our service engineers are fully qualified and have extensive product knowledge, be it for burners, heat pumps, condensing boilers or solar collectors.

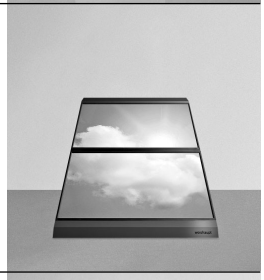


Wall-hung condensing boilers for gas **up to 240 kW**

The wall-hung condensing boilers WTC-GW have been developed to meet the highest demands in ease of operation and efficiency. Modulating operation means these units operate quietly and economically.

Floor-standing condensing boilers for oil and gas **up to 1,200 kW**

The floor-standing condensing boilers WTC-GB (up to 300 kW) and WTC-OB (up to 45 kW) are efficient, low in pollutants and versatile in use.
Even the largest capacities can be covered by cascading up to four gas condensing boilers.



Solar systems

The stylish flat-plate collectors are the ideal complement for any Weishaupt heating system. They are suitable for solar water heating and for combined heating support. With versions for on-roof, in-roof and flat roof installations, solar energy can be utilised on almost any roof.

Water heaters/Energy storage

The diverse program of potable water and energy storage for various heat sources includes storage volumes of 70 to 3,000 litres. In order to minimize storage losses, potable water cylinders from 140 to 500 litres are available with highly efficient insulation using vacuum insulation panels.

Heat pumps **up to 180 kW**

The heat pump range offers solutions for the utilisation of heat from the air, the soil or ground water.
Some systems are also suitable for cooling buildings.

Geothermal probe drilling

With its daughter company, BauGrund Süd, Weishaupt also offers geothermal probe and well drilling. With the experience of more than 10,000 systems and more than 2 million meters of drilling, BauGrund Süd offers a comprehensive service program.

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