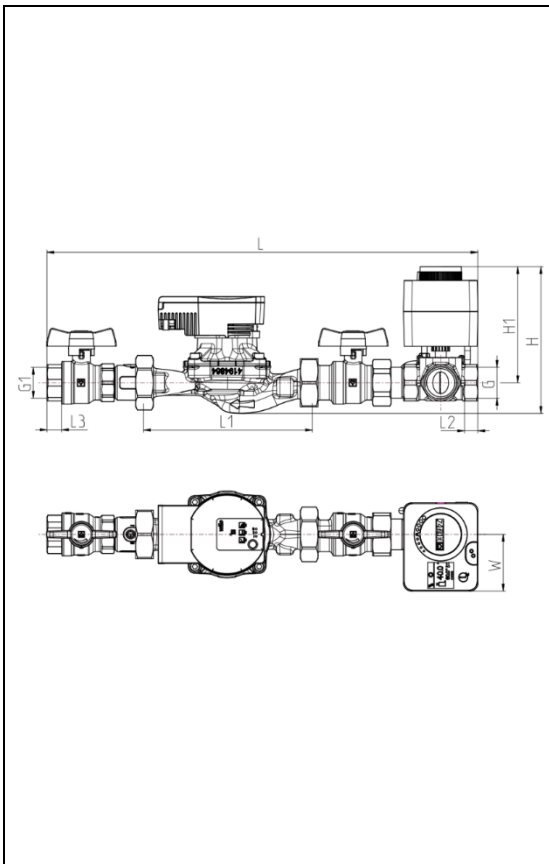


HERZ – EUROMIX SMARTCONTROL

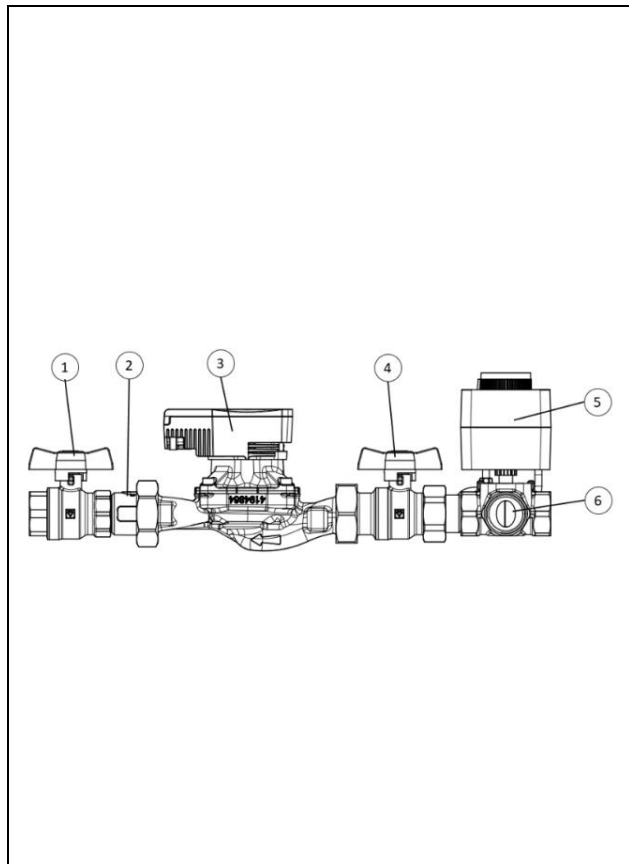
Return temperature set

Installation instructions ENG

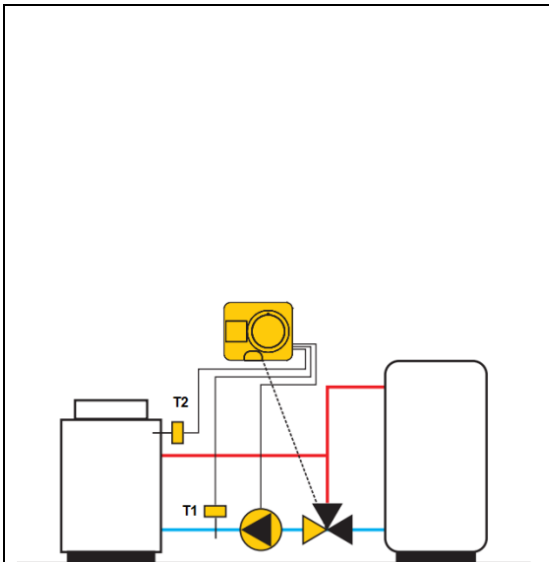
A



B

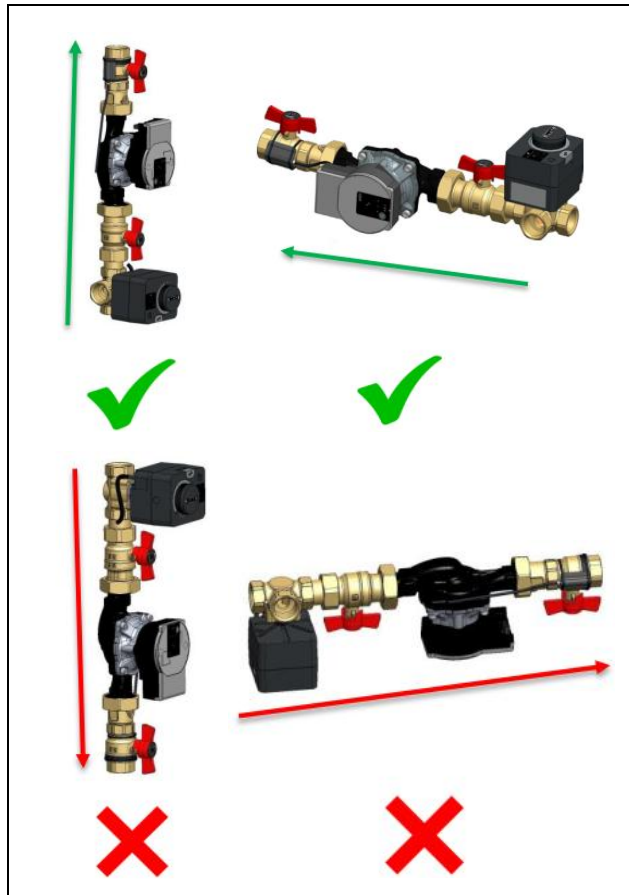


C



T1- temperature sensor for cold water return
T2-temperature sensor for the heat source

D



☑ Material and construction

Ball valve:	forged brass acc. to EN 12165; CW617N
Ball:	forged brass acc. to EN 12165, hard chrome plated , CW617N
Spindle:	forged brass acc. to EN 12164, CW614N
Spindle seals:	PTFE
Ball seals:	PTFE
External threads:	acc. to ISO 7-1
Internal threads:	acc. to ISO 228-1
Check valve:	forged brass acc. to EN 12165; CW617N
Gaskets:	EPDM

Order Nr.	DN	Pump	kW	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	G* [in]	G1* [in]	G2** [in]	R** [in]	H [mm]	H1 [mm]	W [mm]
1 4522 22	20	Wilo Yonos PARA RS 25/6 RKA 180	20	426	180	13	11	3/4"	3/4"			148	114	60
1 4522 23	25	Wilo Yonos PARA RS 25/6 RKA 180	35	465	180	15	16	1"	1"			158	124	60
1 4522 24	32	Wilo Yonos PARA RS 25/6 RKA 180	60	508	180	18,8	18	1 1/4"	1 1/4"			162	128	60
1 4522 25	40	Wilo Stratos PARA 30/1-12	100	689	180	21,4	22	1 1/2"		1 3/4"	1 1/2"	257	201	136
1 4522 26	40	Wilo Stratos 40/1-12	150	754	230	21,4	22	1 1/2"		1 3/4"	1 1/2"	334	250	136

For the dimensions of the Pump group THERMO, see page 2, point A.

☑ Components of HERZ Return temperature set

1. Ball valve
2. Check valve
3. Circulation pump
4. Ball valve
5. 1 4522 00 Smartcontrol controller
6. 1 2137 0X 3-way mixing valve

See page 2, point B.

☑ Operating data

Operating pressure:	10bar without pump, with pump see pump characteristics
Min. operating temperature:	0°C (water 0,5°C)
Max. operating temperature:	110°C
Max. short-term temperature load:	120°C

Medium:

Heating water according to ÖNORM H5195 or VDI- Standard 2035. The use of ethylene, or propylene glycol in a mixing ratio of 25- 50% is allowed. EPDM gaskets can be affected by Mineral oils lubricants and thus lead to failure of the EPDM seals. Please refer to the manufacturers documentation when using ethylene glycol products for frost and corrosion protection.

☑ Scope

The HERZ EUROMIX SMARTCONTROL- Return temperature set is used in heating systems in industrial and household areas. With connection of the boiler and the buffer tank, it is necessary to install the return temperature set for protection of the boiler protecting against too low back flow temperature entering the boiler. Low temperature of boiler backflow should be avoided because of two reasons:

- It prevents condensation and prolongs boiler life because the return to the boiler has the correct temperature.

- Provides the necessary operating temperature of the boiler and thus the proper operation of the heating system and filling of the buffer tank

The advantage of the HERZ EUROMIX SMARTCONTROL – return temperature set compared to other sets is that the set includes a HERZ SMARTCONTROL motor drive, which continuously monitors the return water temperature and energy source with the provided sensors. Using the collected data, it ensures optimal regulation and appropriate adjustment of the return flow to the boiler. The entire system features a “Plug&Play” installation method

See page 2, point C

Installation

HERZ-Return temperature set must be assembled by trained specialist staff (licensed specialist companies – installers). All engineering standards and recognized regulations must be adhered to by these specialist staff. This set may only be used in accordance with return temperature set of the appropriate HERZ biomass boiler. Use the enclosed documentation for the smart controller as well as the pump. Following assembly, the set must be checked for water-tightness by the installer. The correct installation position of the valve insert must be checked. The drawings correspond to a schematic representation and not to the installation situation.

A system where the HERZ Euromix Smartcontrol – return temperature set is installed must be flushed to remove any dirt or debris that may have accumulated during installation. Failure to remove dirt or debris may affect performance and the manufacturer's warranty. The installation of filters of appropriate capacity at the inlet of the water from the main supply is always advisable. In areas that are subject to highly aggressive water, arrangements must be made to treat the water before it enters the valve.

Access to the HERZ Euromix Smartcontrol – return temperature set must be unobstructed for any maintenance that may be required to the return temperature set or valve connections. The pipework from/to the HERZ Euromix Smartcontrol – return temperature set must not be used to support the weight of the return temperature set itself. When connecting the HERZ Euromix Smartcontrol – Return temperature set to the system components use suitable sealing material (spinning material, Teflon ribbon, sealing paste) to coat the pipes. There should not be an excess of sealing material on the pipe because it can damage the thread. All the connecting pipes have to be correctly aligned, so the pump group is not loaded with a bending moment. When using copper or plastic pipes take into account the pressure and temperature limits of used material.

When assembling, use a suitable assembly tool that adapts to pump group end connections. Following assembly, the connections of the return temperature set must be checked for water-tightness by the installer. All engineering standards and recognized regulations must be adhered to by these specialist staff.

The advantage of the HERZ EUROMIX SMARTCONTROL – return temperature set compared to other sets is that the set includes a HERZ SMARTCONTROL motor drive, which continuously monitors the return water temperature and energy source with the provided sensors. Using the collected data, it ensures optimal regulation and appropriate adjustment of the return flow to the boiler. The entire system features a “Plug&Play” installation method.

For allowed mounting positions, see page 2, point D



WARNING

HOT WATER / LIQUID

Pay attention while installing / commissioning / servicing the Return temperature set because the temperature of medium can exceed 100°C. Exposure to this high temperature medium can cause death, serious injury or damage of the other components in the system.

Make sure that when works are being carried out on the HERZ Return temperature set the system is cooled down and it is unpressurised. Before any disassembly make sure that the system is drained.



DANGER

ELECTRIC SHOCK

Usage all of electrical standards and recognized regulations must be adhered to by specialist electricians who are installing the circulation pump in the HERZ pump group. Usage of correct safety equipment against electric shock is obligatory.

Live parts can cause electric shock that will result in serious injury or death.

When working on the circulation pump, disconnect the mains voltage supply and ensure that it cannot be switched on.

See detailed instructions for the circulation pump for the correct connection to the main electrical supply.

Maintenance

The ingress of condensate, dripping water etc. into the drive should be prevented. Repairs on the device must be carried out by authorized persons only.

According to EN 806-5 (point 6. Operation), valves must always be in their fully opened or closed position and actuated at regular intervals to ensure they remain operational. Therefore HERZ Ball valves must be closed and opened periodically at least twice a year. This prevents the ball valve from blocking, reduces sediment deposition, and reduces the possibility of corrosion inside the valve.

Regular maintenance of heating systems keeps them running smoothly, optimizing their energy consumption and reducing utility bills. Well-maintained components ensure the heating system doesn't have to work harder than necessary to achieve the desired temperature.

HOT WATER / LIQUID

Pay attention while installing / commissioning / servicing the Pump group because the temperature of medium can cause death, serious injury or damage of the other components in the system. Make sure that when works are being carried out on the HERZ Pump group the system is cooled down and it is unpressurised. Before any disassembly make sure that the system is drained.



WARNING

Make sure, that regular maintenance is done periodically at least twice a year, according to the procedures written below:

1. Check and clean the system filters.
2. Check that the non-return valves are operating normally, without problems caused by impurities.
3. Limescale can be removed from internal components by immersion in a suitable de-scaling liquid.
4. When the components which can be maintained have been checked, commissioning should be carried out again.

In-service tests should be carried out regularly to monitor the pump group performance, as deterioration of performance could indicate that the valve and/or the system require maintenance. If, during these tests, the performance of the valve has changed significantly in comparison to the previous tests, the details given in the installation sections should be checked and maintenance carried out.

The following aspects should be checked regularly to ensure that the optimum performance levels of the valve are maintained, periodically at least twice a year.

- Motor smart controller:

In case the motor smart controller is broken, then only the specialist electricians can exchange or service it.



DANGER

These specialist electricians need to respect all of electrical standards and recognized regulations. Usage of correct safety equipment against electric shock is obligatory. Live parts can cause electric shock that will result in serious injury or death.

Disposal instructions

The disposal of HERZ - Pump group must not endanger the health or the environment. National legal regulations for the proper disposal of the HERZ-pump group have to be followed.



PUMPFIX

Since 1896

Austrian company

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