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# PRODUCT INFORMATION

## Boiler charging unit



### LaddoTRONIC 25/7

For boiler sizes up to 50 kW  
(recommendation: HVS 16, HVS 25, HVS 40)



### LaddoTRONIC 32/80

For boiler sizes up to 120 kW  
(recommendation: HVS 50, HVS 80, HVS 100)

## Technical description

## Codes of practice, regulations, standards, safety indications

Please read carefully the product information before starting the installation in order to avoid damage caused by improper installation. The installation has to be carried out by a qualified company according to the generally recognized codes of practice. Attention has to be paid to country specific regulations. Warranty rights will be lost if the installation is not carried out by a qualified person or not in accordance with the regulations.

### Attention should be paid to the following codes of practice:

<b>DIN 4751</b>	safety requirements for hot water central heating systems
<b>DIN 4753</b>	Water heaters and water heating installations for drinking water and service water; requirements, marking, equipment and testing
<b>DIN 4807</b>	Expansion vessels
<b>DIN EN 12828</b>	Heating systems in buildings - Design for water-based heating systems
<b>DIN 18380</b>	Installation of central heating systems and hot water supply systems
<b>DIN 18382</b>	Electrical supply systems rated for voltages up to 36 kV
<b>VDE 0100</b>	Electrical installations of buildings
<b>VDE 0105</b>	Operation of electrical installations
<b>VDE 0190</b>	Potential equalization of electrical systems

No interventions are allowed during boiler operation. Maintenance and repair works at electrical facilities are only to be carried out by qualified persons.

Attention has to be paid to the attached technical information sheets (mixer, pump) and they are a valid part of this installation manual in regard to the mentioned safety information.

## LaddoTRONIC 25/7

## LaddoTRONIC 32/80

### Ready-to-assemble compact boiler charging unit for all popular boiler sizes up to 120 kW nominal output.

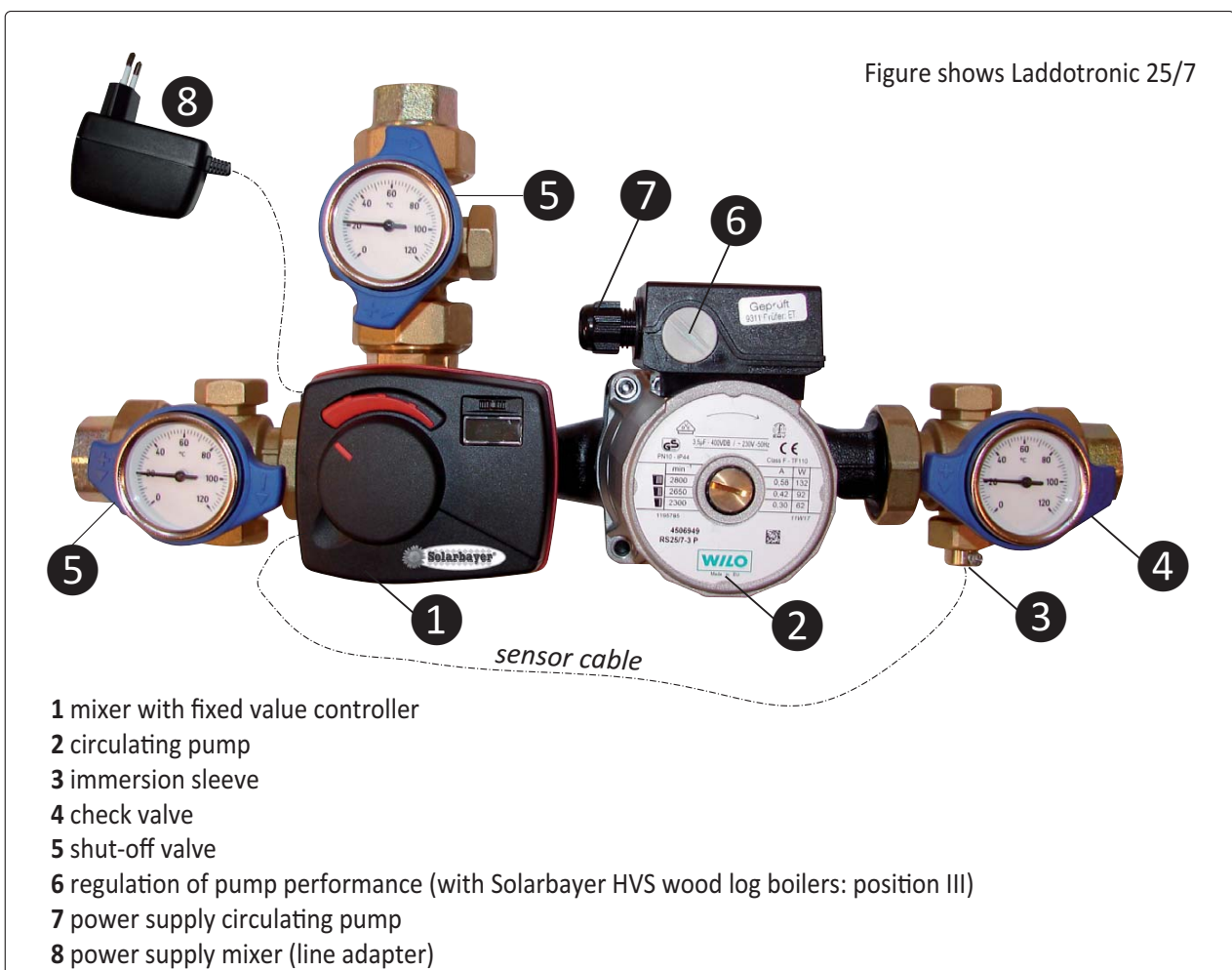
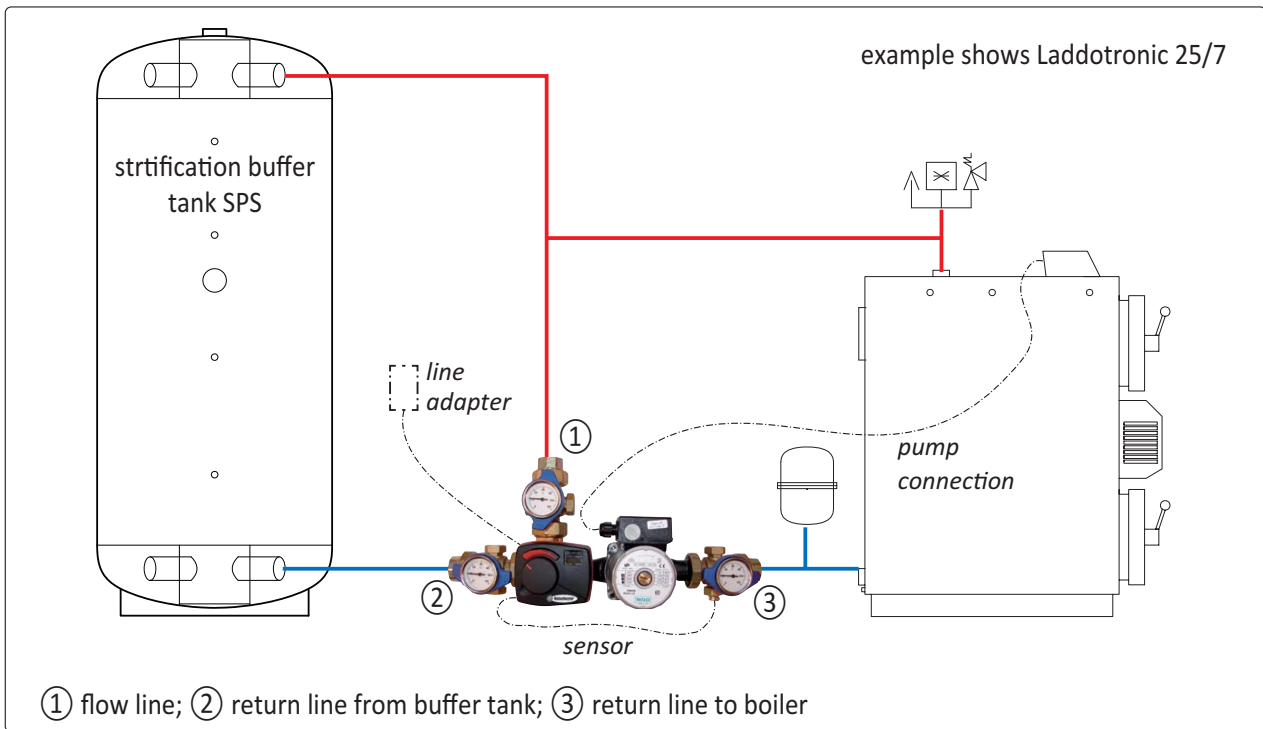
Ready-to-assemble compact boiler charging unit for all boiler sizes up to 120 kW nominal output for the perfect operation of a wood log boiler system in combination with a buffer tank. Electronic control unit with variably adjustable opening temperature (factory setting: 70°C).

The boiler reaches the perfect operating temperature very fast. The cold water from the buffer tank to the boiler return is preheated, thus, a perfect corrosion protection is guaranteed. The buffer tank is loaded with high and even temperature. After the finished heating phase of the boiler the residual heat is still loaded into the buffer tank. In case of a power failure the boiler heat can be transferred into the buffer tank via manual operation.

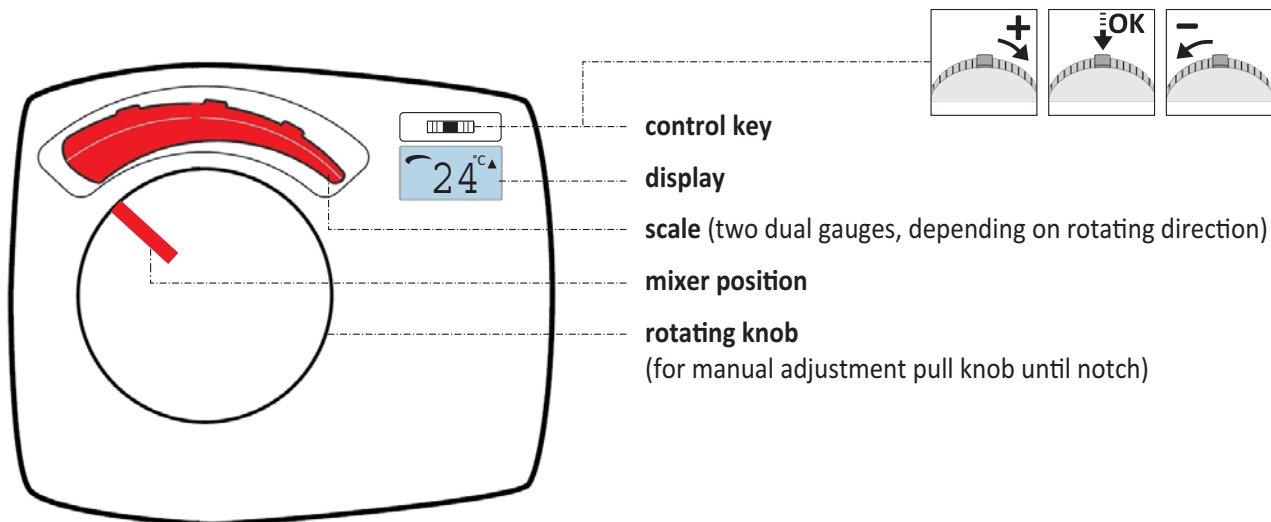
### Scope of delivery

- LaddoTRONIC complete unit (control unit, mixer, mixer motor, pump, check valves with thermometers)
- line adapter 230/24 VAC, cable length approx. 1,5 m
- sensor cable (flow line sensor)

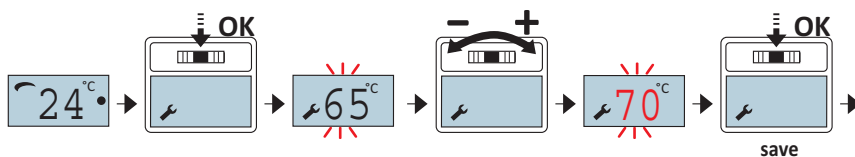
### Connection example



# Controller



## Adjusting target temperature (factory setting: 70°C):

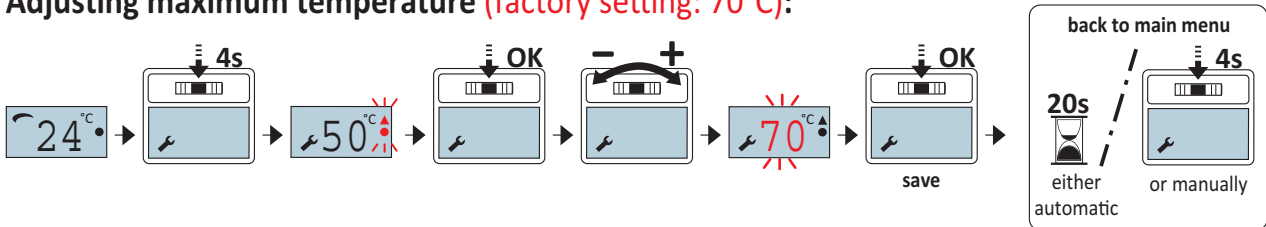


**i** We recommend the factory settings for the operation of a Solarbayer wood log boiler „HVS”

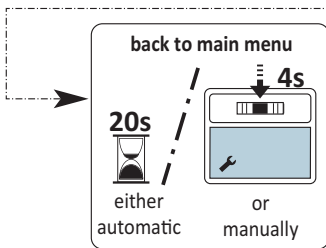
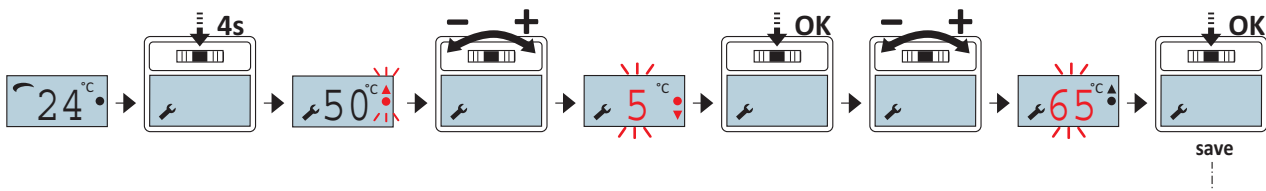
## Setting controller on expert level

**i** The controller is already preset with the correct settings. Those can be reestablished or changed when necessary.

### Adjusting maximum temperature (factory setting: 70°C):

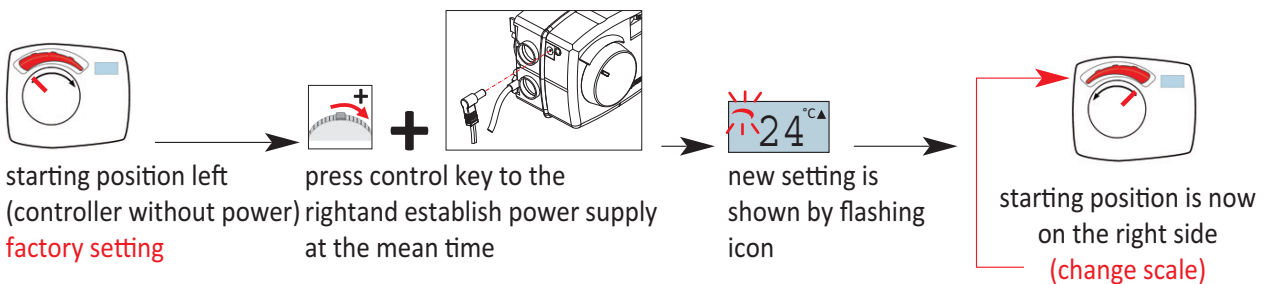


### Adjusting minimal temperature (factory setting: 65°C):

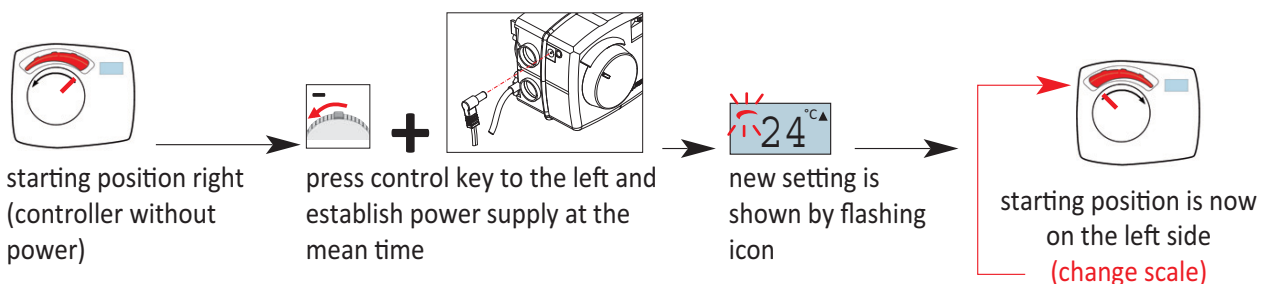


### Adjusting the rotating direction of the mixer (factory setting: starting position left)

#### Changing the rotating direction from the starting position left to starting position right



#### Changing the rotating direction from the starting position right to starting position left (factory setting)

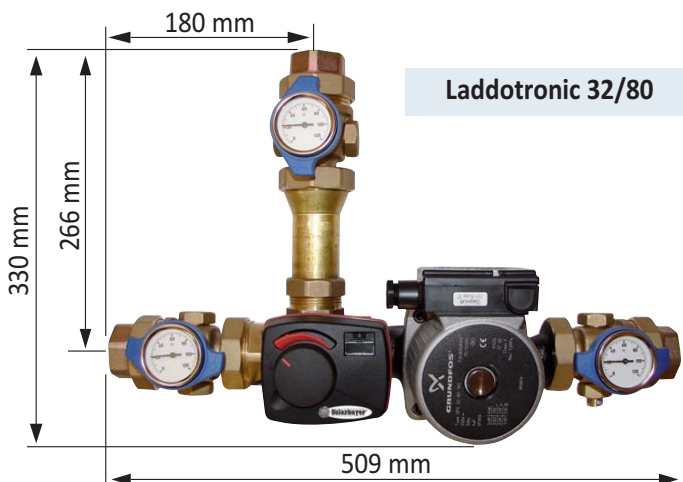
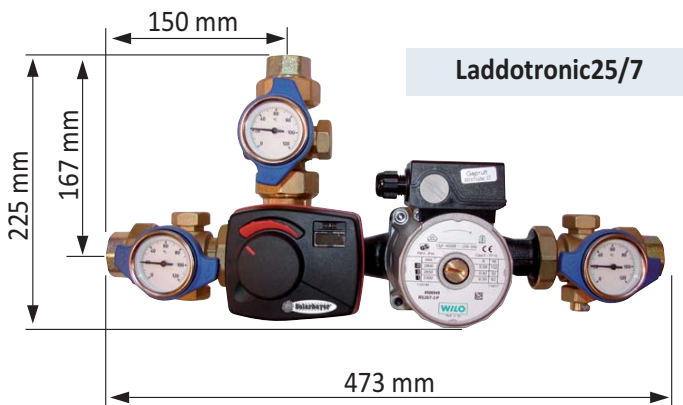


## Technical facts

Pump	Laddotronic 25/7	Laddotronic 32/80
Mains voltage	230 V/50 Hz	230 V/50 Hz
Protection category	IP 41	IP 41
Pump	Wilo RS 25/7, 3-level	Grundfos UPS 32-80, 3-level
Pump performance	3-level, 62/92/132 W	3-level, 135/210/230 W

Actuator control	Laddotronic 25/7	Laddotronic 32/80
Mains voltage	24 ± 10% VAC, 50/60 Hz, 230 ± 10% VAC, 50 Hz	
Protection category	IP 41	
Power consumption 24 VAC	3 VA	
Power consumption 230 VAC	10 VA	
Torque	6 Nm	
Running time at max. speed	30 s	
Sensor type	Pt 1000	

	Laddotronic 25/7	Laddotronic 32/80
Screwed connection	1" internal to 1½" external thread	1¼" internal to 2" external
Bypass	yes	no



### Resistance parameter sensor type PT 1000

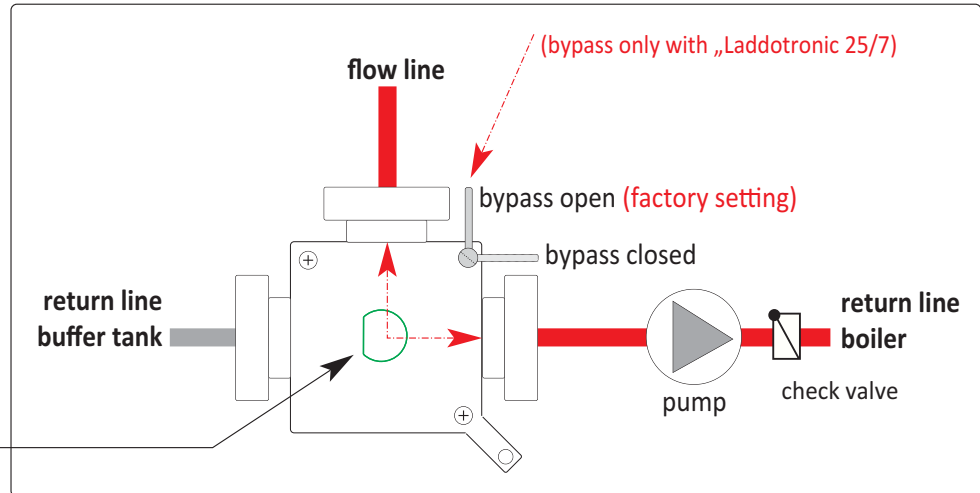
0 °C	1000 Ω
5 °C	1020 Ω
10 °C	1039 Ω
15 °C	1058 Ω
20 °C	1078 Ω
25 °C	1097 Ω
30 °C	1117 Ω
35 °C	1136 Ω
40 °C	1155 Ω
45 °C	1175 Ω
50 °C	1194 Ω
55 °C	1213 Ω
60 °C	1232 Ω
65 °C	1252 Ω
70 °C	1271 Ω
75 °C	1290 Ω
80 °C	1309 Ω
85 °C	1328 Ω
90 °C	1347 Ω
95 °C	1366 Ω
100 °C	1385 Ω

## Additional information

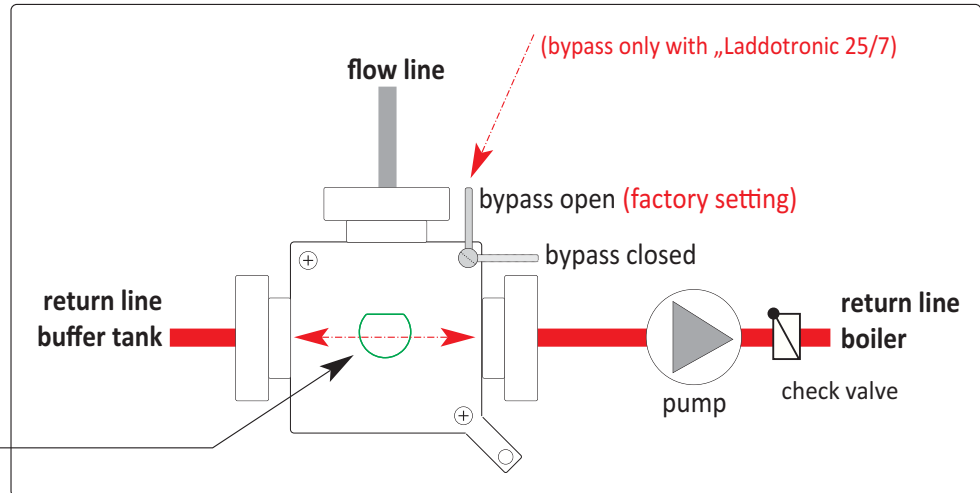


Attention has to be paid to the correct position of the bearing shaft when remodeling the actuator.

In this position the straight edge of the bearing shaft is directed towards the return line of the buffer tank (return line to the buffer tank is closed)



In this position the straight edge of the bearing shaft is directed towards the flow line of the buffer tank (flow line is closed, buffer tank is charged)







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Valid is the most current version of the mounting instruction which can be found on our homepage

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