



THUIS
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THUIS STROOM BOILERS AND BUFFER TANKS

Technical Data Sheet



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THUIS STROOM BOILER TANKS

Thuis Stroom Boiler Tank 200 Lt
Code: TS-TBOI200-SO

Thuis Stroom Boiler Tank 300 Lt
Code: TS-TBOI300-SO

Figure 1. TS - Boiler tank



THUIS STROOM BUFFER TANK

Thuis Stroom Buffer Tank 100 Lt
Code: TS-TBUF100-SO

Figure 2. TS - Buffer tank

GENERAL DESCRIPTION - THUIS STROOM BOILER TANKS

- There is 1 heat exchanger in the TS-TBOI-SO boiler and 4 sleeves connected to the tank body.
- The domestic water is heated instantaneously from the upper heat exchanger. In the sleeves connected to the tank body, the water can be heated by a heater (heat pump, boiler) and used in the heating supply.
- TS-TBOI-SO can store simultaneously in 2 different variants according to system requirements.
Can be used as domestic hot water + buffer tank.
- The hot water stored in the tank is used both for heating support and heating domestic water.
- The heat exchanger in the boiler is made of Chrome-Nickel 316L stainless steel.
- Since the domestic water is heated instantly, Legionella and other bacteria do not grow.
- Multiple heat sources can be integrated into the boiler. Optionally can be operated with electric heater.
- When choosing a non-solar heat source, this is the most efficient model.
- Perfectly compatible with heat pumps.
- Anode rod and maintenance free.

THUIS STROOM HEAT EXCHANGERS		
Corrugated pipe		
D	(mm)	25,20
D1	(mm)	31,60
a	(mm)	3,20
b	(mm)	2,00
Tolerance	-	± 0,30
Operating pressure	(bar)	11
Surface area per meter	(m ² /m)	0,218
Min. section area	(mm ³)	498,76
Volume	(m ³ /m)	0,724
Material		Inox 316L

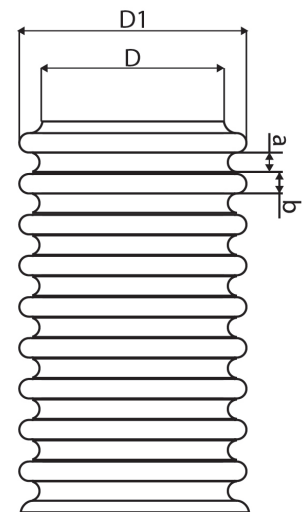


Table 1. TS- Heat Exchangers

Figure 3. TS-Heat Exchangers

Boiler Tanks		200	300
Energy Efficient class	°	C	C
Heat loss	W	74	85
Tank volume	Liters	170	245
Basic data			
Empty weight	kg	65	85
Full weight	kg	235	330
Dimensions (height/diameter)	mm	1200x540	1700x540
Max permissible boiler water temperature	C	130	130
Maximum working pressure	Bar	6	6
Outer Cylinder Material	-	Electrostatic powder painted ST 37 Steel	
Insulating Material	-	Polyurethane 50 mm 40 kg/m ³	
Tank Material	-	HRP 6222/3mm	
Domestic water exchanger (stainless steel AISI 316L)			
Water volume of the heat exchanger	Liters	12	12
Domestic water heat exchanger surface area	m ²	3.83	3.83
Maximum working pressure	Bar	6	6
Solar heating support (stainless steel AISI 316L)			
Water volume of the heat exchanger	Liters		
Heat exchanger surface area	m ²		
Maximum working pressure	Bar		
Thermal output data			
Amount of hot water without reheating at a discharge 8 l/min	Liters	140	210
Amount of hot water without reheating at a discharge 12 l/mi	Liters	120	180
Pipe connection			
Feed water in/out	Inch	1 ¼"	
Underfloor heating in/out	Inch	1 ¼"	1 ¼"
Electric heater	Inch	1 ¼"	1 ¼"
Domestic water in/out	Inch	¾"	¾"
Sensor	Inch	½"	½"

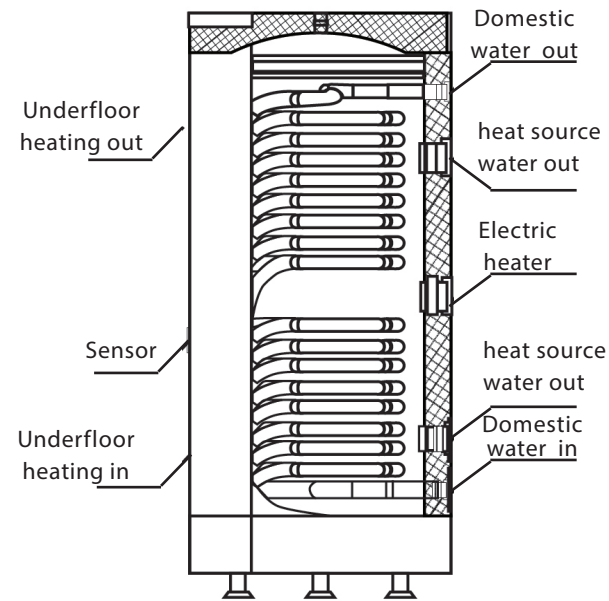


Figure 4. TS- Boiler Tank

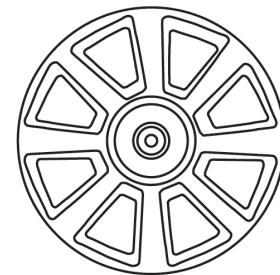


Figure 5. TS- Boiler Tank Top View

Table 2. Specifications Thuis Stroom Boiler Tank

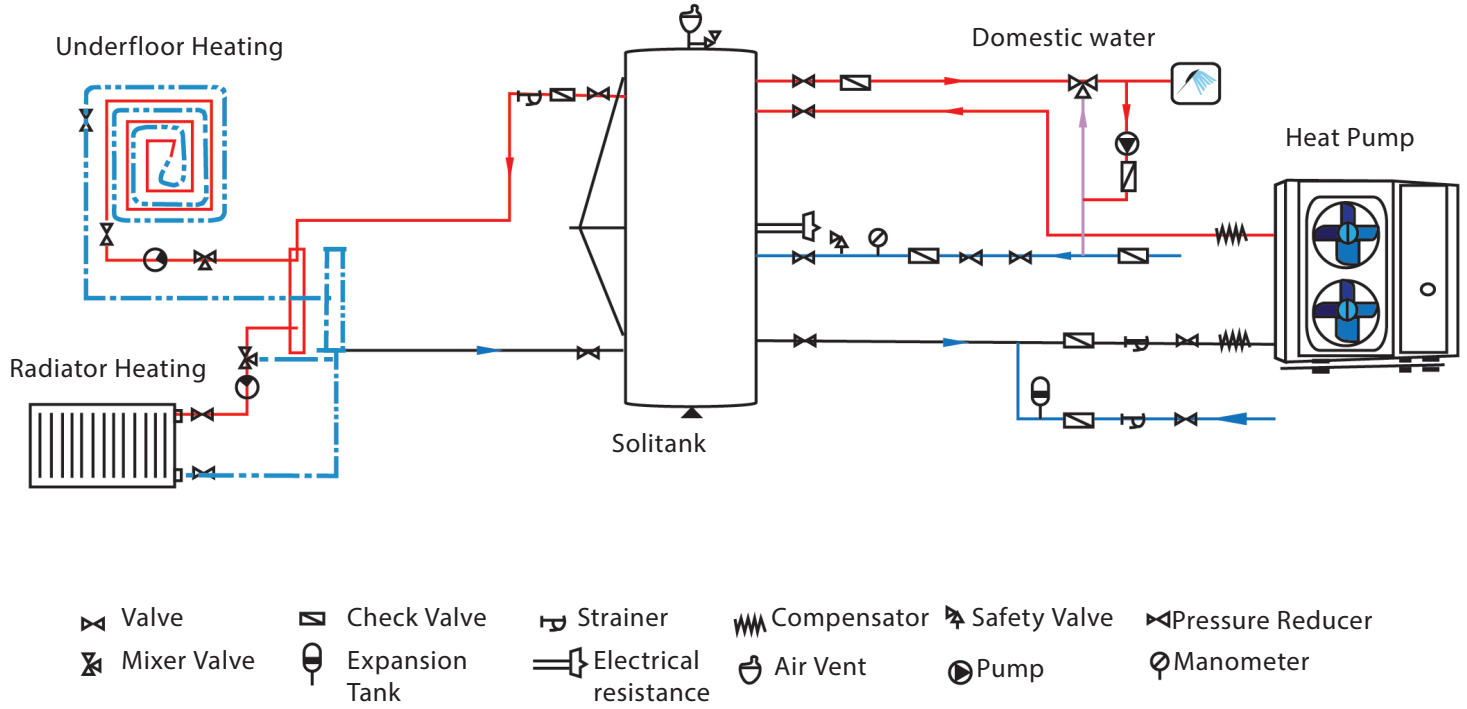


Figure 6. Function process of the Boiler tank

GENERAL DESCRIPTION - THUIS STROOM BUFFER TANKS

- There are 4 sleeves connected to the buffer tank body. The domestic water is heated instantaneously from the upper heat exchanger. In the sleeves connected to the tank body, the water can be heated by a heater (heat pump, boiler) and used in the heating supply.
- Extends the life of heat pump by preventing it continuously operating
- When the heat pump is in defrost mode, it prevents heat loss of the space to be heated.
- When choosing a non-solar heat source this is the most efficient model
- Multiple heat sources can be integrated into the buffer boiler.
- Optionally can be operated with electric heater.
- Easy installation thanks to its compact design.
- Anode rod and maintenance free.



Buffer Tank		100
Energy efficiency class	-	B
Heat loss	W	45
Tank volume	Liters	100
Basic data		
Empty weight	kg	50
Full weight	kg	150
Dimensions (height/diameter)	mm	750x540
Maximum working pressure	Bar	6
Outer Cylinder Material	-	Electrostatic powder painted ST 37 Steel
Insulating Material	-	Polyurethane 50 mm 40 kg/m ³
Tank Material	-	HRP 6222/3mm
Domestic water exchanger (stainless steel AISI 316L)		
Water volume of the heat exchanger	Liters	
Domestic water heat exchanger surface area	m ²	
Maximum working pressure	Bar	
Solar heating support (stainless steel AISI 316L)		
Water volume of the heat exchanger	Liters	
Heat exchanger surface area	m ²	
Maximum working pressure	Bar	
Thermal output data		
Amount of hot water without reheating at a discharge rate of 8 L/min	Liters	
Amount of hot water without reheating at a discharge rate of 12 L/min	Liters	
Pipe connection		
Feed water in/out	Inch	1 ¼"
Underfloor heating in/out	Inch	1 ¼"
Electric heater	Inch	1 ¼"
Sensor	Inch	½"

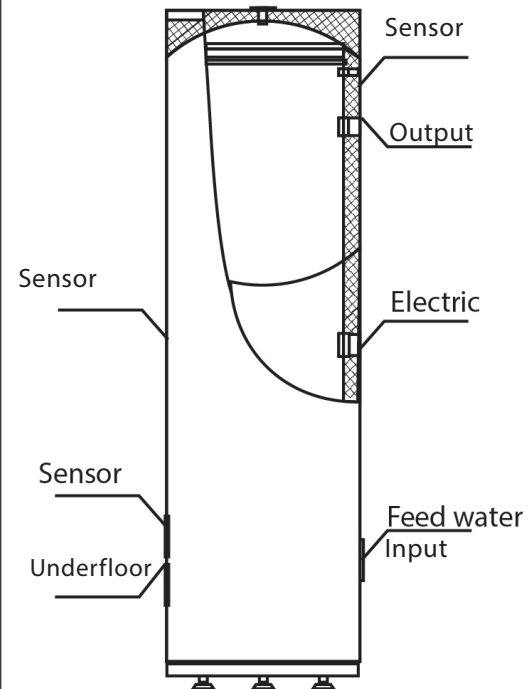


Figure 7. TS- Buffer Tanks Vector

Table 6. Specifications Thuis Stroom Buffer Tank

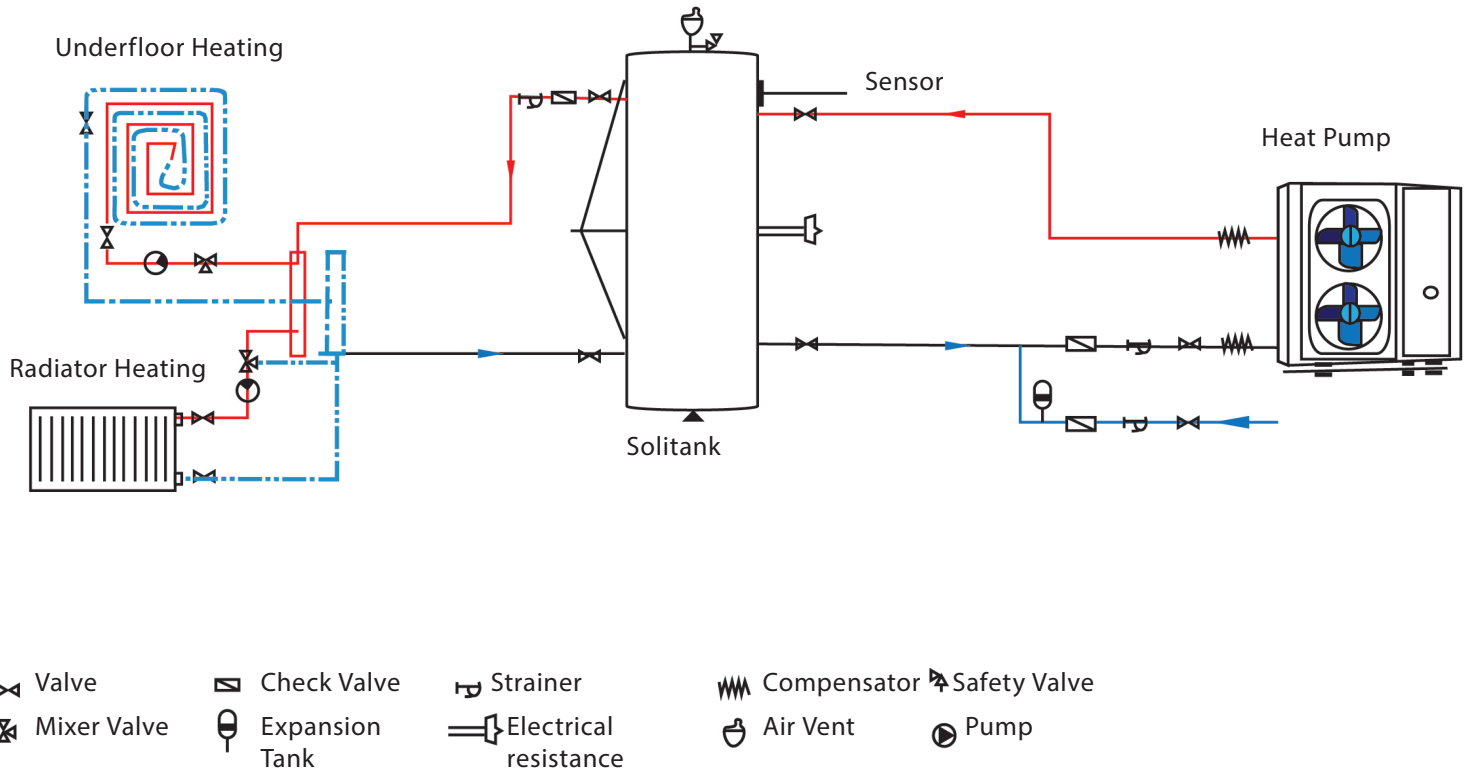


Figure 8. Function process of TS - Buffer Tank



THUIS STROOM



The "Solarkeymark" denotation, is issued by ESTIF and is throughout Europe, has become the most widely accepted certificate for solar thermal products, this has been made obligatory for all goods entering Germany since January 2007 and the favoured certificate to get refund incentive payments EU countries.



The Federal Office of Economics and Export Control (BAFA) is a superior federal authority subordinated to the Federal Ministry of Economics and Technology (BMWi) in Germany. A central task of BAFA in the foreign trade sector is export control. In the energy sector BAFA implements measures to promote a better use of renewable energies, the saving of energy, for the maintenance and extension of the power-heat-linkup and for German coal mining, and participates in crisis-contingency measures in the mineral oil sector.



The German "TÜV" (Technischer Überwachungs Verein) certificate.



SRCC provides authoritative performance ratings, certifications and standards for renewable energy products, with the intention of protecting and providing guidance to consumers, incentive providers, government, and the industry.



IEC (International Electrotechnical Commission) prepares International Standards for systems of photovoltaic conversion of solar energy into electrical energy and for all the elements in the entire photovoltaic energy system.



The "ISFH" (Institute für Solarenergieforschung) certificate issued by the Leibniz University Solar Energy Research Institute.



CSTBat; Worldwide accredited association that promotes the development of France through the culture of quality.



The "ITW" (Institut für Thermodynamik und Wärmetechnik) certification issued by the Thermodynamics and Heating Techniques Institute at Stuttgart University.



The SEAI (Sustainable Energy Agency of Ireland)



The "CE" (Conformité Européenne) approval certifying health and safety in Europe.



ISO 27001 Information Security Management System certificates; ISO 27001 Information security management system is established by an accredited certification organization to pass through 2 stages of supervision and to prove its continuity.



HYB; states that manufacturing facilities comply to Turkish Standards.



The Turkish Standards Compliance Certificate:
This certification states that the authorized manufacturer's products comply with Turkish Standards.



The "INTA" (Instituto Nacional De Técnica Aeroespacial) award issued by the Spain's International Quality Institute,



Occupational health and safety management system.



The National Renewable Energy Centre is a technology center specialising in applied research, and the development and promotion of renewable energy. It is highly rated and has acknowledged national and international prestige.



The MCS certifies microgeneration technologies used to produce electricity and heat from renewable sources in the UK.



Worldwide accredited association that promotes the development of Italy through the culture of quality.



Eurofins Scientific is an international life sciences company which provides a unique range of analytical testing services to clients across multiple industries



Fraunhofer is Europe's largest application-oriented research organization based in Munich, GERMANY.



ISO 14001 Environmental Management System (EMS) provides a continuous cycle of planning, implementing, reviewing, and improving the processes and actions that are performed to meet business and environmental goals.



ISO 9001:2015 specifies requirements for a quality management system where an organization, needs to demonstrate its ability to consistently provide product that meets customer and applicable regulatory requirements.