

WARNINGS

- ▲ The appliance may be used by children aged 3 and older and persons with physical, sensory or mental disabilities or lacking experience or knowledge, if they are under supervision or taught about safe use of the appliance and if they are aware of the potential dangers. Children aged from 3 to 8 years are only allowed to operate the tap connected to the storage tank.
- ▲ Children should not play with the appliance.
- ▲ Children should not clean or maintain the appliance without supervision.
- ▲ The installation should be performed in accordance with the valid regulations and the instructions of the manufacturer. It should be performed by a professionally trained installation expert.
- ▲ It is obligatory to install a safety valve with a rated pressure of 0.6 MPa (6 bar), 0.9 MPa (9 bar) or 1.0 MPa (10 bar) – see the label – on the inlet pipe of the hot water storage tank to prevent the elevation of pressure in the tank by more than 0.1 MPa (1 bar) above the rated pressure.
- ▲ Water may drip from the outlet opening of the safety valve, so the outlet opening should be set to atmospheric pressure.
- ▲ The outlet of the safety valve should be installed facing downwards and in a non-freezing area.
- ▲ To ensure proper functioning of the safety valve, the user should perform regular controls to remove limescale and make sure the safety valve is not blocked.
- ▲ Do not install a stop valve between the hot water storage tank and the safety valve, because it will impair the pressure protection of the storage tank!
- ▲ Before connecting the heater to the power supply, the storage tank must be filled with water!
- ▲ The storage tank is protected in case of failure of the operating thermostat with an additional thermal cut-out. In case of thermostat failure water in the storage tank may reach the temperature of up to 130°C in accordance with safety standards. The possibility of such temperature overload should be taken into consideration in the execution of plumbing.
- ▲ Should you choose to disconnect the power, the storage tank should be drained thoroughly before the onset of freezing conditions.
- ▲ Water from the storage tank is drained through the inlet pipe of the tank. For this purpose, a special fitting (T-fitting) with an outlet valve must be mounted between the safety valve and the inlet pipe.
- ▲ To avoid hazard, damaged power cord may only be replaced by the manufacturer, authorized service technician, or other authorized person.
- ▲ In the electrical installation, please install a disconnect switch to separate all poles from the power supply network in accordance with the national regulations.
- ▲ Please do not try to fix any defects of the storage tank on your own. Call the nearest authorised service provider.



Our products incorporate components that are both environmentally safe and harmless to health, so they can be disassembled as easily as possible and recycled once they reach their final life stage. Recycling of materials reduces the quantity of waste and the need for production of raw materials (e.g. metals) which requires a substantial amount of energy and causes release of harmful substances. Recycling procedures reduce the consumption of natural resources, as the waste parts made of plastic and metal can be returned to various production processes.

For more information on waste disposal, please visit your waste collection centre or the store where the product was purchased.

Dear buyer, thank you for purchasing our product.

PRIOR TO THE INSTALLATION AND FIRST USE OF THE HOT WATER STORAGE TANK, PLEASE READ THESE INSTRUCTIONS CAREFULLY.

This storage tank has been manufactured in compliance with the relevant Standards and tested by the relevant authorities as indicated by the Safety Certificate and the Electromagnetic Compatibility Certificate. The technical characteristics of the product are listed on the label attached to the protective cover.

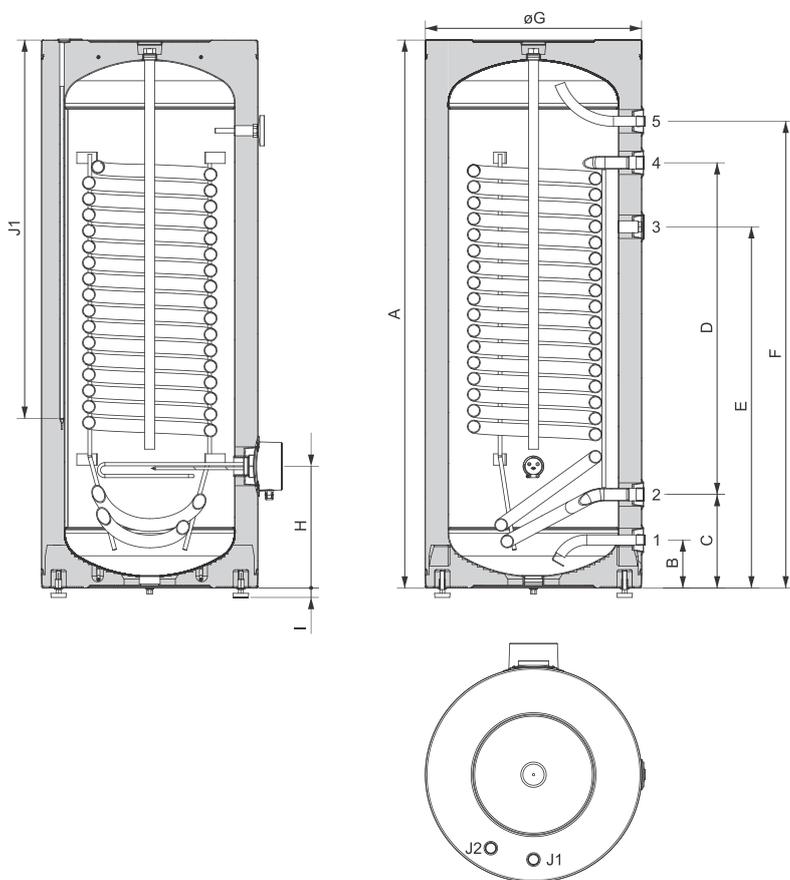
The connection of the storage tank to the plumbing and power networks must be carried out by qualified staff only. All repairs and maintenance work in the interior of the storage tank, as well as limestone removal or testing or replacement of the corrosion protection anode, may only be carried out by an approved maintenance service provider.

The hot water storage tank is designed in a manner which allows using the following heating sources, via a heat exchanger:

- Central heating hot-water system,
- Solar power,
- Heating pump.

INSTALLATION

The heater should be installed in a dry room that is not subject to freezing conditions, preferably in the vicinity of other sources of heating (e.g. boiler room). Prior to installation screw on the enclosed adjustable legs. Level the storage tank longitudinally and transversally by rotating the adjustable legs.

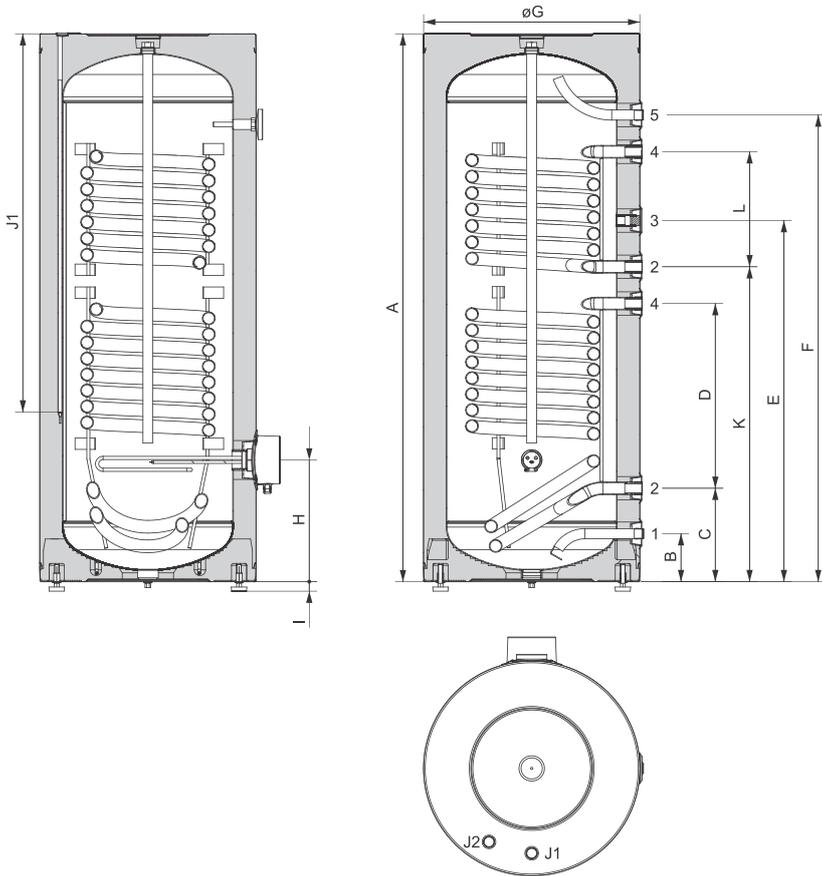


KEY

1	Cold water inflow
2	Medium outlet from the heat exchanger
3	Circulation conduit
4	Medium inflow into the heat exchanger
5	Hot water outflow
J1	Long sensor tube
J2	Short sensor tube

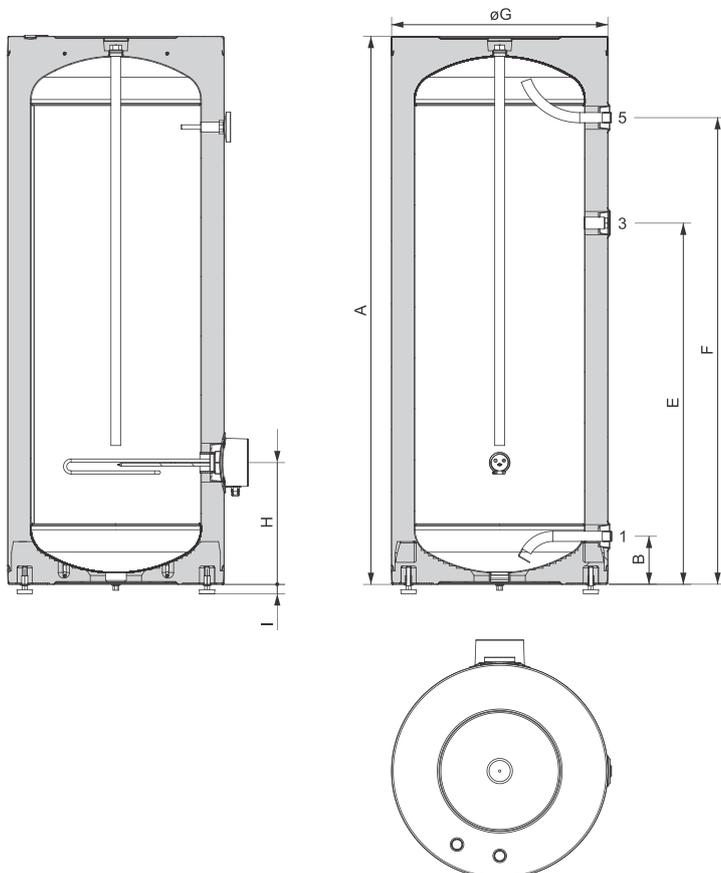
	VLGM200A1-1	VLGM200A2-1	VLGM300B1-1	VLGM300B2-1	VLGM300B3-1
A	1454	1454	1490	1490	1490
B	128	128	140	140	140
C	248	248	237	237	237
D	490	880	530	980	890
E	958	958	1042	1042	1030
F	1238	1238	1334	1334	1334
G	570	570	670	670	670
H	323	323	287	287	307
I	25 – 70	25 – 70	25 – 70	25 – 70	25 – 70
J1	1000	1000	1020	1020	1020
J2	430	430	450	450	450
1	G3/4	G3/4	G1	G1	G1
2	G1	G1	G1	G1	G5/4 *
3	G3/4	G3/4	G3/4	G3/4	G3/4
4	G1	G1	G1	G1	G5/4 *
5	G3/4	G3/4	G1	G1	G1

* internal thread



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	VLGM200A1-2	VLGM300B1-2
A	1454	1490
B	128	140
C	248	237
D	490	530
E	958	1042
F	1238	1334
G	570	670
H	323	287
I	25 – 70	25 – 70
J1	1000	1020
J2	430	450
K	836	912
L	305	325
1	G3/4	G1
2	G1	G1
3	G3/4	G3/4
4	G1	G1
5	G3/4	G1



KEY	
1	Cold water inflow
3	Circulation conduit
5	Hot water outflow

	VLGM200A	VLGM300B
A	1454	1490
B	128	140
E	958	1042
F	1238	1334
G	570	670
H	323	287
I	25 – 70	25 – 70
1	G3/4	G1
3	G3/4	G3/4
5	G3/4	G1

Image 1: Connection and installation dimensions of the storage tank [mm]

CONNECTION TO THE WATER SUPPLY

Connection to water supply should be made according to the markings for the connections, as defined in the previous Chapter.

For safety reasons the supply pipe must be fitted with a safety valve or, alternatively, a valve of the safety class that prevents the pressure in the tank from exceeding the nominal pressure by more than 0.1 MPa (1 bar). The outlet opening on the safety valve must be equipped with an outlet for atmospheric pressure. The heating of water in the storage tank causes the pressure in the tank to increase to the level set by the safety valve. As the water cannot return to the water supply system, this can result in dripping from the outlet opening of the safety valve. The drip can be piped to a drain by installing a catching unit just below the safety valve. The drain installed below the safety valve outlet must be piped down vertically and placed in an environment that is free from the onset of freezing conditions.

In case you want to avoid water dripping from the safety valve, an expansion tank for domestic water with at least 5 % of the volume of the storage tank should be installed on the inlet pipe of the storage tank.

To ensure proper functioning of the safety valve, the user should perform regular controls to remove limescale and make sure the safety valve is not blocked. To check the valve, open the outlet of the safety valve by turning the handle or unscrewing the nut of the valve (depending on the type of valve). The valve is operating properly if the water comes out of the nozzle when the outlet is open.

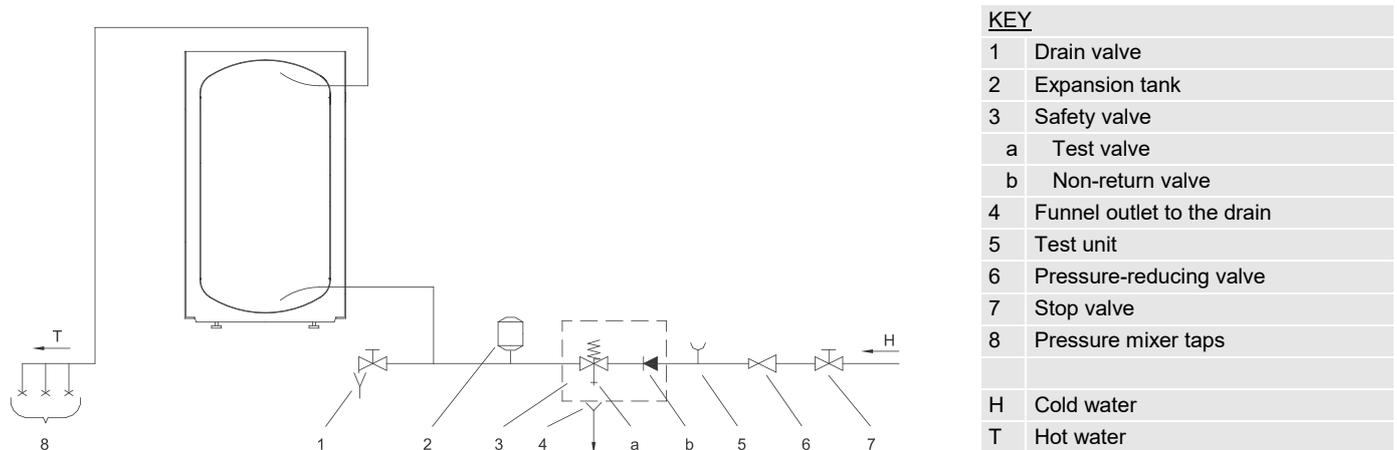


Image 2: Closed (pressure) system

The storage tank can be connected to the domestic water supply network without a pressure regulator if the pressure in the network is lower than the nominal pressure (see the label). If the pressure in the network exceeds the nominal pressure, a pressure regulator must be installed.

CONNECTION TO THE POWER SUPPLY NETWORK

The heater is powered directly from the heating system control unit with a regulation voltage of 220–240 V, 50/60 Hz. To connect the electric heater and the superordinate control unit (heat pump, gas boiler, solid fuel furnace, oil boiler etc.), a connecting cable must be installed with a diameter of min. 2.5 mm² (H05VV-F 3G 2.5 mm²), so the protective cover must be removed. Cable connection, which is carried out directly to the clamps of the thermostat and grounding to the heater flank, is shown in the sketch below.

The built-in thermostat of the electric heater is pre-set to the maximum (75 °C). When setting the superordinate control unit, you are limited to this temperature. If the limit temperature is exceeded, the built-in thermostat in the hot water storage tank will be shut off.

An all-pole disconnect device must be installed in the electric installation to comply with the National Installation Regulations.

⚠ CAUTION: Prior to any intervention in the interior, the hot water storage tank must be disconnected from power supply! Interventions may only be carried out by authorised professionals!

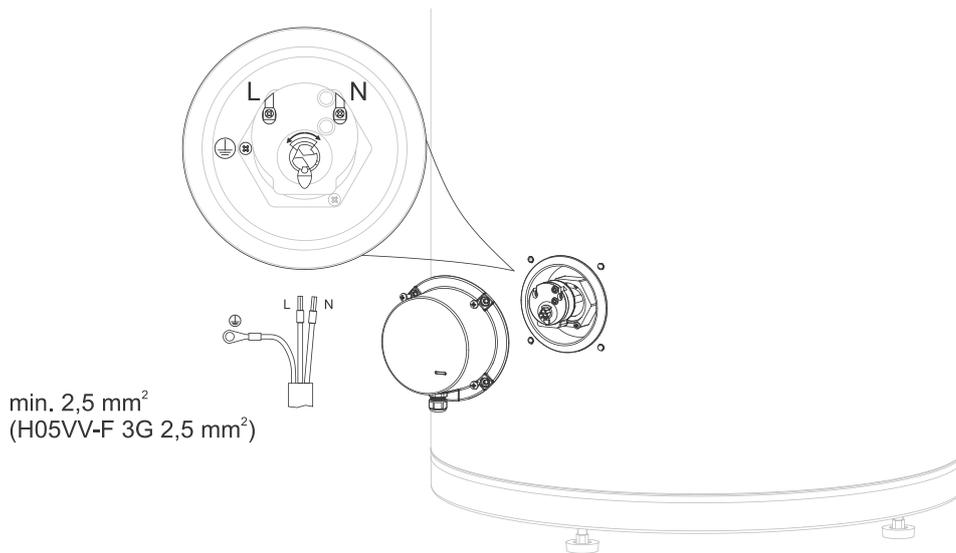
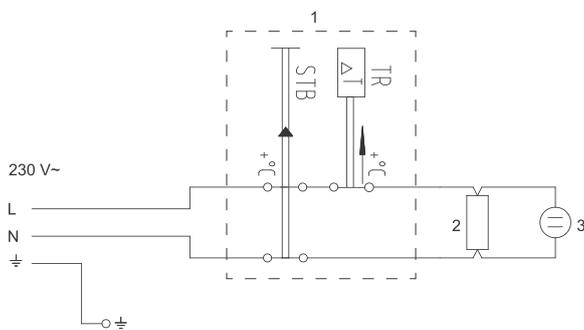


Image 3: Connecting the heater



KEY	
1	Thermostat and bipolar thermal cut-out
2	Heater
3	Light indicator
L	Live conductor
N	Neutral conductor
⊕	Earthing conductor

Image 4: Electric installation

INSTALLATION OF SENSORS

On the upper side of the storage tank there are two sensor tubes for mounting the sensors for regulation of the system connection of the hot water storage tank to other heating sources. The maximum diameter of the sensors is 8 mm.

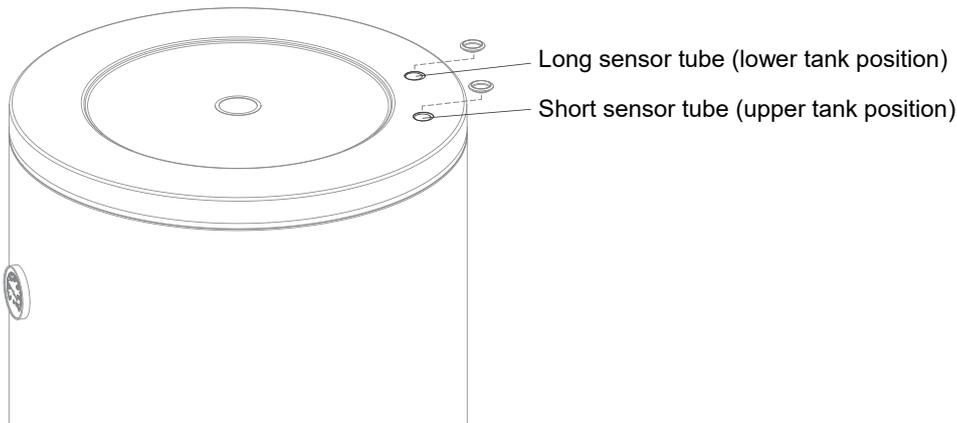


Image 5: Installation of sensors

WARNING: Before any intervention into the interior of the storage tank disconnect it from the power supply! All interventions must be carried out by qualified staff only!

CONNECTION TO ALTERNATIVE SOURCES OF HEATING

The hot water storage tank enables the water for sanitary use to be heated by alternative sources of energy (e.g. central heating, solar power etc.) by installing a Heat Exchanger.

Examples of connecting the hot water storage tank to various sources of heating are shown in the drawings below.

KEY

1	Hot water storage tank	8	Safety valve
2	Central heating hot-water system	9	Air relief valve
3	Solar panel	10	Fill/drain valve
4	Differential thermostat with sensors (T1, T2, T3, T4)	11	Reduction valve
5	Bypass pump	12	Drain valve
6	Expansion tank	13	Stop valve
7	Non-return valve	14	Test unit
		15	Funnel outlet to the drain

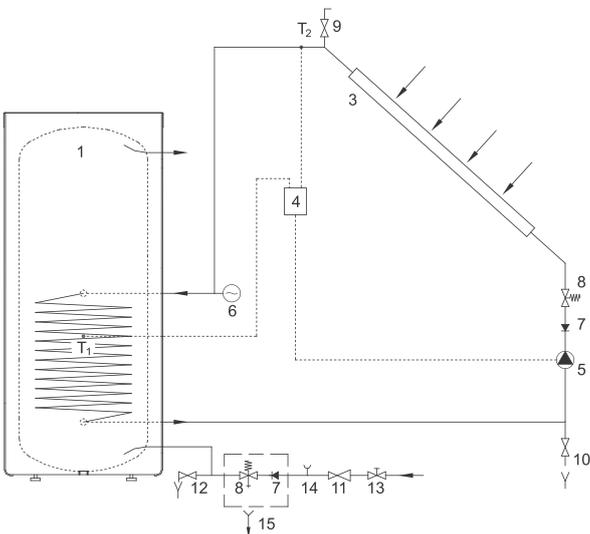


Image 6: Connection to solar panels

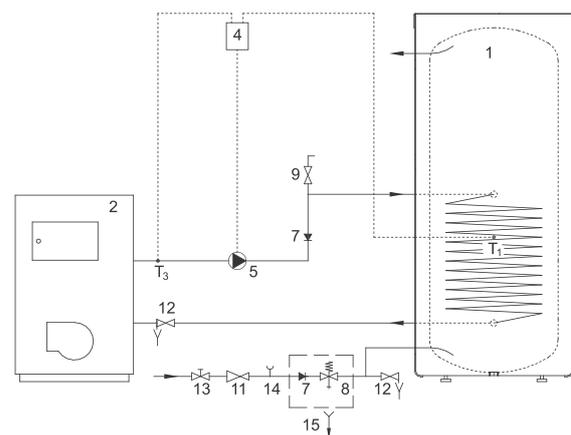


Image 7: Connection to the central heating hot-water system

USE AND MAINTENANCE

The hot water storage tank is ready for use once it has been connected to water and electricity and other heating sources. The usual main sources for heating domestic water are central heating or solar power; in this case any regulation of water heating is performed in the heating system.

The built-in electrical heater is only intended for auxiliary heating of water and is controlled by an external unit.

In case of exposure to sub-zero temperatures, the water should be drained from the storage tank thoroughly before the onset of freezing conditions. Water from the storage tank is drained through the inlet pipe of the storage tank. For this purpose, a special fitting (T-fitting) with an outlet valve must be mounted between the safety valve and the inlet pipe. Before discharge make sure the storage tank is disconnected from the power supply, close the inlet of cold water into the storage tank, open the hot water tap on the connected mixer tap and wait for the water in the storage tank to cool down. After discharging through the inlet pipe there is still some water left in the storage tank.

The external parts of the water heater may be cleaned with a soft cloth and mild cleaning fluids. Do not use cleaning fluids containing abrasives.

Regular preventive maintenance inspections ensure faultless performance and long life of your storage tank. Tank Warranty is subject to regular inspections of the wear of the protective anode. The period between individual regular inspections should not be longer than specified in the Guarantee statement. Inspection should be carried out by an authorised maintenance service provider recording the inspection on the Guarantee Certificate of the product. During the inspection, the wear of the corrosion protection anode will be inspected and any limestone built up in the interior of the storage tank, depending on the quality, quantity and temperature of used water, will be removed as required. After inspecting the storage tank, the maintenance service provider will also recommend the date of the next inspection according to the ascertained status.

Please do not try to fix any defects of the storage tank on your own. Call the nearest authorised service provider.

TECHNICAL CHARACTERISTICS OF THE APPLIANCE

Type		VLGM200 A1-1	VLGM200 A1-2	VLGM200 A2-1	VLGM300 B1-1	VLGM300 B1-2	VLGM300 B2-1	VLGM300 B3-1
Energy efficiency class ¹⁾		C	C	C	C	C	C	C
Standing loss S ²⁾	[W]	65,2	65,2	65,2	81,0	81,0	81,0	80,9
Storage volume	[l]	187,9	181,5	179,9	274,7	266,7	263,3	249,3
Rated pressure	[MPa (bar)]	0,6 (6); 0,9 (9); 1,0 (10)						
Weight/filled with water	[kg]	77 / 265	88 / 270	91 / 271	124 / 399	138 / 405	144 / 407	169 / 418
Anti-corrosion protection of tank		Enamelled/Mg anode						
Protection class		I						
Degree of protection		IP24						
Heat exchanger surface	[m ²]	1,05	1,05 + 0,75	2,0	1,46	1,46 + 0,95	3,0	4,0
Temperature of the heating medium in the heat exchanger	[°C]	< 95						
Insulation thickness	[mm]	60	60	60	67	67	67	67
Heat loss ²⁾	[kWh/24h]	1,6	1,6	1,6	1,9	1,9	1,9	1,9
Maximum diameter of sensors	[mm]	ø8						
Connected load	[W]	3000						
Voltage	[V~]	230						

¹⁾ Commission Regulation EU 812/2013

²⁾ Tested pursuant to EN 12897:2006

Type		VLGM200A	VLGM300B
Use profile		L	XL
Energy efficiency class ¹⁾		C	C
Energy efficiency of water heating (η_{wh}) ¹⁾	[%]	37,9	38,5
Annual electrical energy consumption ¹⁾	[kWh]	2702	4348
Daily electrical energy consumption ²⁾	[kWh]	12,496	20,429
Set thermostat temperature	[°C]	60	60
Smart value		0	
Storage volume	[l]	198,6	283,3
Mixed water at 40 °C V40 ²⁾	[l]	295	451
Rated pressure	[MPa (bar)]	0,6 (6) / 0,9 (9) / 1,0 (10)	
Weight/filled with water	[kg]	60/258	100/383
Anti-corrosion protection of tank		Enamelled/Mg anode	
Protection class		I	
Degree of protection		IP24	
Insulation thickness	[mm]	60	67
Heating time from 10 °C to 65 °C	[h]	4:20	6:10
Connected load	[W]	3000	
Voltage	[V~]	230	

¹⁾ directive 812/2013; EN 50440

²⁾ EN 50440

³⁾ Tested pursuant to SIST EN 60379:2005

WE RESERVE THE RIGHT TO ANY MODIFICATIONS NOT AFFECTING THE FUNCTIONALITY OF THE APPLIANCE.

The instructions for use are also available on our website <https://www.tikigroup.eu>.

