

VLG 200 - 400

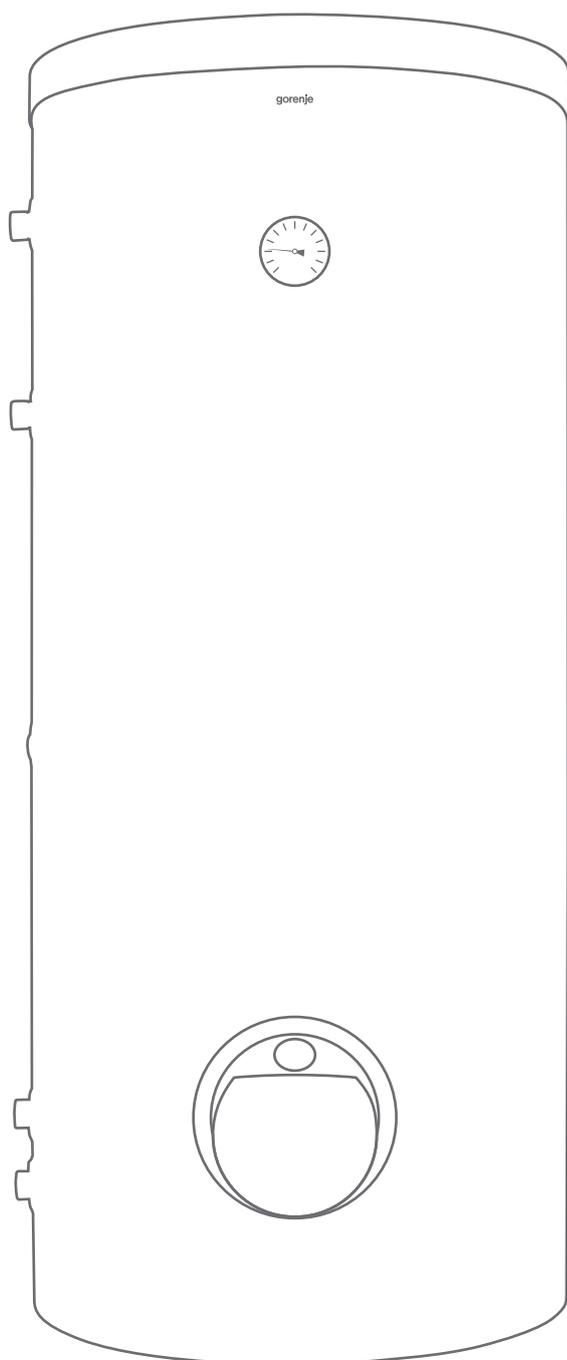
UPUTE ZA UPOTREBU

gorenje

INSTRUCTIONS FOR USE

HR/BIH

EN



UPOZORENJA

-  Uređaj mogu koristiti djeca starija od 8 godina te osobe sa smanjenim fizičkim, psihičkim ili mentalnim sposobnostima ili osobe s nedostatkom iskustva, odnosno znanja ukoliko su pod nadzorom ili su obrazovani glede upotrebe uređaja na siguran način, te da razumiju moguće opasnosti.
-  Djeca se ne smiju igrati s uređajem.
-  Djeca ne smiju bez nadzora čistiti i održavati uređaj.
-  Ugradnja mora biti provedena sukladno važećim propisima te prema uputama proizvođača. Istu mora provesti stručno osposobljen monter.
-  Na dovodnu cijev spremnika tople vode potrebno je ugraditi sigurnosni ventil s nominalnim tlakom 0,6 MPa (6 bara), 0,9 MPa (9bara) ili 1,0 MPa (10 bara) (gledaj natpisnu pločicu) koji sprječava povišenje tlaka u kotlu za više od 0,1 MPa (1 bara) iznad nominalnog tlaka.
-  Voda može kapati iz dovodnog otvora sigurnosnog ventila te iz toga razloga odvodni otvor mora biti otvoren na atmosferski tlak.
-  Ispuštanje sigurnosnog ventila mora biti namješteno prema dolje i to na području na kojem neće doći do zamrzavanja.
-  Za pravilan rad sigurnosnog ventila potrebno je periodično provoditi kontrole zbog uklanjanja vodenog kamena te provjere eventualne blokade sigurnosnog ventila.
-  Između spremnika tople vode i sigurnosnog ventila nije dozvoljena ugradnja zapornog ventila jer se time onemogućuje tlačno čuvanje spremnika!
-  Prije priključenja grijača na struju spremnik se obavezno mora napuniti vodom!
-  Spremnik je zaštićen dodatnim termičkim osiguračem u slučaju otkazivanja radnog termostata. U slučaju otkazivanja termostata voda u spremniku može sukladno sigurnosnim standardima doseći temperaturu i do 130 °C. Kod provedbe vodovodnih instalacija obavezno je uzeti u obzir da može doći do navedenih temperaturnih preopterećenja.
-  Ukoliko ćete spremnik isključiti iz električne mreže, vodu morate istočiti da ne bi došlo do opasnosti od zamrzavanja.
-  Voda iz spremnika se isprazni putem dovodne cijevi kotla. U tu svrhu se preporuča da se između sigurnosnog ventila i dovodne cijevi ugradi T-član s ispusnim ventilom.
-  Molimo da mogući kvar na spremniku ne popravljate sami, već da o njemu obavijestite najbližeg ovlaštenog servisera.

 Naši su proizvodi opremljeni ekološki besprijekornim i zdravstveno ispravnim neškodljivim komponentama te su proizvedeni tako da se u svojoj posljednjoj fazi trajanja mogu što jednostavnije rastaviti i reciklirati.

Reciklažom materijala smanjuju se količine otpada i potreba za proizvodnjom osnovnih materijala (naprimjer kovine), što iziskuje puno energije i uzrokuje emisije štetnih tvari. Postupcima reciklaže smanjuje se potrošnja prirodnih izvora budući da se otpadni dijelovi od plastike i kovine ponovno vraćaju u različite proizvodne procese.

Za više informacija o sustavu odlaganja otpadaka posjetite lokalni centar za odlaganje otpadaka ili trgovca kod kojeg ste kupili proizvod.

Cijenjeni kupci zahvaljujemo vam na kupovini našeg proizvoda. MOLIMO DA PRIJE UGRADNJE I PRVE UPOTREBE SPREMNIKA TOPLE VODE PAŽLJIVO PROČITATE UPUTE.

Spremnik je izrađen sukladno važećim standardima te službeno testiran, za istoga su izdani sigurnosni certifikati o elektromagnetskoj kompatibilnosti. Osnovne tehničke karakteristike spremnika navedene su na natpisnoj pločici nalijepljenoj na zaštitnom pokrovu.

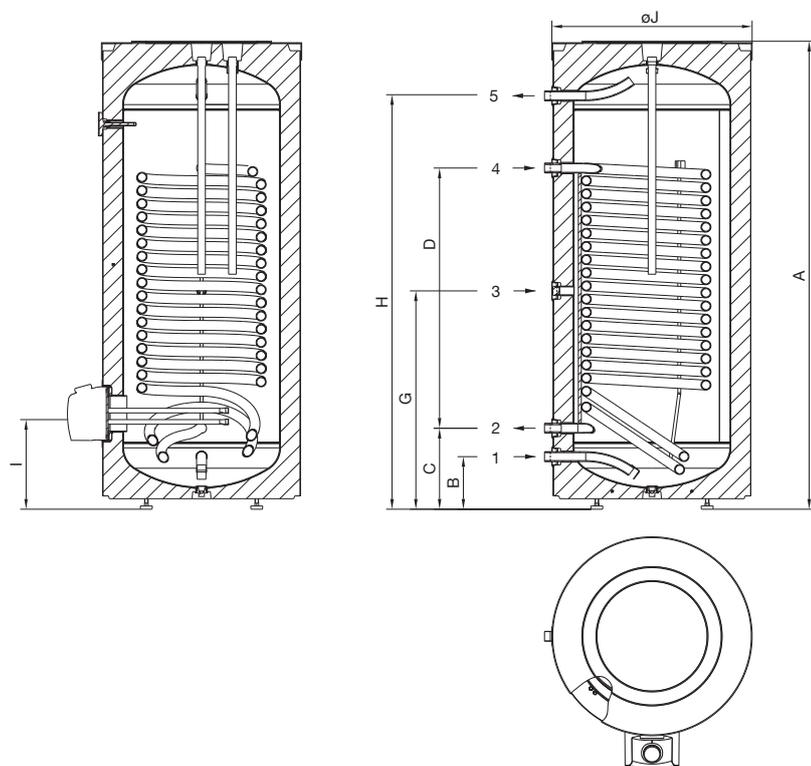
Spremnik tople vode na vodovodnu i električnu mrežu smije priključiti samo za to osposobljen stručnjak. Zahvate u njegovoj unutrašnjosti zbog popravaka, uklanjanja vodenog kamenca i provjere ili zamijene antikorozijske zaštitne anode može provoditi samo ovlaštenu servisera.

Spremnik tople vode izrađen je na način da se putem prijenosnika topline mogu koristiti sljedeći izvori grijanja, i to:

- kotao centralnog grijanja;
- sunčeva energija;
- toplinska crpka.

UGRADNJA

Spremnik tople vode postavite u suh prostor u kojem ne dolazi do zamrzavanja, po mogućnosti u blizini drugih izvora energije (npr. u ložionicu/kotlovnicu). Prije montaže zašarafite podesive nožice koje su priložene uz spremnik. Spremnik izravnajte uzdužno i poprečno vrteći pritom podesive nožice.

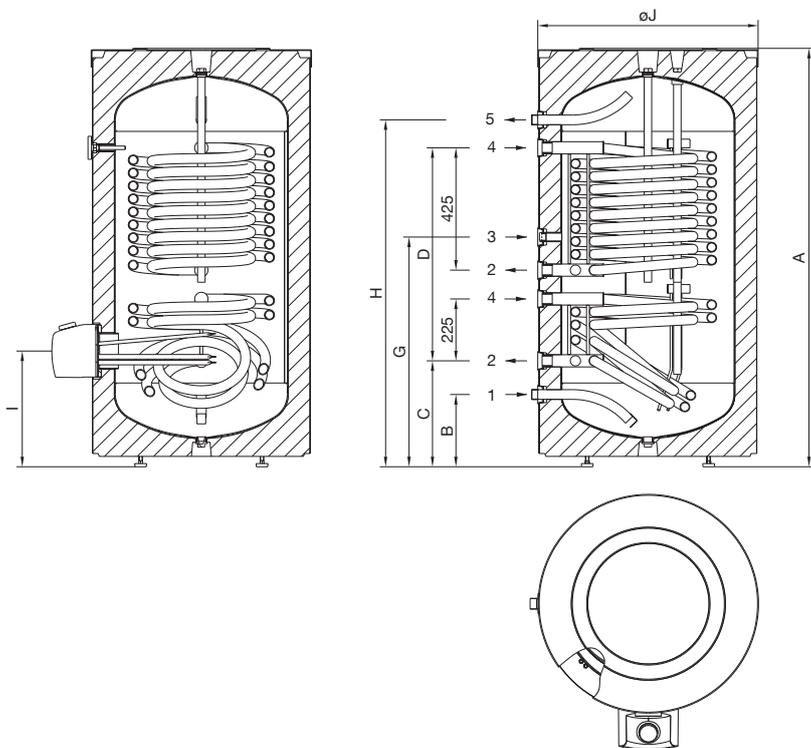


LEGENDA

- 1 Dotok hladne vode
- 2 Izlazak medija iz prijenosnika topline
- 3 Cirkulacijski vod
- 4 Ulazak medija u prijenosnik topline
- 5 Otjecanje tople vode

	VLG 200 A1-1G	VLG 200 A3-1G	VLG 300 B1-1G	VLG 300 B2-1G	VLG 300 C1-1G	VLG 400 C1-1G
A	1535	1675	1590	1590	1445	1915
B	180	220	175	175	250	250
C	300	340	270	270	370	370
D	880	1015	890	890	610	1070
G	780	945	740	740	800	990
H	1355	1435	1410	1410	1205	1675
I	365	405	320	340	400	400
J	580	680	680	680	760	760
1	G 3/4	G 3/4	G1	G1	G1	G1
2	G1	G1	G1	G 5/4	G 5/4	G 5/4
3	G 3/4					
4	G1	G1	G1	G 5/4	G 5/4	G 5/4
5	G 3/4	G 3/4	G1	G1	G1	G1

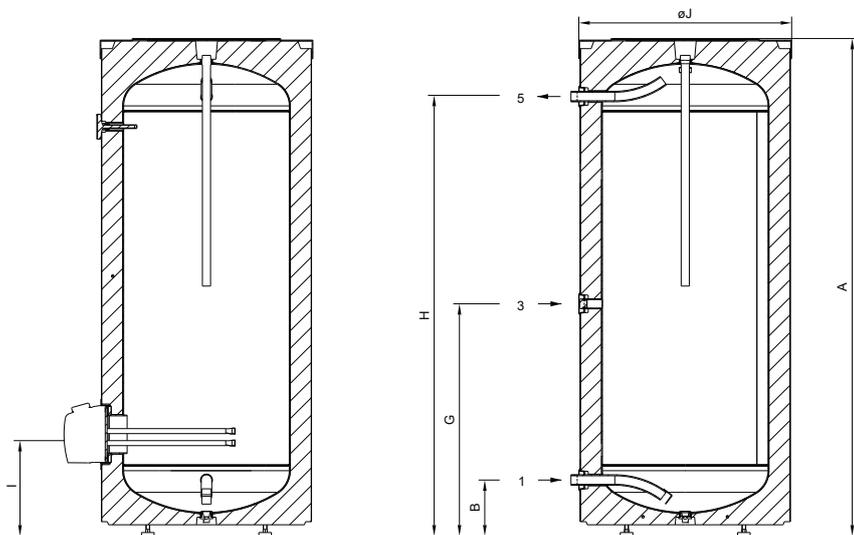
Sl. 1: Priključne i montažne mjere spremnika (mm)

**LEGENDA**

- 1 Dotok hladne vode
- 2 Izlazak medija iz prijenosnika topline
- 3 Cirkulacijski vod
- 4 Ulazak medija u prijenosnik topline
- 5 Otjecanje tople vode

VLG 300 C1-2G	
A	1445
B	250
C	370
D	740
G	800
H	1205
I	400
J	760
1	G1
2	G5/4
3	G 3/4
4	G5/4
5	G1

Sl. 2: Priključne i montažne mjere spremnika (mm)



	VLG 200 A-G	VLG 300 B-G	VLG 400 B-G
A [mm]	1535	1590	1915
B [mm]	180	175	250
G [mm]	780	740	990
H [mm]	1355	1410	1675
I [mm]	365	320	400
J [mm]	580	680	760
1	G 3/4	G1	G1
3	G 3/4	G 3/4	G 3/4
5	G 3/4	G1	G1

LEGENDA

- 1 Dotok hladne vode
- 3 Cirkulacijski vod
- 5 Otjecanje tople vode

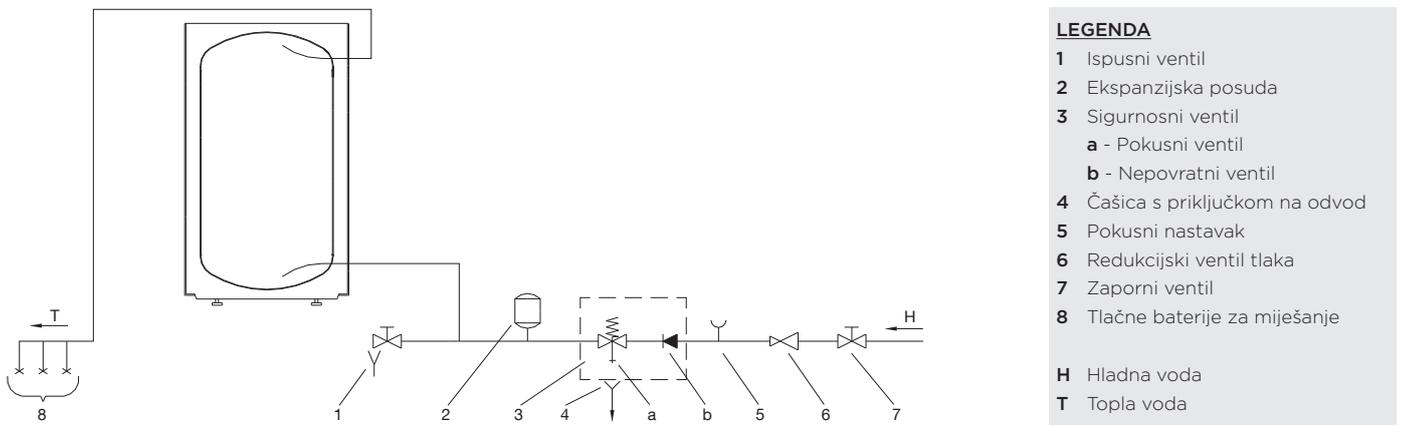
PRIKLJUČENJE NA VODOVODNU MREŽU

Priključenje na vodovodnu mrežu napravite prema uputama za priključenje iz prethodnog poglavlja.

Na dovodnu cijev, zbog jamčenja sigurnosti kod rada spremnika potrebno je ugraditi sigurnosni ventil ili sigurnosnu grupu koja sprječava povećanje tlaka u kotlu za više od 0,1 MPa (1 bara) iznad nominalnog tlaka. Odvodni otvor na sigurnosnom ventilu obavezno mora imati izlaz na atmosferski tlak. Kod grijanja vode u spremniku tlak vode u kotlu se povećava do granice koja je namještena na sigurnosnom ventilu. Budući da je povratak vode u vodovodnu mrežu spriječen, može doći do kapanja vode iz odvodnog otvora sigurnosnog ventila. Vodu koja kapa možete provesti u odvod putem prihvatnog nastavka koji namjestite ispod sigurnosnog ventila. Odvodna cijev namještena ispod ispusta sigurnosnog ventila mora biti namještena u smjeru ravno prema dolje te u okolini u kojoj ne dolazi do zamrzavanja.

U slučaju da želite izbjeći vodu koja kapa iz sigurnosnog ventila, morate na dovodnu cijev spremnika ugraditi ekspanzijsku posudu za sanitarnu vodu volumena najmanje 5 % volumena spremnika.

Za pravilan rad sigurnosnog ventila potrebno je periodički provoditi kontrole radi uklanjanja vodenog kamenca te provjere eventualne blokade sigurnosnog ventila. Prilikom kontrole morate pomakom ručke ili odšaraflijanjem matice ventila (ovisno od tipa ventila) otvoriti istjecanje iz sigurnosnog ventila. Kod toga kroz sapnicu ventila za istjecanje mora isteći voda, što je znak da je ventil u odličnom stanju.



Sl. 3: Zatvoreni (tlačni) sistem

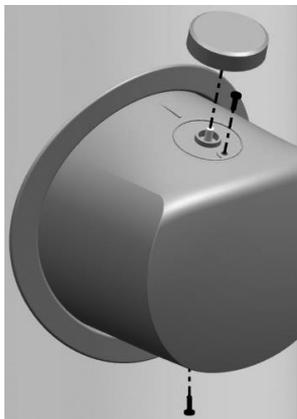
Spremnik možete priključiti na kućnu vodovodnu mrežu bez regulatora tlaka ako je tlak u mreži niži od nominalnog tlaka (gledaj natpisnu tablicu). U slučaju da je tlak u mreži viši od nominalnog, potrebno je ugraditi regulator tlaka.

PRIKLJUČENJE NA ELEKTRIČNU MREŽU

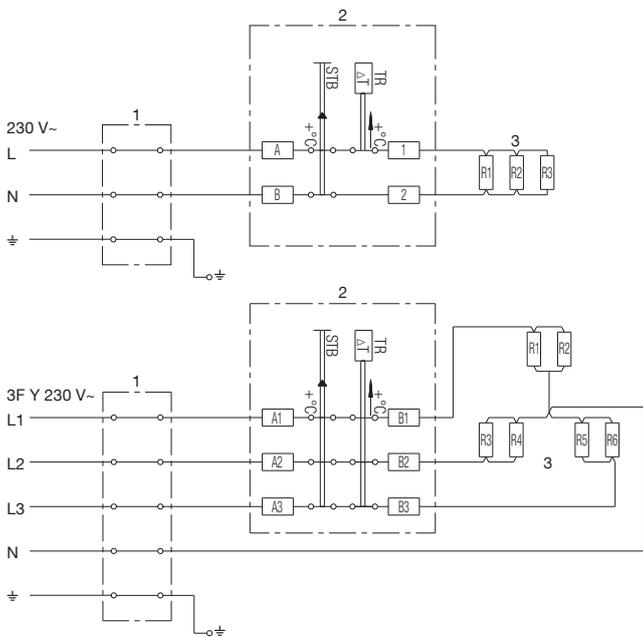
Prije priključenja u električnu mrežu potrebno je u spremnik ugraditi priključnu uzicu minimalnog presjeka barem 1,5 mm² (HO5VV-F 3G 1,5 mm²) za 3kW grijač, u slučaju 6kW grijača (HO5VV-F 5G 2,5 mm²), zato morate skinuti zaštitni poklopac.

To učinite na način da prvo izvučete gumb koji je umetnut na os termostata te odšarafite vijak.

Priprema za odvajanje svih polova mora biti ugrađena u elektroinstalaciji sukladno nacionalnim instalacijskim propisima.



Sl. 4: Uklanjanje pokrova grijača



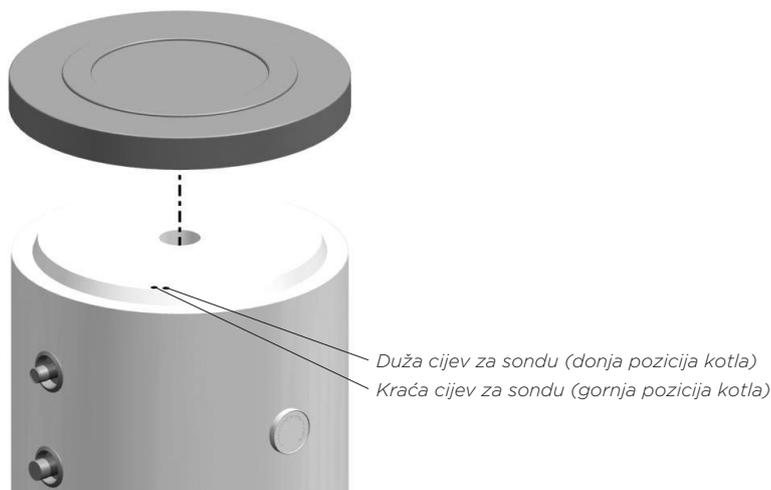
Sl. 5: Sheme električkih instalacija

LEGENDA

- 1 Priključna spajalica
- 2 Termostat i dvopolni odnosno trolpolni toplinski osigurač
- 3 Grijač
- L Fazni vodič
- L1 Fazni vodič
- L2 Fazni vodič
- L3 Fazni vodič
- N Neutralni vodič
- ⊕ Zaštitni vodič

NAMIJEŠTANJE SOND I

Na gornjoj strani spremnika ispod pokrova postavljene su dvije cijevi za sonde gdje se mogu umetnuti sonde za regulaciju sistemske povezanosti spremnika tople vode i drugih izvora grijanja. Maksimalni promjer sonde je 8 mm.



SI. 6: Namještanje sondi

UPOZORENJE: Prije svakog zahvata u unutrašnjost spremnika, isti obavezno morate isključiti iz električne mreže! Zahvat može provesti samo osposobljen stručnjak!

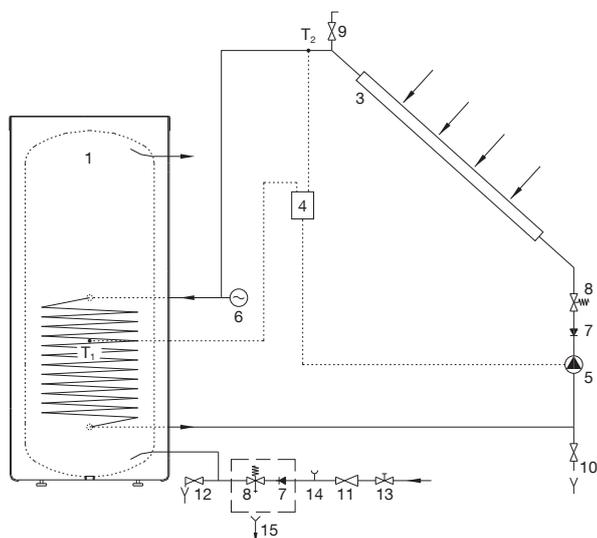
PRIKLJUČENJE NA DRUGE IZVORE GRIJANJA

Spremnik tople vode omogućava pripremu sanitarne vode putem izmjenjivača topline s različitim izvorima energije (npr. centralno grijanje, sunčeva energija...).

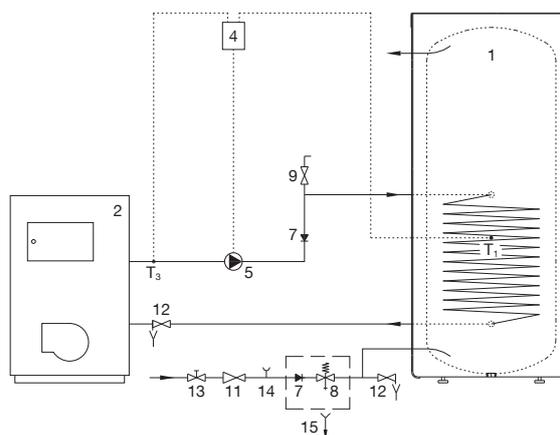
Na skicama su prikazani primjeri spajanja spremnika tople vode s različitim izvorima grijanja.

LEGENDA

- | | |
|--------------------------------------------------------|--------------------------------------------|
| 1 Spremnik tople vode | 8 Sigurnosni ventil |
| 2 Kotao centralnog grijanja | 9 Ventil za odzračivanje |
| 3 Solarni kolektor | 10 Ventil za punjenje i pražnjenje sistema |
| 4 Diferencijalni termostat sa sondama (T1, T2, T3, T4) | 11 Redukcijski ventil |
| 5 Cirkulacijska crpka | 12 Ispusni ventil |
| 6 Ekspanzijska posuda | 13 Zaporni ventil |
| 7 Nepovratni ventil | 14 Pokusni nastavak |
| | 15 Čašica s priključkom na odvod |



SI. 7: Spajanje sa solarnim konektorima



SI. 8: Spajanje s kotlom centralnog grijanja

UPOTREBA I ODRŽAVANJE

Nakon priključenja na vodovodnu i električnu mrežu te druge izvore grijanja spremnik tople vode je spreman za upotrebu. Obično je osnovni izvor grijanja sanitarne vode centralno grijanje ili sunčeva energija, pri čemu je regulacija grijanja tople vode provedena u sistemu grijanja.

Ugrađen električni grijač namijenjen je samo za dodatno grijanje vode. Temperaturu regulirate vrtnjom gumba u smjeru kazaljke na satu na željenu temperaturnu razinu.

- * - Zaštita od zamrzavanja, temperatura približno 10 °C
- ☞ - Temperatura vode približno 35 °C.
- eco - Temperatura vode približno 55 °C.
- ☺ - Temperatura vode približno 85 °C.

Termometar prikazuje temperaturu na mjestu ugradnje, dok se vrtnjom gumba na termostatu regulira temperatura vode u donjem dijelu spremnika. Zato može doći do razlika između te dvije temperature.

Kada postoji opasnost da dođe do zamrzavanja vode u spremniku, istu morate iz njega istočiti. Vodu iz spremnika ispraznite kroz dolaznu cijev spremnika. U tu svrhu se preporuča da se između sigurnosnog ventila i dovodne cijevi ugradi T-član s ispusnim ventilom. Prije pražnjenja spremnik treba isključiti iz električne mreže, zatvoriti dovod hladne vode u spremnik, otvoriti ručicu za toplu vodu na priključenoj bateriji za miješanje te pričekati da se voda u spremniku ohladi. Nakon što se voda isprazni putem dovodne cijevi, u spremniku ostane manja količina vode.

Vanjski dio spremnika čistite mekanom krpom i blagim tekućim sredstvima za čišćenje. Ne koristite sredstva za čišćenje koja sadrže alkohol ili abrazivna sredstva.

Redovitim servisima osigurat ćete besprijekoran rad i dugi životni vijek spremnika. Garancija u slučaju hrđanja kotla vrijedi samo ako ste provodili propisane redovite preglede istrošenosti zaštitne anode. Razdoblje među pojedinim redovitim pregledima ne smije biti duže nego što je to navedeno u garancijskoj izvaji. Pregledi moraju biti izvedeni od strane ovlaštenog servisera koji vam pregled evidentira u garancijskom listu proizvoda. Prilikom pregleda serviser provjeri istrošenost antikorozivne zaštitne anode i prema potrebi očisti kamenac koji se s obzirom na kvalitetu, količinu i temperaturu potrošene vode nakupi u unutrašnjosti spremnika. Serviser će vam nakon pregleda spremnika, s obzirom na utvrđeno stanje, preporučiti i datum sljedeće kontrole.

Molimo da mogući kvar na spremniku ne popravljate sami već da o njemu obavijestite najbližeg ovlaštenog servisera.

TEHNIČKA SVOJSTVA UREĐAJA

Tip*		VLG 200 A1-1G	VLG 200 A3-1G	VLG 300 B1-1G	VLG 300 B2-1G	VLG 300 C1-1G	VLG 300 C1-2G	VLG 400 C1-1G
Razred energetske učinkovitosti ¹⁾		C	B	C	C	B	B	B
Vlastiti gubitak S ²⁾	[W]	70,8	58,3	88,8	88,8	68	68	71,9
Korisni volumen	[l]	184	190,3	275,5	262	283,7	283,7	396
Nominalni tlak	[MPa (bar)]	0,6 (6); 0,9 (9); 1,0 (10)						
Masa/napunjen vodom	[kg]	97 / 281	115 / 305	140 / 416	165 / 427	165/449	170/454	230/626
Antikorozijska zaštita kotla Emajlirano/Mg anoda		• / •	• / •	• / •	• / •	• / •	• / •	• / •
Razred zaštite		I						
Stupanj zaštite		IP24						
Površina prijenosnika topline	[m ²]	2,0	2,3	2,5	4,0	3,45	1,05 + 2,4	6,15
Temperatura grijaćeg medija u prijenosniku topline	[°C]	< 95						
Debljina izolacije	[mm]	60	110	67	67	75	75	75
Toplinski gubici ²⁾	[kWh/24h]	1,7	1,4	2,1	2,1	1,6	1,6	1,7
Maksimalni promjer sonde	[mm]	ø8						

* Ako u tipskoj oznaci nema slova G, aparat je bez električnog grijača

¹⁾ Uredba komisije EU 812/2013

²⁾ Testirano po EN 12897:2006

Model		VLG 200 A1-1G3	VLG 200 A3-1G3	VLG 300 B1-1G3	VLG 300 B2-1G3	VLG 300 B1-1G6	VLG 300 B2-1G6	
Potrošnja struje	[W]	3000				6000		
Napon	[V-]	230				400		

Model		VLG 300 C1-1G3	VLG 300 C1-2G3	VLG 400 C1-1G3	VLG 300 C1-1G6	VLG 300 C1-2G6	VLG 400 C1-1G6	
Potrošnja struje	[W]	3000			6000			
Napon	[V-]	230			400			

Tipovi		VLG 200 A-G	VLG 300 B-G	VLG 400 C-G
Profil uporabe		XL	XL	XL
Razred energetske učinkovitosti ¹⁾		C	C	C
Energetska učinkovitost grijanja vode η _{wh} ¹⁾	[%]	38,1	38,0	38,1
Godišnja potrošnja električne energije ¹⁾	[kWh]	4399	4412	4400
Dnevna potrošnja električne energije ²⁾	[kWh]	20,317	20,397	20,328
Podešena temperatura termostata		"eco"	"eco"	"eco"
Moguće sigurnosne mjere (sastav, postavljanje, održavanje)		Kod tlačnog priključenja obavezna uporaba sigurnosnog ventila.		
Vrijednost smart		0	0	0
Zapremina	[l]	203	319	449
Miješana voda na 40°C V40 ²⁾	[l]	305	508	712
Nominalni tlak	[MPa (bar)]	0,6 (6); 0,9 (9); 1,0 (10)		
Masa/napunjen vodom	[kg]	63/265	97/397	230/626
Antikorozijska zaštita kotla Emajlirano/Mg anoda		• / •	• / •	• / •
Razred zaštite		I		
Stupanj zaštite		IP24		
Debljina izolacije	[mm]	60	67	75
Toplinski gubici ³⁾	[kWh/24h]	1,7	2,1	1,7
Vrijeme zagrijavanja od 10 °C do 65 °C	[h]	4 ²⁵⁾	6 ⁵⁶⁾	4 ⁵³⁾

¹⁾ direktiva 812/2013; EN 50440

²⁾ EN 50440

³⁾ Testirano po SIST EN 60379:2005

Model		VLG 200 A-G3	VLG 300 B-G3	VLG 400 C-G6
Potrošnja struje	[W]	3000		6000
Napon	[V-]	230		400

PRIDRŽAVAMO PRAVA NA PROMJENE KOJE NE UTJEČU NA FUNKCIONALNOST APARATA.

Upute za korištenje dostupne su na našim web stranicama <http://www.gorenje.com>.

WARNINGS

-  The appliance may be used by children aged 8 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 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.
-  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.

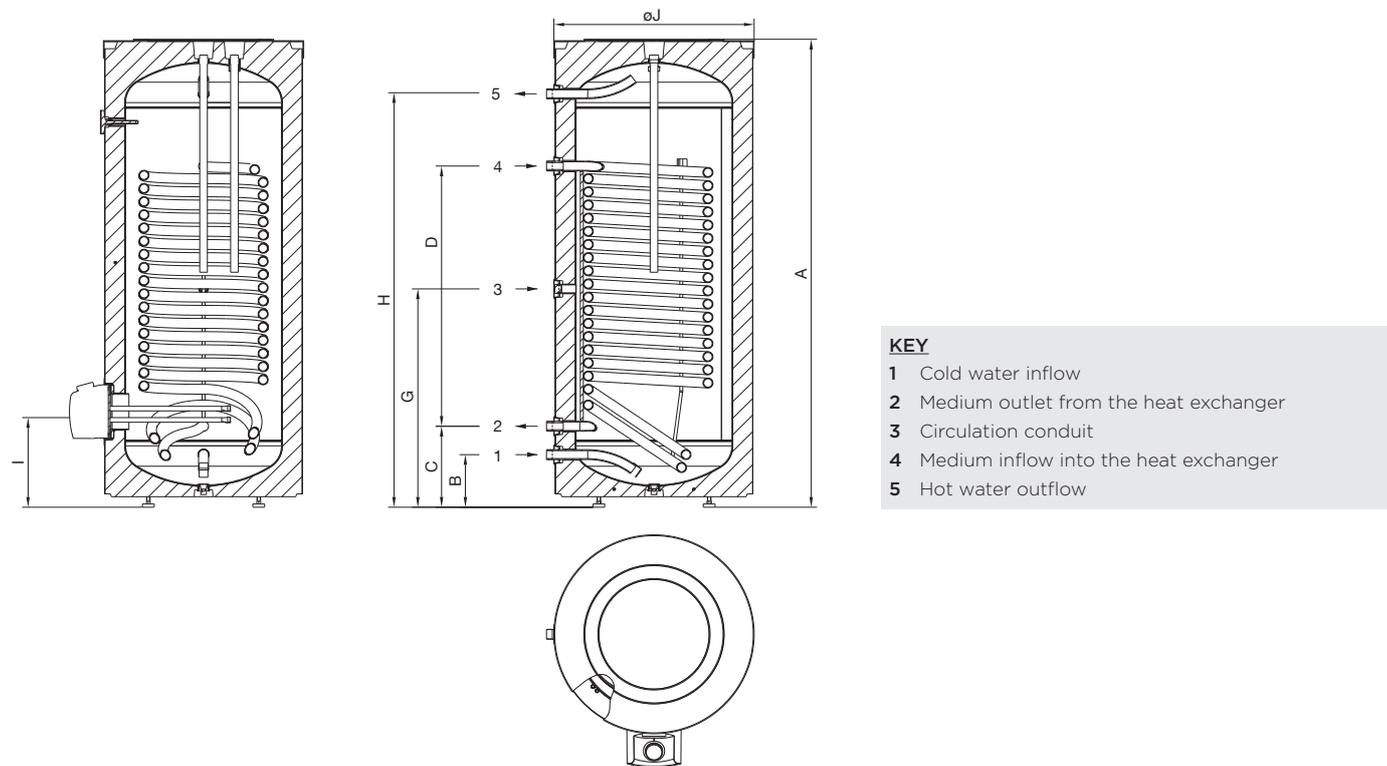
The connection of the storage tank to the plumbing and power networks must be carried out by qualified staff only. All repairs and maintenance work in the interior of the storage tank, as well as limestone removal or testing or replacement of the corrosion protection anode, may only be carried out by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

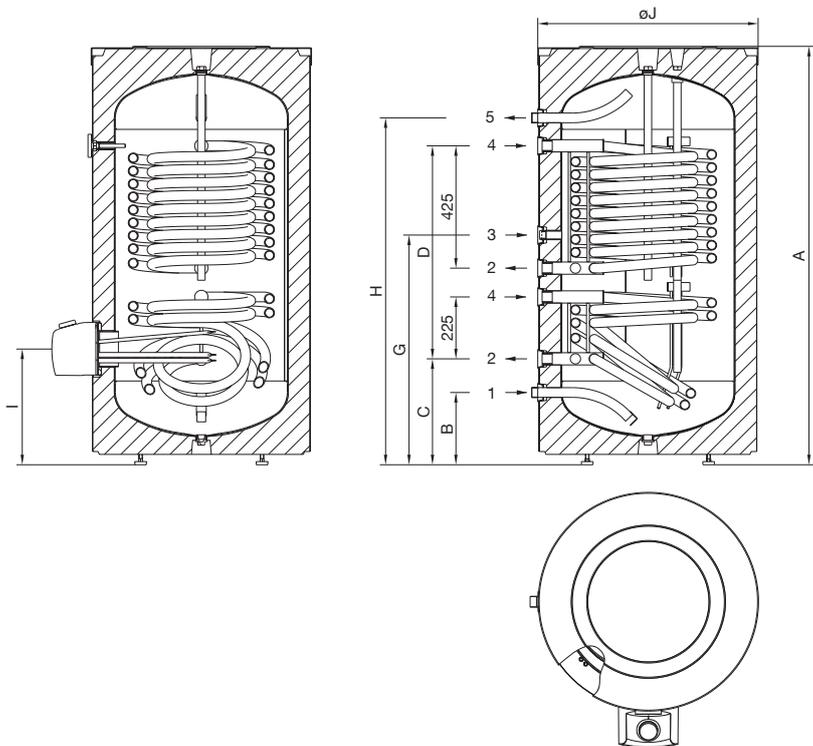
INSTALLATION

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.



	VLG 200 A1-1G	VLG 200 A3-1G	VLG 300 B1-1G	VLG 300 B2-1G	VLG 300 C1-1G	VLG 400 C1-1G
A	1535	1675	1590	1590	1445	1915
B	180	220	175	175	250	250
C	300	340	270	270	370	370
D	880	1015	890	890	610	1070
G	780	945	740	740	800	990
H	1355	1435	1410	1410	1205	1675
I	365	405	320	340	400	400
J	580	680	680	680	760	760
1	G 3/4	G 3/4	G1	G1	G1	G1
2	G1	G1	G1	G 5/4	G 5/4	G 5/4
3	G 3/4					
4	G1	G1	G1	G 5/4	G 5/4	G 5/4
5	G 3/4	G 3/4	G1	G1	G1	G1

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

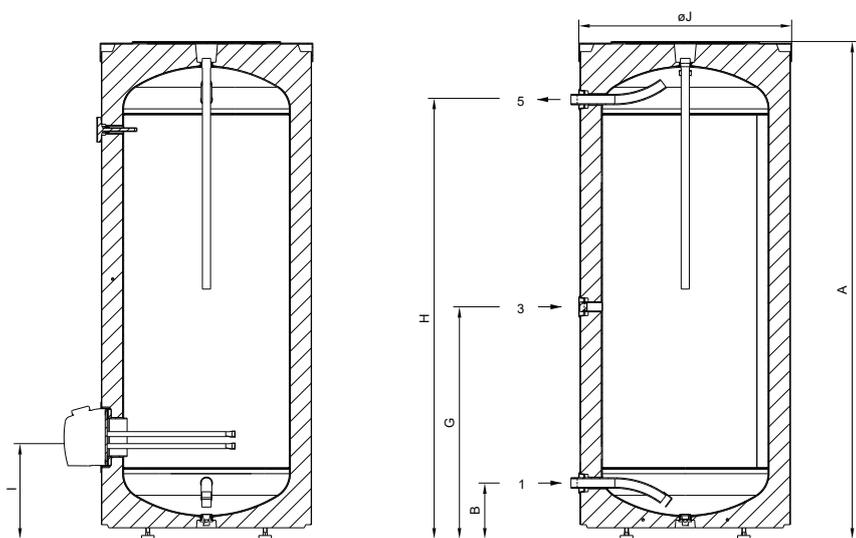


KEY

- 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

VLG 300 C1-2G	
A	1445
B	250
C	370
D	740
G	800
H	1205
I	400
J	760
1	G1
2	G5/4
3	G 3/4
4	G5/4
5	G1

Image 2: Connection and installation dimensions of the storage tank [mm]



	VLG 200 A-G	VLG 300 B-G	VLG 400 B-G
A [mm]	1535	1590	1915
B [mm]	180	175	250
G [mm]	780	740	990
H [mm]	1355	1410	1675
I [mm]	365	320	400
J [mm]	580	680	760
1	G 3/4	G1	G1
3	G 3/4	G 3/4	G 3/4
5	G 3/4	G1	G1

KEY

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

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.

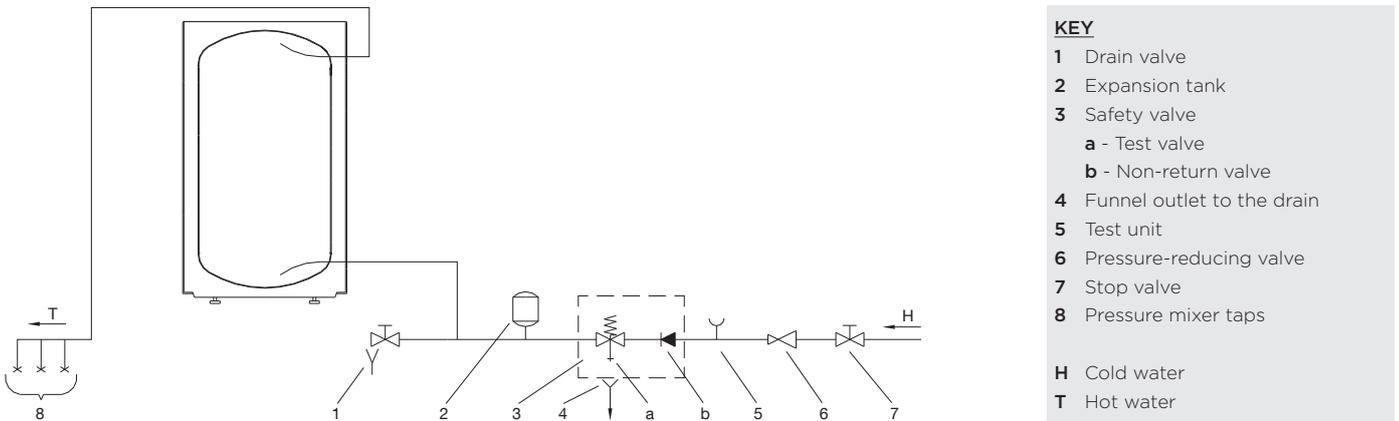


Image 3: Closed (pressure) system

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

Before connecting the storage tank to the power supply network, a connection cable with a minimum cross-section of at least 1.5 mm² (H05VV-F 3G 1.5 mm²) for a 3kW-heating element and 2.5 mm² for a 6kW-heating element (H05VV-F 5G 2,5 mm²) must be installed in it and the protection cover must be removed.

This is done by pulling out the knob on the thermostat axis and unscrewing two screws.

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

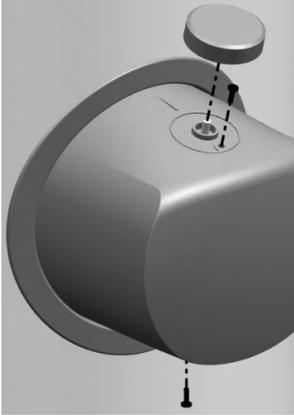


Image 4: Removal of heater cover

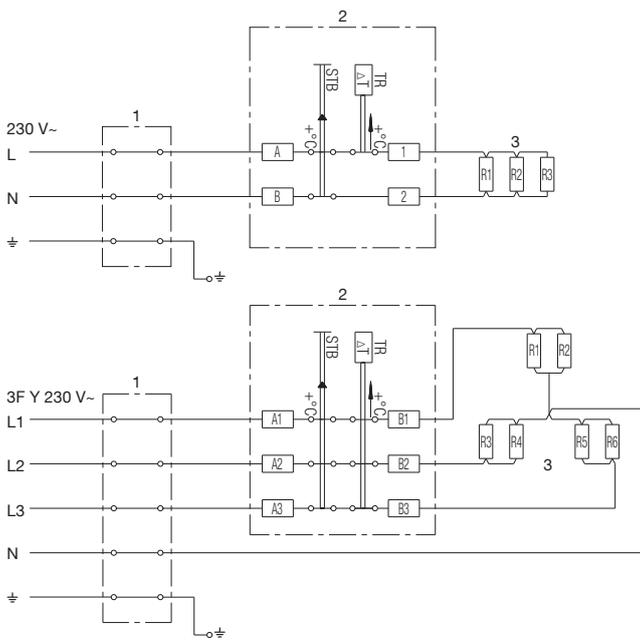


Image 5: Schemes of electric installations

KEY

- 1** Connection terminal
- 2** A thermostat and a bipolar or tripolar thermal cut-out
- 3** Heater
- L** Live conductor
- L1** Live conductor
- L2** Live conductor
- L3** Live conductor
- N** Neutral conductor
- ⊕** Earthing conductor

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.

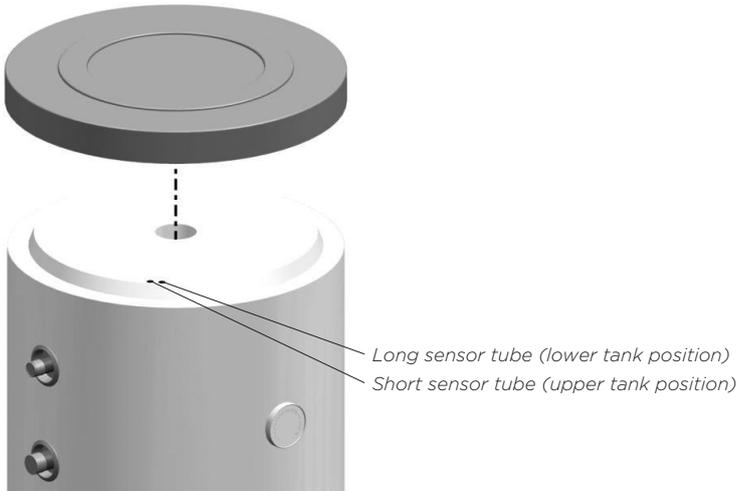


Image 6: Installation of sensors

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 |

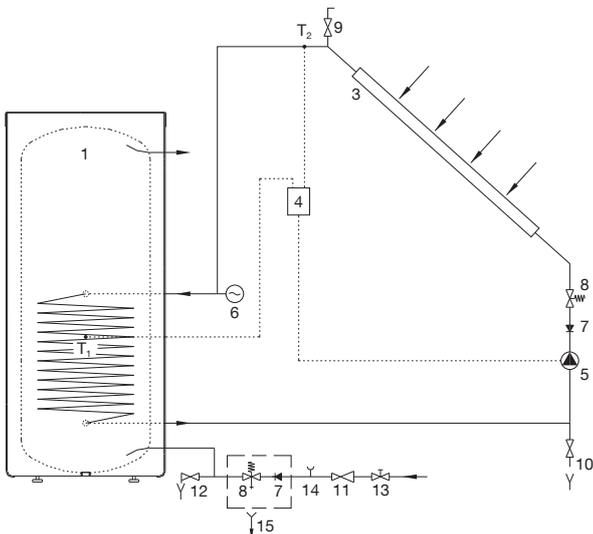


Image 7: Connection to solar panels

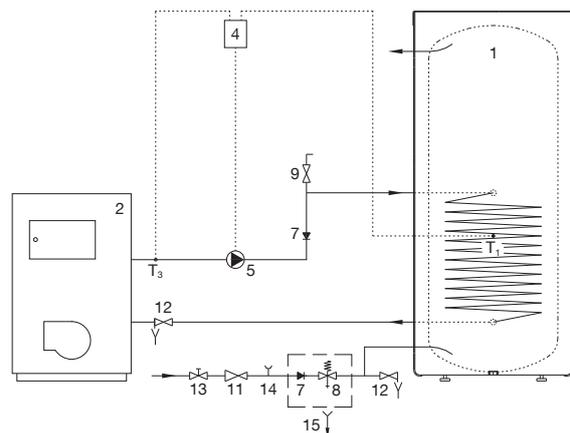


Image 8: Connection to the central heating hot-water system

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 electric heating element is designed for backup heating of water only. The temperature is set by turning the knob in a clockwise direction to reach the desired temperature level.

* - Protection against freezing, temperature around 10 °C.

☞ - Water temperature around 35 °C.

eco - Water temperature around 55 °C.

☺ - Water temperature around 85 °C.

The thermometer shows the in-situ temperature, whereas by turning the knob on the thermostat the water temperature in the lower part of the storage tank is set. Thus, these two temperatures may vary.

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 alcohol or 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 *		VLG 200 A1-1G	VLG 200 A3-1G	VLG 300 B1-1G	VLG 300 B2-1G	VLG 300 C1-1G	VLG 300 C1-2G	VLG 400 C1-1G
Energy efficiency class ¹⁾		C	B	C	C	B	B	B
Standing loss S ²⁾	[W]	70,8	58,3	88,8	88,8	68	68	71,9
Storage volume	[l]	184	190,3	275,5	262	283,7	283,7	396
Rated pressure	[MPa (bar)]	0,6 (6); 0,9 (9); 1,0 (10)						
Weight/filled with water	[kg]	97 / 281	115 / 305	140 / 416	165 / 427	165/449	170/454	230/626
Anti-corrosion protection of tank Enamelled/Mg anode		• / •	• / •	• / •	• / •	• / •	• / •	• / •
Protection class		I						
Degree of protection		IP24						
Heat exchanger surface	[m ²]	2,0	2,3	2,5	4,0	3,45	1,05 + 2,4	6,15
Temperature of the heating medium in the heat exchanger	[°C]	< 95						
Insulation thickness	[mm]	60	110	67	67	75	75	75
Heat loss ²⁾	[kWh/24h]	1,7	1,4	2,1	2,1	1,6	1,6	1,7
Maximum diameter of sensors	[mm]	ø8						

* If there is no letter G in the type designation, the appliance does not include the electric heater.

¹⁾ Commission Regulation EU 812/2013

²⁾ Tested pursuant to EN 12897:2006

Model		VLG 200 A1-1G3	VLG 200 A3-1G3	VLG 300 B1-1G3	VLG 300 B2-1G3	VLG 300 B1-1G6	VLG 300 B2-1G6	
Connected load	[W]	3000				6000		
Voltage	[V-]	230				400		

Model		VLG 300 C1-1G3	VLG 300 C1-2G3	VLG 400 C1-1G3	VLG 300 C1-1G6	VLG 300 C1-2G6	VLG 400 C1-1G6	
Connected load	[W]	3000			6000			
Voltage	[V-]	230			400			

Type		VLG 200 A-G	VLG 300 B-G	VLG 400 C-G
Use profile		XL	XL	XL
Energy efficiency class ¹⁾		C	C	C
Energy efficiency of water heating η_{wh} ¹⁾	[%]	38,1	38,0	38,1
Annual electrical energy consumption ¹⁾	[kWh]	4399	4412	4400
Daily electrical energy consumption ²⁾	[kWh]	20,317	20,397	20,328
Set thermostat temperature		"eco"	"eco"	"eco"
Potential safety measures (assembly, installation, maintenance)		Compulsory use of a safety valve with the pressure connection.		
Smart value		0	0	0
Storage volume	[l]	203	319	449
Mixed water at 40 °C V40 2)	[l]	305	508	712
Rated pressure	[MPa (bar)]	0,6 (6); 0,9 (9); 1,0 (10)		
Weight/filled with water	[kg]	63/265	97/397	230/626
Anti-corrosion protection of tank Enamelled/Mg anode		• / •	• / •	• / •
Protection class		I		
Degree of protection		IP24		
Insulation thickness	[mm]	60	67	75
Heat loss ³⁾	[kWh/24h]	1,7	2,1	1,7
Heating time from 10 °C to 65 °C	[h]	4 ²⁵⁾	6 ⁵⁶⁾	4 ⁵³⁾

¹⁾ directive 812/2013; EN 50440

²⁾ EN 50440

³⁾ Tested pursuant to SIST EN 60379:2005

Model		VLG 200 A-G3	VLG 300 B-G3	VLG 400 C-G6
Connected load	[W]	3000		6000
Voltage	[V-]	230		400

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

The instructions for use are also available on our website <http://www.gorenje.com>.

