

VLG 200 - 400

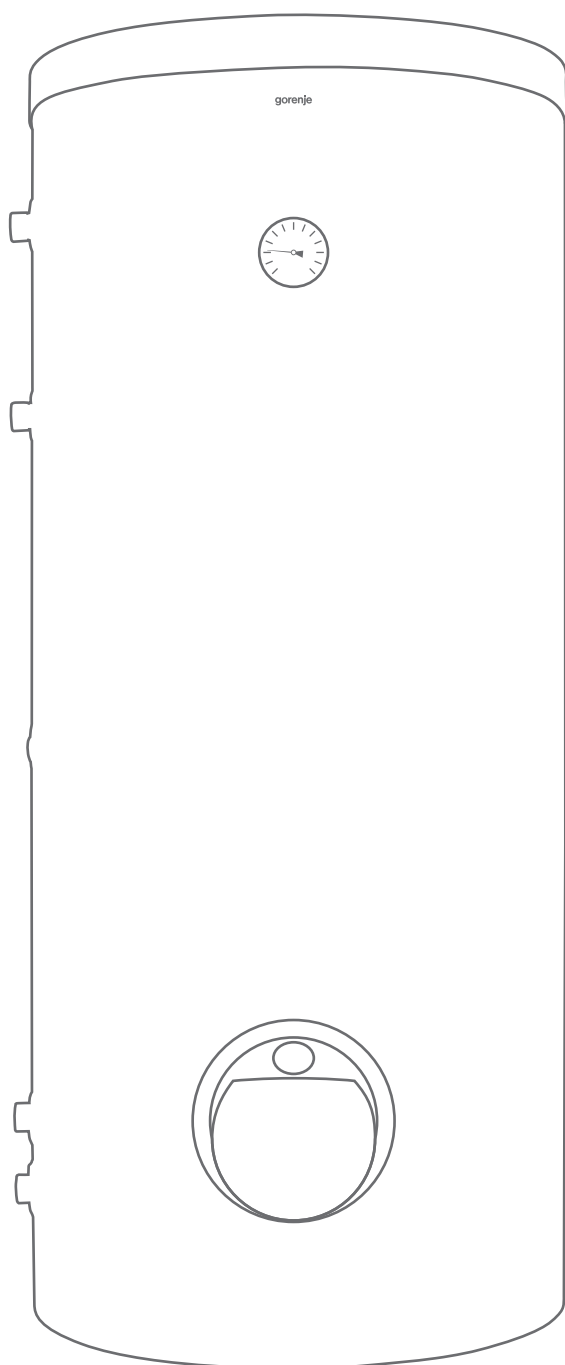
NAVODILO ZA UPORABO

gorenje

INSTRUCTIONS FOR USE















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OPOZORILA

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-  Aparat lahko uporabljajo otroci stari 8 let in starejši in osebe z zmanjšanimi fizičnimi, čutnimi ali mentalnimi sposobnostmi ali s pomanjkanjem izkušenj oz. znanjem če so pod nadzorom ali poučeni glede uporabe aparata na varen način in da razumejo možne nevarnosti.
-  Otroci se ne smejo igrati z aparatom.
-  Čiščenje in vzdrževanje aparata ne smejo izvajati otroci brez nadzora.
-  Vgradnja mora biti izvedena v skladu z veljavnimi predpisi in po navodilih proizvajalca. Izvesti jo mora strokovno usposobljen monter.
-  Na dotočno cev hranilnika tople vode je potrebno obvezno vgraditi varnostni ventil z nazivnim tlakom 0,6 MPa (6 bar), 0,9 MPa (9 bar) ali 1,0 MPa (10 bar) (glejte napisno tablico), ki preprečuje zvišanje tlaka v kotlu za več kot 0,1 MPa (1 bar) nad nazivnim.
-  Voda lahko kaplja iz odtočne odprtine varnostnega ventila zato mora biti odtočna odprtina odprta na atmosferski tlak.
-  Izpust varnostnega ventila mora biti nameščen v smeri navzdol in v območju, kjer ne zamrzuje.
-  Za pravilno delovanje varnostnega ventila je potrebno periodično izvajati kontrole, da se odstrani vodni kamen in se preveri, da varnostni ventil ni blokiran.
-  Med hranilnik tople vode in varnostni ventil ni dovoljeno vgraditi zapornega ventila, ker s tem onemogočite tlačno varovanje hranilnika!
-  Pred električno priključitvijo grelca je potrebno hranilnik obvezno najprej napolniti z vodo!
-  Hranilnik je zaščiten za primer odpovedi delovnega termostata z dodatno toplotno varovalko. V primeru odpovedi termostata lahko v skladu z varnostnimi standardi voda v hranilniku doseže temperaturo tudi do 130 °C. Pri izvedbi vodovodnih inštalacij je obvezno potrebno upoštevati, da lahko pride do navedenih temperaturnih preobremenitev.
-  Če boste hranilnik iz električnega omrežja izklopili, morate ob nevarnosti zamrznitve vodo iz njega iztočiti.
-  Voda iz hranilnika se izprazni skozi dotočno cev kotla. V ta namen je priporočljivo med varnostni ventil in dotočno cev namestiti poseben T-člen z izpustnim ventilom.
-  Prosimo Vas, da morebitnih okvar na hranilniku ne popravljate sami, ampak o njih obvestite najbližjo pooblaščenno servisno službo.

 Naši izdelki so opremljeni z okolju in zdravju neškodljivimi komponentami in so izdelani tako, da jih lahko v njihovi zadnji življenjski fazi čim bolj enostavno razstavimo in recikliramo.

Z reciklažo materialov zmanjšujemo količine odpadkov in zmanjšamo potrebo po proizvodnji osnovnih materialov (na primer kovine), ki zahteva ogromno energije ter povzroča izpuste škodljivih snovi. Z reciklažnimi postopki tako zmanjšujemo porabo naravnih virov, saj lahko odpadne dele iz plastike in kovin ponovno vrnemo v različne proizvodne procese.

Za več informacij o sistemu odlaganja odpadkov obiščite svoj center za odlaganje odpadkov, ali trgovca, pri katerem je bil izdelek kupljen.

Cenjeni kupec, zahvaljujemo se Vam za nakup našega izdelka. PROSIMO, DA PRED VGRADNJO IN PRVO UPORABO HRANILNIKA TOPLE VODE SKRBNO PREBERETE NAVODILA.

Hranilnik je izdelan v skladu z veljavnimi standardi in uradno preizkušen, zanj pa sta bila izdana varnostni certifikat in certifikat o elektromagnetni kompatibilnosti. Njegove osnovne tehnične lastnosti so navedene na napisni tablici, nalepljeni na zaščitnem pokrovu.

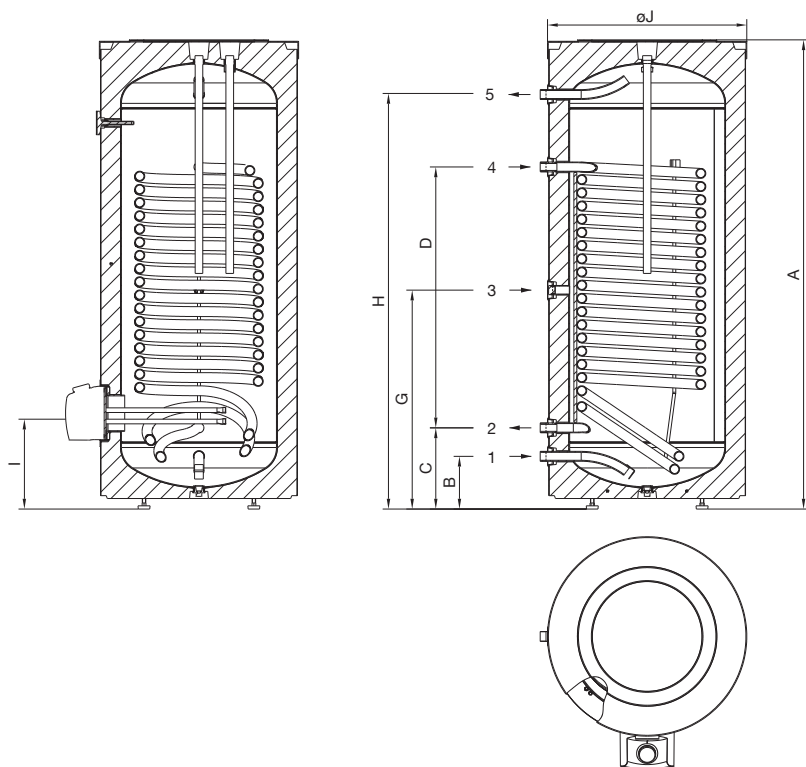
Hranilnik sme priključiti na vodovodno in električno omrežje le za to usposobljen strokovnjak. Posege v njegovo notranjost zaradi popravila, odstranitve vodnega kamna ter preverjanja ali zamenjave protikorozijske zaščitne anode lahko opravi samo pooblaščen servisna služba.

Hranilnik tople vode je izdelan tako, da lahko preko toplotnega prenosnika uporabljamo sledeče vire ogrevanja in sicer:

- kotel centralnega ogrevanja,
- sončno energijo,
- toplotno črpalko.

VGRADNJA

Hranilnik tople vode postavite v suh prostor, kjer ne zmrzuje, po možnosti v bližino drugih virov ogrevanja (npr. v kurilnico). Pred postavitvijo privijačite priložene nastavljive nogice. Hranilnik izravnajte vzdolžno in prečno z vrtenjem nastavljivih nogic.

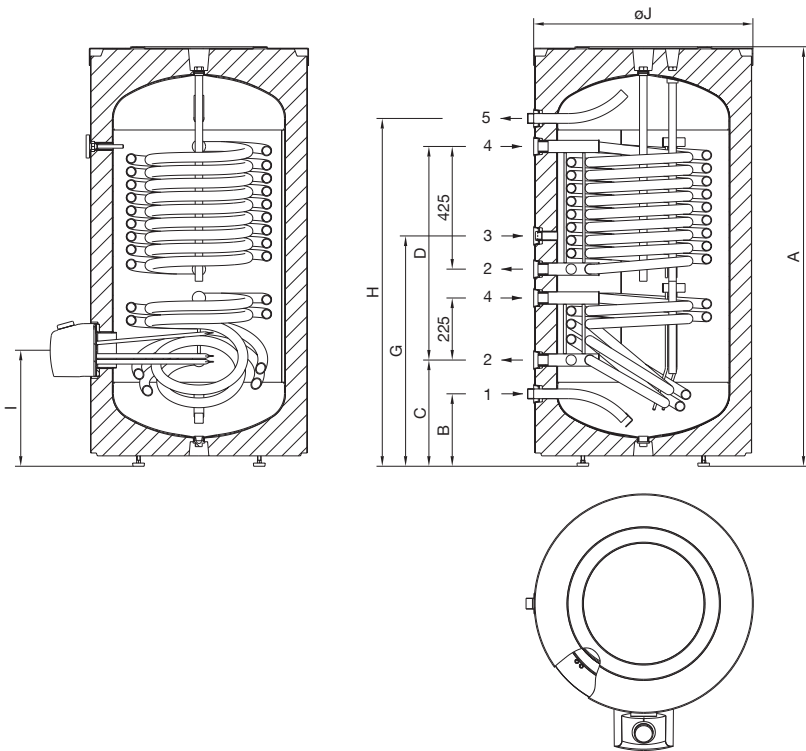


LEGENDA

- 1 Dotok hladne vode
- 2 Izstop medija iz prenosnika toplote
- 3 Cirkulacijski vod
- 4 Vstop medija v prenosnik toplote
- 5 Odtok 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	G 3/4	G 3/4	G 3/4	G 3/4	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

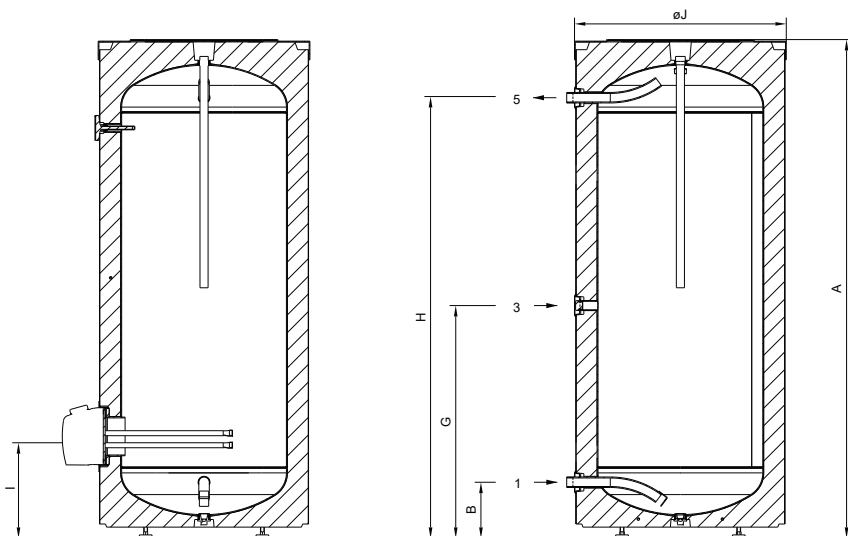
SI. 1: Priključne in montažne mere hranilnika [mm]

**LEGENDA**

- 1 Dotok hladne vode
- 2 Izstop medija iz prenosnika toplote
- 3 Cirkulacijski vod
- 4 Vstop medija v prenosnik toplote
- 5 Odtok 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 in montažne mere hranilnika [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 Odtok tople vode

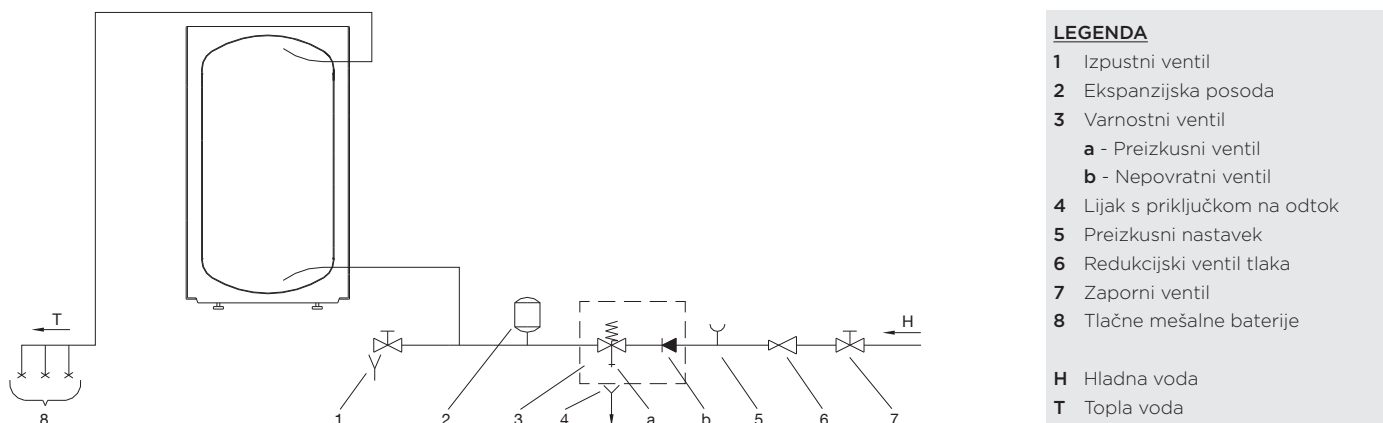
PRIKLJUČITEV NA VODOVODNO OMREŽJE

Priključitev na vodovodno omrežje napravite po označbah za priključke iz predhodnega poglavja.

Na dotočno cev je zaradi zagotavljanja varnosti pri delovanju hranilnika potrebno vgraditi varnostni ventil ali varnostno grupo, ki preprečuje zvišanje tlaka v kotlu za več kot 0,1 MPa (1 bar) nad nazivnim. Iztočna odprtina na varnostnem ventilu mora imeti obvezno izhod na atmosferski tlak. Pri segrevanju vode v hranilniku se tlak vode v kotlu zvišuje do meje, ki je nastavljena v varnostnem ventilu. Ker je vračanje vode nazaj v vodovodno omrežje preprečeno, lahko pride do kapljanja vode iz odtočne odprtine varnostnega ventila. Kapljajočo vodo lahko speljete v odtok preko lovilnega nastavka, ki ga namestite pod varnostni ventil. Odtočna cev nameščena pod izpustom varnostnega ventila mora biti nameščena v smeri naravnost navzdol in v okolju, kjer ne zmrzuje.

V primeru, da se želite izogniti kapljajoči vodi iz varnostnega ventila, morate na dotočno cev hranilnika vgraditi ekspanzijsko posodo za sanitarno vodo volumna najmanj 5% volumna hranilnika.

Za pravilno delovanje varnostnega ventila je potrebno periodično izvajati kontrole, da se odstrani vodni kamen in se preveri, da varnostni ventil ni blokirán. Ob preverjanju morate s premikom ročke ali odvitjem matice ventila (odvisno od tipa ventila) odpreti iztok iz varnostnega ventila. Pri tem mora skozi iztočno odprtino ventila priteči voda, kar je znak, da je ventil brezhiben.



Sl. 3: Zaprti (tlačni) sistem

Hranilnik lahko priključite na hišno vodovodno omrežje brez regulatorja tlaka, če je tlak v omrežju nižji od nazivnega tlaka (glejte napisno tablico). Če tlak v omrežju presega nazivni tlak, je potrebno obvezno vgraditi regulator tlaka.

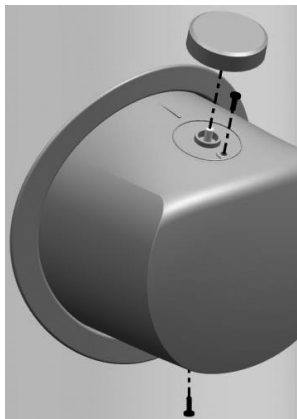
PRIKLJUČITEV NA ELEKTRIČNO OMREŽJE

Pred priključitvijo v električno omrežje je potrebno v hranilnik vgraditi priključno vrstico minimalnega preseka vsaj 1,5 mm² (H05VV-F 3G 1,5 mm²) za 3kW grelo, v primeru 6kW grela (H05VV-F 5G 2,5 mm²), zato morate odstraniti zaščitni pokrov.

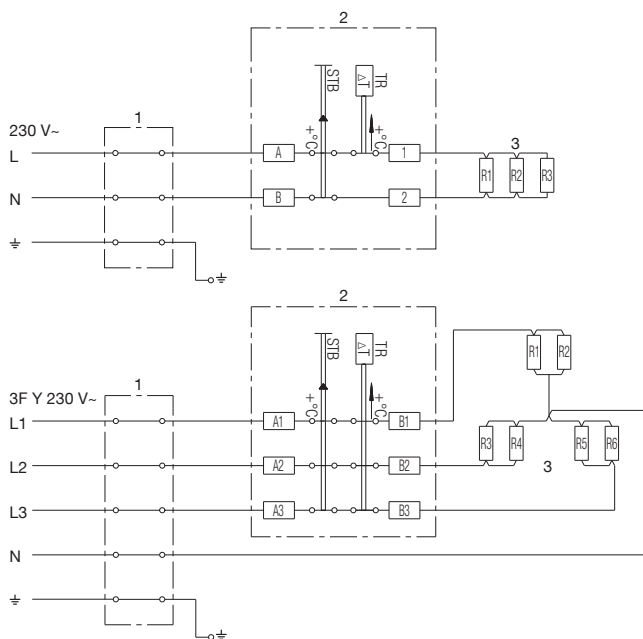
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To storite tako, da najprej izvlčete gumb, ki je vstavljen na os termostata in odvijete vijaka.

Priprava za ločitev vseh polov mora biti vgrajena v električni inštalaciji v skladu z nacionalnimi inštalacijskimi predpisi.



Sl. 4: Odstranitev pokrova grelca



Sl. 5: Sheme električnih vezav

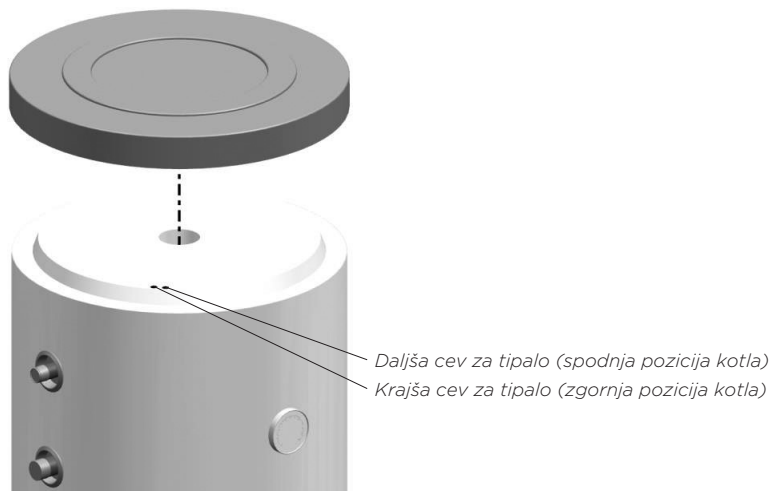
LEGENDA

- 1 Priključna sponka
- 2 Termostat in dvopolna oz. tripolna varovalka
- 3 Grelec

- L Fazni vodnik
- L1 Fazni vodnik
- L2 Fazni vodnik
- L3 Fazni vodnik
- N Nevtralni vodnik
- ⊕ Zaščitni vodnik

NAMESTITEV TIPAL

Na zgornji strani hranilnika pod pokrovom sta nameščeni dve cevi za tipala, kjer se lahko vstavijo tipala za regulacijo systemske povezave hranilnika tople vode z drugimi viri ogrevanja. Maksimalni premer tipal je 8 mm.



SI. 6: Namestitev tipal

OPOZORILO: Pred vsakim posegom v njegovo notranjost morate hranilnik obvezno izključiti iz električnega omrežja! Poseg lahko izvede le usposobljen strokovnjak!

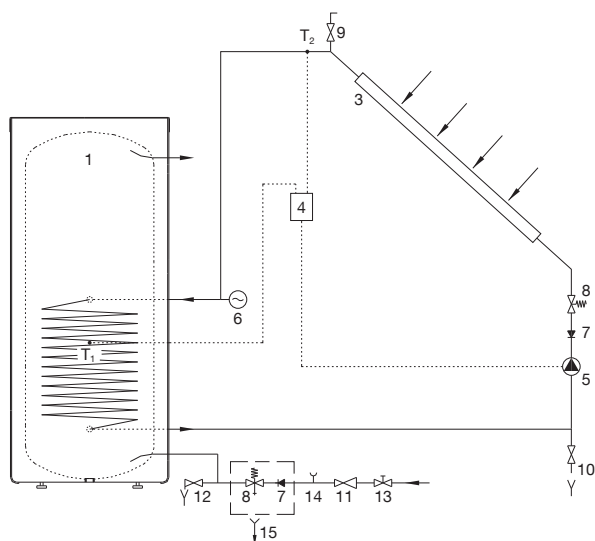
PRIKLJUČITEV NA DRUGE VIRE OGREVANJA

Hranilnik tople vode omogoča pripravo sanitarne vode preko izmenjevalca toplote z različnimi viri energije (npr. centralno ogrevanje, sončna energija, ...).

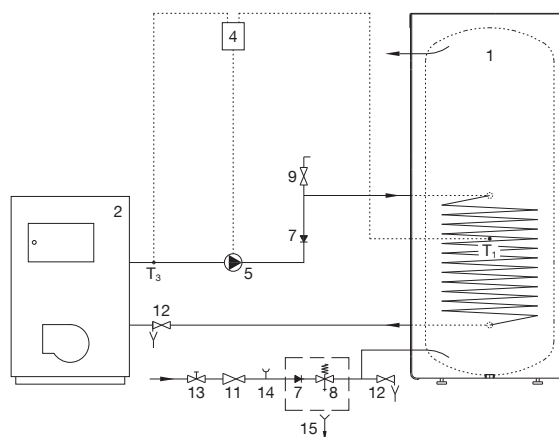
Primeri povezave hranilnika tople vode z različnimi viri ogrevanja sta prikazana na skicah.

LEGENDA

- | | |
|--|--|
| 1 Hranilnik tople vode | 8 Varnostni ventil |
| 2 Kotel centralnega ogrevanja | 9 Ventil za odzračevanje |
| 3 Sprejemnik sončne energije | 10 Ventil za polnjenje in praznjenje sistema |
| 4 Diferenčni termostat s tipali (T1, T2, T3, T4) | 11 Reducirni ventil |
| 5 Obtočna črpalka | 12 Izpustni ventil |
| 6 Ekspanzijska posoda | 13 Zaporni ventil |
| 7 Protipovratni ventil | 14 Preizkusni nastavek |
| | 15 Lijak s priključkom na odtok |



SI. 7: Povezava s sprejemniki sončne energije



SI. 8: Povezava s kotlom centralnega ogrevanja

UPORABA IN VZDRŽEVANJE

Po priključitvi na vodovodno in električno omrežje ter druge vire ogrevanja je hranilnik tople vode pripravljen za uporabo. Običajno je osnovni vir za ogrevanje sanitarne vode centralno ogrevanje ali sončna energija, pri čemer je regulacija ogrevanja tople vode izvedena v sistemu ogrevanja.

Vgradni električni grelec je namenjen le za dodatno ogrevanje vode. Temperaturo nastavljate z vrtenjem gumba v smeri urinega kazalca na zelen temperaturni nivo.

- * - Zaščita proti zmrzovanju, temperatura približno 10 °C.
- ☞ - Temperatura vode približno 35 °C.
- eco - Temperatura vode približno 55 °C.
- ☺ - Temperatura vode približno 85 °C.

Termometer prikazuje temperaturo na mestu vgradnje, medtem ko z vrtenjem gumba na termostatu nastavljate temperaturo vode iz spodnjem delu hranilnika. Zato se ti dve temperaturi lahko razlikujeta.

Kadar obstaja nevarnost, da bo voda v hranilniku zmrznila, jo morate iz njega iztočiti. Voda iz hranilnika se izprazni skozi dotočno cev hranilnika. V ta namen je priporočljivo ob vgradnji med varnostni ventil in dotočno cev namestiti poseben T-člen z izpusnim ventilom. Pred praznjenjem je hranilnik potrebno izključiti iz električnega omrežja, zapreti dovod hladne vode v hranilnik, odpreti ročico za toplo vodo na priključeni mešalni bateriji in počakati da se voda v hranilniku ohladi. Po izpraznitvi vode skozi dotočno cev, v hranilniku ostane manjša količina vode.

Zunanost hranilnika čistite z mehko krpo in blagimi tekočimi čistili. Ne uporabljajte čistil, ki vsebujejo alkohol ali abrazivna sredstva.

Z rednimi servisnimi pregledi boste zagotovili brezhibno delovanje in dolgo življenjsko dobo hranilnika. Garancija za prerjavenje kotla velja le, če ste izvajali predpisane redne preglede izrabljenosti zaščitne anode. Obdobje med posameznimi rednimi pregledi ne sme biti daljše kot je navedeno v garancijski izjavi. Pregledi morajo biti izvedeni s strani pooblaščenega serviserja, ki Vam pregled evidentira na garancijskem listu proizvoda. Ob pregledu preveri izrabljenost protikorozijske zaščitne anode in po potrebi očisti vodni kamen, ki se glede na kakovost, količino in temperaturo porabljene vode nabere v notranjosti hranilnika. Servisna služba vam bo po pregledu hranilnika glede na ugotovljeno stanje priporočila tudi datum naslednje kontrole.

Prosimo Vas, da morebitnih okvar na hranilniku ne popravljate sami, ampak o njih obvestite najbližjo pooblaščenno servisno službo.

TEHNIČNE LASTNOSTI APARATA

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 energijske učinkovitosti ¹⁾		C	B	C	C	B	B	B
Lastna izguba S ²⁾	[W]	70,8	58,3	88,8	88,8	68	68	71,9
Prostornina za shranjevanje	[l]	184	190,3	275,5	262	283,7	283,7	396
Nazivni tlak	[MPa (bar)]	0,6 (6); 0,9 (9); 1,0 (10)						
Masa / napolnjen z vodo	[kg]	97 / 281	115 / 305	140 / 416	165 / 427	165/449	170/454	230/626
Protikorozijska zaščita kotla Emajlirano / Mg anoda		• / •	• / •	• / •	• / •	• / •	• / •	• / •
Razred zaščite		I						
Stopnja zaščite		IP24						
Površina prenosnika toplote	[m ²]	2,0	2,3	2,5	4,0	3,45	1,05 + 2,4	6,15
Temperatura grelnega medija v prenosniku toplote	[°C]	< 95						
Debelina izolacije	[mm]	60	110	67	67	75	75	75
Toplotne izgube ²⁾	[kWh/24h]	1,7	1,4	2,1	2,1	1,6	1,6	1,7
Maksimalni premer tipal	[mm]	ø8						

* Če v tipski oznaki ni črke G, je aparat brez električnega grelca.

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	
Priključna moč	[W]	3000				6000		
Napetost	[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	
Priključna moč	[W]	3000			6000			
Napetost	[V-]	230			400			

Tip		VLG 200 A-G	VLG 300 B-G	VLG 400 C-G
Profil rabe		XL	XL	XL
Razred energijske učinkovitosti ¹⁾		C	C	C
Energijska učinkovitost ogrevanja vode η_{wh} ¹⁾	[%]	38,1	38,0	38,1
Letna poraba električne energije ¹⁾	[kWh]	4399	4412	4400
Dnevna poraba električne energije ²⁾	[kWh]	20,317	20,397	20,328
Nastavitev temperature termostata		"eco"	"eco"	"eco"
Morebitni varnostni ukrepi (sestava, nameščanje, vzdrževanje)		Pri tlačni priključitvi obvezna uporaba varnostnega ventila		
Vrednost smart		0	0	0
Prostornina za shranjevanje V	[l]	203	319	449
Mešana voda pri 40°C V40 ²⁾	[l]	305	508	712
Nazivni tlak	[MPa (bar)]	0,6 (6); 0,9 (9); 1,0 (10)		
Masa / napolnjen z vodo	[kg]	63/265	97/397	230/626
Protikorozijska zaščita kotla Emajlirano / Mg anoda		• / •	• / •	• / •
Razred zaščite		I		
Stopnja zaščite		IP24		
Debelina izolacije	[mm]	60	67	75
Toplotne izgube ³⁾	[kWh/24h]	1,7	2,1	1,7
Čas segrevanja od 10 do 65 °C	[h]	4 ²⁵⁾	6 ⁵⁶⁾	4 ⁵³⁾

¹⁾ Uredba komisije EU 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
Priključna moč	[W]	3000		6000
Napetost	[V-]	230		400

PRIDRŽUJEMO SI PRAVICO DO SPREMEMB, KI NE VPLIVAJO NA FUNKCIONALNOST APARATA.

Navodila za uporabo so na voljo tudi na naših spletnih straneh <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.

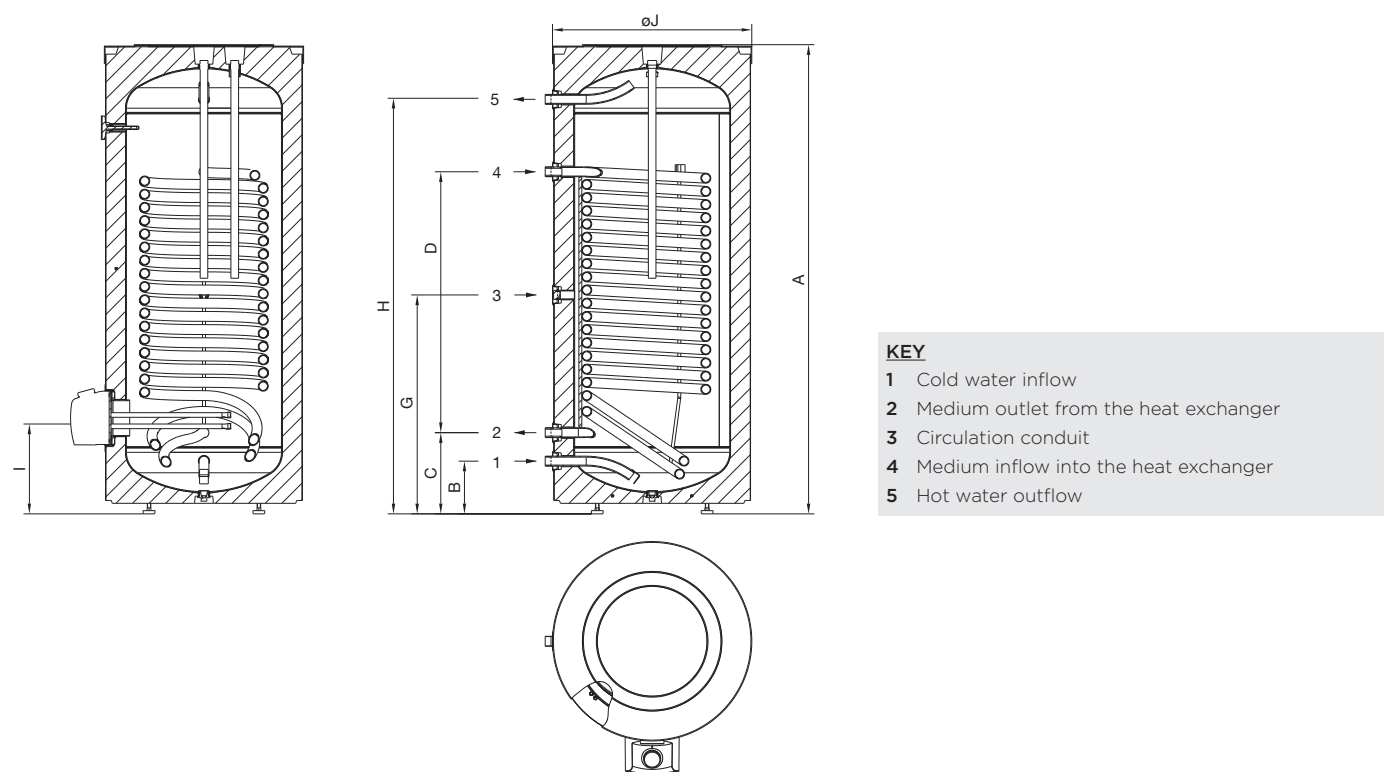
The connection of the storage tank to the plumbing and power networks must be carried out by qualified staff only. All repairs and maintenance work in the interior of the storage tank, as well as limestone removal or testing or replacement of the corrosion protection anode, may only be carried out by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

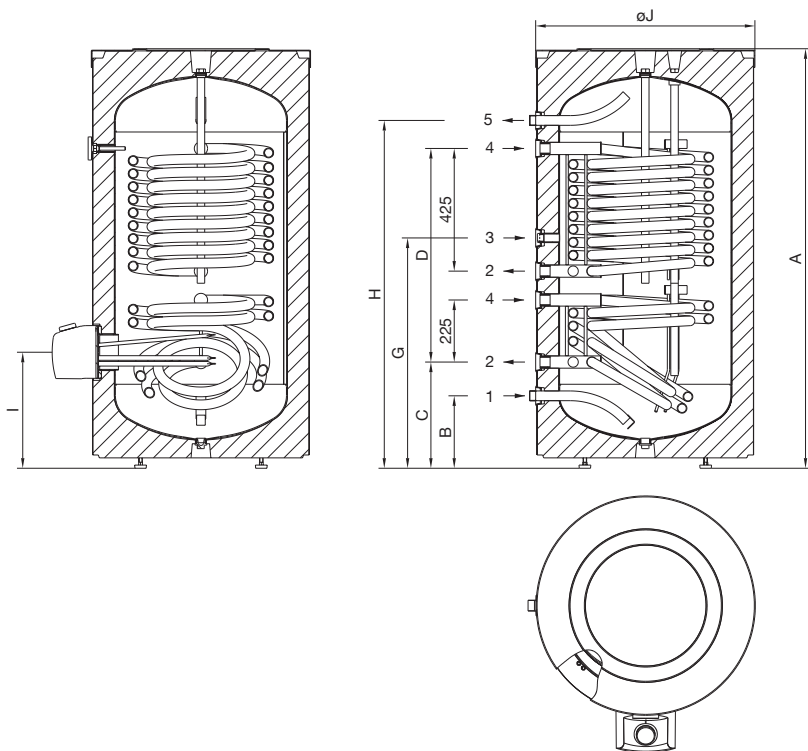
INSTALLATION

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	G 3/4	G 3/4	G 3/4	G 3/4	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]

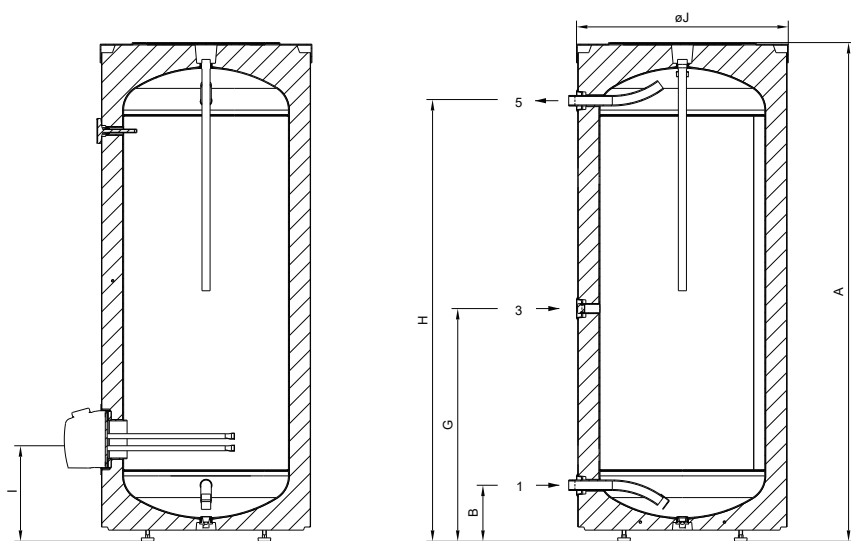


KEY

- 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.

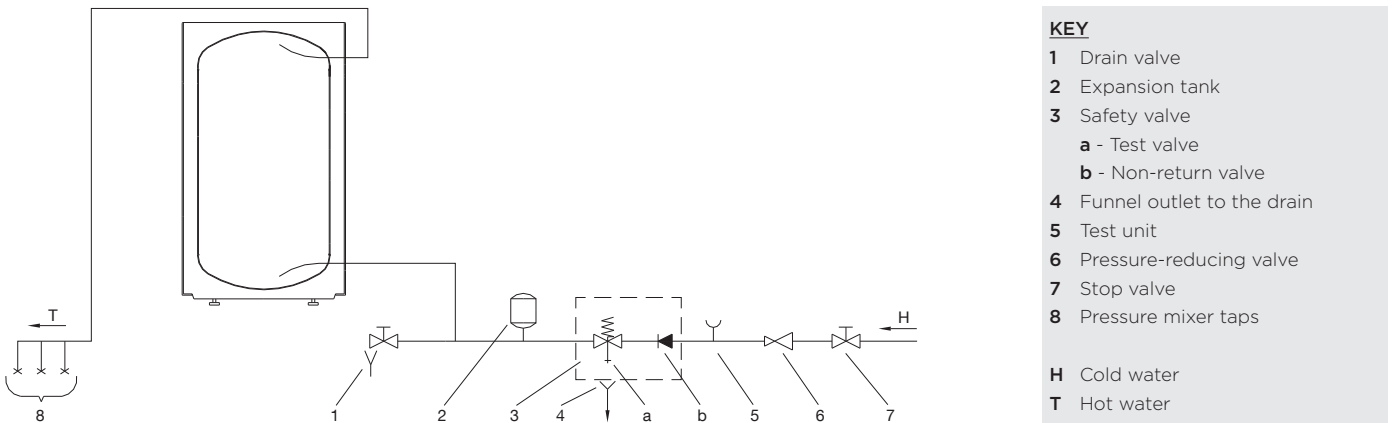


Image 3: Closed (pressure) system

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.

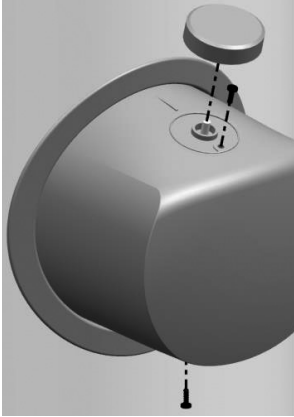


Image 4: Removal of heater cover

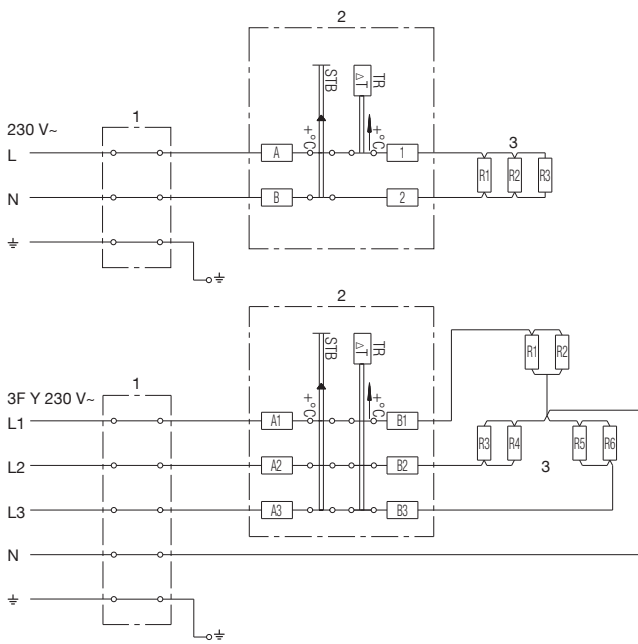


Image 5: Schemes of electric installations

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.

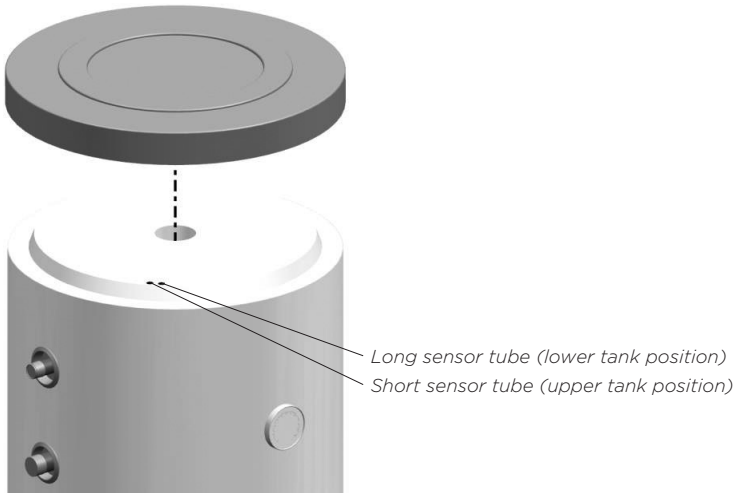


Image 6: Installation of sensors

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 |

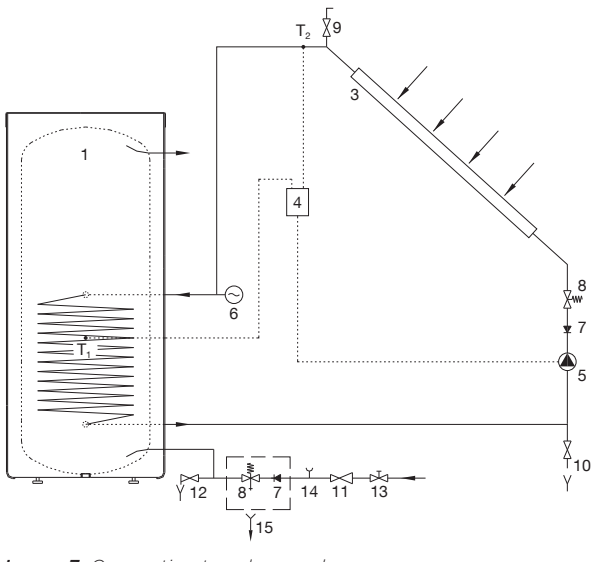


Image 7: Connection to solar panels

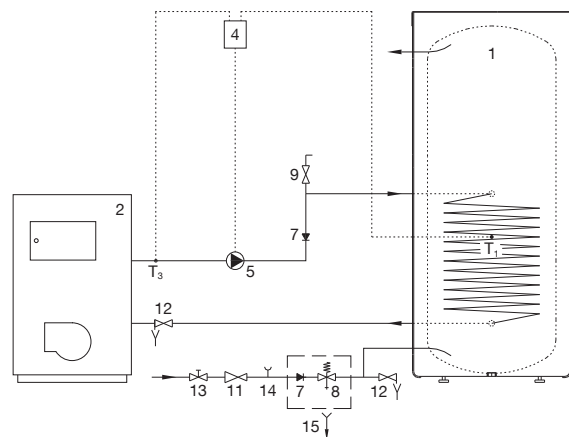


Image 8: Connection to the central heating hot-water system

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>.

