

VLG 200 - 400

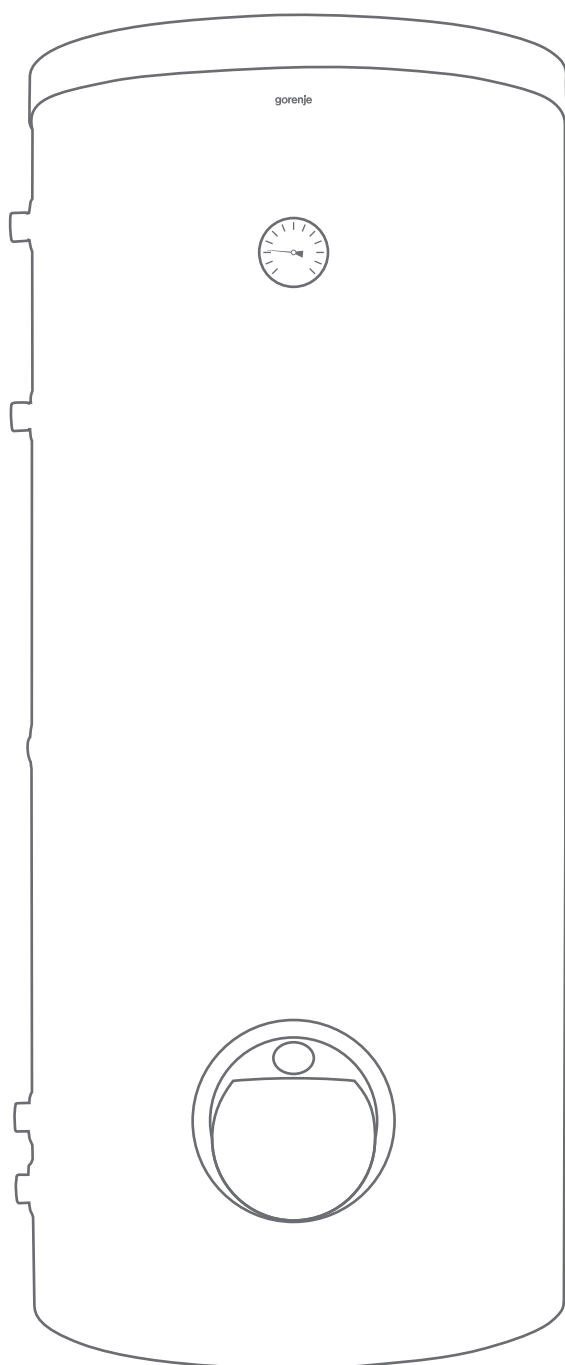
UPUTSTVO ZA UPOTREBU

gorenje















INSTRUCTIONS FOR USE


SR/MNE

EN



UPOZORENJA

-  Pod nadzorom ili ako su podučeni o bezbednoj upotrebi aparata i ako razumeju moguće opasnosti, aparat mogu upotrebljavati deca starija od 8 godina i osobe sa smanjenim telesnim, osetnim ili mentalnim sposobnostima i nedovoljnim iskustvom ili znanjem.
-  Deca se ne smeju igrati uređajem.
-  Čišćenje i održavanje uređaja ne smeju obavljati deca bez nadzora.
-  Ugradnja mora da se izvede u skladu sa važećim propisima i uputstvima proizvođača i od strane stručno osposobljenog montera.
-  Na dovodu tople vode bojlera potrebno je obavezno ugraditi sigurnosni ventil sa nominalnim pritiskom 0,6 MPa (6 bar), 0,9 MPa (9 bar) ali 1,0 MPa (10 bar) (pogledaj priloženu tabelu), koji sprečava povećavanje pritiska u kotlu za više od 0,1 MPa (1 bar) nad nominalnim.
-  Voda može kapati iz odvodnog otvora sigurnosnog ventila i zato mora odvodni otvor da bude otvoren na atmosferski pritisak.
-  Ispust sigurnosnog ventila mora da bude namešten u smeru nadole i na mestu na kome ne smrzava.
-  Za pravilan rad sigurnosnog ventila potrebno je da se periodično izvodi kontrola, da bi se uklonio kamenac i da bi se proverilo da nije sigurnosni ventil blokirao.
-  Između bojlera i sigurnosnog ventila nije dozvoljeno ugrađivati zaporni ventil jer biste time onemogućili sigurnosnu zaštitu bojlera!
-  Pred uključivanjem grejača u električnu mrežu se mora bojler obavezno napuniti s vodom!
-  U slučaju otkazivanja radnog termostata, bojler je zaštićen sa dodatnom toplotnim osiguračem. U slučaju otkazivanja termostata u skladu sa sigurnosnim standardima voda u bojleru se može zagrejati i na 130°C. Kod izvođenja vodovodnih instalacija se obavezno mora uzeti u obzir da može doći do navedenog temperaturnog preopterećenja.
-  Ako bojler isključite iz električne mreže da ne bi došlo do zamrzavanja iz njega morate ispustiti vodu.
-  Voda iz bojlera se ispušta kroz dovodnu cev kotla. Zato se preporučuje da između sigurnosnog ventila i dovodne cevi montirate poseban T-član sa ispusnim ventilom, koji će tome služiti.
-  Molimo da eventualne kvarove na bojleru ne popravljate sami, nego da o njih obavestite najbližu ovlašćenu servisnu službu.

 Naši proizvodi su opremljeni komponentama koje nisu štetne po zdravlje i životnu sredinu i napravljeni su tako da ih u njihovoj zadnjoj životnoj fazi možemo što jednostavnije rastaviti i reciklirati.

Reciklažom materijala smanjujemo količine otpadaka i smanjujemo potrebu za proizvodnjom osnovnih materijala (na primer metala) koja zahteva ogromno energije i uzrokuje ispušte štetnih materija. Reciklažnim postupcima tako smanjujemo potrošnju prirodnih resursa jer otpadne delove od plastike i metala ponovo vraćamo u različite proizvodne procese.

Za više informacija o sistemu odlaganja otpadaka posetite svoj centar za odlaganje otpadaka ili trgovca, kod koga je proizvod kupljen.

Cenjeni kupče, hvala Vam što ste kupili naš proizvod MOLILMO DA PRE UGRADNJE I PRVE UPOTREBE BOJLERA PAŽLJIVO PROČITATE UPUTSTVA.

Bojler je napravljen u skladu sa važećim standardima i zvanično testiran, dobio je sigurnosni sertifikat i sertifikat o elektromagnetnoj kompatibilnosti. Osnovni tehnički podaci o proizvodu su navedeni na tablici koja je zalepljena na zaštitnom poklopcu.

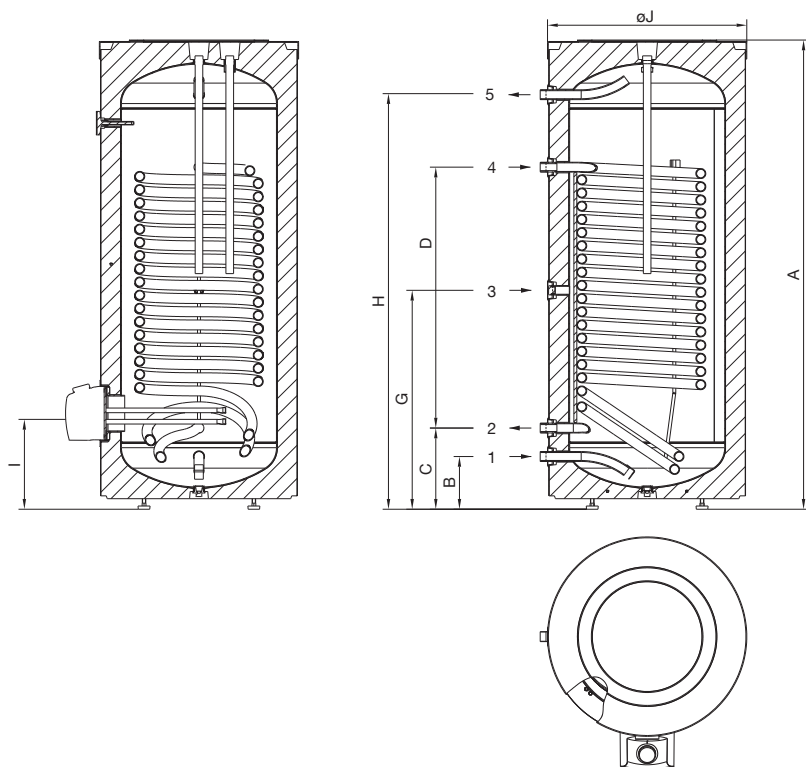
Bojler sme priključiti na vodovodnu i električnu mrežu samo za to stručno osposobljena osoba. Sve zahvate u njegovoj unutrašnjosti zbog popravke, uklanjanja kamenca i provere ili zamene antikorozivne zaštitne anode može obavljati samo ovlašćena servisna služba.

Bojler je napravljen tako da može preko toplotnog prenosioca da upotrebljava sledeće izvore zagrevanja:

- kotao centralnog grejanja,
- sunčevu energiju,
- toplotnu pumpu.

UGRADNJA

Bojler postavite u suv prostor gde ne zamrzava, po mogućnosti u blizini drugih izvora grejanja (npr. u ložionicu). Pre instalacije mu montirajte priložene prilagodljive nogice. Bojler izravnajte uzdužno i poprečno vrtanjem prilagodljivih nogica.

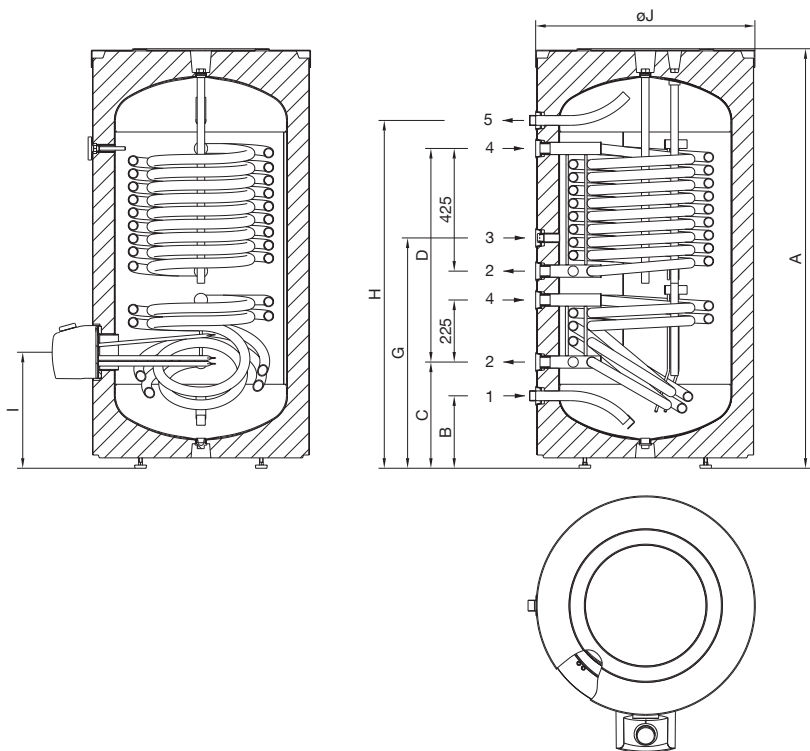


LEGENDA

- 1 Dovod hladne vode
- 2 Izlaz medija iz prenosioca toplote
- 3 Cirkulacijski vod
- 4 Ulaz medija u prenosnik toplote
- 5 Odvod 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

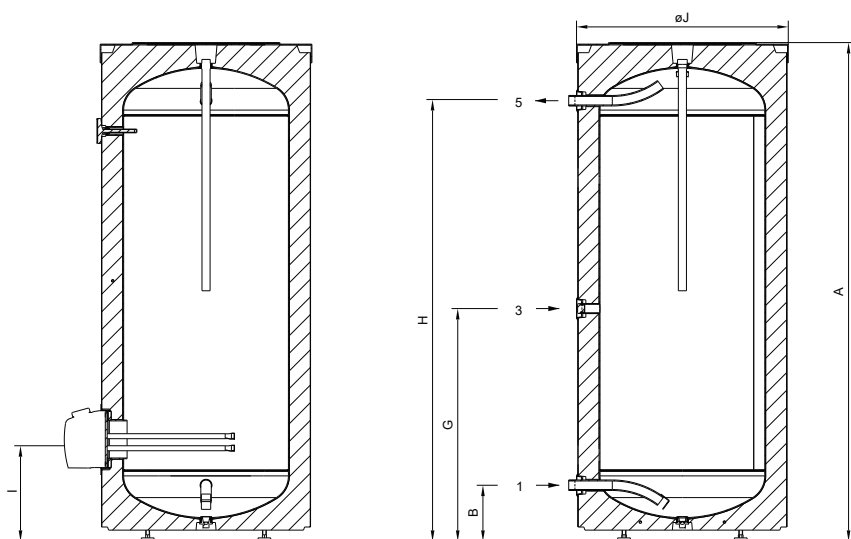
SI. 1: Priključne i montažne mere bojlera [mm]

**LEGENDA**

- 1 Dovod hladne vode
- 2 Izlaz medija iz prenosnika toplote
- 3 Cirkulacijski vod
- 4 Ulaz medija u prenosnik toplote
- 5 Odvod 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 mere bojlera [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 Dovod hladne vode
- 3 Cirkulacijski vod
- 5 Odvod tople vode

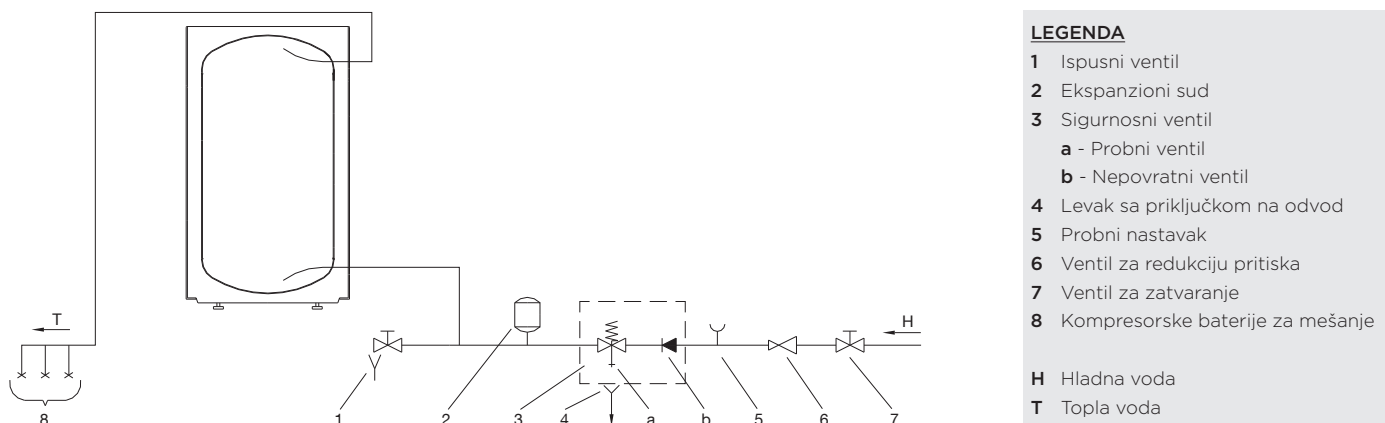
PRIKLJUČIVANJE NA VODOVOD

Priključivanje na vodovod napravite po oznakama za priključke iz prethodnog poglavlja.

Zbog sigurnosti je potrebno na dovodnu cev ugraditi sigurnosni ventil ili sigurnosnu navlaku koja sprečava povećanje pritiska u kotlu za više od 0,1 MPa (1 bar) preko nominalnog. Odvodni otvor na sigurnosnom ventilu mora da ima izlaz na atmosferski pritisak. Pri zagrevanju vode u bojleru se pritisak vode v kotlu povećava do granice koja je dozvoljena sigurnosnim ventilom. Pošto je vraćanje vode u vodovod onemogućeno može doći do njenog kapanja iz odvodnog otvora sigurnosnog ventila. Tu vodu možete da usmerite u odvod preko spremnika za vodu koji bi postavili ispod sigurnosnog ventila. Odvodna cev montirana ispod elementa za ispuštanje na sigurnosnom ventilu mora da bude nameštena u smeru pravo nadole i u sredini gde ne smrzava.

U slučaju da želite izbeći kapanje vode iz sigurnosnog ventila, morate na dovodnu cev ventila ugraditi ekspanzioni sud za sanitarnu vodu zapremine najmanje 5% zapremine bojlera.

Za pravilan rad sigurnosnog ventila potrebno je periodično izvoditi kontrole, odstranjivati kamenac i proveravati da sigurnosni ventil nije blokiran. Pri proveravanju pomeranjem ručke ili odvijanjem matice ventila (u zavisnosti od tipa ventila) morate da otvorite odvod iz sigurnosnog ventila. Prilikom toga kroz mlaznicu ventila za isticanje mora da priteče voda, što će značiti da je ventil besprekoran.



Sl. 3: Zatvoreni (kompresorski) sistem

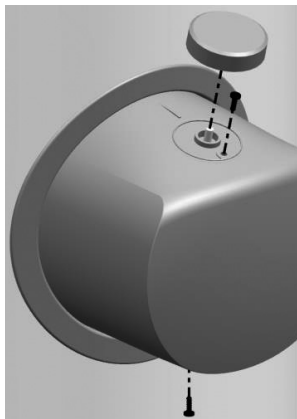
Bojler možete da priključite na kućnu vodovodnu mrežu bez regulatora pritiska ako je pritisak u mreži manji od nominalnog pritiska navedenog na tablici. Ako je mrežni pritisak veći od nominalnog mora da se ugradi regulator pritiska.

PRIKLJUČIVANJE NA ELEKTRIČNU MREŽU

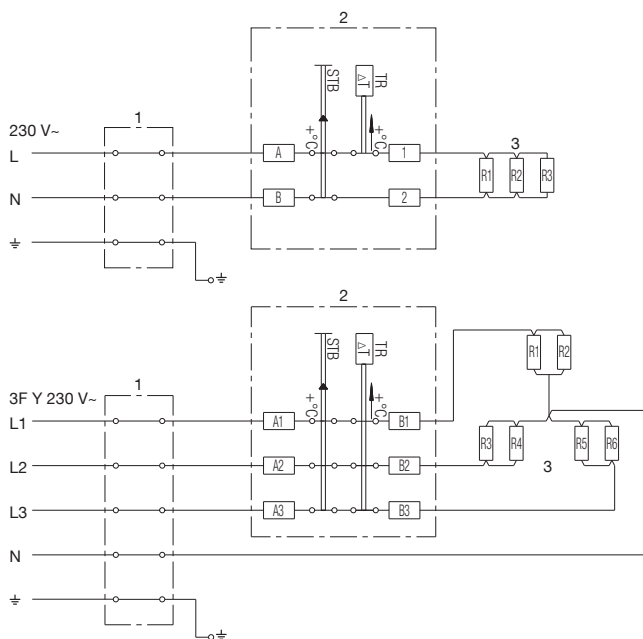
Pre priključivanja u električnu mrežu je u boiler potrebno ugraditi priključnu žicu, za 3kW grejač minimalnog preseka 1,5 mm² (H05VV-F 3G 1,5 mm²) a za 6kW grejač (H05VV-F 5G 2,5 mm²), zašta je potrebno prvo odstraniti zaštitni poklopac.

To učinite tako, da prvo izvučete dugme koje je postavljeno na osu termostata i odvijete zavrtnanj.

Priprema za odvajanje svih polova mora biti ugrađena u električnu mrežu u skladu sa nacionalnim instalacionim propisima.



Sl. 4: Uklanjanje poklopca grejača



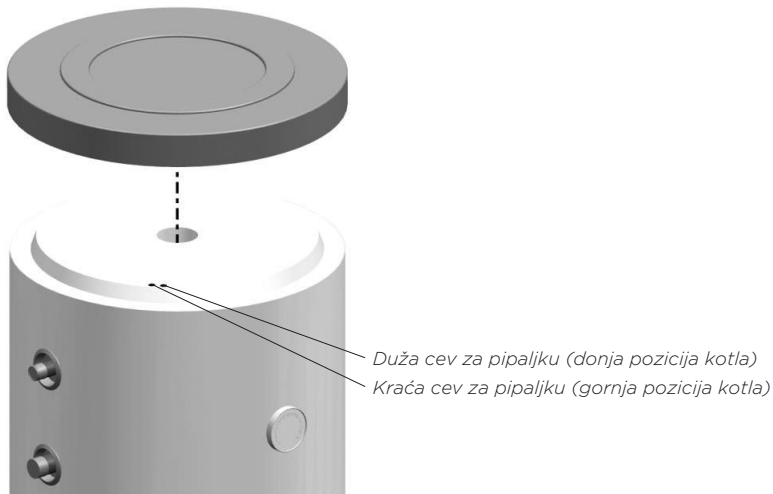
Sl. 5: Sheme električnih veza

LEGENDA

- 1 Priključne kleme
- 2 Termostat i dvopolni ili trolpolni toplotni osigurač
- 3 Grejač
- L Fazni provodnik
- L1 Fazni provodnik
- L2 Fazni provodnik
- L3 Fazni provodnik
- N Neutralni provodnik
- ⊕ Zaštitni provodnik

MONTAŽA PIPALJKI

Na gornjoj strani bojlera pod poklopcem su montirane dve cevi za pipaljke, gde se mogu ugraditi pipaljke za regulaciju sistemske veze bojlera sa drugim izvorima grejanja. Maksimalni prečnik pipaljki je 8 mm.



SI. 6: Montaža pipaljki

UPOZORENJE: Pre svakog posega u unutrašnjost bojlera, morate ga obavezno isključiti iz električne mreže! Posege mogu da izvedu samo osposobljena stručna lica.

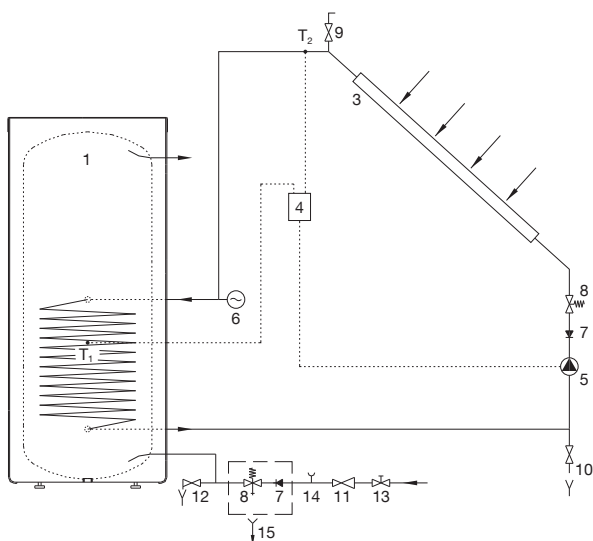
PRIKLJUČIVANJE NA DRUGE IZVORE GREJANJA

Bojler omogućava zagrevanje sanitarne vode preko razmene toplote sa različitim izvorima energije (npr. centralno grejanje, sunčeva energija, ...).

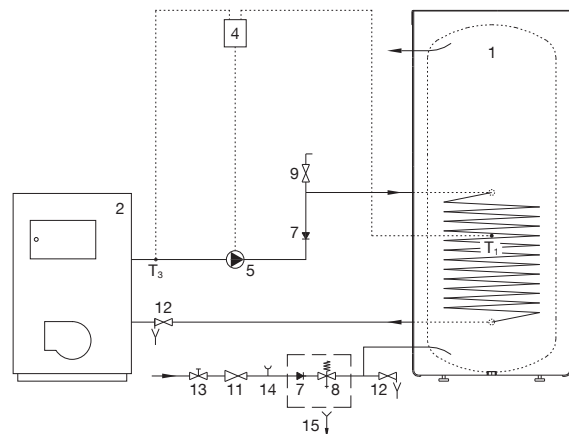
Primeri povezivanja bojlera sa različitim izvorima zagrevanja su prikazani na skicama.

LEGENDA

- | | |
|--|--|
| 1 Bojler | 8 Sigurnosni ventil |
| 2 Kotao centralnog grejanja | 9 Ventil za odvođenje zraka |
| 3 Prijemnik sunčeve energije | 10 Ventil za punjenje i pražnjenje sistema |
| 4 Diferencijalni termostat s pipaljkama (T ₁ , T ₂ , T ₃ , T ₄) | 11 Redukcioni ventil |
| 5 Protočna pumpa | 12 Ispusni ventil |
| 6 Ekspanzioni sud | 13 Ventil za zatvaranje |
| 7 Protipovratni ventil | 14 Probni nastavak |
| | 15 Levak sa priključkom na odvod |



SI. 7: Povezivanje sa prijemnikom sunčeve energije



SI. 8: Povezivanje sa kotlom za centralno grejanje

UPOTREBA I ODRŽAVANJE

Nakon što ga priključite na vodovodnu i električnu mrežu i druge izvore grejanja je bojler spreman za upotrebu. Najčešće je osnovni izvor grejanja sanitarne vode centralno grejanje ili sunčeva energija pri čemu je regulacija grejanja tople vode izvedena u sistemu za zagrevanje.

Ugradni električni grejač je namenjen samo za dodatno grejanje vode. Temperaturu nameštite vrtenjem regulatora u smeru kazaljki na satu na željeni temperaturni nivo.

- * - 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 mestu ugradnje, vrtenjem regulatora pa se reguliše temperatura u donjem delu bojlera. Zato se te dve temperature mogu razlikovati.

Ako postoji opasnost da voda u bojleru može da smrzne, morate je ispustiti. Voda iz bojlera se ispušta kroz dovodnu cev bojlera. U tu svrhu je preporučena ugradnja posebnog T-člana sa ispusnim ventilom između sigurnosnog ventila i dovodne cevi. Pre pražnjenja je potrebno bojler isključiti iz električne mreže, zatvoriti dovod hladne vode u bojler, otvoriti ručku za toplu vodu na priključeni bateriji za mešanje i sačekati da se voda u bojleru rashladi. Po pražnjenju vode kroz dovodnu cev će u bojleru ostati manja količina vode.

Spoljašnjost bojlera čistite sa mekom krpom i blagim tečnostima za čišćenje. Ne upotrebljavajte sredstva za čišćenje koja su abrazivna ili sadrže alkohol.

Redovnim servisnim pregledima ćete osigurati besprekorno delovanje i dug vek trajanja bojlera. Garancija protiv rđanja kotla važi samo ako ste obavljali propisane redovne preglede istrošenosti zaštitne anode. Periodi između pojedinačnih redovnih pregleda ne smeju biti duži nego što je navedeno u garantnom listu proizvoda. Preglede mora da obavi ovlašćeni serviser koji će Vam ih evidentirati na garantnom listu proizvoda. Prilikom pregleda će proveriti istrošenost antikorozivne zaštitne anode i po potrebi očistiti kamenac koji se u zavisnosti od kvaliteta, količine i temperature potrošene vode skuplja u unutrašnjosti bojlera. Servisna služba će vam u zavisnosti od utvrđenog stanja preporučiti datum sledeće kontrole.

Molimo da eventualne kvarove na bojleru ne popravljate sami, nego da o njih obavestite najbližu ovlašćenu servisnu službu.

TEHNIČKE KARAKTERISTIKE 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 energetske iskoristivosti ¹⁾		C	B	C	C	B	B	B
Sopstveni gubitak S ²⁾	[W]	70,8	58,3	88,8	88,8	68	68	71,9
Zapremina spremnika	[l]	184	190,3	275,5	262	283,7	283,7	396
Nominalni pritisak	[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
Antikorozivna zaštita kotla Emajlirano / Mg anoda		• / •	• / •	• / •	• / •	• / •	• / •	• / •
Razred zaštite		I						
Stepen zaštite		IP24						
Površina prenosnika toplote	[m ²]	2,0	2,3	2,5	4,0	3,45	1,05 + 2,4	6,15
Temperatura grejnog medija u prenosniku toplote	[°C]	< 95						
Debljina izolacije	[mm]	60	110	67	67	75	75	75
Toplotni gubitak ²⁾	[kWh/24h]	1,7	1,4	2,1	2,1	1,6	1,6	1,7
Maksimalan prečnik pipaljki	[mm]	ø8						

* Ako u tipskoj oznaci nema slova G, to znači da je aparat bez električnog grejača.

¹⁾ Propis 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 snaga	[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	
Priključna snaga	[W]	3000			6000			
Napon	[V-]	230			400			

Tipovi		VLG 200 A-G	VLG 300 B-G	VLG 400 C-G
Područje upotrebe		XL	XL	XL
Razred energetske efikasnosti ¹⁾		C	C	C
Energetska efikasnost zagrevanja vode nwh 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"
Eventualne sigurnosne mene (sastav, nameštanje, održavanje)		Kod priključivanja pod pritiskom je obavezna upotreba sigurnosnog ventila.		
Vrednost smart		0	0	0
Zapremina	[l]	203	319	449
Mešana voda pri 40°C V40 ²⁾	[l]	305	508	712
Nominalni pritisak	[MPa (bar)]	0,6 (6); 0,9 (9); 1,0 (10)		
Masa / napunjen vodom	[kg]	63/265	97/397	230/626
Antikorozivna zaštita kotla Emajlirano / Mg anoda		• / •	• / •	• / •
Razred zaštite		I		
Stepen zaštite		IP24		
Debljina izolacije	[mm]	60	67	75
Toplotni gubitak ³⁾	[kWh/24h]	1,7	2,1	1,7
Vreme zagrevanja 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
Priključna snaga	[W]	3000		6000
Napon	[V-]	230		400

PRIDRŽAVAMO PRAVO NA PROMENE KOJE NE UTIČU NA FUNKCIONALNOST APARATA.

Uputstvo za upotrebu je na raspolaganju na našoj internetnoj strani: <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.

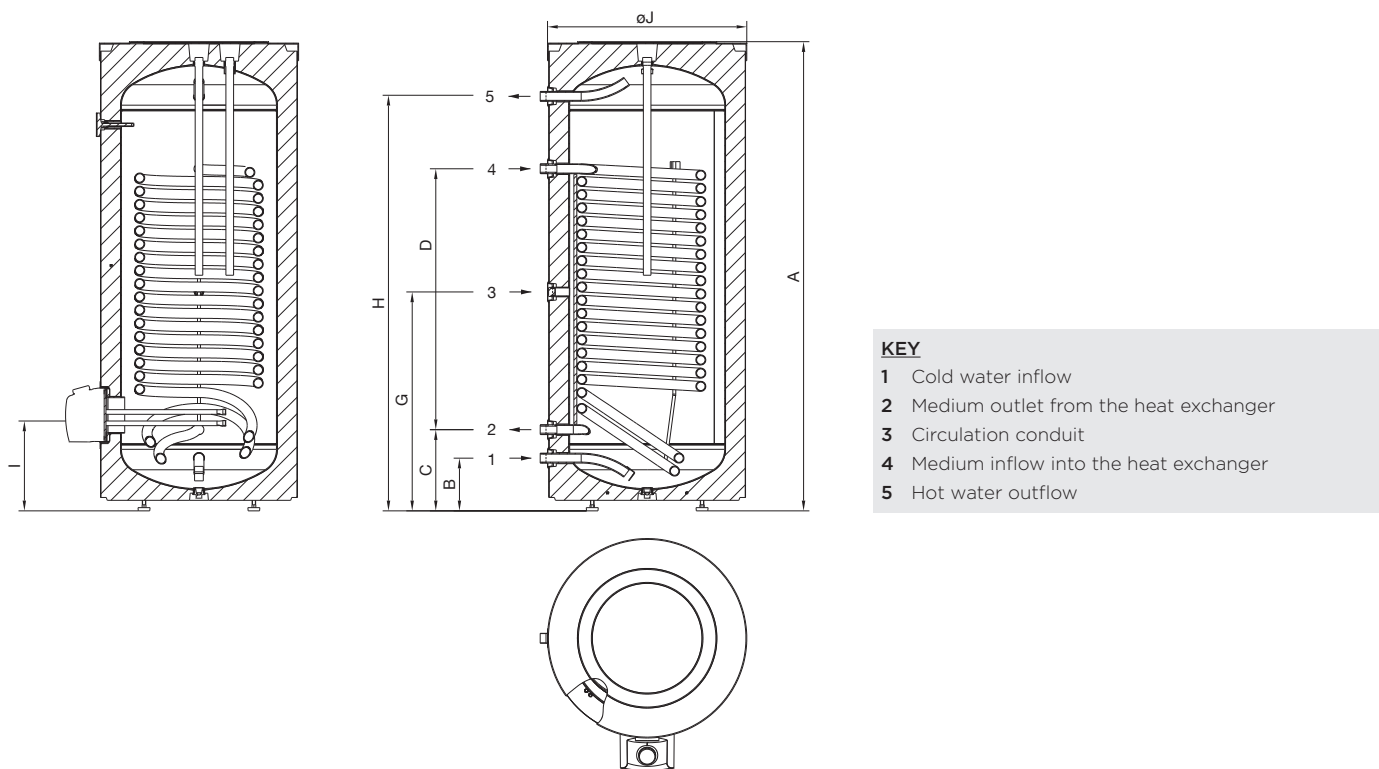
The connection of the storage tank to the plumbing and power networks must be carried out by qualified staff only. All repairs and maintenance work in the interior of the storage tank, as well as limestone removal or testing or replacement of the corrosion protection anode, may only be carried out by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

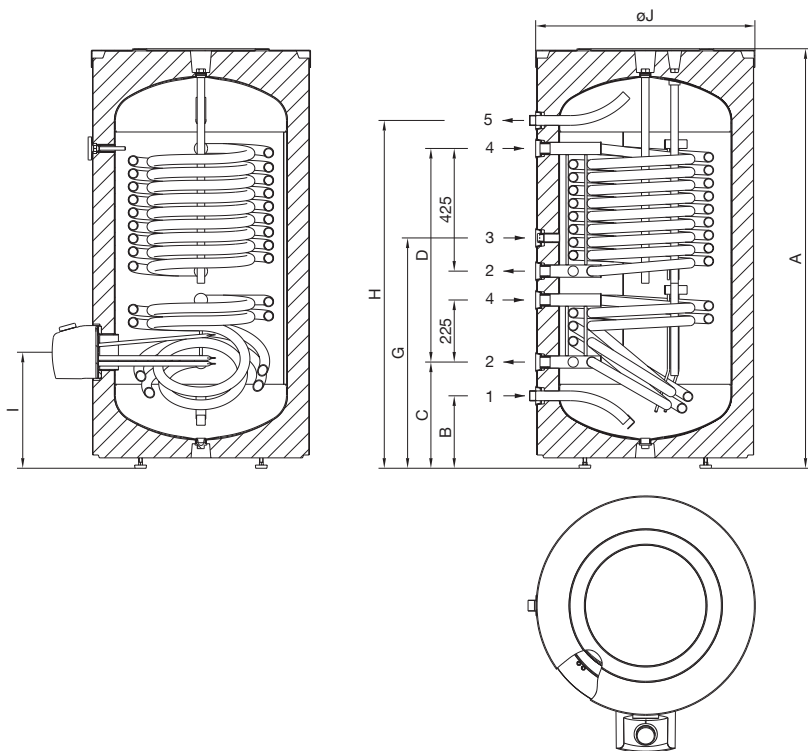
INSTALLATION

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]

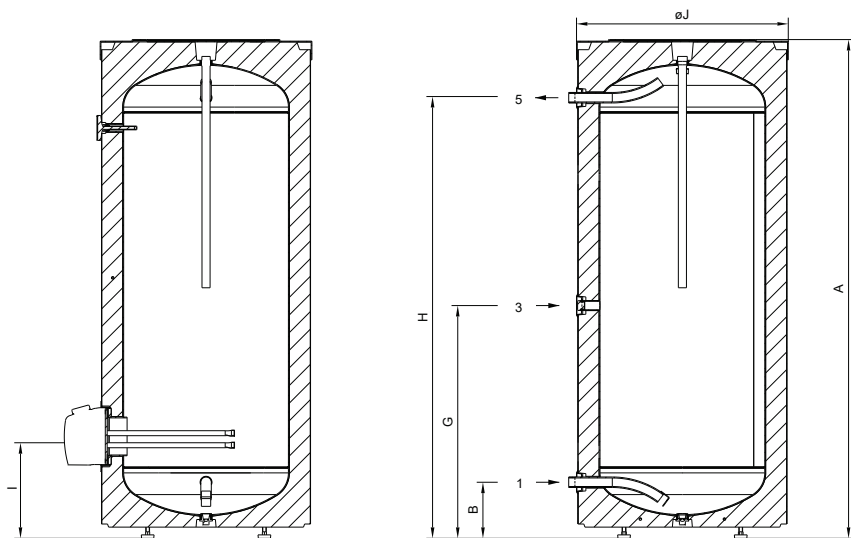


KEY

- 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.

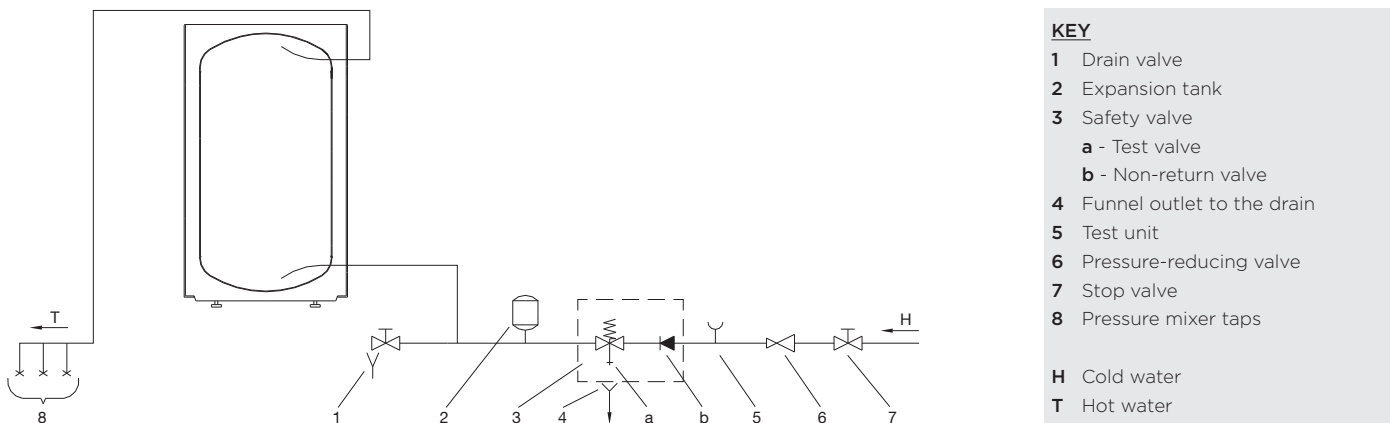


Image 3: Closed (pressure) system

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.

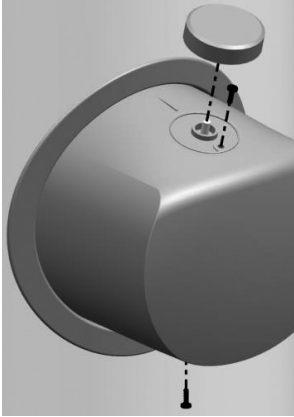


Image 4: Removal of heater cover

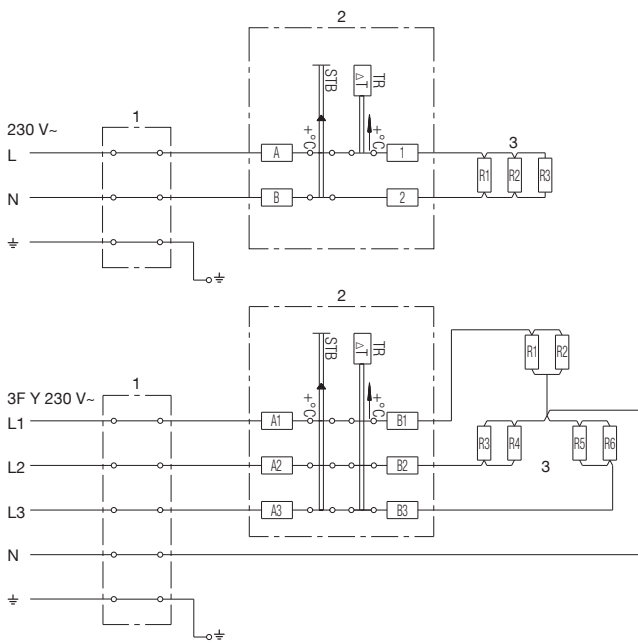


Image 5: Schemes of electric installations

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.

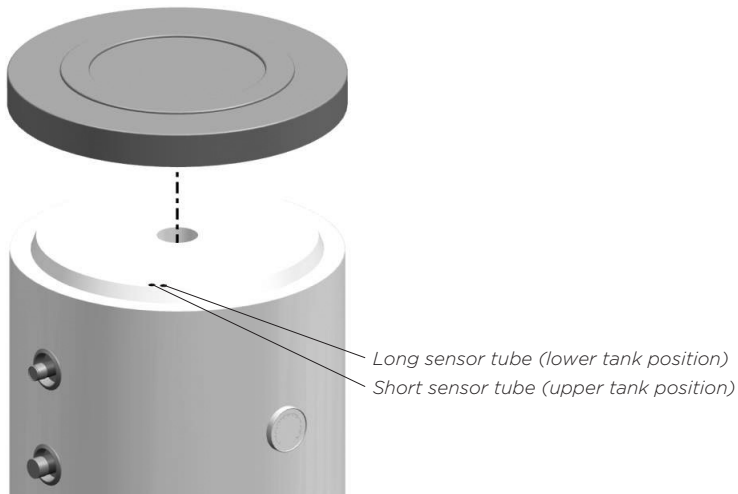


Image 6: Installation of sensors

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 |

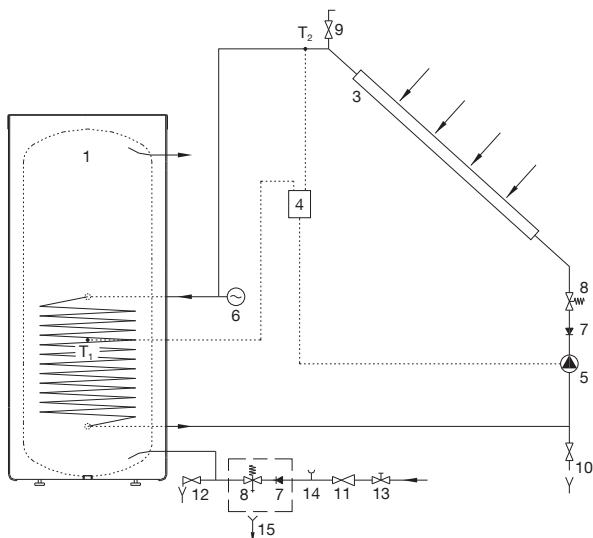


Image 7: Connection to solar panels

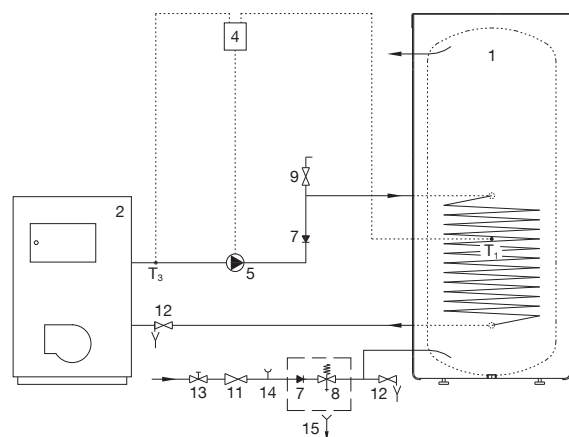


Image 8: Connection to the central heating hot-water system

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>.

