



Austria Email



***KRO / KRU***  
***5/10L***



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# NOTES

- ⚠ The unit can be used by children eight years old and older as well as by persons with reduced physical, sensory or mental capabilities or who lack experience and knowledge if they are supervised or if they have been trained with regard to the safe use of the unit and understand the resulting risks. Children may not play with the unit or its packaging. Cleaning and user maintenance may not be performed by children without supervision.
- ⚠ The unit may only be installed and operated as described in this manual or the associated technical information. Any other use is not in accordance with instructions and is therefore impermissible.
- ⚠ A defective unit may not continue to be operated.
- ⚠ Installation and commissioning may only be performed by qualified specialised personnel who therefore assume the responsibility for proper assembly in accordance with the applicable laws, standards and guidelines.
- ⚠ The unit is only suitable for a pressure-free connection.
- ⚠ Before connecting the unit to the mains, it must be filled with water!
- ⚠ The unit may only be set up in dry, frost-protected spaces. The water heater is to be completely emptied if there is a risk of freezing.
- ⚠ If a connection cable is damaged, immediately disconnect the power supply and call a professional!
- ⚠ Maintenance, cleaning and any necessary repair or service work may only be performed by specialised personnel who are qualified for this purpose. Never try to fix errors and faults yourself.

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## **Dear Customer,**

You have decided to on a unit from our company.

### **We would like to thank you for your confidence!**

Please read these operating instructions carefully before installing and operating the water heater. Keep this brochure in a safe place and, if applicable, please pass it on to subsequent owners.

You will receive a nice unit, built to the latest state of the art and which complies with the applicable standards and regulations. The unit was subjected to a proper inspection and is provided with a safety certificate and a certificate of electromagnetic compatibility.

You will find the technical specifications on a label between the two connection pipes. The installation and initial commissioning as well as necessary interventions for repair or maintenance may only be performed by a licensed expert. Within this small brochure you will find all the important information for correct installation and operation. It is still important to have your licensed expert explain the function of the unit to you and demonstrate its operation. Of course, our company is also glad to be at your disposal through the Customer Services and Sales Departments for any advice you may require.

## **OPERATIONAL REQUIREMENTS**

This unit is only suitable for hot water preparation within closed spaces and may only be installed with due consideration of the relevant professional standards.

The unit must be used exclusively in accordance with the conditions set out on the rating plate. In addition to the legally recognised standards and regulations, the connection conditions of the local electricity and water works as well as those set out in the operating and assembly instructions must be complied with.

The room where the unit is used must be frost-free. The installation of the unit must be carried out in a place where one might reasonably expect it to be, i.e., the device must be easily accessible and available in case it needs to be replaced.

For proper operation, the drinking water quality must comply with the Drinking Water Ordinance. In order to prevent the ingress of foreign bodies, we recommend the upstream installation of a water filter.

If setting up and installing the unit in an unusual place, a potential water leakage is to be taken into consideration and therefore also a device for capturing the escaping water with a corresponding drain so that secondary damage is avoided.

Should a device, at the point of delivery, clearly display a malfunction, damage or other defect, this must not fitted, used in the system or commissioned. Subsequent complaints regarding devices with an obvious defect which have been connected and installed are expressly excluded under the warranty and guarantee.

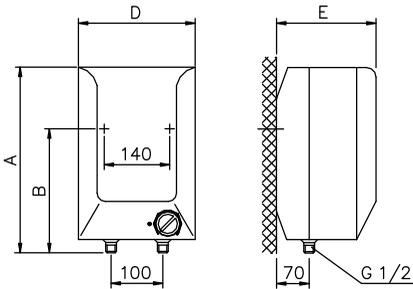
# INSTALLATION

The unit is to be installed as close as possible to the tapping point according to its installation dimensions. It is to be fastened to the wall with wall screws with a nominal diameter of at least 5 mm. Depending on your needs, you can choose between an over the sink table (KRO) and an under the table mount (KRU).

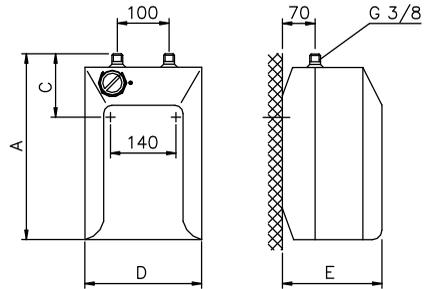
## DIMENSIONS

	A	B	C	D	E
KRO 0520	390	264		256	213
KRU 0520	390		138	256	213
KRO 1020	500	398		350	265
KRU 1020	500		122	350	265

Connection and mounting dimensions of the water heater [mm]



Above the sink



Below the sink

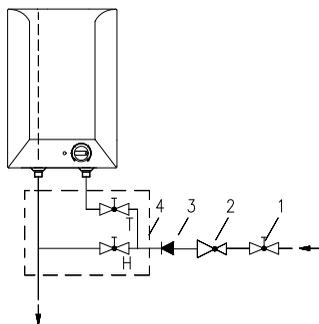
# WATER CONNECTION

The water heater is suitable for pressure-free assembly. The system allows for water withdrawal at a tap. The connection is to be done in accordance with the valid standards and laws as well as according to these operating and assembly instructions, including the corresponding diagrams.

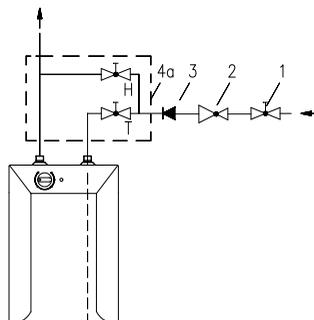
For a pressure-free mounting, a corresponding mixed tap is required, which must be coordinated to the type of assembly (under table or over table).

The cold water connection is marked in blue and the hot water connection is red. A non-return valve must be installed on the inlet pipe before the mixed tap, which prevents the water draining from the boiler if there is no water in the system. If the system line pressure is higher than 5 bars, a pressure reducing valve must be installed before the mixed tap.

When choosing the mixed tap, the manufacturer's specifications with respect to a pressure drop from the resistor are to be observed, which results with the flow of the water through the mixed tap. When the valve is fully open, this pressure may not be higher than 0.2 bar. No devices with a water drive or water diffuser may be connected at the water outlet, which could cause a pressure increase in the boiler. If the instructions are not complied with, damage may occur during start-up. These are excluded from the warranty and guarantee.



Above the sink



Below the sink

Legend:

1 - Shut-off valve

2 - Reducing valve

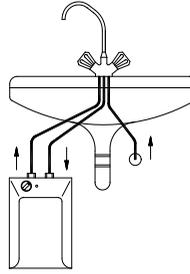
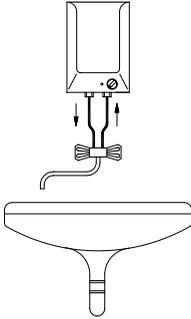
3 - Return Flow Inhibitor

4 - The single hole mixed tap - on top

4a - The single hole mixed tap - below

H - Cold water

T - Hot water



The water heater must be filled with water prior to electrical connection. During the first filling, open the hot water inlet of the mixed tap. The water heater is full when bubble-free water flows out of the outflow pipe of the mixed tap. **If the unit is operated without water, the heater fuse will be damaged during the first use and the water heater will not work.**

**The first start-up as well as the first heating process is to be monitored by an expert!**

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# ELECTRICAL CONNECTION

**Before the electrical connection is made, the storage tank must be completely filled with water!**

**CAUTION: You must disconnect the power before any intervention in the water heater!**

The electrical connection must be made according to the valid provisions and standards. The water heater is connected to the mains via the connection cable.

In some cases, it is necessary to replace the installed connection cable with a new cable. To do this, the plastic casing of the water heater must be removed. In order to remove this, first remove the plate on the front of the casing by carefully inserting a spanner in the slot between the plate and protective cover, first at the thermostat knob and then opposite from the knob. If the plate is loosened on both sides, it can be removed by hand. Then remove the thermostat knob and remove the fastening screw below the knob. Last unscrew all four fastening screws and the casing can be removed. Now the installed connecting cable can be removed from the connecting terminal and replaced with a new cable.

It should be noted that in case of failure (body circuit / leakage) it can trigger the RCD (Residual Current Device) come. This means that all electrical equipment is energized in this circuit.

Therefore, a separate RCD must be provided for the operation of the small memory should other electrical equipment to be used, in which an uninterruptible power supply must be guaranteed, as Freezers, refrigerators for medicines, emergency lighting, etc.

Legend to symbols:

- 1 - Thermostat
- 2 - Heating fuse
- 3 - Heating rod
- 4 - Control lamp
- 5 - Connecting terminal

- L - Phase conductor
- N - Neutral conductor
- ⊥ - Protective conductor

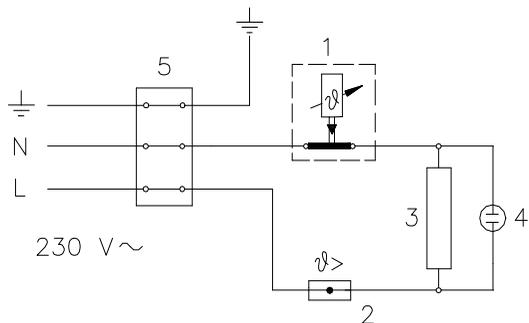


Diagram for connection to the electrical line

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# USE AND MAINTENANCE

Once you have connected the water heater to the water line and the electric network, the water heater is ready for operation.

By turning the thermostat knob attached to the front of the protective cover, choose the desired water temperature between 25°C and 75°C. We recommend the setting position "e". This is the most economical setting where the water temperature is about 41°C for KRO/KRU 0520 or 35°C for KRO/KRU 1020. Calcification and heat loss are lower with this setting than at higher temperatures (item II 55 °C and III 75 °C).

Due to the temperature regulator hysteresis ( $\pm 7$  K) and potential radiation losses (cooling of the plumbing), the temperatures quoted are subject to a tolerance of  $\pm 10$ K.

The operation of the water heater is indicated by a control lamp, which illuminates until the water in the unit has reached the desired temperature or the water heater is switched off. When the water is heated, its volume changes. With a pressure-free connection, the excess water therefore drips out of the mixed tap. Do not try to prevent this dripping (e.g. by tightening the mixed tap), since this may result in damage to the mixed tap. If the unit is put out of action or remains unused for a lengthy period of time, then it must be drained and completely isolated from the power supply.

In rooms permanently subject to frost damage, the water heater must be drained before the start of the cold weather season if the device will be out of action for several days and is not being operated in frost protection mode "✱".

Do not use any scouring agents to clean the device and do not use any paint thinners (such as Nitro, trichloride, etc.)

It is best to clean it using a damp cloth with a few drops of a liquid household cleaning agent. In hospitals and other public buildings, it is essential to comply with the prevailing regulations for cleaning and disinfection.

Flawless functioning and a long service life are ensured by regular service. The first check is to be performed by an expert after about 2 years of operation. During this check, the corrosion protection anode is checked and limescale is removed if necessary. The amount of calcification depends on the water quality, the water quantity and the water temperature. Based on the determined amount of calcification after 2 years of operation, the expert will recommend the time for the next inspection.

**We ask you to not repair any faults of the water heater yourself, but rather to inform the nearest customer service representative.**

# TECHNICAL CHARACTERISTICS

Type		KRO 0520	KRU 0520	KRO 1020	KRU 1020
Specified load profile		XXS	XXS	XXS	XXS
Energy efficiency class <sup>1)</sup>		A	A	A	A
Water treatment energy efficiency (nwh) <sup>1)</sup>	[%]	35.2	35	35.3	35.1
Annual electricity consumption <sup>1)</sup>	[kWh]	525	527	523	525
Daily electricity consumption <sup>2)</sup>	[kWh]	2.475	2.49	2.464	2.477
Temperature setting of the thermostat	[°C]	e *			
"smart" value		0	0	0	0
Volume	[l]	5.5	5.7	9.8	9.9
Weight / full	[kg]	3.5 / 8.5		4 / 14	
Connected rating	[W]	2000			
Connection voltage	[V~]	230			
Protection class		I			
Type of protection (protection level)		IP24			
Heating time from 10 °C to 65 °C	[min]	10		20	
Dimensions of the packaging	[mm]	215x265x425		275x320x500	

\* Rotary knob to position "e" means a temperature of about 41°C for KRO/KRU 0520 or about 35°C for KRO/KRU 1020

1) Commission regulation EU 812/2013; EN 50440

2) EN 50440

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## Guarantee, Warranty and Product Liability

The warranty will be fulfilled in accordance with the current legal provisions of the Republic of Austria as well as with those of the EU.

1. A condition for the operation of guarantee services by the product manufacturer (hereinafter referred to as the PM) is the presentation of the paid invoice for the purchase of the device for which the guarantee service is being invoked, whereby the identity of the device in terms of type and serial number must be taken from the invoice and must be produced by the claimant. This is subject exclusively to the PM's general terms and conditions of business and sales and delivery conditions.
2. To the extent required by law and/or the installation and operating instructions, the assembly, installation, connection and commissioning of the device in question must have been carried out by a licensed electrician and/or installer with due regard to the necessary instructions for this. The storage tank (without external covering or plastic external covering) must be protected from direct sunlight in order to prevent discolouring of the polyurethane foam and any possible warping of plastic components.
3. The room where the unit used must be frost-free. The installation of the device must be carried out in a place where one might reasonably expect it to be, i.e. the device must be easily accessible in case of servicing, repairs or in case it needs to be replaced. The costs for any necessary changes to the structural conditions (e.g. doors and corridors too narrow) are not covered by the guarantee and warranty offered and shall therefore be refused by the PM. When setting up, installing and operating the water heater in unusual places (e.g. lofts, living quarters with water sensitive flooring, store rooms etc.) potential water leakage must be taken into consideration and therefore a device for capturing and draining off any leaked water must be provided in order to prevent secondary damage in the sense of the product liability provisions.
4. The warranty shall not apply in the following cases:  
Improper transportation, normal wear and tear, deliberate damage or damage through negligence, any application of force whatsoever, mechanical damage or damage due to frost or resulting from exceeding the operational pressure stated on the rating plate even once, the use of connection fittings that do not comply with the applicable standards or non-functioning storage tank connection fittings, as well as unsuitable and non-functioning operating fittings, glass or plastic part breakage, any colour differences, damage through improper use, particularly by failing to observe the operating and assembly instructions (operating and installation instructions), damage caused by external influences, connection to the wrong voltage, corrosion damage due to aggressive waters not suitable as drinking water in accordance with national guidelines (such as the Austrian Drinking Water Ordinance TWV – BGBl. II Nr. 304/2001), divergences of the actual drinking water temperature at the storage tank instruments from the stated water temperature of up to 10°K (hysteresis of the regulator and potential cooling through plumbing), continued used despite the occurrence of a defect, unauthorised modifications to the device, installation of additional components that have not been tested together with the device, improperly executed repairs, too low conductivity of the water (at least 150 µs/cm), operational wear of the magnesium anode (wear part), natural scaling, lack of water, fire, flood, flooding and inundation, lightning strike, voltage overloading, power outages or other acts of force majeure, use of non-original third party components, e.g. heating elements, protective anode, thermostat, thermometer, finned tube heat exchanger, etc., uninsulated components introduced opposite the tank, the infiltration of foreign bodies or electro-chemical influences (e.g. mixed installations), failure to pay due care and attention to the planning

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documentation, failure to renew the in-built protective anode on time and to document it, lack of or unprofessional cleaning and operation, as well as any divergences from the norm that even slightly reduce the value or the functional capability of the device. In addition, as a matter of basic principle, all regulations set out in ÖNORM B 2531, DIN 1988 (EN 806), DIN 1717, VDI 2035 or the corresponding national regulations and legislation must be complied with.

5. In case of a justifiable claim, this must be reported to the nearest PM customer services centre. They shall reserve the right to decide whether a faulty component should be replaced or repaired and/or whether a faulty device will be exchanged for a fault-free device of the same value. In addition the PM expressly reserves the right to demand that the customer return the device to which the claim applies. The time for a repair or replacement is determined by the PM!
6. Repairs under the guarantee may only be carried out by people licensed to do so by the PM. Exchanged parts shall become the property of PM. Should any repairs to the water heater be required following necessary service works these shall be invoiced to the customer as repair and pro-rata materials costs.
7. In case of third-party interference without our express instruction, any and all claims shall be null and void, even if this is done by a licensed installation technician. The acceptance of costs arising from repairs carried out by third-parties shall be subject to the PM having been requested to fix the fault and having either failed to meet their exchange or repair obligations or not having done so within a reasonable period.
8. The guarantee period shall neither be renewed nor extended as a result of the services in response to claims under the guarantee or warranty, or service and maintenance work.
9. Transport damage shall only be inspected and perhaps recognised if these are reported to the PM in writing within one working day of delivery.
10. To the extent permissible by law, any claims over and above provisions made in the guarantee, such as in particular those relating to compensation for damages and consequential losses, are excluded. Pro-rata labour hours for repairs, as well as the costs of restoring the system to its original condition must be paid by the customer at the full rate. The guarantee offered shall only cover the repair or replacement of this device in accordance with this guarantee statement. The provisions of the PM's sales and delivery conditions shall continue to apply in full provided that they are not modified through these guarantee conditions.
11. Services not provided within the framework of these guarantee conditions shall be invoiced to the customer.
12. A precondition for the fulfilment of these guarantee provisions by the PM is that, on the one hand the device has been fully paid for and, on the other hand, that the claimant has fully complied with all of his obligations towards the reseller.
13. A guarantee shall be provided for the enamelled internal boiler for water heaters, with no diminution of the guarantee provisions in accordance with Points 1 to 12 for the period offered following delivery. If the guarantee conditions are not met then the legal warranty conditions of the country to which the

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goods have been delivered shall apply.

14. For the attainment of claims in accordance with Austrian product liability legislation, it should be noted that:

Any possible claims from the product liability stated above which deal with damage caused by a failure of a product (e.g. a person receives bodily injury, health is damaged or some other bodily part is damaged by the product), are only justified when all the prescribed measures and requirements which are needed for error-free and standard compliant operation of the device have been fulfilled. This includes for example the mandatory and documented replacement of the anode, connection to the correct operating voltage, damages arising from improper operation are to be avoided etc. These provisions are to be derived from the fact that, had all instructions been complied with (standards, installation and operating instructions, general guidelines etc.) the fault in the device or product that caused the secondary damages would not have arisen. Furthermore, it is indispensable that the necessary documentation, such as for example the designation and manufacturer number of the storage tank, the seller's invoice and the concessionaire who performed the sale as well as a description of the fault are submitted for the inspection of the allegedly faulty storage tank in the technical laboratory (absolutely necessary as a trained professional will inspect the storage tank and analyse the cause of the fault). To avoid any confusion regarding the storage tank during transportation, it must be provided with a clearly legible label (preferably with the address and signature of the end user). A corresponding photographic record is required showing the extent of the damage, the installation details (cold water input, hot water output, heater flow and/or back-flow, safety fittings, and, if applicable, expansion vessel) as well as the faulty area of the storage tank. In addition the PM expressly reserves the right to demand the provision of any documentation, the device or device components by the customer deemed necessary to clarify the situation. A prerequisite for the performance of services under the heading, Product Liability, is that it is incumbent upon the damaged party to prove that the damage was caused by a product of the PM. Claims made in line with the Austrian Product Liability Act are only valid for the sums above the first EUR 500 (excess). Until such time as the entire situation and circumstances have been clarified as well as until such time as the cause that resulted in the damages has been clearly identified, the PM decidedly rejects any potential culpability. Failure to observe the operating and installation instructions as well as the relevant standards is considered negligence and leads to a disclaimer of liability in the area of compensation.

Subject to technical alterations, errors and misprints excepted.  
Please forward this on to the user.

10/2016