

ELECTRIC INSTANTANEOUS WATER HEATER

GB



PPH2



KDH



KDH2



Used product can't be treated as general communal waste. Disassembled appliance has to be delivered to the collection point of electrical and electronic equipment for recycling. Appropriate utilisation of used product prevents potential negative environmental influences that may occur as a result of inappropriate handling of waste. In order to get more detailed information about recycling this product you should contact the local government unit, waste management service or the shop where this product has been purchased.

Safety instructions

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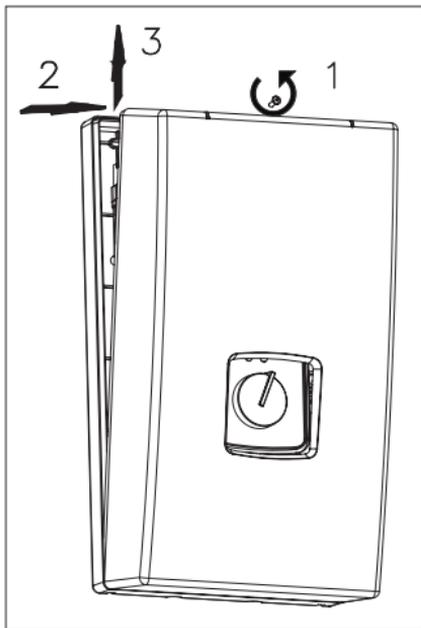
1. Read and strictly follow the installation and operating instructions to ensure a long life and reliable unit operation.
2. The unit is designed to be wall mounted.
3. The unit can only be used when in perfect technical condition and correctly installed.
4. If there is a non-return valve installed on the water supply pipe the safety valve must be fitted between the unit and non-return valve.
5. Inlet and outlet pipes should not be made of plastic. This relates to KDH only.
6. The unit should always be vented before initial start-up. Vent the unit each time after the water has been emptied from the heater or pipes (e.g. when water supply system has been repaired or maintained).
7. Connection to electrical system and measurement of fire protection effectiveness should be made by a qualified person.
8. The unit has to be earthed or neutrally grounded.
9. The unit must be permanently connected to the electrical system equipped with an earth clamp.
10. Electric installation should be equipped with residual current protective devices and other solutions which will ensure disconnecting the heater from the source of power (intervals between all their poles should not be less than 3 mm).
11. The unit must not be installed in the place which is exposed to the danger of explosion and place in which the temperature may go down below 0°C.
12. It is not recommended to use mixer taps with thermostat.
13. The unit must be kept in a place in which the temperature never goes down below 0°C (there is a water inside the unit).
14. The unit must be connected to the cold water supplies only.
15. Do not use when the water has been emptied from the unit or pipes (e.g. when water supply system has been repaired or maintained).
16. Unit's cover must not be taken off while power is on.
17. Failure to install the filter on water supply pipe can cause unit damage.
18. Appropriate precaution must be taken when using hot water. Temperature of water over 40°C may cause hot feeling and can be dangerous for children.

This appliance is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities or lack of experience and knowledge, unless they have been given supervision or instructions concerning use of the appliance by a person responsible for their safety.

Children should be supervised to ensure that they do not play with the appliance.

Installation – Assembly

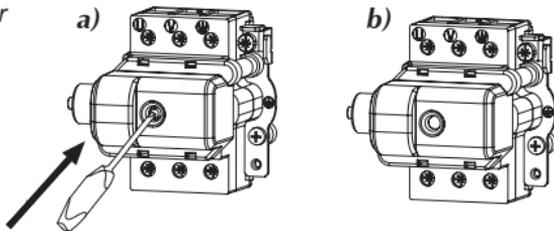
1. Apply the supported template on the place where the unit will be fitted. Mark points for drilling the holes for fixing screws.
2. Bring the water system pipes and electric supply cables to the marked places.
3. Take off the unit's cover.
4. Run the supply wire through the hole before you fix the unit on the wall.
5. Connect the unit to the electric mains.
6. Remove rubber plugs from cold and hot water fittings.
7. Connect the unit to the water supply system.
8. Open the cold water valve and check for leaks.
9. Vent the unit. See page 8, section "Venting"
10. Make sure that the WC3 or WT3 temp. limiter is at working position (the knob should be pushed in).
11. Put the unit's cover back.
12. Make sure that there is no access to live parts through the holes at the back plate.



Safety temperature limiter

WC3/WT3

- a) to switch on
- b) WC3/WT3 on



Venting

1. Shut off electric mains from the heater.
2. Turn the flow on (turn the hot water tap on) in order to vent the water installation (for about 15-30 seconds), until the flow of water becomes constant and even.
3. Switch on the electric supplies.

Operating

The unit switches on automatically right after reaching appropriate rate of flow. When the rate of flow rises the second step switches on. A user may set the heater on work at lower temperature range by turning the knob in position I (economic mode - reduced maximum power). Turning the knob in position II sets the heater at work at higher temperature range (full power mode: maximum power = rated power).

There are two indicators on the case:

- green - power supply "on",
- red - heating "on".



knob in position I

$$(P_{max} = 2/3 P_n)$$



knob in position II

$$(P_{max} = P_n)$$

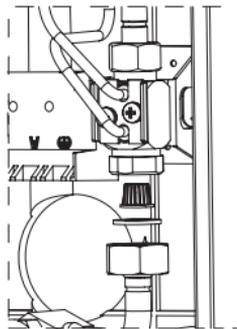
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Maintenance

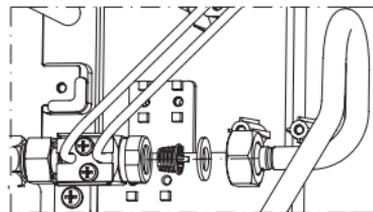
Filter cleaning:

1. **Cut off power and cold water supplies.**
2. Take off the unit's cover
3. Undo the inlet fitting from the orifice - on the cold water side (hold the orifice with spanner 22).
4. Take the filter out from orifice.
5. Clean up the filter.
6. Fix the filter back.
7. Do up the inlet fitting to the orifice.
8. Open the cut-off valve on cold water supply pipe - check connections for leaks.
9. Fix the unit's cover back.
10. Vent the water system – see Venting on page 8

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Faults

In case the unit does not heat the water, check for possible reasons:

Fault	Reason
control lights off	power supply failure
unit doesn't heat up the water/ water temp. is too low	power supply failure
	water flow rate is too low (e.g. filter is blocked with impurities)

The guarantee does not cover the above repairs.

If there is a fault in the appliance (the heater does not work and all the above reasons do not occur), contact the nearest authorised service.

Technical data

Hydraulic instantaneous water heater		PPH2, KDH2	PPH2, KDH2	PPH2, KDH2	PPH2, KDH2	PPH2, KDH2	KDH	
		KDH	KDH	KDH	KDH	KDH		
Rated power	kW	9	12	15	18	21	24	
Rated voltage		400V 3~						
Rated current	A	3 x 13,0	3 x 17,3	3 x 21,7	3 x 26,0	3 x 30,3	3 x 34,6	
Supply water pressure	MPa	0,15 - 0,6			0,2 - 0,6	0,25 - 0,6		
Operating point	position I	l/min	1,9 1,8	2,3 2,3	3,2 2,9	3,6 3,5	4,3 4,1	4,7
	position II	l/min	3,1 2,8	3,8 3,7	4,7 4,6	5,1 5,5	6,1 6,4	7,3
Efficiency (at $\Delta t = 30^{\circ}\text{C}$ and 0,4 MPa)	l/min	3,3	4,3	5,4	6,5	7,6	8,7	
Overall dimension (height without tap set x width x depth)	mm	PPH2 440 x 245 x 126						KDH, KDH2 440 x 245 x 120
Weight	PPH2	~4,0						
	KDH2	~4,3						
	KDH	~5,2						
Fuse rated current	A	16	20	25	32	40		
Min. connecting wires section	mm ²	4 x 1,5	4 x 2,5		4 x 4		4 x 6	
Max. connecting wires section	mm ²	4 x 16						
The maximum allowed network impedance	Ω						0,43	0,37
Water supply pipe section		G 1/2" (distance between inlet and outlet 100 mm)						

The minimal resistivity of water at 15°C for PPH2 and KDH2 is 1100 Ω cm.

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