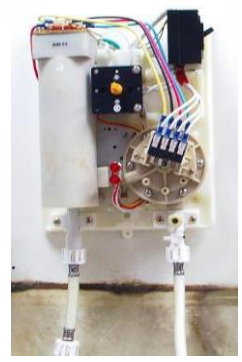




Product name	**INSTANT ELECTRIC WATER HEATER**
Dimensions	• Product: 32*23*13 cm • Inner color box: 37*16*25 cm • Master box: 50.5*38.4*52 cm • Net weight of master box: 25.6 kg • Gross weight of master box: 26.6 kg • Packaging volume: 0.101 m3
Packaging	• 1 item per inner box • 6 items per master carton
Loading quantity	• 1500 pcs for 1*20ft • 3200 pcs for 1*40ft
MOQ	600 pieces
Technical details	• **10.8 KW – 49amp – 220V/60HZ - 50HZ** • **ΔT 25°C - Inlet water temperature increases by 25°C** • **6.5 litres/minute** • **Working pressure: 3 - 85 psi**
Description	• There are **two indicator lights**: 1. One to indicate whether the heater is on 2. The other to indicate whether the heater is heating • It has **four safety systems**: 1. **Against water overheating** > Safety thermostat activates when it reaches 85 degrees 2. **Life-saving system** > the breaker trips in the event of electrical current dispersion 3. **Electrical overload system** > the breaker trips 4. **Mechanical water overpressure protection system** > discharge valve • The switch has 3 power settings + OFF • The cables have connectors • Fixing kit included

NK602

www.norwikpower.com

INSTRUCTION MANUAL

INSTALLATION AND OPERATION

ELECTRIC WATER HEATER

PLEASE READ THIS MANUAL CAREFULLY BEFORE OPERATIN6 YOUR EQUIPMENT. KEEP THIS MANUAL HANDY FOR FUTURE REFEREN.

www.norwikpower.com

IMPORTANT:

- Read the technical instructions before installing or operating this unit.
- Install the heater with a qualified technician to ensure the warranty is valid.
- Never make improvised or temporary electrical connections. Ground this unit.
- Purge the air from the unit by circulating water before connecting the power supply.
- Install this unit as close as possible to the hot water supply point.
- Water from springs and deep wells contains high levels of minerals that quickly solidify on the heating element. In these cases, preventive maintenance every 6 months is essential, and it is recommended to use water softeners and filters to improve water quality.

INDEX:

1. FEATURES

1.1 General Features

Operation

Select the desired heating power (temperature setting) between low, medium, or high. When you open the hot water tap, the heater will automatically turn on, heating the water for as long as needed.
It has a water flow regulator, which allows you to decrease or increase the amount of water flowing through the heater and, consequently, the water temperature.

Safety:

Overheating and overpressure safety system. Unique with a safety breaker against electrical faults.
Water connection at the bottom for maximum safety.
Equipped with a water valve that determines the automatic ignition of the heater, based on water pressure and flow.

Efficiency:

You will never run out of hot water (IT DOES NOT HAVE A TANK). It turns on automatically only when the hot water is opened for maximum electricity savings.

Comfort:

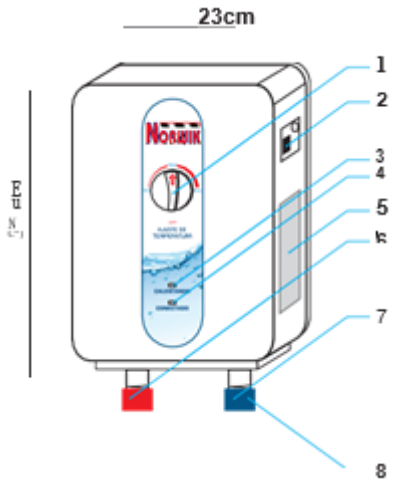
So small it fits anywhere and is easy to install.

Durability:

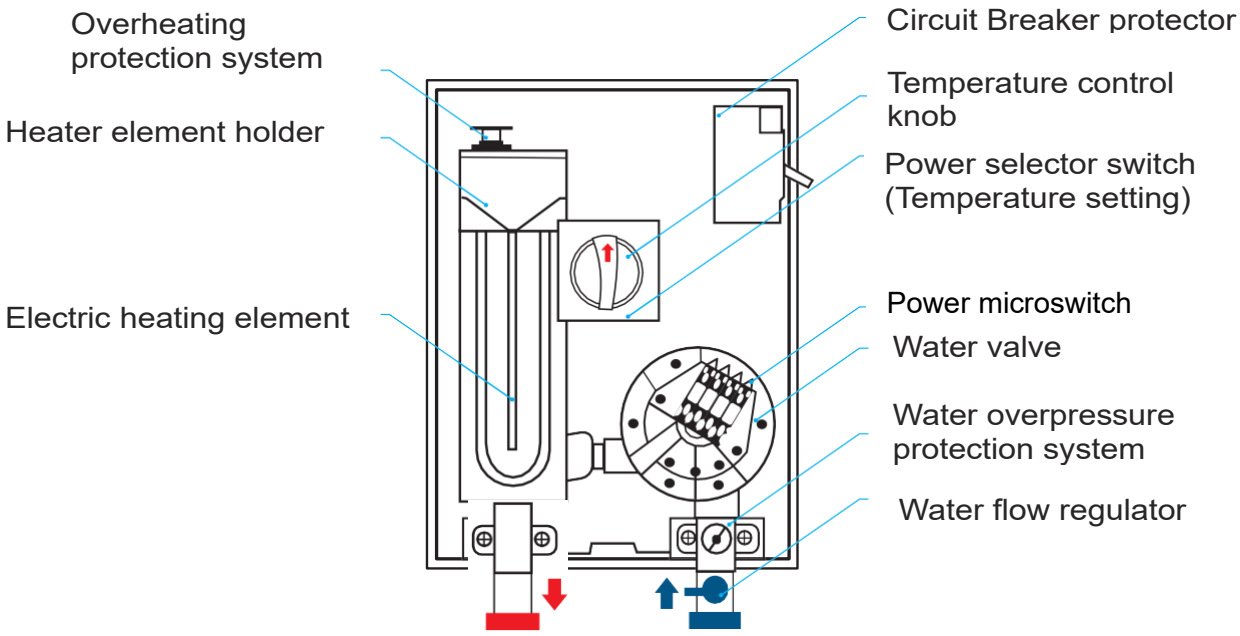
Advanced design WITHOUT ELECTRONIC BOARD, long lifespan guaranteed.
High-quality thermoplastic casing, RUSTPROOF.

1.2 Dimensions and names of external parts

1. Temperature adjustment knob
2. Circuit breaker protector
3. Heating indicator light
4. Power supply indicator light
5. Technical specifications label
6. Water filter
7. Cold water inlet
8. Hot water outlet



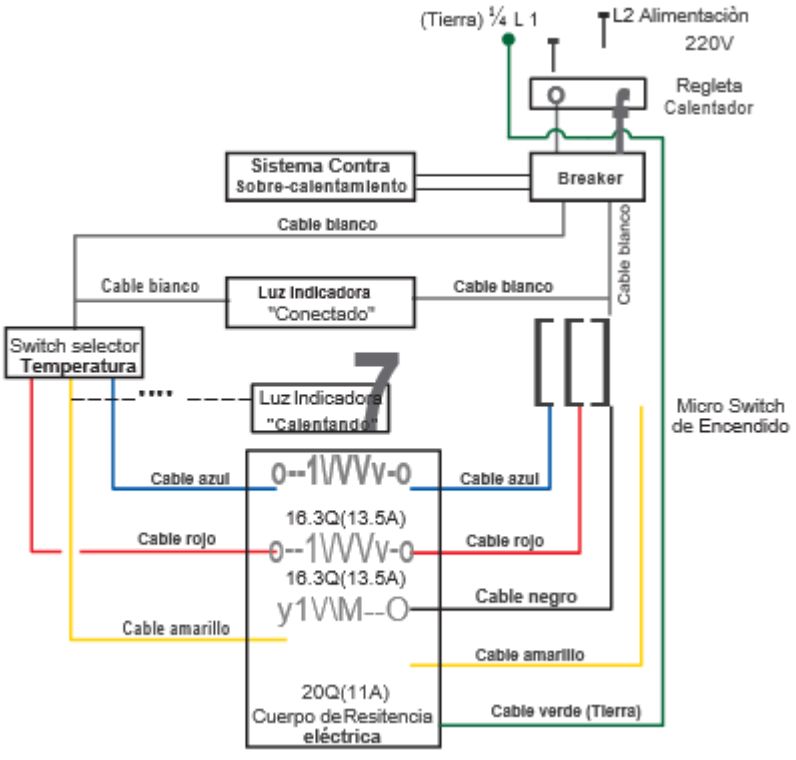
1.3 Names of internal parts



1.4 Technical features

Model	NK602					
Voltage	220V					
Temperature increase in °C	Mínimum	+8	Medium	+18	Maximum	+25
Power (kw/hr)		3		7 ,8		10,8
Theoretical power consumption (Amp)		13,5		35,5		49
Water pressure	Minimum 3 PSI			Maximum 85 PSI		
Water flow rate @ 25°C	6 Lts/min					
Water connection (½" NPT)	Cold (right side)			Hot (left side)		
Dimensions	32 x 23 x 13cm					
Net weight	3,4 kg					
Electrical Connections (Regia rear)	Green GROUND (⏚)			Left LINE(L1)		Right LINE(2)

1.5 Electrical diagram



2. INSTALLATION

2.1 Accessories (included in the package)

- 3 screws and plastic dowels for fixing.
- 1 metal bracket for wall mounting.

2.2 Installation location

It is recommended to locate your Norwik heater as close as possible to the hot water supply point. In an easily accessible location for future maintenance.
The heater should not be installed outdoors where it is exposed to direct sun or rain, or where the ambient temperature can drop below O °C.

2.3 Mounting the heater

Fix the metal bracket to the wall using 2 screws and the plastic plugs in the packaging.

Hang the heater once the electrical connection has been made (see electrical installation).

Completely fix the heater with the third screw [included in the package] in the lower dimple located between the water connections.

2.4 Water connection

The cold water pipe and the hot water pipe, both located at the bottom of the unit, must be clearly identified.

The cold water inlet is on the right side of the heater and the hot water outlet is located on the left side of the heater.

It is advisable to bleed the cold water pipe before connecting it to remove impurities contained in the pipe and prevent clogging of the heater.

The hot and cold water connection nipple is 1 /2’ NPT male thread.

The connection can be made with a hot water resistant PVC pipe or a copper pipe, provided that a stop cock is fitted at the cold water inlet.

The minimum water pressure must be 3 PSI or 2 metres water column, if the pressure is lower than this, the water valve will prevent automatic ignition of the appliance to avoid internal damage.

2.5 Electrical installation

Check that the supply voltage to the heater is the same as indicated on the Technical Data Label on the right hand side of your Norwik heater, i.e. 220 Volts.

During the electrical installation make sure that the breaker switch of the heater is in the 'Off' position as well as the temperature setting selector.

Disconnect the electrical supply at the main panel, place a 2 x 60 Amp Breaker on the main panel, exclusively for the heater and run two electrical wires from the main panel Breaker to the heater, #8 Awg for Lines L1 and L2 (DO NOT USE LESS THAN 8 AWG WIRE) and a #10 Awg wire for the ground connection.

These wires should be connected to the heater through the terminal strip on the back of the heater as shown below.

GREEN	Left	Right
GROUND(⏚)	LINE (L1)	LINE (L2)

Once the cables are connected, check that the screws on the terminal strip of both the heater and the Breaker on the panel are tightened securely.

IMPORTANT

Connect the equipment grounding cable to a grounding system, e.g. metal water pipe, electrical box or buried copper rod, the latter is the best way of grounding.

It is recommended that the electrical installation is carried out by a professional electrician or by our qualified personnel for the warranty to be valid!

3. USE AND MAINTENANCE

3.1 Operation

Before supplying the heater with electricity, make sure that all the air inside the appliance has been purged. To do this, let the water run through the heater by opening the hot water tap for one minute.

Check that there are no water leaks at the water connections, you can use a dry napkin, placing it around the connections and checking that it is not damp or wet.

Turn the breaker switch on the main panel and then the Breaker on the heater to the on position. At this point the 'on' indicator light on the front panel of the heater should come on, meaning that the heater is now supplied with power. Set the temperature setting selector to the desired heating position (see figure 1).

By passing a water flow rate of 6 L/min through the heater, the heater will raise the water temperature in relation to the cold water temperature by:

1. 'Minimum' position: the heater will raise the water temperature by approximately 8 °C.
2. Medium' position: the water temperature will be raised by approximately 18 °C.
3. In the 'Maximum' position the temperature will be raised by 25 °C above the cold water temperature.

The Norwik heater has a device at the cold water inlet which can be used to regulate the water flow rate through the heater and consequently the water temperature (see figure 2). For example, if the water flow is reduced to 3 Lts/min, the heater will increase the temperature by 50 °C in relation to the cold water inlet temperature, i.e. the more water flow through the heater the lower the temperature and the lower the water flow the higher the temperature.
To find out in a practical way what is the flow rate of water passing through your heater, carry out the following operation: Place the water coming out of the heater in a container for 1 minute.

Count the litres of water contained in the container and the result will be the litres of water circulating through the heater in 1 minute (Lts/min).
Once the desired temperature has been selected, open the hot water tap and the heater will switch on automatically, at which point the 'Heating' indicator light should be on to indicate that the heater is in operation, i.e. heating the water. When the hot water tap is closed, the heater will switch off automatically.

Your Norwik heater is equipped with four independent safety systems:

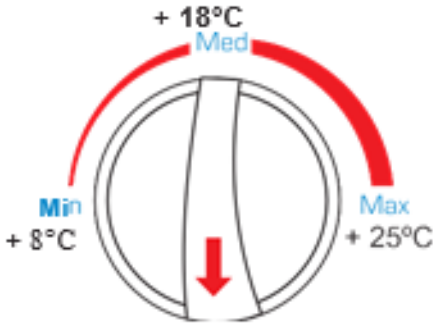
1. Safety device against overheating of the water, which cuts off the power supply to the heater in case the water exceeds 85 °C.
   If this device is activated, the breaker switch of the heater must be reset and the cause of the activation must be checked.

2. Water overpressure relief valve, which relieves any increase in pressure caused by the water, thus preventing internal damage.

3. Electrical dispersion safeguard, which cuts off the power supply to the heater in the event of a disturbance or failure of the power supply.
   If this device is activated, the heater's Breaker must be reset and the cause of the activation checked.

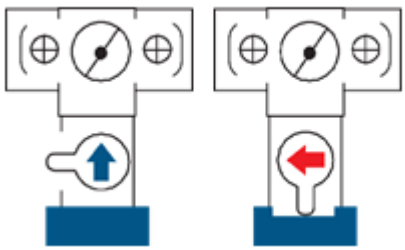
4. Water valve, which, if there is insufficient water flow, does not allow automatic ignition of the heater.

Fig.1: Adjustments of the water flow regulator



OFF
TEMPERATURE SETTING

Fig.2: Water flow adjustment



More water circulating
LESS temperature

Less water circulating
MORE temperature

3.2 Maintenance

The frequency of maintenance depends very much on the quality of the water supplied to the heater.
There is a filter at the cold water inlet of the water heater to prevent impurities from entering the water heater. When this filter becomes clogged, the flow of water through the appliance will decrease, so it should be cleaned occasionally.
To clean the filter, cut off all power supply to the heater, disconnect the power supply cables and water connections, unhook the heater, and flush the heater in the opposite direction. In cases where the water contains a lot of solid impurities, it is advisable to fit a separate external filter to facilitate cleaning. Water from springs and deep wells has a high content of minerals that solidify quickly in the heating element. In these cases it is necessary to carry out preventive maintenance, descaling the calcareous salts adhered to the heating element at least once every 6 months.
In these cases it is highly recommended to install water softeners in order to improve water quality and thus prolong preventive maintenance.

Model: _____

Series: _____

Purchased in: _____

Date: _____

Installed by : _____

Date: _____

3.3 Maintenance History

Date	Name of the technician	Maintenance performed	Replaced parts

Notes:

_____
_____
_____
_____
_____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