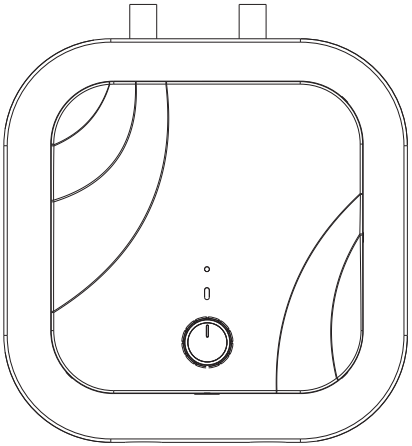
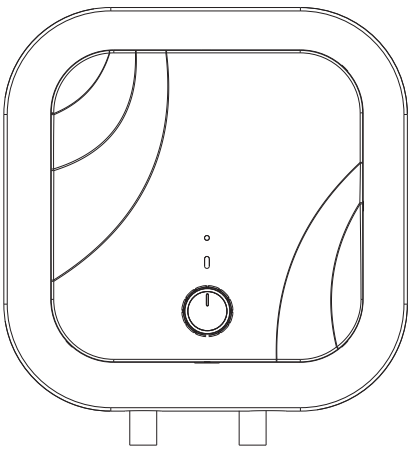




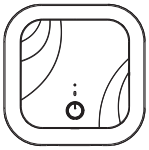
EN **IMPORTANT -** These instructions are for your safety. Please read through them thoroughly prior to handling the product and retain them for future reference.

V11224_5063022583697_MAND2_2324

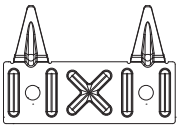
EN Oversink and undersin electrical water heater - 10 to 30 litres

5063022583697
5063022583680
5063022583710
5063022583703

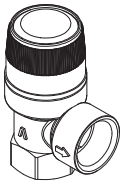
EN Parts



01. x1

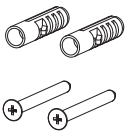


02. x1

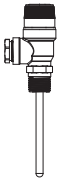


03. x1

04. x2



05. x1

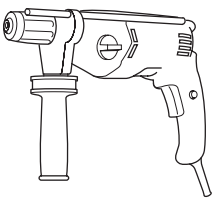


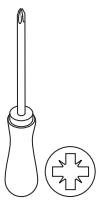
06. x1 (With factory-fitted T&P valve for 30L model only)

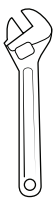
NOTE: These components are not included and need to be sourced seperated depending on your installation set-up:

- Type AA Tundish x1
- 2ltr Expansion Vessel (set to 3.5 bar) x1
- Check valve x1
- Pressure reducing valve (set to 3.5 bar) x1

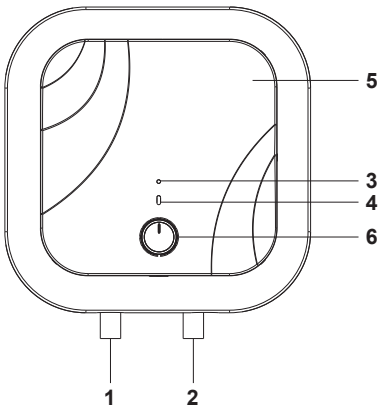
EN You will need



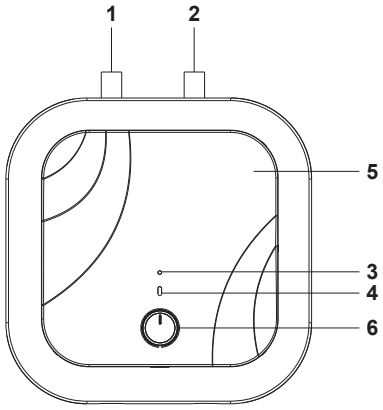




EN Contents



Oversink



Undersink

EN **1.** Hot water outlet (1/2" male BSP) **2.** Cold water inlet (1/2” male BSP) **3.** Power indicator **4.** Heating indicator **5.** Control panel cover **6.** Heating power control knob

EN
General safety instructions

CAUTION!

THIS MANUAL IS AN INTEGRAL PART OF THE PRODUCT. KEEP IT WITH CARE WITH THE APPLIANCE, AND HAND IT ON TO THE NEXT USER/OWNER IN CASE OF CHANGE OF PROPERTY.

READ THE INSTRUCTIONS AND WARNING IN THIS MANUAL CAREFULLY, THEY CONTAIN IMPORTANT INFORMATION REGARDING SAFE INSTALLATION, USE AND MAINTENANCE.

CHILDREN AGED 3 TO 8 YEARS ARE ONLY ALLOWED TO OPERATE THE TAP CONNECTED TO THE WATER HEATER.

- If in doubt, do not use the appliance but contact Customer Services on 0330 678 3077 (UK) and 1 800 365 800 (Eire).
- Check the package and make sure you have all of the parts listed and decide upon the appropriate location for your product. If this product contains glass please take care with fitting or handling to prevent personal injury or damage to the product. The specification plate shown on this appliance displays all the necessary identification information for ordering replacement parts. If you sell the appliance, give it away, or leave it behind when you move house, please ensure that you pass on this manual so that the new owner can become familiar with the appliance and its safety warnings.

- The appliance must be installed and commissioned by a qualified technician in accordance with local legislation and health and safety regulations. All power circuits must be shut off before you open the front panel and access the electrical components.
- DO NOT use the appliance for anything other than its specified use. The manufacturer is not liable for damage resulting from improper or incorrect use or failure to observe the instructions given in this manual.
- Incorrect installation can result in damage to property and injury to persons and animals; the manufacturer is not liable for the consequences.
- DO NOT leave any of the product packaging materials within the reach of children- they can cause serious injury.
- 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 instruction 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.
- DO NOT touch the appliance when barefoot or if any part of your body is wet.
- Any repairs, maintenance, plumbing and electrical connection must be done by qualified technicians using original spare parts only. Failure to observe the above instructions can compromise the safety of the appliance and relieves the manufacturer of any liability for the consequences.
- The hot water temperature is regulated by a thermostat which also acts as a resettable safety device to prevent dangerous overheating.

- The electrical connection must be done as indicated in this manual.
- If the appliance is equipped with a power cord, the latter may only be replaced by an authorised service centre or professional technician.
- Do not tamper with the overpressure safety device, if supplied together with the appliance; trip it from time to time to ensure that it is not jammed and to remove any scale deposits. In countries which have enacted EN 1487, the appliance's intake pipe must be equipped with a safety device compliant with the said standard, calibrated to a maximum pressure of 0.7 MPa, including at least a cock, check valve, safety valve and hydraulic load cutout.
- Do not operate this appliance if it has a damaged cord or plug, if it is not working properly, or if it has been damaged or dropped. If the supply cord is damaged, it must be replaced by the manufacturer or its service agent or a similarly qualified person in order to avoid a hazard.
- The water may drip from the discharge pipe of the pressure-relief device and that this pipe must be left open to the atmosphere; The pressure-relief device is to be operated regularly to remove lime deposits and to verify that it is not blocked.
- Make sure to drain the appliance when it is out of service or in an area subject to subzero temperatures.
- Water heated to over 50 °C can cause immediate serious burns if delivered directly to the taps. Children, disabled persons and the aged are particularly at risk. We recommend installing a thermostatic mixer valve on the water delivery line, marked with a red collar.
- Do not leave flammable materials in contact with or in the vicinity of the appliance.

General safety standards

WARNING! DO NOT OPEN THE APPLIANCES OR REMOVE FROM ITS INSTALLATION.

- Electrocution hazard due to the presence of live electrical equipment. Personal injury - burns caused by overheated components and wounds caused by sharp edges.

WARNING! DO NOT START OR STOP THE APPLIANCE BY INSERTING/PULLING THE POWER PLUG.

- Electrocution hazard due to damage to the power cord, its plug or the socket.

WARNING! DO NOT DAMAGE THE POWER CORD.

- Electrocution hazard due to bare live wires.

WARNING! DO NOT LEAVE OBJECTS ON THE APPLIANCE.

- Personal injury due to objects falling off the appliance as a result of vibration.
- Damage to the appliance or other property due to objects falling off the appliance as a result of vibration.

WARNING! DO NOT CLIMB ONTO THE APPLIANCE.

- Personal injury due to falling off the appliance.
- Damage to the appliance or other property due to the appliance itself detaching from its mounting.

WARNING! DO NOT CLEAN THE APPLIANCE WITHOUT HAVING FIRST SWITCHED IT OFF, PULLED ITS POWER PLUG OR SHUT OFF ITS POWER SWITCH.

- Electrocution hazard due to the presence of live electrical equipment.

WARNING! INSTALL THE APPLIANCE TO A SOLID WALL WHICH IS NOT SUBJECT TO VIBRATION

- Danger of the appliance falling off the wall due to structural collapse, or noisy operation

WARNING! MAKE THE ELECTRICAL HOOKUP WITH CABLES OF ADEQUATE CROSS SECTION.

- Danger of fire due to overheating of undersized electrical wires.

WARNING! RESTORE ALL SAFETY AND CONTROL FUNCTIONS AFTER WORKING ON THE APPLIANCE AND CHECK THAT THEY ARE OPERATIONAL BEFORE RETURNING IT TO SERVICE.

- Damage or blocking of the appliance due to improper control.

WARNING! DRAIN ALL COMPONENTS CONTAINING HOT WATER, USING THE BLEED COCKS, BEFORE HANDLING THEM.

- Danger of burns.

WARNING! DESCALE THE SYSTEM AS GIVEN IN THE PRODUCT'S "CARE MAINTAINANCE"; WHEN DOING SO, VENTILATE THE ROOM, WEAR SAFETY CLOTHING, MAKE SURE NOT TO MIX PRODUCTS, AND PROTECT THE APPLIANCE ITSELF AND ANY ADJACENT OBJECTS.

- Personal injury due to contact of the skin and eyes with acid, inhalation or ingestion of noxious chemicals.
- Damage to the appliance and adjacent objects due to corrosion by acid.

WARNING! DO NOT USE INSECTICIDES, SOLVENTS OR AGGRESSIVE DETERGENTS TO CLEAN THE APPLIANCE.

- Damage to plastic and painted parts and assemblies.

Anti-legionella recommendations (European standard CEN/ TR 16355)

Legionella is a small bacterium, of stick-like form, and is found naturally in fresh water. Legionnaire's disease is a

serious pulmonary infection caused by inhalation of the *Legionella pneumophilia* bacterium and other species of *Legionella*. The bacterium is frequently to be found in the plumbing of houses, hotels and water used in A/C and air cooling systems. The most effective measure against infection is to prevent the bacterium proliferating in water circuits. European standard CEN/TR 16355 provides guidelines for preventing the proliferation of Legionella in drinking water systems, without substituting applicable focal legislation.

General recommendations

“Conditions favourable to the proliferation of Legionella’’.
The following conditions are favourable to the proliferation of Legionella:

- Water temperature in the range 25 - 50 °C. To reduce the proliferation of Legionella, the water temperature be kept outside these limits to prevent them growing or reduce their growth to a minimum. If this is not possible, the drinking water system must be sanitised thermally;
- Stagnant water. To prevent water stagnating for a long time, the drinking water system must be flushed or made to run abundantly at least once a week;
- Nutrients, biofilms and sediment in the circuit, including boilers, etc. Sediment may promote the proliferation of Legionella and should be regularly eliminated from water storage devices, boilers and expansion/ holding tanks (for instance, once a year).

As regards storage heater like the present, if:

- the appliance is switched off for several months at a time or
- the water temperature is kept constant in the range 25 - 50 °C, the Legionella bacterium may grow inside the tank. If such circumstances, to reduce the proliferation of the bacterium, one must run a thermal sanitisation cycle.

This cycle is suited to use in domestic hot water systems and complies with the guidelines for the prevention of Legionella given in Table 2 of standard CEN/TR 16355 (see below).

Types of hot water system

	Separate hot and cold water			
	No storage		Storage	
	No circulation of hot water	Circulation of hot water	No circulation of mixed water	Circulation of mixed water
Ref. In Enclosure C	C.1	C.2	C.3	C.4
Temperature	-	≥ 50 °C[e]	in storage heater[a]	≥ 50 °C[e]
Stagnation	-	≤ 3 l [b]	-	≤ 3 l [b]
Sediment	-	-	remove[c]	remove[c]

	Mixed hot and cold water					
	No storage upline of the mixer valves		Storage upline of the mixer valves		No storage upline of the mixer valves	
	No circulation of mixed water	Circulation of mixed water	No circulation of mixed water	Circulation of mixed water	No circulation of mixed water	Circulation of mixed water
Ref. In Enclosure C	C.5	C.6	C.7	C.8	C.9	C.10
Temperature	thermal disinfection[d]	thermal disinfection[d]	in storage heater[a]	≥ 50 °C[e] thermal disinfection[d]	thermal disinfection[d]	thermal disinfection[d]
Stagnation	-	≤ 3 l [b]	-	≤ 3 l [b]	-	≤ 3 l [b]
Sediment	-	-	remove[c]	remove[c]	-	-

a Temperature > 55 °C all day or at least 1 h a day > 60 °C.
b Volume of water contained In the pipes between the circulation system and the most distant tap.
c Remove the sediment from the storage heater as required by local conditions, but no less frequently than once a year.
d Thermal disinfection for 20 minutes at 60 °C, for 10 minutes at 65 °C or 5 minutes at 70 °C at all delivery points at least once a week.
e The water temperature In the circulation circuit may not fall below 50°C.
- Not required

This storage water heater is sold without a thermal disinfection cycle function ; as a consequence, if, for any reason, one of the above said “Conditions for Legionella growth” could occur; it’s highly recommended to enable such function by rotating the knob up to maximum water temperature (>60°C).

However, the thermal disinfection cycle does not kill all Legionella bacteria in the storage tank. It follows that if the water temperature setting is less than 55 °C, the Legionella bacterium infection may reoccur.

CAUTION: THE WATER TEMPERATURE IN THE TANK CAN CAUSE IMMEDIATE SERIOUS BURNS. CHILDREN, DISABLED PERSONS AND THE AGED ARE PARTICULARLY AT RISK OF BURNS. CHECK THE WATER TEMPERATURE BEFORE TAKING A BATH OR SHOWER.

User instructions

PLEASE KEEP THIS BOOKLET FOR FUTURE REFERENCE

The heater is insulated to a high standard therefore it may be left on all the time. The temperature of the water may be adjusted by turning the knob on the front of the heater, allow half an hour for the temperature to stabilise between settings. Maximum temperature is achieved with the knob turned fully clockwise.

The neon light shows when the heating element is working, under control of the thermostat.

NOTE: The water heater does not have an “low” setting.

Water Regulations and Byelaws

These regulations and byelaws ensure a good supply of wholesome water, and that only approved materials, pipes and fittings are used to convey water.

Building Regulations

These are a statutory document and take priority over all other regulations and recommendations. The installation of an unvented hot water system of over 15 litres is classified as a “Controlled Service” and Regulation G3 applies. To meet the requirements of the regulation, installation of an unvented system should be undertaken by a “competent installer”.

All installations of unvented hot water storage systems having a capacity of more than 15 litres should be notified to the relevant Local Authority by means of building notice or by the submission of full plans. It is important to note that it is a criminal offence to install an unvented hot water storage system over 15 litres without notifying the Local Authority.

Electrical Installation

WARNING: THE APPLIANCE MUST BE EARTHED.

The electrical installation must be in line with the current I.E.E. wiring regulations.

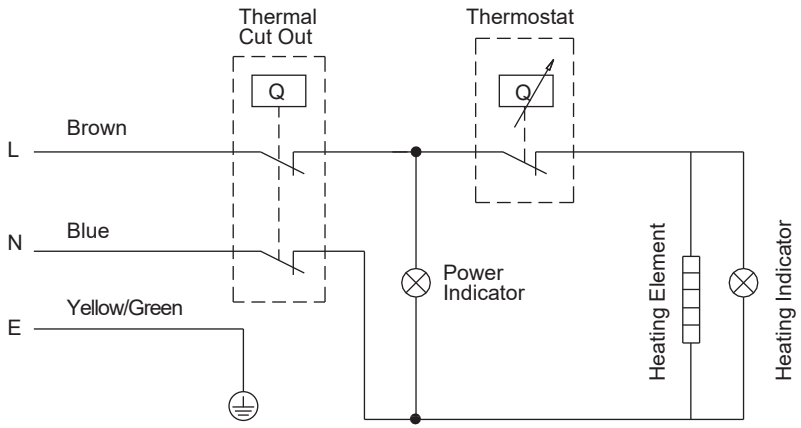
A mains supply of 240 V AC 3 kW (13 amps) is required.

The water heater is supplied with heat resisting cable, round 3 core 1.5 mm (to BS 6141 table 8) and should be used to connect to the electrical supply through either:

- a 13 amp socket to BS 1363; or
- a double pole fused isolating switch with a contact separation of 3 mm minimum on each pole.

Colour codings and diagrams are as follows:

Brown	live
Blue	neutral
Green and yellow	earth



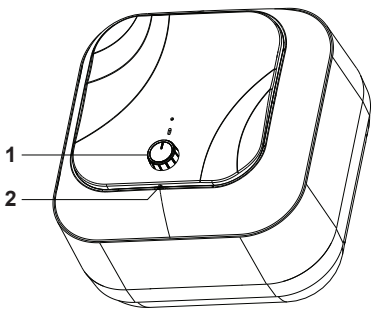
To remove the cover for access to the wiring, firstly the installer must remove the heating power control knob (#1) and remove 2 x screws.

Next, gently press the screwdriver into the clip (#2) that holds the cover in place and lift. once this has been removed, firmly lift the panel away from the body and all other clips will detach themselves.

To re-fit the cover, first align the heating controller in the cover.

Align the top edge of the cover first to the water heater and firmly push all clips back into place working from top to bottom.

Finally secure the screws and control knob.



Technical specifications

For the technical specifications, refer to the nameplate (the nameplate is located next to the water intake/ outlet pipes).

Model Ean	Unit weight (KG)	Qelec (kwh)	Load profile	Lwa	ηwh	Storage volume
5063022583697	7.4	2.463	XXS	15 dB	35%	10 L
5063022583680	9.3	2.477	XXS	15 dB	35%	15 L
5063022583710	9.3	2.477	XXS	15 dB	35%	15 L
5063022583703	13	2.732	S	15 dB	32%	30 L

The power consumption data in the table and the other information given in the Product data label are defned in relation to EU Directives 812/2013 and 814/2013.

This appliance is conforming with the international electrical safety standards IEC 60335-1 and IEC 60335-2-21.

The CE marking of the appliances attests its conformity to the following EC Directives, of which it satisfies the essential requisites:

- LVD Low Voltage Directive: EN 60335-1, EN 60335-2-21, EN 60529, EN 62233, EN 50106.
- EMC Electro-Magnetic Compatibility: EN 55014-1, EN 55014-2, EN 61000-3-2, EN 61000-3-3.
- RoHS2 Risk of Hazardous Substances: EN 50581.
- ErP Energy related Products: EN 50440.
- EN 12897:2006

Recycling & disposal

This symbol is known as the ‘Crossed-out Wheelie Bin Symbol’.

When this symbol is marked on a product or battery, it means that it should not be disposed of with your general household waste.

Some chemicals contained within electrical/electronic products or batteries can be harmful to health and the environment.

Only dispose of electrical/ electronic/battery items in separate collection schemes, which cater for the recovery and recycling of materials contained within.

Your co-operation is vital to ensure the success of these schemes and for the protection of the environment.

Aftersales and spare parts

This product comes with a two-year warranty from the date of purchase.

For aftersales support within this period, please visit: www.kingfisherspares.com, or contact the customer service team:

- UK 0330 678 3077 uk@kingfisherservice.com
- Eire 1 800 365 800 eire@kingfisherservice.com

Further information about this appliance can also be found at: www.kingfisher.com/products

Guarantee

We take special care to select high quality materials and use manufacturing techniques that allow us to create products incorporating design and durability. This product has a manufacturer's guarantee of 2 years against manufacturing defects, from the date of purchase (if bought in store) or date of delivery (if bought online), at no additional cost for normal (non-professional or commercial) household use.

To make a claim under this guarantee, you must present your proof of purchase (such as a sales receipt, purchase invoice or other evidence admissible under applicable law), please keep your proof of purchase in a safe place. For this guarantee to apply, the product you purchased must be new, it will not apply to second hand or display products. Unless stated otherwise by applicable law, any replacement product issued under this guarantee will only be guaranteed until expiry of the original period guarantee period.

This guarantee covers product failures and malfunctions provided the product was used for the purpose for which it is intended and subject to installation, cleaning, care and maintenance in accordance with the information contained in these terms and conditions, in the user manual and standard practice, provided that standard practice does not conflict with the user manual.

This guarantee does not cover defects and damage caused by normal wear and tear or damage that could be the result of improper use, faulty installation or assembly, neglect, accident, misuse, or modification of the product. Unless stated otherwise by applicable law, this guarantee will not cover, in any case, ancillary costs (shipping, movement, costs of uninstalling and reinstalling, labour etc), or direct and indirect damage.

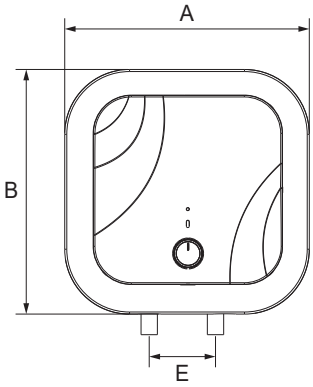
If the product is defective, we will, within a reasonable time, repair.

Rights under this guarantee are enforceable in the country in which you purchased this product. Guarantee related queries should be addressed to the store you purchased this product from.

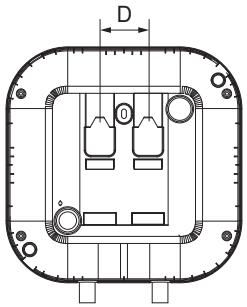
The guarantee is in addition to and does not affect your statutory rights.

IMPORTANT - RETAIN THIS INFORMATION FOR FUTURE REFERENCE: READ CAREFULLY

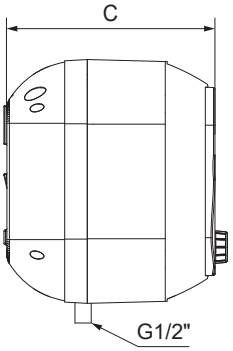
Oversink



Front view

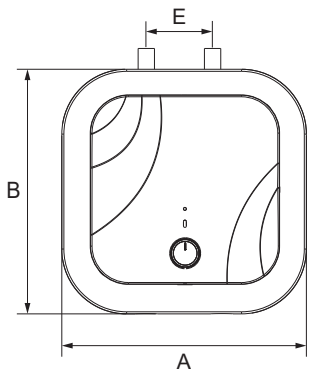


Back view

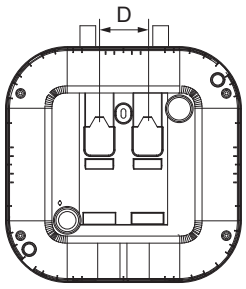


Side view

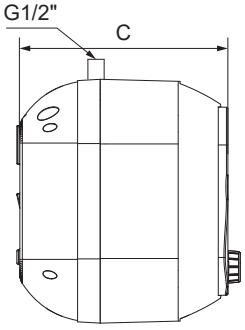
Undersink



Front view



Back view



Side view

(mm)

Model EAN	A	B	C	D	E
5063022583697	324	324	277	66	100
5063022583680	368	368	297	66	100
5063022583710	368	368	297	66	100
5063022583703	440	440	385	66	100

Before you start

PLEASE READ THE FOLLOWING INSTRUCTIONS CAREFULLY BEFORE USING THE PRODUCT.

The installation must comply with all relevant Water Regulations/Byelaws and Building Regulations.

The installer should check with the local water authority for confirmation of the maximum water supply pressure.

Siting & fixing

WARNING: THE APPLIANCE SHOULD BE LEFT PACKED UNTIL IT IS READY TO BE INSTALLED. WHEN UNPACKING THE 30 L MODEL TAKE CARE NOT TO DAMAGE THE TEMPERATURE AND PRESSURE RELIEF VALVE ON THE TOP OF THE HEATER.

A drain has to be provided for any water discharged through the safety valves.

Access to the heater is not normally needed on a day-to-day basis, but 300 mm clearance to the front of the water heater sould be kept for servicing and maintenance. A cold water supply pressure between 1 and 3.5 bar is required (if the mains pressure is above 3.5 bar a pressure reducing valve must be installed). **Please note that turning down the stop-cock will reduce flow not pressure.**

A 240 V AC; 3 kW single phase electrical supply is required.

Ensure the unit is installed in a place where freezing will not occur.

Ensure a suitable low level drain off cock is installed on the hot and cold plumbing system.

Plumbing

WARNING: THE APPLIANCE MUST NOT BE SUPPLIED WITH WATER OF HARDNESS LESS THAN 12 °F, NOR WITH ESPECIALLY HARD WATER (GREATER THAN 25 °F); WE RECOMMEND INSTALLING A WATER SOFTENER, PROPERLY CALIBRATED AND CONTROLLED - DO NOT ALLOW THE RESIDUAL HARDNESS TO FALL BELOW 15 °F.

The outlet from temperature and pressure relief valve/pressure relief valve must not be for any other purpose.

Take great care not to allow any swarf into the pipe work or fittings, as this might impair the operation of the safety valve(s).

The water connection may be carried out as per the following:

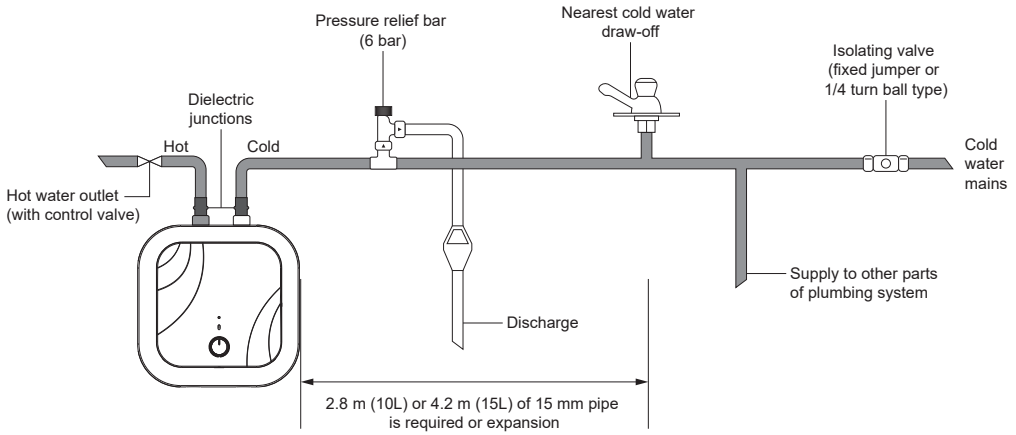


Fig. 1
(NOTE: This system is not suitable for model 30 L.)

Using the feed pipe to accommodate expansion

(Schedule 2, Section 6: Paragraph 15 of the Water Supply (Water Fittings) Regulations 1999 and the Water Byelaws 2000, Scotland) (Fig. 1).

Do not fit any stop cocks or isolating valves within the distance required for expansion. If a pressure reducing valve is needed, due to a mains pressure of over 3.5 bar, an expansion control kit must be fitted regardless of expansion pipework installed. The expansion distances quoted are for 15mm pipes and can be approximately halved for 22 mm pipes.

Using a set of expansion controls (Fig. 2 & 3).

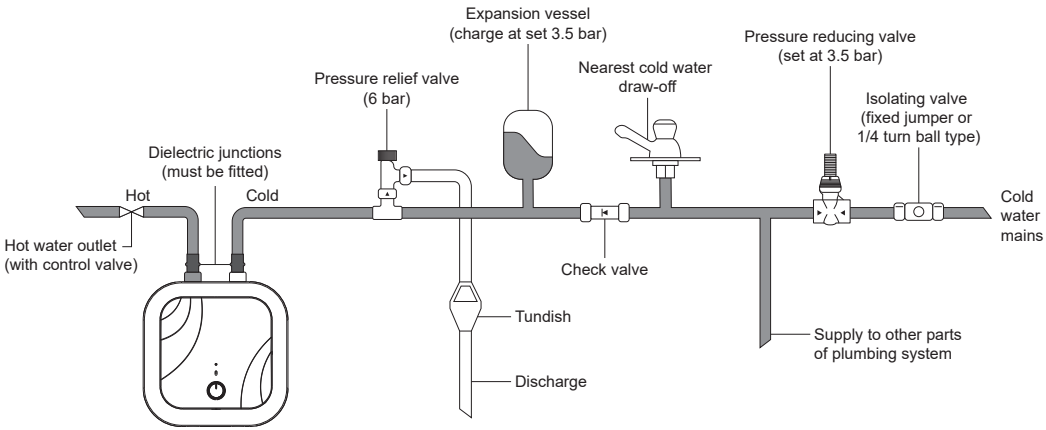


Fig. 2
(Models 10 L / 15 L)

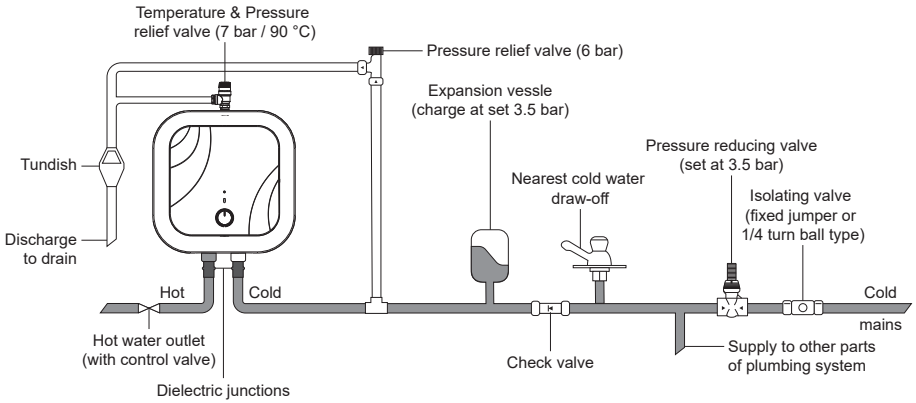


Fig. 3
(Models 30 L)

The tundish must be installed away from electrical devices.

The model 30 L is covered under the Building Regulations and therefore it is not possible to accommodate the expansion water within the system pipe work and consequently a set of expansion controls must be installed.

The product must be fitted by a competent person. Must be installed with the Expansion Vessel, Discharge Tundish and if mains pressure is over 3.5 bar then the Pressure Reducing Valve is also required.

NOTE: The discharge from relief valves must be made in a safe and conspicuous manner; therefore a tundish is required.

NOTE: Please note that in all cases the dielectric junctions must be connected to the heater before any other connection is made (these prevent an electrolytic reaction).

Only the use of copper pipe is recommended for connection to and from the heater. If any other material is used it must be able to withstand 90 °C at 7 bar pressure for long periods.

No valve must be fitted between the expansion/pressure relief valve and the water heater.

All other required safety components to install the model 30L are available in stores in the Flomasta brand.

15 mm pressure reducing valve set at 3.5 bar.

Expansion vessel (pressure to be checked and precharged to 3.5 bar).

Discharge pipework

NOTE: The following guidelines refer to Building Regulation G3. It is good practice to follow these guidlines for all relief valve discharge pipe work.

1. The tundish must be vertical and fitted within 600 mm of the temperature & pressure relief valve and must be located with the cylinder. The tundish must also be in a position visible to the occupants, and positioned away from any electrical devices. The discharge pipe from the tundish should terminate in a safe place where there is no risk to persons in the vicinity of the discharge and to be of metal.
2. Discharge pipes from the temperature & pressure relief (used for 30 ltr) and pressure relief valve may be joined together.
3. The pipe diameter must be at least one pipe size larger than the nominal outlet size of the safety device unless it's total equivalent hydraulic resistance exceeds that of a straight pipe 9 m long.
    - i.e. Discharge pipes between 9 m and 18 m equivalent resistance length should be at least 2 sizes larger than the nominal outlet size of the safety device. Between 18 m and 27 m at least 3 times larger, and so on.

- Bends must be taken into account in calculating the flow resistance.
- See fg. 4 and Table 2.

4. The discharge pipe must have a vertical section of pipe at least 300 mm in length, below the tundish before any elbows or bends in the pipe work.
5. The discharge pipe must be installed with a continuous fall.
6. The discharge must be visible at both the tundish and the final point of discharge, but where this is not possible or practically difficult; there should be clear visibility at one or other of these locations. Examples of acceptance are:

   - Ideally below a fixed grating and above the water seal in a trapped gully.
   - Downward discharges at a low level; i.e. up to 100 mm above external surfaces such as car parks, hard standings, grassed areas etc. These are acceptable providing that where children may play or otherwise come into contact with discharges, a wire cage or similar guard is positioned to prevent contact, whilst maintaining visibility.
   - Discharges at high level; i.e. into a metal hopper and metal down pipe with the end of the discharge pipe clearly visible (tundish visible or not). Or onto a roof capable of withstanding high temperature discharges of water 3 m from any plastic guttering systems that would collect such a discharge (tundish visible).
   - Where a single pipe serves a number of discharges, such as in blocks of flats, the number served should be limited to not more than 6 systems so that any installation can be traced reasonably easily. The single common discharge pipe should be at least one pipe size large than the largest individual discharge pipe to be connected. If unvented hot water storage systems are installed where discharges from safety devices may not be apparent i.e. in dwellings occupied by the blind, infirm or disabled people, consideration should be given to the installation of an electronically operated device to warn when discharge takes place. Note: The discharge will consist of scalding water and steam. Asphalt, roofing felt and non-metallic rainwater goods may be damaged by such discharges.

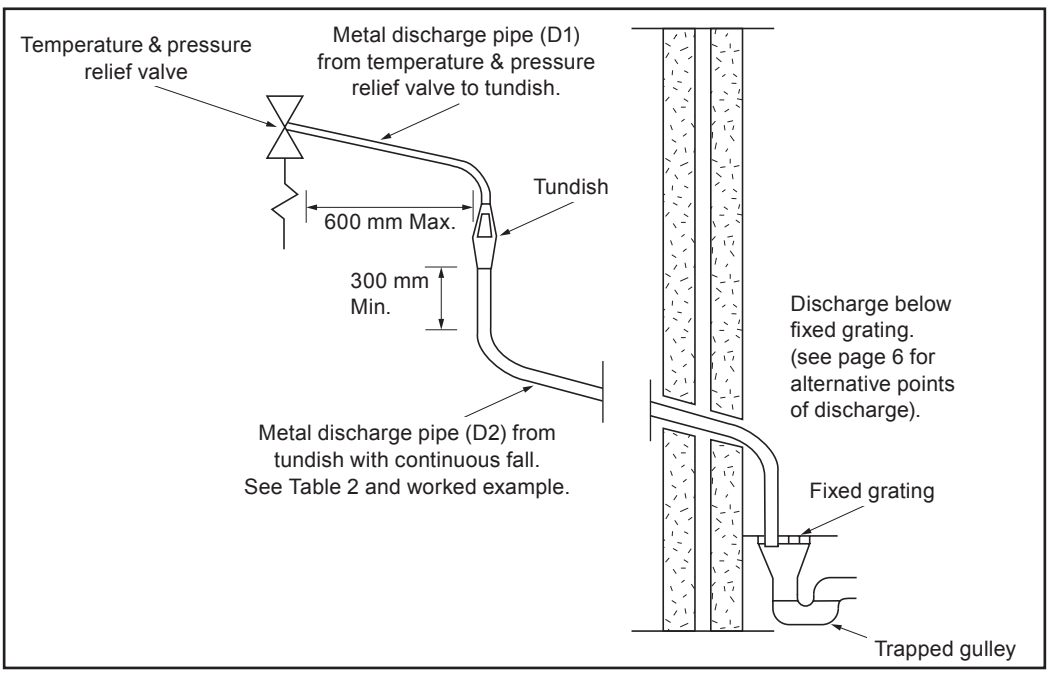


Fig. 4
(Suggest ways of terminating discharge pipes safely)

Sizing of copper discharge pipe “D2” for common temperature valve outlets.

Valve outlet size	Minimum size of discharge pipe D1*	Minimum size of discharge pipe D2* from tundish	Maximum resistance allowed, expressed as a length of pipe (I.e. no elbow or bends)	Resistance created by each elbow or bend
G 1/2	15 mm	22 mm	Up to 9 m	0.8 m
		28 mm	Upto 18 m	1.0 m
		35 mm	Up to 27 m	1.4 m
G 3/4	22 mm	28 mm	Up to 9 m	1.0 m
		35 mm	Upto 18 m	1.4 m
		42 mm	Up to 27 m	1.7 m
G1	28 mm	35 mm	Up to 9 m	1.4 m
		42 mm	Upto 18 m	1.7 m
		54 mm	Up to 27 m	2.3 m

Worked example

The example below is for a G 1/2” temperature & pressure relief valve with a discharge pipe (D2) having 4 no. elbows and length of 7 m from the tundish to the point of discharge.

From Table 2

Maximum resistance allowed for a straight length of 22 mm copper discharge pipe (D2) from G 1/2” T & P valve is 9 m.

Subtract the resistance for 4 no. 22 mm elbows at 0.8 m each = 3.2 m.

Therefore the maximum permitted length equates to: 5.8 m.

As 5.8 m is less than the actual length of 7 m therefore calculate the next largest size.

Maximum resistance allowed for a straight length of 28 mm pipe (D2) from G 1/2” T & P valve equates to: 18 m.

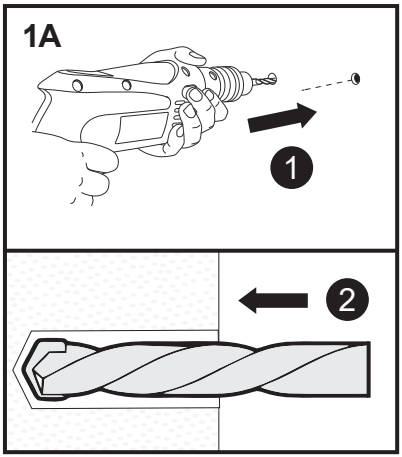
Subtract the resistance for 4 no. 28 mm elbow at 1.0 m each = 4 m.

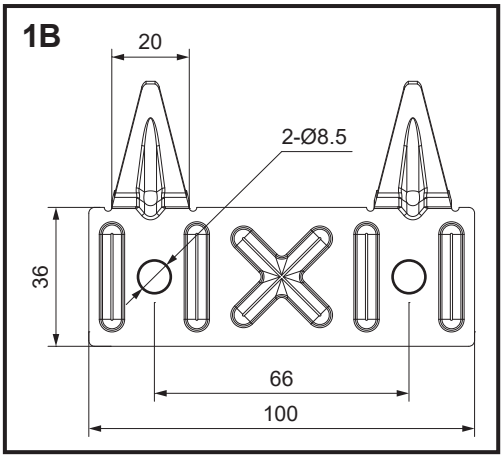
Therefore the maximum permitted length equates to: 14 m

As the actual length is 7 m, a 28 mm (D2) copper pipe will be satisfactory.

This electrical water heater shall be installed on a solid wall. If the strength of the wall cannot bear the load equal to two times of the total weight of the heater filled fully with water, it is then necessary to install a special support.

01



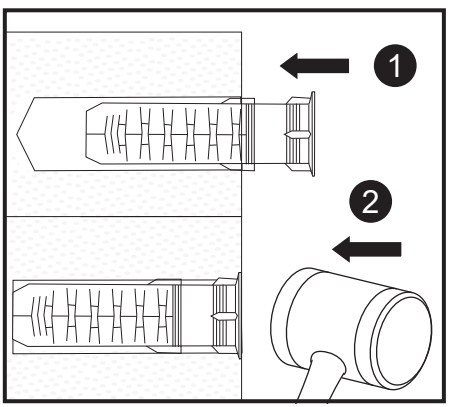


EN Select a suitable location for the water heater, ensuring there is adequate room for future maintenance. Before installing the bracket, check the wall for any hidden cables, pipes etc, using a wall screen detector.

Refer to bracket dimensions provided in figure 1 B above.

1. Drill two holes in the horizontal direction (the distance between holes should be 66 mm);
2. The depth of each holes should be 50 mm, and the diametre is 10 mm.

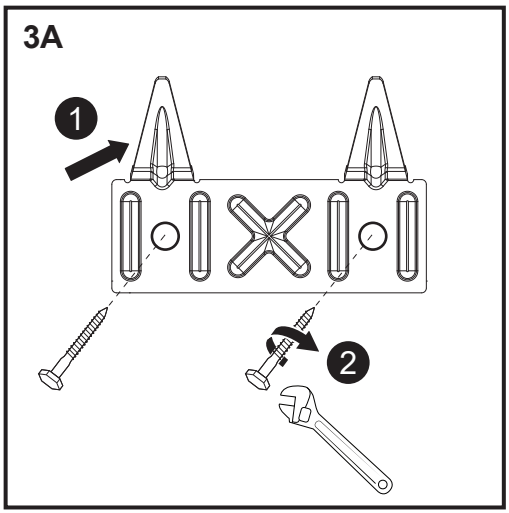
02

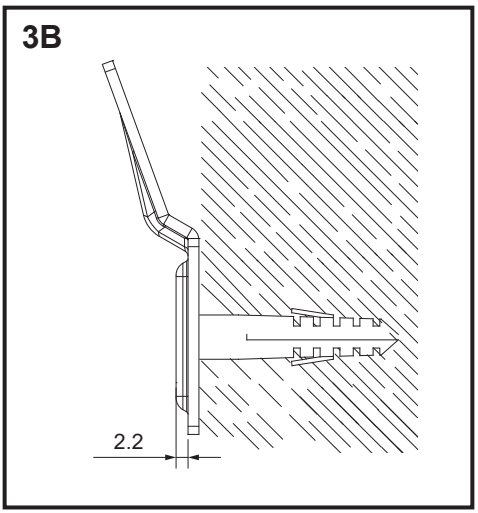


EN Insert the two plastic wall plugs into the holes.

Use a hammer to ensure the wall plug is install firmly.

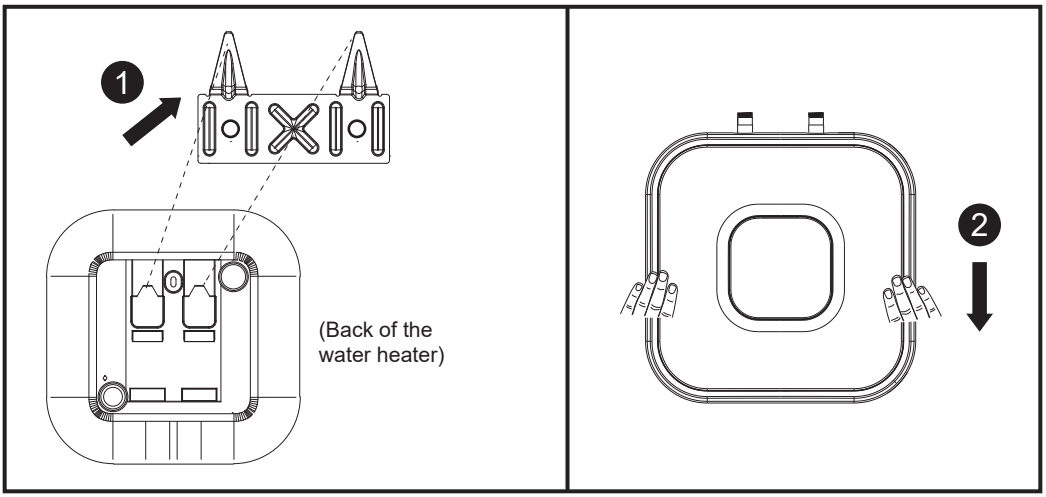
03





EN Secure the bracket into the wall with the screws provided.
The bracket hook should be installed in upward direction (shown in Figure 3B)

04



EN Hange the water heater onto the bracket hook carefully.
To make sure the water-heater is seated onto the brackets correctly. Gently apply a load downwards whilst maintaining it in a level position.

How the heater works

The heating element is controlled by a thermostat which senses the water temperature. The operating temperature can be adjusted by the heating power control knob on the front of the heater.

In addition to the thermostat there is a thermal cut-out which is set to switch off the power to the element if the thermostat fails and the water temperature rises too high. Once the cut-out operates it can only be reset manually (this should be carried out by a qualified installer, electrician or service engineer - see maintenance section.

A magnesium anode is provided to prevent corrosion of the water container. The 30 L model has a temperature and pressure relief valve on top of the heater which is a safety device to back-up the thermostat and thermal cut-out. It works by sensing an excess water temperature or pressure and releasing the hot water to the discharge tundish and drain. This additional safety device is a requirement of the Building Regulations, section G3 and must not be removed or blanked.

The heater will only work in the vertical position as the element is shaped to heat the water at the bottom of the tank. The inlet pipe needs to deliver cold water to the bottom of the tank and the hot water outlet draws water from the top of the tank.

When water is heated it expands, in a small unvented water heater of this type, the expansion can normally be accommodated back into the cold water mains (not model 30 L).

Where this is not possible the installer will need to fit an expansion vessel and check valve.

NOTE: If a valve i.e. a non return valve, water meter, pressure reducing valve or any type of valve or fitting that acts as a non return valve is fitted on the cold water mains, this will prevent expansion. Therefore it will be necessary to install an expansion vessel (see pages 17 & 18 figs 2 & 3).

NOTE: If in doubt always install a pressure reducing valve (limited to 3.5 bar) and expansion vessel.

Troubleshooting

Failures	Reasons	Treatment
The heating indicator light is off.	Failures of the temperature controller.	Contact with the professional personnel for repair.
No water coming out of the hot water outlet.	1. The running water supply is cut off. 2. The hydraulic pressure is too low. 3. The inlet valve of running water is not open.	1. Wait for restoration of running water supply. 2. Use the heater again when the hydraulic pressure is increased. 3. Open the inlet valve of running water.
The water temperature is too high.	Failures of the temperature control system.	Contact with the professional personnel for repair.
Water leak from tank connection	Missing washer in die-electric connection.	Remove die-electric connection and fit rubber washer.
No hot water	Thermal cut-out has operated. The heating element has burnt-out. The thermostat is faulty.	Contact with the professional personnel for repair.
Milky water at tap outlet.	Heavy limed and oxygenated water being heated (harmless). Not an issue with the water heater.	Contact local plumber for further help and guidance.
Pressure relief valve dripping/running all the time.	Mains pressure is above 3.5 bar. A pressure reducing valve must be fitted.	Contact with your installer or local plumber.
Pressure and temperature valve dripping and running all the time. (30 L only)	1. The thermal cut-out and thermalstat has failed. (This is only the case if the water being discharged is close to boiling temperature.) 2. Mains pressure is too high A pressure reducing valve must be fitted.	Contact with the professional personnel for repair. Contact with your installer or local plumber.

For the user

In order to obtain the best performance from the heater, **the sacrificial anode must be checked every year and replaced as necessary.** If the heating element is heavily coated with scale we recommend descaling and removing any lime deposit from the heater at the time of this inspection. Where the additional cold water controls are fitted, the expansion vessel will need to be recharged by the installer.

IMPORTANT NOTE: THE HEATER MUST BE SERVICED ANNUALLY. FAILURE TO SERVICE WHICH INCLUDES INSPECTION AND REPLACEMENT OF THE SACRIFICIAL ANODE WILL INVALIDATE WARRANTY.

For the installer

WARNING: SWITCH OFF THE POWER FIRST.

Access to the electrical components, the magnesium anode and water container is gained by opening the front cover.

If the thermal cut-out has operated the cause must be found before resetting.

- The front cover needs to be remove (follow steps outlined on page 12);
- The screws of the element should be untightened and then the element can be removed from the water container.
- Once the element is free from the water container the anode may then be inspected and removed if necessary.
- When reassembling the cover make sure that the heating power control knob is coupled with the thermostat.

Check controls (where fitted) as per the following:

- Line strainer - with the water supply turned off remove screen from strainer and clean of any detritus;
- Expansion vessel - with the water supply turned off and taps open, check expansion vessel pressure and top up as necessary;
- Temperature & pressure relief valve - with the water supply turned on, check manually by lifting the test lever/turning the test knob (ensure valve closes after testing);
- Expansion relief valve - check manually by turning the test knob (ensure valve closes after testing);
- Discharge pipes (D1) - from both temperature & pressure relief and expansion relief valve for obstructions;
- Tundish & discharge pipe (D2) - open either valve gradually to produce a full bore discharge into tundish and D2 without any back pressure;
- Pressure reducing valve - check that the correct outlet pressure is being maintained by recording the pressure at an in-line terminal fitting i.e. tap.

Manufacturer :

UK Manufacturer:
Kingfisher International Products Limited,
1 Paddington Square, London, W2 1GG,
United Kingdom

EU Manufacturer:
Kingfisher International Products B.V.,
Rapenburgerstraat 175E,
1011 VM Amsterdam,
The Netherlands

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