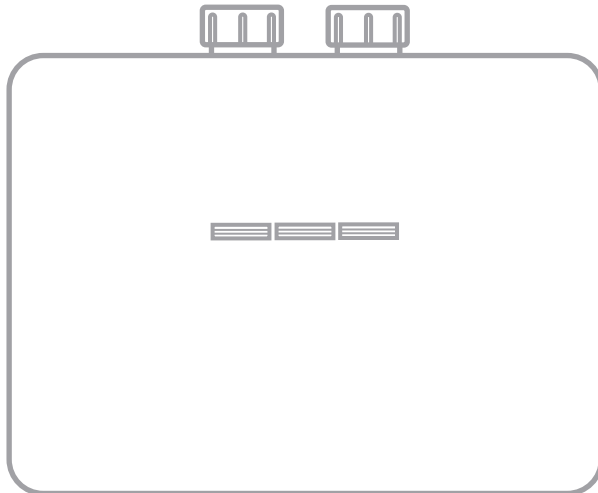




Product Instruction Manual

Rho



IN44T & IN60T

Instantaneous inline water heater

Thank you for purchasing a Hyco instantaneous water heater. Instantaneous water heaters are very energy efficient since they only consume energy when they are used and so have no standing losses. The IN44T & IN60T models are mains pressure instantaneous water heaters with external electronic temperature control. Bare wire heating systems offer rapid heat up times and a near instant supply of hot water. The heaters are intended for handwashing applications and should be used in conjunction with spray head taps. Please read and understand these instructions before commencing installation, and leave them with the user when installation is complete.

1. Important safety points

- The appliance must only be connected to a single phase supply.
- Isolate electrical and water supply before installation.
- Electrical installation must be carried out by a qualified electrician in accordance with the latest edition of the IEE wiring regulations.
- Only connect the appliance to a power supply that conforms to the specification stated on rating plate.
- The appliance must be earthed at all times.
- The appliance must be permanently connected to the electrical supply through an isolating switch with a contact separation of no less than 3mm in all poles.
- Do not use the appliance if there is any possibility of the water supply being frozen.
- Never remove the cover of the appliance without first isolating it from the electrical power supply.
- This appliance can be used by children aged from 8 years and above and persons with reduced physical, sensory or mental capabilities or lack of experience and knowledge if they have been given supervision or instruction concerning use of the appliance in a safe way and understand the hazards involved. Children shall not play with the appliance. Cleaning and user maintenance shall not be made by children without supervision.
- Do not use a supply with incoming water temperatures greater than 60°C.

2. Installation

Wall Mounting



Do not install if there is a risk of water freezing in the heater.



Do not install the heater where the consequences of a leak could be unusually severe. (e.g. above computer equipment).

- When choosing a location for the heater, consider the visibility of any leak that might arise. This is particularly important when locating in a concealed area such as a cupboard.
- The heater must be mounted horizontally with the inlet and outlet connections at the top of the heater.
- Before attaching the heater to the wall, consider the wiring route to the heater.

It is advised that the heater be located as close as practical to the hot water outlet in order to avoid unnecessary heat losses through the pipework.

There are two options available for the mounting of the product, select either the key hole slots at the rear of the product or use the supplied bracket.

1 Using the bracket

Using the supplied bracket and ensuring a level, mark the two screw holes onto the desired mounting surface.

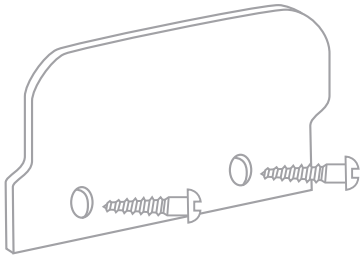
2 Using the key hole slots

The back plate of the heater is detachable by the four screws located in each corner. Once removed use the backplate as a template and, ensuring a level, mark the two required screw holes.

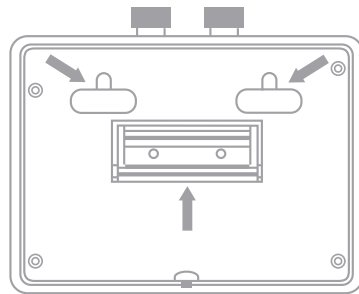


Ensure there are no hidden cables or pipes before commencement of drilling.

Drill the holes, insert the wall plugs and screw the bracket/heater to the wall.
(see diagram below).



1



2

Plumbing connections

The heater is designed for use with spray head type taps.

Ensure the following criteria are met for the water supply:

- Minimum flow = 2.0L/min
- Pressure Min/Max = 0.1Mpa/0.75Mpa
- Water resistivity = $\geq 1300 \Omega\text{cm}$

Suitable for use with pre-heated water e.g. solar heating systems to a maximum of 60°C.



Flush supply pipes to remove any debris before connecting the heater to the water supply.

Make the plumbing connections as indicated on the front cover of the heater:

- Blue/Inlet (cold mains)
- Red/Outlet (hot tap/outlet)

It is strongly recommended that a service valve be fitted close to the product on the cold feed, this will aid future maintenance.

The inlet is the left hand pipe and the outlet the right, when viewed from the front. The supplied gauze should be fitted into the inlet side of the heater.

The enclosed spray head/flow limiter attachment should be installed into the outlet of the hot tap to ensure best performance of the heater.

Turn on the colds main feed and draw water through the heater for several minutes by opening the hot outlet. Ensure a smooth flow of water from the outlet to confirm all air is purged from the system and check for leaks on all connections. This step is required every time the heater has been drained for any reason, such as routine maintenance.

Electrical connection



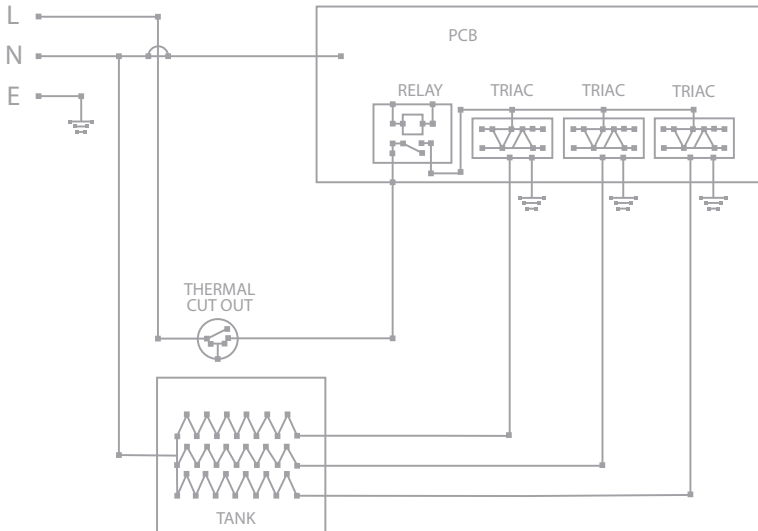
Do not commence electrical installation before connecting the heater to the water supply and verifying there are no leaks or air gaps.



Electrical installation must be carried out by a qualified electrician in accordance with the latest edition of the IEE wiring regulations.

- Electrical supply should be capable of isolation via a double poled switch.
- The heater must be earthed.
- Isolate electric and water supply before electrical installation.
- Refer to the rating label on the heater to ensure correct specification of installation.

The heaters are supplied pre-wired.
(see diagram below).



3. Operation

Once installed and connected to the electrical supply the heater is ready for use.

Turn on the heater using the power On/Off button. On first installation the temperature setting will default to 38°C. To adjust this press the +/- buttons until the desired maximum target temperature is displayed. The heater will automatically begin heating when it detects a flow of water through it (min 2.0L/m).

Open the outlet valve and check the display, the temperature display will flash if the set temperature cannot be reached. It may be possible to reduce the flow rate in order to achieve the set temperature, but it must have a minimum flow of 2.0L/min in order to operate.



Due to the nature of instantaneous heaters, water is only heated as it passes through the tank. Because the maximum power of the heater is fixed there is a limit to the rate at which hot water can be delivered.

The heater incorporates intelligent control and will ensure the maximum temperature setting is not exceeded regardless of drop in flow or increase in incoming water temperature.

4. Maintenance

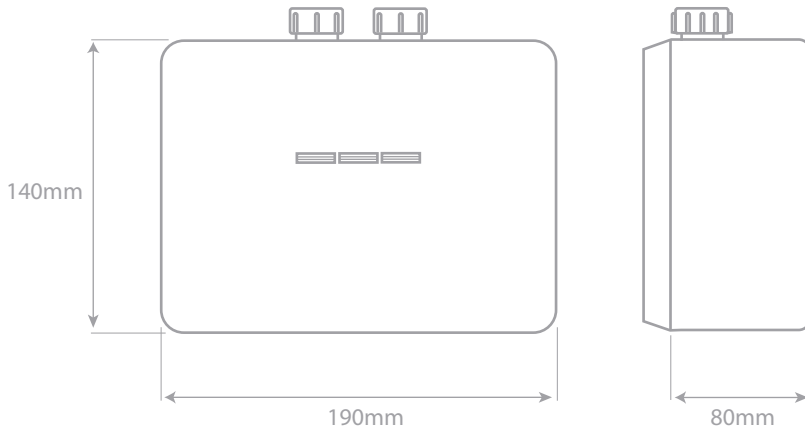
- Always disconnect the power before commencing any cleaning or maintenance.
- Never open the cover of the heater without first isolating the mains power supply.

To clean the heater cover only use a clean damp cloth, do not use abrasive compounds.

Electrical and plumbing components should be inspected on a regular basis by a suitably qualified/competent person.

5. Specifications

	IN44T	IN60T
Power supply	230V~ 50Hz	230V~ 50Hz
Dimensions	H140 x W190 x D80mm	H140 x W190 x D80mm
Power	4400W	6000W
Protection class	IPX4	IPX4
Rated current	19A	27A
Over heat protection temperature	80°C	80°C
Minimum operating flow rate	2.0L/Min	2.0L/Min
Minimum operating pressure	0.1MPa	0.1MPa
Maximum rated pressure	0.75MPa	0.75MPa
Required water resistivity	≥1300 Ωcm	≥1300 Ωcm
Maximum incoming water supply temperature	60°C	60°C
Water fittings	1/2" BSP	1/2" BSP



6. Trouble Shooting

Defect	Possible cause	Action
Water is too hot	Temperature set too high on the heater	Turn down the temperature on the heater (see section 6).
Water is too cold	Water flow rate is too high	Ensure flow restrictor and spray attachment are fitted. (see section 4).
	Temperature setting is too low	Turn up temperature setting (see section 6).
No display on the heater	Unit in standby	Turn On the heater (see section 6).
	Power supply problem	Check that power is supplied to heater and is correct specification as per the rating label.
	Minimum flow not met	Ensure a flow of at least 2L/min.

For technical faults that cannot be resolved using the trouble shooting table contact the technical department on 01924 225200 for further assistance and advice.

7. Guarantee and service policy

This product is guaranteed against faulty materials and manufacture for a period of one year from the date of purchase. Hyco will in its sole discretion replace, repair or refund any faulty unit. Incorrect installation and failure to follow correct operating instructions are excluded. Consequential costs such as labour charges or damage to surroundings are expressly excluded.



INFORMATION FOR CORRECT DISPOSAL OF THE PRODUCT IN ACCORDANCE WITH THE EUROPEAN DIRECTIVE 2002/96/E.

At the end of its working life this equipment must not be disposed of as household waste. It must be taken to a local authority waste collection centre or to a dealer providing this service. Disposing of electrical and electronic equipment separately enables its components to be recovered and recycled to obtain significant savings in energy and resources. In order to underline the duty to dispose of this equipment separately, the product is marked with a crossed out dustbin.

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