

**SureFlow Series:**  
**CTS11F, CTS17F & CTS19F/6**  
(1501F) (3001F) & (3001F/6)

**Auto-Fill Catering Water Boiler**  
**With Integrated Multi-Filter**  
**Installation And User Instructions**



The Professional's Choice



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## Introduction

Dear Customer,

Thank you for purchasing this Instanta product.

Your new water boiler is designed to give you years of trouble-free service provided that the instructions contained in this manual are followed.

All new series Instanta products are energy efficient, simple to operate and easy to service. Find out more about Instanta products at [www.instanta.com](http://www.instanta.com)

## Safety Information



Please read the following carefully before starting work on this equipment.

A competent person should install this appliance in accordance with the installation instructions for this appliance and all relevant local and national standards including the following:

- Health & Safety at Work Act
- IEE Regulations
- Local & national Building Regulations
- BS Codes of practice
- Water Supply Regulations

All personnel should be provided with sufficient training in the safe use of this appliance. A warning notice displayed next to the machine is often helpful in notifying users that the appliance contains and dispenses near boiling water.

- Inform users that certain surfaces will become hot (especially the draw-off tap).

Care should be taken to avoid potential injury from burns and scalding whilst operating this appliance.

- In line with Health and Safety requirements we recommend a risk assessment be carried out after the boiler has been installed.
- Always disconnect the unit from the power supply before servicing.
- The unit must be earthed.
- Keep these instructions in a safe place near the unit for future reference.

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 they do not play with the appliance.

## Environmental (Information On Disposal For Users Of Waste Electrical & Electronic Equipment)

The “crossed out wheelee bin” symbol on this product means that discarded electrical and electronic products should not be mixed with general waste. Disposing of the product correctly will help to save valuable resources and prevent any potential negative effects on human health and the environment which could otherwise arise from inappropriate waste handling. For proper treatment, recovery and recycling of end-of-life products, please contact your dealer or supplier for further information, or local authority for details of your nearest designated collection point.

## Delivery Checklist

Before starting installation, check that you have the following parts;

- Catering Water Boiler
- Drip-tray
- Drip-tray fitting kit
- White water inlet hose (3/4" BSP connection)
- User instructions

## Technical Specification

Model		CTS11F (1501F)	CTS17F (3001F)	CTS19F /6 (3001F/6)
Width	mm	243	243	243
Depth	mm	362	362	362
Depth with drip-tray	mm	510	510	510
Height	mm	610	668	668
Power Rating	KW	3.0	3.0	6.0
Weight (Empty)	KG	13.2	14.4	14.8
Weight (Full)	KG	26	32.7	33.1
Water Inlet Pressure:	Bar	2 to 7	2 to 7	2 to 7

## Installation

The boiler must be installed on a level work surface with sufficient strength to support its weight. Ensure all vents are unobstructed.

Locate in an area where there is adequate space to use the boiler safely (e.g. free from risk of congestion and tripping hazards).

### Connection to Mains Water Supply:

Connect the WRAS approved water filling hose (3/4" BSP) to the inlet connection point on the back of the boiler and the other end to the mains water supply, via an accessible isolating tap with a 3/4" BSP thread\*.

**IMPORTANT:** If micro-bore pipe is used instead of the inlet hose supplied, the size must be minimum OD 3/8" (10mm)

The water supply must have a pressure not exceeding 7bar (96psi), and no lower than 2bar (20psi) NOTE: If your water pressure exceeds 7bar, fit a suitable pressure reduction valve.

***We regret that Instanta cannot be held responsible for any machine malfunctions if the water pressure exceeds that stated. If in doubt, consult your water supply company.***

\*To meet WRAS installation requirements, an approved single-check valve providing back-flow prevention protection, should be fitted at the point of connection between the water supply and the appliances.

**NOTE:** *Water that has been treated by the Reverse Osmosis process can become aggressive (due to lack of minerals or ions), and in extreme cases can cause leaching and corrosion of pipes, fittings and other metal parts within the appliance.*

*If the appliance is being fed by water treated by Reverse Osmosis, we strongly recommend that the water is tested regularly.*

*If you have any queries in this respect, please contact our customer services team.*

### Electrical Connection:

The boiler must be Earthed.

**3.0KW models: CTS11F (1501F) & CTS17F (3001F)** Your machine is supplied with standard 13amp bonded plug with a 13amp fuse

**6.0KW model: CTS19/6 (3001F/6)** Your machines is supplied with a 1.5mtr cord [3-core @ 4.0mm]. Wire to at least a 30amp supply via an all-pole disconnection isolator switch (easily accessible for safety). Only a qualified electrician should undertake this work.

### Overflow;

The drip-tray has a limited capacity and is designed to handle small spillages and drips. Wherever possible, we strongly recommend that it is connected to a permanent waste outlet using the fitting kit provided.

If preferred, and as an alternative, the overflow can be connected from the back of the machine using an optional rear-overflow kit (Pt. No: ROFK1) available from Instanta Spares Department (01704 502905).

**IMPORTANT:** Whichever overflow connection is chosen, the diameter of the pipe used must be no less than 15mm.

Failure to connect the overflow-outlet to a permanent waste of drain, could lead to property damage from flooding.

If in all circumstances, it is absolutely not possible to direct the boiler overflow-outlet to

a permanent waste or drain, then the mains water supply to the boiler should be isolated and the unit switched off whenever it is left unattended for long periods (e.g. overnight).

**Whilst every reasonable precaution is taken to prevent an overflow, Instanta cannot be held responsible for any damage caused as a result of incorrect installation or blockage of the overflow or failure to direct the overflow to a safe outlet.**

## Operation

First use (once water and electrical connections have been made);

- Switch boiler on. The screen will light up red and will run through an initial self-diagnostic check before starting to fill with water (screen reads; “NOT READY FILLING”).
- Once primed with water, the boiler will begin to heat (screen reads; “NOT READY HEATING”).
- When the correct temperature has been reached, the display will change from Red to White and will simply read “READY”.
- The boiler will then continue in a heat/fill cycle until the tank is at full capacity. (During the heat/fill cycle, small amounts of water are added to ensure the water at the tap is always at the correct temperature).

**IMPORTANT NOTE:** In normal daily use, the boiler may be used as soon as the “READY” message is displayed, but on first install, wait at least 15 minutes before starting to use.

- Drain off approximately 10 litres of water (to flush the new filter cartridge through).
- The boiler is now ready for use.

## Regular Daily Use

Switch boiler on and wait for the screen to turn white and show “READY” message. The water will then be at the correct temperature.

Dispense water via the lever tap. (CAUTION: Boiler dispenses near-boiling water).

## AQ35 Multi-Filter

Instanta’s new built-in filtration system ensures that water is always to the highest standard,

whilst delivering lower maintenance costs and improved energy efficiency.

Quick and easy to change, the new filter reduces sediment, chlorine taste & odour, and lime-scale via a slow release scale inhibitor, providing better water and therefore, better quality drinks.

## Filter Replacement:

A series of bars on the FILTER display shows the estimated remaining life in the current filter cartridge. When the filter has just 200 Litres remaining, the filter icon will begin to flash as a reminder. When the filter needs replacing, the screen will show the message; “CHANGE FILTER”.

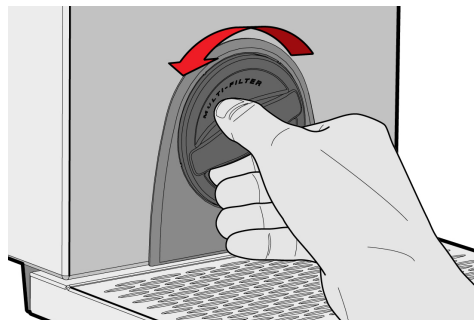
The boiler will continue to operate with the CHANGE FILTER screen but scale may build up more rapidly and the water taste may be affected.

Replace the filter as follows;

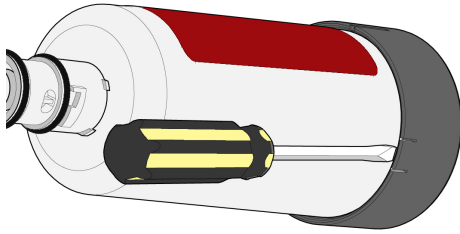
1. Switch boiler off and draw water down to tap level.



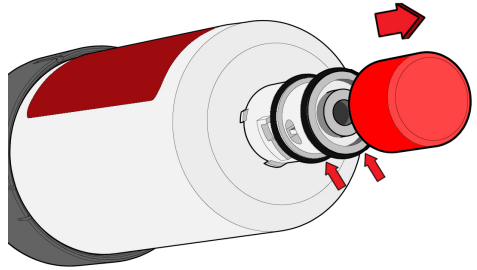
2. Grip cartridge and rotate a quarter-turn to the left and pull forward. CAUTION: A small amount of water will drain from the head.



3. Align a flat screw-driver or similar with the tab on the filter and gently push.



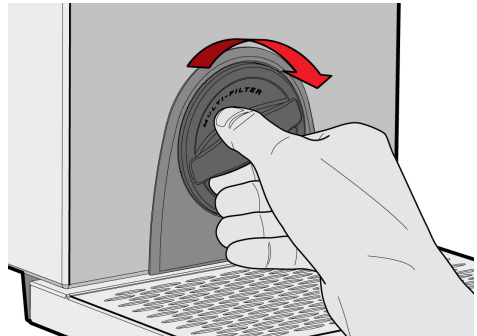
6. Remove protective cap from the top of the new cartridge and ensure the two rubber seals are in place.



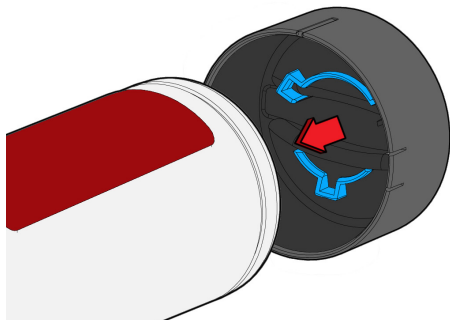
4. With one tab loosened, pull the filter cap off the old cartridge.



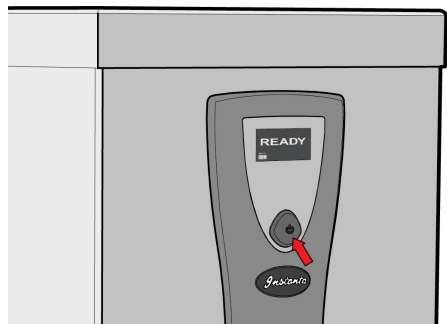
7. Insert new cartridge and turn until it locates. Install with a quarter-turn to the right until cartridge comes to a complete stop (Inlet water will automatically turn on).



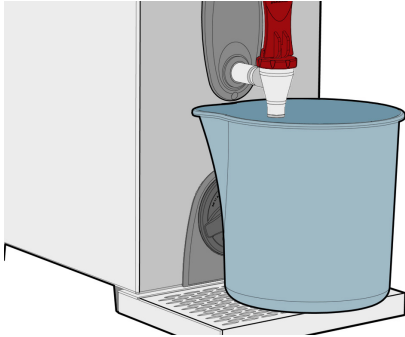
5. Align the shape on the inside of the filter cap (highlighted above) with the shape on the end of the new filter and push the two together until it clicks firmly in place.



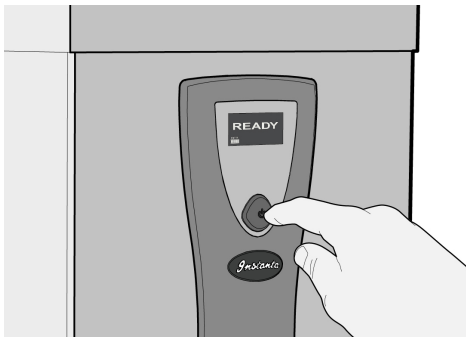
8. Switch boiler back on and allow to fill (15 minutes).



9. Drain-off approximately 10 litres of water.



10. TO RESET FILTER MONITOR: ...Press and hold "On/Off" button, screen will go blank but continue to hold, until "READY" message is displayed on a red screen.



The boiler is now ready for use.

## Adjusting Filter Monitor (Optional):

The filter monitor is factory-set to "medium" (default) which is suitable for most parts of the UK with average or medium water hardness.

Hard and Soft Water: The effectiveness of the filter will be reduced in hard water areas (and should be replaced more frequently), or extended in soft water areas where scale is less of a problem.

If in doubt as to the hardness of water supplied in your area, consult your local water authority or Instanta Technical Support.

The filter monitor on the boiler can be changed from the default "medium" setting to "hard" or "soft" setting as follows;

Replace the filter cartridge (as steps 1 to 9 "AQ35 Filter Replacement" above). Then;

- Turn machine off.
- Press & hold "on/off" button (for approximately 12 seconds) until red screen shows "PR" in top-right corner, then release button. Temperature setting is displayed.
- Press & hold button (long push) for approximately 5 seconds until screen changes to show "medium" (default filter setting).
- Press button (short push) to scroll between the different filter settings;  
SOFT  
MEDIUM  
HARD  
EMPTY FILTER SYMBOL (No Filter monitor).
- With the required filter setting selected, Press & hold button (long push) for 4 seconds to save.
- Press & hold button (long push) for approximately 6 seconds until display goes blank.
- Turn machine back on again.
- TO RE-SET & CONFIRM NEW SETTINGS; ...Press & hold button, screen will go blank but continue to hold, until "READY" message is displayed on a red screen (See; Step 10 above).

## Cleaning

- Clean the external surfaces of the boiler regularly to maintain good hygiene
- Empty the front drip-tray regularly
- Wipe external surfaces of the boiler with a damp cloth. Do not use abrasive materials on the outer surfaces.
- Wipe the draw-off tap each day to keep clean and also prevent lime-scale deposits from building up around the tap-outlet.

## Maintenance & Service Information

### Filter:

Twist to the left and remove. See “AQ35 Filter Replacement” section above.

### Descaling:

The boiler should be periodically checked for scale build-up...see below:

In hard water areas, the boiler should be descaled on a regular basis to maintain efficient operation, minimise energy consumption, and also retain the water quality. The frequency depends on the hardness of the local mains water supply and the regular replacement of the AQ35 filter cartridge.

### To de-scale:

- Disconnect machine from power supply
- Empty the machine through the draw-off tap and allow to cool
- Lift off the outer-lid.
- Remove tank-lid (four fixing screws).
- Lift out the evaporation plates (inside of tank – Remember order of removal).
- Remove as much scale as possible by hand. Any scale which is difficult to remove can be dissolved by using a de-scaling solution.
- Wipe clean the level sensing probes.
- Flush with copious amounts of cold water to ensure all traces of de-scaler are removed before using the boiler again.
- Replace evaporation plates, tank-lid and outer lid.

### Draw-off tap:

The draw-off tap components are subject to wear & tear. We strongly recommend that the tap is inspected periodically (at least once a year as part of a general maintenance routine). It is advisable to keep a spare tap assembly in case of emergencies.

## Accessories & Spares (Tel: 01704 502905)








Tap Washer	- TP1001/L
Tap Spring	- TP1007/N
Tap Bonnet	- HSTP100
Upper Tap Assembly	- XTP1050/A

A full range of spares and accessories are available from our spares department.

## Service Warnings And Fault Diagnosis

Your boiler is fitted with an intelligent fault diagnosing system and is able to detect various fault conditions. Some of these are less serious and the machine will continue to operate as normal, while others are more serious and will disable the unit.

Before calling for service, switch the machine off at the mains supply. Draw-off a small amount of water and then switch back on after 10 minutes. If the fault does not clear, call technical support for advice.

	SCREEN MESSAGE	POSSIBLE CAUSES	ACTION
WHITE SCREEN	<b>READY</b> CHANGE FILTER 	• Filter cartridge is exhausted and should be replaced as soon as convenient	• Replacement filter cartridge available from Instanta Spares Part no: AQ35
WHITE SCREEN	<b>READY</b> ! CHECK WATER! 	• Water is turned off • Inlet hose kinked or bent • Low incoming water pressure	• Check water supply and stop-cock • Check incoming water is at minimum of 2 bar
WHITE SCREEN	<b>READY</b> ! CLEAN PROBES! 	• Low water level probe scaled up	• De-scale
FLASHING RED SCREEN	<b>NOT READY</b> HEATING  ⚠ ⚠	• Over-boil safety switch tripped on initial heat-up • Faulty element • Boil dry safety switch tripped	• Isolate machine and wait for 10 minutes, then turn back on again • Call service if fault persists
FLASHING RED SCREEN	<b>NOT READY</b> HEATING  ⚠ ⚠	• Over-boiled when in 'Ready' mode due to excessive limescale in tank • Temperature sensor disconnected or wires cut	• De-scale • Reduce temperature setting • Call service if fault persists
FLASHING RED SCREEN	<b>NOT READY</b> OF  ⚠ ⚠	• Unit has over-filled to top level sensor	• De-scale tank and level sensors
FLASHING RED SCREEN	<b>NOT READY</b> TH  ⚠ ⚠	• Thermistor has failed	• Replace Thermistor

The majority of possible faults have been covered above. However, in certain circumstances, safety controls within the boiler may be activated. There are two resettable safety cut-outs in your boiler:

- 1). Over-boil safety cut-out; (activates should the boiler produce excess steam). This can be due to;
  - lime-scale within the tank,
  - a temporary interruption in the water supply,
  - a faulty temperature sensor.

To reset boiler; Switch off at the mains power supply and allow the boiler to cool down for ten minutes before switching back on (the safety device should automatically reset).

- 2). Boil-dry safety cut-out – this will activate if the boiler has been boiled dry, for example, due to lime-scale build-up or water starvation.

If the boil-dry cut-out has activated, this will require a manual reset. Contact Instanta Technical Support department for assistance with this.



**Safety Caution:** Isolate boiler from power supply before removing any outer panels or attempting any reset.

## Guarantee

Your boiler is guaranteed for two years from date of installation.

Our guarantee includes on site labour and parts for problems caused by fault of manufacture and component failure with the following exclusions:

- Problems caused by hard water and lime scale. We regret that we cannot be held responsible for problems caused by hard water.
- Dripping Taps. These components are subject to wear and tear but in the event of a tap failing within twelve months of installation, we will be pleased to replace the tap assembly by post. Fitting is very simple and requires no tools. An engineer call out is not necessary.
- Accidental damage, misuse or use not in accordance with these instructions and damage caused by incorrect installation.
- The manufacturer disclaims any liability for incidental, or consequential damages.

## Service/Technical Support:

Tel: 01704 502911

To ensure your service enquiry is handled as efficiently as possible, please have the following information available;

- Brief description of problem
- Product Type (model)
- Serial Number (label on right-hand side of machine). This is essential.



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