



Installation, Operating and Servicing Instructions

Electric Auto-Fill Push Button Water Boilers EB3F/PB and EB3F/PBM

Please make a note of your product details for
future use:

Date Purchased: _____

Model Number: _____

Serial Number: _____

Dealer: _____

CONTENTS

Important Information	2
Warnings and Precautions	3
Technical Data	3
Checklist of Enclosures	3
Installation and Commissioning	3-4
Operating Instructions	5-7
Cleaning	7-8
Servicing, Maintenance and Component Replacement	8
Fault Finding	9
Spare Parts List	10
Accessories	10
Service Information and Guarantee	11

IMPORTANT INFORMATION



Read these instructions carefully before using this product, paying particular attention to all sections that carry warning symbols, caution symbols and notices. Ensure that these are understood at all times.



WARNING!

This symbol is used whenever there is a risk of personal injury.



CAUTION!

This symbol is used whenever there is a risk of damaging your Lincat product.



NOTE:

This symbol is used to provide additional information, hints and tips.

KEEP THIS MANUAL FOR FUTURE REFERENCE

WARNINGS AND PRECAUTIONS



This appliance must be installed, commissioned and serviced by a qualified person in accordance with national and local regulations in force in the country of installation.

If the supply cord is damaged, it must be replaced by the manufacturer, its service agent or similarly qualified person.

Ensure that the plug/socket is accessible at all times.

Strip plastic coating and clean the appliance before use.

During operation parts may become hot - avoid accidental contact.

Disconnect this appliance before servicing, maintenance or cleaning.

TECHNICAL DATA

Model	Height (mm)	Width (mm)	Depth (mm)	Weight (kg)
EB3F/PB	655	290	465	13.0

CHECK LIST OF ENCLOSURES

Warranty card
Instructions manual
Drip tray and insert
Inlet hose with 3/4" BSP connection
FilterFlow badge
Sample of descaling agent

INSTALLATION AND COMMISSIONING

This appliance must be earthed.



An equipotential bonding terminal is provided to allow cross bonding with other equipment.

If replacing the plug connect the terminals as follows:

Green and Yellow wire	Earth	E
Blue wire	Neutral	N
Brown wire	Live	L

Supply cords shall be oil resistant, sheathed flexible cable not lighter than ordinary polychloroprene or equivalent elastomer sheathed cord (code 60245 IEC 57)

Install this appliance on a level surface ensuring all vents are unobstructed.

The serial plate is located on the side of the appliance Fig 1 (H).

Instructions for wall mounting are supplied with the wall mounting kits (see Accessories).

Power Ratings

Model	kW	Ambient temperature Deg C	Water inlet pressure (bar)	Water inlet pressure (kPa)
EB3F/PB	3.0	5 to 30	1 to 8	100 to 800

The EB3F/PB is supplied with a 13 amp plug.

Water supply and waste connection

Connect the supplied white water inlet hose to the inlet connection point on the base of the boiler and the other end to the supply via an accessible isolating tap with a 3/4" BSP thread.

If required, the drip tray can be connected to a waste water outlet using a 1/2" bulkhead connector (not supplied). Knock out the blank in the tray base. If cables are required to exit at either side of the boiler the thinner section between the moulded base sides may be cut away with a hacksaw.

OPERATING INSTRUCTIONS

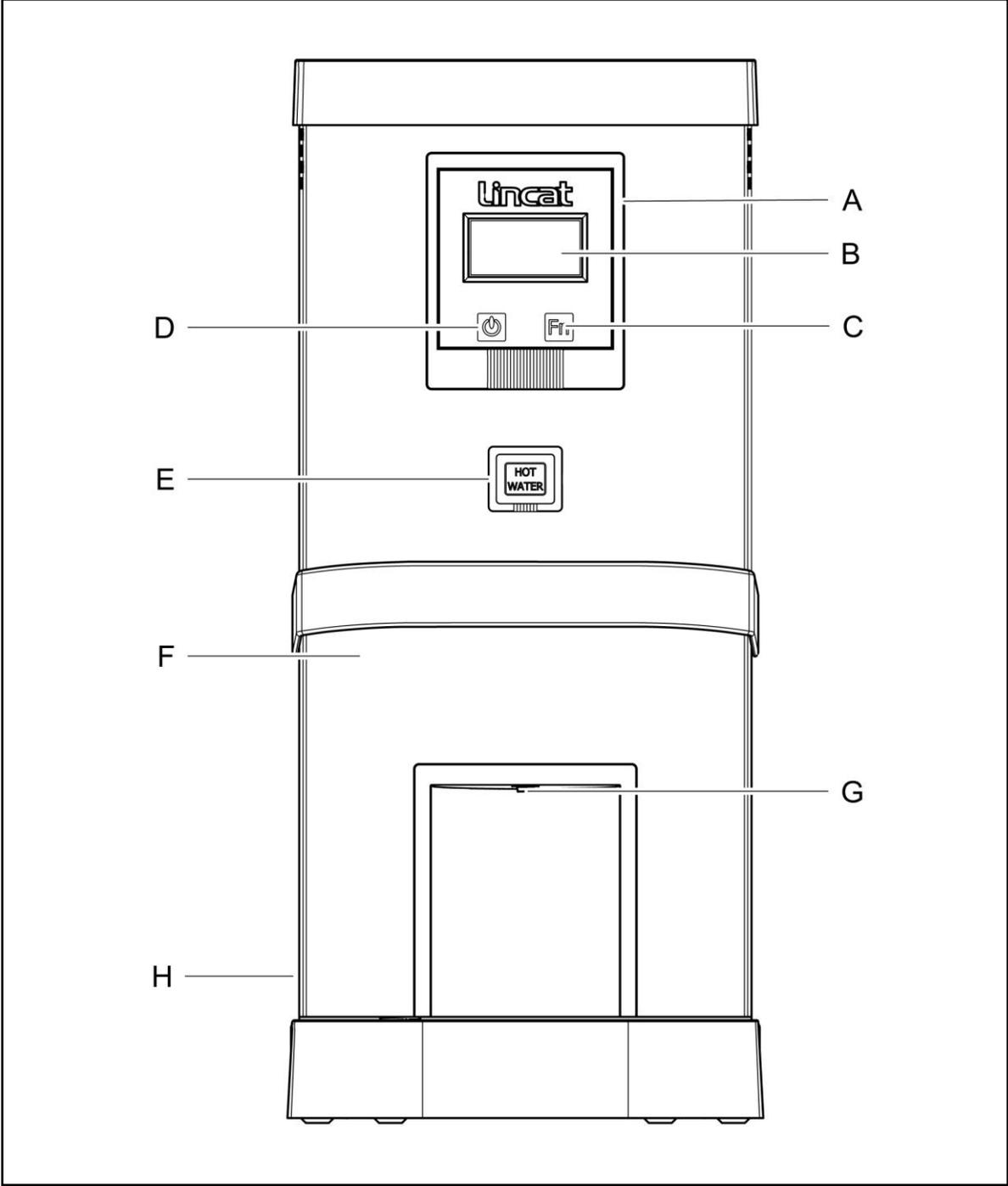


Fig 1

First Use

Only qualified or trained personnel should use this appliance.

Switch on the water and electricity supplies. Leave the boiler to fill for 30 minutes.

Drain off approximately 5 litres of water to remove any loose carbon particles from the filter.

Regular Operation

The boiler starts automatically when the water supply is turned on. During the heating cycle, only small quantities of water are added to ensure hot water is always available at the dispenser.

The boiler is designed to be permanently switched on: it is only necessary to turn it off for de-scaling or maintenance.

Water is drawn off through the dispenser (G).

Adjustment – Water temperature, screen backlight and contrast

Consult Fig 1.

Turn power off and on again. The FilterFlow screen (B) is displayed on the control panel (A).

Press and hold the **power** button (D) until the software version is displayed. Press the function button **Fn** (C) and the temperature will be displayed.

Press the **power** button to cycle through the values 70 to 96 Deg C. Press the **Fn** button to select the required value.

The backlight adjustment screen is displayed next. Press the **power** button to cycle through the values 1-25. Press the **Fn** button to select the required value.

The contrast adjustment screen is displayed next. Press the **power** button to cycle through the values 35 to 60. Press the **Fn** button to select the required value.

Press the **power** button to exit.

EB3F/PBM PROGRAMMING GUIDE

The PBM version of the EB3F has the option to preset upto 3 measured dispense sizes. This quick guide shows the procedure for programming the water boiler.

The measured dispense can only be set when the unit is full and upto temperature. So connect the unit to the water supply and electric, allow 30 minutes for the unit to fill and heat.

<p>To enter the programming mode, turn the electric off to the unit. Press and hold the “power button” and turn the electric on. After a few seconds the programming mode is entered.</p>	<pre> FW VERSION 6.00 EB3.4000L.PB NEXT </pre>
<p>Push the “Fn” button until the Use dispense screen is visible. Pressing set turns off the timed dispense and the unit changes to Push and hold for dispensing Press next.</p>	<pre> USE_DISPENSE TIMER ON SET NEXT </pre>
<p>Press set to select 1, 2 or 3 measured dispenses. Press next.</p>	<pre> DISPENSE OPTIONS 03 SET NEXT </pre>
<p>Press yes to select to set the dispense volumes. Or next to exit.</p>	<pre> SET_DISPENSE SIZES? YES NEXT </pre>
<p>Select the size to set. Press OK.</p>	<pre> SELECT_SIZE TO PROGRAM [Cup] [Mug] [Large Mug] OK SIZE </pre>
<p>Press and hold the Hot water button to fill the chosen cup / mug. Release the button when the cup is full.</p>	<pre> PRESS & HOLD HOT WATER ↓ CANCEL </pre>
<p>After filling there is a chance to test the volume and then either repeat the setting procedure or accepting the set volume. Press OK to accept</p>	<pre> PRESS HOT WATER TO TEST [Cup] [Mug] [Large Mug] OK REPEAT </pre>
<p>Press exit to return to the standard User screen or next to continue and programme more sizes.</p>	<pre> SERVICE EXIT NEXT </pre>

The unit also has some built-in safety features when in measured dispense mode. These are

- Pressing the “Hot water” button at any time during the filling will stop the fill cycle.
- Other size receptacles can be filled by pressing and holding the “Hot Water” button until full, similarly under-filled receptacles can be topped up in this way.

Standby

If the boiler is left unused for any length of time, turn the element off by pressing the **power** button.

Filter replacement

The filter display shows the estimated life remaining in the filter cartridge (Fig 2). A reminder message is displayed when the filter needs changing. The boiler can be used without a filter, but scale will quickly build up and water taste may be affected.

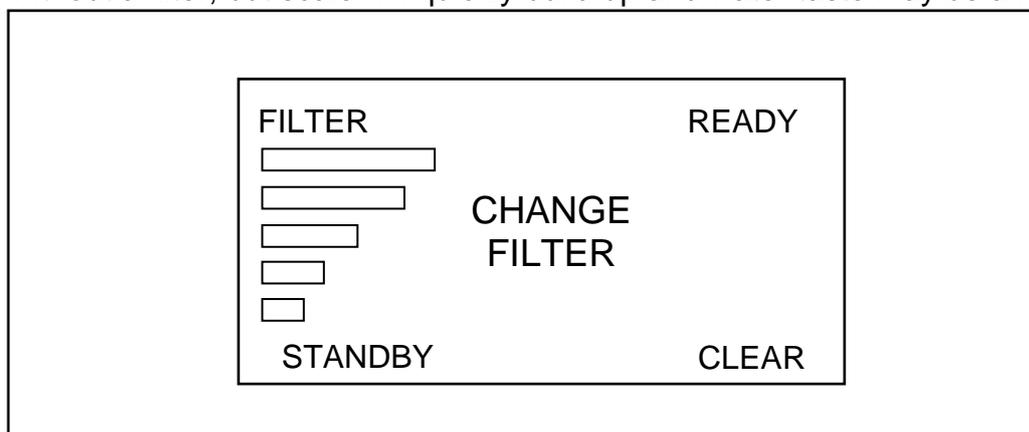


Fig 2

To replace the filter

Remove the drip tray from the appliance. Pull the bottom of the lower panel (Fig 1 (F)) outwards and release the two spring pins. Slide the panel downwards to remove.

Twist the base of the filter 90 degrees to the left and lower the cartridge out of the appliance. It will contain a small amount of water,

Remove the black cap and place it on the new filter.

Re-insert the filter into the recess and lock into place by twisting to the right.

Refit the lower panel.

For EB3F/PB, hold the Fn button for 10 seconds to reset the filter life. For EB3F/PBM hold the Fn and On/Off buttons down simultaneously for 10 seconds.

Drain off approximately 5 litres of water to remove any loose carbon particles from the filter.

CLEANING



Do not use a water jet or steam cleaner, and do not immerse this appliance.

Clean all panels with warm water and mild detergent, do not use abrasive materials. Dry with a soft cloth.

Slide out and empty the drip tray regularly, and wipe the dispensing nozzle daily to remove limescale deposits.

De-scaling

The boiler should be de-scaled regularly to maintain efficient operation and water quality. The frequency depends on the hardness of the water and timely replacement of the filter.



The de-scaling procedure must be performed by trained personnel as it requires the removal of panels from the boiler giving access to live electrical components.

De-scaling the boiler at the end of the working day gives the de-scaling agent several hours to work. Lincat recommend our own de-scaling agent MS19, available from our Spares department.

Wear protective clothing.

Isolate the boiler from the electrical supply.

Turn off the power and allow the water to cool to 60 Deg C.

Using a 3mm allen key, remove the screw in the top of the boiler.

Remove the insulation from the top of the tank. Unscrew and remove the tank lid.

Add the de-scaling agent slowly to avoid eruption of the water, following the manufacturers instructions.

Replace tank lid and outer lid and attach an 'Out of Use' notice to prevent use during de-scaling.

Turn on the electricity and run the boiler normally for 30 minutes. Isolate the boiler and allow the water to cool.

Remove both outer and tank lids again. Inspect the tank and level sensor housings for scale deposits. If necessary, repeat the de-scaling process.

Drain and flush de-scaling agent as follows:

Remove the drip tray, lower panel, silicone dispense hose and the inner cover.

Connect a hose from the overflow pipe to a bucket and open the service valve to drain the water from the tank.

Flush the tank with clean water, shut the valve and replace the covers.

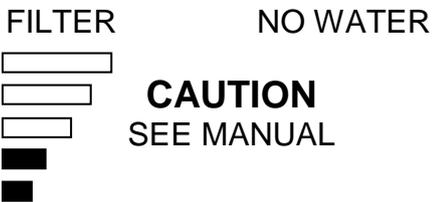
Replace the drip tray and tank lid, ensuring the gasket is sealing the top of the tank correctly. Re-fit the outer lid and turn on the boiler.

SERVICING, MAINTENANCE AND COMPONENT REPLACEMENT

Other than replacing the filter, all servicing, maintenance and component replacement on these appliances should be carried out by one of our recommended service engineers.

FAULT FINDING

The control panel displays information that can help with fault diagnosis. Before calling for service, draw off a litre of water, clear the fault code by pressing the **Fn** button and turn the boiler off and on again at the supply. If the fault persists, call service for advice.

Message displayed	Possible causes	Corrective action
FILTER DESCALE  STANDBY CLEAR	Scale on level sensors Boiler overfilling	Descale Check water inlet valve
FILTER NO WATER  STANDBY CLEAR	Water turned off Inlet hose kinked or blocked Water pressure too high or too low Drain valve open	Check water supply and drain valve Call service if fault persists

<p>FILTER NOT HEATING</p> <p> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> </p> <p>CAUTION SEE MANUAL</p> <p>STANDBY CLEAR</p>	<p>Boil dry/overheat protector tripped Temperature sensor fault Element failed PCB fault Faulty or loose connection</p>	<p>Check connections Call service if fault persists</p>
<p>FILTER THERMISTOR</p> <p> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> </p> <p>CAUTION SEE MANUAL</p> <p>STANDBY</p>	<p>Temperature sensor fault</p>	<p>Call service</p>

SPARE PARTS LIST

Part Number	Description
CO206	1/4" to 3/8" elbow
CO251	Dispensing nozzle
DV02	Service valve
EBM05	Outer lid
EL235	Element
FC02	Filter cartridge
FH02	Filter head
GA48	Lid gasket
LE47	Level sensor insulator
LE48	Upper level sensor
LE49	Lower level sensor
PI12	Inlet hose
PL202	Mains cable
PR77	Circuit board
SO24	Solenoid valve
SV03	Dispenser solenoid valve
SW86	Dispenser switch
TH87	95° cutout thermostat
TH88	120° cutout thermostat
TH98	Thermistor

ACCESSORIES

Part Number	Description
BR49	Wall mounting kit
FC02	Replacement filter cartridge

SERVICE INFORMATION

For help with the installation, maintenance and use of your **Lincat** equipment, please contact our service department:

☎ UK: 01522 875520

For non-UK customers, please contact your local Lincat dealer

All service work, other than routine cleaning should be carried out by one of our authorised service agents. We cannot accept responsibility for work carried out by other persons.

To ensure your service enquiry is handled as efficiently as possible, please tell us:

- Brief details of the problem
 - Product code
 - Type number
 - Serial number
- } All available on serial plate

Lincat reserve the right to carry out any work under warranty, given reasonable access to the appliance, during normal working hours, Monday to Friday, 08:30 to 17:00.

GUARANTEE

This unit carries a comprehensive UK mainland twelve month/2 year warranty. The guarantee is in addition to, and does not diminish your statutory or legal rights.

The guarantee does not cover:

- Accidental damage, misuse or use not in accordance with the manufacturer's instructions
- Consumable items
- Damage due to incorrect installation, modification, unauthorised service work or damage due to scale, food debris build-up, etc.

The manufacturer disclaims any liability for incidental, or consequential damages. Attendance is based on reasonable access to the appliance to allow the authorised technician to carry out the warranty work.

Service calls to equipment under warranty will be carried out in accordance with the conditions of sale. Unless otherwise specified, a maximum of 15 minutes of administrative time, not spent directly carrying out servicing work, is provided for within the warranty. Any requirement for staff attending the call to spend greater time than 15 minutes due to administrative requirements, such as on health and safety risk assessments, will be chargeable at the prevailing rate.