



Installation, Operating and Servicing Instructions

Electric Auto-Fill Water Boilers EB3F, EB4F, EB6F, EB6TF

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

Date Purchased: _____

Model Number: _____

Serial Number: _____

Dealer: _____

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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.



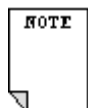
WARNING!

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	Width (mm)	Depth (mm)	Weight (kg)
EB3F	655	290	465	15
EB4F				
EB6F		455		19
EB6TF				

CHECK LIST OF ENCLOSURES

Warranty card
Instructions manual
Drip tray and insert
Inlet hose with $\frac{3}{4}$ " BSP connection
Filterflow badge
Sample of de-scaling 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

The fixed wiring insulation must be protected by insulated sleeving having a temperature rating of 60 Deg C.

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 Fig 1 (F).

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

Model	Power (kW)	Ambient temperature Deg C	Water inlet pressure (bar)	Water inlet pressure (kPa)
EB3F	3.0	5 to 30	1 to 8	100 to 800
EB4F	4.5			
EB6F	6.0			
EB6TF	6.0			

Electrical supply

The EB3F is supplied with a 13 amp plug.

The EB4F is supplied with a bulkhead cable connector. Connect a 2.5mm² 3 core cable.

The EB6F and EB6TF are supplied with a bulkhead cable connector. Connect a 4mm² single or 3 phase cable.

Means of isolation with at least 3mm contact separation in all poles must be incorporated into the fixed wiring of these appliances.

Water supply and waste connection (All)

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

Use the hose set supplied with the appliance - any previous hose set is not to be re-used.

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.

Ensure the metal overflow pipe protrudes through the metal base of the boiler.

OPERATING INSTRUCTIONS

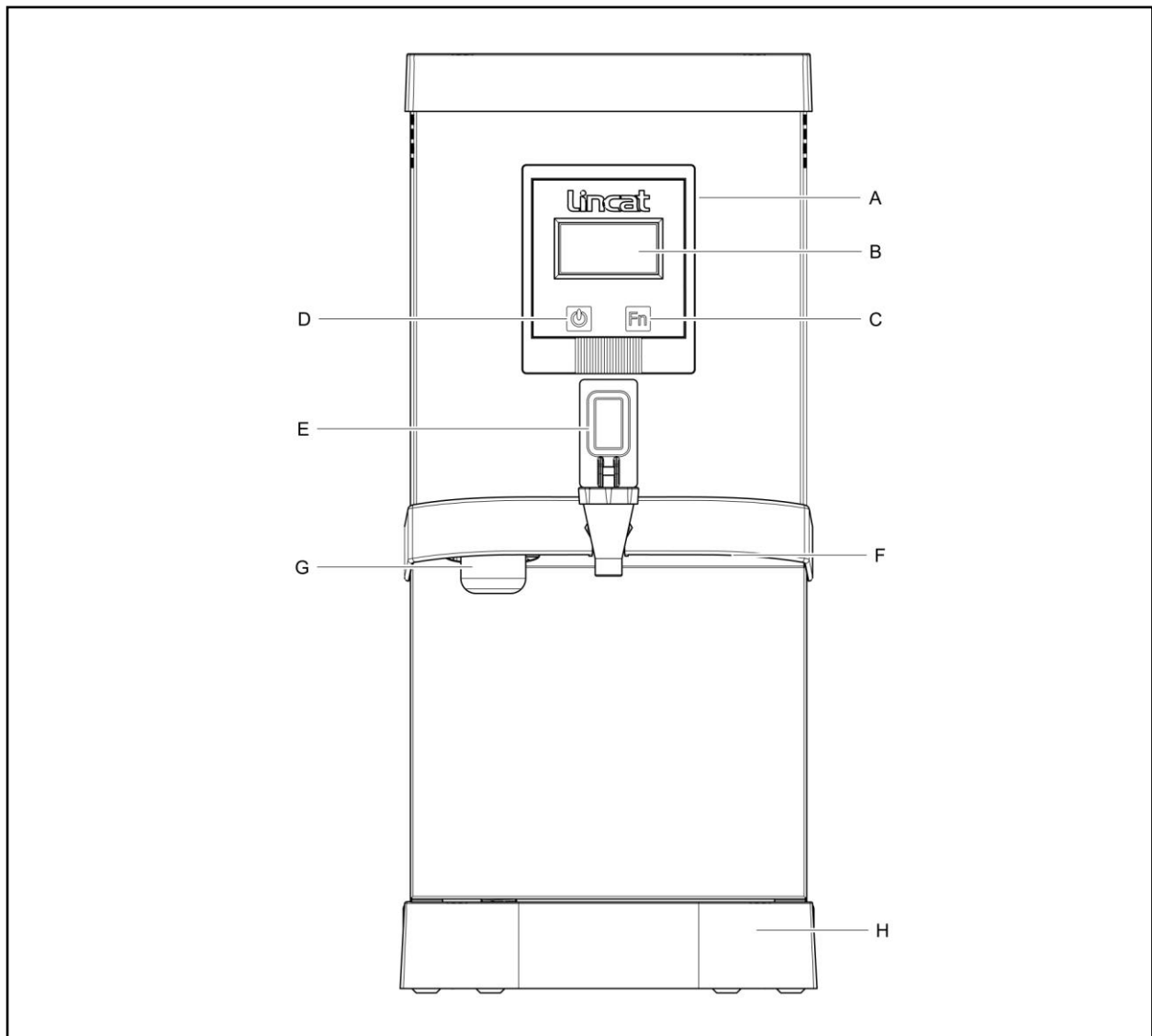


Fig 1

Only qualified or trained personnel should use this appliance.

First Use

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 tap.

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 tap (E).

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 70-96 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 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 values 35-60. Press the **Fn** button to select the required value.

Press the **power** button to exit.

Standby

If the boiler is to be 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 build up quickly and water taste may be affected.

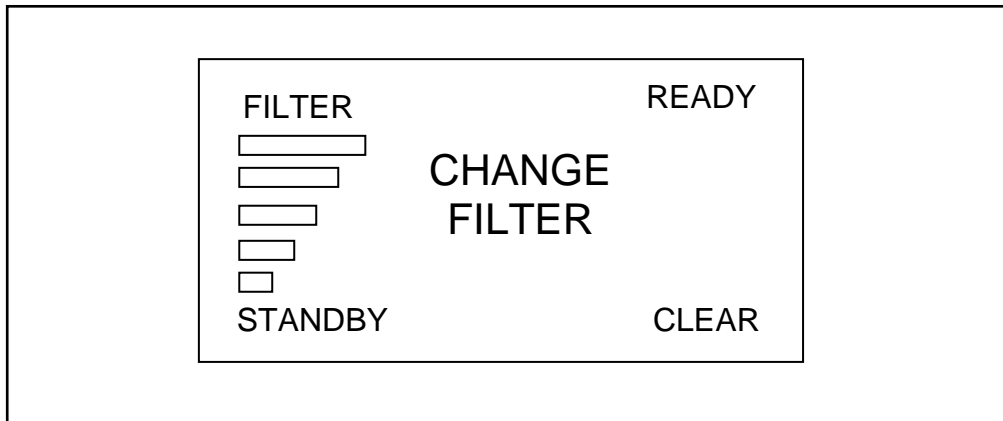


Fig 2

To replace the filter:

Twist the base of the filter (G) 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 in place by twisting to the right.

Press and hold the **Fn** button for 5 seconds to reset the filter life.

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 (H) regularly, and wipe the dispensing tap spout daily to remove lime scale 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 manufacturer's 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 all de-scaling agent as follows:

Remove the drip tray.

Remove the front panel by unscrewing the two screws behind the drip tray.

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 front cover.

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 [] [] CAUTION [] SEE MANUAL [] [] STANDBY CLEAR	Scale on level sensors Boiler overfilling	Descale Check water inlet valve
FILTER NO WATER [] [] FAULT [] SEE MANUAL [] [] STANDBY CLEAR	Water turned off Inlet hose kinked or blocked Water pressure too high or low Drain valve open	Check water supply and drain valve Call service if fault persists
FILTER NOT HEATING [] [] FAULT [] SEE MANUAL [] [] STANDBY CLEAR	Boil dry/overheat protector tripped Temperature sensor fault Element failed PCB fault Faulty or loose connection	Check connections Call service if fault persists
FILTER THERMISTOR [] [] FAULT [] SEE MANUAL [] [] STANDBY CLEAR	Temperature sensor fault	Call service

SPARE PARTS LIST

Part Number	Description	Used on
CO206	¼" to 3/8" elbow	All
CO215	Contactora	All excluding EB3F
DV02	Service valve	All
EBM05	Outer lid	EB3F, EB4F
EBM08	Outer lid	EB6F, EB6TF
EL235	Element 3kW	EB3F, EB6F, EB6TF
EL241	Element 4.5kW	EB4F
FC02	Filter cartridge	All
FH02	Filter head	All
GA48	Lid gasket	EB3F, EB4F
GA51	Lid gasket	EB6F, EB6TF
LE47	Level sensor insulator	All
LE48	Upper level sensor	All
LE49	Lower level sensor	All
PI12	Inlet hose	All
PL202	Mains cable	EB3F
PR74	Circuit board	EB3F
PR75	Circuit board	EB4F
PR76	Circuit board	EB6F, EB6TF
SL20	Tap union nut	All
SL21	Tap circlip	All
SL29	Tap	All
SO23	Solenoid valve	EB4F, EB6F, EB6TF
SO24	Solenoid valve	EB3F
TH87	95° cutout thermostat	All
TH88	120° cutout thermostat	All
TH98	Thermistor	All

ACCESSORIES

Part Number	Description	Used on
BR49	Wall mounting kit	EB3F, EB4F
BR50	Wall mounting kit	EB6F, EB6TF
FC02	Replacement filter cartridge	All

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 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 (such as filters, glass, bulbs, slot toaster elements and door seals.)
- 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.