



ELBA

INSTANT WATER HEATER MODEL: ACQUA SERIES EWH-K3420(SW) EWH-K3420(GB)

Owner's Manual

Please read this manual carefully before operating your set. Retain it for future reference. Record model number and serial number of the set. See the label attached on the set and quote this information to your dealer when you require service.

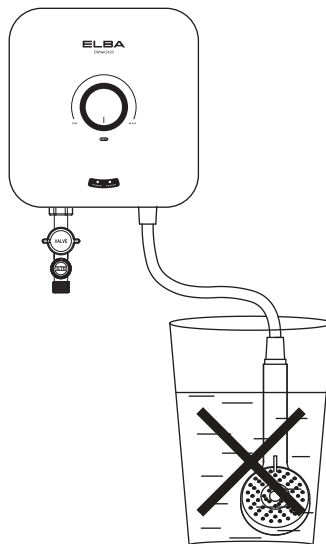
For The Warranty Terms & Conditions, Please Refer To Warranty Certificate.

Thank you for purchasing ELBA Instant Water Heater.
Please read this manual thoroughly and understand the content before use.



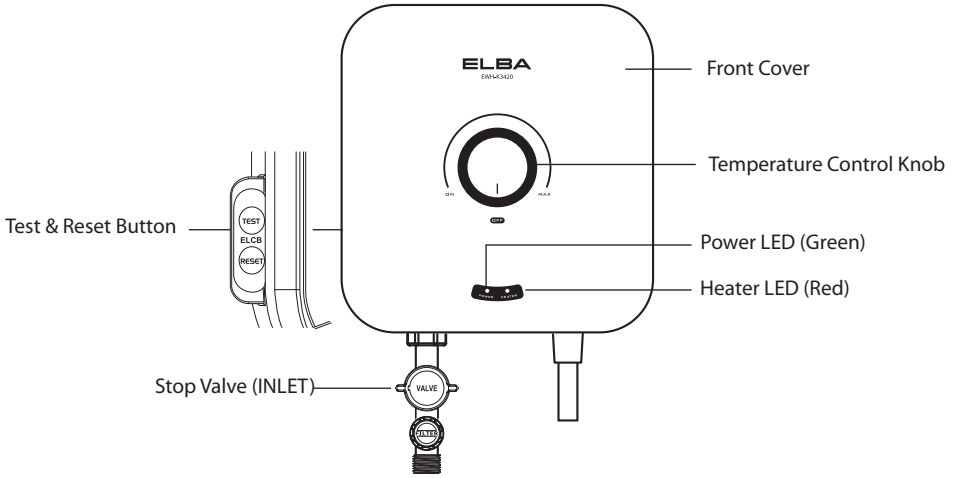
SAFETY PRECAUTION

1. Do not install the INLET & OUTLET and Stop Valve of the heater wrongly.
2. Do not install the heater where there is consistent spray directly over the unit.
3. Do not connect the OUTLET to any tap or fitting that is not recommended by the manufacturer.
4. Do not block the heater OUTLET in any way.
5. Do not attempt to repair the heater without a qualified technician.
6. This appliance is not intended for use by person (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been supervision or instruction concerning the use of the appliance by a person responsible for their safety.
7. Children should be supervised to ensure that they do not play with the appliance.
8. Engage a qualified electrician for installation.
9. Test water temperature with hand before using the shower.
10. Check the ELCB once a month (please refer to the Test Run of Heater) and consult professional for repair if there is any malfunction.
11. Metallic / chrome flexible hose and conductive control valve shall not be used.
12. Use only new hoses to connect the appliance to the water supply. The old hose-sets should not be reused.
13. This appliance is not to be used as a portable water supply.
14. The water inlet of this appliance shall not be connected to inlet water obtained from any other water heating system.
15. Do not leave the hand shower idle in the pail. (refer below)

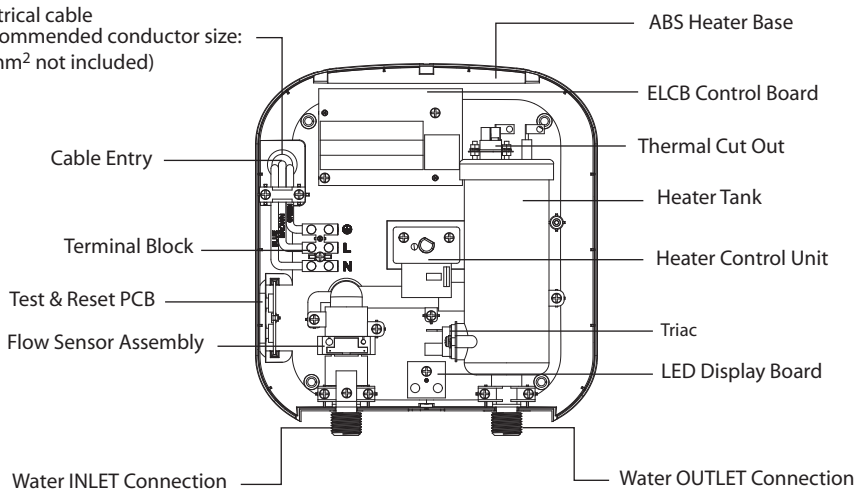


1. WATER HEATER PARTS IDENTIFICATION

EXTERNAL PARTS IDENTIFICATION



INTERNAL PARTS IDENTIFICATION



2. GENERAL INFORMATION

INSTALLATION



**CAUTION:
THIS APPLIANCE MUST BE EARTHED**

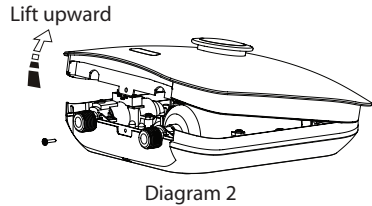
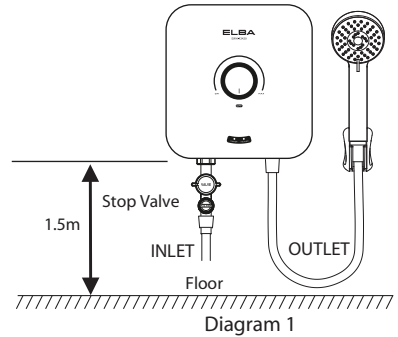
1. All plumbing work should be completed before proceeding to electrical wiring connection. (Table 1)
2. Installation must be carried out by a qualified electrician with close reference to this manual and in compliance with the local regulations.
3. The unit works at a minimum water flow rate of 2.0 litre/min, which then would trigger the built-in pump (only for pump model), boosting a stronger shower spray.
4. The built-in electronic Earth Leakage Circuit Breaker (ELCB) would cut-off the power supply to heater in the event of a current leakage as low as 15mA.
5. The Thermal Cut-Off would automatically shut off the power supply shall there be any abnormal rise of showering temperature.
6. The unit only operates when there is sufficient water flow to trigger the flow switch.
7. Electrical loading Table 1:

Voltage (Vac)	Power (kW)	Amperes (A)	Recommended Conductor Size (csa)			Fuse/MCB (A)	ON/OFF Switch (A)
			mm ²	Conduit Cable	Flexible Cable		
220 – 50/60Hz	3.5	16.0	2.5	7/0.67mm	50/0.25	20	20
	4.5	20.5	2.5	7/0.67mm	56/0.30	25	25
	5.5	25.0	4.0	7/0.85mm	56/0.30	32	32
	6.0	27.3	4.0	7/0.85mm	56/0.30	32	32
	6.5	29.6	4.0	7/0.85mm	84/0.30	32	32
	7.5	34.1	6.0	7/1.04mm	84/0.30	40	40
230 – 50/60Hz	3.5	15.2	2.5	7/0.67mm	50/0.25	20	20
	5.5	24.0	4.0	7/0.85mm	56/0.30	32	32
	6.6	28.7	4.0	7/0.85mm	56/0.30	32	32
	8.8	28.3	6.0	7/1.04mm	84/0.30	40	40
240 – 50/60Hz	3.6	15.0	4.0	7/0.67mm	50/0.25	32	20
	3.8	16.3	4.0	7/0.67mm	50/0.25	32	20
	4.2	17.5	4.0	7/0.67mm	50/0.25	32	20
	7.7	32.1	6.0	7/1.04mm	84/0.30	40	40
	9.0	37.5	6.0	7/1.04mm	84/0.30	40	40

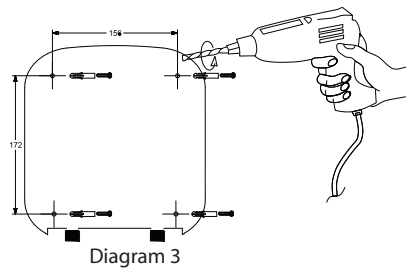
8. Instantaneous water heater shall be equipped with a 2-pole control switch and its own residual current device.
9. Water heaters exceeding 3kW shall be permanently connected to a 20A/30A rated circuit breaker/fuse with an isolator switch and residual current device.

3. INSTALLATION PROCEDURES

1. All the plumbing works should be completed before proceeding to electrical wiring connection.
2. INLET and OUTLET connection of the heater unit should not be reversed, with stop valve installed on INLET. (Diagram 1).
3. It is recommended to mount the unit at 1.5m above the floor to bottom of the heater.
4. Mounting position (Refer Diagram 2).
 - Remove screw from the bottom of the heater
 - Lift the plastic cover upward
 - Mark mounting position on the wall for all 4 screws
 - Drill the holes with 5.0mm diameter drill bit (Refer Diagram 3)
 - Install the unit to the wall with plug
5. Installation of Heater INLET and OUTLET connection.



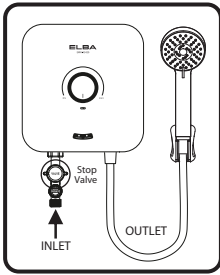
- a) Connect the stop valve to INLET, and be sure to put a gasket to prevent water leakage.
- b) Connect the piping from the stop valve to incoming water supply. If necessary make use of sealing tape for the connection to prevent water leakage.
- c) Connect flexible hose to heater OUTLET. Turn on the water mains to drain out all the plumbing dirt and fill the heater tank. Then, connect the flexible hose to the hand shower.



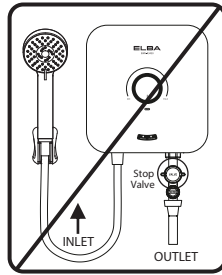
(Note: This step will prevent damage to the heating element).

SAFETY PRECAUTION

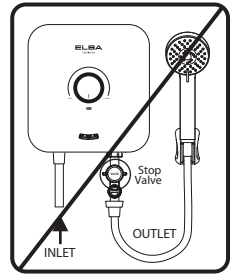
Do not install reverse INLET and OUTLET of heater



✓ correct installation



✗ inlet - outlet reverse
(wrong installation)



✗ stop valve reverse
(wrong installation)

6. Electrical Connection

IMPORTANT NOTE !

SWITCH OFF THE MAIN SUPPLY
BEFORE ELECTRICAL WORK

- Insert electrical cable through the rubber grommet as shown.
- Connect the cable to the terminal block and fully tighten them as the following:-
 - Red or BrownLive (L)
 - Black or Blue.....Neutral (N)
 - Green or Green/Yellow.....Earth \oplus
- Restore the cover and secure screw at the bottom. (Diagram 4)
- Align the knob from 'ON' position in clockwise direction to 'MAX' and return to 'OFF' mark as shown. (Diagram 5)

Restore cover

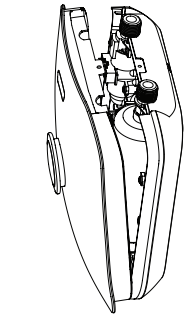


Diagram 4

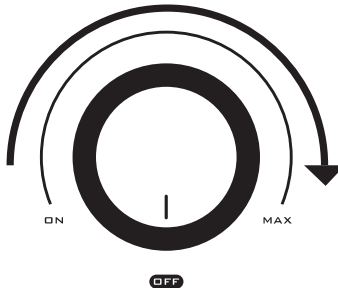


Diagram 5

Test Run of Heater

- a) Turn on the stop valve and water should spray out from the head.
- b) Switch on the main power supply ('POWER' LED would light up).
- c) Turn on the Temperature Control and 'HEATER' LED would light up. The water should be warmed in few seconds.
- d) Test the ELCB by pressing 'TEST' Knob switch. The unit should be tripped. 'POWER' and 'HEATER' LEDs would light off.
- e) Press 'RESET' switch. The unit should resume to normal condition.
- f) The heater is now ready for use.

4. OPERATION PROCEDURES

1. Switch on the main power supply, the 'POWER' LED would light up.
2. Turn on the water supply at the stop valve.
3. Turn on the Temperature Control Knob. The 'HEATER' LED would light up and the water temperature will be increased accordingly as the knob is turned clockwise from 'ON' to 'MAX'.
4. For normal cold shower, just turn the Temperature Control Knob to 'OFF' position.
5. Switch off the power supply when not in use.

5. GENERAL MAINTENANCE

DO NOT USE THINNER, ALCOHOL OR PETROL

You may clean the heater with a damp cloth and mild detergent but do not use thinner, alcohol, petrol or any other organic solution.

CLEAN FILTER REGULARLY (DIAGRAM 6)

- a) Remove the filter mesh from the stop valve (for filter type only) by turning the knob filter counter clockwise and pulling out the knob (Diagram 6). Flush it with water to remove any trapped sediments. Install the knob filter back to its original position.

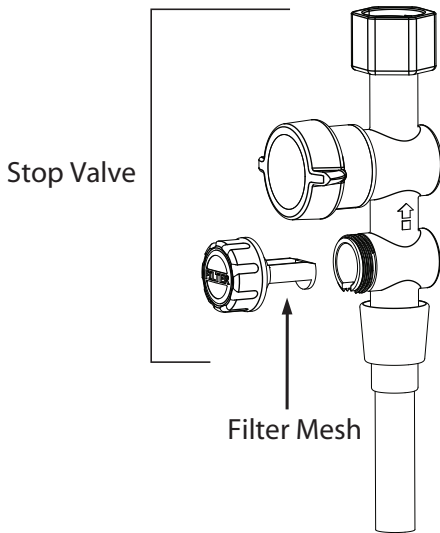


Diagram 6



**CLEAN FILTER
MESH REGULARLY**

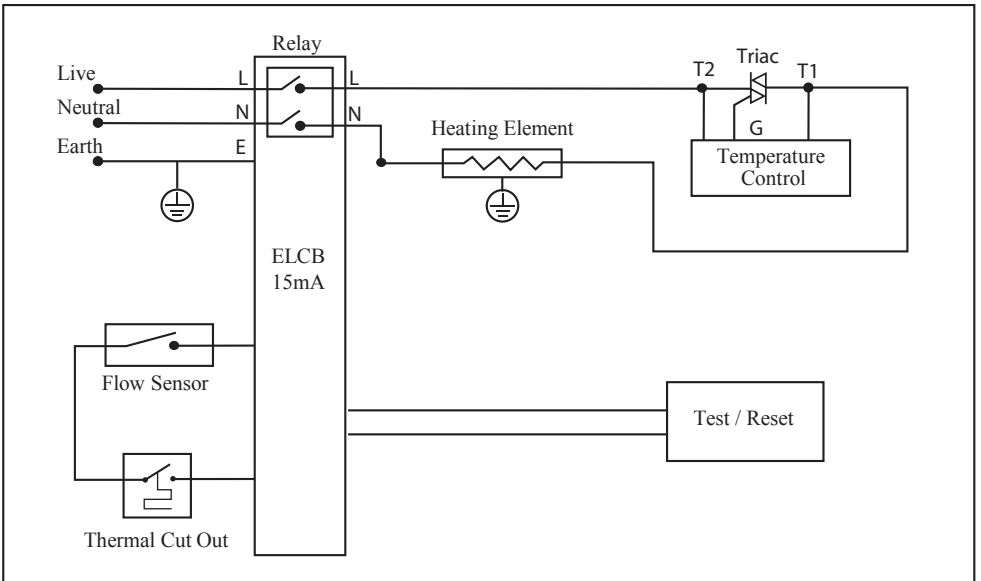
6. TECHNICAL SPECIFICATION

Electrical loading	3.8kW 240V 50/60Hz
Other loading	Please refer Electrical loading table 1
ELCB sensitivity	15 mA
Operating condition	Open system (Open outlet)
Water connection	ø15mm (1/2" BSP)
Degree of protection	IP25
Min water flow rate	2 litre/ min
Min water pressure	0.2 bar (20kPa / 2.9psi)
Max water pressure	6 bar (0.6MPa / 87psi)
Heater dimension (mm)	250 (H) x 236 (W) x 87 (D)
Heater nett weight	1.2kg

Notes: The specification of product design and accessories shown are correct at the time of printing and subject to change without prior notices.

7. SCHEMATIC WIRING DIAGRAM

NON-PUMP (EWH-K3420(SW) / EWH-K3420(GB))



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