

Size: 21cm(H) x 29.7cm(W)



ALPHA Smart REVO-E/i (M) H01A00130 (21cm(W) x 29.7cm(H)_ 30.08.2017

Size: 21cm(H) x 29.7cm(W)

- Thank you for purchasing **ALPHA** Instant Water Heater. Read this manual thoroughly and understand the instructions before use. After reading, keep this manual handy for future reference.

SIGNAL EXPLANATION



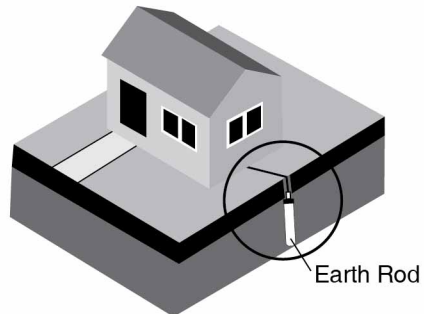
SAFETY PRECAUTION

Serious injury and damage to property may result if instructions are not followed.



SAFETY PRECAUTION

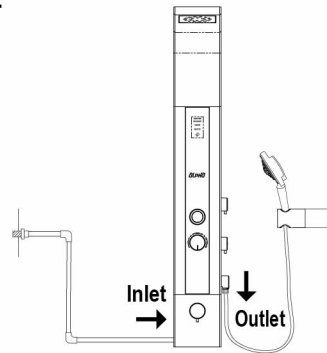
1. Earthing installation must be carried out in accordance with local regulation.



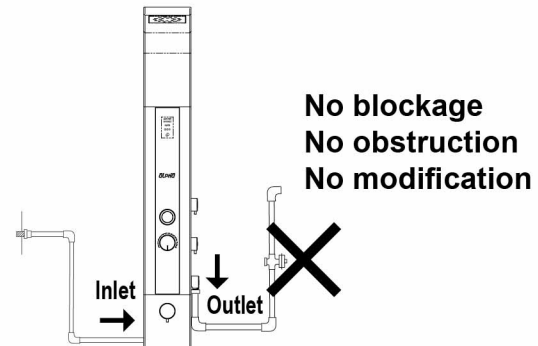
2. Engage qualified electrician for installation.



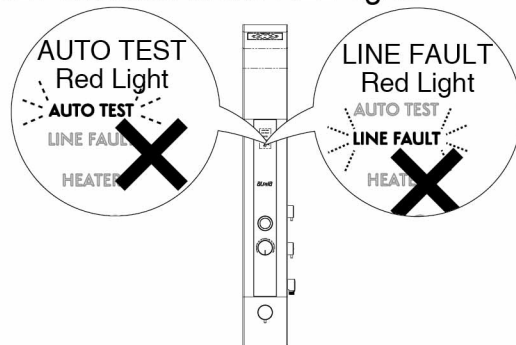
3. Do not install reverse INLET and OUTLET of heater.



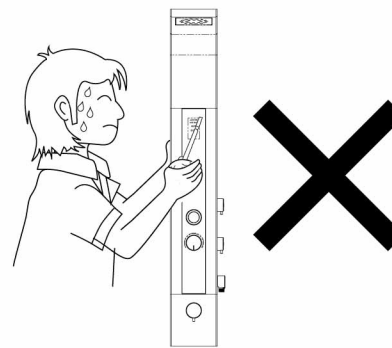
4. Do not block heater OUTLET in any way.



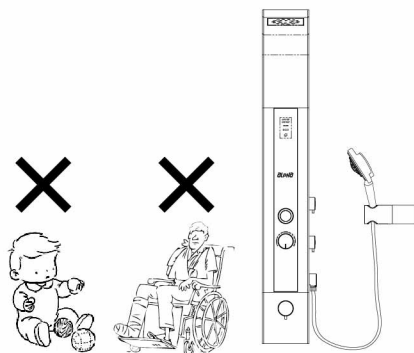
5. Do not use heater if AUTO TEST or LINE FAULT indicator show RED light.



6. Do not attempt to repair unit yourself.



7. Do not leave children, elderly or disable person alone in shower.



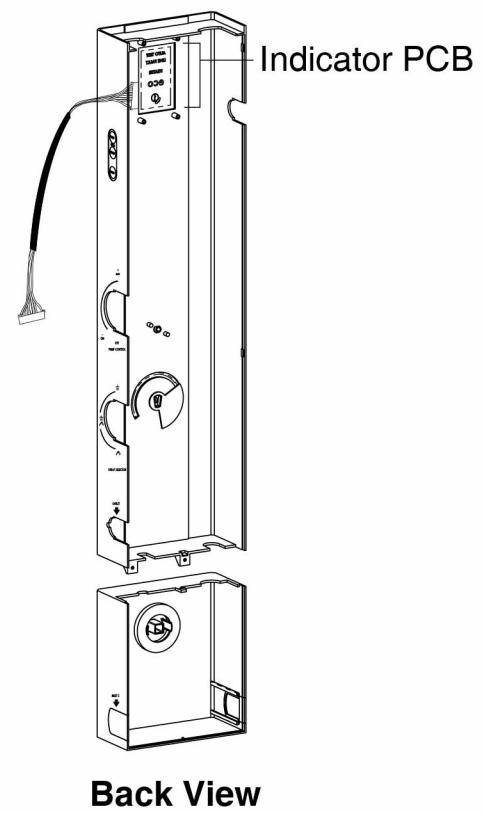
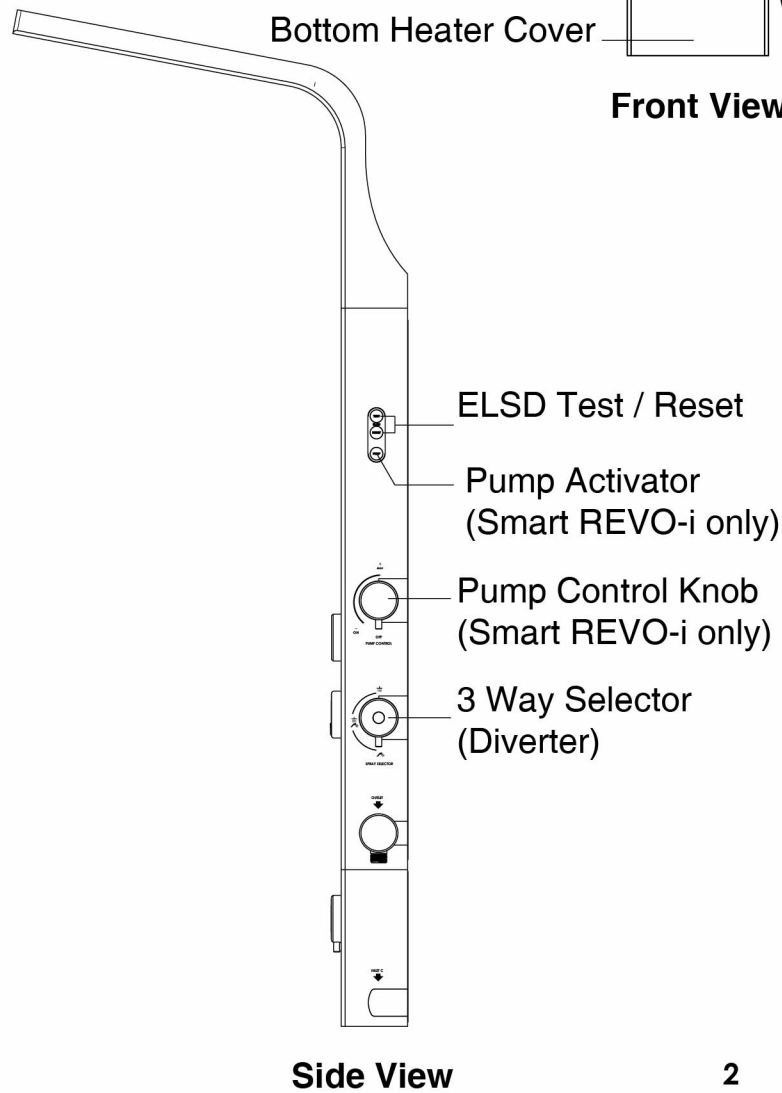
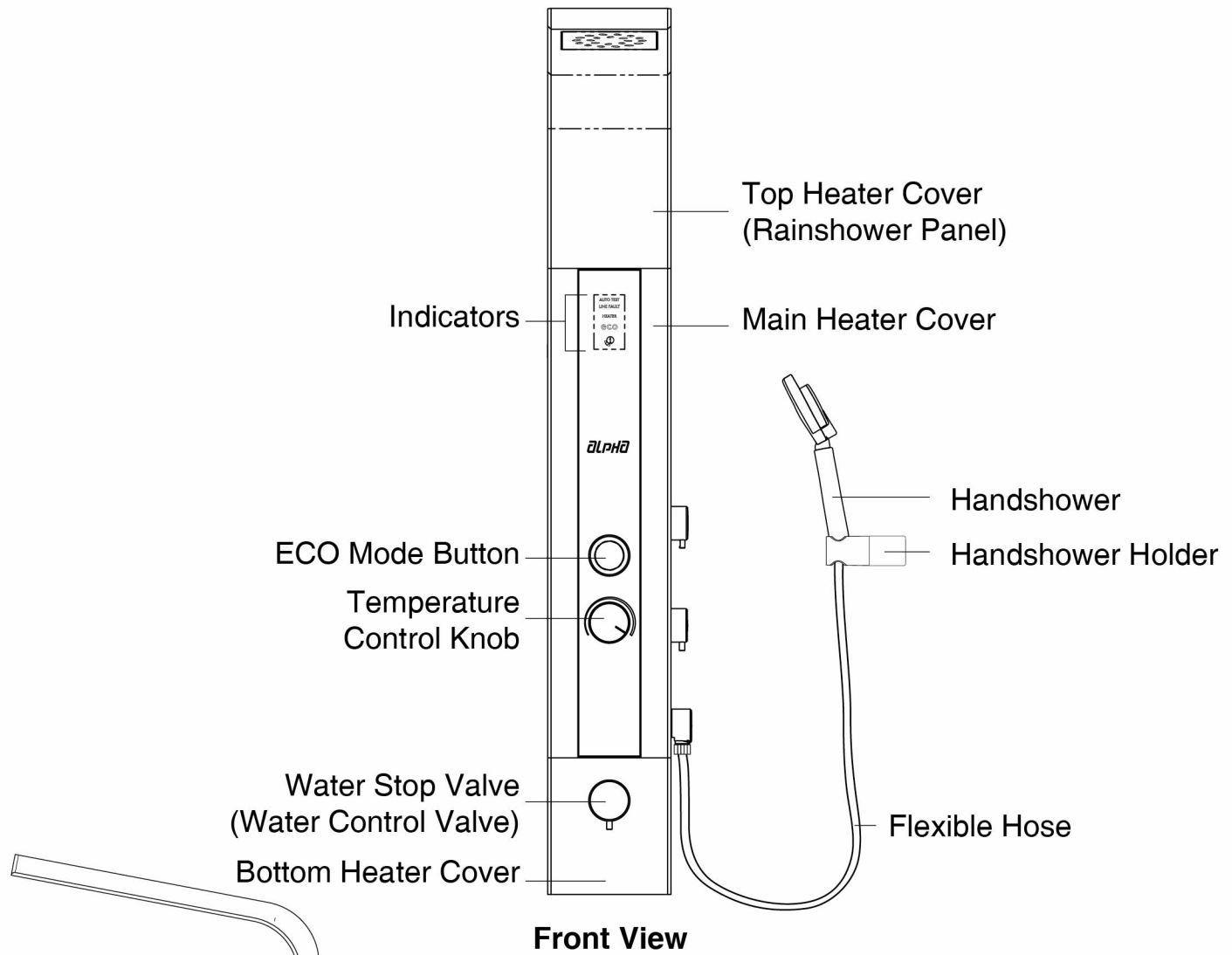
8. Test the water temperature with hand before stepping into shower.



Size: 21cm(H) x 29.7cm(W)

PART DESCRIPTION: SMART REVO-E/ REVO-i SERIES HEATER

EXTERNAL PART IDENTIFICATION

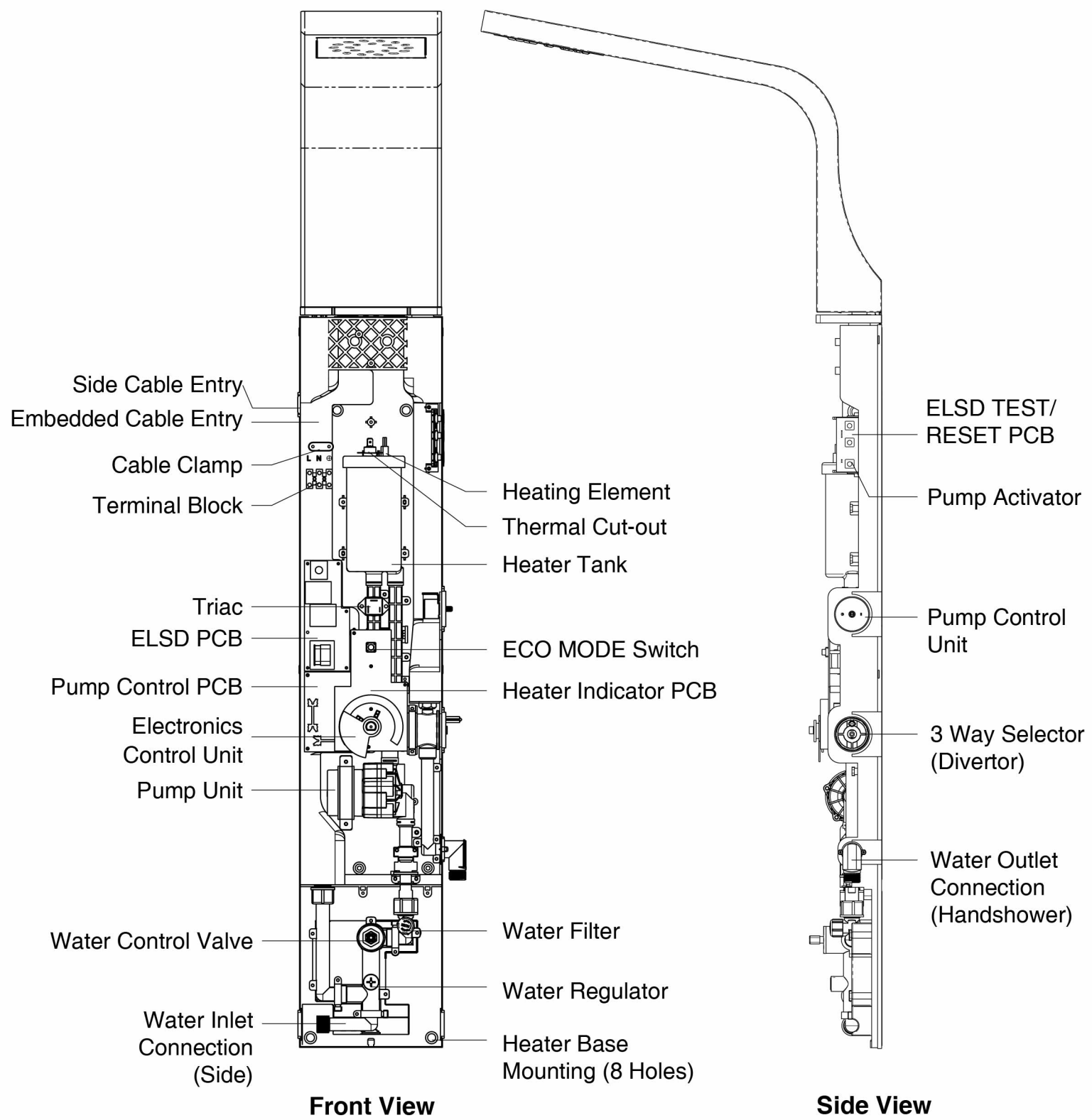


Size: 21cm(H) x 29.7cm(W)

PART DESCRIPTION: SMART REVO-E/ REVO-i SERIES HEATER

INTERNAL PART IDENTIFICATION

SMART REVO-i

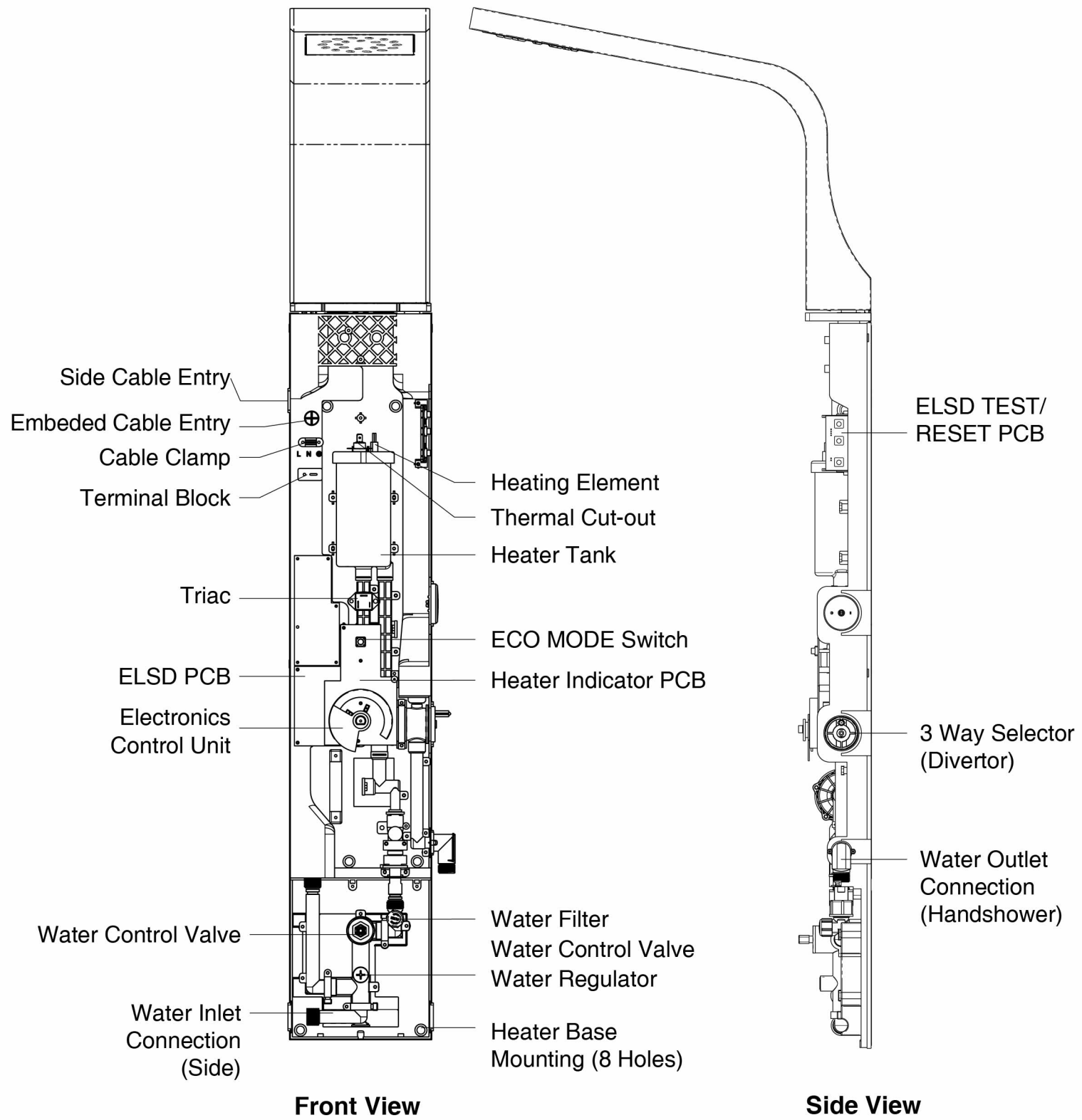


Size: 21cm(H) x 29.7cm(W)

PART DESCRIPTION: SMART REVO-E/ REVO-i SERIES HEATER

INTERNAL PART IDENTIFICATION

SMART REVO-E



GENERAL INFORMATION

ELECTRICAL:

⚠ CAUTION: THIS APPLIANCE MUST BE EARTHED.

1. All wiring MUST conform to local regulations. If in doubt, always consult a qualified electrician.
2. Installation must be carried out by a qualified electrician.
3. The heater must be permanently connected to the electricity supply through a double pole linked switch having a contact separation of at least 3mm in all poles incorporated in the circuit, and out of reach from the person using the shower.
4. The use of plug and socket is not recommended.
5. Correct size of wire conductor corresponding to different electrical loading should be used.
6. A typical electrical wiring connection is shown in diagram 1.

Voltage (V~)	Power (kW)	Amperes (A)	Recommended Conductor Size (csa)			Fuse/ MCB (A)	ON/OFF Switch (A)
			mm	Comduit Cable	Flexible Cable		
220 - 50/60Hz	3.5	16.0	4.0	7/0.85mm	56/0.30	20	20
	4.5	20.5	4.0	7/0.85mm	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	56/0.30	40	40
	7.5	34.1	6.0	7/1.04mm	84/0.30	40	40
230 - 50/60Hz	3.5	15.2	4.0	7/0.85mm	56/0.30	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	38.3	6.0	7/1.04mm	84/0.30	45	45
240 - 50/60Hz	3.6	15.0	4.0	7/0.85mm	56/0.30	20	20
	4.2	17.5	4.0	7/0.85mm	56/0.30	20	20
	7.1	29.6	4.0	7/0.85mm	56/0.30	40	40
	9.5	39.6	6.0	7/1.04mm	84/0.30	45	45

Table 1: Electrical Loading Table

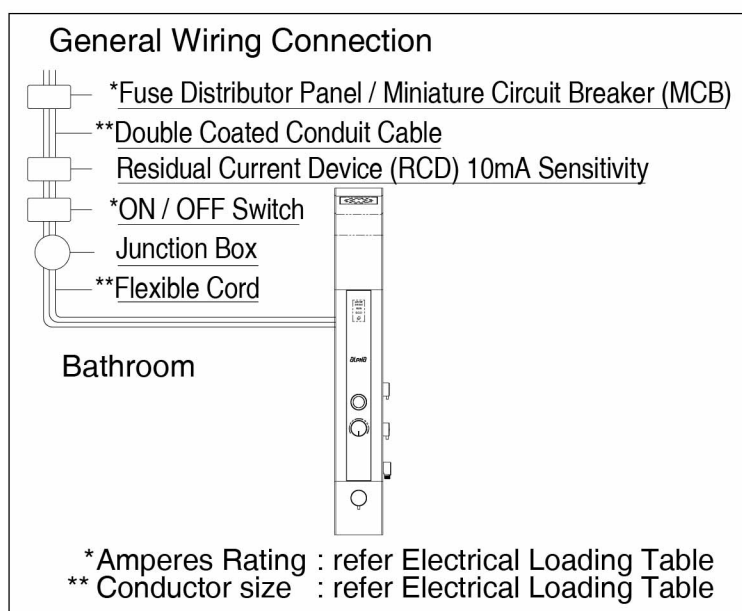


Diagram 1

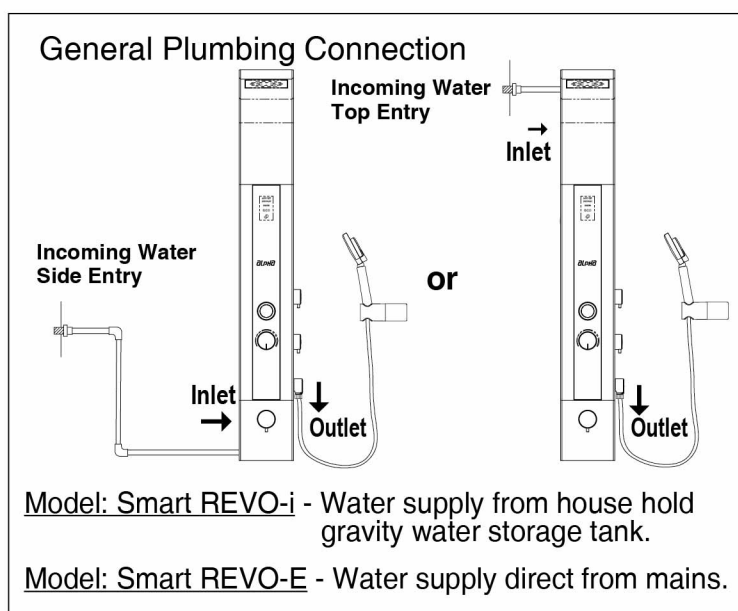


Diagram 2

GENERAL INFORMATION

WATER:

1. The heater works at a minimum water flow rate of 3 liters/min. Note that for heater model without built-in pump an incoming water with consistently flow rate of 5 liters/min and above would excel its performance.
2. A typical plumbing connection is shown in diagram 2.

SAFETY:

Note: An approved type of Residual Current Device (RCD) of 10mA sensitivity should be installed in conjunction with the heater.

1. The built-in Earth Leakage Sensing Device (ELSD) would cut off the power supply to the heater in the event of current leakage of as low as 15mA.
2. Upon power on at mains, the heater will perform 10 seconds 'self-test' routine. If the ELSD is in proper working condition after the 'self-test', the AUTO TEST indicator will light up Green and heater will be in power. If ELSD is faulty, its AUTO TEST indicator will indicate Red and power will be cut off from heater.
3. The built-in LINE FAULT detector will indicate Green light if wiring is done correctly. If improper electrical wiring is detected, LINE FAULT indicator will show Red light and power will be cut off from heater.
4. The heater operates when there is sufficient water to trigger the Flow Switch.
5. The Thermal Cut-out would automatically breaks off the power supply if there is abnormal rise in shower temperature.
6. Heater casing designed to high degree of protection IP25 prevents water from entering into the heater during shower.

IMPORTANT NOTE:

1. This heater is suitable for use in the shower cubicles. However, do not install the heater unit where there is consistent spray directly over the unit.
2. If the heater's ELSD trips during normal operation, switch off the mains and contact the sales agent for repair(s).
3. If the AUTO TEST and LINE FAULT indicators indicate Red light, switch off the mains and contact a qualified electrician to check the electrical supply line.
4. In the event the heater malfunctions, never attempt to repair the unit yourself.
5. The outlet point of this heater, hose and handshower act as a vent. They must not be blocked, obstructed or modified in any way. Fittings not recommended by manufacturer must not be connected. The use of unapproved accessories may not only affect its performance and safety of the user but also invalidates its guarantee.
6. If there is a sudden reduction of incoming water, the shower temperature will increase. This does not indicate the fault of the heater. Adjust the Temperature Control Knob (to reduce heating power) or Regulator Unit (to increase flow) in order to get the desired shower temperature.
7. Always test the water spray temperature with your hand before stepping into the shower.
8. 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.
9. Do not leave your children, elderly, infirm or disable persons unattended in the shower.

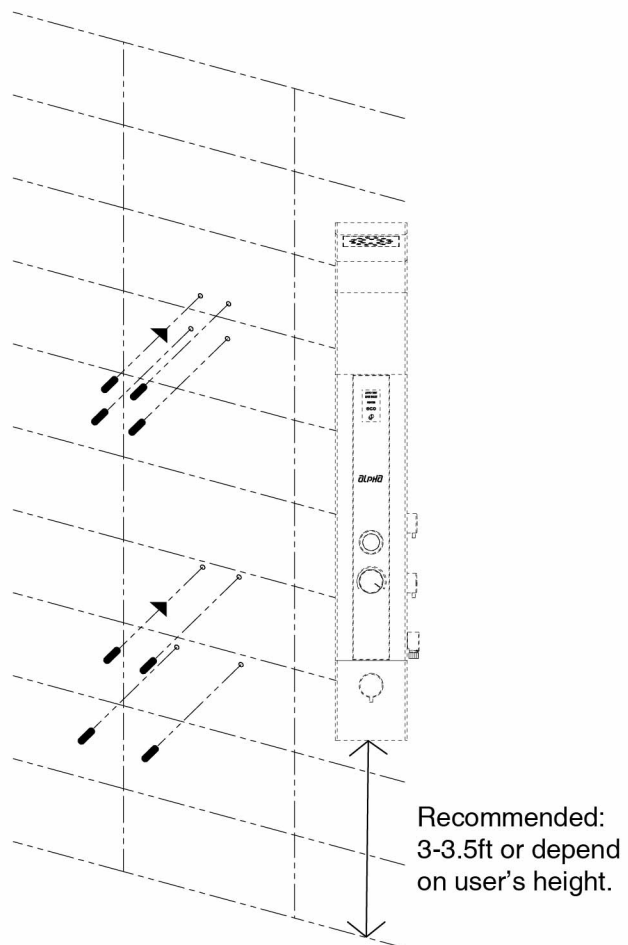
Size: 21cm(H) x 29.7cm(W)

INSTALLATION PROCEDURES

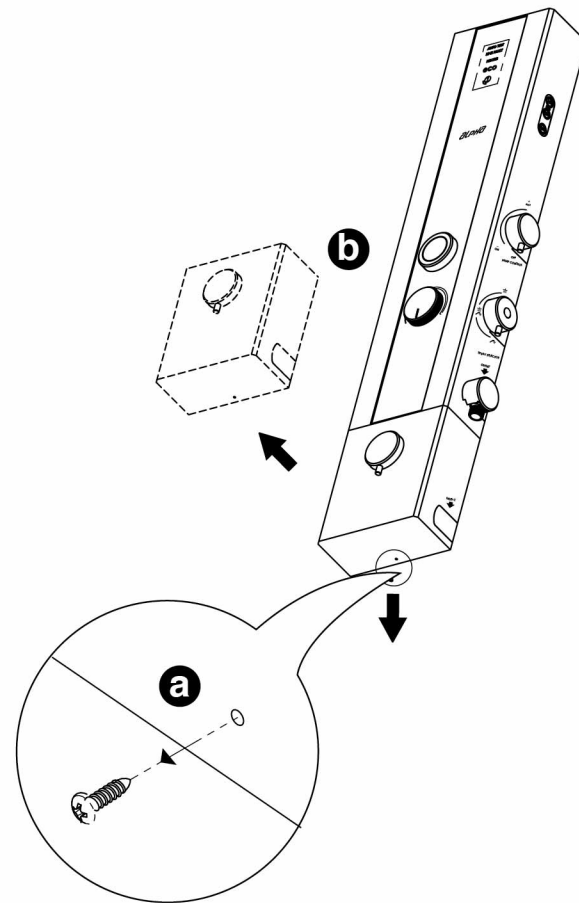
IMPORTANT:

- All plumbing work should be completed before proceeding to electrical wiring connection.
- Metallic / Chromed hose and conductive control valve shall not be used (in Malaysia only-Malaysian government's regulations. Optional for others).
- Heater outlet shall not be connected to any tap or fittings not recommended by manufacturer.
- The heater unit must be installed on solid wall to avoid the possibility of distorting the unit.
- Inlet and Outlet connections of the heater should not be reversed.

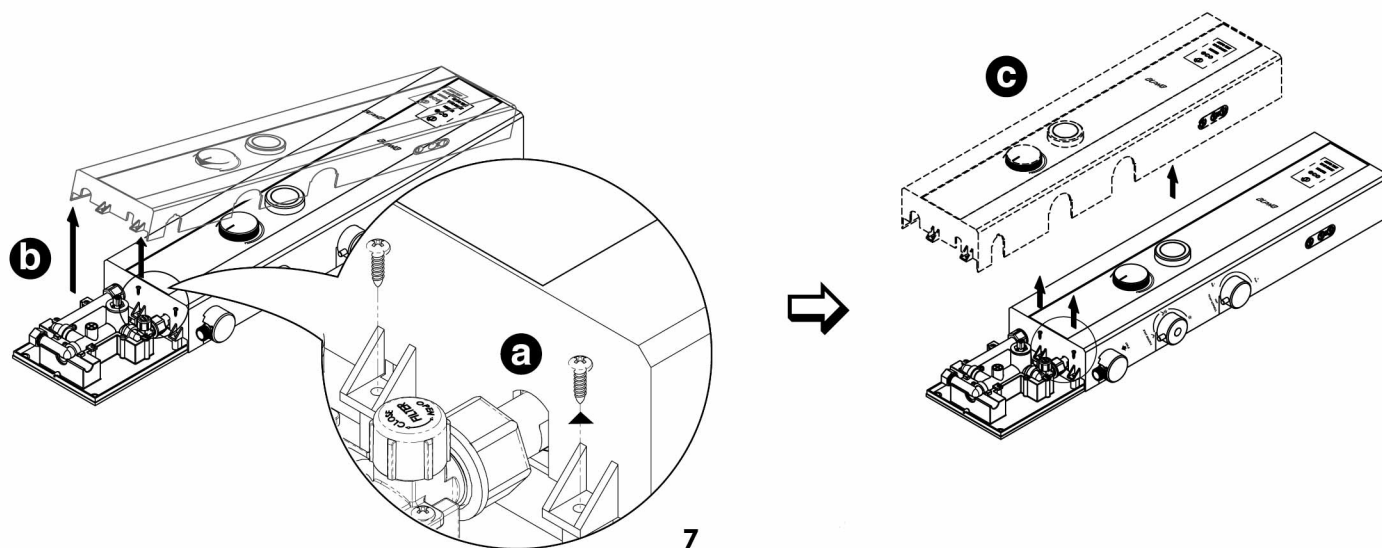
1. Mark out 8 mounting points on the wall (use template).
Drill 8 mounting holes, insert wall plug.



2. Remove screw at the bottom of the heater.
Remove Heater Bottom Cover by lifting the bottom upward.



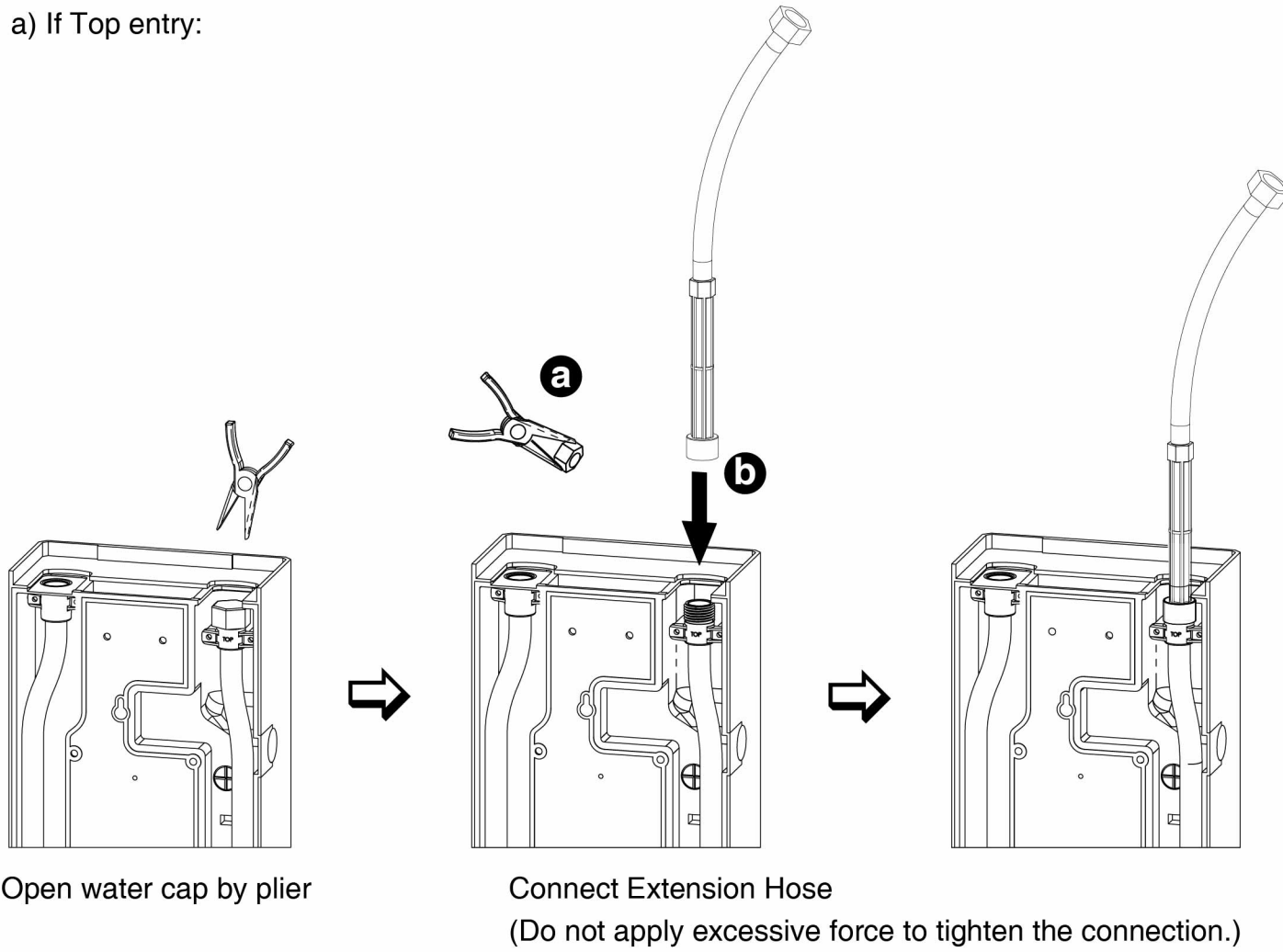
3. Remove 2 screws at the bottom of the Main Heater Cover.
Remove heater cover by lifting the bottom upward.



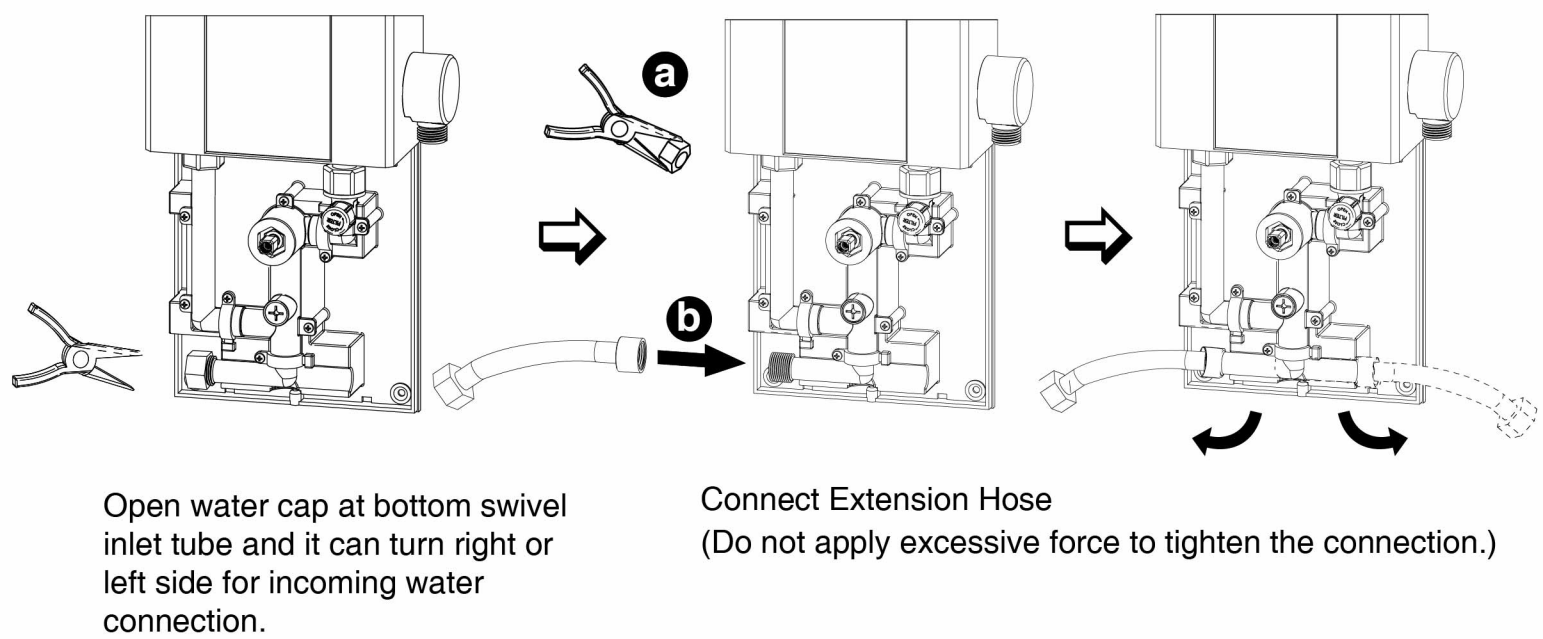
INSTALLATION PROCEDURES

4. Decide the position of entry of incoming water connection.

a) If Top entry:



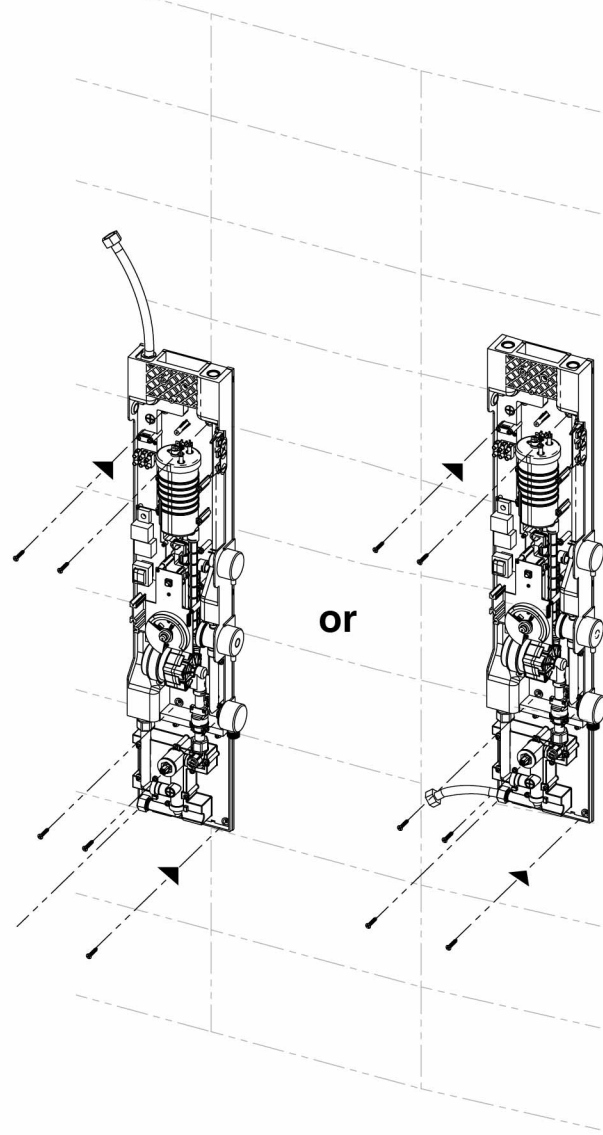
b) If Side entry:



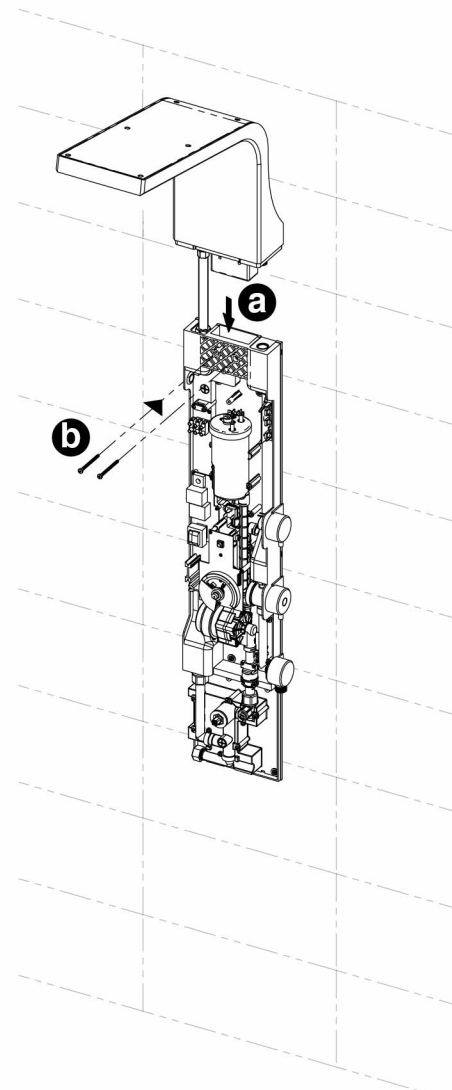
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INSTALLATION PROCEDURES

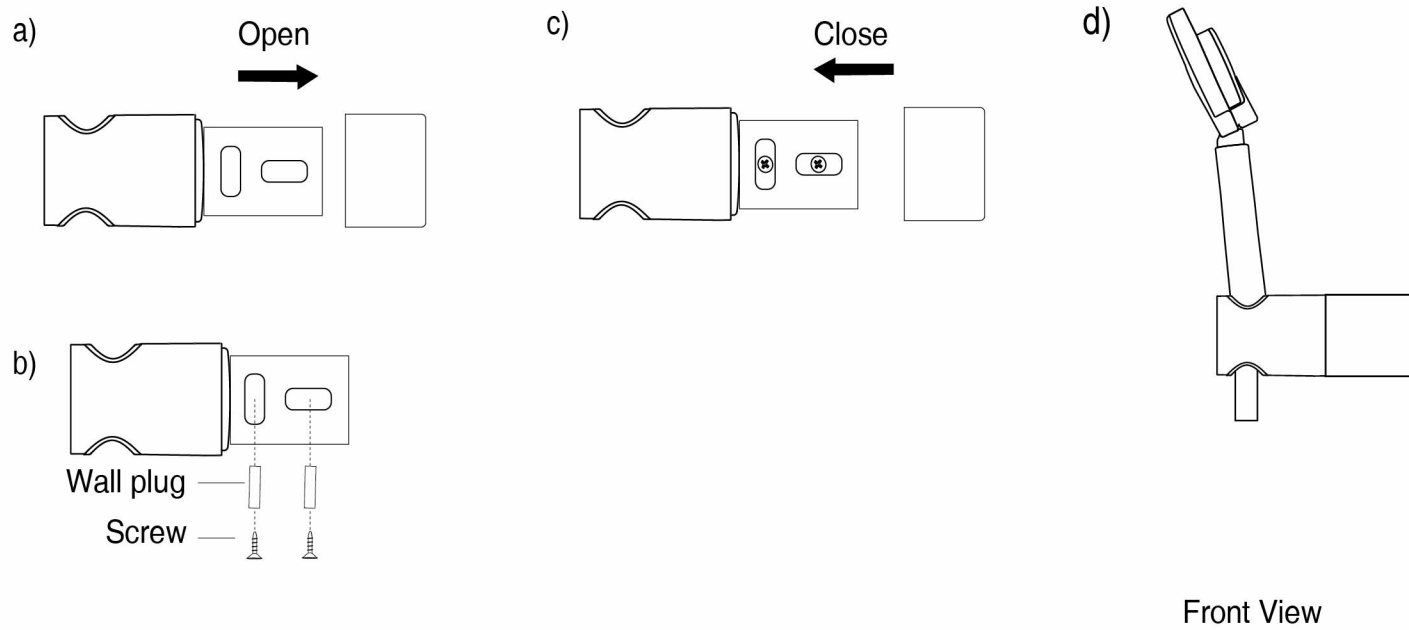
5. Hang Heater to the wall & mounting with 6pcs Heater Wall Screw. (Refer accessories box)



6. Slot in Rainshower to the main heater. Ensure it is fully insert. Secure it with 2pcs Rainshower Wall Screw. (Refer accessories box)



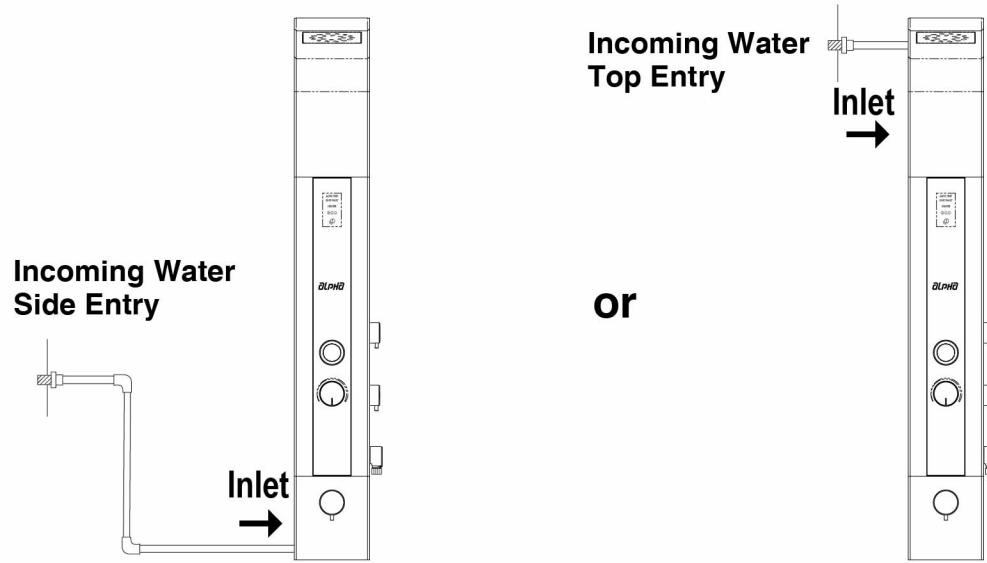
7. Mount handshower bracket with screws provided (Height at discretion of user).



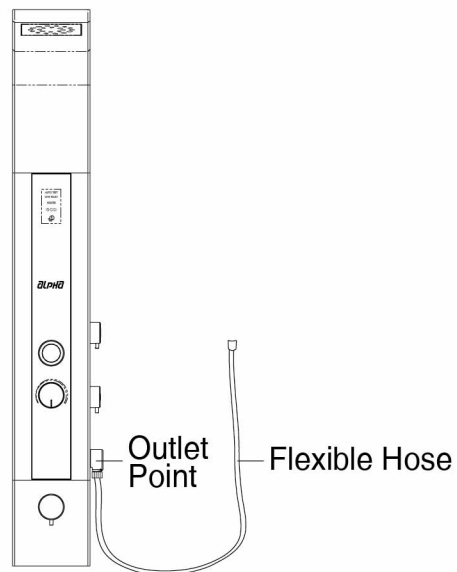
Size: 21cm(H) x 29.7cm(W)

INSTALLATION PROCEDURES

8. Connect incoming water supply to Extension Hose.



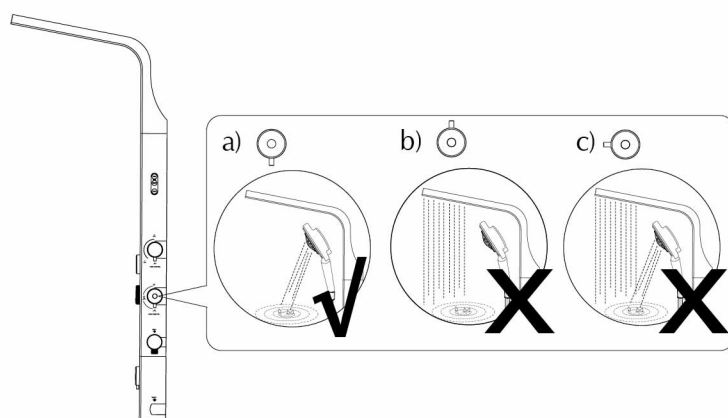
9. Connect Flexible Hose to Outlet point. (Do not connect handshower at this stage.)



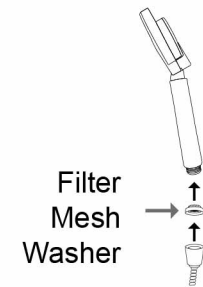
10. Turn on water supply to drain out plumbing dirt.

a) Ensure 3 Way Selector turn to handshower point.

b) Drain out all plumbing dirt.



c) Connect handshower

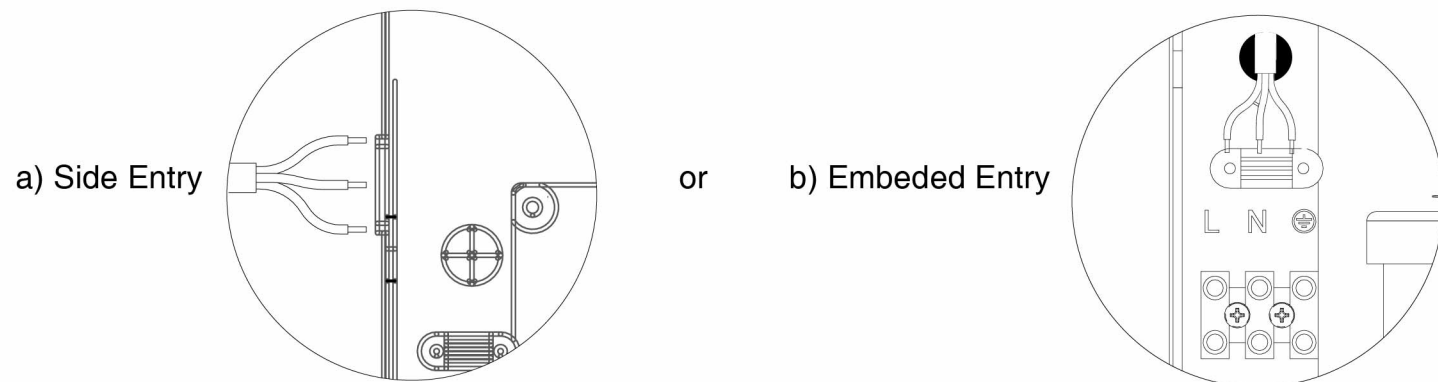


INSTALLATION PROCEDURES

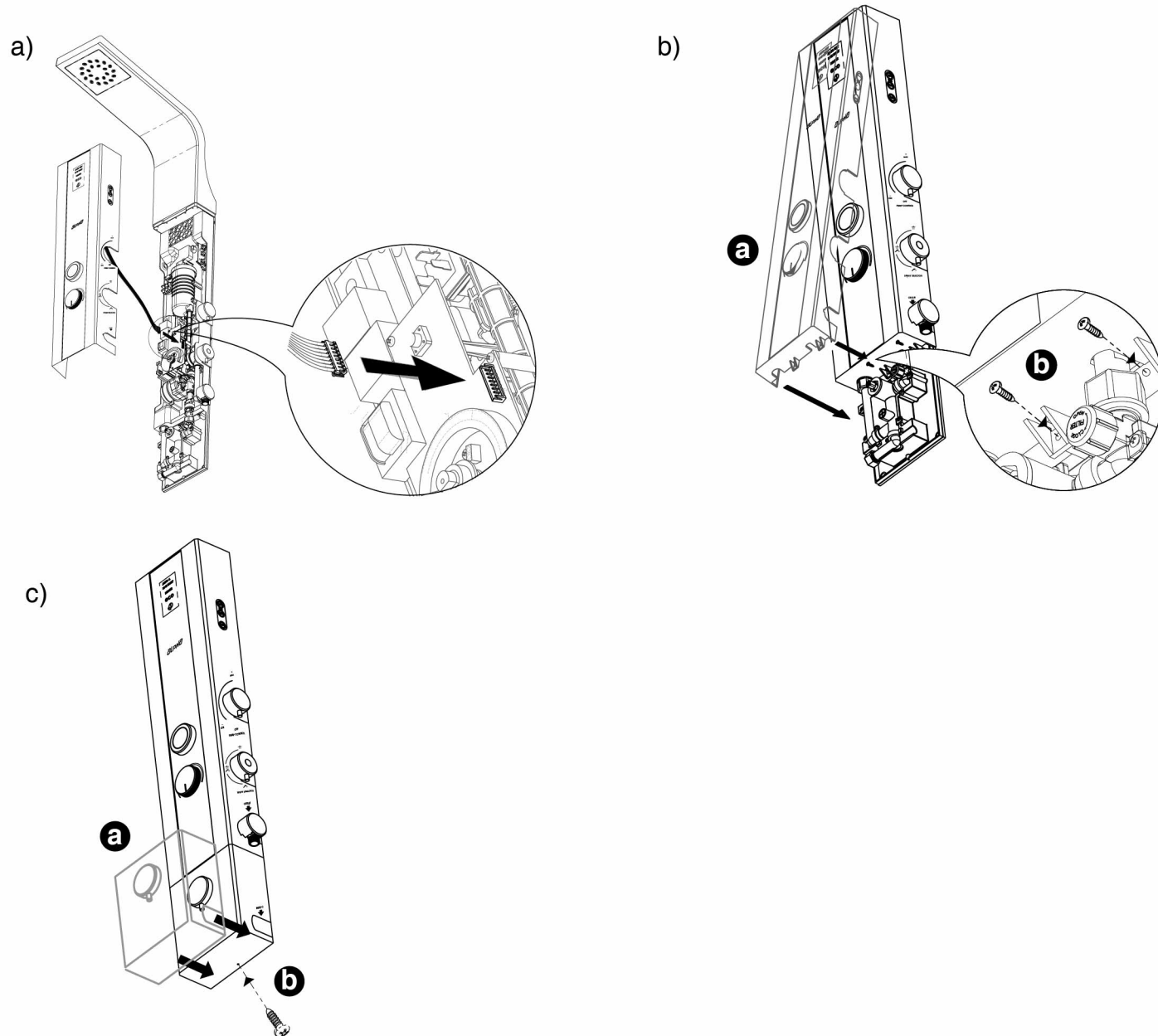
11. Connect mains wire :

⚠ CAUTION: MAKE SURE ELECTRICAL MAINS IS OFF.

RED or BROWN LIVE (L)
BLACK or BLUE NEUTRAL (N)
GREEN/YELLOW or YELLOW/GREEN EARTH (⊕)




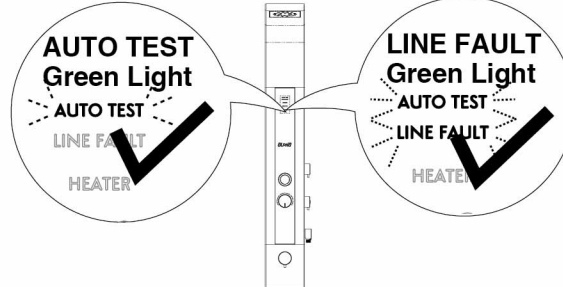
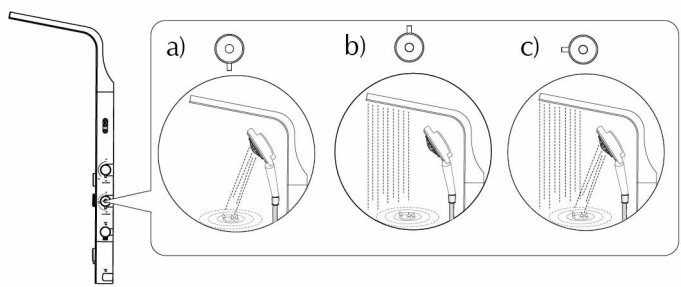
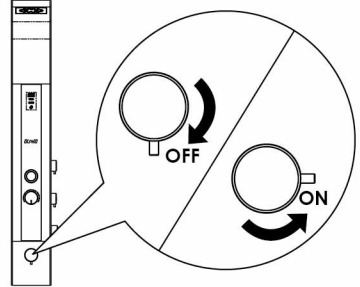
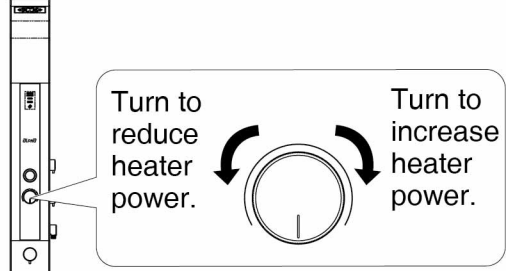

12. Connect display wire and replace Main and Bottom Heater Cover.



OPERATING PROCEDURES



CAUTION: 'AUTO TEST' and 'LINE FAULT INDICATOR' must indicate green light. Do not use appliance if green light is not shown. Contact agent for repairs.

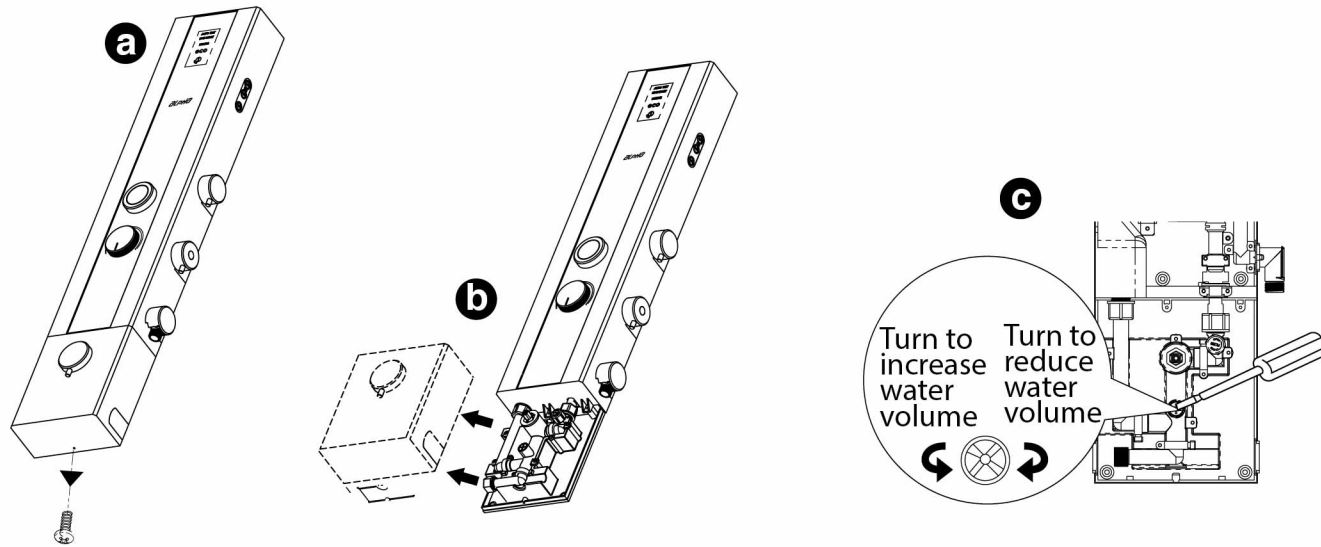
<p>1. Switch on Heater Switch outside bathroom.</p> 	<p>2. Heater performs self-routine test.</p> 
<p>3. Adjust Selector Valve at your desired spray.</p> 	<p>4. Turn on Water Stop Valve.</p> 
<p>5. Turn on Temperature Control Knob.</p> 	<p>6. Switch off Heater Switch when not in use.</p> 

Note:

- The shower water may not be hot enough even at 'MAX' in areas where the water pressure is exceptionally high and cold. This can be remedied by reducing the water inflow or replacing the unit with one that is of higher power (if it is approved by relevant authorities).
- The built-in Pump can be independently controlled by using the Pump Control Knob. In low pressure areas (below 15 p.s.i.), adjust pump speed to obtain desired spray of water. If water pressure is high (over 15 p.s.i.), turn "OFF" the Pump Control Knob to achieve hotter shower. (Model SMART REVO-i)
- The Pump Activator is specially designed for low pressure areas where the water pressure is too weak to trigger the Built-in shower Pump. Just press the Pump Activator Button and the Shower Pump will spring into action. (Model Smart REVO-i)
- It is recommended that the pump be operated at intervals of 30 minutes with 30 minutes rest in between. (Model SMART REVO-i)

CUSTOMER GUIDANCE

1. Adjust Regulator Unit - reduce water inflow if water not hot enough.



2. LINE FAULT indicator :

Red Warning Light shows there is an improper electrical connection.

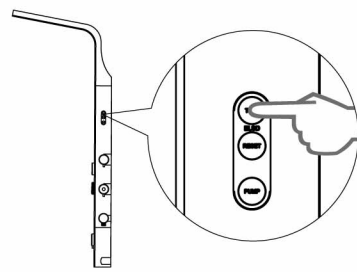
- Earth wire not connected to heater.
- Live and Neutral phases are reversed.
- Earth conductor not grounded (floating) or having high resistance to ground.

Warning: Improper earthing may result in malfunctioning to the RCD/ELCB. Never use the heater if there is doubt on the Earthing installation.



Green light indicates proper electrical connection.

3. Test ELSD at least once a month.



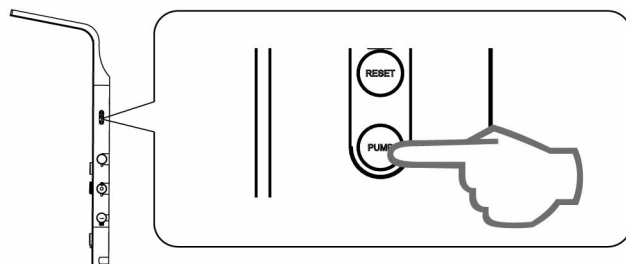
Check the ELSD at least once a month as follow:

Turn on electric and water supply to the heater.

- Press TEST button: Heater would trip and power go off.
- Press RESET button: Heater power would resume.

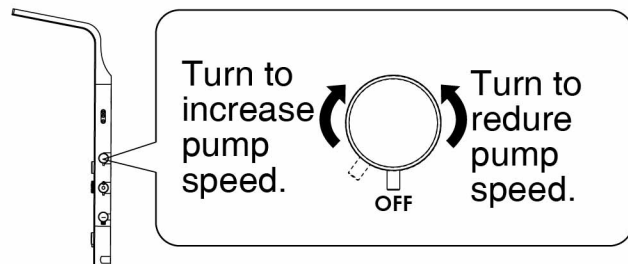
Contact agent for repair if there is malfunction.

4. Press PUMP ACTIVATOR to trigger the pump if water pressure too weak (Model SMART REVO-i).



CUSTOMER GUIDANCE

5. Turn on Pump when water pressure is low (Model SMART REVO-i).



6. ECO MODE for lower power connection



ECO MODE off = full range power.

ECO MODE on = reduce 30% from full range power.

MAINTENANCE:

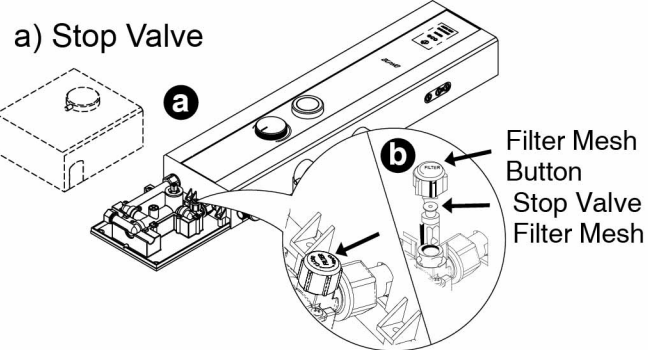


DO NOT USE THINNER, ALCOHOL OR PETROL

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

CLEAN FILTER REGULARLY

The filter should be cleaned whenever there is a sign of inlet water blockage.



a) Stop Valve

Remove Filter Mesh Button. Pull out Stop Valve Filter Mesh and flush it with water to remove any trapped sediments. Slot back the unit to its original position and secure it.

b) Handshower



b) Handshower

Disconnect the handshower from the hose. Remove Filter Mesh Washer and flush it with water to remove any trapped sediments. Reassemble the handshower to the hose in its original position.

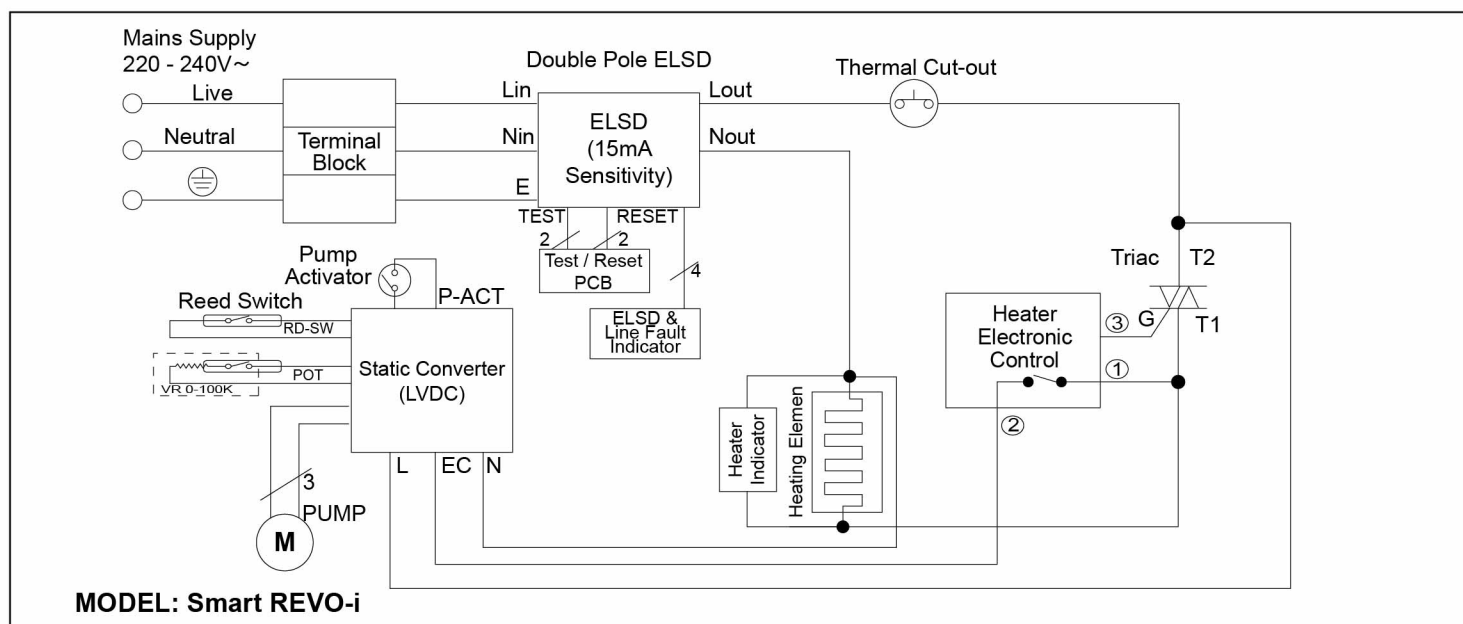
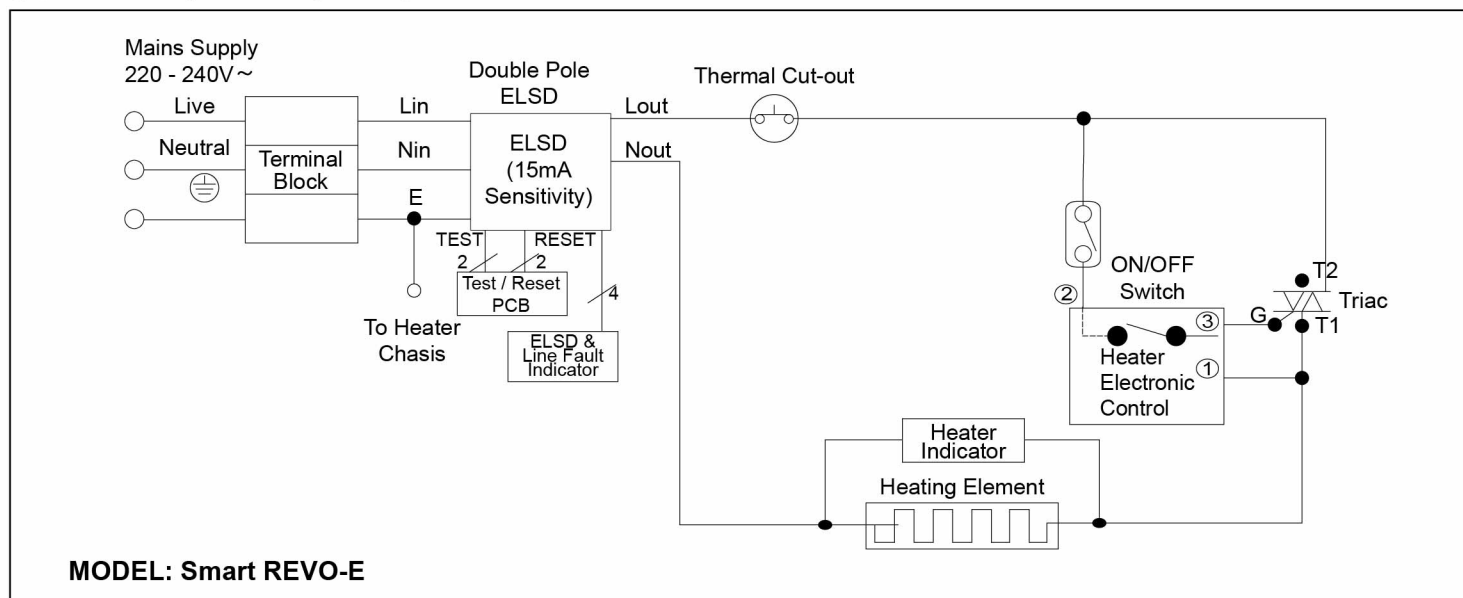
GENERAL INFORMATION

SPECIFICATIONS

Heater Power Rating	SMART REVO-E	4.20kW 240V~ 50Hz
	SMART REVO-i	4.28kW 240V~ 50Hz
Others Power Rating	Refer to Electrical Loading Table for reference	
Water Connection	Ø 15.0mm (½" BSP)	
Operating Condition	Open Outlet	
Protection Against Electric Shock	Class I	
Water Temperature Control	Electronics	
Degree Of Protection	IP25	
Minimum Flow Rate	3 liters / minute	
Minimum Pressure	20kPa (0.2 bar / 2.9 psi)	
Maximum Inlet Pressure	0.38MPa (3.8 bar / 55psi)	
Heater Dimension	1300mm (L) x *181mm (W) x 505mm (H)	
Heater Nett Weight	SMART REVO-E	5.8kg
	SMART REVO-i	6.5kg

* If included knobs dimension is 211mm

SCHEMATIC WIRING DIAGRAM



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