

*Breeze*

**ALPHA**

*Make Every  
Shower A*

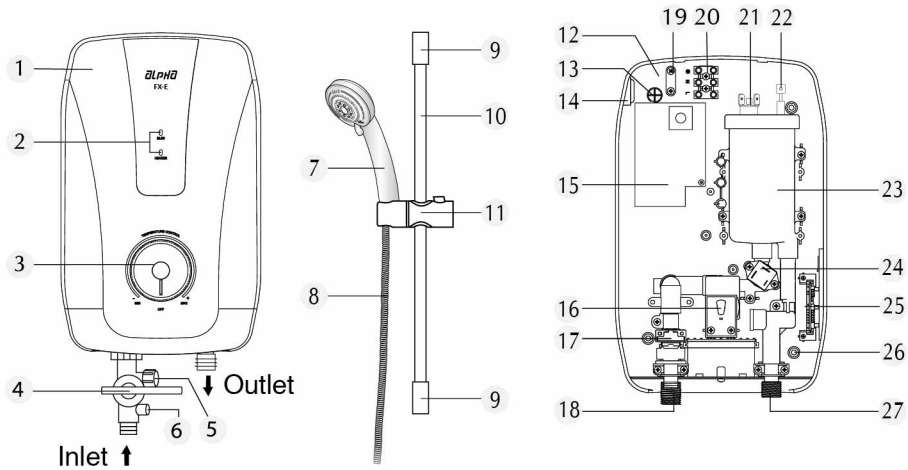


Model : FX-E  
FX-i

**FX  
SERIES**

ALPHA FX-E, i (M) H01A00141\_2 in 1 (21cm(W) x 29.7cm(H))\_ 26.04.2018

## PART DESCRIPTION:

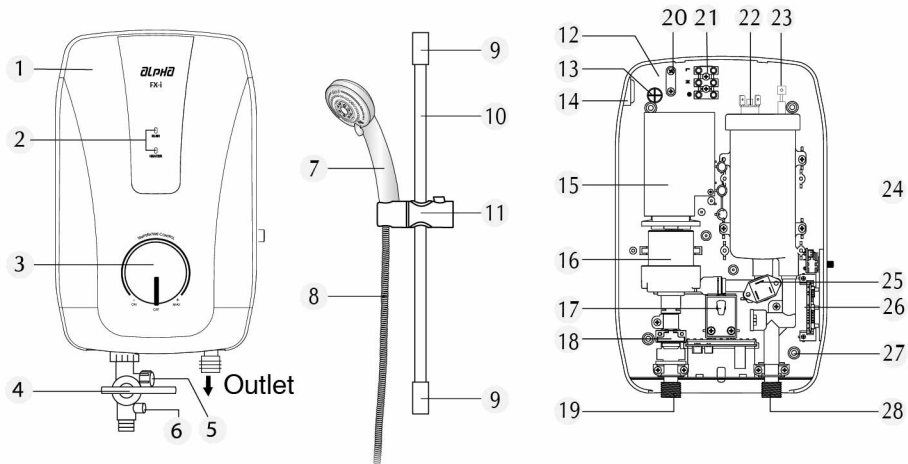


Model : FX-E  
(Open Outlet Heater)

- |                             |   |
|-----------------------------|---|
| 1. Front Cover              | 14. Side Cable Entry                        |
| 2. Indicator Lights         | 15. Built-in ELSD                           |
| 3. Temperature Control Knob | 16. Electronics Control Unit                |
| 4. Stop Valve               | 17. Flow Switch Assembly                    |
| 5. Water Filter Unit        | 18. Water INLET Connection                  |
| 6. Water Regulator Unit     | 19. Cable Clamp                             |
| 7. Handshower               | 20. Terminal Block                          |
| 8. Flexible Hose            | 21. Thermal Cut-Out                         |
| 9. Rail Supports            | 22. Heating Element                         |
| 10. Sliding Rail            | 23. Heater Tank                             |
| 11. Shower Holder           | 24. Triac                                   |
| 12. Heater Base             | 25. TEST / RESET PCB                        |
| 13. Rear Cable Entry        | 26. Heater Base Mounting Holes<br>(4 Holes) |
|                             | 27. Water OUTLET Connection                 |

\* The shower accessories may look different from the picture shown in the manual as it is subjected to requirement from different countries.

## PART DESCRIPTION:



Model : FX-i  
(Open Outlet Heater)

- |                             |   |
|-----------------------------|---|
| 1. Heater Cover             | 16. Pump Assembly                           |
| 2. Indicator Lights         | 17. Electronics Control Unit                |
| 3. Temperature Control Knob | 18. Flow Switch Assembly                    |
| 4. Stop Valve               | 19. Water INLET Connection                  |
| 5. Water Filter             | 20. Cable Clamp                             |
| 6. Water Regulator          | 21. Terminal Block                          |
| 7. Handshower               | 22. Thermal Cut-Out                         |
| 8. Flexible Hose            | 23. Heating Element                         |
| 9. Rail Supports            | 24. Heater Tank                             |
| 10. Sliding Rail            | 25. Triac                                   |
| 11. Shower Holder           | 26. TEST / RESET PCB                        |
| 12. Heater Base             | 27. Heater Base Mounting Holes<br>(4 Holes) |
| 13. Rear Cable Entry        | 28. Water OUTLET Connection                 |
| 14. Side Cable Entry        |   |
| 15. Built-in ELSD           |   |

\* The shower accessories may look different from the picture shown in the manual as it is subjected to requirement from different countries.

## 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 allowed.
5. Correct size of wire conductor corresponding to different electrical loading shall be used.

| 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

6. A typical electrical wiring connection is shown in diagram 1.

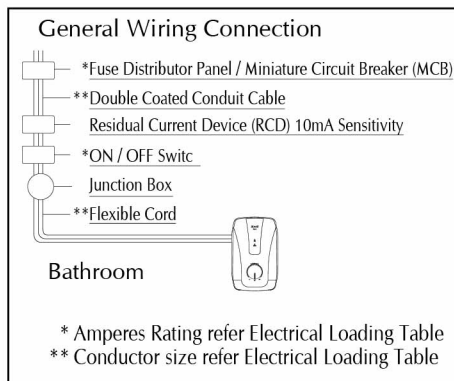


Diagram 1

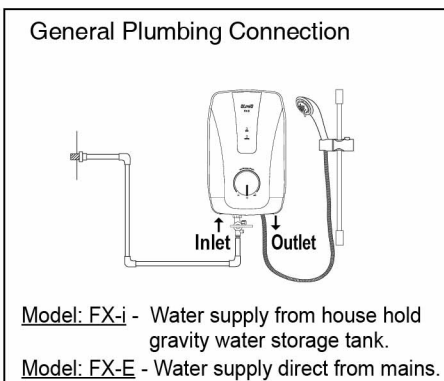


Diagram 2

## GENERAL INFORMATION

### WATER:

1. The heater works at a minimum water flow rate of 3 litres/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 shall be installed in conjunction with the heater.**

1. The built-in Earth Leakage Sensing Device (ELSD) will cut off the power supply to the heater in the event of current leakage of as low as 15mA.
2. The heater operates when there is sufficient water to trigger the Flow Switch.
3. The Thermal Cut-out would automatically cut-off the power supply if there is abnormal rise in the water temperature during shower.
4. Heater casing designed to a high degree of protection (IP25), it prevents water from entering into the heater during shower.

### IMPORTANT NOTE:

1. This heater is tested suitable for use in the shower cubicles. However, do not install the heater unit where is consistent spray directly over the unit.
2. If the heater's ELSD trips during normal operation, switch off the mains supply and contact the service centre for repair(s).
3. In the event if the heater malfunctioned, never attempt to repair the unit by yourself.
4. 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 voids its warranty.
5. 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 Water Regulator (to increase flow) in order to get the desired shower temperature.
6. Always test the water spray temperature with your hand before stepping into the shower.
7. 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.
8. Children should be supervised to ensure that they do not play with the appliance.

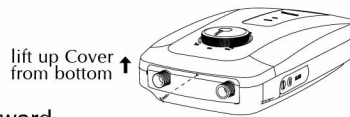
## INSTALLATION PROCEDURES

### IMPORTANT:

- All plumbing work shall 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 must not be reversed.

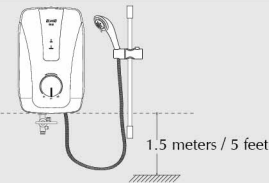
### 1. Decide the mounting position:

- Turn off the water source.
- Remove screw at the bottom of the heater.
- Remove Heater Cover by lifting the bottom upward.
- Mark out 4 mounting points on the wall.



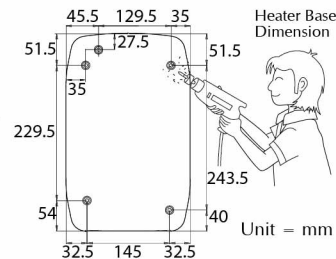
### Note:

*It is recommended that mount the bottom of the heater be 1.50 meters / 5 feet above the floor of the bathroom. However the height of the installation level is at the discretion of the user.*



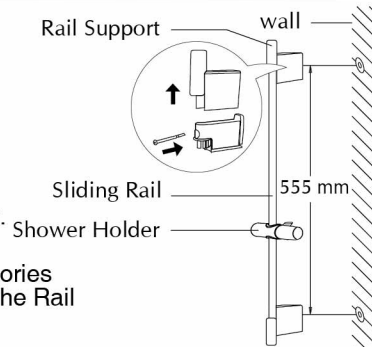
### 2. Mounting of the heater:

- Drill the 4 holes with 5.0mm diameter drill bit.
- Put in the wall plugs and install the heater to the wall with screws provided.



### 3. Shower Accessories Installation:

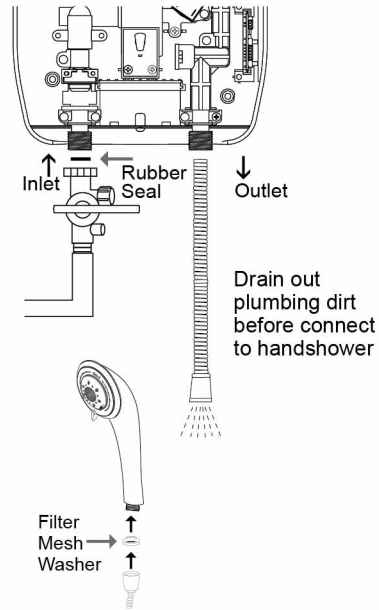
- Fix the Shower Holder and Rail Supports (Top and Bottom) on to the Sliding Rail.
- Mark the positions of the 2 holes of the Rail Supports - be sure that the top portion is in level or not higher than the top of the heater.
- Drill the holes and mount the shower accessories with wall plugs and screws provided. Insert the Rail Support Caps on to the Rail Supports.



## INSTALLATION PROCEDURES

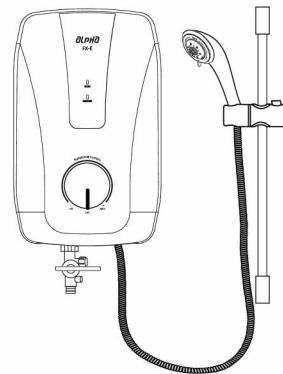
### 4 Connection of heater Inlet and Outlet:

- Connect Stop Valve to heater Inlet with use of the rubber seal provided.
- Connect incoming water supply to Stop Valve. If necessary make use of the sealing tape to prevent water leaking.
- Connect Flexible Hose to heater Outlet. *(Do not connect the other end of flexible hose to handshower at this stage).*
- Turn on the water supply to drain out all the plumbing dirt and to fill up the heater tank. *(This step will prevent damage to Heating Element.)*
- Connect the other end of flexible hose to handshower - be sure to put in the Filter Mesh Washer in order to prevent dirt from entering the handshower.



#### Note:

- Do not apply excessive force to tighten any of the connections.
- Excessive force may cause damage to the connector.
- Do not bend the Flexible Hose or install any accessories which can block the water flow at heater outlet.



## INSTALLATION PROCEDURES

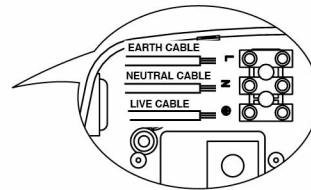
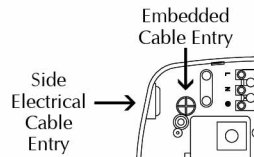
### 5 Electrical Connection:



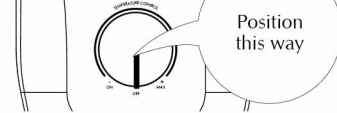
**CAUTION:**

**Make sure the electrical mains is off before carrying on the electrical work.**

- a) Insert electrical cable through the rubber grommet for side entry or wall embedded entry.
- b) Connect cable to Terminal Block and fully tighten them as follows:  
RED or BROWN ..... LIVE (L)  
BLACK or BLUE ..... NEUTRAL (N)  
GREEN/YELLOW or  
YELLOW/GREEN ..... EARTH (⊖)
- c) Replace the Heater Cover:
  - i) To ensure correct position, turn the Electronic Control Unit and Pump Control Unit (at Heater Base) to the off position (as shown in picture).
  - ii) Install the heater cover and ensure that the Temperature Control Knob is aligned (point to 'OFF') to its control unit accordingly.
  - iii) Secure the screw as shown.



Heater Cover



Heater Base



### 6 Test Run Of Heater:

- a) Turn on Stop Valve.
- c) Turn on the Temperature Control Knob. The 'HEATER' indicator will light up. The water should be warm in a few seconds.
- d) The water would get warmer as the Temperature Control Knob is turned clockwise.
- e) Check the built-in ELSD as follow:
  - Press 'TEST' button: unit should trip and cut off power supply.
  - Press 'RESET' button: unit should resume normal function.If the above mentioned steps prevail, the ELSD is functioning normally.



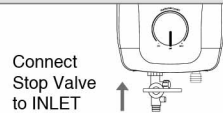

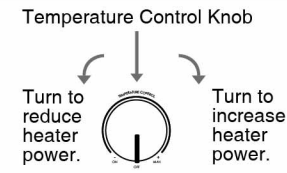
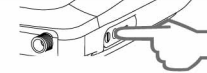
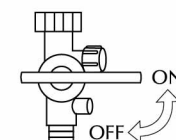
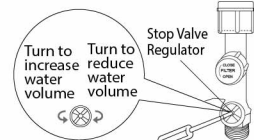
## OPERATING PROCEDURES

- 1 Switch on the heater switch outside the bathroom. The 'ELSD' indicator would light up.
- 2 Turn on the Stop Valve. Adjust the Water Regulator for suitable water shower volume.
- 3 Turn on Temperature Control Knob. The 'HEATER' indicator would light up. The shower water would get warmer as the knob is turned clockwise from 'ON' to 'MAX'.
- 4 Normal cold water can be selected by setting the Temperature Control Knob to 'OFF' position.
- 5 Switch off the heater switch when not in use.

### Note:

- The shower water may not be hot enough even at 'MAX' in areas whereby 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 FX-i)
- The Pump Activator is specially designed for low pressure areas whereby 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 FX-i)
- It is recommended that the pump be operated at intervals of 30 minutes with 30 minutes rest in between. (Model FX-i)

## CUSTOMER GUIDANCE:

|   |   |
|---|---|
| a) Connection of heater INLET:  | b) Connection of heater OUTLET:   |
|  <p>Connect Stop Valve to INLET</p>  |  <p>Connect Flexible Hose to OUTLET</p>   |
| c) Temperature Control Knob:  | d) Built-in ELSD:   |
|  <p>Temperature Control Knob</p> <p>Turn to reduce heater power.</p> <p>Turn to increase heater power.</p> |  <p>Check the ELSD at least once a month as follow:<br/>Turn on electric and water supply to the heater.</p> <ul style="list-style-type: none"> <li>• Press TEST button: Heater would trip and power go off.</li> <li>• Press RESET button: Heater power would resume.</li> </ul> <p>Contact service centre for repair if there is malfunction.</p> |
| e) Stop Valve:  | f) Regulator Unit:  |
|  <p>ON</p> <p>OFF</p>  |  <p>Stop Valve Regulator</p> <p>Turn to increase water volume</p> <p>Turn to reduce water volume</p> <p>Adjust clockwise to reduce water inflow if shower temperature not hot enough even at 'MAX' power setting.</p>  |

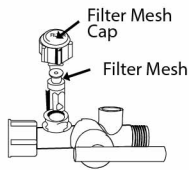
## MAINTENANCE:



### **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.

#### a) Stop Valve



#### b) Handshower



### **CLEAN FILTER REGULARLY**

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

#### a) Stop Valve

Remove Filter Mesh Cap. Pull out Filter Mesh and flush it with water to remove any trapped sediments. Slot it back to its original position before securing it with the Filter Mesh Cap.

#### b) Handshower

Disconnect the handshower from the hose. Remove Filter Mesh Washer and flush it with water to remove any trapped sediments. Re-connect the handshower back to the hose.

#### **Note:**

- Make sure to turn off the incoming water supply before the operation.
- This has to be done more regularly in area where the inlet water supply is dirty.
- The design of the stop valve may look different from the picture shown in the manual as it is subjected to requirement from different countries.

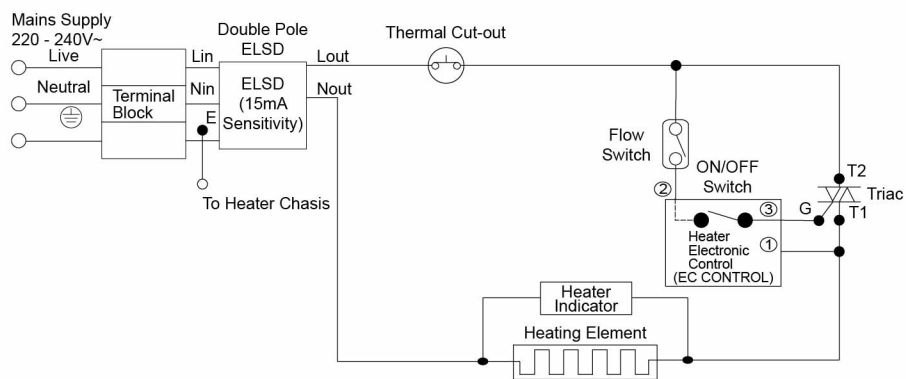
## GENERAL INFORMATION

### SPECIFICATIONS

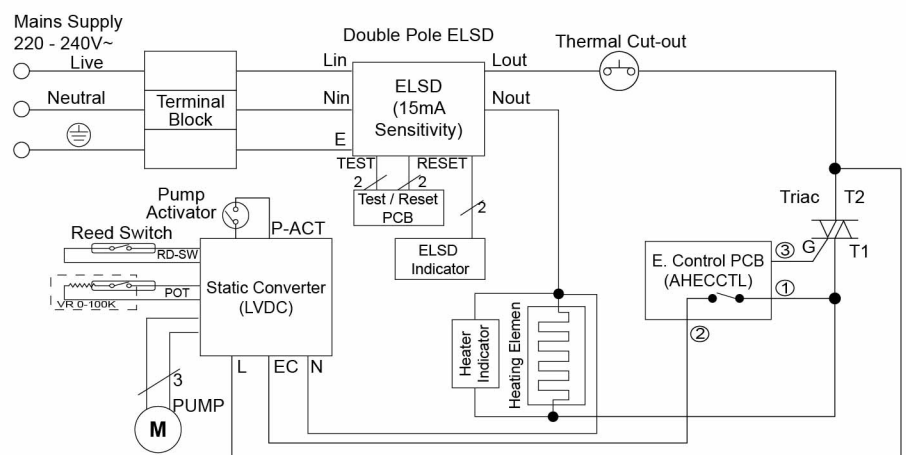
|                                   |   |                    |
|-----------------------------------|---|--------------------|
| Heater Power Rating               | FX-E  | 3.60kW 240V ~ 50Hz |
|                                   | FX-i  | 3.64kW 240V~ 50Hz  |
| Others Power Rating               | Refer 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                  | 340mm (L) x 210mm (N) x 93.5mm (H)              |                    |
| Heater Nett Weight                | FX-E  | 1.5kg              |
|                                   | FX-i  | 1.8kg              |

## GENERAL INFORMATION

### SCHEMATIC WIRING DIAGRAM



MODEL: FX-E



MODEL: FX-i

ALPHA FX-E/i (M) H01A00141 26.04.2018

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