# **Electric Instant Tankless Water Heater Operation & Instruction Manual**

FD55P

FD68P



Our spirit of business is to build something valuable, to solve day to day problems, save & provide useful service, and to explore the frontiers of human possibility.

You have world's most efficient shower, which uses minimum fresh water, power & simultaneously reduce pollution to help environment.

By using this shower, you not only save, you also support sustenance of mankind and leave better world for the future generations to come.



Please read, follow installation & operation instructions carefully, to ensure long life & reliable operation of the appliance.

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#### Attention!

This is not a do-it-yourself project. Failure to have this appliance installed by a licensed plumber and electrician will void all warranties.

Under no circumstances should you attempt to install, repair or disassemble the electric instantaneous water heater without first shutting off all power to the unit directly at the circuit breaker box.

Installation of this product is restricted to indoor locations only by licensed plumbing or electrical contractors.

# **Important Safety Instructions**

- The installation must be in compliance with your local electrical and plumbing codes.
- This appliance must be EARTHED & All wiring and installation must be supervised by a qualified electrician.
- 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.
- This appliance can be used by children aged from 8 years and above and persons with reduced physical, sensory or mental capabilities or lack of experience and knowledge if they have been given supervision or instruction concerning use of the appliance in a safe way and understand the hazards involved.
- This appliance MUST be permanently connected to the fixed circuit breaker and it must be installed vertically. DO NOT install this appliance near to tinder or strong magnetic field place.
- Children should be supervised to ensure that they do not play with the appliance. Cleaning and user maintenance shall not be made by children without supervision.
- This unit is designed for 0.02-0.6mpa / 0.2-6kg / 0.2-6bar, max working pressure. Safety release devices have been provided in the unit and also at the outlet. It is essential to check pressure of water at inlet to ensure trouble free performance. Special care needs to be taken while installing water heater in multi-story buildings or at locations where hydro pneumatic pumping systems are being used to supply water.
- To ensure savings it is essential to regulate flow of water by switching the unit on, visually see the flow of water meter on the unit, and regulate the outflow valve of the unit for a flow between 2.2 to 2.3 liter per minute to get the highest efficiency from the equipment.
- WARNING: Do not switch on if there is a possibility that the water in the heater is frozen.



- The recommended temperature of hot water for bath is 44.4 degree centigrade, our unit temperature is limited to a maximum of 55 degree centigrade for safety, yet it is advised to feel outlet water temperature, before taking shower, for sensitive skin or avoiding scalding.
- Check valve is required to be installed at the water inlet to enable service as required.
- Connecting with other apparatus may compromise the safety and service life of the unit.
- The manufacturers shower head is a integral part of the system. To ensure efficiency and trouble free service of the equipment use of other shower heads / taps / multi connections is forbidden.
- If the supply cord is damaged, it must be replaced by the manufacturer, its service agent or similarly qualified persons in order to avoid a hazard.
- The outlet must not be connected to any tap or fitting other than those specified.
- The spray head must be descaled regularly.

#### **Product Features**

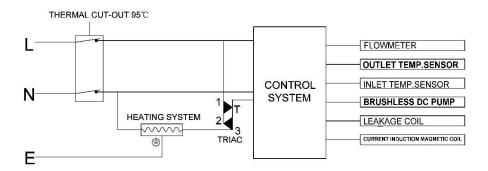
This electric instantaneous water heaters is incorporated with patented heating technology, eradicating the need for storage tank, combined with highest multi-safety devices, enhanced for your safety and luxury with state of the art features for long service life and equally ensuring low water & power consumption for the benefit and sustainability of mankind.

- The world's first patented shower to use maximum 2.3 liter of water per minute or lower depending upon application. It is performed by 2 nozzles for delivery of water for shower by enhancing the surface area. One nozzles uses 0.9 and the other 1.6 liter per minute. Combined usage leads to maximum flow of 2.2 ~ 2.4 liter per minute without compromising on the luxury of the bathing or its intended application.
- Shower head functions to alternate between each nozzles or using simultaneously and also infinitely control the
  water flow depending upon the users intended application. Once the user sets a particular temperature and
  pressure suitable, he can START / STOP the unit with Shower head, without the need to touch the unit the
  next time to start.



- Patented technology heating, separates water from electricity by multi-layers of composite nano insulation
  material, which ensures no direct contact of water with electricity. Its element is about 97% efficient, and
  delivers instant hot water at desired temperature thus leading to no stand-by heating loss coupled with highest
  power savings. The unit automatically computes to informs user of electricity load, water flow consumption
  and give indicative usage total at (+/- 2%) of power or total water (+/- 5%) at 2 LPM flow.
- Heater, on reaching desired temperature, our state of the art micro processors, provides constant water temperature with less than 2 degree variation, even when the flow of water is paused in between the bath, thus eradicating the stigma of Cold water sandwich effect of tankless / instant water heaters.
- Over-heating function. When the outlet water temperature reaches over 55°C, the heater will automatically enter into pause mode, and the screen displays E1. Thus avoiding any scalding due to hot water. The unit start to work automatically when the temperature drops to **55°C**.
- If unit detects electricity leakage, the power will be cut off by the protector and the screen displays E2.
- Temperature sensor in the event of failure or malfunction, the unit stops working and displays E3.
- High voltage, in the event of high input voltage of 270 and above the unit displays input voltage and HI. The unit shuts down automatically, The unit starts working only when normal voltage is detected, and starts operating normally as desired by the user.
- Dry run protection of unit and the pump, in the event of water stops flowing, the entire unit shuts down automatically. The unit resumes automatically on availability of water. For safety of pump and longer service life the pump initially restarts at lower speed for 5 seconds and goes into full functional mode as desired by the user.
- Dry-heating thermal cut-off is automatically activated when the heating chamber temperature reaches 95°C.

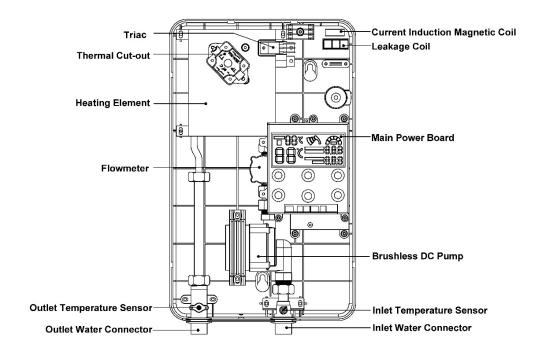
#### **Electrical Diagram**



# **Technical Data**

Model	FD55P	FD68P	
Phase	1	1	
Rated Voltage	220V-2	220V-240V	
Rated Frequency	50/60	50/60 Hz	
Rated Power	5.5kW	6.8kW	
Brushless DC Pump Power Range watts	8-10 - 13 - 2	8-10 - 13 - 21 - 36- 48	
Rated Current	24A	29.6A	
Required Rating of Circuit Breaker	32 Amps	40 Amps	
Rated Pressure	0.6M	0.6MPa	
Min. Water Flow To Active	0.5L/	0.5L/m	
Efficiency Δt=25°C	3.9 L/min	4.3 L/min	
Safety Class	IP2!	IP25	
Connecting Wires Section	3x2.5mm <sup>2</sup>	3x4mm²	
Temp. Setting Arrange	20°C-5	20°C-55°C	
Overheat Protection	65°0	65°C	
Thermal Cut-off	95°0	95°C	
Pipe Section	G1/2	G1/2"	
Product Size	380*238*	380*238*88mm	

#### **Product Inner Structure**



#### **Installation Guideline**

The installation must be in compliance with the local governing Electrical and Plumbing codes.

- Make sure the appliance is intact, and the fittings are complete.
- Do not install the unit in a room where there is a chance of freezing.
- Make sure of proper connections to main power supply, properly grounded with dedicated branch circuits, circuit breaker
  of proper voltage rating. Ground connection must be brought to the "ground" at the circuit breaker panel. The connecting
  wire should meet the standard of installation requirement and your local governing laws.
- The power must be routed through dedicated circuit breaker. Switch off the circuit breaker when not in use.
- DO NOT install this appliance near to tinder or strong magnetic field place. The unit must only be mounted in a VERTICAL
  position.
- Mount the unit onto a flat section of wall, well away from any potential splashes of water or spray.
- Please electrify / switch on only after the machine connections are properly done and checked.



#### **Installation Method**

• Mounting on The Wall

Locate an appropriate place on a section of wall as above mentioned.

**Fig 1** Front and back of the appliance.

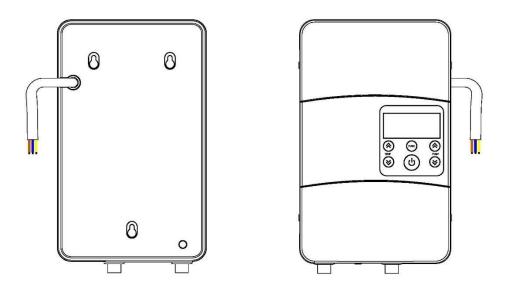


Fig 2 Use the cardboard to make 3 mark, then drill 3 hole with 6mm diameter, and insert 3 expansion bolts in the wall and put 4\*25 mm self-tapping screw into the expansion bolt.

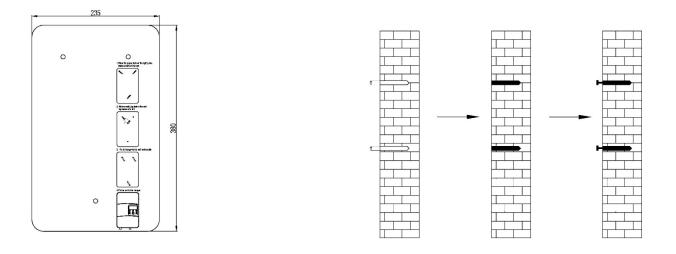
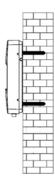


Fig 3 → Fix the heater on the wall.

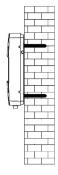


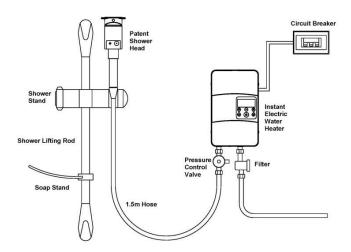
• The appliance is equipped with extended cable jutting out of the unit, therefore there is no need to open the front case during the installation.

#### Water Connections

- The water pipe must comply with national and applicable state and local water pipe codes.
- Connect directly to the main water supply with required pressure only. Flush pipe to remove any debris.
- It is required that use G1/2 " water connections for both models.
- Install rubber seal rings at the connections. When all water connections are completed, check for leaks and take corrective action before proceeding.

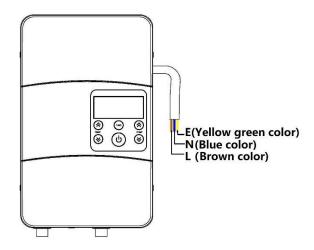
Fig 4 Connect the 1m inlet water pipe with inlet valve having water filter. The outlet water connector connects with pressure relief valve, flow control and patent shower head, remember to install the rubber seal ring.





#### • Electrical connection

- Electrical work must comply with national and applicable state and local electrical codes.
- The unit must be connected to a properly grounded dedicated branch circuit of proper voltage rating.
- Both models can be connected to a single circuit, use a supply cable protected by a double pole breaker.
- Power feed the cable to terminal blocks, make sure the metal wire ends and the terminal blocks to be completely in
  contact by using either lugs and with electrical conducting paste, then tighten the screws to make sure the full
  current can go through. Thus ensuring that carbon formation at the contact points due to loose contacts is avoided
  and the cable does not get heated in the due course of usage.
- Before beginning any work, ensure that main breaker panel switched OFF to avoid any danger of electric shock, all
  mounting and plumbing must be completed before proceeding with electrical hook-up.

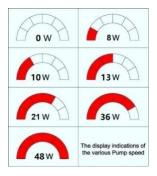


Origins Ultimate

# **Operation Instructions**

- Turn on the circuit breaker, to start power supply the unit. A beeping can be heard and LED light is on, the appliance is ready and enters into standby mode.
- Turn on the water, the appliance starts to work. Press 03 seconds to turn ON/OFF the appliance. When the unit is ON, LED displays the settings.
- Start the shower handle, and open both the nozzles to their full mode, check the water flow on the unit, in case if the flow the flow of water is higher than 2.3 liter due to higher inlet pressure, then control the flow between 2.2 to 2.3 liter per minute using the control of outlet valve of the heater.
- Press temperature to adjust the outlet temperature from 20°C to 55°C. Outlet water temperature can be set directly on the heater. The actual outlet temperature will reach the setting temperature in seconds and the outlet temperature will be constant.
- Press pump 

  to adjust the pump wattage from 8w-10w-13w-21w-36w-48w or vice versa.



- Press (FUNC) key to check water flow in Liter /minute & actual power in kW.
- Press (FUNC) to check total water consumption Liter and total power consumption in 0.01KWh.
- It is advised to initially let some water flow for few seconds for the unit to stabilize, check the temperature with hands before taking shower.
- If the user wishes to only us the shower unit without starting the heater, he can do so by setting the temperature to 20 Deg centigrade, and can enjoy the natural temperature of the inlet water which is indicated on the unit.
- If the unit is not be used in winter, drain out water completely so that the heater will not be frozen.
- Clean inlet strainer and shower periodically to keep unrestricted flow of water for your enjoyment.
- By shutting the water flow of the shower head, the unit automatically goes in standby mode, without the need to switch on or off the unit every time.
- It has a automatic memory function to avoid repetitive operation, while you turn on the appliance, the default temperature and the pump pressure level will be the same as set the last time.



# **■**Trouble-shooting

Problems	Possible Causes	Corrective Actions	
1. Inlet and outlet	Loose fit	Tighten to fit.	
fittings leaking	<ul> <li>Rubber washer worn-out</li> </ul>	<ul> <li>Change rubber washer.</li> </ul>	
2. LED no signal	<ul> <li>Power not connected.</li> </ul>	<ul> <li>Check power supply.</li> </ul>	
2. 225 110 Signal	<ul> <li>LED damaged.</li> </ul>	Change LED.	
	<ul> <li>No water out from shower.</li> </ul>	<ul> <li>Open valve to get water.</li> </ul>	
3. Functional keys not working	<ul> <li>Water pressure too low.</li> </ul>	<ul> <li>Open valve to get pressure.</li> </ul>	
	<ul> <li>Key or PCB damaged.</li> </ul>	Change key or PCB.	
4. Water too hot	<ul> <li>Too high temperature set.</li> </ul>	<ul> <li>Set lower temperature.</li> </ul>	
4. Water too not	<ul> <li>Water flow too low.</li> </ul>	<ul> <li>Increase inlet water flow.</li> </ul>	
	<ul> <li>High inlet water pressure</li> </ul>	<ul> <li>Reset Water outlet to &lt; 2.3 LPM</li> </ul>	
5. Water too cold	<ul> <li>Set at Low temperature.</li> </ul>	<ul> <li>Set a higher temperature.</li> </ul>	
	<ul> <li>Water flow too much.</li> </ul>	Reduce water flow.	
6. Lower water output	<ul> <li>Inlet strainer or shower clogged.</li> </ul>	Clean strainer and shower.	
7 .50 !!	Outlet temperature is above	Reduce the set temperature	
7. LED displays E1	55 degree centigrade	Increase the inlet water flow	
8. LED displays E2	Electricity leakage	Call qualified electrician / dealer	
9. LED displays E3	<ul> <li>Inlet water temperature sensor failure</li> </ul>	Call qualified electrician / dealer	
10. LED displays E5	<ul> <li>Outlet water temperature sensor failure</li> </ul>	Call qualified electrician / dealer	
11. LED displays LO	• Voltage is ≤ 180 Volts	<ul> <li>Unit works with lower voltage but with lowered efficiency.</li> </ul>	
12. LED displays HI	<ul> <li>Voltage is ≥ 270 Volts</li> </ul>	<ul> <li>Stops working.</li> </ul>	
13, LED displays U	<ul> <li>Program version</li> </ul>		

Important: 8 and 9 should only be performed by qualified electrician

#### Normal Maintenance

Note: Do not attempt to repair this water heater yourself. call a service person for assistance. Always shut off the power supply while operating maintenance.

This unit does not require regular maintenance. but due to quality of water of different locations which tend to clog and restrict the flow, it is recommended following maintenance.

- Periodically remove scale and dirt that may build up in the unit.
- There is a built in filter screen at inlet connection which should be cleaned from time to time. Please turn off the power and water flow before doing this.



# **■**Correct disposal of this product



This symbol on the product, or in its packing, indicates that this product may not be treated as household waste. Instead, it should be taken to the appropriate waste collection point for the recycling of electronic equipment, By ensuring this product is disposed of correctly, you will help prevent potential negative consequences for the environment and human health, which could otherwise be caused by the inappropriate waste handling of this product. For more detailed information about the recycling of this product, please contact your local council, your household waste disposal service.

# **■**Packing List

Item	Unit	Quantity
Electric Water Heater	Unit	1
Installation Cardboard	Piece	1
Installation Screw sets	Set	1 set
Operation and Installation instructions	Сору	1
Shower set	Set	1

Keep this Instructions Manual in a safe place once your unit is installed. You may need to refer to it for general instructions or future maintenance.



#### **CERTFICATIONS & APPLICATION DETAILS:-**

**Unit Serial No:** 

Patent No: 201841003297.

TM (India) No: 4302608 & 4302609.

TM (China) No: 4127488 and 41286174.



EN 55014-1:2017, EN 55014-2:2015, EN 61000-3-2:2014, EN 61000-3-3:2013. EN 60335-2-35:2016, EN 60335-1:2012+A11:2014+A13:2017, EN 62233:2008

EN 60335-1:2012+A11:2014+A13:2017, EN 60335-2-35:2016, EN 62233:2008. IEC 60335-1:2010+A1:2013+A2:2016, IEC 60335-2-35:2012+A1:2016.

GCC: CISPR 55014-1:2016, CISPR 55014-2:2015, IEC 61000-3-2:2018, IEC 61000-3-3:2013+A1:2017.







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