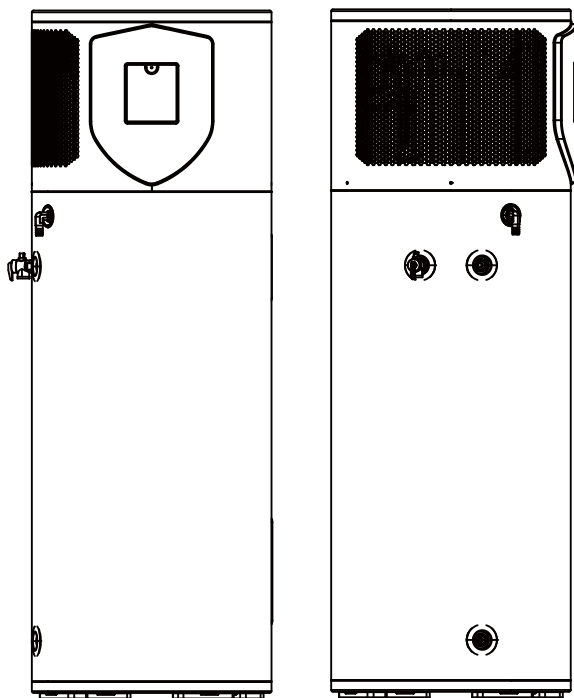


Neopower[®]



Instruction & Operation Manual

DC INVERTER HOT WATER HEAT PUMP



Models:

NA43-210B/NA44-270B/NA45-320B

CONTENT

1. SAFETY PRECAUTIONS	1
2. INSTALLATION PRECAUTIONS	2
3. INSTALLATION	3-6
4. PLUMBING CONNECTIONS	7-11
5. PARAMETER TABLE	12
6. SIZE DIAGRAM	13
7. ELECTRICAL CONNECTIONS	14
8. WIRING DIAGRAM	15
9. POWER SPECIFICATION	15
10. OPERATING INSTRUCTIONS FOR THE WIRE CONTROLLER	16
11. WIRELESS CONTROLLER LCD DISPLAY	16-17
12. OPERATION	18-22
13. USER PARAMETERS	23
14. ERROR CODE AND THE SOLUTION	23-24
15. E88 ERROR CODE AND SOLUTION	25-27
16. WIFI FUNCTIONALITY MANUAL	28-31
17. MAINTENANCE	32-33
18. HEAT PUMP WARRANTY	34-37

1. SAFETY PRECAUTIONS

To prevent injury to users or others, avoid damage to property, the following instructions must be followed. Failure to do so may result in personal injury or property damage due to incorrect operation.

- Installation of this unit must comply with all applicable local regulations, by-laws, and standards.
- Verify the main voltage and frequency before installation. This unit is designed for earthed sockets and outdoor use only, with a required supply of 220–240 V~ / 50 Hz.
- Do Not activate Heat Pump, Unless cylinder is full of water.
- Read the WARNING section carefully before beginning installation.
- Follow all cautions listed in this manual, as they contain critical safety information.
- After reading, keep this manual in an accessible location for future reference.

WARNING

The unit must be securely mounted to avoid noise and vibration: when inadequately installed, the unit could fall causing injury. The bearing surface should be flat to bear the weight of the unit and suitable for installing the unit without increasing noise or vibrations.	
If the unit is installed in an enclosed area, ensure adequate ventilation to prevent asphyxiation in the event of a refrigerant leak. Refrigerant may not contain an odor and can be flammable.	
Use the provided or specified parts for the installation work: the use of defective parts could cause an injury due to possible fire, electric shocks, the unit falling etc.	
DO NOT remove Covers or labels from the unit: Covers will expose 240V wiring. labels are for the purpose of warning and reminding, keeping them can ensures safe Handling and operations.	
Outdoor installation is Highly preferred: The Heat Pump collects ambient air temperature and pumps it into the water in the storage vessel.	
This water heater should not be used by children, or by individuals with limited abilities or experience, unless properly supervised or instructed.	
Make sure that there is no obstruction located within the required clearances around the unit. Do Not place articles on or against this appliance.	
This appliance must only be installed by a licensed trade persons and in accordance with; AS/NZS3500.4 National Plumbing regulations, AS/NZS 3000 Wiring Rules, Local Governing Authority regulations, Building Codes of Australia, OH&S rules and regulations.	

CAUTIONS

	This Appliance uses R290 (Propane) refrigerant, which is a flammable gas class 3, according to; AS5149 and must be handled by a refrigeration mechanic with appropriate Australian refrigeration license. Refrigerants may not contain an odor.
	Do not clean the unit when the power is 'ON': always shut 'OFF' the power when cleaning or servicing the unit. If not, it could cause injury due to high-speed running of the fan blades, or electrical shock.
	Disconnect the appliance from the power supply by removing the plug from the socket or, by turning off the main switch if installed upstream of the unit.
	Warning; Risk of fire / Flammable material. If refrigerant is leaked, together with an external ignition source, there is a possibility of ignition or explosion.

	Do not perform Maintenance /cleaning to the machine before turning the units power supply OFF. Unplug or turn off the external isolator switch to the unit.
	NOTICE TO VICTORIAN CONSUMERS This appliance must be installed by a person licensed with the Victorian Building Authority. Only a licensed person will have insurance protecting their workmanship. So make sure you use a licensed person to install this appliance and ask for your Compliance Certificate. For further information contact the Victorian Building Authority on 1300 815 127
	Do not use means to accelerate the defrosting function of the machine in any way.
	Inside the unit, there are some moving parts. Be especially careful when working near them, even if the unit is off.
	Do not insert fingers or other objects into the fan and evaporator.
	The temperatures of exhaust piping of the compressor are usually high. Therefore, be careful of burns when working near the inner condensing coils and pipe work.
	The aluminum fins are very sharp and can cause serious injury to body parts.

2. INSTALLATION PRECAUTIONS

WARNING

All the operations described below must be carried out only by QUALIFIED PERSONNEL. Prior to any work on the unit, make sure that the power supply is disconnected.

When installing or servicing the unit, it is necessary to strictly follow the rules listed in this manual, to conform to all the specifications of the labels stuck on the unit, and to take any possible precautions. Not observing the rules reported on this manual can create dangerous situations.

	Upon receiving the unit, inspect it immediately for any signs of damage. The unit is shipped in perfect condition from the factory. Any damage found upon delivery must be reported to the carrier and clearly noted on the Delivery Note before signing.
	Do not Operate heat pump without water in the cylinder.
	Hot water can cause scolding. This machine can deliver water over 50 degrees. To prevent scalding when using hot water, it is a requirement to install a tempering control devise, A water temperature mixing valve (Approved Tempering Valve) will control the maximum outlet temperature not exceeding 50 degrees.

3. INSTALLATION

All Neo Power heat pumps must be installed by a licensed plumber in compliance with the guidelines specified in AS/NZS3500.4, which pertains to the "National Plumbing and Drainage Code for Hot Water Supply - Acceptable Solutions."

CHOOSE A SUITABLE LOCATION

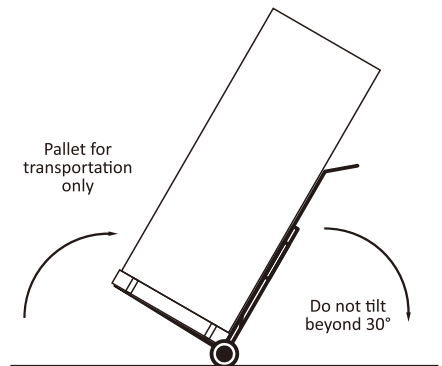
1. Ideally, the Heat Pump should be installed outdoors. However, for indoor installations, please ensure that the chosen location complies with the requirements outlined in AS/NZS 5149.
2. Make sure there is ample space for installation and maintenance with a recommended minimum vertical distance of 300mm.
3. The product must be installed in a dry environment free from humidity.
4. Ensure that the supporting surface is level (Minimum 50mm slab, with a horizontal angle not exceeding 2°) and capable of bearing the weight of the heat pump when filled with water. Refer to technical data for heat pump's weight.
5. Choose a suitable outdoor location where inlet and exhaust air vent are away from strong winds, and the unit has sufficient clearances around the unit as shown on pages 5&6.
6. Ensure there is easy access to the system for maintenance purposes.
7. Always provide extra space for pipe connections and power cables.
8. Avoid installing the product on a surface with loose coverings as it may produce excess noise during operation.
9. The heat pump is advised to be connected to an independent AC 240V 10amp electrical circuit. It is the responsibility of the installing electrician to ensure existing power circuits are not overloaded.
10. When installing near a coastline within 500 meters, be mindful that extra maintenance may be necessary, Insufficient shelter from coastal conditions can shorten the system's service life and potentially void the warranty.



If you install the product in an environment prone to frost, take all necessary precautions to ensure proper insulation of all pipework.

TRANSPORTING THE HEAT PUMP

1. To ensure the warranty remains valid, it's crucial to store and transport the pumps in an almost upright position with a tilt angle of no more than 30°. Storing or transporting the unit horizontally will void the warranty.
2. Always transport the system while it's inside its packaging.
3. The packaged system weighs 126KG for models 210Ltr, 150KG for 270Ltr and 166KG for models 320Ltr. For safe handling and to prevent damage, it's necessary to have two people always carry the system. Never Tilt the Heat Pump lower than 30 degrees.
4. Please be aware that the external casing of the unit is prone to denting and damage. When moving the unit, exercise care and caution, as any marks caused by improper handling are not considered defects and are not covered under the warranty.



MINIMUM INDOOR INSTALLATION REQUIREMENTS

1. If the heat pump requires internal installation, the following requirements must be met, Ventilation is a requirement;
For a 210L unit, Minimum Room Volume should be at least 35m³ Per Unit.
For a 270L unit, Minimum Room Volume should be at least 55m³ Per Unit.
For a 320L unit, Minimum Room Volume should be at least 75m³ Per Unit.
2. If the heat pump must be installed in a smaller indoor space but is connected to an adjacent room, there must be a fixed open door connecting the rooms. A fixed open door cannot be closed under any circumstances. Mechanical ventilation should also be considered.
3. Place heat pumps a safe distance away from potential ignition sources or corrosive environments to prevent the risk of fire or damage.
4. Consider the serviceability of the heat pump during installation. ensuring there is enough space for maintenance and repair tasks.
5. Follow all relevant electrical and safety standards required for the installation.
6. Regularly perform maintenance and inspections on both the heat pump and the ventilation system to ensure safe and efficient operation.

Always remember installers must diligently adhere to all Australian standards. Our guidelines should be viewed as supplementary information and do not override established standards.

VENTILATION GUIDELINES:

These guidelines pertain to the proper operation of the heat pump and are not related to the storage of flammable refrigerants. It's important to ensure that the location complies with AS/NZS 5149 requirements.

Ideally, the heat pump should be installed outdoors. However, for indoor installations, it's crucial to be aware of potential issues and take preventive measures.

One significant concern with indoor installations is the risk of air stagnation. In confined spaces, the air temperature can gradually decrease, leading to a decrease in the heat pump's efficiency and in some cases, even failure.

To prevent this, make sure the ambient air temperature doesn't drop below 5°C. Continuously monitor the air temperature within the space to ensure adequate ventilation throughout the heat pump's lifetime.

To maintain a stable air temperature, consider the following recommendations:

1. Choose an ideal installation spaces with an air volume greater than 20m³.
2. If the area is smaller than 20m³, ensure cross ventilation. Cross ventilation can be achieved either naturally or mechanically.
3. Natural ventilation occurs when there are appropriately sized openings on opposite ends of the enclosure/courtyard facilitating cross airflow.
4. When using mechanical ventilation through a supply or extraction fan. ensure a minimum air volume of 1000 m³/h (278 L/s).
5. In mechanically ventilated areas, establish a make-up air pathway. This can take the form of grilles, Vents, Undercut doors, Open doors, Open windows, etc.
6. To achieve effective cross ventilation, position the make-up air pathway on the opposite side of the enclosure from the fan.

INSTALLATION OF THE HEAT PUMP BASE

1. BASE

The unit must be installed on a concrete plinth or a stable structure capable of supporting weights exceeding 400kg. it's crucial that the supporting structure remains stable over time and does not shift, especially due to factors like water drainage.

-You'll need a concrete base that's at least 50mm thick. If you're using concrete base pavers, make sure they have a minimum dimension of 600mm x 600mm.

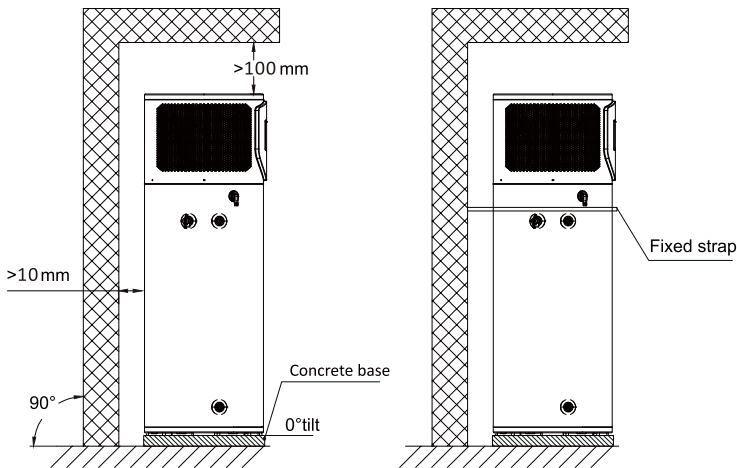
-Make sure all four feet of the unit are supported by the base you are using to avoid any potential warranty issues.

-Ensure proper drainage is in place to handle any potential overflow.

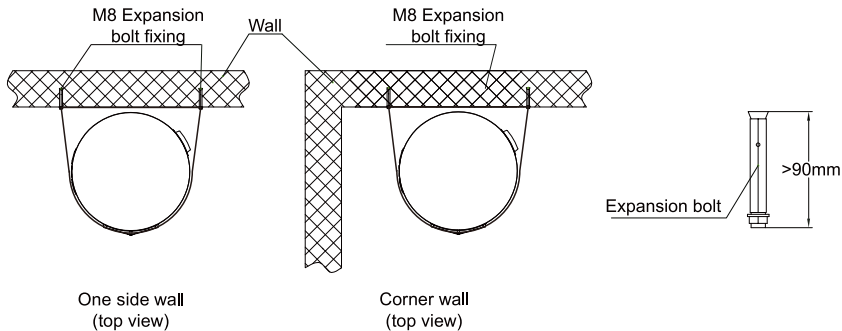
-During installation, it's essential to position the unit completely vertically and level to facilitate proper condensate drainage. **INSTALLER MUST ENSURE CONDENSATION WILL DRAIN DURING OPERATION.**

-If the system is installed with a tilt exceeding 3° it could void the warranty.

-The fixing strap is recommended as shown as following figures:

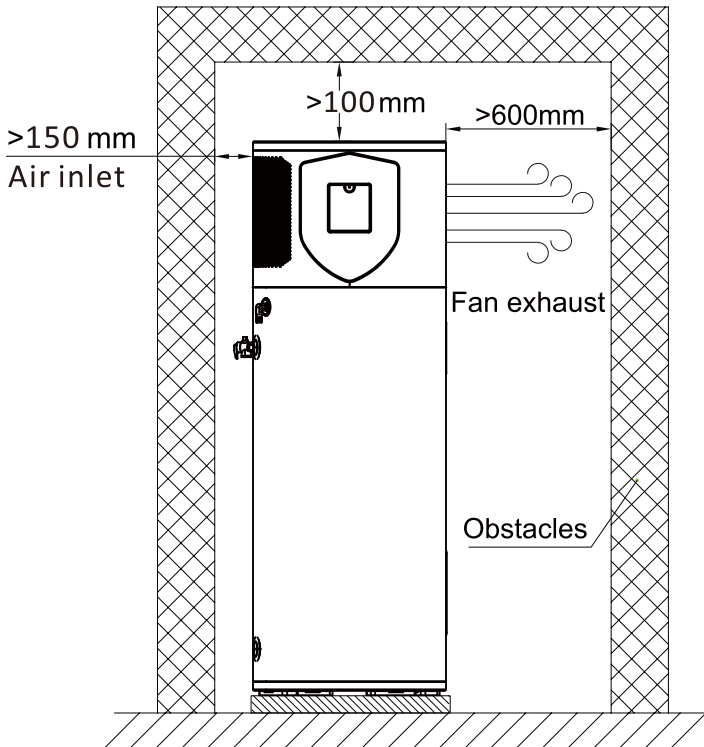


Fixing Strap



2. AIR FLOW

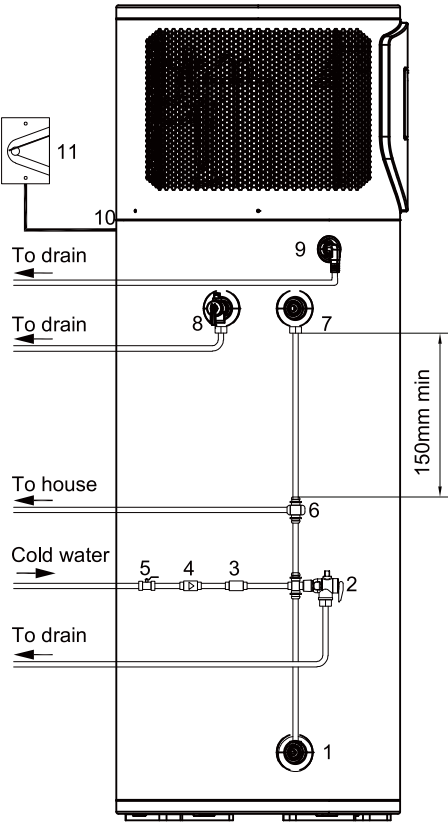
- Do not install the unit in areas where there is a risk of falling debris, such as leaves, as this could block air vents or cause damage to the unit.
- Avoid placing the system in locations with multiple walls or structures.
- Follow and maintain these minimum clearance requirements from any structure:
 - $\geq 100\text{mm}$ above the unit,
 - $\geq 600\text{mm}$ clearance for the Air outlet
 - $\geq 150\text{mm}$ clearance for the Air Inlet
 - $> 10\text{mm}$ Behind the unit
- Ensures ventilation to prevent cold air accumulation, and allows full access for servicing of the unit.
- Install the unit to ensure that the control interface is easily accessible for users. There should be clear access to the electrical panel located at the side of the system. **Improper installation could result in voiding the warranty or requiring additional charges to rectify the system's compliance.**



⚠ WARNING

- A minimum of 20m^3 of unobstructed space surrounding the unit.
- For indoor installations the ensure that the location complies with the requirements of AS/NZS 5149.
- The electrical access point and display panel should always be accessible.

4. PLUMBING CONNECTIONS



1	Cold water supply outlet (G3/4" female thread)
2	Expansion control valve (ECV)
3	Pressure reduction valve (500k Pa)
4	Non-return valve (DN20)
5	Isolation valve (DN20)
6	Tempering valve (high performance recommended)
7	Hot water outlet (G3/4"female thread)
8	P&T Relief Valve* (G3/4" female 850k Pa)
9	Condensing drainage Elbow (DN20)*
10	Electrical cable*
11	Isolation switch (hardwired into 10 amp circuit)
* Supplied with system	

- AS 1357.1 certified non-return valve shall be installed in supply water inlet connection.
- Watermark certified ball valve must be installed in supply water inlet connection.
- AS 4032.2 certified tempering valve (setting:50C) shall be installed in outlet connection of heat pump water heater for personal hygiene purposes.

⚠ NOTE

THIS APPLIANCE CAN DELIVER WATER EXCEEDING 50 °C IN ACCORDANCE WITH AS 3498. TEMPERATURE CONTROL VALVE IS REQUIRED AS PER AS/NZS 3500.4. SERVICING IS TO BE CARRIED OUT ONLY BY THE MANUFACTURER’S AUTHORIZED AGENT. COLLECT FLUID FOR APPROPRIATE DISPOSAL.

The installation shall conform to the Plumbing Code of Australia (PCA). All pipe installations must comply with the relevant provisions of Australian Standard AS 3500.4 or NZBC G12. Pipe materials should only be used that are considered acceptable in the AS/NZS 3500.4 or NZBC G12 guidelines.

 WARNING

IF THE HOT WATER SYSTEM IS NOT USED FOR TWO WEEKS OR MORE, A QUANTITY OF HIGHLY FLAMMABLE HYDROGEN GAS MAY ACCUMULATE IN THE WATER HEATER. TO DISSIPATE THIS GAS SAFELY, IT IS RECOMMENDED THAT A HOT TAP BE TURNED ON FOR SEVERAL MINUTES OR UNTIL DISCHARGE OF GAS CEASES. USE A SINK, BASIN, OR BATH OUTLET, *BUT NOT A DISHWASHER, CLOTHES WASHER, OR OTHER APPLIANCE*. DURING THIS PROCEDURE, THERE MUST BE NO SMOKING, OPEN FLAME, OR ANY ELECTRICAL APPLIANCE OPERATING NEARBY. IF HYDROGEN IS DISCHARGED THROUGH THE TAP, IT WILL PROBABLY MAKE AN UNUSUAL SOUND LIKE AIR AND WATERS SPATTER ESCAPING FROM THE TAP OUTLET.

 WARNING

THIS APPLIANCE MAY DELIVER WATER AT HIGH TEMPERATURE. REFER TO THE PLUMBING CODE OF AUSTRALIA (PCA), LOCAL REQUIREMENTS AND INSTALLATION INSTRUCTIONS TO DETERMINE IF ADDITIONAL DELIVERY TEMPERATURE CONTROL IS REQUIRED.

COLD WATER SUPPLY INTLET

1. The cold water supply connection uses a G 3/4" female thread.
2. To connect the cold water supply, use a G 3/4" socket, **with the supplied port seals**.
3. The cold water supply inlet can also serve as a drainage point for emptying the system.

HOT WATER CONNECTION

1. The hot water supply connection also uses a G 3/4" female thread.
2. Connect the hot water supply using a G 3/4" socket, **with the supplied port seals**.
3. To ensure thermal efficiency, insulate all hot water lines and connections with a minimum 13mm closed-cell insulation.
4. All hot water supply components must be made of copper, with in 1Mtr of the outlet.

Non-Return Valve AND Isolation valve

It is necessary to ensure a non-return isolation valve is installed directly in the cold-water supply line that feeds the system. Non-Return valve enables the isolation of the hot water system from the rest of the home's water supply. Simplifying maintenance, draining and unit replacement.
Do not use a hose-set to connect the system to the water supply.

CONDENSATE DRAIN

1. When heat is extracted from the atmosphere through evaporator coils, it generates condensation in the form of water, In places with higher humidity, this condensation occurs at a faster rate.
 2. To collect the water by-product, a condensate tray is placed at the base of the heat pump. Any surplus water from this tray is channeled through the condensate drain.
 3. The system comes with a pre-installed condensate drain connection elbow, it is essential to route a condensate drain hose, from this elbow to a discernable point of discharge. Failing to do so could lead to issues like; Building damage, the growth of algae and moss in the form of a slip Hazard.
 4. Ensure that the condensate line is free of kinks, Must run on a continuous downward direction with the discharge end remaining permanently open with required air gap as per AS/NZS 3500.4.
- CONDENSATION DRAIN LINE SHOULD NOT BE CONNECTED TO ANY PTR DRAIN LINE. But can exit at the same point of discharge.

PRESSURE & TEMPERATURE RELIEF (PTR) VALVE

- 1. The system comes with a PTR (Pressure and Temperature Relief) valve that matches the water heater tank's pressure rating. The valve is rated with a capacity of 850kPa, 10kW, and a set temperature range of 93-99°C.
- 2. Install the provided PTR valve at Point 8, as indicated above.
- 3. Ensure that the PTR valve is insulated with a minimum 13mm closed-cell insulation to minimize heat loss.
- 4. The PTR Drain line **MUST** be installed with continuously downward fall to a discernable point of discharge.
- 5. The discharge end **MUST** remain permanently open to the atmosphere, with required air gap as per AS/NZS 3500.4.

CHECKING THE PTR VALVE

(FREQUENCY: 6 MONTHS INTERVALS)

To ensure the PTR valve functions correctly, perform the following steps in approximately six months intervals, replace the valve if needed:

Locate the PTR valve on the left side of the unit. Gently easing the valve lever and closing again, allowing some water to drain from the tank down the drain hose.

It is normal for the valve to release a small quantity of water through the drain line during heating.

If it discharges more than a bucket of water during a 24 hour period or discharges continuously there may be another problem. If the valve dribbles continuously, try easing the valve gear for a few seconds as described above. This may dislodge any foreign matter and alleviate the problem.

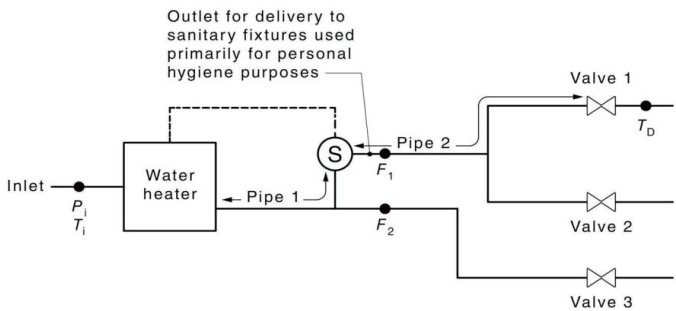
In the case of the valve requiring replacement, contact your Plumbers or reach out to our service team for assistance.

Note: The expelled water may be very hot.

TEMPERING VALVE

- 1. To reduce the risk of scalding injury a temperature control (tempering) valve must be fitted to the hot water supply pipe work. This valve should be checked at regular intervals to ensure its operation and settings remain correct.

WARNING: SCALDING OCCURS AT 50°C. THIS APPLIANCE IS CAPABLE OF PRODUCING HOT WATER AT WELL ABOVE 50°C. A TEMPERING VALVE MUST BE INSTALLED AS PER YOUR LOCAL GOVERNMENT AND REGULATORY REQUIREMENTS.



⚠ WARNING

THIS APPLIANCE MUST ONLY BE INSTALLED IN ACCORDANCE WITH THE ACCEPTABLE PLUMBING CONFIGURATIONS SPECIFIED IN THE INSTRUCTIONS. FAILURE TO DO SO MAY RESULT IN CONDITIONS WHERE DELIVERY TEMPERATURE CONTROL IS INADEQUATE.

2. We Recommend the use of a high-performance tempering valve for more precise control of hot water delivery temperature.
3. If the building's previous hot water system did not have a tempering valve, you may notice a difference in the hot water delivery temperature. This adjustment is both normal and legally mandated by regulations. If you have any questions or concerns, please get in touch with your installer for assistance.

EXPANSION CONTROL VALVE

1. Please adhere to local Plumbing regs and requirements when considering the installation of an ECV. (Note: This is optional and has different rules for different States, Territories & councils.)
Western Australia and South Australia: Install a 700 kPa Expansion Control Valve (ECV) on the cold water supply to the storage cylinder to comply with local regulations.
Other Areas: A 700 kPa ECV is recommended in regions where water supply tends to cause scaling. This helps reduce hot water discharge from the Pressure and Temperature Relief (PTR) valve, minimizing wear on the valve.
2. It is recommended that the ECV is rated at no more than 700kPa.

PRESSURE REDUCING / PRESSURE LIMITING VALVE (PLV)

1. 15mm Barrel-Style Devices; These valves are designed for connection to the mains water supply feeding the tank. They are recommended for use where the incoming water pressure Does Not exceed 700 kPa.
2. High-Pressure Installations If the mains water pressure regularly exceeds 700 kPa, it is recommended to install a heavy-duty pressure limiting device at the property boundary, such as; At the water meter.

IMPORTANT TO NOTE

The manufacturer does not cover issues resulting from incorrect placement or the use of an inappropriate pressure limiting device. Confirming Water supply pressure is the responsibility of the installer.

MIN-MAX FILLING WATER PRESSURE

Permitted min-max filling water pressure: Min 200KPA - Max 550KPA.

DEFROST OPERATION

During heat pump operation, frost may accumulate on the evaporator when ambient temperatures drop. To maintain optimal system performance, the unit will automatically initiate a defrost cycle, which generally lasts between 3 and 10 minutes.

During this process:

- The fan motor will temporarily stop running.
- The compressor will continue to operate as usual.

This defrost cycle is a standard function designed to ensure that your system remains efficient even in colder weather. The automatic removal of frost helps sustain effective heating and prevents performance losses caused by ice buildup.

UNDERSTANDING COP (COEFFICIENT OF PERFORMANCE)

COP (Coefficient of Performance) is a measure of a heat pump's efficiency. It represents the ratio of heat output to electrical energy input.

For example, a COP of 5.4 means the system produces 5.4 units of heat for every 1 unit of electricity consumed.

HOW AMBIENT TEMPERATURE AFFECTS COP

The COP of a heat pump varies depending on the ambient (outdoor) temperature:

At higher ambient temperatures, the heat pump operates more efficiently, resulting in a higher COP and shorter heat-up times.

At lower ambient temperatures, the system's efficiency decreases, leading to a lower COP and longer heat-up times.

AUTOMATIC BALANCING WITH E-HEATER

When the ambient temperature drops below approximately 2°C, the system automatically adjusts the heating contributions between the heat pump and the electric heater (E-heater):
The heat pump provides a smaller portion of the heating capacity as its efficiency drops.
The E-heater provides a greater portion to compensate and maintain performance.
This balance ensures consistent water heating even in very cold conditions, although it may increase energy consumption during these periods.

ABOUT TCO(THERMAL-CUTOFF)

If the water temperature is higher than 95°C, the TCO will automatically shut off the power of E-heater. After that it needs to be reset manually. Thermal Cut Out Button needs to be reset (pushed) to reinstate power supply. The switch is protected behind the electrical supply cover.

RESTARTING AFTER LONG-TERM SHUTDOWN

When the unit is restarted after a long period of inactivity (including after trial operation), it is normal for the first heating cycle to initiate a disinfection process.
During this cycle:

- The system may heat the water to a temperature higher than the user-set temperature.
- This is an automatic safety feature designed to sanitize the system and ensure water hygiene.

Note: This behavior is normal and no action is required. The unit will return to regular operation after the disinfection cycle is complete.

 WARNING

The appliance is not to be used 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.

Children are not to play with the appliance.

If the supply cord is damaged, it must be replaced by the manufacturer, service agent or Electrical qualified persons in order to avoid Electrical hazard.

Excess water may drip from the discharge pipe of the Pressure Temperature Relief device. This pipe must be left open to the atmosphere, and maintain an air gap above the discharge point.

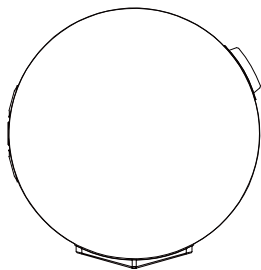
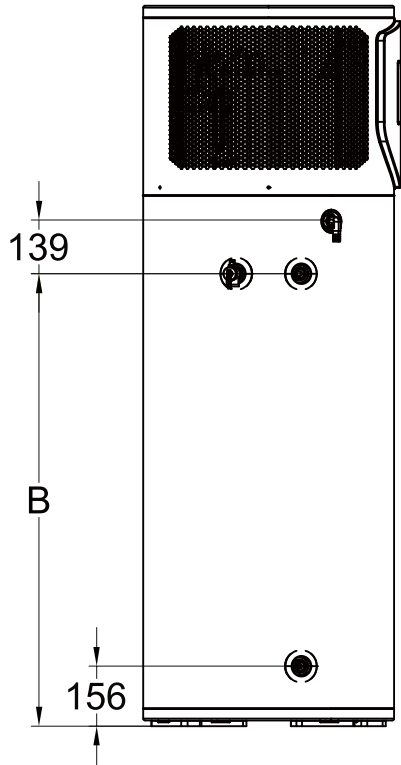
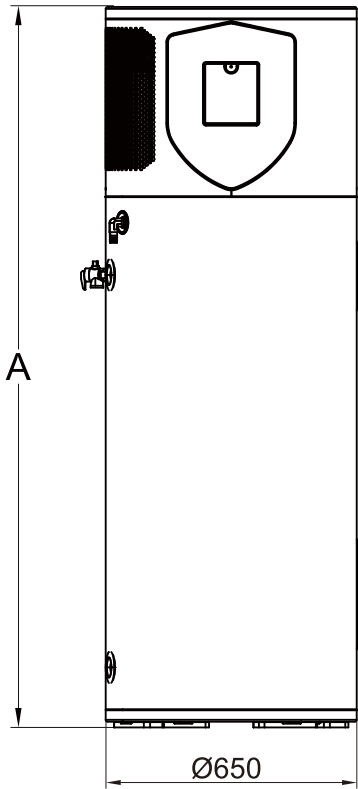
The appliance must adhere to, and be installed in accordance with Australia wiring regulations.

The pressure-relief device is to be Gently operated to remove lime deposits and to verify that it is not blocked.

5. PARAMETER TABLE

Model	NA43-210B	NA44-270B	NA45-320B
Power Supply	220-240V~/50Hz/60Hz		
Rated Heating Capacity (kW)	3	3	3
Rated Input Power (kW)	0.556	0.556	0.556
COP	5.4	5.4	5.4
Max Current (A)	9A	9A	9A
Tank Capacity (L)	210	270	320
Refrigerant	R290/410g		
Heat Exchanger	Microchannel		
Defrosting method	by 4 way valve		
Water Proof Level	IPX4		
Max Water Tank Pressure	0.85MPa		
Outer Casing / Shape	Metal		
Expansion Valve	Electronic		
Air Flow (m³/h)	1000m³/h		
Air Discharge	Horizontal		
Air Duct Diameter	Non-ducted		
Back-up Heater (kW)	1.6		
Rate Current (A)	7.1		
Default Water Temperature (°C)	60		
MAX Water Temperature (°C)	75		
Working Temperature Range (°C)	-7-46		
Unpacked Dimension (L*W*H)(mm)	650*650*1650	650*650*1870	650*650*2090
Packed Dimension (L*W*H)(mm)	720*720*1785	720*720*2005	720*720*2225
Net Weight (kg)	116	130	146
Gross Weight (kg)	126	150	166
Noise (dB(A))	43		
Loading qty (20GP/40HQ)	21/45	21/45	21/45
Heating Capacity at Air 20°C/15°C, Water Temperature from 15°C to 55°C			

6. SIZE DIAGRAM



3	320L	2090	1393
2	270L	1870	1173
1	210L	1650	953
NO.	Model	A	B

7. ELECTRICAL CONNECTIONS

7.1. The electrical connections must be completed by a qualified and trained professional and in accordance with the local and national regulations AS3000.

- This product is recommended to be wired on a dedicated circuit protected by a 10A circuit breaker.
- The circuit must be connected to a reliable earth electrode connected to the unit.
- The testing of the circuit and final connections are the responsibility of the trained qualified installer.



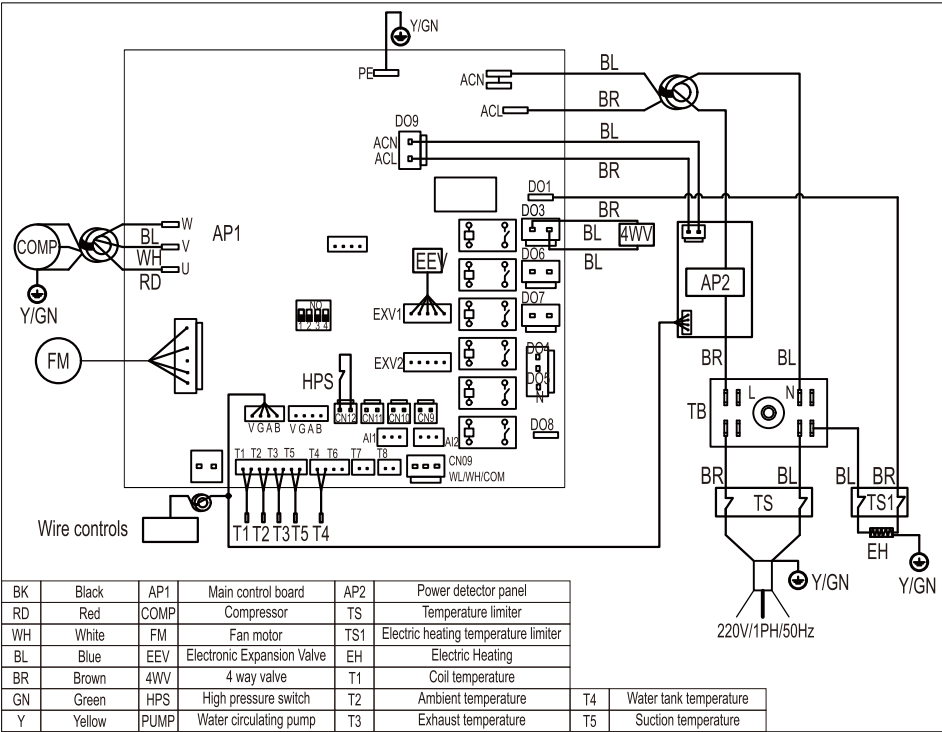
NOTE:

Final connection is via a 10A isolating switch Or GPO near the heat pump.

- The heat pump is supplied with a 3 pin earthed plug and may be run off a power socket where such connection is compliant with National wiring regulations AS.3000 and/or such requirements as stipulated by local authorizing bodies.
- Should permanent connection to power supply be required by National wiring regulations AS.3000 and/or local authorizing bodies. A qualified electrician should remove the unit plug and utilize the power supply cord to wire the system into a junction box with isolation switch..
- Instead of using a 3-pin plug, hard wiring the system to a 10A isolator switch is highly recommended.
- Before any work can commence ensure that the heater is isolated from the power supply at the switchboard.
- If a power cable is damaged, it shall be replaced by a qualified professional to avoid risks.

8 WIRING DIAGRAM

For NA43-210B/NA44-270B/NA45-320B



9. POWER SPECIFICATION

Models	Power supply	Max-current	Cable diameter	Protection Thermal magnetic (D curve) Protection
NA43-210B	220-240V/50Hz	9A	H07RN-F 3G2.5mm ²	10A
NA44-270B	220-240V/50Hz	9A	H07RN-F 3G2.5mm ²	10A
NA45-320B	220-240V/50Hz	9A	H07RN-F 3G2.5mm ²	10A

10. OPERATING INSTRUCTIONS FOR THE LCD CONTROLLER

10.1 Wire controller key icon description



-- Switch the machine ON/OFF



-- Mode



-- Function



-- Query



-- Setting

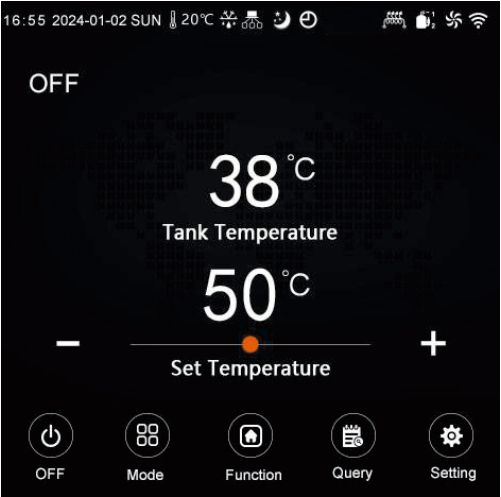
11. CONTROLLER LCD DISPLAY OPEARATION

11.1 Power-on display as shown below

After 3 Second, the normal page will be displayed. If the communication fails, the page will be displayed all the time. When you touch the screen, a key sound will be heard. If you do not touch the screen for 2 minutes, the screen will automatically turn off. You can wake up the screen by tapping the screen.



11.2 Main interface display



11.2.1 Screens Icon description

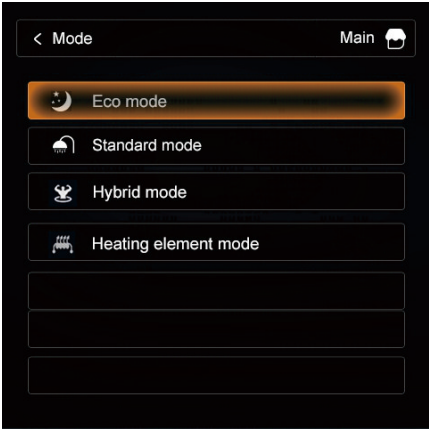
The top of the main interface explained, left to right; Time, Year-month-Date, Day of the week, Ambient temperature,
The following Icons will be displayed On or Off;

-  **Heating (Shower Head & Heating):** Machine operational in a heat mode. Also displays heat mode selected. Shower Head will not display when the machine is powered OFF, reached set temp. or If Timer sequence is off.
-  **Fault display:** When there is a unit fault flashing on the display, Click the icon to enter the real-time fault/fault record view.
-  **Defrosting display:** when the unit enter defrosting, lights up on the display.
-  **Quiet mode:** has been selected, All Heat modes light up in this position.
-  **Timing Function:** is enabled, lights up on the display.
-  **Electric heating Mode:** when the element is activated, lights up on the display.
-  **Compressor icon:** when the compressor is active, lights up on the display.
-  **Fan icon:** when the fan is active, lights up on the display.
-  **WIFI:** wifi connection is successful Please have.

12. OPERATION

12.1 On/Off : Tap the on/off key to START or SHUT DOWN "  " Heat Pump operation.
ON is displayed below this button when active, while the (Heat mode) is displayed beside the shower Head.
OFF is displayed when Machine has been turned off / shutdown, and the Shower Head icon has disappeared.

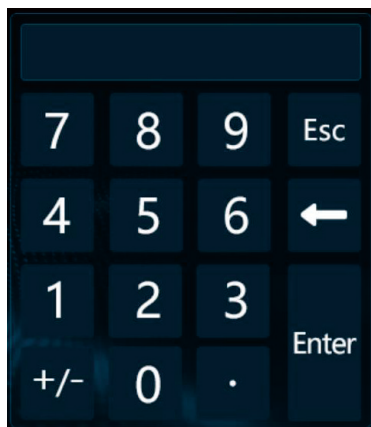
12.2 Mode key: Tap this Function Key "  " to Enter the units heat modes selection page. Standard, Eco, Hybrid, Electric element, are the list of heating modes to select from. Press" Mode " or "Main" in the top corners to return to the home page;



12.3 Adjusting the Temperature Setting



Tap " + " " - ", Or swipe along the Temperature slider to set the desired temperature.
Alternatively, Tap the Set Temperature Value display on the screen, enter the set temperature in the pop-up keyboard and press "Enter" to confirm the change.



12.4 Function Button

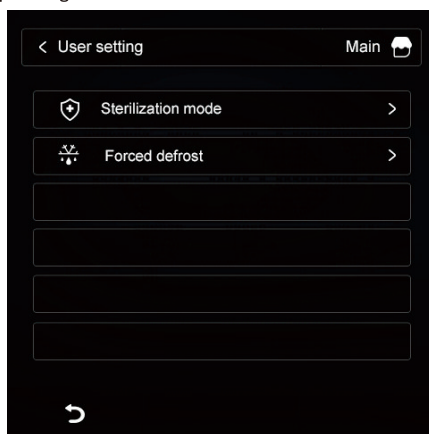
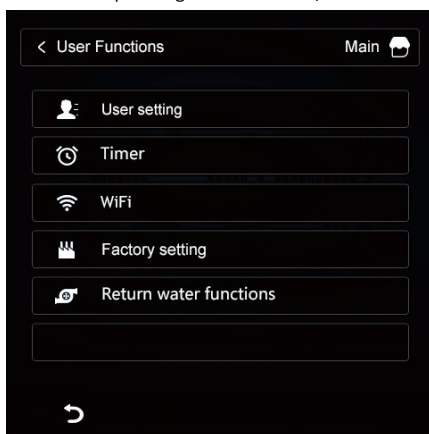
Tap on the Function button "  " to enter the User functions selection page; Choose from the list; User setting, Timer, WiFi, Factory setting, Return water function.

User command operation, from top to bottom are respectively Sterilization mode, Forced defrost.

Sterilization mode: The system automatically heats the water to a higher temperature (around 60°C–70°C) to effectively eliminate bacteria inside the water tank and piping, ensuring hygienic and safe water use.

Forced defrost: When the unit experiences heavy frost buildup under low ambient temperatures, this function allows manual initiation of a defrosting cycle to quickly remove frost and restore heating efficiency.

Click the corresponding button to start/close the corresponding function.



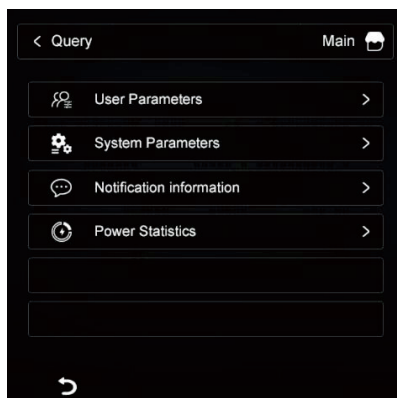
12.5 Running parameter query

12.4.1 Press the Query key "  " to enter the machine information pages; "User Parameters", "System Parameter", "Notification Information", "Power statistics".

12.4.2 User Parameters: View and adjust basic settings such as water temperature, mode, and timer.
System Parameter: Installer menu for system configuration and protection settings. Not for user adjustment.

Notification Information: Display current alarms, system messages, and fault history.

Power Statistics (Optional): Show power consumption and operating efficiency data.



12.6 Display fault:

When the unit experience a fault, the "🔔" icon will flash, Once the fault is resolved, the icon will turn off. (Refer to Page 12 for error codes)

12.6.1 Enter the Fault Query Page

Tap the fault icon "🔔" to open the Fault Query page.

12.6.2 Fault Information

The system displays up to 20 real-time faults and historical fault records.

Example of fault codes:

00E03: 00 → Main unit fault; E03 → Specific fault code;

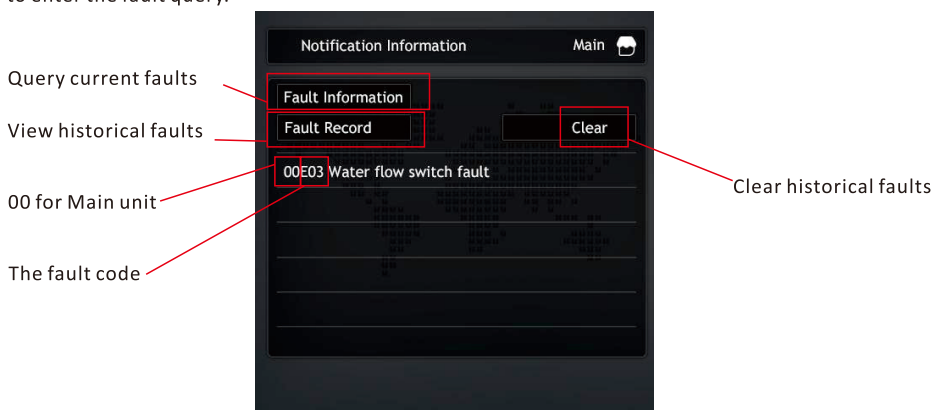
12.6.3 How to Use

Tap "Fault Record" to view historical faults.

Tap "Fault Information" to view current faults.

Tap "Clear" to delete historical fault records.

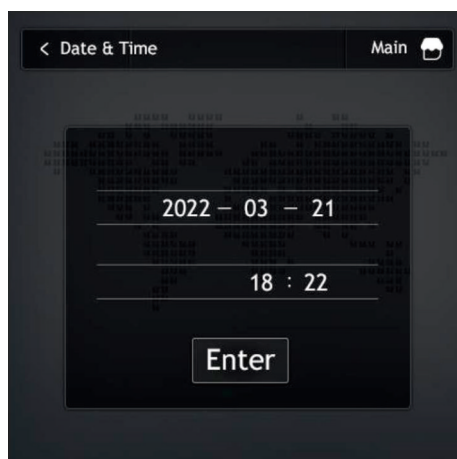
In the screen staying on, press "🔔" to enter the query page, and then click "Notification Information" to enter the fault query.



12.7 Clock setting

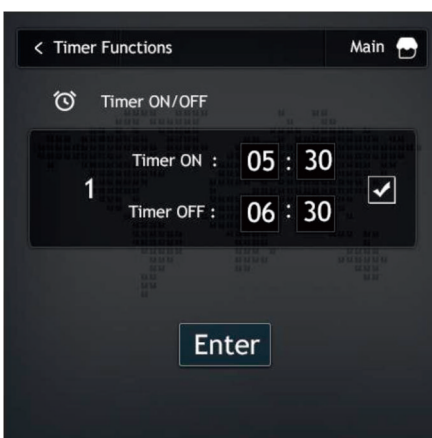
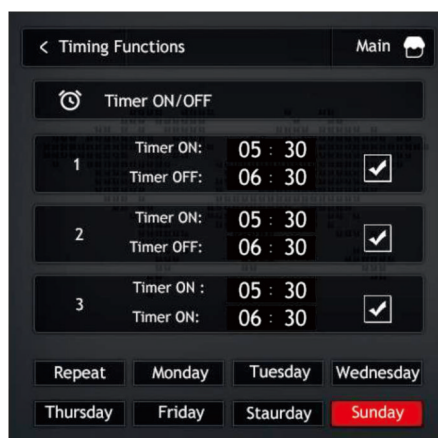
In the screen staying on, press "⚙️" to enter the setting page, then click "Date&Time" to enter the time setting page,

Display Format: Year, Month and Date. to enter the value through the keyboard, and finally press "Enter" to save the time.



12.8 Set the timing control on and off the machine

When the screen is lit up, click "  " button to enter the function selection page; Then click "Timing Functions" to enter the on-off timing view page. If you need to enable weekly timing, click any button from Monday to Sunday to start weekly timing; Click time period to enter the time setting of this time period, enter the time through the keyboard, click the button "  " to start/close the time period, press "Enter" to save the setting after completion;

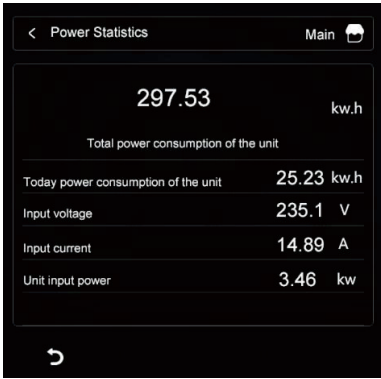


12.9 WIFI distribution network

When the screen is lit up, click "  " button to enter the function selection page; Then click "WIFI Distribution" to enter the WIFI operation interface. Long press the button for more than 3S to release and enter the corresponding WIFI distribution mode, and the corresponding button will light up. The WIFI distribution time is 3mins, and the timeout exits.

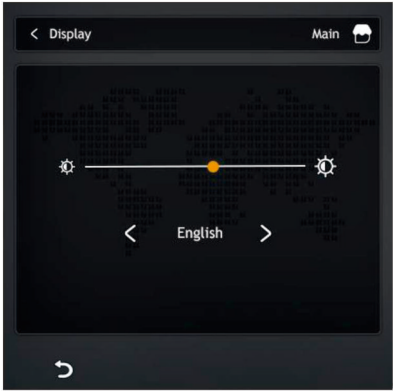
12.10 Power module parameter query (optional)

When the machine is equipped with a power module, in the state of bright screen, press "" to enter the query page, and then click "Power Statistics" to enter the unit electricity information query, you can query the total electricity consumption, current power, voltage, current parameters.



12.11 Brightness setting

In the bright screen state, press "" to enter the setting page, then click " Display" to enter the brightness setting interface, swipe the slider to set different brightness.



12.12 Restore factory Settings

When the screen is lit up, press "" to enter the setting page, then click "Restore factory Settings" to enter the factory Settings restoration page, and then click "√" to restore factory Settings.

12.13 Program version view

When the screen is lit up, press "" to enter the Settings page, and then click "About" to view the program version number of the display and the main board.

13. USER PARAMETERS

Code	Parameters	Set range	Set value
P28	Standard hot water set temp.	30-80 °C	60 °C
P29	Silent Hot water set temp.	30-80 °C	60 °C
P33	Min. Hot Water Temp.	10-40 °C	40 °C

14. ERROR CODE AND THE SOLUTION

Error code	Error	Possible reason	Solution
E05	High voltage Switch Protection	1. Disconnect the signal cable of the high voltage switch. 2. Too much refrigerant in the system. 3. Air intake or blockage in the fluorine system. 4. The temperature detection is inaccurate, and the actual water temperature is too high. 5. Water shortage in the tank.	1. Test the wiring of the high voltage switch. 2. Discharge to reduce the amount of refrigerant. 3. Discharge refrigerant , re-vacuum and fill new Refrigerant. 4. Check whether the water temperature probe is detached to ensure that the probe can reliably detect the temperature of the water tank. 5. Detect whether the water tank is short of water and refill it with Water.
E09	The communication between the controller and the main control board is faulty	1. Check the communication connection between the wire controller and the main board. 2. The communication port of the main control board is broken.	1. Check the communication cable connection. 2. Replace the main control board.
E12	High exhaust temperature protection	1. The fluorine system is blocked. 2. Lack of refrigerant or bad sensor in the fluorine system.	1. Check the sensor connection. 2. Replace the sensor.
E14	The tank temperature sensor is faulty	1. The sensor cable is disconnected or short-circuited. 2. The sensor is damaged.	1. Check the sensor connection. 2. Replace the sensor.

E15	The water inlet temperature sensor is faulty	1. The cable connecting the sensor is disconnected or short-circuited. 2. The sensor is damaged.	1. Check the sensor connection. 2. Replace the sensor.
E16	The coil sensor is faulty	1. The sensor cable is disconnected or short-circuited. 2. The sensor is damaged.	1. Check the sensor connection. 2. Replace the sensor.
E18	Exhaust sensor failure	1. The cable connecting the sensor is disconnected or short-circuited. 2. The sensor is damaged.	1. Check the sensor connection. 2. Replace the sensor.
E21	Environmental sensor failure	1. The cable connecting the sensor is disconnected or short-circuited. 2. The sensor is damaged.	1. Check the sensor connection. 2. Replace the sensor.
E29	The return air sensor is faulty	1. The sensor cable is disconnected or short-circuited. 2. The sensor is damaged.	1. Check the sensor connection. 2. Replace the sensor.
E38	DC fan failure	1. The fan motor is improperly connected to the drive board. 2. Motor damage.	1. Check whether the fan motor is reliably connected to the drive board. 2. Detect whether the fan motor is damaged, if damaged , replace the motor.
E88	Inverter module 1 protection see attached table	Compressor or compressor driver board is bad.	1. Replace the driver plate. 2. Replace compressor.
E96	Inverter module 1 protection see attached table	1. The signal cable is in poor contact or broken. 2. The electronic components on the main control board are damaged or damp. 3. The electronic components on the press drive board are damaged or damp. 4. The power supply of the press drive board is not energized.	1. Check the wiring to ensure reliable connection. 2. Press the main control board. 3. Press the drive board more. 4. Test the power cord of the drive board.

15. E88 ERROR CODE AND SOLUTION

P1	Bit0: IPM current overflow /IPM module protection	The IPM over current FO is faulty
P2	Bit1: Compressor drive failure/Abnormal software control/compressor out of step	Press stall, out of step, weak magnetic failure
P3	Bit2: Compressor current overflow	The press phase current exceeds 13.4A
P4	Bit3: Input voltage out of phase (single phase is not effective)	
P5	Bit4: IPM current sampling failure	The current sampling voltage is greater than 3V or less than 1.5V
P6	Bit5: Power components overheating shut down	IPM module temperature greater than 95 degrees
P7	Bit6: Pre-charge failed	
P8	Bit7: DC bus over voltage	The DC bus voltage exceeds 430V
P9	Bit8: DC bus under voltage	The DC bus voltage is below 135V
P10	Bit9: AC input under voltage	
P11	Bit10: AC input current overflow	The input current is greater than 11.5A
P12	Bit11: Input voltage sampling failure	
P13	Bit12: Communication failure between DSP and PFC	
P14	Bit13: Heat sink temperature sensor is faulty	
P15	Bit14: Communication failure between DSP and communication board	
P16	Bit15: Abnormal communication with the main control board	
P17	Bit0: compressor current overflow alarm	Phase current exceeds 13.4A
P18	Bit1: Compressor weak magnetic protection alarm	
P19	Bit2: PIM overheating alarm	
P20	Bit3: PFC overheating alarm	
P21	Bit4: AC input current overflow alarm	The input current is greater than 11.5A
P22	Bit5: EEPROM fault alarm (applicable to EE models without storing system parameters)	

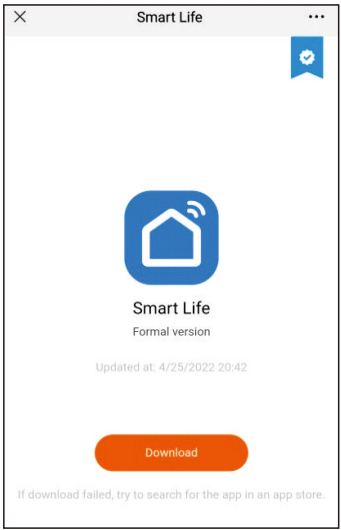
P23	Bit6: NA	
P24	Bit7: EEPROM refresh completed (can not be eliminated until restart)	
P25	Bit8: temperature sensing fault frequency limit	
P26	Bit9: AC under voltage frequency limiting protection alarm	
P27	Bit10: NA	
P28	Bit11: NA	
P29	Bit12: NA	
P30	Bit13: NA	
P31	Bit14: NA	
P32	Bit15 : NA	
P33	Bit0: IPM module overheats and stops	The IPM module temperature is greater than 95 degrees
P34	Bit1: The compressor is out of phase	
P35	Bit2: Compressor overload	Phase current exceeds 13.4A
P36	Bit3: Input current sampling failure	
P37	Bit4: PIM supply voltage failure	
P38	Bit5: Pre-charge circuit voltage failure	
P39	Bit6: EEPROM fault (for EE storage system parameter models)	
P40	Bit7: AC input over voltage fault	
P41	Bit8: Microelectronic fault	
P42	Bit9: Compressor type code fault	
P43	Bit10: Current sampling signal current overflow (hardware current overflow) Bit11 to Bit15: NA	
P44	Bit11: NA	
P45	Bit12: NA	

P46	Bit13: NA	
P47	Bit14: NA	
P48	Bit15: NA	

16. WIFI FUNCTIONALITY MANUAL

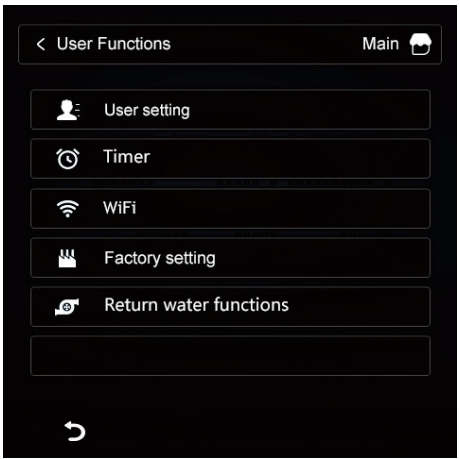
16.1 Download APP and Registration:

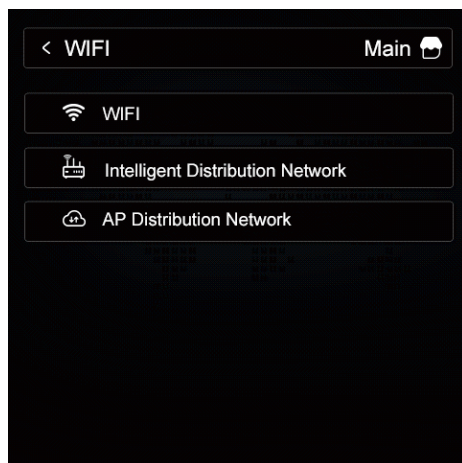
Download "Smart Life" app from the app store, as shown in the below:



16.2 Enter Wi-Fi Configuration Mode on the Wired Controller

On the wireless controller, press "Function" → "WIFI" to enter the Wi-Fi configuration interface. Then press the button for either Smart Mode Pairing or AP Mode Pairing to enable the controller's Wi-Fi pairing mode.

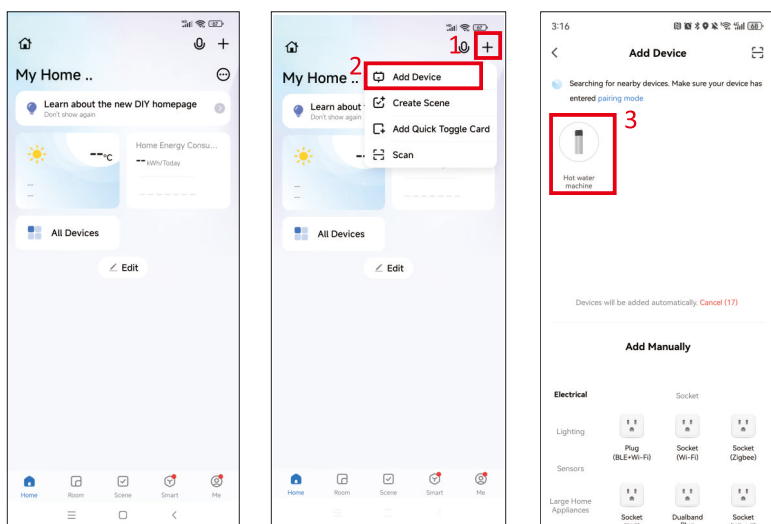




16.3 Enable Bluetooth and Add Device in the App

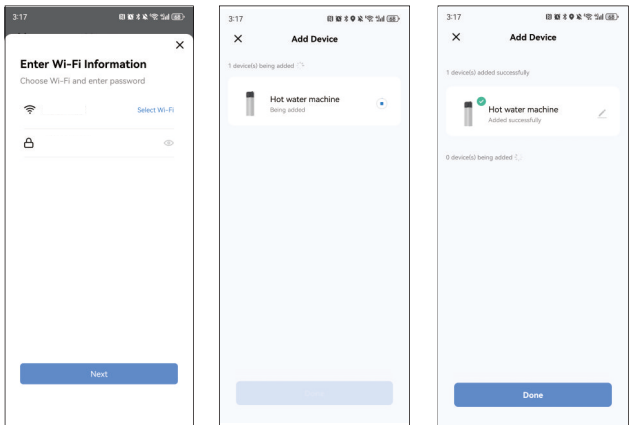
Turn on your phone's Bluetooth. Open the downloaded app, and tap the "+" icon in the top right corner of the home screen to add a device. The app will switch to the radar scanning interface.

Once the device is found, it will display its model (e.g., Hot water machine). Tap the device icon to proceed.



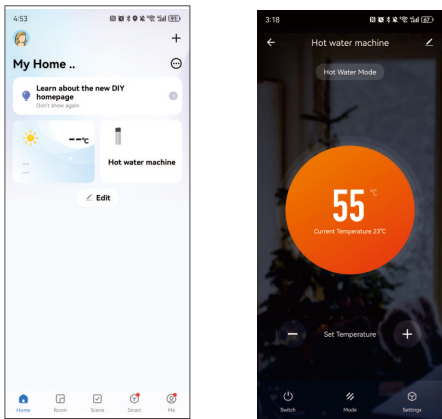
16.4 Enter Wi-Fi Information and Complete Device Addition

Input the Wi-Fi SSID and password of the router currently connected to your phone. The device will enter the addition process. Once successfully added, tap “Done” to finish.



16.5 Device Interface Access

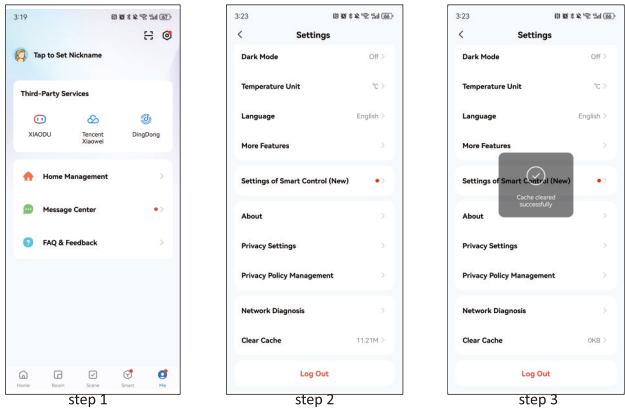
The newly connected Wi-Fi module will automatically appear in the home screen's device list. Tap the device to access the unit's control interface.



16.6 Refresh Interface (After App Update)

If the phone is already connected to the wired controller’s Wi-Fi but the interface hasn’t updated, you may need to clear cache data in the app and re-enter the interface to get the latest version. To do this:

- 1. On the app’s home screen, tap "Me" in the bottom-right corner to enter account management.
- 2. Tap the gear icon (settings) in the top-right corner.
- 3. Scroll to the bottom and tap “Clear Cache” to refresh the interface.



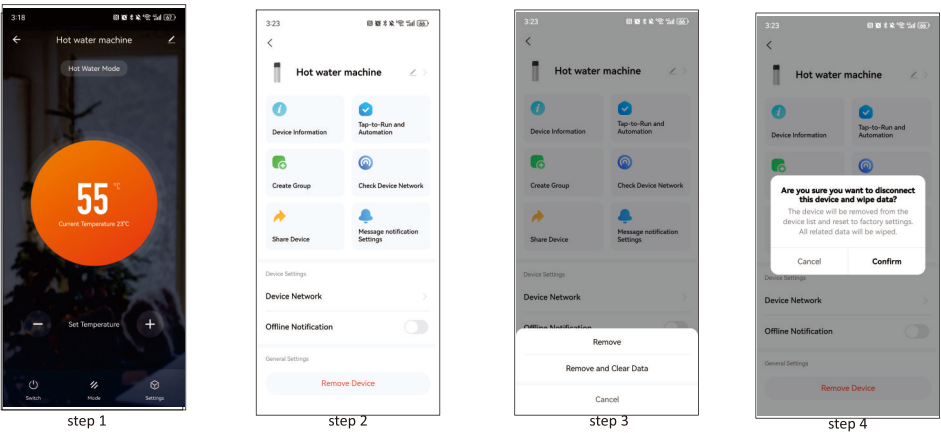
16.7 Unbind and Remove Device

To unbind a device from the phone:

- 1. Enter the bound device’s control interface.
- 2. Tap the device settings icon in the top-right corner.
- 3. Scroll down and tap "Remove Device".

Next, tap "Unbind and Clear Data", then confirm.

This will complete the unbinding process and return the controller to Wi-Fi pairing mode.



17. MAINTENANCE

RECOMMENDED REGULAR MAINTENANCE TABLE

Checking Item	Checking content	Checking frequency	Action
1	anode	Every 5 years	Replace it if it has been used out
2	inner tank	Every 5 years	Clean the tank
3	E-heater	Every 5 years	Clean E-heater
4	PTR valve	6 Months release water	Operate by gently easing the lever
	If water is constantly leaking from PTR valve, Check water pressure and or have valve replaced.		

CHECKING THE ANODE & REPLACING IF REQUIRED

The high-quality vitreous enamel lined low carbon steel tank is fitted with sacrificial anodes which are designed to help protect the tank and extend its operational lifespan. Over time, these anodes gradually wear down as they prevent internal corrosion of the cylinder. To maintain optimal performance and durability, it is advisable to have the anodes inspected and replaced by a qualified technician when necessary.

Regular inspection is recommended, and replacement intervals of no more than 5 years is advised. The anodes installed at the factory are made of magnesium, which is suitable for use in areas where the total dissolved solids (TDS) in the water supply are 600 mg/L or less, a common condition in most regions. The machine is equipped with one short anode rod on the side and one long anode rod on the top. Detailed specifications are shown in the table below:

Model	Short anode rod	Long anode rod
210L	G3/4 male thread Length is 460 mm	NPT 3/4 male thread Length is 750 mm
270L	G3/4 male thread Length is 460 mm	NPT 3/4 male thread Length is 900 mm
320L	G3/4 male thread Length is 460 mm	NPT 3/4 male thread Length is 1150 mm

The replacement steps are as follows:

1. Turn off the power to the water heater and shut off the cold-water inlet valve.
2. Open a hot water tap to relieve pressure from the tank.
3. Locate the anode positions on the side of the tank.
4. Remove the anode cover(s) on the side of the tank to expose the anode bolt head.
5. Unscrew and remove the anode from the tank.
6. Inspect the anode for signs of wear or corrosion and assess its remaining lifespan.
7. If the anode is still in good condition, re-install it, ensuring a proper seal.
- If the anode has degraded, replace both the side and top anodes with new ones.
Note: Failure to replace a depleted anode when required may void the water tank's warranty.
8. Turn the cold water inlet valve back on.
9. Open a hot water tap until all air is purged and hot water flows consistently, then close the tap.
10. Restore power to the water heater.
11. The unit is now ready for normal operation.

FILLING THE SYSTEM

Here are the steps to follow for filling and pressuring the system after it has been properly connected:

1. Once the system is correctly connected, proceed to fill and pressure the tank.
2. To start filling the water system, first, open the non-return valve on the cold-water inlet. Simultaneously, make sure at least one hot water tap inside the property is open. As the system fills with water, you'll hear air escaping from the open hot water tap. This process, called "bleeding the system," ensures that any trapped air is removed from the system. When you consistently see water flowing from the hot water tap, it means the system is fully bled, and you can then close the tap.
3. Always ensure that the tank is completely filled with water before connecting and activating the electricity supply.

18. HEAT PUMP WARRANTY

This warranty is provided by Imaca Pty Ltd Trading as Neo Power. It applies to heat pumps installed in a single family dwelling only and is provided only to those acquiring the heat pump as consumers with in the meaning of the Australian Consumer Law. The terms of the warranty are effective from the date the heat pump is installed. Imaca Pty Ltd may verify this date by requesting a copy of the compliance certificate that accompanied the installation. The compliance certificate is mandatory in all Australian states and territories.

Warranty period

The product is covered by a warranty against defects for 5 years from the date of installation. When proof of installation date is not provided, the start date of the warranty will commence from the system date of manufacture determined by the systems unique serial identifier. It is recommended that homeowners keep receipts, invoices, warranties, and any installation record forms where applicable, in a safe place.

18.1 Component Warranty Table

Component	Warranty Period (Parts Only)	Warranty Period (Parts and Labour)
Glass Lined Tank	7 years	2 years
Refrigeration	5 years	2 years
Electrical (controller and sensor leads)	5 years	2 years
Sacrificial Anode & PTR valve	2 years	2 years
Consumable Items	2 years	2 years

Below warranty table exclusive to product installed under the Solar Victoria Programs (Solar Homes Program). only applied to the heat pump installed on and from September 1st 2025

Component	Warranty Period (Parts Only)	Warranty Period (Parts and Labour)
Glass Lined Tank	7 years	5 years
Refrigeration	5 years	5 years
Electrical (controller and sensor leads)	5 years	5 years
Sacrificial Anode & PTR valve	5 years	5 years
Consumable Items	2 years	2 years

18.2 Eligibility requirements to make a claim

- The person(s) making the claim must be the product owner or have consent to act on behalf of the owner.
- The person(s) making the claim must contact Neo Power as soon as they notice any defect(s) without excessive delay, and the product must be within its warranty period.
- The product must have its original serial numbers and/ or rating labels where applicable.
- The warranty period begins from the date of installation of the component(s), in the event that proof of installation cannot be provided, the period begins from date of purchase, and in the event that this is also not available, the warranty will begin from date of manufacture of the product.

18.3 General warranty conditions

18.3.1. This Warranty is for domestic & residential and commercial use of the hot water heating system.

18.3.2. To the extent that a claim falls under the 'Parts Only' Warranty Period, the Warranty covers the repair and/or replacement of such failed component in domestic and commercial use free of charge. However, the transport, installation and labor costs of repairing the component or delivering the replacement component and removing and replacing the existing component will be the responsibility of the customer of the existing component.

18.3.3. To the extent that a claim falls under the 'Parts and Labor' Warranty Period, the Warranty covers the repair and/or replacement of such failed component in domestic and commercial use and any associated labor costs free of charge. Please note the cost of freight may be charged to the customer.

18.3.4. The decision to repair or replace the component that is the subject of the Warranty will be entirely at the discretion of Neo Power

18.3.5. Where a component, in domestic and commercial use, is repaired or replaced by Neo Power, the balance of any original Warranty Period will remain effective. The repaired or replaced part does not carry any additional warranty period.

18.3.6. Neo Power reserves the right to alter the design, components or construction to its domestic hot water system or custom design. Such alterations shall not constitute a defect in design or construction under this Warranty.

18.3.7. Any claim under this Warranty must include full details of the defect and/or damage to the Neo power hot water system or component(s) in domestic and commercial use. All claims must be made within one (1) month of the detection of the defect.

18.3.8. Dated proof of purchase is required prior to commencement of any work under this Warranty.

18.3.9. Neo Power does not warrant any installation work conducted by the installer of the hot water system or component(s) in domestic and commercial use.

18.3.10. This Warranty only applies to the Neo Power hot water system and its components, or component(s) in domestic and commercial use and does not cover any plumbing or electrical associated parts, including but not limited to any parts supplied by any person installing the Neo Power hot water system or component(s) in domestic and commercial use.

18.3.11. To the extent permitted by law, Neo Power shall not be liable under this Warranty for any consequential loss or damage or any incidental expenses resulting from any breach of this warranty, including but not limited to, claims for damage to buildings, roofs, ceilings, walls, foundations, gardens, personal belonging or household effects, fixtures and fittings, or any other consequential loss, damage or inconvenience, either directly or indirectly due to leakage from the Neo Power hot water system or component(s) in domestic and commercial use or any other matter related to the system or its operation.

18.3.12. The benefits conferred by this Warranty are in addition to all other rights and remedies in respect of the Neo Power hot water system or component(s) in domestic and commercial use, which the purchaser has under the Competition and Consumer Act 2010 and consumer protection legislation of the States and Territories. Nothing in this Warranty has the effect of excluding, restricting or modifying those rights.

18.3.13. Goods presented for repair may be replaced by refurbished goods of same type rather than being repaired. Refurbished parts may be used to repair/ replace the goods.

18.3.14. If the Customer has not paid in full for the Neo Power hot water system or component(s), then this Warranty does not apply (Proof of purchase is a MUST).

18.3.15. Our goods come with guarantees that cannot be excluded under the Australian Consumer Law. You are entitled to a replacement or refund for a major failure and compensation for any other reasonably foreseeable loss or damage. You are also entitled to have the goods repaired or replaced if the goods fail to be of acceptable quality and the failure does not amount to a major failure.

18.3.16. Neo Power does not accept liability for consequential damage or any incidental expenses resulting from any breach of the Warranty.

18.3.17. Warranty does not cover the following:

- Subject to any statutory provisions to the contrary, claims for damages to walls, foundations etc. or any other consequential loss caused either directly or indirectly by leakage from the heat pump hot water system or any other faults.

- The warranty does not cover any faults that may arise from connecting to a water source that is unfiltered such as dams, bores, rivers etc.

18.3.18. The warranty will be rendered void in the following circumstances

- Failure due to misuse, natural disasters, Acts of God, accidental damage, installation by an installer who is not unauthorized to install a Neo Power heat pump hot water system or incorrect installation and attempts to repair Neo Power by an unqualified person.
- Repairs and service carried out by a person who is not a Qualified Service Person or Authorized Service Agent.
- Faults caused by incorrect installation, water problems and or electricity supply.

18.3.19. Where the Neo Power hot water system is installed in a position that does not allow safe, ready access, the cost of accessing the site safely, including the cost of additional materials handling and/or safety equipment, shall be the owner's responsibility.

18.3.20. This Warranty does not apply to any defects or damage NOT due to faulty factory parts or workmanship including, but not limited to, defects or damage caused by or resulting from:

- accidental damage, storm damage, vandalism, failure due to misuse or abuse, or neglect of any kind;
- incorrect or improper installation of the Neo Power hot water system, including but not limited to, installation otherwise than in accordance with the instructions contained in the owner's manual supplied by Neo Power or incorrect system selection;
- alteration or repair of the Neo Power hot water system other than by a licensed plumber or by an approved Neo Power agent;
- attachment of any parts or accessories other than those manufactured or approved by Neo Power;
- freezing in regions with minimum temperatures below -10°C;
- the power supply to the Neo Power hot water system being cut by
- power surges, animals, birds and/or rodents.
- excessive water pressure, negative pressure (partial vacuum), excessive temperature, corrosive atmosphere
- faulty plumbing and/or electrical wiring.
- Sludge/sediment because of connection to a water supply from filtered or treated sources ie. spring, dam, bore, river or town supply from a bore.
- contamination and corrosion from particles in the water supply.
- serial tags/stickers on any of the components being removed or defaced.
- the Neo Power hot water system being relocated from its original point of installation.

18.4 Heat pump warranty conditions

18.4.1. All Neo Power hot water system must be installed by a licensed installer.

18.4.2. Only a licensed professional must Install, Commission or Service Neo Power hot water system.

18.4.3. All Neo Power hot water system must be installed in accordance with Manufacturer's Installation Instructions and in Accordance with local regulations, municipal building codes and current AS/NZS 3000, AS/NZS 3500, AS 3498 and AS/NZS 5601

18.4.4. If the Neo Power hot water system has not been installed in accordance with Manufacturer's Installation Instructions or installed as to be easily accessible for servicing, a service charge may apply.

- The integration with tank and controller should follow the instructions in the installation manual.
- The operational conditions should not exceed from those specified in the installation manual (i.e. -10 to 43 °C).
- The storage tank MUST have a 850 kPa PTR valve installed, while the main cold pressure to the hot water system is limited by a 500 kPa PLV.
- Electricity supply to the heat pump unit must be accordance with the relevant Australian standards as well as guidelines in the installation manual (i.e. 240V supply and 10A circuit breaker).

18.4.5. Water quality must be within limits specified below table.

Total Dissolved Solids	< 600 mg/L or ppm
Total Hardness (CaCO ₃)	< 200 mg/L or ppm
Electrical Conductivity	850 µS/cm
Chloride	< 300 mg/L or ppm
pH Level	Min 6.5 to Max. 8.5
Magnesium	<10 mg/L or ppm
Sodium	< 150 mg/L or ppm
Iron	< 1mg/L or ppm
Alkalinity (as CaCO ₃)	< 200 mg/L or ppm
Dissolved (free) CO ₂	< 25 mg/L or ppm

WARRANTY FORM

Please complete details and retain this warranty together with your purchase invoice and plumbing certificate, which must be presented when making a warranty claim.

Homeowner Name:

Street Number and Name:

Suburb, State, Postcode:

Owner contact phone no:

Owner Email:

Date of Installation:

Product detail and Model No:

Heat pump Serial Number:

Supplier Name:

Plumber Name:

Plumber contact details:

This warranty does not exclude, limit or modify any warranty, condition or liability which is or may be implied or imposed on the Company by virtue of the Trade Practices Act, 1974, or any other statute, law, rule or regulation except for the extent to which the Company is lawfully entitled. Note that Imaca Pty Ltd Trading as Neo Power is not liable for any expenses associated with making a warranty claim.

Contact Details:

Imaca Pty Ltd

Add: 1 Jellico Drive, Scoresby, VIC 3179

Tel: 1300 062 788

E-mail: info@neopower.com.au

Version 1: 10.10.2025