
Commercial Undercounter Dishwasher (High Temp)

Installation and Operation Manual

Model: HZ-UH50



WARNING: IMPROPER INSTALLATION, ADJUSTMENT, ALTERATION, SERVICE OR MAINTENANCE CAN CAUSE PROPERTY DAMAGE, INJURY OR DEATH. READ THE INSTALLATION, OPERATING AND MAINTENANCE INSTRUCTIONS THOROUGHLY BEFORE INSTALLING OR SERVICING THIS EQUIPMENT.

**Please read and keep these instructions. Indoor
use only**

Ensure suitable water hardness of 1.5~4.3gpg (20~75mg/L)

Ensure thorough pre-washing of tableware.

Ensure only detergents recommended by professional chemical companies are used.

Ensure the machine is thoroughly cleaned, rinsed, and dried (with the door open) at the end of each working day.

Ensure limescale is removed regularly according to the chemical company's requirements.

Ensure only products declared safe for stainless steel are used.

Do not use water that is too soft (recommended water hardness range: 25-75 mg/L).

Do not use household dishwashing detergents.

Do not allow food residues to accumulate at the bottom of the water tank.

Do not let detergents, disinfectants, quick-drying agents, or descaling agents exceed the concentrations recommended by the chemical manufacturer.

Do not use steel wool to clean tableware or the surface of the dishwasher.

Do not allow foreign objects to enter the machine, especially metal objects.

Do not rinse the exterior of the dishwasher with a faucet or other water source.

Note: If the equipment is installed or repaired by unauthorized personnel, or if any non-original spare parts are used, or if any unauthorized technical modifications are made to the machine, the manufacturer's warranty and product liability will become void.



Do Not Connect To Hot-Water Supply Exceeding A Temperature of 140°F

CONTENTS

1

Planview.....4

2 Control panel

.....5

3 The principle

.....6

4 Assembly

.....6

5 Check and debug

.....9

6

Operation.....9

7 Sanitaion Operation Standards.....11

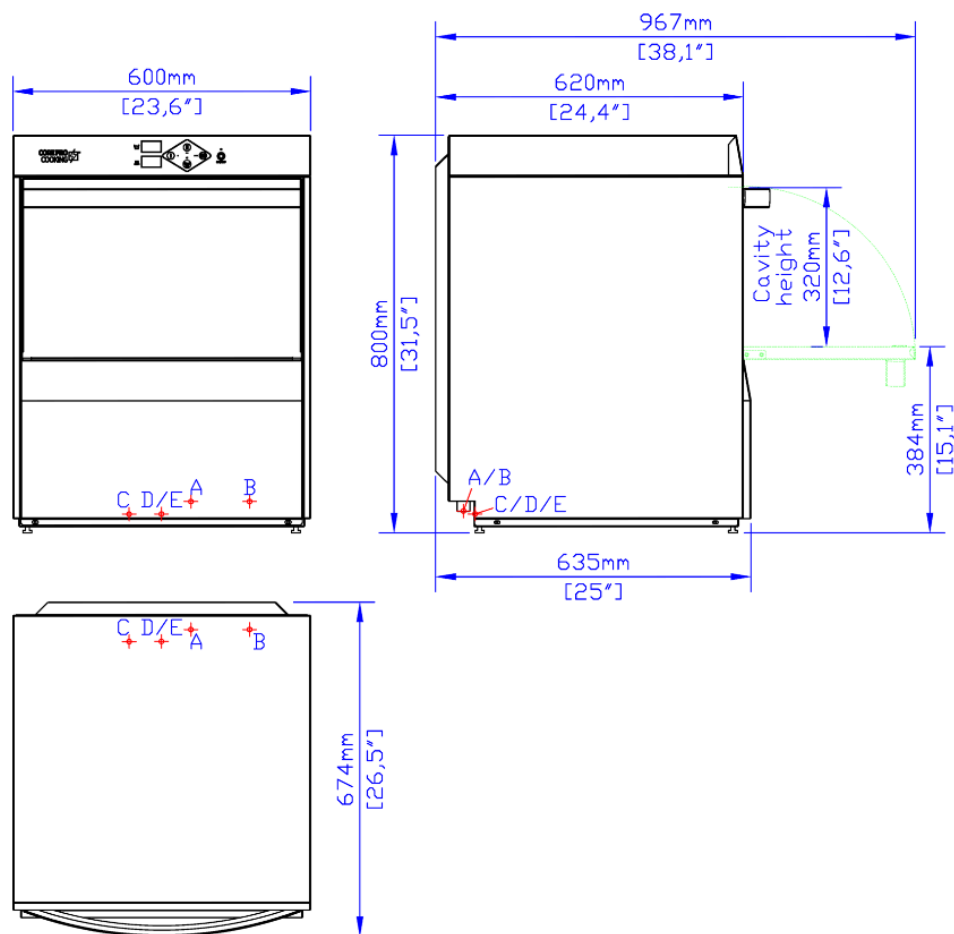
8 Long term non use

.....11

9 Troubleshooting guide

.....	12
10 Schematic diagram.....	13

1. Plan view



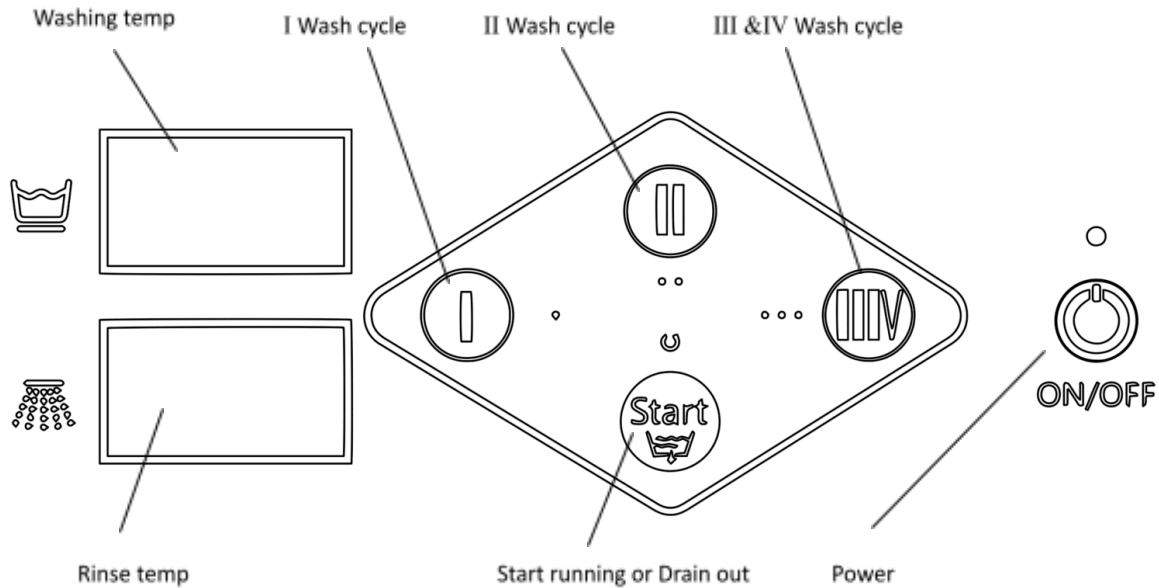
TECHNICAL PARAMETERS

Undercountertop dishwasher HZ-UH50	
Overall dimension	23.6" x 25" x 31.5" (600 x 635 x 800mm)
Racks per hour	24
Water inlet temp	122°F-140°F (50°C-60°C)
Power supply	208-240V / 60Hz/1 phase
Total Power	2.95 kW
Max wash height	12.6" (320 mm)
Wash heat power	1.7 kW
Spray heating power	2.5 kW
Wash pump power	0.45 kW
Water consumption per rack	0.66 gallons (2.5 Litres)
Water tank capacity	4.9 gallons (18.5 Litres)
Wash temperature	131°F-140°F (55°C-60°C)
Spray temperature	180°F-194°F (82°C-90°C)

Rack size	20"x20" (500*500 mm)
-----------	----------------------

2 . Control panel

Control panel display and buttons instructions



1	Rinse temp display	Display the real-time temperature of rinse water during operation Display machine malfunctions and information
2	Wash temp display	Display the real-time temperature of the wash water during operation Display troublesome and information
3	I Wash cycle	After pressing this button, the total cleaning time for a rack is 120 seconds
4	I I Wash cycle	After pressing this button, the total cleaning time for a rack is 180 seconds
5	I I I Wash cycle	After pressing this button, the total cleaning time for a rack is 240 seconds
6	I V Wash cycle	Long press the 3-second III cleaning cycle mode button to enter the cleaning time of 600 seconds (press any mode button to exit the low-temperature disinfection mode after cleaning is complete)
7	Power	The power switch, After pressing this button to turn off the unit, it still remains powered on

3. The principle

A dishwasher needs to go through two processes of washing and rinsing to complete a dish wash.

Firstly, the washing program runs. At this point, the washing rack is fixed, and the water pump running hot water from the washing tank to push the upper and lower washing arms to rotate.

The water flow is sprayed out from the washing arms to clean the dishes.

After the washing program is completed, enter the rinsing program.

The rinsing water does not contain detergent. At this time, the upper and lower rinsing arms simultaneously spray high-temperature clean water at 176-185 °F Celsius to clean the dishes.

The rinse water from the previous working cycle enters the washing tank as the washing water for the next cycle, ensuring that the water in the washing tank is continuously updated and cleaned.

4. Assembly

The dishwasher shall be installed in accordance with local codes, or in the absence of local codes, installed in accordance with the applicable requirements in the National Electrical Code, NFPA 70, Canadian Electrical Code (CEC), Part I, CSA C22.1, and Standard for Ventilation Control and Fire Protection of Commercial Cooking Operations, NFPA 96.

Before installation, please refer to the specifications on the dataplate on the right side of the machine to determine if your power supply matches it.

After opening the dishwasher packaging box, please immediately check for any damage caused by transportation reasons. If any damage is found to the machine, please keep the packaging materials and notify the supplier within 15 days after receiving the goods.

Leveling dishwasher; Place the dishwasher in its fixed position and rotate the leveling feet to ensure that the equipment is level and stable.

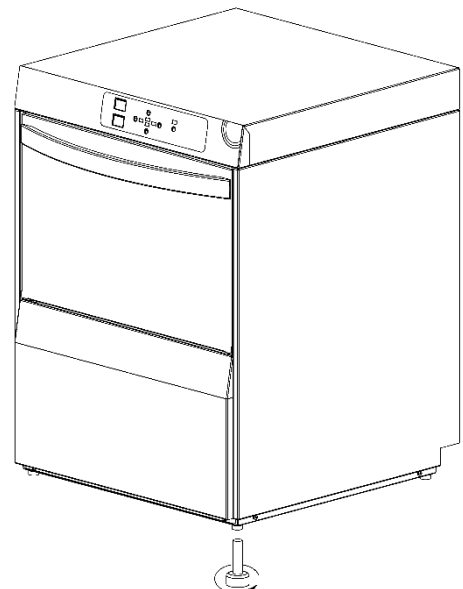
Sealing dishwasher to the floor:

This dishwasher must be properly sealed to the floor to ensure compliant sanitary operation in accordance with applicable standards.

To complete the sealing procedure:

- a. Use appropriate sealing strips or other recommended sealing materials.
- b. Seal all edges between the dishwasher bottom and the floor.

Note: Ensure the floor is clean and dry prior to sealing. When sealed as described, the installation is intended to prevent liquid spillage on adjacent surfaces from passing under inaccessible portions of the dishwasher, thereby maintaining sanitary conditions.



4.1 The undercounter dishwasher should be installed under a counter away from heat sources and avoid direct sunlight. The side or back of its body can be against cabinets or walls, and the inlet and outlet pipes can be placed on the right or left side according to installation needs. Simultaneously close to the tap and sewer for easy access to water and discharge of sewage.

4.2 Preparation before installation. Before installing the dishwasher, it is necessary to check whether the water supply pressure meets the requirements and whether a booster pump is needed. Use a water pressure gauge to check if the water pressure is between 0.15 and 0.50 MPa. If it exceeds this range, it cannot be installed normally and corresponding water pressure treatment should be carried out.

4.3 Installation of the host. Install the machine on a stable platform, and ensure that the height of the drainage pipe is within 40~100mm. After placement, adjust the adjusting screw of the foot to keep the dishwasher level, so as to ensure the normal use of the dishwasher.

4.4 Connection of inlet pipe. First, connect the water valve connector that is compatible with the inlet pipe to the tap water pipe and confirm that it is secure; Open the water valve and confirm that there is no water leakage at the connection. (Maximum inlet water temperature 140 °F)



Do not connect to hot water supply systems with temperatures exceeding 60 °C (140F)

4.5 Connection of drain pipes. Install the drainhose on the drainpipe or hang it on the pool. The terminal height of the pipe should be between 40-100mm, and the end of the drain pipe should be higher than any part from this end to the drain outlet to prevent sewage from being trapped in the pipe. Drain pipes should not be submerged in the water surface inside the sewer pipe to prevent wastewater from flowing back. At the same time, check whether the drainage pipe is dented or bent.

4.6 Installation of power supply, install independent circuit breakers according to the position of the dishwasher, and pay attention to good grounding. Check if the power supply voltage and frequency are consistent with the specifications on the machine dataplate, then plug the power supply into an electrical outlet and conduct a trial run.

4.7 Installation of power supply, install independent circuit breakers according to the position of the dishwasher, and pay attention to good grounding. Check if the power supply voltage and frequency are consistent with the specifications on the machine dataplate, then plug the power supply into an

electrical outlet and conduct a trial run.

4.8 Circuit Connection, The electrical connection of the equipment should be carried out by authorized technicians. Please refer to the wiring diagram, machine dataplate, and technical specifications for service dimensions: Check if the power supply voltage is consistent with the voltage shown on the dataplate.

The size of the power cord must be suitable for the rated current (ampere load) of the machine. Use only copper wires. Electrical appliances must be grounded using the grounding connection of the electrical wiring board.

 **Warning:** The circuit and grounding connections must comply with the applicable provisions of the national electricity regulations and other local electricity regulations.

 **Warning:** An independent full pole disconnect device such as an air switch must be installed in the power supply circuit of this machine. Please refer to the circuit data sheet for electrical parameters.

 **Warning:** Cut off the power and hang a clear sign at the power switch to let others know that you are repairing the circuit.

Please refer to the instructions on the power cord and the electrical schematic on the inside of the machine panel to correctly connect the power cords of different colors to the power supply.

 **Warning:** When testing the machine for the first time after installation, it is necessary to first check whether the rotation direction of the cleaning pump motor matches the indicated direction. When the washing pump is reversed, the dishwasher cannot work properly, and even a short period of reversal can cause damage to the water pump.

 **Warning:** The applicable type and concentration of cleaning agents should comply with local management regulations.

 **Warning:** The pressure of the distributor should not exceed 0.05 to 0.1 MPa.



Equipotential indication: The terminal indicated by the equipotential indication refers to the terminal where the various parts of the equipment or system used after interconnection reach the same potential. This is not necessarily a ground potential, such as local connection (equipotential connection is located below the equipment).



Grounding protection indication: The terminal indicated by the grounding protection sign refers to the terminal connected to the external protective conductor to prevent electric shock in case of a fault, or the terminal connected to the protective grounding electrode.

Electric parameters

Model	Connection	Voltage	Load current	Total Power	Wash pump current	Wash pump power	Rinse heat current	Rinse heat power
UH50	208-240V 60HZ 2-Pole 3-Wire	208V	13A	2.72kW	2.7A	0.56kW	10.4A	2.16kW
		240V	14.5A	3.5kW	2.6A	0.62kW	12A	2.88kW

5. Check and debug

After installing the new machine, it should be checked and debugged before use. Before starting the machine for the first time, check whether all installation tools and other items inside the machine have been removed; Check for water leakage and leakage of cleaning agents; During debugging, it is also necessary to check whether the safety system and door switch are functioning properly; Check if all screws are tightened. At the same time, the debugging and training of the machine can only be carried out by qualified technicians who have received professional training. Only after training can operators start using this machine.

6. Operation

6.1 Operations must be carried out by trained personnel

6.2 If the machine door is opened during operation, cleaning water may spray out and cause injury. Please wait for the program to finish before opening the door.

6.3 Best cleaning effect description: The cleaning effect is closely related to the water quality. If the mineral content in the water is high, point like or stripe like dissolved minerals can be seen on the glass during the drying process.

6.4 Machine start-up preparation

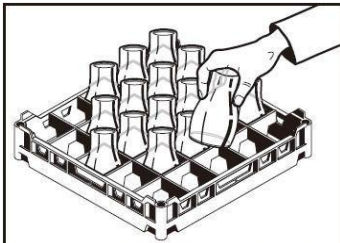
Check if the cleaning, rinsing spray arms, and filter screen positions are correct. Open the inlet valve, turn on the main switch, or plug in the plug.

Check if the amount of cleaning and drying agents is sufficient.

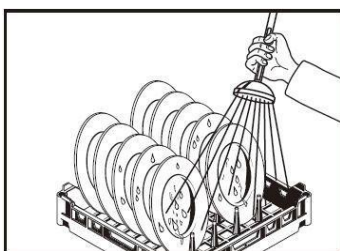
Close the machine door. Press the power switch on the control panel. The machine will activate

the solenoid valve to automatically fill the water. After the water filling is completed, the machine will automatically heat up, which may take more than ten minutes. When the temperature of the cleaning water tank reaches 131 °F and the rinsing temperature exceeds 179.6 °F, the machine is ready for operation

6.5 Prepare to clean tableware



Please place the washing utensils face down on the washing rack



Remove food residues.

6.6 Choose an appropriate wash cycle

I	120"wash cycle	For slight dirtiness of tableware
II	180"wash cycle	The tableware is generally dirty
III / IV	240"/ 600"wash cycle	The tableware is very dirty

6.7 Cleaning

Slide the rack into the machine and close the door.

Press the on/off button, the power indicator light will turn on, indicating that the machine is turned on. The machine enters automatic preparation mode.

Firstly, the water is automatically filled with water.

When the predetermined water level is reached, the water tank starts to heat automatically.

When the set temperature is reached, the heating stops and the cleaning program is waited for to be executed.

The cleaning program runs automatically.

When the program is completed, the buzzer beeps, indicating the end of the washing cycle.

Open the machine door and take out the rack.

Let the dishwashing utensils sit for a period of time to allow sufficient drying time.

Execute washing program:

-  Press the button to enter the 1st automatic washing cycle, which lasts for 120 seconds;
-  Press the button to enter the 2nd automatic washing cycle, which lasts for 180 seconds;
-  Press the button to enter the 3rd level automatic washing cycle, which lasts for 240 seconds;
-  you can also enter the 4th level automatic washing cycle, which is also in low-temperature disinfection mode, which lasts for 600 seconds. Press and hold the heavy cleaning mode button for 3 seconds when turned on, and for 10 minutes, it will deeply refresh 360 degrees without dead corners, flush super strong penetration through heavily polluted dead corners (press any mode button to exit the low-temperature disinfection mode after cleaning is completed)

6.8 Shut down

Press the power switch, and the machine will stop running. At this time, the machine is still powered on. The main power switch should be turned off, the plug should be unplugged, and the inlet valve on site should be closed

6.9 Daily cleaning

! Improper use of chemicals may cause corrosion.

Do not use any additives containing chlorine, acid, or metal to clean the machine.

Do not use metal brushes.

Open the machine door.

Remove the filter and clean it. Please ensure that food residues do not enter the pump suction port.

Rinse the fine filter screen with running water.

Clean the inside of the machine.

Replace the filter screen.

Half open door for ventilation.

6.10 Weekly Cleaning

Unscrew the screws on the rinsing spray arm to remove the rinsing spray arm and cleaning spray arm.

Remove the cleaning/rinsing arm and clean it.

Reinstall the cleaning/rinsing arm.

Attention: When removing the drainage pipe, be careful not to come into contact with high-temperature hot water to prevent burns. After draining, when cleaning the electric heating pipe, pay attention to the high residual temperature of the electric heating pipe to prevent burns!

7. Sanitation Operation Standards

- Operators must strictly comply with all sanitation requirements when taking clean tableware.
- Do not touch clean tableware with dirty or oily hands. When operating tableware, gloves should be worn or hands should be kept clean to prevent contamination.
Be careful that the tableware will be very hot.
- Thoroughly dry the tableware with a clean disinfectant cloth. Do not use unsterilized kitchen towels or cloths to dry dishes.
- Wait for the machine to reach the appropriate washing temperature to ensure thorough disinfection and cleaning. For optimal results, please clean the tableware after the machine is ready.
- Empty the washing bucket and rinse the filter at least twice a day, or rinse after completing 40-50 washing cycles.
- Ensure the correct dosage of detergent and drying agent (according to the supplier's recommended amount). At the beginning of the workday, check if the product quantity in the storage tank can meet the daily demand.
- Dishwashers should be kept absolutely clean and regularly maintained.

8. Long term non use

If the machine is not in use for a long time (holidays, temporary closures, etc.), please follow the following procedures:

Completely empty the machine, including the boiler.

Thoroughly clean the machine.

Keep the machine door open.

Close the inlet valve.

Cut off the main power supply.

If there is a risk of freezing temperature, consult technical service personnel on how to protect the machine from freezing.

9. Troubleshooting guide

Symptoms	Possible Cause	Check or Replace
The machine does not take in water	No water source; clogged filter; water level switch malfunction; solenoid valve failure; safety switch malfunction	Reconnect the water supply; clean the filter; replace faulty parts
The rinse arm is not spraying water	No water source; clogged filter; solenoid valve malfunction; rinse water pump cannot draw water; rinse system needs descaling	Reconnect the water supply; clean the filter; replace faulty parts; descaling

There are streaks or stains on the laundry	Rinse water has too high a mineral content; rinse water temperature is below 180°F; rinse water volume is reduced; inappropriate accelerator or incorrect amount of accelerator.	Soften the water; adjust the water temperature; clean the filter and rinse arms; replace the drying agent or adjust the dosage
Too much foam in the washing tank	Reduced rinse water volume	Clean the filter and rinse arm in front of the rinse solenoid valve
	Wash water temperature below 104°F	Check the washing temperature settings and the thermal protection device, as well as the air circuit breaker. If the thermal protection device trips, reset it manually and check for faults; if the air circuit breaker trips, inspect the wiring before resetting.
	Inappropriate detergent or fabric softener	Change detergent or fabric softener

10. Schematic diagram

