INSTRUCTIONS

Manual for Smart Self-Priming Pump

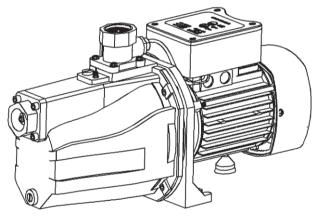
JB/TJB/T10604

Please read this manual carefully before using the product. If you have any questions,

please refer to the manual or call the manufacturer.







Cold and Hot Water Smart JET Pump



Before starting the installation, please read the manual carefully and pay attention to the safety warning marks and instructions!

The manufacturer shall bare no liability or award any compensation for any personal injury, pump injury or other property loss, caused by non-compliance with the contents of this manual or failure to head any of the safety warnings or local regulations!

1.Product Functions

Smart Jet Pump Functions:

- (1)Smart mode (2) power delay (3) water shortage protection
- (4) water start (5) fluid over temperature protection
- (6) over current protection (7) lightning protection, etc.

This series of electric pumps has the advantage of high suction and lift. It is commonly used for domestic water supply, tap water pressure boosting, shallow well water lifting, equipment support (air energy, solar energy, water heater, purified water, etc.), irrigation, aquaculture, industry and mining, hotels and multiple story building water supply and boosting, central heat and air conditioning water recirculation and more.

2. Conditions of use

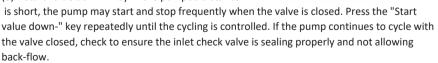
- (1). The maximum temperature for conveying liquid is 80° C. The liquid must be clean, non-corrosive, free of solid particles and/or fibers. Do not use with flammable, explosive and gaseous liquids.
- (2). The liquid should have a PH value between 6.5 and 8.
- (3). The power supply frequency is 60Hz, single-phase voltage of 115V /230V, and a three-phase voltage of 380V, as specified on the product nameplate.

3.Buttons and Indicator Lights

When you plug in the pump for the first time, it automatically starts in Smart Mode.

The pump will start and stop according to demand flow and pressure.

- (1). Auto/Reset· key: smart mode function or reset function.
- (2). "Start value up +" key: If the pump does not start due to high head conditions, press the "Start value up+" key repeatedly until it starts.
- (3)." Start value down -"key: If the pumped distance



- (4). "Flow(Bright)": If the water valve is off and the "Flow(Bright) light is on solid, and the water pump does not stop, remove the flow switch on the pump body, clean and reinstall it.
- (5). "Water shortage(Flash)": If the "Water shortage(Flash)" light is on and flashing, check whether there is water at the inlet, unplug and re-plug in the power cord or press any key to exit the water shortage fault."

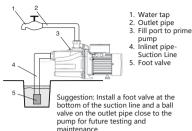




4.Instructions for Installation and Use

- (1). After installing, confirm all piping and fittings are properly sealed. Close any valves completely when not in use to avoid pressure relief, pump cycling and shutdown.
- (2). Ensure the fan blades spin freely and prime the pump chamber with water through the fill port (3.)
- (3). Unscrew the fill plug and fill the pump chamber with water before powering on the pump.

Correct installation sketch



5. Installation Notes on Inlet and Outlet piping

- (1). The diameter of the inlet pipe should be at least as large as the diameter of the outlet pipe to ensure adequate flow to the pump and to avoid pressure loss and excessive noise.
- (2). When installing electric pumps, do not use soft or flexible rubber pipes that can flatten and reduce inlet flow rates.
- (3). A bottom (or foot) valve should be installed vertically in the well or tank and/or a check valve installed vertically to prevent damage from sediment.
- (4). All joints of the inlet pipeline must be properly sealed. Minimize elbows wherever possible to improve inlet flow to the pump.
- (5). Pumps should be installed as close as possible to the water source."

6. Start-up and Operating Procedure

- 1) After the installation is complete, check the pipeline and all valves and connection points for leaks.
- 2) Close the outlet valve completely when done using water to avoid pressure relief leading to shutdown.
- 3) Check the fan blade for free rotation.
- 4) Remove the fill plug and fill the pump chamber with clean water."



Please use the manual strictly. Before switching on, please check the insulation resistance carefully to prevent leakage. The electric pump should be grounded reliably and equipped with leakage protection switch. Touch is strictly prohibited after power is switched on. Do not wash, swim or let cattle into the water nearby to avoid electric shock. Pumps must be cut off and repaired no matter what malfunction occurs.

7. CAUTIONS

- (1) Before installing or doing any maintenance, the power supply must be turned off first.
- (2) The electric pump should be properly grounded in order to prevent electric shock.
- (3) Install a leakage protection device or alarm in areas that could be affected by pump or pipe leakage.
- (4) No combustible articles should be stored within 3.3 feet (1 meter) of the pump to avoid the risk of fire.
- (5) Ensure adaquate ventilation around all sides of the pump.



- (6) If the pump is installed outdoors, it must have an appropriate cover to protect it from wind, rain, and direct sunlight.
- (7) If abnormal conditions are discovered while the pump is in use, such as abnormal noises, low water output or intermittent water flow, the power supply should be turned off immediately. Refer to the troublshooting section of the manual.
- (8) Do not touch the electric pump when it is wet or when the power is on, to avoid electric shock.
- (9) Avoid spraying water directly on the pump, and do not immerse the pump in water.
- (10) If the ambient temperature drops lower than $0^{\circ}F$ ($4^{\circ}C$), take anti-freezing measures to prevent damage to the pump.
- (11) In cold seasons, the water bolts should be screwed. Open to empty the the pump body and prevent cracking due to freezing.
- (12) When not in use for a long time, close the inlet and outlet water pipe valves and turn off the power supply to the pump.
- (13) When turning the pump back on after it has not been in use for a long time, follow all of the initial start up procedures."

8. Electrical Connection



Do not attempt to connect power to the pump until you have verified that the power supply is turned off. The electric pump should be properly grounded, and should be equipped with proper circuit protection."

This pump shall be connected to the power supply by following all local codes and regulations.

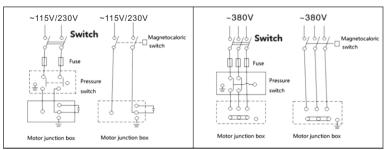
The nameplate contains the power specifications for each specific pump. Make sure that the motor voltage matches the power supply voltage.

Check motor rotation on three-phase motors.

Ensure proper motor rotation by observing the fan blade. The motor should rotate in a clockwise direction.

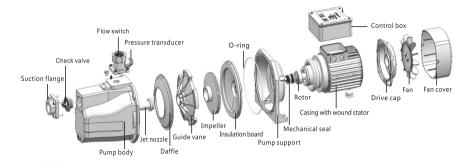
If the rotation is counter-clockwise, disconnect the power supply and swap two of the power supply leads.

Electrical Connection Diagram





9. Exploded View



10. Troubleshooting

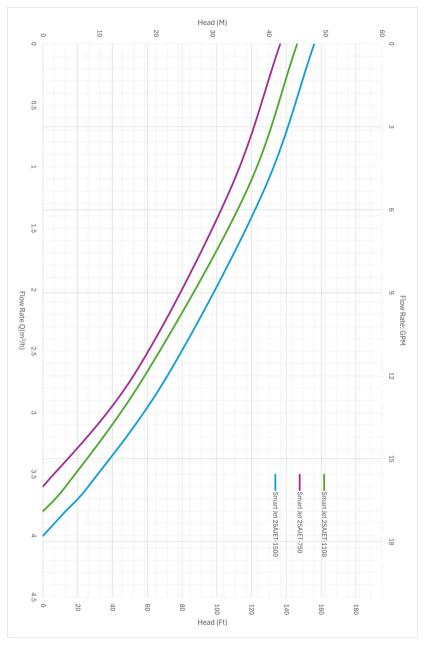
Problem	Causes / Conditions	Solutions	
	Water shortage - Indicator flashes and enters water shortage state.	Check to be sure there is water at the inlet. Press the "+" button and turn the power supply off/on.	
Pump does not start.	Head pressure is too great.	Repeatedly press the "UP+" button to increase the starting pressure.	
	Water temperature exceeds 60 C (140 F).	When the water cools the pump will start automatically.	
Pump turns off.	Valve is closed and flow indicator lights are on.	Remove the flow switch. Clean and reinstall or replace if necessary.	
Pump starts frequently.	Pump continues to cycle with all valves and taps closed.	Check for leaks in the plumbing system, open taps or filter systems or toilet valves. Bleed air from the piping system.	
	ciosca.	Press the "DOWN-" button to reduce the start-up pressure.	
	The installed pump is not right for the application.	Install a different pump.	
Low water pressure.	The inlet pipeing is too small or long, or contains too many bends.	Increase the inlet pipe sizes and eliminate bends in the piping system.	
	The inlet pipe, filter, check valve or pump body is restricted.	Clean or replace pipes, foot and check valves. Clean pump chambers.	
	Low voltage, long or under-sized wire.	Check supply voltage. Increase wire size or shorten the length of wire.	



Problem	Causes / Conditions	Solutions	
Motor runs but no water comes out.	The pump is not primed.	Prime the pump chamber by filling with water. Retry.	
	Impeller is damged.	Replace the impeller.	
	Suction water level is below the intake pipe.	Lengthen the intake pipe to remain below the water level during operation.	
	There is a suction leak and air is pulled into the pump.	Repipe the leaking fittings. Apply more thread seal or glue new fittings better.	
	Water has frozen in the piping system or pump chambers.	Thaw ice first, then turn the pump back on.	
The motor won't start or makes loud noises.	The impeller or pump is stuck.	Power off the pump. Insert a screwdriver into the center hole on the fan cover. Rotate fan until it spins freely.	
	The shaft or bearings are worn or stuck.	Replace the bearings.	
	There is a break in the main or secondary windings.	Repair or replace the motor.	
The motor	The capacitor is the wrong size, is missing or damaged.	Replace the capacitor.	
won't start and is not	The main or secondary motor windings are burnt out.	Check the motor and repalce if damaged.	
getting power.	The circuit board is burnt out.	Rewire the motor without the cirtcuit board to test the motor. If the motor runs, replace the circuit board.	
Motor burnt out.	The impeller has been stuck and overloaded the motor for a long time.	Clean the impurities from the pump chamber and retest the pump function.	
	The mechanical seals are dirty or worn from abrasion.	Clean or replace the mechanical seals.	



10. Curve Graph







Smart Jet Pump Limited Warranty

Congratulations! You have purchased one of the finest hot and cold water, smart JET booster pumps available! In the unlikely event of a problem due to defects in material and workmanship, we proudly warranty our Smart JET Pump to the original owner, at the original installation location, when installed within recommended parameters from the date of original installation as follows:

For a period of 18 MONTHS: For the entire Smart JET Pump. If registered, for a period of 24 MONTHS.

ALL PUMPS MUST BE REGISTERED AT THE TIME OF INSTALLATION BY GOING TO: www.coastalwaterfilters.com/product-registration and filling out the required information.

Any part found defective within the terms of this warranty will be repaired or replaced by the dealer at the manufacturer's discretion. You pay only freight from our factory and local dealer charges. To obtain local warranty service, contact your original dealer. If original dealer is unknown, contact Coastal Water Filters for authorized service dealer in your area. If no authorized dealer is located in your area, please obtain a Return Merchandise Authorization (RMA) by contacting customer service at #1-239-398-7651 and then ship the defective part or component freight prepaid to:

Coastal Water Filters, Inc. 435 23rd St. NW Naples, Florida 34120

Coastal Water Filters, at its discretion, will repair or replace the part or component at its expense and return part freight collect.

Our product performance specifications are furnished with each pump. The above provisions of the warranty are valid as long as the pump is connected in compliance with local plumbing codes and in an equivalent manner and condition of the original installation and is owned by the original owner. We do not know the characteristics of your water supply or the purpose for which you are purchasing this system. Please understand that the quality of water supplies may vary seasonally or over a period of time, and that your water usage rate may vary as well.

This warranty does not cover damages due to accident, fire, flood, freezing, or any other Act of God. CWF is not responsible for damages due to change in water conditions, misapplication, misuse, neglect, vacuum, oxidizing agents, alteration, or lack of maintenance. No responsibility is assumed for loss of use of the pump, inconvenience, loss or damage to real or personal property or any incidental or consequential damages. Furthermore, we assume no liability and extend no warranties, express or implied, for the use of this product with a non-potable water source.

To the extent permitted by law, CWF disclaims all implied warranties, including without limitation warranties of merchantability and fitness for particular purpose; to the extent required by law, any such implied warranties are limited in duration to the aforementioned period specified above.

Some states do not allow limitations on how long an implied warranty lasts, so the above limitation may not apply to you. Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you. This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

NOTES		
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Ozmosis Smart Jet Pump
MODEL #:
PUMP SERIAL #:
HP:VOLT:
INVOICE #:
DATE:





Manufactured by: Coastal Water Filters, Inc 435 23rd St. NW Naples, FL 34120 Phone: 239-398-0967

E-mail: info@coastalwaterfilters.com





