

Water Pump

User's Manual

For Clean Water

Thanks for choosing our company's products.
Please read the user's manual carefully before operation .

WARNINGS!

1. Before operation, make sure that the electric pump is properly grounded.
2. Do not touch the electric pump while it is running.
3. Do not run the electric pump without water.

PRODUCTS OVERVIEW

Centrifugal-type Clean Water Pumps (Hereinafter referred to as pump) mainly consists of water pump, seal, and motor. The motor is asynchronous; the pump has the structure of centrifugal impeller and volute-casing with large capacity, stable operation and low noise. Single mechanical seal is applied between the water pump and the motor, anti-water ring which is rotating on the shaft will assist the water splash and the isolation, "O" rings for all the static joints are applied.

The pump, a kind of highly efficient energy-saving, hygienic, safe and ideal house-hold electric pump characterized by small size, light weight, compact structure, simple and convenient installation, can be widely applied in farm irrigation, spray irrigation, garden spray irrigation, vegetable greenhouse water supply, aquaculture water supply and drainage, well water lift, tap water pressurization and other occasions such as water for family life .

CONDITIONS FOR USE

The pump will work normally and continuously under the following conditions:

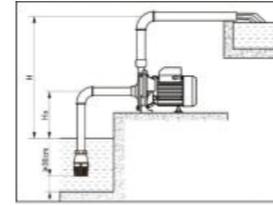
1. Medium temperature does not exceed +40 C;
2. PH value of medium is within the range of 6.5 ~ 8.5;
3. Volume ratio of solid-containing impurities in medium does not exceed 0.1%, particle size is not more than 0.2mm;
4. Performance parameters of the pump refer to the parameters indicated on the nameplate as a reference;
5. The pump must be applied under the conditions indicated on the nameplate .

INSTALLATION AND PRECAUTIONS

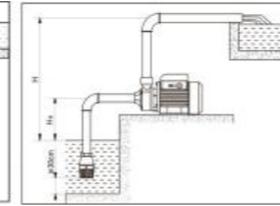
1. Prior to installation and application, it is necessary to overall check and make sure that there exists no damages of the pump during the transportation and storage . Such as the cables, plugs and etc . are in good conditions or not. In case of any damages, it is necessary to call professional staffs immediately to make replacements or repairs before using.
2. Prior to the operation of electric pump, it is necessary to check to see whether the insulating resistance is bigger than 2MΩ when it is close to the operating temperature .

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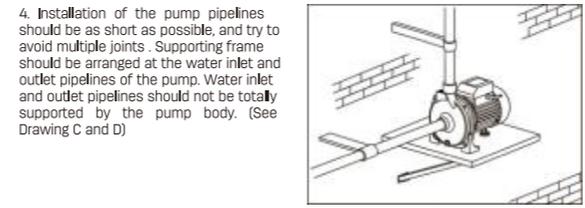
3. During the installation, it is necessary to fix the whole machine properly, use steel pipe or hose (should not be too soft so as not to be sucked flat) to connect the bottom valve (if the configuration is made available) with the water inlet of electric pump, and it is required that the distance between bottom valve or strainer mesh and water bottom must be more than 30cm so as to avoid the impact on operation due to the suction of impurities into pump chamber. Moreover, the suction height of the pump should not exceed the suction requirement of the pump. (See Drawing A and B)



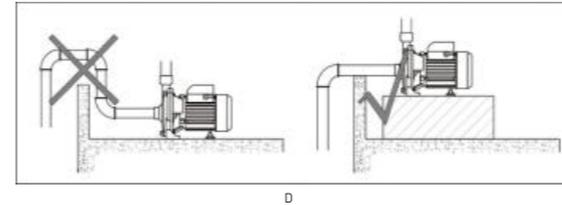
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B



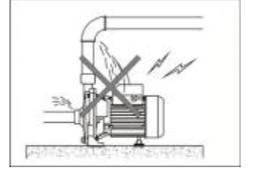
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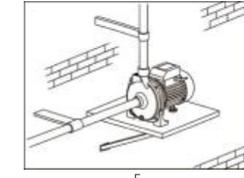
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5. Water inlet pipelines and their interfaces should be properly sealed to avoid air leakage . Water outlet pipes should be firmly connected to stop water from splashing on the motor parts and thus cause electric leakage . (See Drawing E) .



E



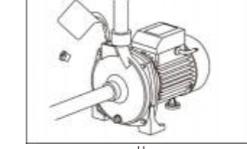
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6. Leakage protection device should be properly installed in the pump, and reliable grounding should be made available at the grounding mark of the pump and cables . (Except the pump equipped with the plug) . In addition, reliable grounding should also be arranged in the electric outlets that connected. (See Drawing F)

7. It is strictly prohibited to let the pump horizontally placed or submerged in water, and it is necessary to stop the electric pump from water splash, high flow water spray, and prevent the winding insulation from being damaged as a result of exposure to moisture . (See Drawing G)



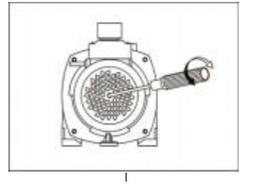
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H

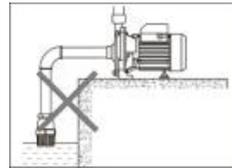
8. In the first use of the pump, it is necessary to enable the pump body to be fully injected with water, and tighten the water-injecting screw after the air is totally evacuated. (See Drawing H)

9. Please dial the rotating shaft with the straight screwdriver before starting in order to check the pump running is flexible or not, then start the motor to check the motor running is normal or not after the power is supplied, The clockwise rotation is correct when seeing from the fan end. (See Drawing I)



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J

10. During the operating process of the pump, it is necessary to check the decline of water level, the bottom valve and the end of water inlet pipe exposing to the water surface is prohibited. (See Drawing J)

11. If the user wants to let the pump changed as automatic control, it is necessary to install appropriate pressure control device at the water outlet.

12. When the pump is in operation, and the user wants to adjust the electric pump location or carry out the action of touching the pump, it is necessary to turn off the power at first so as to avoid the occurrence of accident.

MAINTENANCE

1. Regularly check the insulation resistance between the pump winding and the enclosure, making sure that the insulation resistance is not less than 2 MΩ. Otherwise, corresponding measures must be taken, and the requirement must be met for operation.

2. After 2000 hours of normal operation, maintenance of the pump should be conducted according to the following procedures:

Air tightness test: After dismantling of the pump for repair or seal replacement is conducted, it is necessary to carry out water (air) pressure test on the pump parts, the test pressure should be 0.2 MPa, which shall last 5 minutes, until no leakage or sweating is found.

Dismantle the pump: Check all wearing parts, such as rolling bearings, mechanical seal, impeller, check valve, bottom valve, etc ., replacements should be arranged if damages exist.

3. When the temperature is lower than 4℃, it is necessary to arrange the anti-freezing work so as to prevent the pump body from cracking as a result of frost.

4. If the pump is not to be used for a long time, it is necessary to dismantle the pipelines, drain off the water inside the pump (See Drawing K), clean the main components for anti-rust treatment, put them in the draughty place and store properly.



K

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TROUBLESHOOTING

TROUBLE	MAIN REASONS	SOLUTIONS
Difficult starts	<ol style="list-style-type: none"> 1. Power voltage too low. 2. Pump phase lost. 3. Impeller clogged. 4. Big loss of cable voltage . 5. Stator winding burnt. 	<ol style="list-style-type: none"> 1. Adjust voltage to 0.9-1.1 times of the rated value 2. Check the switch, cable and terminal 3. Adjust clogged part. 4. Select the proper cable . 5. Rewind and overhaul
Failed water priming	<ol style="list-style-type: none"> 1. Air exist in pump chamber. 2. Air leakage in inlet pipe . 3. Foot valve not opened or clogged seriously, large resistance exist inside pipe . 4. Air leakage seals inside pump. 	<ol style="list-style-type: none"> 1. Fill enough water to remove air. 2. Check joints and pipeline to ensure proper sealing 3. Check whether foot valve keep flexible, remove clogging matter, shorten the inlet pipe . 4. Adjust the submersible depth or replace airtight packing.
Less flow	<ol style="list-style-type: none"> 1. Pipe too long, head too high or pipe curve too much. 2. End valve, strainer, impeller Partly clogged. 3. Stator worn badly. 	<ol style="list-style-type: none"> 1. Shorten pipe, use within head range or change pipe curve . 2. Remove clogging matter. 3. Replace impeller.
Sudden stops	<ol style="list-style-type: none"> 1. Switch disconnected or fuse burnt. 2. Impeller clogged. 3. Stator winding burnt. 	<ol style="list-style-type: none"> 1. Check whether the head in use or power voltage conform to requirements and adjust accordingly. 2. Remove the foreign matter 3. Rewinding and overhaul.
Stator winding burnt	<ol style="list-style-type: none"> 1. Winding turn-to-turn short circuit or short circuit between phases due to mechanical seal leakage . 2. Impeller clogged. 3. Electric pump starts and stops frequently. 4. Electric pump runs in overload. 5. Power voltage is too low . 	<p>Remove the troubles, disassemble the winding and rewind according to the original technical requirements, soak and dry the insulated paint or send to the maintenance unit for repair.</p>

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Product Certificate

Inspector:
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Date of manufacture :



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Reserved for future use

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