SHYLIYU 3QGD-12V-200W

SHYLIYU 3QGD-12V-200W Solar Submersible Deep Well Pump Instruction Manual

Model: 3QGD-12V-200W | Brand: SHYLIYU

1. Product Overview

The SHYLIYU 3QGD-12V-200W is a 12V DC 200W solar-powered submersible deep well screw pump designed for efficient water transfer. Constructed with a durable stainless steel body and a 100% copper wire, oil-filled motor, this pump offers reliable performance for various applications. It features a 3-inch diameter, a maximum flow rate of 2300 liters per hour (10 GPM), and a maximum lift of 40 meters (131 feet) with a 1-inch outlet.

This pump is suitable for household water supply, agricultural irrigation, garden watering, camping car water supply, and drainage in low-lying flooded areas. Its simple structure facilitates easy installation and maintenance.



Image 1: SHYLIYU 3QGD-12V-200W Solar Submersible Deep Well Pump.

2. Safety Instructions

- **Submersion:** Always ensure the pump is completely submerged in water during operation. Running the pump dry (without water) will cause damage and is strictly prohibited.
- **Voltage Compatibility:** Verify that the voltage and frequency of your power source are compatible with the pump's specifications (12V DC) before connection.
- **Electrical Connections:** Observe correct wiring polarity. The red wire is for the positive (+) connection, and the black wire is for the negative (-) connection. Incorrect wiring can damage the pump or power source.
- **Installation Environment:** Install the pump in a stable and secure manner to prevent movement or damage.
- **Maintenance:** Disconnect power before performing any maintenance or inspection on the pump.
- **Children and Pets:** Keep children and pets away from the pump and its operating area.

3. Components

The SHYLIYU 3QGD-12V-200W pump consists of several key components:



Image 2: Labeled diagram of the pump's main components.

1. **Cable:** Electrical cable for power connection.
2. **1" Water Outlet:** Threaded connection for water discharge.
3. **Stainless Steel Body:** The main housing of the pump, providing durability and corrosion resistance.
4. **Water Inlet:** Openings for water entry into the pump.
5. **Motor:** The internal electric motor that drives the screw mechanism.
6. **Base:** The bottom part of the pump, often with mounting points or feet.

4. Setup and Installation

Follow these steps for proper installation of your solar submersible well pump:

1. **Prepare the Well:** Ensure the well casing is clear of debris and large obstructions. The pump requires a minimum 3-inch diameter well.
2. **Attach Discharge Pipe:** Connect a 1-inch discharge pipe to the pump's water outlet. Use appropriate thread sealant to ensure a watertight connection.
3. **Secure the Pump:** Attach a safety rope or cable to the designated sling holes on the pump. This will be used to lower and retrieve the pump from the well. Do not use the electrical cable to support the pump's weight.
4. **Lower the Pump:** Carefully lower the pump into the well, ensuring it remains vertical. The pump must be fully submerged in water. Avoid letting the pump rest on the bottom of the well, as this can lead to sediment intake.
5. **Electrical Connection:** Connect the pump's electrical cable to your 12V DC power source (e.g., solar panel system with charge controller and battery). Ensure the red wire connects to the positive (+) terminal and the black wire to the negative (-) terminal. Secure all connections to prevent water ingress.
6. **System Integration:** If using a solar panel and controller, ensure they are correctly installed and configured according to their respective manuals to provide stable 12V DC power to the pump.



Image 3: Typical setup for a solar-powered deep well pump system.

5. Operating Instructions

Once the pump is correctly installed and connected to a stable 12V DC power source, operation is straightforward:

1. **Verify Submersion:** Confirm that the pump is fully submerged in water before applying power.
2. **Apply Power:** Activate the power supply to the pump. If using a solar system, ensure sufficient sunlight is available or the battery is charged.
3. **Monitor Water Flow:** Observe the water flow from the discharge pipe. It may take a few moments for water to reach the surface, especially in deep wells.
4. **Continuous Operation:** The pump is designed for continuous operation as long as it is submerged and receiving adequate power.
5. **Shut Down:** To stop the pump, simply disconnect the power supply.

Applications: This pump is versatile and can be used for:

- Home and village water supply
- Agricultural irrigation and garden watering
- Camping car water supply
- Filling ponds, pools, and water tanks
- Aquaculture and prairie ranch water needs
- Drainage in low-lying flooded areas

6. Maintenance

Regular maintenance ensures the longevity and optimal performance of your pump:

- **Periodic Inspection:** Periodically inspect the pump and electrical cable for any signs of damage, wear, or corrosion.
- **Clean Inlet Screen:** If the pump's performance decreases, it may be due to a clogged water inlet screen. Carefully retrieve the pump and clean any debris from the inlet openings.
- **Check Connections:** Ensure all electrical connections remain tight and free from corrosion.
- **Storage:** If the pump will not be used for an extended period, especially in freezing conditions, remove it from the well, drain all water, clean it thoroughly, and store it in a dry, protected area.

7. Troubleshooting

Refer to the following table for common issues and their potential solutions:

Problem	Possible Cause	Solution
Pump does not start or run.	No power; incorrect wiring; motor fault.	Check power supply and connections. Ensure red is positive, black is negative. Verify solar panel output or battery charge. If problem persists, contact support.
Low or no water flow.	Pump not fully submerged; clogged inlet; discharge pipe blockage; insufficient power.	Ensure pump is fully submerged. Retrieve and clean inlet screen. Check discharge pipe for kinks or blockages. Verify adequate power supply.
Pump runs intermittently.	Fluctuating power supply; low water level in well.	Check power source stability (e.g., solar panel exposure, battery health). Monitor well water level.
Excessive noise or vibration.	Pump not properly suspended; internal damage; sediment intake.	Ensure pump is suspended freely and not touching well walls. Retrieve and inspect for damage or sediment.

8. Specifications

Specification	Value

Specification	Value
Brand	SHYLIYU
Model Number	3QGD-12V-200W
Voltage	12 Volts (DC)
Power	200W
Maximum Flow Rate	2300 Liters Per Hour (10 GPM)
Maximum Lifting Height	40 Meters (131 Feet)
Outlet Size	1 inch (25mm)
Pump Diameter	3 inches (80mm)
Material	Stainless Steel
Product Dimensions (L x W x H)	6.1" x 3.15" x 15.75" (40 x 8 x 15.5 cm)
Item Weight	2.65 Kilograms

9. Product Video

Watch this video for a visual overview of the SHYLIYU DC Submersible Pumps, showcasing different models and their features.

Your browser does not support the video tag.

Video 1: Overview of SHYLIYU DC Submersible Pumps.

10. Warranty and Support

For warranty information, technical support, or service inquiries, please refer to the contact details provided with your purchase documentation or visit the official SHYLIYU website. Keep your purchase receipt as proof of purchase for any warranty claims.

Ask a question about this manual

Ask about setup, troubleshooting, compatibility, parts, safety, or missing instructions. Manuals+ will review the question and use this page's manual context to help answer it.

Name

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After a successful submission, we securely hash the supplied account or form email before sending it to Microsoft Advertising for conversion attribution. Privacy details.

Question

Example: How do I reset this device or fix this error?

Details

Model number, symptoms, what you tried, or the section of the manual you are using.

Submit question