

uxcell JCF63R

uxcell DC24V 10W 6RPM Reversible Worm Gear Motor JCF63R Instruction Manual

Model: JCF63R



1. INTRODUCTION

This manual provides essential information for the safe and efficient operation, installation, and maintenance of your uxcell DC24V 10W 6RPM Reversible Worm Gear Motor. Please read this manual thoroughly before using the product and retain it for future reference.

The uxcell JCF63R is a high-torque, speed-reducing electric gearbox motor designed for various heavy-load applications requiring precise and reversible motion. Its worm gear mechanism provides self-locking capabilities and efficient power transmission.

2. SAFETY INFORMATION

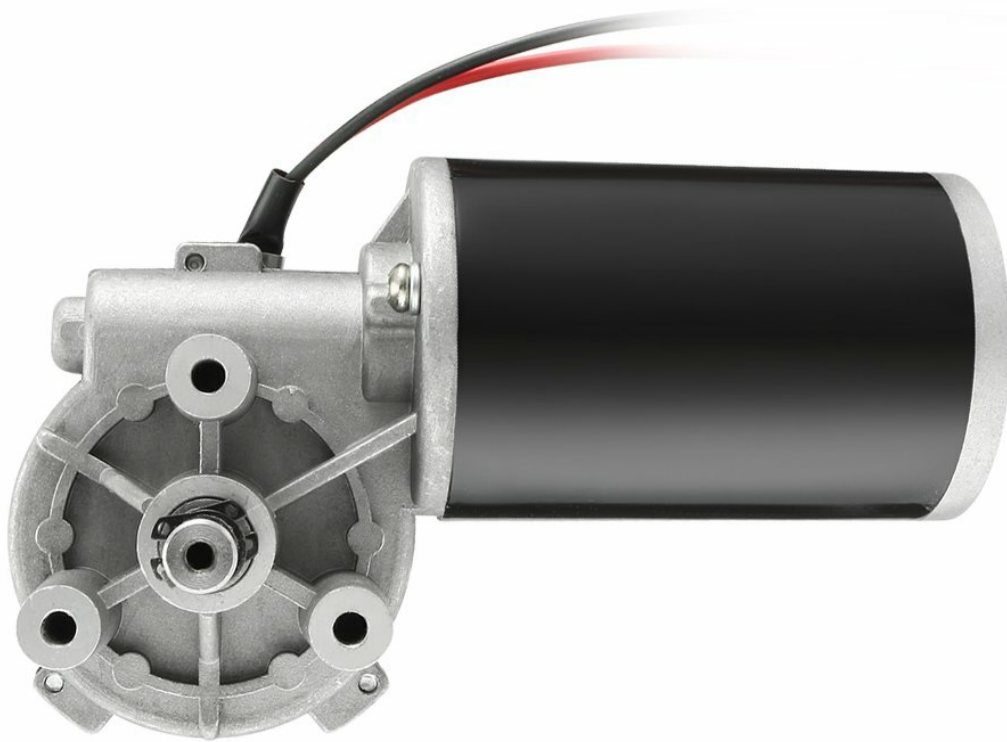
Observe the following safety precautions to prevent injury and damage to the motor:

- **Electrical Safety:** Ensure the power supply matches the motor's rated voltage (DC 24V). Disconnect power before making any connections or performing maintenance.
- **Overheating:** The motor's temperature will rise during operation. Avoid touching the motor surface with bare hands during or immediately after use to prevent burns.
- **Proper Mounting:** Securely mount the motor using the designated M6 screw holes to prevent movement or vibration during operation.
- **Load Limits:** Do not exceed the rated torque (2N.M) or power (10W) to prevent damage to the motor or gearbox.
- **Environmental Conditions:** Operate the motor in a dry environment, free from excessive dust, moisture, or corrosive substances.

3. PRODUCT OVERVIEW

The uxcell JCF63R motor features a compact cylindrical design with an integrated worm gear reducer, providing

high torque at low speeds. It is equipped with a 10mm diameter output shaft and pre-attached power cables.



63 Motor-Right Hand Worm Gear

Figure 3.1: Top-down view of the uxcell DC24V Worm Gear Motor, showing the motor body and gearbox assembly.



Figure 3.2: Angled view of the motor, highlighting the gearbox and electrical connections.



Figure 3.3: Front view with key dimensions for mounting and integration.

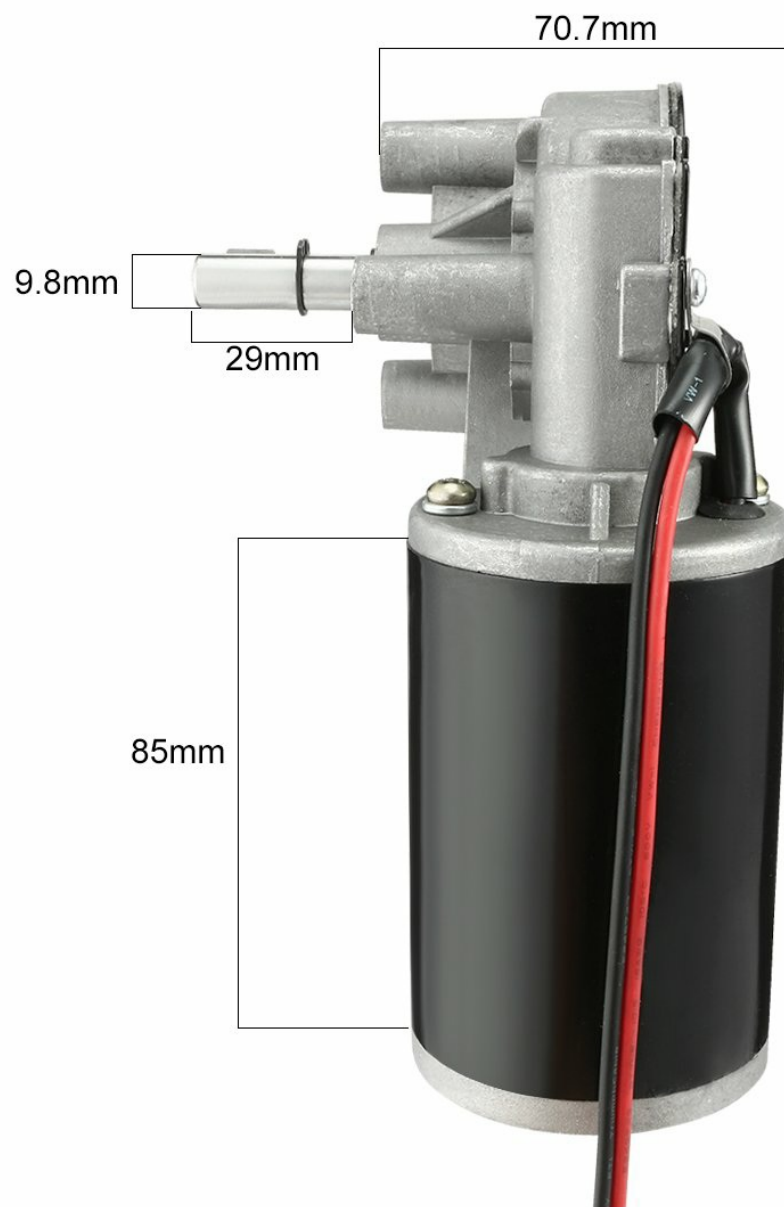


Figure 3.4: Side view with additional dimensions, including shaft length and gearbox depth.



Figure 3.5: Close-up of the 10mm output shaft, showing the keyway and threaded end for securing attachments.



Figure 3.6: Rear view of the motor, showing the end cap and mounting points.

4. SPECIFICATIONS

Parameter	Value
Rated Voltage	DC 24V
Rated Speed	6 RPM
Rated Power	10 Watts
Rated Torque	2 N.M
Motor Size (Diameter x Length)	63mm x 100mm (approx.)
Shaft Diameter	10mm
Cable Length	30cm
Mounting	M6 screw holes

Parameter	Value
Material	Metal
Model	JCF63R
Certifications	CE, RoHS

5. SETUP

5.1. Unpacking

Carefully remove the motor from its packaging. Inspect for any visible damage. The package content includes:

- 1 x Electric Gear Motor (JCF63R)

5.2. Mounting

1. Identify a stable and secure mounting surface capable of supporting the motor's weight and operational forces.
2. Align the motor's M6 screw holes with corresponding holes on your mounting surface.
3. Secure the motor using M6 screws (not included) appropriate for your application. Ensure all screws are tightened firmly to prevent vibration and misalignment.

5.3. Electrical Connection

1. Connect the motor's red wire to the positive (+) terminal of your DC 24V power supply.
2. Connect the motor's black wire to the negative (-) terminal of your DC 24V power supply.
3. To reverse the motor's direction, reverse the polarity of the power supply (connect red to negative, black to positive).
4. Ensure all connections are secure and insulated to prevent short circuits.

5.4. Attaching Load to Output Shaft

The motor features a 10mm diameter output shaft with a threaded end. Attach your load (e.g., pulley, gear, coupling) to this shaft. Use a 5mm tightening nut (not included) to secure the attachment firmly. Ensure the load is balanced and aligned to prevent excessive stress on the shaft and gearbox.

6. OPERATING INSTRUCTIONS

Once properly installed and wired, the motor is ready for operation.

1. Apply DC 24V power to the motor. The motor will begin to rotate at its rated speed of 6 RPM.
2. Observe the direction of rotation. If reversal is needed, disconnect power and reverse the polarity of the power supply as described in Section 5.3.
3. Monitor the motor during initial operation to ensure smooth performance and no unusual noises or excessive heat.

Typical Applications: This motor is suitable for applications such as garage doors, label printers, auto shutters, automatic stabilized voltage supplies, grills, ovens, cleaning machines, garbage disposers, household appliances, slot machinery, money detectors, automatic actuators, coin refund devices, and peristaltic pumps.

7. MAINTENANCE

Regular maintenance helps ensure the longevity and reliable operation of your motor.

- **Cleaning:** Keep the motor free from dust, dirt, and debris. Use a soft, dry cloth to wipe the exterior. Avoid using solvents or harsh chemicals.
- **Inspection:** Periodically inspect the motor for any signs of wear, loose connections, or damage to the casing or wires. Check the output shaft for excessive play.
- **Lubrication:** The gearbox is typically pre-lubricated for its lifespan. If the motor is subjected to extreme conditions or prolonged use, consult a motor specialist for potential re-lubrication requirements.
- **Temperature Monitoring:** Ensure adequate ventilation around the motor, especially during continuous operation, to prevent overheating.

8. TROUBLESHOOTING

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

Problem	Possible Cause	Solution
Motor does not run	No power supply Incorrect wiring Overload Internal damage	Check power source and connections Verify correct polarity (DC 24V) Reduce load Contact support
Motor runs slowly or with reduced torque	Insufficient voltage Excessive load Friction in load mechanism	Check power supply voltage Reduce load to within specifications Inspect and lubricate connected mechanisms
Motor makes unusual noise	Misalignment of load Internal gear wear Loose mounting	Realign load Reduce load, consider replacement Tighten mounting screws
Motor overheats	Continuous heavy load Insufficient ventilation Internal friction	Reduce operating time or load Ensure proper airflow around motor Contact support if issue persists
Gearbox failure (e.g., stripped gears)	Excessive shock load Over-torque beyond specifications Material fatigue	Avoid sudden impacts or jamming Ensure load is within 2N.M torque limit Replacement may be necessary

9. WARRANTY AND SUPPORT

For warranty information, technical support, or service inquiries, please contact uxcell customer service through their official channels. Keep your purchase receipt or order details handy when contacting support.

You can visit the official uxcell store for more product information and contact options:[uxcell Store on Amazon](#)



