

Goulds CB10412

Goulds CentriPro CB10412 1 HP 230V Submersible Well Pump Control Box Instruction Manual

Model: CB10412

1. INTRODUCTION

This manual provides essential information for the safe and efficient installation, operation, and maintenance of the Goulds CentriPro CB10412 1 HP 230V Control Box. This control box is designed for use with 3-wire, single-phase, 230-volt submersible well pump motors. Please read this manual thoroughly before attempting any installation or operation.

2. SAFETY INFORMATION

WARNING: Electrical Shock Hazard. Installation and servicing of this equipment should only be performed by qualified personnel. Disconnect all power before servicing.

- Always ensure the main power supply to the pump system is disconnected before performing any work on the control box or pump.
- Follow all local and national electrical codes.
- Ensure proper grounding of the control box and pump motor.
- Do not operate the control box if it is damaged or if any wiring is exposed.
- Keep children and unauthorized personnel away from the pump system.

3. PACKAGE CONTENTS

Verify that all components are present and undamaged upon unpacking.

- One (1) Goulds CentriPro CB10412 1 HP 230V Control Box.



This image displays the product packaging for the Goulds CentriPro CB10412 control box. The label clearly indicates 'CB10412', '1HP, 1PH, 60HZ, 230V CONTROL BOX', and 'QTY 1'. It also shows the manufacturer as CENTRIPRO, ITT Industries, Auburn, NY 13021, and a UPC barcode.

4. SETUP AND INSTALLATION

Installation of the control box requires electrical expertise. It is strongly recommended that a qualified electrician or pump technician perform the installation.

4.1 Mounting the Control Box

- Mount the control box in a clean, dry, and easily accessible location, protected from weather and direct sunlight.
- Ensure adequate ventilation around the box to prevent overheating.
- Use appropriate fasteners to secure the box firmly to a wall or support structure.

4.2 Wiring Connections

IMPORTANT: Ensure power is OFF at the main breaker before making any connections.

1. Open the control box cover.
2. Identify the terminals for incoming power, pump motor leads (L1, L2, L3 for 3-wire motors), and ground.
3. Connect the incoming 230V single-phase power supply to the designated terminals (typically L1 and L2).
4. Connect the three wires from the submersible pump motor to the corresponding terminals in the control box. Refer to the wiring diagram inside the control box cover for exact connections.
5. Connect the system ground wire to the ground terminal within the control box.

6. Ensure all connections are tight and secure.
7. Close the control box cover securely.

5. OPERATING INSTRUCTIONS

The CentriPro CB10412 control box is designed for automatic operation in conjunction with a pressure switch (not included) in a water well system.

5.1 Initial Startup

1. After ensuring all wiring is correct and secure, restore power to the system at the main breaker.
2. The pump should start when the pressure in the system drops below the cut-in pressure setting of the pressure switch.
3. Observe the pump's operation for any unusual noises or vibrations.
4. Allow the system to cycle a few times to ensure proper function and pressure regulation.

5.2 Normal Operation

Once installed and configured, the control box will automatically manage the power supply to the submersible pump based on the signals from the pressure switch, maintaining the desired water pressure in the system.

6. MAINTENANCE

Regular inspection and basic maintenance can help ensure the longevity and reliable operation of your control box.

- **Annual Inspection:** At least once a year, with power disconnected, open the control box and visually inspect for any signs of corrosion, loose wiring, or insect nests.
- **Cleanliness:** Keep the exterior of the control box clean and free from dust and debris.
- **Fuse Check:** If the pump fails to start, and other troubleshooting steps have been exhausted, check the fuses inside the control box (if applicable) for continuity. Replace with fuses of the exact same type and rating.
- **Ventilation:** Ensure that the area around the control box remains clear to allow for proper heat dissipation.

7. TROUBLESHOOTING

Before attempting any troubleshooting, ensure the main power supply to the pump system is disconnected.

Problem	Possible Cause	Solution
Pump does not start	No power to control box Blown fuse Faulty pressure switch Motor issue	Check main breaker Replace fuse (same type/rating) Inspect/replace pressure switch Consult a pump technician
Pump runs continuously	Leaking plumbing Faulty pressure switch Low water level in well	Check for leaks Inspect/replace pressure switch Consult a well professional

Problem	Possible Cause	Solution
Low water pressure	Pump not delivering full capacity Partially clogged lines/filter Pressure switch setting too low	Consult a pump technician Inspect and clean lines/filter Adjust pressure switch setting

If these steps do not resolve the issue, contact a qualified pump technician for further assistance.

8. SPECIFICATIONS

Feature	Specification
Brand	Goulds
Model Number	CB10412
Horsepower (HP)	1 HP
Voltage	230 Volts
Phase	Single Phase (1PH)
Frequency	60 Hz
Maximum Amps	9.8 A
Material	Stainless Steel
Power Source	AC/DC
Item Weight	2.61 pounds (1.19 Kilograms)
Package Dimensions	8.86 x 8.82 x 3.23 inches
UPC	755717497222

9. WARRANTY AND SUPPORT

For information regarding product warranty, please refer to the documentation provided with your purchase or visit the official Goulds Pumps website. For technical support or service inquiries, please contact an authorized Goulds Pumps dealer or service center.