Grundfos 98124695

Grundfos MAGNA1 65-120 F Circulator Pump Instruction Manual

Model: 98124695

1. Introduction

This manual provides essential information for the safe and efficient operation of your Grundfos MAGNA1 65-120 F circulator pump. Please read these instructions carefully before installation, operation, or maintenance to ensure proper function and longevity of the product. Adherence to these guidelines will help prevent damage and ensure optimal performance.

2. Safety Information

Always observe local regulations and safety standards during installation and operation. Disconnect power before performing any service or maintenance. Ensure proper grounding to prevent electrical shock. The pump operates under pressure; ensure all connections are secure to prevent leaks. Only qualified personnel should perform electrical connections and complex installations.

- **Electrical Safety:** Ensure the power supply matches the pump's requirements (115V, 1-Phase, 60 Hz). All wiring must comply with local electrical codes.
- **Pressure Safety:** The maximum operating pressure is 174 PSI. Do not exceed this limit.
- **Temperature:** Avoid contact with hot surfaces during operation.
- **Handling:** The pump is heavy. Use appropriate lifting techniques and equipment during installation.

3. Product Overview

3.1 Product Description

The Grundfos MAGNA1 65-120 F circulator pump is engineered for simplicity and efficiency, making it suitable for basic heating and cooling applications. Compliant with EuP 2015 energy efficiency regulations, this pump delivers significant electricity savings while offering an intuitive, user-friendly interface and a maintenance-free design. Its canned-rotor construction ensures no upkeep is required, enhancing reliability for systems like mixing loops, heating and air-conditioning surfaces, ground-source heat pumps, and smaller chiller applications. This single-phase pump integrates the controller and operating panel into the control box for streamlined operation.

3.2 Key Features

- **Energy-Efficient Performance:** Meets EuP 2015 regulations for substantial electricity savings, driven by a 4-pole synchronous permanent-magnet motor (PM motor) that surpasses conventional motor efficiency.
- **Maintenance-Free Operation:** Canned-rotor design eliminates maintenance needs, paired with a robust cast-iron pump housing.
- **Versatile System Compatibility:** Supports heating and cooling applications, including mixing loops, heating/air-conditioning surfaces, ground-source heat pumps, and smaller chillers, with a maximum operating pressure of 174 PSI.
- **Intuitive Control:** Features an integrated controller and operating panel in the control box for user-friendly operation.
- **Durable Construction:** Incorporates a carbon-fiber-reinforced rotor can, stainless steel bearing plate and cladding, and an aluminum stator housing for enhanced durability.
- **Precise Speed Regulation:** Equipped with an integrated frequency converter for adjustable pump speed, operating at 60 Hz and 1 x 115 V rated voltage.
- **Flexible Installation:** Designed with a GF53/65 pipe connection for seamless integration into various systems, ensuring reliable performance across applications.

3.3 Product Image

Image: Grundfos MAGNA1 65-120 F Circulator Pump, showing its black and red casing, integrated control panel, and cast-iron pump body with flange connections.

4. Setup and Installation

Proper installation is crucial for the pump's performance and longevity. Refer to the detailed installation guide provided with the product for specific instructions and diagrams. Below are general steps:

1. **Mounting:** Securely mount the pump in the designated location, ensuring it is level and supported.
2. **Pipe Connection:** Connect the pump to the piping system using the GF53/65 pipe connections. Ensure all connections are watertight and properly sealed.
3. **Electrical Connection:** Connect the pump to a 115V, 1-Phase, 60 Hz power supply. Ensure proper grounding and follow all local electrical codes. The integrated controller and operating panel are

located within the control box.

4. **System Filling and Venting:** Fill the system with the appropriate fluid and thoroughly vent any air from the pump and piping to prevent cavitation.

5. Operating Instructions

The Grundfos MAGNA1 features an intuitive integrated controller for ease of use. Once installed and powered, the pump will typically begin operation according to its factory settings or previously configured parameters.

- **Power On:** Apply power to the pump. The integrated display will illuminate, indicating operational status.
- **Mode Selection:** Use the control panel to select the desired operating mode or adjust pump speed. The integrated frequency converter allows for precise speed regulation to match system requirements.
- **Monitoring:** Observe the display for operational feedback, including power consumption and status indicators.
- **Adjustments:** Make minor adjustments as needed to optimize flow and pressure for your specific heating or cooling application.

6. Maintenance

The Grundfos MAGNA1 65-120 F circulator pump is designed for maintenance-free operation due to its canned-rotor construction. This eliminates the need for traditional pump maintenance such as shaft seals or lubrication.

- **Periodic Checks:** Periodically inspect the pump and piping for any signs of leaks, unusual noises, or vibrations.
- **Cleanliness:** Keep the pump's exterior clean and free from debris to ensure proper cooling of the motor.
- **System Fluid Quality:** Ensure the circulating fluid is clean and free of contaminants that could affect pump performance or system components.

7. Troubleshooting

If you encounter issues with your pump, consider the following common troubleshooting steps:

- **Pump Not Running:** Check power supply, circuit breaker, and electrical connections. Ensure the pump is receiving the correct voltage.
- **No Flow or Low Flow:** Verify that isolation valves are fully open. Check for air in the system and vent if necessary. Inspect for blockages in the piping or pump.
- **Unusual Noise:** Air in the system is a common cause; vent thoroughly. Check for cavitation (gurgling sound) which may indicate insufficient system pressure or flow. Ensure the pump is securely mounted.
- **Leaks:** Inspect all pipe connections and seals. Tighten or replace as needed.

For persistent issues, consult a qualified technician or contact Grundfos customer support.

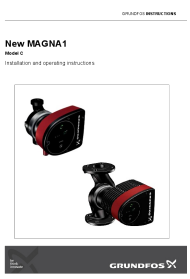
8. Technical Specifications

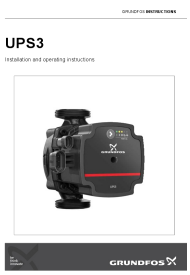
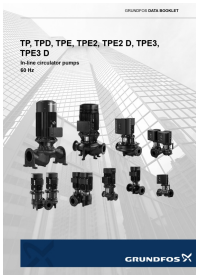
Specification	Value
Manufacturer	Grundfos
Part Number	98124695
Product Dimensions	16 x 10.48 x 13.4 inches
Item Model Number	98124695
Color	Black
Included Components	Circulator Pump
ASIN	B00LBHPI3A
Date First Available	June 26, 2014

9. Warranty and Support

For detailed warranty information, please refer to the documentation provided with your purchase or visit the official Grundfos website. In case of technical issues or questions not covered in this manual, please contact Grundfos customer support or an authorized service partner. Ensure you have your model number (98124695) and purchase details available when seeking support.

Related Documents - 98124695

	Grundfos MAGNA1 Model C: Installation and Operating Manual Comprehensive installation and operating instructions for the Grundfos MAGNA1 Model C circulator pump, covering setup, operation, technical data, and troubleshooting.
	Grundfos Pump Replacement Guide 2016/17: Domestic, Hot Water, and Light Commercial Circulators This guide from Grundfos provides comprehensive information for replacing domestic, hot water, and light commercial circulator pumps. It lists compatible Grundfos models, product codes, and fitting details for various pump types and manufacturers.

	[Grundfos UPS3 Circulator Pump Installation and Operating Instructions] A comprehensive guide for the installation and operation of the Grundfos UPS3 circulator pump. This document details safety precautions, installation procedures, control functions, technical specifications, performance curves, and troubleshooting for the UPS3 model.
	[Grundfos ALPHA 15-58 Installation and Operating Instructions] Comprehensive installation and operating manual for the Grundfos ALPHA 15-58 high-efficiency circulator pump. Learn about setup, control functions, troubleshooting, and technical specifications.
	[Grundfos ALPHA2 L Model C Circulator Pump: Installation and Operating Instructions] Comprehensive instructions for the Grundfos ALPHA2 L Model C circulator pump, covering installation, operation, safety, and technical specifications. Learn how to install and use your Grundfos pump efficiently.
	[Grundfos TP, TPD, TPE, TPE2, TPE2 D, TPE3, TPE3 D Series In-line Circulator Pumps Data Booklet] Comprehensive data booklet for Grundfos TP, TPD, TPE, TPE2, TPE2 D, TPE3, TPE3 D in-line circulator pumps. Details performance, applications, installation, controls, and technical specifications for HVAC and industrial fluid handling.