

Liberty Pumps SXL24=3

Liberty Pumps SXL24=3 Simplex Pump Control with Alarm Instruction Manual

1. INTRODUCTION

1.1 Product Overview

The Liberty Pumps Model SXL24=3 is an SX-Series Simplex Pump Control with Alarm, designed to manage the operation of a single pump in various applications. This unit provides reliable control and includes an alarm feature to alert users to specific operational conditions, ensuring efficient and safe pump performance. It is engineered for durability and ease of integration into existing systems.

1.2 Safety Information

WARNING: Before installation, operation, or maintenance, ensure all power to the pump control system is disconnected at the main electrical panel. Failure to do so can result in serious injury or death from electrical shock.

- Installation and servicing must be performed by qualified personnel in accordance with all local electrical and plumbing codes.
- Do not operate the pump control with damaged wiring or components.
- Ensure the control panel is properly grounded to prevent electrical hazards.
- Keep children and unauthorized personnel away from the pump control system.
- Wear appropriate personal protective equipment (PPE) during installation and maintenance.

2. SETUP AND INSTALLATION

2.1 Unpacking and Inspection

Carefully remove the SXL24=3 control panel from its packaging. Inspect the unit for any visible damage that may have occurred during shipping. Report any damage to the carrier and supplier immediately.

2.2 Mounting the Control Panel

Mount the control panel in a dry, accessible location, away from direct sunlight and excessive vibration. Use appropriate fasteners to secure the panel to a sturdy surface. Ensure adequate clearance around the panel for ventilation and future servicing.

2.3 Electrical Connections

All electrical wiring must comply with national and local electrical codes. The SXL24=3 operates on 240 Volts and has a current rating of 14.9 Amps. Connect the incoming power supply, pump motor, and float switches to the designated screw terminals inside the control panel. Refer to the wiring diagram located inside the control panel door for specific connections. Ensure all connections are tight and secure.

2.4 Float Switch Installation

Install the float switches at the appropriate levels within the tank or basin to control pump operation and activate the alarm. Typically, one float controls the pump ON level, another controls the pump OFF level, and a third float activates the high-level alarm. Ensure floats are free to move and will not interfere with each other or other tank components.



This image displays two models of the Liberty Pumps SX-Series Simplex Pump Control with Alarm. The units feature a control panel enclosure and multiple float switches extending from the bottom, designed for monitoring and controlling pump operations.

3. OPERATING INSTRUCTIONS

3.1 Initial Power-Up

After completing all electrical connections and verifying their correctness, restore power to the control panel. The system will perform a self-check. Observe the indicator lights on the panel for normal operation.

3.2 Pump Operation

The SXL24=3 automatically controls the pump based on the liquid levels detected by the float switches. When the liquid level rises to the 'Pump ON' float, the pump will activate. When the liquid level drops to the 'Pump OFF' float, the pump will deactivate.

3.3 Alarm Function

If the liquid level rises above the 'High Level Alarm' float, the integrated alarm will activate, typically indicated by an audible signal and a visual light. This signifies a potential issue such as pump failure or an unusually high inflow. Silence the audible alarm by pressing the designated button on the control panel, but investigate the cause of the alarm immediately.

4. MAINTENANCE

4.1 Regular Inspections

Periodically inspect the control panel and float switches for any signs of wear, corrosion, or damage. Ensure all electrical connections remain tight. Check that the float switches move freely and are not obstructed by debris.

4.2 Cleaning

Keep the exterior of the control panel clean and free of dust and debris. Use a soft, dry cloth for cleaning. Do not use abrasive cleaners or solvents that could damage the enclosure.

4.3 Float Switch Testing

Periodically test the float switches by manually raising and lowering them (with power disconnected if accessing inside the tank) to ensure they activate and deactivate the pump and alarm correctly. This should be done by qualified personnel.

5. TROUBLESHOOTING

Before attempting any troubleshooting, ensure power is disconnected. If you are unsure about any procedure, contact a qualified technician.


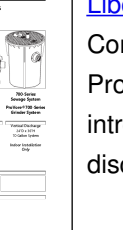
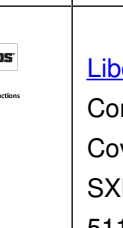


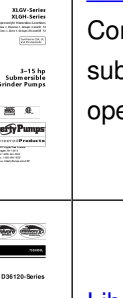
- **Pump Not Running:** Check power supply, circuit breakers, and float switch positions. Verify pump motor is operational.
- **Pump Running Continuously:** Inspect 'Pump OFF' float switch for obstruction or malfunction. Check for wiring errors.
- **Alarm Activating Frequently:** Investigate the cause of high liquid levels (e.g., pump failure, clogged discharge line, excessive inflow). Check 'High Level Alarm' float switch for proper operation.
- **No Power to Panel:** Check main circuit breaker and incoming power connections.

6. SPECIFICATIONS

Feature	Specification
Model	SXL24=3
Brand	Liberty Pumps
Voltage	240 Volts
Current Rating	14.9 Amps
Connector Type	Screw
Item Weight	13 Pounds
Manufacturer	Liberty
ASIN	B009PRS2IG
UPC	671812112009
Date First Available	October 12, 2012

7. WARRANTY AND SUPPORT

Specific warranty details for the Liberty Pumps SXL24=3 are not provided in this document. For information regarding product warranty, technical support, or replacement parts, please contact Liberty Pumps directly through their official website or customer service channels. Ensure you have your product model number (SXL24=3) and purchase date available when contacting support.

 <p>SX-SERIES Simplex Pump Controls</p> <p>Detailed specifications and features for Liberty Pumps' SX-SERIES Simplex Pump Controls, designed for reliable single-pump control in residential and commercial applications. Includes NEMA 1 and NEMA 4X enclosure options, model specifications, and switch details.</p>	<p>SX-SERIES Simplex Pump Controls - Liberty Pumps</p> <p>Detailed specifications and features for Liberty Pumps' SX-SERIES Simplex Pump Controls, designed for reliable single-pump control in residential and commercial applications. Includes NEMA 1 and NEMA 4X enclosure options, model specifications, and switch details.</p>
 <p>Liberty Pumps Simplex Sewage/Grinder Systems</p> <p>Comprehensive installation manual for Liberty Pumps Simplex Sewage/Grinder Systems, including Pro370, Pro380, ProVore 380, and 700-Series models. Covers safety precautions, system introduction, basin dimensions, cover descriptions, installation procedures, electrical connections, discharge, venting, float switch control, and warranty information.</p>	<p>Liberty Pumps Simplex Sewage/Grinder Systems Installation Manual</p> <p>Comprehensive installation manual for Liberty Pumps Simplex Sewage/Grinder Systems, including Pro370, Pro380, ProVore 380, and 700-Series models. Covers safety precautions, system introduction, basin dimensions, cover descriptions, installation procedures, electrical connections, discharge, venting, float switch control, and warranty information.</p>
 <p>Liberty Pumps Control Panel Installation Instructions</p> <p>Comprehensive guide for Liberty Pumps Simplex control panels (Single Phase and Three Phase). Covers installation, operation, troubleshooting, and warranty information for models SXL21=3, SXL24=3, SXH21=3, SXH24=3, SX34=3-131, SX34=3-141, SX34=3-171, SX34=3-191, SX34=3-511, SX54=3-121.</p>	<p>Liberty Pumps Control Panel Installation, Operation, and Troubleshooting Manual</p> <p>Comprehensive guide for Liberty Pumps Simplex control panels (Single Phase and Three Phase). Covers installation, operation, troubleshooting, and warranty information for models SXL21=3, SXL24=3, SXH21=3, SXH24=3, SX34=3-131, SX34=3-141, SX34=3-171, SX34=3-191, SX34=3-511, SX54=3-121.</p>
 <p>ProVore® 380 Simplex Grinder System</p> <p>Detailed information on the Liberty Pumps ProVore® 380 Simplex Grinder System, including its 1 hp grinder pump features, technical specifications, dimensional data, performance curve, optional accessories like the access riser, and alarm systems for residential sewage applications.</p>	<p>Liberty Pumps ProVore® 380 Simplex Grinder System: Features, Specifications, and Accessories</p> <p>Detailed information on the Liberty Pumps ProVore® 380 Simplex Grinder System, including its 1 hp grinder pump features, technical specifications, dimensional data, performance curve, optional accessories like the access riser, and alarm systems for residential sewage applications.</p>
 <p>Liberty Pumps LGV, LGH, XLGV, XLGH Series</p> <p>Comprehensive installation manual for Liberty Pumps LGV, LGH, XLGV, and XLGH Series submersible grinder pumps. Covers safety precautions, general information, wiring, installation, operation, maintenance, and troubleshooting for both ordinary and hazardous locations.</p>	<p>Liberty Pumps LGV, LGH, XLGV, XLGH Series Installation Manual</p> <p>Comprehensive installation manual for Liberty Pumps LGV, LGH, XLGV, and XLGH Series submersible grinder pumps. Covers safety precautions, general information, wiring, installation, operation, maintenance, and troubleshooting for both ordinary and hazardous locations.</p>
 <p>Liberty Pumps Duplex Grinder Systems</p> <p>Comprehensive installation manual for Liberty Pumps D3648, D3660, D3672, D3684, D3696, and D36120-Series Duplex Grinder Systems, covering safety, installation, specifications, and warranty.</p>	<p>Liberty Pumps Duplex Grinder Systems Installation Manual</p> <p>Comprehensive installation manual for Liberty Pumps D3648, D3660, D3672, D3684, D3696, and D36120-Series Duplex Grinder Systems, covering safety, installation, specifications, and warranty.</p>

