LEFOO LF10-1H

LEFOO Air Compressor Pressure Switch Control User Manual

Model: LF10-1H

Introduction

This manual provides essential information for the safe and effective installation, operation, and maintenance of your LEFOO Air Compressor Pressure Switch Control. Please read this manual thoroughly before use and retain it for future reference. This pressure switch is designed to regulate the pressure in air compressor systems, automatically turning the compressor on and off within a specified pressure range.

Safety Information

WARNING: Risk of Electric Shock and Injury.

- Always disconnect power to the compressor before installing, servicing, or performing any maintenance on the pressure switch.
- Installation and wiring must be performed by a qualified electrician in accordance with all local and national electrical codes.
- Ensure the voltage rating of the switch (230 Volts) matches your power supply.
- Do not exceed the maximum operating pressure of 150 PSI.
- Wear appropriate personal protective equipment (PPE) during installation and maintenance.
- This device operates under high pressure. Ensure all connections are secure and leak-free.

Product Overview

The LEFOO LF10-1H pressure switch is a critical component for automatic air compressor operation. It features a durable housing, an unloader valve, and an on/off lever for manual control.

Figure 1: LEFOO Air Compressor Pressure Switch Control (Model LF10-1H). This image shows the black housing of the pressure switch, with a brass fitting on the left side for air connection and a red-tipped on/off lever on the right side. The LEFOO brand name and "PRESSURE CONTROL" text are visible on the front surface.

Key Components:

- **Pressure Switch Body:** Houses the internal electrical contacts and pressure sensing diaphragm.
- **Unloader Valve:** Releases air from the compressor head when the motor stops, allowing for easier restart.
- **On/Off Lever:** Manual control to turn the compressor on or off.
- **Air Inlet Port:** Single female NPT connection for air pressure sensing.

Specifications

Feature	Specification
Brand	LEFOO
Model Name	LF10-1H (LF10-L1)
Voltage Rating	230 Volts
Current Rating	15 Amps
Stock Pressure Setting	95-125 PSI (Cut-in/Cut-out)
Maximum Operating Pressure	150 PSI

Feature	Specification
Special Feature	Pressure Detection
Included Components	Unloader valve, on/off lever, single female NPT air inlet port
Switch Style	Pressure Switch
Certifications	CSA, UL
Item Weight	2 pounds
Package Dimensions	4.02 x 3.94 x 3.62 inches

Setup and Installation

1. **Disconnect Power:** Ensure the air compressor is completely disconnected from its power source before beginning installation.
2. **Depressurize System:** Release all air pressure from the compressor tank.
3. **Remove Old Switch (if applicable):** Carefully disconnect wiring and unscrew the old pressure switch from the compressor manifold.
4. **Apply Thread Sealant:** Apply appropriate thread sealant (e.g., PTFE tape or pipe dope) to the threads of the new LEFOO pressure switch's air inlet port.
5. **Install New Switch:** Screw the new pressure switch firmly into the compressor manifold. Do not overtighten.
6. **Wire the Switch:** Connect the electrical wiring to the pressure switch terminals according to the compressor's wiring diagram and local electrical codes. Ensure all connections are secure and insulated. This switch is rated for 230 Volts and 15 Amps.
7. **Connect Unloader Line:** If your compressor has an unloader line, connect it to the unloader valve port on the pressure switch.
8. **Verify Connections:** Double-check all electrical and air connections for security and proper insulation.

Operating Instructions

1. **Initial Power-Up:** With the on/off lever in the "OFF" position, reconnect power to the air compressor.
2. **Turn On:** Move the on/off lever to the "ON" position. The compressor motor should start and begin to build pressure.
3. **Automatic Operation:** The pressure switch is factory set to turn the compressor off at approximately 125 PSI and turn it back on at approximately 95 PSI. The compressor will cycle automatically within this range to maintain tank pressure.
4. **Manual Shut-off:** To manually stop the compressor, move the on/off lever to the "OFF" position.
5. **Pressure Adjustment (Advanced):** While the switch has a stock setting, some models allow for minor pressure adjustment. Refer to specific diagrams if available. *Caution: Adjusting pressure settings incorrectly can be dangerous. Only attempt if you are knowledgeable and follow manufacturer guidelines.*

Maintenance

Regular maintenance ensures the longevity and reliable operation of your pressure switch.

- **Inspect Periodically:** Regularly check the pressure switch for any signs of physical damage, corrosion, or loose connections.
- **Clean:** Keep the exterior of the switch clean and free of dust, dirt, and debris. Do not use harsh chemicals or solvents.
- **Check for Leaks:** Periodically check the air connections for leaks using soapy water. Tighten connections if leaks are detected.
- **Verify Operation:** Ensure the on/off lever moves freely and the compressor cycles correctly within its pressure range.
- **Power Disconnection:** Always disconnect power before performing any cleaning or inspection that requires touching the switch.

Troubleshooting

Problem	Possible Cause	Solution
Compressor does not start.	No power to compressor. On/off lever in "OFF" position. Faulty pressure switch. Motor overload.	Check power supply and circuit breaker. Move lever to "ON". Test switch continuity; replace if faulty. Reset motor overload protector.
Compressor runs continuously.	Air leak in system. Faulty pressure switch (not cutting out). Pressure setting too high.	Check all air connections for leaks. Replace pressure switch. Verify pressure setting (if adjustable).
Compressor cycles too frequently.	Small air leak. Tank check valve issue. Pressure switch differential too narrow.	Locate and fix air leaks. Inspect or replace tank check valve. This switch has a fixed differential (95-125 PSI).
Unloader valve constantly leaks air.	Stuck unloader valve. Faulty check valve on tank.	Clean or replace unloader valve. Inspect or replace tank check valve.

Note: For issues not listed or if solutions do not resolve the problem, contact qualified service personnel.

Warranty and Support

Specific warranty information for the LEFOO Air Compressor Pressure Switch Control (Model LF10-1H) is not provided in this manual. Please refer to the product packaging, purchase documentation, or contact LEFOO directly for warranty details.
For technical support or inquiries, please visit the official LEFOO website or contact their customer service department. Contact information may be available on the product packaging or through your point of purchase.
You can also visit the LEFOO Store on Amazon for more information.

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