

Sodeca 1023853

Sodeca SI-Presostato Differential Pressure Switch User Manual

Model: 1023853

[Contents](#) [Setup](#) [Operation](#) [Maintenance](#) [Product Overview](#) [Safety Information](#) [Troubleshooting](#) [Package](#) [Specifications](#) [Warranty & Support](#)

1. PRODUCT OVERVIEW

The Sodeca SI-Presostato (Model 1023853) is a differential pressure switch designed for monitoring pressure differences across filters in ventilation systems. This device activates a contact to trigger an alarm relay when the measured pressure difference reaches a pre-selected value. It serves as a crucial accessory for maintaining optimal performance and detecting filter blockages in Sodeca ventilation apparatus.

The unit measures approximately 15 x 15 x 12 centimeters and has a weight of 1 kg.



Figure 1: Sodeca SI-Presostato Differential Pressure Switch. This image displays the compact grey housing of the pressure switch, highlighting its general appearance and potential connection points.

2. SAFETY INFORMATION

Read all instructions carefully before installation and operation. Failure to follow these instructions may result in equipment damage, personal injury, or death.

- Installation and maintenance should only be performed by qualified personnel.
- Ensure the power supply is disconnected before performing any installation, wiring, or maintenance.
- Do not operate the device if it appears damaged.
- Protect the device from moisture, extreme temperatures, and corrosive environments.
- Use only original Sodeca replacement parts and accessories.

3. PACKAGE CONTENTS

Verify that all items are present and undamaged upon unpacking.

- Sodeca SI-Presostato Differential Pressure Switch (Model 1023853)
- Mounting hardware (if included by manufacturer)
- Instruction Manual (this document)

4. SETUP AND INSTALLATION

The SI-Presostato is designed for integration into ventilation systems to monitor filter conditions.

1. **Mounting:** Select a suitable location near the filter bank where the pressure switch can accurately measure the differential pressure. Mount the device securely using appropriate hardware. Ensure it is easily accessible for adjustments and maintenance.
2. **Pressure Connections:** Connect the high-pressure port of the switch to the upstream side of the filter and the low-pressure port to the downstream side of the filter using appropriate tubing. Ensure all connections are airtight to prevent inaccurate readings.
3. **Electrical Wiring:** Connect the electrical contacts of the pressure switch to the alarm relay or control system as per the wiring diagram provided with your specific ventilation system. Ensure all wiring complies with local electrical codes and safety standards. **WARNING: Disconnect all power before making electrical connections.**
4. **Initial Calibration:** Once installed, power on the ventilation system. The pressure switch may require initial calibration or adjustment of its set point. Refer to the "Operating Instructions" section for details on setting the desired differential pressure threshold.

5. OPERATING INSTRUCTIONS

The SI-Presostato operates by continuously monitoring the pressure difference between its two ports. When this difference exceeds a user-defined set point, the internal switch changes state, activating a connected alarm or control mechanism.

1. Setting the Differential Pressure Threshold:

Locate the adjustment screw or dial on the pressure switch. Using a small screwdriver or by rotating the dial, adjust the set point to the desired differential pressure value. This value typically corresponds to the maximum allowable pressure drop across a clean filter before it requires cleaning or replacement. Consult your ventilation system's specifications for recommended filter pressure drop limits.

2. Monitoring:

Once the set point is configured, the device will continuously monitor the pressure. When the actual differential pressure across the filter reaches or exceeds the set point, the internal contact will switch, triggering the connected alarm or control system (e.g., a warning light, an audible alarm, or a signal to a building management system).

3. Alarm Reset:

After the filter has been cleaned or replaced and the differential pressure returns below the set point, the switch will reset. Depending on your system's configuration, the alarm may automatically clear, or it may require a manual reset from the control panel.

6. MAINTENANCE

Regular maintenance ensures the longevity and accuracy of the SI-Presostato.

- **Periodic Inspection:** Visually inspect the device and its connections periodically for any signs of damage, wear, or loose connections.
- **Tubing Check:** Ensure the pressure sensing tubes are free from kinks, blockages, or leaks. Replace any damaged tubing.
- **Cleaning:** Keep the exterior of the device clean and free from dust and debris. Do not use abrasive cleaners or solvents.

- **Functionality Test:** Periodically test the functionality of the pressure switch by simulating a high-pressure drop (e.g., by temporarily blocking the low-pressure port or creating a controlled pressure difference) to ensure the alarm triggers correctly.
- **Filter Replacement:** The primary purpose of this device is to indicate when filters need attention. Ensure filters are replaced or cleaned promptly when the alarm is triggered to maintain system efficiency and prevent damage.

7. TROUBLESHOOTING

Problem	Possible Cause	Solution
Alarm does not trigger when filter is dirty.	Set point too high. Blocked pressure sensing tubes. Loose or incorrect wiring. Faulty switch.	Adjust set point lower. Check and clear tubes. Verify wiring connections. Test switch functionality; replace if faulty.
Alarm triggers constantly or prematurely.	Set point too low. Actual filter is dirty. Leak in pressure sensing tubes.	Adjust set point higher. Inspect and replace/clean filter. Check and seal tube connections.
No response from the device.	No power to the control circuit. Completely disconnected wiring. Device failure.	<ul style="list-style-type: none"> • Check power supply. • Inspect all wiring. • Contact Sodeca support.

8. SPECIFICATIONS

Feature	Detail
Brand	Sodeca
Model Number	1023853
Product Dimensions	15 x 15 x 12 cm
Product Weight	1 kg
Color	Grey
Included Components	Accessory for ventilation apparatus
Batteries Required	No
Manufacturer	Sodeca

9. WARRANTY AND SUPPORT

For warranty information and technical support, please contact Sodeca directly or refer to their official website. Keep your purchase receipt as proof of purchase for any warranty claims.

Sodeca Contact Information: Please visit www.sodeca.com for the most up-to-date contact details and support resources.



