

## Sodeca REB-60 (1105710)

# Sodeca REB-60 Heat Recovery Unit

## USER MANUAL

### 1. Introduction

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This manual provides essential information for the safe and efficient installation, operation, and maintenance of the Sodeca REB-60 Heat Recovery Unit. The REB-60 is designed to recover heat from exhaust air, transferring it to fresh incoming air, thereby reducing energy consumption for heating or cooling. It features EC technology for low power consumption and an integrated automatic bypass system.

Please read this manual thoroughly before attempting any installation, operation, or maintenance procedures. Keep this manual in a safe place for future reference.

### 2. Safety Instructions

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**WARNING: Failure to follow these safety instructions may result in electric shock, fire, serious injury, or death.**

- Installation, maintenance, and repair must only be performed by qualified and authorized personnel in accordance with local and national electrical and building codes.
- Always disconnect power to the unit before performing any maintenance or service.
- Ensure proper grounding of the unit to prevent electric shock.
- Do not operate the unit with damaged electrical cords or components.
- Keep hands and foreign objects away from moving parts, such as fans, during operation.
- Ensure adequate ventilation around the unit as specified in the installation guidelines.
- This unit is not intended for use in explosive or corrosive atmospheres.

### 3. Product Overview

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The Sodeca REB-60 is a high-efficiency heat recovery unit designed for various ventilation applications. Its robust construction and advanced features ensure reliable performance and energy savings.

### Key Features:

- **EC Technology:** Equipped with low-consumption fans for reduced electrical usage.
- **Automatic Bypass:** Features a 100% automatic bypass system for optimal temperature control, especially during moderate outdoor temperatures.
- **Counterflow Plate Heat Exchanger:** Efficiently transfers heat between air streams without mixing.
- **Lateral Access:** Designed for easy access to internal components for maintenance.
- **Particle Filters:** Includes particle filters for improved indoor air quality.
- **Durable Construction:** Galvanized steel structure with anti-condensation foam coating and expanded polypropylene interior for models 15 to 120.
- **Low Profile:** Suitable for installation in false ceilings.



Image of the Sodeca REB-60 heat recovery unit, showcasing its compact design suitable for various installations.

## 4. Installation

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The Sodeca REB-60 unit is designed for installation in false ceilings due to its low-profile design. For larger models (REB-400 and REB-600, not this model), installation in a roof or technical room is also possible. Proper installation is crucial for the unit's performance and longevity.

### General Guidelines:

- **Location:** Choose a location that allows for easy access for maintenance, especially to the lateral access panels. Ensure sufficient space for airflow and service.
- **Mounting:** Securely mount the unit using appropriate hardware suitable for its weight (approximately 55 kg). Ensure the mounting surface can support the unit.
- **Ductwork:** Connect the supply and exhaust air ducts to the unit. Ensure all connections are airtight to prevent air leakage and maintain efficiency.
- **Condensate Drain:** Install a condensate drain line with a proper trap to remove moisture generated during heat recovery. Ensure the drain line has a continuous slope.
- **Electrical Connection:** All electrical wiring must be performed by a qualified electrician according to local codes. The unit is compatible with 50/60 Hz power supplies.

*Refer to the detailed installation diagrams and electrical schematics provided with the physical product for precise instructions.*

## 5. Setup

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After physical installation and electrical connection, the unit requires initial setup to ensure optimal performance.

### Initial Steps:

- **Power On:** Restore power to the unit.
- **Fan Regulation:** The low-consumption fans incorporate built-in regulation. Adjust fan speeds as necessary to achieve desired airflow rates and noise levels. This may involve using an external control panel or internal settings, depending on the specific model configuration.
- **Bypass Functionality:** The bypass system is 100% automatic. Verify its operation by observing air temperatures during periods when outdoor air is suitable for direct ventilation (e.g., mild weather).
- **System Check:** Perform a complete system check to ensure all components are functioning correctly, including airflow, heat recovery, and condensate drainage.

## 6. Operating the Unit

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The Sodeca REB-60 is designed for continuous operation to maintain optimal indoor air quality and energy efficiency. Its operation is largely automated.

### Normal Operation:

- **Heat Recovery Mode:** During cold periods, the unit recovers heat from the exhaust air and transfers it to the fresh incoming air, pre-heating it before it enters the building.
- **Bypass Mode:** When outdoor temperatures are moderate and heat recovery is not beneficial (e.g., to prevent overheating in summer or for free cooling), the automatic bypass system will divert the air streams around the heat exchanger. This allows fresh outdoor air to enter directly.
- **Airflow Control:** Fan speeds can be adjusted to control the volume of fresh air supplied and stale air exhausted. Refer to your specific control interface for adjustments.

For detailed control options and advanced settings, consult the separate control panel manual if applicable.

## 7. Maintenance

Regular maintenance is essential to ensure the long-term efficiency and reliability of your Sodeca REB-60 unit. Always disconnect power before performing any maintenance.

### Maintenance Schedule:

- **Filter Cleaning/Replacement (Quarterly or as needed):** The unit is equipped with particle filters. These filters should be inspected regularly (e.g., every 3 months) and cleaned or replaced when dirty. Dirty filters reduce airflow and efficiency. Access to filters is typically through the lateral maintenance panels.
- **Heat Exchanger Cleaning (Annually):** Over time, the heat exchanger plates can accumulate dust and debris, reducing efficiency. The heat exchanger should be inspected and cleaned annually by qualified personnel.
- **Condensate Drain Inspection (Quarterly):** Check the condensate drain line and trap for blockages or leaks. Ensure it is clear and functioning correctly to prevent water accumulation within the unit.
- **Fan Inspection (Annually):** Inspect fan blades for dirt buildup and ensure they rotate freely without obstruction. Clean if necessary.
- **General Inspection (Annually):** Check all electrical connections, ductwork, and mounting hardware for wear, damage, or loose connections.

For specific cleaning procedures and recommended replacement parts, refer to the service manual or contact Sodeca support.

## 8. Troubleshooting

This section provides guidance for common issues. For problems not listed here or if issues persist, contact qualified service personnel.

Problem	Possible Cause	Solution
No power to the unit	Power supply disconnected, tripped circuit breaker, faulty wiring.	Check power supply, reset circuit breaker. Verify wiring with a qualified electrician.
Reduced airflow	Clogged filters, blocked ducts, fan malfunction.	Clean or replace filters. Check ducts for obstructions. Inspect fans for damage.
Unusual noise from unit	Loose components, fan imbalance, motor issue.	Inspect for loose parts. Check fan blades for debris. Contact service if motor noise persists.
Water leakage	Blocked condensate drain, improper drain slope, damaged drain pan.	Clear condensate drain. Ensure proper slope. Inspect drain pan for damage.
Ineffective heat recovery	Dirty heat exchanger, bypass stuck open, incorrect fan settings.	Clean heat exchanger. Check bypass operation. Verify fan speed settings.

## 9. Specifications

Key technical specifications for the Sodeca REB-60 Heat Recovery Unit (Reference: 1105710).

Feature	Detail
Manufacturer	Sodeca
Model Number	REB-60
Manufacturer Product ID	1105710
Dimensions (L x W x H)	113 x 99.5 x 31.3 cm
Weight	55 kg
Color	Grey
Components Included	Heat Recovery Unit
Power Compatibility	50/60 Hz
Heat Recovery Efficiency	Up to 86% (as per product description for similar models)
Maximum Airflow	720 m <sup>3</sup> /h (as per product title)

## 10. Warranty and Support

For warranty information, please refer to the documentation provided with your purchase or contact your authorized Sodeca dealer or the manufacturer directly. Warranty terms and conditions may vary based on region and purchase agreement.

For technical support, spare parts, or service inquiries, please contact Sodeca customer service or your local distributor. Ensure you have the model number (REB-60) and manufacturer product ID (1105710) available when seeking assistance.

**Sodeca Contact Information:** Please visit the official Sodeca website for the most up-to-date contact details and support resources.