Sodeca REB-120 (1105712)

Sodeca REB-120 Heat Recovery Unit User Manual

Model: REB-120 (Reference: 1105712)

Brand: Sodeca

1. Product Overview

The Sodeca REB-120 is an advanced heat recovery unit designed for efficient ventilation and energy saving in various applications. It features EC technology for low electrical consumption and an integrated bypass system for optimal performance across different seasons. This unit is engineered to recover heat with high efficiency, contributing to a comfortable indoor environment while reducing energy costs.

Its robust construction includes a counterflow plate heat exchanger and low-consumption fans with integrated regulation. The design allows for easy side access for maintenance. The unit is compatible with 50/60 Hz operation and includes particle filters for air quality.

Figure 1: Front view of the Sodeca REB-120 Heat Recovery Unit, showing its compact design and duct connections.

2. Key Features

- **EC Technology:** Equipped with low-consumption fans for reduced electrical usage.
- **Integrated Bypass:** Features a 100% automatic bypass system (except for REB-15 model) for efficient operation in varying conditions.
- **High Heat Recovery Efficiency:** Achieves heat recovery efficiency of up to 79%.

- **Counterflow Plate Heat Exchanger:** Ensures effective heat transfer.
- **Easy Maintenance:** Designed with lateral access for convenient servicing.
- **Durable Construction:** Structure made of galvanized steel with anti-condensation foam coating and expanded polypropylene interior.
- **Compact Design:** Low profile suitable for false ceiling installation.
- **Particle Filters:** Includes particle filters for improved air quality.

3. Setup and Installation

Proper installation is crucial for the optimal performance and longevity of your Sodeca REB-120 unit. It is highly recommended that installation be performed by a qualified professional in accordance with local building codes and regulations.

3.1 Pre-Installation Checklist

- Ensure the installation location provides adequate space for the unit and future maintenance access.
- Verify that the electrical supply matches the unit's requirements (compatible with 50/60 Hz).
- Confirm that ductwork is properly sized and sealed to prevent air leakage.
- Prepare a stable and level mounting surface, capable of supporting the unit's weight (91 kg).

3.2 Mounting and Connections

The REB-120 is designed for installation in false ceilings or technical rooms. Securely mount the unit using appropriate fasteners. Connect the supply and exhaust air ducts to the designated ports. Ensure all electrical connections are made safely and correctly by a certified electrician.

Refer to the detailed installation diagrams provided in the separate technical manual for specific wiring and ducting configurations.

4. Operating Instructions

Once installed and powered, the Sodeca REB-120 operates largely automatically, thanks to its integrated regulation and automatic bypass system.

4.1 Initial Startup

1. After installation, ensure all access panels are securely closed.
2. Apply power to the unit. The unit will typically perform a self-check.
3. Monitor the unit for any unusual noises or vibrations during the first few minutes of operation.

4.2 Normal Operation

The unit's EC fans will adjust their speed to maintain optimal airflow and pressure. The automatic bypass will engage or disengage based on outdoor and indoor temperature differences to maximize heat recovery or provide free cooling when appropriate.

For advanced control and monitoring, consult the specific control panel manual (if applicable) or integrate with a building management system as per professional advice.

5. Maintenance

Regular maintenance ensures the efficiency and longevity of your heat recovery unit. Always disconnect power to the unit before performing any maintenance procedures.

5.1 Filter Replacement/Cleaning

The particle filters should be inspected and cleaned or replaced regularly, typically every 3-6 months depending on air quality and usage. Dirty filters can significantly reduce airflow and efficiency.

1. Locate the filter access panel (lateral access).
2. Carefully remove the old filters.
3. Clean reusable filters according to manufacturer guidelines or replace with new ones.
4. Reinsert filters and secure the access panel.

5.2 Heat Exchanger Cleaning

Periodically, the heat exchanger may require cleaning to remove accumulated dust and debris. This should be done by a qualified technician, typically annually, to maintain optimal heat transfer efficiency.

5.3 General Inspection

Regularly check for any signs of wear, damage, or unusual operation. Ensure all duct connections remain sealed. If any issues are detected, contact a qualified service technician.

6. Troubleshooting

This section provides basic troubleshooting steps for common issues. For complex problems, always contact a qualified service technician.

Problem	Possible Cause	Solution
Unit not starting	No power supply; tripped circuit breaker; loose wiring.	Check power connection; reset circuit breaker; inspect wiring (by professional).
Reduced airflow	Clogged filters; blocked ducts; fan malfunction.	Clean or replace filters; check ducts for obstructions; contact service.
Unusual noise	Loose components; fan imbalance; motor issue.	Inspect for loose parts; contact service for fan/motor issues.
Poor heat recovery	Dirty heat exchanger; bypass stuck open; sensor malfunction.	Clean heat exchanger (professional); contact service.

7. Technical Specifications

Specification	Value
Manufacturer	Sodeca
Model Number	1105712 (REB-120)
Product Dimensions (L x W x H)	148.8 x 113.2 x 39.5 cm
Product Weight	91 kg
Color	Grey
Included Components	Heat Recovery Unit
Maximum Airflow (approx.)	1440 m^3/h

Specification	Value
Heat Recovery Efficiency (approx.)	79%

8. Warranty and Support

Warranty information for the Sodeca REB-120 Heat Recovery Unit is typically provided at the point of purchase or included with the product documentation. Please retain your proof of purchase for warranty claims.

For technical support, service, or to inquire about replacement parts, please contact Sodeca customer service or an authorized Sodeca distributor in your region. Contact details can usually be found on the manufacturer's official website or on the product packaging.
Always ensure that any service or repairs are carried out by qualified and authorized personnel to maintain warranty validity and ensure safe operation.