Operating and Maintenance Manual SWT180 Brine-Earth Heat Exchanger







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1. GENERAL SAFETY INSTRUCTIONS

Caution:

The following safety instructions should be observed:

- Read this installation manual thoroughly before beginning with the operation and maintenance of the SWT180.
- All covers must be closed during operation of the system.
- No liability whatsoever is assumed for any damage caused by non-product-specific storage, inappropriate operation, insufficient maintenance or improper use.
- The technical specifications of this operating and maintenance manual must be observed to ensure the legal fulfilment of any warranty claims. The warranty is extended to five years if only genuine Pluggit components are used.
- Technical modifications reserved.

2. GENERAL NOTES

2.1. INTENDED USE

The SWT180 can be used to preheat the supplied outside air in winter and precool it in summer.

To do so, the supplied outside air is directed through the heat exchanger of the SWT180 in which a brine mixture (water-antifreeze mixture) circulates.

This allows the utilisation of the higher earth temperature in order to heat the outside air and ensure frost-proof operation of the ventilation unit in winter.

In summer the cooler earth temperature is used to pre-cool the outside air.

3. MAINTENANCE

Caution:

Disconnect the SWT180 from the mains supply prior to any maintenance work.

3.1. FILTER REPLACEMENT

The installed filter is used to filter the supplied outside air from large dirt particles and prevent the ventilation unit from becoming dirty.

It cannot be ensured that the hygienic requirements are met if the system is operated without a filter.

- Check the filter approx. every 6 months and replace it, depending on the level of dirt, however at least once a year.
- The filter must also be replaced if **"Replace filter**" (see page 4) is displayed on the SWT180S controller.

Note:

By default, "**Replace filter**" is displayed every 12 months. The display must be reset after replacing the filter (see page 4).

- Install a filter of at least G4 filter quality.
- Alternatively, a filter of F7 filter quality can be installed, depending on the level of pollution of the ambient air.
- Always insert the filter on the outside air intake side.



1. Unscrew the screws (1) and remove the cover (2).





- 2. Pull out the filter (3) and replace it.
- 3. Screw the cover (2) tight with the screws (1) and connect the SWT180S controller to the mains supply.

3.2. BLEEDING THE SYSTEM

If there is any air in the system, it may cause a decrease in capacity or system failure.

Request customer service when bleeding the system.

3.3. MAINTENANCE OF SWT180 COMPONENTS

The heat exchanger, the circulation pump, the expansion tank and the safety assembly must be subjected to regular maintenance according to legal regulations.

Request customer service for maintenance of the SWT180 components.

4. SWT180S CONTROLLER

The SWT180S controller controls and monitors the SWT180 functions.

4.1. DESCRIPTION



- 1 SWT180S controller
- **2** Display
- **3** Confirm entry
- 4 Move up one menu line
- 5 Move down one menu line
- 6 One menu level back

4.2. SETTINGS

4.2.1. Activating the menu list

 Press the key ← . The standard display changes and the password must be entered.

Note:

The password query is only active if a password is stored in the **"Password"** menu (see page 4).

- Press the key ▼ or ▲ until the complete password has been entered.
- Press the key ← . The display switches to the menu list.



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4.2.2. Setting the operating mode

- 1. Activate the menu list (see page 3).
- 2. Press the key $\mathbf{\nabla}$ or \mathbf{A} until "Mode" is displayed.
- Press the key ← . The SWT180 can be switched on at a set temperature or at a certain time.

4.2.3. Setting summer/winter mode

- 1. Activate the menu list (see page 3).
- Press the key ▼ or ▲ until "(Summer/Winter)" is displayed.
- Press the key ← .
 A period of time can be set for summer and winter.
- Press the key ▼ or ▲ until the desired period of time (day/month) is set.
- 5. Press the key ◀ repeatedly until the standard display appears.

4.2.4. Setting the temperature for summer mode

- 1. Activate the menu list (see page 3).
- Press the key ▼ or ▲ until
 "Summer mode" is displayed.
- Press the key ← . The temperature at which the SWT180 is to be switched off can be set.
- Press the key ▼ or ▲ until the desired temperature is set.
- 5. Press the key ◀ repeatedly until the standard display appears.

4.2.5. Setting the temperature for winter mode

- 1. Activate the menu list (see page 3).
- Press the key ▼ or ▲ until
 "Winter mode" is displayed.
- Press the key ← . The temperature at which the SWT180 is to be switched on can be set.
- Press the key ▼ or ▲ until the desired temperature is set.
- 5. Press the key ◀ repeatedly until the standard display appears.

4.2.6. Setting the password

- 1. Activate the menu list (see page 3).
- 2. Press the key ▼ or ▲ until **"Password"** is displayed.
- Press the key ← . A four-digit password can be set.
- 4. Press the key $\mathbf{\nabla}$ or \mathbf{A} until the desired password is set.

4.2.7. Setting the filter replacement interval

- 1. Activate the menu list (see page 3).
- 2. Press the key ▼ or ▲ until **"Filter"** is displayed.
- 3. Press the key ← .
- Press the key ▼ or ▲ until "Replace filter" is displayed.
- Press the key ← .
 The interval for the next filter replacement can be set.
- 6. Press the key $\mathbf{\nabla}$ or \mathbf{A} until the desired interval is set.
- Press the key
 repeatedly until the standard display appears.

4.2.8. Resetting the "Replace filter" display

The display must be reset each time after the filter has been replaced.

- 1. Activate the menu list (see page 3).
- 2. Press the key $\mathbf{\nabla}$ or \mathbf{A} until **"Filter"** is displayed.
- 3. Press the key ← .
- 4. Press the key ▼ or ▲ until **"Reset filter"** is displayed.
- Press the key ← . The interval for the next filter replacement is reset.
- 6. Press the key ◀ repeatedly until the standard display appears.



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4.2.9. Setting the language

- 1. Activate the menu list (see page 3).
- Press the key ▼ or ▲ until "Basic setting" is displayed.
- 3. Press the key 🖊 .
- 4. Press the key ▼ or ▲ until **"Language"** is displayed.
- Press the key ← .
 Either German or English can be selected as display language.
- 6. Press the key ◀ repeatedly until the standard display appears.

4.2.10. Setting the contrast

- 1. Activate the menu list (see page 3).
- Press the key ▼ or ▲ until "Basic setting" is displayed.
- 3. Press the key 🛶 .
- 4. Press the key \blacksquare or \blacktriangle until "Contrast" is displayed.
- Press the key ← . The contrast of the display can be set.
- 6. Press the key $\mathbf{\nabla}$ or \mathbf{A} until the desired contrast is set.
- Press the key
 repeatedly until the standard display appears.

4.2.11. Setting the time and date

- 1. Activate the menu list (see page 3).
- Press the key ▼ or ▲ until "Basic setting" is displayed.
- 3. Press the key 🛶 .
- 4. Press the key ▼ or ▲ until **"Time/Date"** is displayed.
- Press the key ← . The current time and date can be set.
- 6. Press the key $\mathbf{\nabla}$ or \mathbf{A} until the time and date are set.
- 7. Press the key ◀ repeatedly until the standard display appears.

4.2.12. Switching on the pump

- 1. Activate the menu list (see page 3).
- Press the key ▼ or ▲ until "Basic setting" is displayed.
- 3. Press the key \blacklozenge .
- 4. Press the key $\mathbf{\nabla}$ or \mathbf{A} until **"Pump test"** is displayed.
- Press the key ← . The pump is switched on separately.
- 6. Press the key ◀ repeatedly until the standard display appears.

4.2.13. Displaying the software version

- 1. Activate the menu list (see page 3).
- Press the key ▼ or ▲ until "Basic setting" is displayed.
- 3. Press the key \clubsuit .
- 4. Press the key ▼ or ▲ until **"Version**" is displayed.
- 5. Press the key ← . The current software version is displayed.
- 6. Press the key ◀ repeatedly until the standard display appears.

5. REMOVAL FROM SERVICE/DISPOSAL

5.1. SHUT-DOWN FOR REMOVAL

The system may be removed from service only by qualified personnel.

- De-energise the system.
- Disconnect the entire system from the mains supply.

5.2. PACKAGING

The transport and protective packaging is made largely of reusable materials.

All packaging materials should be disposed of according to local regulations.

5.3. OLD UNIT

The SWT180 and SWT180S controller also contain valuable materials and substances which should not end up in the residual waste.

Hand over old units to a local recycling plant for recycling.

The technology makes the difference.

Pluggit innovations with added value for the user and the environment.



PluggMar^{*} Fresh air and heat supply in one – quicker, more flexible and more economic than customary heating systems.



allfloor – in ceilings and walls, on or under concrete and screed – the Pluggit system concept provides maximum flexibility for the installation of air ducts and is as ideal for use in new buildings as it is for the refurbishment of existing buildings.



The highly sensitive sensor and control system of this innovative technology enables the precise amount of fresh air required or desired to be supplied. The system adjusts itself to the costeffective, time-saving system characteristics at the press of a button and automatically calibates itself at regular intervals.



Energy efficiency – a high heat recovery level on its own makes a ventilation system look effective und energyefficient only at first glance. Decisive for the evaluation is rather the ratio between the energy applied and the heat recovery level achieved – referred to as electrical energy-efficiency. A high level of tightness, an economic design and state-of-the-art heat exchanger technology ensure excellent values for our ventilation systems in terms of heat recovery and energy efficiency.



The CleanSafe principle ensures an almost impossible level of pollution of our distribution system due to technically smooth surfaces supplemented with a trouble-free cleaning concept, with convincing results confirmed by an independent testing institute.



How about fresh air in existing buildings? The unique fresh air system for the energetic refurbishment of existing buildings.

How about fresh air? You can obtain more information on the company, on the intelligent technology of Pluggit fresh-air systems, on references and regional contacts at **www.pluggit.com** or as dialogue at **www.lueftungsblog.de**







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