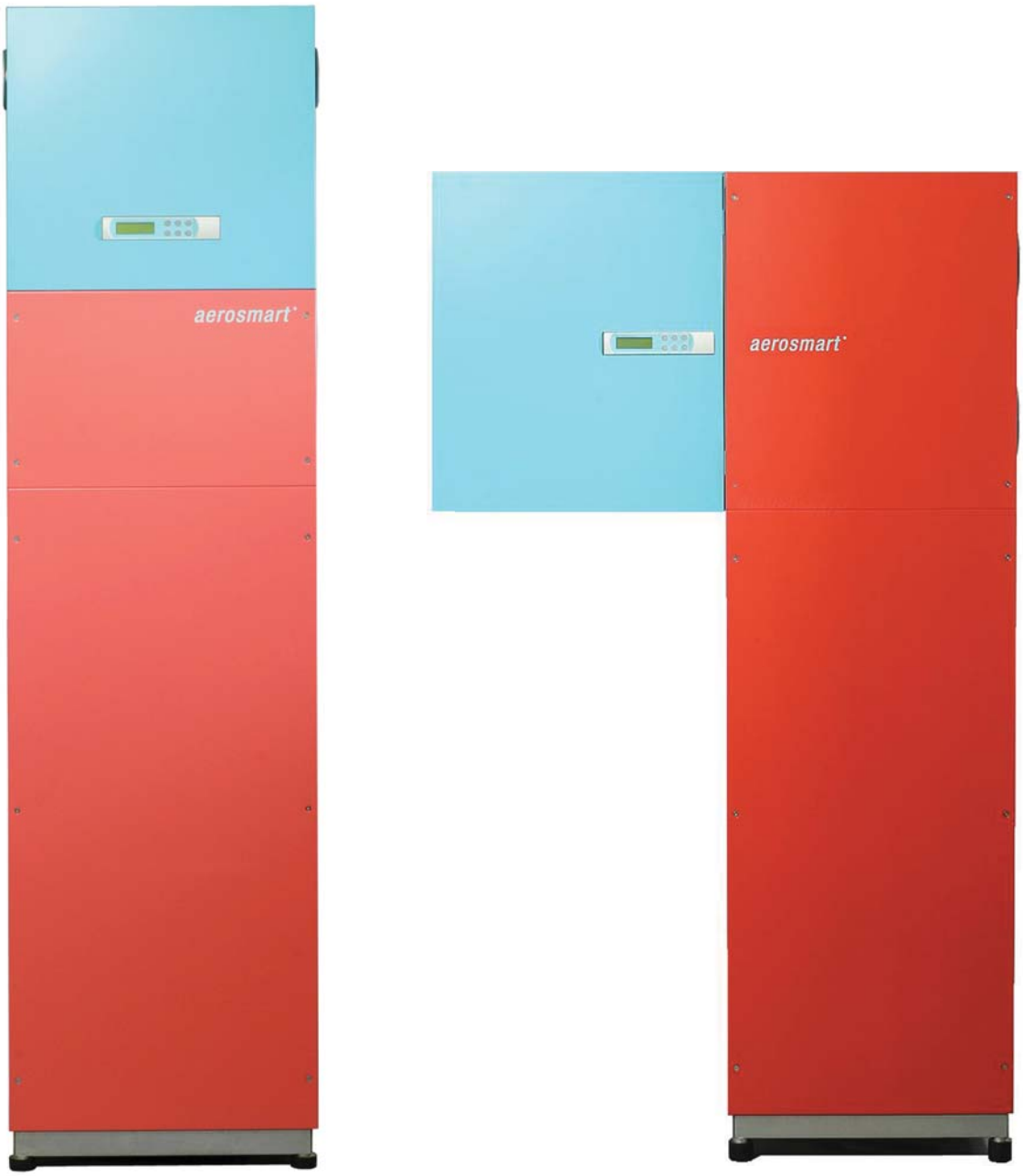
drexel und weiss

pioneering the energy revolution



aerosmart S / M / L

Operating, Maintenance and Commissioning

Contents

Technical Data

General Data

Mains supply ..... 230 VAC / 50 Hz
Recommended pre-fuse for the mains cable 1 ..... 16 A
Recommended pre-fuse for the mains cable 2 ..... 13 A
Heat recovery level
according to VDI 2071 with nominal volumetric flow ..... 85 %
Average heat provision level of the ventilation module ..... 85–93 %
Maximum power consumption of the fans (total) ..... 100 W
Maximum power consumption of the immersion heater ..... 2000 W
Operating fluids:
Refrigerating agent ..... R134a / 2.3 kg
Refrigerating machine oil ..... Triton SEZ 32

aerosmart S

Weight ..... approx. 232 kg
Nominal air quantity ..... 120 m³/h
Minimum air quantity ..... 105 m³/h
Maximum air quantity at 100 Pa external ..... 180 m³/h
Sound power level at nominal air quantity and 100 Pa external:
Housing ..... 45 dB(A)
Air inlet ..... 37 dB(A)
Air vent ..... 48 dB(A)

aerosmart M

Weight ..... approx. 255 kg
Nominal air quantity ..... 160 m³/h
Minimum air quantity ..... 140 m³/h
Maximum air quantity at 100 Pa external ..... 230 m³/h
Sound power level at nominal air quantity and 100 Pa external:
Housing ..... 45 dB(A)
Air inlet ..... 48 dB(A)
Air vent ..... 48 dB(A)

aerosmart L

Weight ..... approx. 255 kg
Nominal air quantity ..... 205 m³/h
Minimum air quantity ..... 180 m³/h
Maximum air quantity at 100 Pa external ..... 230 m³/h
Sound power level at nominal air quantity and 100 Pa external:
Housing ..... 45 dB(A)
Air inlet ..... 48 dB(A)
Air vent ..... 48 dB(A)

Customer Information

These operating instructions are part of the unit and must remain with it. This manual contains important notes and tips on operating your compact unit, which protect you from personal injury and also guarantee a long service life of the unit. The figures all depict the right-hand version of the device (supply air connection located on the right). All instructions are equally applicable to the left-hand version (supply air connection located on the left). Please keep the operating instructions for future reference. Please pay attention to the safety instructions!

Product Description

The devices in the aerosmart series are compact units which consist of a ventilation module with heat recovery, a domestic water storage tank and a heat pump. The unit is used to heat the supply air and the domestic water. The aerosmart S, aerosmart M und aerosmart L units are operated via a micro-processor controller. Although the unit types differ in terms of their appearance, weight and managed air quantities, these differences do not affect their operation.

Proper Application

The unit is designed for the ventilation, heating and warm water generation of living rooms and lounges in passive houses and, if applicable, for near-passive buildings depending on the calculation and building design.

Unsuitable Applications

No applications other than those specified under proper application are permissible.

The unit must not be used to dehumidify buildings under construction. Drying and heating a building structure can cause considerable damage to the unit. The ventilation of rooms with extremely high humidity levels, such as saunas, or heavily contaminated extract air is also not permitted.

Safety Instructions

WARNING: Indicates that the non-adherence to the recommended safety procedures could lead to damage to the unit or personal injury.

CAUTION: Indicates that the non-adherence to the recommended safety procedures could lead to damage to the unit.

NOTE: Helpful information and useful tips.

Operation

The unit is controlled, managed and operated via a micro-processor controller on the unit and a room operating panel. Two types of room operating panels are available:

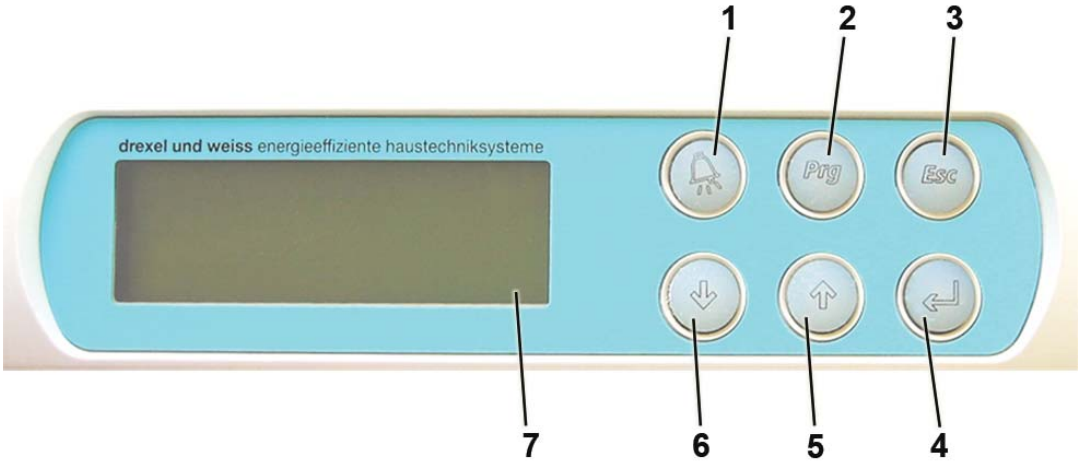
- Analogue room operating panel with heating mode
- Digital room operating panel

If the analogue room operating panel is used, the basic settings must be made on the compact unit (micro-processor controller) during commissioning.

If the digital room operating panel is used; the settings can all be made on either the room operating panel or the micro-processor controller.

Micro-Processor Controller

The micro-processor controller is located on the ventilation module. It manages the ventilation, room heating and the heating of the domestic hot water.



1. 'Alarm' button: this button illuminates red if the controller transmits an error message. Press the button to acknowledge the fault.
2. 'Prg' button: is only required to program the software.
3. 'Esc' button: use this button to exit a program item or a menu.
4. '⏎' (Enter) button: use this button to confirm selected values, settings or menu items.
5. '↑' arrow key: for scrolling in the menu. Use this button to select individual menu items and amend the values.
6. '↓' arrow key: for scrolling in the menu. Use this button to select individual menu items and amend their values.
7. Display: the four-line display shows settings and various measurements.

Main Display

The main display shows the time and date, the current operating mode and the current values for the room, set-point and actual temperature.

12:11 DI. 09/12/03
AUTOMATIK
Akt. Sollwert: 21.5°C
Akt. Raumtemp.: 20.3°C

If you are viewing a different menu page, simply press the 'Esc' button one or more times to return to this main display.

Operating Modes

AUTOMATIK: all functions are fully automated in this operating mode. Fan levels acc. to programming; water and room heating acc. to the established set-point temperature.

STAND-BY SOMMER: ventilation and heating are deactivated in this operating mode. The heat pump and the two fans are only activated if the domestic water is heated. An external switch can be used to switch on the ventilation (or both fans) for an hour, for example, the light switch in a windowless toilet.

ANLAGE AUSGESCHALTEN: all functions are deactivated.

Press the 'Esc' button until the main display appears.

▼

Use the down '↓' or up '↑' arrows to select the desired operating mode.

▼

Press '↵' (Enter) to confirm your selection.

Switching On

Select the operating mode AUTOMATIK.

▼

Press '↵' (Enter) to confirm your selection.

For further information, see Operating Modes.

Switching Off

Select the operating mode ANLAGE AUSGESCHALTEN.

▼

Press '↵' (Enter) to confirm your selection.

For further information, see Operating Modes.

Analogue Room Operating Panel with Heating Mode

Use this room operating panel to set the room temperature and activate the special 'Party' mode. The LED indicator lights show if the heating is activated and if a filter change or fault is pending.

Setting the Room Temperature

The dial can be used to adjust the set-point temperature by +/- 3°C. On delivery of the system, the middle setting is 21.5°C.

This means that the temperature can be adjusted from 18.5°C (dial fully to the left) to 24.5°C (dial fully to the right).

Note: Do not turn the dial too far! The left stop point is at approx. 8 o'clock, the right-hand stop point is at approx. 4 o'clock.

What room temperature is right for me?

The setting basically depends on your needs. Temperature sensitivity in humans is subjective and differs from one person to the next. Standard settings are between 20 and 23°C.

Environmental influences

As the room operating panel has a temperature gauge to measure the room temperature, no heat-emitting devices should be placed beneath it or in its immediate vicinity (e.g. televisions or computers).

Such heat-emitting devices would substantially influence the temperature measurements.

A handy hint for greater system efficiency

If possible, find your desired temperature at the start of the heating period.

The system works most efficiently if the set-point temperature is set once and then left unchanged. Regularly changing this setting uses the top up heater in the room more than necessary.

Special 'Party' Mode

Pressing the 'Party' button sets the ventilation to fan level 3 for a predetermined period. Once this period has passed, the fan level automatically returns to the currently set level. On delivery of the system, the default period is 60 minutes, but this can be adjusted on the micro-processor controller. The special 'Party' mode cannot be reset by pressing the button again.

Heating (LED)

This indicator light illuminates if the heating mode is enabled.

Filter/Fault (LED)

LED continually illuminated: coarse particle filter needs replacing.

Please refer to the 'Maintenance' section.

LED flashes: a fault has occurred. The fault type can be viewed on the micro-processor controller's display screen.

Please refer to the 'Error messages' section.

Digital Room Operating Panel

The digital room operating panel on the ventilation device operates at the same time as the micro-processor controller. The menu navigation, buttons and scope of operation are identical.

Setting the Room Temperature

Press the 'ESC' button until the main display appears.

12:11 DI. 09/12/03
AUTOMATIK
Akt. Sollwert: 21.5°C
Akt. Raumtemp.: 20.3°C

▼

Press the 'Enter' button. The cursor jumps to the `'Akt. Sollwert'`.

▼

Use the '↓' and '↑' arrows to set your desired room temperature.

▼

Press '↵' (Enter) to save your settings.

What room temperature is right for me?

The setting basically depends on your needs. Temperature sensitivity in humans is subjective and differs from one person to the next. Standard settings are between 20 and 23°C.

A handy hint for greater system efficiency

If possible, find your desired temperature at the start of the heating period.

The system works most efficiently if the set-point temperature is set once and then left unchanged. Regular changing of this setting results in the top-up heater in the room being used more than necessary.

Special 'Party' Mode

The ventilation is set to fan level 3 for a specific period. Once this period has passed, the fan level automatically returns to the currently set level. On delivery of the system, the default period is 60 minutes, but this can be adjusted in the technician level.

Press 'Esc' to go from the main display to the main menu.

Statusebene
Technikerebene
Herstellerebene
Übersicht

▼

Press 'Enter' to select the 'Statusebene' submenu.

<STATUSEBENE>
Party-Funktion
Ein mit ENTER:
AKTIV

▼

Activate the party function by pressing 'Enter' twice.

▼

Press 'Esc' several times to return to the main display.

Maintenance

System maintenance by users is mainly limited to regularly changing the coarse particle filters in the ventilation module and the fine particle air filter in the outside air unit. The operating unit provides regular filter change notifications as the system operating hours are counted in the background. A reminder to change the coarse particle filters is displayed approx. every 60-180 days, according to the managed nominal air quantity (depending on the environment and the filter class). The fine particle air filter only has to be changed approx. once or twice a year. As the flow capacity and acoustic level generated by the compact unit are affected by the amount of dirt in the filters, we recommend that filters are changed regularly. No tools are required.

Caution: Possible damage to the unit resulting from dust and contamination. The coarse particle filters in the unit not only improve your air quality, but also protect the entire ventilation system. The system must not be operated without a coarse particle filter.

Note: The filter should be changed within 2-4 weeks of the 'Filter change' message appearing..

Safety Instructions for Filter Changes

Caution: The filter change intervals are only valid for a completely run-in system. After the initial commissioning, the filters can sometimes become very dirty after a relatively short time (construction dust). In this case, no error message is displayed.

Caution: Filters cannot be washed or vacuum cleaned as this would drastically affect their functionality. Contaminated filters must always be replaced with clean filters. Filters should be disposed of in the residual waste.

Caution: For uninterrupted operation of the ventilation unit, we recommend that the system is serviced by an authorised service partner after two operating years. Local laws and regulations governing maintenance intervals and procedures must be adhered to.

Changing Coarse Particle Filters

Do not switch off the device or unplug it from the mains as the controller will not detect the change of filter.

Open the ventilation module's inspection cover.
The cover is held in place by latches and can be removed at the recessed grip. With a slight tug, without any tools, the cover latches can be released.

▼

Remove both filter cartridges.
(See figure; no. 1+2).

▼

Remove the dirty filter pads.

▼

Insert new filter pads and push the cartridges back into the openings.
Take care with the insertion direction! Ensure that airtightness is guaranteed.

▼

Reattach the inspection cover.
Ensure that the cover is properly locked in place.
(Contact switch on the control unit must be activated).

▼

Unit starts automatically.

▼

After changing the filter, press the 'Alarm' button to acknowledge the 'Filter or Filter change' message on the micro-processor controller.

▼

Press '↵' (Enter) to confirm.

▼

Note the filter change date in the logbook at the back of this manual.

Fig.: aerosmart S without inspection cover

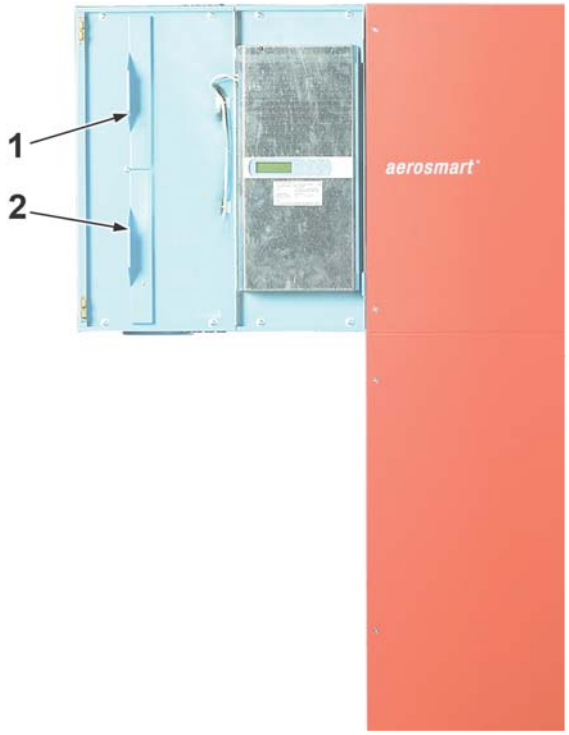


Fig.: aerosmart M without inspection cover

Spare filter:

Please order the coarse particle filters from your authorised technician.

Part description	**Number**
Spare filter for aerosmart M/L ..... (10 per packet)	193.0200
Spare filter for aerosmart S ..... (10 per packet)	193.0892

Changing the Fine Particle Air Filter

The fine particle air filter is located in the outside air unit and not in the compact unit. Depending on the composition of the ventilation system, numerous filter types can be used. If the error message 'Change fine particle air filter' is displayed, replace the dirty fine particle air filter (within 2 - 4 weeks) with a new filter of the same type. For some filter types, the ventilation direction must be taken into consideration (marked by an arrow). The filter change must be acknowledged on the controller.

Fig.:
Examples of external filters

Acknowledge Fine Particle Air Filter

Change to the Technician Level on the main menu of the control.
(The English text in the following tables is for representation only and will not be displayed on the control.)

▼

<TECHNIKEREBENE>	Technician Level
Bitte beachten Sie	Please consider the
bei Aenderung die	manufacturers details
Herstellerangaben!	when making changes!

Press the '↑' (up) arrow button once.

▼

The operating hours counter for the fine particle air filter appears.
Press the 'Enter' button.

<BETRIEBSSTUNDEN>	Operating Hours
FEINSTAUBFILTER	fine particle air filter
Summe: ######	sum
Reset: N	Reset: No

The cursor jumps to the 'Reset' indicator..

▼

Press an arrow button.
The 'Reset': N indicator changes to Y and the 'Summe' indicator is set to zero.

▼

Press '↵' (Enter) to confirm.

▼

Note the filter change date in your in the logbook at the back of this manual.

Spare filter for the outside air system:

Please order the filters for the outside air system from your authorised technician directly.

Commissioning

Pre-Requisites for Commissioning

The compact unit's water, air, electricity and mechanical connections must conform to the installation instructions - the boiler must be filled with water and the stopcocks must be opened.

Caution: The unit must not be operated without complete insulation of the air pipes (exhaust and outside air) as any condensation could damage the individual unit components, such as the electronics or the fans.

Initial Commissioning

Warning: Electrically conductive components can cause serious personal injury! Improper working procedures could damage the unit components. The initial commissioning may only be carried out by technicians authorised by drexel und weiss.

When the controller is powered on for the first time, the controller initially performs a self-test. The main display then appears.

12:11 DI. 09/12/03	Time Weekday date
AUTOMATIK	automatic
Akt. Sollwert: 21.5°C	set-point temperature
Akt. Raumtemp.: 20.3°C	current room temperature

Settings on the Overall System

After initially commissioning the unit, adjust the supply and extract air valve flow rates according to the planned flow rates.

▼

Measure and record the air quantities.

Decommissioning

Warning: Serious personal injury can result from improper working procedures. Decommissioning may only be carried out by suitably qualified and authorised technicians.

Disconnect all electrical connectors from the unit and remove the water and ventilation connections in accordance with local safety regulations.

The unit still contains both valuable materials and substances that may not be disposed of in the residual waste. Please deliver your old unit for recycling to a collection point for recyclable materials. For operating fluids, please refer to the 'Technical Data'.

Menu levels

The individual software areas are divided into levels. Press the 'Esc' button to access the main menu with the following submenus:

Statusebene	Status Level
Technikerebene	Technician Level
Herstellerebene	Manufacturer Level
Übersicht	Overview

Use the arrow keys to select a sub-menu.

Press 'Enter' to confirm your selection.

Status Level - Viewing Operating Parameters

All available measurements and settings can be requested in the status level. The values cannot be adjusted.

Statusebene
Technikerebene
Herstellerebene
Übersicht

Party-Funktion	Shows if the party function is enabled
(EVU-Abschaltung)	Shows if the energy supply utility shut down is enabled; only available with double tariff control and when the surge current cut off is enabled.
Raumtemperatur	Current room temperature (measured by the gauge in the analogue room operating panel or in the external gauge housing).
Temp. Boiler Unten	Domestic water temperature in the lower region of the storage tank.
Temp. Boiler Mitte	Domestic water temperature in the middle region of the storage tank.
Temp. Verdampf.block	Current temperature in the heat pump's evaporator block.
Heizen Stufe 1	If the room thermostat requests “heating level 1”, 'YES' appears here. If no cut-off is enabled (DW priority), the supply air is heated in the aerosmart.
Heizen Stufe 2	If the room thermostat requests “heating level 2”, 'YES' appears here. The external room heating is also enabled (start-up and shut-down delays apply for pellet stoves)
Verdichter	Current status of the compressor
MV - Fluessig	Current status of the liquid solenoid valve
MV – Heissgas	Current status of the hot gas solenoid valve
MV – Luft	Current status of the solenoid valve for the air capacitor
Zusatzheizung	Current status of the top-up heater in the room

Anf. Heizstab	Current status of the (optional) immersion heating element in the boiler
Boilergrenztemp. Überwachung	The boiler is monitored for overheating. Temperature above 68°C = level 1; temperature above 73°C = level 2 (see error messages `Übertemperatur Boiler WP aus` - Excess temperature boiler heat pump off).
Aktuelle Stufe	Current fan level (0/1/2/3)
Aktuelle Luftmenge	Current air quantity in m³/h
Gerätetype	Displays the unit type and the current software version.

Technician Level - Setting Operating Parameters

All operation-related settings are made in the technician level. Use the arrow buttons to scroll through the individual parameters on the menu pages. The cursor always flashes on the value to be amended.

Statusebene
Technikerebene
Herstellerebene
Übersicht

Selecting the Room Operating Panel

<TECHNIKEREBENE>	Technician Level
Bitte wählen Sie Ihr	Please select your
Raumbediengerät aus:	room operating panel:
ANALOG	ANALOG

Select the type of your operating unit (analogue or digital).

Press '↵' (Enter) to confirm.

Setting the Domestic Water Temperature

<TECHNIKEREBENE>	Technician Level
BW-Sollwert: 42.0°C	Domestic water set-point
Zyklisch Aufheizen: N	Cyclic heating process: No
Beginn: 04:00	Start

BW-Sollwert

The DW set-point (domestic water set-point) can be set from 37°C to 50°C. If, for example, the set-point is set at 42.0°C, domestic water heating is enabled as soon as the temperature in the lower area of the boiler (actual value) falls below this point. On reaching 47.0°C, i.e. 5°C above the set-point, the domestic water heating process is switched off again.

What domestic water temperature is right for me? The usual domestic water temperature is 36-38°C for showering, 37 to 42°C for having a bath and 40 to 45°C for washing dishes. Depending on the temperatures you are used to, we recommend a DW set-point temperature of between 38 and 48°C.

Note: If no warm water is removed for an extended period during the heating period, the domestic water temperature can exceed the predetermined set-point.

Zyklisches Aufheizen

This parameter makes it possible to regularly heat domestic water to 60°C. (immersion heater must be switched on).

The function is regionally stipulated by the legislator (e.g. Switzerland) and is normally not required.

J = Yes

N = No

Beginn

This setting is used to determine when the cyclic heating process is started. The time set here is usually one at which a reduced rate electricity tariff is available.

Setting the Default Set-Point Room Temperature

Stnd. Sollwert: 21.5°C	Standard set-point temperature
Akt. Sollwert: 20.3°C	Set-point temperature
Nachtabsenkung: 0.0°C	Reduced set-point temperature
Von/Bis: 22:00/06:00	From/ To:

Stnd. Sollwert

When using the analogue room operating panel, the user can turn the dial to adjust the room set-point temperature by +/- 3°C. The middle dial setting is programmed. The default set-point can lie between 18 and 24°C.

Note: This option is not available when using the digital room operating panel as the desired temperature is directly programmed on the room operating panel.

Akt. Sollwert

Current set-point: air temperature measured by the room gauge. This value cannot be adjusted.

Nachtabsenkung der Raumsolltemperatur

This can be used to reduce the room set-point temperature for a freely definable period of the day (Default set-point) by up to 5°C.

Von/Bis: 22:00/6:00

Enter the time period for the reduction of the room set-point temperature.

Room Heating Cut-Off

This function can be used to briefly disable the room heating if the temperature in the domestic water storage tank falls below a specific level. During the cut-off, the heat pump is only used to heat the domestic water. Two menu pages are available to set the room heating cut-off:

<TECHNIKEREBENE>	Technician Level
Fühlerwahl für	Temperature gauge for
Sperre Raumheizung	Room heating cut-off
BOILERTEMP.MITTE	Middle boiler temp.

This parameter determines the temperature gauge used for the room heating cut-off. If there is a high level of warm water usage, this parameter can be set to 'BOILERTEMP.UNTEN'.

BOILERTEMP.UNTEN Lower boiler temperature

BOILERTEMP.MITTE Middle boiler temperature

<TECHNIKEREBENE>	Technician Level
Sperre Raumheizung	Room Heating cut-off
Soll: 35°C	Set
Diff: 07.0°C	Difference

Soll

By increasing the set-point, the warm water comfort can be increased.

Diff

The 'Difference' value describes the hysteresis, the exceeding of which deactivates the room heating cut-off.

Setting the Nominal Air Quantities

<TECHNIKEREBENE>	Technician Level
Nennluftmenge:	Nominal air quantity
### m3/h	
(Lüfterstufe 2)	(fan level 2)

This parameter is used to program the system's nominal air quantity. Please refer to the house technology planning for the value to be set.

Note: It is only necessary to enter the nominal air quantity for fan level 2. The air quantities for levels 1 and 3 are automatically defined with -30% (level 1) and +30% (level 3).

Timeframe for Fan Control

There are two available menu pages for the temporal programming of the fans. The default level is fan level 2, which does not have to be programmed. This level always applies when no timeframe is enabled.

Zeitprogramm 1	Time program 1
Lüfterstufe: 1	Fan level
Beginn: 00:00	Start
Ende: 00:00	End

For example, program a timeframe for fan level 1 for the time of day at which the house is usually empty.

Zeitprogramm 2	Time program 2
Lüfterstufe: 3	Fan level
Beginn: 00:00	Start
Ende: 00:00	End

You can also program a timeframe for fan level 3, for example, for fixed cooking times.

Note: You can set two time programs for fan level 1 or two time programs for fan level 3.

Setting the Time and Date

Uhr neu einstellen	Set clock
Zeit: 00:00	Time:
Datum: 01/01/00	Date: day/month/year
Wochentag: SO.	Weekday:

This window can be used to set the time and date.

MO. = Monday

DI. = Tuesday

MI. = Wednesday

DO. = Thursday

FR. = Friday

SA. = Saturday

SO. = Sunday

Setting the Time Period for the Party Mode

<TECHNIKEREBENE>	Technician Level
Laufzeit für	Time period for the
Party-Funktion:	Party mode
60 min Status: Ein	status

Use this window to set the time period for the 'Party' mode. The default value is 60 minutes; values between 10 and 99 minutes can be entered.

Ein = On

Aus = Off

External Filters

<TECHNIKEREBENE>	Technician Level
Aussenfilter: Ja	Outside air filter: Yes

Use this window to enter whether your system has a fine particle air filter (usually in front of the ground source heat exchanger in the external area). If so, the controller issues regular filter change reminders (1 x year).

Ja = Yes

Nein = No

Top-up heater

<TECHNIKEREBENE>	Technician Level
Pellet- o. Stückholz:	Pellet or Log stove
Nein	No

Use this window to enter whether a top up heater is used in the form of an ambient-air dependent pellet or log stove. If so, a special safety switch is used to deactivate the extract air fan if the supply ventilator fails, to prevent any low-pressure in the room.

Operating Hours Counter

For control, service and maintenance purposes, various operating hours for individual operations can be viewed here.

J = Yes

N = No

<BETRIEBSSTUNDEN>	Operating Hours
VERDICHTER	Compressor
Summe: 00000 STD.	Sum: 00000 hours
Reset: N	Reset: No

<BETRIEBSSTUNDEN>	Operating Hours
Raumheizungsstufe 1	Room heating level 1
Summe: 00000 STD.	Sum: 00000 hours
Reset: N	Reset: No

<BETRIEBSSTUNDEN>	Operating Hours
Raumheizungsstufe 2	Room heating level 2
Summe: 00000 STD.	Sum: 00000 hours
Reset: N	Reset: No

<BETRIEBSSTUNDEN>	Operating Hours
Grobstaubfilter	Coarse particle filter
Summe: 00000 STD.	Sum: 00000 hours
Reset mit Türkontakt	Reset with door contact switch

<BETRIEBSSTUNDEN>	Operating Hours
Feinstaubfilter	Fine particle air filter
Summe: 00000 STD.	Sum: 00000 hours
Reset: N	Reset: No

Manufacturer Level - Factory Settings

Statusebene
Technikerebene
Herstellerebene
Übersicht

This menu can be used to set the factory parameters. If needs be, these parameters can be changed by the authorised customer service agents. A password is therefore required to access the menu.

Overview – Current Operating Status

This menu provides a quick overview of the current operating status.

Statusebene
Technikerebene
Herstellerebene
Übersicht

Tr: 14.0°C	Verd.: 1
Tb:-04.4°C	MV-FL: 1
Tu: 34.4°C	MV-HG: 0
Tm 34.4°C	MV-LU: 1

Tr	Current room temperature measured by the sensor on the control unit or an external room sensor
Tb	Temperature on the heat pump evaporator register
Tu	Current temperature in the lower area of the boiler. Depending on this temperature, the heat pump is activated.
Tm	Current temperature in the middle area (centre) of the boiler. Depending on this temperature, the domestic water heating can be given priority and the room heating can be temporarily disabled by the heat pump.
Verd.	Current status of the compressor or the heat pump
MV-FL	Current status of the liquid line's solenoid valve. This valve is only closed at the start of thawing; it otherwise opens when the compressor operation starts.
MV-HG	Current status of the hot gas line's solenoid valve. It is open during the compressor's start phase (unloaded start) and during the thaw process.
MV-LU	Current status of the air capacitor line's solenoid valve. Air heating is enabled when this valve is open.

Faults

Error Messages

The messages described here are displayed on both the micro-processor controller and the digital room operating panel. The faults cannot be acknowledged until they have been resolved. If several faults occur simultaneously, use the up '↑' and down '↓' arrow buttons to scroll through the error messages.

If a fault cannot be acknowledged by holding down the Enter button (2 sec), please contact your customer service technician.

Warning: Electrically conductive components can cause serious personal injury! Improper working procedures could damage unit components. The inner inspection cover may only be opened by authorised technicians.

`Alarm Niederdruck-Pressostat:`

Check if the air quantity is too low due to a closed air line. (E.g. very dirty exhaust air filter, contaminants in the air line).

The following operating conditions are not permissible for the heat pump: room temperature too low; outside air entrance temperature from the ground source heat exchanger too low; lack of cooling agents

`Alarm Hochdruck-Pressostat:`

Air quantity too low. The heat cannot be dispersed via the air. (E.g. minimum air quantity set too low, frozen outside air grid in winter)

`Zuluftventilator ausgefallen / Abluftventilator ausgefallen`

A valve has failed. If the fault cannot be acknowledged by holding down the Enter button (2 sec), please contact your customer service technician.

`Blocktemperatur zu tief`

The following operating conditions are not permissible for the heat pump: room temperature too low; outside air entrance temperature from the ground source heat exchanger too low; block gauge faulty; extract air fan faulty or dirty.

Low air quantity and very damp extract air

Closed extract or exhaust air line

`Fühlerfehler Verdampfer / Boiler unten / Mitte`

Temperature gauge/cable faulty / connector loose; all the system's temperature gauges are monitored. If the lead to a sensor is disconnected, a gauge provides meaningless values or a short-circuit occurs, a relevant error message is issued and an emergency program is enabled.

`Übertemperatur Boiler Wärmepumpe aus`

1. Storage tank temperature above 68°C - unit automatically switches to fan level 3; blocked supply air filter or fine particle air filter, authorised technicians to check ground source heat exchanger.

2. Storage tank temperature above 73°C - storage tank overheats, system switches off; shortly after the initial commissioning (approx. 20 minutes), check if the DW storage tank is filled with water. If necessary, fill the DW storage tank with water.

While heating the building envelope; if no warm water has been taken from the DW storage tank for a long time. Remove warm water.

If the fault reoccurs within a short timeframe, check if the coarse particle filter and the fine particle air filter have become extremely dirty (possibly through construction dust). If the fault reoccurs, contact customer service technician.

`No Link` (or no text in the digital room operating panel)

Fault with addressing the digital room operating panel; the digital room operating panel is already correctly addressed on delivery. It is, however, possible that the message 'No link' appears after commissioning or changing the room operating panel. To create a link to the micro-processor controller, the address must be corrected on the operating panel:

Hold down the '↓', '↑' and '↵' buttons at the same time until the text: '`DISPLAY ADDRESS SETTING`' appears.

▼

Confirm your selection by pressing '↵' (cursor flashes on the address)

▼

Use the '↓', '↑' arrows to set the correct address (I/O board address 00: display address: 00 or I/O board address 01: display address: 32)

▼

Confirm the new value by pressing '↵'.
The following message appears: 'DISPLAY ADDRESS CHANGED'

▼

The room operating panel now has the correct address and operates alongside the micro-processor controller in the ventilation unit.

`Other`

The display shows '`Automatik`' but the compressor is not operating; Press '↵' (Enter) to confirm the operating mode change. To check this fault, press 'Esc' twice. The current operating mode will appear on the display.

After a filter change: check if the inspection cover is fully closed (contact switch).

`Automatik` Automatic mode

Faults in the Ventilation System

Noises

The unit is becoming louder by the day since its initial commissioning: exhaust air filter / supply air filter very dirty - fans working at an increased speed to try to achieve the minimum air quantity. Check the condition of all filters.

Unit becomes louder during operation: impermissible resistance in an air line (e.g. contaminant blocking air inlets, outside air inlet frozen over in winter)

Important Unit Information (Logbook)

Your authorised technician has handed over the unit to you with the following settings. Please keep this data handy in case of queries.

Customer:	
Location:	
Unit type / version:	
Serial number:	
Initially commissioned on:	
Installation company:	
Authorised technician:	

Set air quantity (m^3/h)	

Time program 1	Fan level	Start	End
Time program 2	Fan level	Start	End

Filter change (Date):			

Maintenance (Date):			

Legal notice

Publisher:
drexel und weiss energieeffiziente
haustechniksysteme gmbh.
Achstrasse 42, 6922 Wolfurt
T 05574 47895-0
F 05574 47895-4
E-mail: office@drexel-weiss.at
www.drexel-weiss.at
ATU 35542007; FN 192604t;
Company Accounts Registrar: Feldkirch

Document number: 20080908.01 BWI-EN