Operating Instructions
Webasto BlueComfort Classic
Self-Contained Air Conditioning Systems

Webasto
Marine Comfort

General information

Dear Webasto Customer!

These Operating Instructions provide an overview about how to use the self-contained air condition system and its control panel. An extensive documentation and description can be found in the installation and service instructions.

To ensure safe use of the appliance, ALWAYS read and follow all instructions in this manual and the Operating Instructions of the external Webasto heater. It is very important that an authorized Webasto dealer carries out any repair or maintenance not described in this manual.

Safety notes

In general, all A/C (air-conditioning) systems are running on 230 or 115 Volt AC. For all work at any of the components like pumps, compressor, blowers or electronics, the power connection has to be interrupted. All work at the electric wiring must be performed by specialized installers.
Before starting the air-condition system, check the following points:
• The closing valve at the sea-cock is open!
• The sea-water strainer is clean and filled with water!
• The boat has enough water under the body and the sea-cock is not blocked!
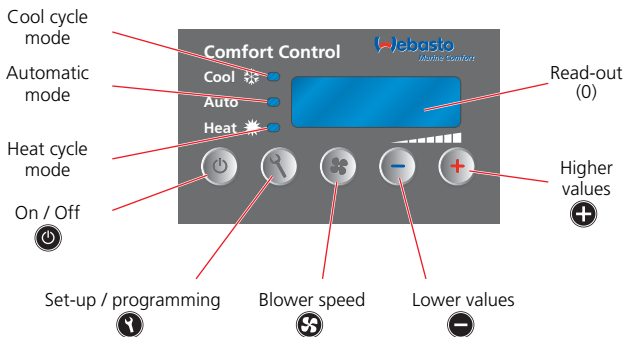• All supply and return air grilles are open and not blocked by luggage, clothing or anything else!

If the system is operating in cooling cycle, reverse cycle heating or in dehumidification mode water shall come out of the over-board discharge. If not, switch off the system and check the sea-water circuit again!

Also follow the safety notes in the Operating Instructions of the external Webasto heater.

The control panel „Comfort Control"

The digital control panel is always factory pre-programmed and the secondary commands are code-protected.

• Factory pre-setting for the function is "Automatic cooling or heating by external diesel heater"

• Further functions can be selected (see next pages)

Cool cycle mode

Automatic mode

Heat cycle mode

On / Off

Read-out (0)

Higher values

Set-up / programming

Blower speed

Lower values

Operating the „Comfort Control"

When the air-conditioning is connected with the electrical power, the system initializes itself. The display shows *Init* and afterwards the frequency, e.g. *50 Hz*.

Starting

Press once the ⏻ button.
On is displayed and after appr. 20 sec. the current room temperature, e.g. *28.5* (°C) is shown. Depending on the room and set-point temperature the appropriate mode will start. Mode indication by LED.

⇨ A malfunction is indicated by a blinking error code (see below)

⇨ *ba11* is no error code that causes a system stop (see below)

Setting the temperature

With the buttons ⊖ and ⊕ between 15 °C and 29 °C while the room temperature is displayed.

Air-condition without heat cycle
⇨ the set temperature must be below the room temperature.
e.g. room temperature 25 °C
                    Set temperature between 15 °C and 24 °C.

Air-condition with heat cycle
⇨ the set temperature can be between 15 °C and 29 °C.
e.g. room temperature 25 °C
                    Set temperature = 20 °C, Cool mode starts.
                    Set temperature = 29 °C, Heat mode starts.

Setting blower speed

Press the button ❄ until *b* is shown to the left and the selected value to the right, e.g. *b 5* (blower speed 5)

Value Range (Blower speeds): *1-2-3-4-5* and *A*

Factory Setting: *A* (Automatic blower speed)

Set value with the buttons ➖ and ➕.

Secure your setting by pressing the ⏻ button.

The display shows *memo* and then the room temperature.

In the automatic blower speed mode (*b A*) the blower start and operation depends on the temperature. If there is no need for blower operation, the display shows *ba11*. It can take some time before the blower starts.

Displaying the evaporator temperature

Press the ☀ button until *E* is shown to the left and a numerical value to the right, e.g. *E10.5*. Check if the current operation mode is functioning properly.
⇒ Cool mode (LED snow flake)=   Evaporator temperature drops constantly
⇒ Heat mode (LED sun)   =   Evaporator temperature rises constantly (reverse cycle heating only)

Selecting the function mode

Press the ☀ button until *F* is shown to the left and the selected value to the right, e.g. *F5* (heat cycle only with external heater)

Values:
F1 = cool cycle only
F2 = heat cycle only (reverse cycle heating)
F3 = automatic cooling or heating by reverse cycle
F4 = automatic cooling or heating by external diesel heater
F5 = heat cycle only (external heater)
F6 = dehumidification cycle (drying the air by cooling and heating at the same time. Display shows *dry*. After 30 min. the unit switches to the previous functioning mode automatically)

Factory Setting: *F4* (automatic cooling or heating by external diesel heater)

Set value with the buttons ➖ and ➕.

Confirm by pressing the ☀ button.

Secure your setting by pressing the ⏻ button.

The display shows *memo* and then the room-temperature.

Displaying the AC voltage

Press the ☀ button until *U* is shown to the left and a numerical value to the right, e.g. *U230*.

Access to further program levels

Press the 🕐 button until *code* is displayed. With a special access code specific settings can be modified (by the installer).
Further information can be found in the installation instructions.

Error code display and actions

The error codes are viewed on the display screen. After the error codes are displayed, the system is shut off for 60 sec. and re-started (except for *ba11*). If the same error occurs within 30 minutes, the A/C system will be completely stopped. In this case, it can only start again if the error has been solved and the system has been completely switched off and on again.

Error codes and causes

AAA	Persistent low voltage (below 195 Volt for more than 5 sec.)
A01	Low pressure cut-out ⇨ Room temperature too low for compressor operation in F6 mode. Please see Installation Instructions. ⇨ Not enough refrigerant in the system, please inform service station. ⇨ Sea-water temperature in heat mode too low (< 7 °C), heat mode not possible
A02	High pressure cut-out ⇨ Sea-water circuit interrupted, please check circuit. ⇨ Too much refrigerant in system, please call service station. ⇨ Sea-water temperature in heat mode too high (> 17 °C), heat mode not possible
A03 - A08	Not applicable
A09	Room temperature sensor (external or internal) defective or absent.
A10	Temperature sensor at evaporator defective or absent.
CA11	Compressor has been deactivated. Re-activate with the *code* menu
tA11	Compressor stopped by de-icing control. Automatic re-start. This code is only visible in the evaporator temperature read-out (*E*).
bA11	No error but status information, indicating that blower is in standby mode. Blower will automatically start once evaporator has reached required temperature.

No heating power in F4, F5 or F6 mode without showing an error code on A/C display: check external heater according to heaters' Operating and Installation Instructions.

Warranty claims

Failure to follow the Installation Instructions and the information, recommendations and descriptions therein will void all warranties. The same applies if repairs are carried out incorrectly, with the use of non-genuine parts or by unauthorized personnel. Warranty claims are only valid if the claimant can verify that he has complied with the maintenance and safety instructions.

Maintenance

Check daily:

- sea-water strainer, clean it and remove any debris if required.

Check monthly:

- air filter at the evaporator and in the return air grilles (where applicable) and clean if necessary.
- sea-water circuit for leaks in the whole system from the sea-cock to the sea-water exit.
- condensation drain for free flow and leaks.
- air-ducting for damage, interruption and free flow.
- function of the system by having it run for at least 10 minutes in cooling mode and in heating mode with external heater.
- coolant level in heater circuit.

Check yearly:

- electrical connections for corrosion of contacts and to ensure that they are secure.
- heaters' exhaust system for corrosion and leaks.
- fuel lines for leaks. Clean or replace fuel filter.

Winter use and storage

- Make sure that the heater circuit contains approx. 25 to 30% or more pure glycol to avoid accidental freezing of the system during the winter. For sufficient winter protection, let the percentage glycol depend on the local temperature.
- Winter storage: at frost temperatures the whole sea-water circuit must be emptied and the sea-water valve closed.

General Recommendation

When leaving the boat unattended for a longer period close all sea-water valves.