

Operating Instructions

Webasto BlueCool Premium

Chilled Water Marine Air Conditioning Systems

Webasto
Marine Comfort



WARNING: Cancer and Reproductive Harm
www.P65Warnings.ca.gov

General information

Dear Webasto Customer!

These Operating Instructions provide an overview about how to use the chilled water air conditioning system and its control panels. 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. 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!
- After turning the system on, water comes out of the over-board discharge. If not, switch off the system and check the sea-water circuit again!

Designated Control Panels

The chiller unit is operated and controlled by the **Chiller Control** digital control panel. **Directly** connected air handlers for one cabin are also operated by this control panel. Other cabins with **indirectly** connected air handlers are controlled by separate **Cabin Control** digital control panels.

The system must be started with the Chiller Control prior to normal functionality of the air handlers in other cabins.

Chiller Control: Start and stop of the chiller unit

- Programming and setup of the chiller unit
- Setup of directly connected air handlers
- Selection of operation mode (Automatic, Cooling, Heating)

Cabin Control:

- Start and stop of indirectly connected air handlers
- Temperature and blower setting for indirectly connected air handlers

The operation mode can not be selected with the Cabin Control!

„Chiller Control“ for chiller and directly connected air handlers

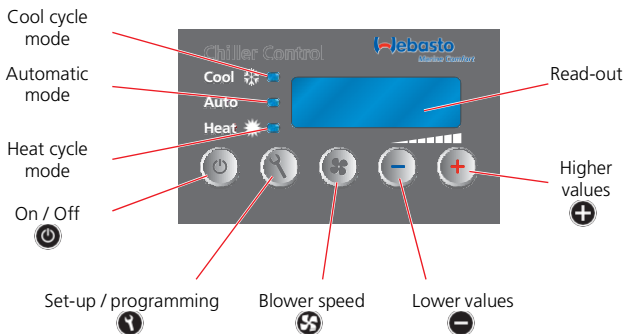
The digital control panel is always factory pre-programmed and the secondary commands are code-protected.

- If your chilled water system has a heating option, the cabins can be heated until the sea-water temperature drops below 6 °C (43 °F).

The function „Automatic with Reverse Cycle“ (F3) is pre-set.

- If an external water heater is integrated in your chilled water system, you can heat independently from the sea-water temperature (See separate heater documentation for further details).

The function „Automatic with External Heater“ (F4) is pre-set.



Operating the „Chiller 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) (83 °F) is shown.

Setting the temperature

With the buttons  and  between 15 °C (59 °F) and 29 °C (84 °F) while the room temperature is displayed.


e.g. room temperature 25 °C (77 °F)

Set temperature = 20 °C (68 °F), Cool mode starts.

Set temperature = 29 °C (84 °F), Heat mode starts.

Attention: Only the mode that is preselected by the Chiller Control can be started.

Setting blower speed

Press the button  until **b** is shown to the left and the selected value to the right, e.g. **b 05** (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 . Your setting is secured.

⚠ 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 chilled water temperature

Press the  button until **H** is shown to the left and a numerical value to the right, e.g. **H10.5**. Check if the current operation mode is functioning properly.

☀ Cool mode (LED snow flake) = Chilled water temperature drops constantly

☀ Heat mode (LED sun) = Chilled water temperature rises constantly

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.

„Cabin Control“ for indirectly connected air handlers

Illustration see paragraph „Chiller Control“ for chiller and directly connected air handlers.



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
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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 more than 6 times within 60 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 limit for more than 5 sec. See Installation Instructions for further details.)
A01	Low pressure cut-out compressor 1 ❖ COOL mode: Insufficient chilled water flow. ❖ HEAT mode: Insufficient seawater flow or seawater temperature in heat mode too low (< 7 °C), heat mode not possible.
A02	High pressure cut-out compressor 1 ❖ COOL mode: Insufficient seawater flow. ❖ HEAT mode: Insufficient chilled water flow.
A03	Low pressure cut-out compressor 2 (causes see A01)
A04	High pressure cut-out compressor 2 (causes see A02)
A05	Low pressure cut-out compressor 3 (causes see A01)
A06	High pressure cut-out compressor 3 (causes see A02)
A07	Low pressure cut-out compressor 4 (causes see A01)
A08	High pressure cut-out compressor 4 (causes see A02)
A09	Room temperature sensor defective or absent.
A10	Temperature sensor at chilled water loop defective or absent.
CA11	All compressors have been deactivated. Re-activate with the code menu
ba11	No error but status information, indicating that blower is in standby mode. Blower will automatically start once chilled water circuit has reached required temperature.

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 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-waterexit.
- 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.

Check yearly:

- electrical connections for corrosion of contacts and to ensure that they are secure.

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.