



miniClima *shortManual EBCeasy1-2*

Topic: Short instructions for the application, installation, usage, maintenance & care, de-installation, storage and packing-up of the respective devices.

Valid for: miniClima Constant Humidity Devices, Series EBC10/11/12 (Rev.3)/easy, Type EBCeasy1-2.

Optional accessories or extras are described in their respective supplement manuals.



THIS MANUAL CONTAINS IMPORTANT INFORMATION - PLEASE READ IT CAREFULLY BEFORE USING OR INSTALLING YOUR DEVICE!

The devices covered by this manual are not destined for being used by persons (including children) with limited physical, sensory or intellectual abilities and/or by persons lacking the required experiences/skills, except such persons are going to be supervised by a person that is responsible for their safety or such persons have been thoroughly briefed beforehand about the usage of the device and it can be expected that the persons will have comprehended the explanations and that they will also follow them. Children have to be kept well away from the devices, ensuring that they will not play with them.



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1 GENERAL INFORMATION

1.1 What can be expected from the work of an EBCeasy, what can't

1.1.1 Primary purpose

The miniClima Constant Humidity Devices EBC are built for the regulation of the relative air-humidity in both air- and steam-tight enclosed museum showcases, switchboards, deposit cupboards, containers and similar applications (hereinafter only referred to as "cases"). The devices help in reaching and keeping a desired level of relative air-humidity inside the cases. They are not built for the purpose of influencing or changing any other state or condition of the air being processed (e.g. temperature, pollution, etc.), but further equipment¹ can be added to an EBC for filtering dust and particles out of the system air.

1.1.2 Characteristic features

Once set up correctly, the EBC, the case and the interconnections between EBC and case (hosepipes) together form a tight air circulation system. As long as the EBCeasy is turned on and has adjusted its internal air-leading parts, the air circles almost continuously through it. More in detail: The air is exhausted from the case, led to the EBC, where it is going to be either humidified, dehumidified or left unchanged - depending on the set and actual RH values. The conditioned air is then led back into the case. Conditioning is achieved by means of a solid state polymer ionic membrane. On one side of the membrane it splits hydrogen ions (H⁺) from the air, migrates it through the membrane and discharges it on the other side. The membrane can only be used in one direction. Therefore the EBCeasy is equipped with a mechanism to switch the air-stream between both sides of the membrane depending on the necessity to humidify or dehumidify. The respective other side of the membrane is opened to the surrounding air to equalize the generated humidity level. When the EBCeasy has to change its operation-state between humidifying, dehumidifying or just circulating, it first stops its circulation fan, then closes flaps being open to the outside and then opens flaps according to the new operating state and starts the circulation fan again. The outside air is therefore never opened to the internal air-stream directly. Moreover to avoid the transport of external particles into the internal air-stream, the outside air is filtered by filter-pads of filter-class F6 on the incoming side and of filter-class F3 on the outgoing side.

During all these times a digital sensor measures the values for relative air humidity and temperature within the case. The EBC receives these values and compares the measured RH value with the setpoint, the

¹ See www.miniclima.com for our current products and available optional accessories.



hysteresis and the threshold values, which can all be set via the menu prompts on the front panel of the EBC.

Through the work of the EBC, the desired level of the air humidity in the case is constantly approached - duration and speed depending on the initial values, on the conditions (temperature, humidity) the case is exposed to, and on a number of further variables (like the temperature at the EBC's place of installation, the size and shape of the case, the air/steam tightness of the case, the kind of materials stored inside the case, the length of the hosepipes, whether or not the hosepipes are laid in many bends and turns etc). After the setpoint range (=setpoint +/- hysteresis) has been reached, the RH is going to be kept on a constant level. A negligible movement around the setpoint might be observed. This behaviour is technically induced and does not constitute an error.

A typical reaction process can be seen in the following picture, showing the humidification and dehumidification by an EBCeasy1 for a showcase of 1,0m³ (RH: blue, T: red) at 30%RH, 22°C surrounding conditions.

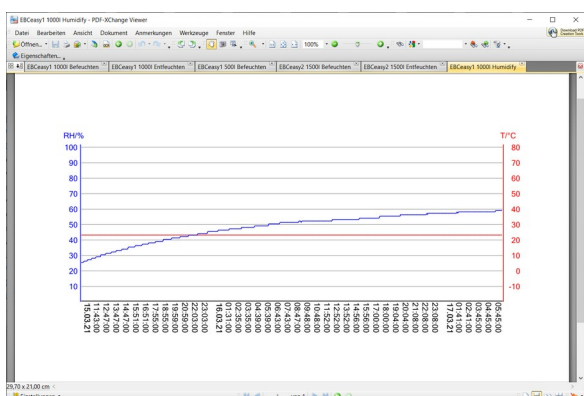


Fig. 1: Humidification Process EBCeasy1

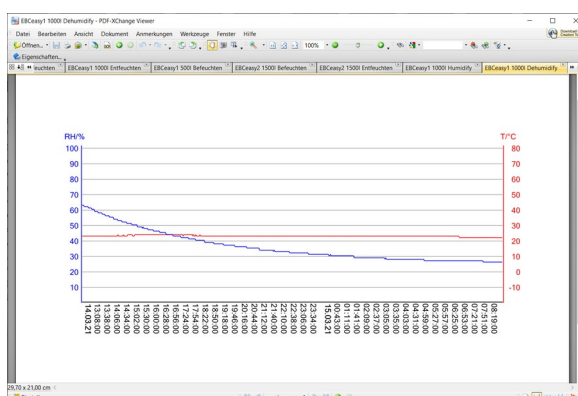


Fig. 2: Dehumidification Process EBCeasy1



A typical reaction process can be seen in the following picture, showing the humidification and dehumidification by an EBCeasy2 for a showcase of 2,0m³ (RH: blue, T: red) at 30%RH, 22°C surrounding conditions.

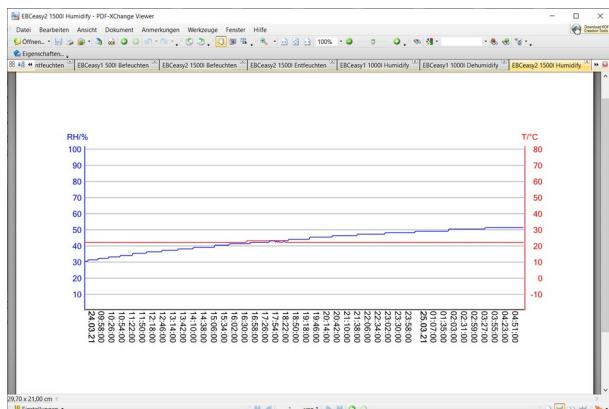


Fig. 4: Humidification Process EBCeasy2

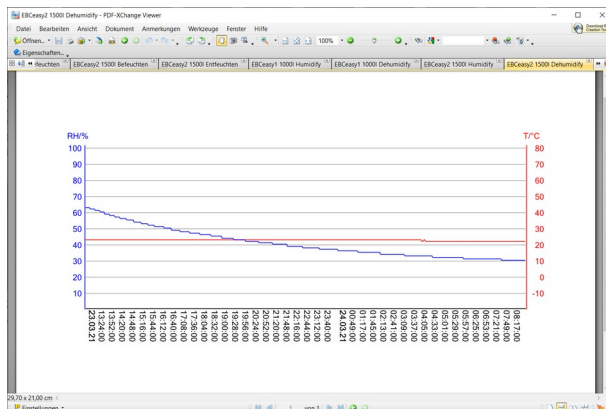


Fig. 3: Dehumidification Process EBCeasy2

1.2 Risk of use, recommendations

Our devices are first and foremost used for the regulation of the relative humidity of the air surrounding precious and/or irreplaceable works of art or artefacts. It is therefore necessary to cover all possible imponderables, when installing and using the EBCs. For this purpose, please do bear in mind the following recommendations and risks of use.

A clean installation, carried out according to the instructions found in this manual, is the basis for a working system. In particular essential are:

- ✓ The use of a climate-ready case (air-tight, steam-tight).
- ✓ The positioning of the miniClima RH/T sensor on a spot that features the same environmental conditions as the one where the exhibit is placed (see section 3.2.3 "RH/T sensor", p. 12).
- ✓ The design and positions of the air inlets and outlets on the case (see section 3.1 "Setting up the EBC, establishing the hosepipe connections", p. 8).
- ✓ That the air resistance within the air circuit is kept low (short hosepipe connections, avoidance of too many bends and turns when laying the hosepipes etc. - see section 3.1 "Setting up the EBC, establishing the hosepipe connections", p. 8).
- ✓ Preventing different temperatures inside the case (light installations, solar radiation,...). The miniClima RH/T sensor and the exhibit in particular need to be exposed to the very same temperature.
- ✓ The temperature surrounding the EBC and the hosepipes (see section 3.1 "Setting up the EBC, establishing the hosepipe connections", p. 8).



- ✓ Regular visual inspection of the EBCs, regular maintenance and care of the EBCs (see section 7 "Maintenance and care", p. 18).

We recommend a beforehand verification by the user/customer that our product is going to be able to fulfil the individual expectations and needs required for the specific case. Please don't hesitate to get in touch for any questions.

It is further recommended to test the function of a completely installed system (consisting of the case, the interconnections and the EBC(s)) before using it to control the relative air-humidity of sensitive exhibits or components. In doing so, possible errors (i.e. wrong installations) can be discovered early enough to have them corrected.

Please bear in mind that every technical device can break. So, to be on the safe side with respect to the lasting integrity of your sensitive and valuable exhibits or components, further actions should be considered:

- ✓ Regular inspections of the case and the EBC through skilled personnel probably provide for the highest possible safety against technical failures or breakdowns.
- ✓ Installation of external signal devices for every EBC, to be alarmed in time when one of our devices needs attention (see section 3.2.5 "Wirings for the external signals (Composite error alarm and on-off status)" on p. 13).
- ✓ Having a spare unit at hand if need be or when the regular inspection at our workshop becomes due. You can save time and avoid delays during which your case might remain without humidity control. Those who decide for this option should actually best have their EBCs rotate in regular intervals.

Please mind to install, use, maintain, deinstall, pack up, store and ship your EBC and all accessories correctly and in accordance to the instructions.

1.3 Permissible ambient conditions

- ✓ -5 - 30°C, 15-80%RH, non-condensing (applies to the storage of the EBC as well as to the operation of the completely installed system as a whole).

Note: The performance of the EBCeasy also depends on the humidity of its environment, as a high difference of the humidity inside and outside of the showcase can cause diffusion of humidity through the membrane.



⚠ **NOTE:** The values -5 - 30°C and 15-80%RH refer to the air-conditions surrounding the EBC and the case which are generally obligatory for operation (or damage-free storage) of the EBC. They do not refer to the surrounding air-conditions were the full capacity with respect to the achievable setpoint range (inside the case) will be given (see also section 9 "Technical data", p. 18).

1.4 Further requirements for using EBCs

The EBCeasy has to be operated with 12V DC, 24W. An according wall power supply is usually part of delivery.

1.5 Available types

EBCeasy-1 device for air volumes of up to approx. 1,0m³.

EBCeasy-2 device for air volumes of up to approx. 2,0m³.

⚠ **NOTE:** The capacity of an EBC will differ depending on the ambient conditions, the tightness and constitution of the case, the tightness and constitution of the connections between case and device, the kind and consistency of the materials stored/presented inside the case, and the like.

Every EBC of the current series can be used as both a master unit and a slave. The decision for one of the two hierarchic states is selected automatically dependant upon the type of cable connected to the EBC. If it is the cable of a miniClima RH/T sensor then the EBC becomes a master controller; if it is the control line coming from another EBC then the unit becomes a slave and will duplicate the function of the EBC that is the first in the line (chain of EBCs).

With this it is possible to increase the max. volume of the air that can be conditioned: Every added EBCeasy1/2 increases the capacity by approx. 1,0/2,0m³.

2 IDENTIFYING YOUR UNIT AND ITS ACCESSORIES/OPTIONS

The detailed instructions are found in Manual_EBCeasy_en.



3 INSTALLATION

3.1 Setting up the EBC, establishing the hosepipe connections

🔧 **NOTE:** If you have ordered air-distribution-boxes (LVB20), filter boxes, or other accessories relevant for the hosepipe connections, do also regard their additional installation manuals at this point.

The EBC should be positioned as close as possible to the case, to keep the air resistance, which increases with the length of the used hosepipes, low. The EBC should not be located in the air-conditioned part of the case itself. The device has to be installed horizontally and firm. The device has to be given the possibility to emit its self-produced heat during the operation. It is therefore necessary to ensure, that...

- 1) ...the device's place of installation (mostly the plinth of the case) is aired (e.g. by means of ventilation holes in the plinth², or by ventilation fans, if necessary);
- 2) ...the EBC is placed on a plain surface
- 3) ... the filter grills on the sides are not blocked and that edge distances of min. 10mm (right side, left side) are kept for an adequate ventilation;
- 4) ...the air slits are vacuum cleaned regularly, if necessary, and the filter(s) behind the air grill(s) on the right and/or left side are regularly checked and replaced (see section 7 "Maintenance and care", p. 18).

☠️ **CAUTION:** Absence of ventilation at the device's place of installation or blocked cooling air in-/outlets of the device might overheat the device, as well as reduce the dehumidification and humidification capacity of the device.

Note: The performance of the EBCeasy also depends on the humidity of its environment, as a high difference of the humidity inside and outside of the showcase can cause diffusion of humidity through the membrane.

Two hosepipe connections for the air circulation have to be established between each EBC and the case. Follow the steps described below for each device that shall be connected to the case (includ. every slave unit, if any):

The device itself is already equipped with two hosepipe fittings. The hosepipe fittings on the case wall need to be affixed now. You need two hosepipe fittings for every EBC - one for the air inlet, one for the air outlet.

² Recommended sizes and positions for the ventilation holes: 2x50cm² per EBCeasy: top & bottom panel of the plinth and/or both side panels of it.



Firstly define the ideal positions of the air in-/outlets on the case so as to best enable an equal distribution of the conditioned air.

NOTE: The positions shown in Fig. 5 do not represent a general solution or recommendation.

Mind the following rules before deciding:

- 1) As already mentioned above, all used EBCs should be positioned as close as possible to their respective cases, though they can also be placed some meters away, if necessary. Due to the growing air resistance the efficiency of the EBCs diminishes a little with the length of the tubes. Mind the total length of the hosepipe provided with your EBC.
- 2) The hoses must not be laid next to heat-emitting parts.
- 3) In- and outlets (even those of different EBCs) must not be located directly next to each other on the case wall (you may position inlets next to inlets and outlets next to outlets). If they need to be positioned close to each other, anyway, the inner construction of the case should be realised along the ideas presented in Fig. 5.
- 4) The constructions on the inside of the case should be realised in a way that enables the air to stream over the whole volume of the case. Should i.e. some air in- and outlets be located behind the same partition wall or divider, the inlets need to be sealed off from the outlets even if much space is left between those in- and outlets - see Fig. 5.
- 5) For partition walls / dividers / sealed off separations between in- and outlets: The overall surface of the openings between each partition / separated part and the rest of the case should at least be of the same size as the sum of the cross-sections of all hosepipes connected to this partition / separated part, thus ensuring that the air does not need to overcome a higher air resistance there than it does inside the hosepipes.

- 6) There is no universally valid figure for the permissible max. total length of the hosepipe connections per air circuit between EBC and case but the length that is usually delivered with a device (3m) can be taken as a reference.

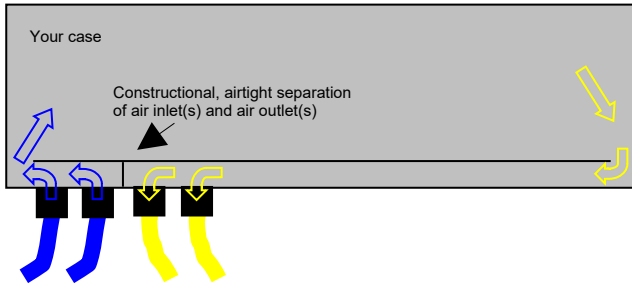


Fig. 5 - The shown positions of the hose fittings do not represent a general solution or recommendation.

As soon as the positions are fixed, you need to clarify whether the thickness of the case walls exceeds 6mm on those positions where you want to bring on the hosepipe fittings. If the thickness is 6mm or less you may cut, drill, or crack the holes for the hosepipe fittings directly in the case wall³: EBCeasy: Ø 20mm. If the thickness is above 6mm on the other hand, you need to use intermediate pieces (not part of the delivery by default) whose thicknesses actually are max. 6mm, e.g. metal plates like our flanges. The necessary diameters for the boreholes when using flanges or the like result from the size of the counter nut and gasket of the respective hosepipe fitting: VE20.. (EBCeasy): Ø 30mm;

! IMPORTANT: Mind the necessity that every air in-/outlet on the case has to be carried out airtight.

Hosepipe fittings, which are fitted directly to the case wall with the delivered gasket, need no further sealing.

3.1.1 Handling the hosepipe fittings

3.1.1.1 Handling VE20_V3

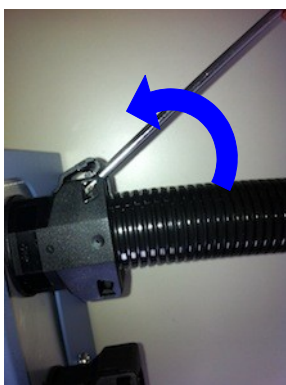
- 1) Cut the hosepipe as straight and even as possible. We recommend the use of nippers built for that purpose (can be ordered with us).
- 2) The connectors have to be affixed to either the showcase wall or to an intermediate piece/flange using the rubber gasket and the counter nut (make sure that this connection is air-tight).
- 3) Finally, simply press the delivered hosepipe into the connector until it stops. Have the fixing clips of the connector closed while doing so. There is no need to open them up in the beginning. There is also no

³ Mind that purpose-made models might be equipped differently. Always measure off the delivered parts before cutting/drilling/cracking. Also, EBCs that shall be used together with LVBs will need different boreholes on the case walls - see the delivered installation manual for the LVBs.

need for the use of any tools for this process.



- 4) Use a tool (i.e. a screw driver) for opening up the connection again. Push the latches on both sides to the outside in order to do so:



3.1.2 Connecting the hosepipes to the EBC

Dispose of the protective coverings on the hosepipe fittings of the EBC, if any. After that, proceed as described above in order to attach the hosepipes to the EBC's fittings. Mind the different types of fittings mentioned above.

3.2 Electrical connections

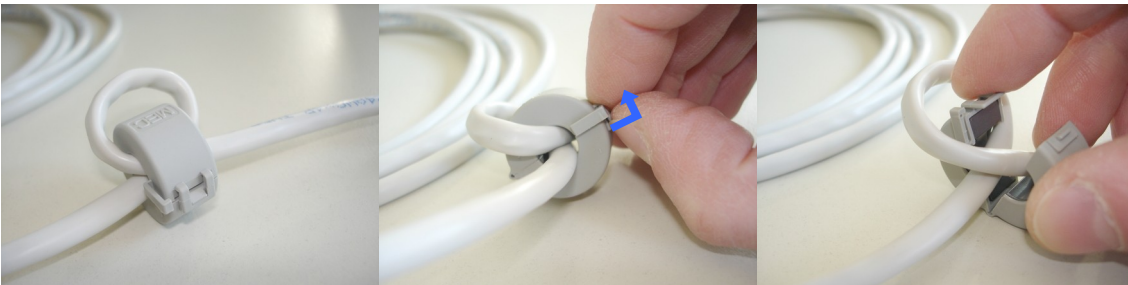
3.2.1 Plugging and securing the 12V Connection



The cable of the 12V power supply shall be laid between the handle and the housing to achieve a kind of strain relief.

3.2.2 Handling the ferrite core

In case you need to take off the ferrite core(s) of the RH/T sensor cable or the control line temporarily, this can be done easily (kind and colours of the cores vary):



⚠ **IMPORTANT:** Do not forget to put the core(s) back on the cable before using the EBC: Wind the cable through each core once - see the pictures above. The core(s) should be positioned next to the RJ45 plug of the sensor cable or next to each of the RJ45 plugs of the control line respectively.

3.2.3 RH/T sensor

(Applies to EBCs used as master units only.)

Please see the printed note that has been added your delivery before handling the sensor.

⚠ **IMPORTANT:** The RH/T sensor has to be affixed at a suitable point inside the case, which ideally is in the close surrounding of the humidity sensitive objects stored/presented in the case. The sensor does not



necessarily have to be placed in the visible part of the case, but even so, it has to be positioned on a spot and under conditions that are comparable to those of the exhibit in the case. Especially lighting installations and their effect on the temperature of the air surrounding the sensor may have a heavy impact on the functioning of a correct humidity control. Do not cover, wrap, or in any other fashion separate the sensor from the air that surrounds the exhibit.

By default the sensor comes complete with housing, a 2.5m or 5m cable, a RJ45 plug and a ferrite core. As neither all parts of the sensor housing nor the plug can be detached from the cable, you need a borehole of min. Ø 13mm in the case wall so as to be able to lead the complete sensor with housing and cable (sensor sided) through. It is also possible to just plug the top of the sensor including its housing into the showcase, a borehole of Ø 10mm is then enough. ⚠ **IMPORTANT:** The chip of sensor is an easily damageable electronic component. Therefore it is important to take good care to not harm it when leading it through the wall! It is also essential to take care for an airtight lead-through of the sensor cable through the wall of the case.

Once the sensor is positioned and mounted inside the case, verify that the EBC is still not plugged to the mains connection. Then plug the sensor cable to its jack on the front plate of your EBC, labelled **Sensor & Control** in. With the sensor plugged in, the EBC is already defined to be a master unit.

⚠ **IMPORTANT:** Do not plug or unplug the sensor to/from the EBC during operation! Always turn the EBC off, wait for the completion of the pumping process (if any) and then pull the mains connection before handling the sensor cable. Otherwise the electronics of the EBC might be harmed and/or unexpected malfunctions might occur.

3.2.4 Control lines

(Applies to master/slave-systems only.)

The detailed instructions are found in Manual_EBCeasy_en.

3.2.5 Wirings for the external signals (Composite error alarm and on-off status)

The detailed instructions are found in Manual_EBCeasy_en.

4 INITIAL AND CONTINUED OPERATION

As soon as all hosepipe connections and all required cable connections on the front panel are established, you can continue with setting the device into operation. Proceed as follows:



4.1 mains connection

Use the delivered wall power supply. At first plug the cable to the socket-inlet (backside) of the device. Then plug the power supply to an appropriate (see section 1.4 "Further requirements", p. 7) socket-outlet. If necessary, you can use any common and approved international mains plug adapter - still, voltage and frequency of the mains connection have to be within the above (p. 7) mentioned range, and the connection has to be fuse protected and earthed.

⚡ **NOTE:** In case of a power outage (or when the mains connection has been cut in any other way), the EBC will always return to the last mode it had been working in (Stand-by or humidity control) as soon as the power supply becomes reestablished. Also, all settings that had been taken on the EBC will remain intact despite of any power outage.

4.2 Stand-by mode

Once a working mains connection has been established the EBC's LED lights up green and the display indicates the software version programmed into the EBC's processor. After some seconds the display switches to ("ser_no" corresponds to the respective serial number):



Fig. 6 - Display message during stand-by mode (Master sets).

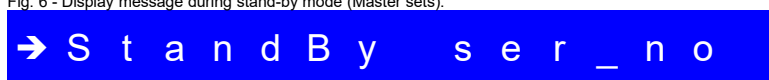


Fig. 7 - Same message on a slave unit. Slave mode requires an established connection to the master and both the slave and the master have to be plugged to the mains supply.

The EBC adjusts its internal flaps to control the internal air-stream, the according engine noise can be heard for some seconds. While in stand-by mode, an EBC will neither circulate the air between case and EBC, nor will it start/continue with any humidifying or dehumidifying processes. Also no data will be logged or provided live on the RS232 interface at this stage. Previously recorded data can be read out during stand-by, though, and the menu on the EBC's front panel is accessible, too (see section 4.4 "Settings and read-outs - working with the menu", p. 16).

4.3 Switching on and off

Push the **On-Off/Reset** button for about a second to set the device into operation. Slave sets are switched automatically with the master, they can neither be switched on nor off separately.



Depending on the actual settings and the values in the case the unit (or chain of units) will immediately switch into the respective mode of operation, and so the message on the display of the master unit can now be one of these ("50%" being an exemplary value):



Fig. 8 - Possible display messages during normal operation (Master sets).

The humidity value displayed to the left resembles the actual humidity in the case as measured by the miniClima RH/T sensor.

EBCs used as slave units will always copy the display of the chain's master unit, except for an arrow symbol on the leftmost display element. This arrow marks any slave unit for better recognisability (the arrow is not prompted in menu mode):



Fig. 9 - Possible display messages during normal operation (Slave sets).

🔗 **NOTE:** In case the messages on your display are in German please turn to section Fehler: Verweis nicht gefunden "Fehler: Verweis nicht gefunden" on p. Fehler: Verweis nicht gefunden to see how to change the menu language.

If wished, press **On-Off/Reset** (on the master unit) again for about a second to set the device (or chain) back into stand-by mode.



4.4 Settings and read-outs - working with the menu

🔑 **NOTE:** The menu can be used both during operation and while the EBC is in stand-by mode.

The following variables can be set with the menu on the EBC front panel:

- ✓ The setpoint for the desired level of the relative humidity inside the case (%RH) - Menu entry 1.
- ✓ The upper and lower thresholds for the humidity alarm (%RH) - Menu entries 2 & 3.
- ✓ The acoustic alarm (On/Off) - Menu entry 4.
- ✓ The delay for the first humidity alarm (Days) - Menu entry 5.
- ✓ The menu and display language (English/German) - Menu entry 6.
- ✓ The correction for the interpretation of the data coming from the RH/T sensor (Calibration; %RH) - Menu entry 11.
- ✓ The hysteresis - Menu entry 12

Furthermore the following data can be read out from within the menu:

- ✓ The temperature inside the case as read from the RH/T sensor (°C) - Menu entry 7.
- ✓ The temperature at the membrane inside the EBC (°C) - Menu entry 8.
- ✓ The temperature at the electric circuits inside the EBC (°C) - Menu entry 9.
- ✓ The hours of operation of the EBC (Hrs) - Menu entry 10.

🔑 **IMPORTANT:** Note down the current hours of operation of your EBC for future reference (cp. section Fehler: Verweis nicht gefunden "Fehler: Verweis nicht gefunden" on p. Fehler: Verweis nicht gefunden).

🔑 **NOTE:** The menu is identical at masters and slaves, but some settings can only be taken on masters. If you i.e. try to alter the setpoint or one of the alarm thresholds within the menu of a slave unit, the software will switch back to the value set in the master shortly after.

🔑 **NOTE:** Any EBC will cancel the menu mode after a few seconds of inactivity. All changes that have been made and then confirmed with ↵ Enter will remain intact. All changes that have not been confirmed before will be rejected.



4.4.1 Menu entry Setpoint

With this entry you can set the desired level for the relative humidity inside your case (master units only) - this is the core function of an EBC (or a chain of EBCs). Default setting is 50%RH (might also be factory-set to a client-specific value). The EBC master unit always compares the value it receives from the RH/T sensor inside your case to the one defined here. It then starts/continues with its work to bring the measured value inside the case in line with the one set by you. All connected slaves will duplicate this work.

Press **Menu/Esc** to call up the menu of the master unit. The display reads:



Fig. 10 - Display message in menu mode, 1st menu entry.

4.4.1.1 Description/options

Setpoint is the variable that can be altered with this menu entry; **50%** (example) is the currently set value of this variable (in %RH).

Press **Menu/Esc** once more to leave the menu mode without changing any values.

Up indicates that you can move up the menu to go to the next menu entry by pressing **Up**. No changes will be made to the setpoint value by doing so.

Enter indicates that this variable can be set by pressing **Enter**.

Press **Enter** to alter the value for Setpoint (possible range: 10-85%). The two digits resembling the value on the display start to blink. Use the **Up** and **Down** buttons to make your changes, and confirm the new value with **Enter**. The value will not be stored as long as you do not press this button.

The detailed instructions of the further menu entries are found in Manual_EBCeasy_en.

4.5 Procedures during operation

During normal operation every EBC (master or slave) always displays the currently present humidity level (in %RH) and whether this level is in range (=setpoint plus/minus hysteresis) or not. If not, the display prompts the kind of process that is currently activated in order to approach the setpoint (humidification or dehumidification) - see Fig. 8 and Fig. 9 (p. 15). Slave units additionally prompt a rightwards arrow in the display (leftmost symbol), in order to be immediately recognised as working in slave mode.



The LED on the front plate is on and gleaming green, signalling that the system works properly. The changeover contacts for your (possibly installed) external status display devices are both switched ("make contact"; cp. Fehler: Verweis nicht gefunden, p. Fehler: Verweis nicht gefunden) according to the EBC's status of being switched on and having not issued any alarm. During all times the internal fan for the circulation of the air between EBC and case is running with a silent buzz.

When the EBC changes its status, it stops its circulation fan, arranges its internal flaps to force the internal air-stream to pass the membrane on the appropriate side and starts its circulation fan again. This is done by electric motors that can be heard for some seconds. While in one of the states "dehumidifying" or "humidifying" a second fan is running to exchange the air on the other side of the membrane with the outside air to balance the differing humidity level. The air is sucked to the inside of the EBC on one of the unit's sides through air grill(s) and filter-pads of filter-class F6 to avoid that external particles reach the internal air stream. The air is blown out of the EBC on the same side through air grill(s) and filter-pads of filter-class F3. Those air grills have to be kept clean and an edge distance of about 1cm shall be left.

⚠ NOTE: In case of a power outage (or when the mains connection has been cut in any other way), the EBC will always return to the last mode it had been working in (Stand-by or humidity control) as soon as the power supply becomes reestablished. Also, all settings that had been taken on the EBC will remain intact despite of any power outage.

5 ALARMS - WHAT THEY MEAN AND HOW TO REACT

The detailed instructions are found in [Manual_EBCeasy_en](#).

6 TROUBLESHOOTING

The detailed instructions are found in [Manual_EBCeasy_en](#).

7 MAINTENANCE AND CARE

The detailed instructions are found in [Manual_EBCeasy_en](#).

8 DEINSTALLING / PACKING UP / STORING / SHIPPING

The detailed instructions are found in [Manual_EBCeasy_en](#).

9 TECHNICAL DATA

The detailed instructions are found in [Manual_EBCeasy_en](#).