

homecare



# CPAP 20 CLICK 2

**CPAP unit**

*Description of the equipment and instructions for use  
for devices from SN 65000*

**WEINMANN**  
medical technology

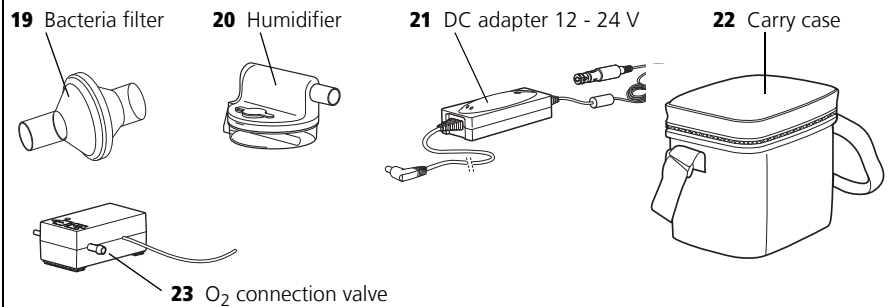
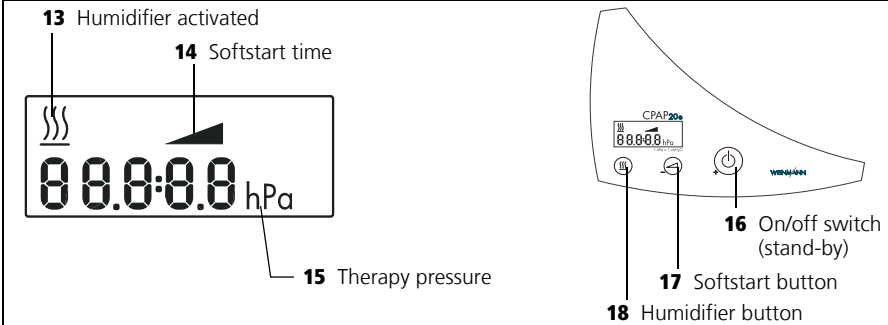
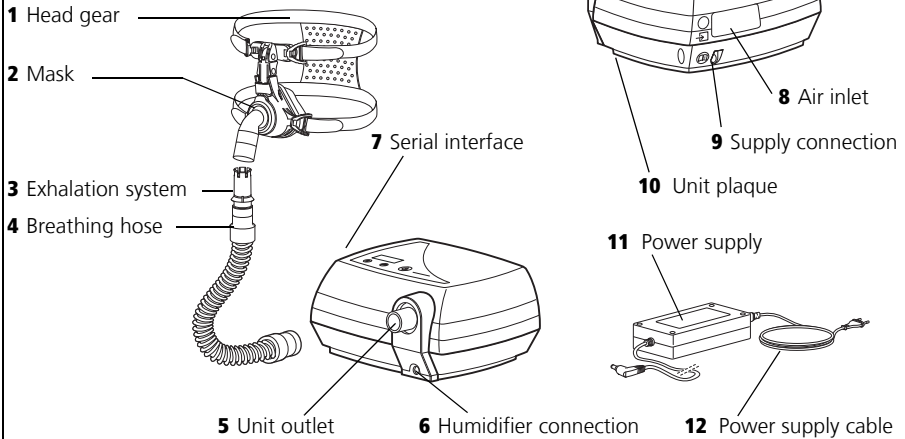
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# Overview

## CPAP 20



## Legend

### 1 Head gear (Accessories)

Helps locate the mask correctly and securely.

### 2 Mask (Accessories)

The mask is used to provide the patient with air at the required therapy pressure.

### 3 Exhalation system (Accessories)

Exhalation air containing carbon dioxide is diverted here during the therapy.

### 4 Breathing hose

The air flows through the breathing hose to the mask.

### 5 Unit outlet

The air flows from here via the breathing hose and mask to the patient.

### 6 Humidifier connection

Used to connect the CLICK 2 humidifier (supplied as an accessory).

### 7 Serial interface

Used exclusively to connect to devices for visualization and evaluation of therapy data.

### 8 Air inlet

Securely positions the coarse and fine dust filters.

### 9 Supply connection

This is the connection for the external power supply or DC adapter.

### 10 Unit plaque

Provides information about the unit, e.g. serial number and year built.

### 11 Power supply

Used to supply power to the unit.

### 12 Power supply cable

Connects the power supply to the power supply.

### 13 Humidifier activated

This symbol appears when the humidifier is in operation. The current humidity level is displayed.

### 14 Softstart time

This symbol appears when the softstart time is set or the softstart is activated.

### 15 Therapy pressure

The therapy pressure is shown in hPa (hectoPascal).  $1 \text{ hPa} = 1 \text{ mbar} \approx 1 \text{ cm H}_2\text{O}$ .

### 16 On/off switch (stand-by)

Switches the therapy unit on and off.

### 17 Softstart button

Activates the softstart or sets the softstart time (5 - 30 minutes in 5 minute increments)

### 18 Humidifier button

Activates the humidifier or sets the humidifier level (6 levels).

### 19 Bacteria filter (Accessories)

Used to protect the patient from bacteria, particularly if the unit is being used by a number of patients.

### 20 Humidifier (Optional)

Used to heat and humidify the air flow created by the therapy unit.

### 21 DC adapter 12 - 24 V (Accessories)

For operating the therapy unit via a DC socket (12 - 24 V).

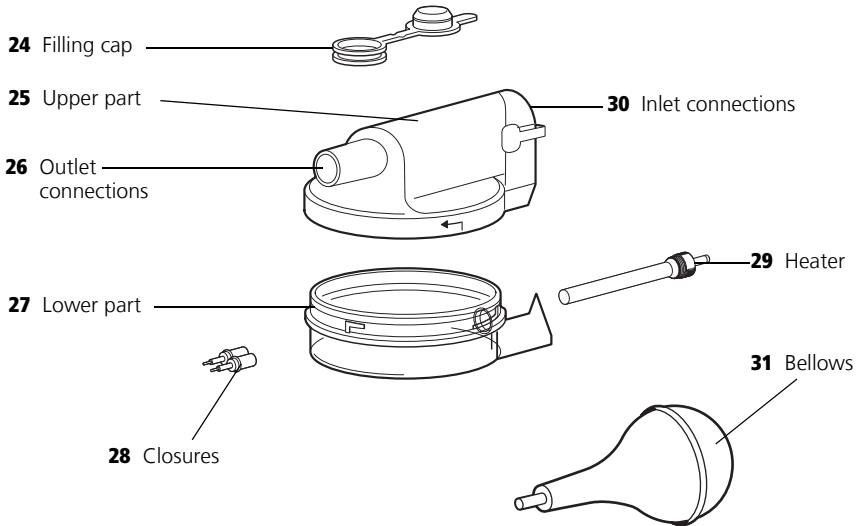
### 22 Carry case (Accessories)

For carrying the therapy unit.

### 23 O<sub>2</sub> connection valve

For introducing oxygen into the mask.

## CLICK 2 (optional)



## Legend

### 24 Filling cap

For filling the humidifier.

### 25 Upper part

Closes the humidifier, contains the filling cap.

### 26 Outlet connections

From here the moistened air flows into the breathing hose.

### 27 Lower part

Contains approximately 280 ml water.

### 28 Closures

Used to shut off the pressure gland during preparatory hygienic operations.

### 29 Heater

Heats the water in the humidifier. This humidifies the air.

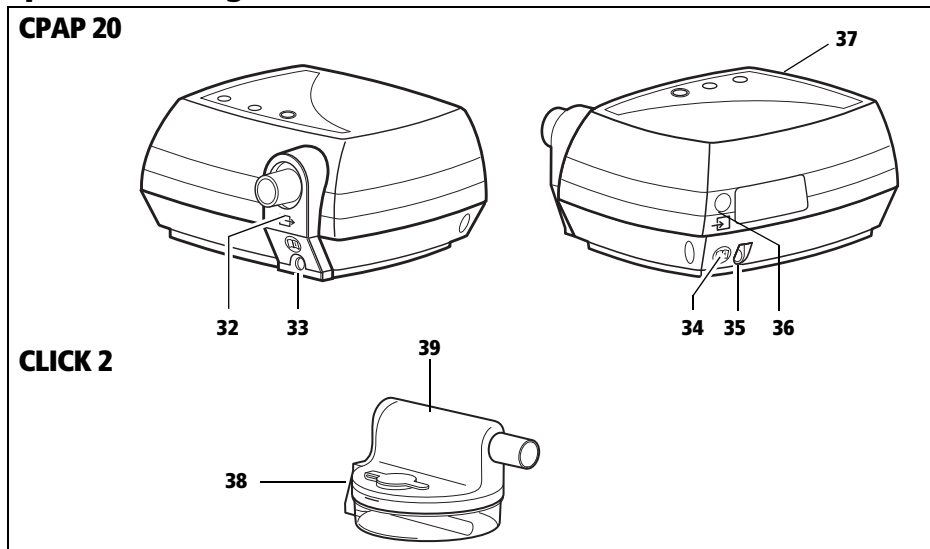
### 30 Inlet connections

The air flows from the therapy unit into the humidifier.


### 31 Bellows

Dries the CLICK 2.






## Special markings on the unit



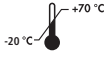
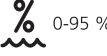


	Symbol	Meaning
<b>CPAP 20:</b>		
32		Unit outlet: air escapes with 4 - 20 hPa
33		Please use the appropriate User Guide! Connector for respiratory humidifier CLICK 2 WM 27330.
34		DC voltage
35		Please use the appropriate User Guide! Connection for power supply WM 24480 or DC adapter WM 24469, to operate the therapy units using a DC socket (12 - 24 V)
36		Unit inlet: allows air at room temperature to enter
37		Please use the appropriate User Guide! Connection for setting the therapy parameters with <i>SOMNOadjust</i> WM 23930 and <i>SOMNOsupport</i> WM 23975 by specialist staff or to control the O <sub>2</sub> connection valve, WM 24042. Max. current consumption 163 mA.
<b>CLICK 2 (optional):</b>		
38		Unit is hot! Do not touch the heater rod.

	Symbol	Meaning
39		Do not use the humidifier on patients whose airways have been bypassed


## Unit plaques

Symbol	Meaning
	Year built
	Unit type B
	Do not dispose of the unit as household waste
	Please use the appropriate User Guide!
	Type of protection from electric shock: Unit of protection class II
<b>CE 0197</b>	CE 0197 symbol: Confirms that the product conforms to the applicable European directives.
<b>IPX1</b>	Protection against ingress of water (drips)
<b>SN</b>	Unit serial number

## Labeling on the packaging of the therapy device

Symbol	Meaning
	Permitted temperature for storage: -20°C to + 70°C
	Permitted humidity for storage: max. 95 % relative humidity.
<b>CE 0197</b>	CE 0197 symbol: Confirms that the product conforms to the applicable European directives.
	Protect device from wet
	Fragile

## Labeling on the packaging of the breathing tube

Symbol	Meaning
	Use only for a single patient



# 1. Description of unit

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## 1.1 Intended use CPAP 20

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CPAP 20 is a CPAP unit (CPAP = Continuous Positive Airway Pressure) used to treat sleep-related breathing disorders in patients from the age of 12 years.

No special knowledge or training is required in order to use the unit. All that is required is instruction by a clinic or a medical practitioner.

### **Important!**

- CPAP 20 can only reliably prevent airway closure when the CPAP pressure prescribed by a doctor for the specific patient has been calculated, e.g. in a sleep laboratory.
- CPAP 20 is **not** designed for life support.
- Only use the unit for the purposes described below.

## 1.2 Intended use CLICK 2

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The CLICK 2 humidifier is an optional accessory for the Weinmann CPAP 20 therapy unit.

The CLICK 2 humidifier is used to heat the air flow created by the CPAP 20 and to increase its humidity. This will prevent the patient's upper airways drying out during the therapy.

CLICK 2 can only be used with the CPAP 20 therapy unit. Operation with third-party devices is not permitted.

Only use the unit for the purposes described below.

## 1.3 Functional description CPAP 20

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CPAP 20 operates according to the principle of an electrically driven flow generator, with the pressure level being controlled electronically.

- A fan draws in ambient air via a filter and conveys it to the unit outlet. From here the air flows through the breathing hose and the mask to the patient.
- A pressure sensor measures the upcoming pressure at the unit outlet and shows this on the display. The microprocessor-controlled flow generator controls the pressure to the set value and reduces fluctuations in pressure caused by breathing.
- A softstart automatic system is installed to help the patient fall asleep more easily. When the unit is switched on, the CPAP pressure starts at the initial pressure selected by the doctor and is then slowly increased to the setpoint pressure selected. The time of the pressure increase can be adjusted between 5 and 30 minutes in 5-minute increments.
- The therapy parameters are adjusted using the *SOMNOadjust* remote control system or the *WEINMANNsupport* evaluation program.
- CPAP 20 automatically saves all settings in the event of a power failure. This means that the unit does not need to be reset when power is restored.

## 1.4 Functional description CLICK 2

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The humidifier works on the so-called overflow principle. The air coming from the therapy unit is conveyed across the surface of a heated water tank, increasing the relative humidity and the temperature of the air flow. The amount of humidity released can be adjusted using the buttons on the Weinmann therapy unit. The output of the heater rods and consequently the temperature of the water in the humidifier chamber is controlled electronically by the Weinmann unit. The water level can be checked at any time through the window in the humidifier chamber.

## 2. Safety Instructions

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Please read these operating instructions through carefully. They form part of the equipment and should be available at all times.

For your own safety, the safety of your patients, and to comply with the requirements of EU Directive 93/42 EEC, please observe the following points.

### 2.1 Safety instructions

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#### Operating the unit

**Caution!**

- The power supply supplied allows the unit to be operated at voltages between 115 V and 230 V. Check that your supply voltage falls within this range. With a 12 V DC or 24 V DC supply, use the WM 24469 DC adapter available as an accessory.
- CPAP 20 must be connected to an easily accessible socket so that the mains plug can be quickly removed in the event of a power failure.
- Do not cover the unit or power supply. Do not use in the vicinity of a heater or in direct sunlight. The unit may overheat, resulting in insufficient therapy delivery and damage to the unit.
- Maintain a safe distance between the CPAP 20 and equipment that emits HF radiation (e.g. mobile phones). This unit may otherwise malfunction (see page 44). If CPAP 20 interferes with other equipment (e.g. a radio), put the CPAP 20 further away from the equipment.

**Caution!**

- Do not use the therapy unit or humidifier if the unit is malfunctioning, parts are damaged and/or the contact between the humidifier and the heater rod is damp.

- The performance of the humidifier can be affected if it is used outside the permitted temperature range.
- Observe the operating instructions for your mask.
- Please observe the section „5. Hygienic preparation " on page 25 to avoid infection or bacterial contamination.

## **Transport/Accessories/Spare Parts/Repair**

### **Caution!**

- Do not transport (or tilt) the CPAP 20 with the humidifier installed. Tilting might cause water remaining in the humidifier to run into the CPAP 20 and damage it.
- Only have checks and repair work carried out by Weinmann or specialist staff.
- If third-party items are used, functional failures may occur and fitness for use may be restricted. Biocompatibility requirements may also not be met. Please note that in such cases, any claim under warranty and liability will be voided if neither the accessories nor genuine replacement parts recommended in the instructions for use are used.

### **Caution!**

- Modifications to the CPAP 20 and CLICK 2 are not permitted.
- Third-party masks may only be used after being approved by Weinmann. Using unapproved masks may result in unsuccessful therapy.
- Please make sure that the accessories you use are complete and are suitable for the therapy. This particularly applies to the exhalation system. The CO<sub>2</sub> content of the exhaled air may otherwise adversely affect your breathing.

## Oxygen supply

### Warning!



- **There is a risk of fire!** Do not smoke or use open fires if oxygen is being used during therapy. The oxygen may be deposited in clothing, bed linen or in your hair and can only be removed by thorough ventilation.

### Caution!

- An oxygen supply is only permitted if the WM 24042 O<sub>2</sub> connection valve is used. Valves of third-party manufacture may only be used following authorization by the manufacturer, Weinmann. If unauthorized valves are used, there is a risk of fire.
- On the topic of oxygen, it is essential to follow the safety instructions in the instructions for use of your oxygen supply system and the O<sub>2</sub> oxygen valve.
- Oxygen must be supplied via the breathing mask. Supply via any other point is not permitted. The quantity of oxygen supplied must not exceed 4 l/min. If excessive quantities are supplied, there is a risk of fire.

## 2.2 Contraindications

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CPAP 20 should be used with particular caution or not at all with some diseases. In individual cases. It is up to the doctor supervising treatment to decide whether use is indicated. In such cases, use needs to be tightly controlled and the risk weighed up against the benefits.

This implies:

- Acute cardiac decompensation
- Severe cardiac arrhythmias, atrial fibrillation with reduced filling of the right ventricle.
- Insufficiency of the right heart or other pulmonary hypertension
- Severe hypotension, especially in combination with intravascular volume depletion

- High risk of barotraumas
- Bullous lung emphysema
- Severe dehydration
- Severe epistaxis (nosebleeds)
- Acute sinusitis, otitis media or perforated eardrum
- Pneumothorax or pneumomediastinum
- Pneumoencephalus
- Severe skull trauma
- Status following brain surgery and following surgical intervention on the pituitary gland or the middle/ inner ear.

## 2.3 Side effects

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When using CPAP 20 the following undesirable side effects may occur during short-term and long-term usage:

- pressure points on the face caused by the mask and the forehead padding
- reddening of facial skin
- nasal congestion
- dry nose
- dry mouth in morning
- feeling of pressure in the sinuses
- irritation of conjunctiva of eyes
- gastrointestinal insufflation ("wind")
- nosebleeds

# 3. Set up of equipment

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## 3.1 Setting up and connecting the CPAP 20

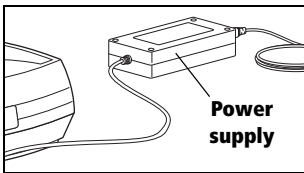
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1. Set up the unit on a flat surface, e.g. a bedside cabinet or on the floor next to the bed.

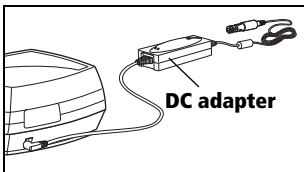
**Caution!**

Do not cover the unit or power supply. Do not use in the vicinity of a heater or in direct sunlight. The unit may overheat, resulting in insufficient therapy delivery and damage to the unit.

2. Plug the power supply cable into the supply connection of the CPAP 20. Then plug the power supply into a socket outlet (using the power supply cable).

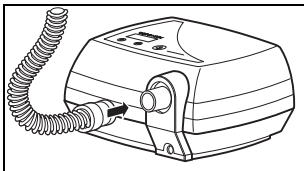


The power supply automatically determines the appropriate mains voltage (115 V - 230 V).



If the CPAP 20 is to be operated with a voltage of 12 or 24 V DC, connect the WM 24469 DC adapter (available as an option) instead of the power supply.

On the display „0“ appears to show it is ready for use.



3. Plug the breathing hose into the unit outlet.

**Note:**

The device automatically compensates for differences in air pressure (e.g. as a result of great altitude).

## 3.2 Fitting the breathing mask

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1. Adjust the forehead support of the mask (if present).
2. Connect the headgear to the mask.
3. Position the mask.
4. Adjust the headgear so that the bulge of the mask only results in low pressure to prevent pressure points on the face.

### Warning!



For further instructions, please refer to the operating instructions for the relevant mask.

### Warning!



Full-face masks must be equipped with an emergency exhalation valve so that you can breathe through nose or mouth in the event of any device failure. Full-face masks without an emergency exhalation valve may not be used!

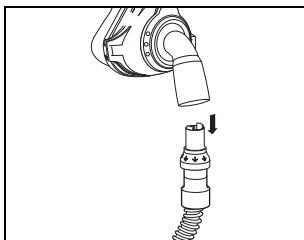
## External exhalation system

No exhalation system is integrated in some masks. In order for the used, carbon dioxide (CO<sub>2</sub>)-enriched air to be able to escape, an external exhalation system is required on these masks. Follow the instructions for use of your mask.

### Warning!



Without an exhalation system the CO<sub>2</sub> concentration would rise to critical values in the mask and hose, thus hindering your breathing. Risk of suffocation!



- Fit the external exhalation system between the breathing mask and the breathing tube.



## 3.3 Filling and connecting the CLICK 2

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### Before using for the first time

Before using for the first time, rinse the humidifier with copious amounts of water (see "5. Hygienic preparation" on page 25).

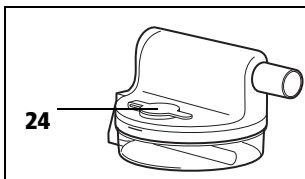
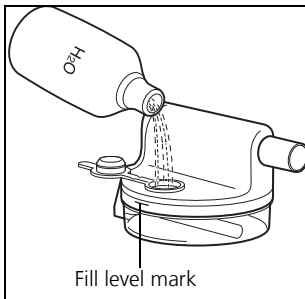
### Filling the humidifier

#### Caution!

- Do not fill the humidifier when it is connected to the therapy unit and do not overfill above the maximum level, otherwise water may enter the therapy unit. This can damage the unit.
- Do not fill the humidifier with hot water as this might damage the housing and heating rod resulting in incorrect operation and insufficient therapy delivery.

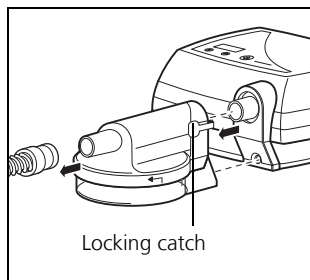
#### Note

- The use of aromatic additives, such as eucalyptus oil, may damage the plastic parts of the humidifier.



1. Open the filling cap of the humidifier.
2. Fill the humidifier up to the mark with distilled water. If no distilled water is available, low calcium boiled water can be used instead (but not as a rule!). Check that the heater rod does not scale up (see "5.4 Descaling CLICK 2" on page 30).
3. Firmly close the humidifier with the filling cap.
4. After filling, check that the humidifier is not leaking. Run your finger over the bottom of the humidifier or place the humidifier on a piece of kitchen paper. Any escaping water will then be easy to spot.

## Adapting the humidifier

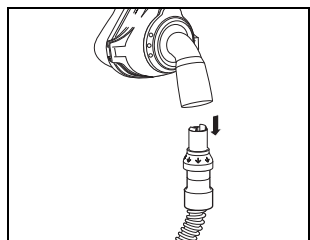


1. If necessary, release the corrugated tubing from the therapy unit.
2. Click the humidifier into position from the front onto the sleep apnea unit. The inlet connection and the heating rod must be directed towards the sleep apnea unit. Take care to engage the lock.
3. Connect the corrugated tube to the outlet connections of the humidifier.
4. To release the humidifier, press the locking catch and withdraw it off the unit.

## 3.4 Accessories

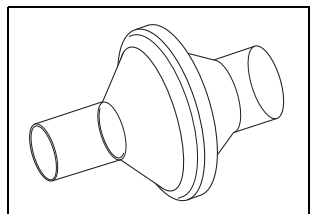
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### External exhalation system



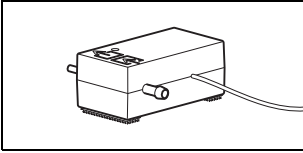
Even if the device fails, the exhalation system enables you to breathe through the nose or mouth. Full-face masks must also be fitted with a safety valve. Remove the mask as quickly as possible. First check whether there has been a power failure. Follow the instructions for use for your exhalation system.

### Bacteria filter



If the CPAP 20 is to be used by several patients (e.g. in a hospital), a bacteria filter should be used to protect against infection. It is inserted between the breathing tube and the device outlet port. Using a bacteria filter can reduce the pressure and flow rate.

## Oxygen supply



For safety reasons (risk of fire) the direct introduction of oxygen into the breathing hose or the mask without any special protective device is not permitted. However, the supply of up to 4 l/min oxygen to the breathing mask is possible when using the WM 24042 oxygen connection valve.

An oxygen concentrator (e.g. Oxymat), liquid oxygen or an oxygen cylinder with a suitable pressure reducer may be used. This application must be prescribed by the patient's doctor.

To prevent oxygen entering the therapy unit, the CPAP 20 automatically generates a therapy pressure of at least 5 hPa when an oxygen connection valve is attached. You must always follow the safety instructions for handling oxygen as well as the operating instructions for the oxygen valve and the oxygen unit used.

# 4. Operation

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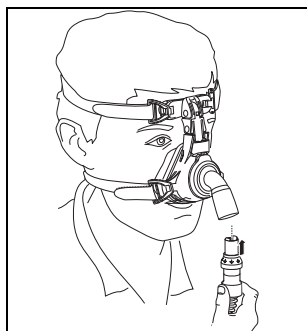
## 4.1 CPAP 20 startup

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Always use an exhalation system. Used air containing carbon dioxide (CO<sub>2</sub>) escapes from the mask via the exhalation system. Without an exhalation system, the CO<sub>2</sub> concentration in the mask and tube would rise to critical levels and thus inhibit your breathing.

The exhalation system must always be fitted in the immediate vicinity of the mask.

An exhalation system is already incorporated in some mask systems. In this case, no separate exhalation system is required. Please refer to the relevant instructions for use for the mask used.



1. If the mask does not have an integrated exhalation system, push the exhalation system onto the end of the breathing tube.
2. Connect the breathing tube, including the exhalation system, to the breathing mask (tapered push connector). Please follow the relevant instructions for use for the mask/exhalation systems.

Guide the breathing tube away from your head. Never put the breathing tube around your neck.

3. Press the On/Off key.

The therapy period will appear for approx. 3 seconds in the display. The flow generator starts to convey air through the breathing hose.

If softstart has been preselected, the softstart display will then light up and the softstart time will appear in the display.

CPAP 20 is now ready for operation.

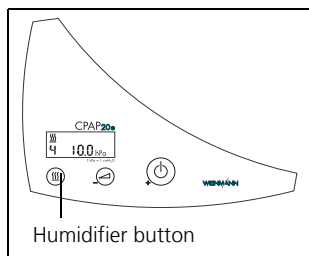
**Note:**



If the device is not used for 15 minutes, it will automatically switch off (only if the therapy pressure is higher than 6hPa).

## 4.2 CLICK 2 setting

### Switching on the humidifier

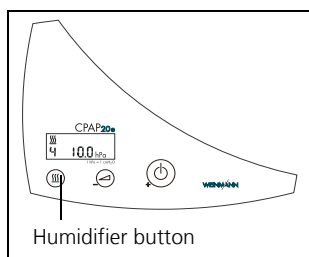
1. Fill up the humidifier and set up as described in "3.3 Filling and connecting the CLICK 2" on page 17.
2. Switch on the therapy unit.






3. Press the humidifier button  of the therapy unit. The humidifier symbol  and the humidification level display (level 4 in this case) are shown in the display of the therapy unit.

### Setting the heating level

1. Make sure your therapy unit is switched on.



2. Press the humidifier button  for approx. 3 seconds until the number and the humidifier symbol  start to flash.
3. Release the humidifier button .
4. Now select the heating level (1-6) using the on/off switch (+) or the softstart button (-).

The displayed value is saved after 4 seconds.

Which is the best setting for you will depend on the room temperature and the air humidity. The optimum setting will therefore vary depending on the time of year. Under normal conditions heating level 3 is sufficient.



If the temperature is 23 °C and air humidity 70 %, a humidity of 100 % can be reached with heating level 6 and a flow rate of 20 l/min.

If your airways are dry when you wake up, the heating level is too low. Select a higher setting.


If condensation forms in the breathing hose during a night therapy session, the heating level is too high. Choose a lower heating level.

## Switching off the humidifier

There are two ways of switching off the humidifier:

- Press the humidifier button  of the sleep apnea unit. The humidifier symbol  in the display of the sleep apnea unit goes out. The therapy unit remains switched on.
- Press the on/off switch on your therapy unit. The humidifier and the therapy unit are both switched off. When you switch the therapy unit on again, the humidifier is also switched on automatically and runs at the heating level of the previous therapy session.


## Automatic switch-off at low levels

If the therapy unit detects that there is not enough liquid in the humidifier, it switches the humidifier off within 15 minutes. The humidifier symbol  in the display goes out.

## 4.3 Softstart setting


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The softstart time can be selected in 5-minute increments up to a maximum of 30 minutes. Proceed as follows:

1. Switch on CPAP 20 and press the softstart button . Hold the button down until the display for the softstart time flashes.
2. Now select the softstart time (5-30 minutes in 5-minute increments) using the on/off switch (+) or the softstart button (-).

If a button is not pressed for 4 seconds, the displayed softstart time will be saved and the display stops flashing.

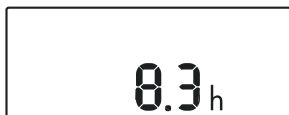
The softstart settings are saved when the unit is switched off. Whenever CPAP 20 is started up, it automatically starts in softstart mode if this was switched on.

Softstart can be switched on and off at any time by pressing the softstart button .

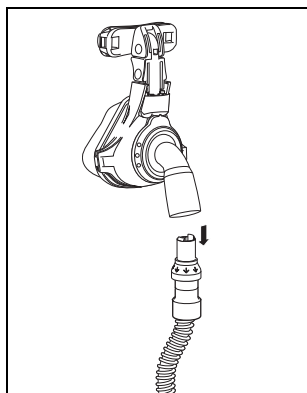
## 4.4 After usage

---

1. Remove the headgear with the mask.
2. Push the on/off switch to switch the device off.



The daily therapy duration of the last session is shown on the display. Then "0" appears.



3. Remove the tube connection and the exhalation system from the mask.
4. Clean the mask and the exhalation system (see "5. Hygienic preparation" on page 25).

**Note:**

CPAP 20 and the power supply consume approx. 4 watt in standby mode. The unit does not have a mains switch. To save electricity you can remove the power plug from the outlet socket during the day. It is therefore advisable to connect the unit to a readily accessible socket. The stored values and settings will not be lost.

5. Clean the humidifier (see "5. Hygienic preparation" on page 25).

## 4.5 Read off therapy duration

---

CPAP 20 saves the data from 366 days and the associated therapy duration. You can display the following values:

- Total therapy duration in hours
- Average therapy duration per day
- Therapy duration of current day including date

**Note:**

A **therapy day** always starts and ends at 12 noon. Data recorded between midnight and 12 noon is allocated to the previous **day**.

The total therapy duration is shown for a few seconds when the unit is **switched on**. When **switching off** the therapy duration for the current day is displayed.

To read off further data, proceed as follows:

1. When switching off the unit hold down the on/off switch for approx. 4 seconds until the average therapy duration per day is displayed.
2. Release the on/off switch. The average therapy duration per day and the total therapy duration are each displayed for 5 seconds. The current date and the therapy duration for the day then flash up alternately.

3. The daily therapy duration for previous days can now be displayed.

Press the softstart button until the required date appears in the display.

You can also simply press and hold the softstart button, releasing it when the desired date is displayed.

Use the on/off switch in the same way to return to the current date.

If a button is not pressed for 10 seconds, the total operating time will appear for 3 seconds. Then "0" appears.

## 4.6 Traveling with therapy units

---

To transport the therapy unit over long distances, it should be packed in the carry case (available as an accessory).

1. Place the unit, the power supply, the power cable, the breathing hose, the mask incl. exhalation system and, if necessary, the humidifier in the carry case.
2. Close the zips of the carry case and adjust the shoulder strap to the correct length.

### **Caution!**

Please do not forget to take spare filters and the operating instructions with you, as well as the DC adapter if necessary. If you want to take the therapy unit as hand luggage in an aircraft, you should find out any formalities necessary from the airline before departure.



# 5. Hygienic preparation

---

**This product may contain disposable items.** Disposable items are intended to be used only once. So use these items only once and do **not** reprocess them. Reprocessing disposable items may impair the functionality and safety of the product and lead to unforeseeable reactions as a result of ageing, embrittlement, wear, thermal load, the effects of chemical processes, etc.

## 5.1 Intervals

---

- Clean the mask and exhalation system every day in accordance with the operating instructions. Replace both parts every 12 months.
- Check the filters regularly:
  - clean the coarse dust filter once a week and replace it at least every 6 months.
  - change the fine filter once a month depending on soiling.
- Regularly wipe clean the housing of the CPAP 20 and the power supply.
- The breathing hose should be cleaned according to the level of soiling, however at least once a month. Replace it every 12 months.
- Wash the headgear in accordance with the accompanying instructions for usage.
- Clean the humidifier every day.

## 5.2 Cleaning CPAP 20

---

### Cleaning the breathing hose

1. Detach the breathing hose from the unit and from the exhalation system.
2. Clean the corrugated hose so no residues remain with a small amount of detergent in warm water. Rinse the inside of the hose thoroughly.
3. Then rinse thoroughly both inside and outside using clean, warm water.

#### **Important!**

#### **4. Shake the hose thoroughly.**

5. Hang up the hose and allow to drip to prevent moisture from getting into the CPAP 20.

The breathing hose is dried completely with the help of the CPAP 20 .

6. Remove the humidifier if required.
7. Plug the breathing hose into the unit outlet.
8. To start the drying process, press at the same time the softstart button (CPAP 20 switched off) and the on/off switch.

The unit will now switch on and dry the breathing hose (this takes 30 minutes). The remaining time is displayed. It switches off automatically at the end of the drying process.

You can interrupt the process at any time by pressing the on/off switch. If the breathing hose is still damp in places after drying, start the drying process again.

### Cleaning the CPAP 20 housing

#### **Warning!**



- **Electric shock!** Before cleaning, remove the power supply cable from the supply connection of the therapy unit.
- Make sure no liquid gets into the housing. Never immerse the unit in disinfectant or any other liquid. This can damage the unit and consequently endanger users and patients.

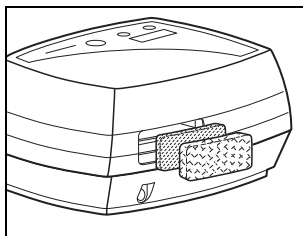
### **Caution!**

- Make sure no liquid gets into the pressure glands. This may cause the unit to malfunction.

Wipe down the unit, the power supply and the power supply cable with a damp, soft cloth.

The CPAP 20 must be completely dry before starting up.

## **Cleaning the coarse dust filter/changing the fine filter**



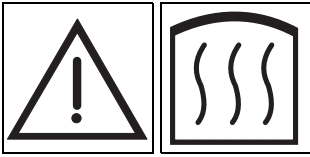
1. Remove the coarse dust filter and clean under fresh running water until no residues remain.
2. Replace the fine filter if necessary, as it cannot be cleaned.
3. Let the coarse dust filter dry.  
Before start up, the coarse dust filter must be completely dry.
4. Replace the coarse dust filter.

## **Accessories**

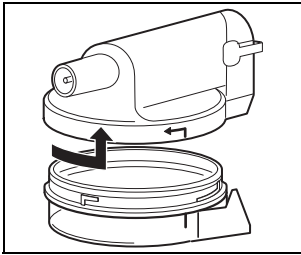
To clean the exhalation system, the mask and the headgear, please see the section "Hygienic preparation" in the relevant operating instructions.

To clean the humidifier CLICK 2, please see the section "5.3 Cleaning CLICK 2" on page 28 of these operating instructions.

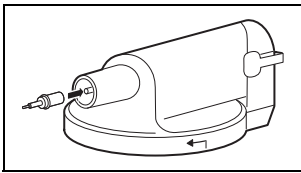
## 5.3 Cleaning CLICK 2



Do **not** touch the heater rod. The metal takes a long time to cool down.

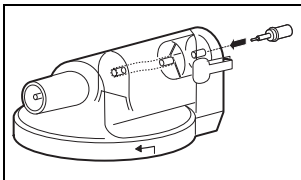


1. Open the humidifier by twisting the upper and lower parts against each other in a counter-clockwise direction.



2. No water must penetrate into the pressure line during cleaning or this could lead to incorrect pressure readings. Therefore the pressure line must remain sealed.

To seal the pressure line at the outlet-connections push the silicone tube of the closure (supplied as standard CLICK 2) over the end of the pressure line.

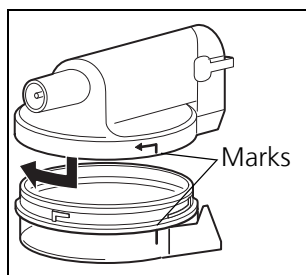


To seal the pressure line at the inlet connections, push the thin end of the closure by a slight rotational movement into the seal of the pressure line.

Clean the upper and lower parts with lukewarm water to which a little detergent has been added. We recommend cleaning the housing parts once a week in the upper tray of the dishwasher at a maximum temperature of 65 °C.

3. Then rinse the parts in clean water.
4. Vigorously shake the lower part to remove any water that may have entered the heater rod contact. Dry the parts thoroughly with a soft cloth. The heater rod contact must be dry.

5. Check whether the pressure measurement tube is still correctly fitted in the upper part. If necessary reinsert it.

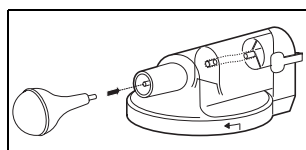


6. Fit the upper and lower parts together such that the marks are aligned. Turn the upper and lower parts against each other clockwise as far as they will go.
7. Remove the closure. The humidifier is now ready for use again.

For hygiene reasons, we recommend that the plastic parts are replaced after a maximum of two years use.

## CLICK 2 drying

If water penetrates into the pressure line, then dry CLICK 2 as follows:



1. Push the bellows included in the delivery, as illustrated, onto the end of the pressure line at the outlet connectors.

### Caution!



The bellows must **only** be used for drying the humidifier. During drying CLICK 2 must not be connected to the therapy unit. Otherwise the unit could be damaged.

2. Press the bellows together so that any moisture is blown out.

### Caution!

Keep the bellows pressed in so that moisture is not sucked back in again.

3. Remove the bellows.
4. Repeat steps **1.** to **3.** two or three times.

## 5.4 Descaling CLICK 2

---

If the lower part of the housing and the heater rod are covered in scale:

1. Pour about 150 ml of normal vinegar (5% solution without additives) into the lower part of the humidifier and leave to stand for one hour.
2. Pour the vinegar solution away.
3. Wipe the housing parts with a clean cloth and rinse thoroughly several times with water.
4. Then carefully wipe all parts.

## 5.5 Disinfection CPAP 20

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If necessary, for example after an infectious illness or if the unit has become unusually contaminated, you can also disinfect the housing, the power supply cable, the breathing hose, and the humidifier. Please observe the operating instructions for the disinfectant used. We recommend that you wear suitable gloves when disinfecting the equipment (e.g. household or disposable gloves).

### Unit

#### Warning!



- Electric shock! Before cleaning, remove the power supply cable from the supply connection of the therapy unit.
- Make sure no liquid gets into the housing. Never immerse the unit in disinfectant or any other liquid. This can damage the unit and consequently endanger users and patients.

#### Caution!

- Make sure no liquid gets into the pressure glands. This may cause the unit to malfunction.

The housing, power supply and power supply cable of the CPAP 20 are cleaned by being simply wiped over with disinfectant. We recommend terralin® protect.

## Breathing hose

- We recommend gigasept FF® as a disinfectant.
- When disinfecting use the same procedure as for cleaning.
- The breathing hose must not be heated to temperatures in excess of 70 °C. Sterilization is not permitted.

## Accessories

To disinfect or sterilize the exhalation systems and the mask, please see the section "Disinfecting and sterilizing" in the relevant operating instructions.

When there is a change of patient please refer to section "5.6 Disinfection CLICK 2" on page 31 and "5.8 Multiple patient use CLICK 2" on page 32 for instructions on how to disinfect the CLICK 2 humidifier.

## 5.6 Disinfection CLICK 2

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The humidifier can be disinfected. Please observe the operating instructions for the disinfectant used. We recommend that you wear suitable gloves when disinfecting the equipment (e.g. household or disposable gloves).

We recommend gigasept FF®.

- The procedure for dismantling and assembling the humidifier is the same as for cleaning.
- To ensure full disinfection, the filling cap should also be removed and disinfected separately.

For hygiene reasons, we recommend that the plastic parts are replaced after a maximum of two years use.

## 5.7 Multiple patient use CPAP 20

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If the unit is operated with a bacteria filter:

- change the bacteria filter

If the unit is operated without a bacteria filter:

- have the unit subjected to hygienic preparation by a dealer on change of patient.

## 5.8 Multiple patient use CLICK 2

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If the unit is operated with a bacteria filter:

- change the bacteria filter

If the unit is operated without a bacteria filter:

- have the unit subjected to hygienic preparation by a dealer on change of patient.



# 6. Functional check

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## 6.1 Intervals

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Carry out a functional check on the CPAP 20 and the CLICK 2 at least every 6 months.

If you find a defect during the functional check, do not use the unit until the defect has been remedied.

## 6.2 Function check of CPAP 20


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1. Assemble CPAP 20 with the breathing hose, exhalation system, mask and power supply cable ready for operation.
2. Push the on/off switch to switch the device on. If Softstart is switched on, switch it off with the softstart button. The fan conveys air through the breathing hose to the mask and the current pressure in hPa is shown in the display.
3. Close the opening of the mask, e.g. using your thumb or hand.  
Compare the pressure shown on the display with the CPAP pressure prescribed. There should only be a divergence of max.  $\pm 1.0$  hPa.
4. Press the softstart button to switch on softstart. The softstart display appears and the display shows the softstart time.  
The pressure increases slowly and reaches the CPAP pressure after the time selected. The CPAP pressure is then shown on the display.
5. Switch off the unit using the on/off switch.

If the values or functions are not satisfactory, please send in the unit for repair to the dealer or the manufacturer.

## 6.3 Function check of CLICK 2

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1. Carry out a visual inspection of the plastic housing.  
If cracks/damage or severe soiling is evident, the plastic parts or seals must be replaced.
2. Fill the humidifier up to the mark with water.
3. Check whether the humidifier is leaking.
4. Empty the water.
5. Now pour in about 50 ml of water.
6. Connect the humidifier to the therapy unit.
7. Switch on the therapy unit.
8. Switch the humidifier on by pressing the humidifier button  on the therapy unit.
9. Set heater level 6 on the therapy unit.
10. Check whether the humidifier is getting warmer.

If the water has not heated up after 15 minutes, send the humidifier and the therapy unit for repair to the dealer or the manufacturer.

# 7. Malfunctions and Rectification

If there are defects that cannot be rectified at once, please contact Weinmann or your dealer immediately to have the unit repaired. To prevent greater damage, stop using the unit.

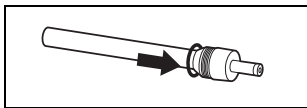
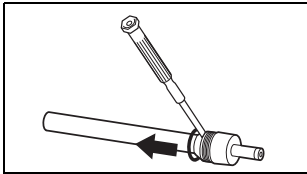
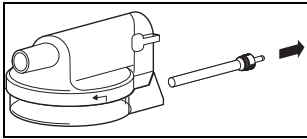
## 7.1 CPAP 20

Malfunction	Cause	Rectification
No running noise, standby/status display not illuminated.	No supply voltage available	Check power supply cable is securely connected. Check function of outlet by connecting another piece of equipment (e.g. a lamp).
Unit is running but does not reach CPAP pressure level selected.	Filter soiled	Clean/change filter (5.2, page 26).
	Mask not airtight	Adjust headgear so that mask is airtight. Replace mask if defective.
Error message "Err E", "Err b", "Err c", "Err A", "Err H" or "Err S" in display.	Problems with electronics or program "crashed"	Disconnect power and reconnect.
There is no pressure or incorrect pressure to the mask.	Water in the pressure measurement port	Dry the pressure measurement line, see page 29.
	The pressure measurement tube is incorrectly fitted in the upper part.	Push the pressure measurement tube on to the correct connecting piece, see 5.3.
	No mains voltage available at the therapy unit.	Check mains cable is securely connected. Check function of outlet by connecting another piece of equipment (e.g. a lamp).

## 7.2 CLICK 2

Malfunction	Cause	Rectification
Humidifier does not warm up.	Humidifier is not activated.	Switch on the air humidifier, see 4.2, page 21.
	Electronics defect	Send the humidifier and the therapy unit to your dealer for repair.
The humidifier is leaking.	The heater rod seal is defective.	Replace the seal, see page 36.
	The seal on the underside of the housing is leaking.	Replace the seal, see page 36.
	Cracks in lower part	Replace the lower part.

### Replacing the heater rod seal



1. Remove the heater rod from the lower part of the housing by turning counter-clockwise.

2. Using a small, clean screwdriver, carefully prise out the seal.

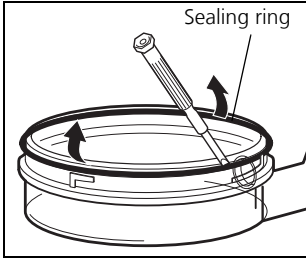
#### **Important!**

Take care to ensure that the groove in which the seal fits is not damaged.

3. Carefully press the new sealing ring into the groove on the heater rod. Under no circumstances use a tool.

4. Fit the new heater rod.

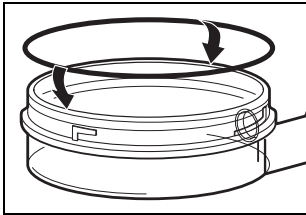
## Replacing seal of housing base



1. Open the breath humidifier by turning the base and top section anticlockwise against each other.
2. Take a small clean screwdriver and carefully remove the sealing ring from the groove of the housing base.

### **Important!**

Make absolutely sure that the groove containing the sealing ring is not damaged when doing so.



3. Carefully press the new sealing ring into the groove of the housing base. When doing so, do not use tools under any circumstances.
4. Reassemble base and top section.

## 8. Maintenance

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The device is designed for a service life of 5 years.

When used in accordance with purpose and in accordance with the instructions for use, the device requires no maintenance during this period.

## 9. Disposal

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Do not dispose of the unit with domestic waste. For proper disposal of the device and its components, please contact a certified waste disposal site for electronic goods. Ask your Environmental Officer or local council for the address. Appliance packaging (cardboard and inserts) may be disposed of in the paper recycling bin.

# 10. Scope of supply

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## 10.1 Standard scope of supply

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### CPAP 20

**WM 27300**

<b>Parts</b>	<b>Order number</b>
CPAP 20 basic unit	WM 27301
Breathing hose	WM 24445
Power supply	WM 24480
Power supply cable	WM 24133
Instructions for use CPAP 20 + CLICK 2 EN	WM 67762

### CLICK 2

**WM 27330**

<b>Parts</b>	<b>Order number</b>
CLICK 2 basic unit	WM 27331
Closures, complete and packed	WM 24020
Bellows	WM 24394

## 10.2 Accessories and spare parts

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You can order accessories and spare parts separately if required. A current list of accessories and spare parts can be ordered on the Internet at [www.weinmann.de](http://www.weinmann.de) or via your dealer.

# 11. Technical data

## 11.1 Specifications

	<b>CPAP 20</b>	<b>CPAP 20 with CLICK 2</b>
Product class as per 93/42/EEC	IIa	
Dimensions WxHxD in cm	21 x 9.8 x 18.5	21 x 14 x 31.3
Weight	approx. 1.25 kg	approx. 1.5 kg (without water)
Temperature range – operation – storage	+5 °C to +35 °C –20 °C to +70 °C If the unit runs at +40 °C , the air output can heat up to 42 °C.	
Adm. humidity for operation and storage	≤ 95 % rF (no condensation)	
Air pressure range	600 - 1100 hPa (automatic altitude compensation) (allows for operation in an altitude of up to approximately 4000 meters)	
Diameter of breathing hose connection (mask) in mm	19.5 (suitable for 22 mm standard cone)	
Electrical connection	115-230 V AC +10/-15 %, 50–60 Hz with WM 24480 power supply or 12-24 V DC -15/+25 % with WM 24469 DC adapter	
Power consumption during – operation – standby	<b>230 V</b> <b>115 V</b> <b>24 V</b> <b>12 V</b> 0.1 A   0.2 A   0.8 A   1.6 A 0.02 A   0.03 A   0.2 A   0.24 A	<b>230 V</b> <b>115 V</b> <b>24 V</b> <b>12 V</b> 0.14 A   0.28 A   1.3 A   2.6 A 0.02 A   0.03 A   0.2 A   0.24 A
Classification as per prEN 60601-1:2004 – type of protection from electric shock – level of protection from electric shock – protection against damaging ingress of water – operating mode	Protection class II  Type B  IPX1  Constant operation	



	<b>CPAP 20</b>	<b>CPAP 20 with CLICK 2</b>
Electromagnetic compatibility (EMC) as per EN 60601-1-2:2007 – radio shielding – radio interference suppression	Test parameters and limit values can be obtained from the manufacturer if required.  EN 55011 B EN 61000-4 parts 2 to 6, part 11	
Mean sound pressure level under EN ISO 17510-1:2009	≤ approx. 30 dB (A) at 10 hPa (corresponds to an acoustic power level of 38 dB (A) )	
CPAP operating pressure range Pressure accuracy	4 to 20 hPa  ± 0.8 hPa (1mbar = 1 hPa ≈ 1cm H <sub>2</sub> O)	
Max. CPAP pressure with malfunction	< 40 hPa	
Maximum flow rate to ISO 17510-1:2002 at:		
20 hPa	130 l/min	125 l/min
15 hPa	140 l/min	135 l/min
13 hPa	150 l/min	145 l/min
10 hPa	160 l/min	155 l/min
7 hPa	170 l/min	165 l/min
5 hPa	175 l/min	170 l/min
4 hPa	180 l/min	175 l/min
0 hPa	185 l/min	180 l/min
Tolerance	±15 l/min	±15 l/min
Maximum flow rate to EN ISO 17510-1:2009 at:		
4 hPa	110 l/min	96 l/min
8 hPa	110 l/min	96 l/min
11 hPa	110 l/min	96 l/min
15 hPa	110 l/min	96 l/min
18 hPa	110 l/min	96 l/min
Heating of respiratory air	2.5 °C	depending on heating level

	<b>CPAP 20</b>	<b>CPAP 20 with CLICK 2</b>
Precision of dynamic pressure (short-term precision) with 10 breaths/min to EN ISO 17510-1:2009 at 4 hPa: at 8 hPa: at 12 hPa: at 16 hPa: at 20 hPa:	$\Delta p = 0.2 \text{ hPa}$ $\Delta p = 0.2 \text{ hPa}$ $\Delta p = 0.3 \text{ hPa}$ $\Delta p = 0.3 \text{ hPa}$ $\Delta p = 0.3 \text{ hPa}$	$\Delta p = 0.2 \text{ hPa}$ $\Delta p = 0.3 \text{ hPa}$ $\Delta p = 0.3 \text{ hPa}$ $\Delta p = 0.3 \text{ hPa}$ $\Delta p = 0.4 \text{ hPa}$
Precision of dynamic pressure (short-term precision) with 15 breaths/min to EN ISO 17510-1:2009 at 4 hPa: at 8 hPa: at 12 hPa: at 16 hPa: at 20 hPa:	$\Delta p = 0.3 \text{ hPa}$ $\Delta p = 0.3 \text{ hPa}$ $\Delta p = 0.3 \text{ hPa}$ $\Delta p = 0.4 \text{ hPa}$ $\Delta p = 0.4 \text{ hPa}$	$\Delta p = 0.3 \text{ hPa}$ $\Delta p = 0.3 \text{ hPa}$ $\Delta p = 0.4 \text{ hPa}$ $\Delta p = 0.4 \text{ hPa}$ $\Delta p = 0.4 \text{ hPa}$
Precision of dynamic pressure (short-term precision) with 20 breaths/min to EN ISO 17510-1:2009 at 4 hPa: at 8 hPa: at 12 hPa: at 16 hPa: at 20 hPa:	$\Delta p = 0.4 \text{ hPa}$ $\Delta p = 0.4 \text{ hPa}$ $\Delta p = 0.5 \text{ hPa}$ $\Delta p = 0.5 \text{ hPa}$ $\Delta p = 0.5 \text{ hPa}$	$\Delta p = 0.4 \text{ hPa}$ $\Delta p = 0.4 \text{ hPa}$ $\Delta p = 0.5 \text{ hPa}$ $\Delta p = 0.5 \text{ hPa}$ $\Delta p = 0.5 \text{ hPa}$
Precision of static pressure (long-term precision) to EN ISO 17510-1:2009	$\Delta p = 0.06 \text{ hPa}$	
Fine filter separation level to 1 $\mu\text{m}$ to 0.3 $\mu\text{m}$	$\geq 99.5 \%$ $\geq 85 \%$	
Fine filter service life	$\geq 250$ hours with normal room air	

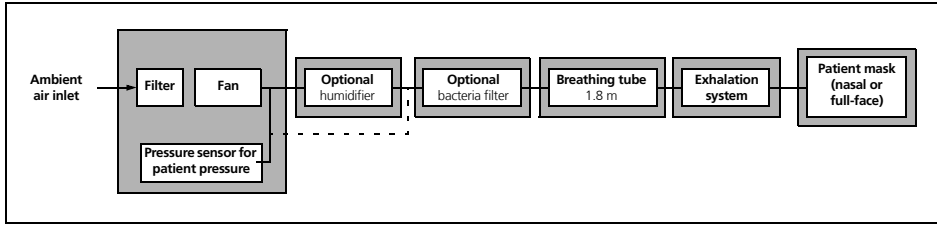
**CE 0197** Subject to design modifications.

	<b>CLICK 2</b>
Product class as per 93/42/EEC	II a
Dimensions WxHxD in mm	120 x 97 x 157
Weight (without water)	250 g
Temperature range – operation – storage	+5 °C to +35 °C –20 °C to +70 °C
Humid operation and storage	≤ 95 % relative humidity
Ambient pressure range	600 to 1100 hPa
Electrical connection	30 V DC
Power consumption	20 VA
Classification as per EN 60601-1 – level of protection from electric shock	Unit type B
Electromagnetic compatibility (EMC) as per EN 60601-1-2 – Radio shielding – radio interference suppression	EN 55011 B IEC 1000-4, parts 2 to 6, part 11
Max. permitted fill quantity	280 ml
Max. permitted operating pressure	30 hPa
Max. permitted flow (free-flowing)	160 l/min
Max. mask temperature	37 °C
Gas leakage at 30 hPa	negligible
Humidifier output at heating level 6: Flowrate = 20 l/min Flowrate = 30 l/min Flowrate = 40 l/min  at 23 °C and 65 % relative humidity	14.1 mg/l 10.3 mg/l 8.0 mg/l

**CE 0197** Subject to design modifications.

All values established subject to ATPD conditions (ambient temperature and pressure, dry).

## 11.2 Pneumatic diagram



## 11.3 Safety distances

<b>Recommended safety distances between portable and mobile HF telecommunications equipment (e.g. mobile phones) and CPAP 20 or CLICK 2</b>			
<b>Nominal output of HF equipment</b>	<b>Safety distance dependent on transmission frequency</b>		
	<b>in m</b>		
<b>in W</b>	<b>150 kHz - 80 MHz</b>	<b>80 MHz - 800 MHz</b>	<b>800 MHz – 2.5 GHz</b>
0.01	0.12	0.12	0.24
0.1	0.37	0.37	0.74
1	1.17	1.17	2.34
10	3.69	3.69	7.38
100	11.67	11.67	23.33

## 12. Warranty

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Weinmann gives the customer a limited manufacturer warranty on new original Weinmann products and any replacement part fitted by Weinmann in accordance with the warranty conditions applicable to the product in question and in accordance with the warranty periods from date of purchase as listed below. The warranty conditions can be downloaded from [www.weinmann.de](http://www.weinmann.de) on the Internet. We can also send you the warranty conditions on request.

In the event of a claim under warranty, contact your specialist dealer.

<b>Product</b>	<b>Warranty period</b>
Weinmann devices including accessories (except masks) for sleep diagnosis, sleep therapy, home ventilation, oxygen medicine and emergency medicine	2 years
Masks including accessories, rechargeable batteries, batteries (unless quoted differently in the technical documentation), sensors, tube systems	6 months
Disposable products	None

## 13. Declaration of Conformity

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Weinmann Geräte für Medizin GmbH + Co. KG declares herewith that the product complies fully with the respective regulations of the Medical Device Directive 93/42/EEC. The unabridged text of the Declaration of Conformity can be found on our website at [www.weinmann.de](http://www.weinmann.de)

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**WEINMANN**  
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WM 67762b - 06/2014 EN