

# ○ Purus iQ3



## Service - Manual

For the Installation, Programming,  
Cleaning and Maintenance





**This operating handbook relates to the following equipment:**

## **Purus iQ3**

**Type:** \_\_\_\_\_

**Serial number:** \_\_\_\_\_

This service manual is for the installation, programming, cleaning and maintenance. It is a part of the equipment and must always be available close by the machine, and always be available up to the disposal of the equipment.

If you should loss or damage the manual, you must request a replacement from the manufacturer or the local distributor. If you have any questions please contact your local distributor.



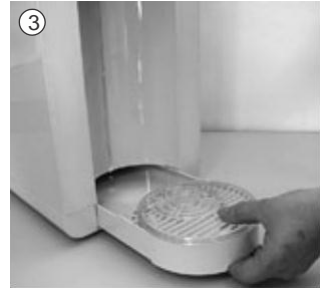
**Best Product  
Design/Innovation**

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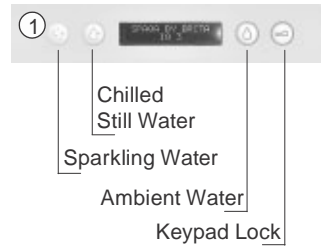


# 1. Machine Construction Overview

## 1.1 Dismantling



- 1. Display and Buttons
- 2. Aerator with filter
- 3. Drip tray with capacity of 1.5 L



# 1. Machine Construction Overview

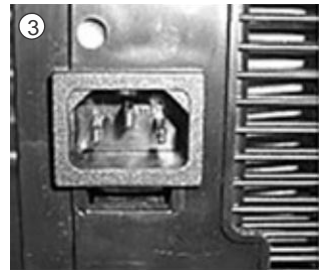
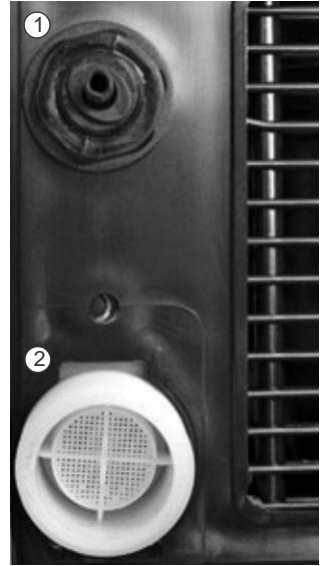
## 1.2 Inside front cover



- 1. Connection for external CO<sub>2</sub> bottle
- 2. Aerator (change every 12 months)
- 3. BRITA filter
- 4. Disposable CO<sub>2</sub> bottle (optional)



### 1.3 View from rear



- 1. External CO<sub>2</sub> connection
- 2. Mains water inlet
- 3. Power supply connection
- 4. Programming button
- 5. Programming card slot
- 6. Machine identification plate
- 7. Evaporator

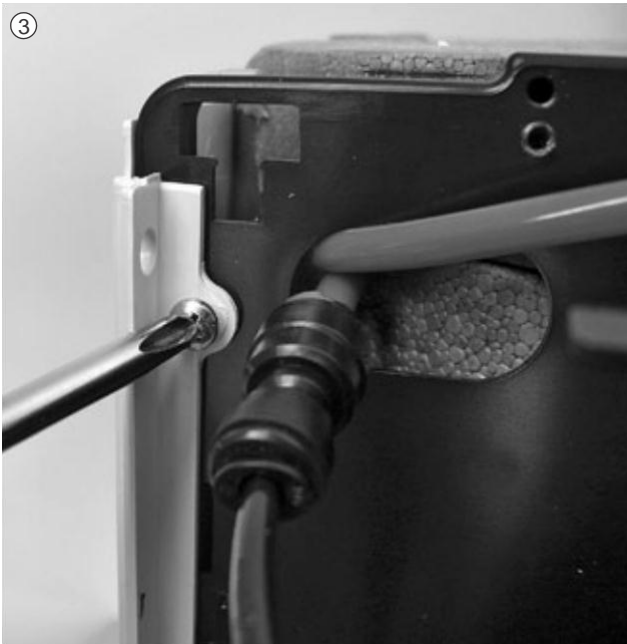


# 1. Machine construction overview

## 1.4 removal of covers



1. Undo top cover screws
2. Remove top cover first
3. Remove side covers

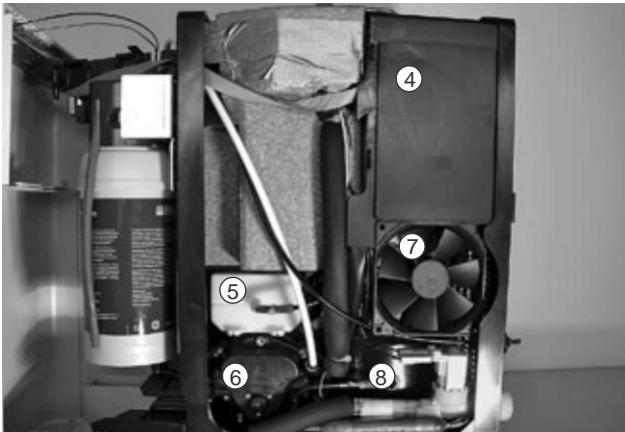




## 1.5 Internal View



Left Side view



Right Side view



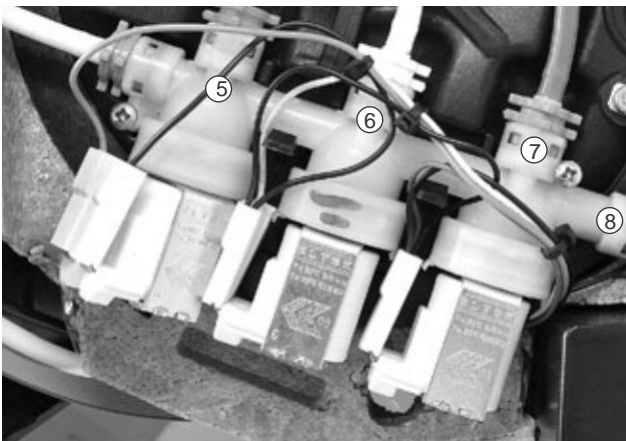
- |                              |                       |
|------------------------------|-----------------------|
| 1. High pressure pump        | 5. Ozone Generator    |
| 2. Compressor (Time out 4 h) | 6. High pressure pump |
| 3. Carbonator                | 7. Cooling fan        |
| 4. PCB Cover                 | 8. Inlet valve        |

# 1. Machine construction overview

## 1.6 view from top



1. Thermostat
2. Relief valve (7.5 bar)
3. Level probes
4. Outlet valves



5. CO<sub>2</sub> water
6. Chilled Still water
7. Ambient still water
8. Ozone injector

## 2. General equipment information

### 2.1 Machine identification plate

The machine identification plate contains important information. Please always indicate type of device and serial number for spare part orders.



#### The machine identification plate shows the following detail:

OEM:	Manufacturer
Model/type of device:	E-iQ3-E-3 sparkling+ozono
Model number:	010124/0005
Voltage / Current:	220/230VAC 50Hz 0.84 A
Cooling agent:	Refrigerant:R134a (40gr)
Max. Inlet water pressure:	5 bar
Max CO <sub>2</sub> pressure:	6 bar
Manufacturing country:	Made in Italy

### 2.2 Introduction and advice

- Before installation of the equipment, please read the operating instructions carefully.
- The correct use of the equipment depends exclusively on the user.
- Correct functionality of the equipment is guaranteed only when genuine spare parts are used.
- Installation, setup and repair of the equipment must only be carried out by a trained engineer.

#### The manufacturer is not responsible for damage to the equipment caused by:

- Neglect to follow the guidelines in this manual.
- Repairs which are not carried out by an authorised engineer.
- Recalibration, change and inappropriate use (including connection to none drinking water supply).

## 2. General equipment information

### 2.3 Safety Information

This equipment is manufactured with consideration to safety aspects. Regardless this equipment must only be serviced by authorised persons. Repair and servicing must be carried out only by trained technicians who are experienced with the equipment or similar devices to recognise and prevent any faults that may cause injury.

These operating instructions must be read in their entirety prior to installing the equipment to ensure a safe installation and perfect operation of the equipment.

#### **Attention:**

Remove the power supply to the equipment before removing any covers. The equipment is developed in accordance with the following European safety certifications:

- EN 60335-2-24:2003 + A11:2004 + A1:2005  
+ A2:2007

"Safety of the electrical household appliances and similar devices".

### 2.4 Hazard Risk

Please take into account local legal requirements with regards to installation and use of CO<sub>2</sub> compressed gas. Do not submerge the equipment in water. Always disconnect from the mains power supply when cleaning the equipment.

**Never allow children to operate the equipment unsupervised.**

### 2.5 Accessories

Various accessories are available for the equipment. Where accessories are in the form of kits they will be supplied with instructions, which must be adhered to in order to maintain the safety of the equipment.

- IQ3 pressure regulator for disposable
- CO<sub>2</sub> 600 gr bottle.
- IQ3 Commercial 10 kg CO<sub>2</sub> regulator
- IQ3 CO<sub>2</sub> disposable 600 gr. bottle
- IQ3 200 ml disposable cups
- IQ3 300 ml disposable cups
- IQ3 Glass Decanter 0.7 L
- IQ3 Plastic sports bottle 1.0 L
- IQ3 1.4 L plastic jug
- IQ3 Disinfection Spray
- IQ3 Sanitation Kit
- IQ3 Water Meter
- IQ3 Water Filter

## **3. Installation Guide**

### **3.1 Notes for Installation**

- Read the manual carefully before using the iQ3.
- The mains water supply must be potable (safe for drinking).
- The iQ3 should always be connect to a mains electricity supply.
- Do not touch for hygiene reasons the water dispense nozzle.
- Use only original manufacturer supplied spare parts.

### **3.2 General Functionality**

The iQ3 can produce the water in 3 different ways. Selection 1 Filtered water at ambient temperature

Selection 2 Chilled filtered water

Selection 3 Chilled carbonated filtered water

The temperature and the amount of carbonation of the water can be adjusted.

### **3.3 Cleaning and Maintenance**

Before carrying out any cleaning and maintenance work make sure that the power supply is disconnected.

For cleaning the external areas of the iQ3 use a damp, lint free cloth.

### **3.4 HCCAP Record keeping**

Ensure that HCCAP records are kept where applicable.

### **3.5 Recommendations for first time installation of CO<sub>2</sub>, and water connections.**

The installation of the equipment may must be carried out by a trained technician.

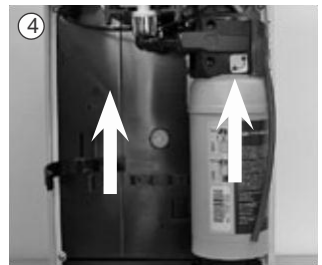
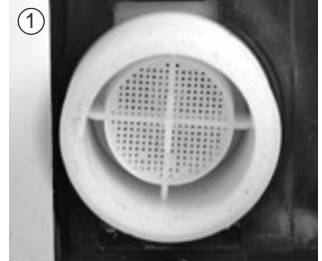
The installation must follow this sequence: Gas, water, electricity (GWE).

## 4. Installation

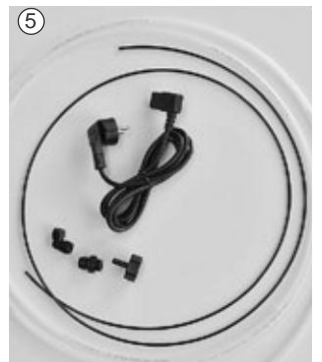
### 4.1 First installation

#### 4.1.1 Preparation

Attach the CO<sub>2</sub> gas supply before flushing the filter.  
See details on the following page.



1. Connect the mains water supply to the iQ3. Do not turn the water supply on. Do not attach the mains cable.
2. Remove the drip tray
3. Remove the front cover
4. Installation positions of a CO<sub>2</sub> disposable bottle, and the BRITA water filter.
5. The accessories provided: Water connection kit, mains power cable.

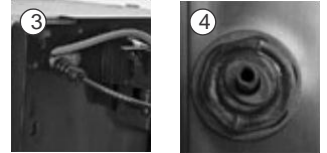
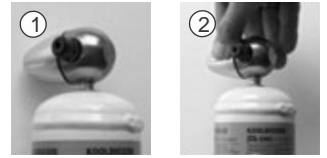


## 4.1.2 CO<sub>2</sub> Installation

Before installing the CO<sub>2</sub> the BRITA C1000AC must first be fitted and flushed. See details on the following page.



### Disposable or commercial CO<sub>2</sub>

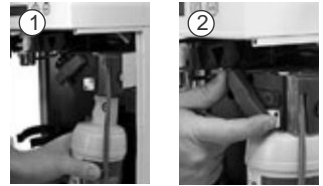


1. The equipment is supplied with a 4 mm CO<sub>2</sub> inlet hose. The hose is suitable for the disposable CO<sub>2</sub> system. For more details on CO<sub>2</sub> and valves please refer to later chapter.
2. Ensure that the pressure regulator valve is OFF (closed) and connect the valve to the disposable CO<sub>2</sub> bottle, then attach the 4 mm hose to the push fit on the valve. Mount the bottle in the bracket at the front of the equipment. Cut the hose to the required length and connect to the push fit connector at the front of the equipment. Leave the CO<sub>2</sub> regulator closed.
3. Alternatively for commercial 6/10 kg CO<sub>2</sub> bottles, connect link pipe to the push fit connector at the front. The external CO<sub>2</sub> bottle is then connected at the 4 mm push fit connector at the rear of the equipment.
4. Ensure that commercial bottle regulating valve is OFF (closed)
5. Fit the commercial bottle regulating valve as described in the later chapter regarding CO<sub>2</sub> bottles and valves. Leave the CO<sub>2</sub> regulator closed.
6. make sure the CO<sub>2</sub> bottle is secured and in a safe position. Consider the CO<sub>2</sub> handling legal regulations.

## 4. Installation

### 4.1 First Installation

#### 4.1.3 Fitting the Water Filter



1. Fit the C1000AC cartridge with the bayonet fixing to the filter head.
2. Push the Cartridge upwards in correct position. Lock the cartridge with the blue lever. Open the mains water supply. Check the water connection for leaks.
3. Connect the equipment to the mains power supply.
4. Press the Ambient water button and dispense 1 L of water to flush the filter. Then press the Sparkling water button briefly the pump will now run for a short time to fill the carbonator.
5. Refit the front cover, the equipment is ready for use. Please allow some time for the temperature to reach the programmed value.





## 5. Sanitation and cleaning.

### 5.1 Sanitation with Anolyte-sani-Brita Service cartridge.

#### 5.1.1 Sanitation with the Service Cartridge.

Sanitation should be carried out at installation and at 6 monthly intervals.



1. Turn off Water Supply. Press the button for ambient water for 10 sec, then press the button for Cool water for 10 sec. Now press the sparkling water button, keep pressed until the water stops and only CO<sub>2</sub> gas is dispensed. Close the CO<sub>2</sub> regulator valve, press the Sparkling water button again to release the gas pressure. Now switch equipment power off.
2. Lead the grey hose of the filter head into a container and press the grey button on the filter head to release the pressure in filter.
3. Place the cleaning agent in the special service cartridge.
4. Remove the filter Brita C1000 cartridge. and replace with the Service Cartridge.
5. Place a container under the discharge. Press the key still chilled water button until the water turns blue in colour. Press ambient water button, until the water turns blue in colour, use a indikator to check. Press the button for sparkling water briefly so the pump starts, wait for the pump to stop (carbonator full), press and hold the sparkling water button until water turns blue in Colour.
6. Wait for 20 mins. so that the solution can activate.
7. Remove the service cartridge and refit the Purity1000 filter (if necessary renew the filter if Service life or capacity is reached).
8. Rinse water through each button chilled, ambient and sparkling until water runs clear through each selection. Examine the pH value (acidity). Still= 6.5 - 7.0, Sparkling = 6-6.5
9. Open the CO<sub>2</sub> regulator valve and dispense 2 L sparkling water to re-carbonate.
10. Fill out the service record.



## 5. Sanitation and cleaning

### 5.2 Sanitation

#### 5.2.1 Sanitation with iQ - sani - clean - SHOT (using Anolyte)

##### Alternative Cleaning option.

1. Fit the Anolyte kit (injector and bottle with 1 L concentrate) instructions are included with the kit. The kit is fitted externally between the water supply and intake valve of the equipment.
2. Remove the Brita filter from the filter head and dispose.
3. Rinse from all 3 selections 5 L for each.
4. Turn OFF the mains water supply and hold button 1 sparkling water until all water is dispensed and only CO<sub>2</sub> gas is dispensed. Now turn off the CO<sub>2</sub> supply at the regulator.
5. Turn the lever on the injector to "caustic solution" and turn ON the mains water supply.
6. Dispense 200 ml using button 3 ambient water.
7. Dispense 300 ml using button 2 chilled water
8. Briefly press button 1 Sparkling water. The pump will start and fill the carbonator.
9. When the pump stops press button 1 sparkling water and dispense 500 ml of water. turn the injector lever to „water“.
10. Allow 30 minutes for the internal components to soak. (The kit can be dismantled meanwhile or left in place for next time)
11. Rinse after the soak period, 5 L using button 3, 5 L using button 2, and 10 L using button 3.
12. Turn the main water supply Off and turn On the CO<sub>2</sub>. Hold button 1 sparkling water until all water is dispensed and only CO<sub>2</sub> gas is dispensed. Now turn the Water supply on and allow the carbonator to refill.
13. Fit a new Brita C1000 filter and flush with 1 L using button 3 Ambient water.

##### Note:

10 L of chilled sparkling water should be dispensed to rinse the carbonator, to be sure that the Anolyte is rinsed from the system. alternatively us PH indicator strips to make sure PH level is neutral.

The Anolyte cotains: sodium hypochlorite and hypochlorous acid.



Chilled  
Still Water  
Sparkling Water  
Ambient Water

### 5.3 Disinfection of Dispense area



Disinfect after maintenance the dispense area with disinfection spray around to ensure perfect hygiene. Appoint a responsible person to carry out cleaning at least once a week, daily in hygiene sensitive environment.

Proceed here as follows:

- Clean the entire dispense area with a disinfectant.
- Remove and clean the drip tray with disinfectant, make sure the drip tray is completely dry before replacing it.
- Spray the outlet nozzle outside and inside from beneath with disinfection spray. leave for 5 minute to soak.
- Run 1 litre of water using the ambient water button to rinse the disinfectant from the nozzle.
- Wait for approx. 30 minutes until the cooling the temperature of 4°C - 8°C reached.
- Make sure that the responsible person on site is familiar with this cleaning procedure.

The equipment is built in a hygienically germ-free production facility. To ensure that the hygiene remains as intended make sure that cleaning instructions are adhered too. Use our pollution free and highly effective disinfection spray.

#### Cleaning and disinfection procedure:

1. Clean the entire dispense area with a disinfectant.
2. Remove the drip tray and empty.
3. Clean the drip tray with disinfectant, rinse and dry before replacing.
4. Spray the outlet nozzle outside and inside from beneath with disinfection spray. leave for 5 minute to soak.
5. Run 1 litre of water into a jug using the ambient water button to rinse the disinfectant from the nozzle.
6. Clean the exterior of the equipment with a damp cloth. Before cleaning press the far right hand service button for 10 seconds the will lock the other buttons to prevent accidental dispense while cleaning. After cleaning, press the service button again for 10 seconds to enable the dispense buttons.

### 5.4 Ozone Generator - Active Sanitation



Ozone Sanitation - after every dispense a small quantity of O<sub>3</sub> (Ozone) is injected into dispense valves, dispense pipes and nozzle. Ozone acts on and destroys bacteria. The

Ozone generator will activated every 30 minutes and after every dispense.

#### Examination:

Every 2 years the Ozone generator should be inspected to ensure its effectiveness (a simple test is to smell for the Ozone).

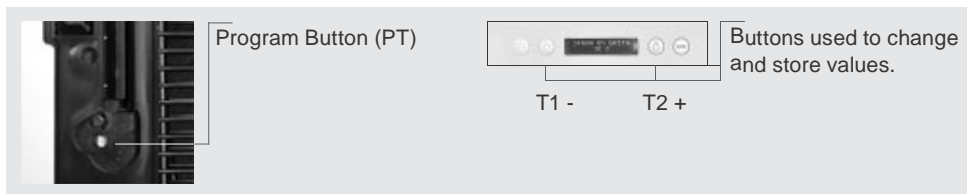
### 5.5 Hygiene guidance

Hygiene guidance and hygiene references for the user. A careful HYGIENE is the basic condition for beverage quality and long life span of the iQ3. A rigorous hygiene routine ensures a reliable, continuous use, a fresher drink supply and a multitude of highly pleased users over the entire Life span of your water machine.



## 6. Programming

### 6.1 To enter programming mode press program Button (PT) for 6 seconds.



Press PT to scroll through the options.

	Default setting	Options
<b>Refrigerator Temp</b> ↓ (PT)	Refrigerator temperature +8.0	T1 to decrease T2 to increase Range 4.0 - 6.0 - 8.0
<b>Energy Saving</b> ↓ (PT)	Energy Saving Mode 00	00 Normal 01 Button + LED dimmed 02 Button, LED and display dimmed. When a button is pressed the display will light.
<b>Enable Tones</b> ↓ (PT)	Tones ON	ON or OFF
<b>ECO Reset KG</b> ↓ (PT)	CO <sub>2</sub> saving counter	Press T1 and T2 together to reset.
<b>Power Ozone</b> ↓ (PT)		00 Ozone generator Off. 01 Ozone generator runs for 200 ms after each dispense. 02 Ozone generator runs for 400 ms after each dispense. 03 to 05 Ozone generator runs for 600 -1000 ms after each dispense.
<b>Software version</b> ↓ (PT)	V4.1 N F04 k00 Cv 000000 g 00000 V4.1	Software Version F04 Brita Filter Purity 1000 K00. CV 00000 Custom ID field. G 00000 Number of days active.
<b>Save Settings</b> ↓ (PT)		Press T1 and T2 together to save
<b>Exit Programming Mode</b>		Remove mains power for 5s

## 7. Intended Use

### 7.1 Conditions

- The machine is designed only for the dispense of filtered water and cooled filtered Water with CO<sub>2</sub>.
- The typical usage is for the customer, guest and employees.
- The installation and hygiene cleaning using the Sanitab or Anolyte must be carried out by a trained technician.
- The equipment is intended for use with a mains drinking water supply.
- Local legal requirements are to be adhered to when installing and changing CO<sub>2</sub> bottles.
- The machine must be installed on a sturdy surface, free of vibration, must be dry and indoors at room temperature. Do not operate in a cold environment, or where environmental conditions can be extreme. The equipment must be attached to a clean power supply free of voltage spikes.
- Maximum dispense based on 10 °C temperature differential between water supply and dispense to ensure drink temperature remains suitable is 16 L/Hr. Maximum volume in one dispense is 1 L with a 3 minute recovery period or approx. 260 ml maximum per minute.
- Any damage relating to vandalism, improper use, or servicing by an untrained person will not be covered by warranty.
- A spare part warranty of 24 months is included. Some parts may naturally wear during this and are not covered, such as seals and lights. Items that fail due to misuse, poor water quality or lack of cleaning are not covered such as pumps and valves. The warranty covers manufacturing defects only.
- A water filter, such as the Brita C1000AC, is absolutely necessary to ensure correct operation. The filter must be replaced at its rated capacity.
- Regular maintenance, such as replacement of seals in use of CO<sub>2</sub>- systems and visual inspections should be carried out no later than six months. The cleaning of the cooling and the sanitation with Anolyte or sanitab and replacement of the aerator should also take place during these every 6 months.
- Hygiene regulations must be observed whilst carrying out all cleaning and maintenance work.

#### Attention:

Please change the O3 Generator and the adaptors (A0000000004+A000000002+A000000109) every 2 years.

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### 7.2 Operational basis

To ensure quality of the equipment the manual and checklist must be complied to. Maintenance, care and cleaning is essential for quality advantages: Better Hygiene and maintenance will make a more reliable and a fresher tasting drink, and will increase the life of the equipment.

### 7.3 Advantages of the IQ3

**Economical because:** No stock requirements as with Bottled water so no upfront funding and additional storage space is not needed, no transportation required. The IQ3 will never run out of water- iQ3 will dispense 24 hours a day, 365 days per year!

**Ecological:** Your water is supplied fresh, without fuel consumption, directly to your premises, with no trucks, no traffic jams, no return transport of empty bottles, no cleaning of empties (with water!), no detergent. In comparison, when using the IQ3 there is less than one tenth CO<sub>2</sub> emissions associated with using a bottled water cooler. The output is as desired: cup, glass or carafe. Your drink dispenses as long as you press the selection button.

## 7. Intended Use

### 7.4 Information on Accessories

CO<sub>2</sub>- Please note following information:

- The CO<sub>2</sub> cylinder must be installed upright. Cylinders must be secured with an additional safeguard against falling over.
- The CO<sub>2</sub> cylinders must not be exposed to direct sunlight. The bottles must be placed at least two feet away from a heat source.

#### Important:

Please note the statutory regulations when commissioning CO<sub>2</sub>.

## 8. Maintenance, cleaning and care

### 8.1 Cleaning Recommendation

The machine has left our production hygienically sanitised. For this condition to remain the cleaning instructions given must be adhered to. For disinfection use only an environmentally friendly and highly effective disinfectant.

### 8.2 Weekly disinfection cleaning

- Clean the entire output area with disinfectant.
- Remove the drip tray and remove any remaining water.
- After drying, wipe clean the drip tray with disinfectant and push the tray back into the unit.
- Spray the dispense nozzle with disinfectant spray.
- Rinse the nozzle after a soak time of 5 minutes with 1 liter of water to rinse off any residue of the disinfectant from the inside of dispense nozzle.
- Check the water and CO<sub>2</sub> supplies are secure. Clean the outside of the unit with a damp cloth.
- to prevent accidental dispense press the right button <sup>1</sup> before cleaning for 5 seconds to lock the keypad. After cleaning, again press the right button for 5 seconds to unlock the keypad.



### 8.3 Sanitation

Sanitise the equipment during the routine 6 month service call. The device must only be used with a water filter in operation. Read the chapter about water filters, for more information about consumption in liters. We recommend a calibrated water meter be installed before on the water supply to the machine to accurately monitor the water usage.

### 8.4 Taste filter (water filter)

The Brita C1000AC filter fitted internally will improve the taste of the water. Replace the filter when stated capacity is reached or every 6 months.

#### Important:

Adverse effects can be seen if the filter is being used past its capacity. This has adverse consequences on the effectiveness of the device and can be dangerous to your health. The device will no longer filter out microbiological particles if it has expired.

### 8.5 General information on maintenance

Ensure that: When cleaning and servicing the power supply is removed. Do not use a steam cleaner on the equipment. Cleaning must only be carried out by a trained person.

## 8.6 Installation and service checklist

The following work must be carried out under the maintenance rule:

Component?	To be checked	ok?
Water Supply	Supply secure at mains stop valve. Secure at inlet valve	<input type="checkbox"/> <input type="checkbox"/>
Water filter	New Water Filter fitted? Water filter fitted securely without leaks?	<input type="checkbox"/> <input type="checkbox"/>
Sanitation	All 3 water outlets disinfected with Anolyte or Sanitab?	<input type="checkbox"/>
Outlet dispense	Each of the 3 dispense option operates?	<input type="checkbox"/>
Cooling	Is the cooling system operational? Does the cooling system fan operate?	<input type="checkbox"/> <input type="checkbox"/>
Dispense area	Aerator disinfected or replaced as nesecary? Dispense area cleaned and disinfected?	<input type="checkbox"/> <input type="checkbox"/>
Drip tray	Drip tray emptied, cleaned and disinfected? Overflow functionality of drip tray checked?	<input type="checkbox"/> <input type="checkbox"/>
CO <sub>2</sub> connection	Pipe work checked for leaks?	<input type="checkbox"/>
CO <sub>2</sub> connection for- Refillable system	Checked regulator pipe fitting for leaks? Check fitting of regulator on the cylinder, make sure cylinder is upright and secure.	<input type="checkbox"/> <input type="checkbox"/>
Water and Electrical connections	Check all connections are secure	<input type="checkbox"/>
Functional Test	Carry out a final test of each dispense and check temperature.	<input type="checkbox"/> <input type="checkbox"/>

The equipment has been cleaned and checked for all functions. The equipment is ready for use.

Date: \_\_\_\_\_

Technician: \_\_\_\_\_

## 9. Technical Data

<b>Dimensions:</b>	
Height:	445 mm
Width:	240 mm
Depth:	510 mm
Dispense area height:	260 mm
Dispense area width:	145 mm
Weight approx:	18 Kg (Incl. packaging)
<b>Electrical power ratings:</b>	
Supply Voltage:	230 Volt (+/- 10%)
Power max.:	140 Watt
Power consumption average in 24hr:	0.9 KWh
IP Standards rating:	CEI 70/1 EN60529IP 20
<b>Temperature:</b>	
Dispense water temperature options:	+4 °C, +6 °C, +8 °C
Inlet water temperature:	+5 °C to +25 °C
Water outlet temperature:	+4 °C, +6 °C, +8 °C
Operating temperature (room Temp.):	+10 °C to +32 °C
Storage temperature:	+2 °C to +35 °C
Humidity:	35 – 75%
<b>Pressure ratings:</b>	
Inlet water pressure:	1.5 to 5.0 bar
CO <sub>2</sub> Min/Max pressure:	3.5 to 6.0 bar
<b>Refridgeration:</b>	
Coolant R134A:	40 g
Compressor rating:	65 W
Water tank capacity (carbonator):	4 Litre
Cooling capacity:	Max. 16 Litre per hour (delta t=10 °C) No more than 1 Litre per dispense with 3min recovery.
<b>Noise data:</b>	
Stand-by noise level:	48 dB (A)
Operating noise level:	62 dB (A)



## 10. Water and CO<sub>2</sub>

### 10.1 Water supply



Our drinking water is subject to stringent controls. Tap water is the most highly monitored of all foodstuff. For pure fresh water the IQ3 uses a high quality water filter from the worlds leading manufacturer, BRITA.

### 10.2 The Water filter

The water filter uses an activated charcoal Pre-filter block to reduce dirt and particles. Capillary diaphragm filtration reduces 99.9999% of the bacteria, asbestos fibers and parasites like Cryptosporidium and Giardia and other impurities that may represent a hygiene risk. Reduces chlorine as well as other smell and taste materials. Reduces the wear of the coolers internal components. The cartridge is quick and easy to change, designed to be hygienic, so internal components are not exposed to contamination.

#### Installation guidelines:

- Use 3/8 water connection systems.
- Install the filter cartridge vertically, the cart- ridge downward hanging.
- Leave a free space of approx. 7 cm under the cartridge, to enable easy change.
- Rinse the cartridge for approx. 3 minutes of ambient water.

#### References to the enterprise:

- Change the cartridge during regular routine maintenance every 6 months.
- Change the cartridge if the capacity is reached or the pressure falls under 0.7 bar
- Capacity: 10000 litres or 12 months whichever comes first.
- The flow rate must not exceed 3.8 l/min.
- Always rinse the cartridge after first installation or after cartridge change.

Please note that the impurities, bacteria mentioned should not be in the water supply. The filter will remove them if they are.

### 10.3 CO<sub>2</sub> connection

There are two options for supplying CO<sub>2</sub> to the equipment:

- IQ3 CO<sub>2</sub> disposable bottle system.
- IQ3 CO<sub>2</sub> refillable system for commercial bottles.

#### **IQ3 CO<sub>2</sub> disposable bottle system.**

Items Required:

- 1 pressure regulating valve (only use for disposable bottles)
- 1 CO<sub>2</sub> disposable bottle 600 gr. Filling weight

Ensure that the pressure regulator valve is OFF (closed) and connect the valve to the disposable CO<sub>2</sub> bottle, then attach the 4 mm hose to the push fit on the valve. Mount the bottle in the bracket at the front of the equipment. Cut the hose to the required length and connect to the push fit connector at the front of the equipment. Examine the system for tightness. the max CO<sub>2</sub> pressure is 5 bar. Adjust the valve accordingly.

- **Indication + (plus)**  
Turn in the clockwise direction to increase pressure.
- **Indication- (minus/OFF)**  
Turn in the anti-clockwise direction to close the valve.



#### **Guide to setting the valve for desired pressure:**

- Pressure control is possible from 0 to 5 bar.
- from closed condition (minus) 1 1/4 revolutions toward plus = approx. 1 bar pressure.
- from closed condition (minus) 1 1/2 revolutions toward plus = approx. 1.5 bar pressure.
- from closed condition (minus) 1 3/4 revolutions toward plus = approx. 2 bar pressure.
- from closed condition (minus) 2 revolutions toward pluses = approx. 2.5 bar pressure.
- from closed condition (minus) 2 1/4 revolutions toward plus = approx. 3 bar pressure
- from closed condition (minus) 2 1/2 revolutions toward plus = approx. 4 bar pressure
- from closed condition (minus) 3 revolutions toward plus = approx. 5 bar pressure

## 10. Water and CO<sub>2</sub>

### 10.3 CO<sub>2</sub> connection

#### Guide to setting the valve for desired pressure:

Optimal CO<sub>2</sub> pressure for the iQ3 is between 3 bar and 5 bar.

**Please note that the CO<sub>2</sub> Pressure must always be at least 0.5 bar more than the water pressure.**

### 10.4 CO<sub>2</sub> of systems and connection

CO<sub>2</sub> refillable system for commercial CO<sub>2</sub> bottles.

#### Items required:

- 1 pressure - reducing valve (see picture)
- 3 m hose 8 mm.
- 1 adapter 4 mm to 8 mm.

It is possible to supply CO<sub>2</sub> to the iQ3 using refillable commercial CO<sub>2</sub> bottles. To allow for larger CO<sub>2</sub> capacities. So that: 3 kg, 6 kg, 10 kg refillable bottles can be used, which need to be stored externally to the equipment. Take into consideration the height and space required for safe storage of the bottle, since there are different bottle forms. Make sure the pressure-regulating valve is closed and attach the to the bottle. Fit the 8 mm hose on the lower connection at the pressure - regulating valve, and secure the fitting nuts bolt firmly. Fit the adapter on the 8 mm hose, fit the 4 mm Hose between the adaptor and the rear of the equipment, make sure the link hose is connected at the front of the machine. Open the CO<sub>2</sub> supply at that Bottle. Examine this for leaks. Important: Secure the bottle to prevent it from falling over.



Optimal pressure with the iQ3 is between 3 bar and 5 bar.

**Please note that the CO<sub>2</sub> Pressure must always be at least 0.5 bar more than the water pressure.**

#### Attention:

Please always work with vertical standing CO<sub>2</sub> bottles (don't turn the bottle upside-down). If you have to change something, please always keep the position on „OFF“ (no pressure). Changes of CO<sub>2</sub> bottles only by trained persons.

## 11. Troubleshooting

### 11.1 Troubleshooting guide

Problem	Cause	Solution
<b>Water is not dispensing.</b>	The water supply is turned off. The water supply pipe is kinked / trapped. There is no power to the machine.	Turn the water supply on. Inspect the water supply pipe. Inspect the mains power supply.
<b>Water is dispensing slowly.</b>	The water filter is blocked The mains water pressure is too low.	Replace the water filter, call a technician.
<b>The required temperature is not reached.</b>	Recommended usage of 16 l/h has been exceeded. The compressor is faulty.	Reduce usage. Call service technician.
<b>Water Leak.</b>	The filter is not fitted correctly. There is a leak in the system.	Check the water filter. Turn OFF the water supply and call technician.
<b>The Sparkling water dispense is not sparkling.</b>	CO <sub>2</sub> Bottle is empty.	Replace CO <sub>2</sub> Bottle.
<b>The sparkling water button gives gas only (no water).</b>	The pump is not functioning	Turn off mains power, wait for 30 seconds. Turn on power, if fault still exists call the technician.
<b>Sparkling water dispense is intermittent.</b>	CO <sub>2</sub> pressure is too high.	Reduce pressure at the bottle pressure regulator.
<b>Sparkling water is not sparkling enough.</b>	CO <sub>2</sub> pressure too low, or bottle is nearly empty.	Turn up the pressure at the Bottle regulator or replace bottle.

A1 = filter end

A4 = time out cooling unit (overheating)

B1 = filter blocked

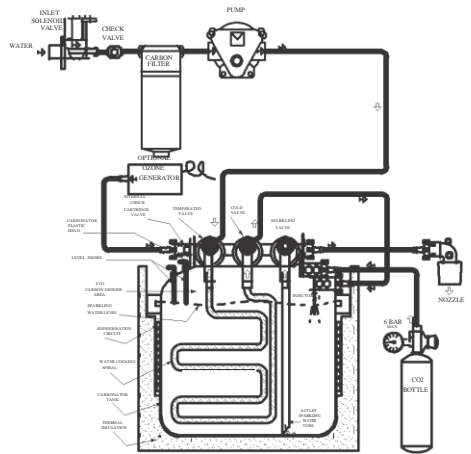
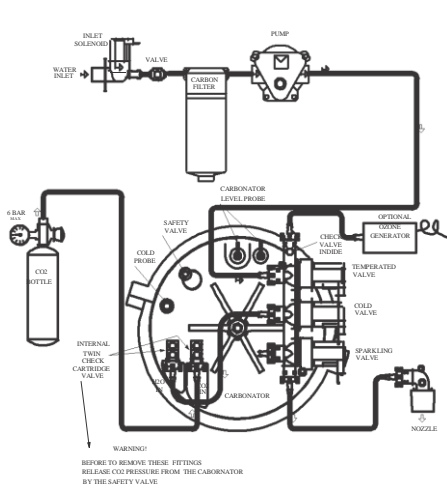
B2 = time out pump (overheating)

generally: switch out to reset the machine

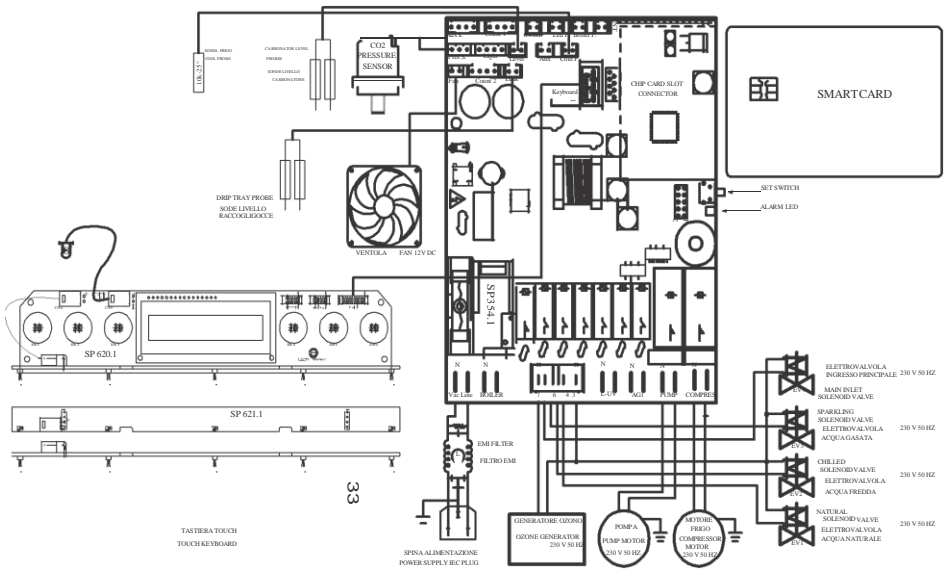
## 12. Schematics

### 12.1 Water Circuit

Attention: do not bow the water tubes!



### 12.2 Wiring Diagram



## Safety Markings



1. CE Marking on a product is a manufacturer's declaration that the product complies with the essential requirements of the relevant European health, safety and environmental

protection legislations. Product Directives contains the "essential requirements" and/or "performance levels" and "Harmonized Standards" to which the products must conform. Harmonized Standards are the technical specifications (European Standards or Harmonization Documents) which are established by several European standards agencies (CEN, CENELEC, etc). CEN stands for European Committee for Standardization. CENELEC stands for European Committee for Electrotechnical Standardization.

2. CE Marking on a product indicates to governmental officials that the product may be legally placed on the market in their country.

3. The CE Mark on the equipment ensures the free movement of goods within the EFTA and the European Union (EU) single market (total of 28 countries). CE Marking on a product permits the withdrawal of the non-conforming products by customs and enforcement/vigilance authorities. The IEC CB Scheme is by far the largest international certification system for products and is a worldwide certification. It has more than 60 member countries, but is also accepted outside these countries.



The CB Scheme facilitates the recognition of test reports when applying for national safety certification of electrical products in the various member countries of IECEE. Also, it is now widely used among business partners in

international trade for the detection of the essential conformity of its electrical / electronic products.

### Why we use Nemko CB

- Nemko has for many years a leading issuer of CB tests, especially for IT products.
- With a CB Test Certificate from Nemko the manufacturer can provide a basis to achieve an acceptance in most countries around the world.
- CB Test Certificates are now generally accepted, and also be in the prime document for proof of product safety in the international business-to-business trade of electrical appliances.

- The CB Scheme is an IEC standard. Nemko is a European Norm (EN). You can also use the policy to the European standard as proof of conformity and CE marking.
- In addition, products in the individual countries are tested, compensate for national differences to IEC / EN standards, so that the CB Test Certificate is recognised.
- Manufacturers use this control to national accounts in different countries to show that their products meet the relevant standards.
- There are no annual license fees or charge for the CB - Certificate.
- IECEE is a part of the IEC, the "International Electrotechnical Commission."

### Paper ECO Ecological characteristics:

- ISO 9706 LONG LIFE.
- Alkaline content > 2%.
- Fully recyclable and biodegradable.
- Neutral pH (cold extraction).
- Pulp bleached using ECF Process (Chlorine free).
- Pulp from properly managed forests.
- 94/62/EG (Absence of heavy metals)

## Safety Markings



The EPDWA association was founded to promote, develop and maintain the highest standards of hygiene, safety and ethics in the European Point-of-Use Drinking Water industry for the benefit of customers. This is achieved by providing our members with information, Support and training. It represents their interests at local, national and European level. Fast Track to this kind of support will help to keep growing your business, and be informed about new developments.

### What are the goals of the EPDWA?

- To assist the members of the association so that they achieve the highest standard of quality and hygiene.
- To promote the observance of the members to ethical, professional and legal practices.
- To recruit organizations within the European point of use of Drinking Water Industry to comply with the standards and pursuit of the objectives of the association.
- To facilitate the exchange of technical, scientific and legal information between industry and members.
- As the authoritative source for the collection of all information in this field.
- Collaboration with government agencies and authorities, in terms of rules and standards for the industry.
- To cooperate with other industries, organizations and associations.

### We are a member of the Association AQUA ITALIA



The AQUA ITALIA association was founded in the second half of the seventies, in the ANIMA Federation, and its intention was to merge the Italian company for production and manufacture of equipment, chemical products, equipment and components for the treatment of the primary water. In recent years, member companies have discussed the following topics:

- Water production plants for water intended for drinking purposes, municipalities, consortia, etc. using the most advanced systems of clarification, flocculation, desalination, disinfection, etc..
- Water treatment plants for domestic use, preventing corrosion and scaling, improved organoleptic characteristics (taste, odor, color, etc.).
- boilers for the production of steam or hot water, in order to prevent negative phenomena linked to scaling and/or corrosion inside generators and steam/condensate.
- water cooling and humidification, to eliminate problems related to scaling, corrosion and development of biological.
- plants and chemical treatments for the majority of industrial processes that use and reuse water.
- water treatment systems for swimming pools for public and private, in order to maintain proper water balance and provide the user the best health and sanitation, combined with the well-being and comfort that these structures provide.

# EC Declaration of Conformity

EC DECLARATION OF CONFORMITY  
2004/118/EC, 2006/95/EC. [Manufacturer] S.r.l.  
Loc. Isola del Pero, 16-17041 Altare (SV)-Italy  
de- clare under our responsibility that the  
product WATER DISPENSER Model SMILE,  
SORGENTE and UNDERCOUNTER to which  
this declaration relates is in conformity with the  
following stan- dards or other normative  
documents:

- Household and similar electrical appliances- Safety- Part 1: General requirements - EN 60335 -1:2002 + A1:2004 + A2:2006 + A11:2004 + A12:2006 + A13:2008.
- Safety of household and electrical applian- ces - Part 2-24: Particular requirements for refrigerating ap- pliances, ice- cream applian- ces and ice -makers -EN 60335 -2-24:2003 + A11:2004 + A1:2005 + A2:2007.
- Measurement methods for electroma- gnetic fields of household appliancesand similar apparatus with re-gard tohuman exposure- EN 62233:2008.
- Household and similar electrical appliances- Safety- Part 2-15: Particular requirements for appliances for heating liquids- EN 60335-2-15:2002 + A1:2005 + A2:2008.



Prüfung	Prüfungsort	Prüfungsmethode	Prüfungsergebnis	Prüfungstermin
1) Wasser gekocht = CO <sub>2</sub> vom 27.12.2010	Pseudomonas aeruginosa	0 KBE/250ml	10 KBE/250ml	nc
2) Wasser gekocht vom 27.12.2010			0 KBE/250ml	c
3) Wasser gekocht = CO <sub>2</sub> vom 29.12.2010			0 KBE/250ml	c
4) Wasser gekocht vom 29.12.2010			0 KBE/250ml	c
5) Wasser gekocht = CO <sub>2</sub> vom 04.11.2010 - ohne Vorlauf			0 KBE/250ml	c
6) Wasser gekocht vom 04.11.2010 - ohne Vorlauf			200 KBE/250ml	nc
7) Wasser gekocht = CO <sub>2</sub> vom 04.11.2010 - mit Vorlauf			0 KBE/250ml	c
8) Wasser gekocht vom 04.11.2010 - mit Vorlauf			0 KBE/250ml	c

e = anforderung  
nc = nicht konform  
c = nur zur information

Die Prüfergebnisse beziehen sich ausschließlich auf die oben bezeichneten und im Labor untersuchten Prüfgegenstände. Der vorliegende Bericht darf ohne schriftliche Genehmigung der Phytos nicht auszugsweise vervielfältigt werden.

Phytos GmbH & Co. HD besitzt die Kompetenz nach DIN EN ISO/IEC 17025 Prüfungen im Bereich Mikrobiologie zu den einzelnen Prüfverfahren der spezifischen und unspezifischen Kultivierungsverfahren sowie der Probenahme zur Untersuchung von Roh- und Trinkwasser (DIN EN ISO 22823-2:06).  
Phytos GmbH & Co. HD ist gemäß § 13 Abs. 5 TrinkwV 2001 als Untersuchungsstelle hinsichtlich mikrobiologischer Untersuchungen und Probenahme anerkannt und gelistet.

Die Prüfergebnisse beziehen sich ausschließlich auf die oben bezeichneten und im Labor untersuchten Prüfgegenstände. Der vorliegende Bericht darf ohne schriftliche Genehmigung der Phytos nicht auszugsweise vervielfältigt werden.

**Abweichungen** keine  
**Bemerkungen** Vorgehen s. Folgetafel  
**Schlussfolgerung** Nach den oben aufgeführten Ergebnissen ist der im Gerät aktivierte Ozonstoß gegen Rückverkeimung durch Pseudomonas aeruginosa (ATCC 9027) zu 100% wirksam.

Ausgestellt von **Phytos**  
Dr. Heide Schmitt  
Wasseranalytikerin  
für die E.C.  
ausgestellt am 10.01.2011

Überprüft von **Phytos**  
Johannastraße 9  
47829 Grevenbroich  
ausg. 10.01.2011











