

Cornelius.

LOOP STYLE XL CC



Manual operation English

Legal notice

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Countertop Vending Machine

Model

LOOP Style XL CC

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1 Safety

1.1 Intended use

By using the unit as intended you will not only protect yourself, but also prevent damage occurring to the unit and its components!

The intended use of over counter coolers from the LOOP STYLE series (referred to as "unit" in the following) is to refrigerate and convey non-alcoholic beverages and their basic ingredients. CO2 or electric pumps are used as conveying equipment for the brands.

The unit is only suitable for stationary installation in a closed room. Stationary installation is to be carried out by an expert in compliance with all of the specifications given this manual.

The inlet temperature of the liquid must not exceed 32°C otherwise the pressure in the refrigeration cycle will rise above specification.

Minimum ambient temperature 10°C, maximum ambient temperature 32°C

The intended use means that you will carry out all activities with and on the unit to the specifications provided in this document.

This unit is only to be operated by those who meet the requirements set out in this document.

Work on the unit and its components not included in the activities described in this document may only be performed by experts, means authorized and skilled people.

1.2 Improper use

Improper use of the unit and unauthorized modifications to the unit and its components may cause personal injury and equipment damage for which Cornelius Deutschland GmbH shall assume no liability. Improper use of the unit is prohibited.

The following in particular is regarded as improper use:

- Mobile operation of unit
- Operation of unit in areas without supervision by skilled personnel
- Operation of the unit in an area, where water jet is possible.
- Cleaning with a water jet
- Any handling as e.g. use or service by children under the age of 8 years
- Any cleaning or service by children without supervision by a skilled, authorized adult.
- Use by persons (including children) with physical, sensory or mental disabilities or those with insufficient experience and knowledge, unless they are supervised by a person responsible for their safety, or this person has instructed them in the use of the unit.
- Use by those under the influence of medication, alcohol, drugs or other substances which impair their physical, sensory or mental abilities.
- The refrigeration of non-specified liquids and those above the maximum supply temperatures as this may cause unacceptably high pressures to build up in the refrigeration circuit.
- Operating the unit below the minimum and above the maximum ambient temperatures (minimum and maximum temperatures *see chapter 3.3, page 15*).
- Operating the unit with conveying media other than those defined in this document.
- Operating the unit in locations and ambient conditions which do not fully meet the requirements of this manual
- Operation of the unit by untrained staff

1.3 Staff

1.3.1 Operator

The operator is the natural or legal person who uses the unit or on whose behalf the unit is used. The operator must ensure that the unit is only used as intended, in observance of the safety instructions set out in this document.

The operator must ensure that all users read and understand the safety information. The operator is responsible for the planning and proper implementation of regular safety inspections and maintenance work.

With regard to operating the unit, Cornelius Deutschland GmbH recommends observing the national regulations of the country of use which govern the operation of drink-dispensing systems.

1.3.2 User

The operator specifies who will operate this unit. Cornelius recommends the following:

- If this unit is only to be operated by employees, they are to be instructed in its use, demonstrate their abilities to use it to the operator or their authorized representative, and be expressly charged with its use. This document is to be available to staff at all times.
- If this unit is openly accessible and set up so that untrained staff can use it, the operator is to provide instructions for use directly at the unit; these must be clearly understood by this group of people, therefore ensuring that the unit will be handled safely.

1.3.3 Expert

An expert in terms of this document refers to someone who has the relevant training, experience and information and knowledge of relevant standards, laws, regulations, accident prevention regulations, generally accepted safety-related regulations and operating conditions to be able to perform the required activities as well as recognize potential risks and avert them.

For assignments requiring expert knowledge, e.g. in electrical engineering, mechanics or fluid technology, only skilled workers with the right qualifications are to carry these out.

An expert must also have received technical training in the unit-specific special features of Cornelius products. The assigned tasks are always to be carried out in compliance with this manual.

1.4 Presentation of warning

The documents supplied with the unit provide warnings regarding any hazards that might exist.

1.5 Safety instructions

1.5.1 General safety information

Any work on the unit and its components which goes beyond the operation and servicing and maintenance that the operator is authorised for, may only be performed by experts (for a definition of experts, see chapter 1.3.3, page 5). Furthermore, it is crucial that when performing work on the unit all safety information is observed; this information is set out in the following sections. Some of the tasks may have additional safety information which highlights the specific hazards associated with such work.

1.5.2 Disclaimer of liability and warranties

If work is undertaken on the unit which is not described in this document, Cornelius Deutschland GmbH shall not assume any liability for any resulting hazards and damages. The same applies to described work which is partly or not fully performed in compliance with the regulations set out in this document.

Warning!



Risk of personal injury and equipment damage due to improperly executed work

Improperly executed work at the unit will cause dangers to persons and damage to the unit.

- Have all work at the unit carried out by Cornelius Deutschland GmbH or by a service partner.

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Warning!



Risk of personal injury and equipment damage due to the use of non- approved spare parts and accessories

Using spare parts and accessories that are not recommended by the manufacturer may lead to personal injury and equipment damage.

- For your own safety and to protect your warranty, only use original spare parts.

1.5.3 Safety information to prevent personal injury and equipment damage

Please always observe the following safety information in order to prevent personal injury occurring:

Danger!



Risk of death from electric shock

Touching live electrical parts will result in a risk of electric shock!

- Do not carry out any work on the electrical system.

Warning!



Risk of burns when touching hot parts of the unit

Touching parts of the unit after it has been in continuous use over an extended period of time will result in a risk of burns.

- Take appropriate safeguard measures, such as by wearing heat- resistant protective gloves.

Danger!



Risk of poisoning and risk of explosion due to improper handling of CO₂ cylinders

Risk of death from CO₂!

- Observe all information on occupational safety for the safe operation of dispensing systems as applicable in the respective country of installation.

Danger!



Risk of personal injury and equipment damage due to improper operation

Risk of death from improper operation!

- Make sure that only users who are users as defined in the user section use the unit; *see chapter 1.3.2, page 5.*
- Children must be supervised to ensure that they do not play at or with the unit.

Danger!

Risk of personal injury and equipment damage due to leaking refrigerant

In accordance with DIN EN 378 standard, part 1, the refrigerant used with this unit, R290 (propane), is classified as safety group A3. It is not poisonous and not caustic or corrosive. However, it is combustible and highly flammable. As a result, a potentially explosive atmosphere may occur in the case of leaks.

The refrigerant is heavier than air and, consequently, accumulates at the bottom and may enter lower lying areas (e.g. sewage systems). At high concentrations, this may lead to a lack of oxygen, resulting in a risk of suffocation. Lower concentrations may have a narcotic effect. The refrigerant has a very slight, somewhat sweet smell.

- Avoid any damage to components that carry the refrigerant
- If you suspect any leaks, however small, shut down the unit, air the room well and inform your service partner.
- Do not allow direct contact with the skin of any leaking refrigerant.
- Fire, open flames and smoking are prohibited.
- If you begin to notice any smell, leave the room and alert the fire service

Notice!

In particular, safety standards are to be observed in their scope of validity (e.g. EN 60335-2-75).

2 Transport and packaging

Choose a suitable packaging when returning the unit itself or one of its components to Cornelius Deutschland GmbH, e.g. for repairs. In particular, make sure that the unit and any components are protected from shock/impact, moisture, dirt and electrostatic discharge (ESD). This will prevent transport damage to the unit and to the components, for which the manufacturer shall assume no liability.

Caution!**Component damage due to freezing liquids**

Ambient temperatures that are below freezing will lead to the freezing of any water or cleaning agent residue remaining inside the unit. This will lead to damages of internal components.

- Before shipment, storage or relocation of the unit, the unit is to be cleaned and the cleaning solution is to be fully drained from the unit.

2.1 Storage

Avoid excessive temperature fluctuations as condensate may form, which in turn may cause damage to the unit or to the components.

The permissible storage temperature is -10 °C to +50 °C.

The acclimatization period is 6 hours.

Caution!**Damage due to improper storage**

Dirt or moisture entering a unit, as well as certain weather conditions (e.g. condensate forming at the unit, sunlight) will cause damage to the unit and its components.

- Protect the unit and its components by storing the unit in a clean and dry place, and by ensuring stable ambient conditions.
- If possible, store the unit in its original packaging. Unpacked units must be covered with a dustproof cover. No condensate must form under the cover.

Caution!**Risk of electrostatic charge!**

Improper handling or storage may result in electrostatic charges.

- If possible, store units and/or any electronic components in their original packaging.
- Keep units and/or electronic components away from charged objects, fields and insulators.
- Avoid electrostatic charges when removing packaging and/or handling electronic assemblies and components by working at an ESD protected workstation or work area.
- When working at the unit or its components wear a grounding (antistatic) wrist strap at the very least and wear antistatic gloves if necessary.

Caution!**Component damage due to material ageing**

Material can age due to long storage periods, thereby affecting the material's properties (e.g. plastics and seals may become brittle). The properties of lubricants may change due to long storage periods.

- Check the assemblies and components for damage before each use/before installing them. Do not install assemblies or components that show visible signs of ageing.

Caution!**Component damage due to freezing liquids**

Ambient temperatures that are below freezing will lead to the freezing of any water or cleaning agent residue remaining inside the unit. This will lead to damage to internal components.

Before shipment, storage or relocation of the unit, the unit is to be cleaned and the cleaning solution is to be fully drained from the unit.

3 Disposal

Disposal of the units must be carried out in compliance with the applicable local and/or national and international regulations. Units must not be disposed of with household waste.

If the unit contains fuels or lubricants in liquid, paste-like or gaseous form, such as oil, grease, cooling agents etc., such fuels or lubricants are to be collected using appropriate measures and disposed of in compliance with the applicable local and/or national and international regulations. Such fuels or lubricants must always be prevented from seeping into the ground, the sewage system and any bodies of water, and must always be prevented from entering the atmosphere.

4 Installation Requirements

4.1 Installation Sites

Comply with the valid national regulations for installation sites and electrical connections. Ventilation of the installation sites must be appropriate for unit output. Inadequate ventilation of the unit will result in overheating and damage. Always make certain that no intake or discharge vents are covered or blocked.

	LOOP Style XL
Heat output in watt	945
Air flow in m ³ /hour	400

4.2 Electrical Connections

A socket outlet with an earthed contact featuring a maximum protection of 16 amperes is required.

The line voltage must always be within the following tolerances: 230 VAC +6%/-10% / 50 Hz

	LOOP Style XL
Power consumption in watt	790

Should placement of the unit require an extension cable, please note the following points:
Cable length must not exceed 50 meters.
Only use cable with a size of 2.5 mm².
Only one unit is allowed per extension cable.

4.3 Hydraulical connections

The hydraulical connections have to comply to all national mandatory norms, laws and directives. They must be carried out only by skilled and authorized personnel with appropriate tools.

5 Installation

The unit must be installed by a trained service technician.

Please take care, that the socket for the unit is always accessible.

If the power supply cable to the unit is damaged, it has to be replaced by the manufacturer, the service partner or any other qualified person to avoid safety hazard.

The unit must be planar aligned. Max. angle of +/-2 °C is permitted.

5.1 Water Connection

The connections to mains water are not delivered with this unit. Please use only water connections that are in line with IEC/EN 61770. Connect the unit to a feed line with an inner diameter of 8 mm. We recommend use of a water filter and a water pressure regulator for the water input. To permit flushing of the filter, a t-piece should be mounted downstream of the filter. The water flow pressure should be 0,2 MPa (2 bar) (mount control pressure gauge on water pressure regulator). The unit must only be operated with a water pressure regulator.

5.2 CO₂ Connection

You will require a two-stage pressure regulator, 0,7 MPa (7 bar).

Use tubing with 4mm ID.

One pressure is for the carbonator bowl and the other one for the syrup flow.

Set the CO₂-pressure: see table on page 21 (chapter 6.1).

5.3 Connecting Syrup

Use minimum 6 mm ID syrup tube to connect syrup container with correct cooling coil into the unit.

6 Putting into and out of Operation

6.1 Putting into Operation

Before starting operation of the unit the transport lock must be removed.

In order to ensure the proper function of the unit, please follow the below outlined points in their order.

Comply with the cleaning regulations defined by local laws before beginning each operation.

Connectors must be cleaned every time prior to attaching a beverage container.

Connect coupling to beverage container.

For soft drink note: gray coupling = CO₂, black coupling =beverage/syrup

Open the valve of the CO₂-cylinder and the pressure regulator. Check the CO₂-pressure on the pressure regulator.

It should be within the following standard values:

Syrup:	0,42-0,49 MPa (4,2-4,9 bar)	
Carbonator pressure:	0,52-0,58 MPa (5,2-5,8 bar)	cold carbonation
Diet/light-beverage:	0,21-0,28 MPa (2,1-2,8 bar)	

Set the CO₂-pressure by turning the control screw:

To increase the pressure: Clockwise

To reduce the pressure: Counterclockwise

Afterwards check the CO₂-lines for leaks by closing the CO₂-valve. The pressure (high pressure gauge) displayed at the pressure regulator should not drop. If it does, notify the service technician immediately! Do not forget to re-open the CO₂-valve if no leakage is evident.

Open the water feed line and check the flow pressure. Standard value: 0,17-0,35 MPa (1,7-3,5 bar).

Set flow pressure at the control screw on the water pressure regulator:

To increase the pressure: Clockwise

To reduce the pressure: Counterclockwise

Check the beverage/syrup lines for leaks. Only a visual inspection is possible. If liquid is leaking, call a service technician.

Close the water feed line. The pressure display should not drop. If it does, notify the service technician immediately! Check the incoming waterline for leaks. Do not forget to re-open the water feed line if no leakage is evident.

6.2 Turning on the Unit

The water bath must be filled to the overflow with tap water. Refer to the technical data for the amount required.

Take care, that no water runs into the agitator motor. Reference: Use for this a suitable funnel and filler tube.

To prevent algae from forming in the water, add the disinfectant Molco (PN 14-9670-150). The 150 ml container of disinfectant is sufficient for 30 liters of water.

Insert the mains plug for the cooler into the socket outlet with an earthed contact.

Units with water bath are ice bank controlled. These units start working automatically after the water bath is filled with water. The compressor will cycle off after the ice bank has been built. (full ice bank capacity). The control board of the unit has a time delay for switching on and off the cooling system when it runs in ice

bank mode. After the cooling system is switched on the running time is no less than 5 minutes. Switch off signals will be ignored in this time. After the cooling system switches off, the delay is no less than 3 minutes. Switch on signals will be ignored in this time. The 3 minutes delay occurs when turning on the unit and after a break in power supply. This unit contains a 3-pin ice bank probe.

Post-mix units include a carbonator pump which switches on automatically and fills the carbonator bowl. The carbonator pump switches off when the water has reached its highest level in the carbonator bowl but after no more than 5 minutes. Long run periods are signs of leaks or insufficient water. It is then only possible to turn the pump back on by executing a network reset (pulling out the mains plug briefly).

The carbonators in post-mix units are protected against running dry. If the flow rate quantity is so large that the "empty electrode" is activated, then the carbonator bowl is empty. In such cases voltage supply for the post-mix valves will be switched off. A beverage withdrawal is only again possible if the carbonator bowl is filled.

Release air from the carbonator bowl by pulling the safety valve for about 2 to 4 seconds.

6.3 Purging the Syrup Systems

Purging the syrup systems

Place a cup under the nozzle.

Manually open each syrup valve in turn and observe syrup flow. Purging is completed when all air is removed from the system. If syrup continues to show air bubbles, check tightness of line connections.

6.4 Adjusting the Water-to-Syrup Ratio for Post-mix

Adjust the water flow rate on the post-mix valve in accordance with the valve supplier specifications.

Note: Allow the refrigeration unit to operate until minimal amount of ice has formed on the evaporation coils, making this adjustment. Alternatively, allow the full ice bank to form (compressor cycle off) before adjusting the ratio. The drink temperature should not be higher than 5°C.

The water-to-syrup ratio is measured by use of a ratio cup having two chambers into which the soda and the selected syrup are dispensed. The ratio, if incorrect, is adjusted by turning the related syrup flow regulator adjusting screw located near the solenoid valve.

To increase the syrup flow rate: Clockwise

To reduce the syrup flow rate: Counterclockwise

6.5 End of Operation (End of dispense-time)

It is imperative that the CO₂-cylinder and water line be turned off each time operation is ended. Be sure to open again before continuing at operation.

6.6 Daily Inspection

- Check whether carbon dioxide and water lines are open.
- Check the beverage/syrup lines for leaks. Only a visual inspection is possible. If liquid escapes, call a service technician.
- Check the CO₂-lines for leaks by closing valve on the CO₂-cylinder. The inlet pressure indicated on the pressure regulator should not drop. If it does, call a service technician immediately.
- Do not forget to re-open the CO₂-cylinder valve afterwards.

6.7 Taking out of operation (Vacation, end of season)

Perform the following steps in case of protracted standstill periods:

- Close the CO₂-cylinder, the CO₂-stopcocks on pressure regulators and the water feed line.
- Pull the mains plug out of socket outlet with earthed contact.
- Detach the couplings from beverage containers.
- Have the system emptied and cleaned.

Only trained specialists are to carry out this procedure.

7 Cleaning and Disinfection Directions

7.1 Cleaning Directions

Comply with the valid national regulations for cleaning bar equipment at the particular installation site.

Clean connection parts and tap fittings in advance whenever making connections or changing the type of beverage. Clean parts coming into contact with air and beverage (e.g. dispense nozzle) on a daily basis.

The condenser fins must be cleaned in regular intervals. These vary according to the amount of dirt in the air at the installation site (approximately every three months). This is best done with a brush and a vacuum cleaner.

The water level in the water bath must be checked regularly and the contents must be exchanged at least once annually. Algae formation can be reduced by adding disinfectant (order number 14-9670-150). For a 30 liters water-bath one disinfectant container is sufficient.

The unit is to be emptied and cleaned by trained person only based on the following recommendations:

To be cleaned by trained specialists	CO ₂ -lines	Product-lines	Syrup-lines	Soda water-lines
Before commissioning		X	X	X
Before each change of type of beverage		X	X	
Before and after a pause of more than 1 week		X	X	
Every 2 weeks		X		
Every 3 months			X	X
Every 12 months	X			

7.2 Cleaning and Disinfection Procedure before use

In order to achieve a proper hygienic performance of the dispense equipment, it is crucial to run the initial and recurring sanitization procedure (intervals according to DIN 6650-6) on all product and water lines of the system.



Attention!

Cleaning / sanitizing agents are harmful and may cause severe health injuries! During the work with any agents make sure to always wear proper clothing (gloves, safety goggles, etc.). Special attention must be taken during the flushing of the agent at the dispense valves. It must be made sure, that no operator uses the dispense equipment during sanitation (e.g. use clear signs on the valves, etc.)!

Take care of an adequate behaviour towards hygiene while working on the equipment (e.g. disinfecting hands prior to work, etc.) in order to professionally deal with the matter. The unit should be cleaned / sanitized starting as close as possible from the mains water connection (wall outlet) to make sure that also the tubing is being treated.

Remark -> Water filters:

In case the system is equipped with a water filter, the filter cartridge needs to be removed before doing the cleaning / sanitization and replaced by a blind plug that allows bypassing the filter. Do not use any empty service filter cartridges to flush the sanitizing agent into the system, as this will not allow a proper and consistent level of sanitizing agent in the unit.

In addition, the high levels of agent passing through the dispenser when using such cartridges may damage components such as sealings, O-rings, etc. in the dispenser.

Remark -> Carbonator- / Circulation pumps

With units such as Triton, Apexx and Energize the carbonator- and soda circulation pumps must be turned off during the cleaning / sanitization process (otherwise foaming issues will occur).

Remark -> Stillwater lines inside the cooler

In case your equipment has still water lines, it must be made sure that these are also being cleaned / sanitized. In case your equipment currently does not use Stillwater, the line must be equipped with a stopcock to manually drain sanitizing agent from this tube.

In case the Stillwater line is in general not being used on the cooler, it is recommended to disconnect this line as close as possible from the water cycle and close the water line with a blind plug (this avoids areas within the circuit which might not be sufficiently flushed).

Remark -> Electrical post-mix valves, which cannot be manually operated

These type of taps must be operated electrically. When doing this, it needs to be considered that on some dispense equipment the 24V electrical power supply to the valves is cut, when the empty electrode in the carbonator bowl is reached. In that case the empty sensing must be bypassed, by e.g. short circuiting all connectors on the plug of the level probe connection.

Remark -> CO₂- or Water pressure sensors on the dispense equipment

Depending on the type of equipment you may have CO₂- or water pressure sensors installed, which will in case of low CO₂ or low water supply cut the 24V power supply to the valves.

In order to still be able to operate the system during the sanitization process, it is required to short circuit such sensors (make sure to put them back into operation after service).

Remark -> Post-mix valve blocks

It is recommended to clean / sanitize the valve blocks separately. Especially valve blocks with an integrated stop cock (e.g. Lancer block) need special care, as the gap in the stop cock allows bacteria to collect, which might not be sufficiently treated with the sanitizing agent.

In case the dispenser is out of operation (without cooling) for more than 10 days, it is necessary to run the cleaning- and sanitization procedure prior to putting the unit back into operation.

Should it be necessary, to open a once sanitized system again (e.g. to install a new water filter) all opened connections must be disinfected with a sanitization spray prior to reconnecting.

A.) Flushing-in of sanitization agent (e.g. P3 Ansep CIP from Ecolab)**1.) Syrup Lines**

- 1.1) The product lines filled with syrup must first be flushed with water. For this an external water distributor can be used to connect and flush several syrup lines simultaneously. The post-mix valves should be operated on the syrup side only for flushing.
Attention! Gas driven syrup pumps must not see any positive pressures on the incoming side of the pump, as this may damage the pumps.
- 1.2) Connect the water distributor to the CO₂ supply in order to drive the water out of the syrup lines. This avoids that the sanitizing agent is being diluted in the tubing. Afterwards close the CO₂ gas and depressurize the complete system again.
- 1.3) Fill your cleaning tank with the cleaning / sanitizing agent according to the mixing ratios given by the manufacturer of the agent.
(e.g. when using P3 from ECOLAB -> 50ml for 1 litre water = 5% solution)
In order to achieve a proper mixing in the cleaning tank, it is recommended to first fill in the agent and then top-of with clean water.
- 1.4) Connect the syrup lines to the cleaning tank and dispense cleaning / sanitization agent from every single dispense valve. Make sure that agent leaves from all installed taps.

2.) Water Lines

- 2.1) Close the water- + the CO₂ supply to the unit and depressurize the system with the taps
- 2.2) Disconnect the water supply to the unit and cut the power supply to the carbonator pump in order to avoid dry running of the pump (e.g. by pulling the plug of the pump).
- 2.3) Connect the water line feeding the dispenser to CO₂ gas pressure and drain all water from the tubing of the system. This ensures that the sanitizing agent that is afterwards flushed into the dispenser is not being diluted e.g. in the carbonator bowl.
Afterwards close the gas supply again and depressurize the system.
- 2.4) Connect the cleaning tank to the water inlet of the dispenser and pressurize the tank with approx. 3 bars pressure (Attention! Remove any water filters before doing this!).
- 2.5) Pull the safety relieve valve on the carbonator bowl and carefully let some sanitizing agent leave the valve. This ensures that the carbonator bowl is flooded completely with the sanitizing agent all the way to the top.
 Attention! : Avoid that excessive amounts (= >50ml) of agent is being introduced into the water bath, as this will carry the risk of corrosion of metal parts in the water bath. In case larger amounts were spilled, the water in the water bath needs to be replaced.

The LOOP post-mix cooler works with a membrane / diaphragm pump please make sure the pump is in operation when the sanitizing agent is being flushed into the unit. This will ensure that all parts of the pump will come into contact with the sanitizing agent.

- 2.6) Flood the complete dispense system with the cleaning / sanitizing agent by operating the post-mix valves. Ensure that on all valves clearly visible agent is being drawn.

Effect- / working time for the cleaning / sanitizing agent is min. 20 minutes!

In the meantime remove the dispense nozzles from the valves and sanitize them manually by putting them for 20 minutes into sanitizing agent.
In case it is seen that the nozzles are heavily dirty, clean the nozzles mechanically by using a clean brush and sanitization agent.

B.) Flushing-out of sanitization agent

1.) Syrup Lines

- 1.1) Disconnect the cleaning tank and bring out any remaining sanitizing agent from the syrup lines by using CO₂ gas. Afterwards close the CO₂ supply and depressurize the system via the dispense valves.
- 1.2) Connect the water distributor and sufficiently flush clean water through the syrup lines (for this please open only the syrup side of the dispense valves). In case a hygiene water filter is being used with the dispenser, it is recommended to use for this flushing the water coming from the hygiene filter.



Attention! It must be ensured, that no cleaning / sanitizing agent remains in the dispense system after service (risk of health injuries)!
The proof that all agent residues have been removed has to be tested with indicator or test papers (contact agent manufacturer). The results have to be documented.

- 1.3) Connect the syrup containers again to the syrup lines and dispense syrup on the post-mix valves until a consistent flow of syrup occurs again.

2.) Water lines

- 2.1) Pressurize the water line to the cooler with CO₂ pressure and dispense all sanitizing agent from the valves. This makes it easier to flush out any remaining agent from the system.
- 2.2) Close the gas again and depressurize the unit via the dispense valves.
- 2.3) Install a new water filter cartridge and reconnect the unit via the filter to the mains water line again (refer to filter manufacturer guidelines in case the filter needs priming prior to use).

In case a hygiene filter is being used on the dispenser, it must be ensured that the new filter cartridge is inserted prior to flushing the system with water. This ensures that a just sanitized system is not being contaminated again by using poor quality mains water to flush out any remaining sanitizing agent.

Spray the filter head and the connecting position of the filter cartridge with an adequate sanitizing spray to avoid any introduction of bacteria again.

- 2.4) Open the mains water supply. Pull the safety relieve valve on the carbonator bowl until only clean water leaves the valve, to ensure that there are no residues of sanitizing agent left in the head area of the carbonator bowl.
- 2.5) Open the CO₂ gas supply to the carbonator and reconnect the carbonator pump to the power supply.
- 2.6) Dispense sufficiently water from the post-mix valves to ensure that no sanitizing agent is left in the system.

Depending on the unit type (Over counter dispenser / large soda circuit installation with long python runs, etc.) the amount of water that needs to be dispensed may vary.



Attention! It must be ensured, that no cleaning / sanitizing agent remains in the dispense system after service (risk of health injuries)!
The proof that all agent residues have been removed has to be tested with indicator or test papers (contact agent manufacturer). The results have to be documented.

Dispense from each tap a few beverages to fully put the system back into operation again. The cleaning / sanitization procedure must be documented accordingly and the documentation must remain at the cooler (this may vary depending on local regulations).

8 Problems and Troubleshooting

Before seriously troubleshooting the dispense equipment, first check:

- Is the electricity to the unit interrupted?
- Are the beverage containers empty?
- Is the CO₂-cylinder empty?
- Are all valves on CO₂-cylinder open?

Type of problem	Cause	Remedy
Beverage too warm while compressor is running	Condenser dirty or covered	Use brush to clean condenser between louvers
	Too much beverage being removed	Examine drink-draw capacity
Beverage too warm, Compressor not running	Not enough water in water-bath	Fill up water level
	Electronic control or compressor defective	Call service technician
Beverage foams at a tap	Product/syrup stored too long and enriched with CO ₂	Connect container with fresh basic material
Beverage foams at all taps	CO ₂ -pressure too high	Set pressure
	All products/syrup enriched with CO ₂	Connect container with fresh basic materials
	All beverage too warm	Check storage temperature see "Beverage too warm"
Valve only pours syrup	Fault in water circulation	Check if water feed line is open
		Check water flow pressure of 0,2 MPa (2 bar)
		Check if the carbonator motor is running, If not call service technician
	Valve defective	Exchange valve
CO ₂ -volume in the beverage to low (flat drinks)	Water lines frozen	Call service technician
	Air in carbonator (only post-mix)	Bleed air
Too much or not enough Syrup in beverage	CO ₂ -pressure too low	Adjust pressure
	Regulator in tap is clamping	Call service technician
	Delivery pressure for Syrup too low or too high	Adjust CO ₂ -pressure

9 Technical Data

Output capacity soft drink 0,2/0,3 liters	
Peak dispense at 2 drinks per minute	322 (0,3 l)
Continuously – drinks per hour	75 (0,3 l)
Supply voltage	230V/50Hz
Power consumption in Watt	790
Compressor output in Watt (HP)*	447 (1/3)
Cooling performance	
in Watt	400
in kcal/h	344
Weight of ice bank in kg	11
Ice bank capacity in kcal	880
Ice build up in minutes	154
Water bath capacity in liter	29
Dimensions in mm	
Height (soft drink)	655
Width incl. drip tray	435
Depth incl. drip tray	730
Shipping weight in kg	60

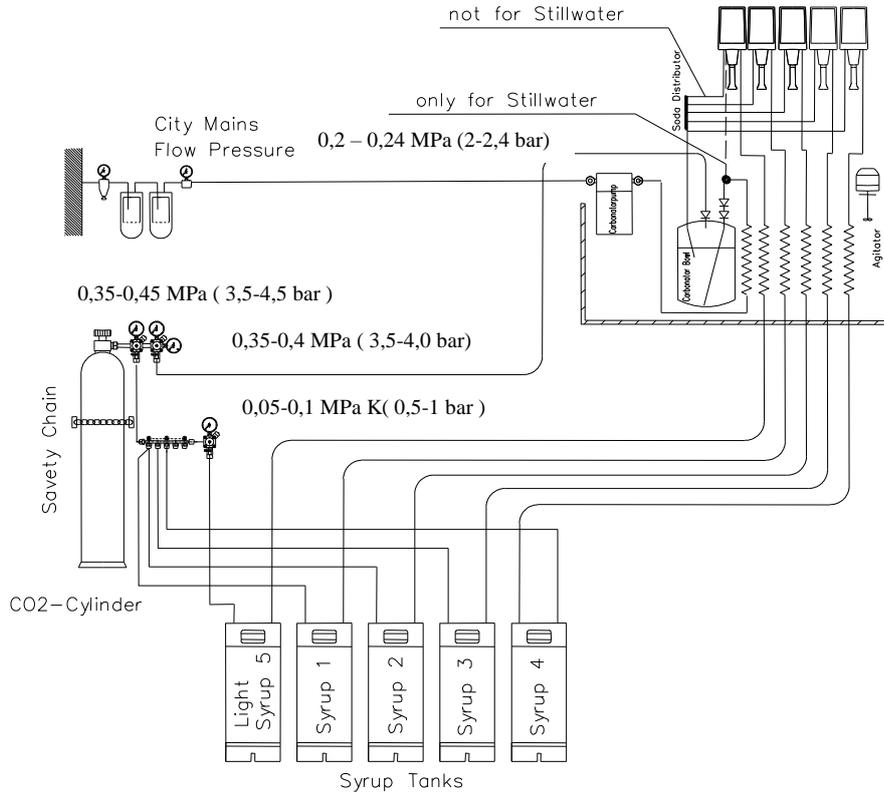
* at -10°C evaporation temperature

Cooling capacities and output capacity for soft drinks at 24°C ambient temperature and water or syrup inlet temperature of 24°C and beverage outlet temperature of less than 5°C.

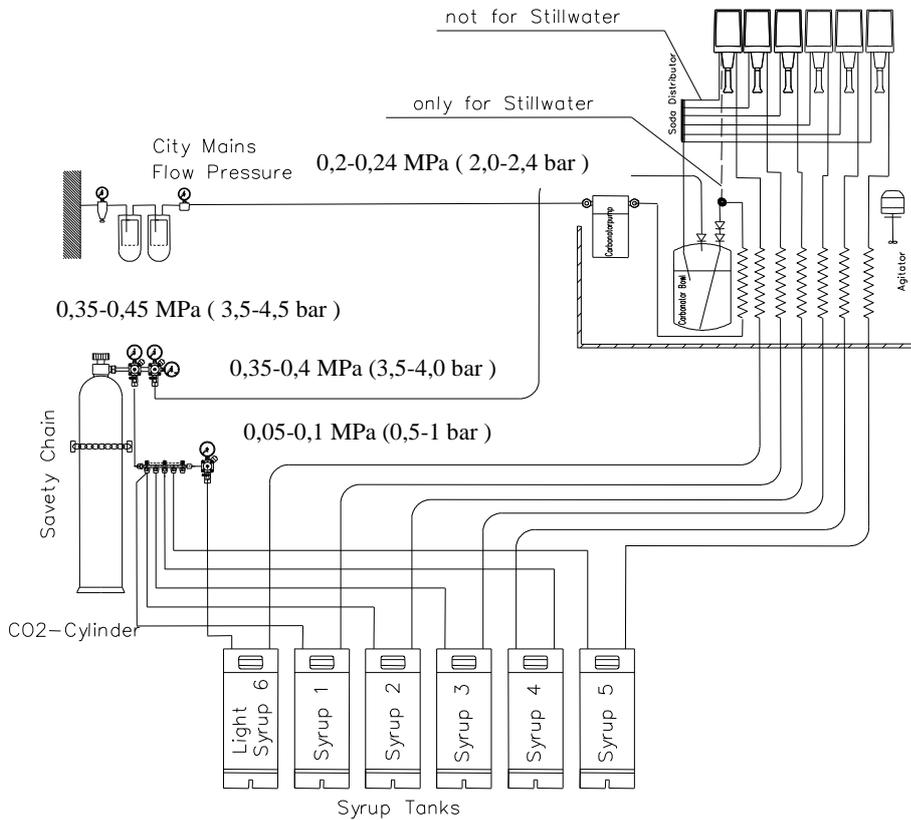
We reserve the right to make modifications.

10 Flow Chart

LOOP STYLE XL 5 Valve

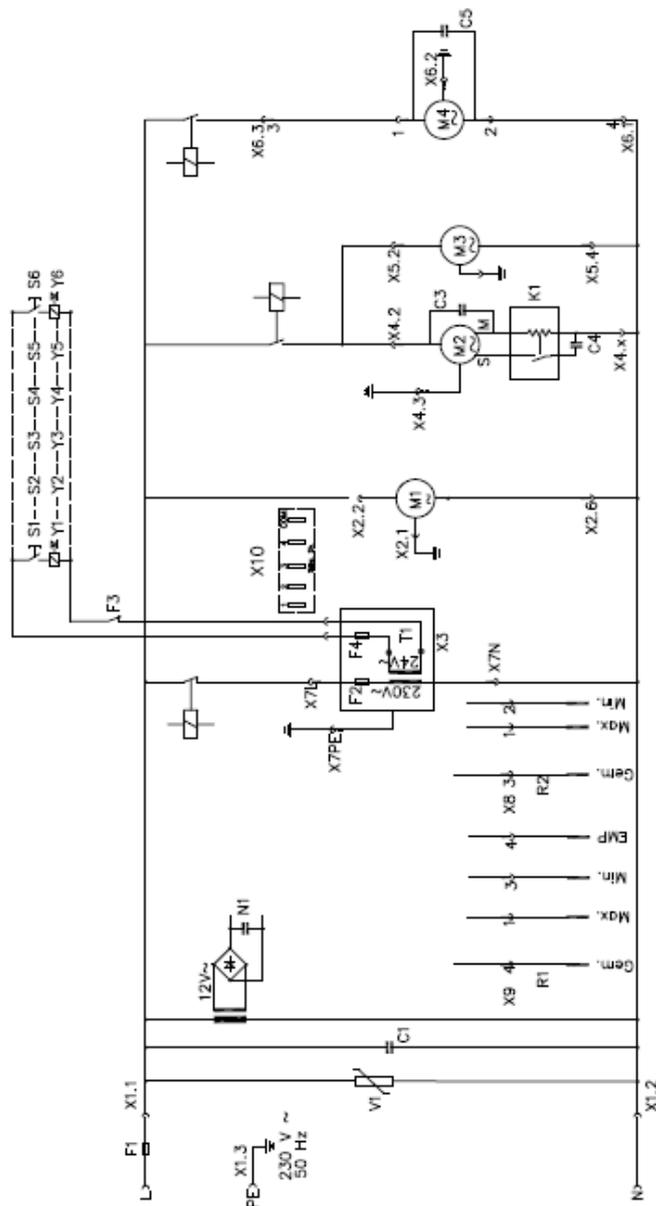


LOOP STYLE XL 6 Valve



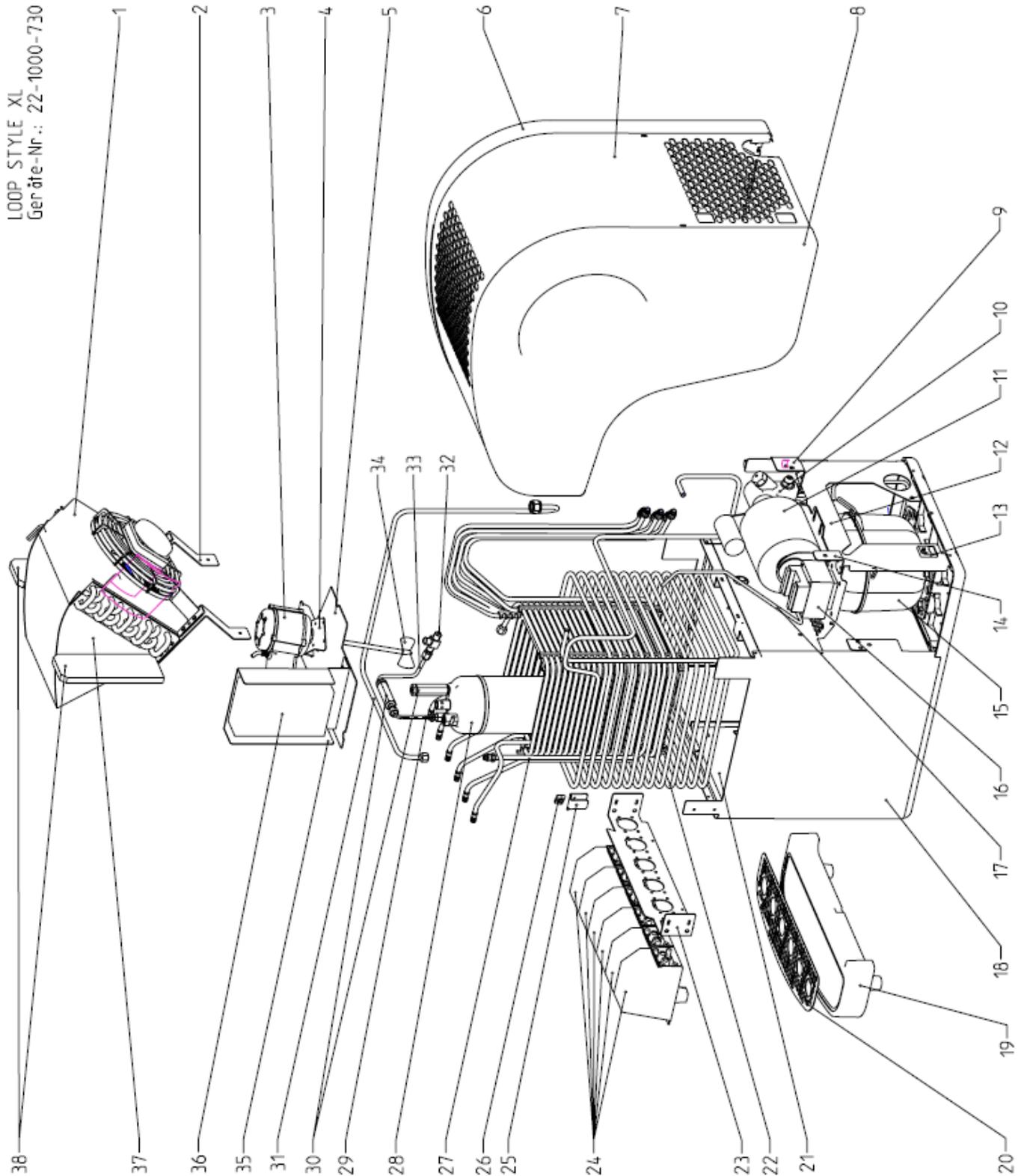
11 Circuit Diagram

- C1 Interference capacitor
- C3 Operating capacitor compr.
- C4 Starting capacitor
- C5 Capacitor carbonator pump
- F1 Fuse 10AT
- F2 Temp. fuse transformer
- F3 Key Switch
- F4 Fuse 4A transformer
- K1 Starting relay
- M1 Agitator
- M2 Compressor
- M3 Fan motor 1
- M4 Carbonator pump
- N1 Ice bank level control
- R1 Level probe
- R2 Ice bank probe
- S1 Product switch
- T1 Transformer
- X1 Main terminal
- X2 Plug agitator
- X3 Plug product switch
- X4 Plug compressor
- X5 Plug fan motor
- X6 Plug carbonator pump
- X7 Plug transformer
- X8 Plug ice bank probe
- X9 Plug level probe
- X10 Stillwater input
- X11 Plug capacitor agitator
- Y1 Solenoid valve
- V1 Varistor



12 Exploded View / Sprengzeichnung

LOOP STYLE XL POM



13 Spare Part List / Ersatzteilliste

Pos.	Part-No.	Benennung	Description
1	220098287	Verflüssiger mit Lüftermotor	Condenser with Fan Motor
2	220110873	Halteblech Verflüssiger	Bracket Condenser
3	440000105	Rührwerkmotor	Agitator
4	220110759	Halteblech Rührwerk	Bracket Agitator
5	220110758	Traverse	Traverse
6	220110750	Verkleidung Links	Cladding Left
7	220110755	Blechabdeckung	Stainless Bend Cover
8	220110751	Verkleidung Rechts	Cladding Right
9	220110878	Abstandhalter	Spacer
10	440000761	Wasserpumpe	Water Pump
11	440000842	Karbonatormotor	Carbonator Motor
12	220110874	Zwischenwand	Partition Wall
13	141647630	Kaltgerätestecker	Rubber Connector
14	220110756	Abstandhalter	Spacer
15	440005036	Kompressor	Compressor
16	141647545	Transformator	Transformer
17	220111200	Heißgasleitung	Hot Gas Tube
18	220110871	Mantelblech	Sheet Metal Housing
19	220110752	Tropfschale	Drip Tray
20	220110753	Tropfgitter	Grill
21	220055772	Wasserbad	Water Bath
22	220110875	Verdampfer	Evaporator
23	220110872	Anschlußplatte	Connecting Plate
24	741000403	Postmixhahn	Postmix Valve
25	220110879	Eisbankfühlerhalter	Holder Ice Bank Probe
26	220111270	Eisbankfühlerhalter	Holder Ice Bank Probe
27	220110869	Kühlschlangepaket	Cooling Coil ASM
28	220104253	Karbonatorbehälter	Carbonator Bowl
29	220111196	Verbindungsrohr 1	Connecting Tube 1
30	149799020	Doppelrückschlagventil	Double Check Valve
31	220111198	Rohr	Tube
32	176195200	T-Stück	Adapter
33	220111197	Verbindungsrohr 2	Connecting Tube 2
34	220107820	Rührwerkflügel	Agitator Propeller
35	220110870	Halteblech Main Controller	Bracket Maincontroller
36	141647462	Main Controller	Main Controller
37	220110754	Luftleitblech	Fan Adapter
38	220110877	Isolierung	Insulation

14 Declaration of Conformity



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EG - Konformitätserklärung

Im Sinne der EMV - Richtlinie	2014/30/EU
Maschinenrichtlinie	2006/42/EG
Druckgeräte - Richtlinie	2014/68/EU
RoHS - Richtlinie	2011/65/EU
Lebensmittelmateriale Richtlinie	1935/2004/EG

EC - Declaration of Conformity

According to EMC - Directive	2014/30/EU
Machine Directive	2006/42/EG
Pressure - Directive	2014/68/EU
RoHS - Directive	2011/65/EU
Food Contact Material Directive	1935/2004/EG

Hersteller / Manufacturer:
Gerätebeschreibung / Type of Unit:
Typenbezeichnung / Name of Unit:

CORNELIUS DEUTSCHLAND GMBH
Getränkekühler / Beverage Cooler
LOOP Style, LOOP Style XL (HC)

Normen, mit denen Konformität bescheinigt wird: Regulations under which conformity are certified

EN 55014 - 1 :2006 + A1 :2009 + A2 :2011
EN 55014 - 2 :2015
EN 61000 - 6 - 2 :2005
EN 61000 - 6 - 3 :2007 + A1:2011
EN 61000 - 3 - 2 :2014
EN 61000 - 3 - 3 :2013
EN 61000 - 4 - 2 :2009
EN 61000 - 4 - 3 :2006 + A1 :2008 + A2 :2010
EN 61000 - 4 - 4 :2012
EN 61000 - 4 - 5 :2014
EN 61000 - 4 - 6 :2014
EN 61000 - 4 - 11 :2004
EN 60335 - 1 :2012 + A11 :2014 + A13 :2017
EN 60335 - 2 - 24 :2010
EN 60335 - 2 - 75 :2004 + A1 :2005 + A11 :2006 + A2 :2008 + A12 :2010
EN 62233 : 2008

Erklärung:

Hiermit erklären wir, dass die oben genannten Produkte sowie in den von uns in Verkehr gebrachten Ausführungen bei bestimmungs- gemäßer Verwendung mit den Lebensmitteln Trinkwasser, Sodawasser und Getränkesyrops aufgrund ihrer Bauart den einschlägigen, grundlegenden Anforderungen der EU/EG-Richtlinien entsprechen
Des weiteren erklären wir, dass die in Serie gebauten Geräte dem geprüften Baumuster entsprechen.

Declaration:

Herewith we certify that all above listed products and their variants, which are placed on the markets comply with the relevant basic requirements of the EU/EC regulations, provided that the products are used for the handling of potable water, soda water and beverage syrups according to their design and purpose as marked by our company.

Furthermore, we certify the units manufactured in series comply with the approved prototype.

Langenfeld, den / Dated, Langenfeld 22.08.2019


D. Engelen
Leitung Qualitätsmanagement Europa
European quality manager


T. Zöllner
Leitung Entwicklung Soft Drinks
Engineering Manager Soft Drinks



A Marmon / Berkshire Hathaway Company

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UST-ID.-Nr.: DE811142805
Steuer Nr.: 135/5713/2092

Sitz der Gesellschaft: Langenfeld
Amtsgericht Düsseldorf HRB 45002
WEEE-Reg.-Nr. DE 26128839
Geschäftsführer (alle einzelvertretungsberechtigt)
Andrew John Hume
Brian Richard Stewart Watson