



2. Safety Regulations

2.1 General Safety Regulations

This device is of leading-edge design and manufacture. If used and maintained in accordance with these operating instructions, it will be safe to operate. Please comply with the following safety instructions to avoid hazards and damage.

The device must be in satisfactory condition whenever operated. Any modifications which detrimentally affect the safety of the device are therefore strictly prohibited. Please contact your service company if you wish to obtain more information about safety.

No safety equipment (such as safety valves, overload protection devices, etc.) is to be removed, modified or put out of commission (risk of injury or death!).

Take care that only authorized persons work on the device and that the operators are trained. Make certain that no unauthorized persons change the settings on the device or tamper with it.

You are obligated to check the device on a daily basis for externally discernible damage and defects. Immediately report modifications which affect safety and function to the service company nearest you.

Note that only original CORNELIUS replacement parts and accessories which have been checked and approved are to be used. IMI Cornelius Deutschland GmbH assumes no liability whatsoever for damage resulting from the use of non-original parts and accessories or from improper handling.

2.2 Safety Instructions Electricity

An electric shock may be fatal or result in serious injury. For this reason, any unauthorized tampering is strictly prohibited. Water and electricity are a fatal mixture.

Always pull out the main plug before any cleaning work on or near the device. As delivered, it features a moulded earthing-pin plug and it must be connected to a socket outlet with an earthing contact. If no appropriate socket outlet with an earthing contact is available, the connection must be made by authorized persons only, with the regulations applicable at the installation site (VDE standards in Germany, for example) being observed.

2.3 Safety Instructions CO₂

Place the carbon dioxide cylinder in an upright position next to the workstation and secure it against falling over. Protect it against heat (e.g., against sunshine). Minimum distance from heater 0.5 m (TRSK).

Escaping carbon dioxide is heavier than air and may present danger of suffocation if large quantities collect in enclosed spaces. Remember that parts of the device are at operating pressure. Do not loosen or dismantle any components at operating pressure.

3. Installation Requirements

3.1 Installation Sites

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

| | Compact 150 Sodadis dispenser | CR4 Sodadis dispenser |
|----------------------------------|----------------------------------|--------------------------|
| Heat output in watts | 635 | 533 |
| Air flow in m ³ /hour | 200 | 200 |



3.2 Electrical Connections

A socket outlet with an earthing contact featuring a maximum protection of 16 amps is required.

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

| | Compact 150 Sodadis dispenser | CR4 Sodadis dispenser |
|----------------------------|----------------------------------|--------------------------|
| Power consumption in watts | 300 | 270 |

4. Installation

The device must be installed by a trained service technician

4.1 CO₂ Connection

You will require a single-wire pressure regulator, 7 bar for soft drinks. Connect the pressure regulator to the unit, using tubing with an inner diameter of 4 mm,.

4.2 Connecting Water

Connect one tube with an inner diameter of 8 mm to the unit.

The flow pressure should be 2 to 2.5 bar.

If a water filter is used, always remember to clean or change the filter regularly in order to avoid algae or bacteria development

5. Putting into and out of Service

5.1 Putting into Service

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

Connect the dispensing valves to the unit.

Open the main valve on the CO₂ cylinder and the main valve on the pressure regulator. Check the CO₂ pressure at the pressure regulator.

CO₂ carbonation pressure: 3.5 to 4.0 bar

Set the CO₂ pressure by turning the control screw:

Clockwise to increase the pressure

Counter-clockwise to reduce the pressure

Afterwards check the CO₂ lines for leaks by closing the CO₂ main valve. The admission pressure displayed at the pressure regulator should not drop. If it does, notify the service technician immediately. Do not forget to re-open the CO₂ globe valve after the check.

Open the water feed line and check the flow pressure in it. Standard value: 2.0 to 2.5 bar. Set it at the control screw on the water pressure regulator:

Clockwise to increase the pressure

Counter-clockwise to reduce the pressure

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

5.2 Turning On the Device

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

Take care, that no water runs into the agitator motor.

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 main plug for the cooler into the socket outlet with an earthing contact.



Ice bank controlled units start working after the water bath has been filled with water and switches off automatically after the ice bank has been built up.

5.3 End of Operation

It is imperative that the CO₂ cylinder and water line is being turned off each time after operation.

5.4 Daily Inspection

Check whether carbon dioxide lines are open.

Check the water lines for leaks. Only a visual inspection is possible. If liquid escapes, call a service technician.

Check the CO₂ lines for leaks by closing the 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.

5.5 Putting out of Service

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 main plug out of socket outlet with earthing contact.

Detach the couplings from beverage containers.

Have the device emptied and cleaned (only trained specialists are to carry out this procedure).

6. Instructions for Cleaning

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

Clean parts coming into contact with air and beverage, the mouth of the tap for example, on a daily basis.

The risk of serious etching exists when handling liquid sanitisation agents. Always wear safety glasses and appropriate clothing during cleaning jobs. Follow the instructions of the sanitisation agents manufacturer.

The condenser louvres must be cleaned at regular intervals which vary according to the amount of contamination at the site (approximately every three months). This is best done with a brush and a vacuum cleaner.

The level of 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.

The device is to be cleaned and emptied by trained specialists only on the basis of the following recommendations:

| To be cleaned by trained personnel | CO ₂ lines | Soda water lines |
|--|-----------------------|------------------|
| Before commissioning | | X |
| Before each change of type of beverage | | |
| Before and after a pause | | |
| Every 2 weeks | | |
| Every 3 months | | X |
| Every 12 months | X | |

7. Problems and Troubleshooting

Before looking for problems with the dispense equipment, first check:

Is the flow of electricity to the device interrupted?

Is the flow of water to the device interrupted?

Is the CO₂ cylinder empty?

| Type of problem | Cause | Remedy |
|---|--|---|
| Beverage too warm, compressor running | Condenser dirty or covered. | Use brush to clean condenser between louvres. |
| | Too much beverage being dispensed | Note out-put capacity |
| Beverage too warm, compressor not running | Compressor not turned on. | plug mainplug in, otherwise call service technician |
| CO ₂ volume in the beverage is too low | Air in carbonator | Pull relieve valve on carbonator |
| | Too much beverage being dispensed | Examine output capacity |
| | CO ₂ cylinder empty | Change CO ₂ cyl. |
| | Valve on CO ₂ cylinder closed | Open valve |
| | Stopcock on pressure regulator closed | Open stopcock |
| | CO ₂ pressure too low | Adjust pressure |

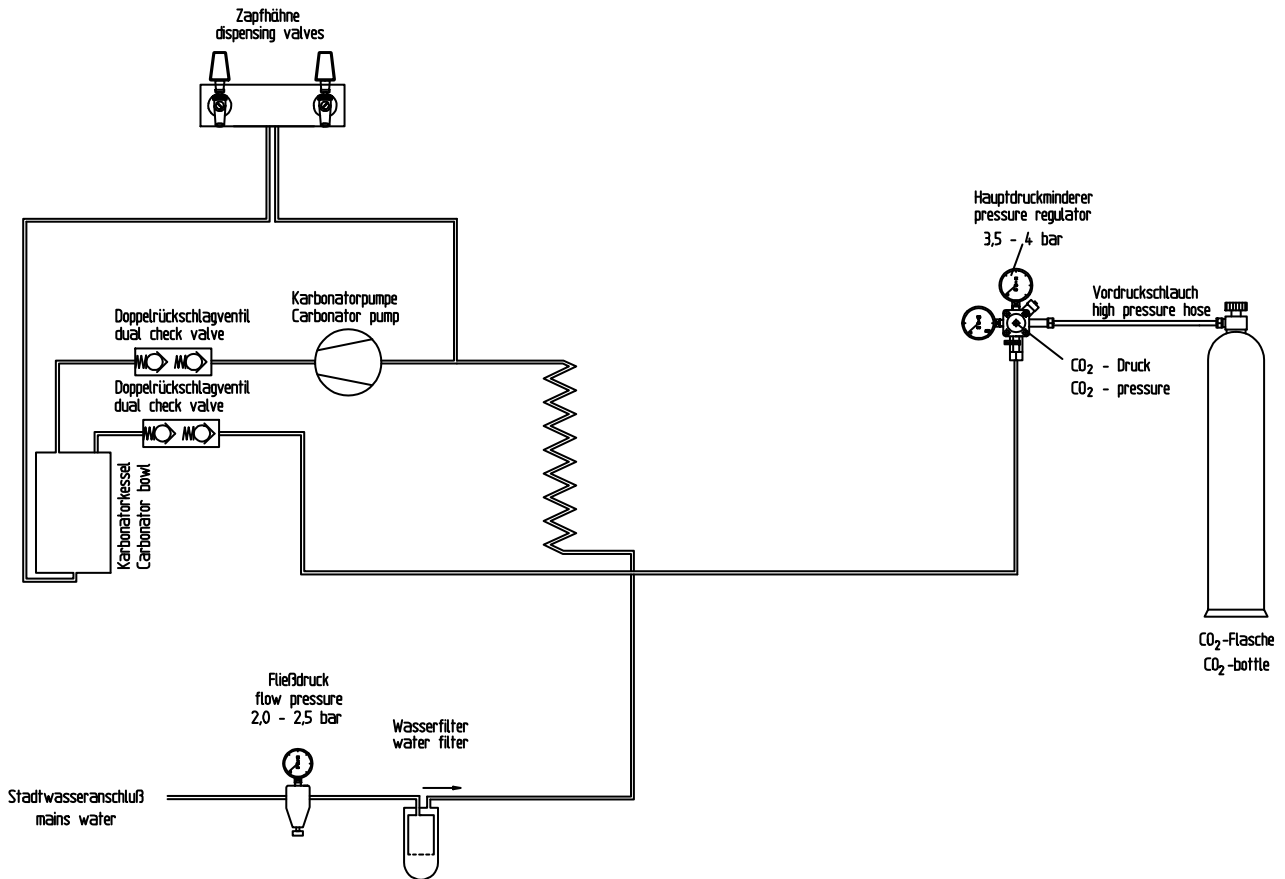
8. Technical Datas

| | Compact 150 Sodadis dispenser | CR4 Sodadis dispenser |
|--|----------------------------------|--------------------------|
| Output capacity soft drink 0.2 L tap rate: 2 drinks per minute | 180 | - |
| Output capacity soft drink 0.3 L tap rate: 2 drinks per minute | 85 | - |
| Supply voltage | 230 V / 50 Hz | 230 V / 50 Hz |
| Power consumption in watts | 300 | 270 |
| Compressor output in watts | 250 | 155 |
| Refrigerant R134 a in kg | 0,185 | 0,090 |
| Cooling / ice bank performance at -10°C evaporation temperature | | |
| in watts | 335 | 263 |
| in kcal | 250 | 226 |
| Weight of ice bank in kg | 3,5 | 2,5 |
| Ice bank capacity in kcal | 280 | 200 |
| Ice build up time in minutes | 85 | 87 |
| Waterbath capacity in litres | 14 | 6,5 |
| Cabonatorpump output in L / h | 120 | 120 |
| Dimensions in mm | | |
| Height | 415 | 377 |
| Width | 505 | 437 |
| Depth | 335 | 312 |
| Shipping weight in kg | 30 | 23 |

Cooling capacities and output capacity for soft drinks at 24°C ambient temperature and water inlet temperatures of 24°C and beverage outlet temperature of less than 5.5°C.

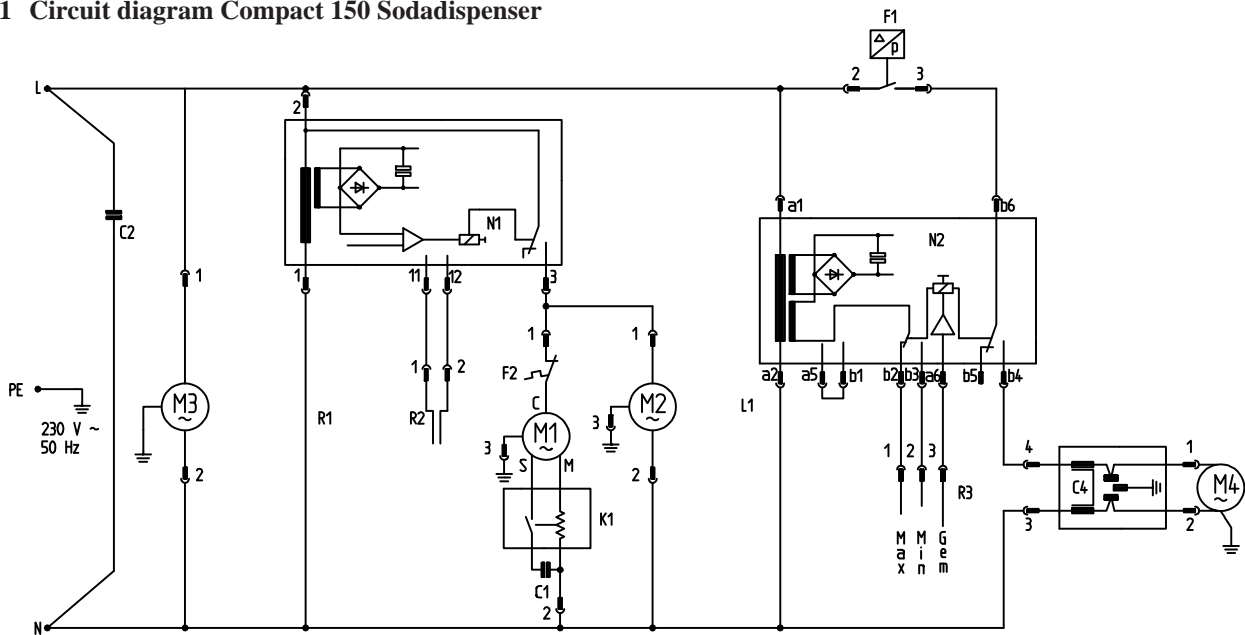
We reserve the right to make modifications.

9. Flow Chart



10. Circuit diagram

10.1 Circuit diagram Compact 150 Sodadispenser



| | | | | | |
|----|--------------------|---------------------------|----|-----------------|------------------------|
| C1 | Anlaufkondensator | start capacitor | M2 | Ventilator | fan motor |
| C2 | Entstörkondensator | interference capacitor | M3 | Rührwerkmotor | agitator motor |
| C4 | Entstörfilter | radio interference filter | M4 | Karbonatorpumpe | carbonator pump |
| F1 | Druckschalter | pressure switch | N1 | Eisbankregler | ice bank control board |
| F2 | Thermoschutz | overload protection | N2 | Niveauregler | level control board |
| K1 | Startrelais | start relay | R2 | Eisbankfühler | ice bank probe |
| M1 | Kompressor | compressor | R3 | Niveauelektrode | level probe |

10.2 Circuit diagram CR4 Sodadis dispenser

