



**Please keep these operating instructions in a safe place.**

**Dear Customer!**

**Check this product for visible damage immediately upon receipt. Inform the shipper if there is any shipping damage.**

**Note that damage resulting from improper handling or operation is not covered under the warranty.**

**For further claims please refer to our conditions of sale and conditions of payment.**

**Before putting the device into operation:**

Read all the operating instructions carefully.

Familiarize yourself with all controls.

Ask the service company installing the device to write its address down here for any subsequent repairs, emergencies, etc.

**Address of your technical service company:**    Name: .....

City: .....

Street address: .....

Telephone: .....

Contact person: .....

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**1. Introduction**

Our foremost aim is to produce a quality product. If you should encounter any difficulty which these operating instructions do not help you with, call or write us. We will be glad to be of assistance. If you write, please include the model and serial number of the device.

Our address:

IMI Cornelius Deutschland GmbH  
 Carl-Leverkus-Strasse 15  
 D-40764 Langenfeld, Germany  
 Tel.: 0(xx49) 2173 793-0  
 Fax: 0(2173) 2173 77438  
 Internet: [www.imi-cornelius.de](http://www.imi-cornelius.de)

## 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.

Machinery listed in this operating instructions comply with the relevant requirements of the EC regulations regarding the purpose for which it was designed: 89/336/EEC, 73/23/EEC and 98/37/EC.

### 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 CO<sub>2</sub> and O<sub>2</sub>

Place the gas cylinders 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. Caution with open flame, by oxygen explosion hazard.

Remember that parts of the device are at operating pressure. Do not loosen or dismantle any components at operating pressure.

## 3. Intended Use

The CR6 Sodadis dispenser is designed for cooling tap water and also for making soda water from tap water and CO<sub>2</sub> or O<sub>2</sub>, which is also approved for food according to the local regulation. The cooling of other drinks or liquids is forbidden.

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

The energy exchange from the cooling circuit to the liquids within the cooling coils and the carbonator bowl has to occur with water only.



## 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 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.

#### **CR6 Sodadispenser**

Heat output in watt	670
Air flow in m <sup>3</sup> /hour	130

### 4.2 Electrical Connections

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

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

#### **CR6 Sodadispenser**

Power consumption in watt	500
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## 5. Installation

The device must be installed by a trained service technician

### 5.1 CO<sub>2</sub>- and O<sub>2</sub>-Connection

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

### 5.2 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

## 6. Putting into and out of Service

### 6.1 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 CO<sub>2</sub>-cylinder and the main valve on the pressure regulator. Check the CO<sub>2</sub>-pressure at the pressure regulator.

CO<sub>2</sub>-carbonation pressure: 3.5 to 4 bar

Set the CO<sub>2</sub>-pressure by turning the control screw:

Clockwise to increase the pressure

Counter-clockwise to reduce the pressure

Afterwards check the CO<sub>2</sub>-lines for leaks by closing the CO<sub>2</sub>-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 CO<sub>2</sub>-globe valve after the check.

Open the main valve on the O<sub>2</sub>-cylinder and the main valve on the pressure regulator. Check the O<sub>2</sub>-pressure at the pressure regulator.

O<sub>2</sub>-carbonation pressure: max. 7 bar

Set the O<sub>2</sub> pressure by turning the control screw.

Afterwards check the O<sub>2</sub>-lines for leaks by closing the O<sub>2</sub>-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 O<sub>2</sub>-globe valve after the check.

Open the water feed line and check the flow pressure in it. Standard value: 2 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.

## 6.2 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.

The unit start working automatically and switches off after reach the cut-off temperature.

## 6.3 End of Operation

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

## 6.4 Daily Inspection

Check whether gas lines are open.

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

Check the gas lines for leaks by closing the valve on the gas 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 gas cylinder valve afterwards.

## 6.5 Putting out of Service

Perform the following steps in case of protracted standstill periods:

Close the gas cylinders, the gas 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).

## 7. Instructions for Cleaning

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

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 condensor 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 by trained specialists only on the basis of the following recommendations:

To be cleaned by trained specialists	gas-lines	CO <sub>2</sub> - and O <sub>2</sub> -water lines
Before commissioning		X
Before each change of type of beverage		
Before and after a pause		
Every 2 weeks		
Every 6 months		X
Every 12 months	X	

## 8. 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 gas cylinder empty?

Type of problem	Cause	Remedy
Beverage too warm	Condenser dirty or covered Too much beverage being dispensed Electronic control of the compressor defective	Use brush to clean condenser between louvres Note out-put capacity Call service technician
No water expense	Water feed line interrupted	Open water tap
No water expense CO <sub>2</sub> or O <sub>2</sub>	Pump defective	Call service technician
Gas volume in the beverage is too low	Air in carbonator gas cylinder empty Valve on gas cylinder closed Gas pressure too low	Pull relieve valve on carbonator Change gas cylinder Open valve Adjust pressure



# CR6 Sodadispenser

## 9. Technical Data

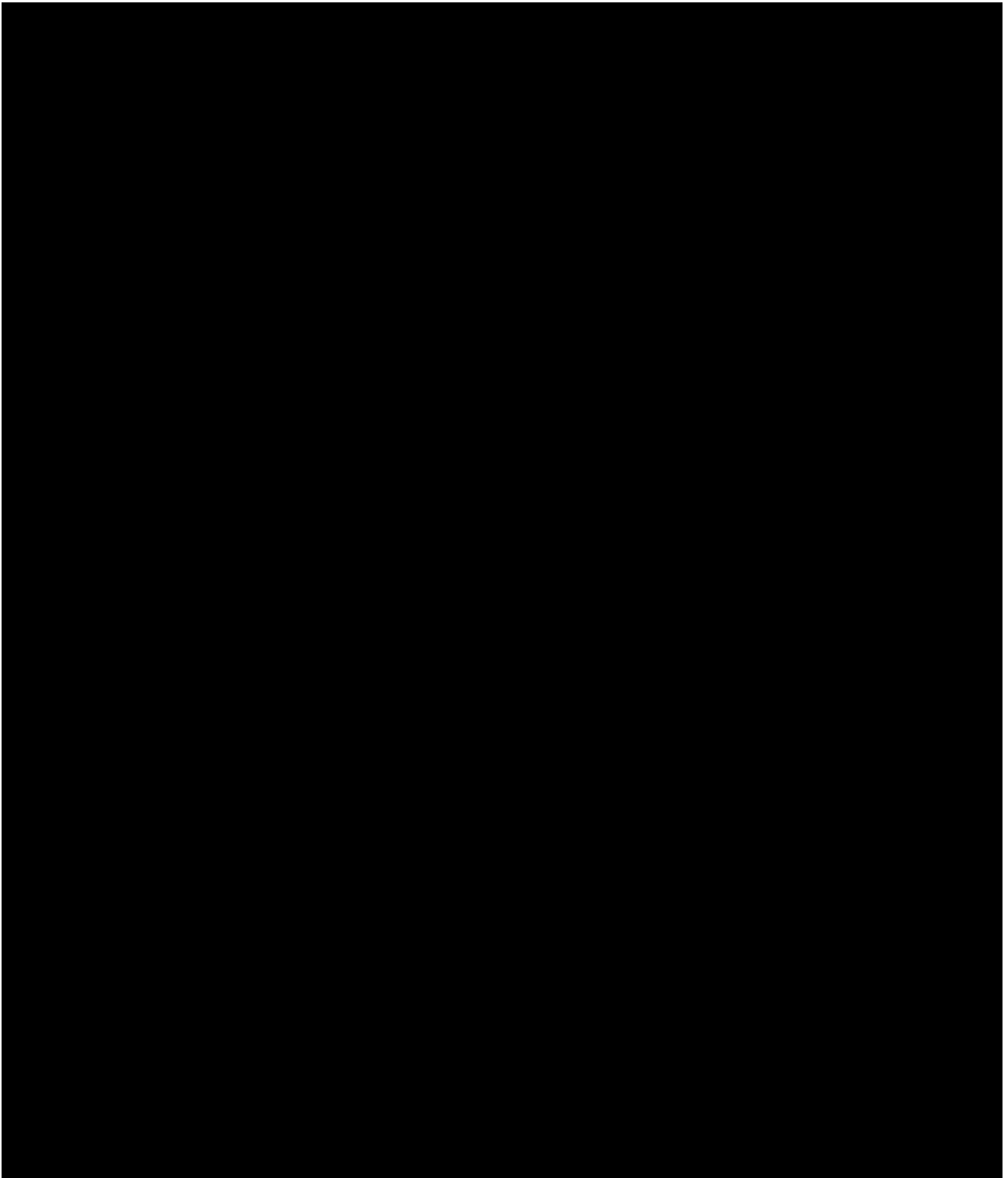
	<b>CR6 Sodadispenser</b>
Output capacity soft drink 0.2 liters continuous performace/hour	220
Supply voltage	230V/50Hz
Power consumption in watt	500
Compressor output in watt (PS) at -10°C evaporator temperature	300 (1/4)
Refrigerant R134 a in kg	0.22
Cooling performance in watt	327
in kcal/h	380
Waterbath capacity in liter	21
Cabonatorpump output in liter /hour	100
Dimensions in mm	
Height	450
Width (incl. handle)	600
Depth	370
Shipping weight in kg	35

Cooling capacities and output capacity for soft drinks at 24°C ambient temperatures and water inlet temperatures of 18°C and beverage outlet temperatures of less than 8°C.

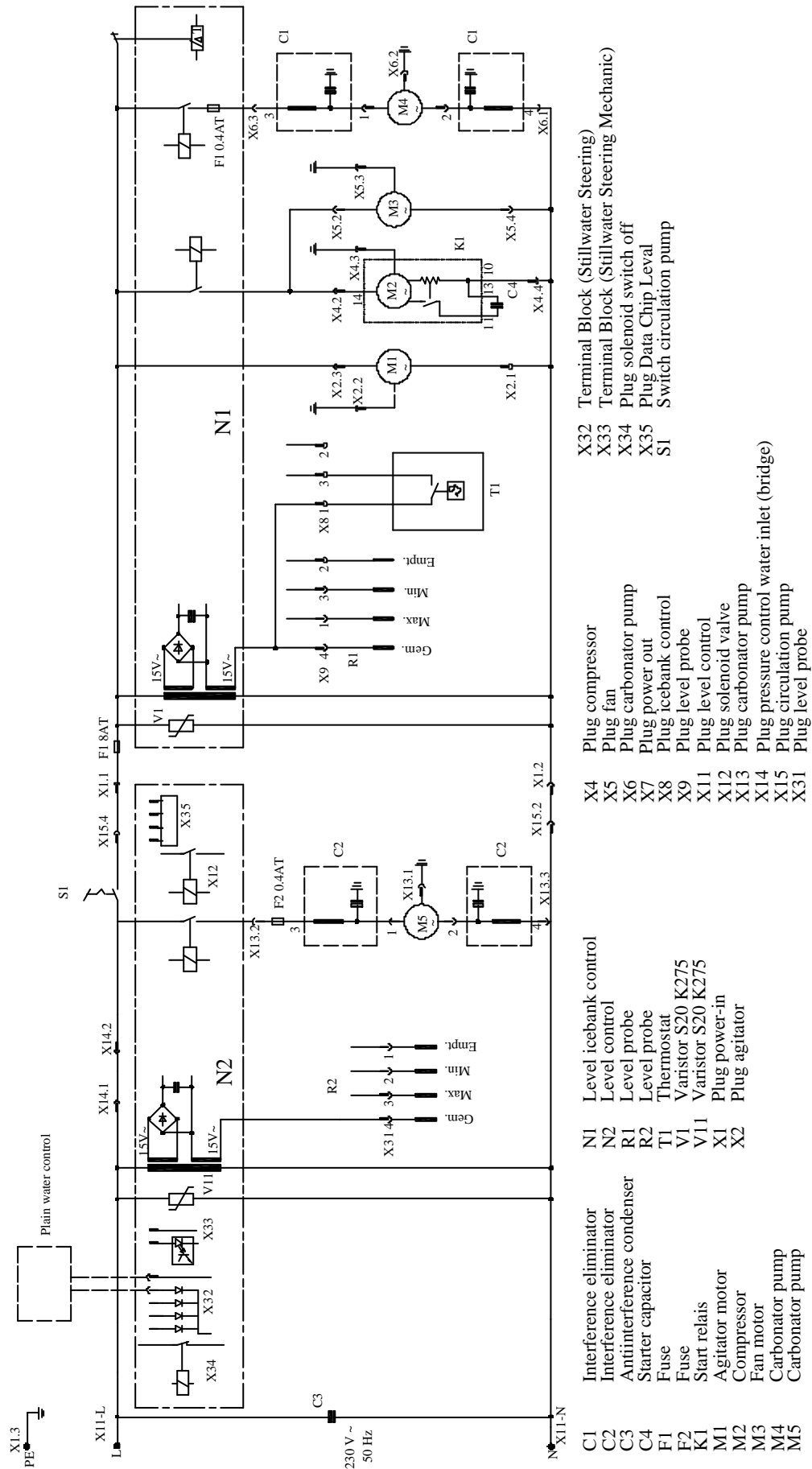
We reserve the right to make modifications.



10. Flow Chart



## 11. Circuit Diagram



- |     |  |     |   |
|-----|--|-----|---|
| C1  | Interference eliminator                    | X32 | Terminal Block (Stillwater Steering)          |
| C2  | Interference eliminator                    | X33 | Terminal Block (Stillwater Steering Mechanic) |
| C3  | Anti-interference condenser                | X34 | Plug solenoid switch off                      |
| C4  | Starter capacitor                          | X35 | Plug Data Chip Level                          |
| F1  | Fuse                                       | S1  | Switch circulation pump                       |
| F2  | Fuse                                       |     |   |
| F3  | Start relais                               |     |   |
| K1  | Agitator motor                             |     |   |
| M1  | Compressor                                 |     |   |
| M2  | Fan motor                                  |     |   |
| M3  | Carbonator pump                            |     |   |
| M4  | Carbonator pump                            |     |   |
| M5  | Carbonator pump                            |     |   |
| N1  | Level icebank control                      |     |   |
| N2  | Level control                              |     |   |
| R1  | Level probe                                |     |   |
| R2  | Level probe                                |     |   |
| T1  | Thermostat                                 |     |   |
| V1  | Vanistor S20 K275                          |     |   |
| V11 | Vanistor S20 K275                          |     |   |
| X1  | Plug power-in                              |     |   |
| X2  | Plug agitator                              |     |   |
| X4  | Plug compressor                            |     |   |
| X5  | Plug fan                                   |     |   |
| X6  | Plug carbonator pump                       |     |   |
| X7  | Plug power out                             |     |   |
| X8  | Plug icebank control                       |     |   |
| X9  | Plug level probe                           |     |   |
| X10 | Plug level control                         |     |   |
| X11 | Plug solenoid valve                        |     |   |
| X12 | Plug carbonator pump                       |     |   |
| X13 | Plug carbonator pump                       |     |   |
| X14 | Plug pressure control water inlet (bridge) |     |   |
| X15 | Plug circulation pump                      |     |   |
| X31 | Plug level probe                           |     |   |