

EASYZON C

Chlorine Dioxide system

**EN** 02**Operation &
Maintenance Instructions**

Read these operation and maintenance instructions before start up!
To be held for future reference.

Contents

1. Safety	4	8.9 % Production.....	20
1.1 General	4	8.10 Gas Alarm (Terminals 42 (-) – 43 (+)).....	20
1.2 Warnings used in this Operation & Maintenance Manual.....	4	8.10.1 Electrical wiring gas detector	21
1.3 Operators qualification and training	4	8.11 Report alarm password 0100	21
1.4 Important electrical safety tips	4	8.12 Flow sensors monitor password 0010	21
1.5 Hazards due to non-compliance with the safety instructions	4	8.13 Manual ventilation.....	21
1.6 Safe operation	4	8.14 Manual cargo water	21
1.7 Safety instructions for the owner/operator	5	8.15 Error messages.....	22
1.8 Safety instructions for installation, maintenance and inspection.....	5	9. Shutdown and disposal	23
1.9 Self-made modifications and spares procurement.....	5	9.1 Rinsing the unit.....	23
1.10 Systems working with chemicals.....	5	9.2 Disposal of the chemicals.....	23
1.11 Safety instructions on chemicals.....	6	9.3 Disposal of old equipment	23
1.11.1 Special notes on Hydrochloric acid.....	6	10. Maintenance	24
1.11.2 Special notes on Sodium Chlorite.....	6	10.1 Fundamental information for maintenance.....	24
2. Information and safety warnings on Chlorine Dioxide	7	10.2 Description of maintenance	24
2.1 The product Chlorine Dioxide	7	11. Spare parts	25
2.2 Chlorine Dioxide for disinfection applications.....	7	12. Device revision	27
2.3 Preparation of Chlorine Dioxide	7	13. Declaration of harmlessness	29
3. Technical description	8	14. Warranty Application	30
3.1 Technical data.....	8		
3.2 Use limitations	8		
3.3 Description of Chlorine Dioxide system	8		
4. Installation	9		
4.1 Dimensions (mm.).....	9		
4.2 Functional description	9		
4.3 Fixing	10		
4.4 Hydraulic installation	11		
4.4.1 Hydraulic connection	12		
4.4.2 Water supply.....	12		
4.4.3 Dilution water adjustment.....	12		
4.5 Dosing pumps	12		
5. Electronic control	13		
5.1 Display and operating elements	13		
5.2 Electrical wiring	14		
5.3 Electrical wiring description	14		
5.4 Internal fuses.....	15		
5.5 Power connection box	15		
6. Start up	16		
6.1 First attentions.....	16		
6.2 Start up.....	16		
6.3 Calibration pump	16		
6.4 Control safety system.....	16		
7. Parameters configuration	17		
7.1 General configuration Cod. 1000	17		
8. Run modes	18		
8.1 Manual run mode.....	18		
8.1.1 Operative configuration of the manual run mode cod. 0000.....	18		
8.1.2 Manual run mode.....	18		
8.2 Flow rate run mode.....	18		
8.2.1 Operative configuration of the flow rate run mode cod. 0000.....	18		
8.3 Direct run mode.....	19		
8.3.1 Operative configuration of the direct run mode cod. 0000	19		
8.4 "Flow + An." run mode.....	19		
8.4.1 Operative configuration of the Flow + An. Run Mode (Cod. 0000).....	19		
8.5 Washing	20		
8.6 Automatic ventilation	20		
8.7 Remote ON/OFF.....	20		
8.8 Remote RESET.....	20		

1. Safety

1.1 General

This Operating & Maintenance Manual contains basic information to be noted during installation, operation and maintenance. Please have your staff and any person in charge of the unit read and understand this manual before starting any work with it. Store this manual safely in a place where mechanics, installers and other technical staff as well as operators can rapidly access it in case of emergency. The safety instructions must be observed.

Obey the safety instructions in the Operation & Maintenance manual for the dosing pumps and other accessories.

1.2 Warnings used in this Operation & Maintenance Manual

This Operation & Maintenance Manual contains vital information which may endanger people, the environment and the device if they are disregarded. These statements are identified by the following symbols:

**DANGER!**

Refers to an imminent danger. Non-compliance can lead to death or extremely serious injury.

**WARNING!**

Refers to a potentially hazardous situation. Non-compliance can lead to death or extremely serious injury.

**CAUTION!**

Refers to a potentially hazardous situation. Non-compliance can lead to minor injury or property damage.

**IMPORTANT! or NOTICE!**

Appears in conjunction with safety instructions which may endanger the machine and its operation if disregarded.

**IMPORTANT!**

Draws attention to supplementary information to make the work easier and ensure troublefree operation.

Markings which are affixed directly to the unit, such as

- Cable markings
- Markings for process fluid connections

must be observed without fail and must remain fully legible at all times.

1.3 Operators qualification and training

The personnel employed for installation, operation, inspection, and maintenance, must be suitably qualified for this work. Area of responsibility, tasks and supervision of the personnel must be provided at all times by the customer. Personnel who do not have the required know-how must be duly trained and instructed. If necessary, this can also be undertaken by the manufacturer or certified supplier on behalf of the owner. Operators who are to

work with the meter must read and understand the manual in all of its parts.

1.4 Important electrical safety tips

When installing and using this electrical equipment, basic safety precautions should always be followed, including the following:

Read and follow all instructions.

**WARNING!**

To reduce the risk of injury, do not permit children to use this product unless they are closely supervised at all times.

**WARNING!**

Risk of Electric Shock. Connect only to a grounding type receptacle protected by a ground-fault circuit-interrupter (GFCI). Contact a qualified electrician if you cannot verify that the receptacle is protected by a GFCI.

**WARNING!**

To reduce the risk of electric shock, replace damaged cord immediately.

**DANGER!**

Fire hazard. Pressure surge: parts may burst and cause fatal injury. The equipment may not be used in a highly combustible area under any circumstances.

The cable connections must be closed after changing the electrical connections in order to ensure the unit's degree of protection.

1.5 Hazards due to non-compliance with the safety instructions

Failure to comply with the safety instructions may endanger not only people, but also the environment and the unit. Non-compliance with the safety information will immediately cancel your rights of claiming for damages even during the warranty period. The following hazards in particular may arise:

- Failure of major unit functions.
- Failure of specified methods for maintenance and repair.
- Danger to people or damage of devices due to electrical, mechanical and chemical effects.
- Danger to the environment due to leakage of hazardous substances.

1.6 Safe operation

The safety instructions contained in this Operation & Maintenance Manual must be observed. The owner is responsible for ensuring compliance with local safety regulations. Disturbances susceptible of impairing safety are to be eliminated immediately!

1.7 Safety instructions for the owner/operator

Statutory regulations must be observed.

Leakages (e.g. when a membrane breaks) of dangerous materials to be conveyed (e.g. aggressive, poisonous) must be purged in such a way that they do not become a risk to people and the environment.

A safe and ecologically beneficial disposal of process materials as well as replacement parts must be ensured.

Danger due to electric current must be excluded (for further details, refer to the German VDE standards as well as local rules and regulations as well as chapter 6.6).

1.8 Safety instructions for installation, maintenance and inspection

The operator has to ensure that all assembly, maintenance and inspection works are done by authorized and qualified technical operators.



WARNING!

Assembly and maintenance of the control system are to be strictly done after disconnecting the device from the power supply. The procedure specified in the Operation & Maintenance Manual for shutting down the system must be observed without fail. It must be secured against reconnection during the works! Cables are to be attached likewise only in this condition. Neglecting of these instructions can lead to severe damages of device and loss of warranty.

Pumps or units in contact with potentially harmful media must be decontaminated.

All safety mechanisms and guards must be refitted and reactivated as soon as the work is complete.

1.9 Self-made modifications and spares procurement

The device may be converted or changed only by qualified technical personnel.

If the configuration of the device is wrongly made by assembly or service personnel, errors and dangers in the function of the machine can result. In this case, the manufacturer declines any liability.

Genuine spare parts and accessories authorized by the manufacturer ensure greater safety. Otherwise the guarantee expires.

1.10 Systems working with chemicals

CAUTION!

When working on the device, the accident prevention regulations applicable on site must be observed and the specified personal protective equipment worn. The following protective equipment is recommended:



Protective clothing Protective gloves Goggles

All people responsible for installation and maintenance should wear this protective equipment.

Before working on the device, disconnect it from the mains supply and protect it against reconnection.



CAUTION!

Any chemical still present in the hydraulic system may spray out when the power supply is reconnected. This may lead to caustic or other burns to the face and hands. Dosing lines must always be connected before starting the pump again.

System parts and lines may be pressurised. Working on the device requires special safety precautions and may only be carried out by instructed technical personnel.



CAUTION!

Always relieve the pressure before starting work on the device. Chemical could spray out. This may lead to caustic or other burns.

The unit must be rinsed out with water when work is carried out in order to prevent any unintentional contact with the chemicals.



WARNING!

Never look into the open end of a clogged line or valve. Chemical may emerge unexpectedly and cause caustic or other burns to face and hands.

Before start up, all hydraulic connections must be inspected for correct tightness and, if necessary, must be tightened up using appropriate tools.



CAUTION!

If connections are loosened for venting or other reasons, leaking chemical must be removed professionally. This is the only way to avoid the danger of physical injury and corrosion at the components.

Chapter 1: Safety

1.11 Safety instructions on chemicals

The supplier of the chemicals provides the chemical safety data sheets. They must be followed and must be accessible to anyone who uses the unit. The following data does not replace the supplier's EEC safety data sheets.

Personal protection equipment must be used during all work involving chemicals. The following protective equipment is recommended as a minimum:



Protective clothing



Protective gloves



Goggles

1.11.1 Special notes on Hydrochloric acid

A concentrated (33%) Hydrochloric acid (HCl) must be used as per EN 939. Other concentrations are not permissible.



CAUTION!

Concentrated Hydrochloric acid is irritating.



CAUTION!

Hydrochloric acid steam has a corrosive effect on many materials. Make sure the container is always closed.

1.11.2 Special notes on Sodium Chlorite

A concentrated (25%) Sodium Chlorite (NaClO₂) must be used as per EN 938. Other concentrations are not permissible.



DANGER!

There is a risk of explosion for use in higher concentrations!



DANGER!

Sodium Chlorite must not be mixed with acid. A poisonous Chlorine Dioxide develops.

Do not alternate the use of chemical containers and intake lines. The chemical containers must be arranged in separate catch basins. It is strongly recommended that the catch basins and intake lines be clearly marked.



CAUTION!

Dried up Sodium Chlorite has an oxidising effect and can ignite flammable materials. Never leave Sodium Chlorite to dry up on a cloth or paper towel. Wash away spilt chemicals with plenty of water. Immediately rinse out splashes of chemicals on articles of clothing with water.

2. Information and safety warnings on Chlorine Dioxide

2.1 The product Chlorine Dioxide

Chlorine Dioxide (molecular formula ClO_2) is an orange-yellow gas featuring a density of 3 kg/m^3 , in standard conditions. It is heavier than air and thus accumulates itself at ground level.



WARNING!

Chlorine Dioxide is a very toxic substance if inhaled and very irritant for the eyes, the respiratory organs and skin. Exposure to Chlorine Dioxide requires the use of a specific respirator mask. The relative TLV ("Threshold Limit Value", i.e. the reasonable ambient-air level or concentration to which a worker can be exposed without adverse health effects) is set, in Germany, at 0.1 ppm.



NOTICE!

The requirements in Germany for what concerns personal protective equipment and structural equipment are determined and set forth by the regulation for the prevention of industrial accidents "BGV-V D5" on "the chlorination of water".



WARNING!

Explosion hazards! At critical concentrations, Chlorine Dioxide explosively decomposes into Chlorine and oxygen. As a dissolved gas in water, Chlorine Dioxide is not explosive.

The following rules must thus be held valid at all times:

- The plant can be operated only at the specifically prescribed chemical concentrations (consult the technical data)
- The chemicals cannot be mixed outside of the reactor.
- The reactor must consistently be maintained at an over-pressure level of at least 1 bar.
- The Chlorine Dioxide solution must be diluted with water directly at the reactor outlet, at max. $2 \text{ g ClO}_2/\text{l}$.
- Prior to starting up plant operations, the reactor must be filled with water. (delivered state)
- The Chlorine Dioxide solution must strictly not be heated.

The EASYZON device has been engineered in consideration of all the rules herein. There need not be any fear of explosion, provided of course that the unit is implemented in compliance with all the specifications provided and as per its intended uses. All directions on installation, initial operations, operation and maintenance must be observed at all times.



IMPORTANT!

Chlorine Dioxide solutions are chemically unstable. Meaning that long-term storage is not possible.

Should storage nevertheless be necessary, the storage concentration range should lie between 0.5 up to a maximum of $2 \text{ g ClO}_2/\text{l}$. Storage times should not overrun 30 minutes. The storage tank is required to be clean and dark. High temperatures will accelerate deterioration.

2.2 Chlorine Dioxide for disinfection applications

Chlorine Dioxide is a potent, fast-acting oxidizing and disinfectant agent, with the following properties:

- ClO_2 distinguishes itself due to excellent effectiveness levels against bacteria, viruses, spores and algae.
- Even at pH values ranging between pH 6,5 and 11, ClO_2 features top disinfection power levels. (The disinfection power levels registered with Chlorine instead decrease considerably in presence of increasing pH values.)
- ClO_2 has a higher disinfection strength than Chlorine, it therefore also works against Chlorine resistant organisms.
- The implementation of ClO_2 prevents the generation of trihalomethanes (THM) and chloramines.
- Due to its high latency period in drinking water, ClO_2 provides for prolonged, continuous disinfection, e.g. in extensively branched-out piping networks.
- The odour threshold of ClO_2 lies approximately 4 times higher compared to Chlorine.

Some typical uses of ClO_2 are:

- the disinfection of drinking water
- the prevention of biofilm and algae proliferation in cooling water circuits
- the treatment of process water
- the treatment of foodstuff
- for odour-control in a wide selection of processes

2.3 Preparation of Chlorine Dioxide

EASYZON C is engineered for the preparation of Chlorine Dioxide by the oxidation of Sodium Chlorite method. Hydrochloric acid (HCl) and Sodium Chlorite (NaClO_2) are mixed into a reactor, where they undergo a reaction process resulting in Chlorine Dioxide:



A significant surplus of Hydrochloric acid in the reactor provides for the virtually total transformation of the Sodium Chlorite into Chlorine Dioxide. Directly at the reactor outlet, the Chlorine Dioxide preparation is then diluted with water.



NOTICE!

The preparation of 1 kg of Chlorine Dioxide requires: 6.5 litres of 33% Hydrochloric acid solution and 5.7 litres of 25% Sodium Chlorite solution.

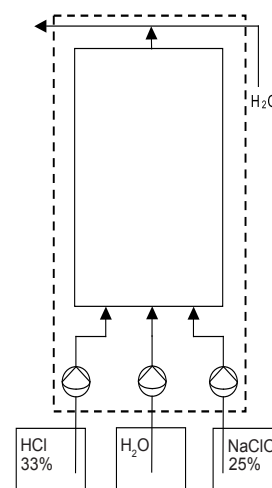


Fig. 2.3: Simplified scheme of the installations

3. Technical description

3.1 Technical data

	EASYZON 7200 C
Production	7240 g/h
Max. pressure	3 bar
Max. rate reagents	48.3 l/h
Max. rate water	270.5 l/h
Medium power	750 W

Tab. 3.1: Technical data

This performance data are referred to maximal operating pressure which has not to be exceeded.

Range temperature: + 4 ... + 40 °C

Electrical power supply: 210...230 VAC, 50 Hz
(Option: 12 VDC, only for unit control)

Installation supply: Aerated room

3.2 Use limitations

The generators could be used only for the production and dosage of Chlorine Dioxide (ClO_2) using as reagents:

- Hydrochloric acid (HCl) pure pharmaceutical, in watery solution 33%
- Sodium Chlorite (NaClO_2) in watery solution 25%
- Water free from dirt

3.3 Description of Chlorine Dioxide system

Three dosing pumps driven by a microprocessor control unit feed the reagent acid, chlorite and water by three valves with balls to the reactor.

Go out reactor we have a Chlorine Dioxide solution of 2% (20 g/l ClO_2).



WARNING!

The dosing pumps of system must be running only in external control by microprocessor unit with impulse signal. The setting pumps must be 1:1. Different setting pump like: internal control or pulse multiplication or pulse division are dangerous and the control unit stops the generator with display "low dosing ..." or "high dosing..." and failure device.



IMPORTANT!

The feeding of the components to the reactor is checked by flow sensors; acid and chlorite sensor on the reactor box and water flow sensor outside under reactor box. The water flow sensor has a bypass with a disk (into the pipe union) for regular distribution water. The control unit checks the correct dosing of every pump and if it don't receive the feedback from flow sensor stops device after eighth stroke failure with display " low dosing ..." and failure device.



IMPORTANT!

The Chlorine Dioxide system has a water production tank integrated on PP frame. This tank has two level switches for loading water by solenoid valve; it is located under the bases of pumps. The system has a safety check; the microprocessor is monitoring how many strokes are necessary for empty tank (from level max to level min.) and stops machine when the comparison of volume tank/ml stroke water pump is not correct.

ex. : volume water tank = 24.000 ml.
 volume stroke/ml = 60 ml/str
 $24.000/60 = 400$ strokes
 $400 \text{ strokes} + 30\% (\text{tolerance}) = 520 \text{ strokes}$

If after 520 strokes of water pump the tank level is not to minimum switch the controller stops machine with display "failure no correct water dosing" and "failure device".

4. Installation

4.1 Dimensions (mm.)

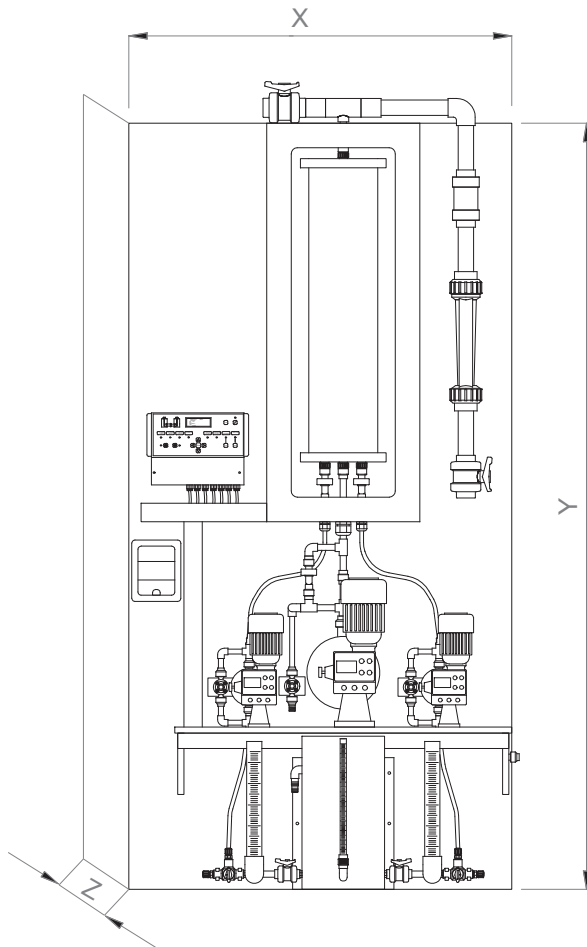


Fig. 4.1: Dimensions

EASYZON	7200 C
Width "X"	1250
Height "Y"	2500
Depth "Z"	500
Dilution	PVC pipe DN 40/d 50
Product outlet	PVC pipe DN 40/d 50
Reactor water inlet	PVC pipe DN 15/d 20
Chemical Inlet	PE hose d 12/16

Tab. 4.1: Dimensions of system

4.2 Functional description

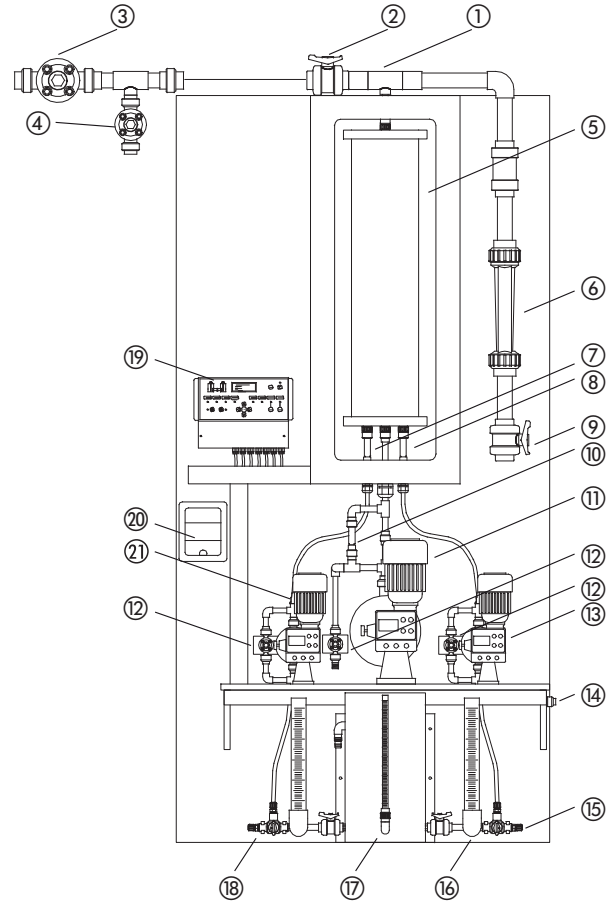


Fig. 4.2: Functional description

- ① Static mixer
- ② Output ClO_2 d 50 - DN 40, PVC-U - Glue
- ③ Backpressure valve
- ④ Safe valve
- ⑤ Reactor
- ⑥ Flow control
- ⑦ Reagent HCl flow sensor
- ⑧ Reagent NaClO_2 flow sensor
- ⑨ Input water predilution d 50 - DN 40, PVC-U - Glue
- ⑩ Water flow sensor
- ⑪ Water pump
- ⑫ Overpressure valve
- ⑬ NaClO_2 dosing pump
- ⑭ Input water production d 20 - DN 15, PVC-U - Glue
- ⑮ From NaClO_2 storage tank
- ⑯ Pump control and calibration system
- ⑰ Production water tank
- ⑱ From HCl storage tank
- ⑲ Electronic control
- ⑳ Power supply box
- ㉑ HCl dosing pump

Chapter 4: Installation

4.3 Fixing

The generators Type EASYZON 7200 C must be installed in vertical position, fixing to wall or stainless steel frame.

The fixing must be with appropriate support.

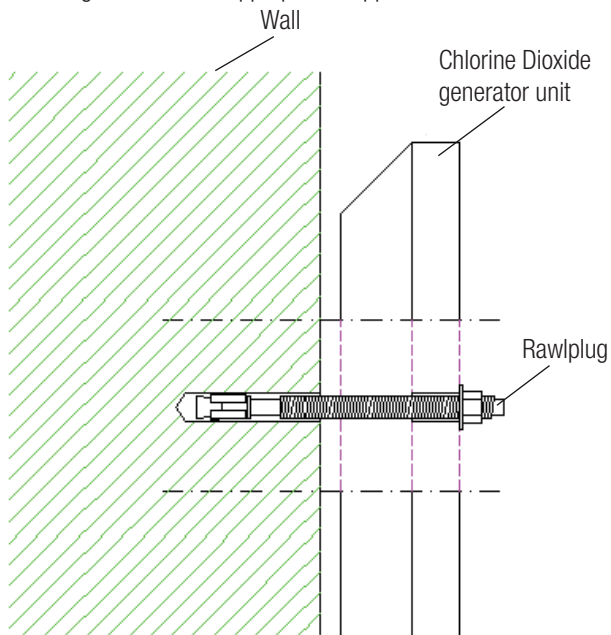


Fig. 4.3: Fixing

Thread Ø (mm)	M10	M12
Nom. drill bit Ø (mm)	10	12
Drilling depth (mm)	72	93
Embedment depth (mm)	60	78
Setting torque (Nm)	30	50
Ø Clearance hole (mm)	12	14

Tab. 4.3: Fixing

4.4 Hydraulic installation

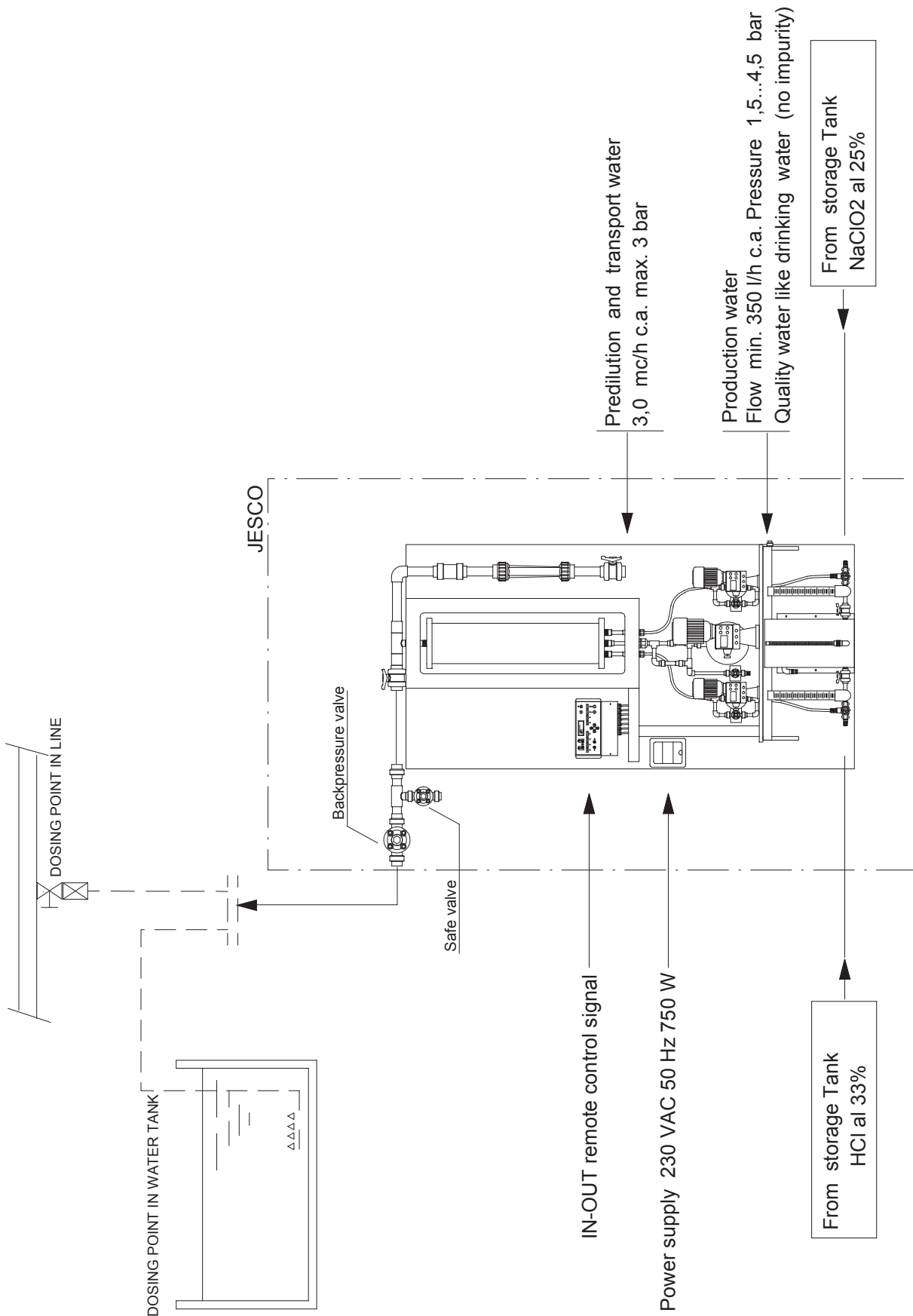


Fig. 4.4: Hydraulic installation

Chapter 4: Installation

4.4.1 Hydraulic connection

Always use appropriate tools for the installation at plastic connecting parts. To avoid damage, never apply excessive force. A thin layer of silicone grease is applied to plastic threads for smooth running.

The piping must be installed on the unit free from any tension.

4.4.2 Water supply

The dilution water must be free from impurities. If necessary, a particle filter (80 µm) must be installed.

The manufacturer recommends drinking water quality.



NOTICE!

When connecting to the drinking water supply the local regulations have to be observed. In most cases the installation of a piping or system separator is mandatory.

Depending on the type of installation (see installation examples), a circulation pump or a solenoid valve is used. Before the installation, make sure that the technical data (pressure class, flow rate characteristic, operating voltage) is appropriate for the respective application. If a solenoid valve is used, an upstream pressure-reducing valve is recommended.

4.4.3 Dilution water adjustment

Switch on the dilution water supply. If it is not possible to do this manually, press the "Select" key to switch the EASYZON to the MANUAL RUN MODE and then press the "On/Off" key to switch on the unit.

When you adjust the water flow rate, make sure that at least 1 l water flows per 1 g Chlorine Dioxide production. This means for example at least 7200 l/h for the EASYZON 7200 C. A higher flow rate is not harmful.

Adjust the switching contact at the flow meter for dilution water until the LED "PREDIL. SENSOR" flashes.



NOTICE!

At this point, the dosing pumps have not yet been bled and error messages can be expected. Press the "Reset" key to display the error messages and press "OK" to confirm them.

4.5 Dosing pumps

Before start up gearing oil must be filled up at all dosing pumps. Refer to the manual of the pumps.



IMPORTANT!

Don't operate the pumps before filling in the gearing oil. Gears will be damaged!

5. Electronic control

5.1 Display and operating elements

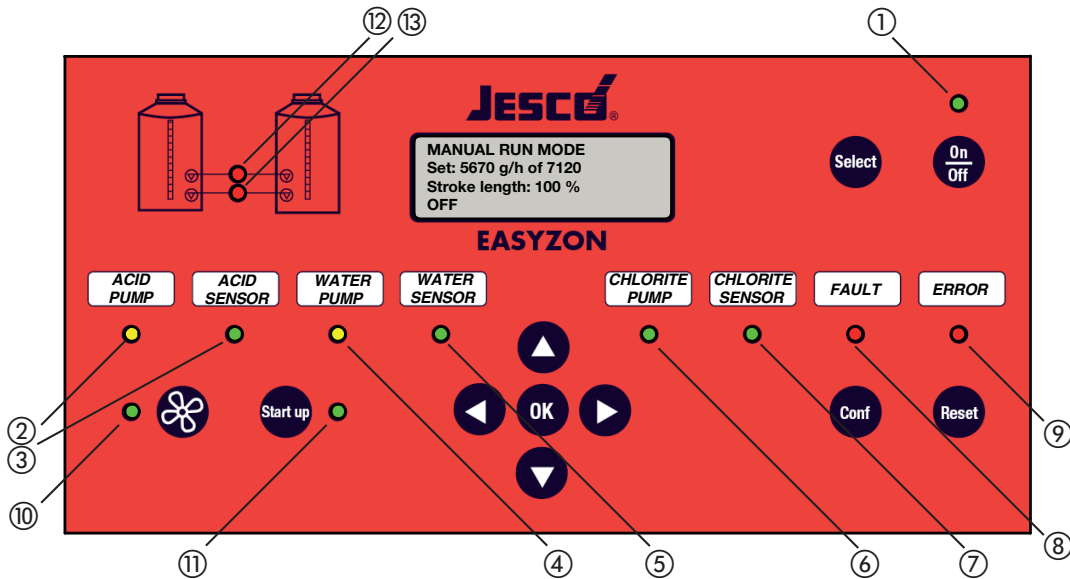


Fig. 5.1: Operating panel of the control system

Key no.	Designation	Function
T1	On/Off	Switching the device on and off
T2	Select	Selection of manual or automatic operation
T3	Reset	Display of alarms (press "OK" to acknowledge)
T4	Conf	Change-over to the configuration mode
T5	Start up	Temporary run mode of the generator for calibration of pumps or adjust flow sensors
T6		Activates the ventilator of the reactor cabinet
	OK	Change-over to the EDIT mode In the EDIT mode: Confirming the entry of parameter and switching to the next parameter Acknowledging an alarm
		Modification of the cursor position
		Change-over to the next display window (page) in RUN MODE In the EDIT mode: Modification of the values of the cursor position

Tab. 5.1.1: Description of the functions of the keys

LED no.	Col-our	Designation	Function
①	green		flashes when the unit is switched on
②	green	Acid Pump	flashes when the acid pump is activated
③	yellow	Acid Sensor	goes off when the acid sensor reacts
④	green	Water Pump	flashes when the water pump is activated
⑤	yellow	Water Sensor	goes off when the water sensor reacts
⑥	green	Chlorite Pump	flashes when the chlorite pump is activated
⑦	yellow	Chlorite Sensor	goes off when the chlorite sensor reacts
⑧	red	Fault	flashes in the case of a disturbance (level, dilution water, dosing)
⑨	red	Error	flashes in the case of an alarm (dosing) fault relay output-unit arrest
⑩	green		flashes when the cabinet ventilator is switched on
⑪	green		flashes during temporary run mode of generator for calibration of pumps or adjust flow sensors
⑫	red		flashes when the supply of chemicals is almost exhausted
⑬	red		flashes when the supply of chemicals is exhausted

Tab. 5.1.2: Description of the LED's

Chapter 5: Electronic control

5.2 Electrical wiring

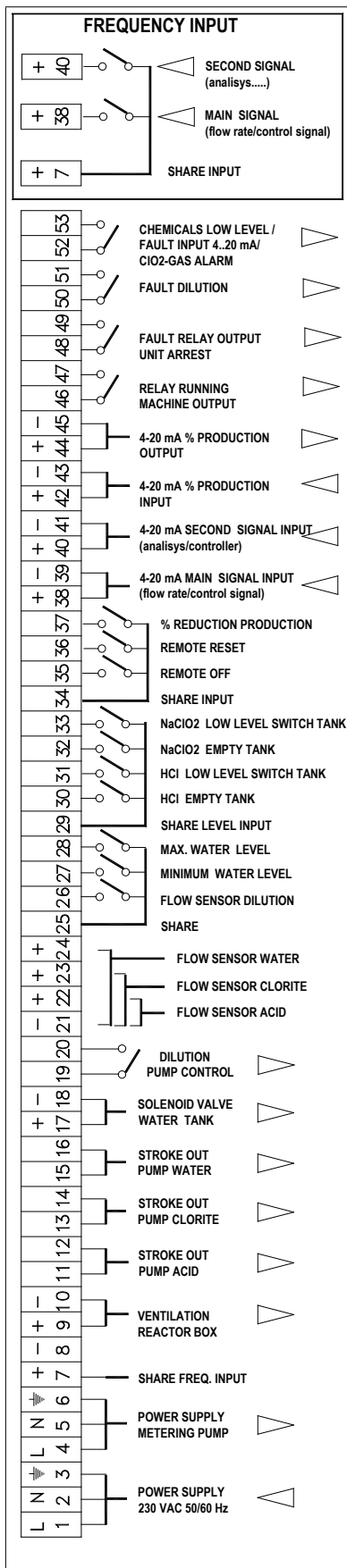


Fig. 5.2: Electrical wiring

5.3 Electrical wiring description

Terminal	Function	Wired by manufacturer
1 Line	Power supply 230 V - 50/60 Hz	/
2 Neutral		
3 Earth (PE)		
4 Line	Dosing pumps power supply HCl, NaClO ₂ and water	YES
5 Neutral		
6 Earth (PE)		
7 (+)	Share input impulse (+ 24 Vcc)	
8 (-)	Free	
9 (+)	Cabinet ventilation (24 Vcc)	YES
10 (-)		
11	Impulse HCl pump	YES
12		
13	Impulse NaClO ₂ pump	YES
14		
15	Impulse Water pump	YES
16		
17 (+)	Power supply solenoid valve for loading tank water	YES
18 (-)		
19	Control relay of dilution pump (only control signal)	/
20		
21 (-)	Flow sensor HCl	YES
22 (+)		
21 (-)	Flow sensor NaClO ₂	YES
23 (+)		
21 (-)	Flow sensor water	YES
24 (+)		
25	Flow sensor dilution	YES
26		
25	Water empty level tank	YES
27		
25	Water low level tank	YES
28		
29	HCl empty tank	/
30		
29	HCl low level tank	/
31		
29	NaClO ₂ empty level tank	/
32		
29	NaClO ₂ low level tank	/
33		
34	Remote OFF	/
35	Remote RESET	/
34	Reduction % production	/
36		
34	Contact input flow meter (to use also in a proportional mode)	/
37		
7 (+)	Input 4...20 mA flow meter (to use also in a proportional mode)	/
38 (+)		
38 (+)	Input 4...20 mA flow meter (to use also in a proportional mode)	/
39 (-)		
7 (+)	Contact input from the residue Chlorine regulator (to use only in flow+analysis mode)	/
40 (+)		
40 (+)	Input 4...20 mA from the residue Chlorine regulator (to use only in flow+analysis mode)	/
41 (-)		
42 (+)	Input 4...20 mA of reduction production or Input 4...20 mA gas detector (inverted polarity)	/
43 (-)		
44 (+)	Output 4...20 mA of production	/
45 (-)		
46 (N)	Running machine output	/
47 (NA)		
48 (N)	Fault relay output Unit arrest	/
49 (NA)		
50 (N)	Fault dilution (No Flow)	/
51 (NA)		
52 (N)	Chemicals low level Fault input 4...20 mA	/
53 (NA)		

Tab. 5.3: Electrical wiring description

5.4 Internal fuses

The internal fuses of the control system are installed on the bottom left-hand side of the circuit board (from the left to the right):

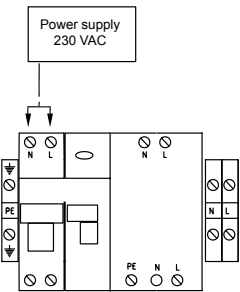
Internal fuse	Description	Value
F6 (5x20)	power supply 220 VAC	1 A
F2 (5x20)	power supply 24 VDC	0.5 A
F1 (5x20)	power supply dosing pumps	3 A

Tab. 5.4: Internal fuses



NOTICE!
Use only fuses with identical technical data.

5.5 Power connection box



DATA SHEET	
N.1 ELECTRONIC SWITCH C60 N 6 A	
N.1 SUPPLY FILTER FN 402 - 6,5 - 02	
N.3 TERMINAL 2.5 mm ²	
N.1 DIN - BOX - POLYESTER IP 65 8 MOD.	
N.3 Pg. 9 - SCREW FITTINGS	
N.2 Pg. 11 - SCREW FITTINGS	

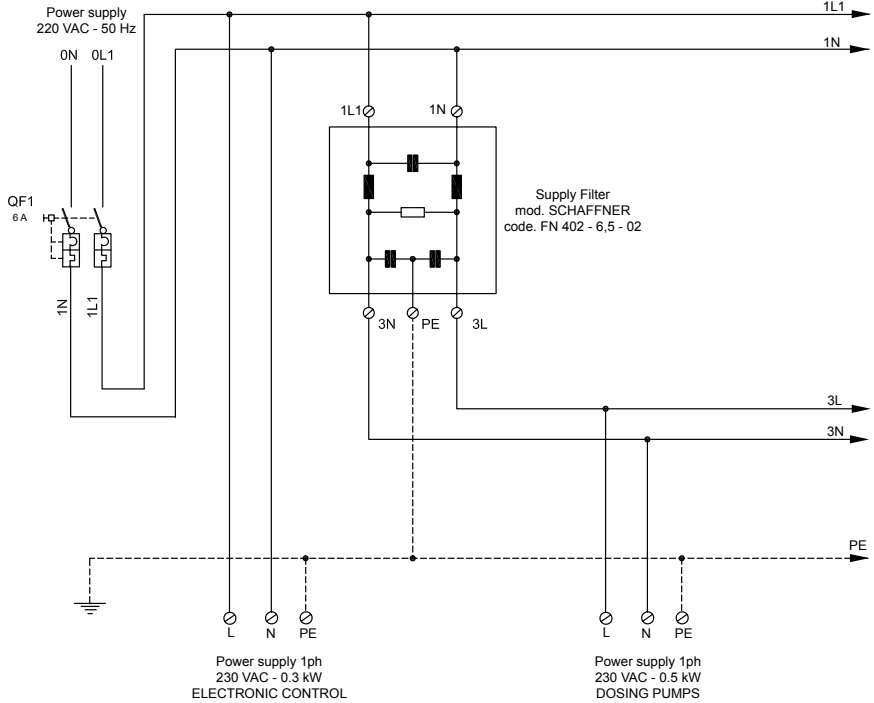


Fig. 5.5: Power connection box

6. Start up

6.1 First attentions

Before the start up with chemicals is need to run machine only with water (see valves position in calibration pumps) and then:

1. Control all hydraulic connection
2. Connect the electric supply (the display of electronic control is on)
3. Rotate the valves like from picture (calibration pumps)
4. Connect, with a tube (PVC 6 x 4), the bleeding of any pumps with a tank

6.2 Start up

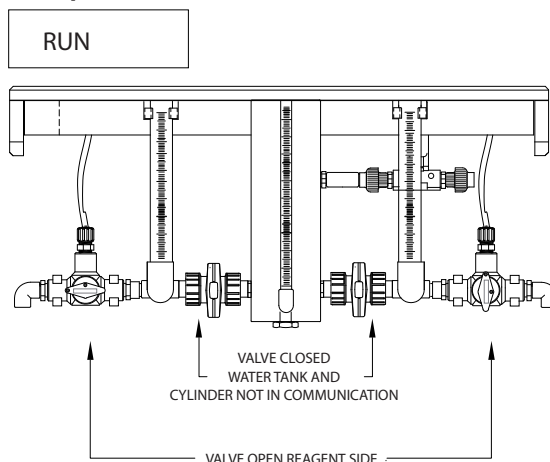
The Start up is a cycle of the strokes for expel the air from tubes. The number of strokes are set up in the General Configuration and are 30 for EASYZON 7200. During this cycle the flow sensor monitoring are excluded.

Control: Press the key **T5** when the generator is switched off.

The Start up finish when ending the cycle or with pressing the key **T5**.

1. Open the predilution valves
2. Turn on the predilution pump
3. Regulate the predilution with the floating at 75 % on max. rate
4. Run the Start Up (press key **T5**)
5. During the Start Up, rotate the valve of bleeding of any pumps
6. Repeat the Start Up, until there isn't more air in the tubes
7. Run the Start Up (press key **T5**)
8. During the Start Up, move the 3 flow sensors more up possible
9. Move down the flow sensor until it marks all stroke of his pump
10. Repeat the Start Up, until you finish the regulation of flow sensors

Valve position



CALIBRATION PUMPS

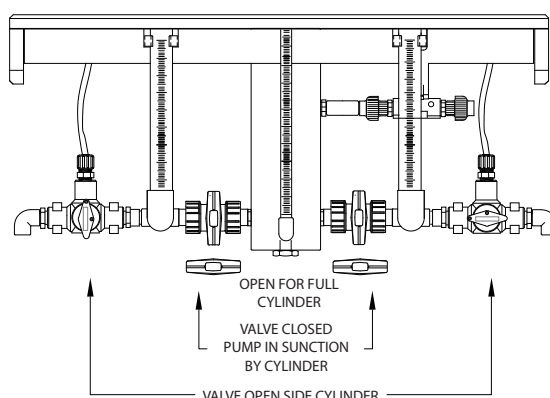


Fig. 6.2: Valve position

6.3 Calibration pump

1. Press key ◀ and ▶
2. Close the 2 valves of two ways
3. Take a note of reagents and water levels (graduated cylinders)
4. Rotate the mechanical pump regulation on 100%
5. Press key **T5** (Start the Start Up)
6. At the end of Start Up, take a note of reagents and water levels
7. Calculate the total volumes any pumps have to pump
8. Insert the total volumes in the program (password 0000)
9. Rotate the valves like from picture (run)
10. Run the Start Up (press key **T5**)
11. Repeat the Start Up, until there isn't more air in the pipes

6.4 Control safety system

1. Exclude one flow sensor; then 8 strokes the generator go to failure.
Restore the flow sensor and press key **RESET + OK**.
Test all sensors.
2. Active the minimum level contact, then 10 seconds the generator goes to failure.
Restore the minimum level contact and press key **RESET + OK**.

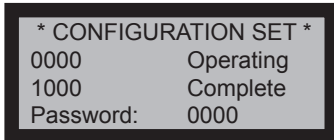
7. Parameters configuration

There are two main levels of configuration:

GENERAL CONFIGURATION, for every kind of Run Mode

OPERATIVE CONFIGURATION, parameters concerning the Run Mode

- With key **T1-ON/OFF** to switch off the generator.
- To press the key **T4 Conf.**



For the **operative configuration** press only the key **OK**.

For the **general configuration** with the keys **▶, ◀, ▲, ▼** set the value **1000** and confirm it with the key **OK**.

After every change parameter press **OK** key for confirmation.

7.1 General configuration Cod. 1000

LUTZ JESCO

VER. CHD 7200 C N_3.0.0

push key ▼

AUT. RUN_MODE=1

[1 = FLOW RATE RUN MODE]

[2 = DIRECT RUN MODE]

[3 = FLOW+AN. RUN MODE]

Choice the kind of the Run Mode.

push key ▼

REM_OFF[1=NO,0=NC]=0

Choice of the Run Mode for the input of the Remote OFF (Terminals 34-35) Normal Open (N.O.) or Normal Closed (N.C.).

REM_RES[1=NA,0=NC]=0

Choice of the Run Mode for the input of the Remote RESET (Terminals 34-36) Normal Open (N.O.) or Normal Closed (N.C.).

LANG.[0=IT,1=ING]=1

Choice of the language: 0 = Italian, 1 = English.

START_UP_S[str]=100

Number of stock that the generator makes during the start up.

push key ▼

PREDIL_S_DELAY[sec]=10

Delay of the alarm that reports the fault of dilution water.

BLEED[1=YES,0=NO]=0

Sequence for the automatic discharge of air and gas.

MAIN_S[1=mA,0=fre] =1

Main Input Signal (flow rate) for the Automatic Mode; 1 = Analogical Input 0 = Impulse Input.

ANALIS[1=mA,0=fre]=1

Input Signal from Chlorine Dioxide regulator (only in Flow+An. Run Mode); 1 = Analogical Input 0 = Impulse Input.

push key ▼

REV_SIG_AN[1=INV]=0

Inversion of the signal incidence 4...20 mA of the Chlorine Dioxide regulation (Flow+An. Run Mode); 1 = Inverse 0 = Direct.

OFF_PR_DELAY[sec]=01

Delay time off control predilution flow. Terminal 19 – 20. Need for batch system.

00 = disable function

Default = 00

push key ▼

TIME ADJUST

Days of the week, Hours, Month, and Year.

To go out of the Configuration Menu press the key **Conf.**

Chapter 8: Run modes

8. Run modes

8.1 Manual run mode

With the Manual Run Mode it is possible to set only a fixed dosage.

8.1.1 Operative configuration of the manual run mode cod. 0000

- With the key **T1-ON/OFF** to switch the generator off.
- Press the key **T4 Conf.** and the key **OK**.

Page 1

ACID[ml]=n.nn

That is the total volume of the HCl dosing pump. Start Up phase.

CHLORIT[ml]=n.nn

That is the total volume of the NaClO₂ dosing pump. Start Up phase.

WATER[ml]=n.nn

That is the total volume of the water dosing pump. Start Up phase.



NOTICE!

The volume stroke of the acid and chlorite dosing pumps could differ of 30% at the most.

push key ▼

ACID [ml/str]=n.nn

That is the volume stroke of the HCl dosing pump.

CHLORIT [ml/str]=n.nn

That is the volume stroke of the NaClO₂ dosing pump.

WATER [ml/str]=n.nn

That is the volume stroke of the water dosing pump.

These values are not possible to change; are only for check.

push key ▼

%_PROD[1=YES,0=NO]=0

It could empower or not the analogical input for the Remote Control with an analogical signal 4...20 mA that controls the maximum % of production (Terminals 42 (+) – 43 (-)).

MAX_METERING[%]=100

Maximum production value with terminals 34-37 are at the closing of the command contact (Terminals 34-37).

To go out the Configuration Menu press the key **Conf.**

8.1.2 Manual run mode

Selection: When the generator is switched off press the key **SELECT**

```
MANUAL RUN MODE
Set: 6835 g/h of 7120
Stroke Length: 100 %
OFF
```

Starting: Press the key **T1 ON/OFF:**

```
MANUAL RUN MODE
Set: 35 g/h of 143
Stroke Length: 100 %
RUN
```

Setting Data: Press the key **OK**. With the keys ▲ and ▼ it is possible to change the value, and with the keys ◀ and ▶ you could move the cursor. Press an other time the key **ENTER** in order to confirm the data.

8.2 Flow rate run mode

The Flow Rate Run Mode is the production control in proportion to the capacity of the Raw Water.

8.2.1 Operative configuration of the flow rate run mode cod. 0000

- With the key **T1-ON/OFF** to switch the generator off.
- Press the key **T4 Conf.** and the key **OK**.

Page 1

ACID[ml]=n.nn

That is the total volume of the HCl dosing pump. Start Up phase.

CHLORIT[ml]=n.nn

That is the total volume of the NaClO₂ dosing pump. Start Up phase.

WATER[ml]=n.nn

That is the total volume of the water dosing pump.



NOTICE!

The volume stroke of the acid and chlorite dosing pumps could differ of 30% at the most.

push key ▼

ACID [ml/str]=n.nn

That is the volume/ stroke of the HCl dosing pump.

CHLORIT [ml/ str]=n.nn

That is the volume stroke of the NaClO₂ dosing pump.

WATER [ml/str]=n.nn

That is the volume stroke of the water dosing pump.

These values are not possible to change; are only for check.

ACID[ml]=n.nn

That is the total volume of the HCl dosing pump.

push key ▼

MAX_FLOW[m³/h]=100

Flow rate of flowmeter (electromagnetic or rotatable).

It allows the generator to calculate the production potentiality.

K_FL_METER[l/imp]=010

The value of the contact output constant litres/impulses for the automatic control.

%_PROD[1=YES,0=NO]=0

It could empower or not the analogical input for the Remote Control with an analogical signal 4...20 mA that control the maximum % of production (Terminals 42 (+) – 43 (-)).

MAX_METERING[%]=100

That is the maximum value of allowed production with the automatic run mode.

To go out the Configuration Menu press the key **Conf**.

8.3 Direct run mode

The Direct Run Mode is the production control in proportion to a regulator signal, analogical **0/4...20 mA** or frequency signal (max. 120 imp/min.).

8.3.1 Operative configuration of the direct run mode cod. 0000

- With the key **T1-ON/OFF** to switch the generator off.
- Press the key **T4 Conf.** and the key **Enter**.

Page 1**ACID[ml]=n.nn**

That is the total volume of the HCl dosing pump. Start Up phase.

CHLORIT[ml]=n.nn

That is the total volume of the NaClO₂ dosing pump. Start Up phase.

WATER[ml]=n.nn

That is the total volume of the water dosing pump. Start Up phase.

**NOTICE!**

The volume stroke of the acid and chlorite dosing pumps could differ of 30% at the most.

push key ▼

ACID[ml/str]=n.nn

That is the volume stroke of the HCl dosing pump.

CHLORIT[ml/str]=n.nn

That is the volume stroke of the NaClO₂ dosing pump.

WATER[ml/str]=n.nn

That is the volume stroke of the water dosing pump.

These values are not possible to change; are only for check.

ACID[ml]=n.nn

That is the total volume of the HCl dosing pump.

%_PROD[1=YES,0=NO]=0

It could empower or not the analogical input for the Remote Control with an analogical signal 4...20 mA that control the maximum % of production (Terminals 42 (+) – 43 (-)).

MAX_METERING[%]=100

That is the maximum value of allowed production with the automatic run mode.

F_MAX_INPUT[str/m]=100

That is the value of the maximum input frequency (max. 120 imp/minute).

To go out the Configuration Menu press the key **Conf**.

8.4 “Flow + An.” run mode

The Flow+An. Run Mode is the production control in proportion to the capacity of the raw water and the analysis value of the residue Chlorine Dioxide, analogical **0/4...20 mA** or frequency.

8.4.1 Operative configuration of the Flow + An. Run Mode (Cod. 0000)

- With the key **T1-ON/OFF** to switch the generator off.
- Press the key **T4 Conf.** and the key **OK**.

Page 1**ACID[ml]=n.nn**

That is the total volume of the HCl dosing pump. Start Up phase.

CHLORIT[ml]=n.nn

That is the total volume of the NaClO₂ dosing pump. Start Up phase.

Chapter 8: Run modes

WATER[ml]=n.nn

That is the total volume of the water dosing pump. Start Up phase.



NOTICE!

The volume stroke of the acid and chlorite dosing pumps could differ of 30% at the most.

push key ▼

ACID[ml/str]=n.nn

That is the volume stroke of the HCl dosing pump.

CHLORIT[ml/str]=n.nn

That is the volume stroke of the NaClO₂ dosing pump.

WATER[ml/str]=n.nn

That is the volume stroke of the water dosing pump.

These values are not possible to change; are only for check.

ACID[ml]=n.nn

That is the total volume of the HCl dosing pump.

MAX_FLOW[m³/h]=100

It allows the generator to calculate the production potentiality.

K_FL_METER[l/str]=010

The value of the contact output constant for the automatic control.

BEARING_ANALIS[%]=20

That is the incidence value of the regulator Chlorine Dioxide signal.

%_PROD[1=YES,0=NO]=0

It could empower or not the analogical input for the Remote Control with an analogical signal 4...20 mA that control the maximum % of production (Terminals 42 (+) – 43 (-)).

MAX_METERING[%]=100

That is the maximum value of allowed production with the automatic run mode.

F_MAX_INPUT[str/m]=100

That is the value of the maximum input frequency of the residue Chlorine Dioxide (max 120 imp/minute).

To go out the Configuration Menu press the key **Conf**.



NOTICE!

Without flow meter signal (not flow or not signal) the Chlorine Dioxide production does not run.

8.5 Washing

Control: Press the key **T5 for 5 seconds** when the generator is switched off.

The Washing is composed of 2 cycles:

- Start Up
- 2 cycles of drainage of the water

During the washing the dosage automatic controls are excluded.

At the end of the washing, the generator is switched off.

8.6 Automatic ventilation

Control: It takes place automatically if is empowered the

AUT_BLEED[1=YES,0=NO]=1

in the General Configuration. It consists of an automatic execution on a Start Up.

8.7 Remote ON/OFF

Control: OFF (generator switched off) closing with a contact free potential. Terminals 34 – 35.

8.8 Remote RESET

Control: Remote RESET closing with a contact free potential. Terminals 34 – 35.

If the fault happens often we advise not to abuse of this method and look for the cause of the problem.

8.9 % Production

Control: If you set up the

%_PROD[1=YES,0=NO] on 1,

you can empower the analogical input for the Remote Control with an analogical signal 4...20 mA that controls the maximum % of production. (Terminals 42 (+) – 43 (-)).

8.10 Gas Alarm (Terminals 42 (-) – 43 (+))

Control: To press the key **T4 Conf**. For the **gas detector range** with the keys ►, ◀, ▲, ▼, set the value 3000 and confirm it with the key **OK**.

Page 1

```
GAS DETECTOR RANGE
MAX.RANGE = 0,00 ppm
SET 1 GAS = 0,00 ppm
SET 2 GAS = 0,00 ppm
```

MAX.RANGE = 0,00 ppm

That is the max. range of the detector.

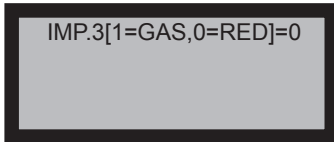
SET 1 GAS = 0,00 ppm

This is the first level of alarm. When the gas exceeds this level, the alarm close the terminals 52-53.

SET 2 GAS = 0,00 ppm

This is the second level of alarm. When the gas exceeds this level, the alarm close the terminals 48-49 end the generator goes in failure.

Page 2



IMP.3[1=GAS,0=RED]=0

It could activate or not the analogical input of gas detector.

8.10.1 Electrical wiring gas detector

There are 2 bridges of gas detector you can use: active detector (out 4...20 mA) or passive detector.

If you want to use an active or an passive detector, you must change an contact on the electronic board.

Connect Pin 1 e 2 for the active detector.

Terminal 42 + / 43 -

Connect Pin 2 e 3 for the passive detector.

Terminal 42 - / 43 +

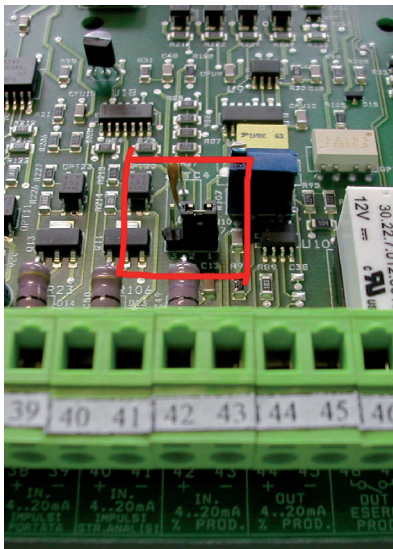
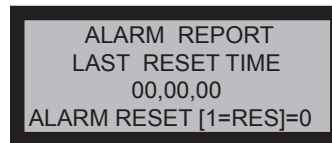


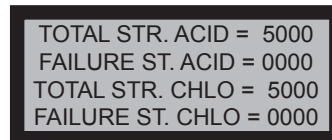
Fig. 8.10.1: Electrical wiring

8.11 Report alarm password 0100

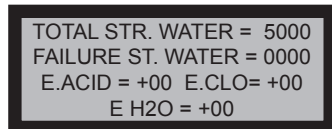


You can see the all last alarm and you can (1) reset these alarms.

8.12 Flow sensors monitor password 0010



You can see all the errors for every flow sensor. On display you can read for every pump total stroke and the feedback of flow sensor. After every enter in password 0010 you reset all errors.



E.ACID = +00 .. These are the control that every pump is setting in external control 1:1.

When the strokes of pumps are not compare with the frequency remote control of electronic unit you have an failure and alarm.

8.13 Manual ventilation

Control: Press the key **T8 VENT**.

You must do a manual ventilation before open the lock of the reactor box.

8.14 Manual cargo water

Control: Press the key ◀ and ▶

Control for the cargo cycle of the water.

Chapter 8: Run modes

8.15 Error messages

N°	Error message	Condition	Terminal ref.	Effect
1	Reading failure water flow meter (4...20 mA)	Signal < 3,6 mA or > 21,8 mA	+38/-39	Check signal
2	Reading failure % production or gas detector (4...20 mA)		+42/-43	Check signal or calibrate gas detector (option)
3	Reading Failure ClO ₂ controller (4...20 mA)		+40/-41	Check signal
4	Empty level acid tank	Close contact	29/30	Check reagent level or level switch
5	Empty level chlorite tank	Close contact	29/32	Check reagent level or level switch
6	Failure no correct water dosing	No correct water dosing pump (When dosing pump not bleed water tank with correct stroke)		Check the metering dosing pump with cylinder Check the safe valve (only with motor dosing pump) Check min. and max. level switch water tank
7	Failure empty level water	Close contact	25/27	Check flow water to solenoid valve Check solenoid valve Check level switch
8	Low chlorite dosing	No correct metering dosing pump	-21/+23	Check reagent level Check metering dosing pump and setting Degasing air line Calibrate green sensor up or down Clean the pipe sensor
9	Low water dosing	No correct metering dosing pump	-21/+24	Check reagent level Check metering dosing pump and setting Degasing air line Calibrate green sensor up or down Clean the pipe sensor
10	Low acid dosing	No correct metering dosing pump	-21/+22	Check reagent level Check metering dosing pump and setting Degasing air line Calibrate green sensor up or down Clean the pipe sensor
11	High chlorite dosing	No correct metering dosing pump	-21/+23	Check metering dosing pump and setting
12	High water dosing	No correct metering dosing pump	-21/+24	Check metering dosing pump and setting
13	High acid dosing	No correct metering dosing pump	-21/+22	Check metering dosing pump and setting
14	Error predilution water flow less	Open contact	25/26	Check water flow and sensor

Tab. 8.15: Error messages

9. Shutdown and disposal



CAUTION!

Personal protection equipment must be worn at all times when working on the unit in accordance with the valid regulations for accident prevention!



Protective clothing Protective gloves

Goggles

No special measures are necessary for a brief shutdown of the unit (e.g. several hours). Press the "On/Off" key to switch off the unit.

For lengthier interruptions to the running of the unit it must be rinsed off thoroughly with water (see 8.1). Remove the intake lines from the chemicals tanks and close the tanks. After you have rinsed the unit, close the feed line for the dilution water and if required close the ball valve at the injection point.

9.1 Rinsing the unit

It is necessary to rinse the unit before a long shutdown for maintenance purposes.

The intake lines are taken out of the chemical tanks for rinsing and put into tubs filled with water. The tanks are closed.

Switch the unit to "MANUAL RUN MODE" and operate the unit for about 1/4 hour at the maximum production capacity. The dosing pumps feed water into the reactor thus rinsing the entire system.



CAUTION!

During the rinsing procedure, a small quantity of chlorine dioxide is produced and the residual chlorine dioxide from the reactor is used in the process. Make sure that this does not result in overdosing.

In batch systems, a weak chlorine dioxide solution remains in the supply tank after rinsing. If the remaining solution must not be used in the process, it must be neutralised before it can be drained off into the waste water.

9.2 Disposal of the chemicals

The chemicals must be disposed of without any risk of sustainable effects on people, equipment and the environment. On this background, the following notes must be respected.



WARNING!

Chlorine dioxide is poisonous when inhaled, it has a pungent smell and can cause chemical burns in the respiratory system. Therefore, observe the instructions for neutralisation in all cases.

Neutralisation of the chlorine dioxide solution

For 1 g chlorine dioxide, approx. 18 g sodium thiosulphate pentahydrate are required. An overdosing is not harmful. Sodium

thiosulphate pentahydrate is usually available as crystals. For the dissolving of 1 kg, approx. 5 l water are required.

Example: A supply tank with 100 l chlorine dioxide solution with a concentration of 1 g/l should be neutralised. Dissolve 1800 g sodium thiosulphate pentahydrate in a tub with 10 l water and slowly add the chlorine dioxide solution.

After a reaction time of approx. 5 minutes, the solution can be disposed of via the drainage system.

Disposal of used activated carbon

The activated carbon absorbs the chlorine dioxide from the atmosphere in the product tank. Completely loaded activated carbon has a strong smell of chlorine dioxide and has to be neutralised.

Put the content of the activated carbon cartridge into a neutralisation solution that consists of 1 l water and 200 g sodium thiosulphate pentahydrate.

9.3 Disposal of old equipment

If the equipment is to be disposed of after its service life, it has to be thoroughly rinsed. The equipment is manufactured allowing for the ROHS guideline and the old electrical equipment law. The manufacturer takes care of the disposal if the equipment is sent back free of charge. It is not part of domestic waste.

10. Maintenance

10.1 Fundamental information for maintenance

EASYZON is a device manufactured to the highest standard of quality with a long service life. Some parts are subject to wear due to chemical and mechanical loading. To ensure a long operating life, visual inspections are recommended regularly. Regular preventative maintenance of the unit protects it against operational failures.

The frequency of the maintenance is only conditionally dependent on the intensity of its use. The chemical wear, for example of rubber parts, starts with the first medium contact and is then irrespective of its type of use.

The manufacturers specifies a maintenance once a year minimum. Use spare parts kits which comprise the typical wear parts. (see chapter "Spare parts")



CAUTION!

Before any maintenance work, the unit must be thoroughly rinsed as specified in 9.1 and the system must be relieved from pressure. Personal protection equipment must be worn in accordance with the valid regulations for accident prevention!



Protective clothing



Protective gloves



Goggles



CAUTION!

The power supply must be disconnected for maintenance work on EASYZON 7200 C and secured against unintentional restart.



NOTICE!

Plastic threads (especially PVC threads) are easier to screw on and unscrew again if a thin layer of silicone grease has been applied to them.

10.2 Description of maintenance

Dosing pumps

At the dosing pumps, maintenance is restricted to the replacement of the seals and the balls in the check valves at the dosing head and the replacement of the pump membranes. The maintenance work is described in the operation manual of the dosing pumps.

Back pressure regulating valve

For larger plants, a back-pressure valve is installed instead of the multifunctional valve Pentabloc. For these valves, it is only necessary to replace the membranes. Loosen the union nut to remove the membrane. You do not need to loosen the adjustment screw when replacing the membrane.

Flow monitors

The flow monitors for the chemicals are subject to mechanical wear and the float and the housing are replaced as part of the maintenance. The ring sensors are installed with the cable down and must not be mixed up. It is recommended to mark them before the disassembly.

Reactor valves

All seals for the reactor valves are included in the servicing kit. To disassemble the valve, push the valve ball with a blunt object. The valve ball is not a wear part.

Make sure not to mix up the valve parts as the valves at the reactor input and output are not identical. Apply a thin layer of silicone grease to all o-rings before you install them.

Other components

All other parts are usually not subject to wear. If you detect leakages or other damages, replace the seals or replace the entire part.

Safety devices

Push up the contactor at the flow meter for dilution water. If the unit is operating, an alarm is signalled after about 10 seconds. If required, check the preset delay time PRE_S_DELAY in menu 1000.

Change the position of one of the ring sensors at the flow rate monitor for chemicals. If the LED does not flash at each dosing stroke any more, an alarm must be signalled after 8 dosing strokes.

Dosing result

If it is not checked during daily operation, it must be at the latest checked as part of maintenance if the dosing concentration of chlorine dioxide complies with the requirements in the application process.

11. Spare parts

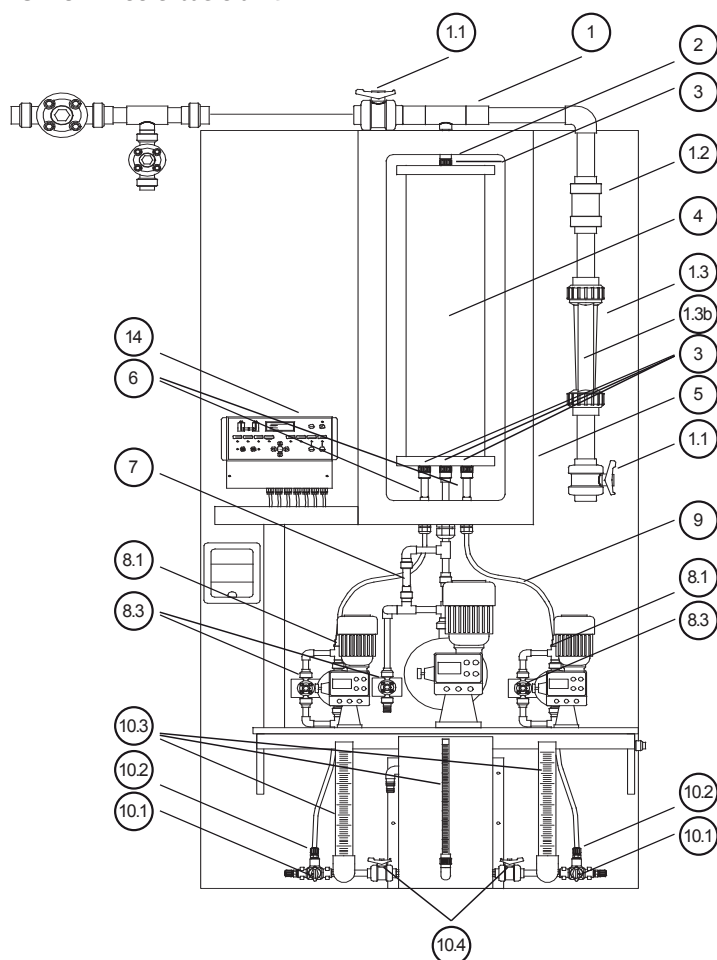
EASYZON 7200 C basic unit

Fig. 11.1: Spare parts basic unit

N°	Quantity	Description
1	1	Predilution system
1.1	2	2 way ball valve d 50
1.2	1	No return valve – seat ball FPM
1.3	1	Flowmeter 300...3000 lt/h – DFM 350 PVC-U d 50
1.3a	1	Float – PVDF magnetic
1.3b	1	Electronic contact – Ze901 – No
2	1	Mixer/reactor connection – 1”G – PVDF/PVC
3	4	IN / OUT reactor valve – 1” - PVDF
3.1	1	Body valve
3.2	1	Ball seat PTFE
3.3a	2	O-ring FPM 22 x 2.62 mm
3.3b	1	O-ring FPM 15.60 x 1.78 mm
3.4	1	Ceramics ball d 14 mm
4	1	Reactor body (without valves)
5	1	Ventilation system
5.1	1	Fan 90 x 90 - 24 VCC
5.2	1	Protection grille
5.3	1	Active carbon
5.4	1	Fan box

6	2	Reagent flow sensor
6.1	2	Flow sensor body PVC d 21 mm type DJ
6.2	2	Float type D
6.3	2	Proximity sensor RJ21N
6.4	2	Ring nut PVC 3/8” – pipe 8 x 12 mm
6.5	2	Ring nut PVC 1”
7	1	Water flow sensor
7.1	1	Flow sensor body PVC d 21 mm type DJW
7.2	1	Union end PVC
7.3	1	Float type D
7.4	1	Proximity sensor RJ21N
7.5	2	Ring nut PVC 1”
7.6	1	Flow-reducing disk – PVC + O-ring FPM
8		Pumps accessories
8.1	4	Connection tube 12 x 8 mm – d 16 PVC
8.2	4	Ring nut PVC 3/8”
8.3	3	Security valve – PVC-U
9	4 m	8 x 12 mm PTFE pipe
10	2	Reagent suction system
10.1	2	3 way valve for reagent – PP ½”

Chapter 11: Spare parts

10.2	6	Valve connection – PP – pipe 8 x 12 mm
10.3	2	Reagent cylinder complete
10.3a	2	Cylinder label
10.4	2	2 way valve – PVC – d 20
11	1	Water suction system
11.1	1	Foot valve – PP – 1" 1/4
11.2	1	PVC line d 25
12	1	Water tank
12.1	1	Water tank body - PP
12.2	2	Level switch with reed contact
12.3	1	Electric level connector – 4 pin
12.4	1	Solenoid valve buker 6113 – 24 VDC – R ½"
13	1	Reactor box
13.1	2	Lock door M10 – AISI 316
13.2	1	Set pipe 12 x 8 mm PP
14	1	Control unit
14.1	1	Fuse 3.15 A
14.2	1	Fuse 2 A
14.3	1	Fuse 0.5 A
14.4	1	Relay 12 VCC
14.5	1	Supply filter 230 VAC
14.6	1	Miniature circuit breaker – 2P C6
15		Label
15.1	2	Acid label
15.2	2	Chlorite label
15.3	2	Water label
15.4	1	Supply warning label

Tab. 11.1: Spare parts basic unit

12. Device revision

This operation manual apply to following units:

Type of device	Software	Revision
EASYZON C	CHD_C N_3.0.0	03/2010

It contains all the technical information required for installation, start-up and maintenance. Should you have any questions or require further informations regarding these operating instructions, please contact the manufacturer or its official national representative.

EU-Konformitätserklärung

Der Unterzeichnete Lutz-Jesco GmbH, Am Bostelberge 19, 30900 Wedemark, bestätigt, dass die nachfolgend bezeichneten Geräte in der von uns in Verkehr gebrachten Ausführung die Anforderungen der harmonisierten EU-Richtlinien, EU-Sicherheitsstandards und produktspezifischen Standards erfüllen. Bei einer nicht mit uns abgestimmten Änderung der Geräte verliert diese Erklärung ihre Gültigkeit.

(EN) EU Certificate of Conformity

The undersigned Lutz-Jesco GmbH, Am Bostelberge 19, 30900 Wedemark, hereby certifies that, when leaving our factory, the units indicated below are in accordance with the harmonised EU guidelines, EU standards of safety and product specific standards. This certificate becomes void if the units are modified without our approval.

(FR) Certificat de conformité aux directives européennes

Le constructeur, soussigné: Lutz-Jesco GmbH, Am Bostelberge 19, 30900 Wedemark, déclare qu'à la sortie de ses usines le matériel neuf désigné ci-dessous était conforme aux prescriptions des directives européennes énoncées ci-après et conforme aux règles de sécurité et autres règles qui lui sont applicables dans le cadre de l'Union européenne. Toute modification portée sur ce produit sans l'accord express de Jesco supprime la validité de ce certificat.

(ES) Declaración de conformidad de la UE

El que suscribe Lutz-Jesco GmbH, Am Bostelberge 19, 30900 Wedemark, declara que la presente mercancía, objeto de la presente declaración, cumple con todas las normas de la UE, en lo que a normas técnicas, de homologación y de seguridad se refiere, En caso de realizar cualquier modificación en la presente mercancía sin nuestra previa autorización, esta declaración pierde su validez.

(NL) EU-overeenstemmingsverklaring

Ondergetekende Lutz-Jesco GmbH, Am Bostelberge 19, 30900 Wedemark, bevestigt, dat het volgende genoemde apparaat in de door ons in de handel gebrachte uitvoering voldoet aan de eis van, en in overeenstemming is met de EU-richtlijnen, de EU-veiligheidsstandaard en de voor het product specifieke standaard. Bij een niet met ons afgestemde verandering aan het apparaat verliest deze verklaring haar geldigheid.

(HU) EG (EK)– Egyezőségi nyilatkozat

A Lutz-Jesco GmbH, Am Bostelberge 19, 30900 Wedemark ezúton kijelenti, hogy a szóban forgó termék annak tervezése és szerkezeti módja, valamint forgalomba hozott kivitele alapján a vonatkozó alapvető biztonság technikai és egészségügyi követelményeknek és az alábbi felsorolt EG –irányelveknek minden szempontból megfelel. A terméken engedélyünk nélkül végrehajtott módosítások következtében jelen nyilatkozat érvényét veszíti.

(PT) Certificado de conformidade da UE

Os abaixo mencionados Lutz-Jesco GmbH, Am Bostelberge 19, 30900 Wedemark, por este meio certificam que ao sair da fábrica o aparelho abaixo mencionado está de acordo com as directrizes harmonizadas da UE, padrões de segurança e de produtos específicos. Este certificado ficará nulo se a unidade for modificada sem a nossa aprovação.

Bezeichnung des Gerätes:	Anlage zur Herstellung und Dosierung von Chlordioxid
Description of the unit:	Chlorine dioxide system
Désignation du matériel:	Dioxyde de chlore
Descripción de la mercancía:	Dioxydo de cloro
Omschrijving van het apparaat:	Installatie voor aanmaak en dosering van Chloordioxide
A termék megnevezése:	Klórdioxid előállító és adagoló berendezés
Designação do aparelho:	

Typ / Type / Tipo / Típusjelölés:	EU-Richtlinie / EU directives/ Directives européennes / Normativa UE / EU-richtlijnen / Vonatkozó EG-irányelvek / Directrizes da UE	Harmonisierte Normen / harmonized standards / Normes harmonisées / Estándares acordemente / Toegepaste normeringen / Hatályos normák / Normas harmonizadas
EASYZON D	2006/42/EG	
EASYZON C	2006/95/EG	
	2004/108/EG	

i.V. Dipl. Ing. Klaus Albert
Lutz-Jesco, Wedemark, 30.03.2010

Technische Leitung / Technical Department Manager / Direction technique /
Dirección Técnica / Hoofd technische dienst / Műszaki irodavezető / Director Técnico

13. Declaration of harmlessness

Please copy and send it back with the unit!

Please attach it to the outer side of the packing!

Declaration of harmlessness

(Please fill out separately for each unit – pump or accessory)

We forward the following device for repairs:

type: EASYZON 7200 C, other:.....

Part-no.:

Serial number:

Date of delivery:

Reason for repair:

Chemical metered:

hydrochlorid acid, sodium chlorite, chlorine dioxide

Properties: Irritating, corrosive, toxic

We hereby certify, that the product has been cleaned thoroughly inside and outside before returning, that it is free from hazardous material (i.e. chemical, biological, toxic, flammable, and radioactive material) and that the lubricant has been drained. *)

If the manufacturer find it necessary to carry out further cleaning work, we accept the charge will be made to us.

We assure that the aforementioned information is correct and complete and that the unit is dispatched according to the legal requirements.

Company:

Address:

Phone:

Fax:

E-Mail:

Customer No.:

Contact person:

Date:

Signature / stamp

*) If not applicable please cross out!

Chapter 14: Warranty Application

14. Warranty Application

Please copy and send with the device.

If the device breaks down within the period of warranty, please return it in a cleaned condition with the complete warranty application, filled out.

Sender

Company:..... Phone:..... Date:.....

Address:.....

Contact person:

Lutz-Jesco order-no.:..... Delivery date:

Device type:..... Serial no.:

Nominal capacity/nominal pressure:

Description of fault:.....

.....

.....

.....

.....

Type of fault:

1. Mechanical fault 2. Electrical fault.....

- premature wear..... - loose connections such as plug connector or cable

- wear parts..... - operating elements (e.g. switches/buttons)

- breakage/other damage..... - electronics - corrosion.....

- damage in transit

Service conditions of the dosing pump

Point of use / system designation:.....

Accessories used (Suction line, PDS, etc.):.....

.....

.....

Commissioning (date):.....

Duty period (approx. operating hours):

Please describe the specifics of the installation and provide a simple diagram with details of the material, diameter, length and levels.



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