



USER MANUAL



Carbonator KT1

Code 699204

Original instructions v1.1 (02/2021)

 **OPREMA^{d.d.}**
Catering equipment

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SIGNS USED IN MANUAL



Points out, on or around device, direct danger for life or serious injuries for user and generally persons in the area; great attention and work with caution are needed.



Points out, on or around device, potential risk of serious injury for user and generally persons in the area, great attention and work with caution are needed.



Points out that device is under voltage. Before any work always unplug the cooling unit from electrical installation to prevent damages and injuries.



Contains information that helps ensure correct performance of device.

USER INSTRUCTIONS

This manual contains instructions for installation, usage and handling with devices. It is a part of the unit, it has to be stored close to device and it helps technical staff during every movement or installation of device. Before installation and usage of unit, please read carefully this manual containing all necessary information to ensure correct and safe installation.



This manual refers to the standard versions of device
Nonstandard devices can have minor differences which are not described in this Manual.

REGULATORY COMPLIANCE

Company Oprema d.d. is manufacturer of professional cooling units for catering, with special accent on cooling units for cooling and dispensing beer, juices, wine, water and sparkling water. Quality, environment, health protection, work safety management policy, product safety and all components that are in contact with the beverage is the basis of process management in Oprema d.d..



Within European Union, all cooling units are harmonized with following directives:

Directive 2014/35/EU (LVD) – electrical safety of cooling units (low voltage equipment)

Directive 2014/30/EU (EMC) – electromagnetic compatibility



This product meets all basic demands of EU legislation which are relevant to this product



This device meets the mandatory safety regulations. Inexpert use can result in personal injury and material damage. The following warnings and safety instructions must be observed before using this device.



COOLING UNIT MARKS AND CHARACTERISTICS

Every device has its own identification number/code. This number is on the plate/label "technical data". Plate/label with technical data is the only way to identify device; consists all necessary data about unit which are relevant to the user/service people for quick and simple identification.

OPREMA [®]		CE			
Oprema d.d. Gospodarska ulica 5 42230 Ludbreg - Croatia					
TYPE		MODEL			
1		2		2	
SERIAL N°		CODE		CLIMATE CLASS	
3		4		5	
(V)	(Hz)	POWER (kW)	RUN (A)	WEIGHT (kg)	
6	7	8	9	10	
Made in Croatia, EU					



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1. Type: name of the cooling unit
2. Model: cooling unit model
3. Serial number: serial number of unit
4. Code: unit identification code
5. Climate class: climate class
6. (V): voltage in volts
7. (Hz): frequency in Herz
8. Power: electricity in kW during normal work
9. Run: current in Amperes during normal work
10. Weight: weight of unpacked unit in kg
11. Quality control: unit is tested for secure usage
12. Oprema: manufactured in Oprema d.d. (with destroying and removing this label you lose warranty)

This manual is valid for following cooling unit:

KARBONATOR KT1

WARRANTY

Warranty on device is valid for 24month from date of production, except if is not agreed different by contract. We recommend to save original box, packing material and invoice at least during the warranty period.



TRANSPORT AND STORAGE

It is important to handle with care during loading and unloading to avoid damage of the device.

Crane can be used for unit movement only if unit is on pallet.

- DO NOT turn around the unit
- DO NOT shake the unit or complete packing

Unit has to be stored in adjusted and clean space, with temperature between 0-40°C. It is necessary to take care that there is no water in cooling unit left. Do not store coolers one on other, and take care to set them in vertical position like marked on packaging.

PACKING POSTPONEMENT

When cooling unit is unpacked, it is necessary to check if it looks in proper condition (undamaged visually). In case of any doubt on damage of cooling unit within packaging, do not install and use the unit. During packing postponement we ask you to respect local legislation concerning packing postponement. Do not incinerate packing parts or throw them to the environment. Packing of this cooling unit can be recycled in total. Keep packing material away from children.

AMBIENT CONDITIONS FOR INSTALLATION

Device has to be installed in the place where it is protected from rain, water sparkles, with temperature correspondent to its climate class (marked on label Technical data); in case this terms are not assured warranty is no longer valid and malfunctions in performance are possible.

Possible climate classes are:

SN – temperature of environment from 10°C to 32°C

N – temperature of environment from 16°C to 32°C

ST – temperature of environment from 18°C to 38°C

T – temperature of environment from 18°C to 43°C

PROCEDURE IN CASE OF MALFUNCTION

Most of technical issues can be easily solved by simple procedures. To this purpose we ask you to read instructions carefully before informing service people or manufacturer. In case you cannot solve the problem by using instructions from this manual, please contact the seller from which you bought the unit. Keep units in good condition and do not allow any modification on it except if they are approved by the producer.



Danger

To prevent risk of injuries and damages, bottle CO2 has to be always positioned in vertical position, fixed on wall holder. If there is any doubt on gas release, especially in small spaces, it is necessary to ventilate potentially contaminated space.

WORKING PRINCIPLE

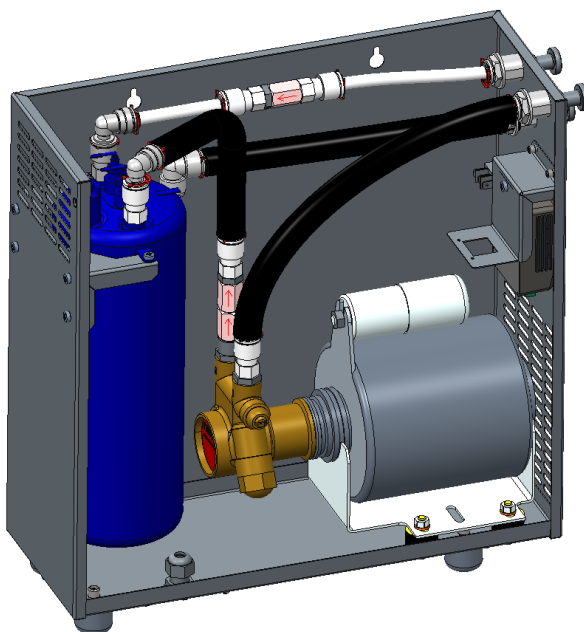
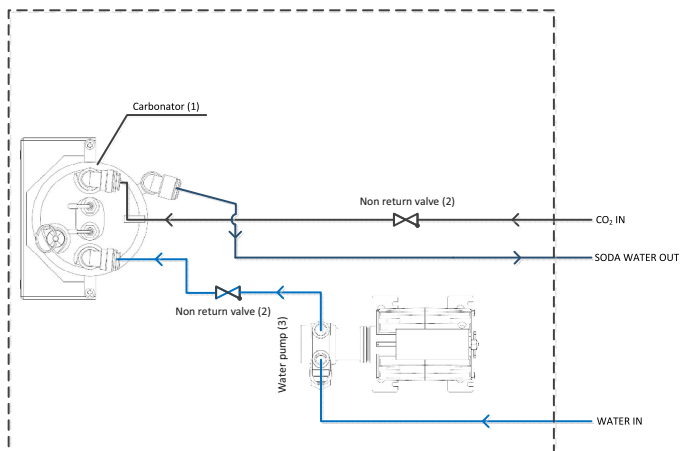
CO2 is passing through the pressure regulator and going into CO2 IN connection, then through non return valve (2) into carbonator (3).

Water is going from water line to WATER IN connection, passing through pump and non return valve into carbonator (3).

In carbonator (1) CO2 absorbs into water. Soda water is going out through SODA WATER OUT connection.

1. CARBONATOR KT1 EU

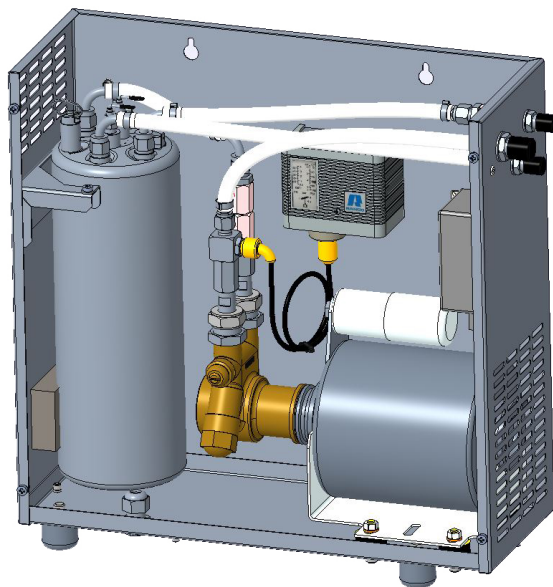
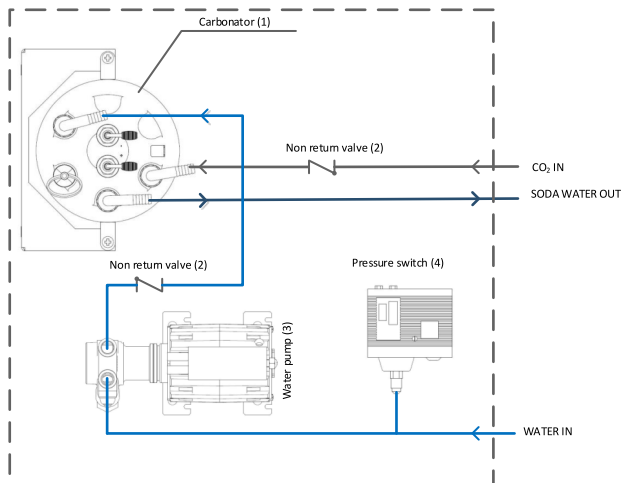
1.1. Working principle





2. CARBONATOR KT1 HK

2.1. Working principle





In accordance with current law regulations, installation and release of cooler in function, this needs to be done by specialized and trained technical staff.

INSTALLATION (KT1 EU)

- Install pressure regulator on CO2 bottle (bottle needs to be closed).
- Connect CO2 line to CO2 IN (connector 3/8").
- Connect water line supply to WATER IN (connector 3/8").
- Connect SODA WATER OUT to dispenser (connector 3/8").
- Connect the appliance to electricity. With this appliance is turned on.
- Open water line.
- Open the valve on CO2 bottle, if pressure is in red area, bottle should be replaced.
- On CO2 regulator set the pressure to 5,5 bar. If CO2 bottle is set further from the appliance or under appliance, it is necessary to adjust the pressure (increase) for 0,02bar for each meter horizontal length or for 0,1bar for each meter of vertical length.
- Appliance is ready for dispensing soda water.

INSTALLATION (KT1 HK)

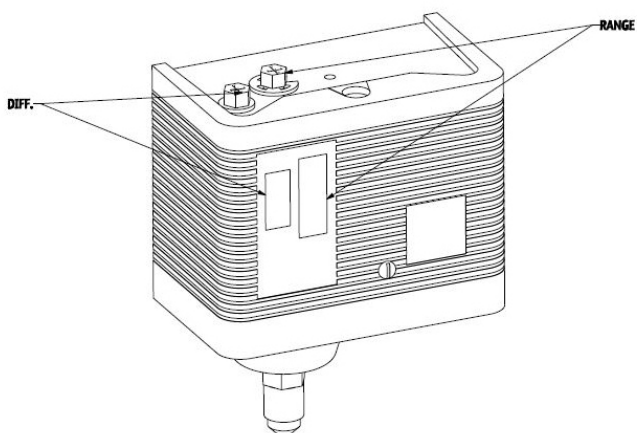
- Install pressure regulator on CO2 bottle (bottle needs to be closed).
- Connect CO2 line to CO2 IN (7/16" 20 UNF male thread).
- Connect water line supply to WATER IN (5/8" 18 UNF male thread).
- Connect SODA WATER OUT to dispenser (7/16" 20 UNF male thread).
- Connect the appliance to electricity. With this appliance is turned on.
- Open water line.
- Open the valve on CO2 bottle, if pressure is in red area, bottle should be replaced.
- On CO2 regulator set the pressure to 5,5 bar (SAFETY VALVE PRESSURE RELIEF: 8,5 BAR).
If CO2 bottle is set further from the appliance or under appliance, it is necessary to adjust the pressure (increase) for 0,02bar for each meter horizontal length or for 0,1bar for each meter of vertical length.
- Appliance is ready for dispensing soda water.



PRESSURE SWITCH SETTINGS ADJUSTING (KT1 HK)

First you have to remove top cover on pressure switch (one screw).

Then you have two adjusting screws, according to the picture below you can adjust CUT IN pressure and DIFF pressure.



Default settings for pressure switch:

CUT IN: 1,30 bar

DIFF: 1 bar => CUT OUT: 0,35 bar



MALFUNCTION



Before performing maintenance, make sure the carbonator device cable is unplugged.

Description	Possible reason	Repair description
Pump is not working	Appliance is not connected to power supply	Connect appliance to power supply
	Cable plug is not plugged in	Connect plug
	To low voltage of power supply	Minimal voltage for normal work is 100V (-10%)
	Plug broken or power cable damaged	Call for service
	Damaged pump	Call for service
	Pump protection activated during overheating	Call for service
	Level probes in saturator don't work	Call for service
Pump is working all the time	Level probes in saturator don't work	Call for service
Beverage is not exiting dispense tap	Water inlet line is closed	Open the water line
	CO2 Bottle is empty	Replace CO2 bottle
	Valve on CO2 pressure regulator is closed	Open the valve
	Level probe in saturator doesn't work	Call for service
Soda water is not enough carbonated	CO2 pressure to low	Adjust pressure
Dispensed beverage is warm or not tasting good	Too old beverage in system	Replace beverage and sanitize
	Tube and installation set is not sanitized	Repeat sanitation or call for service
Bottle of CO2 is emptying too fast		Call for service



INSTRUCTIONS FOR DEVICE DISASSEMBLING



Procedure of cooler disassembling must be done with compliance to legislation.

- Steel, plastic and other materials must be disposed by authorized person
- Isolation material must be disposed by authorized company and person

According to Legislation about Management of waste electrical and electronic device, and according to EU Legislation 2011/65/EU, symbol with waste disposal crossed can on equipment or package is stating that product should after use be disposed separately from other waste, connected to decreased use of dangerous substances in electronic and electrical equipment and adequate waste disposal. Separated collect and recycling of this equipment is decreasing possible negative effect on environment and health, and assures that some of the materials are being reused. Not authorized disposal of this product by user could cause apply of legal sanctions in accordance with current legislation.

