



OPREMA
UREĐAJI d.d.



UPUTSTVO ZA RAD
USER INSTRUCTIONS
GEBRAUCHSANWEISUNG
ИНСТРУКЦИЯ ПО ЭКСПЛУАТАЦИИ
И СОДЕРЖАНИЮ



OPREMA-UREĐAJI d.d. Ludbreg is the only manufacturer of dispensing and cooling units for beer, wine, water, soda-water and soft drinks in Croatia. In November 1998 the company was awarded the certificate EN ISO 9001:1994. The company was recertificated by RWTÜV and was awarded the **EN ISO 9001:2008** and **ISO 14001:2004** following the final Assessment Report. The Certificate is a proof that both structure and business activities are now in accordance with this standard. Our goal is to meet the demands and expectations of our customer as well as the expectations of the modern world market. Aware of the fact that only a stable system of Quality and Environmental management provides conditions for quality products, we constantly improve and expand it by implementing new insights and world experience. Furthermore certifying the quality system, OPREMA UREĐAJI d.d. has also (as for example the "GS" certificate) certified its products according to the requirements set for CE by the European Community.



Certificates by TÜV Products Service and VDE that already exist, are just another proof that in developing and producing our cooling and dispensing units we meet the criteria of the unified European standards and currently valid directives 89/336/EEC - Electromagnetic compatibility (EMC) and 73/23/EEC - Low voltage equipment (LVD). Regarding transition countries as well as our customers in Russia and Ukraine and other countries with specific legislation, our products have been certified according to CB. Participating in all major fairs specialized in beer coolers and pumps we aim to persuade our existing and potential future buyers that we follow the world trends regarding design and quality and that we are capable of manufacturing units according to the demands and expectations of our buyers within agreed time under optimal conditions.

The units' type **OKSI** and **BERG** are suitable for cooling and dispensing beverages in system premix. OKSI indicates OPREMIN KONZOLNI SISTEM ZA ISTAKANJE (Oprema's console system for beverages dispensing). The coolers types **BERG** are whole compact units and can be installed on the counter. They are also suitable for cooling and dispensing beverages in system premix. Premix system is a technology for cooling and dispensing beverages from distribution containers or kegs for beer which are under CO₂ pressure, immediately prior to consumption. Beverage is cooled by circulating inside of cooling coils submerged in a cooling bath.

The coolers types OKSI are composed of:

- cooling aggregate
- dispensing towers
- connecting elements
- the bottles for nutritive CO₂

The coolers types BERG are composed of:

- cooling aggregate with installed taps
- connecting elements
- the bottles for nutritive CO₂



USER INSTRUCTIONS

User instruction consists of installation and usage instructions. This instruction is an integral part of every cooler unit and it should always be with the cooler and also during every displacement or installation so that technical personnel could use it. Before installation and usage of cooler, you should carefully read this user instruction in which there are important informations for correct and safe use.

COOLER LABEL AND FEATURES

Every unit has its own identification number/code. This number is placed on the label "Technical identifications". Label with technical information is the only way to identify the cooler; on it there are useful informations about unit necessary for constructor / maintenance, for fast and easy identification.

TRANSPORT AND STORAGE

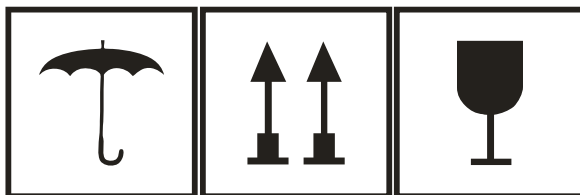
To avoid damage of cooler, it is important to handle carefully during loading and unloading.

Crane can be used for displacement of coolers when they are put on pallets.

- **do not turn the cooler**
- **do not shake the cooler or package**

Cooler must be stored in convenient and clean environment where temperature is between 0-40°C, and there should be no water or products remains.

Coolers can't be placed one on another, and allways must be in vertical position like it's shown on packing.



PACKAGE DISPOSAL

When cooler is unpacked, it has to be checked if it is in correct condition. If there is any doubt about environment protection inside of package, no installation or usage should be made. Package must be destroyed or removed according to the law regulations.

PROCEDURE IN CASE OF IRREGULARITY

Most of technical problems can be easily solved with simple interventions. For that purpose we ask you to carefully read this user instruction before you call maintenance service or producer. In case of impossibility to solve problem using this instruction, contact the company from which you have bought the cooler.



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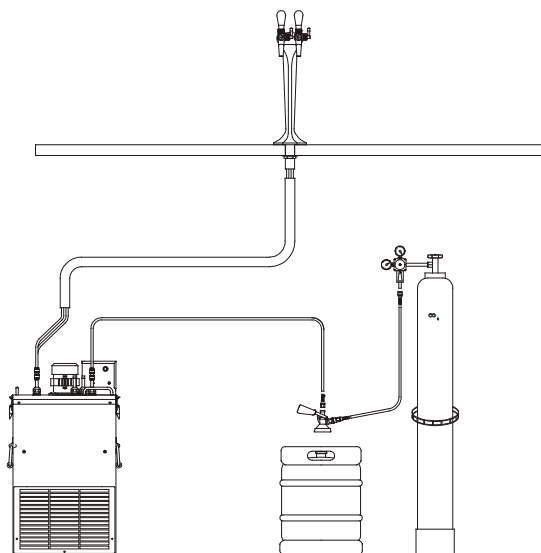
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POURING PROCEDURE

USE ONLY OPEN BOTTLES

This type of cooler must be used for pouring and selling drinks only in open bottles and glasses for immediate consumption. Poured products must be used immediately: you can't keep it in bottles. Any other way of consumption is inappropriate, and potentially dangerous for health. Producer disassociates it self from any damage as result of inappropriate use of the cooler.

POSITIONING



Cooling units is adoptable to every space, so the possibilities of placement are really high. Unit can be installed in open environment but only if it's protected from rainfall; and if it's placed in closed room, temperature must never be less then 2 or 3°C, and also where there is no water leakage. Unit must be properly set on flat surface with maximum lean of 2 degrees. During installation of integral version is necessary to provide enough air circulation around, i.e. 0,4 min front and behind the air enter and exit. Regarding the water coolers is necessary to provide a permanent water flow to cool and drainage the water. The heat exchanger would not be situated on the extremely low

temperatures places. Heat dump units have installed a thermometer to shut of the fan of the condenser when the temperature of a glycol inside the HD reach + 10 °C, but very low temperatures will cause the fall of condensing pressure what will effect on the function of a cooler. For all kind of coolers it is necessary to take care not to be close to any source of heat. The ambient temperature has a considerable influence on work of the cooling system, especially for the integral version. Generally the increase of the ambient temperature causes the fall of cooling efficiency. But the coolers should not be installed on the places with the ambient temperature bellow zero. The coolers are made with one phase el. cable, length of 3 m, and it is necessary to provide the grounded electric supply of 230 voltages, 50 Hz frequency. Deviation of the voltage should not be more/less than 10% of the prescribed value in order to avoid the damage of the electric components. The beer kegs and CO₂ bottles should be placed on the neighbouring room, cellar or some other assistant place.

INSTALLATION & SETTING

In accordance with current law regulation, installation and use of unit must be done by specialized and adequate trained technical personnel.

Operation and efficiency must be checked at least once a year by specialized technical personnel.



WARNING

During the installation the cooler should be disconnected from the el. grid until the installation and putting into function is complete. It is recommended not to start the cooler at least two hours after the installation had been made.

The installation procedure:

1. Install the CO₂ reducer on the bottle (the bottle should be closed)



2. Connect the CO₂ enter on the keg head.
3. Connect the product exit on the keg head
4. Connect the product coils with the dispensing tower
5. Connect the enter/exit of recirc. pipes by taking care to reduce maximally the length between the cooler and dispensing place. Recirculation line will serve as accompanying factor in the cooling of the beer. Check if exist a valve on the recirculation line, and whether is full open.
6. Regarding water coolers, connect the entrance of cooling tube with the water main as well as connect the exit in order to drain the warm water. Open the



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USER INSTRUCTIONS
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water valve. Until the cooling system does not start to work, the water will not pass through the tubes.

7. Regarding Heat Dump coolers connect the external heat exchanger with the basic cooler and fill the reservoir with glycol or some other liquid, which do not freeze under low temperatures (below 0°C). Connect the fan of the heat exchanger to the cooler. Check if all valves are open in order to provide the full flow.
8. Fill the water bath with the clean water.
9. Plug the cooler to the el. main. The cooling system will start to work, as well as the motor agitator and the fan .
10. Regarding the heat dump coolers, after few minutes check the remained quantities of glycol in the reservoir and refill it if necessary.
11. Open the CO₂ valve on the CO₂ bottle, check the pressure level not to be inside the red zone; change the CO₂ bottle if necessary.
12. Adjust the CO₂ pressure depends on the type of beer and instructions of the beer producer cca. 2,5 bars. If the beer keg is situated far from the cooler or under the cooler it is necessary to increase the pressure for 0.02 bars for each meter of additional length i.e. for 0.1 bars for each meter of high difference.
13. Pour few glasses of beer; simultaneously adjust the flow of dispensing, by using the compensator on the tap. The beer is still too warm, while it is necessary to pass 2-4 hours to make the ice reserve to cool the beer and to start with pouring. The required ice building time depends on the ambient temperature and the water temperature in the water bath, as well as the size of the ice bank necessary to be made for the certain capacity of cooler.



WARNING

**Keep ventilation openings in the appliance enclosure or in the built
– in structure, clear of obstruction.
- Do not damage the refrigerant circuit.**



OPREMA
UREĐAJI d.d.



UPUTSTVO ZA RAD
USER INSTRUCTIONS
GEBRAUCHSANWEISUNG
ИНСТРУКЦИЯ ПО ЭКСПЛУАТАЦИИ
И СОДЕРЖАНИЮ

MANIPULATION WITH THE COOLER

1. Open the main valve on the CO₂ bottle.
2. Control the fall of CO₂ pressure on the bottle and when is shown the red area on manometer, change the bottle
3. During the CO₂ bottle changing, wash simultaneously the keg head and connectors.
4. Close the CO₂ valve when not using the cooler.
5. Choose the regime of work Summer- winter, on the switch button, (for the coolers which have that option). In the summer mode the cooler creates the ice bank which assures the bigger dispensing power of cooler to pour the beer under 5 °C cold. In the winter mode of work, the water bath temperature is controlled and adjustable by the thermostat and no ice bank. Some coolers have mounted thermostat which operates in modus cold water-ice. You can adjust button in level 1-7 and choose working modus.



WARNING

The cooler is equipped with automatic control of the ice bank and should not be unplugged from the el. grid while the restaurant is closed. By water-cooled cooler, it should always have the water valve open to achieve desired quantity of water.

CLEANING AND MAINTENANCE

1. **Daily works**
Ordinary cleaning of taps and towers
2. **Monthly works**
Once a month change the water from water bath. Clean the cooler from outside, especially taking care on the condenser unit cleaning with brush. The dirty condenser causes a lower cooling efficiency of the cooler.



WARNING

When cleaning the cooler unplug it from the electric grid.



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UREĐAJI d.d.



UPUTSTVO ZA RAD
USER INSTRUCTIONS
GEBRAUCHSANWEISUNG
ИНСТРУКЦИЯ ПО ЭКСПЛУАТАЦИИ
И СОДЕРЖАНИЮ

3. System sanitation

Periodically sanitation has to be done by authorized service persons in order to keep the hygienic and high quality taste of cooled beer. Sanitation cycles are estimated by the beer producer. It is recommended to be done at least every three months.

Some components can be damaged during aggressive cleaning. Producer disassociates it self from any damage as result of impropriate cleaning of cooler (use of aggressive and toxic cleaners).



DISASSEMBLING INSTRUCTIONS

Disassembling procedure must be done in accordance with law regulations related to:

- steel, plastic and other materials should be put aside by authorized person
- insulation material must be removed by authorized companies and persons
- Gases must be removed with special equipment by authorized companies and persons. *Gas should never spread around in the room.*
- Symbol of crossed can means that product at the end of its life cycle must be put apart from other waste, related with decreasing use of dangerous substances in electrical and electronic devices, and also in accordance with adequate waste disposal. Individual collection and recycling of this equipment allow us to avoid negative effects on environment, and we can recycle and again use some of the parts. Unauthorized disposal of units by users can be penalized in accordance with current law regulations





TROUBLESHOOTING

TROUBLESHOOTING OF THE COOLING SYSTEM

Fault description	POSSIBLE REASON	Repair description
Compressor does not work	1. Full ice bank	1. When the cooler produces enough ice, the thermostat detects that and stops the compressor. Until the specific quantity of ice is spent, the compressor starts to work.
	2. Cooler disconnected from the electric Main supply	2. Connect the cooler.
	3. Electric connector of the cooling unit disconnected from the electric box	3. Connect the connector.
	4. To low voltage	4. Minimal acceptable voltage is 208 V.
	5. Disconnected or broken wire	5. Call the service assistance.
	6. Irregular compressor protection or failure of the compressor's condenser.	6. Call the service assistance.
	7. Irregular thermostat or electronics.	7. Call the service assistance.
	8. Irregular compressor	8. Call the service assistance.
	9. Activated the compressor's protection because of its overheating.	9. Call the service assistance.
Compressor work continuously, but does not make a sufficient ice bank	1. Overloaded the dispensing capacity.	1. Reduce the dispensing of drinks.
	2. The cooler is placed in too warm place or the air flow through the condenser of the cooler is reduced.	2. Remove the cooler on the cold place or, if necessary, clean the condenser.
	3. Not enough cooling media in the cooling system	3. Call the service assistance.



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USER INSTRUCTIONS
GEBRAUCHSANWEISUNG
ИНСТРУКЦИЯ ПО ЭКСПЛУАТАЦИИ
И СОДЕРЖАНИЮ

Motor agitator does not work	1.	To low voltage	1.	Minimal acceptable voltage is 208 V.
	2.	Disconnected or broken wire	2.	Call the service assistance
	3.	Irregular motor agitator	3.	Change the motor agitator.
	4.	Electric connector disconnected from the electric box	4.	Connect the electric connector to the electric box

Dispensing problems

Fault description	POSSIBLE REASON		Repair description	
The beverage does not flow from the tap	1.	The beverage is frozen in the coil	1.	Call the service assistance.
	2.	The dispense head is not properly fitted to the keg.	2.	Fit properly the dispense head
	3.	The keg is empty	3.	Change the keg
	4.	CO2 bottle is empty	4.	Change the bottle
	5.	Valve on CO2 bottle is closed	5.	Open the valve
	6.	Insufficient pressure in the keg	6.	Set up the pressure again
The beverage flows too slow from the tap	1.	Compensator of the tap is halfway open	1.	Turn the wheel in opposite direction of the watch hand
	2.	Dispense head is not properly fitted to the keg	2.	Fit the dispense head
	3.	CO ₂ pressure too low	3.	Set up the pressure again (empty bottle?)
Dispensed beverage is too warm	1.		1.	Call the service assistance
Dispensed beverage has bad taste	2.		2.	Call the service assistance
The beverage is clear but with too much foam	1.	The glass is too warm	1.	Cool the glass
	2.	Irregular dispense technique	2.	Use the regular technique
Irregular sudden foam exit	1.	Dispense head is not properly fitted to the keg	1.	Fit the dispense head
	2.	The keg is almost empty	2.	Change the keg



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ИНСТРУКЦИЯ ПО ЭКСПЛУАТАЦИИ
И СОДЕРЖАНИЮ**

The foam crown is not lasting	1.	The residue of the greasiness or the cleaning solution in the glass.	1.	Clean the glass properly and rinse the glass with water.
	2.	Keg is too old	2.	Change the keg
Tap is leaking	1.		1.	Call the service assistance
CO ₂ bottle is emptying too fast	2.		2.	Call the service assistance