

# **INSTRUCTION MANUAL**

# UNDERCOUNTER COOLERS LINDR

**ENGLISH** 

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**MODEL CWP 300 4 PUMPS GREEN LINE** 

MODEL CWP 300 4 PUMPS WITH DIGITAL THERMOSTATS GREEN LINE

LINDR.CZ S.P.O. Chladicí a výčepní technika



### CZECH UP YOUR BEER COOLING AND DISPENSING SYSTEMS

#### **IMPORTANT**

This manual contains instructions for installation, use and operation of the appliance. This manual is an integral part of the device. It must be stored in the vicinity of the device for the entirety of its service life and must be made available to the user any time the device is installed, moved, used or maintained. Read this manual carefully before installing and using the device. It contains important information for its correct and safe use.

This manual is a translation of the original Czech manual.

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#### **SYMBOLS AND MARKINGS USED IN THE MANUAL:**



#### **WARNING:**

Not following instructions may cause injury or damage the device.



#### **DANGER:**

Risk of injury by electrical current.



#### **NOTE:**

This symbol indicates information and recommendations for the user.



#### **WARNING:**

The cooling system contains flammable coolant R290 (propane)!



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#### 1. INTRODUCTION:

Thank you for purchasing this LINDR product.

### 2. DESCRIPTION OF THE COOLER: CWP 300 4 PUMPS GREEN LINE:

Professional device, whose unique design properties are designed for after-cooling of double-walled tanks, plate heat exchangers or for winemakers to control fermentation and freezing of wine.

The model is equipped with a drain valve, which allows you to drain water from the device easily and a watermark to see the level.

#### 3. MACHINE PLATE:



# 4. GENERAL INSTRUCTIONS, MEASURES AND SAFETY INSTRUCTIONS:

When using the device, follow basic safety instructions stated by the manufacturer. The device is designed for flow-through cooling of coolant for technological processes. Any other use is considered impermissible and therefore dangerous. The supplier is not liable for damage caused by incorrect use.

# DO NOT USE THE DEVICE FOR PURPOSES OTHER THAN THOSE STATED BY THE MANUFACTURER!

General safety principles. Observe the following safety instructions.

The supplier is not liable for damage caused by activities carried out on this device without observing the following instructions!

**WARNING:** Children must not be allowed to play with the appliance. Store all packaging material out of reach of children (comes with a plastic bag – suffocation hazard).

**WARNING:** Cleaning and maintenance of the appliance by the user must not be done by unsupervised children.

**WARNING:** Before connecting to main electrical supply, check that the voltage and frequency in the mains corresponds to the data stated on the device.

**WARNING:** Always make sure the power socket the cooler is plugged into meets the specifications on the machine plate (voltage, frequency, input power).

**WARNING:** Before any interference with the device, such as cleaning or maintenance, ALWAYS disconnect the device from power supply: set the switch to the "O" position and unplug the appliance from the socket.

**WARNING:** Never place tools or other object into the fan.

**WARNING:** : Never touch electrical components with wet or damp hands.

**WARNING:** To ensure the cooling unit works properly and at full capacity, make sure air supply to the unit is not obstructed.

**WARNING:** Always make sure the power socket you intend to plug the cooler into is accessible, so that the appliance can be immediately unplugged in case of emergency.

**WARNING:** When unplugging the device from the socket, grab the plug and pull it out. Do not under any circumstances pull at the cable; risk of damage.

**WARNING:** To turn the device off completely, unplug the appliance from the power socket.

**WARNING:** In the event the electrical wiring of the product becomes damaged, summon a trained service technician. Do not under any circumstances repair the device yourself

⚠ WARNING: The cooling system contains flammable coolant R290 (propane)!



**WARNING:** Emergency maintenance and repair of the cooling system must be done by trained, authorised technicians familiar with cooling and electrical systems. The technicians should have special training and qualification for handling flammable substances in order to perform service on coolers containing R290. Follow basic regulations and safety measures regarding service and repair!

**WARNING:** Do not use open flame or potential sources of sparks in the vicinity of a cooler using **R290** coolant!

**WARNING:** After unpacking, place the cooler so that heat created by the cooling unit can be vented sufficiently.

**WARNING:** Do not place objects that could prevent air circulation on top of the cooler.

#### *5. INSTALLATION AND PLACEMENT:*

Place the cooler onto a stable, level surface (maximum permitted inclination: 2 degrees). The appliance requires unobstructed air circulation.

- Ensure sufficient free space for air circulation and heat dissipation.
- Ensure sufficient supply of fresh air.
- The device must not be placed in an enclosed space.
- The device must not be placed in the vicinity of heat sources or exposed to direct sunlight.

Minimum required distance of vents from an obstacle that prevents air circulation is 50 cm. In places where the device has no vents, the minimum distance from an obstacle is 7 cm. Ideally, use the device in a cool and well ventilated room. The device is designed for use at ambient temperature of at least 16 °C and at most 32°C.

WARNING: The device MUST NOT be used or stored at ambient temperature lower than 0 °C. The device is designed for use in a normal environment, always indoors, protected from rain or sunlight. Climate class N.

**DANGER:** Protect the cooler and the electrical connection from rain and spraying water!

**WARNING:** Do not under any circumstances lay the cooler on its side, not even during transport.

**NOTE:** In order for the device to work correctly and at maximum output, it is important to not cover up any of the device's vents and ensure sufficient air circulation.

#### 6. ELECTRICAL CONNECTION:

Connect the device to a power socket in accordance with specifications on the machine plate of the device. Electrical wiring is subject to local regulations. If the power leads (cables) are damaged, they must be replaced by the manufacturer, their service technician or a similarly qualified person to prevent risk of hazardous situations

## A DANGER: Do not use or turn on the device if the power lead (cable) is damaged!

#### 7. TESTING:

The product is delivered ready for immediate use.

#### 8. WARRANTY:

The device comes with a warranty in accordance with general legal regulations of the Czech Republic or in accordance with the trade agreement. During the validity period of the warranty, we will remove any defects on the product free of charge, provided these defects were not caused by excess wear, improper handling, incorrect storage or by using the

product in a way that is counter to the instruction manual or the product's design as defined by the manufacturer. Materials replaced during the validity period of the warranty are our property. The legitimacy of the warranty claim is always decided by an authorised service centre. Warranty provided by a retailer outside of the territory of the Czech Republic is governed by the agreement between the retailer and the buyer in their mutual relationship; this agreement is not directly linked to the manufacturer. The agreement does not give the buyer the right to submit warranty claims to the manufacturer. Transport expenses or other costs are not covered by the warranty.

#### **ATTENTION:**

Electrical devices and appliances must be checked/inspected at a time stipulated by valid legislation of the country the device is operated in. Inspection of wiring may only be done by a person with valid authorisation for this activity. Service work, provision of spare parts and inspection is done by the manufacturer or an authorised service centre.

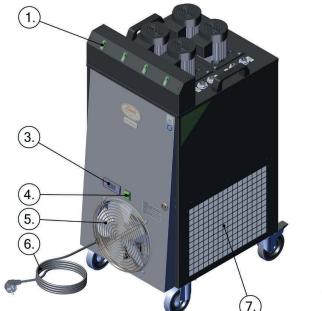
#### 9. DESCRIPTION OF THE DEVICE:

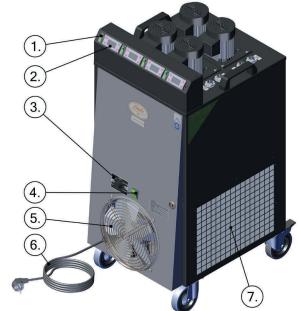
Pump switch (4x)	8.	Pump socket (4x)
Thermostat for pump (4x)	9.	Water outlet (4x)
Thermostat for device	10.	Water input(4x)
Device switch	11.	Pump (4x)
Fan	12.	Overflow
Power cable	13.	Lever indicator (drain)
Condensor	14.	Temperature probe (4x)
	Thermostat for device  Device switch  Fan  Power cable	Thermostat for pump (4x) 9. Thermostat for device 10. Device switch 11. Fan 12. Power cable 13.

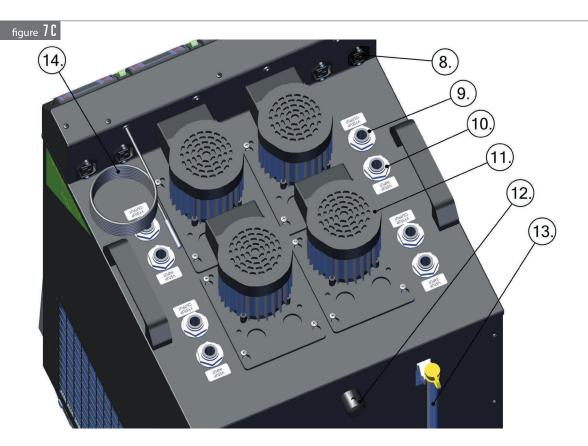
Model: CWP 300 4 PUMPS Green Line
1x thermostat

figure **7B** 

Model: CWP 300 4 PUMPS Green Line with digital thermostat







#### 10. PUTTING INTO OPERATION:

- 1. Connect the cooling device to double-walled tanks, cooling coils or plate heat exchangers (see picture no. 11 A Connection diagram of the cooler with tanks).
- NOTE: For connection use only the fittings and clamps specified by the supplier. Use calibrated hoses.
- 2. Place the temperature probes in places where you want to meassure the temperature.
- 3. Fill the plastic tank with water without any chemical treatment right up to overflow. Use the watermark to check the level in the plastic tank. Keep the level within MIN/MAX.
- 4. Connect the pump cable to the pump socket.
- 5. Before connecting the main power supply, make sure that the voltage and frequency corresponds to the data on the rating plate located on the left side of the chiller. If the data agrees, connect the device to the mains.
- 6. Press the main switch to position (I) to turn on the cooling unit.
- 7. Using the thermostat, which is located on the door of the device, set the temperature of the water bath in the plastic tank to your desired temperature and leave for about 30 - 40 min. to cool down.
- 8. Press the switch on the body to position (I) to switch on the pump, which starts with a delay of five seconds. The digital thermostat, which monitors the temperature in the external vessels, sets the temperature according to points 12. and 13.

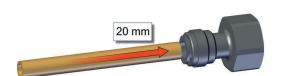
**WARNING:** If you discover a leak, turn off the device. Fix any leaks found on the tubing. If a leak is found inside the device or you are unsure how to proceed, contact a service centre.

#### 11. HOW TO WORK WITH SPEED FITTINGS:

#### 11.1 Speed Fittings Installation:

figure 8B

Grasp the speed fitting and insert the hose all the way inside the speed fitting body (ca. 20 mm). The end of the hose must be straight so that it plugs fully into the coupling. If the hose will not go in, moisten the end of the hose.



#### 11.2 Speed Fittings Removal:

figure  $8\,C$ 

Hold the grey ring tight against the body of the speed fitting and pull out the hose.



**MARNING:** If you do not hold the grey ring but pull at the hose, the speed fitting will cut even deeper into the hose.

**MARNING:** Hoses must not be pressurised during removal.

#### *12. STC 200 THERMOSTAT:*

figure 9 A



#### **Displaying Set Temperature:**

- 1. Short-press the SET button. The display will show the set value.
- 2. To return the display to the current temperature, again short-press the SET button or wait 5s.

#### **Changing Set Temperature:**

- 1. Hold the SET button for more than 2 s.
- 2. The set temperature will be displayed and the °C indicator will begin flashing.
- 3. The set temperature can be changed by pressing  $\forall$  or  $\land$  (within 10 s).
- 4. The newly set temperature can be saved by pressing the SET button again or automatically by waiting 10 s.

**NOTE:** The temperature in double-walled tanks, external vessels is controlled by digital thermostats (CWP 300 4 PUMPS Green Line with digital thermostats), which are located on the chiller body. Set the required temperatures on the thermostats for individual double-walled tanks, external vessels.

#### 13. MECHANICAL THERMOSTAT:

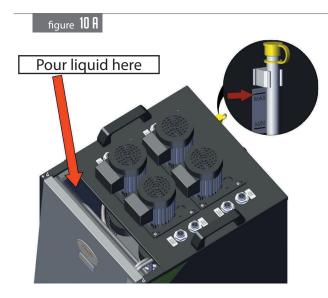
Cooler temperature **CWP 300 4 PUMPS Green Line with digital thermostats** is controlled by a mechanical thermostat, which is located on the radiator door and monitors the water bath temperature in the range of  $0 - 12\,^{\circ}$  C.

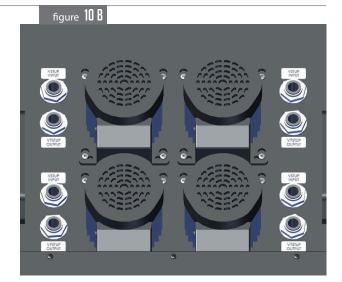




#### 14. PLASTIC TANK FILLING AND CONNECTION WITH BEER TANKS:

- Fill the plastic tank with liquid without chemical additives up to the MAX mark.
- Connect the device to the tank using the speed fittings.



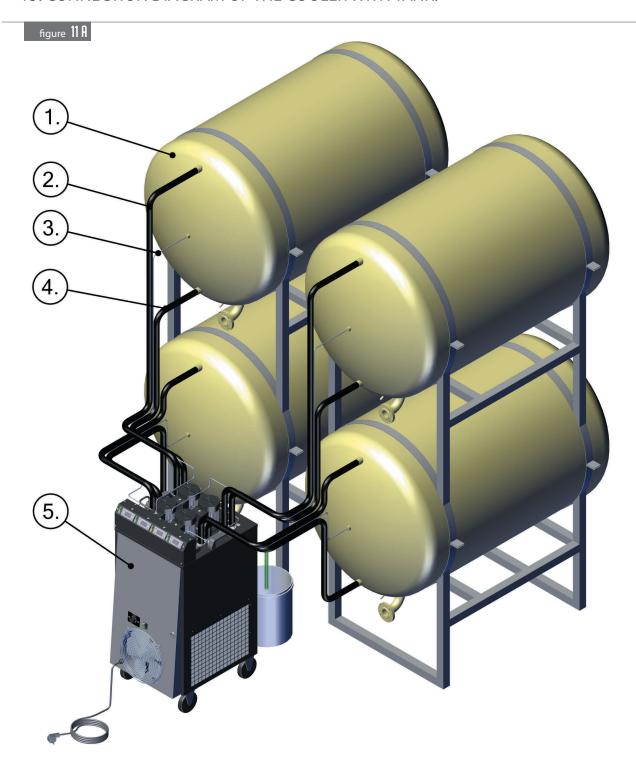


**WARNING:** When the pumps are switched on, the water from the plastic tank will be pumped into the external tank circuit, therefore it is necessary to add water to the plastic tank before the circuit is completely filled.

**WARNING:** Do not tamper with or move the device while it contains water. Doing so could result in water overflowing from the tank.

**NOTE:** In the temperature range -6 to 0 ° C it is necessary to use an antifreeze solution. We recommend using an ecological antifreeze liquid based on monopropylene glycol, which is suitable as a heat transfer fluid for all heating or cooling systems.

#### 15. CONNECTION DIAGRAM OF THE COOLER WITH TANK:



- 1. Double-walled tank
- Hose 12,7mm + insulation, input from the tank to the double-walled tank 2.
- 3. Temperature probe 6m
- Hose 12,7mm + insulation, output from the tank to the cooling device 4.
- 5. Cooling device CWP 300 4x pump



#### 16. CLEANING THE CONDENSER:

The condenser must be cleaned with compressed air 1x a month. Alternatively, clean with a brush.



figure 12 B

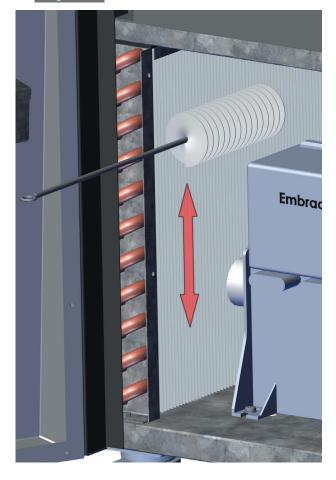
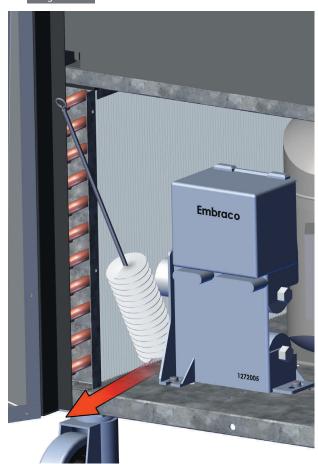


figure 12 C



**WARNING:** The condenser must only be cleaned by professional personnel and at least 1x a month by brushing or by compressed air.

**DANGER:** The appliance must be disconnected from power supply before any intervention in the device. Risk of injury by electrical current.

#### 17. INSPECTION BEFORE EVERY USE:

- 1. Visual check.
- 2. Lead-in cable check.
- 3. Condenser cleanliness check (in case of excess pollution of the condenser, clean more frequently than 1x a month).
- 4. Inspection of water level.



WARNING: Do not use the device if defects or malfunctions are found.

#### 18. PERIODIC CHECKS:

- ✓ 1x day: check the water level in the tank.
- ✓ 1x a week: check that the lead-in cable is undamaged and that the plug is firmly in the socket.
- ✓ 1x a week: check that the device is not exposed to radiant heat.
- ✓ 1x a week: check that air circulation is not obstructed.
- ✓ 1x a month: check the cooling unit's condenser and clean it regularly.
- ✓ 1x a month: check water purity in the device (cooler tank), or change it if necessary.
- ✓ 1x a year: have an engineering inspector. check the electrical safety of the device.

#### 19. MAINTENANCE:

The condenser must be checked for cleanliness every month. Any dirt found must be cleaned with compressed air or wiped off. Otherwise, there is a risk of reduced cooling output or damaging of

Wipe the device only with a soft and, if needed, lightly moistened cloth.

#### 20. ENVIRONMENTAL PROTECTION:

#### **Waste Sorting:**



This product must not be disposed of in communal waste. Electrical waste in the Czech Republic is disposed of within the Rema System (www.remasystem.cz).

#### In countries other than the Czech Republic, waste sorting is subject to local regulations.



Sorted waste enables recycling and reusing used products and packaging materials. Reuse of recycled material helps protect the environment from pollution and reduces resource consumption. Local regulations may regulate the method of disposing household appliances at local collection points or at the point of sale.





#### 21. TABLE OF MALFUNCTIONS:

Malfunction	Cause	Removal	
The device is too noisy.	The device is in contact with a foreign object.	Move the object that is touching the device so that it is not in contact with the cooler.	
	There is a sunken foreign object in the fan compartment.	Remove the object from the fan compartment.	
The device does not work.	Power cable is not plugged in.	Plug in the power cable. Check that the power cable is undamaged.	
	The main switch is not turned on or the therostat is incorrectly set.	Turn on the main switch and set the thermostat to the desired value.	
The device is turned on but does not cool.	The air vents are obstructed.	Make sure the air vents are unob- structed	
	The device has a dirty condenser.	Remove coarse dirt and dust by wiping.	
Speed fittings.	Hose poorly inserted.	Unplug the hose from the speed fitting and check that it does not have a sharp edge.	
	Scratches on the hose.	Shorten the hose with a knife if necessary.	

**NOTE:** If the defect persists even after the above steps are taken, contact a service centre.

### Do not forget to specify the following:

- type of defect
- type of product
- production year
- product's serial number (found on the plate)

### **Ordering Components:**

ALWAYS USE ORIGINAL COMPONENTS. The manufacturer or supplier bear no responsibility for non-original components or components not recommended by the manufacturer.

#### 22. SPARE PARTS:

When ordering spare parts, always provide the following:

- product type
- production year
- product's serial number

#### 23. TECHNICAL DATA:

Name		CWP 300 4 PUMPS Green Line	CWP 300 4 PUMPS Green Line with digital thermostat
Power	(Hp)	1	1
Power	(W)	2300	2300
Maximum output	(l/hour)	200	200
Continuous output	(l/hour)	180	180
Temperature difference	Δt (°C)	10	10
Coolant type		R290	R290
Voltage	(V/ Hz~1)	220 – 240 V 50Hz~1	220 – 240 V 50Hz~1
Input power (W)	(W)	1380	1380
Current (A)	(A)	6	6
Frame dimensions	(WxDxH mm)	420x520x920	420x520x920
Net weight	(kg)	53,5	54,5
Water tank volume	(I)	30	30

