
WAECO
mobile solutions



WAECO CoolFun
CA-35
3-way Absorption Cooler



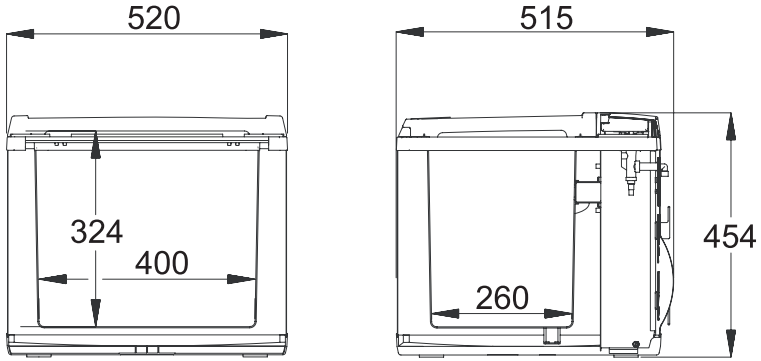
Instruction Manual

Please read this manual carefully before starting the machine. Keep it in a safe place for future reference. If the device is resold, this operating manual must be handed over to the purchaser along with the device.

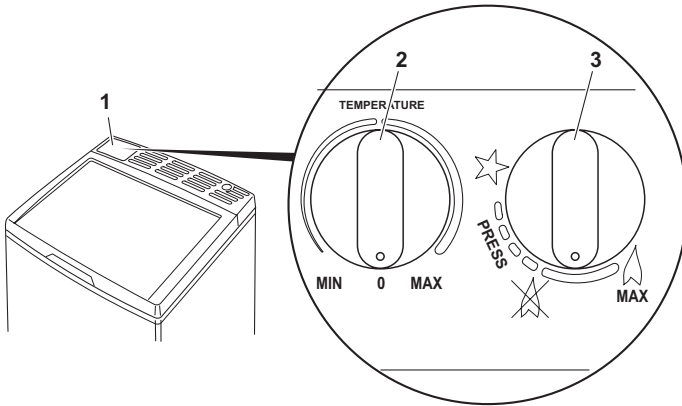
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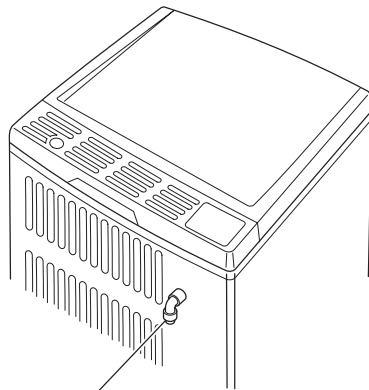
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2



3



1 Thread RH 1/4" BSP

1 Notes on using the instruction manual

The following symbols are used in this instruction manual:



Caution!

Safety instruction: failure to observe this instruction can cause injury or damage the device.



Caution!

Safety instruction: relating to a danger from an electrical current or voltage. Failure to observe this instruction can damage the device and impair its function and cause injury.



Note:

Supplementary information for operating the device.

- **Action:** this symbol indicates that action is required on your part. The required action is described step-by-step.
- ✓ This symbol indicates the result of an action.
- 1 5, page 3:** this refers to an element in an illustration. In this case, item 5 in figure **1** on page 3.

Please observe the following safety instructions.

2 Safety instructions

2.1 General safety



- Do not operate the device if it is visibly damaged.
- Do not damage the cooling system.
- Do not place any electrical devices inside the cooler.
- Ensure that the ventilation slots are not covered.
Keep to the following distances:
 - a gap of at least 10 cm at the rear
 - a gap of at least 5 cm on either side
- The cooling device is not suitable for transporting caustic materials or materials containing solvents.



- Pull out the connection cable or disconnect the hose connection
 - Before cleaning and maintenance
 - After use
- This device may only be repaired by qualified personnel.
Inadequate repairs can lead to considerable hazards.

2.2 Operating the device safely



- **Electronic devices are not toys.**

Always keep and use the device well out of the reach of children.

- **Danger of fatal injury.**

Do not touch exposed cables with your bare hands. This especially applies when operating the device with an AC mains power supply.

- Never immerse the device in water.
- Never expose the device to rain or moisture.
- Protect the device against splashing water.
- Protect the device and the cable against heat and moisture.



- Only use the device in well ventilated areas.

- The device may give off a smell for a short time when it is first operated.

- Only operate the device from a **single energy source**.

- Do not place the device near naked flames or other heat sources (heaters, direct sunlight, gas ovens etc.).

- Do not fill the inner container with ice or fluid.

- WAECO cannot be held liable for damage resulting from improper usage or incorrect operation.

2.3 Operating the device safely with 12 V DC



- The cable between the battery and the cooler must be protected by a fuse of max. 15 A.

- Only use cables with the corresponding cable cross section (see the table on page 9).

2.4 Operating the device safely with 220 V – 240 V



- Only use the connection cable supplied to connect the device to the AC mains.

- Never pull the plug out of the socket by the cable.

- If the cable is damaged, it must be replaced by a cable with the same technical specifications to prevent possible electrical hazards.

- Before starting the device, ensure that the power supply line and the plug are dry.

- Check that the voltage specification on the type plate corresponds to that of the energy supply.

2.5 Operating the device safely with gas



- Only operate the device with gas **outdoors**.
- Do not use gas to operate the device in cars, boats or enclosed spaces.
- When using the device in tents, awnings and on level patios, ensure that there is sufficient air circulation and ventilation.
- Never place the device near flammable materials (paper, dry leaves, textiles).
- Compare the pressure information on the type plate with the pressure information on the LPG gas cylinder.
- Never store liquid gas cylinders in unventilated areas or below ground level (funnel shaped holes in the ground).
- Keep liquid gas cylinders away from direct sunlight.
The temperature must not exceed 50 °C.

3 Scope of delivery

Quantity	Description
1	Cooler
1	Tray with cover for making ice cubes
1	Instruction manual

4 Intended use



The cooler is suitable for cooling foodstuffs and making ice cubes in the tray provided. The device is also suitable for camping.



Caution – When cooling perishable medicines!

If you wish to cool medicines, please check if the cooling capacity of the device is suitable for the medicine in question.



The cooler has been designed for operation with a 12 VDC voltage source (e. g. the cigarette lighter of a vehicle) or alternatively for operation with a mains voltage of 220 – 240 V AC.



The cooler can be operated independently of a voltage supply with liquid gas (LPG).

5 Technical description

The cooler is suitable for use when camping, on a patio, in the garden, or anywhere where a 12 V DC power connection (such as the cigarette lighter in a vehicle) or a 220 V – 240 V mains voltage is available. You can also operate the cooler with liquid gas.

You can cool goods to up to 25°C below ambient temperature.

The device cools with a maintenance-free absorption circuit. Concentrated ammoniac solution is heated in a boiler and then driven out in gaseous form.

The gas which is subjected to high pressure, is liquefied in a condenser and then evaporated by adding hydrogen. This removes heat from the cooling area.

6 Operating the cooler



Before starting your new cooler for the first time, you should clean it inside and outside with a damp cloth for hygienic reasons (please also refer to “Cleaning and maintenance” on page 11).

Food may only be stored in its original packaging or in suitable containers.

6.1 Energy saving tips



- Choose a well ventilated installation location which is protected against direct sunlight.
- Allow food to cool down first before placing it in the device.
- Do not open the cooler more often than necessary.
- Do not leave the lid open for longer than necessary.
- Arrange the food in the cooler so that air can circulate inside.

6.2 Using the cooler



Cool the cooler for about 24 hours before starting your journey using gas or electricity from the mains. This way your cooler will attain the required cooling capacity faster when you reach your destination.

The cooling capacity can be influenced by:

- The ambient temperature
 - The amount of food to be conserved
 - The frequency with which the lid is opened.
- Place the cooler on a firm and level base.
- Check the horizontal position ($\pm 2^\circ$) with a spirit level if necessary.
- Open the lid of the control panel (2.1, page 4) by pressing down on it. Press down on the lid again to close it.



Ensure that the objects placed in the cooler are suitable for cooling to the selected temperature.

Ensure that food or liquids in glass containers are not excessively refrigerated. Liquids expand when they freeze and can thus destroy the glass containers.

Connecting to 220 V – 240 V



Check that the voltage specification on the type plate corresponds to that of the energy supply.

- Plug the earthed plug into a properly installed safety plug socket.
- Set the thermostat control (2.2, page 4) to “MAX”.
- Wait until the temperature in the cooler has dropped.
- Set the thermostat control (2.2, page 4) to the desired temperature range.
- To **switch off** the cooler, set the thermostat control (2.2, page 4) to “0” and pull out the plug.



Connecting to 12 V DC

You cannot set the temperature with the thermostat control during battery operation. The device is simply switched on and starts cooling. Disconnect the cooler from the battery when the engine is not running as otherwise the battery will be completely run down.

- Make sure that the cable from the battery to the cooler is protected by a fuse (max. 15 A).
- Select a cable cross section for the cable between the battery and the socket of the 12 V voltage supply in accordance with the following table:

Cable length	Cable cross section
Up to 2.5m	2.5 mm ²
2.5 m to 4.0 m	4.0 mm ²

- Make sure that the thermostat control for 220 V – 240 V operation (**2** 2, page 4) is in the “0” position.
- Insert the plug of the connection cable into the 12 V socket (e.g. cigarette lighter). The polarity cannot be reversed.
- To **switch off** the cooler, pull the plug out of the socket.




Connecting to a gas source

Only use LPG gas bottles with an approved pressure regulator fitted. Compare the pressure information on the type plate with the pressure information on the gas cylinder.



The device is fitted with a pilot light. The gas supply is interrupted when the flame goes out.

- Position the gas bottle vertically at a distance of at least 1 metre away from the burner (on the back of the cooler).
- Check if the valve on the gas bottle is closed.
Only use approved hose lines (regulated to 2.75kPa) with a maximum length of 1.5m.
- Connect the hose line to the head of the valve on the gas bottle and the cooler (**3** 1, page 4).
The thread required is RH 1/4" BSP
- Make sure that the hose line
 - Is not crushed or kinked
 - Is a safe distance from the burner.
- Open the valve on the gas bottle.
Never check for leaks with an open flame or near sources of ignition.
- Check all connections with a leakage test spray.
There are no leaks if no bubbles form.

- Ensure that
 - The thermostat control for 220 V – 240 V operation (2 2, page 4) is in the “0” position
 - The battery plug is not connected.
- Press in the rotary switch (2 3, page 4) and hold it in for approx. 10 s to force out any air in the hose connection.
- Turn the rotary switch (2 3, page 4) towards “”.
- ✓ You will hear a clicking noise: the Piezo ignition is trying to light the flame. When the flame is burning, the cooler is ready for use.
- If the flame does not ignite, repeat the procedure.



Tip!

If it is not possible to light the gas with the Piezo lighter due to high air humidity, you can light the gas burner with a match at the opening in the back panel of the device when the rotary switch is pressed in.

- Check that all hose lines and all connections are in a technically perfect condition at regular intervals.
- To **switch off** the cooler, first close the valve on the bottle and then turn the rotary switch (2 3, page 4) completely shut in a clockwise direction.

Replacing the gas bottle



Only change the gas bottle in well ventilated areas.

Make sure that there are no sources of ignition in the vicinity.

Only change the gas bottle when the cooler is switched off.

- Switch off the cooler by completely shutting the rotary switch (2 3, page 4) by turning it clockwise.
 - Completely close the valve on the gas bottle.
 - Unscrew the valve from the bottle.
 - Check the condition of the hose line.
- Replace the hose line if the material is brittle or porous.
- Screw the pressure regulator tightly onto the new bottle.

Defrosting the cooler

Humidity can form frost in the interior of the cooler. This reduces the cooling capacity. Defrost the device in good time to avoid this.



Caution!

Never use hard or pointed tools to remove ice or to loosen objects which have frozen in place.

- To defrost the cooler, proceed as follows:
- Take out the contents of the cooler.
 - Place them in another cooling device to keep them cool, if necessary.
 - Switch the cooler off.
 - Leave the cover open.
 - When everything has defrosted, empty the cooler and wipe it out.

Switching off and storing the cooler

If you do not intend to use the cooler for a long time, proceed as follows:

- Switch the cooler off.
- Disconnect the power supply or the hose line to the gas bottle.
- Clean the cooler (see "Cleaning and maintenance" below).
- Leave the cover slightly open. This prevents odours from building up.

7 Cleaning and maintenance



Caution!

Before cleaning the cooler disconnect the power cable or the hose line.



Caution!

Do not clean the cooler under running water or in dish water.



Caution!

Do not use abrasive cleaning agents or hard objects during cleaning as these can damage the cooler.

- Clean the interior of the cooler with a damp cloth from time to time.
- Clean the exterior of the device with a damp cloth.

8 Disposal

8.1 Disposing of packaging material

Do not simply throw the packaging materials away. Please observe the following instructions:

- Place cardboard and plastic packaging in the appropriate recycling waste bins.
- Ask your local authority for the location of the recycling centre closest to you.

8.2 Disposing of the device

If you wish to finally dispose of the device, take it to the nearest recycling centre or return it to your specialist dealer who will be happy to take it back for a small fee.




9 Troubleshooting

In the event of malfunction, please check the following:

Fault	Possible cause	Suggested remedy
The cooler does not work.	The cooler is not properly connected to the electricity supply.	<p>Check if the voltage supply is in full working order.</p> <p>Check if all electrical contacts are in full working order.</p> <p>Check if the voltage supply corresponds to the value on the type plate.</p> <p>Check if the thermostat control is switched on.</p> <p>Check if several energy sources are connected at the same time.</p>
	The cooler is not properly connected to the gas.	<p>Check if the gas supply is in full working order.</p> <p>Check if the valve on the gas bottle is open.</p> <p>Check if there is still gas in the bottle.</p> <p>Check if several energy sources are connected at the same time.</p> <p>Hold the rotary switch down longer when igniting.</p>
	The cooler has not been set up properly.	<p>Check if the device is horizontal.</p> <p>Check if the ventilation of the device is sufficient.</p>
	The cooler has not been filled properly.	<p>Check if warm food has been put into the device.</p> <p>Check if the cooling space has been overfilled or packed too densely.</p>
	The refrigerant circuit is defective.	This can only be repaired by an authorised customer services unit.
The cooler does not start up after a long period of inactivity.	-	<p>Disconnect the device from the energy supply and turn the cooler upside down and wait around five minutes.</p> <p>Turn the cooler the right way up again and switch it on again.</p>

10 Technical data

Product Code: CA-35-12240PB37

Capacity:	35 L
Gas consumption:	12 g/h
Connection pressure:	2.75kPa
Connection to 220 V – 240 V	
Power consumption:	72 W
Current consumption:	0.3 A
Connection to 12 V	
Power consumption:	72 W
Current consumption:	6.1 A
Cooling temperature range:	Up to 25 °C below ambient temperature
Weight:	approx. 19.5 kg
Testing/certification:	   Cert. No. 6903 APP. No. Q051941

This device is CFC-free.

This device carries the AGA symbol to indicate tested and proven safety.

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