Operating Instructions

for RoMatik 160, 210, 420

Winterhalter Gastronom GmbH
Winterhalterstraße 2–12
D-88074 Meckenbeuren
Telefon 07542/402-0
www.winterhalter.de
info@winterhalter.de

89011330-04/2022-01

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for Winterhalter Gastronom RoMatik 160, 210, 420

Contents

1 Intended purpose

The Winterhalter Gastronom RoMatik is designed to demineralise cold water (max. 25°C) for subsequent use in commercial dishwashers.
The RoMatik may only be used for this purpose, and in accordance with the operating instructions provided. We cannot accept any warranty or product liability in the event of a change in the use or design of the RoMatik without our written consent.

2 Safety instructions

The RoMatik is safe to operate provided the following safety instructions are followed:

- Start-up may only be performed by an authorised Winterhalter service engineer.
- The RoMatik may only be connected to a dishwasher.
- The raw water must conform to the requirements of your relevant national drinking water authority. At the very least, the threshold values specified in Section 10 must be complied with.

- The device may only be operated as described in these operating instructions.
- Do not use the device until you have read and understood the operating instructions, and have been briefed in person on its workings and operation.
- Danger of electric shock: do not open any outer coverings if a tool is required for this purpose. Do not interfere with the electrical equipment of the device yourself, but always consult a specialist (electrician).
- The RoMatik must be connected to the cold water supply (max. 25°C).
- Faults which cannot be traced to the on-site water or power supply should be reported to Winterhalter customer service.
- Stop the water supply immediately if a leak occurs anywhere in the device. Unplug the device at the mains to disconnect it from the power supply.
- The RoMatik must be installed in a frost-protected location.
- The RoMatik may only be installed in rooms with a floor drain.
- Take care not to trap any hoses or cables when moving or cleaning the device.

3 Terminology

The following technical terms are used in these instructions:

Raw water
Water from the mains drinking water supply.

Membrane
The raw water is forced through the membrane in order to rid it of minerals and salts.

Permeate
Demineralised water produced by the RoMatik which is fed into the integrated storage tank and used for the dishwasher.

Concentrate
Water containing the minerals and salts extracted from the raw water. From time to time, the RoMatik flushes out concentrate automatically in order to clean the membrane of mineral and salt deposits.

4 Installation and connection

Get a certified fitter to connect the RoMatik to the drinking water supply according to the locally applicable regulations, then get an authorised Winterhalter service engineer to put it into operation.

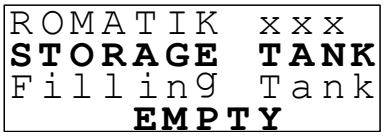
5 Operating the device

To enable the device to produce permeate, it must be permanently connected to the power and water supplies and switched on. The built-in bypass function also allows it to run without power, however, e.g. in case of a fault or power failure. Please note that this will affect the washing results of the connected dishwasher since only raw water is circulated, without the production of permeate.

Switching on

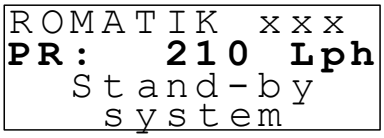
- Remove the cover.
- Switch on RoMatik.
  - ➢ RoMatik starts permeate production.

Display on the screen



When the RoMatik is first switched on, the storage tank into which the permeate is produced is still empty.

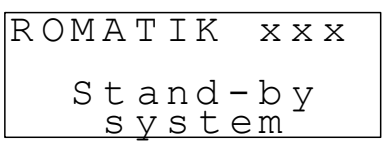
STORAGE TANK EMPTY = storage tank is empty
Filling Tank = storage tank is being filled



Display after a complete production cycle if the connected warewasher has not requested water during this time.

PR: 210 Lph = production volume in litres per hour (sample value).

If water was requested during the production cycle, the following display appears:



6 Extended idle periods (maximum 6 months)

Shutdown

- Switch the RoMatik off with the on/off switch and unplug it from the mains.
- Do **not** empty the storage tank as otherwise the membranes will dry out.
- Store the RoMatik in a cool (between 5 and 10°C), dark, frostproof place for a maximum of 6 months

Start-up

To start the RoMatik up again after an idle period, proceed as follows.

- Connect the RoMatik to the mains and switch it on with the on/off switch.
- Execute a few programs with the dishwasher to empty the water from the storage tank of the RoMatik.

For periods of disuse longer than six months

- Connect the RoMatik to the mains and switch it on with the on/off switch.
- Allow at least 20 minutes of permeate production.
- Put the RoMatik back into storage for a maximum of another 6 months.

7 Fault messages

Display	Cause	Remedy
ROMATIK xxx **LOW PRESSURE** Filling Tank "LOW PRESSURE" flashes	Water supply closed.	Open the water supply.
	Water flow pressure below 1 bar.	Increase pressure.
ROMATIK xxx **STORAGE TANK** Filling Tank **EMPTY**	Storage tank is empty. The connected warewasher temporarily gets raw water, which has not been demineralised.	Wait until the storage tank is filled with permeate again.
CHECK MEMBRA **LOW FLOW RATE**	The permeate amount produced is too low (membrane is clogged).	Have the membrane cleaned by an authorised service technician.
	Inlet water temperature < 2 °C	
MEMBRANE CHE **HIGH FLOW RATE**	The permeate amount produced is too high. The RoMatik may be connected to hot water. Membrane service life is shortened.	Connect RoMatik to cold water.
	Membrane is defective.	Repair by an authorised service technician is required.
CHECK LEVELS USE TROUBLE	Level control in storage tank is defective.	Repair by an authorised service technician is required.

8 Care and maintenance

We recommend that you have the RoMatik serviced at least once a year by an authorised Winterhalter service engineer in order to keep the device in good working order.
The RoMatik 160 should be serviced twice a year if it is connected to a hard water supply.

Clean the outside of the device as necessary using a soft cloth and clear water. Do not use scourers.

Do not spray the RoMatik with a hose or high-pressure / steam-jet cleaner.

9 Technical data

	RoMatik 160	RoMatik 210	RoMatik 420
Permeate output [l/h] (± 5% @1 °C); min - max	100 - 230	190 - 420	260 - 590
Setting for membrane alarm (“High flow rate” or “Low flow rate”) [l/h] (± 5% @1 °C)	90 - 350	133 - 470	280 - 820
Permeate conductivity [µS/cm]	< 20	< 20	< 20
Storage tank [l]	35	66	66
Electrical connection	230V/1/N/PE/50Hz	230V/1/N/PE/50Hz	230V/1/N/PE/50Hz
Connected load [kW]	1.4	1.4	1.9
Water connection	¾“ thread	¾“ thread	¾“ thread
Concentrate outlet [mm]	D10	D10	D10
Height [mm]	760	695	695
Depth [mm]	530	585	585
Width [mm]	250	460	460

10 Threshold values for the raw water

The raw water must conform to the requirements of your relevant national drinking water authority. At the very least, the following threshold values must be complied with:

Bezeichnung	**Limit value**
Copper	max. 2.0 mg/l
Manganese	max. 0.05 mg/l
Sulphate	max. 250 mg/l
Inlet water temperature	2 - 25 °C
Electrical conductivity (at 25 °C)	max. 2000 µs/cm
Total hardness	RoMatik 160: max. 25 °dH (4,5 mmol/l) RoMatik 210/420: max. 10 °dH (1,8 mmol/l)
Minimum flow pressure	1 bar (100 kPa)
Maximum inlet pressure	6 bar (600 kPa)
Chlorine	max. 0.05 mg/l
Iron	max. 0.1 mg/l
TDS (Total dissolved solids)	max. 1500 mg/l

11 Disposal

Incorrect or negligent disposal can cause considerable environmental pollution and/or damage.
For hazardous substances, please observe the disposal regulations listed in the safety data sheets.
Disposal according to national regulations.