# Convection steamers "Rubicon" APK6-2/3-2



### Operation manual

**ATESY**<sup>®</sup>

# Convection steamer "Rubicon" APK6-2/3-2

Thank you for purchasing our product. We believe that you have spent your money well.

#### **Technical details**

Convection steamer «Rubicon" APK6-2/3-2 (hereinafter referred to as the "article"), is designed to cook meals at public catering enterprises using different modes, both steaming and dry heating.

Steam generation is injection type.

The article (see fig. 1) includes a casing (1), a working chamber (2), and a lockable door (3). Under the door there is a tray (5) for collecting condensate. The front panel of the casing there is a control panel (4). Inside the working chamber shelf holders (6) are situated, which are easily removable for cleaning purposes. In the rear part of the working chamber a fan and tubular electric heaters are situated, providing convection and air heating inside the working chamber. With regard to safety considerations the tubular electric heaters are separated from the working chamber with a protective grid (7), which can be removed using special tool only. The grid also has a tray for water supply to the fan blades and the tubular electric heaters.

There is a probe to control food temperature. The article is also provided with a showering device used for the working chamber cleaning purposes. When not in use the probe and the showering device are put on supporting arms, situated on the left lateral panel of the article (see fig. 3).

The working chamber, the front panel and the door are made of materials, certified by the State epidemiologic controlling authority for contact with food products.

Collector cooling system provides water discharge to sewage system with temperature not exceeding 75 °C.

When purchasing the article, read the operation manual thoroughly. This will allow you using the article for a long period of time and doing your business successfully. You can also purchase special supporting racks for convection steamers with rails for food containers.

ATESY company is continuously expanding its product range, so appearance and technical characteristics of the article can differ from the ones specified herein without deterioration of consumer properties.

# Convection steamer operation manual

#### 1.General provisions

- 1.1.The article is designed for connection to five-wired power supplying network AC 3-phase  $380 \text{ V} \pm 10\% 50 \text{ Hz}$  with protective earthing wire and is to be installed indoors in premises with ambient air temperature at least  $10^{\circ}\text{C}$  and relative humidity 60% maximum at  $+20^{\circ}\text{C}$ . It is allowed to connect the article to AC 1-phase  $220 \text{ V} \pm 10\% 50 \text{ Hz}$  with protective earthing wire. In this case there is possibility to switch between normal (6.5 kW) or reduced (3.5 kW) power consumption. When the article is operating at reduced power mode cooking time increases, and moisture level should be set not higher than "4". In case the article is operating at normal power mode (6.5 kW) to the one-phased power main install a jumper having cross-section at least  $2.5 \text{ mm}^2$  to the power terminal board between A and B phases.
- 1.2. The article should be installed on a stable horizontal basement. Check horizontality with a level gauge in two planes.
- 1.3.Remove protective film from all surfaces of the article before use.
- 1.4.Distance between rear wall of the article and a wall should not be less than 100 mm. The distance to heat sources (hotplate s, cabinet ovens, etc.) and flammable materials should be at least 500 mm.

- 1.5. The article should be connected to the power supply mains by qualified electricians having permit to the appropriate works only.
- 1.6. The casing of the article should be reliably earthed with earting wire, situated inside the power supply cable. In order to equalize electrical potential during installation of the article into process line use terminal marked with equipotentiality sign.
- 1.7.Power should be supplied from an electrical switchboard via protective switch. Wire cross-section should be at least:
- 2.5 mm<sup>2</sup> when connecting to three-phased mains and when connecting to one-phased mains at reduced power consumption mode;
- 4 mm<sup>2</sup> when connecting to one-phased mains at normal power consumption mode.
- 1.8.For steam generation and cooling of the condensate discharged to sewage the article should be connected to water supply system. Water quality should comply with the requirements of GOST R 51232-98.
- 1.9.In order to connect showering device use valve at the left side of the article. Connect it with a triple adapter and a flexible hose. Connection diagram for the triple adapter and supply lines is shown in Fig. 3
- 1.10. Water used for steam generation (valve 3/4") should contain no mechanical particles exceeding 0.05 mm. Water hardness should not exceed 6 °dH (2,14 eq.mg/l). It is recommended to use filtering system PURITY C 500 Quell ST manufactured by BRITA company to ensure proper water quality.
- 1.11.In case of any malfunction of the article due to use of hard or non-purified water the warranty should be void.
- 1.12.Protect the article against negligent attitude and mechanical stresses. Perform sanitation of the article on a daily basis at the end of the working day.
- 1.13. Check the delivery set when purchasing.

### 1.14.Commissioning of the article should be reflected in the relevant Act (Appendix 2).

#### 2. Technical specifications

Table. 1

№	Specification	Unit	Value
1	Rated voltage	V	380 or 220
2	Type of current	-	AC 3-PH (+N)
3	Current frequency	Hz	50
4	Rated power consumption, maximum	kW	6.5 (380 V)
			or 3.5 (220 V)
5	Rated power consumption of a heater	kW	6 (380 V)
			or 3 (220 V)
6	Water pressure within the system	kgf/cm <sup>2</sup>	1.56
7	Rated voltage of a heater	V	220
8	Maximum size of food containers	-	2/3
9	Levels number	-	6
10	Clearance between guides	mm	50
11	Timer setting range	-	1 minute to 9 hours
			59 minutes
12	Probe temperature setting range	°C	30 to 120
13	Chamber temperature setting range	°C	30250
14	Water pressure within the municipal wa-	kgf/cm <sup>2</sup>	26
	ter supply system	11817 4111	
15	Water consumption, maximum	l/hr	3,2
16	Dimensions	mm	635x660(725*)x600
	(length x depth x height)		* with handle
17	Weight	kg	60

## The article provides the following operation modes of cooking:

- 7.- "Convection" (hot air treatment at the temperature within range 30°C to 250°C);
- **8.-** "Steam" (steam treatment at the temperature within range 30°C to 250°C);
  - **9.-** "Steam 100°C" (steam treatment at the temperature 100°C);
- **10.** "Regeneration" (steam treatment at the temperature within range 120°C to 160°C);

All cooking modes provide possibility to choose one of parameters – "Timer" (end of cooking after a specified period of time) or

"Food temperature" (end of cooking after reaching of the specified temperature of a meal, control by a probe). When operating using the control probe and the "Food temperature" "Delta T" mode is available, i.e. maintaining of constant set difference between food temperature and chamber temperature.

#### 3. Safety and fire safety requirements

- 3.1. The article is provided with I class electric current protection under GOST MEK 60335-1. Protection degree is IP20 under GOST 14254.
- **3.2.** All repair works should be carried out by personnel duly authorized for repair of devices after disconnection of the equipment from power supply mains.
- 3.3.It is prohibited:
- 3.3.1. To leave the article under operation unattended.
- 3.3.2. To store flammable products in a close proximity to the article.
- 3.3.3. To use the article for room heating because of fire safety considerations.
- **3.4.** After storage in a cold environment the equipment should be adapted at room temperature during 1.5 2 hours.
- 3.5. Attention! When the article is under operation the working chamber and door panels are extremely hot! Be careful not to get burned.
- 3.6. Attention! To ensure hot air and steam have left the chamber crack open the door before opening it in order to avoid burns.
- 3.7. The casing of the article should be reliably earthed.
  3.8. DO NOT operate the article without protective grid in the chamber.

#### 4. Preparing for operation and operation procedure

4.1. General appearance of the article is shown in Fig. 1, the control panel is shown in Fig. 2.

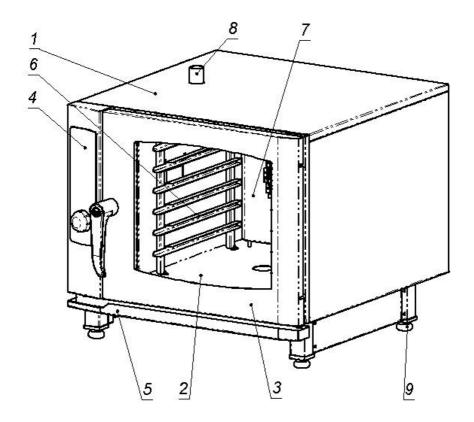


Fig. 1 — General appearance of the article

1	Casing
2	Working chamber
3	Door
4	Control panel
5	Tray
6	Shelf holder
7	Fan protective grid
8	Ventilation pipe
9	Support

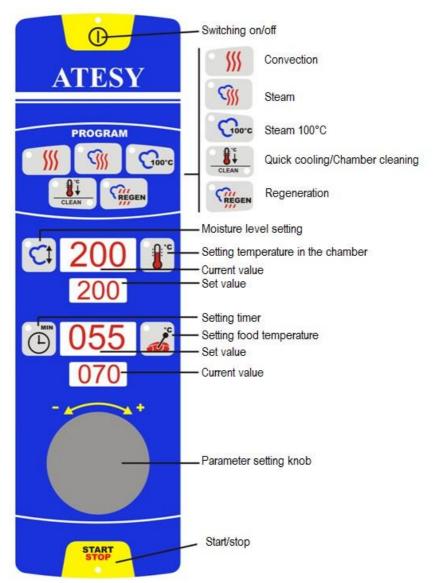


Fig. 2 — Control panel

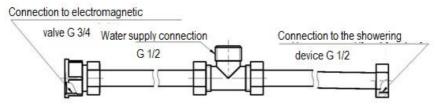


Fig. 3

4.2. Before starting the operation make sure that the protective grid (7) is in place and is fixed by the fixing devices (two fixing devices at the corners are in the "Closed position (see Fig. 4)).

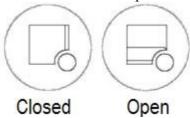


Fig. 4 — Positions of the fan protective grid fixing devices

- 4.3. The article is enabled with the ON/OFF button. After it is pressed control panel indicator and lighting of working chamber lamps are enabled.
- 4.4. Cooking mode selection is carried out by pressing appropriate button in "Program" group.
- 4.5. Parameters are set by pressing appropriate button ("Setting temperature in the chamber", "Setting food temperature" or "Timer setting.) After the button was pressed the "Current value" indicator begins blinking. Select the required value by setting knob, and then press the button to confirm selection.
- 4.6 In order to change moisture level when operating in "Steam", "Steam 100°C", and "Regeneration" modes press "Moisture level setting" button. After the button was pressed the "Current value" indicator begins blinking. Select the required value by setting knob, the moisture level is expressed in conventional units within range 0 (no steam generation) to 10 (maximum steam generation), and then press the button to confirm selection. When working in reduced power mode do not set the moisture level higher than "4".

- 4.7. In all modes of cooking there is manual steam supply function. In order to do this press the "Moisture level setting" button and hold it; this will result in forced steam generation, indicated by blinking indicator of the pressed button.
  - 4.8. Cooking mode is started by the "Start/Stop" button.
- 4.9. In order to gain the best result it is recommended to heat the working chamber up to the required temperature before load of food products.
- 4.10. It is allowed to open the door of the working chamber during operation. The fan and the tubular electric heaters are disabled in this case. After the door is closed, cooking resembles automatically.
- 4.11. Predetermined parameters, such as temperature inside the chamber, food temperature, and time of treatment can be changed without stopping the products preparation process. Switching between control parameters (e.g. switch from the timer to the food temperature and vice versa) is available after the end of current cooking cycle.
- 4.12. It is possible to set up continuous operation mode of the article. In order to do this press the "Timer setting" button and hold it. As a result "-- --" sign will appear at the current and set time indicators, then start and stop the cooking process by pressing the "Start/Stop" button. To disable continuous mode of operation, press the "Timer setting" button and hold it until the set values appear at the display. In order to switch to a controlled parameter disable the continuous mode of operation.
- 4.13. When pre-set control parameter (whether it's time or temperature) is reached, electrical tubular heaters and fan turn off. Sound alarm is triggered at that moment.
- 4.14.In order to enable "**Delta T**" mode select "Food temperature" control parameter, and then press and hold the "Chamber temperature" button until "d" symbol appears in the upper indicator of current value.
- 4.15. For quick cooling of the chamber Crack open the door and press "Chamber cooling" button in a "Program" group (the lower indicator of the current value will display "COL" as a result of this action), and then start cooling mode by pressing the "Start/Stop" but-

ton. The upper indicator of the current value will display current chamber temperature. If the door is closed during cooling procedure, the indicator will display "Opn" (Open), the control system will disable the fan and interrupted sound alarm will be given until the door is opened or the cooling mode will be turned off (by repeated pressing of the "Start/Stop" button.) Operation in the "Cooling" mode should not last more than 10 minutes or until 30 °C is reached.

ATTENTION! In order not to get burned be careful when using the "Quick cooling" mode. During the procedure hot air and steam are discharged from the chamber.

- 4.16. When using the probe lay its cable under the control panel. Do not allow sharp bends of the cable.
- 4.17. To avoid damages always put the probe back when not in use.

### ATTENTION! In order not to get burned be careful when pulling the probe back. Use gripper glove for this operation.

- 4.18. To avoid the working chamber overheating in case the electronic control system malfunction the article design includes thermal limiter disabling tubular electric heaters when the temperature in the chamber reaches 320°C. In case of its tripping please call a qualified technician. Thermal limiter is accessible through the removed rear panel of the article.
  - 4.19. Timely drain the collecting tray during operation.
- 4.20. In case there is no water supply in a system or insufficient pressure when enabling cooking modes using steam there will be a sound alarm, and "H2O" sign will be displayed in the upper current value indicator.

#### 5. Technical maintenance

- 5.1. All technical maintenance works should be carried out after the article was disconnected from the power supply mains.
- 5.2. Perform the working chamber thorough cleaning **daily**, in the end of working shift. It is recommended to clean the article using D-FOAM detergent manufactured by CIDLINES company. Cleaning with D-FOAM detergent should be carried out under the following procedure:

- ensure that the temperature in the chamber does not exceed 60°C, Cool the chamber with "Quick cooling" function, as appropriate;
- press and hold the "Quick cooling/Chamber cleaning" button until the upper indicator displays "CLN" sign, and the lower "1" digit (the digit indicates cleaning step);
- Step 1 apply foam to the inner surfaces of the chamber;
- set temperature in the chamber to 60°C, switch "Convection" mode on for 3 minutes;
- wait 5 to 10 minutes with the door locked;
- open the door, remove fat using a nylon sponge;
- wash the chamber thoroughly using the showering device;
- repeat the cleaning procedure if necessary.

ATTENTION! During cleaning procedure use protective goggles and gloves, wear protective clothes,, and carry out all necessary safety measures, specified at the package of detergent.

- 5.3. After washing and during intervals in work do not close the door completely, leave it crack opened in order to dry the working chamber.
- 5.4. **Once a month** perform visual inspection of the article and working chamber, check integrity of the wiring between the electric switchboard and the article, protective earthing, reliability of the equipotentiality ensuring wire, reliability of water and sewage connections

#### 6. Warranty.

- 6.1. ATESY company guarantees normal operation of the article during 12 months since commissioning or sale provided usage rules stipulated herein are complied with.
- 6.2. Warranty should be void in case the article is damaged due to the customer's fault, as a result of non-compliance with the requirements, provided herein.
- 6.3. Exchange and return of the article of proper quality is possible only in 15 days after purchase date provided the following requirements are met:
  - -Operation manual for the article is available;

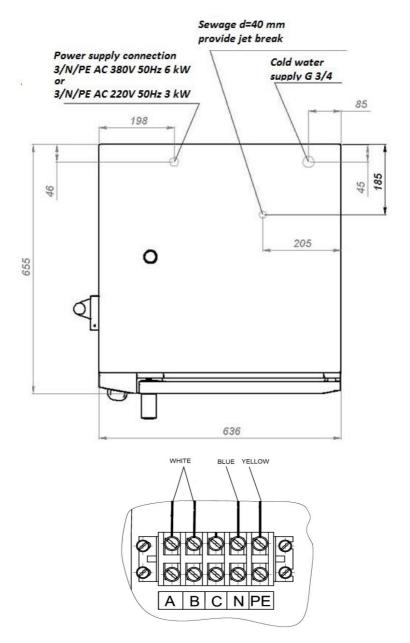
- -Payment document is available;
- -Manufacturer's package is available;
- -The article has clean appearance with no mechanical damage;
- -No unauthorized repair was made.
- 6.4. Warranty storage term is 6 months after manufacture date.
- 6.5. During the warranty term ATESY company carries out warranty repairs, and after expiration of the term concludes post-warranty servicing contracts; please call us by the following number:

#### +7 (495) 995-95-99

Calling this number you can get full list of the company's products.

#### Appendix 1

### Electric, water and sewage supply connection diagram.



7. Delivery set.

1	Delivery setAPK6-2/3-2	1
2	Left tray holder	1
3	Right tray holder	1
4	Showering device Monollith	1
5	Operation manual	1
6	Package	1

### 8. Acceptance details.

Convection steamer APK6-2/3-	2 "Rubicon"
Serial number	complies with the requirements
of the set of design documents a	and is considered as applicable for
use.	
Manufacturing date	20 .
QA check	L.S.

### **ATESY**®

1 Krasnaya str., Lubertsy, Moscow region, Russia, 140000

Tel:+7 (495) 995-95-99

info@atesy.info www.atesy.ru

# ACT of commissioning

Article:					
"Injector-type convection steamer "Rubicon"					
Serial No.					
Date of manufacture: ""20					
Installation site					
(Company	, address, telephone)				
Date of commissioning ""	20				
Entity, which carried out comn	nissioning				
(enti	ity, telephone)				
Officer, who carried out commissioning	Article owner's representative				
(office)	(office)				
(signature)	(signature)				
(name)	(name)				
"	"				