

# **COVEN**

## **COMBI MECHANICAL OVEN**

### **10 EMD MECC**



**INSTRUCTION FOR INSTALLATION USE AND MAINTENANCE**

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**CAUTION**

- We advise the user to verify that the installation of the equipment be performed in a proper way; the manufacturer cannot be held responsible for damages resulting from incorrect installation, poor maintenance or incorrect use.
- Before using the oven carefully read the instructions for use. The manufacturer cannot be held responsible if the requirements indicated in this manual are not observed.
- All installation, maintenance or repair operations must be carried out exclusively by authorized and qualified personnel.

**INSTRUCTIONS FOR THE INSTALLER****POSITIONING THE OVEN**

Position the equipment on a horizontal surface, well-balanced. The distance between the back and side walls of the oven must be of at least 50 cm.

**INSTALLATION**

Remove the plastic film before starting up the oven. Clean all glue residues carefully without using abrasive substances.

**ELECTRICAL CONNECTION**

This oven is manufactured to operate at the voltage indicated on the relevant label. To access the connector board, remove the right side of the unit by removing the fastening screws.

The flexible wire for connection to the mains must not have characteristics lower than the ones with rubber insulation model H07RN – F and the section must be the one indicated in the table “TECHNICAL DATA”.

Connection to the electric line must be made by inserting an automatic switch with adequate capacity with an opening distance between the contacts of at least 3 mm. Furthermore, during operation, power supply must not be very different from the value of the rated voltage  $\pm 10\%$ .

The unit must be connected to a ground outlet. Inside the unit, in the connector board, there is a terminal with the symbol  $\frac{\perp}{-}$  which the ground wire must be connected to.

## INSTRUCTIONS FOR THE INSTALLER

The unit must be connected to a ground outlet. Inside the unit, in the connector board, there is a terminal with the symbol  which the ground wire must be connected to. The equipment must be inserted in an equipotential system, whose effectiveness must be properly verified according to what is indicated in the regulations in force. Connection must be made using a screw with this symbol  (equipotential) on the rear of the equipment. The manufacturer cannot be held responsible if this accident-prevention regulation is not observed.

### WATER CONNECTIONS

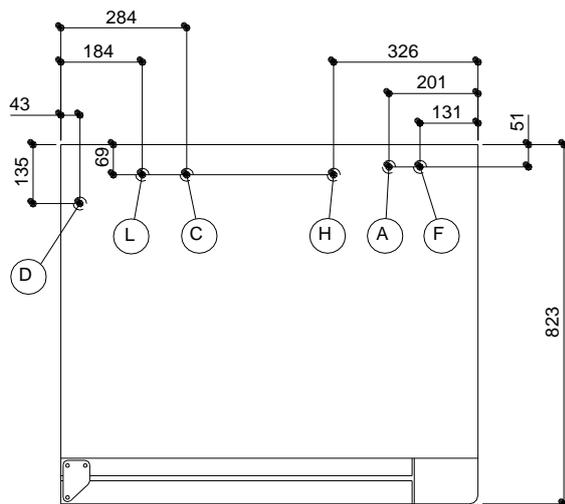
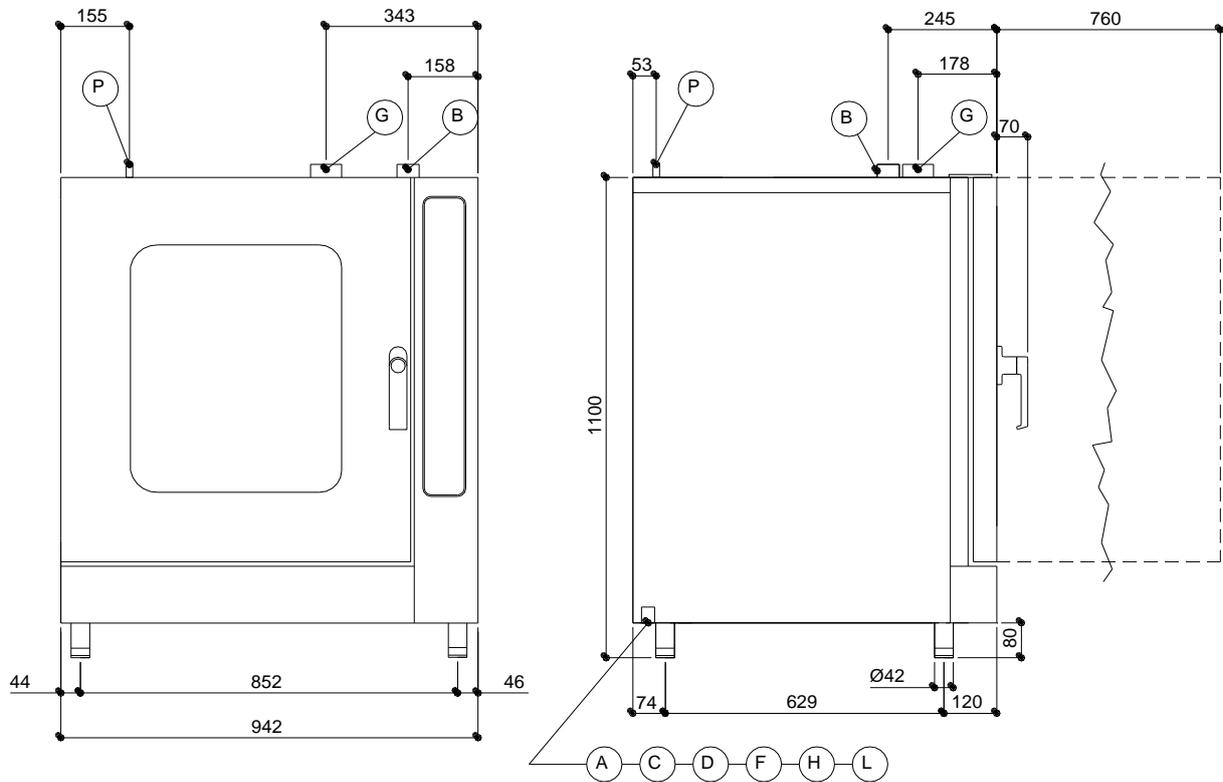
Connect oven to water line by connecting a pipe to joint 3/4" G positioned on the back part of the oven frame. We suggest using joints with seals for connection, with flexible hose for high pressures. Verify that at the end of the operations there are no leaks. Use only material (pipes, joints, etc.) that comply with the standards and that do not leave any rust build-up.

**Caution:** A scale inhibitor must always be installed upstream of the equipment. The hardness of water must be lower than 3°French. If an efficient scale inhibitor is not installed there will be scale build-up on the equipment and this could affect its proper operation.

### CONNECTION TO WATER DRAIN

Connect system to water drain pipe Ø25mm. (D fig. 1) on the bottom back part of the oven. Verify that the connected drain pipe has no bents that exceed the height of the joint itself. Use only materials (pipes, joints, etc.) compliant with the regulations in force and that in any case do not leave rust build-up.

**OVEN INSTALLATION DIAGRAM**



- A. Power cable inlet
- B. Cooking fumes exhaust pipe
- C. Water inlet (3/4"G male)
- D. Water drain (pipe Ø25mm)
- G. Rapid fume exhaust.
- H. Fume reduction water inlet (3/4"G male)
- L. Rapid exhaust of steam

# WIRING DIAGRAM

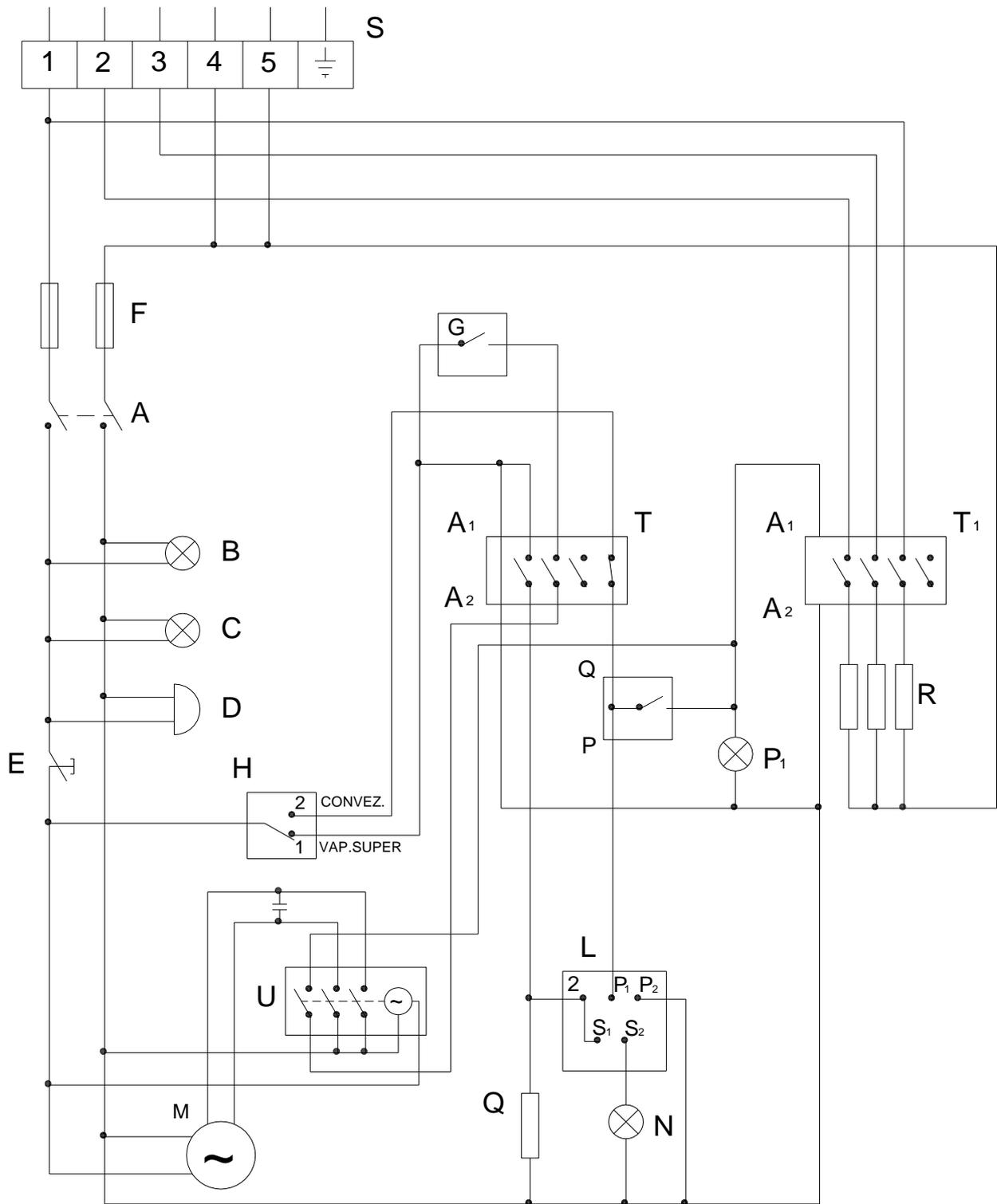


Fig. 1a

## WIRING DIAGRAM – KEY

- A. Timer
- B. Line LED
- C. Internal light
- D. Electronics buzzer
- E. Door micro
- F. Fuses
- G. Super steam thermostat
- H. Cooking selector
- L. Steam quantity selector
- M. Motor fan
- N. Steam quantity LED
- P. Cooking thermostat
- P1. Cooking thermostat LED
- Q. Water solenoid
- R. Armored resistors
- S. Connector board
- T. Contactor
- T1. Resistor contactor
- U. Timer autoreverse

<b>Power KW:</b>	<b>15,4</b>
<b>Power voltage (*):</b>	<b>400 V 3 N ~</b>
<b>Connection cables (H07RN – F)</b>	<b>5X6 mm<sup>2</sup> for power 400 V 3 N ~</b>
<b>Cable gland (H07RN – F 3X6) (H05RN – F 5X2,5) (H07RN – F 5X2,5)</b>	<b>from 14.5 to 20 mm from 12.5 to 15.5 mm from 13.5 to 17 mm</b>
<b>Water inlet pressure:</b>	<b>2 bar min. – 6 bar max.</b>
<b>Water connection:</b>	<b>3/4" G</b>
<b>Water drain connection:</b>	<b>pipe Ø 25mm.</b>

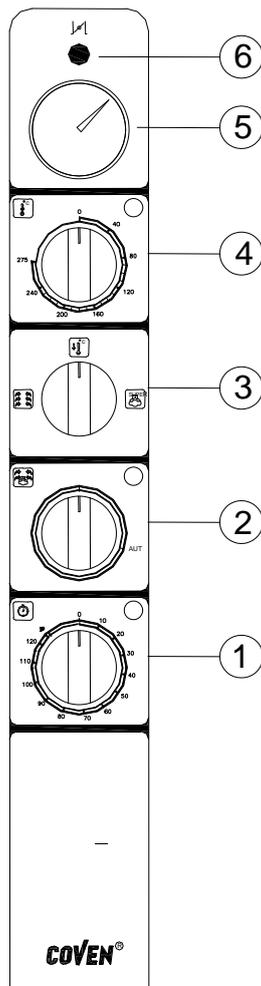
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**CAUTION**

- We advise the user to verify that the installation of the unit was performed properly; the manufacturer cannot be held responsible for damages due to wrong installation, poor maintenance or incorrect use.
- Before starting up the oven, carefully read the instructions for use. The manufacturer cannot be held responsible for non-compliance with the regulations laid out in this instructions manual.
- The manufacturer cannot be held responsible for any errors or inaccuracy of this manual due to transcribing or printing errors. Furthermore, the manufacturer reserves the right to make changes to the equipment deemed necessary or appropriate, which however do not alter the main features of the equipment..
- All the installation, maintenance or repair interventions must be carried out exclusively by authorized and qualified personnel.

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**INSTRUCTIONS FOR USE**



**FIG. 3**

1. Timer
2. Steam quantity selector
3. Cooking type selector
4. Thermostat
5. Thermometer
6. Rapid fume exhaust

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**INSTRUCTIONS FOR USE**

### STARTING UP THE OVEN (FIG. 3)

- ☞ Rotate the timer **1** to the right.
- ☞ Rotate the cooking selector **3** to the left to “convection”.
- ☞ Set cooking temperature using the thermostat **4**.
- ☞ Control the switching on and off of the resistor when the temperature set using the thermometer is reached **5** using the LED.
- ☞ An alternating buzzing sound indicates the end of the set time.

### SELECTING TYPE OF COOKING (FIG.3)

Rotate knob to select the type of cooking **3**

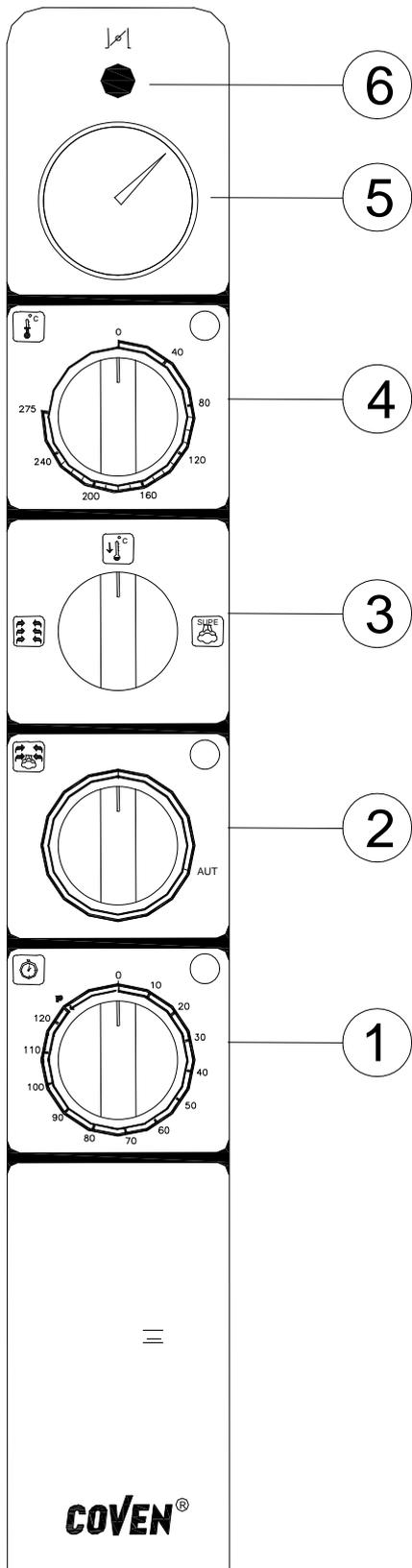
- ☞ Rapid cooling: position "up"
- ☞ Super steam cooking: position "right"
- ☞ Convection cooking: position "left"

### SWITCHING OVEN OFF

- ☞ At the end of the cooking cycle set temperature back to “0”. Rotate the timer to position “0”

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**SUPER STEAM COOKING**



To cook verdure fresh vegetables, boiled meat, thawing frozen food and reduce cooking times.

**a. Switching the oven on**

Rotate timer 1 to the right to set a cooking time between 0÷120 min.  
Or to the left (P) continuous function.

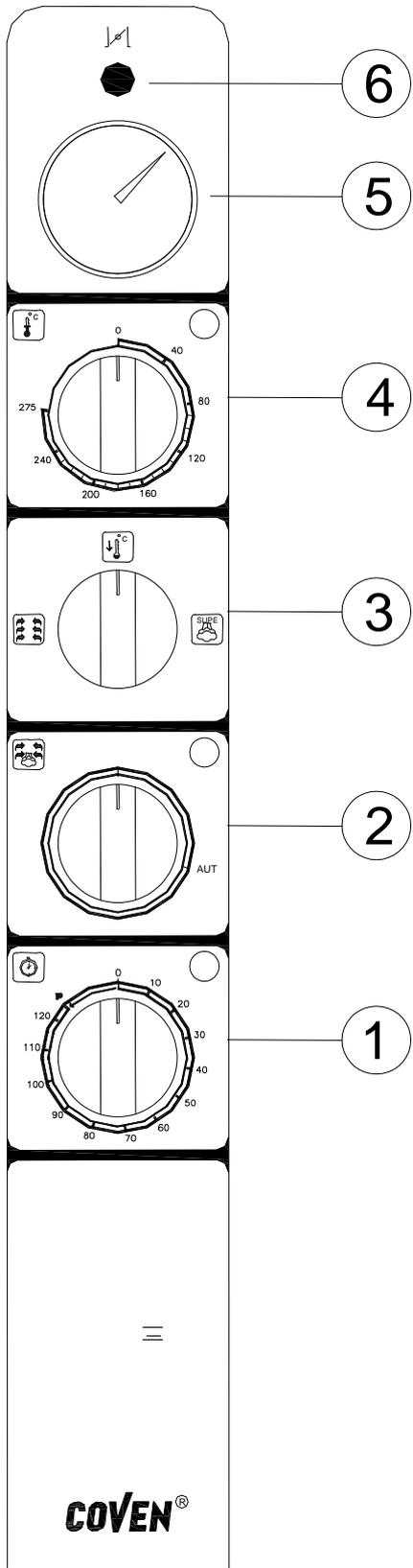
**b. Select type of cooking**

Position knob 3 to the right on "super steam".

**d. It is not necessary to set the temperature. The oven is programmed to reach the temperature of 100°C.**

**FIG. 3**

**MIXED CONVECTION + STEAM COOKING**



*To cook roasts, vegetable stews, fruit pies.*

**a. Switching the oven on**

Rotate timer 1 to the right to set a cooking time between 0÷120 min.  
Or to the left (P) continuous function.

**b. Selecting type of cooking**

Position knob 3 to the left on "dry convection"

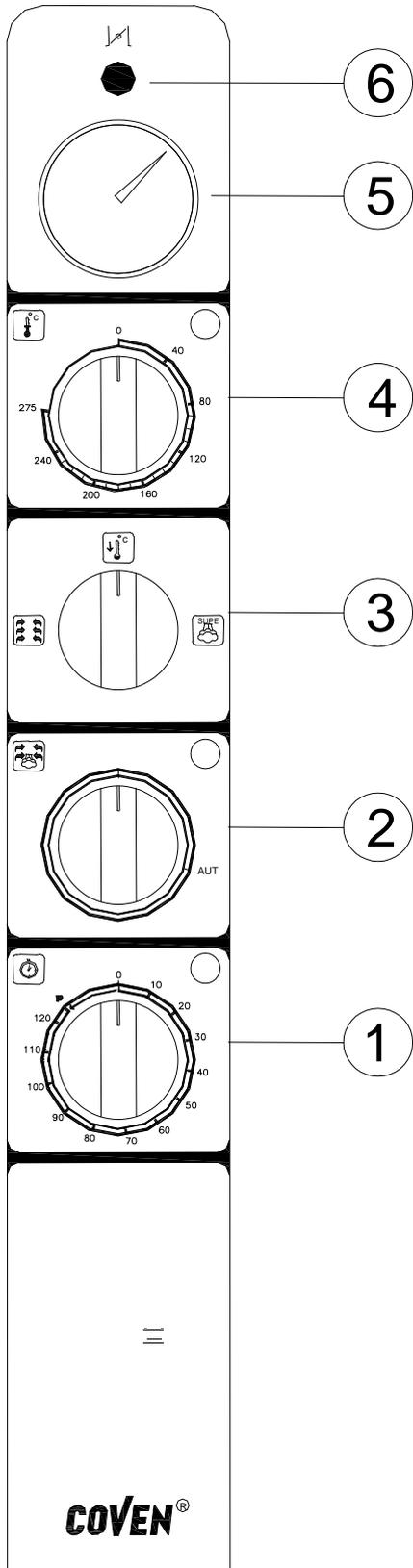
**c. Set temperature**

Set desired value by rotating the knob 4.

**d. During cooking rotate the knob 2 to the right.**

**FIG. 3**

## DRY CONVECTION COOKING



To cook lasagna, pizza, grilled meat or vegetables.

### a. Switching the oven on

Rotate timer 1 to the right to set a cooking time between 0÷120 min.  
Or to the left (P) continuous function.

### b. Selecting type of cooking

Position knob 3 to the left on "dry convection"

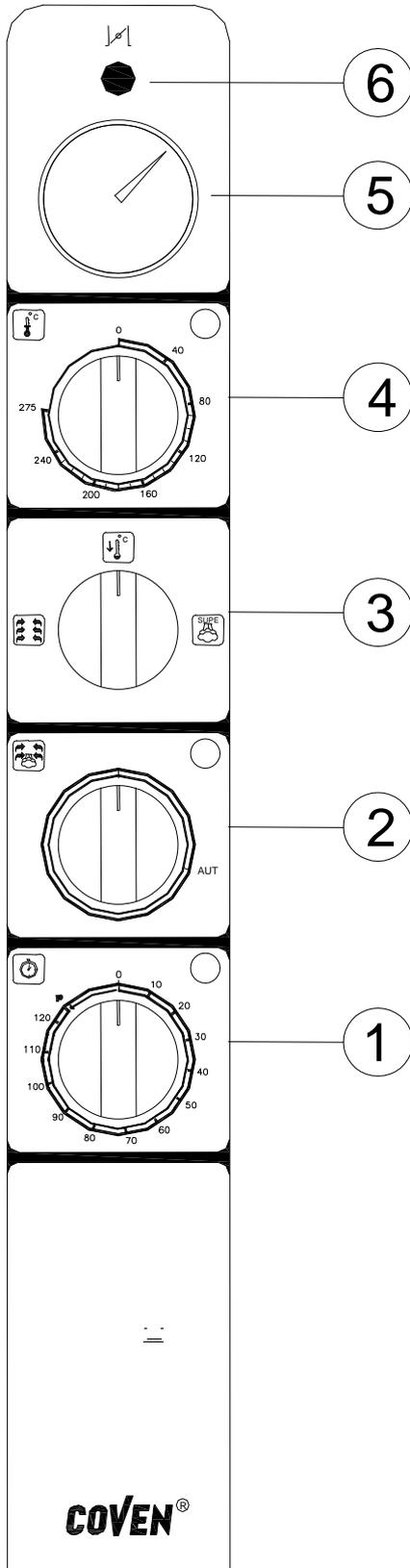
### c. Set cooking temperature.

Set desired value by rotating the knob 4.

d. To eliminate the internal humidity of certain food enable the control "rapid steam exhaust" using knob 6

FIG. 3

**RAPID COOLING**



*To quickly reduce the temperature inside the cooking chamber*

**a. Switching the oven on**

Rotate timer 1 to the right to set a cooking time between 0÷120 min.  
Or to the left (P) continuous function.

**b. Select rapid cooling**

Position the knob 3 up.

**FIG. 3**

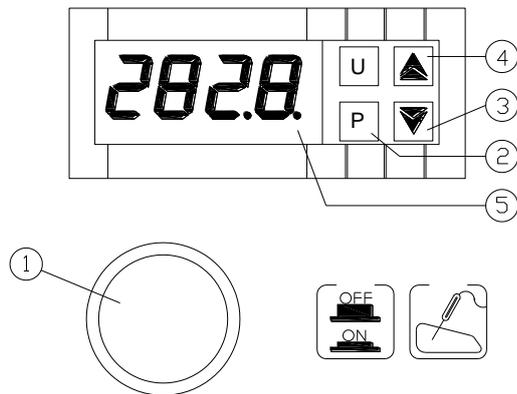
**MAINTENANCE SUGGESTIONS**

- ❖ Do not perform any maintenance or cleaning operation without having first disconnected the oven from the mains.
- ❖ Periodically clean the oven to avoid hygiene and operation problems. The equipment must never be washed with direct jets or pressure! Clean steel parts with water and detergents, do not use acid or aggressive substances or abrasive detergents. Do not use steel wool sponges, which could leave traces of rust. For perfect cleaning results follow this procedure:
  - ☞ Spread a diluted degreasing product on the walls of the cooking chamber
  - ☞ Switch on the “super steam cooking” program for 30 minutes
  - ☞ Caution: at the end of the cleaning procedure open the unit very carefully. The steam contains substances that may damage eyes and hands.
- ❖ In particular areas, water may leave some sort of rusty deposit on the walls of the cooking chamber (the stainless steel is not ruined). On request COVEN can supply a specific cleaning product.

**OPERATING SUGGESTIONS**

- ❖ For steam cooking use stainless steel grids or punched trays. The oven’s capacity is:
  - Nr. 10 stainless steel trays 1/1 GN H. 20mm
  - Nr. 8 stainless steel trays 1/1 GN H. 40mm
  - Nr. 6 stainless steel trays 1/1 GN H. 65mm
- ❖ The hot air must be allowed to circulate above and under the product to cook. Leave free air tracks at least 4 cm. thick above and below the grids.
- ❖ PRE-HEAT THE OVEN FOR 10 MINUTES. PRE-HEATING THE OVEN IS ESSENTIAL TO ASSURE GOOD RESULTS.

## CORE TEMPERATURE PROBE - OPTIONAL



**FIG. 4**

### Operating instructions

- ☞ Press knob 1 OFF/ON to switch core temperature probe on.
- ☞ Insert probe into the food.
- ☞ Press P (knob 2) for a second. Display 5 flashes SP1 and a temperature value. Should you need a different value use knob 3 and 4 to adjust the temperature, and then press 2. (Should you press for more than a second keys 3 and 4, you will increase or decrease quickly values).
- ☞ An acoustic signal announces that preset and real temperature inside food are equal.  
**ATTENTION** : All pre-set functions (main temperature, timer, etc.) are stopped by acoustic signal.