

Instrumentation Production cycle

CE

Electromechanical
control panel
ELM SCT

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4.1 Useful Information

Cooking time in particular can vary according to the type of dough, its homogeneity and volume. Make sure you carefully monitor the first baking cycles and check the results achieved: using the same types of dough under the same conditions, you will obtain standard results.

The heat needed to process your dough depends on its preparation, ingredients and liquids.

Setting the same processing temperatures you can bake different product at the same time.

Disregarding their position, you can use all shelves, and also bake small batches with top results.

Should bread not take on vapor, resulting matt and rough at the end of your baking cycle, check if during the vaporizing cycle the product gets wet. Should this be the case, you need to modify the dough.

Keep in mind that you can achieve good results only if your batch is not too wet when

ready to be moved inside the oven. For this reason, it is important that the rack loaded with the

dough from the proofing chamber, is left to rest 1-2 minutes in the air before going into the oven.

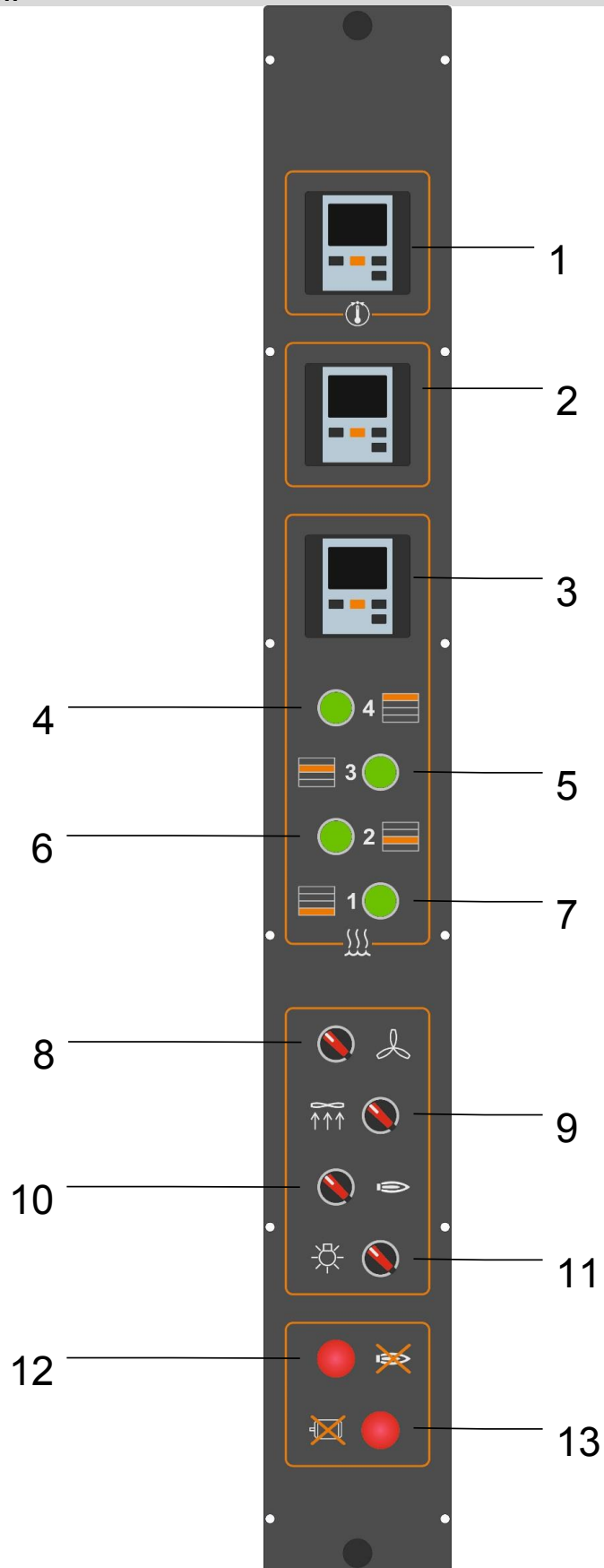
Make sure that the oven door opens only for loading and unloading operations.














Keeping the oven access door open for too long, makes the baking chamber temperatures drop, i.e. uneconomically increases the consumption of fuel or energy.

As a consequence of the loading and unloading operations, temperature displayed on the thermoregulator drops of about 30°. The thermal difference is re-balanced within a maximum span of time of 8/10 minutes. This is quite a short time compared with the original heat exchange between dough and hot air which generates a remarkable drop in temperature of the circulating air

4.2 Instrumentation

FIG.1







1	Thermoregulator 
2	Baking timer 
3	Humidification timer 
4	Chamber 4 humidification button 
5	Chamber 3 humidification button 
6	Chamber 2 humidification button 
7	Chamber 1 humidification button 
8	Fan Selector 
9	Vapor exhauster selector 
10	Heater warning light 
11	Oven light selector switch 
12	Burner shut-off indicator lamp 
13	Engine malfunction indicator light 

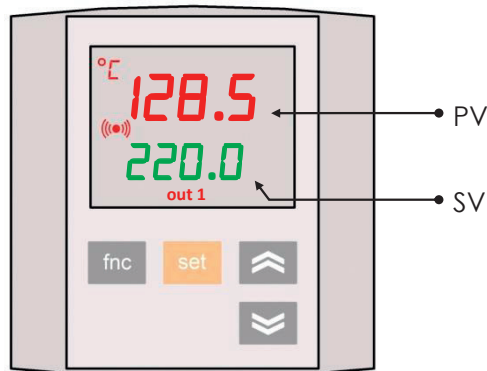
MADE IN ITALY

Thermoregulator

KEYS

-  "fnc" exit function from setpoint and parameters setting
-  "set" function setting of setpoint and parameters
-  "up" scrolling function: scrolling of menu items and setpoints to increase parameter values
-  "down" scrolling function: scrolling of menu items and setpoints to decrease parameter values

DISPLAY and LED

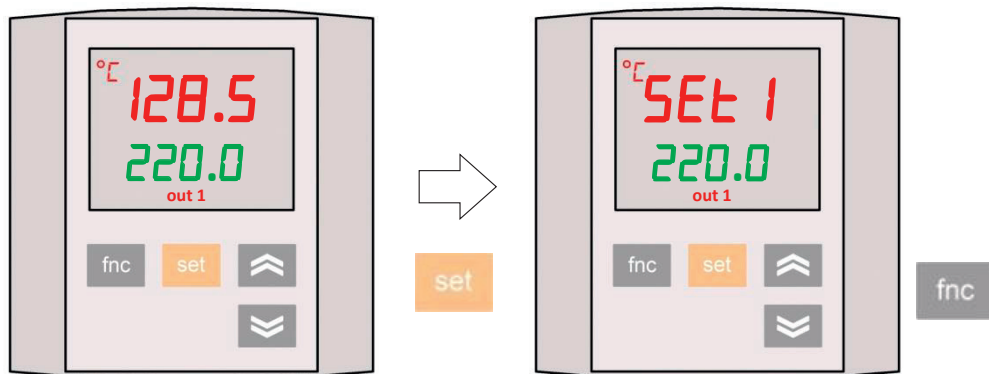


- PV** Displays the temperature value in the baking room, names of parameters and alarms.
- SV** Displays the setpoint and parameters values
- out1** When the exit is on (running heating unit)
- °C** This shows the °C or °F temperature scales displayed
- (((•)))** It starts in case of alarm


ALARM SIGN

- E1** Temperature probe to detect failures, short or open circuits.
- HA1** The alarm is enabled when temperature exceeds the maximum detectable by the probe
- LA1** The alarm is enabled when temperature exceeds the min detectable by the probe



PROGRAMMING SETPOINTS




Turn on the instrument

 Press and release the "set" key

The PV display shows "Set 1" while the "SV" display shows the actual setpoint value

  With the keys "up" and "down" you can modify the setpoint value on the "SV" display

 Pressing the "fnc" key or after 15 seconds, the new value will be stored bringing the instrument to the original value.

Timer

KEYS



"stop-reset" stops and restarts counting, exit function from programming parameters



"start" starts counting, gives access to the setting functions of the parameters

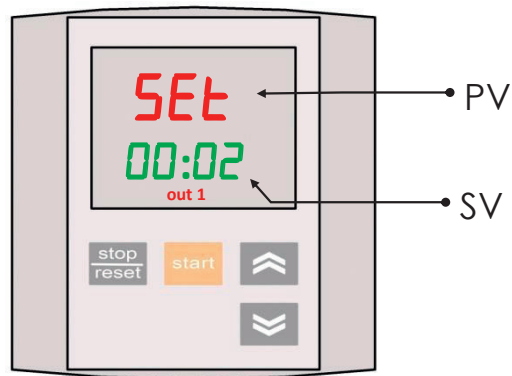


"up" scrolling function: scrolling of menu items and setpoints to increase parameter values



"down" scrolling function: scrolling of menu items and setpoints to decrease parameter values

DISPLAY and LED



PV

Displays counting progress, the parameters names and the alarms

SV

Displays the setpoint and parametes values

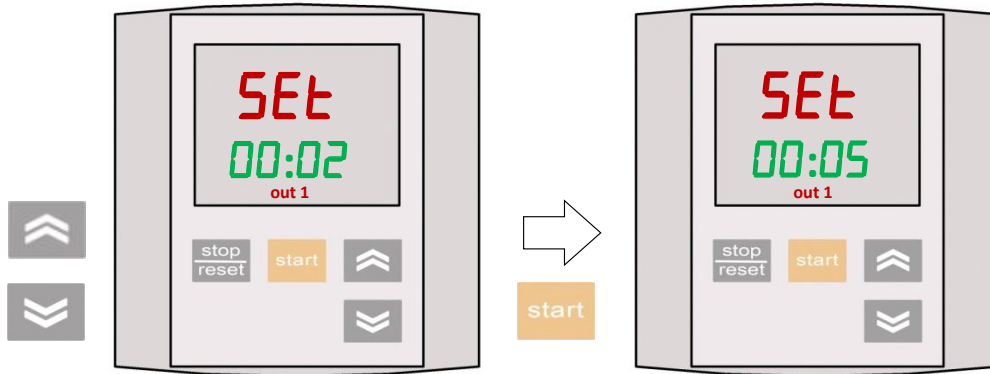
out1

When the exit is on (running heating unit)



Turns on when the baking cycle is over

PROGRAMMING SETPOINTS

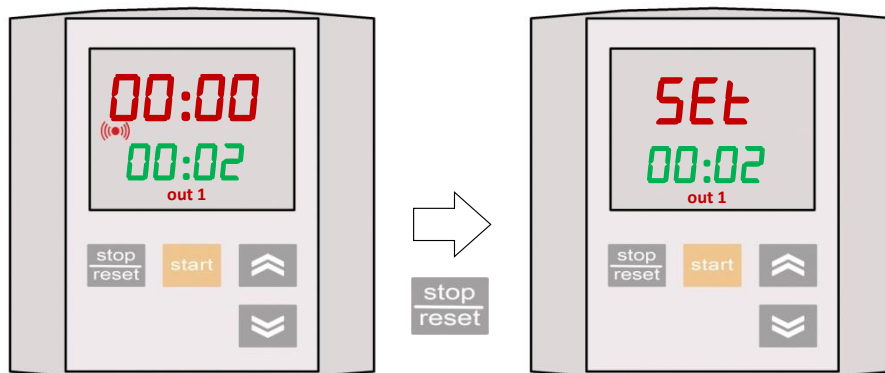


Turn on the instrument

The PV display shows "set" while the "SV" display shows the current setpoint

With the keys "up" and "down" you can modify the setpoint value on the "SV" display

Press and release the "start" key to start counting



Once the counting is over, reset original conditions by pressing the "stop-reset" key

4.3 Production cycle

Startup

Activate the supply of the oven (power, fuel, water)



Set the required temperature on the temperature control.

The heating is enabled (activated fan and heater)



Set the cooking time on the relative timers



and the required drying time.

Wait approx. 30 minutes to allow the oven and the humidifier to reach the desired temperature.

Close the manual gate to exhaust vapors

Open the glass of the required chamber and insert the product to be cooked.



Actuate baking time



1



2



3

Start the vapor intake control to enable humidification



4



For each chamber there is a drying button, since the steam injection is, between the chambers, independent.

Wait for the cooking time as set

An acoustic signal indicates that the time set for cooking is finished

Make sure the mixture is ready for the discharging (if not ready to set a new time for the completion of cooking)

Start the discharging process proceeding as shown in the following order:



Operate the steam aspirator

Open the manual steam discharge gate

Open and half close the door glass for a few moments so that residual hot fluid is aspirated.

Open the door completely and with the aid of temperature-resistant gloves extract the product

Prepare the oven (if necessary) for a new cooking cycle

Turning off the oven



Zero the timer

Open the glass door

Disable in sequence the following actuators:



fan



vapor exhauster

Power off the machine (electrical Energy; fuel; water)

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