# EV9336 Digital controller with 6 outputs for electric bread ovens, with RTC functions, programmed switchon, cooking timer, economy, rapid heating and programs management functions version 3.00



92.0 (3.622) 92.0 (3.622) 92.8 (3.653) 92.0 (3.622) R 92.0 (3.622) 92.8 (3.653) Installation recommendations

- the thickness of the panel must not exceed 4.0 mm (0.157 in)
- position the brackets as indicated in the drawing in this paragraph, moderate the coupling torque
- make sure that the working conditions (temperature of use, humidity, etc.) lie within the limits indicated in the technical data
- · do not install the instrument in proximity of heat sources (resistances, hot air pipes, etc.), appliances with strong magnets (large diffusers, etc.), places subject to direct sunlight, rain, humidity, excessive dust, mechanical vibrations or jerks
- in compliance with Safety Standards, protection against any contact with electrical parts must be assured via correct installation of the instrument. All parts that ensure protection must be fixed in a way that they cannot be removed without the aid of a tool

#### 1.3 Electric connection

With reference to the wiring diagram: the serial port is the communication port with the supervising system (through a serial interface, via TTL, with MODBUS communication protocol) or with the programming key; the port must not be used for two purposes at the same time



Recommendations for the electric connection.

- do not operate on the terminal boards using electric or pneumatic screwdrivers
- if the instrument has been taken from a cold place to a hot place, the humidity could condense inside; wait for about one hour before applying power
- check that the power supply voltage, the frequency and the electric operational power of the instrument correspond with those of the
- local power supply · disconnect the power supply before performing any type of main-
- tenance supply the probes with protection able to isolate them from any
- contact with metal parts or use isolated probes · do not use the instrument as a safety device
- for repairs and information regarding the instrument, contact the Evco sales network

### PRELIMINARY CONSIDERATIONS

#### 2.1 Preliminary considerations

The instrument can be configured to function with 1 measurement input (chamber probe) or with 2 measurement inputs (top probe and floor probe). If functioning with 1 measurement input it is however possible to enable a second probe (steam probe) to subordinate the injection of steam at the temperature of the same.

Functioning with 1 measurement input allows to independently set the power distributed to the top to that distributed to the floor. Functioning with 2 measurement inputs allows to independently set the top and floor work temperatures.

The utilities managed by the digital outputs (i.e. relays K1 ... K6) are the followina

	17.1							
	RELAY	MANAGED UTILITY						
	lono tring.							

- K2 floor
- K3 can be set (default chamber light)
- Κ4 airhole
- K 5 steam injection
- К6 can be set (default steam generator)

To set the type of functioning (with 1 measurement input rather than 2) see paragraph 4.1. However, to set the utility managed by relay K3 and relay K6 see paragraph 4.2.

#### 2.2 Management of the utilities

Top.

- If functioning with 1 measurement input:
- . the output is switched on in cyclical mode, preferably when the floor output is off (the parameter c1 establishes the cycle time. The procedure given in paragraph 4.5 can be used to set the duration of output switch-on, intended as a percentage of the time established with parameter c1)
- the cyclical activity is subject to the chamber temperature (chamber probe), to the work set-point and parameter r0
- If functioning with 2 measurement inputs
- the output activity depends mainly on the top temperature (top probe), the top set-point and parameter r0.

# Floor.

If functioning with 1 measurement input:

- the output is switched on in cyclical mode, preferably when the top output is off (the parameter c1 establishes the cycle time. The procedure given in paragraph 4.5 can be used to set the duration of output switch-on, intended as a percentage of the time established with parameter c1)
- the cyclical activity is subject to the chamber temperature (chamber probe), to the work set-point and parameter r0.
- If functioning with 2 measurement inputs
- the output activity depends mainly on the floor temperature (floor probe), the floor set-point and parameter r6 Chamber light.
- The output is activated in manual mode

Through the multifunction input it is also possible to activate the output in remote mode

# Airhole.

- The output is activated in the following conditions:
- · before the conclusion of the cooking timer count (of the time established with the parameter c5), for the time established with parameter c6
- in manual mode, for the time established for parameter c7.
- Steam injection.
- The output activity depends mainly on parameter t0.
- Through the multifunction input it is also possible to activate the output in remote mode.
- Steam generator.
- If functioning with 1 measurement input:
- if the steam probe is not enabled, the output is activated in manual mode
- if the steam probe is enabled, the output is enabled in manual mode, after which the activity of the same will depend on the temperature
- of the steam (steam probe), the steam set-point and parameter t3. If functioning with 2 measurement inputs, the output is activated in manual mode

# Alarm.

The output is activated during a temperature alarm.

Through the multifunction input it is also possible to activate the out-

# put in remote mode

- Cooking timer
- The output is activated during the cooking timer count.
- Acoustics.
- The output is activated in the following conditions:
- · before the conclusion of the cooking timer count (of the time established with the parameter c9), for the time established with parameter c4
- · during an alarm or an error, with continuous contribution
- On/Stand-by

# The output is activated during the "on" state (see paragraph 3.1).

In spite of the fact that the instrument can manage the 10 utilities stated in this paragraph, there are 6 digital outputs available. Make sure that the desired utility is managed by the instrument (see paragraph 2.1).

USER INTERFACE

#### 3.1 Preliminary considerations The following functioning states exist:

- the "on" state (the instrument is powered and on: the regulators can be on)
- the "programmed switch-on" state (the instrument is powered but switched off via software: the regulators are off and programmed switch-on of the instrument is envisioned)
- the "stand-by" state (the instrument is powered but switched off via software: the regulators are off and programmed switch-on of the instrument is not envisioned)
- the "off" state (the instrument is not powered).

Successively, the term "switch-on" means the passage from the stand-

by state to the on state. The term "switch-off" means the passage from the on state to the stand-by state.

When powered, the instrument re-proposes the state that it was in when the power supply was disconnected.

# 3.2 Selecting the functioning state

To pass from the stand-by state to the on state (and vice versa): make sure no procedure is in progress

# ■ press 🕐 for 1s.

To pass from the programmed switch-on state to the on state:

• make sure no procedure is in progress

• press 🕐 for 1s.

To pass from the on state to the programmed switch-on state: • make sure no procedure is in progress

- press 🕐 and 🖓 for 1s. To pass from the stand-by state to the programmed switch-on state

(and vice versa):

- make sure no procedure is in progress
  - press 👩 and⊙<sub>■</sub> for 1s.

Through the on/stand-by input it is also possible to pass from the on state (or from the programmed switch-on state) to the stand-by state in remote mode

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To pass from the on state (or the programmed switch-on state) to the stand-by state in remote mode.

activate the on/stand-by input (the instrument remains in the standby state for the entire duration of input activation).

The successive deactivation always causes the passage to the on state. If the on/stand/by input is active, it will not be allowed to pass from the stand-by state to the on state (or programmed switch-on state) by pressina the kevs

# 3.3 The display

# If functioning with 1 measurement input, if the instrument is in the on

state: • the upper part of the display will show the quantity established with parameter P5:

- if P5 = 0, the display will show the chamber temperature
- if P5 = 1, the display will show the work set-point
- the lower part of the display will show the size established with parameter P6:
- if P6 = 0, the display will show the chamber temperature
- if P6 = 1, the display will show the work set-point (in this case the "set" LED will be onl
- if P6 = 2, the display will show the value of the cooking timer or its count if the timer is active (in this case the "timer" LED will be on); the value of the cooking timer is displayed in the hours:minutes format.
- if P6 = 3, the display will show the day and real time (in this case the "clock" LED will be on); the day is displayed in format 1 ... 7 (number 1 corresponds to Monday), the real time in the 24 h format.

See also paragraphs 3.5 and 3.7.

- If functioning with 2 measurement inputs, if the instrument is in the on <u>state:</u>
- the upper part of the display will show the size established with parameter P5:
- if P5 = 0, the display will show the top temperature
- if P5 = 1, the display will show the top set-point
- if P5 = 2, the display will show the floor temperature
- if P5 = 3, the display will show the floor set-point
- the lower part of the display will show the size established with parameter P6:
- if P6 = 0, the display will show the top temperature
- if P6 = 1, the display will show the top set-point (in this case the "set" LED and the "1" LED will be on)
- if P6 = 2, the display will show the value of the cooking timer or its count if the timer is active (in this case the "timer" LED will be on); the value of the cooking timer is displayed in the hours: minutes format
- if P6 = 3, the display will show the day and real time (in this case the "clock" LED will be on); the day is displayed in format 1 ... 7 (number 1 corresponds to Monday), the real time in the 24 h format
- if P6 = 4, the display will show the floor temperature
- if P6 = 5, the display will show the floor set-point (in this case the "set" LED and the "2" LED will be on).

See also paragraphs 3.5 and 3.7

### If the instrument is in the programmed switch-on state:

- the upper part of the display will show the program label that will be started on programmed switch-on of the instrument (if no program start is envisioned, the upper part of the display will show "P -")
- the lower part of the display will show the day and time of the next switch-on; the day is displayed in format 1 ... 7 (number 1 corresponds to Monday), the real time in 24 h format (if switch-on is not programmed, the lower part of the display will show "--:--")

. the "delay" LED will be on

- the LED () will be on.
- If the instrument is in the stand-by state: • the upper part of the display will be off
- . the lower part of the display.
- will be off if parameter c8 is set at 0
- it will display the real time if parameter c8 is set at 1 (in this case the "  ${\color{black}}{\mbox{"LED}}$  will be on);the real time is displayed in 24 h format
- the LED () will be on.

#### Temporary setting of the quantity shown by the 3.4 upper part of the display during the on state make sure no procedure is in progress

- press  $\fbox{}_{\Delta}$  and  $\textcircled{}_{0}$  for 1s several times: the upper part of the display
  - will show one of the labels given in the tables in paragraph 3.5 for 2 secs, after which it will show
    - the corresponding value

Any power supply cut-off causes the display of the quantity established with parameter P5 to be restored.

#### 3.5 Learning the quantity shown by the upper part of the display during the on state

• make sure no procedure is in progress

• press  $\square_{\Delta}$  and  $\boxed{O_{O}}$  : if functioning with 1 measurement input, the upper part of the display will show one of the labels given in the following table for 2 seconds.

LABEL	MEANING					
Pb	chamber temperature					
SP	work set-point					
PbS	steam temperature					
f the steam probe is not enabled (parameter $P4 = 0$ ) the " <b>PhS</b> " label						

bel will not be displayed.

If functioning with 2 measurement inputs, the upper part of the display will show one of the labels given in the following table for 2 seconds

• press  $\fbox{||_{\Delta}}$  and  $\fbox{||_{S}}$  for 4s: the upper part of the display will show

• press : the lower part of the display will show the correspond-

• press  $\overbrace{[N]_{\Delta}}$  and  $\overbrace{{{{\mathbb S}}}}$  for 4s: the upper part of the display will show

utility managed by the third digital output (relay K3)

utility managed by the sixth digital output (relay K6)

• press : the lower part of the display will show the correspond-

"PA"

• press or ≤>> within 15s to set "743"

"Pb

• press or (≤), to select "do3" or "do6"

To modify the utility managed by an output:

The meaning of the values is the following:

ing value

The label meaning is the following:

ing value.

not used

alarm

acoustics

on/stand-b

■ press or within 15s

chamber light

steam generator

cooking time

Setting the day and the real time

day), the real time in the 24 h format (hours:minutes).

ment will exit the procedure.

do not operate for 15s (any modifications will be saved).

press or (≤) within 15s; see also parameters r1

do not operate for 15s (any modifications will be saved).

It is also possible to set the work set-point via the SP parameter.

1 measurement input)

• make sure that the instrument is in stand-by state and that no proce-

 $\bullet$  press  $\fbox$  and  $\textcircled{O}_{\texttt{IIII}}$  : the lower part of the display will show the day

The day is displayed in format 1 ... 7 (number 1 corresponds to Mon-

• press : the left part of the indication relative to the real time will

• press : the right part of the indication relative to the real time will

• press : the LED "clock" will switch-off, after which the instru-

4.4.1 Setting the work set-point (only if functioning with

• make sure that the instrument is in on state and that no procedure is

• press (set ): the lower part of the display will show "SP", the upper

• press 3 times or do not operate for 15s: the LED will switch-

4.4.2 Setting the top set-point and the floor set-point

• make sure that the instrument is in on state and that no procedure is

• press : the lower part of the display will show "SP", the upper

• press 2 times or do not operate for 15s: the LED will switch-

 $\bullet$  press  $\ensuremath{\mathfrak{stress}}$  during the modification of the top set-point: the lower

• press : the LED W will switch-off, after which the instrument

It is also possible to set the top set-point via parameter SP1 and the floor

• press No or within 15s; see also parameters r7 and r8

will exit the procedure.

■ press 🔊 several times during the procedure.

do not operate for 15s (any modifications will be saved).

corresponding value and the LED  $\ensuremath{\bigwedge}\xspace$  will flash

• press  $n_{\Delta}$  or  $s_{D}$  within 15s; see also parameters r1 and r2

(only if functioning with 2 measurement inputs)

part the corresponding value and the LED WW will flash

off, after which the instrument will exit the procedure.

part of the display will show "SP2", the upper part the

part the corresponding value and the  $\mathsf{LED}_{\ensuremath{\mathsf{W}}\ensuremath{\mathsf{W}}}$  will flash

off, after which the instrument will exit the procedure.

and r2

of the week and the real time; the indication relative to the day and the "clock" LED will flash.

LABEL MEANING

VALUE MEANING

• press

do3

do6

1

3

4

5

6

• press

4.3

To exit the procedure:

dure is in progress

To modify the day:

To modify the hour

■ press 📢 or 🔬 within 15s

• press or within 15s

flash.

flash.

To go back to previous levels:

To exit the procedure in advance:

To exit the procedure in advance:

To modify the top set-point:

To modify the floor set-point:

To go back to previous levels:

set-point via parameter SP2

To exit the procedure in advance:

in progress

To modify the minutes: • press ℕ or ミシャ within 15s

in progress

press → and s, for 4s.

- LABEL MEANING
- Pb1 temperature of the top SP1 top set-point temperature of the floor Pb2
- SP2 floor set-point

#### 3.6 Temporary setting of the quantity shown by the lower part of the display during the on state

# make sure no procedure is in progress

• press  $\begin{tabular}{|c|c|c|c|} \hline \end{tabular}$  for 1s several times: the lower part of the display will show one of the labels given in the tables in paragraph 3.7 for 2 secs, after which it will show

the corresponding value. Any power supply cut-off causes the display of the quantity established with parameter P6 to be restored.

#### 3.7 Learning the quantity shown by the lower part of the display during the on state

• make sure no procedure is in progress

• press symbol and  $\textcircled{0}_{0}$  : if functioning with 1 measurement input, the lower part of the display will show one of the labels given in the following table for 2 seconds:

LABEL MEANING

- temperature of the floor Ph
- SP top set-point
- tine value of the cooking timer or its count if the timer is active rtc day and real time
- PbS steam temperature
- If the steam probe is not enabled (parameter P4 = 0), the "PbS" label will not be displayed.
- if functioning with 2 measurement inputs, the lower part of the display will show one of the labels given in the following table for 2 seconds value of the cooking timer or its count if the timer is active:
- LABEL MEANING Pb1 temperature of the top
- SP1 top set-point
- tine value of the cooking timer or its count if the timer is active
  - rtc day and real time
- Pb2 temperature of the floor
- SP2 floor set-point
- 3.8 Chamber light switch on/off make sure no procedure is in progress
- press MIF
- Using the multifunction input, it is also possible to cause the same effect by pressing the MIF) key in remote mode.
- If the chamber light is not managed by any digital output, pressing the MIF key will cause the display of the "no" indication for 1s in the lower part of the display.

### 3.9 Buzzer silencing

- make sure no procedure is in progress
- press a key (the first time the key is pressed, the associated effect is not caused).
- Pressing the key also causes the deactivation of the acoustic output and the buzzer output.
- Using the multifunction input, it is also possible to deactivate the buzzer, the acoustic output and the buzzer output in remote mode.
- SETTINGS 4

#### 4.1 Setting the type of functioning (with 1 measurement input rather than 2)

To access the procedure.

- make sure that the instrument is in stand-by state and that no procedure is in progress
- $\bullet$  press  $\fbox{}_{a}$  and  $\fbox{}_{b}$  for 4s: the upper part of the display will show "PA'
- press 🗰 : the lower part of the display will show the corresponding value
- press or vithin 15s to set "**743**"

• press

- press and symptomic for 4s: the upper part of the display will show "Pb".
- To modify the type of functioning:
- press : the lower part of the display will show the corresponding value

The meaning of the values is the following:

rised in the programs to be restored.

- VALUE MEANING
- functioning with 1 measurement input (chamber probe) functioning with 2 measurement inputs (top probe and floor probe)

The modification of the type of functioning does not cause the default value of the configuration parameters to be

restored but causes the default value of the settings memo-

• make sure that the instrument is in stand-by state and that no proce-

Setting the utility managed by the relay K3 and

• press 📢 or 🚓 within 15s

press ||▲] and ≤
 for 4s.

the relay K6 To access the procedure:

dure is in proaress

• press

To exit the procedure:

4.2

### Setting the power distributed to the top and the power distributed to the floor (only if functioning with 1 measurement input)

To modify the power distributed to the top:

- press et and during the modification of the work set-point: the lower part of the display will show "Po1", the upper part the
- corresponding value and a proportioned number of bars
- of the LED **v** will flash press N or ( ) within 15s; see also parameters c0 and c1 do not operate for 15s: the LED **v** will switch-off, after which the instrument will exit the procedure.
- To modify the power distributed to the floor:

 $\hbox{-}\ {\rm press} \fbox{\rm set}_{\rm M}$  during the modification of the power distributed to the

- top: the lower part of the display will show "Po2", the upper part the corresponding value and a proportioned
  - number of bars of the LED
- • press ( the LED will switch-off, after which the instrument will exit the procedure.

To go back to previous levels:

press<sup>™</sup> several times during the procedure.

To exit the procedure in advance:

do not operate for 15s (any modifications will be saved)

It is also possible to set the power distributed to the top through parameter Po1 and the power distributed to the floor through parameter Po2.

# 4.6 Setting the configuration parameters

To access the procedure

- · make sure that the instrument is in stand-by state and that no procedure is in progress
- press [ | | ] and [ ≤ ) (for 4s: the upper part of the display will show "PA" ress : the lower part of the display will show the correspond-ing value

• press N or ≤ within 15s to set "-19" • press ™ or do not operate for 15s

• press and so for 4s: if functioning with 1 measurement input, the upper part of the display will show "SP"; if functioning with 2 measurement inputs, the

upper part of the display will show "SP1".

To select a parameter:

• press ℕ or 🚓

- To modify a parameter
- press et al. in the lower part of the display will show the corresponding value

■ press ( ) or ( ) within 15s

• press st or do not operate for 15s.

To exit the procedure:

• press har and for 4s or do not operate for 60s (any modifications will be saved).

### Cut the instrument power supply off after modification of the parameters.

#### 4.7 Restoring the default values (configuration parameters and settings memorised in the programs)

• make sure that the instrument is in stand-by state and that no procedure is in progress

- $\bullet\, {\rm press}_{[h]_{\Delta}}\, {\rm and}_{{\rm syp}}$  for 4s: the upper part of the display will show "PA"
- press ( the lower part of the display will show the corresponding value
- press → or → within 15s to set "743"
   press ↔ or do not operate for 15s
- press nd and show for 4s: the upper part of the display will show "РЬ"

• press ℕ\_ or ( ) to select "dEF"

press (K): the lower part of the display will show the correspond-ing value

• press → or (=) within 15s to set "149"

- press or do not operate for 15s: the upper part of the display will show "**dEF**" flashing for 4s, after which "**dEF**" will switch on

• cut the instrument power supply off To exit the procedure in advance

• press  $h_{\Delta}$  and  $h_{\nabla}$  for 4s during the procedure (i.e. before setting "149": restore will not be carried out)

# Make sure that the default values are appropriate PROGRAMMED IGNITION

5.1 Preliminary considerations

Programmed switch-on allows to plan the automatic switch-on of the instrument

When the instrument is switched-on, it will function with the last settings memorised before passing to the programmed switch-on state (see paragraph 3.2) or with the settings memorised in a program (see paragraph 12.4).

It is possible to plan 14 switch-on hours, the possible combinations of switch-on days are 12.

If there is a power cut at the switch-on time, this will be re-proposed when the power supply is restored.

# 5.2 Setting programmed ignition

To access the procedure:

 make sure that the instrument is in on state and that no procedure is in proaress

### • press $\mathbf{M}_{\mathrm{M}}$ and $\mathbf{O}_{\mathrm{O}}$ : the upper part of the display will show "HO1" flashing (it is the label of the first switch-on time), the lower part will show a label relative to a combination of switch-on days and the "delay" LED will flash.

• press : the program label that will be started on switch-on will

press N<sub>1</sub> or sign within 15s
 press sign : the "delay" LED will switch on, after which the instrument will out the proceeding

pressession and operate for 15s (any modifications will

The temporary modification of an ignition is re-proposed also after a

power cut and has exclusive effect on the imminent switch-on and not

If passing from the programmed switch-on state to any other state, the

make sure that the instrument is in the programmed switch-on state

press and on 1 s: the lower part of the display will show the

The day is displayed in format 1 ... 7 (number 1 corresponds to Mon-

 $\bullet\, {\rm press}_{\rm [N]_{a}}$  within 15s to select another switch-on already pro-

• press (Right) : the LED "**delay**" will switch on, after which the instru-ment will exit the procedure.

press and on ot operate for 15s (any modifications will

The exclusion of a switch-on is re-proposed also after a power-cut. The

switch-ons excluded are re-proposed in the successive day and time

If passing from the programmed switch-on state to any other state, the

The count is shown in the lower part of the display; during the count

Before conclusion of the count (of the time established with parameter

c9) the buzzer and the acoustic output are activated, for the time estab-

Before conclusion of the count (of the time established with parameter

c5) the airhole is activated, for the time established with parameter c6.

Using the multifunction input, it is also possible to start/interrupt the

make sure that the instrument is in the on state, that the cooking timer

 $\bullet$  press  $\ensuremath{\mathfrak{M}}$  and  $\ensuremath{\textcircled{\mbox{\scriptsize B}}}$  : the lower part of the display shows the value of

The value of the cooking timer is displayed in the hours: minutes format.

The cooking timer can be set between 00:00 and 24:00 h:min. • press : the LED "timer" will switch-off, after which the instru-

ment will exit the procedure.

do not operate for 15s (any modifications will be saved).

The cooking timer can also be set when the count is in progress (this

modification is temporary, i.e. any power supply cut-off causes the

value set with the procedure given at the start of this paragraph to be

restored). If the value is set at 00:00 h:min, the count will be inter-

rupted, the "timer" LED will switch-off and the buzzer will be activated

• press 💽 during timer setting: the "timer" LED will switch on.

make sure that the instrument is in on state and that no procedure is

• make sure that the instrument is in on state and that no procedure is

press<sub>☉</sub> for 4s: the "timer" LED will switch on and the LED will

• press rest for 1s: the "**timer**" LED switches off and the buzzer will be

Cooking timer start and switch-off of the instru-

flash; the instrument will switch-off when the count has

press<sup>™</sup> several times during the procedure.
 To exit the procedure in advance:

6.3 Starting the cooking timer

• press (♡ ; the "timer" LED will switch on.

been concluded.

activated for 3s.

6.5 Interrupting the cooking timer

ment on conclusion of the count

the cooking timer; the left part and the "timer"

count is not in progress and that no procedure is in progress

LED will flash.

The cooking timer allows to start the reverse count of a time.

the LED "timer" is on and the timer output is activated.

not be saved).

on, the "**delay**" LED will flash.

Exclusion of the next switch-on for the benefit of

day of the week and the time of the next switch-

To modify the program that will be started on switch-on:

ment will exit the procedure.

not be saved).

another already programmed

 $\bullet$  press  $\bigodot$  several times during the procedure.

flash.

To go back to previous levels:

on those previously set.

5.4

To exit the procedure in advance:

modification will not be re-proposed.

and that no procedure is in progress

day), the time in the 24 h format.

grammed

To exit the procedure in advance:

exclusion will not be re-proposed.

**COOKING TIMER** 

lished with parameter c4.

To modify the hour:

To modify the minutes: • press N or € within 15s.

for 3 seconds

Alternatively

in progress

in progress

6.4

cooking timer in remote mode.

press in a cr (≤)→ within 15s

To go back to previous levels:

• press : the right part will flash.

6.2 Setting the cooking timer

**Preliminary considerations** 

circumstances.

6.1

The combination of the switch-on days available are the following: LABEL COMBINATION OF DAYS

- Never Monday - 2 -Tuesday - 3 -Wednesday - 4 -Thursday - 5 -Friday - 6 -Saturday - 7 -Sunday 1 - 5 from Monday to Friday 1 - 6 from Monday to Saturday
- 1 7
   from Monday to Sunday

   6 7
   Saturday and Sunday
- To select a switch-on time:
- press → or select "H07").

To select a combination of days to which to apply the selected switchon time (in the example, "H07"):

- press during flashing of the upper part of the display: the lower part of the display will show a flashing label relative to a combination of days and the upper part will switch-on
- press ( ) or ( ) within 15s (e.g. to select "1 5").
- To set the selected switch-on time (in the example "H07"): • press and during flashing of the lower part of the display: the lower
- part of the display will show the switch-on time; the left
- part will flash. The time is displayed in the 24h format (hours:minutes).
- To modify the hour:
- press ( is a constraint of the indication relative to the switch-on time will flash.

To modify the minutes

- press → or → within 15s
   press → constant → co on time label again (in the example "H07") and the lower part will show the combination of days again (in the example "1 - 5").

To set another programmed ignition, repeat the procedure given in this paragraph.

To go back to previous levels:

- press reveral times during the procedure.
- To exit the procedure:

 $\bullet\, \text{press}_{\text{set}}$  and  $\textcircled{O}_{\odot}$  or do not operate for 15s: the "delay" LED switches off.

- To exit the procedure in advance:
- press and to not operate for 15s during the procedure (i.e. before modifying the minutes: any modifications will not be saved).

### For the instrument to automatically switch-on at the day and time set, these must be in the programmed switch-on mode.

To pass from the on state (or the stand-by state) to the programmed switch-on state:

• make sure no procedure is in progress

- press<sub>☉</sub> and <sub>☉</sub> for 1s.
   If the instrument is in the programmed switch-on state:

• the upper part of the display will show the program label that will be started on programmed switch-on of the instrument (if no program start is envisioned, the upper part of the display will show "P -")

- the lower part of the display will show the day and time of the next switch-on; the day is displayed in format 1 ... 7 (number 1 corresponds to Monday), the real time in 24 h format (if switch-on is not programmed, the lower part of the display will show "--:--")
- . the "delay" LED will be on • the LED 🕁 will be on.

#### 5.3 Temporary modification of the day and time of the next switch-on

To access the procedure

• make sure that the instrument is in the programmed switch-on state and that no procedure is in progress

• press  $\mathfrak{m}_{\mathfrak{m}}$  and  $\mathfrak{O}_{\mathfrak{m}}$  : the upper part of the display will show the program label that will be started on switch-on. The lower part will show the day of the week and

time of the next switch-on; the indication relative to the day and the "delay" LED will flash.

The day is displayed in format 1 ... 7 (number 1 corresponds to Monday), the time in the 24 h format (hours:minutes).

• prese :: the right part of the indication relative to the switch-on time will flash.

- To modify the day:
- press (N<sub>k</sub>) or (S<sub>y</sub>) within 15s
   press (N<sub>k</sub>) : the left part of the indication relative to the switch-on time will flash.

• press ⊨ or ⇒ within 15s

To modify the hour:

To modify the minutes: press or ⇒ within 15s Evco S.p.A. • Code 1049336E00 • page 4/8

# STEAM GENERATOR

#### Preliminary considerations 7.1

The steam generator allows to subordinate the steam injection to its own state

If functioning with 1 measurement input, if the steam probe is not enabled, pressing the  $\begin{tabular}{c} \end{tabular}$  and  $\begin{tabular}{c} \end{tabular}$  keys for 1s will cause the steam generator to switch on and successive pressing causes its switch-off. Steam injection is allowed on condition that the steam generator is on. If functioning with 1 measurement input, if the steam probe is not generator, after which the activity of the same will depend on the temperature of the steam (steam probe), the steam set-point and parameter t3 (successive pressing of the keys causes the steam generator to be disabled). Steam injection is allowed on condition that the temperature of the steam is above that established with the steam set-point or at minimum. Once the steam set-point has been reached, above the "steam set-point - t4".

If functioning with 2 measurement inputs, pressing the MF and  $sy_{\rm el}$ keys for 1s will cause the steam generator to switch on and successive pressing causes its switch-off. Steam injection is allowed on condition that the steam generator is on.

If the steam generator is not managed by any digital output, pressing the  $\fbox{MF}$  and  $\fbox{e}$  keys will cause the display of the "no" indication for 1s in the lower part of the display. In this case steam injection is always allowed

#### STEAM INJECTION 8

#### 8.1 Preliminary considerations

The functioning mode of the steam injection depends on parameter t0

If the parameter t0 is set at 0, pressing the (Resp) key causes the injection of steam for the time established with parameter t2 or for the entire duration that the key is pressed. The parameter t1 establishes the minimum time that can pass between the two successive injections

If the parameter t0 is set at 1, pressing the  $s_{y_{\overline{y}}}$  key will enable the automatic injection of the steam (in cyclical mode: parameter t2 establishes the duration of the injector switch-on and parameter t1 establishes the duration of switch-off)

Using the multifunction input, it is also possible to cause the same effect by pressing the  $\boxed{\Rightarrow}$  key in remote mode.

Steam injection is subordinate to the steam generator state (see paragraph 7.1).

#### 8.2 Quick setting of the parameter t2

make sure that the instrument is in on state and that no procedure is in progress

 press and show "t2", the upper part of the display will show "t2", the lower part the corresponding value and the LED

le will flash. The parameter t2 can be set between 1 and 250 ds.

• press 📢 or 🚓 within 15s • press 🚛 : the LED and will switch-off, after which the instrument will exit the procedure.

To exit the procedure in advance.

do not operate for 15s (any modifications will be saved)

#### 8.3 Activation of the injector in manual mode (only if parameter t0 is set at 0)

- make sure that the instrument is in on state and that no procedure is in progress
- press ( → ): the LED ( will switch-on and the injector will be activated, both for the time established with parameter t2 or for the entire duration that the key is pressed.

The injector must not be deactivated in manual mode

#### Enabling of automatic steam injection (only if pa-8.4 rameter t0 is set at 1)

• make sure that the instrument is in on state and that no procedure is in progress

- press will switch on and the injector will be activated in cyclical mode according to that established with
- parameters t1 and t2 (until the key is pressed again). AIRHOLE

#### 9.1 Preliminary considerations

The airhole is activated in the following conditions

· before the conclusion of the cooking timer count (of the time established with the parameter c5), for the time established with parameter c6

 $\bullet$  in manual mode, by pressing the  $\overbrace{|\mathbf{N}|_\Delta}$  key for the time established

with parameter c7.

#### Quick setting of the parameter c7 9.2

• make sure that the instrument is in on state and that no procedure is in progress

- press  $[\mathbf{st}_{abb}]$  and  $[\mathbf{h}_{ab}]$  : the upper part of the display will show "C7", the lower part the corresponding value the left part and the LED 📉 will flash.

# The parameter c7 is visualised in the minutes:seconds format.

To modify the minutes:

• press → or → within 15s • press → : the right part will flash.

To modify the seconds:

- press () or () within 15s. The parameter c7 can be set between 00:00 and 60:00 min:s.
- press 💷 : the LED 📉 will switch-off, after which the instrument will exit the procedure.

To go back to previous levels:

press reveral times during the procedure.

### To exit the procedure in advance:

# • do not operate for 15s (any modifications will be saved).

9.3 Activation of the airhole in manual mode • make sure that the instrument is in on state and that no procedure is

in progress  $\bullet$  press  $\fbox{\sc limits}$  : the LED  $\sc limits$  will switch on and the airhole will be activated, both for the time established with parameter c7.

12.2 Memorising a program

The label meaning is the following:

first program

tenth program

no program used

• make sure that the instrument is in the on state, that no program is in

• press MF and C :: the lower part of the display will show "PrOG"

and "O" (it is the label of the first program).

execution and that no procedure is in progress

second ... ninth program

press → or ⇒ within 15s (e.g. to select "7")

modify the top set-point and the floor set-point

· operate as indicated in the respective procedure, i.e.:

operate as indicated in the procedure given in paragraph 4.4.1 to

operate as indicated in the procedure given in paragraph 4.4.2 to

operate as indicated in the procedure given in paragraph 4.5 to

modify the power distributed to the top and the power distributed

operate as indicated in the procedure given in paragraph  $6.2\ {\rm to}$ 

operate as indicated in the procedure given in paragraph 8.2 to

operate as indicated in the procedure given in paragraph 9.2 to

 $\bullet$  press  $\bigodot_{\tt BB}$  for 1s: the upper part of the display will show "  ${\sf Ch}$  " flash-

To memorise another program, repeat the procedure given in this

 $\bullet$  press  $\ensuremath{\operatorname{MF}}$  and  $\ensuremath{\textcircled{\sc blue}}$  or do not operate for 15s during the procedure

fications will not be saved).

12.4 Program start on programmed switch-on of the in-

• press before escaping the procedure given in chapter 5 (i.e.

• press [MIF]: the upper and lower parts of the display will successively

If functioning with 1 measurement input, the upper and lower parts

of the display will show the following information in succession (for

the value of the work set-point is 150  $^{\circ}\text{C/}^{\circ}\text{F}$ 

the cooking timer value is 00:30 h:min

If functioning with 2 measurement inputs, the upper and lower parts

of the display will show the following information in succession (for

he value of the top set-point is 150 °C/°F

the value of the floor set-point is 150 °C/°F

the cooking timer value is 00:30 h:min

he value of the power distributed to the top is 50 %

the value of the power distributed to the floor is 50 %

after having modified the minutes for example of the switch-

on time "H07" of the combination of days "1 - 5"): the lower part of the display will show "PrOG" and "O" (it is

show the information, after which the instrument will reset

which the label will switch-on.

 press m and ⊗ or do not operate for 15s. To exit the procedure in advance:

12.3 Program start in manual mode

press n during the memorisation of the program.

the label of the first program).

 press is or (≤), within 15s (e.g. to select "7"). To display the information regarding the program:

normal display.

PrOG (continue ...)

150 (continue ...)

50 (continue ...)

50 (continue ...)

10 (continue ...)

00:30

UPP. PART LOWER PART

00:30 (continue ...)

PrOG (continue ...)

150 (continue ...)

150 (continue ...)

00:30 (continue ...)

parameter t2 value is 10 ds

parameter c7 value is 00:30 min:s

10 (continue ...)

The display shows every setting for 1s.

00:30

the program selected

parameter t2 value is 10 ds

parameter c7 value is 00:30 min:s

the program selected

ing for 4s. The lower part will show "PrOG" again and the

flashing program label for 4s (in the example "7"), after

(i.e. before memorising the program: any modi-

To access the procedure

LABEL MEANING

To select a program

To modify the settings:

to the floor

paragraph. To exit the procedure:

modify the work set-point

modify the cooking timer

modify the parameter t2

modify the parameter c7.

The upper part displays "Ch".

To memorise the program:

strument

To select a program:

UPP. PART LOWER PART

example)

7

SP

Po1

Po<sub>2</sub>

tin

ť2

c7

example)

SP1

SP2

tin

ť2

c7

0

9

1... 8

9.4 Deactivation of the airhole in manual mode

• make sure no procedure is in progress

• press : the LED 🔪 will switch-off.

#### ECONOMY 10

# 10.1 Preliminary considerations

The economy allows to reduce the power supplied to the top and the power supplied to the floor by switching an output on when the other is off.

If functioning with 1 measurement input, when the function is in progress the top output and the floor output are switched on for half of the duration of the switch-on set using the procedure given in paragraph 4.5 (intended as a percentage of the time established with parameter c1).

If functioning with 2 measurement inputs, when the function is in progress, the top output and the floor output are switched-on alternately for half the time established with parameter c1.

When the time established with parameter c10 has passed, the function is interrupted.

Through the multifunction input it is also possible to activate the economy function in remote mode.

If the rapid heating function is in progress, the economy function cannot be activated.

### 10.2 Economy activation

• make sure that the instrument is in the on state, that no procedure is in progress and no rapid heating function is in progress press MF and O for 1s.

When the function is in progress the LED () will flash for 1s every 4s. 10.3 Economy interruption in manual mode

• make sure no procedure is in progress

# ■ press MF and On Is.

11 RAPID HEATING (only if functioning with 1 measurement input)

### Preliminary considerations

The rapid heating allows to reach the work set-point as quickly as possible, supplying 100% of the power both to the top and the floor (i.e. excluding switch-on of the top and floor outputs in a cyclical way with benefit to switch-on in continuous mode).

When the temperature of the chamber reaches the "work set-point temperature established with parameter c3" value, the function is interrupted.

If the economy function is in progress, the rapid heating cannot be activated.

### 11.2 Rapid heating activation

causes the event established with parameter c2:

- if c2 = 1, press for 1s (make sure that the instrument is in the on state, that no procedure is in progress and the economy function is not is progress)
- if c2 = 2, pass from the stand-by state (or from the programmed switch-on state) to the on state
- if c2 = 3, press for 1s (make sure that the instrument is in the on state, that no procedure is in progress and the economy function is not is progress) or pass from the stand-by state (or programmed switch-on state) to the on state.

If parameter c2 is set at 0, the function cannot be activated.

When the function is in progress the upper part of the display shows "F-F" alternately to the quantity established with parameter P5.

# 11.3 Interruption of rapid heating in manual mode

# • make sure no procedure is in progress

# press III for 1s. PROGRAMS MANAGEMENT

# 12.1 Preliminary considerations

The programs allow to memorise some settings

On program start-up the instrument will function with the settings it has memorised.

If functioning with 1 measurement input the instrument memorises the following settings

• work set-point (default 150 °C/°F)

• power distributed to the top (default 50 %)

power distributed to the floor (default 50 %)

- cooker timer (default 00:00 h:min)
- parameter t2 (default 10 ds)
- parameter c7 (default 00:30 min:s).

If functioning with 2 measurement input the instrument memorises the following settings.

The programs can be started in manual mode or on programmed

The modification of the settings memorised in a program during the

execution of the same is not re-proposed on the successive start-up of

- top set-point (default 150 °C/°F)
- floor set-point (default 150 °C/°F)
- cooker timer (default 00:00 h:min)

Up to 10 programs can be memorised.

switch-on of the instrument (see chapter 5).

- parameter t2 (default 10 ds)
- parameter c7 (default 00:30 min:s).

the same program.

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To escape	the succession of settings:				
• press					
IO CONTIN	The upper part of the display will show the flashing switch.				
- biess	on time label again (in the example " <b>H07</b> ") and the lower part will show the combination of days again (in the ex-				
	ample " <b>1 - 5</b> ").				
ıı = , ıs se will functi	neclea, on programmed switch-on of the instrument, these on with the latest settings memorised				
To memo	rise another program, repeat the procedure given in this				
paragrap	h.				
To exit th	e procedure:				
- hiezz	switches off.				
To exit th	e procedure in advance:				
• press	and or do not operate for 15s during the procedure				
	(i.e. before confirming the selection of the pro- gram; any modifications will not be saved).				
12.5 li	nterrupting a program				
<ul> <li>make su</li> </ul>	ire no procedure is in progress				
The instru	$\mathbf{F}$ and $\mathbf{O}_{\text{BB}}$ for rs. the buzzer will be activated for ss.				
12.6 L	earning the information regarding the program				
d	uring the execution of the same				
<ul> <li>make su</li> <li>press@</li> </ul>	and mean in progress and lower parts of the display will				
<u> </u>	successively show the information in succes-				
	sion, after which the instrument will reset nor-				
If function	mail display.				
of the dis	play will show the following information in succession (for				
example):	-				
UPP. PART	LOWER PART				
,	the program in execution				
SP	150 (continue)				
Do1	the value of the work set-point is 150 °C/°F				
PUT	the value of the power distributed to the top is 50 %				
Po2	50 (continue)				
tin	the value of the power distributed to the floor is 50 %				
un	the cooking timer value is 00:30 h:min				
t2	10 (continue)				
.=	parameter t2 value is 10 ds				
c/	parameter c7 value is 00:30 mints				
If functior	ing with 2 measurement inputs, the upper and lower parts				
of the dis	play will show the following information in succession (for				
UPP. PART	LOWER PART				
7	PrOG (continue)				
	the program in execution				
SP1	the value of the top set-point is 150 °C/°F				
SP2	150 (continue)				
	the value of the floor set-point is 150 °C/°F				
tin	00:30 (continue)				
t2	<b>10</b> (continue)				
	parameter t2 value is 10 ds				
c7					
The displa	parameter c7 value is 00:30 min:s				
To escape	the succession of settings:				
• press	and O				
ine instru and not a	imenic displays the information memorised in the program any modifications made during execution of the same				
13 S	IGNALS				
13.1 S	ignals				
LED	MEANING				
44 <b>4</b> ,	if it is on, the to output and/or the floor output will be on				
	if it flashes, the modification of the work set-point, the top				
	set-point and the floor set-point is in progress (with the				
-	procedures indicated in paragraphs 4.4.1 or 4.4.2) power distributed to the top LFD				
	supplies and indication regarding the power distributed				
	to the top				
	if it flashes, the modification of the power distributed to the				
	araph 4.5) (with the procedure indicated in para-				
	power distributed to the floor LED				
-	supplies and indication regarding the power distributed				
	to the floor				
	floor is in progress (with the procedure indicated in para-				
	graph 4.5)				
- A	if it is on:				
	<ul> <li>and the parameter t0 is set at 0, steam injection will be in</li> </ul>				

	and the parameter t0 is set at 1, steam injection will be in
	enabled if it flashes:
	• rapid setting of parameter t2 is in progress (see para-
	graph 8.2)
	<ul> <li>steam injection will not be available (parameter t4)</li> </ul>
	airhole LED
	If it is on, the airhole will be activated in manual mode
	• the airhole will be activated due to the effect of the con-
	clusion of the cooking timer count (parameter c6)
	• rapid setting of parameter c7 is in progress (see para-
	graph 9.2)
°C	degrees Celsius LED
	If it is on, the unit of measurement of the temperatures will
°F	degrees Eabrenheit LED
•	if it is on, the unit of measurement of the temperatures will
	be degrees Fahrenheit (parameter P2)
0	on/stand-by LED
	if it is on, the instrument is in the programmed switch-on
	state or in the stand-by state
	If it flashes, the cooking timer count is in progress and on
	if it flashes for 1s every 4s, the economy function will be in
	progress
delay	programmed switch-on LED
-	if it is on, the instrument is in the programmed switch-on
	state
	if it is flashing, setting of the programmed switch-on day
#1	and time is in progress
timer	COOKING UMER LED
	display will be the value of the cooking timer or its count
	if the timer will be activated
	if it flashes:
	<ul> <li>cooking timer setting is in progress</li> </ul>
	• the cooking timer count will be in progress but the lower
<u> </u>	part of the display will be showing another quantity
Clock	real time LED
	display will be the real time
	if it is flashing, setting of the day and real time is in progress
set	set-point LED
	tent of the state of the state
	If it is on, the quantity shown by the lower part of the
	If it is on, the quantity shown by the lower part of the display will be the work set-point value, the top set-point
	if it is on, the quantity shown by the lower part of the display will be the work set-point value, the top set-point or the floor set-point
1	<ul> <li>if it is on, the quantity shown by the lower part of the display will be the work set-point value, the top set-point or the floor set-point</li> <li>the quantity displayed by the lower part of the display will be the top set point value.</li> </ul>
1 2	<ul> <li>if it is on, the quantity shown by the lower part of the display will be the work set-point value, the top set-point or the floor set-point</li> <li>the quantity displayed by the lower part of the display will be the top set-point value</li> <li>the quantity displayed by the lower part of the display</li> </ul>
1 2	<ul> <li>if it is on, the quantity shown by the lower part of the display will be the work set-point value, the top set-point or the floor set-point</li> <li>the quantity displayed by the lower part of the display will be the top set-point value</li> <li>the quantity displayed by the lower part of the display will be the floor set-point value</li> </ul>
1 2 14 IN	<ul> <li>if it is on, the quantity shown by the lower part of the display will be the work set-point value, the top set-point or the floor set-point</li> <li>the quantity displayed by the lower part of the display will be the top set-point value</li> <li>the quantity displayed by the lower part of the display will be the floor set-point value</li> </ul>
1 2 14.1 In 14.1 In	<ul> <li>if it is on, the quantity shown by the lower part of the display will be the work set-point value, the top set-point or the floor set-point is the quantity displayed by the lower part of the display will be the top set-point value</li> <li>the quantity displayed by the lower part of the display will be the floor set-point value</li> <li>DICATIONS</li> </ul>
1 2 14 IN 14.1 In INDICAT.	<ul> <li>if it is on, the quantity shown by the lower part of the display will be the work set-point value, the top set-point or the floor set-point is the quantity displayed by the lower part of the display will be the top set-point value</li> <li>the quantity displayed by the lower part of the display will be the floor set-point value</li> <li>DECATIONS</li> <li>MEANING</li> <li>MEANING</li> </ul>
1 2 14 IN 14.1 In INDICAT. P -	<ul> <li>if it is on, the quantity shown by the lower part of the display will be the work set-point value, the top set-point or the floor set-point is the quantity displayed by the lower part of the display will be the top set-point value</li> <li>the quantity displayed by the lower part of the display will be the floor set-point value</li> <li>DECATIONS</li> <li>dications</li> <li>MEANING</li> <li>the start-up of a program is not envisioned on programmed switch-on of the instrument</li> </ul>
1 2 14 IN 14.1 In INDICAT. P - P 0 9	<ul> <li>if it is on, the quantity shown by the lower part of the display will be the work set-point value, the top set-point or the floor set-point value</li> <li>the quantity displayed by the lower part of the display will be the top set-point value</li> <li>the quantity displayed by the lower part of the display will be the floor set-point value</li> <li>DECATIONS</li> <li>dications</li> <li>MEANING</li> <li>the start-up of a program is not envisioned on programmed start-up of the program 0 9 is envisioned on programmed</li> </ul>
1 2 14 IN 14.1 In INDICAT. P - P 0 9	<ul> <li>if it is on, the quantity shown by the lower part of the display will be the work set-point value, the top set-point or the floor set-point value</li> <li>the quantity displayed by the lower part of the display will be the top set-point value</li> <li>the quantity displayed by the lower part of the display will be the floor set-point value</li> <li><b>DICATIONS</b></li> <li><b>dications</b></li> <li><b>MEANING</b></li> <li>the start-up of a program is not envisioned on programmed switch-on of the instrument</li> <li>start-up of the program 0 9 is envisioned on programmed switch-on of the instrument</li> </ul>
1 2 14 IN 14.1 In INDICAT. P - P 0 9 F-F	<ul> <li>if it is on, the quantity shown by the lower part of the display will be the work set-point value, the top set-point or the floor set-point or the floor set-point value</li> <li>the quantity displayed by the lower part of the display will be the top set-point value</li> <li>the quantity displayed by the lower part of the display will be the floor set-point value</li> <li>DECATIONS</li> <li>dications</li> <li>MEANING</li> <li>the start-up of a program is not envisioned on programmed switch-on of the instrument</li> <li>start-up of the instrument</li> <li>alternately to the quantity established with parameter P5:</li> </ul>
1 2 14 IN 14.1 In INDICAT. P - P 0 9 F-F	<ul> <li>if it is on, the quantity shown by the lower part of the display will be the work set-point value, the top set-point or the floor set-point</li> <li>the quantity displayed by the lower part of the display will be the top set-point value</li> <li>the quantity displayed by the lower part of the display will be the floor set-point value</li> <li>DECATIONS</li> </ul> <b>dications MEANING</b> the start-up of a program is not envisioned on programmed switch-on of the instrument start-up of the instrument alternately to the quantity established with parameter P5: the rapid heating function will be in progress (only if func-
1 2 14 IN 14.1 In INDICAT. P - P 0 9 F-F	<ul> <li>If it is on, the quantity shown by the lower part of the display will be the work set-point value, the top set-point or the floor set-point value.</li> <li>the quantity displayed by the lower part of the display will be the top set-point value</li> <li>the quantity displayed by the lower part of the display will be the floor set-point value</li> <li>DECATIONS</li> <li>dications</li> <li>MEANING</li> <li>the start-up of a program is not envisioned on programmed switch-on of the instrument</li> <li>start-up of the instrument</li> <li>alternately to the quantity established with parameter P5: the rapid heating function will be in program 0 9 is prioring. Locoord</li> </ul>
1 2 14 IN 14.1 In INDICAT. P - P 0 9 F-F decrease time	If it is on, the quantity snown by the lower part of the display will be the work set-point value, the top set-point or the floor set-point value the quantity displayed by the lower part of the display will be the top set-point value <b>DICATIONS dications MEANING</b> the start-up of a program is not envisioned on programmed switch-on of the instrument start-up of the instrument alternately to the quantity established with parameter P5: the rapid heating function will be in progress (only if functioning with 1 measurement input) the time established with parameter c9 is missing 1 second to the cooking time cooking time
1 2 14 IN 14.1 In INDICAT. P - P 0 9 F-F decrease time c9	<ul> <li>if it is on, the quantity shown by the lower part of the display will be the work set-point value, the top set-point or the floor set-point value</li> <li>the quantity displayed by the lower part of the display will be the top set-point value</li> <li>the quantity displayed by the lower part of the display will be the floor set-point value</li> <li>DECATIONS</li> <li>dications</li> <li>MEANING</li> <li>the start-up of a program is not envisioned on programmed switch-on of the instrument</li> <li>start-up of the program 0 9 is envisioned on programmed switch-on of the instrument</li> <li>alternately to the quantity established with parameter P5: the rapid heating function will be in progress (only if functioning with 1 measurement input)</li> <li>the time established with parameter c9 is missing 1 second to the conclusion of the cooking timer count</li> </ul>
1 2 14 IN 14.1 In INDICAT. P - P 0 9 F-F decrease time c9 00:00	<ul> <li>If it is on, the quantity shown by the lower part of the display will be the work set-point value, the top set-point or the floor set-point value</li> <li>the quantity displayed by the lower part of the display will be the top set-point value</li> <li>the quantity displayed by the lower part of the display will be the floor set-point value</li> <li>DICATIONS</li> <li>MEANING</li> <li>the start-up of a program is not envisioned on programmed switch-on of the instrument</li> <li>start-up of the program 0 9 is envisioned on programmed switch-on of the instrument</li> <li>alternately to the quantity established with parameter P5: the rapid heating function will be in progress (only if functioning with 1 measurement input)</li> <li>the time established with parameter 0 is missing 1 second to the conclusion of the cooking timer count</li> <li>flashing: the cooking timer count has ended</li> </ul>
1 2 14 IN 14.1 In INDICAT. P 0 9 F-F decrease time c9 00:00 15 All	if it is on, the quantity shown by the lower part of the display will be the work set-point value, the top set-point or the floor set-point value is the quantity displayed by the lower part of the display will be the top set-point value the quantity displayed by the lower part of the display will be the floor set-point value <b>DICATIONS DICATIONS MEANING</b> the start-up of a program is not envisioned on programmed switch-on of the instrument  start-up of the program 0 9 is envisioned on programmed switch-on of the instrument  alternately to the quantity established with parameter P5:  the rapid heating function will be in progress (only if functioning with 1 measurement input)  the to the cooking timer count  fashing: the cooking timer count has ended <b>ARMS</b>
1 2 14 IN 14.1 In INDICAT. P 0 9 F-F decrease time c9 00:00 15 At 15.1 At	<ul> <li>if it is on, the quantity shown by the lower part of the display will be the work set-point value, the top set-point or the floor set-point value</li> <li>the quantity displayed by the lower part of the display will be the top set-point value</li> <li>the quantity displayed by the lower part of the display will be the floor set-point value</li> <li>DICATIONS</li> <li>MEANING</li> <li>the start-up of a program is not envisioned on programmed switch-on of the instrument</li> <li>start-up of the program 0 9 is envisioned on programmed switch-on of the instrument</li> <li>alternately to the quantity established with parameter P5: the rapid heating function will be in progress (only if functioning with 1 measurement input)</li> <li>the time established with parameter 0 is missing 1 second to the conclusion of the cooking timer count</li> <li>flashing: the cooking timer count has ended</li> </ul>
1 2 14 IN 14.1 In INDICAT. P 0 9 F-F decrease time c9 00:00 15 At 15.1 Al CODE Al	if it is on, the quantity shown by the lower part of the display will be the work set-point value, the top set-point or the floor set-point value the quantity displayed by the lower part of the display will be the top set-point value     the quantity displayed by the lower part of the display will be the floor set-point value     the quantity displayed by the lower part of the display will be the floor set-point value     DICATIONS     dications     MEANING     the start-up of a program is not envisioned on programmed     switch-on of the instrument     start-up of the program 0 9 is envisioned on programmed     switch-on of the instrument     alternately to the quantity established with parameter P5:     the rapid heating function will be in progress (only if func-     tioning with 1 measurement input)     the time established with parameter c9 is missing 1 second     to the conclusion of the cooking timer count     flashing: the cooking timer count has ended     ARMS     arms     MEANING     (hamber temperature alarm lonly if functioning with
1 2 14 IN 14.1 In INDICAT. P 0 9 F-F decrease time c9 00:00 15 Al 15.1 Al CODE AL	If it is on, the quantity shown by the lower part of the display will be the work set-point value, the top set-point or the floor set-point value is the quantity displayed by the lower part of the display will be the top set-point value the quantity displayed by the lower part of the display will be the floor set-point value <b>DICATIONS</b> MEANING  the start-up of a program is not envisioned on programmed switch-on of the instrument start-up of the program 09 is envisioned on programmed switch-on of the instrument alternately to the quantity established with parameter P5: the rapid heating function will be in progress (only if functioning with 1 measurement input) the time established with parameter c9 is missing 1 second to the conclusion of the cooking timer count flashing: the cooking timer count has ended <b>ARMS</b> MEANING  chamber temperature alarm (only if functioning with 1 measurement input)
1 2 14 IN 14.1 In 11.1 In 11.1 In P - P 0 9 F-F decrease time c9 00:00 15 Al 15.1 Al CODE AL	<pre>if it is on, the quantity shown by the lower part of the display will be the work set-point value, the top set-point or the floor set-point value + the quantity displayed by the lower part of the display will be the top set-point value • the quantity displayed by the lower part of the display will be the floor set-point value <b>DICATIONS</b> dications MEANING the start-up of a program is not envisioned on programmed switch-on of the instrument start-up of the program 0 9 is envisioned on programmed switch-on of the instrument alternately to the quantity established with parameter P5: the rapid heating function will be in progress (only if func- tioning with 1 measurement input) the time established with parameter c9 is missing 1 second to the conclusion of the cooking timer count flashing: the cooking timer count has ended <b>ARMS</b> arms MEANING chamber temperature alarm (only if functioning with 1 measurement input) Remedies:</pre>
1 2 14 IN 14.1 In INDICAT. P - P 0 9 F-F decrease time c9 00:00 15 Al 15.1 Al CODE AL	if it is on, the quantity shown by the lower part of the display will be the work set-point value, the top set-point or the floor set-point value is the quantity displayed by the lower part of the display will be the top set-point value the quantity displayed by the lower part of the display will be the floor set-point value <b>DICATIONS DICATIONS MEANING</b> the start-up of a program is not envisioned on programmed switch-on of the instrument start-up of the program 0 9 is envisioned on programmed switch-on of the instrument alternately to the quantity established with parameter P5: the rapid heating function will be in progress (only if functioning with 1 measurement input) the time established with parameter c9 is missing 1 second to the cooking timer count has ended <b>ARMS ARMS MEANING</b> chamber temperature alarm (only if functioning with 1 measurement input) Remedies:  • check the chamber temperature
1 2 14 IN 14.1 In INDICAT. P - P 0 9 F-F decrease time c9 00:00 15 Al 15.1 Al CODE AL	<pre>if it is on, the quantity shown by the lower part of the display will be the work set-point value, the top set-point or the floor set-point 4 • the quantity displayed by the lower part of the display will be the top set-point value • the quantity displayed by the lower part of the display will be the floor set-point value <b>DICATIONS</b> dications MEANING the start-up of a program is not envisioned on programmed switch-on of the instrument start-up of the program 0 9 is envisioned on programmed switch-on of the instrument alternately to the quantity established with parameter P5: the rapid heating function will be in progress (only if func- tioning with 1 measurement input) the time established with parameter c9 is missing 1 second to the conclusion of the cooking timer count flashing: the cooking timer count has ended <b>ARMS</b> arms MEANING chamber temperature alarm (only if functioning with 1 measurement input) Remedies: • check the chamber temperature • see parameters A1 and A3</pre>
1 2 14 IN 14.1 In INDICAT. P - P 0 9 F-F decrease time c9 00:00 15 Al 15.1 Al CODE AL	<pre>if it is on, the quantity shown by the lower part of the display will be the work set-point value, the top set-point or the floor set-point it equantity displayed by the lower part of the display will be the top set-point value • the quantity displayed by the lower part of the display will be the floor set-point value <b>DICATIONS</b> dications MEANING the start-up of a program is not envisioned on programmed switch-on of the instrument start-up of the program 0 9 is envisioned on programmed switch-on of the instrument alternately to the quantity established with parameter P5: the rapid heating function will be in progress (only if func- tioning with 1 measurement input) the time established with parameter c9 is missing 1 second to the conclusion of the cooking timer count flashing: the cooking timer count has ended <b>ARMS</b> arms MEANING chamber temperature alarm (only if functioning with 1 measurement input) Remedies: • check the chamber temperature • see parameters A1 and A3 Consequences:</pre>
1 2 14 IN 14.1 In INDICAT. P - P 0 9 F-F decrease time 09:00 15 AL 15.1 AI CODE AL	if it is on, the quantity shown by the lower part of the display will be the work set-point value, the top set-point or the floor set-point value is the quantity displayed by the lower part of the display will be the top set-point value the quantity displayed by the lower part of the display will be the floor set-point value <b>DICATIONS DICATIONS DICATIONS MEANING</b> the start-up of a program is not envisioned on programmed switch-on of the instrument  start-up of the program 0 9 is envisioned on programmed switch-on of the instrument  alternately to the quantity established with parameter P5:  the rapid heating function will be in progress (only if functioning with 1 measurement input)  the time established with parameter c9 is missing 1 second to the cooking timer count <b>ARMS MEANING</b> chamber temperature alarm (only if functioning with 1 measurement input)  Remedies: <ul> <li>check the chamber temperature</li> <li>see parameters A1 and A3</li> <li>Consequences: </li> <li>the alarm output will be activated </li> </ul>
1 2 14 IN 14.1 IN INDICAT. P - P 0 9 F-F decrease time c0:00 15 AL 15.1 AI CODE AL	if it is on, the quantity shown by the lower part of the display will be the work set-point value, the top set-point or the floor set-point value + the quantity displayed by the lower part of the display will be the top set-point value - the quantity displayed by the lower part of the display will be the floor set-point value - <b>DICATIONS</b>
1 2 14 IN 14.1 In INDICAT. P - P 0 9 F-F decrease time c0:00 15 AL 15.1 AI CODE AL	If it is on, the quantity shown by the lower part of the display will be the work set-point value, the top set-point or the floor set-point value • the quantity displayed by the lower part of the display will be the top set-point value • the quantity displayed by the lower part of the display will be the floor set-point value • <b>DICATIONS</b> MEANING  MEANING  the start-up of a program is not envisioned on programmed switch-on of the instrument start-up of the program 0 9 is envisioned on programmed switch-on of the instrument alternately to the quantity established with parameter P5: the rapid heating function will be in progress (only if functioning with 1 measurement input) the time established with parameter c9 is missing 1 second to the cooking timer count has ended <b>ARMS MEANING</b> chamber temperature alarm (only if functioning with 1 measurement input) emedies: • check the chamber temperature • see parameters A1 and A3 Consequences: • the alarm output will be activated top temperature alarm (only if functioning with 2 meas-
1 2 14 IN 14.1 IN INDICAT. P - P 0 9 F-F decrease time c0:00 15 AL 15.1 AI CODE AL	<pre>if it is on, the quantity shown by the lower part of the display will be the work set-point value, the top set-point or the floor set-point value • the quantity displayed by the lower part of the display will be the top set-point value • the quantity displayed by the lower part of the display will be the floor set-point value <b>DICATIONS</b> dications MEANING the start-up of a program is not envisioned on programmed switch-on of the instrument start-up of the program 0 9 is envisioned on programmed switch-on of the instrument alternately to the quantity established with parameter P5: the rapid heating function will be in progress (only if func- tioning with 1 measurement input) the time established with parameter c9 is missing 1 second to the conclusion of the cooking timer count flashing: the cooking timer count has ended <b>ARMS</b> arms MEANING chamber temperature alarm (only if functioning with 1 measurement input) emedies: • check the chamber temperature • see parameters A1 and A3 Consequences: • the alarm output will be activated • the acoustics output and the buzzer output will be acti- vated top temperature alarm (only if functioning with 2 meas- urement inputs)</pre>
1 2 14 IN 14.1 IN INDICAT. P - P 0 9 F-F decrease time c0:00 15 Al 15.1 Al CODE AL AL1	If it is on, the quantity snown by the lower part of the display will be the work set-point value, the top set-point or the floor set-point value • the quantity displayed by the lower part of the display will be the top set-point value • the quantity displayed by the lower part of the display will be the floor set-point value • <b>DICATIONS</b> MEANING  the start-up of a program is not envisioned on programmed switch-on of the instrument alternately to the quantity established with parameter P5: the rapid heating function will be in progress (only if functioning with 1 measurement input) the time established with parameter c9 is missing 1 second to the conclusion of the cooking timer count flashing: the cooking timer count has ended <b>ARMS ARMS MEANING</b> the ANING the alarm output will be activated • the acoustics output and the buzzer output will be activated to p temperature alarm (only if functioning with 2 measurement input) the alarm output will be activated • the acoustics output and the buzzer output will be activated top temperature alarm (only if functioning with 2 measurement input) Remedies: • check the chamber temperature
1 2 14 IN 14.1 IN INDICAT. P - P 0 9 F-F decrease time c0:00 15 Al 15.1 Al CODE AL AL1	If it is on, the quantity shown by the lower part of the display will be the work set-point value, the top set-point or the floor set-point value • the quantity displayed by the lower part of the display will be the top set-point value • the quantity displayed by the lower part of the display will be the floor set-point value • <b>DICATIONS DICATIONS dications MEANING</b> the start-up of a program is not envisioned on programmed switch-on of the instrument alternately to the quantity established with parameter P5: the rapid heating function will be in programs (only if functioning with 1 measurement input) the time established with parameter c9 is missing 1 second to the cooking timer count flashing: the cooking timer count has ended <b>ARMS arms MEANING</b> chamber temperature alarm (only if functioning with 1 measurement isput) Remedies: • the alarm output will be activated • the acoustics output and the buzzer output will be activated top temperature alarm (only if functioning with 2 measurement input) Remedies: • check the top temperature
1 2 14 IN 14.1 In INDICAT. P - P 0 9 F-F decrease time c9 00:00 15 AL 15.1 AI CODE AL	If it is on, the quantity shown by the lower part of the display will be the work set-point value, the top set-point or the floor set-point value the quantity displayed by the lower part of the display will be the top set-point value <b>DECATIONS dications MEANING</b> the start-up of a program is not envisioned on programmed switch-on of the instrument alternately to the quantity established with parameter P5: the rapid heating function will be in programs (only if functioning with 1 measurement input) the time established with parameter C9 is missing 1 second to the cooking timer count flashing: the cooking timer count has ended <b>ARMS arms MEANING</b> chamber temperature alarm (only if functioning with 1 measurement is considered and a Consequences: • the alarm output will be activated • the acoustics output and the buzzer output will be activated top temperature alarm (only if functioning with 2 measurement input) Remedies: • check the top temperature • see parameters A1 and A3 Consequences: • check the top temperature • see parameters A1 and A3 Consequences: • check the top temperature • see parameters A1 and A3 Consequences: • check the top temperature • see parameters A1 and A3 Consequences: • check the top temperature • see parameters A1 and A3 Consequences: • check the top temperature
1 2 14 IN 14.1 In INDICAT. P - P 0 9 F-F decrease time c9 00:00 15 AL 15.1 AI CODE AL	If it is on, the quantity shown by the lower part of the display will be the work set-point value, the top set-point or the floor set-point value <ul> <li>the quantity displayed by the lower part of the display will be the top set-point value</li> <li>the quantity displayed by the lower part of the display will be the floor set-point value</li> <li>DECATIONS</li> </ul> <b>dications MEANING</b> the start-up of a program is not envisioned on programmed switch-on of the instrument start-up of the program 0 9 is envisioned on programmed switch-on of the instrument alternately to the quantity established with parameter P5: the rapid heating function will be in progress (only if functioning with 1 measurement input) the the cooking timer count has ended <b>ARMS ARMS ARMS Arms MEANING</b> (charms the member temperature • see parameters A1 and A3 Consequences: <ul> <li>the atom output will be activated</li> <li>the acoustics output and the buzzer output will be activated</li> <li>the acoustics output and the buzzer output will be activated</li> <li>the acoustics output and the buzzer output will be activated • the activative A1 and A3 Consequences: <ul> <li>check the top temperature</li> <li>see parameters A1 and A3</li> <li>Consequences:</li> <li>check the top temperature</li> <li>see parameters A1 and A3</li> <li>Consequences:</li> <li>the acoustics output and the buzzer output will be activated</li> <li>the acoustics output and the buzzer output will be activated</li> </ul></li></ul>
1 2 14 IN INDICAT. P - P 0 9 F-F decrease time c9 00:00 15 AL 15.1 AI CODE AL	If it is on, the quantity shown by the lower part of the display will be the work set-point value, the top set-point or the floor set-point value  • the quantity displayed by the lower part of the display will be the top set-point value  • the quantity displayed by the lower part of the display will be the floor set-point value  • the quantity displayed by the lower part of the display will be the floor set-point value  • the quantity displayed by the lower part of the display will be the floor set-point value  • the quantity displayed by the lower part of the display will be the floor set-point value  • <b>DICATIONS</b> dications  MEANING the start-up of a program is not envisioned on programmed switch-on of the instrument start-up of the program 0 9 is envisioned on programmed switch-on of the instrument alternately to the quantity established with parameter P5: the rapid heating function will be in progress (only if functioning with 1 measurement input) the time established with parameter c9 is missing 1 second to the conclusion of the cooking timer count flashing: the cooking timer count has ended  ARMS arms MEANING chamber temperature alarm (only if functioning with 1 measurement input) Remedies: • check the chamber temperature • see parameters A1 and A3 Consequences: • the alarm output will be activated • the acoustics output and the buzzer output will be activated top temperature alarm (only if functioning with 2 measurement inputs) Remedies: • check the top temperature • see parameters A1 and A3 Consequences: • check the top temperature • see parameters A1 and A3 Consequences: • check the top temperature • see parameters A1 and A3 Consequences: • check the top temperature • see parameters A1 and A3 Consequences: • check the top temperature • see parameters A1 and A3 Consequences: • check the top temperature • see parameters A1 and A3 Consequences: • check the top temperature • see parameters A1 and A3 Consequences: • check the top temperature • see parameters A1 and A3 Consequences: • check the top t
1 2 14 IN INDICAT. P - P 0 9 F-F decrease c9 00:00 15 Al 15.1 Al CODE AL	If it is on, the quantity shown by the lower part of the display will be the work set-point value, the top set-point or the floor set-point value the quantity displayed by the lower part of the display will be the top set-point value <b>DICATIONS dications MEANING the start-up of a program is not envisioned on programmed</b> switch-on of the instrument alternately to the quantity established with parameter P5: the rapid heating function will be in prograss (only if functioning with 1 measurement input) the time established with parameter c9 is missing 1 second to the conclusion of the cooking timer count flashing: the cooking timer count has ended <b>ARMS arms MEANING</b> (he acument input) Remedies: • check the chamber temperature • see parameters A1 and A3 Consequences: • the alarm output will be activated • the acoustics output and the buzzer output will be activated • the alarm output will be activated • the acoustics output and the buzzer output will be activated • the alarm output will be activated • the alarm output will be activated • the acoustics output and the buzzer output will be activated
1 2 14 IN INDICAT. P 0 9 F-F decrease time c9 00:00 15 Al 15.1 Al CODE AL	If it is on, the quantity shown by the lower part of the display will be the work set-point value, the top set-point or the floor set-point value the quantity displayed by the lower part of the display will be the top set-point value <b>DICATIONS dications MEANING the start-up of a program is not envisioned on programmed switch-on of the instrument</b> alternately to the quantity established with parameter PS: the rapid heating function will be in programs (only if functioning with 1 measurement input) the time established with parameter C9 is missing 1 second to the cooking timer count flashing: the cooking timer count has ended <b>ARMS arms MEANING the chamber temperature see parameters A1 and A3</b> Consequences: • check the top temperature <b>see parameters A1 and A3</b> Consequences: • cheat the top temperature <b>see parameters A1 and A3</b> Consequences: • cheat the top temperature <b>see parameters A1 and A3</b> Consequences: • the alarm output will be activated • the acoustics output and the buzzer output will be activated • the acoustics output and the buzzer output will be activated • the acoustics output and the buzzer output will be activated • the acoustics output and the buzzer output will be activated • the acoustics output and the buzzer output will be activated • the acoustics output and the buzzer output will be activated • the acoustics output and the buzzer output will be activated • the acoustics output and the buzzer output will be activated • the acoustics output and the buzzer output will be activated • the acoustics output and the buzzer output will be activated • the acoustics output and the buzzer output will be activated • the acoustics output and the buzzer output will be activated • the acoustics output and the buzzer output will be activated • the acoustics output and the buzzer output will be activated
1 2 14 IN INDICAT. P - P 0 9 F-F decrease time c9 00:00 15 AL 15.1 AL CODE AL	If it is on, the quantity shown by the lower part of the display will be the work set-point value, the top set-point or the floor set-point value the quantity displayed by the lower part of the display will be the top set-point value <b>DICATIONS DICATIONS dications MEANING</b> the start-up of a program is not envisioned on programmed switch-on of the instrument alternately to the quantity established with parameter PS: the rapid heating function will be in programs (only if functioning with 1 measurement input) the time established with parameter C9 is missing 1 second to the cooking timer count flashing: the cooking timer count has ended <b>ARMS arms MEANING</b> (chamber temperature alarm (only if functioning with 1 measurement input) Remedies: • check the chamber temperature • see parameters A1 and A3 Consequences: • the alarm output will be activated • the acoustics output and the buzzer output will be activated • the acoustics output and the buzzer output will be activated • the acoustics output and the buzzer output will be activated • the acoustics output and the buzzer output will be activated • the acoustics output and the buzzer output will be activated • the acoustics output and the buzzer output will be activated • the acoustics output and the buzzer output will be activated • the acoustics output and the buzzer output will be activated • the acoustics output and the buzzer output will be activated • the acoustics output and the buzzer output will be activated • the acoustics output and the buzzer output will be activated • the acoustics output and the buzzer output will be activated • the acoustics output will be activated • the acoustics output and the buzzer output will be activated • the acoustics output and the buzzer output will be activated • the acoustics output and the buzzer output will be activated • the acoustics output and the buzzer output will be activated • the acoustics output and the buzzer output will be activated • the acoustics output and the buzzer output will be activated
1 2 14 IN 14.1 In INDICAT. P. P 0 9 F-F decrease time c9 00:00 15 Al 15.1 Al CODE AL	If it is on, the quantity shown by the lower part of the display will be the work set-point value, the top set-point or the floor set-point value <b>DicATIONS</b> • the quantity displayed by the lower part of the display will be the floor set-point value <b>DiCATIONS</b> • <b>DicATIONS</b>
1 2 14 IN 14.1 In INDICAT. P 0 9 F-F decrease time c9 00:00 15 Al 15.1 Al CODE AL AL1 AL2	If it is on, the quantity shown by the lower part of the display will be the work set-point value, the top set-point or the floor set-point value <b></b> the quantity displayed by the lower part of the display will be the top set-point value <b> </b>

• the alarm output will be activated

multifunction input alarm (only if the parameter i5 is set at 5) Remedies: • check the causes that brought about the input activation see parameters i5 and i6 Main consequences: • the top output will be deactivated • the floor output will be deactivated steam injection will not be available the alarm output will be activated the acoustics output and the buzzer output will be activated PF1 power supply cut-off alarm during the cooking timer count with duration shorter than the time established with parameter r13 Remedies: press a key to restore the normal display . check the causes that brought about the power supply cut-off Main consequences: • the count will continue until the instrument is powered • the acoustics output and the buzzer output will be activated PF2 power supply cut-off alarm during the cooking timer count with duration longer than the time established with parameter r13 Remedies press a key to restore the normal display • check the causes that brought about the power supply cut-off Main consequences: • the count will be interrupted • the acoustics output and the buzzer output will be activated When the cause of the alarm disappears, the instrument restores normal functioning, except for the power supply cut-off alarm during the cooking timer count (codes "PF1" and "PF2") which requires a key to be pressed. INTERNAL DIAGNOSTICS 16 Internal diagnostics 16.1 CODE MEANING Pr1 If functioning with 1 measurement input: chamber probe error Remedies: • see parameter P0 check probe integrity check the instrument-probe connection check the chamber temperature Main consequences: • the top output and the floor output will be deactivated • the acoustics output and the buzzer output will be activated If functioning with 2 measurement inputs: top probe error Remedies: • the same as the previous case but relative to the top probe Main consequences: • the top output will be deactivated . the acoustics output and the buzzer output will be activated Pr2 If functioning with 1 measurement input: steam probe error Remedies • the same as the previous case but relative to the steam probe Main consequences: • the steam generator output will be off steam injection will not be available • the acoustics output and the buzzer output will be activated If functioning with 2 measurement inputs: floor probe error Remedies • the same as the previous case but relative to the floor probe Main consequences: • the floor output will be deactivated • the acoustics output and the buzzer output will be activated rtc clock error Remedies: set the day and real time again Main consequences: • the programmed switch-on will not be available • the acoustics output and the buzzer output will be activated When the cause of the alarm disappears the instrument restores normal functioning, except for clock error (code "rtc") that requires the day and real time to be set.

• the acoustics output and the buzzer output will be acti-

vated

id

# 17 TECHNICAL DATA

# 17.1 Technical data

Container: grey self-extinguishing.

Front panel protection rating: IP 54.

Connections: removable terminal boards (power supply, inputs and outputs), 6-pole connector (serial port).

**Temperature of use:** from 0 to 55 °C (from 32 to 131 °F, 10 ... 90% relative humidity without condensate).

Power supply: 115 ... 230 VAC, 50/60 Hz, 5 VA (approx) or 24 VAC,

50/60 Hz. Keeping the clock data in a power-cut: 24 h with battery

charged.

**Battery charging time:** 2 min without interruptions (the battery is charged by the instrument power supply).

# Alarm buzzer: incorporated.

Measurement inputs: can be configured:

- 1 (chamber probe) for J/K thermocouple if functioning with 1 measurement input; second input (steam probe) for J/K thermocouple
- 2 (top probe and floor probe) for J/K thermocouple if functioning with 2 measure-
- ment inputs

# Digital inputs: 2 inputs:

- on/stand-by input in high voltage (230 VAC) with configurable polarity
- multifunction input, for NO/NC contact (potential-free contact, 5 V 1 mA).
- Range of measurement: from -99 to 800  $^\circ C$  (from -99 to 999  $^\circ F$ ) for J thermocouple, from -99 to 999  $^\circ C$  (from -99 to 999  $^\circ F$ ) for K

### thermocouple. Resolution: 1 °C/1 °F.

# Digital outputs: 6 relays

- top (relay K1): 8 A res. @ 250 VAC (NO)
  - floor (relay K2): 8 A res. @ 250 VAC (NO)
  - utility that can be set (relay K3): 8 A res.
  - @ 250 VAC (contact in exchange)
  - airhole (relay K4): 8 A res. @ 250 VAC (NO
  - contact)
  - steam injection (relay K5): 8 A res. @
  - 250 VAC (NO contact)
  - utility that can be set (relay K6): 8 A res.
- @ 250 VAC (contact in exchange)

# The maximum current accepted on clamp 23 is 10 A.

To set the utility managed by relay K3 and relay K6, see paragraph 4.2. **Other outputs**: buzzer output (12 V, max. 20 mA); the output is activated during alarms and errors, with continuous contribution. **Serial port:** port for the communication with the supervising system (through a serial interface, via TTL, with MODBUS communication protocol) or with the programming key.

18	WORK	SEI-PO	JINI, PO	WER DISTRIB	UTED AND C	ONFIGURATION PARAMETERS
18.1	Work	set-poir	nt			
	MIN.	MAX.	U.M.	1 INPUT	2 INPUTS	WORK SET-POINT
	r 1	r2	°C/°F(1)	150	not visible	work set-point
	r 1	r2	°C/°F (1)	not visible	150	top set-point
	r7	r8	°C/°F (1)	not visible	150	floor set-point
18.2	Power	distrib	uted			
PARAM	MIN.	MAX.	U.M.	1 INPUT	2 INPUTS	POWER DISTRIBUTED
	0	100	%	50	not visible	power distributed to the top (percentage of c1); see also c0 and c1
	0	100	%	50	not visible	power distributed to the floor (percentage of c1); see also c0 and c1
18.3	Config	juratio	n paramet	ters		
PARAM	MIN.	MAX.	U.M.	1 INPUT	2 INPUTS	WORK SET-POINT
SP	r1	r2	°C/°F(1)	150	not visible	work set-point
SPS	0	999	°C/°F(1)	100	not visible	steam set-point
SP1	r1	r2	°C/°F (1)	not visible	150	top set-point
SP2	r7	r8	°C/°E (1)	not visible	150	floor set-point
PARAM	MIN	MAX	U M	1 INPUT	2 INPUTS	POWER DISTRIBUTED
Po1	0	100	%	50	not visible	power distributed to the top (percentage of c1): see also c0 and c1
Po2	0	100	%	50	not visible	power distributed to the floor (percentage of c1); see also c0 and c1
PARAM	MIN	MAX	UM		2 INPLITS	
CA1	-25/-5(	25/50	°C/°F(1)	0	0	with 1 measurement input chamber probe inset with 2 measurement inputs top probe offset
CA2	-25/-50	25/50	°C/°F (1)	not visible	0	with 1 measurement input steam probe inset: with 2 measurement inputs floor probe offset
PO	0	1		0	0	type of probe
	ľ	l.			0	
						1 - K
P2	0	1		0	0	temperature unit of measurement (2)
12	ľ	l'			0	$A = \circ$
P4	0	1		0	not visible	enabling the steam probe
1 7	ľ	[		0	LIOC VISIDIE	
DE	0	121		0	0	1 - LS
ГЭ	0	( <sup>2</sup> )		0	U	quartity shown by the upper part or the display during the on state or during infinite infitcitioning
						v = viii i measurement injud, oriamuer temperature, viin z measurement injud, top temperature 1. viit i measurement injud, under sta origination viit a consumeration in the state sint.
						The swarth measurement input, work set-point, with 2 measurement inputs, top set-point
	-					3 = noor set-point
P6	0	(4)		2	2	quantity shown by the lower part of the display during the on state or during normal functioning
						0 = with 1 measurement input, chamber temperature; with 2 measurement inputs, top temperature
						1 = with 1 measurement input, work set-point; with 2 measurement inputs, top set-point
						2 = value of the cooking timer or its count if the timer is active
						3 = day and real time
						4 = temperature of the floor
						5 = floor set-point
PARAM	MIN.	MAX.	U.M.	1 INPUT	2 INPUTS	MAIN REGULATOR
rO	1	99	°C/°F (1)	5	5	with 1 measurement input, work set-point differential; with 2 measurement inputs, top set-point differential
r 1	0	r2	°C/°F (1)	50	50	with 1 measurement input, minimum work set-point; with 2 measurement inputs, top minimum set-point
r2	r1	999	°C/°F (1)	350	350	with 1 measurement input, maximum work set-point; with 2 measurement inputs, top maximum set-point
r6	1	99	°C/°F (1)	not visible	5	floor set-point differential
r7	0	r8	°C/°F (1)	not visible	50	minimum floor set-point
r8	r7	999	°C/°F (1)	not visible	350	maximum floor set-point
r12	0	1		0	0	restraint between the top output and the cooking timer
						1 = YES - the top output remains off if the cooking timer count is not in progress
r13	0	240	min	240	240	duration of a power supply cut-off duration that occurs during a cooking timer count exceeding which the count is interrupted (5)
r14	0	1		0	0	restraint between the floor output and the cooking timer
						1 = YES - the floor output remains off if the cooking timer count is not in progress
PARAM	MIN.	MAX.	U.M.	1 INPUT	2 INPUTS	STEAM INJECTION
tO	0	1		0	0	steam injection functioning mode
						0 = pressing the(sy) key causes the injection of steam for the time established with parameter t2 or for the entire duration that the key is pressed. The
						parameter t1 establishes the minimum time that can pass between the two successive injections
						1 = pressing the I style key enables automatic injection of the steam in cyclical mode (parameter t2 establishes the switch-on duration of the injector and
						parameter t1 establishes switch-off duration)
t1	0	250	S	1	1	se t0 = 0, minimum time that passes between two successive injections
_						se t0 = 1, injector switch-off duration
t2	1	250	ds (7)	10	10	se t0 = 0, minimum injection duration
						se t0 = 1, injector switch-on duration
t3	1	99	°C/°F(1)	5	not visible	steam set-point differential
t4	0	99	°C/°F(1)	50	not visible	temperature of the steam below which, once the steam set-point has been reached, the steam injection is no longer available (relative to the steam set-
						point i.e. "steam set-point - t4") (6)
PARAM	MIN.	MAX.	U.M.	1 INPUT	2 INPUTS	VARIOUS
с0	0	2		0	not visible	restraint between the power distributed to the top and power distributed to the floor
						0 = no restraint
						1 = the modification of the power supplied to an output automatically causes the supply of the maximum power to the other
						2 = the modification of the power supplied to an output causes an automatic adaptation of the power supplied to the other such to quarantee that the
						sum of the two percentages is always 100
c 1	1	999	s	80	80	with 1 measurement input, cycle time for the top output and floor output switch-on, see also Po1 and Po2
			-			with 2 measurement inputs, cycle time for the top output and floor output switch-on, when economy function is in progress (8)
c2	0	3		1	not visible	event that causes the activation of the rapid heating function
	-	-				0 = function cannot be activated
						1 - press = 1 and $1 - press = 1$ .
						2 = to pass from the standby state (or the programmed surthue or the lot be proceeded in progress and the contently function in hours)
						z = 0 passion are sensitively state for the programmed switch roll state (or the off state)
						p) - preserving for its (index sure that the instruments in the on-state, that no procedure is in progress and the economy function is not is progress) or come the stand by table (or the progressmend quick on a state).
<u></u>	0	0.0	0C/0F /11	1.0	pot dall 1	pass norm are starticity state (or the programmed switch-on state) to the on state.
C3	0	199	- U*F(1)	10	not visible	terniperature or use chamber over which the rapid heating function is interrupted (relative to the work set-point i.e. "work set-point - G3")
с4	-1	120	S	15	15	duration of buzzer activation and of the acoustic output on conclusion of the cooking timer count; see also c9 (9) (10)
	-		L			-1 = the buzzer and the acoustic output must be deactivated in manual mode by pressing a key
c 5	0	60	min	20	20	time that passes between the activation of the airhole and the conclusion of the cooking timer count, see also c6
с6	0	60	min	20	20	duration of the activation of the airhole at conclusion of the cooking timer count, see also c5
с7	00:00	60:00	min:s	00:30	00:30	duration of the activation of the airhole in manual mode
с8	0	1		1	1	showing the real time in the lower part of the display during the stand-by state
		L				1 = YES
с9	0	120	S	10	10	time that passes between the activation of the buzzer and the acoustic output and the conclusion of the cooking timer count, see also c4
		.000	Imin	120	120	Imaximum duration of the economy function (11)

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с12	0	999	min	60	60	time that must pass (from programmed switch-on of the instrument) without having operated on the keys so that the instrument passes to the programmed
						switch-on state again
						0 = no function
PARAN	1. MIN.	MAX.	U.M.	1 INPUT	2 INPUTS	TEMPERATURE ALARMS
A1	0	999	°C/°F (1)	0	0	with 1 measurement input, temperature of the chamber above which the chamber temperature alarm is activated; with 2 measurement inputs, tempera- ture of the top above which the top temperature alarm is activated; see also A3 (12)
A2	0	240	min	0	0	with 1 measurement input, chamber temperature alarm delay; with 2 measurement inputs, top temperature alarm delay
A3	0	2		0	0	<ul> <li>with 1 measurement input, type of chamber temperature alarm delay; with 2 measurement inputs, type of top temperature alarm delay</li> <li>0 = no alarm</li> <li>1 = absolute (i.e. A1)</li> <li>2 = with 1 measurement input, relative to the work set-point (i.e. "work set-point + A1"); with 2 measurement inputs, relative to the top set-point (i.e. "top set-point + A1")</li> </ul>
A4	0	999	°C/°F(1)	not visible	0	floor temperature above which the floor temperature alarm is activated, se also A6 (12)
A5	0	240	min	not visible	0	floor temperature alarm delay
A6	0	2		not visible	0	type of floor temperature alarm 0 = no alarm 1 = absolute (i.e. A4) 2 = relative to the floor set-point (i.e. "floor set-point + A4")
PARAN	1. MIN.	MAX.	U.M.	1 INPUT	2 INPUTS	DIGITAL INPUTS
i 1	0	1		0	0	on/stand-by input polarity 0 = live input active 1 = non-live input active
		D		0	U	<ul> <li>a conservation of the induitation input of the induitation input of a set of the input will cause the cooking timer to start and the successive activation will cause its interruption</li> <li>2 = <u>CHAMBER LIGHT SWITCH-ON/OFF</u> - the activation of the input will cause the cooking timer to start and the successive activation will cause its switch-off</li> <li>3 = <u>BUZZER ACOUSTIC OUTPUT AND BUZZER OUTPUT DEACTIVATION</u> - the activation of the input will cause deactivation of the buzzer, the acoustic output and the buzzer output (activate the input again to deactivate these utilities again)</li> <li>4 = <u>STEAM INJECTION</u> - in this case:</li> <li>if t0 = 0, the activation of the input causes the injection of steam for the time established with parameter t2 or for the entire duration that the key is pressed (parameter t1 establishes the minimum time that can pass between the two successive injections) (13)</li> <li>if t0 = 1, the activation of the input causes the duration of switch-off) until the input is activated again (13)</li> <li>5 = <u>DOOR MICRO SWITCH</u> - the activation of the display and activates the buzzer the ite foor output, prevents steam injection, displays the flashing <b>1d</b><sup>2</sup> code in the upper part of the display and activates the buzzer that the input is activated, see also i7</li> <li>6 = <u>START/STOP OF THE ECONOMY FUNCTION</u> - activation of the input causes the activation of the economy function and successive activation will cause interruption</li> </ul>
i6	0	1		0	0	type of contact of the multifunction input 0 = NO (input active with closed contact) 1 = NC (input active with open contact)
i7	0	120	min	0	0	multifunction input alarm signal delay (only if i5 = 5)
PARAN	1 MIN.	MAX.	U.M.	1 INPUT	2 INPUTS	SERIAL NETWORK (MODBUS)
LA	1	247		247	247	instrument address
Lb	0	3		2	2	baud rate 0 = 2.400 baud 1 = 4.800 baud 2 = 9.600 baud 3 = 19.200 baud
LP	0	2		2	2	parity 0 = none (no parity) 1 = odd 2 = even
(1) (2) (3) (4)	the ur set the the va the va	hit of mean ne paran Ilue depe Ilue depe	nsurement of neters related nds on the nds on the	depends on par- ative to the re type of function type of function f is shorter than	ameter P2 egulators ap ning (1 with 1 ning (3 with 1 the time ertat	propriately after modification of parameter P2 measurement input and 3 with 2 measurement inputs) measurement input and 5 with 2 measurement inputs) (itsed with parameter 13, the court will also continue when the instrument is not powered.

(6) steam injection becomes available again when the temperature of the steam reaches the steam set-point again

(7) ds = tenths of second

(8) the top output and the floor output are switched-on alternately for half of the time established with parameter c1

(9) the buzzer and the acoustic output are activated before the conclusion of the cooking timer count (of the time established with the parameter c9), for the time established with parameter c4

(10) if the cooking timer is interrupted (with the procedure given in paragraph 5.4 or by activation of the malfunction input), the duration of buzzer activation and of the acoustic output and the flashing duration

of the 00:00 indication will be 3 seconds (11) if the economy function is in progress, any instrument switch-off will cause interruption of the function. A power cut will not cause interruption of the function but the re-start of the time count established with parameter c10

(12) the parameter differential is 10 °C/18  $^\circ\mathrm{F}$ 

(13) 

