EVC30S40 / EVC70S40 2 output digital modules for electric bread and pizza ovens

Ⓔ **ENGLISH**

1 IMPORTANT
1.1 Important
Read these instructions carefully before installation and commissioning and follow all recommendations for installation and for the electric connection; keep these instructions with the instrument for future consultation.

The instrument must be disposed of according to local Standards regarding electric and electronic appliances.

2 DIMENSIONS AND INSTALLATION
2.1 Dimensions and installation
Dimensions in mm (in); back-panel installation using M3 studs.
The diagram illustrates the model with the greatest supply of hardware.
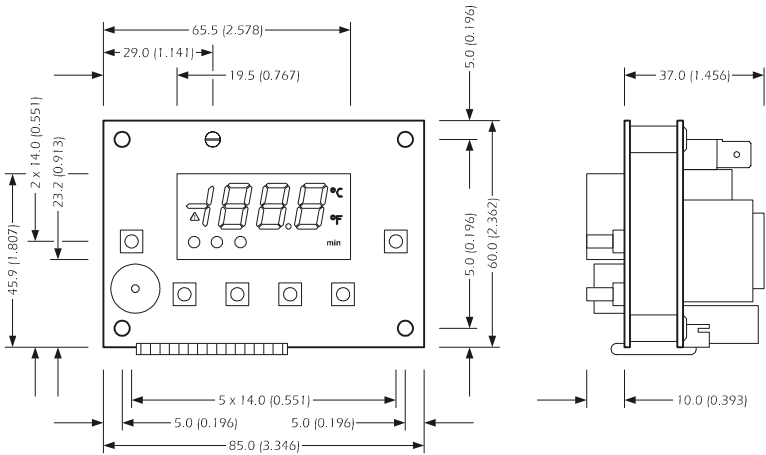
2.2 Recommendations for installation
▪ make sure that the working conditions (temperature of use, humidity, etc.) lie within the limits indicated in the technical data
▪ do not install the instrument in proximity of heat sources (heaters, hot air pipes etc.) appliances withe strong magnets (large diffusers etc.), places subject to direct sunlight, rain, humidity, excessive dust, mechanical vibrations or shocks
▪ in compliance with Safety Standards, the protection against any contact with the electric parts must be ensured via correct installation of the instrument. All parts that ensure protection must be fixed in a way such that they cannot be removed without the aid of a tool.

3 ELECTRIC CONNECTION
3.1 Electric connection
The diagram illustrates the model with the greatest supply of hardware.
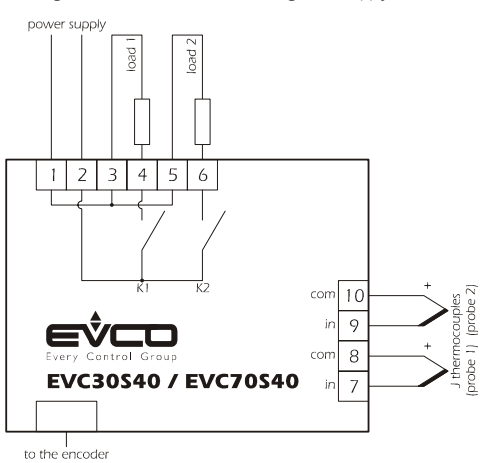
3.2 Recommendations for installation
▪ do not operate on the terminal boards using electric or pneumatic screwdrivers
▪ if the instrument has been taken from a old place to a hot one, the humidity could condense inside. Wait about one hour before applying power
▪ make sure that the power supply voltage, frequency and operational electric power correspond to those of the local power supply
▪ disconnect the power supply before performing any type of maintenance
▪ equip the probes with a protection able to insulate them against 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.

4 MODELS AVAILABLE
4.1 Models available
With reference to the electric connection illustrated in paragraph 3.1.

CODE	FUNCTION	PROBE 1	PROBE 2	LOAD 1	LOAD 2	NUMBER OF KEYS (ENCODER YES/NO)
EVC30S40J7XXX00	simple regulation of the temperature	chamber probe	not used	regulation of the temperature	not used	0 (yes)
EVC30S40J7XXX01	simple regulation of the temperature	chamber probe	not used	regulation of the temperature	auxiliary	4 (no)
EVC30S40J7XXX02	top-floor regulation of the temperature	top probe	floor probe	top	floor	4 (no)
EVC30S40J7XXX03	top-floor regulation of the temperature	top probe	floor probe	top	floor	6 (no)
EVC30S40J7XXX04	top-floor regulation of the temperature	top probe	floor probe	top	floor	0 (yes)
EVC30S40J7XXX05	top-floor regulation of the temperature	top probe	floor probe	top	floor	2 (yes)
EVC70S40X7XXX00	cooking timer	not used	not used	acoustics	not used	4 (no)
EVC70S40X7XXX01	steam injection	not used	not used	timer 1	timer 2	4 (no)
EVC70S40X7XXX02	steam injection	not used	not used	timer 1	timer 2	6 (no)
EVC70S40X7XXX03	cooking timer	not used	not used	acoustics	not used	0 (yes)

4.2 Management of the utilities
Temperature regulation.
The output activity depends mainly on the temperature of the chamber, the work set point and the parameter P5.
Top.
If functioning with 1 measurement input (parameter P3 = 1):
▪ the out put is measured in a cyclical mode, preferably when the floor output is off (the parameter P10 establishes the cycle time. Using the procedure given in paragraph 6.2.1 it is possible to set the duration of output switch-on, intended as a percentage of the time established with the parameter P10)
▪ the cyclical activation is subordinate to the temperature of the chamber (chamber probe), at the work set point and parameter P4.
If functioning with 2 measurement inputs (parameter P3 = 0):
▪ the output activity will mainly depend on the temperature of the top (top probe), the top set point and the parameter P4.
Floor.
If functioning with 1 measurement input (parameter P3 = 1):
▪ the out put is measured in a cyclical mode, preferably when the top output is off (the parameter P10 establishes the cycle time. Using the procedure given in paragraph 6.2.2 it is possible to set the duration of output switch-on, intended as a percentage of the time established with the parameter P10)
▪ the cyclical activation is subordinate to the temperature of the chamber (chamber probe), at the work set point and parameter P4.
If functioning with 2 measurement inputs (parameter P3 = 0):
▪ the output activity will mainly depend on the temperature of the floor (floor probe), the floor set point and the parameter P4.
Timer 1.
The output is on continuously during the count of the time P0.
Timer 2.
The output is on continuously during the count of the time P6.
Acoustics.
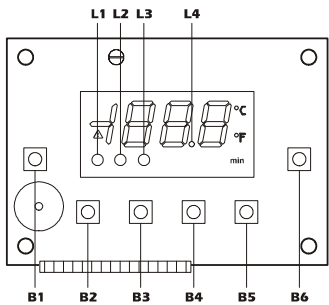The output is on continuously on the conclusion of the count of the cooking timer.
Auxiliary.
The activity of the output depends mainly on parameters P6 and P7.

5 USER INTERFACE
5.1 Preliminary considerations
The diagram illustrates the model with the greatest supply of hardware.

For all models.
The following functioning states exist:
▪ the "on" status (the instrument is powered and "on": the regulators can be switched on)
▪ the "stand-by" status (the instrument is powered but is "off" via software: the regulators are off
▪ the "off" state (the instrument "is not powered").
Successively, the term "switch-on" means that the passage from the stand-by status to the on status; the term "switch-off" means the passage from the on status to the stand-by status.
When the instrument is powered it re-proposes the status in which it found itself at the time when the power supply was disconnected.
If there is a power cut during a time count, the count will start again from the beginning when the power supply is restored.

5.2 Switching the instrument on
For EVC30S40J7XXX01 / 02 / 03 and for EVC70S40X7XXX00 / 01 / 02.
▪ make sure no procedure is in progress
▪ press **B1** : the **L4** LED will switch-off.
For EVC30S40J7XXX00 / 04 / 05 and for EVC70S40X7XXX03.
▪ make sure no procedure is in progress
▪ press the encoder button: the **L4** LED will switch-off.

5.3 Switching the instrument off
For EVC30S40J7XXX01 / 02 / 03 and for EVC70S40X7XXX00 / 01 / 02.
▪ make sure no procedure is in progress
▪ press **B1** for 4 s: the **L4** LED will switch-on.
For EVC30S40J7XXX00 / 04 / 05 and for EVC70S40X7XXX03.
▪ make sure no procedure is in progress
▪ press the encoder button for 4 s: the **L4** LED will switch-on.

5.4 The display
For EVC30S40J7XXX00 / 01.
If the instrument is on, the display will show the size established with parameter P10:
▪ if P10 = 0, the display will show the work set point
▪ if P10 = 1, the display will show the chamber temperature
If the instrument is off:
▪ the display will be off
▪ the **L4** LED will be on

For EVC30S40J7XXX02 / 03 / 04 / 05.

If the instrument is on, the display will show the size established with parameter P16:

- if P16 = 0, if functioning with 2 measurement inputs, the display will show the temperature of the top (otherwise the temperature of the chamber)
- if P16 = 1, if functioning with 2 measurement inputs, the display will show the temperature of the floor (otherwise the temperature of the chamber)
- if P16 = 2, if functioning with 2 measurement inputs, the display will show the average temperature (otherwise the temperature of the chamber)
- if P16 = 3, if functioning with 2 measurement inputs, the display will show the top set point (otherwise the work set point)
- if P16 = 4, if functioning with 2 measurement inputs, the display will show the floor set point (otherwise the temperature of the chamber)

If the cooking timer count is in progress, the display shows the value, the **L3** LED will flash and the **min** LED will be on.

If the instrument is off:

- the display will be off
- the **L4** LED will be on

For EVC70S40X7XXX00 / 03.

If the instrument is on, the display will show the value of the cooking timer and the **min** LED will be on.

If the cooking timer count is in progress, the display shows the value, the **L3** LED will flash and the **min** LED will be on

If the instrument is off:

- the display will be off
- the **L4** LED will be on

For EVC70S40X7XXX01 / 02.

If the instrument is on, the display will show " **- - -** ".

If the steam sequence times count is in progress, the display will show the value, the **L1**, **L2** or **L3** LED will flash and if parameter P9 is set at 1 the **min** LED will be on.

If the instrument is off:

- the display will be off
- the **L4** LED will be on

5.5 Silencing the buzzer

For all models.

- make sure no procedure is in progress
- press a key (or turn the encoder): the first press of the key (or rotation of the encoder) does not cause the associated effect.

6 SETTINGS

6.1.1 Setting the work set point

For EVC30S40J7XXX00.

- make sure that the instrument is in on status and that no procedure is in progress
- press the encoder button: the display will show the corresponding value
- turn the encoder within 15 s; see also parameters P2, P3 and P4
- press the encoder button or do not operate for 15 s: the instrument will leave the procedure.

To exit the procedure in advance:

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

For EVC30S40J7XXX01.

- make sure that the instrument is in on status and that no procedure is in progress
- press **B1** : the display will show the corresponding value
- press **B2** or **B5** within 15 s; see also parameters P2, P3 and P4
- press **B1** or do not operate for 15 s: the instrument will leave the procedure.

To exit the procedure in advance:

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

For EVC30S40J7XXX02 (if the parameter P3 is set at 1).

- make sure that the instrument is in on status and that no procedure is in progress
- press **B2** and **B5** for 4 s: the display will show the corresponding value
- press **B2** or **B5** within 15 s; see also parameters P5, P6 and P11
- do not operate for 15 s: the instrument will leave the procedure.

To exit the procedure in advance:

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

For EVC30S40J7XXX03 (if parameter P3 is set at 1).

- make sure that the instrument is in on status and that no procedure is in progress
- press **B2** : the display shows the corresponding value
- press **B2** or **B5** within 15 s; see also parameters P5, P6 and P11
- do not operate for 15 s: the instrument will leave the procedure.

To exit the procedure in advance:

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

For EVC30S40J7XXX04 / 05 (if parameter P3 is set at 1).

- make sure that the instrument is in on status and that no procedure is in progress
- for EVC30S40J7XXX05 # press the encoder button: the display will show the corresponding value; turn the encoder clockwise within 15 s to show in succession the power supplied at the top and the one supplied at the floor (after 5 s the display will show the work set point again)
- press the encoder button during the showing of the work set point: the display will show the corresponding value

- turn the encoder within 15 s; see also parameters P5, P6 and P11
- press the encoder button three times or do not operate for 15 s: the instrument will leave the procedure.

To exit the procedure in advance:

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

6.1.2 Setting the top set point

For EVC30S40J7XXX02 (if the parameter P3 is set at 0).

- make sure that the instrument is in on status and that no procedure is in progress
- press **B2** : the display shows the corresponding value and the **L1** LED will flash
- press **B2** or **B5** within 15 s; see also parameters P5, P6 and P7
- do not operate for 15 s: the **L1** LED will switch-off and the instrument will exit the procedure.

To exit the procedure in advance:

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

For EVC30S40J7XXX03 (if parameter P3 is set at 0).

- make sure that the instrument is in on status and that no procedure is in progress
- press **B3** : the display shows the corresponding value and the **L1** LED will flash
- press **B2** or **B5** within 15 s; see also parameters P5, P6 and P7
- press **B3** or do not operate for 15 s: the **L1** LED will switch-off and the instrument will exit the procedure.

To exit the procedure in advance:

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

For EVC30S40J7XXX04 / 05 (if parameter P3 is set at 0).

- make sure that the instrument is in on status and that no procedure is in progress
- for EVC30S40J7XXX05 # press the encoder button: the display will show the corresponding value; turn the encoder clockwise within 15 s to show the floor set point (after 5 s the display will show the top set point again)
- press the encoder button during the showing of the top set point: the display will show the corresponding value and the **L1** LED will flash
- turn the encoder within 15 s; see also parameters P5, P6 and P7
- press the encoder button twice or do not operate for 15 s: the instrument will leave the procedure.

To exit the procedure in advance:

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

6.1.3 Setting the floor set point

For EVC30S40J7XXX02 (if the parameter P3 is set at 0).

- make sure that the instrument is in on status and that no procedure is in progress
- press **B5** : the display shows the corresponding value and the **L2** LED will flash
- press **B2** or **B5** within 15 s; see also parameters P5, P6 and P8
- do not operate for 15 s: the **L2** LED will switch-off and the instrument will exit the procedure.

To exit the procedure in advance:

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

For EVC30S40J7XXX03 (if parameter P3 is set at 0).

- make sure that the instrument is in on status and that no procedure is in progress
- press **B4** : the display shows the corresponding value and the **L2** LED will flash
- press **B2** or **B5** within 15 s; see also parameters P5, P6 and P8
- press **B4** or do not operate for 15 s: the **L2** LED will switch-off and the instrument will exit the procedure.

To exit the procedure in advance:

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

For EVC30S40J7XXX04 / 05 (if parameter P3 is set at 0).

- press the encoder button during the setting of the top set point: the display will show the corresponding value, the **L1** LED switches-off and the **L2** LED will flash
- turn the encoder within 15 s; see also parameters P5, P6 and P8
- press the encoder button or do not operate for 15 s: the **L2** LED will switch-off and the instrument will exit the procedure.

To exit the procedure in advance:

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

6.2.1 Setting the power supplied at the top

For EVC30S40J7XXX02 (if the parameter P3 is set at 1).

- make sure that the instrument is in on status and that no procedure is in progress
- press **B2** : the display shows the corresponding value and the **L1** LED will flash
- press **B2** or **B5** within 15 s; see also parameters P9, P10 and P12
- do not operate for 15 s: the **L1** LED will switch-off and the instrument will exit the procedure.

To exit the procedure in advance:

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

For EVC30S40J7XXX03 (if parameter P3 is set at 1).

- make sure that the instrument is in on status and that no procedure is in progress
- press **B3** : the display shows the corresponding value and the **L1** LED will flash
- press **B2** or **B5** within 15 s; see also parameters P9, P10 and P12
- press **B3** or do not operate for 15 s: the **L1** LED will switch-off and the instrument will exit the procedure.

To exit the procedure in advance:

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

For EVC30S40J7XXX04 / 05 (if parameter P3 is set at 1).

- press the encoder button during the setting of the work set point: the display shows the corresponding value and the **L1** LED will flash
- turn the encoder within 15 s; see also parameters P9, P10 and P12
- press the encoder button twice or do not operate for 15 s: the instrument will leave the procedure.

To exit the procedure in advance:

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

6.2.2 Setting the power supplied at the floor

For EVC30S40J7XXX02 (if the parameter P3 is set at 1).

- make sure that the instrument is in on status and that no procedure is in progress
- press **B5** : the display shows the corresponding value and the **L2** LED will flash
- press **B2** or **B5** within 15 s; see also parameters P9, P10 and P13
- do not operate for 15 s: the **L2** LED will switch-off and the instrument will exit the procedure.

To exit the procedure in advance:

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

For EVC30S40J7XXX03 (if parameter P3 is set at 1).

- make sure that the instrument is in on status and that no procedure is in progress
- press **B4** : the display shows the corresponding value and the **L2** LED will flash
- press **B2** or **B5** within 15 s; see also parameters P9, P10 and P13
- press **B4** or do not operate for 15 s: the **L2** LED will switch-off and the instrument will exit the procedure.

To exit the procedure in advance:

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

For EVC30S40J7XXX04 / 05 (if parameter P3 is set at 1).

- press the encoder button during the setting of the power supplied at the top: the display will show the corresponding value, the **L1** LED switches-off and the **L2** LED will flash
- turn the encoder within 15 s; see also parameters P9, P10 and P13
- press the encoder button or do not operate for 15 s: the **L2** LED will switch-off and the instrument will exit the procedure.

To exit the procedure in advance:

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

6.3 Setting the configuration parameters

For EVC30S40J7XXX00 / 04 / 05 and for EVC70S40X7XXX03.

To access the procedure:

- make sure that the instrument is in off status and that no procedure is in progress
- press the encoder button for 4 s: the central display will show "**PA**"
- press the encoder button: the display will show the corresponding value
- turn the encoder within 15 s to set "**-19**"
- press the encoder button or do not operate for 15 s
- press the encoder button for 4 s: the display will show "**P0**".

To select a parameter:

- turn the encoder.

To modify a parameter:

- press the encoder button: the display will show the corresponding value
- turn the encoder within 15 s
- press the encoder button or do not operate for 15 s
- turn the encoder.

To exit the procedure:

- press the encoder button for 4 sor do not operate for 60 s (any modifications will be saved).

For EVC30S40J7XXX01 / 02 / 03 and for EVC70S40X7XXX00 / 01 / 02.

To access the procedure:

- make sure that the instrument is in off status and that no procedure is in progress
- press **B2** and **B5** for 4 s: the central display will show "**PA**"
- press **B1** : the display will show the corresponding value
- press **B2** or **B5** within 15 s to set "**-19**"
- press **B1** or do not operate for 15 s
- press **B2** and **B5** for 4 s: the display will show "**P0**".

To select a parameter:

- press **B2** or **B5**

To modify a parameter:

- press **B1**: the display will show the corresponding value
- press **B2** or do not operate for 15 s
- press **B1** or do not operate for 15 s
- press **B2** or **B5**

To exit the procedure:

- press **B2** and **B5** for 4 s or do not operate for 60 s (any modifications will be saved).

7 COOKING TIMER (for EVC30S40J7XXX02 / 03 / 04 / 05 and for EVC70S40X7XXX00 / 03)

7.1 Preliminary considerations

For EVC30S40J7XXX02 / 03 / 04 / 05.

The cooking timer allows to start the countdown.

The display shows the value during counting (for EVC30S40J7XXX05 # the display will show the size established with parameter P24), the **L3** LED will flash and the **min** LED is on.

Before the conclusion of the count (of the time established with parameter P21) the buzzer is activated, for the time established with parameter P20.

If there is a power cut during the count, the same will start again from the beginning when the power supply is restored.

For EVC70S40X7XXX00 / 03.

The cooking timer allows to start the countdown.

The display shows the value during counting, the **L3** LED will flash and the **min** LED is on.

Before the conclusion of the count (of the time established with parameter P4) the buzzer is activated, for the time established with parameter P3.

The acoustic output is activated at the conclusion of the count until the **B6** key is pressed (or the encoder button is pressed).

If there is a power cut during the count, the same will start again from the beginning when the power supply is restored.

7.2 Setting and start-up of the cooking timer

For EVC30S40J7XXX02 / 03.

- make sure that the instrument is in on status and that no procedure is in progress
- press **B6** : the display shows the corresponding value and the **min** LED will flash
- press **B2** or **B5** within 15 s; see also parameters P17, P18 and P19
- press **B6** : the instrument will exit the procedure, the **L3** LED will flash and the **min** LED will switch-on and the timer will be started.

To exit the procedure in advance:
- do not operate for 15 s (any modifications will be saved).

For EVC30S40J7XXX04.

- make sure that the instrument is in on status and that no procedure is in progress
- turn the encoder: the display shows the corresponding value and the **min** LED will flash
- turn the encoder within 15 s; see also parameters P17, P18 and P19
- press the encoder button: the instrument will exit the procedure, the **L3** LED will flash and the **min** LED will switch-on and the timer will be started.

To exit the procedure in advance:
- do not operate for 15 s (any modifications will be saved).

For EVC30S40J7XXX05.

- make sure that the instrument is in on status and that no procedure is in progress
- press **B1** : the display shows the corresponding value and the **min** LED will flash
- turn the encoder within 15 s; see also parameters P17, P18 and P19
- press **B1** : the instrument will exit the procedure, the **L3** LED will flash and the **min** LED will switch-on and the timer will be started.

To exit the procedure in advance:
- do not operate for 15 s (any modifications will be saved).

For EVC70S40X7XXX00.

- make sure that the instrument is in on status and that no procedure is in progress
- press **B1** : the display shows the corresponding value and the **min** LED will flash
- press **B2** or **B5** within 15 s; see also parameters P0, P1 and P2
- press **B6** : the instrument will exit the procedure, the **L3** LED will flash and the **min** LED will switch-on and the timer will be started.

Alternatively:
- make sure that the instrument is in on status and that no procedure is in progress
- press **B1** : the display shows the corresponding value and the **min** LED will flash
- press **B2** or **B5** within 15 s; see also parameters P0, P1 and P2
- press **B1** or do not operate for 15 s: the instrument will leave the procedure.

To exit the procedure in advance:
- do not operate for 15 s (any modifications will be saved).

Successively:
- press **B6** : the **L3** LED will flash and the **min** LED will switch-on and the timer will be started.

For EVC30S40X7XXX03.

- make sure that the instrument is in on status and that no procedure is in progress
- turn the encoder: the display shows the corresponding value and the **min** LED will flash
- turn the encoder within 15 s; see also parameters P0, P1 and P2
- press the encoder button: the instrument will leave the procedure.

To exit the procedure in advance:
- do not operate for 15 s (any modifications will be saved).

Successively:
- press the encoder button: the **L3** LED will flash and the **min** LED will switch-on and the timer will be started.

7.3 Interrupting the cooking timer

For EVC30S40J7XXX02 / 03 and for EVC70S40X7XXX00.
- press **B6** : the **L3** LED and the **min** LED will switch off.

For EVC30S40J7XXX04 and for EVC70S40X7XXX03.
- press the encoder button: the **L3** LED and the **min** LED will switch off.

For EVC30S40J7XXX05.
- press **B1** : the **L3** LED and the **min** LED will switch off.

8 STEAM SEQUENCE (for EVC70S40X7XXX01 / 02)

8.1 Preliminary considerations

The steam sequence allows to start the countdown of three times.
On the conclusion of the count of a time, the instrument automatically passes to the next count.
During the countdown of the first three times (successively also called "time t1") the display shows the value, the **L1** LED flashes. If the parameter P9 is set at 1 the **min** LED is on and the timer 1 output is on.
During the countdown of the second three times (successively also called "time t2") the display shows the value, the **L2** LED flashes. If the parameter P9 is set at 1 the **min** LED is on and the outputs are switched off.
During the countdown of the third three times (successively also called "time t3") the display shows the value, the **L3** LED flashes. If the parameter P9 is set at 1 the **min** LED is on and the timer 2 output is on.
On conclusion of the countdown of the time t3, the buzzer is activated for the tie established with parameter P12.
The functioning of the instrument on conclusion of the count of time t3 depends on parameter P10.
If there is a power cut during the count, the same will start again from the beginning when the power supply is restored.

8.2 Setting times t1, t2 and t3

For EVC70S40X7XXX01.

- make sure that the instrument is in on status and that no procedure is in progress
- press **B1** : the display shows the time t1 and the **L1** LED will flash
- press **B2** or **B5** within 15 s; see also parameters P0, P1 and P2
- press **B1** : the display will show the time t2, the **L1** LED switches-off and the **L2** LED will flash
- press **B2** or **B5** within 15 s; see also parameters P6, P7 and P8
- press **B1** : the display will show the time t3, the **L2** LED switches-off and the **L3** LED will flash
- press **B2** or **B5** within 15 s; see also parameters P3, P4 and P5
- press **B1** : the instrument will exit the procedure and **L3** LED will switch-off.

To exit the procedure in advance:
- do not operate for 15 s (any modifications will be saved).

For EVC70S40X7XXX02.

To set time t1:
- make sure that the instrument is in on status and that no procedure is in progress
- press **B3** : the display shows the time t1 and the **L1** LED will flash
- press **B2** or **B5** within 15 s; see also parameters P0, P1 and P2
- press **B3** : the instrument will exit the procedure and **L1** LED will switch-off.

To set time t2:
- make sure that the instrument is in on status and that no procedure is in progress
- press **B1** : the display shows the time t2 and the **L2** LED will flash
- press **B2** or **B5** within 15 s; see also parameters P6, P7 and P8
- press **B1** : the instrument will exit the procedure and **L2** LED will switch-off.

To set time t3:
- make sure that the instrument is in on status and that no procedure is in progress
- press **B4** : the display shows the time t3 and the **L3** LED will flash
- press **B2** or **B5** within 15 s; see also parameters P3, P4 and P5
- press **B4** : the instrument will exit the procedure and **L3** LED will switch-off.

To exit the procedure in advance:
- do not operate for 15 s (any modifications will be saved).

8.3 Starting the steam sequence

- make sure that the instrument is in on status and that no procedure is in progress
- press **B6** : the **L1** LED will flash and if the parameter P9 is set at 1 the **min** LED will switch on.

8.4 Interrupting the steam sequence

press **B6** : the **L1**, **L2** or **L3** LED will switch off and if parameter P9 is set at 1 also the **min**LED.

9 QUICK HEATING (for EVC30S40J7XXX02 / 03 / 05)

9.1 Preliminary considerations

The quick heating allows to reach the work set point as quickly as possible, supplying 100% power at the top and the floor (i.e. excluding switch-on of the top and floor outputs in a cyclical mode with the benefit of continuous switch-on).
When the chamber temperature reaches the "work set point - temperature established with parameter P23", the function is interrupted.
If there is a power cut during the quick heating, the same will start-up again when the power supply is restored.

9.2 Activation of quick heating

- make sure that the instrument is on, that there is no procedure in progress and that the parameter P22 is set at 1
- press **B6** for 4 s.

9.3 Interruption of quick heating in manual mode

- make sure no procedure is in progress
- press **B6** for 4 s.

10 AUXILIARY OUTPUT (for EVC30S40J7XXX01)

10.1 Preliminary considerations

The functioning mode of the auxiliary output depends on parameters P6 and P7.
If parameter P6 is set at 0, pressing the **B6** key when the instrument is on causes the output to switch on and when pressed again, causes it to switch off.
If parameter P6 is set at values different to 0 and parameter P7 is set at 0, pressing the **B6** key when the instrument is on causes the output to switch on for the time established with parameter P6.
If parameters P6 and P7 are set at values different to 0, the output will be switched on cyclically (parameter P6 establishes the duration of switch-on and parameter P7 that of switch-off). Pressing the **B6** key when the instrument is on causes the cyclical activity to start and pressing the **B5** key causes its interruption.
The **L2** LED supplies indications regarding the state of the auxiliary output, see chapter 11.

11 SIGNALS

11.1 Signals

LED	MEANING
L1	For EVC30S40J7XXX00 / 01. temperature regulation LED if on, the output for temperature regulation will be off. if flashing, the output for temperature regulation will be on. For EVC30S40J7XXX02 / 03 / 04 / 05. top LED if it is on, the top output will be on if flashing, the top set point setting is in progress or that of the power supplied at the top For EVC70S40X7XXX01 / 02. time t1 LED if on, the setting of time t1 is in progress if flashing, the time t1 count is in progress
L2	For EVC30S40J7XXX01. Auxiliary output LED if it is on, the auxiliary output will be on For EVC30S40J7XXX02 / 03 / 04 / 05. floor LED if it is on, the floor output will be on if flashing, the floor set point setting is in progress or that of the power supplied at the floor For EVC70S40X7XXX01 / 02. time t2 LED if on, the setting of time t2 is in progress if flashing, the time t2 count is in progress
L3	For EVC30S40J7XXX02 / 03 / 04 / 05 and for EVC70S40X7XXX00 / 03. cooking timer LED if it is on, the cooking timer count will be concluded if flashing, the cooking timer count is in progress For EVC70S40X7XXX01 / 02. time t3 LED if on, the setting of time t3 is in progress if flashing, the time t3 count is in progress
L4	For all models. on/stand-by LED if it is on, the instrument is in the stand-by status
⚠	For all models. Power supply cut off LED if flashing, if a power cut should occur when the instrument is on or (during a time count), press a key (or turn the encoder) to switch the LED off.
min	For EVC30S40J7XXX02 / 03 / 04 / 05 and for EVC70S40X7XXX00 / 03. minutes LED if on, the cooking timer count is in progress if flashing, cooking timer setting is in progress For EVC70S40X7XXX01 / 02. minutes LED if it is on, the unit of measurement of the time will be the minute (parameter P9)
°C	For EVC30S40J7XXX00 / 01 / 02 / 03 / 04 / 05. Degrees Celsius LED if it is on, the unit of measurement of the temperatures will be the degree Celsius (parameter P0)
°F	For EVC30S40J7XXX00 / 01 / 02 / 03 / 04 / 05. Degrees Fahrenheit LED if it is on, the unit of measurement of the temperatures will be the degree Fahrenheit (parameter P0)

12 ALARMS

12.1 Alarms

CODE	MEANING
H-t	For EVC30S40J7XXX00 / 01. use temperature alarm Solutions: • press **B2** (or turn the encoder) to display the use temperature • see parameters P8 and P9

	Consequences:
	▪ all outputs will be deactivated
H-t	For EVC30S40J7XXX02 / 03 / 04 / 05.
	use temperature alarm
	Solutions:
	▪ press **B2** to display the use temperature
	▪ see parameters P14 and P15
	Consequences:
	▪ all outputs will be deactivated

When the cause of the alarm has disappeared, the instrument restores normal functioning, except for the use temperature alarm (code "**H-t**"), which requires the **B1** key to be pressed or the encoder button). This switches the instrument off.

13 INTERNAL DIAGNOSTICS

13.1 Internal diagnostics

CODE	MEANING
AL1	For EVC30S40J7XXX00 / 01.
	chamber probe error
	Solutions:
	▪ check that the probe is a J thermocouple
	▪ check the integrity of the probe
	▪ check the instrument-probe connection
	▪ verify the chamber temperature
	Main consequences:
	▪ the temperature regulation output will be deactivated
AL1	For EVC30S40J7XXX02 / 03 / 04 / 05 (if parameter P3 is set at 0).
	top probe error
	Solutions:
	▪ the same as the previous case but relative to the top probe
	Main consequences:
	▪ the top output will be deactivated
	For EVC30S40J7XXX02 / 03 / 04 / 05 (if the parameter P3 is set at 1).
	chamber probe error
	Solutions:
	▪ the same as the previous case but relative to the chamber probe
	Main consequences:
	▪ the top output and the floor output will be deactivated
AL2	For EVC30S40J7XXX02 / 03 / 04 / 05 (if parameter P3 is set at 0).
	floor probe error
	Solutions:
	▪ the same as the previous case but relative to the floor probe
	Main consequences:
	▪ the floor output will be deactivated

When the causes of the alarm have disappeared, the instrument will go back to normal functioning.

14 TECHNICAL DATA

14.1 Technical data

With reference to the model with most hardware.

Container: open frame board

Front panel protection rating: IP 00.

Connections: 6.3 mm faston (0.248 in, power supply and outputs), screw terminal board (measurement inputs), 4-pole connector (to the encoder).

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

Power supply: 230 Vac, 50/60 Hz, 1.5 VA.

Alarm buzzer: incorporated.

Measurement inputs: 2 for J thermocouple; the instrument also incorporates a sensor for the detection of the use temperature.

Range of measurement: from 20 to 500 °C (from 99 to 999 °F).

Resolution: 1 °C/1 °F.

Digital outputs: 2 5 A res. relays @ 250 Vac (NO).

15 CONFIGURATION PARAMETERS

15.1 Configuration parameters

PAR.	MIN	MAX	U. M.	EVC30..00	EVC30..01	EVC30..02	EVC30..03	EVC30..04	EVC30..05	EVC70..00	EVC70..01	EVC70..02	EVC70..03	DESCRIPTION
P0	0	1	----	0	0	0	0	0	0	----	----	----	----	temperature unit of measurement (1) 0 = °C 1 = °F
P0	P1	P2	min	----	----	----	----	----	----	20	----	----	20	predefined cooking timer value
P0	P1	P2	s/min (2)	----	----	----	----	----	----	----	10	10	----	time t1 predefined value
P1	-9	9	°C	0	0	----	----	----	----	----	----	----	----	chamber probe offset
P1	-9	9	°C	----	----	0	0	0	0	----	----	----	----	if P3 = 0, top probe offset if P3 = 1, chamber probe offset
P1	0	P2	min.	----	----	----	----	----	----	0	----	----	0	cooking timer minimum value
P1	0	P2	s/min (2)	----	----	----	----	----	----	----	0	0	----	time t1 minimum value
P2	P3	P4	°C	10	10	----	----	----	----	----	----	----	----	work set point predefined value
P2	-9	9	°C	----	----	0	0	0	0	----	----	----	----	floor probe offset (only if P3 = 0)
P2	P1	999	min	----	----	----	----	----	----	199	----	----	199	cooking timer maximum value
P2	P1	999	s/min (2)	----	----	----	----	----	----	----	999	999	----	time t1 maximum value
P3	20	P4	°C	0	0	----	----	----	----	----	----	----	----	minimum work set-point
P3	0	1	----	----	----	0	0	0	0	----	----	----	----	type of functioning 0 = with 2 measurement inputs (allows to set the top work temperature independently from that of the floor) 1 = with 1 measurement input (allows to set the power supplied at the top independently from that supplied at the bottom)
P3	0	60	s	----	----	----	----	----	----	20	----	----	20	during activation of the buzzer on conclusion of the cooking timer count; also see P24
P3	P4	P5	s/min (2)	----	----	----	----	----	----	----	10	10	----	time t3 predefined value
P4	P3	450	°C	450	450	----	----	----	----	----	----	----	----	maximum work set-point
P4	2	9	°C	----	----	2	2	2	2	----	----	----	----	if P3 = 0, top set point differential and of the floor set point if P3 = 1, work set point differential
P4	0	240	s	----	----	----	----	----	----	10	----	----	10	time that passes between the activation of the buzzer and the conclusion of the cooking timer count, see also P3
P4	0	P5	s/min (2)	----	----	----	----	----	----	----	0	0	----	time t3 minimum value
P5	2	9	°C	2	2	----	----	----	----	----	----	----	----	work set-point differential
P5	0	P6	°C	----	----	0	0	0	0	----	----	----	----	if P3 = 0, minimum top set point and floor set point if P3 = 1, minimum work set point
P5	----	----	----	----	----	----	----	----	----	▪	----	----	▪	firmware code (3)
P5	P4	999	s/min (2)	----	----	----	----	----	----	----	999	999	----	time t3 maximum value
P6	0	1	----	0	----	----	----	----	----	----	----	----	----	enabling of the use temperature alarm (code "**H-t**") 1 = YES
P6	0	600	----	----	0	----	----	----	----	----	----	----	----	duration of auxiliary output switch-on; see also P7
P6	P5	450	°C	----	----	400	400	400	400	----	----	----	----	if P3 = 0, maximum top set point and floor set point if P3 = 1, maximum work set point
P6	----	----	----	----	----	----	----	----	----	▪	----	----	▪	firmware version code (3)
P6	P7	P8	s/min (2)	----	----	----	----	----	----	----	10	10	----	time t2 predefined value
P7	55	65	°C	60	----	----	----	----	----	----	----	----	----	temperature over which the use temperature alarm is activated (code "**H-t**"); see also P6
P7	0	600	s	----	0	----	----	----	----	----	----	----	----	duration of auxiliary output switch-off; see also P6
P7	P5	P6	°C	----	----	200	200	200	200	----	----	----	----	predefined value of the top set point (only if P3 = 0)
P7	----	----	----	----	----	----	----	----	----	▪	----	----	▪	firmware revision code (3)
P7	0	P8	s/min (2)	----	----	----	----	----	----	----	0	0	----	time t2 minimum value
P8	0	1	----	0	----	----	----	----	----	----	----	----	----	size displayed when the instrument is on 0 = work set point 1 = chamber temperature
P8	0	1	----	----	0	----	----	----	----	----	----	----	----	enabling of the use temperature alarm (code "**H-t**") 1 = YES
P8	P5	P6	°C	----	----	200	200	200	200	----	----	----	----	predefined value of the floor set point (only if P3 = 0)
P8	P7	999	s/min (2)	----	----	----	----	----	----	----	999	999	----	time t2 maximum value
P9	----	----	----	▪	----	----	----	----	----	----	----	----	----	firmware code (3)
P9	55	65	°C	----	60	----	----	----	----	----	----	----	----	temperature over which the use temperature alarm is activated (code "**H-t**"); see also P8
P9	0	2	----	----	----	0	0	0	0	----	----	----	----	effect between the power supplied at the top and that at the floor 0 = no effect 1 = the modification of the power supplied at an output automatically causes the supply of the maximum power at the other 2 = the modification of the power supplied at an output causes an automatic adaptation of the power supplied at the other in order to guarantee that he sum of the two percentages is always 100
P9	0	1	----	----	----	----	----	----	----	----	0	0	----	unit of measurement of times P0, P1, P2, P3, P4, P5, P6, P7 and P8 0 = second 1 = minute
P10	----	----	----	▪	----	----	----	----	----	----	----	----	----	firmware version code (3)
P10	0	1	----	----	0	----	----	----	----	----	----	----	----	size displayed when the instrument is on 0 = work set point 1 = chamber temperature
P10	1	999	s	----	----	60	60	60	60	----	----	----	----	cycle time for switch-on of the top output and the floor output; see also P12 and P13 (only if P3 = 1)
P10	0	2	----	----	----	----	----	----	----	----	0	0	----	functioning of the instrument at the conclusion of the time t3 count. 0 = the instrument switches off 1 = the steam sequence is repeated automatically for the number of times established with parameter P11 2 = the steam sequence is repeated automatically until it is interrupted by pressing key **B6**
P11	----	----	----	▪	----	----	----	----	----	----	----	----	----	firmware revision code (3)
P11	----	----	----	----	▪	----	----	----	----	----	----	----	----	firmware code (3)
P11	P5	P6	°C	----	----	200	200	200	200	----	----	----	----	predefined value of the work set point (only if P3 = 1)
P11	1	10	----	----	----	----	----	----	----	----	1	1	----	number of steam sequence (only if P10 = 1)
P12	----	----	----	----	▪	----	----	----	----	----	----	----	----	firmware version code (3)
P12	0	100	%	----	----	70	70	70	70	----	----	----	----	predefined value of the power supplied at the top (percentage of P10; only if P3 = 1); see also P9
P12	0	60	s	----	----	----	----	----	----	----	0	0	----	duration of the activation of the buzzer on conclusion of the time t3 count
P13	----	----	----	----	▪	----	----	----	----	----	----	----	----	firmware revision code (3)

PAR.	MIN	MAX	U. M.	EVC30..00	EVC30..01	EVC30..02	EVC30..03	EVC30..04	EVC30..05	EVC70..00	EVC70..01	EVC70..02	EVC70..03	DESCRIPTION
P13	0	100	%	----	----	30	30	30	30	----	----	----	----	predefined value of the power supplied at the floor (percentage of P10; only if P3 = 1); see also P9
P13	----	----	----	----	----	----	----	----	----	----	▪	▪	----	firmware code (3)
P14	0	1	----	----	----	0	0	0	0	----	----	----	----	enabling of the use temperature alarm (code "**H-t**") 1 = YES
P14	----	----	----	----	----	----	----	----	----	----	▪	▪	----	firmware version code (3)
P15	55	65	°C	----	----	60	60	60	60	----	----	----	----	temperature over which the use temperature alarm is activated (code "**H-t**"); see also P14
P15	----	----	----	----	----	----	----	----	----	----	▪	▪	----	firmware revision code (3)
P16	0	4	----	----	----	2	2	2	2	----	----	----	----	size displayed when the instrument is on 0 = if P3 = 0,, top temperature if P3 = 1, chamber temperature 1 = if P3 = 0, floor temperature if P3 = 1, chamber temperature 2 = if P3 = 0, average temperature if P3 = 1, chamber temperature 3 = if P3 = 0, top set point if P3 = 1, work set point 4 = if P3 = 0, floor set point if P3 = 1, chamber temperature
P17	P18	P19	min	----	----	20	20	20	20	----	----	----	----	predefined cooking timer value
P18	0	P19	min	----	----	0	0	0	0	----	----	----	----	cooking timer minimum value
P19	P18	999	min	----	----	199	199	199	199	----	----	----	----	cooking timer maximum value
P20	0	60	s	----	----	20	20	20	20	----	----	----	----	during activation of the buzzer on conclusion of the cooking timer count; also see P21
P21	0	240	s	----	----	10	10	10	10	----	----	----	----	time that passes between the activation of the buzzer and the conclusion of the cooking timer count, see also P20
P22	0	1	----	----	----	0	0	----	0	----	----	----	----	enabling of the quick heating function (only P3= 1) 1 = YES
P22	----	----	----	----	----	----	----	▪	----	----	----	----	----	firmware code (3)
P23	0	99	°C	----	----	0	0	----	0	----	----	----	----	temperature of the chamber above which the quick heating function is interrupted (relative to the work set point, i.e. "work set point - P23"; only if P3 = 1)
P23	----	----	----	----	----	----	----	▪	----	----	----	----	----	firmware version code (3)
P24	----	----	----	----	----	▪	▪	----	----	----	----	----	----	firmware code (3)
P24	----	----	----	----	----	----	----	▪	----	----	----	----	----	firmware revision code (3)
P24	0	1	----	----	----	----	----	----	0	----	----	----	----	size displayed when the cooking timer count is in progress 0 = size established with parameter P16 1 = cooking timer value
P25	----	----	----	----	----	▪	▪	----	----	----	----	----	----	firmware version code (3)
P25	----	----	----	----	----	----	----	----	▪	----	----	----	----	firmware code (3)
P26	----	----	----	----	----	▪	▪	----	----	----	----	----	----	firmware revision code (3)
P26	----	----	----	----	----	----	----	----	▪	----	----	----	----	firmware version code (3)
P26	----	----	----	----	----	----	----	----	▪	----	----	----	----	firmware revision code (3)

(1)   **the modification of the parameter affects all parameters whose unit of measurement is the degree Celsius or the degree Fahrenheit**

(2)   the unit of measurement depends on parameter P9

(3)   the parameter cannot be modified.