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## **1.-INTRODUCTION**

### NEW FEATURES:

10. New humidity control with intelligent dry (optional with humidity sensor)
11. Hot air recirculation with progressive control via humidity sensor (optional)
12. Speed modification option (standard)
13. Sprinkler system (optional)
14. Input and output checking (currently being developed)
15. Maintenance warning (standard)
16. Alarm for active safety thermostat (standard)
17. Option to include a pause between drum rotation reversals
18. Blue backlit display with white LEDs, larger to permit greater visibility (standard)

## **2.- TECHNICIAN'S MENU**

With the dryer switched on and without running any programmes, press the PROG key three times. The microprocessor will request a password (Code).

**PASSWORD**  
  
\* \* \* \*

To access the technician's menu, enter code 7-8-2-4. Use the INC (^) and DEC (v) keys to change the digits, and the SELECT key to move from one digit to another. When the four figures have been entered, press SELECT to go to the menu.

**PASSWORD**  
  
7-8-2-4

After pressing SELECT, the menu is displayed with four possible sub-menus, as shown in the following box.

**TYPE MENU**  
OPTION  
COUNT  
EDIT  
EXIT

## 2.1.- OPTION

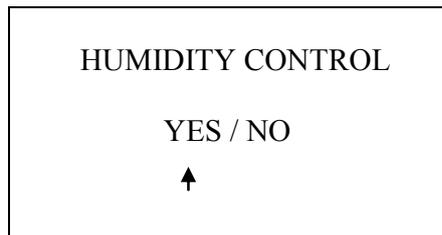
With the configuration menu window open, place the cursor over OPTION, and press SELECT to go to the OPTION menu.

The following windows show the different concepts available for modification in the OPTIONS menu.

### 2.1.1 HUMIDITY CONTROL

The first option displayed is the Humidity Control, allowing you to add the humidity control to the machine. This option is associated to the new intelligent dry system which adjusts the drum speed so that the maximum amount of water is extracted at any point in the drying cycle, thus obtaining a higher level of efficiency. Option only available for dryers for which the Humidity control option has been requested. Use the INC (^) and DEC (v) to move the cursor from Yes to NO or vice-versa, and the SELECT key to confirm the modification and move to the next option.

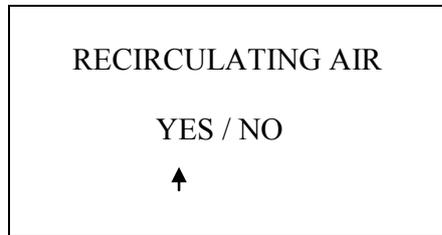
**If the machine is configured with Humidity Control YES, but this option is not installed in the machine, AL-9, Humidity probe is displayed, when the machine is switched on.**



**NOTE:** If this option is activated, it is possible to complete the configuration of parameters in the advanced user menu, such that it is possible to choose to work with automatic rotation speed variation with intelligent dry or to work at a fixed rotation speed, the value of which can be programmed. See advanced user menu.

### 2.1.2 RECIRCULATING AIR

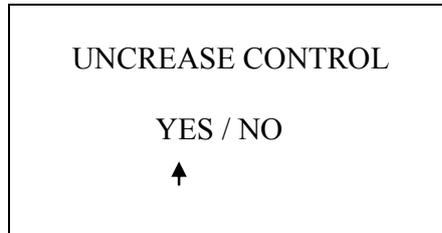
This option is only displayed if YES has been selected in the previous option, HUMIDITY CONTROL. This provides the dryer with an air recirculation system making the dryer a more efficient appliance. Use the INC (^) and DEC (v) keys to move the cursor from YES to NO or vice-versa, and the SELECT key to confirm the modification and move to the next option.



**NOTE:** If this option is activated, the parameter configuration may be completed in the advanced user menu. See advanced user menu.

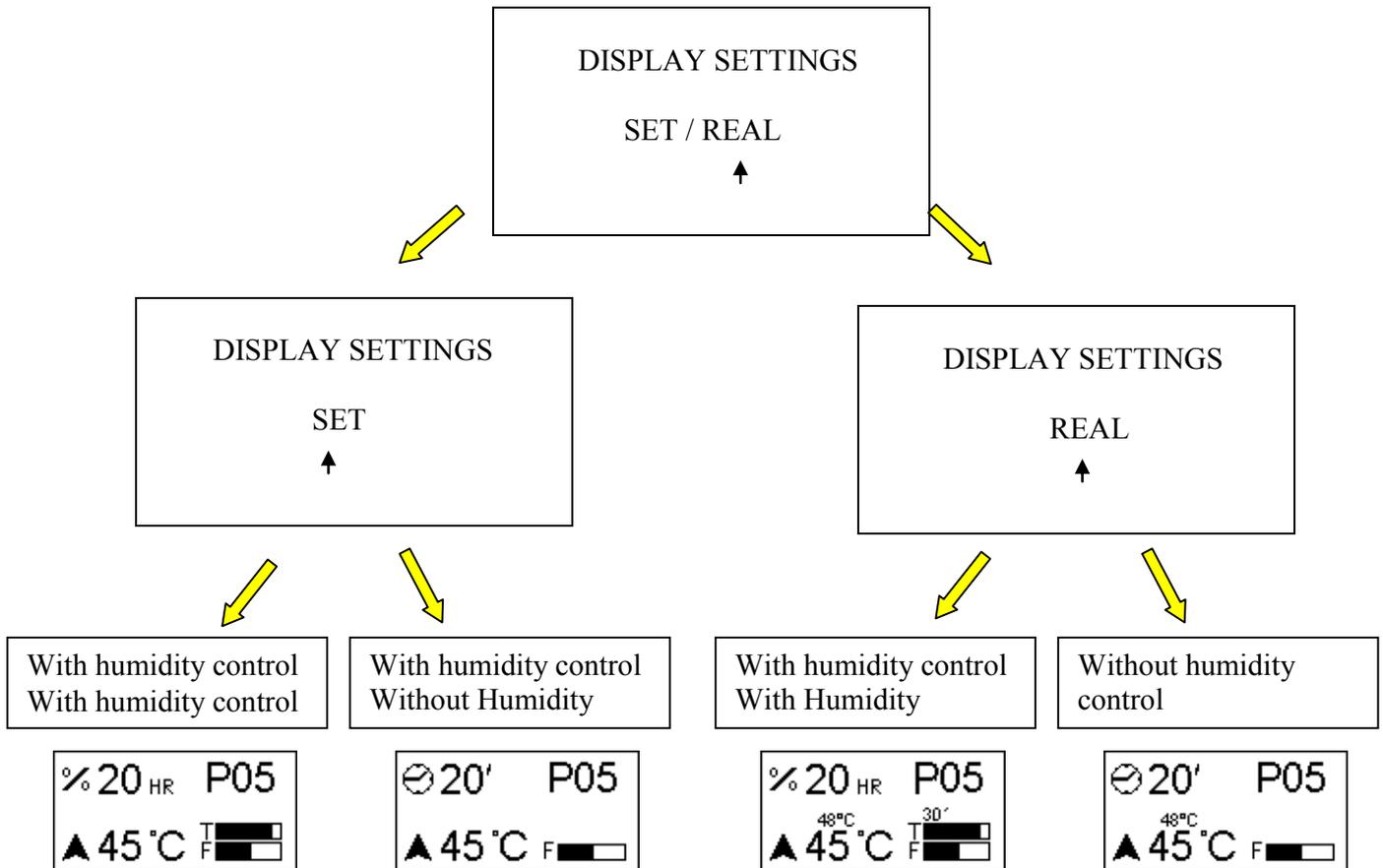
### 2.1.3 UNCREASE CONTROL

This option allows you to configure the machine with the uncrease control system which involves activating the basket motor so that it turns from one side to the other once the programme has completely finished and the door has not been opened within a minute. This is to prevent the clothes inside the drum from creasing. Use the INC (^) and DEC (v) keys to move the cursor from YES to NO or vice-versa, and the SELECT key to confirm the modification and move to the next option.



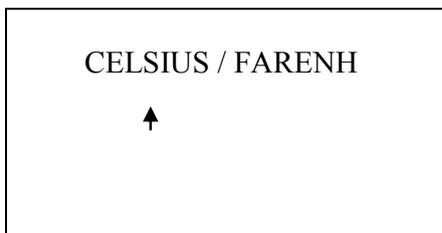
### 2.1.4 DISPLAY SETTINGS– Temp. Real or Programmed

This option allows you to programme the machine so that when a programme is run, the temperature values shown on the microprocessor display correspond to the true temperatures (of the two operating probes) or to the temperature setting of the programme. Use the INC (^) and DEC (v) keys to move the cursor from SET to REAL or vice-versa, and the SELECT key to confirm the modification and move to the next option. We recommend that customers are shown the set point temperature (SET).



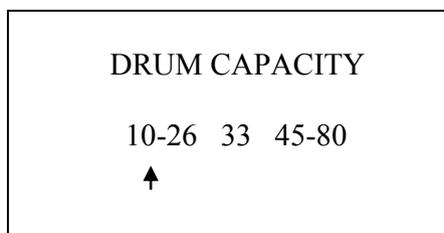
### **2.1.5 CELSIUS/ FARENH– Unit of temperature**

This option allows you to configure the dryer so that the temperature unit is displayed when the programme is run, either in Centigrade (CELSIUS) or Fahrenheit (FARENH). Use the INC (^) and DEC (v) keys to move the cursor from CELSIUS (centigrade °C) to FARENH (Fahrenheit °F) or vice-versa, and the SELECT key to confirm the modification and move to the next option.



## 2.1.6 DRUM CAPACITY

This option tells the microprocessor the size of the dryer. This means that it automatically selects all the parameters affected by the drum capacity. It is divided into three groups: Dryers from 10 kg to 26 kg, 33 kg dryers and lastly dryers from 45 kg to 80 kg. Use the INC (^) and DEC (v) keys to move the cursor through 0-26, 33 or 45-80, and the SELECT key to confirm the modification and move to the next option.



Parameters affected:

Nominal speed of the dryer (DRUM SPEED)

10-26→85%

33→70%

45-80→55%

Range of Intelligent dry speeds

10-26→75%, 80%, 85%, 90%, 95%

33→60%, 65%, 70%, 75%, 80%

45-80→45%, 50%, 55%, 60%, 65%

Belt sensor → (AL-8)

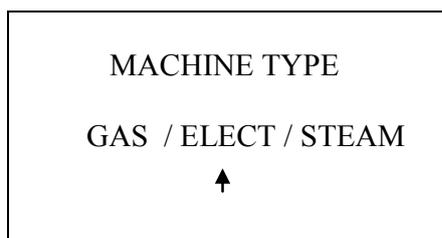
10-26→DEACTIVATED

33→ACTIVATED

45-80→ACTIVATED

### 2.1.7 MACHINE TYPE

This option must inform the microprocessor what type of heating the dryer has in order to ensure the appliance works correctly. When the dryer has gas heating, the software delays the ignition of the burner in order to prevent a possible build-up of gas inside the machine as the intake system will have eliminated any possible traces during the delay. Use the INC (^) and DEC (v) keys to move the cursor from one type to the next, and the SELECT key to confirm the modification and move to the next option.



When GAS is selected, the heating ignition has a delay of 35 seconds for increased safety by avoiding a possible build-up of gas.

At the same time when GAS is selected, for dryers with air RECIRCULATION it is not possible to set the AUTO option to protect the dryer from variations that may significantly affect the correct combustion of the burner.

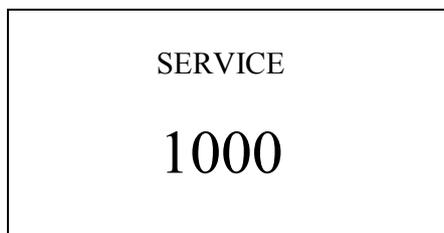
### 2.1.8 SPRINKLER SYSTEM

This option allows you to add the sprinkler system to the dryer. Use the INC (^) and DEC (v) keys to move the cursor from YES to NO or vice-versa, and the SELECT key to confirm the modification and move to the next option.



### 2.1.9 SERVICE – Maintenance

This option allows you to programme the appliance so that, after a certain period in operation, the dryer is able to send a message on the display that notifies the user that a service is required. It is possible to set the time to the number of hours that must pass from when the appliance is switched on until the message is displayed. Use the INC (^) and DEC (v) keys to scroll through the options. Use the SELECT key to confirm the change.



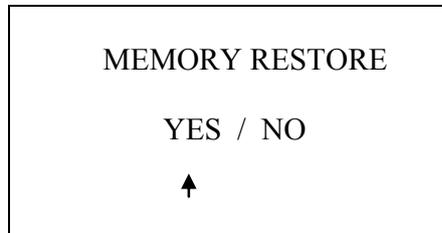
If 0 is selected, this option is deactivated, and the service message is never displayed.

At the end of the selected time period after the appliance has been started, each time that a drying cycle is completed, the message END will flash alternately with the SERVICE icon and message.

When the value of this parameter has been modified and confirmed by pressing SELECT, the meter will set to zero.

### **2.1.10 MEMORY RESTORE – Factory parameters**

This option allows you to reset all the changes so that all the values of the microprocessor are restored to the factory settings. Use the INC (^) and DEC (v) keys to move the cursor from YES to NO or vice-versa, and the SELECT key to confirm the modification.



## 2.2.- COUNT

With the technician's menu window open, place the cursor over COUNT, and press SELECT to go to the COUNT menu.

TYPE MENU	
OPTION	
COUNT	
EDIT	
EXIT	

The count menu is shown below, the left column gives the data and the right column gives the figures for that data.

TOTAL TIME	0004
T.FILTER	0023
FILTER (AL-2)	0004
FLAME (AL-3)	0005
A.FLOW (AL-4)	0000
DRUM ALARM	0000
O.HEAT (AL-6)	0000

**TOTAL TIME:** The Total Time counter gives the number of hours the dryer has been operating. This is not the same as the number of hours the dryer has been switched on.

**T.FILTER:** The T.filter counter gives the number of hours since the filter or fluff bag was last removed for cleaning (the counter counts the number of hours since the filter cover was last opened).

**FILTER (AL-2):** The Filter counter (AL-2) gives the number of times the AL-2 Alarm, filter cover open, has been triggered.

**FLAME (AL-3):** The Flame counter (AL-3) gives the number of times the AL-3 Alarm, no flame, has been triggered. This alarm is only triggered in gas-heated dryers.

**A.FLOW (AL-4):** The A.Flow counter (AL-4) gives the number of times the AL-4 Alarm, no air flow in extraction, has been triggered.

**DRUM ALARM (AL-8):** The Drum Alarm counter gives the number of times the Drum Alarm has been triggered. This alarm is only triggered in belt-driven dryers.

**O.HEAT (AL-6):** The O. Heat counter (AL-6) gives the number of times the AL-6 Alarm, overheating inside the machine, has been triggered.

To exit the counter menu, press PROG, and the microprocessor changes to the technician's menu window.

## 2.3.- EDIT

With the technician's menu window open, place the cursor over EDIT, and press SELECT to go to the EDIT menu.

<b>TYPE MENU</b>	
OPTION	
COUNT	
EDIT	
EXIT	

The EDIT menu is shown below. All the programmes can be edited from this menu, allowing the user to modify all the parameters shown in the following table as required and for each programme.

PROGRAM	001
TEMPER.	060
TIME	010
AG. TIME	060
HUMIDITY	050
COOL TIME	005

**PROGRAM:** With the cursor on PROGRAM, use the INC (^) and DEC (v) keys to move from one programme to another (there are 9 programmes) and use the SELECT key to confirm the programme to be selected and the cursor moves to TEMPER.

**TEMPER:** With the cursor on TEMPER, use the INC (^) and DEC (v) keys to modify the temperature of the previously selected programme. Use the SELECT key to confirm the change in the temperature and the cursor moves to the next option, TIME.

**TIME:** With the cursor on TIME, use the INC (^) and DEC (v) keys to modify the time of the previously selected programme. Use the SELECT key to confirm the change in the time and the cursor moves to the next option, AG. TIME.

**AG. TIME:** With the cursor on AG TIME, use the INC (^) and DEC (v) keys to modify the time the dryer takes to reverse the direction of the drum rotation. Use the SELECT key to confirm the change in the time and the cursor moves to the next option, HUMIDITY. Values below 50" should not be entered.

**HUMIDITY:** With the cursor on HUMIDITY, use the INC (^) and DEC (v) keys to modify the relative humidity of the previously selected programme. It is also possible to set the value to 0 if you wish the programme you are editing to operate with time. Use the SELECT key to confirm the change in the relative humidity and the cursor moves to the next option, COOL TIME.

NOTE: Although the humidity parameter is available, the appliance will only operate correctly when it is fitted with the humidity control option, which is never the case in standard dryers, where this value cannot be edited.

**COOL TIME:** With the cursor on COOL. TIME, use the INC (^) and DEC (v) keys to modify the cooling time required on completion of the drying cycle of the previously selected programme. Press SELECT to confirm the modification to the cooling time.

To exit the counter menu, press PROG, and the microprocessor changes to the technician's menu window.

A table is then displayed with the default parameters configured for each programme.

PROGRAMME	RECOMMENDED USE	DRYING			ROTATION TIME
		Min	°C	%RH	
1	TOWELS	30	80	25	70
2	COTTON 1	35	75	25	70
3	COTTON 2	40	65	30	70
4	SYNTHETICS	20	60	30	70
5	DELICATES	25	45	30	70
6	INTENSIVE 1	20	75	30	70
7	INTENSIVE 2	30	75	30	70
8	EXTRA 1	15	90	20	30
9	EXTRA 2	20	90	15	30

Note: The programmes that operate with humidity control have 60 minutes of time.

## **2.4.- EXIT**

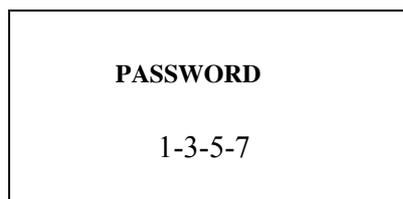
With the “technician’s menu” window open, place the cursor over EXIT, and press SELECT to exit the technician’s menu and go to the main Programme menu.

### **3.- USER MENU**

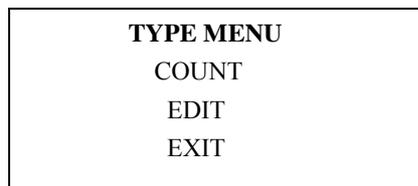
With the dryer switched on and without running any programmes, press the PROG key three times. The microprocessor will request a password (Code).



To access the user menu, enter code 1-3-5-7. Use the INC (^) and DEC (v) keys to change the digits, and the SELECT key to move from one digit to another. When the four figures have been entered, press SELECT to go to the User menu.



When SELECT is pressed, the user menu appears in the window as shown below.



The sub-menus, COUNT, EDIT and EXIT, contain the same information as the sub-menus of the same name in the technician's menu.

## **4.- ADVANCED USER MENU**

With the dryer switched on and without running any programmes, press the PROG key three times. The microprocessor will request a password (Code).

**PASSWORD**  
  
\* \* \* \*

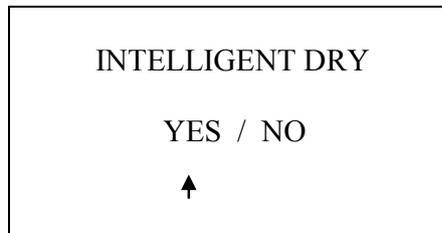
To access the advanced user menu, enter code 1-9-7-7. Use the INC (^) and DEC keys (v) to change the digits, and the SELECT key to move from one digit to another. When the four figures have been entered, press SELECT to go to the Configuration menu.

**PASSWORD**  
  
1-9-7-7

From the advanced user's menu, it is possible to adjust the configurations previously established in the technician's menu. It is also possible to manually adjust the drum rotation speed. The options which, after being activated in the technician's menu, can be adjusted in the advanced user's menu are as follows:

## INTELLIGENT DRY

The intelligent dry system is fitted as standard in the humidity control. Therefore, if HUMIDITY CONTROL (YES) is selected in the technician's menu, the appliance runs its drying cycles using the INTELLIGENT DRY system by default. If the user wishes to use the dryer with the humidity control but without the intelligent dry system, it is possible to deactivate it. Use the INC (^) and DEC (v) keys to move the cursor from YES to NO or vice-versa, and the SELECT key to confirm the modification and move to the next option.



When the humidity control option is selected, the Intel Dry option is automatically activated.

When Intel Dry is active, the time between each rotation reversal (rotation cycle) is fixed and cannot be changed. This value corresponds to the time needed to carry out the speed adaptation process. This time is initially set at 75 seconds.

The speed adaptation process consists of an exploration phase and a positioning phase.

During the exploration phase, the microprocessor has a voltage in its analogue output (24) that ranges between 4.5 and 9.5 volts such that the rotation speed of the drum varies according to the voltage.

During the exploration phase, the microprocessor will have 5 different voltages that will go from low to high.

The first voltage occurs 8 seconds after the rotation cycle starts and lasts a further 8 seconds during which an average reading is taken of the relative or absolute humidity. Immediately afterwards, the second voltage occurs lasting a further eight seconds and during which another average reading is taken of the relative or absolute humidity.

This continues until all five voltages have occurred.

The value of the voltages will depend on the DRUM CAPACITY option (see chapter 2.1.6).

The first voltage starts 8 seconds after the rotation cycle starts and each assessed interval lasts 8 seconds, so that after 64 seconds the exploration phase will have terminated.

Immediately afterwards, the positioning phase starts where the microprocessor emits the output voltage corresponding to the voltage when the humidity value was at its highest. This voltage is continuous until the next speed adaptation process starts.

The speed adaptation processes will be repeated in the following way during the drying cycle:

No speed adaptation process will take place during the first rotation cycle,

but during the second cycle, yes,

during the third, fourth and fifth, no,

during the sixth yes,

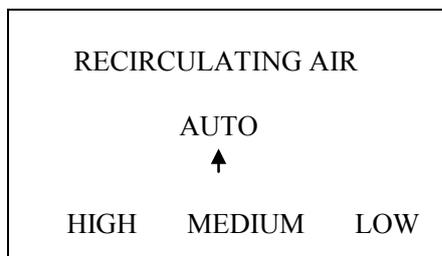
during the seventh, eighth and ninth, no,

during the tenth, yes,

and so on successively.

## RECIRCULATING AIR

This option will only appear in this menu if the RECIRCULATING AIR (YES) option is selected in the technician's menu. The appliance is equipped with an air recirculating system that, thanks to the built-in microprocessor and the variable position gate, permits control of the air flow to be recirculated. There are four possible modes for controlling this air flow. Use the INC (^) and DEC (v) keys to move the cursor from AUTO to HIGH or MEDIUM or LOW, and the SELECT key to confirm the modification and move to the next option.



The recommended option is AUTO, which is the intelligent option, designed to determine the optimal air flow at which the air should recirculate at any moment in order to ensure maximum water extraction in the shortest possible time.

**Note: this option is not enabled for dryers with GAS heating.**

The position of the flap varies according to the humidity of the air extracted from the drum. Such that:

If the humidity is between 1% and 25%, it is set to High mode.

If the humidity is between 26% and 35%, it is set to Medium mode.

If the humidity is between 36% and 99%, it is set to Low mode.

The HIGH option permits the maximum opening of the gate, thus obtaining the maximum possible flow of recirculated air. The position of the gate does not change during the cycle. 8 V between pins 25 and 27.

The MEDIUM option limits the opening of the gate to an intermediate level thus obtaining a moderate flow of recirculated air. The position of the gate does not change during the cycle. 6 V between pins 25 and 27.

The LOW option limits the opening of the gate to a low level thus obtaining a low flow of recirculated air. The position of the gate does not change during the cycle. 4 V between pins 25 and 27.

### **PAUSE TIME**

The dryer is fitted with drum rotation reversal as standard. It is necessary for the drum to stop before starting to rotate in the opposite direction. The PAUSE TIME parameter defines the time that the drum stops for during the drum rotation reversal process. The value is given in seconds. To modify the value shown on the screen, use the INC (^) and DEC (v) keys to increase or decrease this parameter and the SELECT key to confirm the change and go to the next option. The default setting of this parameter is 1 second.

PAUSE TIME 01
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### **PAUSE TEMP**

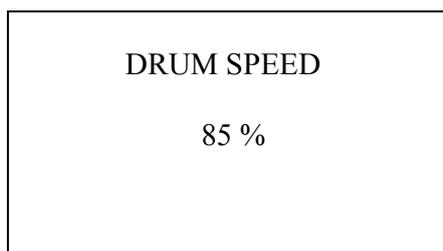
The PAUSE TIME parameter defined above is only effective when the programmed temperature is less than a certain value. This value is the PAUSE TEMP value and is given in °C. Therefore, when the temperature selected in the corresponding programme is lower than the value defined in PAUSE TEMP, the drum rotation pauses during the rotation reversal for the time period defined in the PAUSE TIME parameter. To modify the value shown on the screen, use the INC (^) and DEC (v) keys to increase or decrease this parameter and the SELECT key to confirm the change and go to the next option. The default setting of this parameter is 40 °C.

PAUSE TEMP 40
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## **DRUM SPEED**

If the appliance is programmed to run drying cycles without humidity control, HUMIDITY CONTROL (NO) or to omit the intelligent dry system, INTELLIGENT DRY (NO), this option is displayed and allows the advanced user to adjust the drum rotation speed. The selected speed is fixed for the length of the drying cycle and is limited to 45% to 95%.

**Note: A setting that is too far from the nominal speed may cause damage to the transmission system and may even be dangerous.**



The value of this parameter is given as a % of the maximum value that the drum can turn. If this value is not modified by the user, each dryer model will have a rotation speed corresponding to the nominal speed.

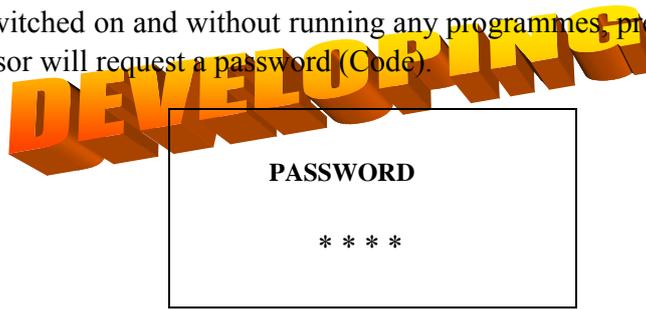
A table is attached below indicating the nominal speed for each model and the minimum and maximum limits of the variation range in %. Any value outside these ranges will be omitted by the software, and the appliance will only operate within the range limits (either the maximum or minimum limit).

The nominal value is automatically set when the DRUM CAPACITY option is configured (see chapter 2.1.6).

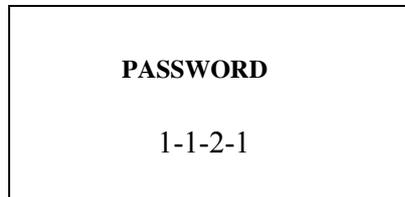
Model according to capacity (kg)	Nominal speed (rpm)	<b>Nominal Value (%)</b>	Minimum speed (rpm)	<b>Minimum Limit (%)</b>	Maximum speed (rpm)	<b>Maximum Limit (%)</b>
10-26	46	<b>85</b>	35	<b>65</b>	51	<b>95</b>
33	37	<b>70</b>	24	<b>45</b>	39	<b>75</b>
45-80	37	<b>55</b>	30	<b>45</b>	43	<b>65</b>

## **5.- CHECKING**

With the dryer switched on and without running any programmes, press the PROG key three times. The microprocessor will request a password (Code).



To access the Checking menu, enter code 1-1-2-1. Use the INC (^) and DEC (v) keys to change the digits, and the SELECT key to move from one digit to another. When the four figures have been entered, press SELECT to go to the Configuration menu.



The display will move to an intake and output window that the maintenance technician can check to ensure it operates correctly.

## **6.- RESTRICTED MENU**

With the dryer switched on and without running any programmes, press the PROG key three times. The microprocessor will request a password (Code).

**PASSWORD**

\* \* \* \*

To access the Restricted menu, enter code 2-6-0-1. Use the INC (^) and DEC (v) keys to change the digits, and the SELECT key to move from one digit to another. When the four figures have been entered, press SELECT to go to the Configuration menu.

**PASSWORD**

2-6-0-1

This takes you to the restricted options.

### **3.1.6.1 DEBT CONTROL**

The DEBT Control option allows you to programme the machine so that it operates for 50 hours once it has been started. If DEBT Control is set to YES, after 50 hours in operation the machine will be blocked. Use the INC (^) and DEC (v) keys to move the cursor from YES to NO or vice-versa, and the SELECT key to confirm the modification.

**DEBT CONTROL**

YES / NO

↑

When the DEBT Control option is confirmed at YES, a new window is displayed showing AL-10 CALL SERVICE (Call technical assistance), with the number of programmes run and the number of programmes in which the microprocessor will be blocked. The factory setting is 50 hours and cannot be modified. Press SELECT to go to the next option.

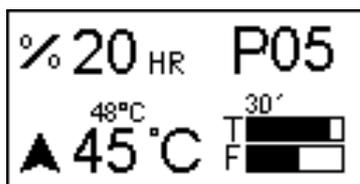
## **7.-HUMIDITY CONTROL**

### **7.1.- Functions associated with the buttons**

When the different buttons are pressed, the functions described modify the machine conditions.

Button	Machine status	Display	Action
Select	Programme selection	P01	Switches to temperature selection
	Temperature selection	45°	Switches to humidity selection
	Humidity selection	%15	Switches to programme selection
	While operating. Temperature selection	45°	Switches to humidity selection
	While operating. Humidity selection	%15	Switches to temperature selection
	In case of alarm	AL-X	Reset alarm
Arrows	Programme selection	P01	Increase / Decrease Programme No.
	Temperature selection	60°	Increase / Decrease temperature
	Humidity selection	%X	Increase / Decrease humidity
Prog. (x3)	Machine stopped		Enters programming mode

#### **a. Information displayed**



The display offers different types of information, including the programme number, the time remaining, the percentage humidity and the temperature setting. The information may vary according to the state of the machine at any moment. When the machine is operating, the % symbol flashes.

When the heating is ON, an arrow pointing upwards appears next to the thermometer.

The following table shows all the possible information displays and the conditions in which they are displayed.

Display	Machine status	Comments
PSM	In the ignition (2s)	Shows software version
END	End / Anti-crease	End of cycle /Anti-crease cycle (2)
AL-X	Alarm	Displays one of the alarms, see section 3

(2) The End / Anti-crease cycle lasts a maximum of 99 minutes. During this period, an alarm will sound every minute, reminding you that the cycle has finished. After 99 minutes the machine returns to the status: Pause.

### **b. How to run a drying cycle using a standard programme**

When the machine is in PAUSE mode, press the arrows to select the required programme number.

When the required programme is displayed, press START/STOP and the required programme will start.

### **c. How to run a drying cycle using the values defined by the user**

When the machine is in PAUSE mode, press SELECT until 60° (Drying temperature) is displayed flashing, and use the arrows to change the setting.

Press SELECT again until the Drying humidity %, 25' is displayed flashing and use the arrows to change the humidity.

Press START/STOP to start the drying cycle.

These values can be also modified while the machine is running.

### **d. PROGRAMMING**

The predefined factory programmes are shown in the table below. These programmes can be modified.

Number	Recommended usage	Drying		Humidity	Rotation time
		mins	°C	%RH	seconds
1	Towels	30	80	25	70
2	Cotton 1	35	75	25	70
3	Cotton 2	40	65	30	70
4	Synthetics	20	60	30	70
5	Delicates	25	45	30	70
6	Intensive 1	20	75	30	70
7	Intensive 2	30	75	30	70
8	Extra 1	15	90	20	30
9	Extra 2	20	90	15	30

To programme press PROG. three (3) times and use the arrows and the SELECT key to enter the password: 1 3 5 7

This takes you to a menu with two options:

- COUNT: A counter which shows the number of alarms and hours of operation.

- EDIT: In this menu, you can select any of the nine programmes and change the parameters of each one:
  - Temperature: Temperature setting.
  - Time: Drying time.
  - Humidity: End of cycle humidity level.
  - Agt. Time: Rotation time in each direction.
  - Cool Time: Maximum cool time. (This may be lower if the temperature of 35°C is reached before the end of this time).

## **8.- OTHER INFORMATION**

### **8.1. Power supply, probes and safety times**

Microprocessor power supply output voltage	12V DC
Recirculation rotary switch power supply output voltage	24V DC
Fuse built-in at source	1 A (250V)

Type of temperature probes	NTC (glass encapsulated)
Range of temperature probes	From -10°C to 200°C
Humidity probe range	Up to 1%
Effective operating range	From 10°C to 150°C
Resistance at 25°C (B-Value 0/100)	49120 $\Omega$ (3970 K $\pm$ 1%)

Safety time for control of AL-4 (Air flow)	20 s
Safety time for control of AL-8 (Belt-drive)	15 s

## 8.2 List of connections

PINs				Comments		
Digital Inputs	1	2	Voltage free contacts	Door micro switch		
	3	4		Filter cover micro switch		
	5	6		Air flow control pressostat		
	7	8		Self-service pulse input		
	9	10		Sensor rotation (Machines with pulleys)		
	11	12		Fan motor circuit breaker		
	13	.		14	230 V safety thermostat alarm input	
	15	16		17	Gas alarm input between 15 and 17. 230V. Pin 16, not used.	
18	19	20	21	Micro processing programming input		
	22	23		12 V microprocessor power input. Pin 22 12 V, Pin 23 0 V (earth)		
Analogue inputs	28	29	30	Humidity control input Pin 28: +VCC Pin 29: RH%		
	31	32		Lower temperature probe (ST1)		
	33	34		Upper temperature probe (ST2)		
Digital outputs	35	36	37	Ventilation relay. Common 37, NO 35. NC 36 not used.		
	38	39	40	Heating relay. Common 40, NO 38. NC 39 not used.		
	41	42	43	Drum motor relay. Common 43, NO 41. NC 42 not used.		
	44	45	46	Direction of rotation relay. Common 46, NO 44, NC 45		
	47	48	49	Sprinkler relay. Common 49, NO 47. NC 48 not used.		
Analogue outputs	24	25	26	27	Drum rotation speed control output Pin 24. Recirculated air control gate rotation control output Pin 25. Earth Pin 27. Pin 26 free output.	

### 8.3 List of alarms

Alarm	Meaning	Possible solutions
AL-1	Door open	* Check door micro switch. Inputs 1-2.
AL-2	Filter cover open	* Check cover micro switch. Inputs 3-4.
AL-3	No flame	* Check gas system. * Perform manual reset. * Check that the pressure is correct. * Inputs 15-17
AL-4	Pressure drop failure or insufficient air flow	* Inputs 5-6 20 s safety time.
AL-5	Fan motor overload	* Circuit breaker built into motor. Inputs 11-12
AL-6	Overheating or variator problem	* When the safety thermostat disconnects the heating or the variator has stopped or is faulty. * Check ventilation system. * Check gas pressure is correct. * If the variator is faulty, it should be repaired or replaced.
AL-7	Dirty filter	* Clean the filter. More than 10 hours have passed since last filter clean. * Clean filter more regularly, do not reach this point.
AL-8	Drive	* Impulse not detected in inputs 9-10 for 15 s.
AL-9	Probe alarm	Three possible causes: <ul style="list-style-type: none"> <li>• Probe 1 or probe 2 disconnected.</li> <li>• Probe 1 or probe 2 out of operating range.</li> <li>• Humidity probe disconnected or option not obtained.</li> </ul>
AL-10	Service	Debt control time finished. Disconnect Debt control.
AL-11	Sprinkler system activated	*The temperature inside the drum is too high or has increased significantly in a very short space of time.