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Customer Care - EMEA
Training and Operations Support
Technical Support

Publication
number

599 76 47-19

EN

**Tumble dryer
with heat pump
and variable
rpm compressor**

New Collection

SERIES 9

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1 Safety and Installation

1.1 Safety measures



- Before starting work on an appliance, check that the earth in the lodgings is working properly by using an appropriate tool and follow the instructions described/illustrated on the Electrolux Learning Gateway portal

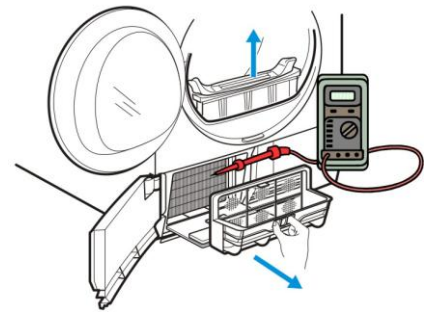
<http://electrolux.edvantage.net>

- This platform is not fitted with an ON/OFF switch. Before you access internal components, take the plug out of the socket to disconnect the power supply.
- When the servicing is completed, ensure that all the connections have been made properly and that all the appliance's safety conditions are as good as new.
- The connection between the earth terminal and the earthed metallic parts must have a low resistance.

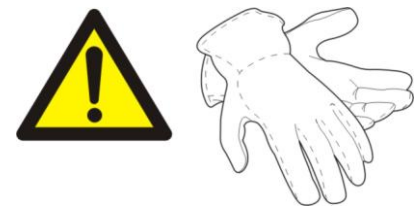
- Servicing must be performed using a tool suitable for measuring the earthing connection in compliance with the IEC/EN 60335-1 standard and follow the instructions described/illustrated on the Electrolux Learning Gateway/Metratester portal

<http://electrolux.edvantage.net>

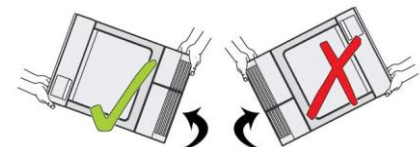
- The resistance reading taken during the trial should not exceed 0.1 Ohm.
- if the compressor needs to be replaced, check the earthing resistance between the earth contact and the accessible metallic part on the condenser.
- In the event of handling/replacing the electronic circuit board, use the ESD (Cod. 405 50 63-95/4) kit to avoid electrostatic discharges damaging the electronic circuit board, see S.B. No. 599 72 08-09.



- All the work to be performed inside the appliance requires specific skills and knowledge and may only be carried out by qualified and authorised service engineers.
- Some of the components in the mechanical part could cause injuries, so wear suitable protection and proceed with caution.



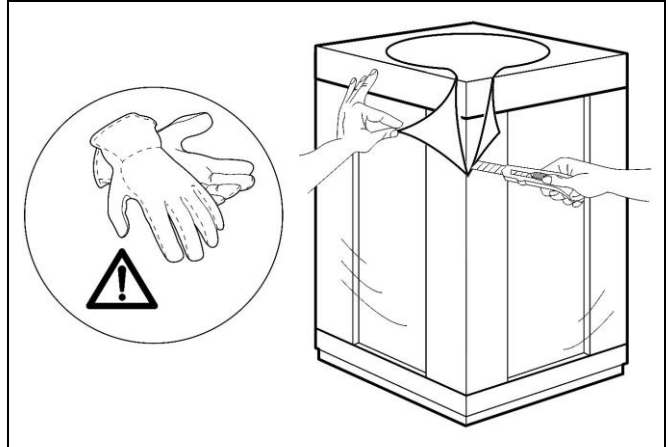
- If the compressor needs to be replaced, it must be welded and not connected via Lockring type connections.
- Always empty all the water from the condensation tank before laying the appliance on its side.
- If the appliance has to be placed on its side for maintenance or another reason, lie it on its left side, to avoid the risk of any residual water falling onto the main circuit board.



- When replacing components, please refer to the code shown in the list of spare parts relating to the appliance. END

1.2 Setting up

Remove the external film. If necessary use a cutter blade.

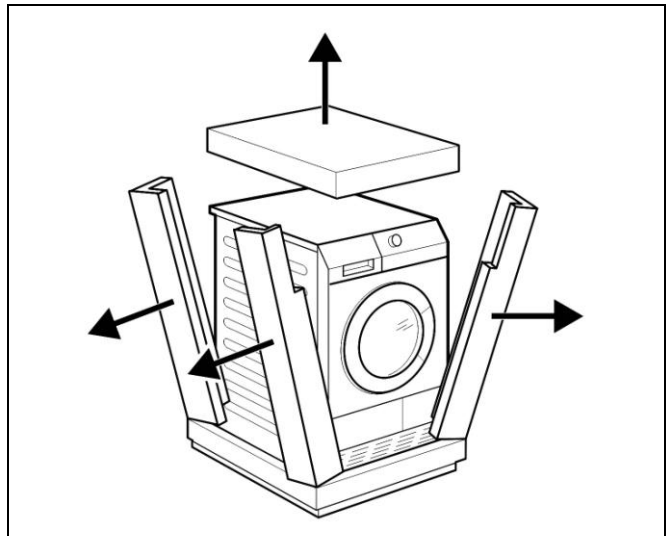


Take off the cardboard cover and remove the corner elements.

Remove the polystyrene base and set the tumble dryer in position.



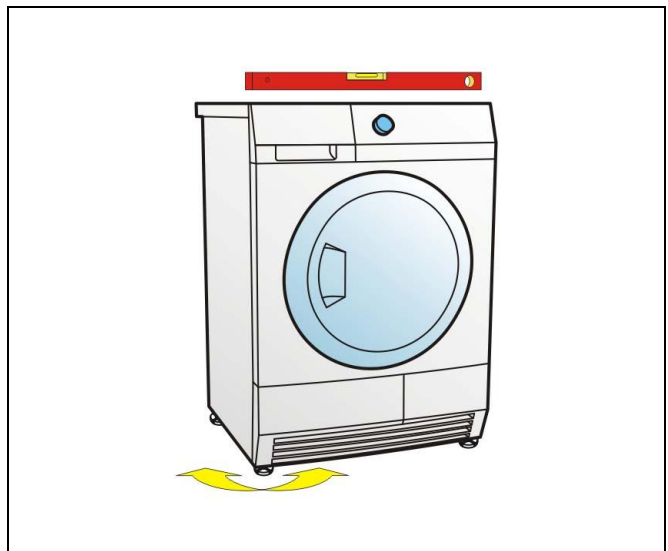
The tumble dryer weighs approximately 60 kg



Adjust the four feet so that the appliance is installed perfectly level (using a spirit level), to allow for the correct flow of condensation water into the purpose-provided tank.

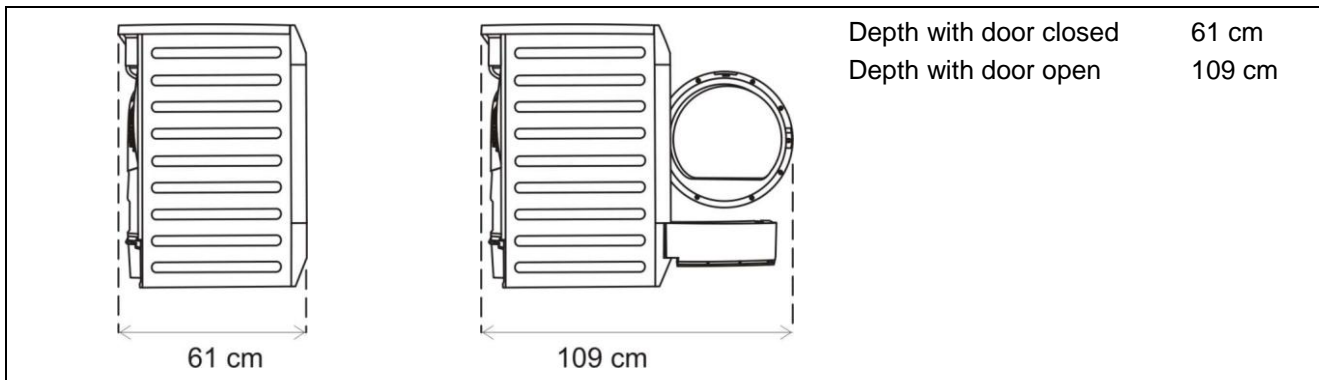
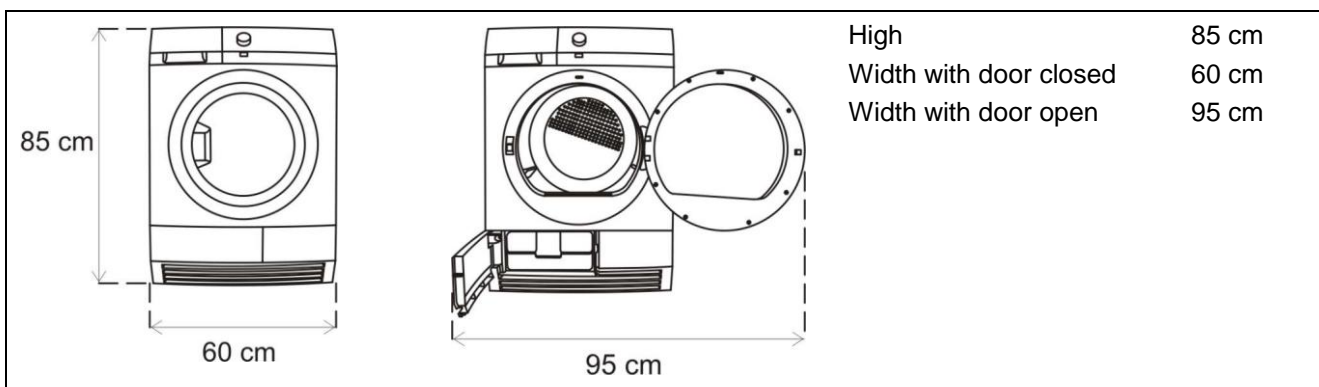


The feet must never be removed. A gap must always be left between the bottom of the tumble dryer and the floor to prevent the appliance from overheating.



2 Technical characteristics

Power supply voltage.	230 V	
Power supply frequency	50 Hz	
Energy class	T IT	
Maximum power absorption	1,050 W	900 W
Maximum energy consumed per 1 hour cycle	1.6 KW/h	1.85 KW/h
Drum volume	118 litres	
Foot adjustment	+1.5 cm	
Weight	approx. 58 kg	
Operating temperature	+5 °C/+35 °C	



2.1 Power supply management

Depending on the characteristics of the main circuit board, and irrespective of the model, the appliance can be completely cut off from the mains, or alternatively set to a special, lower energy consumption mode.

When the 0 Watt power supply circuit is inserted in the main circuit board, the appliance consumption is automatically cut to 0.

Without this circuit, for users to get a power absorption of 0 (zero) Watts, they have to cut off the electricity supply by unplugging the appliance.

In either case, the user interface behaviour is the same.

To turn the appliance on, simply press the ON/OFF button briefly.

The appliance BEEPS once (if the buzzer is enabled), and depending on the selected programme, the display shows the time required to complete drying.

To turn off the appliance, hold down the button for approximately 1 second.

After this time, the user interface beeps once (if the buzzer is enabled) and all the lights and the display are turned off. After turning off the dryer, all the options selected and the programmes are deleted.

- **Behaviour in Stand-Off mode**

In order to minimise electricity wastage when the cycle is not under way, appliances in this platform offer the auto-off function which, when teamed with the Zero -Watt circuit, provide two ways of enabling a low consumption mode:






1. When you press the ON/OFF button to turn off the appliance, the power supply is disconnected and the tumble dryer is secured (motor off, display off, etc...), the cycle and any options selected are reset, so that the next time the appliance is turned on, it is ready to perform a new programme.
2. If, during the programme and options selection phase or after the end of the cycle, the appliance receives no further instructions for at least 5 minutes, it turns off automatically (to save energy in compliance with energy consumption standards).
 - If this occurs during the setting phase, the programme and the options selected are cancelled and the basic programme appears when the appliance is turned back on.
 - If, however, the cycle has ended, all the settings are stored so that when the appliance is turned back on, the user can see that the cycle ended normally, and can restart it if necessary.






If an alarm occurs while a programme is under way, the auto off function is disabled, and an alarm is displayed.

3 Symbols




3.1 Drying programme symbols

 Extra Dry	 Cupboard Dry
 Iron Dry	 Delicate drying
 Time-controlled drying	




3.2 Drying programme phase icons

 Dry phase	 Cooling phase
 Anti-crease guard phase	

3.3 Available

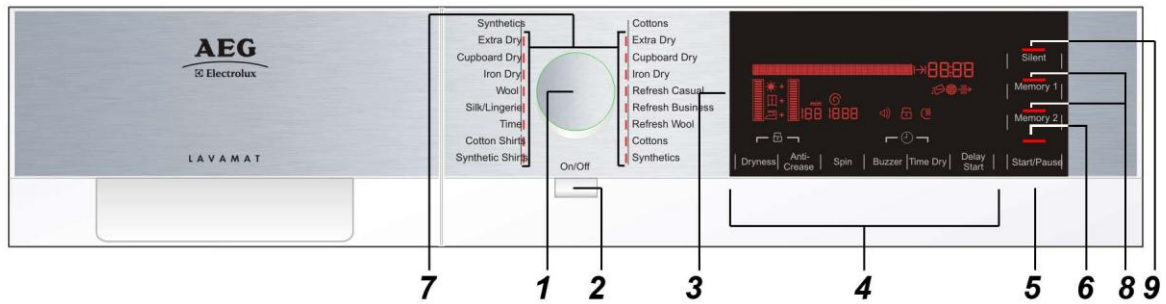
 Buzzer	 The Child Safety Device
 Delaying the start time	

3.4 Warnings

 Water collection tank warning	 Clean fluff filter warning
 Clean heat exchanger warning	

4 Control panel

4.1 Series 9



1. 16 position programme selector dial
2. ON/OFF button
3. LCD display
4. Function touch keys
5. Start/Pause touch key
6. Start (lit continuously) Pause (flashing) LED
7. Programme LEDs
8. Touch buttons and extra Silent/Fast LEDs
9. Touch button and eco LED

4.1.1 Programme selector

The selector dial fitted on series 8 is referred to as the HI-FI selector and it is used to select the desired washing programme; it can be turned both clockwise as well as anti-clockwise.

There are 16 selector positions available, and they can all be configured.

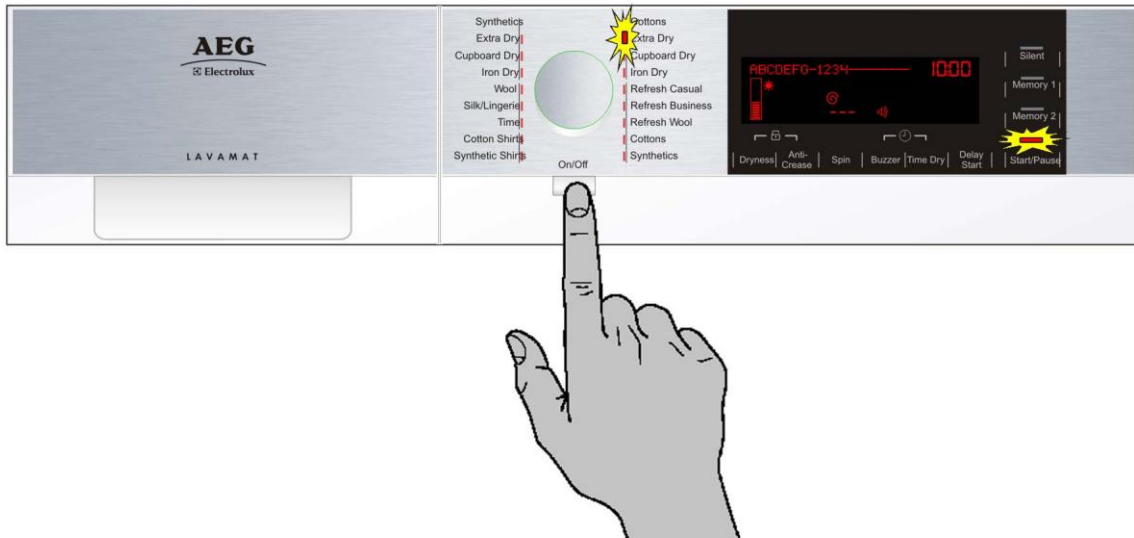
Compared to a traditional selector dial (see series 6), the HI-FI selector does not have an index on the dial or a reset position, the dial itself does not indicate a position on the control panel, but instead allows the selected programme to be indicated by lighting a LED associated with the programme.

To reset a cycle in progress, simply press the On/Off button.

When the appliance is turned on, the first position at the top right is selected by default (except in special circumstances, for instance, if there is a power failure).

When the selector dial is turned clockwise or anti-clockwise, the corresponding LED associated with a programme lights up and the LCD display shows the time required for drying and the programme phases concerned.

4.1.2 ON/OFF button



The ON/OFF button is the only one in the series 9 styling that is not a touch key.

When turning on for the first time or after quitting the diagnostics system the machine will request you to set the language in which programmes are shown on the display and to adjust the time shown on the display.

Press this button to turn on the appliance; the first position at the top right is selected by default (except in special circumstances, for instance, if there is a power failure), the display shows the type of programme selected and for a few seconds the current time, so that the user can check that the time setting is correct, after which the end of cycle time is displayed.

The end of cycle time shown on the display should not be considered as a set time, since it is calculated according to a normal load with a given humidity, and obviously if the appliance load is lighter or the degree of humidity of the fabrics in the appliance is different, the time will change automatically and gradually as drying progresses.

4.1.3 Setting the language

When turning on for the first time or after quitting the diagnostics system the language must be set.

The text line shows the set language, after 3 seconds if no other button is pressed a help message is displayed inviting the customer to turn the dial and select the language, after a further 3 seconds a second help message is displayed, inviting the customer to press the START/PAUSE button to confirm the language selected.

These messages are in the default language indicated in the configuration file, and corresponding to the language indicated in the printed label on the panel.


When the dial is turned, the language changes at every step and, after the timeout (3 seconds), the help messages are displayed in the new language that has been selected.

When the START/PAUSE button is pressed the selected language is confirmed and the display switches to the next step, which is adjustment of the clock.

*If a language is selected by mistake by pressing START/PAUSE or if you wish to change language, go to the paragraph **key combinations – change language**.*

If the language displayed on first switching the machine on is the right one there is no need to turn the dial, simply press START/PAUSE

4.1.4 Setting the time of day

After selecting the language, the line of text displays the message “**Time of day**” and the current time is shown in the right hand figures .

As when setting the language, after approximately 3 seconds wait if no other button is pressed a help message is displayed inviting the customer to turn the dial and select the time of day, after a further 3 seconds a second help message is displayed, inviting the customer to press START/PAUSE to confirm the selection.

When the dial is turned in a clockwise direction, each step corresponds to an increase of 1 hour. Once the required hour has been reached, press START/PAUSE to confirm the hours, and the display will automatically change to adjust the minutes. Once again, turn the dial until the required minutes are displayed and then press START/PAUSE to confirm the choice.

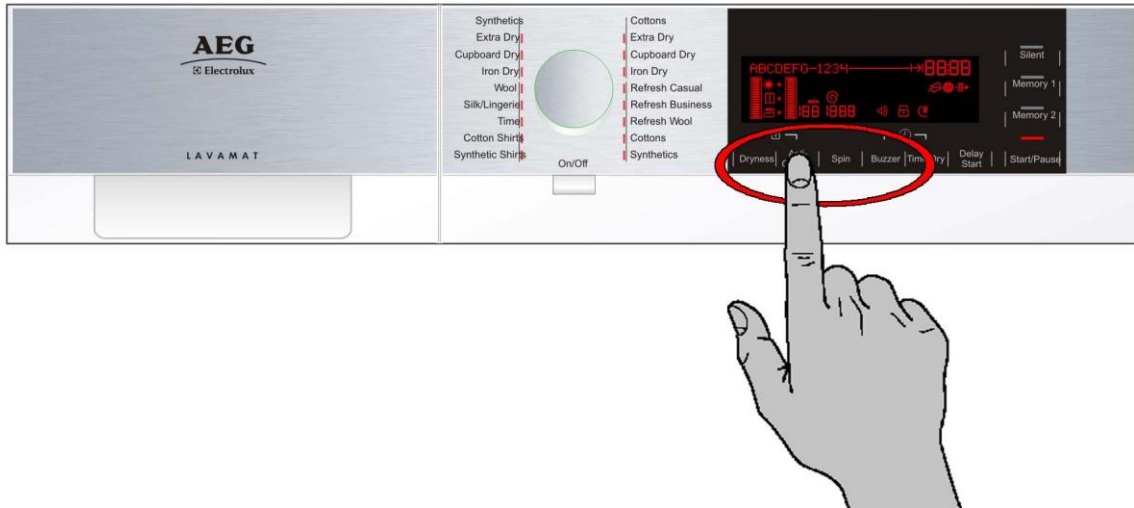
After selecting the language and the time the machine switches to the first position at the top right and is ready to start drying.

*If a time is selected by mistake by pressing START/PAUSE or if you wish to change the time, go to the paragraph **key combinations – change time of day**.*

4.1.5 Option buttons.

The four option buttons are used to change the selected programme according to personal requirements and preferences:

- Dryness.
- Long anti-crease.
- Spin speed.
- Buzzer.



Press one or more buttons to enable or disable the relevant options.

When one or more options have been enabled the related LEDs light up, the state of the selection is displayed for 5 seconds on the line of text and if the options picked affect the cycle time, the display will be automatically updated.

- **Drying**

Once you have selected the programme, the display shows the drying level by default for that type of programme.

All drying types can be upgraded by two levels by pressing the Drying button



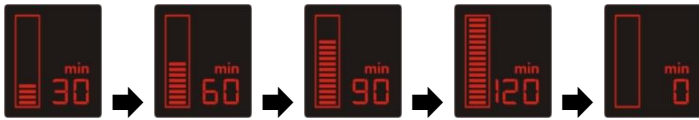
The symbols and the bar graph are only shown in programmes where adjustments are possible. If the drying button is pressed in programmes which do not include this function, the display will show Err.

After selecting this option, the end of cycle time shown on the display is updated automatically.

- **Long anti-crease**

This option is only enabled in programmes where a time for the anti-crease phase is already envisaged by default.

This option allows you to extend the anti-crease phase by up to a maximum of 120 minutes (2 hours) in 30-minute steps.



If you reach the maximum time, the time is reset if the long anti-crease button is pressed again.

If you select a programme where this option is not enabled, nothing is displayed, not even the frame containing the diagram.

- **Spin**

Using this option **the drum rotation speed is not modified** neither is the actual drying time, as this is determined by the humidity sensor. The only thing that is modified is the theoretical time shown on the display, so as to give more precise information on the duration of the drying time.

This option can be used to select **the speed at which the spin was carried out on the washing machine.**

Each time the button is pressed the number increases by 200 rpm from a minimum of 800 rpm



to a maximum of 1,800 rpm



if this option is not selected the display shows ---.

- **Acoustic signal (buzzer)**

This option enables or disables the buzzer sound permanently even after the machine is turned off or following a programme change.



When the alarm is enabled (default configuration), the icon associated with the key is lit

4.1.6 Time-controlled drying

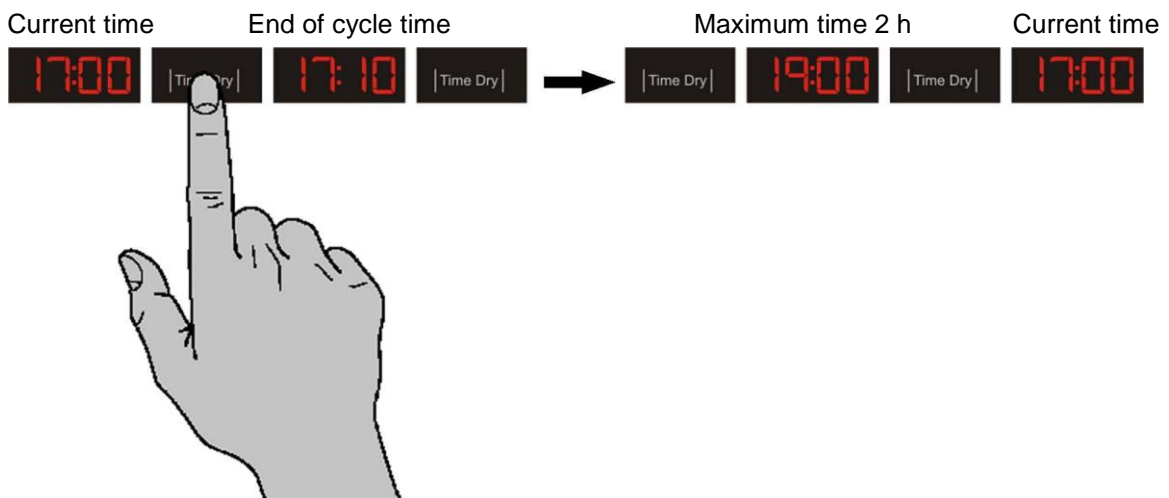
Select the time-controlled programme on the selector dial in order to set the desired drying time by pressing the TIME button, regardless of the level of humidity of the fabrics placed in the machine.



When the programme TIME is selected the relevant icon lights up and the word TIME appears in the line of text.

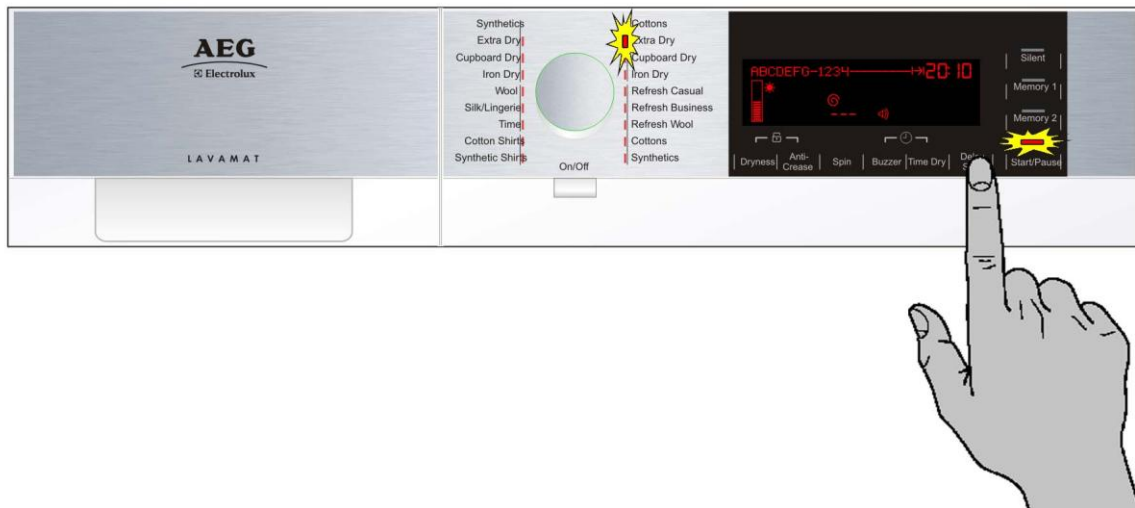
Touch the TIME touch key once and the display will show the words TIME-CONTROLLED DRYING, while the end of cycle time displayed on the right of the LCD will change.

Each time the button is pressed, the end of cycle time (drying time) increases by 10-minute, from a minimum of 10 minutes to a maximum of 120 minutes (2 hours).



If you reach the maximum time, the line of text will display the message MAXIMUM TIME REACHED and the next step resets the timer to 0 (zero).

4.1.7 Delayed Start



Touch this button to postpone the selected programme start.

After touching the touch key once the line of text shows the message NO DELAYED START and the time indicated on the display remains unchanged, that is to say the total of the current time plus the cycle time.

Current time **10:00** cycle time 1:30 the display shows **11:30**.

On touching the touch key a second time the line of text shows the message END OF CYCLE and the time indicated on the display changes by half an hour, that is to say, to indicate the total of the current time plus the cycle time plus the delay set.

Current time **10:00** cycle time 1:30 **11:30** 30 minute delay set the display shows **12:00**.

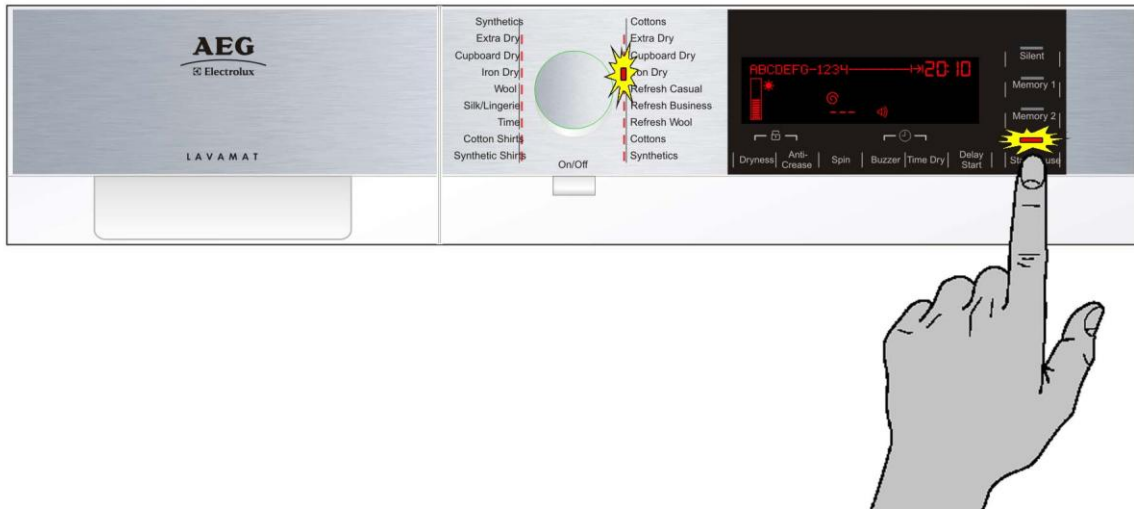
When the touch key is touched again the time will increase by a further 30 minutes.

Current time **10:00** cycle time 1:30 **11:30** 1 hour delay set the display shows **12:30**.

When the touch key is touched again there will be another half hour increase and so on until reaching 10 hours, after which the increases occur once an hour up to a maximum of 23 hours.

After selecting the time, press START/PAUSE to start the countdown, the line of text displays the message DELAYED START while the clock on the right indicates the time remaining before start of the cycle.

4.1.8 Start/Pause





When a programme is selected and the appliance door is closed, simply press the START/PAUSE button to start the cycle.

The corresponding LED will stop flashing and will remain lit permanently, the line of text will indicate the operating phase in progress, while the display will alternate between the cycle time and the time at which the cycle will end.

The operating phases indicated in the line of text are: DRYING – COOLING – ANTI-CREASE – PROLONGED ANTI-CREASE (the latter if selected).

The time remaining and the time at which the cycle will end are identified by a symbol in front of the time.

Time necessary to complete drying 

Time at which drying will end 

NB: the drying time and the time at which drying will end are not fixed times, they vary according to the humidity and size of the load inserted into the machine.

If the door has not been closed, the line of text will display the message DOOR OPEN and the LED will flash.

If the door is opened after the START/PAUSE button has been pressed the cycle will stop, the LED will start to flash and the line of text will show the message PAUSE.

After removing the error by closing the door, press START/PAUSE again for the cycle to start up again.

Press the START/PAUSE button during the cycle to pause the appliance.


When the appliance is on pause, you can add or remove options, but you cannot change the programmes; to do this, in this case, you need to turn off the tumble dryer at the On/Off button.

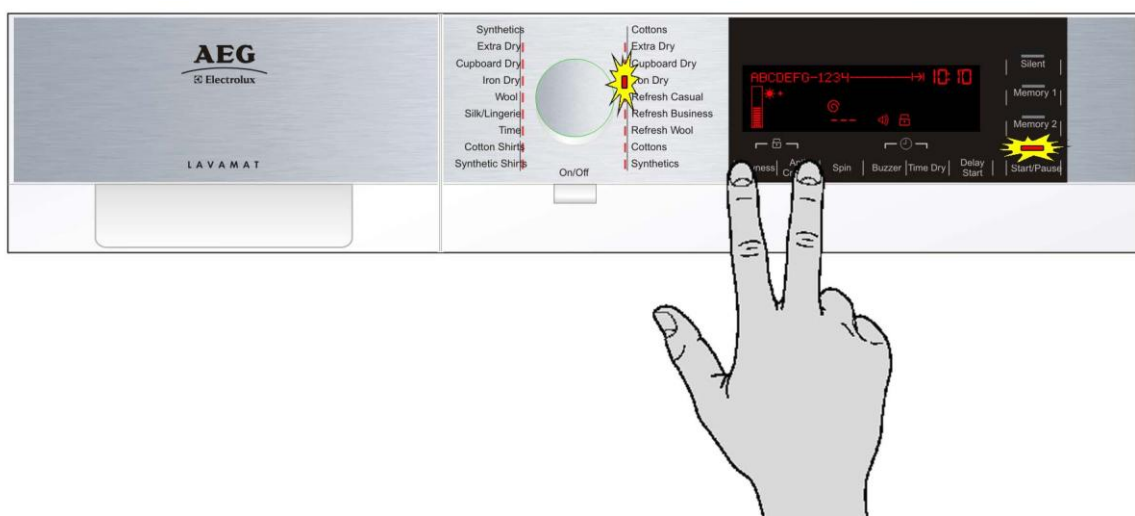
4.1.9 Key Combinations

Some extra options or operating modes can be selected using specific key combinations. The functions available and the related key combinations to set them are:

- Child lock.
- Change water conductivity.
- Permanent removal of water collection tank full alarm.
- Enable or disable buzzer.
- Demo mode.
- Adjust time of day.
- Select language.
- Diagnostics.

- **Child Lock**

To enable the child lock, press the **Dryness** and **Extended Anti-crease** buttons simultaneously; the corresponding icon lights up .



This command blocks the user interface to prevent children from modifying the programme and keeps this function enabled even after the appliance has been turned off; once this option has been enabled, no further programme changes or option additions can be made.

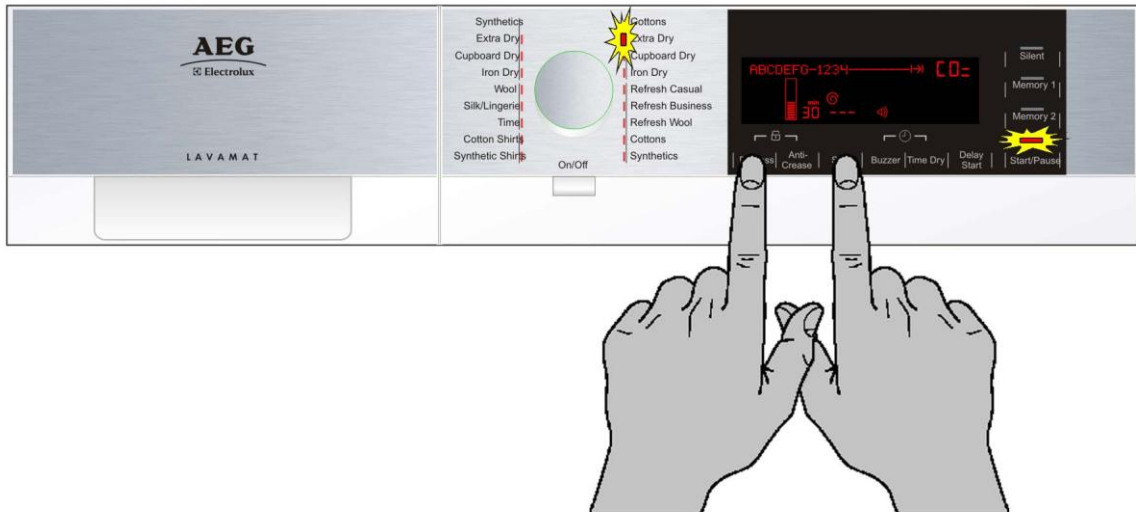
To disable the child lock, press the above key combination again.

- **Water conductivity**

The conductivity of the water used to wash the laundry varies from area to area; the conductivity sensor is set to a standard level, significant variations in conductivity level may have a negative effect on the final results of drying (laundry that is either too dry or still damp).

These variations can be noted particularly in “slightly damp” and “ready-to-iron” cycles; “wardrobe dry” cycles are practically never influenced by changes in conductivity.

To adjust the conductivity level, turn on the tumble dryer at the ON/OFF button and press the **Drying** and **Spin Speed** buttons simultaneously.



To change the conductivity value according to the table, press the **Start/Pause** button.

LCD	Conductivity level	Approximate value (µS/CM)
	LOW	< 300
	MEDIUM	300 – 600
	HIGH	> 600

The normal factory setting is medium level, but some models may have a different configuration.

Ask your local water supplier for details of the conductivity level of your water supply.

- **Permanent removal of water collection tank full alarm**

In washer dryers where the water drain kit is fitted, in order to stop the water collection tank full alarm from being displayed automatically at the end of every cycle, press the **Drying** and **Buzzer** buttons to disable this alarm.



Alarm disabled

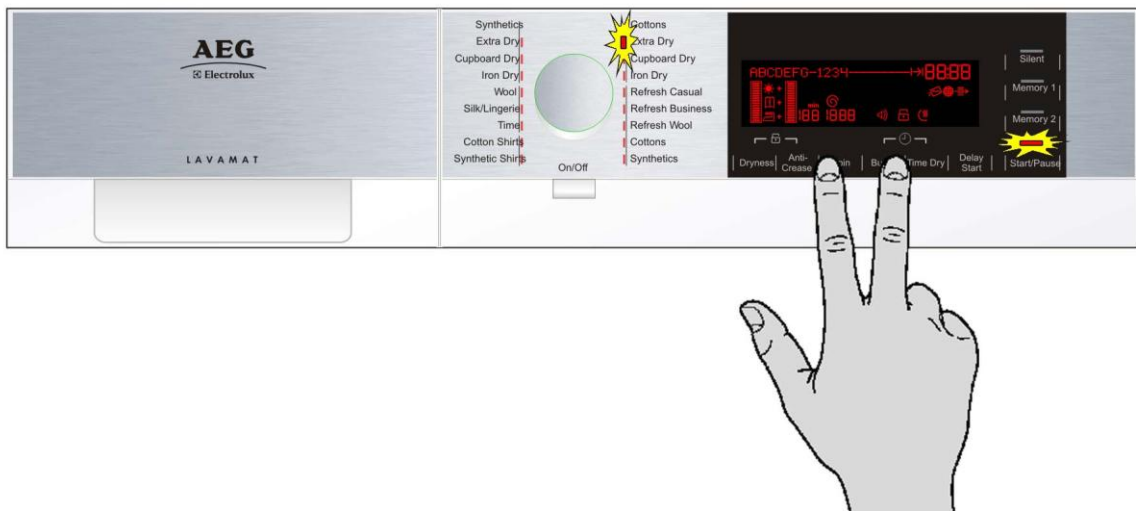


Alarm enabled

- **Enabling or disabling the buzzer**

Press the **Spin Speed** and **Buzzer** buttons simultaneously to enable or disable the buzzer sounding permanently even after the appliance has been turned off or the programme has been changed.

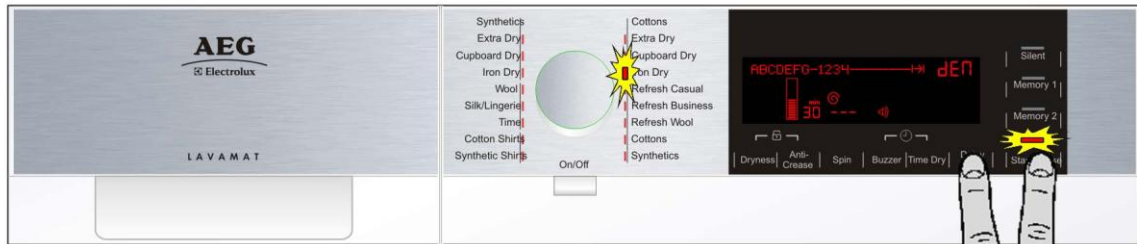
When the alarm is enabled (default configuration), the LED associated with the key is lit.



- **Demo mode**

The Demo mode is particularly used in showrooms to demonstrate to customers how the appliance works, by simulating the drying cycle.

To enter demo mode, turn on the tumble dryer at the ON/OFF button and turn the programme selector dial by three positions and press the **Start/Pause** and **Delay Start** buttons simultaneously.



D



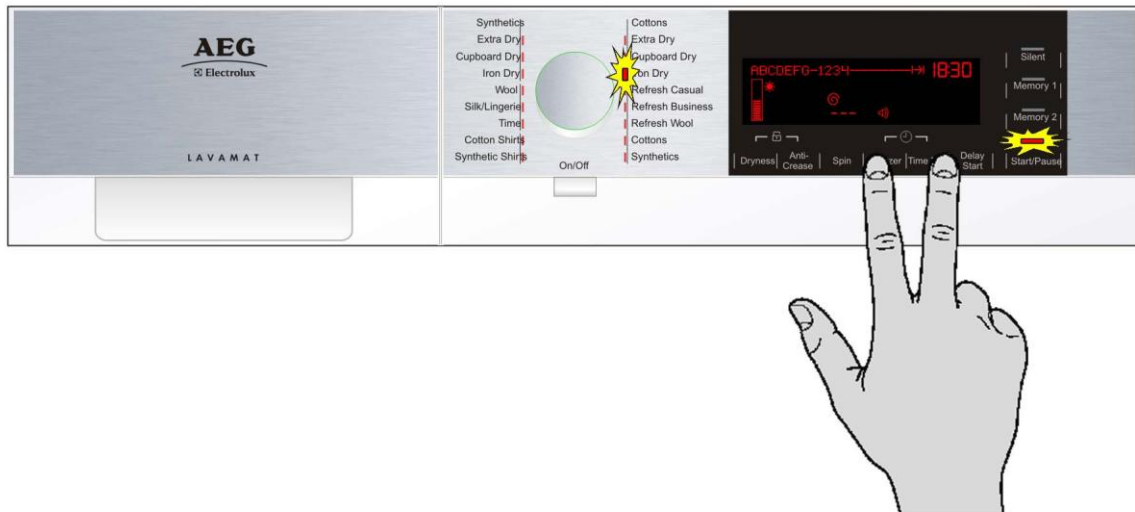
The Demo mode remains enabled even after the tumble dryer has been turned off at the ON/OFF button. When the ON/OFF button is pressed to restart the appliance, the display will show DEM for a few seconds, to facilitate the use of the Demo function in a showroom.

To quit demo mode, disconnect the electricity supply to the tumble dryer.

- **Adjusting the time of day**

When switching on for the first time, after quitting the diagnostics system or when the set time does not correspond to the current time it is possible to adjust the time of day.

In the first two cases the appliance switches automatically to the time adjustment menu, in the third case it is the operator who decides to enter the menu.



Press the keys **Buzzer and timed drying** simultaneously, the line of text will display the message TIME OF DAY and the hour set will be shown on the right hand digit.

After about 3 seconds if no further action is taken a help message is displayed which invites the customer to turn the dial to change the time and press START/PAUSE to store the change. At the same time the figures that correspond to the hours will start to flash to notify the operator that the change only influences the hours.

After adjusting the hour and pressing START/PAUSE, the figures corresponding to the minutes will start to flash. Adjust the minutes by turning the dial and store the setting by pressing START/PAUSE.

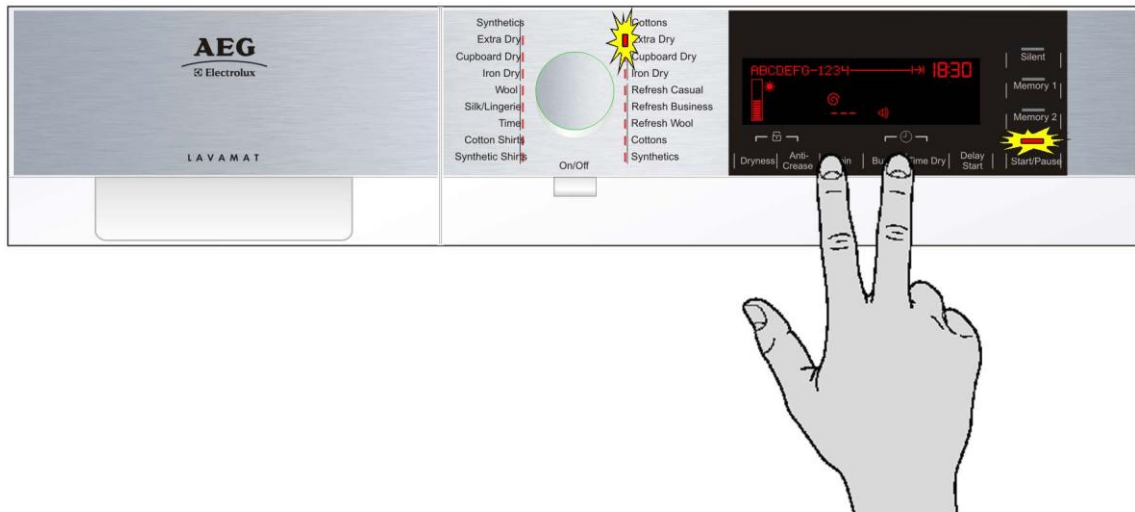
After adjusting the minutes the appliance will return to normal operating mode.

Each step of the dial in a clockwise direction corresponds to an increase in the value, whereas if the dial is turned in an anticlockwise direction the value is decreased.

- **Changing the language**

When switching on for the first time or if the language shown on the display is not the language required it is possible to change the language in which information is displayed.

In the first case the appliance switches automatically to the language adjustment menu, in the second case it is the operator who decides to enter the menu.



Simultaneously press the **Anti-Crease and Audible Signal** keys and the line text will display the message **SELECT LANGUAGE**.

After about 3 seconds if no other button is pressed a help message is displayed inviting the customer to turn the dial and select the required language, after a further 3 seconds a second help message is displayed, inviting the customer to press the **START/PAUSE** button to confirm the language selected.

Only when the machine is first turned on these messages are in the default language indicated in the configuration file, and corresponding to the language indicated in the printed label on the panel.

When the dial is turned, the language changes at every step and, after the timeout (3 seconds), the help messages are displayed in the new language that has been selected.

When the **START/PAUSE** button is pressed the selected language is confirmed and the display switches to normal operating mode.

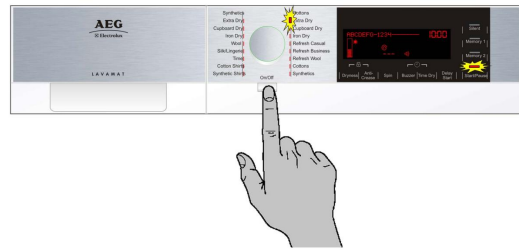
- **Diagnostics**

The diagnostics process is designed to check all the components in the tumble dryer.

To enter diagnostics mode, proceed as follows:

Turn on the tumble dryer at the ON/OFF button. Wait for the LEDs to be lit and for the buzzer to BEEP (if the alarm is not disabled).

Series 9 uses a HI-FI selector dial so the first position is already selected by default.



Press the **Start/Pause** and **Delay Start** buttons simultaneously.



This must be done within 5 seconds after the tumble dryer has been turned on!



- **Quitting diagnostics mode**

To quit diagnostics mode, turn the tumble dryer off at the ON/OFF button, then turn it back on in order to reset it. The display shows the words ELECTRIC RESET then turn it back off.

- **Selector dial positions in diagnostics**

See the paragraph which applies to all stylings “SELECTOR DIAL POSITION IN DIAGNOSTICS”.

4.1.10 Warnings

There are 3 icons under the time indication on the display dedicated to showing warnings, to remind the user to perform specific operations.

- **Condensation water tank**

It lights up at the end of every cycle to remind the user to empty the condensation water collection tank or during the actual cycle if it is full.

This warning can be disabled using the dedicated key combination if the water drain kit is fitted in the tumble dryer.



- **Filter or needle trap**

It lights up at the end of every cycle to remind the user to clean the fluff filter in the air conduit.



- **Condenser**

It lights up at the end of the cycle only after approximately 100 hours of operation, to remind the user to clean the condenser at the bottom of the tumble dryer.



5 Selector dial positions in diagnostics

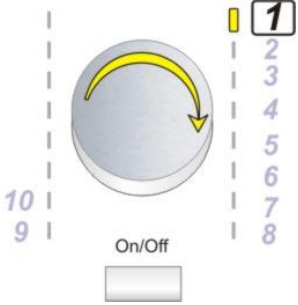


The alarms are enabled during diagnostic testing of components. If an alarm appears, move the selector to the first position to exit the alarm status and, if necessary, continue the test (if the alarm is not triggered again).

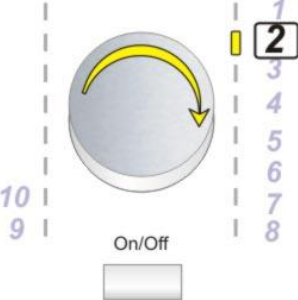
To check the correct functioning of the float switch and pump, the trap should be filled with approximately 0.7 litres of water.

In order to test the conductivity sensor properly in case of a short-circuit (position 8), a short circuit must be created between the two sensors on the front air conduit before moving the selector dial to the eighth position. If the short-circuit is not created properly, the circuit board will display alarm E32 (sensor frequency too low). To exit this alarm, move the selector to the first position.

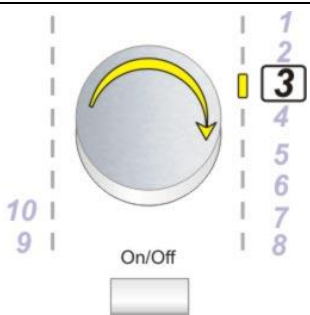
Position 1

User interface test	Purpose of the test:	To test the functionality of all LEDs and switches
	Components activated:	All LEDs. LCD display.
	Behaviour:	All LEDs flash in sequence. Press a button and the corresponding LED is lit; the code is shown on the LCD display and the buzzer sounds. All LCD icons flash simultaneously.
	Working conditions:	There is a control to run the test (always active).

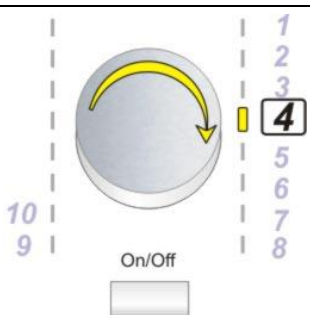
Position 2

Float micro-switch and condensation water pump	Purpose of the test:	To test the pump and micro-switch situated in the condensation water tray.
	Components activated:	If the condensation water collection tray is full and the micro-switch detects this condition, the pump is started.
	Behaviour:	If the water level in the tray is low, the LCD displays III and if the level is high (micro-switch triggered), the LCD displays 000.
	Working conditions:	Door closed (time out 10 sec.).

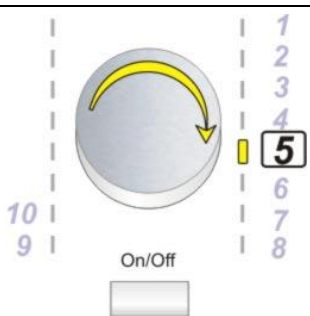
Position 3

Counter Clockwise drum rotation	Purpose of the test:	To test the drum rotation motor in an anti-clockwise direction.
	Components activated:	Motor TRIAC. Anti-clockwise direction relay. Drum rotation motor. Condensation water filling pump.
	Behaviour:	The motor turns the drum anti-clockwise and the condensation water filling pump is in operation.
	Working conditions:	Door closed (time out 10 min.).

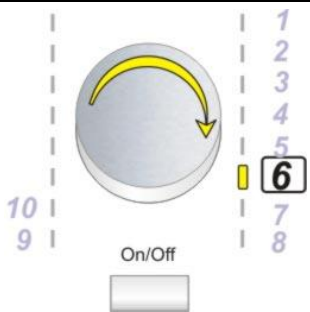
Position 4

Compressor cooling fan	Purpose of the test:	Test operation of the compressor cooling fan.
	Components activated:	Compressor cooling fan TRIAC. Safety relay.
	Behaviour:	LCD indicates the position of the selector.
	Working conditions:	Door closed (time out 10 min.).

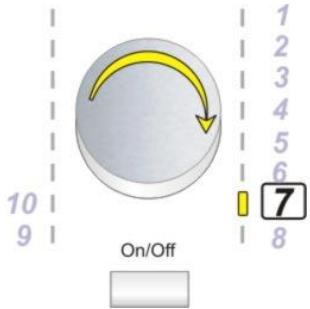
Position 5

Clockwise drum rotation	Purpose of the test:	To test clockwise rotation of the drum.
	Components activated:	Clockwise drum rotation motor. Safety relay.
	Behaviour:	LCD indicates the position of the selector. The drying temperature NTC1 is displayed on the LCD.
	Working conditions:	Door closed (time out 10 sec.).

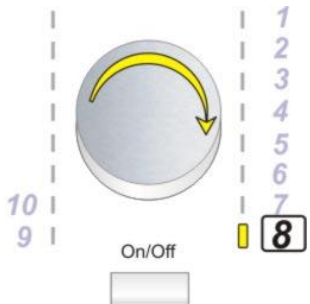

Position 6

Compressor and clockwise drum rotation	Purpose of the test:	To test compressor operation.
	Components activated:	Compressor. Clockwise drum rotation motor.
	Behaviour:	LCD indicates the position of the selector. the drying temperature NTC1 is displayed on the LCD.
	Working conditions:	Door closed (time out 10 sec.).

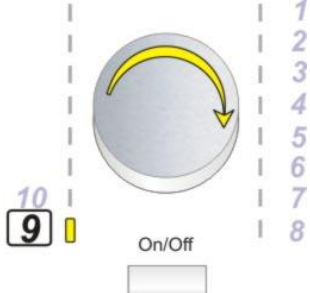
Position 7

Open-circuited conductivity sensor	Purpose of the test:	To check the conductivity sensor in open-circuit conditions.
	Components activated:	Conductivity sensor.
	Behaviour:	<p>The test lasts 4 seconds, during which the LCD flashes, displaying 000.</p> <p>At the end of the test, the LCD stops flashing and displays III.</p> <p>If the test was unsuccessful, the LCD continues to flash, displaying.</p>
	Working conditions:	Conductivity sensor free from any garments or contact.

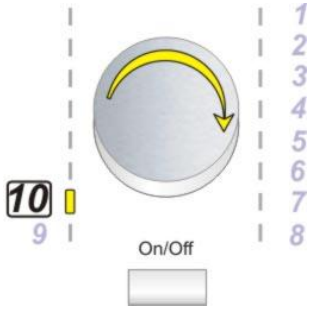
Position 8

Closed circuited conductivity sensor	Purpose of the test:	To verify conductivity sensor in short circuit condition.
	Components activated:	Conductivity sensor.
	Behaviour:	<p>The test lasts 4 seconds, during which the LCD flashes, displaying 000.</p> <p>At the end of the test, the LCD stops flashing and displays III.</p> <p>If the test is unsuccessful, the LCD displays the alarm E32.</p>
	Working conditions:	<p>Short-circuited conductivity sensor.</p> <p> Create a short circuit between the two sensors on the front air conduit before setting the selector dial to the eighth position.</p>

Position 9

Condenser Tank Switch	Purpose of the test:	To test the micro-switch under the condensation water collection tray.
	Components activated:	If the condensation water collection tray is full and the micro-switch detects this condition, the pump is started.
	Behaviour:	If the water level in the tray is low, the LCD displays III and if the level is high (micro-switch triggered), the LCD displays 000
	Working conditions:	Door closed (time out 10 sec.).

Position 10

Last alarm display and possible reset	Purpose of the test:	To see the alarm and delete it.
	Behaviour:	The LCD display flashes and shows any alarm present.
	Working conditions:	Turn the dial to position 10, paying attention not to stop in position 8 in order to avoid error 32. Press the START/PAUSE button to see all the alarms present. To delete the alarms, hold down the START/PAUSE buttons and press the button on the left.

Position 11 and subsequent positions

Last alarm display and possible reset.		
	Behaviour:	All LEDs flash in sequence. Press a button and the corresponding LED is lit; the code is shown on the LCD display and the buzzer sounds.
	Working conditions:	Door closed (time out 10 sec.).

6 Alarms

Operation of the alarms is configurable according to the model. Some or all of the alarms may be displayed to the user.

When an alarm condition occurs, the drying cycle may be interrupted or paused; in some cases, for safety reasons, a forced cooling cycle is performed.

In this case, the electronic board, if possible, disconnects the power relay from the heating element and powers the drum rotation motor with cooling fan. The cycle remains active until the user switches off the appliance.

6.1 Alarm display during normal operation.

On models with LCD the system displays the family of the current alarm to the user.

- First digit: letter “**E**”
- Second digit: the family of the alarm
- Third digit: the alarm number

If we consider, for example, the alarm E53 (communication error between the motor control board and the main board), the following will be displayed:

- First digit: letter “**E**” (error)
- Second-third digit: the number “5 0”, i.e. the family of the alarm E53)

6.2 Reading the alarms

To read the last alarm code stored, proceed as follows:

- ⇒ Access diagnostics mode (see paragraph).
- ⇒ Turn the programme selector dial clockwise to the tenth position and the display will show the last code stored.
- ⇒ To display any other alarms, press the START/PAUSE button.



*Try not to stop on position 8, otherwise a dummy alarm is triggered!
Alarm 32*

- First digit: letter “**E**”
- Second digit: the family of the alarm
- Third digit: the alarm number

The configuration errors E93 are displayed through the flashing of all LEDs and it is not possible to access the diagnostics system.

6.3 Cancelling the last alarm memorised

It is good practice to cancel the alarm code from the memory:

- After reading the alarm, to check whether it is repeated during the diagnostics cycle.
 - After effecting repairs to the appliance, to check whether it is repeated during testing.
1. Start diagnostics mode.
 2. Turn the programme selector in a clockwise direction to position ten.
 3. Press the Start/Pause button and the button immediately to the left of it simultaneously.
 4. Hold the buttons down for approximately 5 seconds.
 5. After deleting, E00 will be displayed.

6.4 Notes about specific alarm codes

▪ Configuration alarm E93:

When configuration alarms are displayed (when the appliance is switched on), the appliance is inoperative and all the LEDs light up. It is not possible to access diagnostics; the only operation possible is to switch off the appliance (selector knob on position "0").

▪ Alarms EH1-EH2-EH3:

In the event of problems with the power supply, the appliance remains in alarm mode until the voltage and frequency are restored to within the normal limits or the appliance is switched off. Alarm family "H" is displayed and it is not possible to access diagnostic mode nor to use the "rapid alarm display" function.

The complete alarm can be read only when the abnormal condition has terminated.

6.5 ALARMS TABLE

FAMILY		ALARM CODE	Full name	Action	Notes and possible causes
Ex20	CONDENSATION WATER FILLING PUMP	Ex21	Condensation water filling pump alarm	<ul style="list-style-type: none"> The cycle is suspended. If detected during configuration, the cycle start will not be permitted. 	<ul style="list-style-type: none"> Pump disconnected (wiring or connector error). Pump faulty. Water filling pump TRIAC error (short-circuit, diode mode, open circuit) (power board error).
		Ex22	Condensation water filling pump detection alarm	<ul style="list-style-type: none"> The cycle is suspended. If it is detected before the cycle starts, the cycle start will not be permitted. 	<ul style="list-style-type: none"> Pump TRIAC detection circuit error (main board error).
Ex30	CONDUCTIVITY SENSOR	Ex31	Conductivity Sensor Frequency too HIGH	No action.	<p>Only active during diagnostics of the HUMIDITY SENSOR SHORT-CIRCUIT.</p> <ul style="list-style-type: none"> The oscillation Frequency is out of Range (main board failure)
		Ex32	Conductivity Sensor Frequency too LOW	No action.	<p>Only active during diagnostics of the HUMIDITY SENSOR SHORT-CIRCUIT.</p> <ul style="list-style-type: none"> The drum is not short-circuited. Wiring error. The oscillation Frequency is out of Range (main board failure).
Ex40	DOOR	Ex45	Door Closed Sensing Alarm	<ul style="list-style-type: none"> The cycle is suspended. If it is detected before the cycle starts, the cycle start will not be permitted. 	<p>Error in the door closed detection circuit.</p> <ul style="list-style-type: none"> Door micro-switch faulty or disconnected. Main board error.

FAMILY		ALARM CODE	Full name	Action	Notes and possible causes
E0x50	DRUM ROTATION MOTOR	Ex51	Motor power TRIAC short-circuited	<ul style="list-style-type: none"> ▪ The cycle is suspended. ▪ If it is detected before the cycle starts, the cycle start will not be permitted. 	<ul style="list-style-type: none"> ▪ Motor faulty. ▪ Faulty wiring. ▪ Main circuit board faulty.
		Ex52	Motor thermal cut-out triggered	<ul style="list-style-type: none"> ▪ The cycle is suspended. ▪ If it is detected before the cycle starts, the cycle start will not be permitted. 	<ul style="list-style-type: none"> ▪ Motor faulty. ▪ Motor thermal cut-out has triggered. ▪ Faulty wiring. ▪ Main circuit board faulty.
		Ex53	Motor TRIAC “sensing” circuit faulty	<ul style="list-style-type: none"> ▪ The cycle is suspended. ▪ If it is detected before the cycle starts, the cycle start will not be permitted. 	<ul style="list-style-type: none"> ▪ Main circuit board faulty.
		Ex54	Motor blocked	<ul style="list-style-type: none"> ▪ The cycle is suspended. ▪ If it is detected before the cycle starts, the cycle start will not be permitted. 	<ul style="list-style-type: none"> ▪ Washing load is too large. ▪ Power supply voltage low. ▪ Motor/drive system blocked.
		Ex55	Inverter board safety alarm	<ul style="list-style-type: none"> ▪ The cycle is suspended. ▪ If it is detected before the cycle starts, the cycle start will not be permitted. 	<p style="text-align: center;">-----</p>
		E57	Inverter is drawing too much current (>15 A)	<ul style="list-style-type: none"> ▪ The cycle is suspended. ▪ If it is detected before the cycle starts, the cycle start will not be permitted. 	<ul style="list-style-type: none"> ▪ Motor-inverter wiring faulty. ▪ Inverter board faulty. ▪ Motor faulty.
		E58	Inverter is drawing too much current (>4.5 A)	<ul style="list-style-type: none"> ▪ The cycle is suspended. ▪ If it is detected before the cycle starts, the cycle start will not be permitted. 	<ul style="list-style-type: none"> ▪ Abnormal motor operation (overload). ▪ Motor-inverter wiring faulty. ▪ Motor faulty. ▪ Inverter board faulty.
		E59	No signal from tachometric generator for 3 seconds	<ul style="list-style-type: none"> ▪ The cycle is suspended. ▪ If it is detected before the cycle starts, the cycle start will not be permitted. 	<ul style="list-style-type: none"> ▪ Motor-inverter wiring faulty. ▪ Inverter board faulty. ▪ Motor faulty.

FAMILY		ALARM CODE	Full name	Action	Notes and possible causes
E0x50	DRUM ROTATION MOTOR	E5A	Overheating on cooling dissipater for Inverter (>88 °C)	<ul style="list-style-type: none"> ▪ The cycle is suspended. ▪ If it is detected before the cycle starts, the cycle start will not be permitted. 	<ul style="list-style-type: none"> ▪ Overheating caused by continuous operation or ambient conditions. ▪ Inverter board faulty. NTC open (on the Inverter board).
		E5H	Input voltage is lower than 175 V	<ul style="list-style-type: none"> ▪ The cycle is suspended. ▪ If it is detected before the cycle starts, the cycle start will not be permitted. 	<ul style="list-style-type: none"> ▪ Faulty wiring. ▪ Inverter board faulty.
		E5C	Input voltage is too high - greater than 430 V	<ul style="list-style-type: none"> ▪ The cycle is suspended. ▪ If it is detected before the cycle starts, the cycle start will not be permitted. 	<ul style="list-style-type: none"> ▪ Input voltage is too high (measure the grid voltage). ▪ Inverter board faulty.
		E5d	Data transfer error between Inverter and main PCB	<ul style="list-style-type: none"> ▪ The cycle is suspended. ▪ If it is detected before the cycle starts, the cycle start will not be permitted. 	<ul style="list-style-type: none"> ▪ Line interference. ▪ Faulty wiring. ▪ Main board or Inverter board faulty.
		E5E	Communication error between Inverter and main PCB	<ul style="list-style-type: none"> ▪ The cycle is suspended. ▪ If it is detected before the cycle starts, the cycle start will not be permitted. 	<ul style="list-style-type: none"> ▪ Faulty wiring between main board and Inverter. ▪ Inverter board faulty. ▪ Main board faulty.
		E5F	Inverter PCB fails to start the motor	<ul style="list-style-type: none"> ▪ The cycle is suspended. ▪ If it is detected before the cycle starts, the cycle start will not be permitted. 	<ul style="list-style-type: none"> ▪ Faulty wiring. ▪ Inverter board faulty. ▪ Main board faulty.

FAMILY		ALARM CODE	Full name	Action	Notes and possible causes
Ex60	COMPRESSOR	E61	Compressor hardware fault	<ul style="list-style-type: none"> ▪ The drying cycle is suspended. ▪ If it is detected before the cycle starts, the cycle start will not be permitted. 	<ul style="list-style-type: none"> ▪ Faulty VSC Circuit board.
		E62	Compressor short-circuited	<ul style="list-style-type: none"> ▪ The drying cycle is suspended. ▪ If it is detected before the cycle starts, the cycle start will not be permitted. 	<ul style="list-style-type: none"> ▪ Compressor short-circuited. ▪ Compressor current leakage. ▪ Faulty wiring. ▪ Main circuit board faulty.
		E63	Compressor alarm	<ul style="list-style-type: none"> ▪ The drying cycle is suspended. ▪ If it is detected before the cycle starts, the cycle start will not be permitted. 	<ul style="list-style-type: none"> ▪ Compressor disconnected (wiring or connector error). ▪ Compressor thermal cut-out has triggered. ▪ Compressor faulty. ▪ Relay error (main board faulty).
		E64	Faulty compressor “sensing” circuit	<ul style="list-style-type: none"> ▪ The cycle is suspended. ▪ If it is detected before the cycle starts, the cycle start will not be permitted. 	<ul style="list-style-type: none"> ▪ Error in the compressor detection circuit. ▪ Main board faulty.
		E65	VSC board alarm active	<ul style="list-style-type: none"> ▪ The cycle is suspended. 	<ul style="list-style-type: none"> ▪
		E66	Motor not connected to the VSC board	<ul style="list-style-type: none"> ▪ The cycle is suspended. 	<ul style="list-style-type: none"> ▪ Compressor disconnected (wiring or connector error). ▪ Compressor thermal cut-out has triggered. ▪ Compressor faulty. ▪ Faulty VSC Circuit board
		E67	VSC board current detection fault	<ul style="list-style-type: none"> ▪ The cycle is suspended. 	<ul style="list-style-type: none"> ▪ Compressor disconnected (wiring or connector error). ▪ Compressor thermal cut-out has triggered. ▪ Compressor faulty. ▪ Faulty VSC Circuit board
		E68	Current detection too high	<ul style="list-style-type: none"> ▪ The cycle is suspended. 	<ul style="list-style-type: none"> ▪ Compressor blocked. ▪ Compressor faulty. ▪ Faulty VSC Circuit board

FAMILY		ALARM CODE	Full name	Action	Notes and possible causes
Ex60	COMPRESSOR	E69	VSC board does not control the motor	<ul style="list-style-type: none"> The cycle is suspended. 	<ul style="list-style-type: none"> Compressor blocked. Compressor faulty. Faulty VSC Circuit board.
		E6A	VSC board overheated	<ul style="list-style-type: none"> The cycle is suspended. 	<ul style="list-style-type: none"> Compressor blocked. Compressor faulty. Faulty VSC Circuit board.
		E6H	Power supply voltage low on VSC board	<ul style="list-style-type: none"> The cycle is suspended. 	<ul style="list-style-type: none"> VSC board wiring. Faulty VSC Circuit board.
		E6C	Power supply voltage high on VSC board	<ul style="list-style-type: none"> The cycle is suspended. 	<ul style="list-style-type: none"> Faulty VSC Circuit board.
		E6D	VSC board failure		
		E6E	Unidentified signal on VSC board	<ul style="list-style-type: none"> The cycle is suspended. 	<ul style="list-style-type: none"> Communication wire between main board and VSC board is faulty.
		E6F	Faulty VSC Circuit board	<ul style="list-style-type: none"> The cycle is suspended. 	<ul style="list-style-type: none"> Faulty VSC Circuit board.
0x70	NTC	E71	Drying NTC alarm	<ul style="list-style-type: none"> The cycle is suspended. If it is detected before the cycle starts, the cycle start will not be permitted. 	<ul style="list-style-type: none"> NTC1 reading out of range. Wiring failure. NTC failure. NTC reading circuit error (main board error).
		E72	NTC Heater alarm	<ul style="list-style-type: none"> The cycle is suspended. If it is detected before the cycle starts, the cycle start will not be permitted. 	<ul style="list-style-type: none"> NTC1 reading out of range. Wiring failure. NTC failure. NTC reading circuit error (main board error).

FAMILY		ALARM CODE	Full name	Action	Notes and possible causes
0x80	IU	E83	Incorrect selector dial position	<ul style="list-style-type: none"> No action. 	<ul style="list-style-type: none"> The code for the selector position is not recognised. Selector faulty (main board error).
		E86	Incorrect selector configuration	<ul style="list-style-type: none"> No action. 	<ul style="list-style-type: none"> Incorrect selector configuration, selector failure (main board faulty).
		E87	Self-diagnosis of main circuit board faulty	<ul style="list-style-type: none"> No action. 	<ul style="list-style-type: none"> Main board faulty.
Ex90	CFG	E91	User interface board communication alarm	<ul style="list-style-type: none"> No action possible. 	<ul style="list-style-type: none"> Faulty wiring. User interface board faulty. Main board faulty.
		E92	Inconsistent user interface board protocol	<ul style="list-style-type: none"> No action possible. 	<ul style="list-style-type: none"> The User Interface board is not compatible with the main board.
		E93	MCF checksum alarm	<ul style="list-style-type: none"> The machine could not work until a right configuration file is programmed. 	<ul style="list-style-type: none"> Wrong Machine Configuration File.
		E94	CCF checksum alarm	<ul style="list-style-type: none"> The machine could not work until a right configuration file is programmed. 	<ul style="list-style-type: none"> Wrong Cycle Configuration File.
		E97	Missing programme on CTF alarm	<ul style="list-style-type: none"> Only detected when configuration is performed. Does not allow the cycle to start. 	<ul style="list-style-type: none"> Wrong selector configuration (MCF) or missing cycle on cycle table (CCF).
		E98	Inconsistent inverter board protocol	<ul style="list-style-type: none"> Only detected when configuration is performed. Does not allow the cycle to start. 	<ul style="list-style-type: none"> The User Interface board is not compatible with the main board. Faulty inverter board or incorrect configuration.
		E9C	User interface checksum alarm	<ul style="list-style-type: none"> No action possible. 	
		E9E	One or more touch keys on the user interface does not work	<ul style="list-style-type: none"> No action possible. 	<ul style="list-style-type: none"> Faulty wiring. Board faulty.

FAMILY		ALARM CODE	Full name	Action	Notes and possible causes
ExB0 (ExH0)	POWER SUPPLY	EH1	Power supply frequency out of range	<ul style="list-style-type: none"> If detected in setup, it would not be possible cycle starting. If happens during cycle execution, it suspend working. It is automatically cleared when power supply return within right limits, it would be possible to start. If a cycle was temporary suspended due to this alarm it automatically restarts. 	<ul style="list-style-type: none"> Power Supply Problems. Wrong MCF. Main board error.
		EH2	Power supply voltage out of range (too HIGH)		<ul style="list-style-type: none"> Power Supply Problems - Too HIGH VOLTAGE. Wrong MCF. Main board error.
		EH3	Power supply voltage out of range (too LOW)		<ul style="list-style-type: none"> Power Supply Problems - TOO LOW VOLTAGE. Wrong MCF. Main board error.
		EH4	Zero Watt relay alarm	<ul style="list-style-type: none"> The tumble dryer is working properly but the zero Watt circuit is never activated. 	<ul style="list-style-type: none"> Main board faulty.
		EHD	Current leakage alarm	<ul style="list-style-type: none"> The cycle is suspended. 	<ul style="list-style-type: none"> Current leakage of any actuator. Faulty wiring. Main board faulty.
		EHE	Safety line alarm	<ul style="list-style-type: none"> The cycle is suspended. 	<ul style="list-style-type: none"> Main board faulty.
		EHF	Safety line sensing alarm	<ul style="list-style-type: none"> The cycle is suspended. 	<ul style="list-style-type: none"> Main board faulty.
ALARMS		EF6	Microprocessor safety reset	<ul style="list-style-type: none"> No action possible. 	<ul style="list-style-type: none"> Main board faulty.

7 Revisions

Revision	Date	Description	Author	Approved by - on
00	01/2013	Document creation	A.D.L.	A.D.L. – 01/2013