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**Condensation tumble
dryer
with heat pump
and steam generator**

Disassembly instructions

Edition: 01/2017 - Rev. 01

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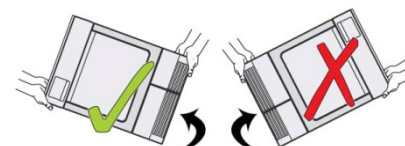
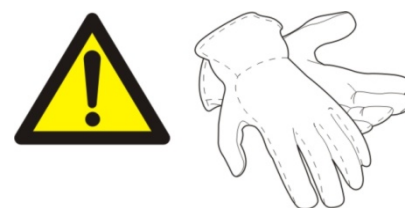
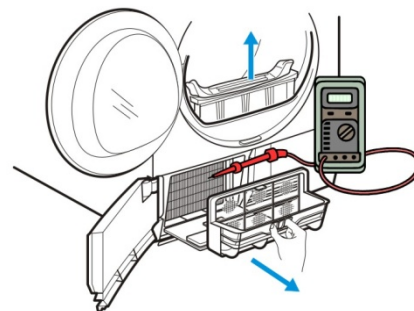
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1 Safety and Installation

1.1 Safety measures

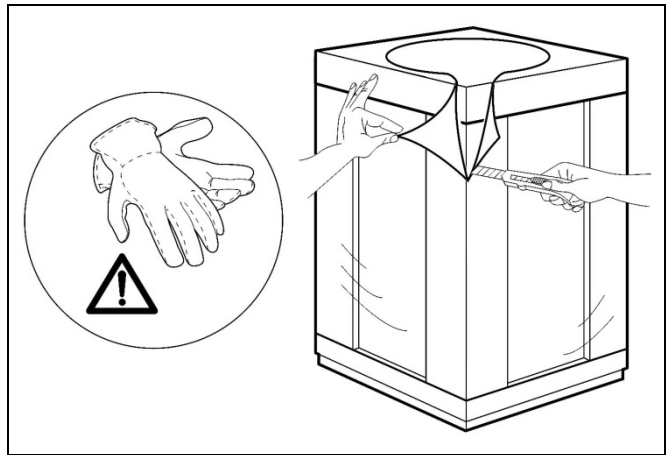


- Before starting work on an appliance, check that the earth in the lodgings is working properly by using an appropriate tool and follow the instructions described/illustrated on the Electrolux Learning Gateway portal <http://electrolux.edvantage.net>
- This platform is not fitted with an ON/OFF switch. 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 Lokring 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.



1.2 Installation

Remove the external film. If necessary use a cutter blade

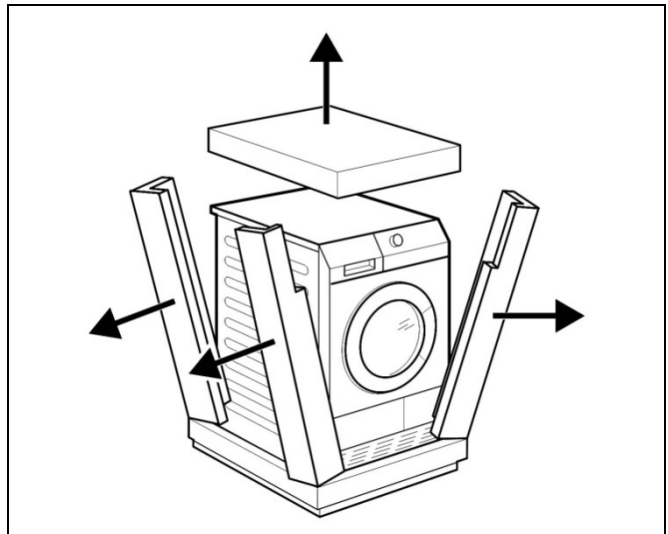


Take off the cardboard cover and remove the corner elements.

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.

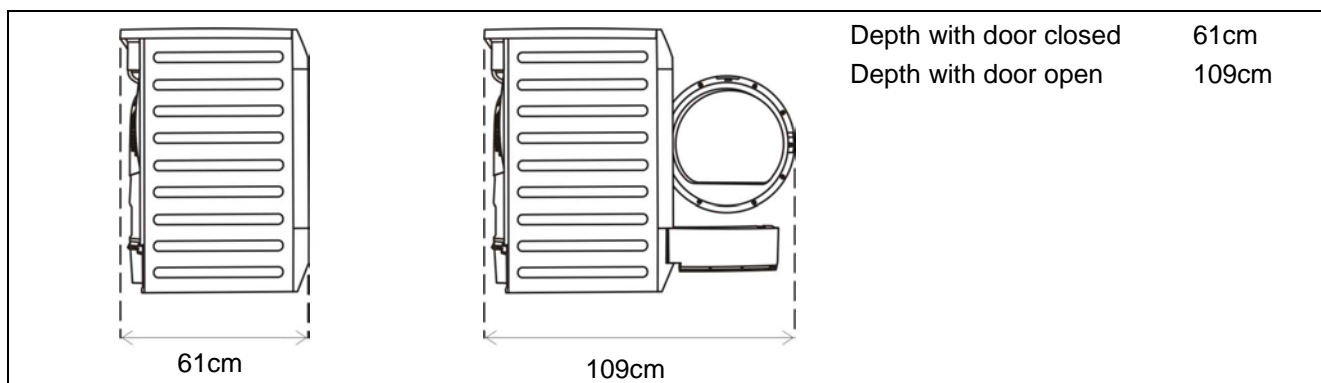
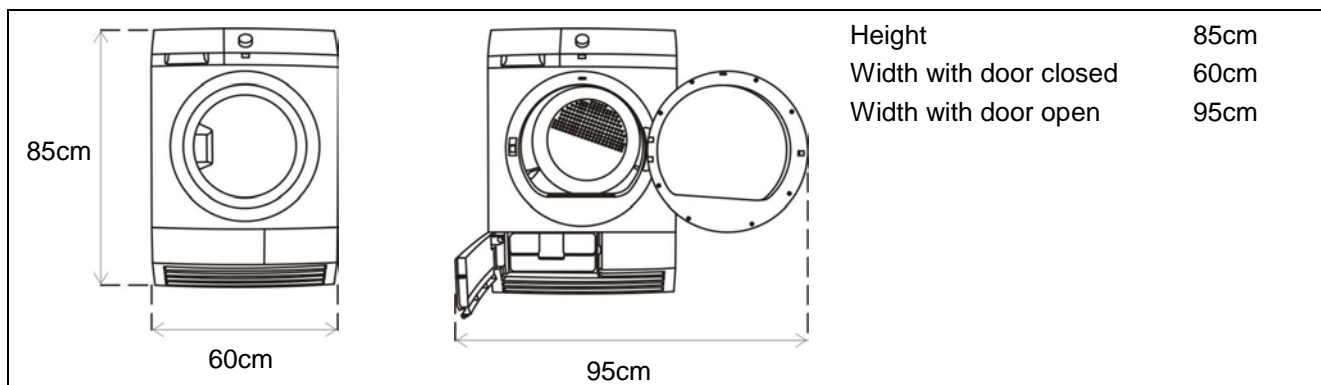


The feet must never be removed. A gap must always be left between the bottom of the tumble dryer and the floor to prevent the appliance from overheating.



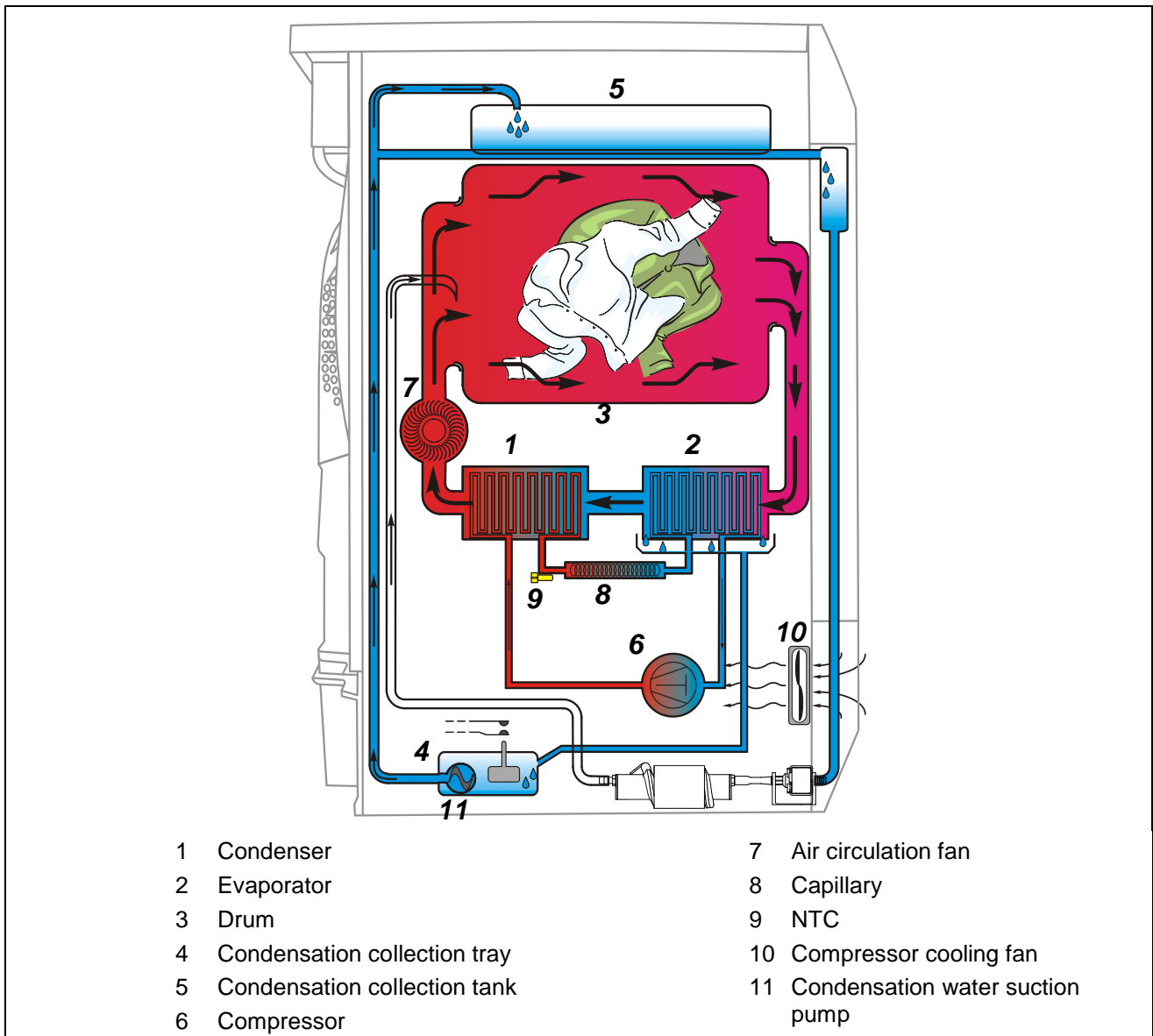
2 Technical characteristics

Power supply voltage.	230V
Power supply frequency	50Hz
Energy class	A++
Maximum power absorption	1650W
Noise	65db
Drum volume	118 litres
Foot adjustment	+1.5cm
Weight	approx. 58 kg
Operating temperature	+5°C/+35°C
Triple-phase motor with permanent magnets	230V 50Hz
Motor rotating speed	2700 rpm
Rotating compressor	480W 220V
Coolant gas	R407c
Amount of coolant gas	610g.
Maximum drum speed	54 rpm



3 Operating characteristics and construction.

3.1 Principle of the heat pump



The cycle of the tumble dryer heat pump consists in evaporating, compressing, condensing and expanding the refrigerant R 407c.

By pressing the START/PAUSE button the drying cycle begins, the gas in the circuit is conveyed by the compressor (6) to the condenser (1), where at the outlet the circulation pipe known as capillary (8) narrows. This capillary slows down the release of gas and ensures that the pressure inside the condenser (1) increases bringing the gas to a liquid status and a pressure level of around 27 bar.

This rise in pressure subsequently increases the temperature of the gas that is now liquid inside the condenser (1) reaching around 53°C.

The air circulated by the fan (7) passes through this condenser (1) overheating before entering the drum (3) where the washing is located.

The evaporator (2) is located at the capillary outlet (8) with the gas circulation pipe being larger than the capillary which thus expands the hot, liquid gas coming from the condenser (1).

This gas expansion means that the gas in its liquid state once again becomes a gaseous state causing the gas itself to cool and subsequently cooling the entire evaporator, bringing it to a temperature of around 20°C.

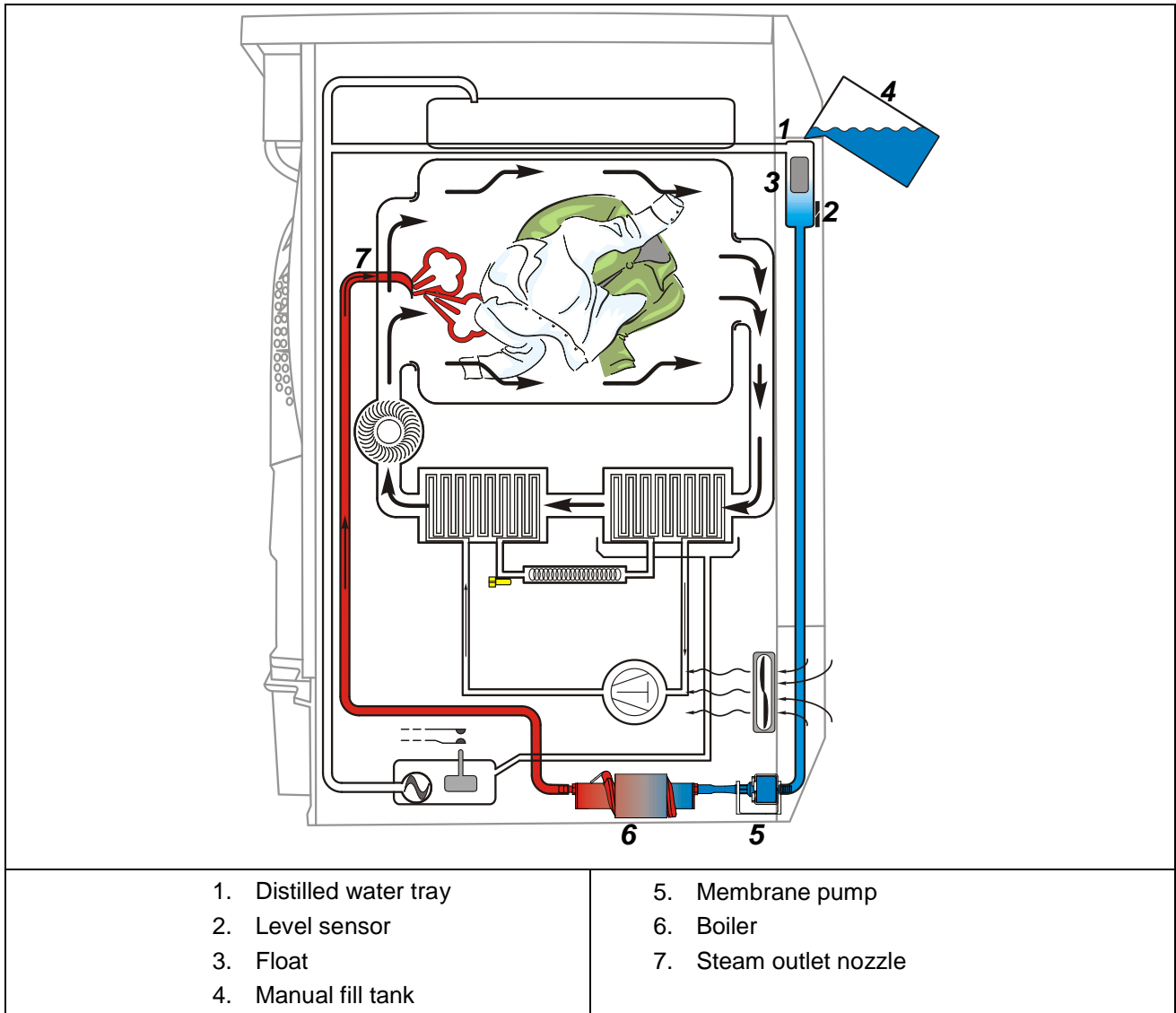
The, by now hot air is circulated by the fan (7) and passes through the washing in the drum (3) absorbing humidity and reaches the evaporator (2) humid and hot. The latter which is now at a lower temperature thanks to the expansion of the gas ensures that all the humidity in the circulating air condenses.

The condensed water created is collected in a tray (4) and conveyed via a pump to the tank (5) located above the drum.

At this point, the air is now cold and dry and goes through the condenser (1) again, once again overheating before entering the drum (3) and the gas now cooled in the evaporator (2) returns to the compressor where it will once again be compressed and sent into the condenser (1) re-starting the cycle.

The entire gas evaporating and compressing system is kept in balance by a NTC (9) located at the entrance to the capillary (8). This collaboration with the main circuit board ensures that if the outgoing temperature from the condenser surpasses a certain level a fan (10) located in front of the compressor starts working and lowers the temperature.

3.2 Steam generator principle



These appliances are fitted with a steam generator comprising a pulse-powered miniature boiler (6) and a pump (5) which is necessary to fill the boiler.

If you wish to use the IRON AID programmes, you first need to fill the tank (1) with distilled water through the filling inlet up to the MAX level of approximately 0.9 litres, or if a drying cycle has already been carried out, it is filled automatically through the condensation water filling pump. This allows the float (3) to move away from the magnetic sensor (2) and therefore cancel the alarm shown on the display.

As soon the drying cycle has ended, the membrane pump (5), which also acts as a non-return steam valve, begins to draw water through the pipe and pump it into the boiler (6). The water that has heated turns into steam and travels up the pipe, and it is then introduced into the drum through the nozzle (7).

The quantity of steam that can be selected using this button varies the amount of time for which the pump and boiler remain in operation.

3.3 Low consumption mode

In order to reduce electricity wastage when the cycle is not running, appliances in this platform offer two ways of enabling low consumption mode:

1. Stand-Off

When the appliance is switched off at the ON/OFF button, it is in the "Stand-Off" or "virtual" off status. The LEDs and the LCD screen are turned off and the buttons are disabled, although the main circuit board and certain electrical components are electrically powered.

You have to unplug the appliance fully to cut off the power supply.

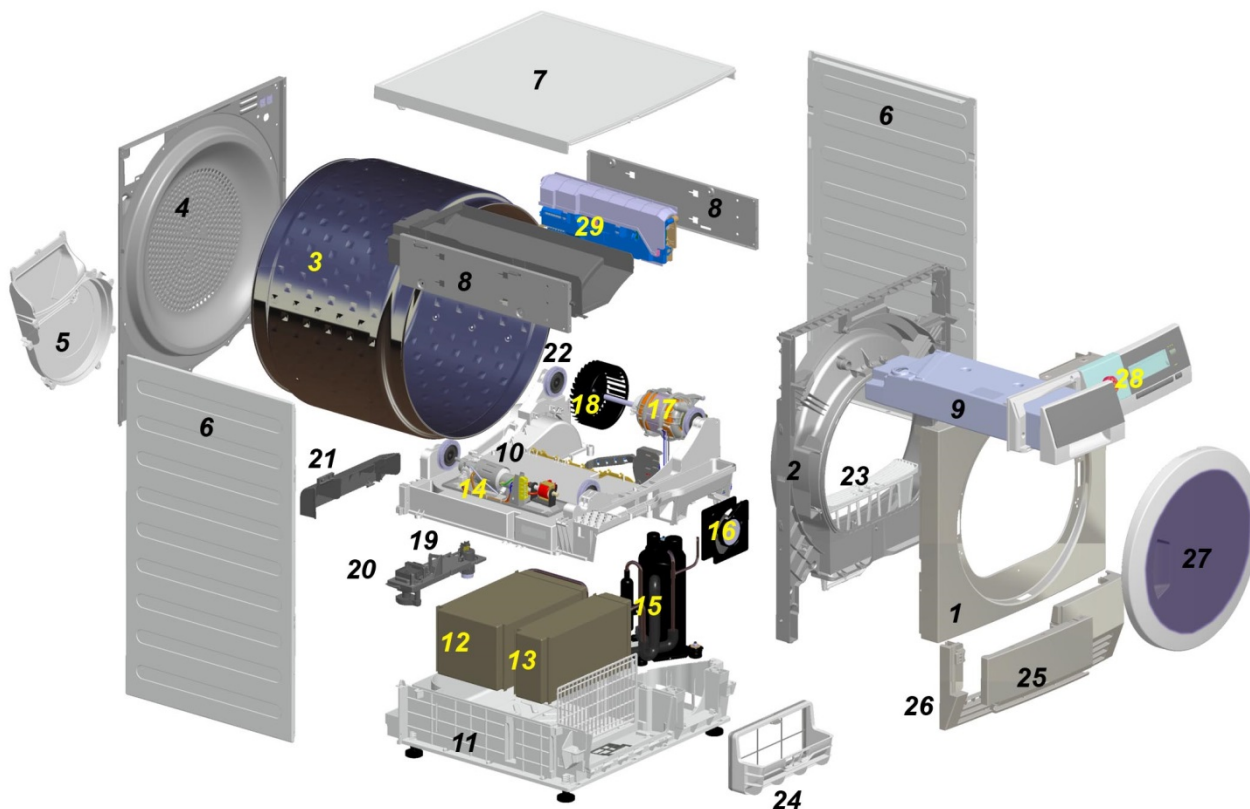
2. Automatic turn off

Automatic turn off together with the Zero Watt circuit works as follows:

- By pressing the ON/OFF button to turn off the appliance, the supply voltage is cut off 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.
- After 5 minutes, at the setting stage, no further instructions are given to the appliance and the programme and selected options are cancelled and the basic programme re-appears when turned on again.
- 5 minutes after the cycle ends, no command is sent to the appliance and all the settings are stored so that when the appliance is turned on again, the user can see if the cycle ended normally and if it should be started again.
- If an alarm goes off when a wash programme is running, the automatic off is disabled and an alarm is displayed.

These operations are carried out in order to save energy in compliance with the < 50mW energy consumption standards.

3.4 Construction characteristics



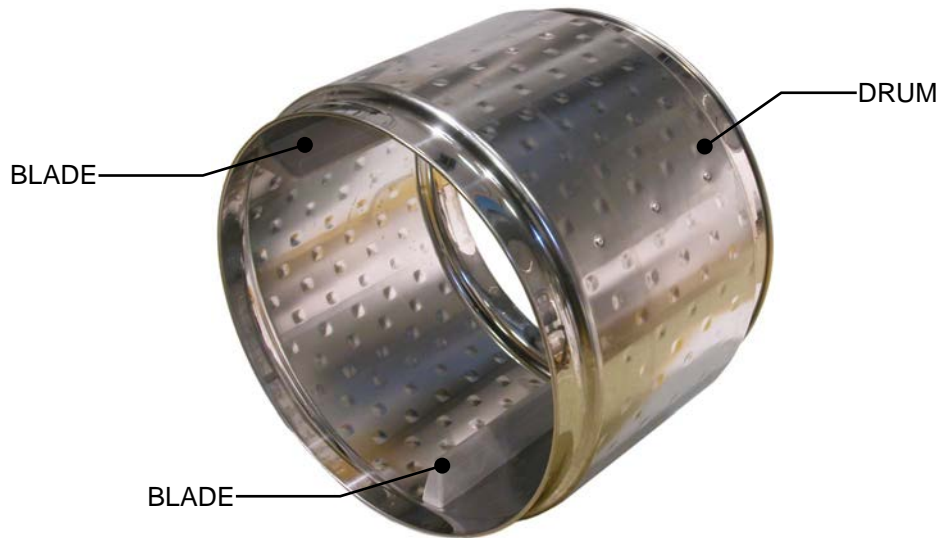
- | | | |
|----------------------------|----------------------------|--------------------------------------|
| 1. Front panel | 11. Base (lower part) | 21. Pump compartment lid |
| 2. Front air conduit | 12. Condenser | 22. Drum rollers |
| 3. Drum | 13. Evaporator | 23. Fluff filter |
| 4. Back panel | 14. Steam generator boiler | 24. Fluff filter base |
| 5. Rear air conduit | 15. Rotating compressor | 25. Fluff filter access door |
| 6. Sides | 16. Compressor fan | 26. Base board |
| 7. Worktop | 17. Motor | 27. Gate/door |
| 8. Crossbars | 18. Air circulation fan | 28. Control panel with control board |
| 9. Condensation water tank | 19. Level sensor | 29. Main board |
| 10. Base (upper part) | 20. Pump | |

The front panel and sides are made of painted sheet metal, whereas the back panel is in zinc-coated sheet metal. These parts are fastened using self-tapping screws and are connected to the base.

The shaped base, in carboran, supports all the main elements.

3.4.1 Drum

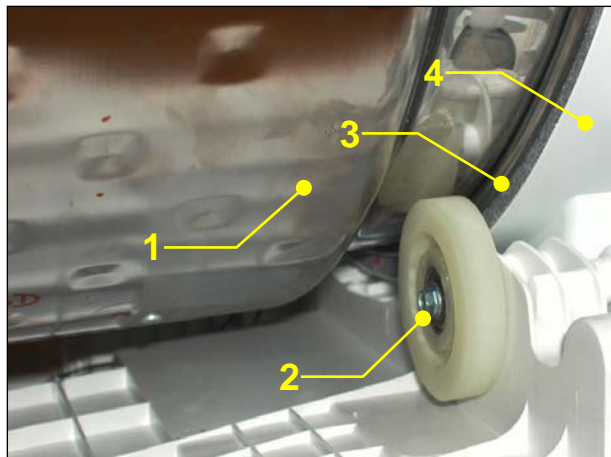
The drum is made up of steel or zinc casing where inside there are three blades positioned at 120° one from the other which move the washing around during drum rotation.



3.4.2 Air seal and drum rollers

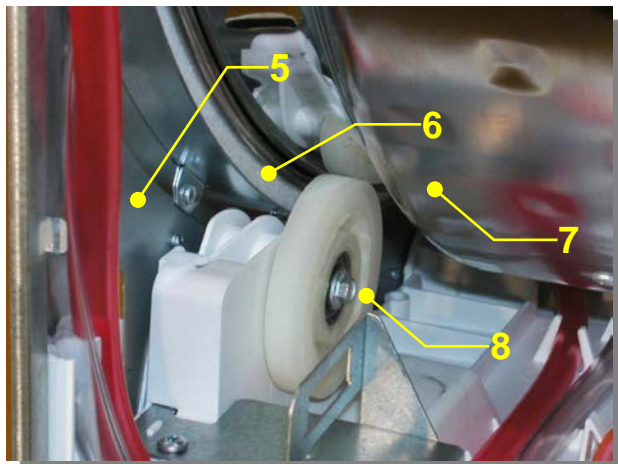
Front air seal

1. Drum
2. Drum rotation roller
3. Front air seal
4. Front air conduit

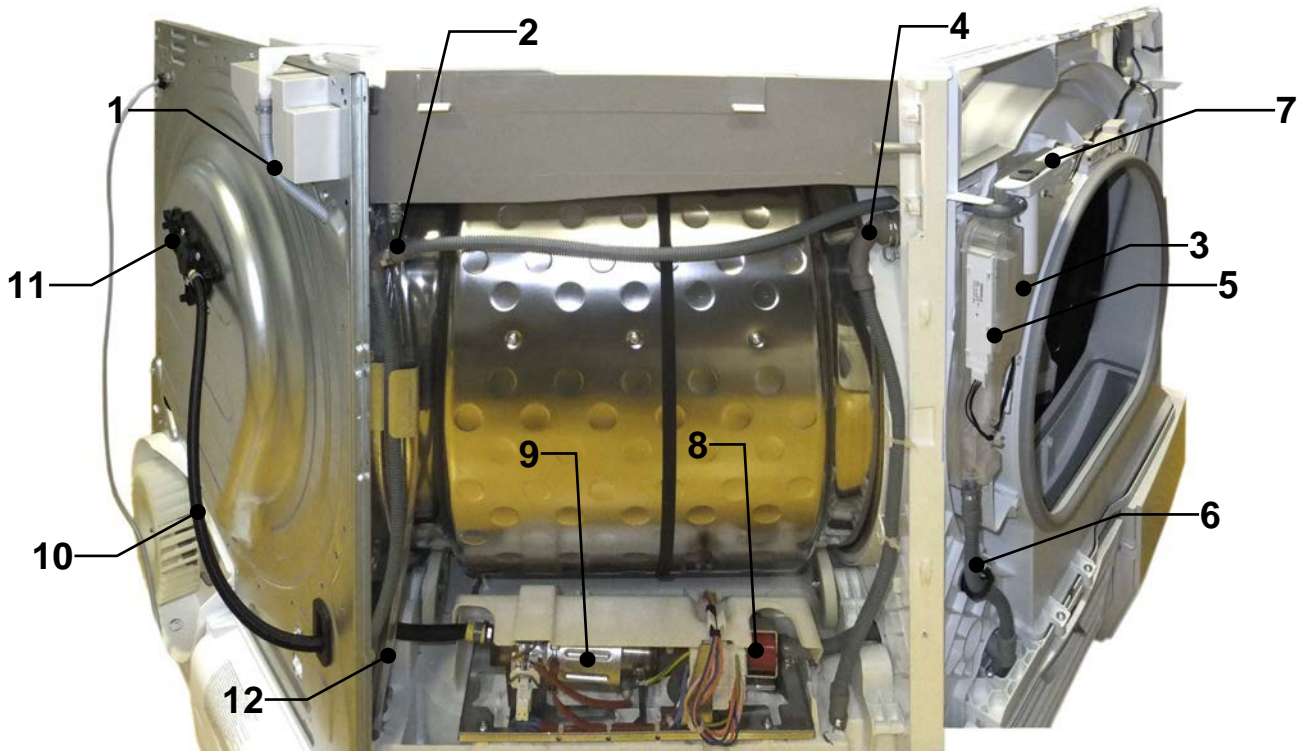


Rear air seal

5. Back panel
6. Rear air seal
7. Drum
8. Drum rotation roller



3.4.3 Water circuit



- | | | | |
|---|--|----|--|
| 1 | Condensation water filling pump from the pump to the main tank. | 6 | Steam generator system water filling pipe. |
| 2 | Fork in the pipe originating from the pump towards the main tank and the steam generator tank. | 7 | Manual water filling assembly and filter. |
| 3 | Steam generator tank (transparent). | 8 | Steam generator pump. |
| 4 | Overflow pipe. | 9 | Steam generator boiler. |
| 5 | Level sensor and LED lights. | 10 | Steam pipe. |
| | | 11 | Steam outlet nozzle in the drum. |
| | | 12 | Main tank overflow pipe. |

The condensation water that forms inside the exchanger is collected in a trap.

There is a float inside this trap that informs the circuit board that there is water. This powers a pump which conveys the water along a pipe (1) from the trap to the main tank; at one point the water from the pump comes to a fork and so one part is shunted along the pipe (2) to the collection tank necessary for the steam generator (3).

Before entering this tank, the water is filtered by the filter present in the manual water filling assembly (7).

The excess water obtained when the drying cycle has not ended yet and the steam generator tank is full is channelled along the overflow pipe (4) towards the trap and from there, the pump recycles it.

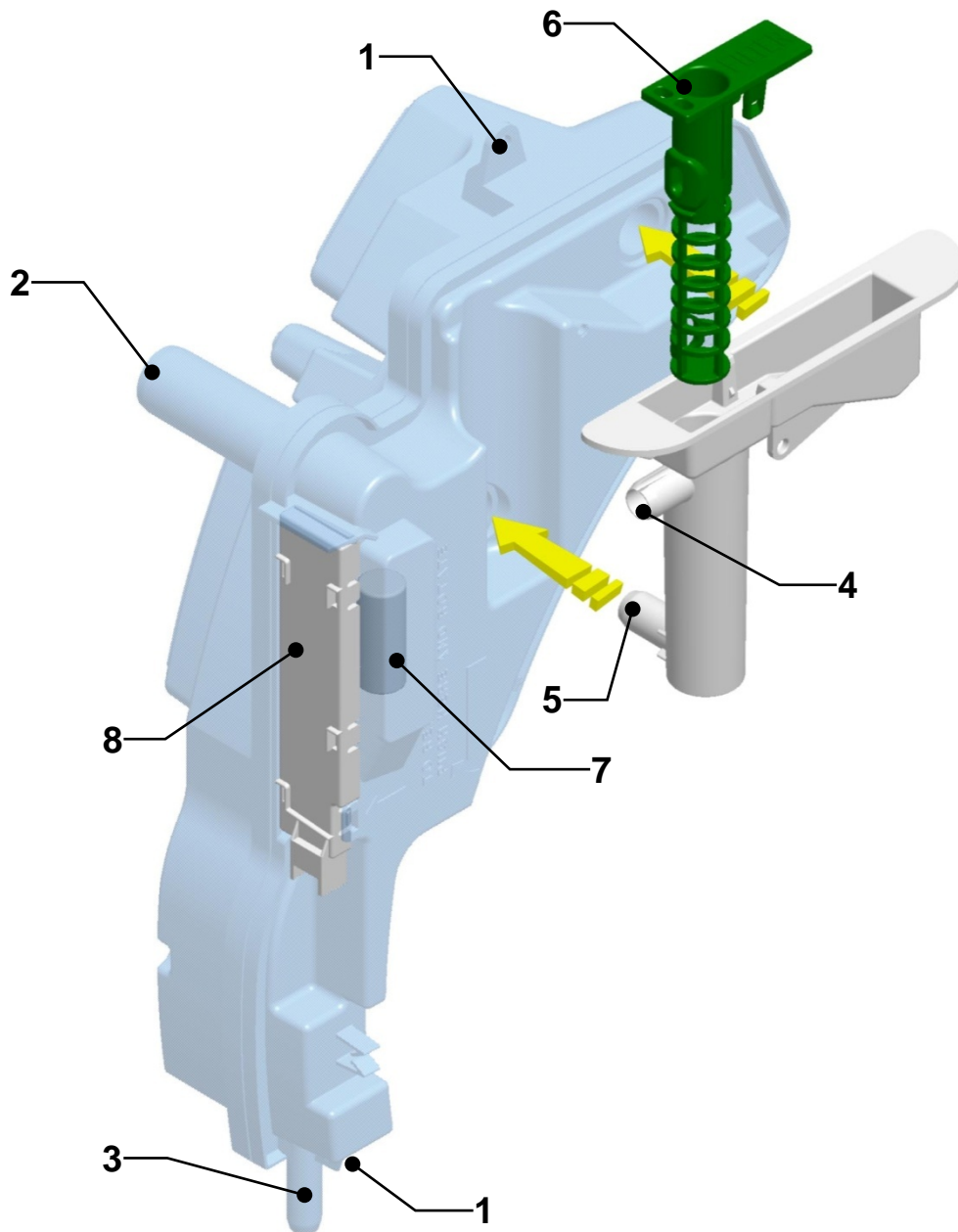
The main tank was designed to collect the condensation water of a complete cycle with a full load, so approximately 5.5 litres.

If for some reason the tank fills up beyond its capacity, the overflowing water is collected by the tank support and is re-conveyed inside the trap along the transparent pipe (12), pushing the float upwards and thus activating the microswitch.

The electronics make 7 attempts to empty the trap within a set time, after which if the float has not dropped the electronic control recognises the problem and disconnects the power supply to the appliance and lights up a LED informing the user that the tank is full.

If you are using a cycle that uses steam, the water inside the transparent tank (3) reaches the pump (8) along the pipe (6); this pump, which also acts as a pulse powered non-return valve, conveys the water to the boiler (9) where it turns into steam and travels along the pipe (10) and the nozzle (11) to the inside of the drum.

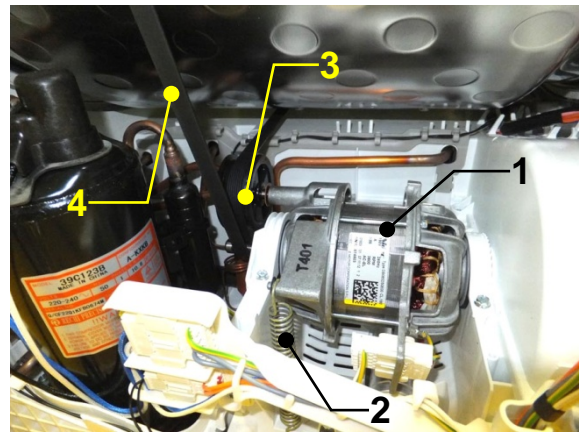
3.4.4 Steam generator tank



- | | |
|---|--|
| 1. Tank fixing points | 5. Water filling assembly and tank connector |
| 2. Overflow outlet | 6. Lint filter |
| 3. Water outlet towards the boiler | 7. Float with magnet |
| 4. Water inlet connector from the condensation trap | 8. LED light and level sensor board |

3.4.5 Drum rotation principle

- 1 Motor
- 2 Belt tensioner spring
- 3 Belt tensioner
- 4 Belt



The drum is turned by a belt (4) which is driven by a motor pulley (1) fixed to the base.

There is a belt tensioner (3) on the motor casing, which increases the angle at which the belt winds onto the drum and works in a pair with the belt tensioner spring (2).

Two-way rotation of the drum is determined by the circuit board, which reverses the direction of power supplied to the motor briefly. The drum rotating in the opposite direction allows the laundry to untangle.

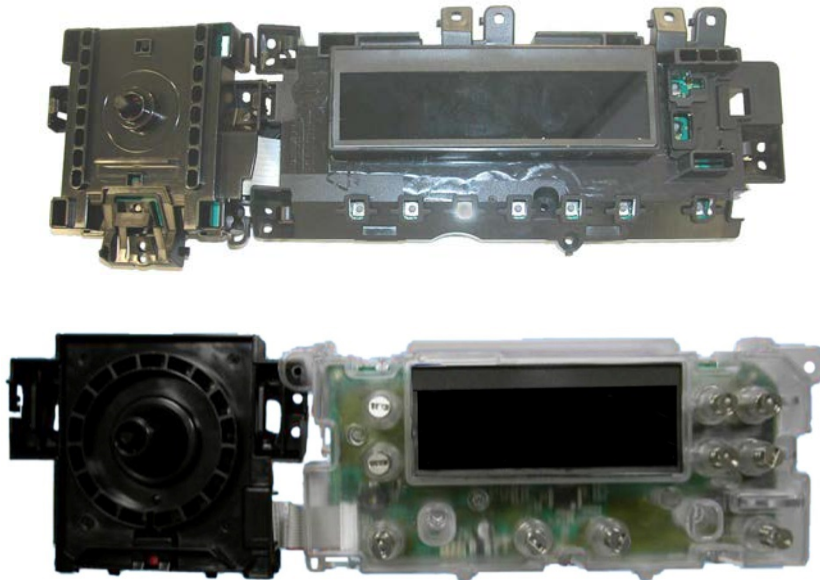
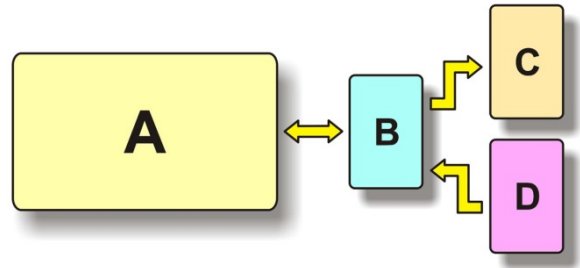
4 Electric components

4.1 Control board

The control board or control panel is designed to allow the setting of the various programmes via the selector and to select the various options by pressing specific keys.

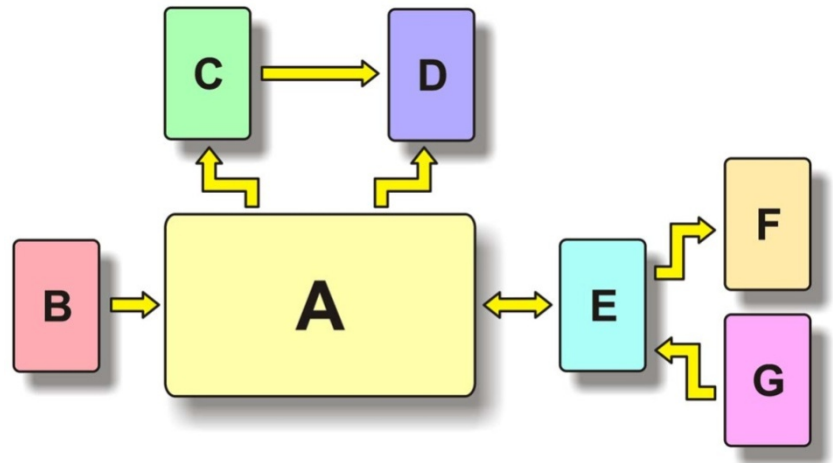
Depending on the appliance model, the control board can be fitted with an LCD to display the various options selected, along with the drying phases, any alarms, the time left until the end of the cycle and other information.

- A** Main circuit board
- B** Control board
- C** LCD
- D** Selector



4.2 Main circuit board EDR12

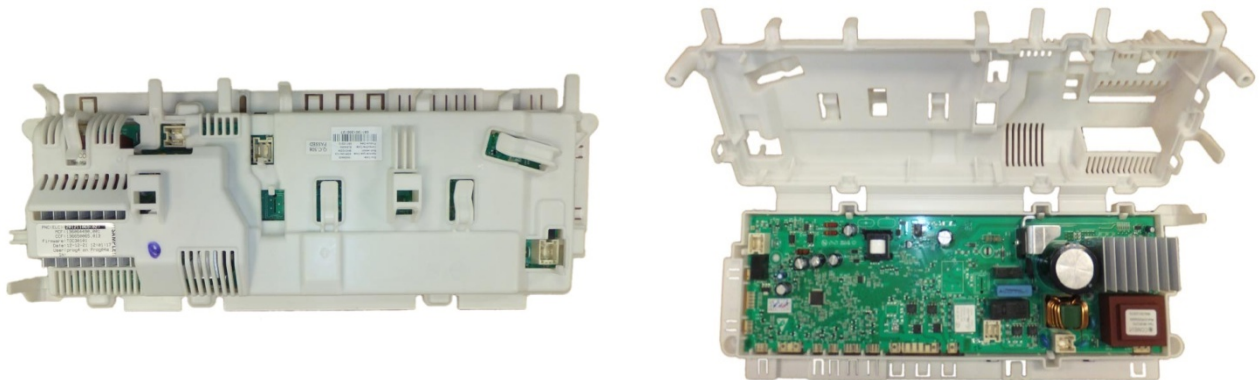
- A Main circuit board
- B Sensors
- C Drum rotation motor control
- D Actuators
- E Control board
- F LCD
- G Selector



The electronic control unit is made up of a circuit board inserted in a plastic box, secured onto the top right crossbar.

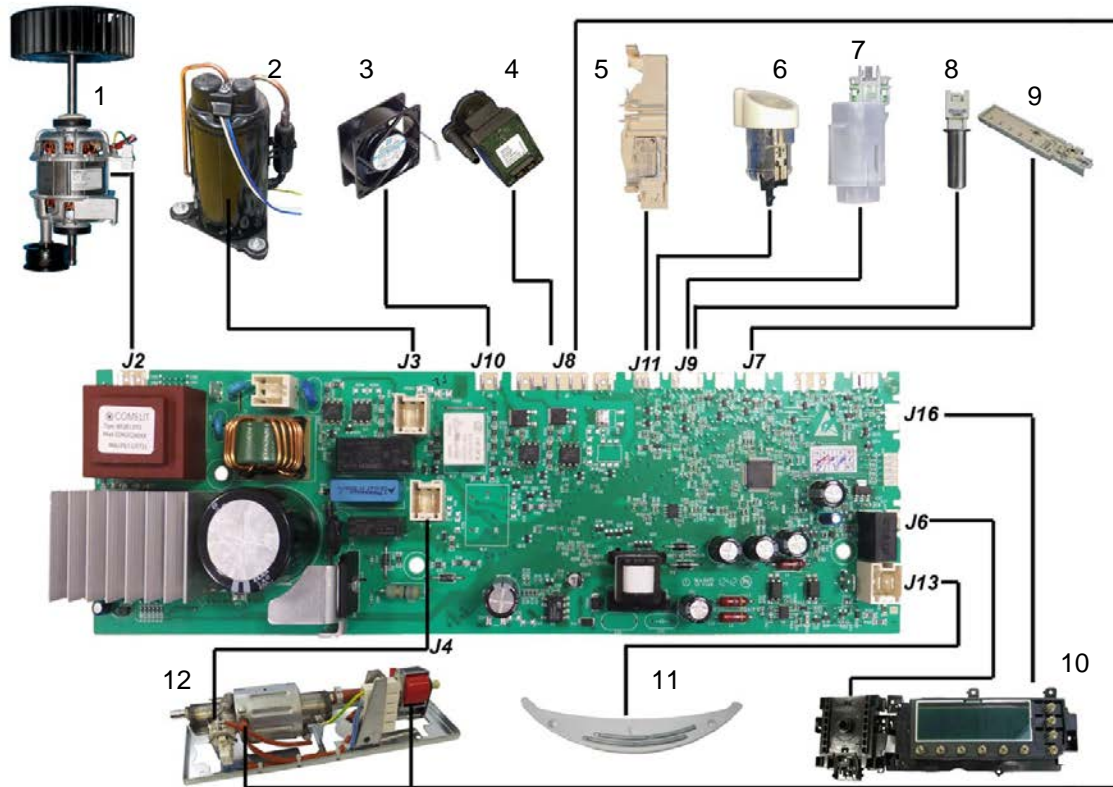
This board receives information from the various sensors located on the tumble dryer and from the control board and elaborates the data and in turn controls all the actuators.

Unlike the previous EDR board, this one features a built-in variable rpm asynchronous three-phase motor control and therefore there is no need to have a separate motor control board.



4.2.1 Main circuit board functions

- Acquires the commands for the drying cycle set-up.
- Powers up all the main components: Drum rotation motor, compressor, drum lamp pump compressor cooling fan Steam generator unit (pump and heating unit).
- Controls the temperature of the air inside the tumble dryer (by means of an NTC probe), the humidity level in the laundry (by means of the conductivity sensor), the level of the tank and the door safety lock.



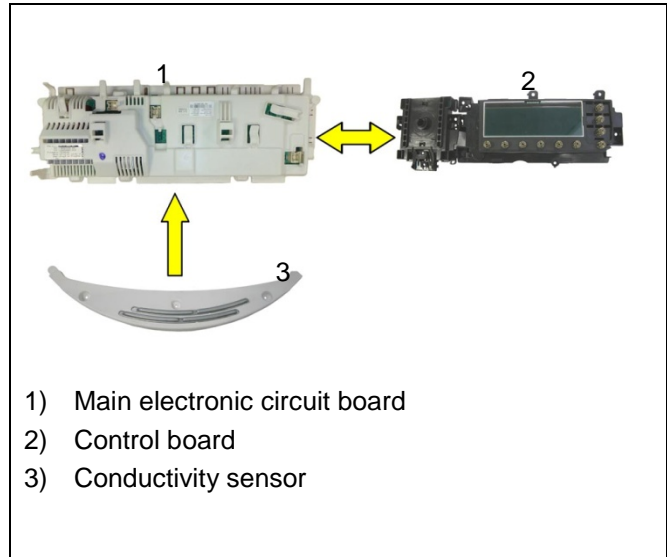
- | | |
|----------------------------|--|
| 1. Drum rotation motor | 8. Temperature probe |
| 2. Compressor | 9. Steam generator tank LED light and level sensor |
| 3. Compressor cooling fan | 10. Control board |
| 4. Condensation water pump | 11. Humidity sensor |
| 5. Door safety microswitch | 12. Steam generator |
| 6. Drum light | |
| 7. Level sensor | |

4.3 Conductivity sensor

These electronics use a conductivity sensor, comprising an electronic circuit (located inside the main circuit board) and a part outside the board comprising two sensors positioned on the front air conduit.

When the drum is empty, there is an infinite impedance between the two sensors, while its value is affected by the laundry load, by the type of fabric and by the degree of humidity in the laundry placed inside the drum.

The main circuit board continually receives information regarding the status of the washing in the drum via the conductivity sensor as well as the settings made by the operator at the start of the cycle via the control board and elaborates these values in order to establish the time needed at the end of the cycle.



4.4 Tank filling pump

The pump is activated by a synchronous motor and it is used to pump condensation water from the tray to the tank.

The pump is powered by a triac on the main board.

Insulation class	155
Motor type	Asynchronous
Volt (V AC)	220-240
Frequency (Hz)	50Hz
Power (W)	5W
Resistor at 20°C	764Ω ± 10%



4.5 Level sensor

The condensation water level sensor is located at the back of the tumble dryer and next to the tank loading pump.

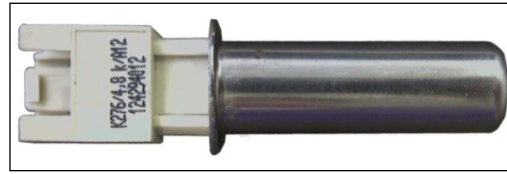
It consists of a float with a magnet at the top and a reed switch positioned on the float guide/support.

When the water forming on the heat exchanger (condenser) falls into the collection tray this causes the float to rise up subsequently bringing the magnet closer to the reed switch which sends a signal to the main circuit board activating the tank loading pump.

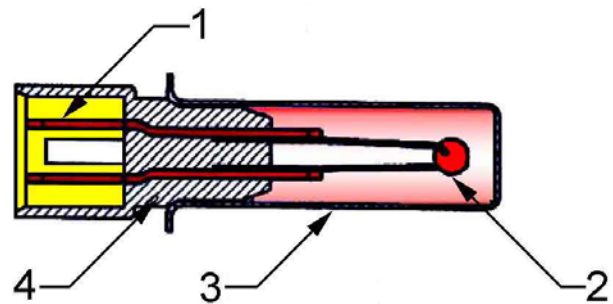


4.6 NTC probe

This sensor is fixed to the hot air fan screw. It comprises a heating element, inserted in a metal capsule, with a value that decreases as the temperature rises. The electronic circuit reads the value of the heating element (which depends on the temperature inside the tumble dryer) and when it drops below a certain value, cuts the power supply to the heater unit. As the air cools, the value of the heating element increases, and when it reaches a certain value the electronic circuit restores the power supply to the heater unit. This occurs every time the temperature inside the appliance exceeds a given value, which varies according to the drying cycle that has been selected.



- 1 Terminals
- 2 NTC heating element
- 3 Metal capsule
- 4 Plastic casing

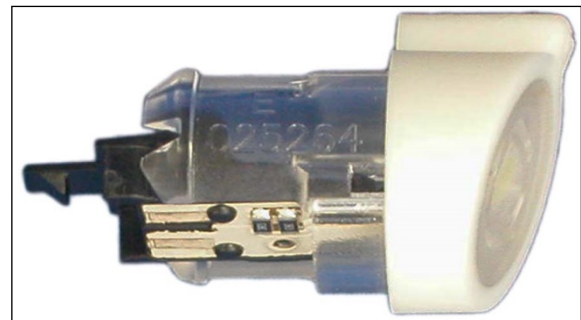


Temperature (°C)	Heating element Ω		
	Rated value	Maximum Value	Minimum value
20	6050 - 5617	6335 - 5686	5765 - 5548
60	1393 - 1250	1419 - 1222	1367 - 1278
80	725 - 640	743 - 620	707 - 660

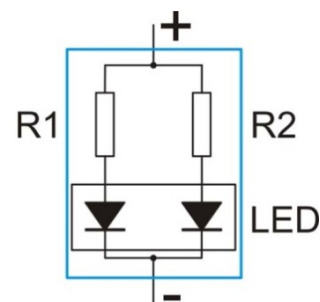
4.7 Drum light

The drum light consists of a high luminosity LED diode inserted in a plastic support and fitted onto the front air conduit.

The lamp is powered directly by the main circuit board when the door is opened with a voltage of 5V.



R1	3.3 Ω
R2	3.3 Ω
Current	150mA
Power	3.3V



4.8 Compressor cooling fan

Axial fan on ball bearings

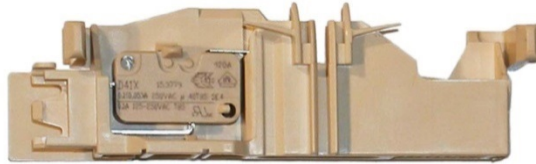
Power supply voltage	132-240V
	50-60Hz
Power consumed	23W
Rotating speed rpm	2600/3000
Air flow at 2600 rpm	2.32m ³
Air flow at 3000 rpm	2.72m ³



4.9 Door micro-switch

The door switch makes it possible for the electric components to be powered after the door has been closed.

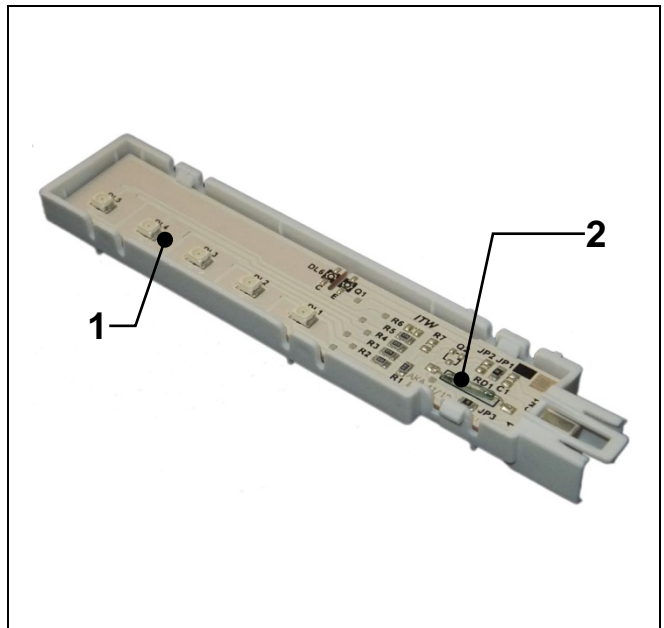
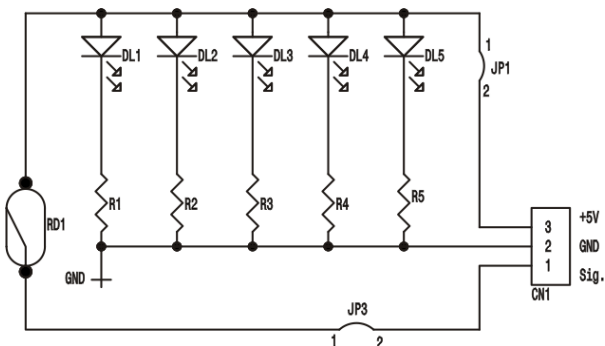
The switch is located above the door and it is closed, when the door itself is closed, by means of a pin located on the door itself.



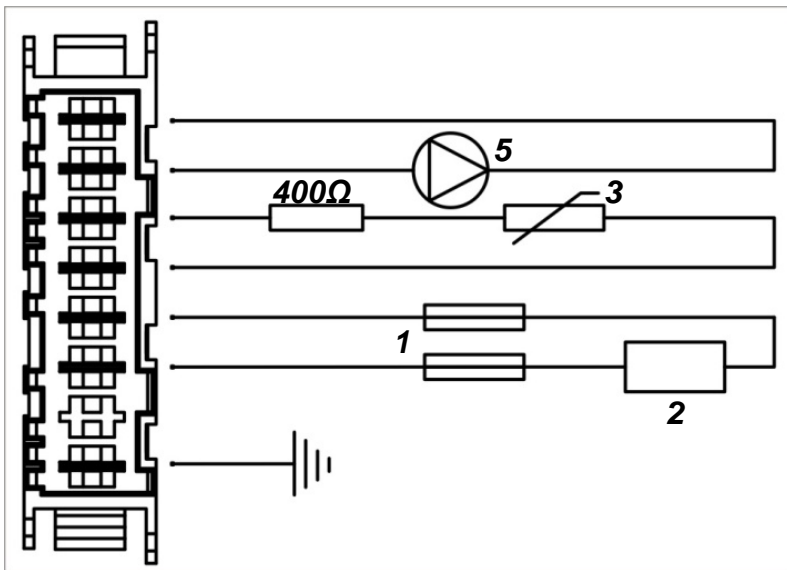
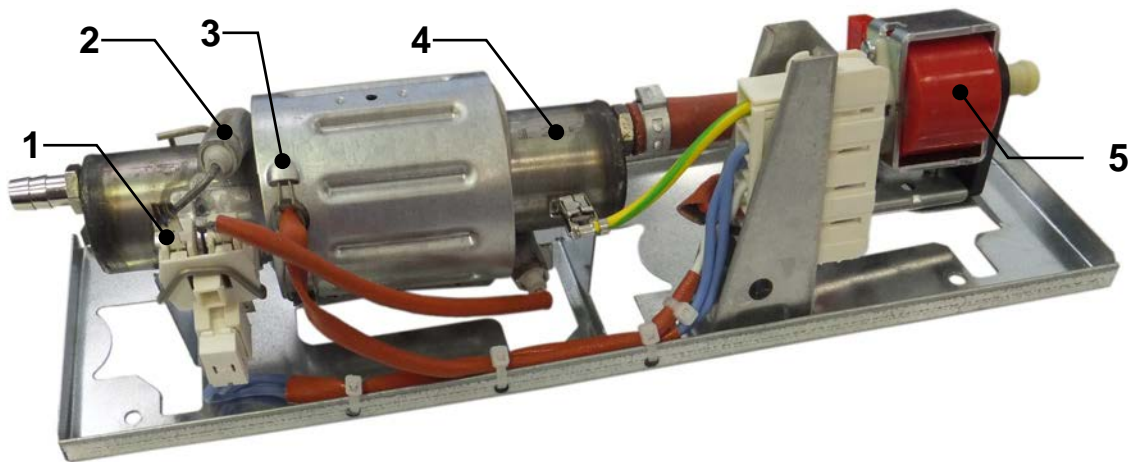
4.10 Steam generator tank LED light and level sensor

The LED lights and level sensor is positioned on the left side of the tank containing the water necessary to generate steam.

It consists of 5 LED diodes (1) which only light up if you select a cycle that uses steam and a magnetic switch (2) that is triggered by a float with a built-in magnet found inside the tank.



4.11 Steam generator unit



1. Thermal fuses
2. Heating element
230V 1500W
3. NTC
4. Boiler
5. Pump

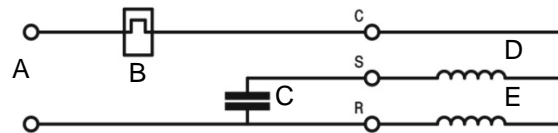
4.12 Compressor

The compressor activates the coolant fluid circuit (R407c).

Power supply voltage	220V 50Hz
Power consumed	480 Watt.
Main coil resistance	$6.84\Omega \pm 7\%$
Auxiliary coil resistance	$5.88\Omega \pm 5\%$
Overall weight	8.5kg
Oil	210cm ³ +-10cm ³ NMOC Ze – Gles RB68EP

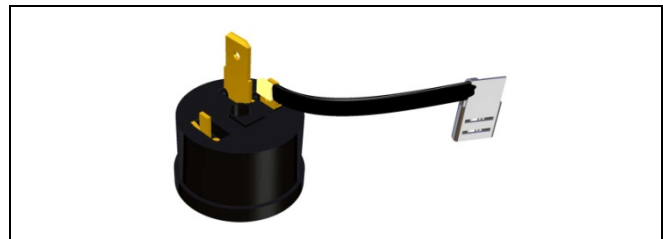


- A Line
- B Heat protection
- C Run capacitor
- D Auxiliary coil
- E Primary coil



4.13 Thermal cut-out

The heat protection is formed by a bimetallic which intervenes when the motor - due to excess effort - increases current absorption and consequently rises in temperature.



4.14 Compressor motor capacitor

The condenser enhances the performance of the compressor motor.

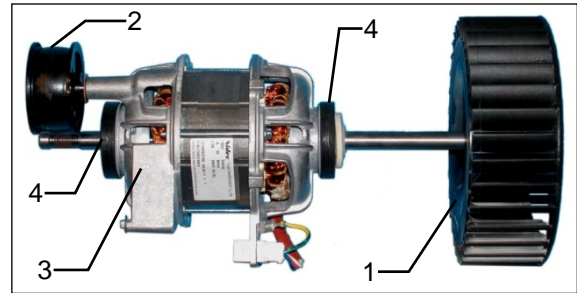
18μF 400V



4.15 Motor

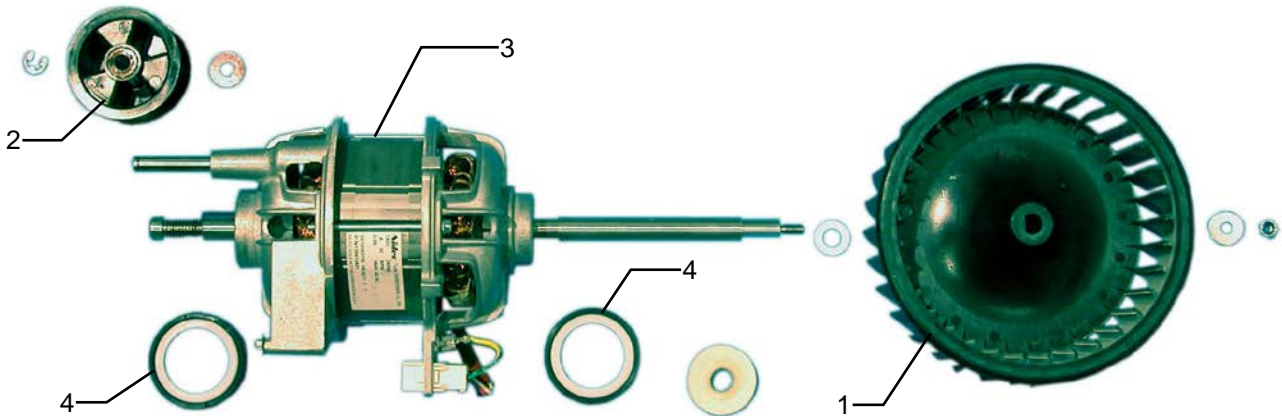
The asynchronous three-phase motor used in this tumble dryer has permanent magnets and is driven directly by the main board.

- 1 Fan
- 2 Belt tensioner
- 3 Motor
- 4 Vibration damping bushes



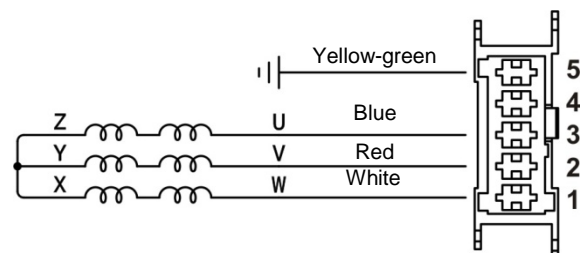
The motor unit consists of a belt tensioner (2) situated on an axis on the motor casing and secured by a spring ring, with one fan (1) for the circulation of hot air, bolted to the motor shaft, of the motor (3) with thermal cut-out and two vibration damping bushes (4) positioned on the two motor casings. The motor power connector is located on a shaft fixed to a casing.

Calmed

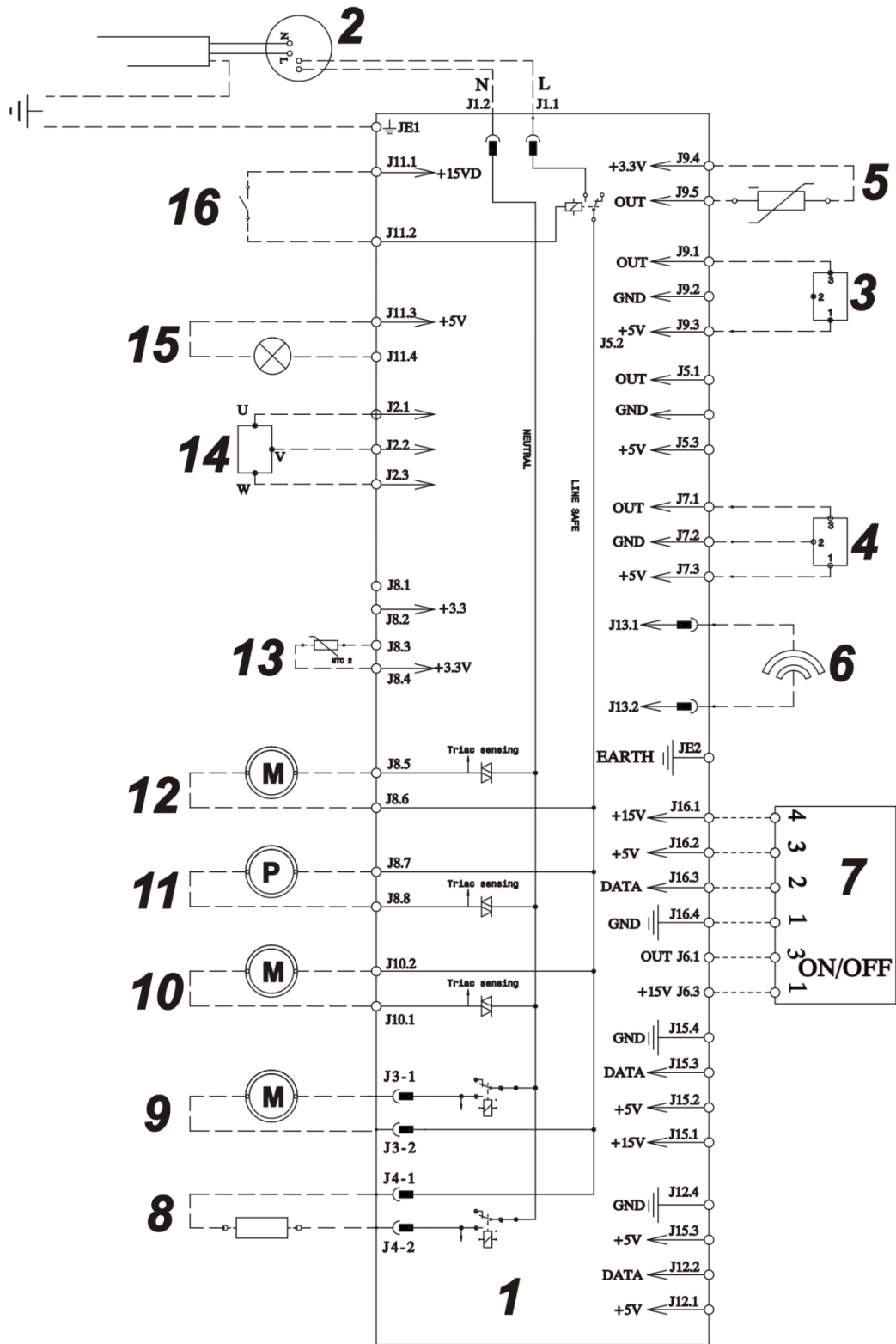


4.15.1 Asynchronous three-phase or Inverter motor technical details

Power supply voltage	230V
Frequency	50 Hz
RPM	2700
Coil resistance 1 - 2	20.4Ω ± 7% at 20°C
Coil resistance 1 - 3	20.4Ω ± 7% at 20°C
Coil resistance 2 - 3	20.4Ω ± 7% at 20°C



5 Wiring diagram



- | | |
|--------------------------------------|-----------------------------|
| 1. Main board | 9. Compressor |
| 2. Anti-disturbance filter | 10. Compressor fan |
| 3. Water collection tray microswitch | 11. Steam generator pump |
| 4. Steam generator tank microswitch | 12. Condensation water pump |
| 5. Temperature probe | 13. Steam generator NTC |
| 6. Humidity sensor | 14. Drum rotation motor |
| 7. User interface card | 15. Drum light |
| 8. Steam generator heating element | 16. Door safety microswitch |

6 Selector dial positions in diagnostics

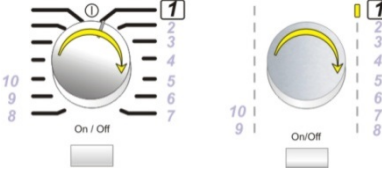


The alarms are enabled during diagnostic testing of components. If an alarm appears, move the selector to the first position to exit the alarm status and, if necessary, continue the test (if the alarm is not triggered again).

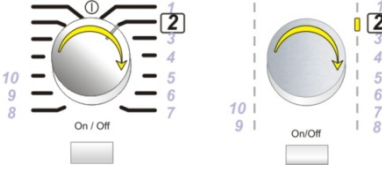
To check the correct functioning of the float switch and pump, the trap should be filled with approximately 0.7 litres of water.

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.

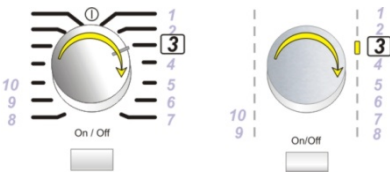
Position 1

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).

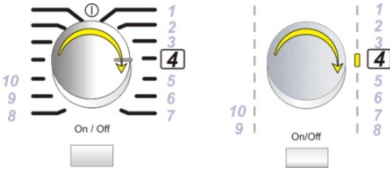
Position 2

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 (timeout 10 secs.).

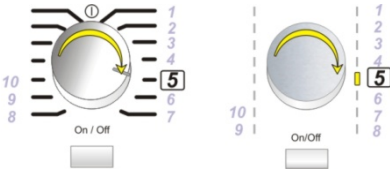
Position 3

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 (timeout 10 mins.).

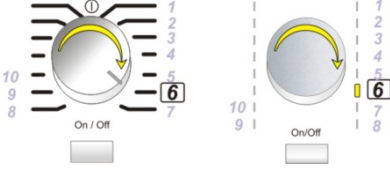
Position 4

Compressor cooling fan and Steam generator	Purpose of the test:	Test operation of the compressor cooling fan.
	Components activated:	Compressor cooling fan TRIAC. Safety relay. Steam generator heating element and pump
	Behaviour:	LCD indicates the temperature read by the NTC found in the steam generator unit.
	Working conditions:	Water inside the steam generator tank otherwise the no water icon flashes. door closed (timeout 10 mins.).

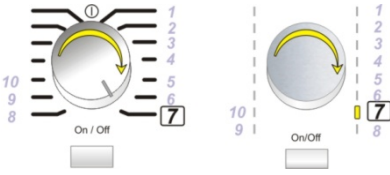
Position 5

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 (timeout 10 secs.).

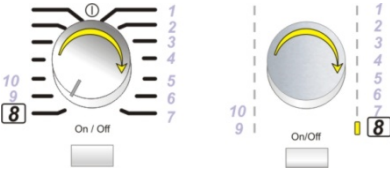

Position 6

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 (timeout 10 secs.).

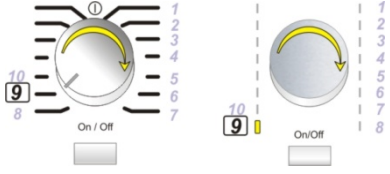
Position 7

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.

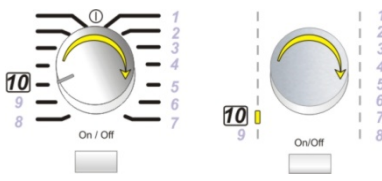
Position 8

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:	Short-circuited conductivity sensor.
		<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

Condensation water tray micro-switch and steam generator water tank micro-switch.	Purpose of the test:	Test the operation of the micro-switch situated in the condensation water tray and the micro-switch found in the steam generator water tank.
	Components activated:	<p>If the condensation water collection tray is full and the micro-switch detects this condition, the pump is started.</p> <p>If the steam generator water tank is full, the pump and the boiler start working.</p>
	Behaviour:	<p>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</p> <p>If the steam generator water tank is full, the icon on the display turns off.</p>
	Working conditions:	door closed (timeout 10 secs.).

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:	<p>Turn the dial to position 10, paying attention not to stop in position 8 in order to avoid error 32.</p> <p>Press the START/PAUSE button to see all the alarms present.</p> <p>To delete the alarms, hold down the START/ PAUSE buttons and press the button on the left.</p>

Position 11 and subsequent positions

Last alarm display and possible reset.		
	Behaviour:	<p>All LEDs flash in sequence.</p> <p>Press a button and the corresponding LED is lit; the code is shown on the LCD display and the buzzer sounds.</p>
	Working conditions:	door closed (timeout 10 secs.).

7 Access to components

7.1 Upper fluff filter cleaning

- Open the door.
- Pull the fluff filter upwards to remove it.
- Open it and remove all fluff.
- Any residual fluff should be removed by washing the filter under running water.

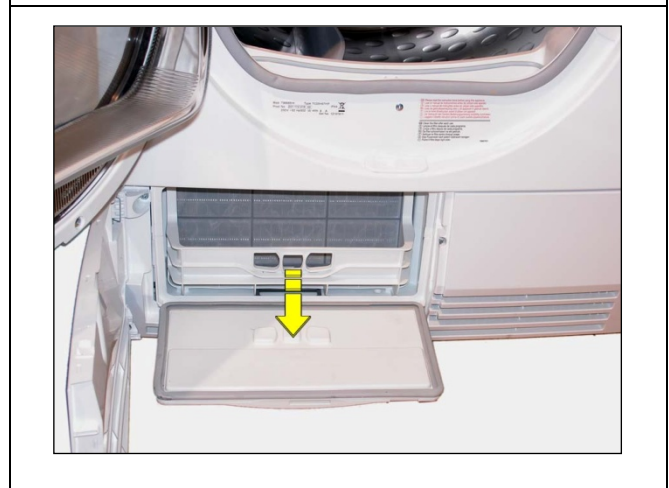
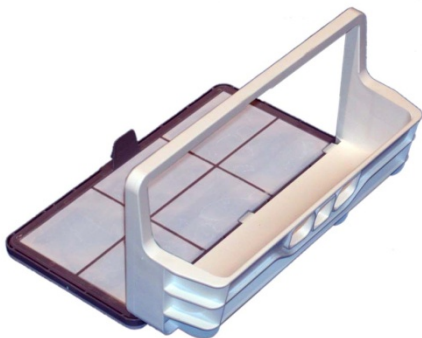


7.2 Condenser filter cleaning

- Open the door.
- Move the locking lever towards the right.
- Open the door in the kick plate.
- Rotate the locking lever clockwise and open the door.

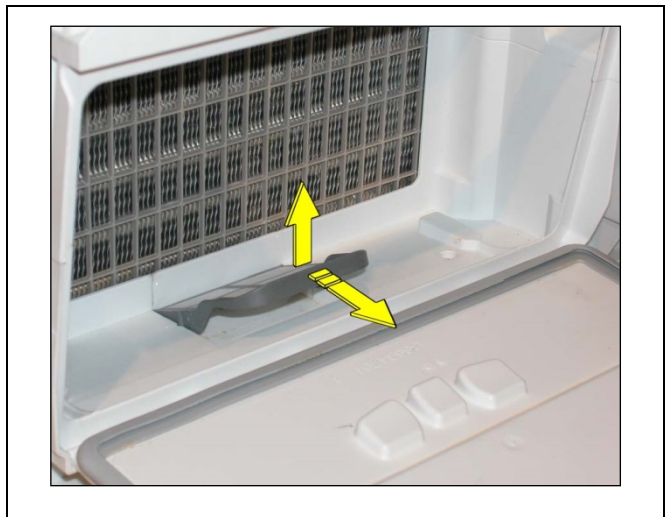


- Pull the filter outwards to remove it.
- Clean it and if necessary wash under running water taking care not to damage it.



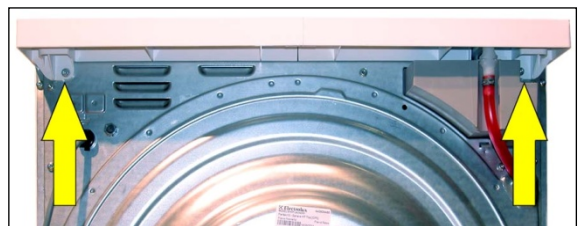
7.3 Clean condensation water filter

- Remove the condenser filter.
- Lift the condensation water filter up slightly.
- Remove and wash it.



7.4 Worktop

- Loosen the 2 rear fixing screws.

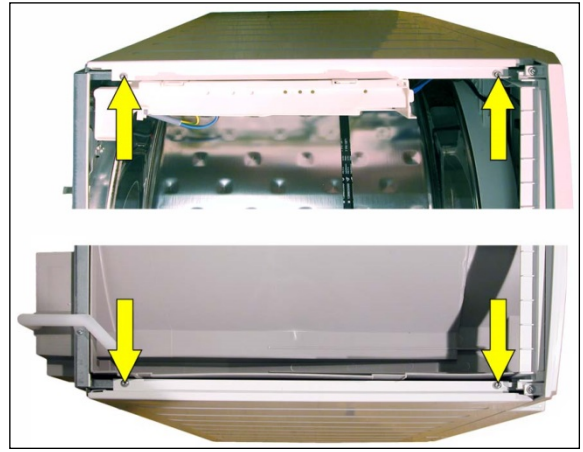


- Remove the tank.
- Loosen the front fixing screw.
- Move the worktop towards the rear and remove it.

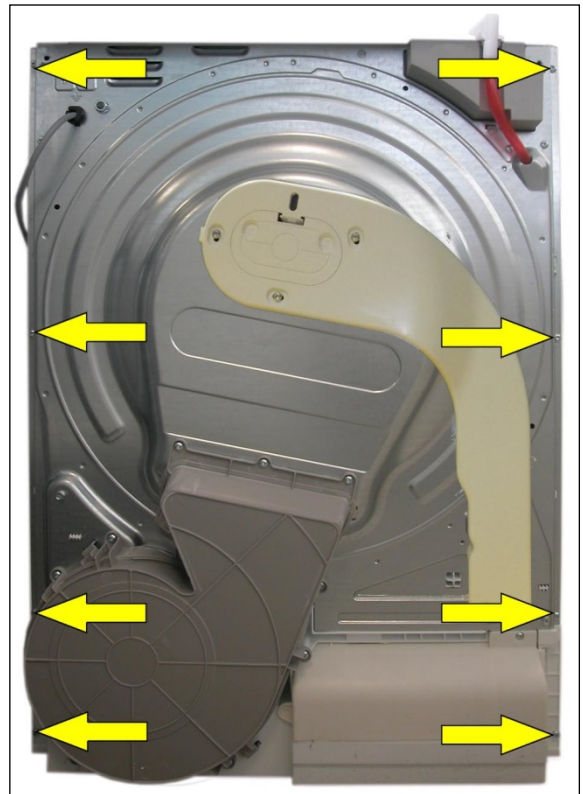


7.5 Sides

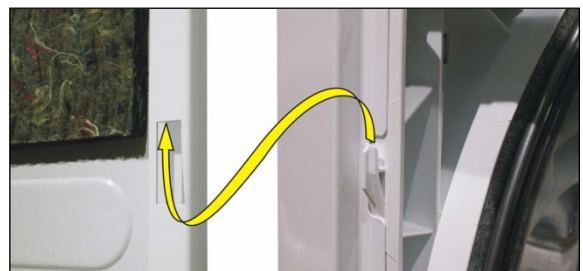
- Remove the worktop.
- Loosen the screws that secure the sides to the top crossbars.



- Unscrew the 4 screws for each side located at the back of the tumble dryer.

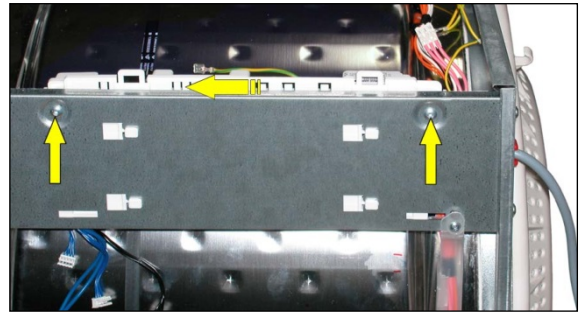


- Slightly lift up the panel to ensure that the fixing catch located in the tumble dryer comes out of pocket located in the panel.



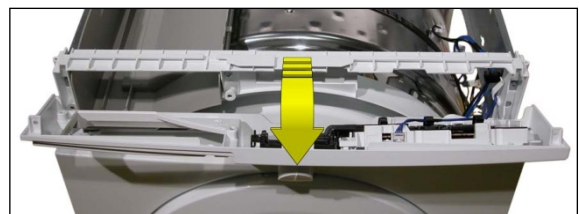
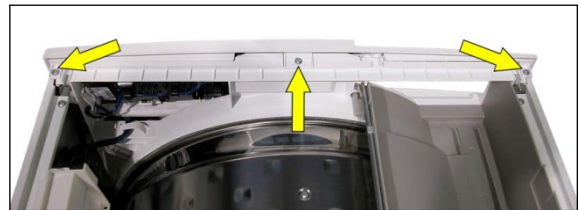
7.6 Main electronic circuit board

- Remove the worktop.
- Remove the right side panel.
- Disconnect all connectors, making a note of their positions.
- Remove the two fastening screws from the crossbar.
- Move the entire board assembly towards the control panel so as to unhook and remove it.



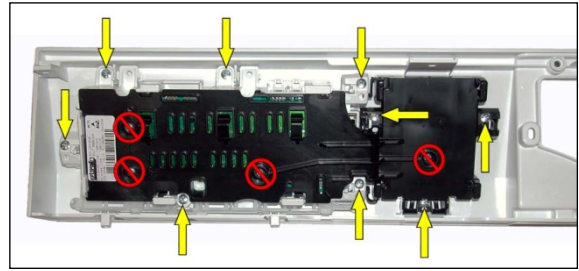
7.7 Control panel

- Remove the worktop.
- Remove the tank.
- Loosen the three screws securing the control panel to the uprights and air conduit.
- Loosen the 2 screws that secure the control panel to the tank support.
- Turn it forward.
- Remove the wiring, making a note of the position of the various connectors.
- Remove the entire control panel.

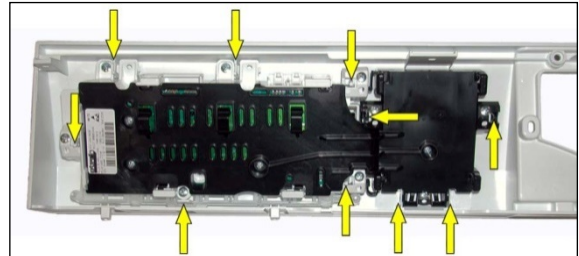


7.8 Control board NEW COLLECTION

- Loosen the 9 fastening screws on the board.

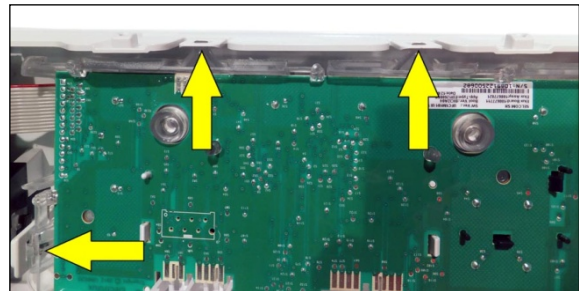


- Using a screwdriver unhook the 10 fixing clips and simultaneously lift up the whole board unit until it has been completely removed.



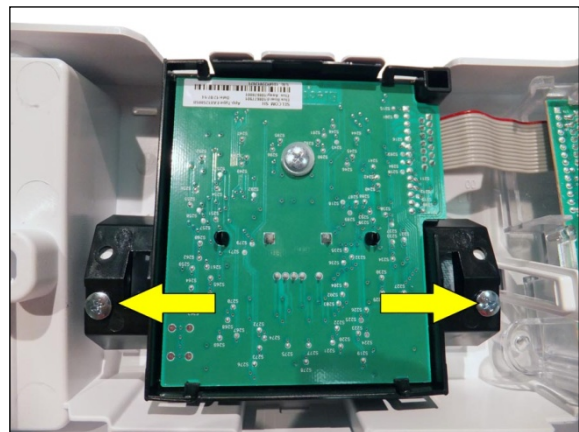
7.9 Control board INSPIRATION RANGE

- Using a screwdriver, release the fixing clips and concurrently raise the entire board assembly until it is fully removed.



- To remove the selector board and respective dial, loosen the two screws that secure the board to the control panel (do not loosen the central screw).
- Move the clips that secure it in place and raise it.

In addition to the board, the selector dial will also be removed: to remove the dial, simply slip it off the pin



7.9.1 Door

Remove the tumble dryer door as follows:

- Unscrew the 2 screws that hold the door to the front.
- Lift up slightly so that the hook unhooks and remove it.

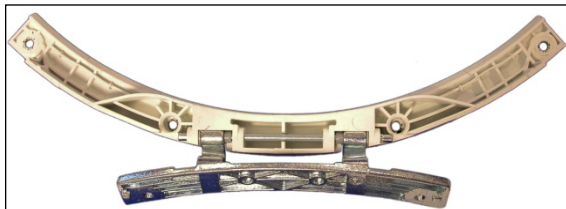


Caution: the glass door weighs approximately 4.5 kg

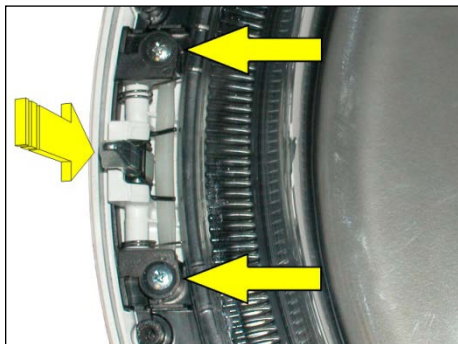


7.9.2 Glass door handle, latch and hinge

- Unscrew the 4 perimetral screws that attach the hinge unit to the door.
- Using a screwdriver and taking care not to damage the frame, remove the whole hinge unit.

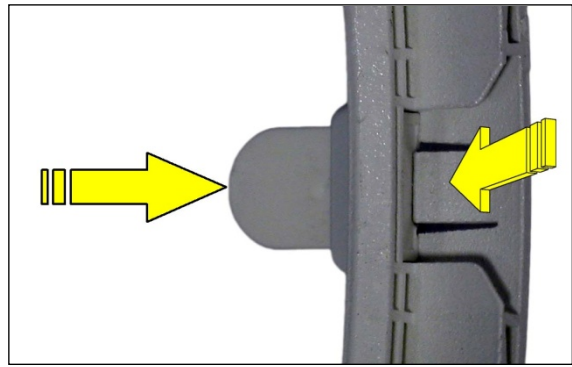


- Unscrew the remaining 8 screws that hold the frame to the door and remove it.
- Loosen the two screws securing the handle assembly and remove it by pushing it out



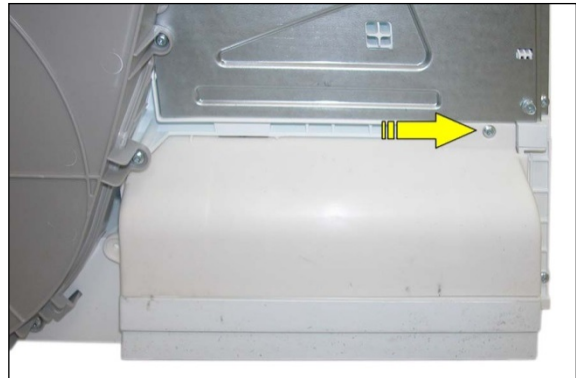
7.9.3 Glass door micro-switch lever

- To remove the door micro-switch lever, press the fastening clip.
- Push the lever in the direction shown by the arrow until you have removed it completely.
- Insert the lever as far as it can go to re-assemble it so that the fastening clips block it



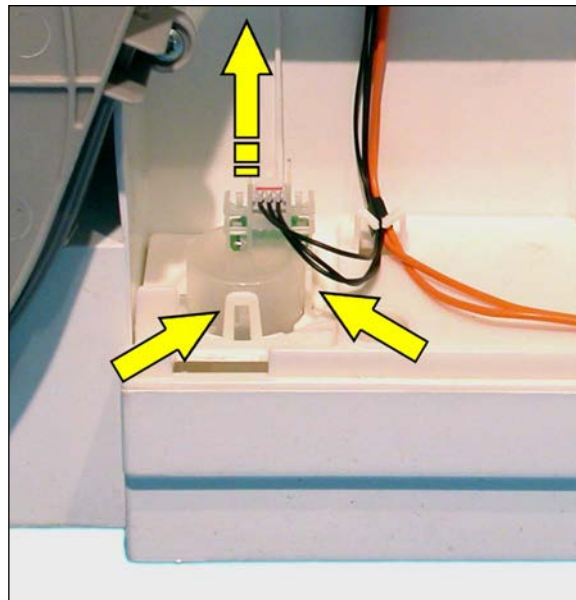
7.10 Level sensor and condensation water pump

- Loosen the screws that hold on the level sensor compartment lid and pump.
- Unhook the fastening clip.
- Remove the protection.



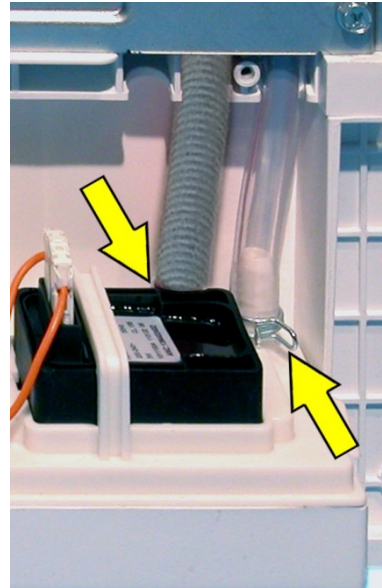
7.10.1 Level sensor

- Detach the connector and remove it.
- Slightly move the locking hooks indicated by the arrows and remove the level sensor by pulling it upwards.

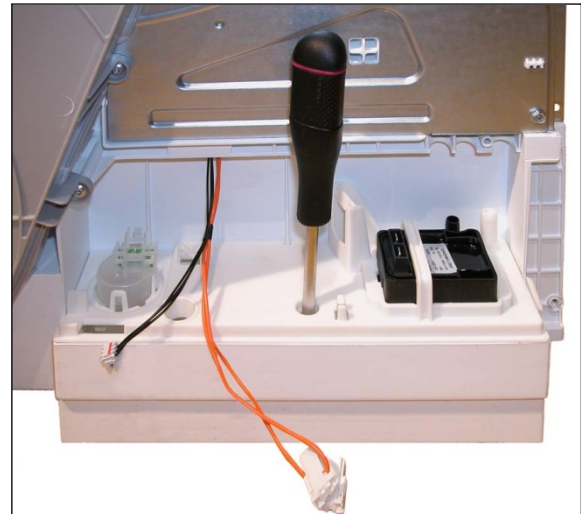


7.10.2 Condensation water pump

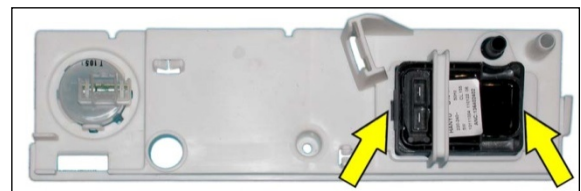
- Using pliers, loosen and raise the clamp securing the supply pipe and raise it a few centimetres.
- Repeat the operation with the transparent pipe (overflow return)



- Disconnect the 2 pump connectors and the level sensor connector.
- Loosen the screw that holds the whole pump and level sensor to the machine and remove it.

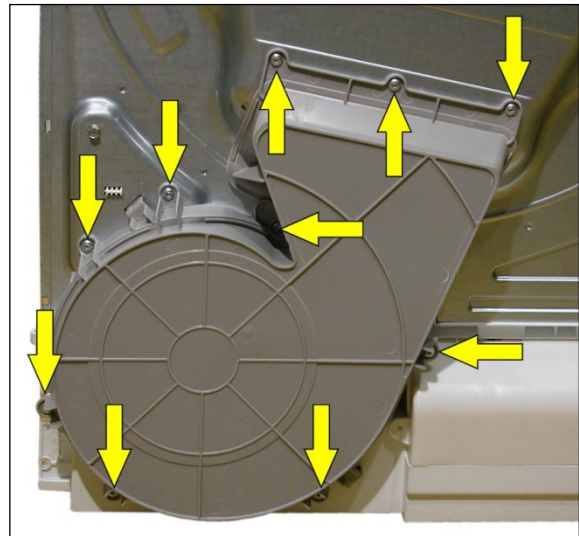


- Insert a screwdriver in the slots indicated by the arrows and remove the pump by pushing it down.

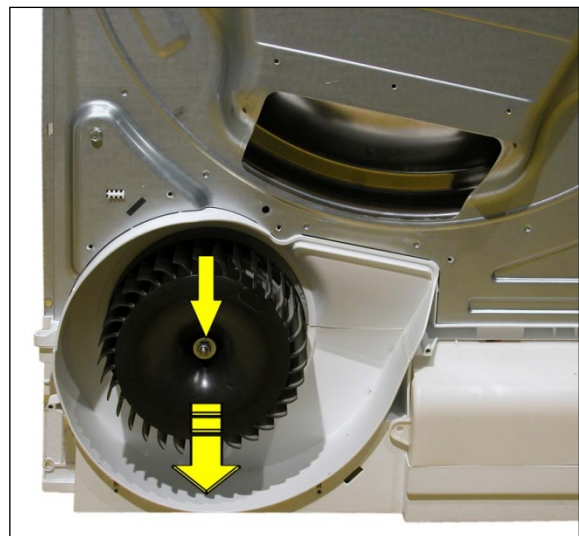


7.11 Three-phase asynchronous motor

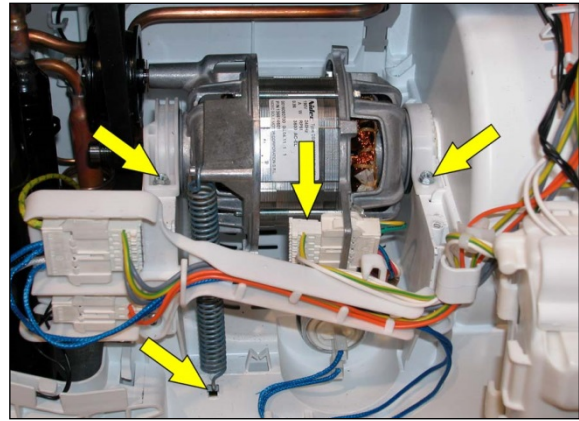
- Remove the right side panel.
- Loosen the 10 screws that hold the rear air conduit.
- If necessary, use a screwdriver to unhook the clips that hold it and remove it.



- Loosen the bolt that holds the hot air circulation fan.
- Remove it by pulling it outwards.



- Disconnect the motor connector.
- Using a pair of pliers, detach the spring that keeps the tensioner spring under tension.
- Remove the belt from the tensioner belt and motor axis.
- Loosen the screws that hold the front and rear motor fastening rods, lift them up by rotating them and remove them by pulling them off the rear hook.



- Slightly rotate the whole motor unit.
- Lift it up and remove.



7.12 Rotating compressor running condenser.

- Remove the worktop.
- Remove the right side panel.
- Remove the drum rotating motor.
- Disconnect the 2 connectors.
- Loosen the screw that holds the condenser in its slot and remove it by pulling it upwards.

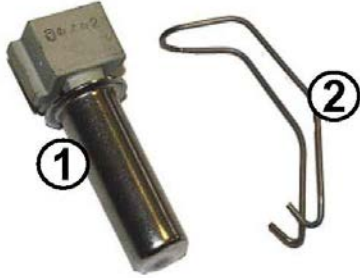


7.13 Temperature probe

- Remove the worktop.
- Remove the right side panel.

We recommend you remove the drum rotation motor to make this operation easier

- Disconnect the probe.
- Remove the probe holding metallic clip (2).
- Pull the probe (1) upwards in order to remove it from its slot.



7.14 Motor protector

- To reach the thermal motor protection, loosen the screw indicated by the arrow which secures the protective cap.



The thermal motor protection is located inside it (indicated by the arrow), kept in contact with the motor by a spring and the motor contacts.



WARNING

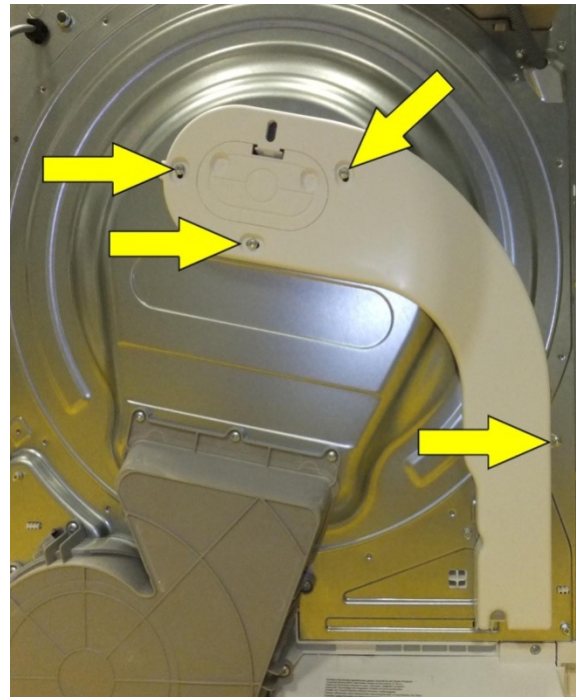
Before disconnecting the electrical wires, make a note of their position.



7.15 Steam pipe and nozzle

To reach the steam nozzle or replace the steam pipe

- Loosen the 4 casing fixing screws
- Remove the entire casing

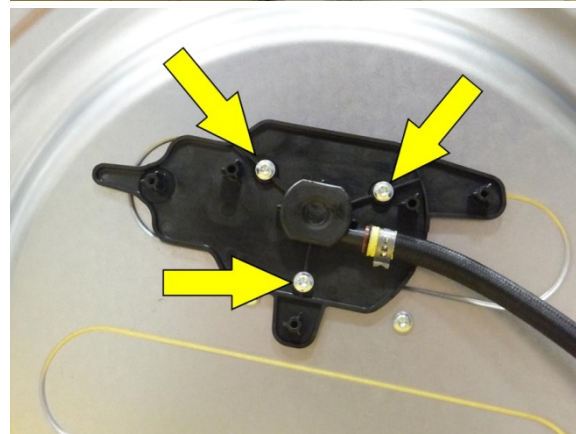


- Loosen the 2 nozzle fixing screws and remove it



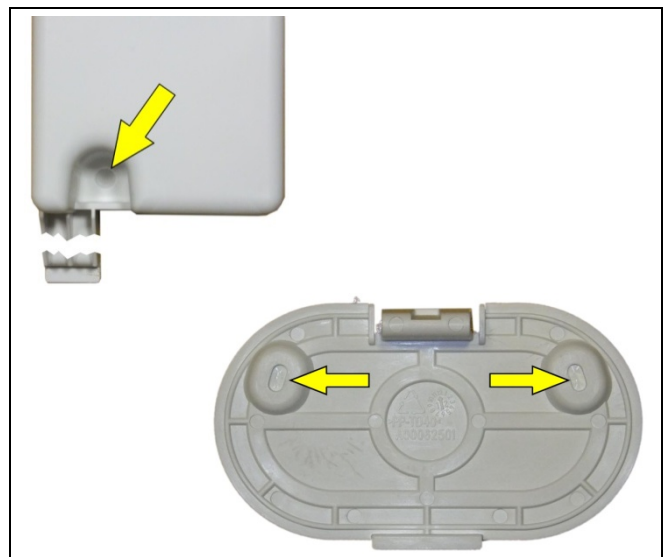
WARNING

The seal is glued in place, so remember to order a replacement seal before you remove the part.



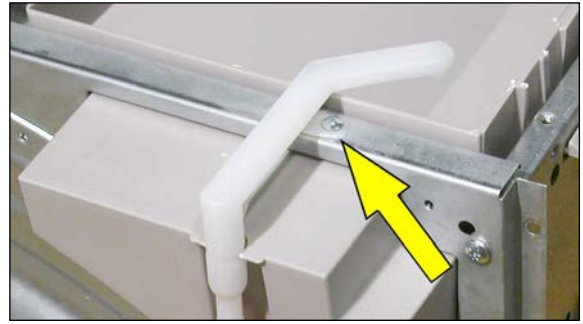
If the fixing clip breaks during the casing removal operations, it can be repaired by perforating the casing and inserting a self-tapping screw; the back panel already features a hole designed for this purpose.

The same applies for the inspection cover



7.16 Back panel

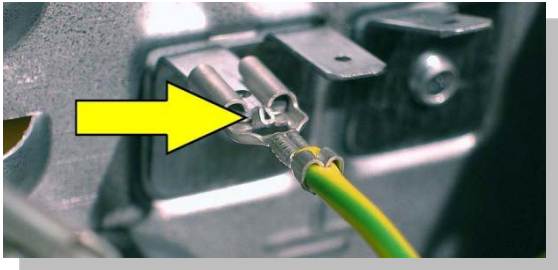
- Remove the worktop.
- Remove the sides.
- Use a pair of pliers to open the clamp and disconnect the red pipe from the connector.
- Pull out the red pipe so it is free from the back panel.
- Loosen the screws securing the tank fitting and remove it.



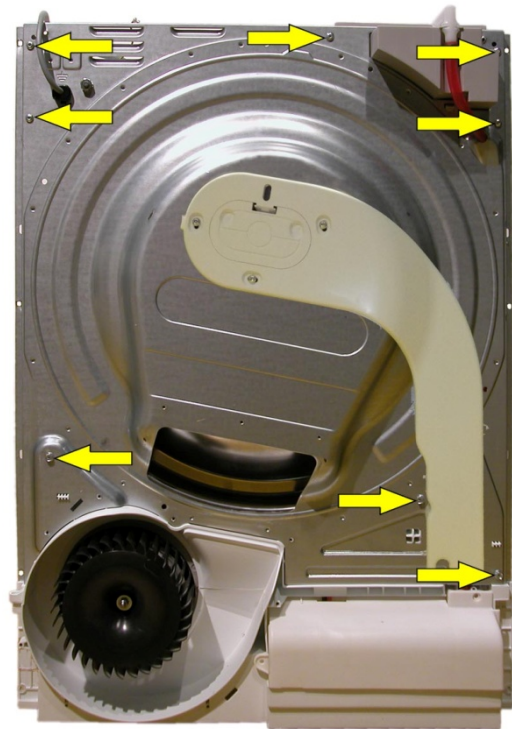
- Disconnect the power supply cable from the main board.
- Disconnect all the mass connections on the back panel.



Warning to remove the connectors slightly lower the locking lever indicated in the figure.



- Remove the rear air conduit.
- Loosen the 3 screws securing the back panel to the appliance base.
- Loosen the 4 screws securing the rear panel to the side crossbars and the screw securing it to the central crossbar.
- Disconnect the steam pipe.
- Release the clip on the tank support.
- Tilt and remove the back panel.

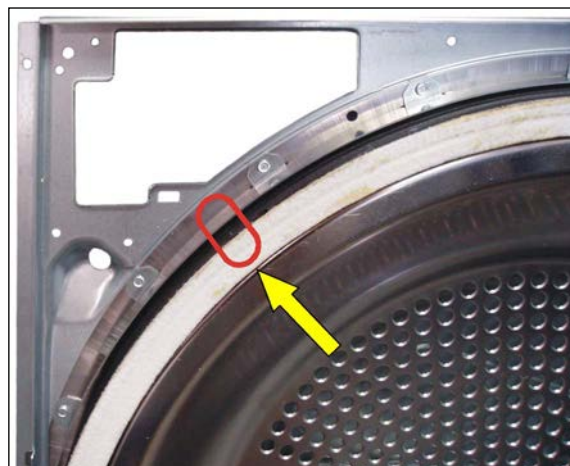


7.17 Rear air seal

- Remove the back panel.
- Raise the air seal to remove it completely.



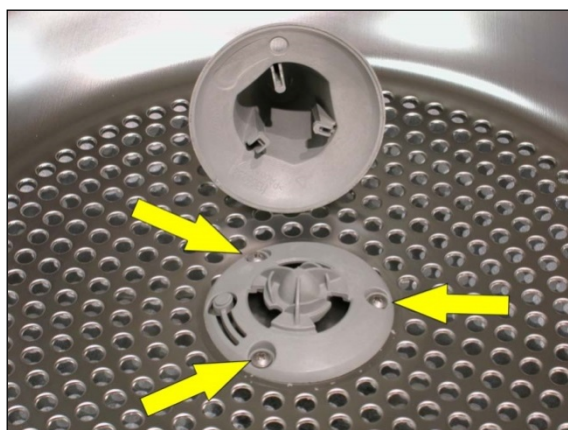
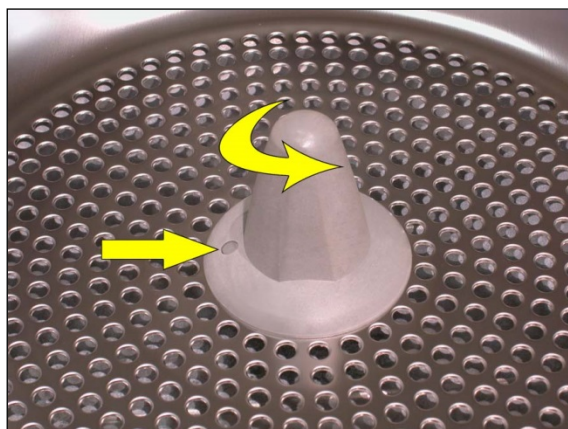
When repositioning the front air seal, make sure the joint is approximately positioned as shown in the figure.



7.18 Anti-entanglement cone

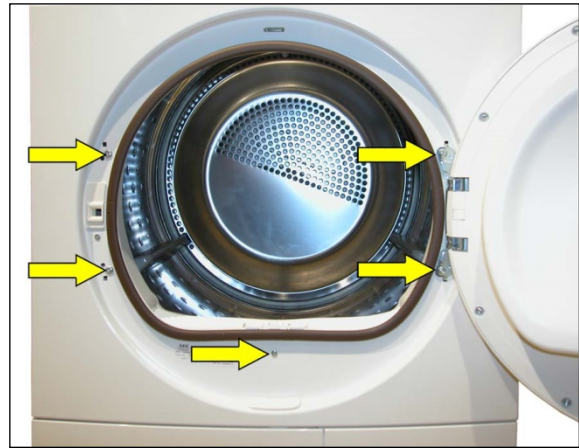
The anti-entanglement cone ensures that during the drying stage the washing does not get tangled up in itself.

- Press the blocking pin to remove and rotate the cone anti-clockwise.
- Loosen the three fastening screws to also remove the base.
- Insert the cone in its slot to re-assemble it and rotate it clockwise until you hear a click that indicates the correct insertion of the blocking pin.

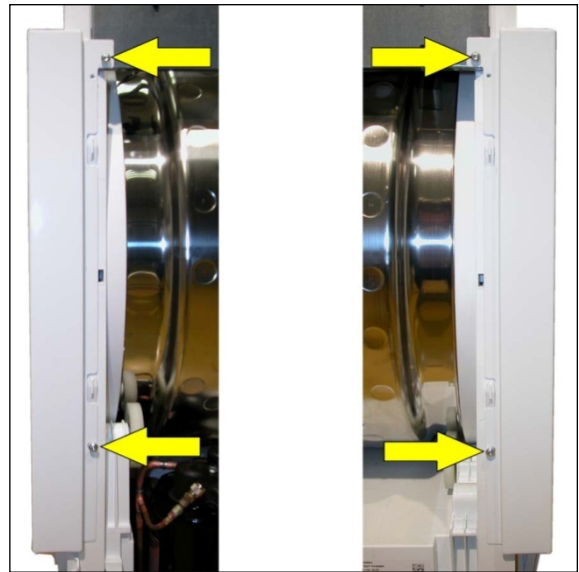


7.19 Front panel

- Remove the worktop
- Remove the control panel (you do not need to disconnect it electrically).
- Loosen the 2 screws securing the appliance door to the air conduit
- If present, remove the aesthetic cover above the door block (not shown in the figure) using a screwdriver.
- Loosen the 3 screws securing the front panel to the air conduit.

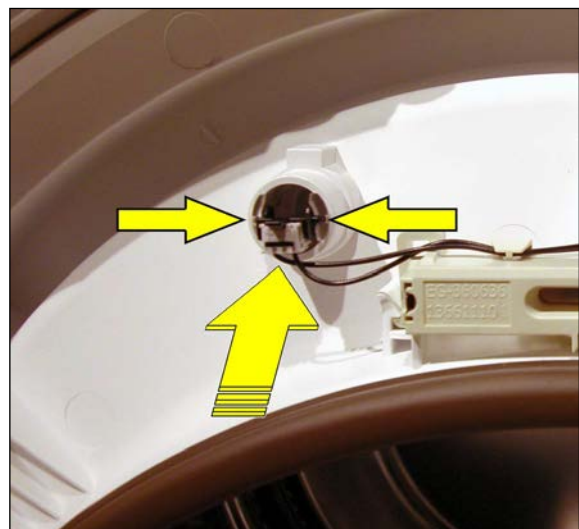


- Loosen the 2 screws on either side securing the front panel to the air conduit.
- Tilt the front panel slightly forward and lift it.



7.20 Drum light

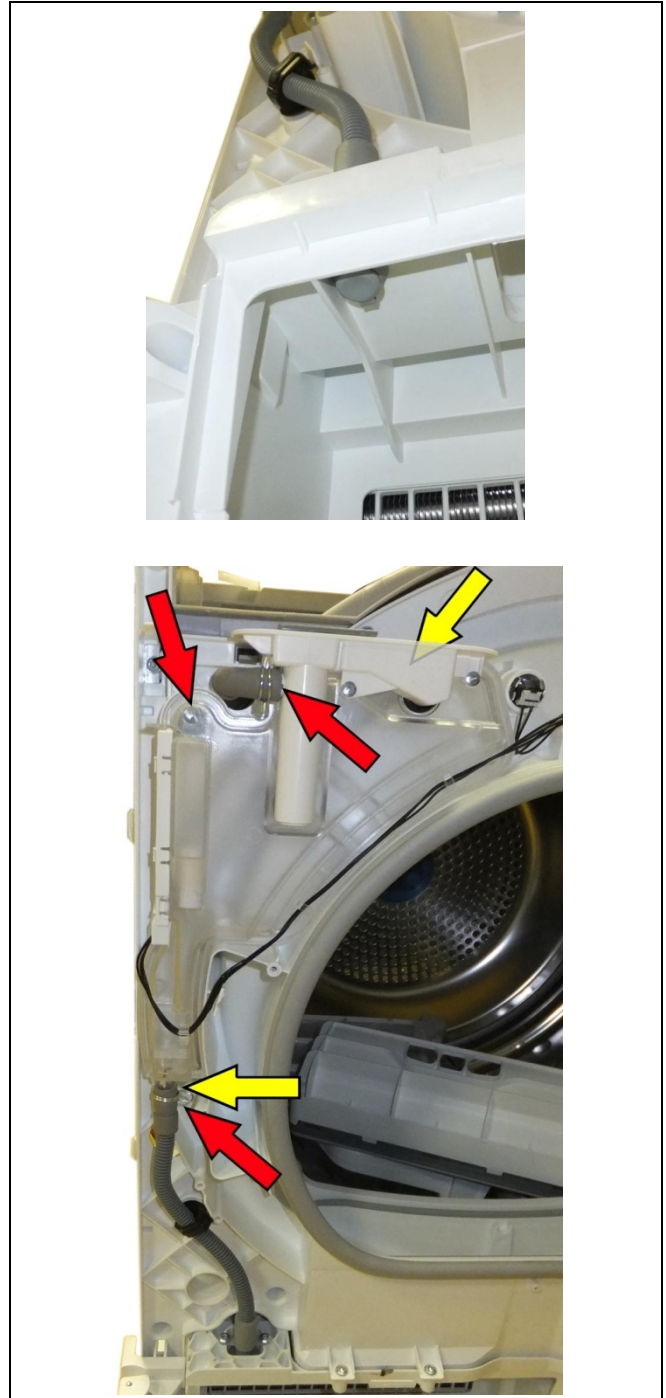
- Remove the frontal piece.
- Disconnect the connector.
- Slightly press the two clips that hold the drum lamp and simultaneously push it inwards until it is completely removed.



7.21 Steam generator water tank

To remove the steam generator tank

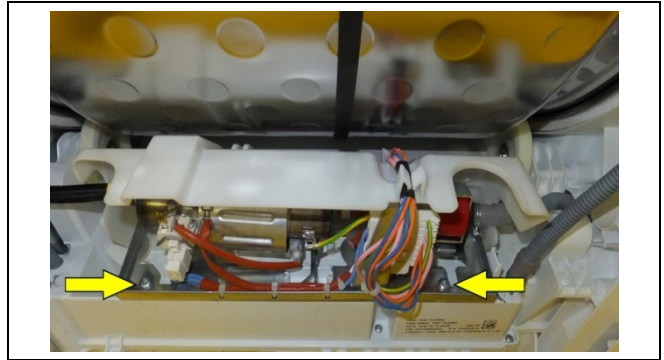
- Remove the lid to empty the steam generator hydraulic circuit completely.
- Disconnect the wiring from the level sensor and LED board
- Release the pipes indicated by the red arrows
- Loosen the 2 screws indicated by the yellow arrows and remove the tank.



7.22 Steam generator unit

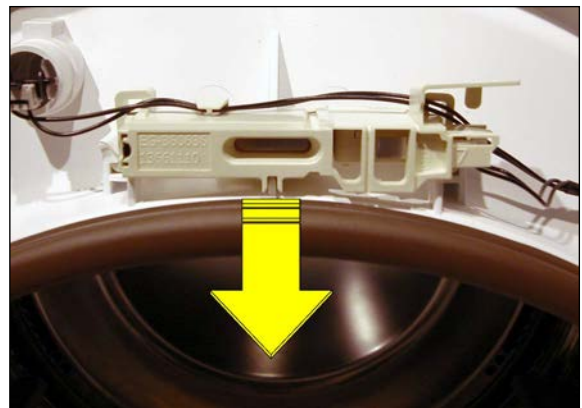
- Disconnect the 2 connectors.
- Disconnect the water inlet pipe and steam outlet
- Loosen the 2 fixing screws and remove the entire unit.

The protective cover does not necessarily have to be removed.



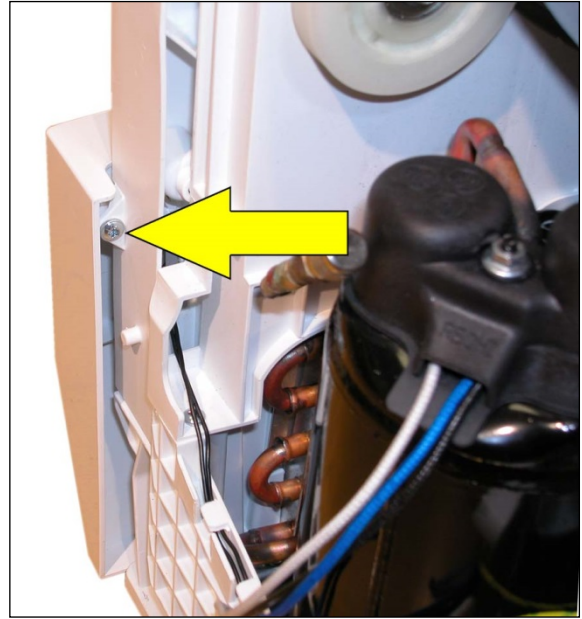
7.23 Door micro-switch

- Remove the frontal piece.
- Disconnect the connector.
- Lift the whole unit outwards.

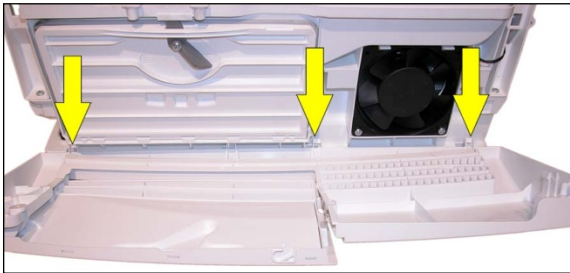


7.24 Base board

- Loosen the 2 front screws.
- Loosen the rear screw on the right side.

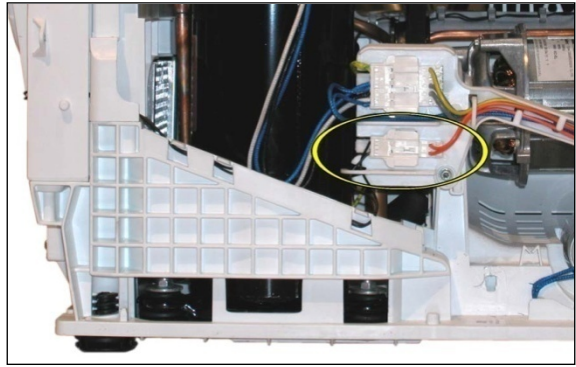


- Using a pair of pliers, unhook the holding clips on the left and right.
- When re-assembling, firstly insert the 3 lower blocking hooks.

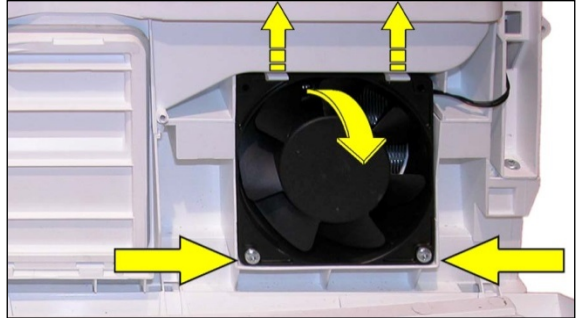


7.25 Compressor cooling fan

- Remove the worktop.
- Remove the side panels.
- Remove the support.
- Disconnect and pull out the cabling.



- Loosen the 2 screws that hold the fan in the lower part.
- Lift up the 2 upper holding hooks and simultaneously remove the fan.



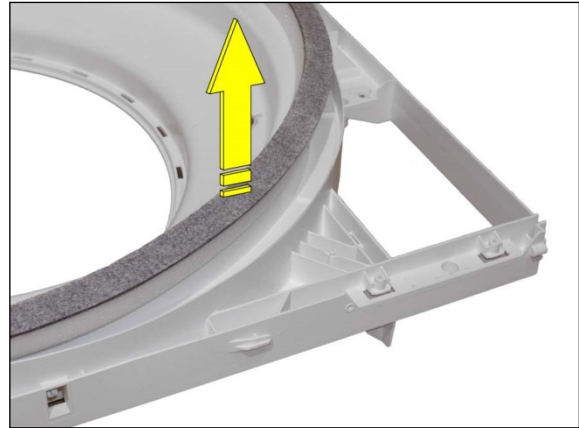
7.26 Front air conduit

- Remove the frontal piece.
- Loosen the 13 screws securing the front air conduit to the crossbars, to the tank support and to the appliance base.
- Raise the two crossbars slightly so as to remove them.
- Tilt the entire air conduit forward and lift it off.

7.27 Front air seal

Once the front air conduit has been removed, the air seal can be removed.

- Raise the air seal to remove it completely

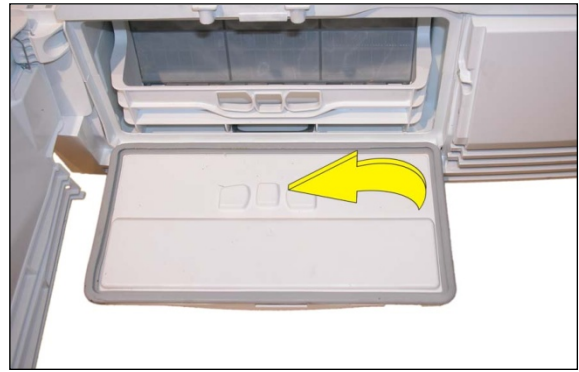


- When repositioning the front air seal, make sure the joint is positioned as shown in the figure.



7.28 Heat exchanger compartment door

- Open the kick plate door.
- Open the heat exchanger compartment door completely.
- Turn it slightly so that the hinge pins are fully released from their seats.
- To reposition the door, position the pins on the hinges.
- Press down fully so that the hinge pins click back into their seats.



7.28.1 Heat exchanger compartment door seal

- Open the kick plate door.
- Open the heat exchanger compartment door completely. You do not need to remove it.
- Raise the seal and remove it



8 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.

8.1 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)

8.2 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.

8.3 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.

8.4 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. 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.

8.5 ALARMS TABLE

FAMILY		ALARM CODE	Full name	Action	Notes and possible causes
Ex20	CONDENSATION WATER FILLING PUMP	E21	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)
		E22	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	E31	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)
		E32	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	E45	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	E51	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.
		E52	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.
		E53	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.
		E54	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.
		E55	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 (>15A)	<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 (>4.5A)	<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 dissipator 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 175V.	<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 430V.	<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
0x60	HEATING ELEMENTS	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 cutout 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.
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. 	NTC1 reading out of range. <ul style="list-style-type: none"> Wiring Failure NTC Failure NTC reading circuit error (main board error).
		E72	Heaters NTC Alarm	<ul style="list-style-type: none"> Stops cycle execution 	NTC2 reading out of Range <ol style="list-style-type: none"> Wiring Failure NTC Failure NTC reading circuit Failure (Main Board Failure)
		E73	Steam generator NTC Alarm	<ul style="list-style-type: none"> Stops cycle execution 	NTC3 reading out of Range <ol style="list-style-type: none"> Wiring Failure NTC Failure NTC reading circuit Failure (Main Board Failure)

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 (Main Board Failure) Selector faulty (main board error)
		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

FAMILY		ALARM CODE	Full name	Action	Notes and possible causes
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. ▪ Inverter board faulty. ▪ Bad main board configuration.
		E9C	User interface checksum alarm	<ul style="list-style-type: none"> ▪ No action possible 	
		E9E	One or more touchkeys on the user interface does not work	<ul style="list-style-type: none"> ▪ No action possible 	<ul style="list-style-type: none"> ▪ Faulty wiring. ▪ Presence of damp on the user interface board. ▪ Board faulty.

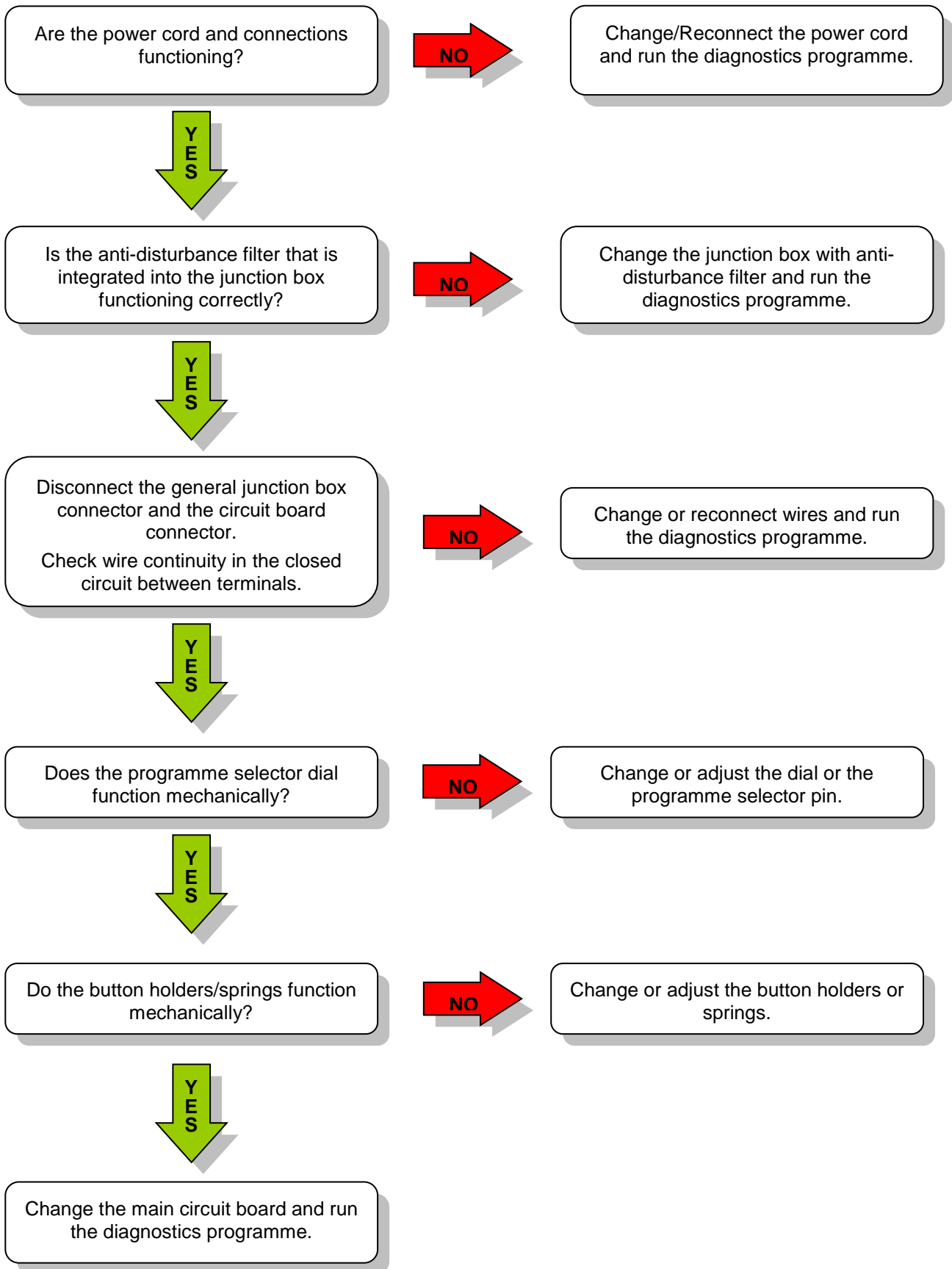
FAMILY		ALARM CODE	Full name	Action	Notes and possible causes
ExB0 (ExH0)	POWER SUPPLY	EH1	Power supply frequency out of range	<ul style="list-style-type: none"> If detected in setup, it would not be possible cycle starting. If happens during cycle execution, it suspend working. It is automatically cleared 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.

FAMILY		ALARM CODE	Full name	Action	Notes and possible causes
ExC0	CONTROL RELAY	EC3	Steam generator heating unit in time out	<ul style="list-style-type: none"> No Action 	<ul style="list-style-type: none">
		EC4	Steam generator heating unit short-circuited	<ul style="list-style-type: none"> Stops cycle execution 	<ul style="list-style-type: none">
		EC5	Steam generator alarm	<ul style="list-style-type: none"> Stops cycle execution 	<ul style="list-style-type: none">
		EC6	Steam generator heating element sensing alarm	<ul style="list-style-type: none"> Stops cycle execution 	<ul style="list-style-type: none"> Steamer Heater Sensing Circuit Failure (Main Board Failure)
		EC7	Steam generator pump alarm	<ul style="list-style-type: none"> Stops cycle execution 	<ul style="list-style-type: none">
		EC8	Steam generator pump diode alarm	<ul style="list-style-type: none"> No Action 	<ul style="list-style-type: none">
		EC9	Steam generator pump sensing alarm	<ul style="list-style-type: none"> Stops cycle execution 	<ul style="list-style-type: none"> Steamer Pump Sensing Circuit Failure (Main Board Failure)
		ECA	Steam generator tank empty	<ul style="list-style-type: none"> No Action 	<ul style="list-style-type: none">

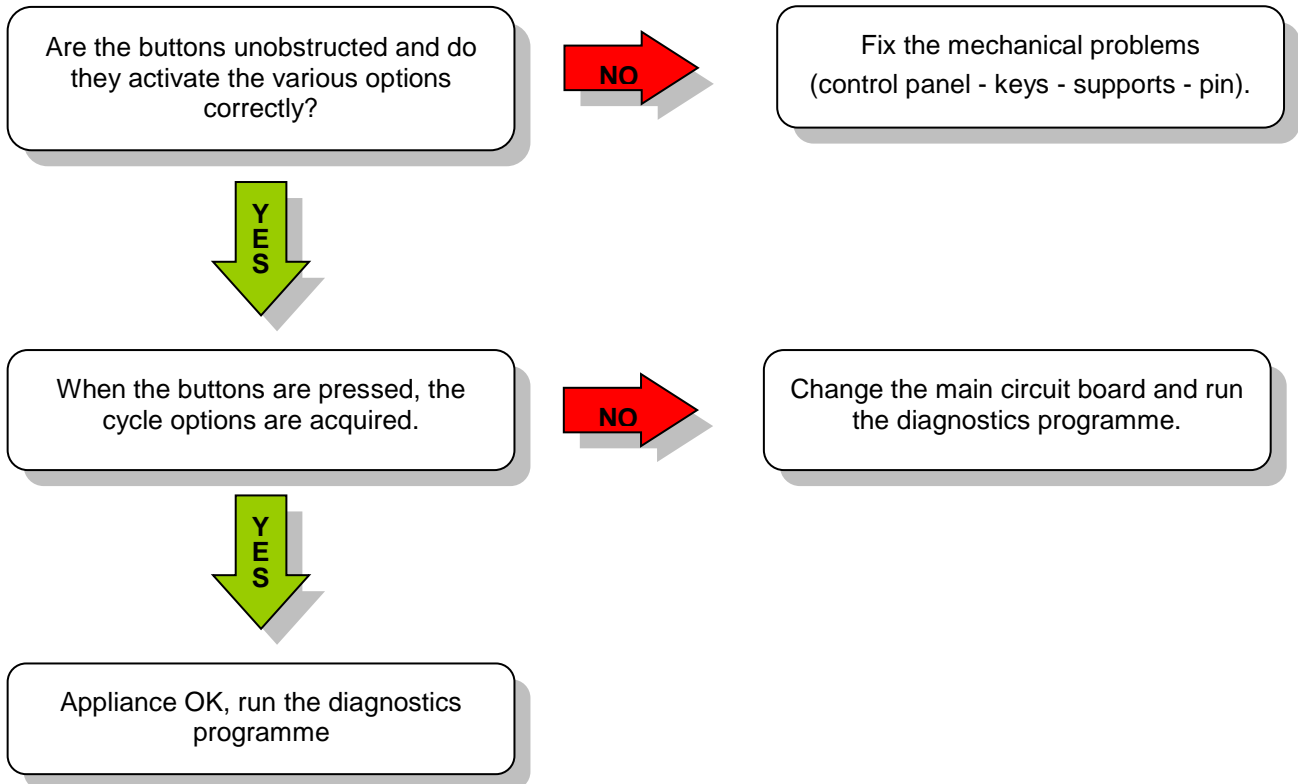
ALARMS		EF6	Microprocessor safety reset.	<ul style="list-style-type: none"> No action possible 	<ul style="list-style-type: none"> Main board faulty.
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9 Troubleshooting

9.1 The diagnostics programme cannot be accessed



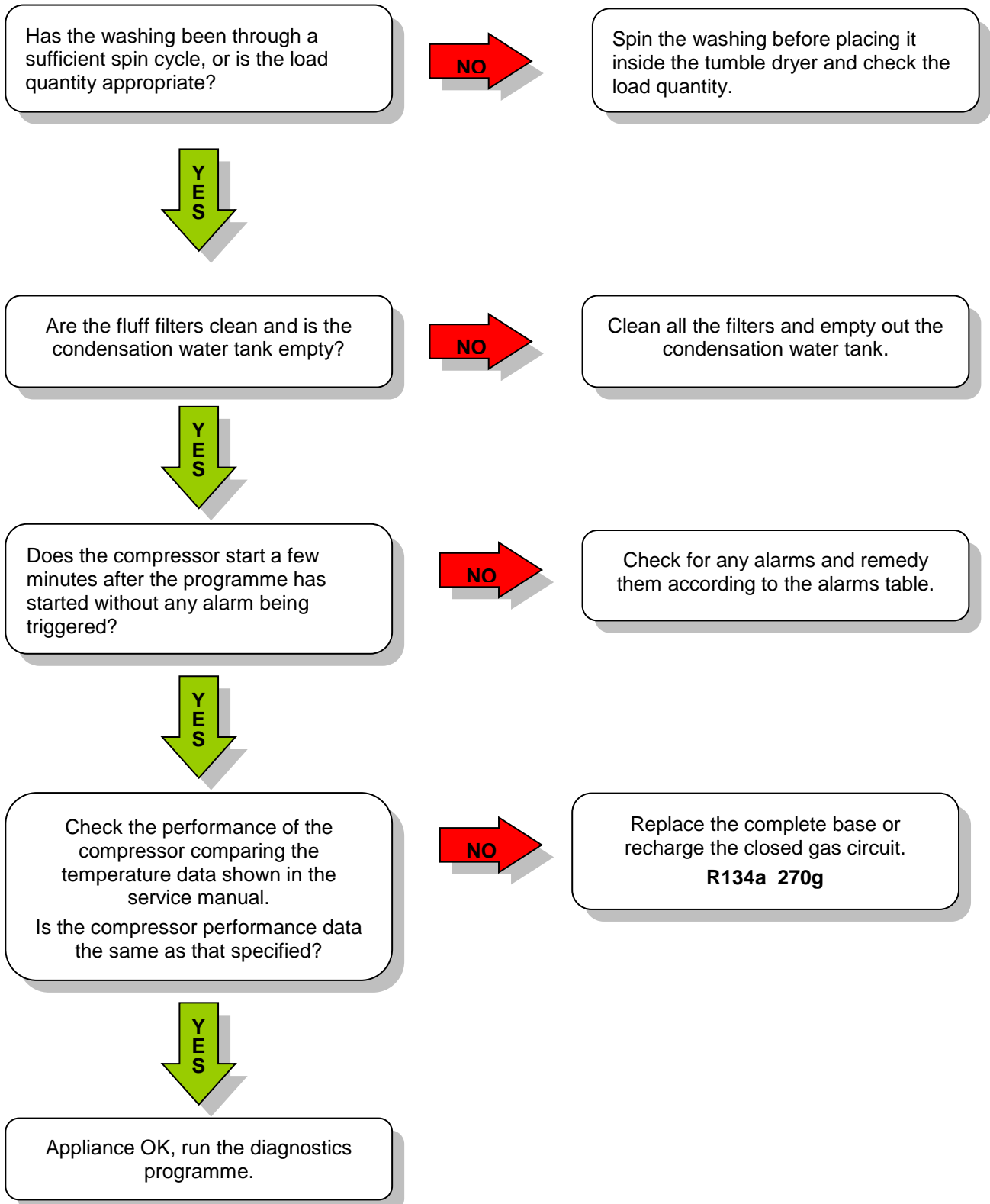
9.2 The LEDs do not light up after the buttons are pressed



Important!

You cannot access the diagnostics system if the main circuit board has not been configured correctly: configuration errors E93 E94 are displayed by the flashing of all LEDs.

9.3 The drying cycle is long and the washing is still humid.

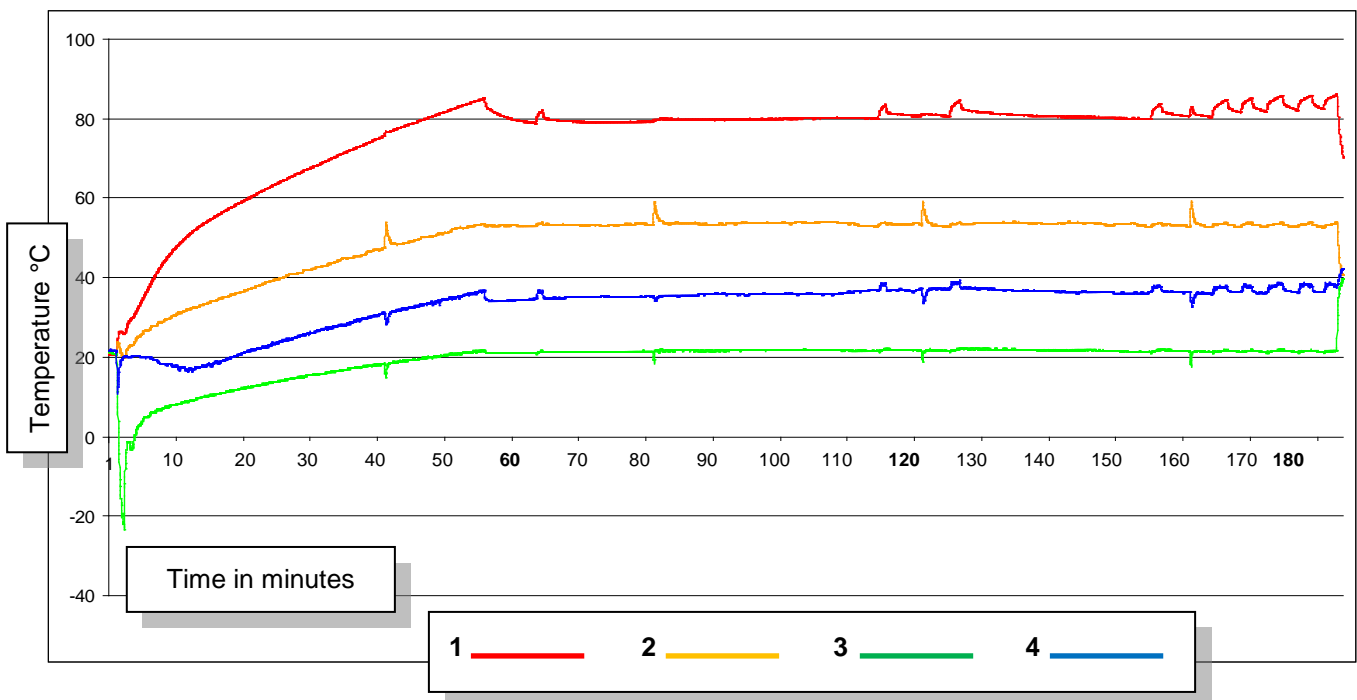
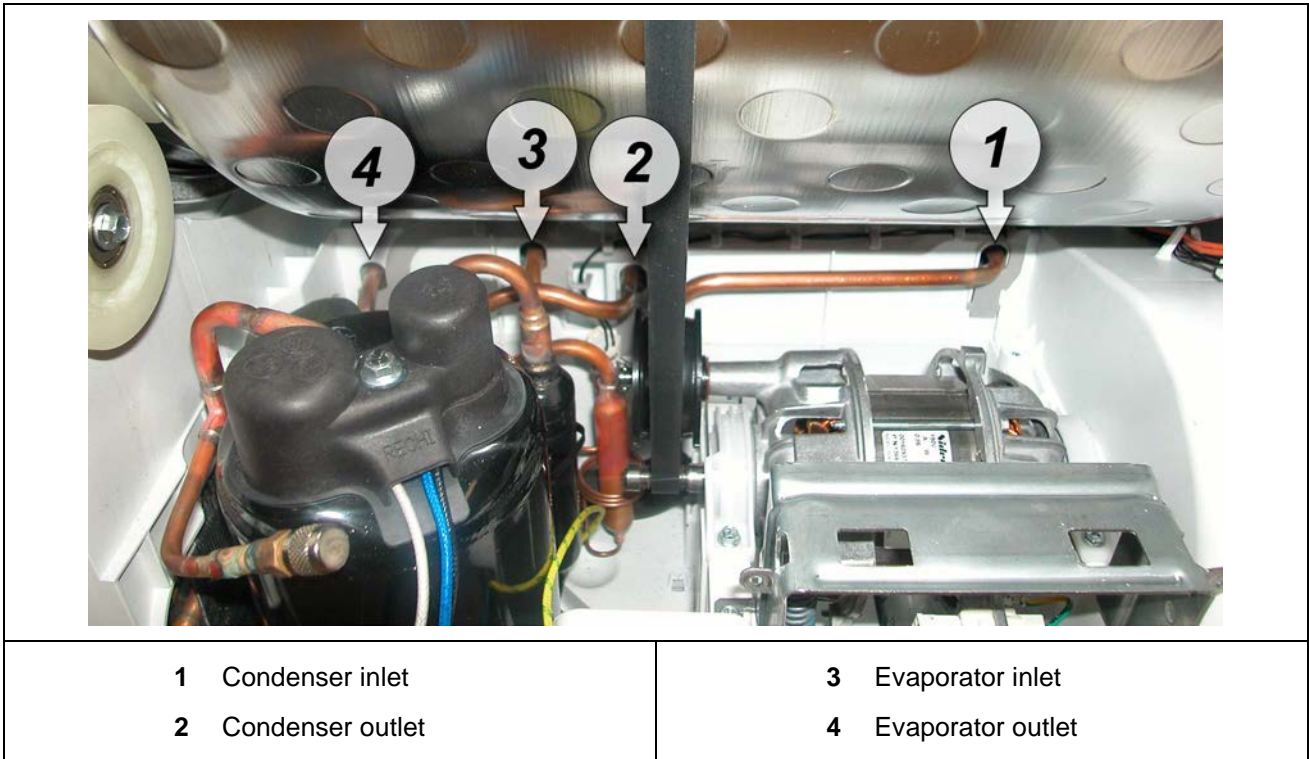


9.4 Checking the heat pump performance

To check the correct functioning of the heat pump, position the sensors in the points indicated and compare the graphs with those provided below.

In the event of significant variations, the presence of a fault is likely.

9.4.1 Models without auxiliary condenser



9.4.2 Servicing the heat pump circuit

9.4.3 Replace compressor



The circuit is evacuated with the compressor switched off.

Dispose of the R407c coolant complying with the legal provisions in your country.

- Disconnect the appliance from the power supply.
- If there is a loading and draining valve evacuate the gas by connecting the evacuation pipe directly to it

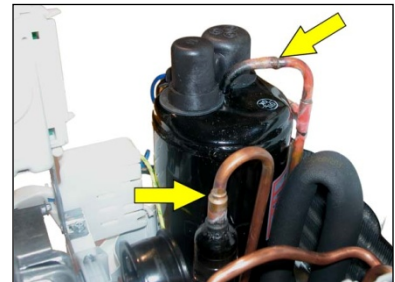


- If there is no loading and draining valve evacuate the gas by inserting the specific pin valve (1).
- Evacuation should take 15 minutes and should only be performed on the suction side.
- During the evacuation cycle, the compressor will need to be shaken at least once to release as much gas as possible still combined with the oil.
- By doing so, as much gas and humidity as possible will be removed from the cooling circuit.



As R407c gas is not inflammable and there are no risks of explosion, it is possible to unsolder the copper pipes using a specific tool or a gas pipe.

- Unsolder the suction conduit and gas supply.
- Slacken the compressor from its slot and remove it.



If it is not already there, connect a valve to the loading pipe (2) to carry out the gas loading stage.

This can be welded directly onto the loading pipe previously cut or, make the connections using LOCKRING connections (3).



9.4.4 Filling

The coolant can be topped up directly from the bottle using purpose-provided scales (4)

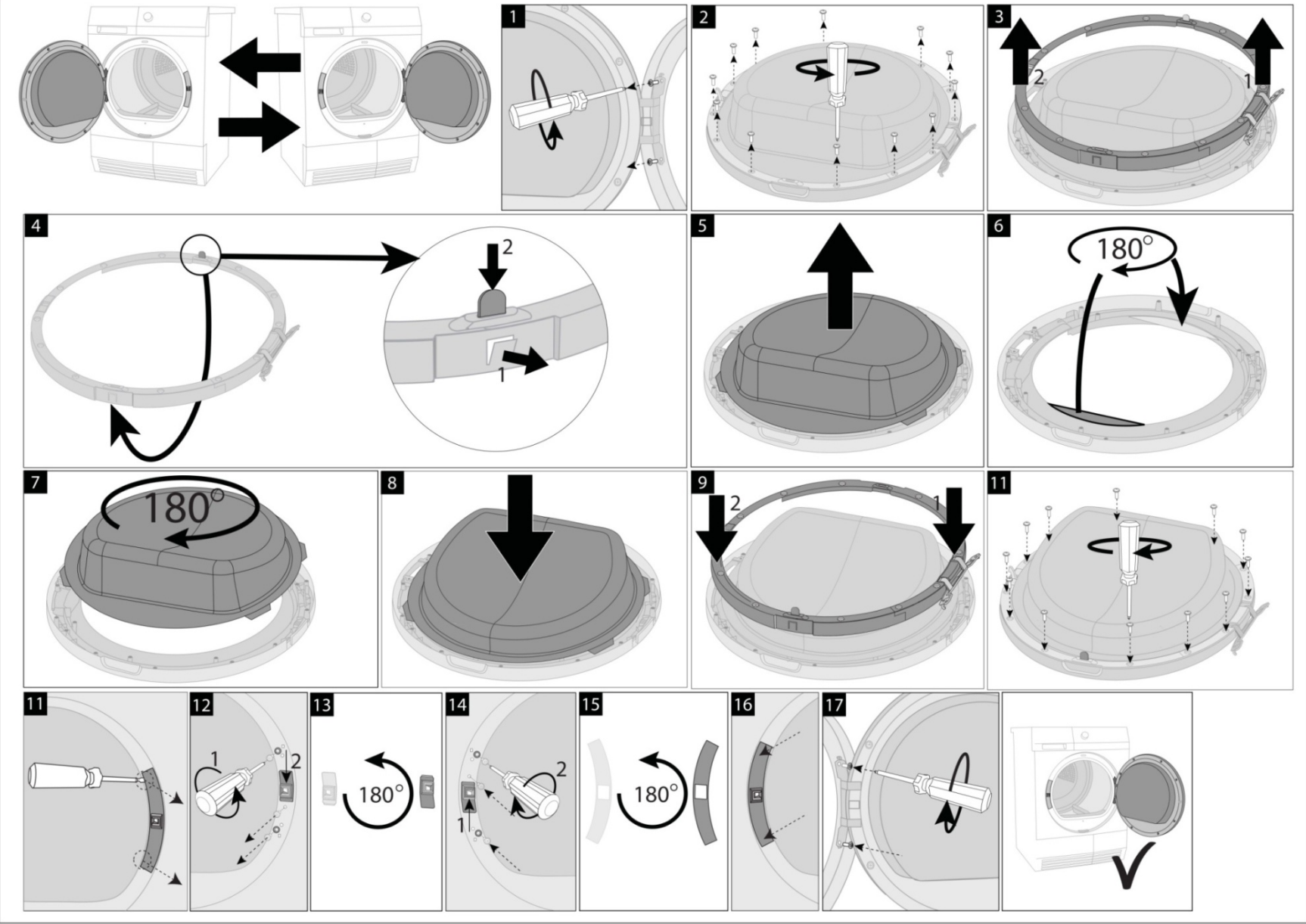
R407c coolant is supplied in disposable bottles.

During filling, the compressors must be switched off and the serviceman must wear appropriate protection devices.

R407c 610g.



10 Door reversibility



11 Revisions:

Revision	Date	Description	Author	Approved by - on
00	05/2013	Document creation	A.D.L.	
01	01/2017	ALARMS TABLE 0x70, ExC0	M.P.	