

GRUNDIG PLATFORM (BETTER)

HEAT PUMP DRYER

SERVICE HANDBOOK



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3. Important Instructions for Safety and Environment:

This section contains safety instructions that will help protect from risk of personal injury or property damage. Failure to follow these instructions shall void any warranty.

3.1. General safety:

- This product can be used by the children at the age of 8 and over and the persons with physical, sensory or mental disorders or unlearned or inexperienced people as long as they are attended by a person who will be responsible for their safety or who will instruct them accordingly about use of the product. Children should not tamper with the machine. Cleaning and user maintenance works should not be carried out by the children unless they are attended by someone.
- Never place the product on a carpet-covered floor; otherwise, lack of airflow beneath the machine will cause electrical parts to overheat. This will cause problems with your product.
- Always have the installation and repairing procedures carried out by the Authorized Service Agent. Manufacturer shall not be held liable for damages that may arise from procedures carried out by unauthorized persons.

3.2. Electrical safety:

- If the product is faulty, it must not be operated unless it is repaired by an authorized service agent! There is the risk of electric shock!
- This product is designed to resume operating in the event of a power recovery following a power cut. If you want to cancel an ongoing program, look at the section titled "Canceling a Program".
- Connect the product to an earthed outlet protected by a 10 ampere fuse. Have the grounding installation performed by a qualified electrician. Our company shall not be liable for any damages that will arise when the product is used without grounding in accordance with the local regulations.
- Unplug the product when it is not in use.
- Never wash the product by spreading or pouring water onto it! There is the risk of electric shock!
- Never touch the plug with wet hands! Never unplug by pulling on the cable, always pull out by grabbing the plug.
- Unplug the machine from the mains during installation, maintenance, cleaning and repair works.
- If the power cord of the machine is damaged, in order to avoid the danger, it should be replaced by the manufacturer, an after sales service agent or an equally qualified personnel (preferably an electrician) or a person to be designated by the importer.
- Do not use extension cords, multi-plugs or adaptors to connect the dryer to power supply in order to decrease the risk of fire and electric shock.
- Power cable plug must be within easy reach after installation.

3.3. Product safety:

- Do not connect the air exit of the product to the chimney holes which are used for the exhaust fumes of the devices operating with gas or other types of fuel.
- You must provide enough ventilation in order to prevent gases exiting from devices operating with other types of fuels including the naked flame from accumulating in the room due to the back fire effect.
- Items cleaned or washed with gasoline/ diesel, dry-laundry solvents and other combustible or explosive materials as well as the items that are contaminated or spotted with such materials should not be dried in the product since they emit flammable or explosive vapor.
- Do not dry the laundry cleaned with industrial chemicals in the dryer.
- Underwear that contains metal reinforcements should not be dried in the dryer. Dryer can get damaged if metal reinforcements come loose and break off during drying.
- Do not reach into the machine when the drum is spinning.
- The final step of the drying programme, namely the cool-down step is performed without applying heat to ensure that the laundry items are kept at a temperature that will not damage them. If you open the loading door before the cool-down step completes, hot vapor will come out.
- Never stop the dryer before the programme completes. If you must do this, remove all laundry quickly and lay them out to a suitable place to dissipate the heat.
- Always clean the lint filter before or after each loading. Never operate the dryer without the lint filter installed.
- Clean inside and exhaust duct of the product regularly. Do not allow fiber, dust and dirt accumulation around the exhaust exit and at adjacent areas.
- Do not dry unwashed items in the dryer.
- Garments or pillows bolstered with rubber foam (latex foam), shower bonnets, water resistant textiles, materials with rubber reinforcement and rubber foam pads should not be dried in the dryer.
- Do not use fabric softeners and anti-static products unless they are recommended by the manufacturers of the relevant product.
- Use softeners, anti-static products, etc. in accordance with the instructions of their manufacturers.
- Do not install the product behind a door with a lock, sliding door or a hinged door which can strike the product.
- Do not install or leave the dryer in places where it will be exposed to outdoor conditions.
- Your product can be operated at temperatures between +5°C and +35°C. If the operating conditions fall outside of this range, operation of the product will be adversely affected and it can get damaged.
- Remove the loading door of the drying compartment before decommissioning or disposing of the product.
- Check all garments before loading into the machine and make sure that there is no any lighters, coins, metal pieces, needles, and etc. in their pockets or on them.

- Make sure that the pets do not enter into the product. Check the drum of the product before using it.
- Do not lean on the loading door when it is open. The product may tip over.
- When your machine is not in use or when you unload the laundry after completion of drying process, the machine will be turned off automatically after 10 minutes.
- Even machine is off, there is still energy on electronic card. Before the intervention, main plug must be plugged out.
- Notice that the metal parts have sharp edges. Please comply with occupational health and safety rules during the repair.

3.4. Intended Use:

- This product has been designed for domestic use. It is not designed for commercial purposes and should not be used for other purposes.
- Use the product only for drying the textile that are marked accordingly.
- Manufacturer denies any liability for the damages arising from misuse or faulty handling of the product.
- The service life of your product is 10 years. During this period, original spare parts will be available to operate the appliance properly.

3.5. Children's safety:

- Packaging materials are dangerous to children. Keep packaging materials in a safe place out of the reach of the children.
- Electrical products are dangerous for the children. Keep children away from the product when it is operating. Do not let them tamper with the product. Activate the child-proof lock in order to prevent the children to tamper with the machine.
- Do not forget to close the loading door when leaving the room where the product is located.

3.6. Compliance with the WEEE Directive and Disposing of the Waste Product:

- This product complies with EU WEEE Directive (2012/19/EU). This product bears a classification symbol for waste electrical and electronic equipment (WEEE).
- This product has been manufactured with high quality parts and materials which can be reused and are suitable for recycling. Do not dispose of the waste product with normal domestic and other wastes at the end of its service life. Take it to the collection center for the recycling of electrical and electronic equipment. Please consult your local authorities to learn about these collection centers.

3.7. Compliance with RoHS Directive:

- The product you have purchased complies with EU RoHS Directive (2011/65/EU). It does not contain harmful and prohibited materials specified in the Directive.

3.8. Package information:

Packaging materials of the product are manufactured from recyclable materials in accordance with our National Environment Regulations. Do not dispose of the packaging materials together with the domestic or other wastes. Take them to the packaging material collection points designated by the local authorities.

4. Technical Specification:**4.1. Product Definition:**

- 4.1.1. Manufacturer** : Arçelik A.Ş.
Çerkezköy - Tekirdağ / TÜRKİYE
- 4.1.2. Model** : Grundig Better HP
- 4.1.3. Capacity (kg)** : 7/8
- 4.1.4. Programs (Qty)** : 14 sensor controlled program

RapiDry mode can be selected 10 of this programs. These are Jeans, Sportswear, Shirt30', BabyProtect, Mix, all cotton and all synthetics programs.

RapiDry mode is not applicable for Bedding, Night, Delicate, Woolmark, Time and Refresh programs.

1 timed program

1 ventilation program (compressor off)

4.2. Dimensions:

- 4.2.1. Height (mm)** : 846
- 4.2.2. Depth (mm)** : 598
- 4.2.3. Width (mm)** : 595

4.3. Package:

- 4.3.1. Material** : PE bag (Shrink-pack)
- 4.3.2. Supporter** : Polystrofoam / Wood

4.4. Packed Dimensions:

- 4.4.1. Height (mm)** : 880 / 895
- 4.4.2. Depth (mm)** : 660 / 670
- 4.4.3. Width (mm)** : 650 / 660

4.5. Weight:

- 4.5.1. Unpacked (kg)** : 50,5 / 51,5 (with plastic door)
52,5 / 53,5 (with glass door)
- 4.5.2. Packed (kg)** : 52,5 / 53,5 (with plastic door)
54,5 / 56 (with glass door)

4.6. Working Condition:**4.6.1. Temperature**

Min. room temperature : 5° C

Max. room temperature : 35° C

4.6.2. Humidity : %95 RH**4.7. Electrical Specification:****4.7.1. Voltage (V / Hz) : 230-240 / 50****4.7.2. Power (W) : 1850****4.7.3. Current (A) : 8****4.8. Power Cord:****4.8.1. Type : 3 x 1.5 mm² or 3x1.0mm² cord copper wire****4.8.2. Insulation : H05V2V2-F 3G1,5mm² / H05V2V2-F 3G1 mm²
H05VV-F 3G1,5mm² / H05VV-F 3G1 mm²****4.8.3. Plug : Earthed, PVC moulded****4.8.4. Length (m) : 1,5 m****4.9. Motor:****4.9.1. Type : Brushless Direct Current (BLDC) Motor****4.9.2. Power (W) : max. 250****4.9.3. Motor speed (rpm) : 2800-3000****4.9.4. Drum speed (rpm) : 54-57****4.9.5. Insulation : F****4.9.6. Run capacitor : NA (Not Available)****4.10. Pump :****4.10.1. Manufacturer / Type : Ascoll / Synchronous****4.10.2. Power (W) : 9****4.10.3. Voltage / Frequency : 220 – 240 V / 50 Hz****4.10.4. Flow Rate (l / min) : 2,4****4.10.5. Head (m) : 0,7****4.10.6. Revolution Speed (rpm) : 3000****4.10.7. Winding Resistance (ohm) : 956 ± %8****4.11. Pump :****4.11.1. Manufacturer / Type : Hanyu / Synchronous****4.11.2. Power (W) : 13****4.11.3. Voltage / Frequency : 220 – 240 V / 50 Hz****4.11.4. Flow Rate (l / min) : 2,4****4.11.5. Head (m) : 0,7**

4.11.6. Revolution Speed (rpm)	: 3000
4.11.7. Winding Resistance (ohm)	: 976 ± %8

4.12. Compressor (Used in HP Hybrid Dryer with A+++ Energy Class):

4.12.1. Manufacturer / Model	: LG / 78PAA
4.12.2. Type	: 1 phase asynchronous
4.12.3. Power (W)	: 420 ±5%
(71°C condensation temperature / 23°C evaporation temperature)	
4.12.4. Cooling Capacity (W)	: 1527 ±5%
(71°C condensation temperature / 23°C evaporation temperature)	
4.12.5. Current (A)	: 1,9
4.12.6. Main Winding (ohm)	: 11,01 ± %7
4.12.7. Auxillary Winding (ohm)	: 6,78 ± %7
4.12.8. Insulation Class	: Synthetic
4.12.9. Capacitor	: 25 µF ± %5
4.12.10. Refrigerant Type / Amount	: R134a / 520 gr

4.13. Compressor Cooling Fan:

4.13.1. Manufacturer / Model	: NMB & MAT 4715MS – 23T – B50
4.13.2. Type	: Shaded Pole Asynchronous
4.13.3. Power (W)	: 15
4.13.4. Winding Resistance (ohm)	: 675
4.13.5. Rotational Speed (rpm)	: 2600 / 2900
4.13.6. Insulation Class	: B

4.14. Door & Compressor NTC:

Door & Compressor NTC (ohm)	: 12.000 ohm @ 25°C
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4.15. Body:

4.15.1. Material	: Sheet metal
4.15.2. Finish	: Acrylic powder paint

4.16. Drum:

4.16.1. Material	: Stainless Steel
4.16.2. Volume (lt)	: 118
4.16.3. Drum speed (rpm)	: 54-57
4.16.4. Front door opening (mm)	: 395x320
4.16.5. Process air flow (m3/h)	: 315
4.16.6. Maximum loading Capacity:	
Cotton(kg)	: 7 / 8
Delicate, Synthetic (kg)	: 3,5 / 4

4.17. Control System Specifications:

- | | |
|-----------------------------------|--|
| 4.17.1. Door Switch | : 250 V, 3 (1)A or 16(4)A |
| 4.17.2. Suppression Filter | : 0,47 μ F(X2) + 0,68 Mohm + 2x0,027
μ F(Y2) + 2x1 mH |
| 4.17.3. Program Timer | : Electronic controller 220-240V,50Hz |

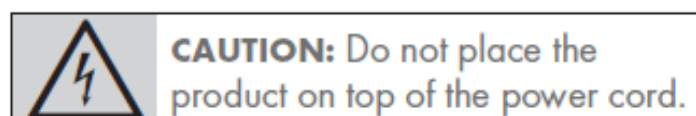
5. Installation:

Refer to the nearest Authorized Service Agent for installation of the product. To make the product ready for use, make sure that the electricity and water drainage systems are appropriate by reading the information/ instructions given in the user manual before calling the Authorized Service Agent. If they are not, call a qualified technician and plumber to have any necessary arrangements carried out.

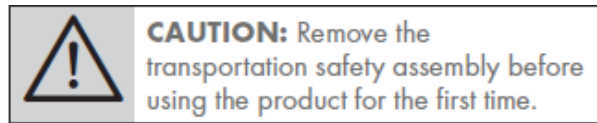
	Preparation of the product's location as well as the electrical, clean water and waste water installations is under customer's responsibility.
	CAUTION: Installation and electrical connections of the product must be performed by the Authorized Service Agent. Manufacturer shall not be held liable for damages that may arise from procedures carried out by unauthorized persons.
	CAUTION: Prior to installation, visually check if the product has any defects on it. If so, do not have it installed. Damaged products cause risks for your safety.
	CAUTION: Let your dryer wait for 12 hours before starting to use it.

5.1. Appropriate Installation Location:

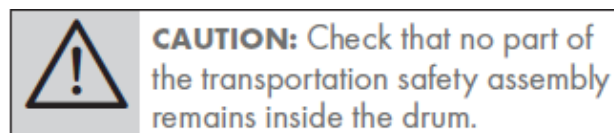
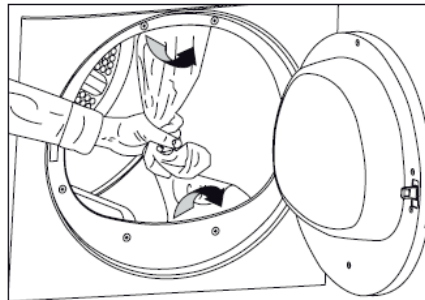
- Install the product on a stable and level surface.
- Dryer is heavy. Do not move it by yourself.
- Operate your product in a well ventilated, dust-free environment.
- Do not block the air ducts in front of and under the product with materials such as long pile rugs, wooden blocks and bands.
- Do not install the product behind a door with a lock, sliding door or a hinged door which can strike the product.
- Once the product is installed, it should stay at the same place where its connections have been made. When installing the product, make sure that the rear wall of it does not touch anywhere (tap, socket, etc.). Also pay attention to select an installation location which you will not be required to change afterwards.
- Place the product at least 1.5 cm away from the edges of other furniture.



5.2. Removing the Transportation Safety Assembly:

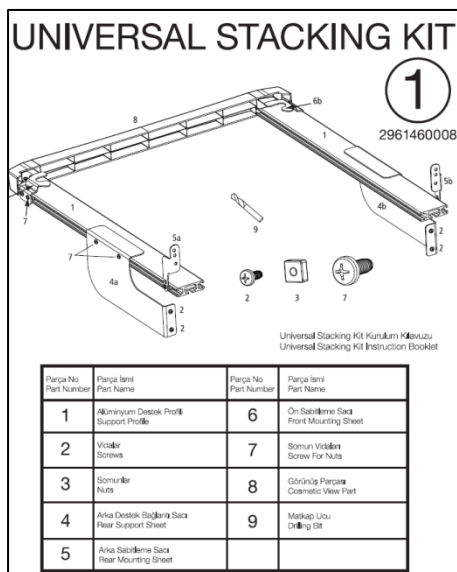


- Open the loading door.
- There is a nylon bag inside the drum that contains a piece of styrofoam. Hold it from its section marked with XX XX.
- Pull the nylon towards yourself and remove the transportation safety assembly.



5.3. Mounting over a Washing Machine:

- A fixing device should be used between the two machines when installing the dryer above a washing machine. The fixing device must be installed by the Authorized Service Agent.



Appropriate Stacking Kit
Stock Numbers / Colour

2977200100 / White

2977200700 / Piano Black

2977201200 / Claret Red

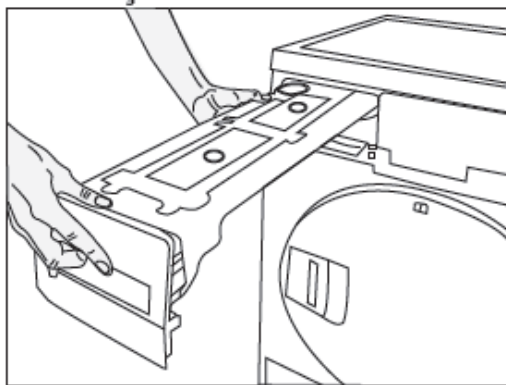
2977201300 / Blue

2977201500 / Gray

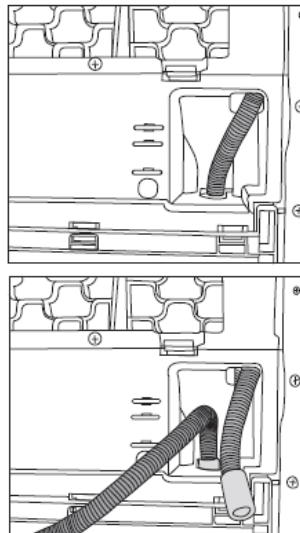
- In the above table, the stock numbers of the appropriate stacking kits for the specified coloured dryer models are given. For the other types of coloured dryer models, the stock numbers of the stacking kits can differ from the table above. For these cases, please contact with the Authorized Service Agent to assemble the appropriate stacking kits.
- Total weight of the washing machine and the dryer -with full load- when they are placed on top of each other reaches to approx. 180 kilograms. Place the products on a solid floor that has sufficient load carrying capacity!

5.4. Connecting to the Drain:

- In products equipped with condenser unit, water accumulates in the water tank during the drying cycle. You should drain accumulated water after each drying cycle.



- You can directly drain accumulated water through the water drain hose supplied with the product instead of periodically draining the water collected in the water tank.



Connecting the water drain hose:

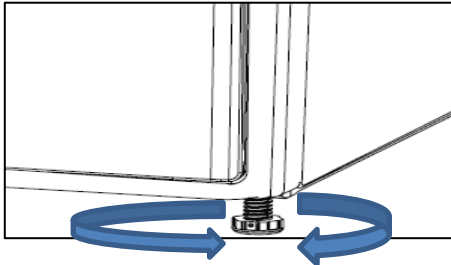
- Pull hose in the product by hand in order to disconnect it from where it is connected. Do not use any tools to remove the hose.
- Connect one end of the drain hose supplied separately with the product to the connection point from where you removed the hose of the product in previous step.

- Connect the other end of the drain hose directly to the wastewater drain or to the washbasin.

	CAUTION: Hose must be fixed in every type of connection. Your house will be flooded if the hose comes loose during water discharge.
	Attach the water drain hose to a height of maximum 80 cm.
	Make sure that the water drain hose is not stepped on, twisted or bent between the drain and the machine.

5.5. Adjusting the feet:

- In order to ensure that the product operates more silently and vibration-free, it must stand level and balanced on its feet. Balance the machine by adjusting the feet.
- Turn the feet to left or right until the machine stands level and firmly.



5.6. Electrical Connection:

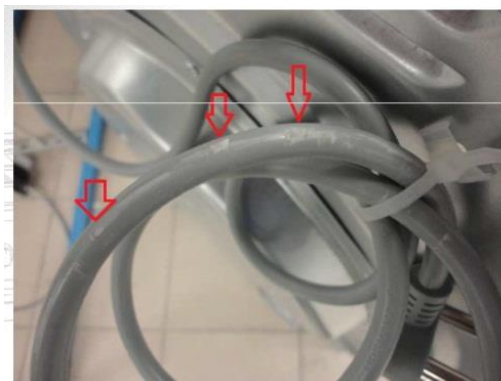
Connect the product to a grounded outlet protected by a fuse complying with the values in the "Technical specifications" table given in the user manual. Our company shall not be liable for any damages that will arise when the product is used without grounding in accordance with the local regulations.

- Connection must comply with national regulations.
- Power cable plug must be within easy reach after installation.
- The voltage and allowed fuse or breaker protection are specified in the "Technical specifications" section in the user manual. If the current of the fuse is less than 10 Amperes, please have a qualified electrician install a 10 Ampere fuse.
- The specified voltage must be equal to your mains voltage.
- Do not make connections via extension cables or multi-plugs.
- The main fuse and switches must have a contact distance of minimum 3 mm.



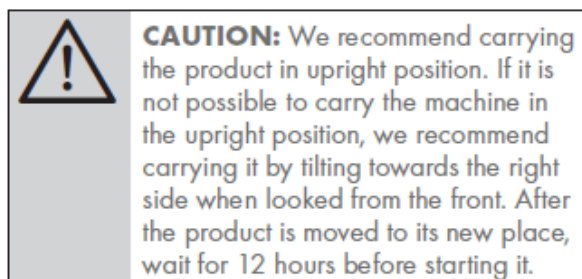
Inappropriate Extension Cable Usage

- When wearing or crushing is encountered on the power supply cord, it should not be repaired, it should only be replaced with the new one.



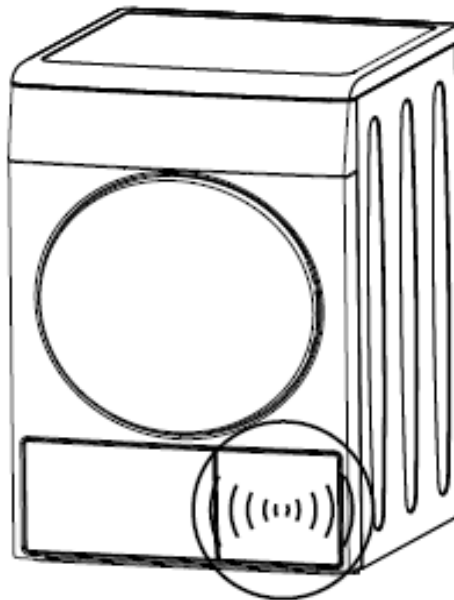
5.7. Transportation of the Product:

- Unplug the product before transporting it.
- Remove the water drain (if any) and chimney connections.
- Drain the water in the product completely.

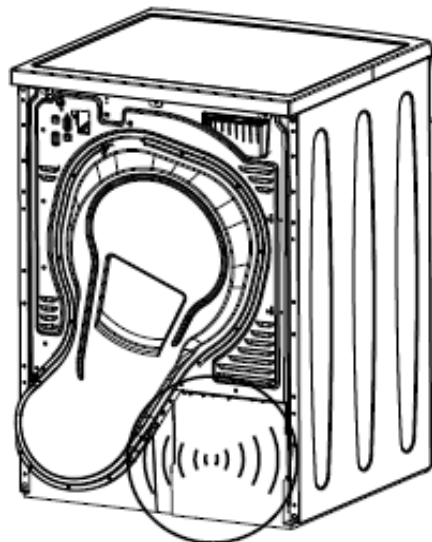


5.8. Warnings related to sound:

It is normal to hear a metallic noise sometimes from the compressor during operation.



Water collected during operation is pumped to water tank via water pump. It is normal to hear pumping noise during this process.



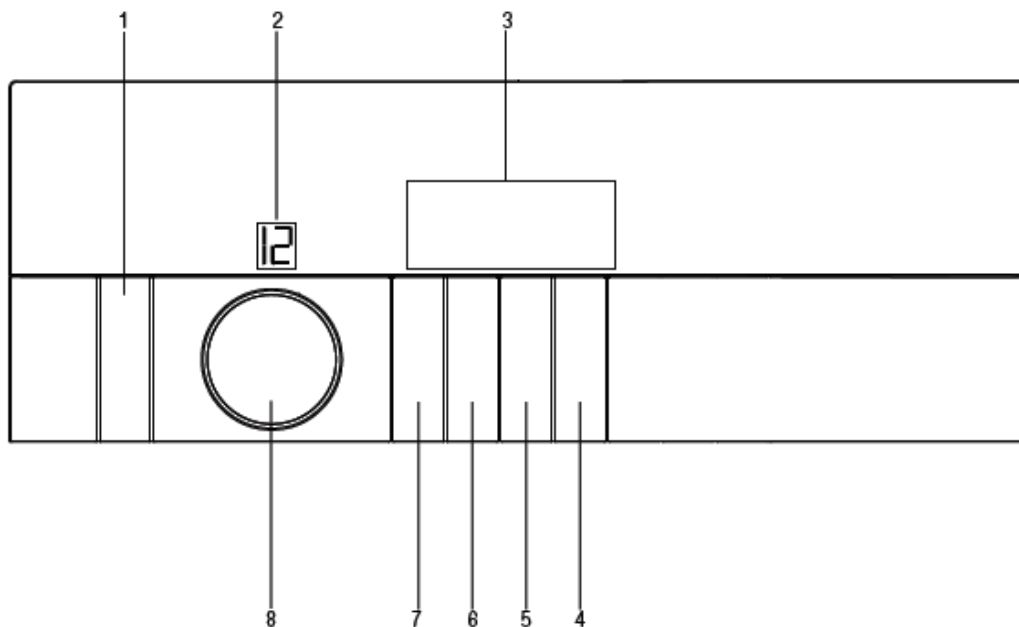
6. Operating the Product:

6.1. Preparation:

Before operating the product, the user should be informed referred to the preparation section (4th section) in the user manual. The important items for the preparation are given below:

- 6.1.1.** Laundry suitable for drying in the machine
- 6.1.2.** Preparing clothes to be dried
- 6.1.3.** Things to be done for energy saving
- 6.1.4.** Correct load capacity
- 6.1.5.** Loading the laundry

6.2. Control Panel:



- 1. On/Off/Cancel button
- 2. Programme number indicator
- 3. Display
- 4. Start/Pause Button
- 5. End Time Setting Selection Button
- 6. Audio warning level / Child lock button
- 7. Express Dry / Time Programmes button
- 8. Programme Selection Knob

Figure 6.1 Control Panel Buttons

6.3. Display Symbols:

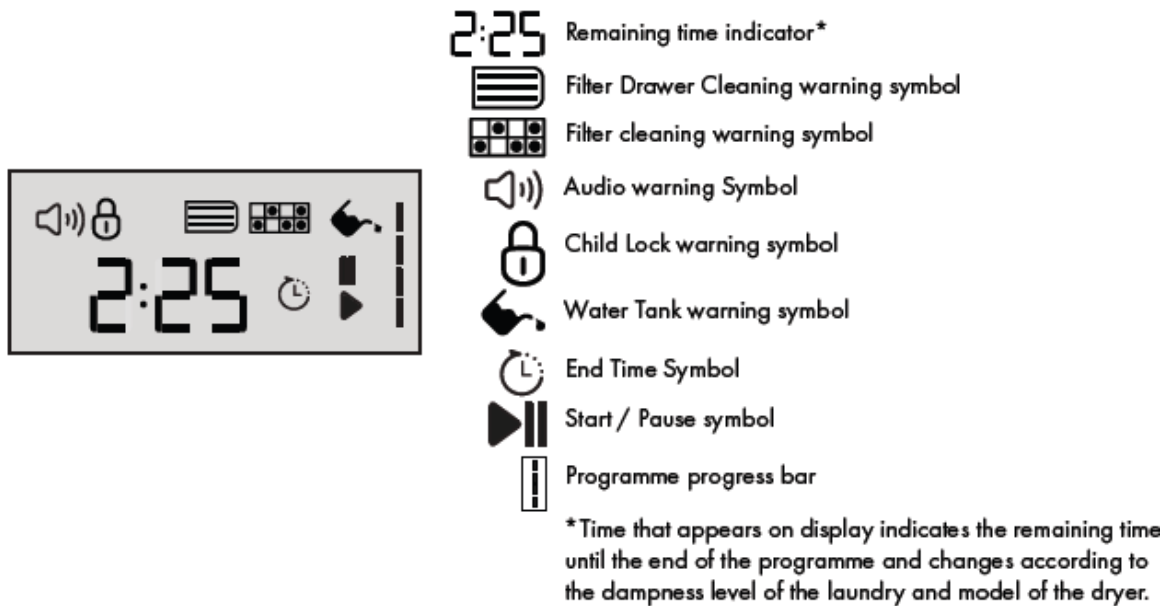
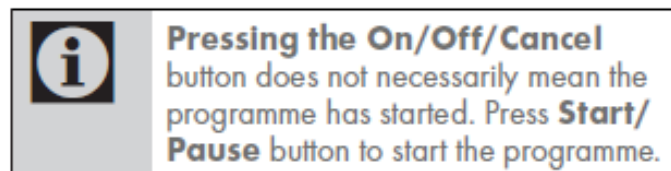


Figure 6.2 Explanation of the Display Symbols

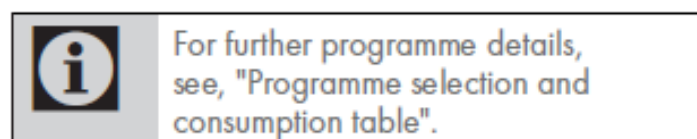
6.4. Preparing the Machine:

- Plug in the machine.
- Place the laundry in the machine.
- Press the On/off/cancel button for 1 second (long).
- When your machine is operated for the first time, it starts with the declaration programme (wardrobe dryness for cottons).



6.5. Programme Selection:

- Decide the appropriate programme from the table below which includes drying levels.
- Select the desired programme with the **Programme Selection** knob.



Extra Dry	Only the cotton laundry is dried at normal temperature. Thick and multi layered laundry (towels, linens, jeans and etc.) are dried in a way that they do not require ironing before being placed in the wardrobe.
Cupboard Dry	Normal laundry (tablecloths, underwear and etc.) are dried in a way that they do not require ironing before being placed in the wardrobe.
Cupboard Dry Plus	Normal laundry (E.g.: tablecloths, underwear) are dried in a way that they do not require ironing before placing in the drawers, but more than those in the ready to wear option.
Iron Dry	Normal laundry (shirts, dresses and etc.) are dried ready to be ironed.

6.6. Main programmes:

Depending on the fabric type, the following main programmes are available:

- **Cottons:**

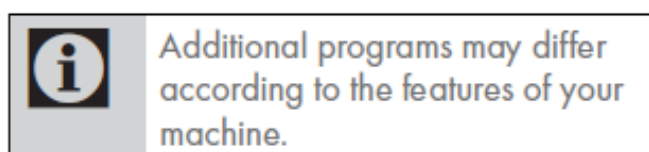
Dry durable laundry with this programme. Dries at normal temperature. It is recommended to use for your cotton items (bed sheets, quilt covers, towels, bathrobes, etc.).

- **Synthetics:**

Dry less durable laundry with this programme. Recommended for synthetics.

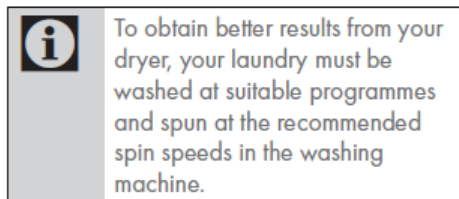
6.7. Additional programmes:

For special cases, following additional programmes are available in the machine.



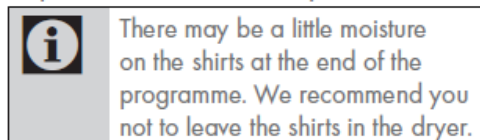
- **Bedding:**

- Dry fiber quilts with 'machine-dryable' label only. Make sure you are loading the quilt in the correct way to avoid damages on the machine and the quilt. Take out the quilt cover before loading the quilt in the machine. Fold the quilt in two before loading.
- Do not load more than 1 double-size fiber quilt (200x200 cm). Do not dry items containing cotton such as quilts, pillows and etc.
- Do not dry items other than quilts such as carpets, rugs or mats. Permanent damage may arise in your machine.



- **Shirt:**

This programme dries the shirts more sensitively and creases them less and thus, helps to iron them more easily.



- **Jeans:**

Use this programme to dry your jeans that are spun at high speeds in the washing machine.

- **Sportswear:**

Use this programme to dry together the synthetic and cotton laundry items and the laundry items made of mixed fabrics.

- **Wool refresh:**

Use this programme to ventilate and soften the woolen laundry that can be washed in the washing machine. Do not use to dry the laundry completely. Take out and ventilate the laundry immediately after the programme is over.

- **Daily:**

This programme is used to dry cottons and synthetics daily.

- **Shirt 30':**

Use this programme to make 2 shirts ready for ironing in 30 minutes.

- **Delicates:**

You can dry your highly delicate laundry (silk blouses, fine underwear, etc.) that are suitable for drying or laundry which is advised to be hand-washed at a lower temperature.



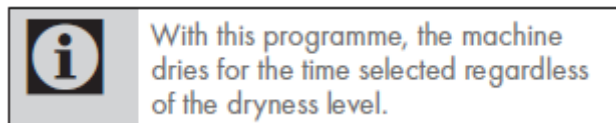
It is recommended to use a cloth bag to avoid certain delicate garments and laundry from getting creased or damaged. Take your laundry immediately out of the dryer and hang them after the programme ends in order to prevent them being creased.

- **Refresh:**

Only ventilation is performed for 10 minutes without blowing hot air. You can air the clothes that have been kept at closed environments for a long time and deodorize unpleasant odors thanks to this programme.

- **Timer Programmes:**

You can select one of the 10 min., 20 min., 30 min., 40 min., 50 min., 60 min., 80 min., 100 min., 120 min., 140 min. and 160 min. timer programmes to achieve the desired final drying level at low temperatures.



6.8. Programme selection and consumption table:

Programme	Kapazität (kg)	Schleudergeschwindigkeit Waschmaschine (U/min)	Ungefähre Restfeuchte	Trocknungszeit (Minuten)	Express Dry (Minuten)
Baumwolle/Buntwäsche					
 Extratrocken	8	1000	% 60	165	130
 Schranktrocken	8	1000	% 60	152	115
 Bügeltrocken	8	1000	% 60	124	95
Hemden	1,5	1200	% 50	50	35
Jeans	4	1200	% 50	117	85
Sportbekleidung	4	1000	% 60	105	70
Mini	4	1200	% 50	100	65
Bettdecken	2,5	1000	% 50	120	-
Wool Protect	1,5	600	% 60	146	-
Schonprogramm	2	600	% 40	50	-
Pflegeleicht					
 Schranktrocken	4	800	% 40	75	50
 Bügeltrocken	4	800	% 40	59	34
Energieverbrauchswerte					
Programme	Kapazität (kg)	Schleudergeschwindigkeit Waschmaschine (U/min)	Ungefähre Restfeuchte	Energieverbrauch in kWh	Express Dry (kWh)
Baumwolle, Leinen, schranktrocken*	8	1000	% 60	1,42*	2,33
Baumwolle, bügeltrocken	8	1000	% 60	1,15	1,99
Pflegeleicht, schranktrocken	4	800	% 40	0,51	0,87
Leistungsaufnahme im Aus-Zustand für das Standart-Baumwollprogramm bei Volllast, PO (W)					0,4
Stromverbrauch des linken-on-Modus für das Standart-Baumwollprogramm bei Volllast, PL (W)					1,0
Enthält vom Kyoto-Protokoll erfasste fluoridierte Treibhausgase. Hermetisch geschlossen. R134a / 0,520kg					

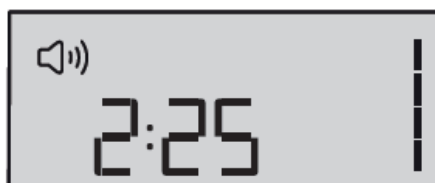
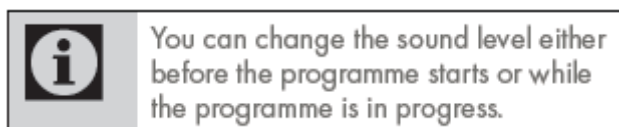
Table 6.1 Programme selection and consumption table:

All values given in the table have been fixed according to EN 61121:2012 Standard. This table is given as a reference. These values may deviate from the values in the table according to the laundry type, laundry spin speed, environmental conditions, voltage fluctuations and also the model of the dryer.

6.9. Auxiliary functions:

6.9.1. Audio Warning:

 The machine will give an audio warning when the programme comes to an end. Use the **Audio Warning Level** button to adjust the sound level.



6.9.2. Anti-creasing:

A 2-hour anti creasing program to prevent laundry from creasing will be activated if you do not take the laundry out after the program has come to an end. This programme rotates the laundry in 10-minute intervals to prevent creasing.

6.9.3. ExpressDry Button

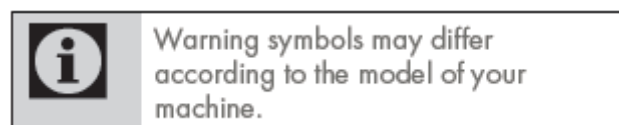
ExpressDry mode can be selected 10 of the programs. These are Jeans, Sportswear, Shirt, Mini, all cotton and all synthetics programs.

ExpressDry mode is not applicable for Bedding, Night, Delicate, Woolmark, Time and Refresh programs.

By using this function with the available programmes, programme duration will be shorten. Visuals are given below for the RapiDry button is activated and not respectively.

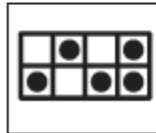
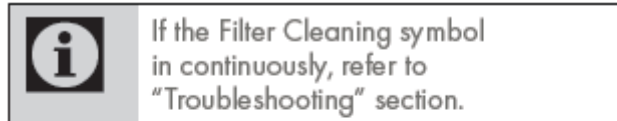


6.10. Warning symbols:



6.10.1. Lint filter cleaning:

When the programme is completed, a warning symbol will appear to remind that the filter needs to be cleaned.



6.10.2. Water tank:

When the programme is completed, a warning symbol will appear to remind that the water tank needs to be drained. If the water tank becomes full while the programme is running, the warning symbol will start to flash and machine will pause. Drain the water in the water tank and press **Start / Pause** button to resume the programme. The warning symbol turns off and the programme resumes operating.



6.10.3. Cleaning the filter drawer:

Warning symbol flashes with certain intervals to remind that the filter drawer needs to be cleaned.

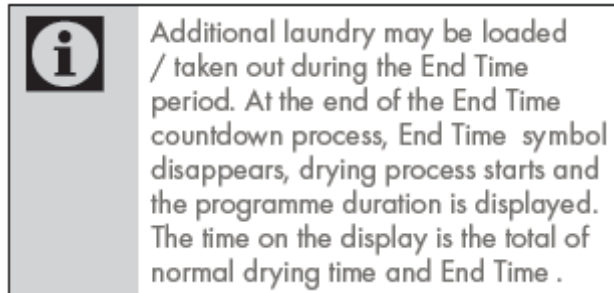


6.11. End Time Setting:

End Time Setting function allows you to delay the ending time of the programme up to 24 hours.

- Open the loading door and put the laundry in.
- Select the drying programme, spin speed and, if required, the auxiliary functions.
- Press **End Time Setting** selection button to set the desired **End Time Setting** symbol lights up on the display.(When the button is pressed and hold, End Time proceeds uninterruptedly).

- Press **Start/Pause** button. **End Time Setting** starts to count down. The “:” in the middle of the displayed **End Time Setting** will start to flash.



6.11.1. Changing the End Time:

If you want to change the time during countdown:

- Press **On/Off/Cancel** button for 3 seconds to cancel the programme. Restart the machine and repeat the End Time procedure for the desired time.
- When your machine is operated for the first time, it starts with the declaration programme (wardrobe dryness for cottons).

6.11.2. Canceling End Time Function:

If you want to cancel the End Time countdown and start the programme immediately:

- Press **On/Off/Cancel** button for 3 seconds to cancel the programme.
- Press **On/Off/Cancel** button to start the programme you have previously selected.

6.12. Starting the Programme:

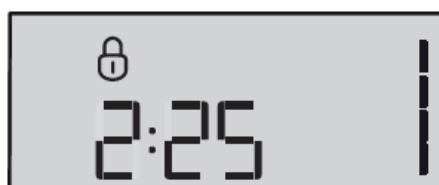
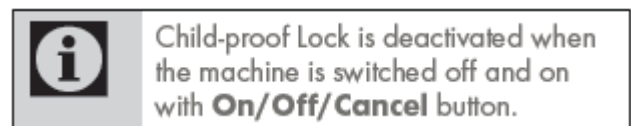
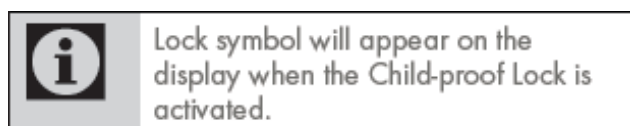
Press **Start/Pause** button to start the program.

Start ► symbol will light up to indicate that the programme has started and “:” symbol in the middle of the remaining time will keep flashing.

6.13. Child Lock:

Machine is equipped with a Childproof Lock which prevents interfering with the current programme flow by pressing any button. All buttons except the **On/Off/Cancel** button on the control panel are deactivated when the Child-proof Lock is active.

In order to activate the Childproof Lock, press Audio Warning, Child-proof button for 3



seconds. To start a new programme after the current programme is over or to interrupt the current programme, the Child-proof Lock should be deactivated. Press the same button for 3 seconds again **to deactivate the Child Lock**.

When the Child-proof Lock is activated:

Display symbols will not change even if the position of Programme Selection knob is changed while the machine is running or in halt.

If the Child Lock is deactivated after changing the position of the Programme Selection knob while the machine is running, the machine stops and new programme information is displayed.

6.14. Changing the programme after it has started:

After the machine starts, you can change the selected programme and dry your laundry in a different programme.

- If you want to select Extra Dry programme instead of Iron Dry programme, press the **Start / Pause** button for 1 second to stop the programme.
- Select Extra Dry programme by turning the Programme Selection knob.
- Press the **Start/Pause** button to start the program.

6.15. Adding / removing Laundry in Pause mode:

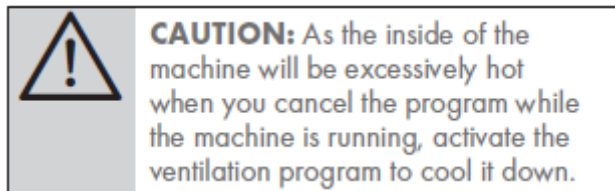
In order to add or take out laundry after the drying programme has started:

- Press Start/Pause button to switch the machine to Pause mode. Drying process will stop.
- While in Pause mode, open the loading door, add or take out laundry and close the loading door.
- Press the Start/Pause button to start the program.

	Any laundry added after the drying process has started may cause the clothes that are already dried in the machine intermingle with wet clothes and the result will be wet laundry after the drying process is over.
	You may repeat laundry adding or removing process as many times as you desire during drying. However, this process will increase the programme time and energy consumption since the drying process will be interrupted repeatedly. Therefore, it is recommended to add laundry before the drying programme has started.
	If you select a new programme by turning the Programme Selection knob while your machine is in Pause mode, then the current program is aborted and new programme information is displayed.
	CAUTION: Do not touch the inner surface of the drum when adding or taking out laundry while a programme is running. Surfaces of the drum are hot.

6.16. Canceling the programme:

If you want to stop drying and cancel the programme for any reason after the machine has started to run, press and hold the **On/Off/Cancel** button for 3 seconds.



6.17. End of Programme:

Lint Filter Cleaning and Water Tank warning symbols light up in the programme follow-up indicator when the programme comes to an end. The loading door can be opened and the machine becomes ready for a second cycle. Press **On/Off/Cancel** button to switch off the machine.

	2-hour Anti-creasing program will be activated if the laundry is not taken out after the program has come to an end.
	Clean the lint filter after each drying. (See "Lint Filter and Loading Door Inner Surface")
	Drain the water tank after each drying cycle. (See "Draining the water tank")

7. Maintenance and Cleaning:

7.1. Lint Filter / Loading Door Inner Surface:

Lint and fiber released from the laundry to the air during the drying cycle are collected in the Lint Filter.

	Such fiber and lint are generally formed during wearing and washing.
	CAUTION: Always clean the lint filter and the inner surfaces of the loading door after each drying process.
	You can clean the lint filter housing with a vacuum cleaner.

To clean the lint filter:

- Open the loading door.
- Remove the lint filter by pulling it up and open the lint filter.
- Clean lint, fiber, and cotton raveling by hand or with a soft piece of cloth.
- Close the lint filter and place it back into its housing.

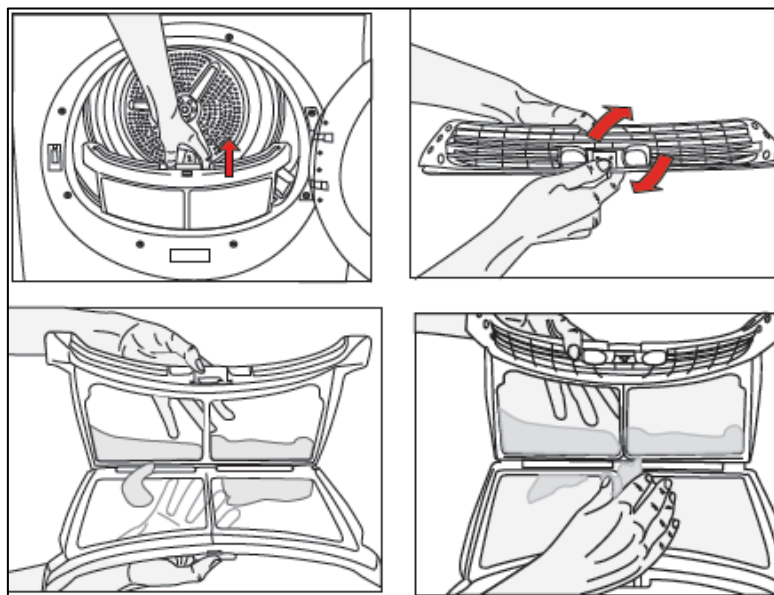


Figure 7.1 Cleaning the Lint Filter by Hand



A layer can build up on the filter pores that can cause clogging of the filter after using the machine for a while. Wash the lint filter with warm water to remove the layer that builds up on the lint filter surface. Dry the lint filter completely before reinstalling it.

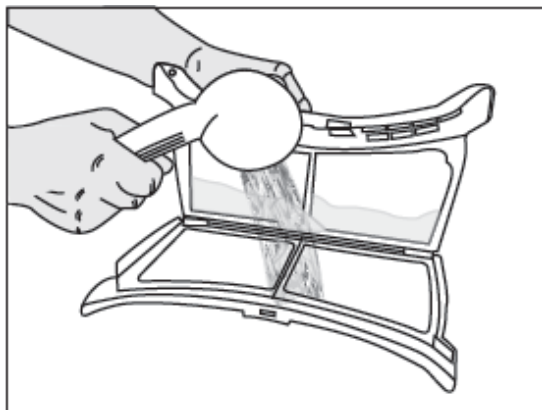
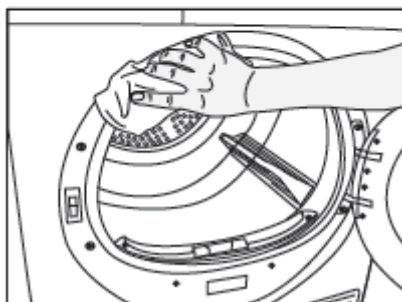
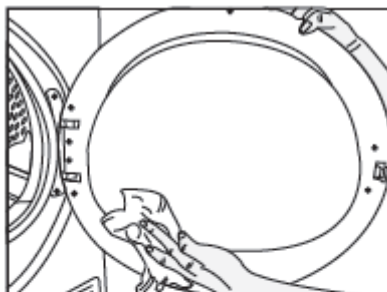


Figure 7.2 Washing the Lint Filter



Clean the entire inner surface of the loading door and loading door gasket.



*Figure 7.3 Cleaning the Loading Door
Inner Surface*

7.2. Cleaning the Sensors:

There are dampness sensors in the machine that detect whether the laundry is dry or not.

To clean the sensors:

- Open the loading door of the machine.
- Allow the machine to cool down if it is still hot due to the drying process.
- Wipe the metal surfaces of the sensor with a soft cloth, dampened with vinegar and dry them.

	Clean metal surfaces of the sensors 4 times a year.
	Do not use metal tools when cleaning metal surfaces of the sensors.
	CAUTION: Never use solvents, cleaning agents or similar substances for cleaning due to the risk of fire and explosion!

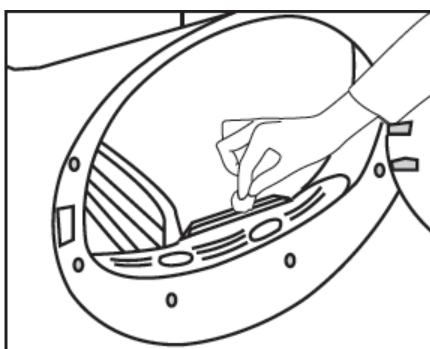


Figure 7.4 Cleaning the Sensors

7.3. Draining the water tank:

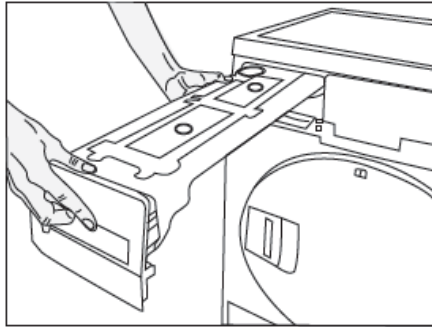
Dampness of the laundry is removed and condensed during drying process and the water that arise accumulates in the water tank. Drain the water tank after each drying cycle.

	CAUTION: Condensed water is not drinkable!
	CAUTION: Never remove the water tank when the program is running!

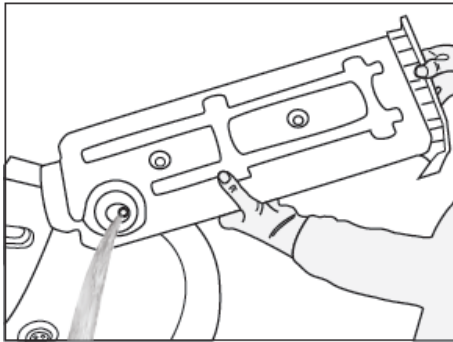
If you forget to drain the water tank, the machine will stop during the subsequent drying cycles when the water tank is full and the Water Tank warning symbol will flash. If this is the case, drain the water tank and press **Start / Pause** button to resume the drying cycle.

To drain the water tank:

- Pull the drawer and remove the water tank carefully.



- Drain the water in the tank.



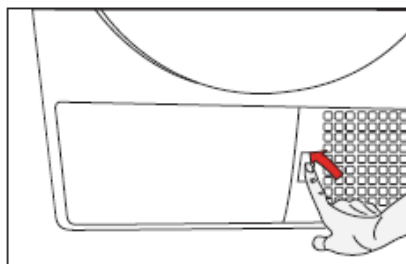
- If there is lint accumulation in the funnel of the water tank, clean it under running water.
- Place the water tank into its seat.

7.4. Cleaning the filter drawer:

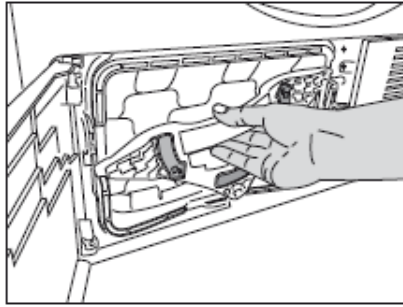
Lint and fiber that could not be captured by the lint filter are blocked in the filter drawer behind the kick plate. Filter Drawer Cleaning warning light will light up maximum at every 5 or 3 drying cycles as a reminder. There is a two-level filter in the filter drawer. The first level is the filter drawer sponge and the second level is the filter cloth.

To clean the filter drawer:

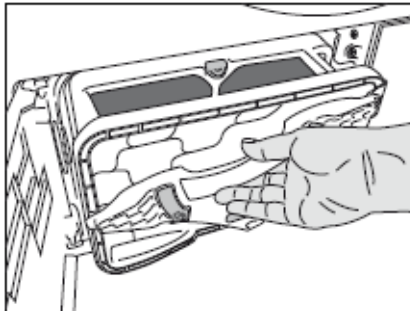
- Press the kick plate button to open the kick plate.



- Remove the filter drawer cover by turning it in the direction of arrow.



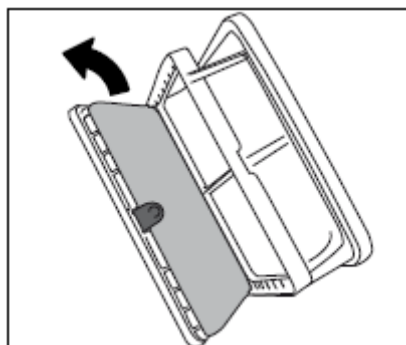
- Pull out the filter drawer.



- Open the filter drawer by pressing the red button.



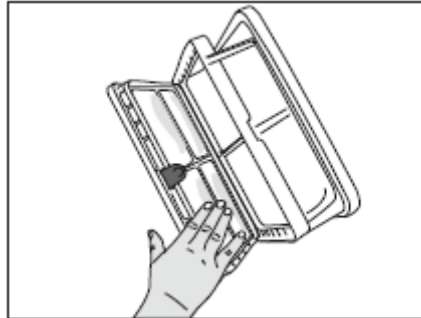
- Take out the filter drawer sponge.



- Clean lint, fiber, and cotton raveling on the filter cloth by hand or with a soft piece of cloth.



When you notice a layer that may lead clogging on the filter cloth, please clean the layer by washing in warm water. Let the filter cloth dry thoroughly before installing back the filter drawer.

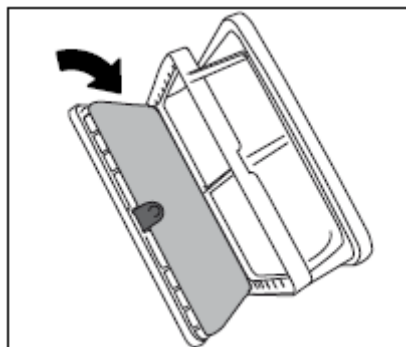


- Wash the filter drawer sponge by hand to remove the fiber and lint on the surface. After washing the sponge, squeeze it by hand and remove the excess water.



It is not necessary to clean the sponge if lint and fiber accumulation on it is not significant.

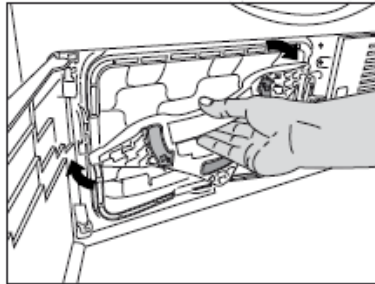
- Place the sponge back into its place.



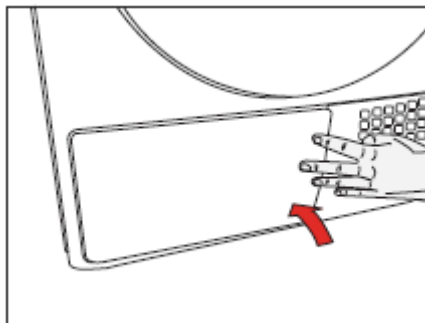
- Close the filter drawer as to lock the red button.



- Place the filter drawer back into its place, turn the filter drawer cover in the arrow direction and close it securely.



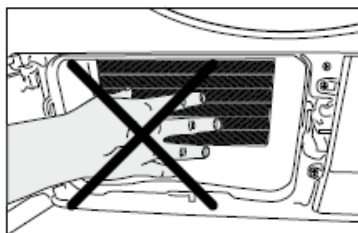
- Close the kick plate cover.



	CAUTION: Drying without the filter drawer sponge in place will damage the machine!
	A dirty lint filter and filter drawer will cause longer drying periods and higher energy consumption.
	A layer can build up on the filter pores that can cause clogging of the filter after using your machine for a while. Wash the lint filter with warm water to remove the layer that builds up on the lint filter surface. Dry the filter completely before using it.

7.5. Cleaning the evaporator:

Clean the lint accumulated on the fins of the evaporator located behind the filter drawer with a vacuum cleaner.



	CAUTION: You can also clean by hand provided that you wear protective gloves. Do not attempt to clean with bare hands.
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8. General Working Principle:

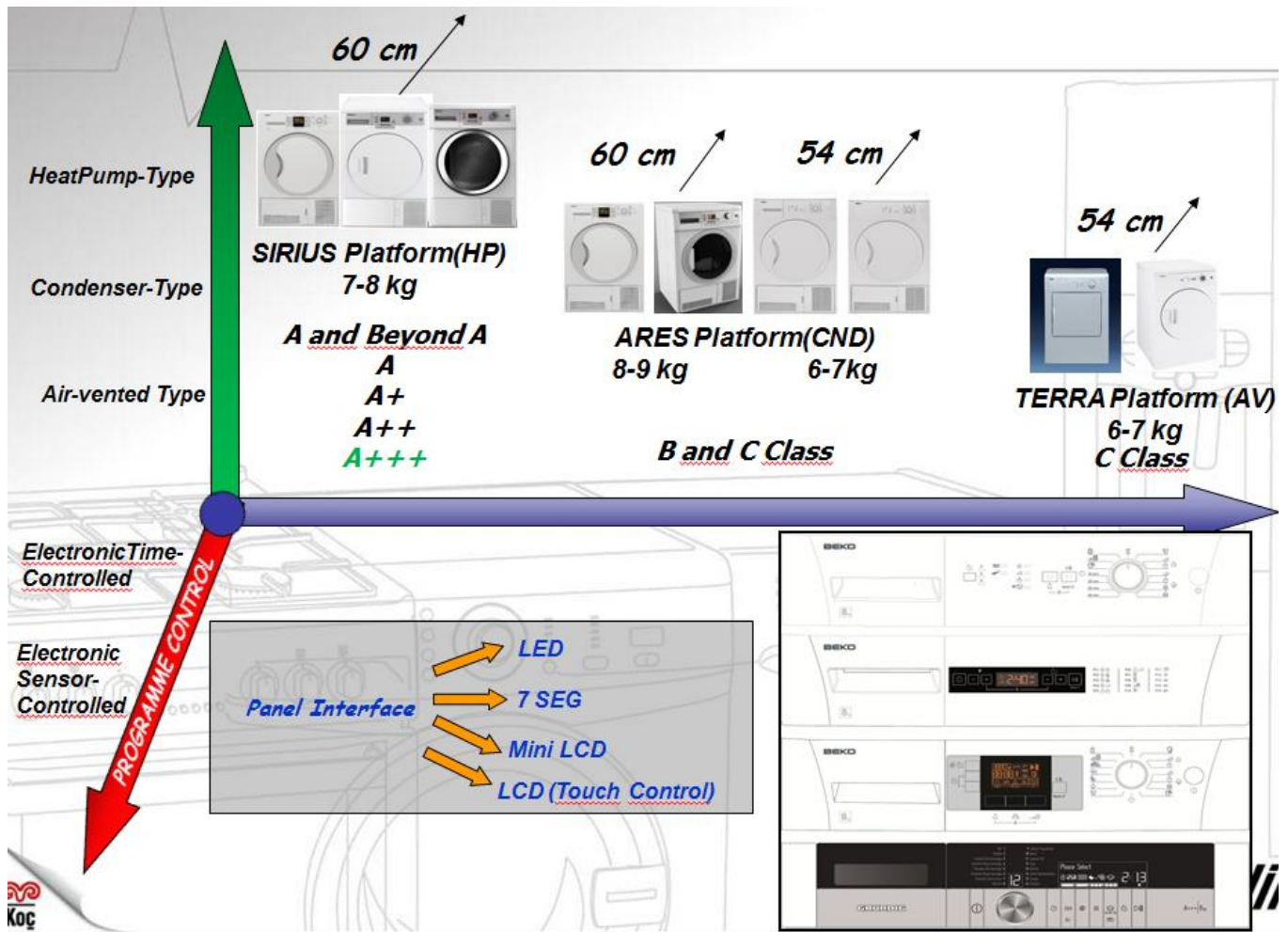
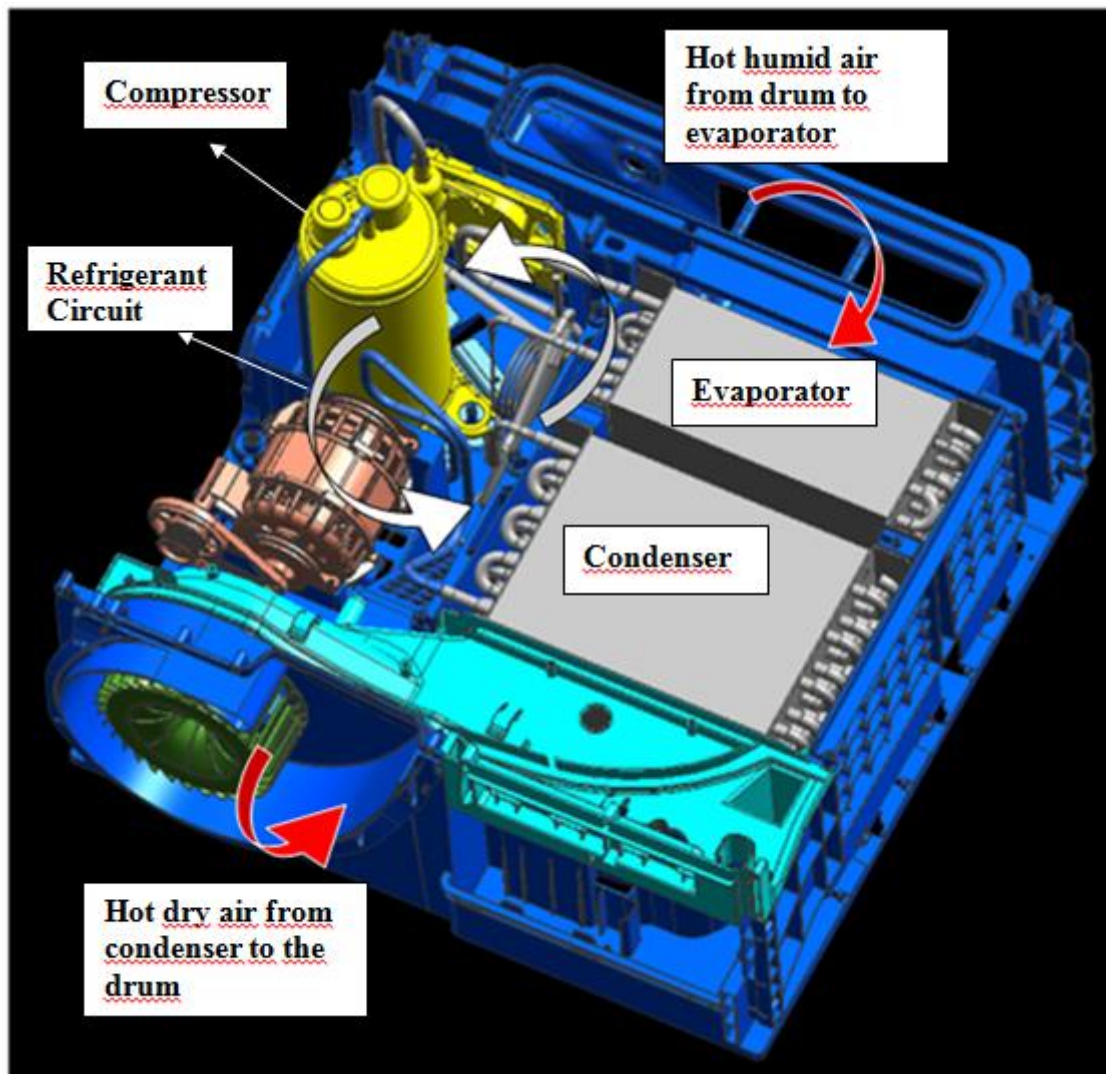
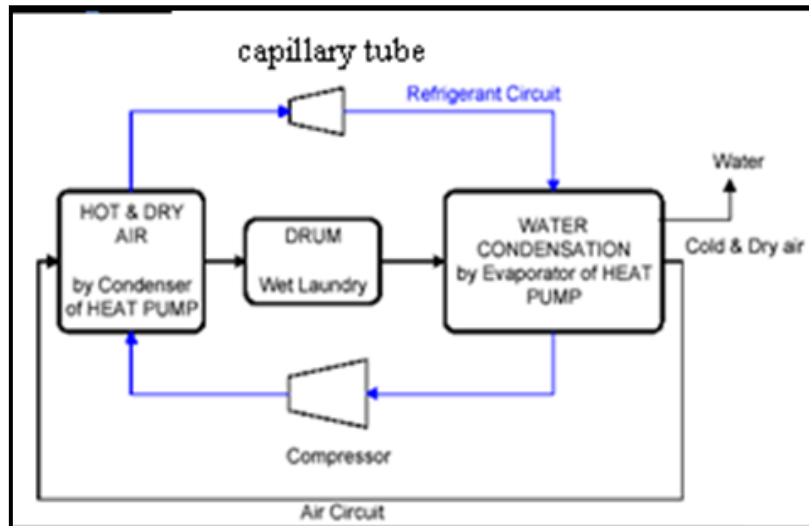


Figure 8.1. Tumble Dryer Product Specification

8.1. Heat Pump Dryer Working Principals:

The heat pump system is consisted of a compressor that pumps the refrigerant which transports the heat energy (**refrigerant circuit in the picture below**). The refrigerant is in vapor phase when it enters the hot heat exchanger so called condenser. The hot refrigerant is used to heat up the air by the condenser of the heat pump system. By giving its heat energy, the refrigerant cools down so that it is condensed, and leaves the condenser in liquid phase. The temperature of the refrigerant in the condenser of the heat pump system is decreasing from 90°C to 60°C in normal room conditions. After leaving the condenser, the refrigerant passes through a capillary tube that makes the refrigerant temperature even less, around 25°C. Then the refrigerant enters the cold heat exchanger so called evaporator. The refrigerant in the evaporator cools down the humid and hot air and the liquid refrigerant becomes vapor after getting energy and heating up to 35° C when it leaves and reenters the compressor. Besides that, the humid and hot air condenses in the evaporator, the water is collected and pumped to the water tank.





Since the temperature of the air that is used to dry the laundries is maximum around 70°C, the air leaves the drum at 45°C, which are almost half of the temperature of the air used in conventional. Due to air vented and condenser dryers, the heat pump dryers are more safer and gentile to laundry compared to conventional dryers. There are much lower risk of hot air injury when you open the door of the dryer while it is working to put extra items in it. The temperature of the cabinet is also much lower. Better drying efficiency within similar program times with lower temperatures is a visible indicator of the energy efficiency of the system.

8.2. Components Related to the Drying Cycle:

8.2.1. Temperature Sensor (NTC) :

Two NTC temperature sensor are used on electronic controlled dryers, one is located after the door filter in air suction channel, other is located on the copper tube at the outlet of the condenser. As the temperature of the surrounding of NTC increases, its resistance decreases. At fixed temperature NTC will always have a specified resistance within the tolerance. With the aid of this principle it operates until the desired temperature is reached.

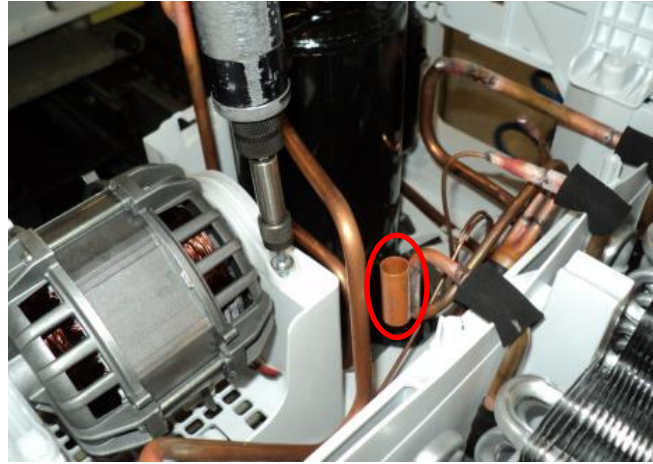


Figure 8.2. NTC located on the outlet of the condenser

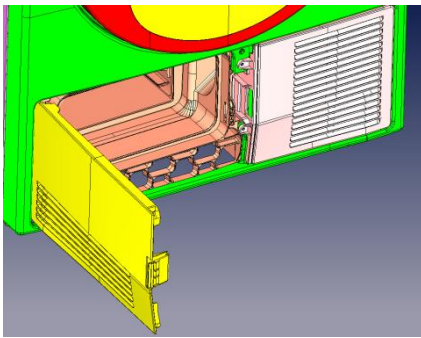


Figure 8.3. NTC located after the door filter in air suction channel

8.2.2. Humidity Sensor :

Humidity level will be measured by the resistance of clothes. With this property of the humidity sensor, it is possible to check and control the humidity level precisely. It is driven by microcontroller.

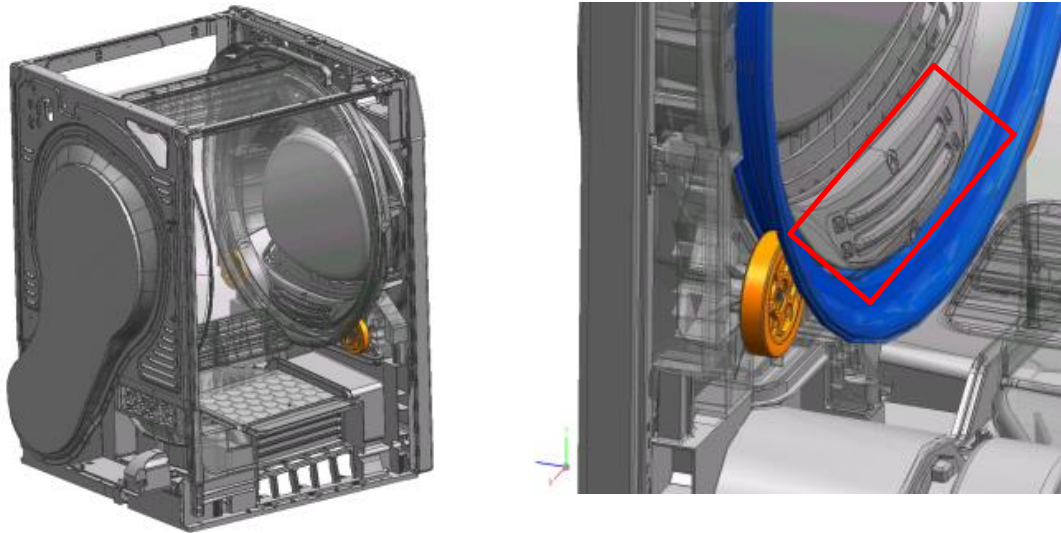


Figure 8.4. Humidity Sensor

8.2.3. Compressor (Rotary):

Heat pump system gets its energy from compressor. Rotary type compressor pressurizes the refrigerant and circulates it in heat exchangers. Compressor electrical input power is between 400W and 700 W due to the working conditions. Compressor has an overload protector which is sensitive both for Temperature and Current. The compressor has 1 phase asynchronous motor. *The technical specifications of the related compressors are given in the section 4.*

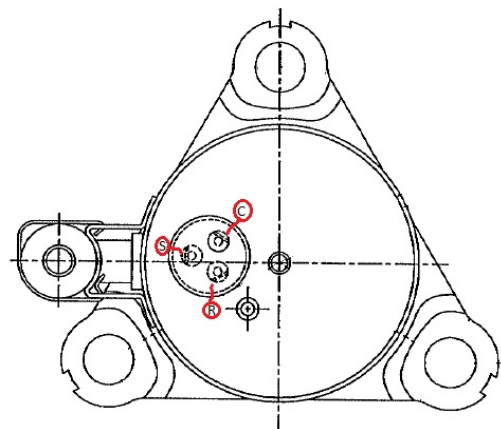


Figure 8.5. Rotary Type Compressor

8.2.4. Door Lock:

Locking and unlocking mechanism of the door lock used in the dryer is a mechanical type of the door lock. When the door pushed, the door is locked and the door is closed. When the pull from the handle of the door, it will be open with a suitable force. This mechanism is designed such that if a child is locked inside the dryer, the door can be opened from inner side. Especially, door lock and hinge should be checked if there is a locking problem.

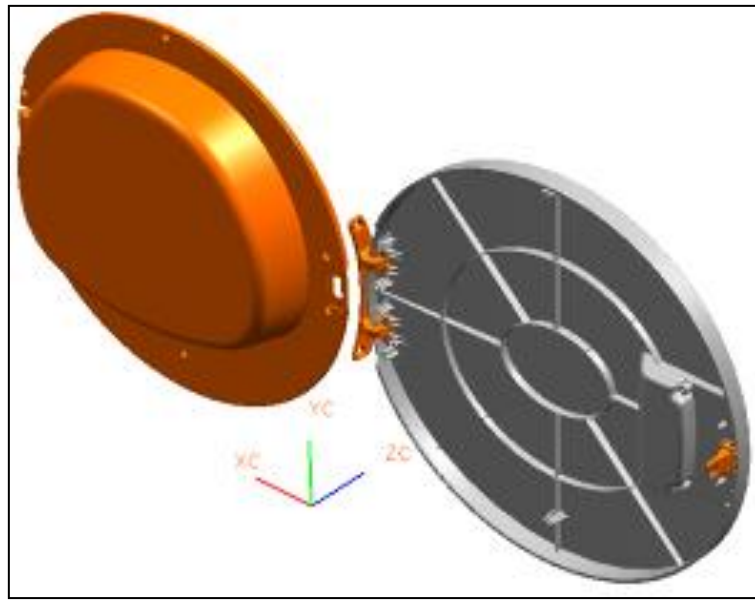


Figure 8.6. Door Lock

8.2.5. Door Microswitch:

The current is sent to electronic card and motor by the door switch. By this way when door is opened due to any reason, motor stops automatically. However because of EN&IEC safety rules, when the door is closed again, motor does not start. It is necessary to press start/pause button to restart dryer.

8.2.6. Motor :

Tumble and fan are driven by 1 pole induction motor. Motor rotates at 2750 rpm and has a 9 μ F capacitor. Asynchronous motor is controlled by two relays. One of them is for direction, other one is for energy. Two relays are embedded on the control panel. Asynchronous motor is used in the models of energy class A+ and A++ (A-50%).

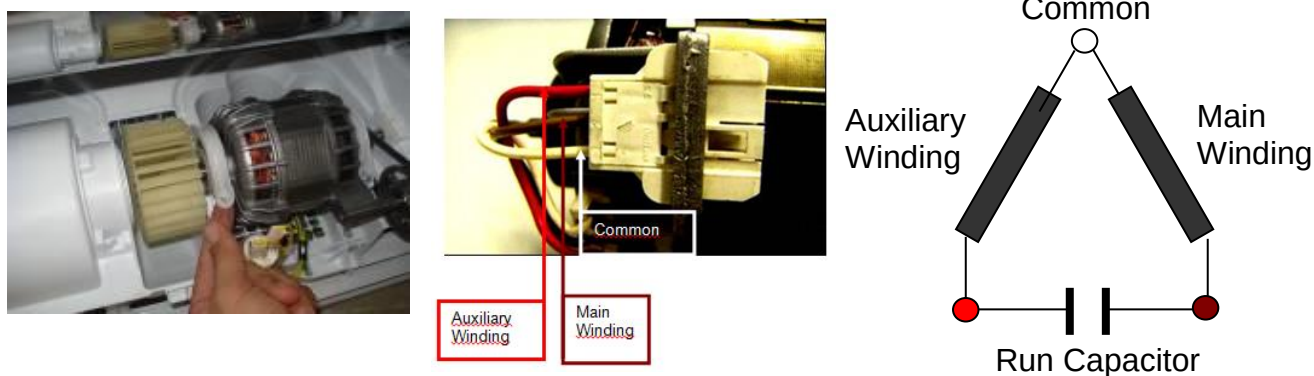


Figure 8.7. Asynchronous Motor

In the heat pump models with energy class of A++(A-60%) and A+++, the drum and fan are driven by brushless direct current (BLDC) motor. This motor communicates with the electronic board by the aid of the motor communication port.



Figure 8.8. BLDC Motor

9. Electronic Components:

9.1. Electronic Card Assembly:

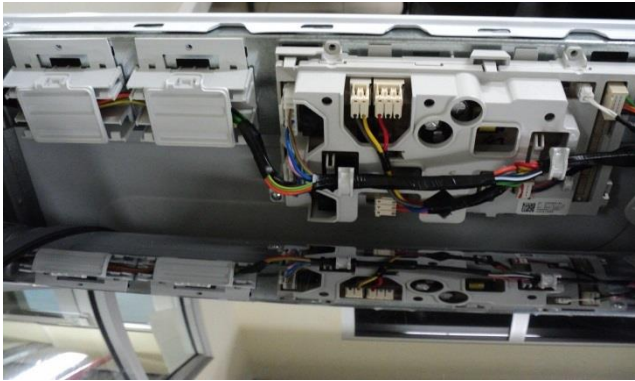
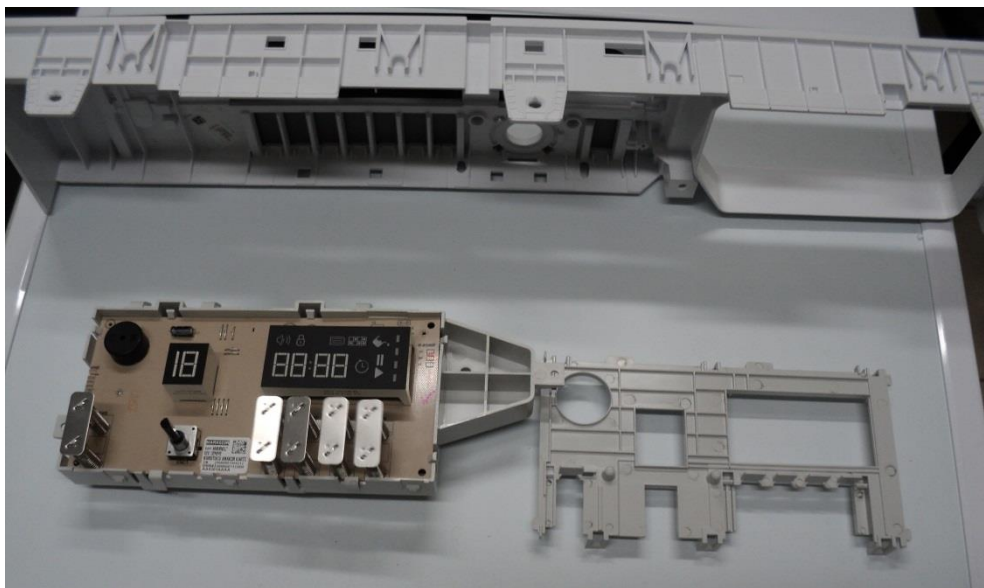
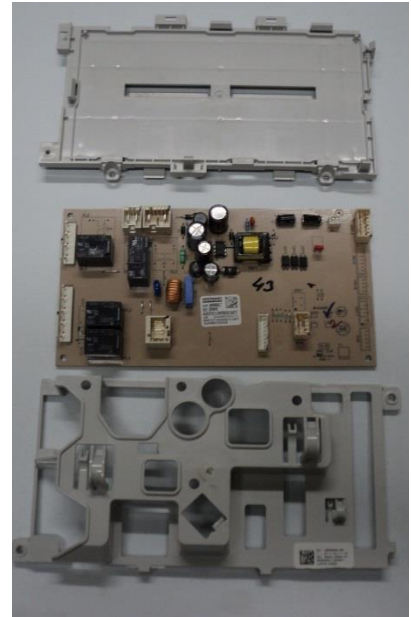


Figure 9.1. The Main Board Assembly



*Figure 9.2. The Display Electronic Card Assembly
(Grundig Better Models)*

Grundig Platform Heat Pump Tumble Dryers have two electronic cards. One of them is the main board located inside the right side panel and the other one is display electronic card which is behind the display and communicates with the main board via display communication port on the main board. On the display card, there are springs which provide the touch control for the buttons on the front panel.

The main board and the display electronic card assembly consist of the components below:

- Main Board
- The card holder of the main board
- Display Electronic Card
- The card holder of the display card

The components on the main board are illustrated in the below figure:

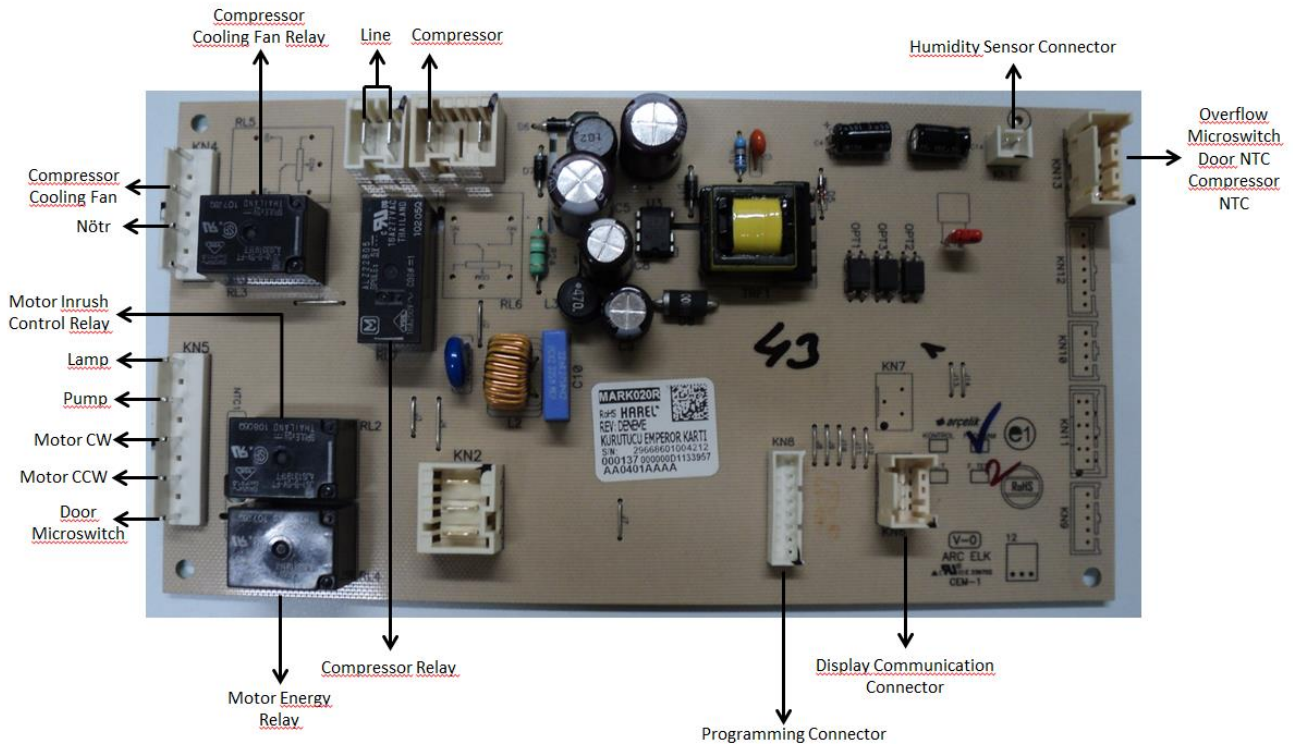


Figure 9.3. Components on the Main Board

10. Service Test Program:

Step 1: While pressing the audio warning level and the end time selection 1-2 seconds, then press the on/off button for 3 seconds to start the service test program. In this program start / pause button is used to pass other steps.



When the test program starts, all the icons are blinking.



Step 2: Start / Pause button is pressed and the software versions appear on the display. Main Board and Display Board software versions appear respectively.



Step 3: Start / Pause button is pressed. “18” and “88:88” light up and all the icons blink. Icon controls are made.



Step 4: Start / Pause button is pressed. The values of the door NTC (nt 02) and compressor NTC (nt 01) are shown on the display.



- If the compressor and / or door NTC is not read, “Error” appears on the display. (If NTC and/or Voltage Error occurs, it cannot be passed to the next steps and the motor does not rotate.)

Step 5: Start / Pause button is pressed. The compressor cooling fan activates. “Fn On” appears on the display. The fan should be controlled whether it suctions or not. When the cooling fan starts to run, it draws a current between 0,08A-0,18A @ 230V.



Step 6: Start / Pause button is pressed. The pump activates. **“Pu On”** appears on the display. If the condenser switch socket is not inserted, buzzer sounds and **“Err”** appears on the display for one second intervals. When the pump starts to run, it draws a current between 0,04A-0,1A @ 230V.



Step 7: Start / Pause button is pressed. Motor rotates clockwise and **“Dr rr”** appears on the display. When the asynchronous motor rotates CW, it draws a current between 0,65A - 1,2A @ 230V; when the BLDC motor rotates CW, it draws a current between 0,65A - 1,45A @ 230V.



Step 8: Make the sensor circuit by touching the sensor plate. Buzzer sounds for 3 seconds and **“Sc on”** appears on the display. Then it is checked that the sensor is short circuit. If the value does not appear in the display for 10 sec., it indicates an error and **“Sc:Er”** appears in the display. Step can not be passed, buzzer sound beep-beep. Lamp must be go out as soon as the door is closed.



Step 9: Start / Pause button is pressed. “**St oP**” appears on the display.



Step 10: Start / Pause button is pressed. Check if the sensor is open circuit. When the sensor value reaches to 18000adc, it means open circuit and “**So on**” appears on the display.



Step 11: Start / Pause button is pressed. The compressor starts, and the compressor NTC value (**nt 01**) appears on the display. When the compressor NTC temperature value reaches to 50-55°C, the compressor stops and “**CP on**” appears on the display. The compressor of the models with the energy class of A+ and A++ draws a current between

1,2A – 2,5A @ 230V, and the compressor of the models with the energy class of A+++ draws a current between 1,0A – 2,0A @ 230V.



Step 12: Start / Pause button is pressed. Motor rotates counter-clockwise (CCW) and “Dr LL” appears on the display. When the asynchronous motor rotates CCW, it draws a current between 0,65A - 1,2A @ 230V; when the BLDC motor rotates CCW, it draws a current between 0,65A - 1,45A @ 230V.



Step 13: Start / Pause button is pressed. The last 5 errors occurred appear on the display respectively starting from the last error.



Step 14: Start / Pause button is pressed. The test program will be exited and cotton cupboard dry program (program # 6) appears on the display.

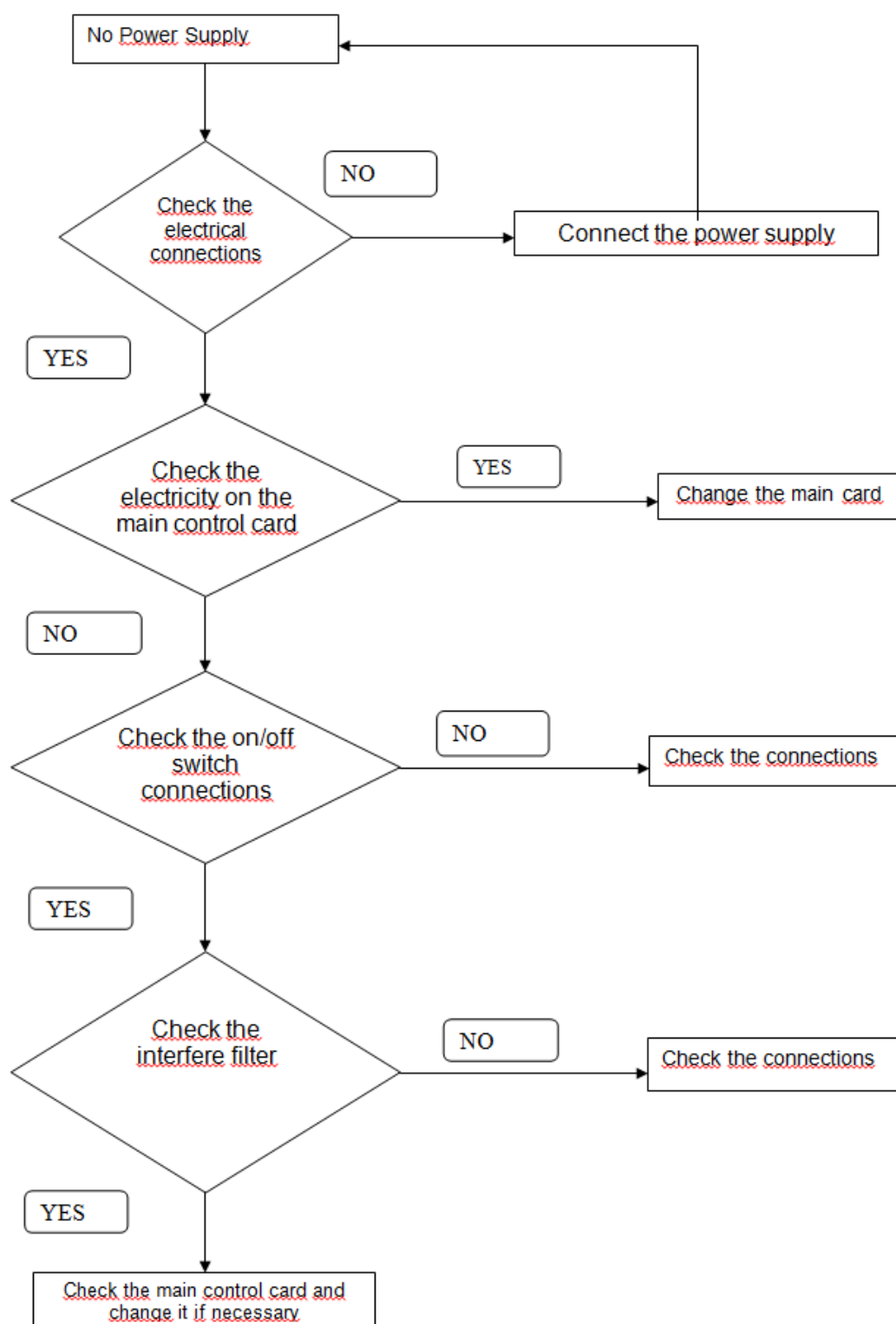


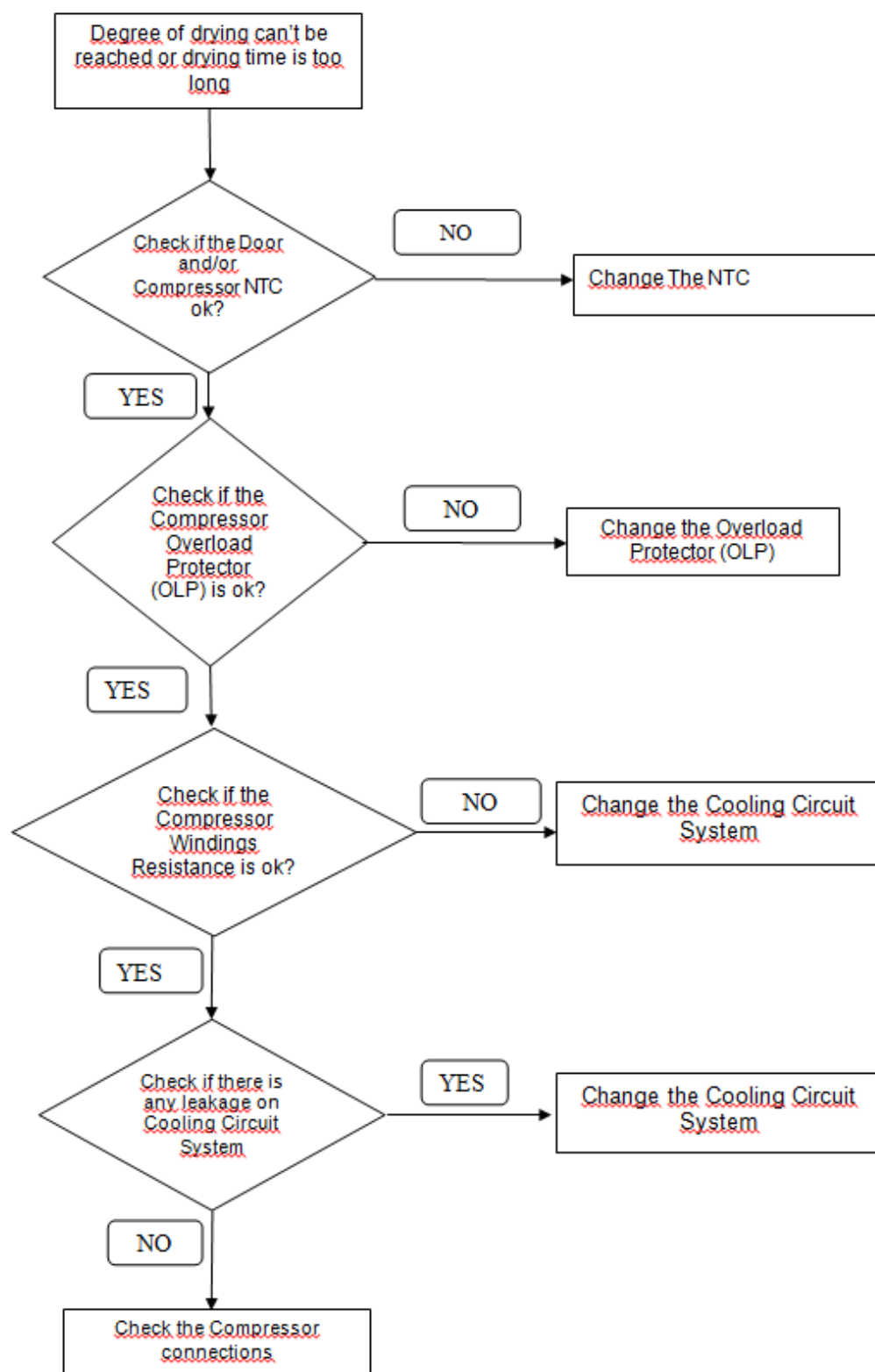
Error Codes:

Error Codes Definition
Er 01 : Door has opened during Run Mode
Er 02 : Overflow switch error
Er 03 : Not Applicable
Er 04 : If the door NTC exceed its limit °C compressor will stop for 5 minutes.
Er 05 : If the Compressor NTC exceed its limits, Compressor will stop 4 minutes for HP
Er 06 : Not Applicable
Er 07 : Not Applicable
Er 08 : If the Door NTC is open circuit.
Er 09 : If the Door NTC is short circuit.
Er 10 : If the Compressor NTC is open circuit.
Er 11 : If the Compressor NTC is short circuit.
Er 12 : If the humidity sensor drying programs reaches its maximum time limit. These limits; Cottons and Synthetics are 300 minutes.
Er 13 : If the drum is empty. (Only beginning of sensor drying programs)
Er 14 : Low Voltage Error (Lower than 165V)
Er 15 : High Voltage Error (higher than 265V)
Er 16 : Start button pressed when the door is open.
Er 17 : Door is open during running.
Er 18 : Communication Error (Main board, Display board)
Er 19 : Program finished by customer.
Er 20 : Start/Stop button pressed during running.
Er 21 : If the compressor stops in one cycle more than 6 times.
Er 22 : If the compressor stops in one cycle more than 40 times. Program finished automatically.
Er 40 : BLDC motor communication problem resetted
Er 41 : BLDC motor rpm is not at required level
Er 42 : BLDC motor rpm at minimum level
Er 43 : BLDC motor locked
Er 44 : BLDC motor reenergised
Er 56 : BLDC abnormal voltage
Er 57 : BLDC communication problem
Er 58 : BLDC motor is not working
Er 59 : BLDC motor no energy
Er 60 : If compressor NTC's value does not increase 10°C in first 6 minutes than heater stops and just compressor runs. (Just in Hybrid Programmes)

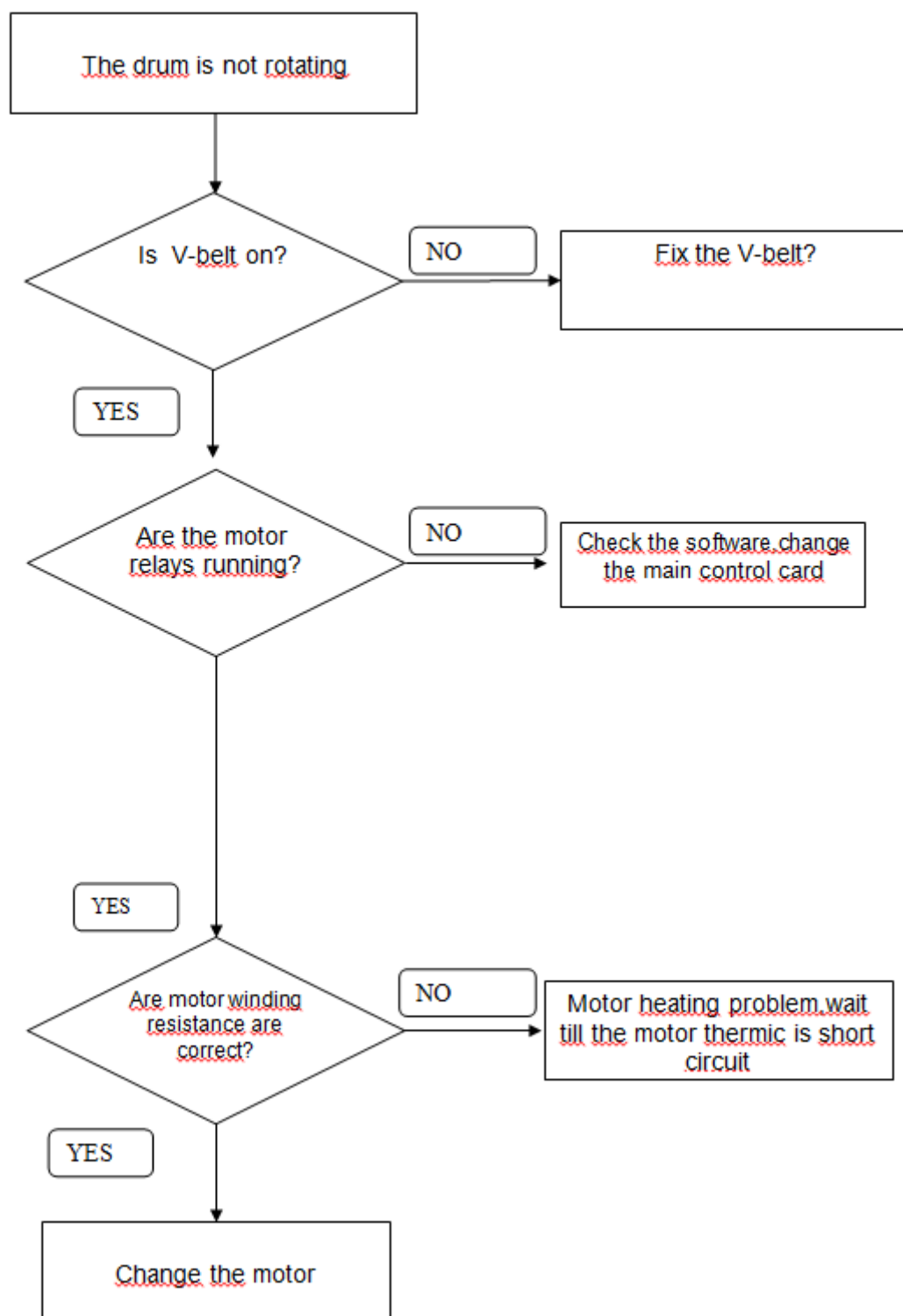
11. Faults Algorithms:

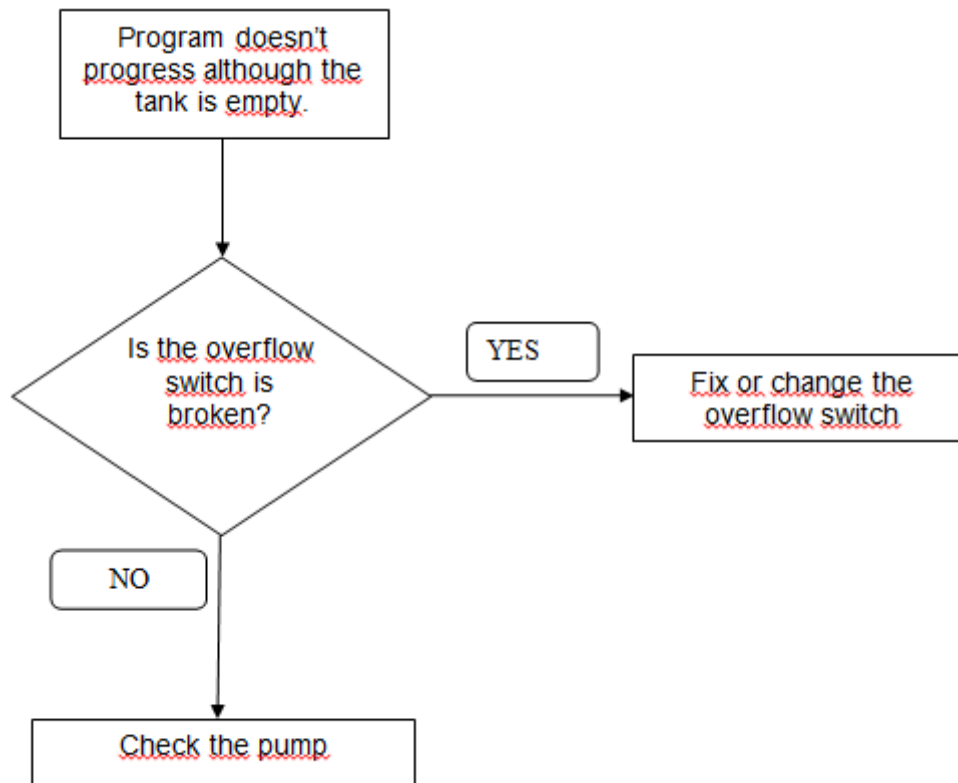
11.1. Machine Does Not Work:



11.2. Degree of Drying can not be reached or drying time is too long:

Cooling circuit system includes the compressor, copper tubes and the heat exchangers (condenser and evaporator)

11.3. Drum is not rotating:

11.4. Program does not progress although the tank is empty:

12. Wiring and Cable Schematics:

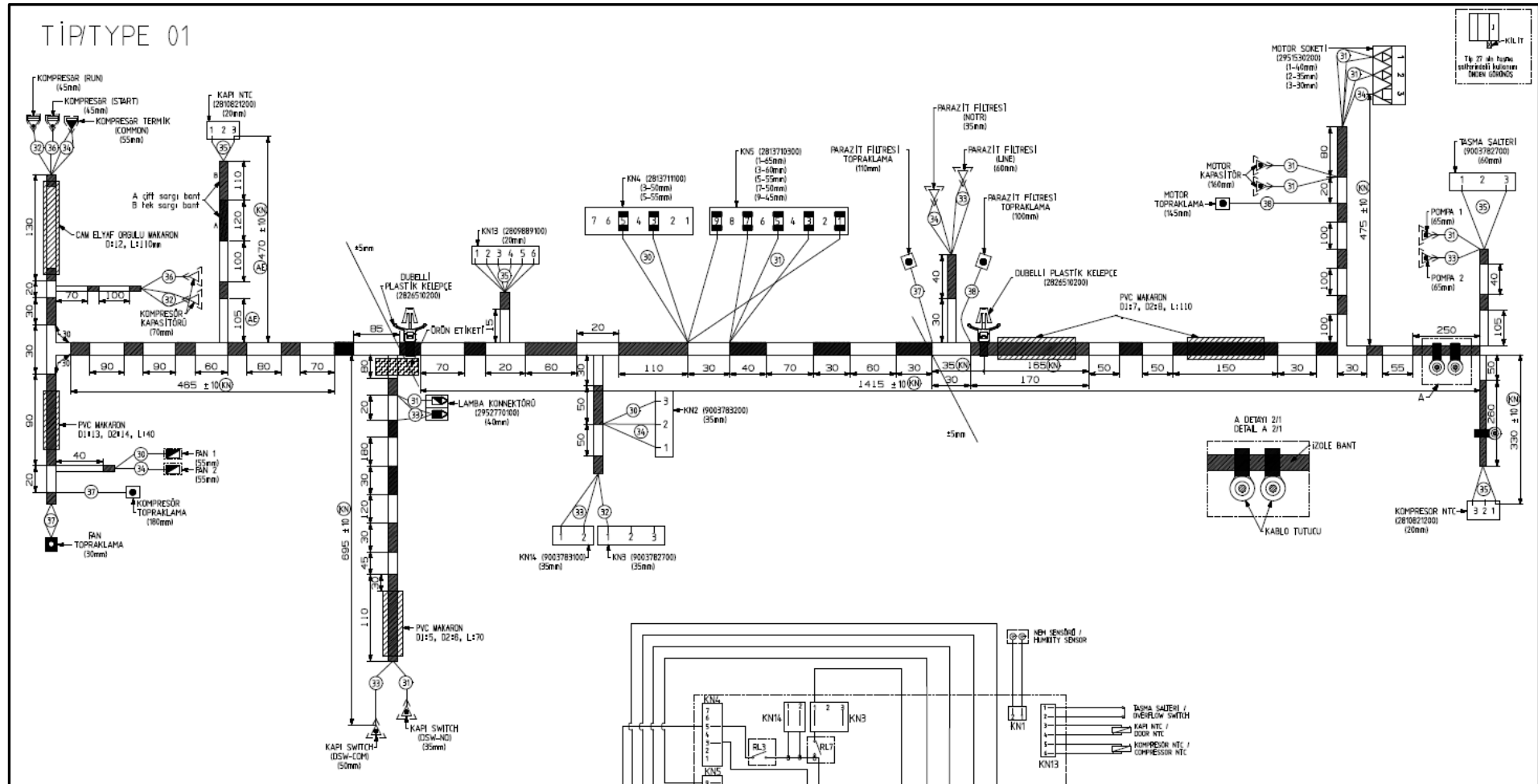


Figure 12-1: Cable Schematics (2984100100) – Heat Pump Models with Energy Classes A+ and A++(A-50%)

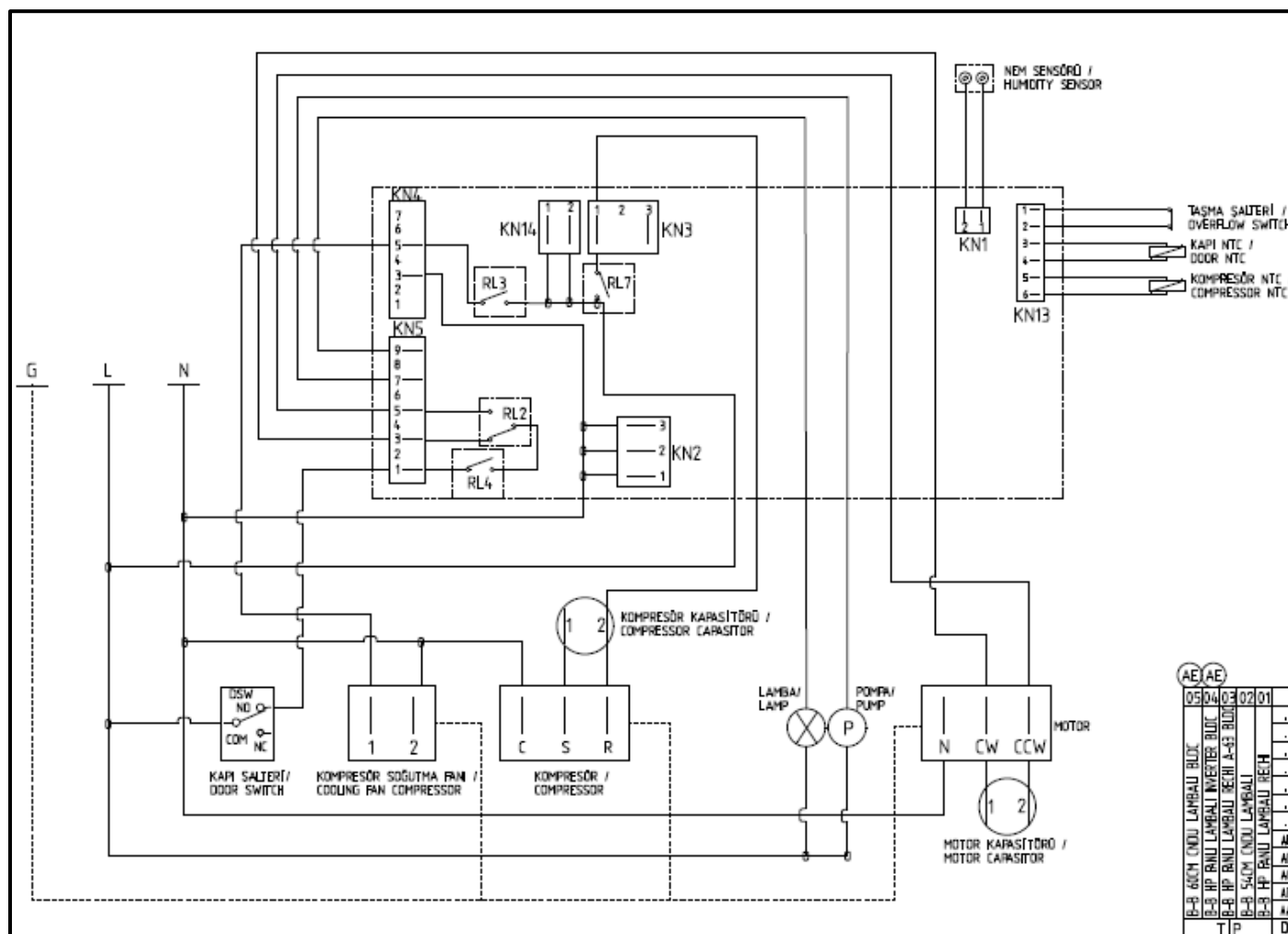
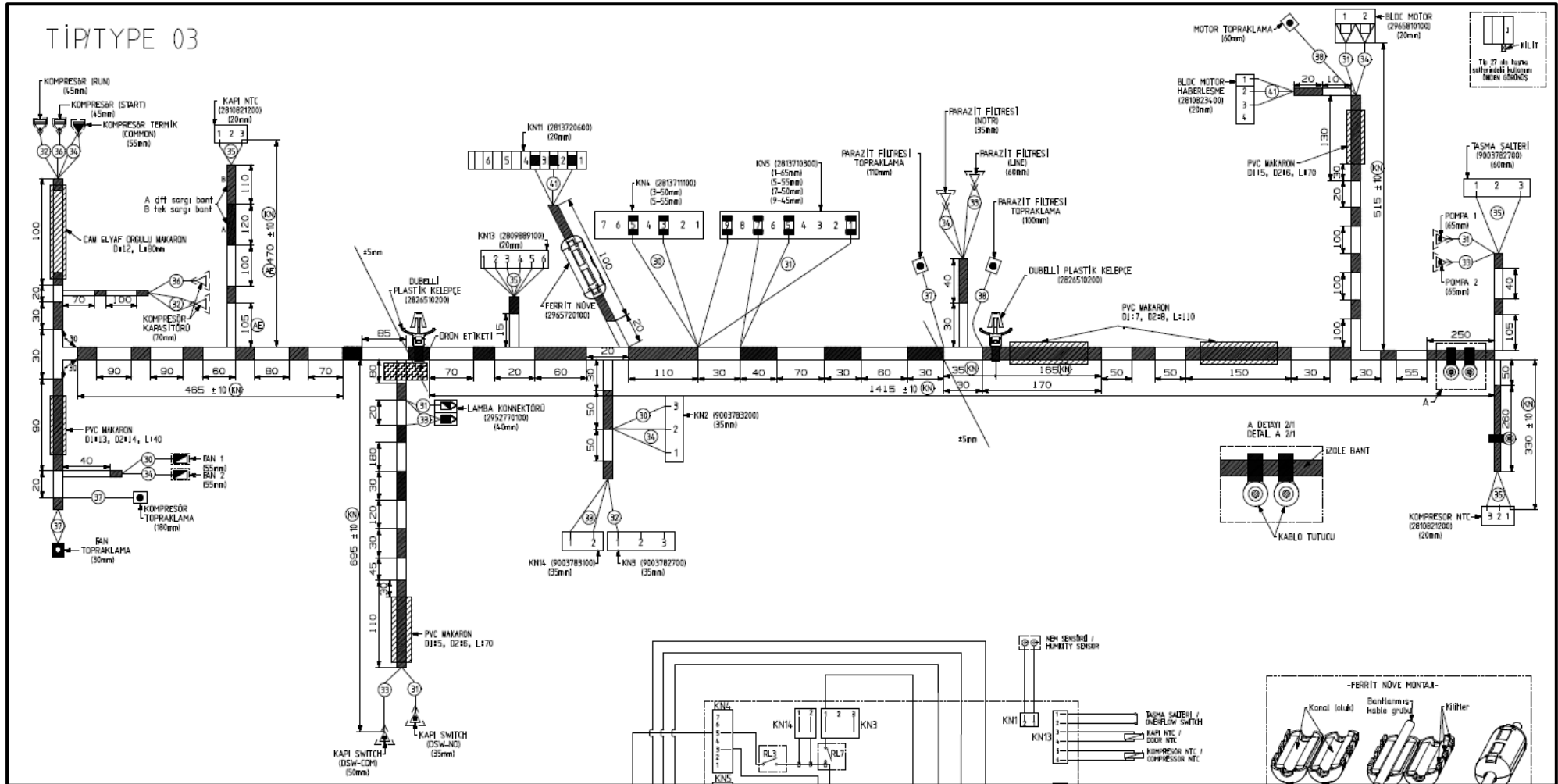


Figure 12-2: Wiring Schematics (2984100100) – Heat Pump Models with Energy Classes A+ and A++(A-50%)



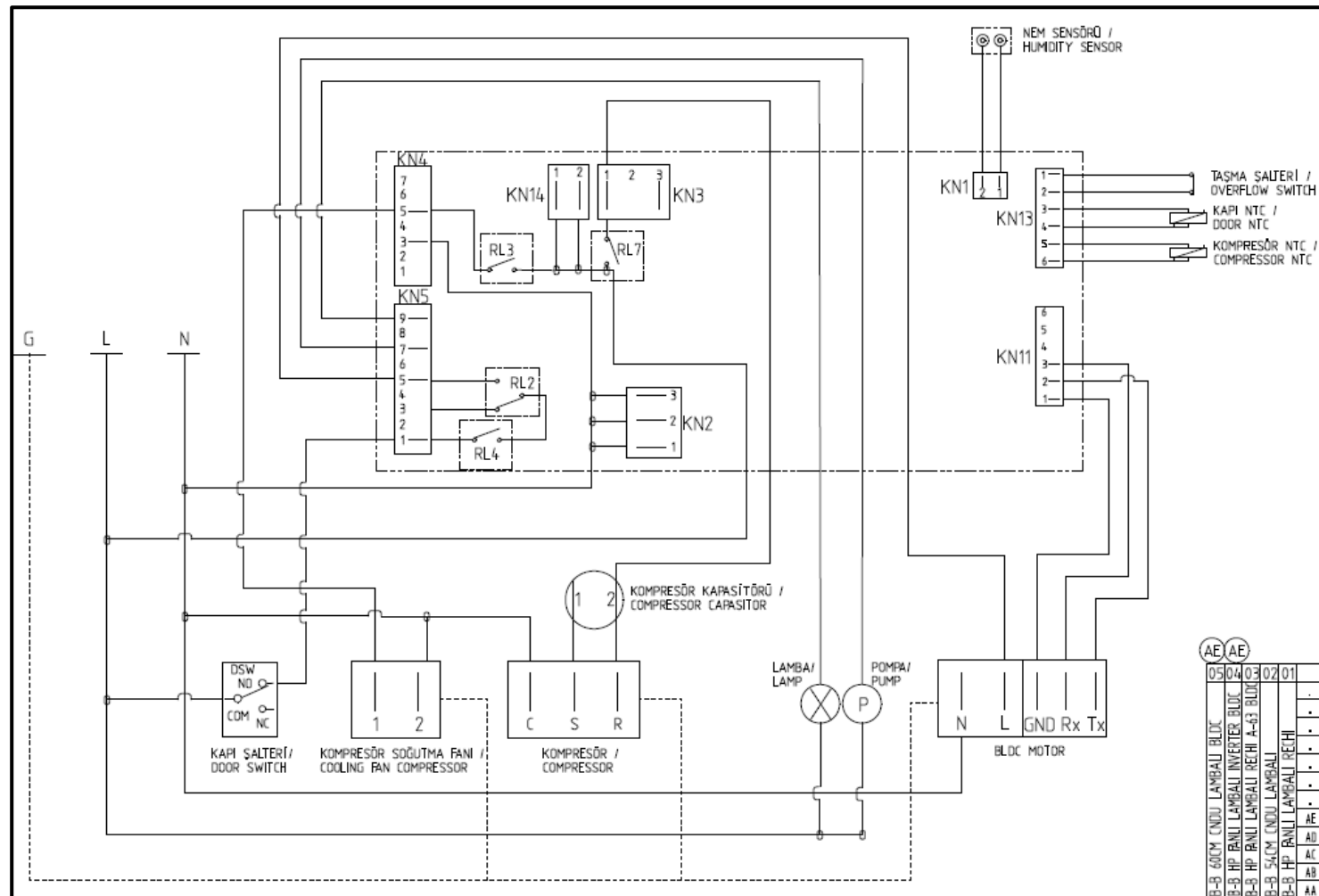


Figure 12-4: Wiring Schematics (2984100300) – Heat Pump Models with Energy Class A+++ (Without Inverter Compressor)

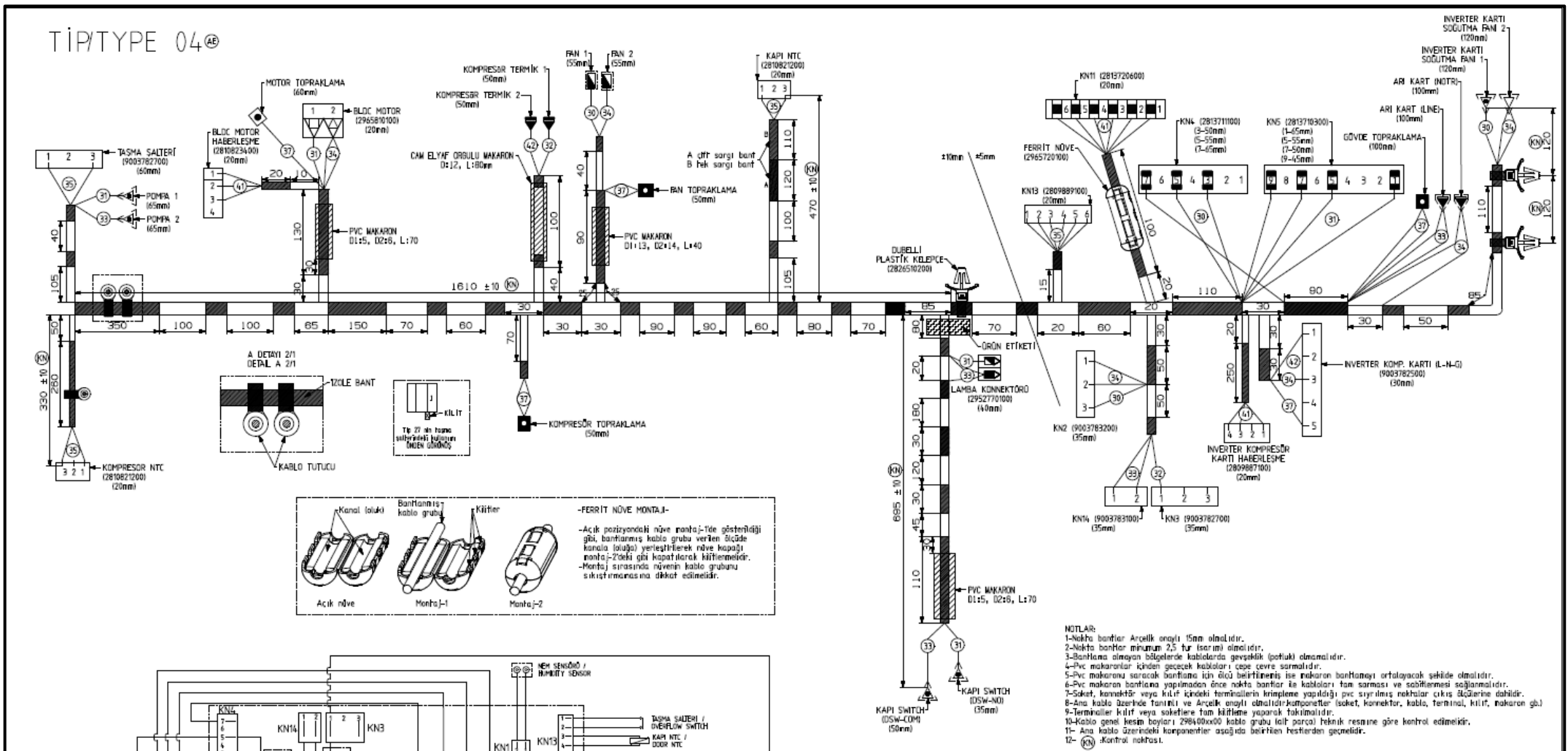


Figure 12-5: Cable Schematics (2984100400) – Heat Pump Models with Energy Class A+++ (With Inverter Compressor)

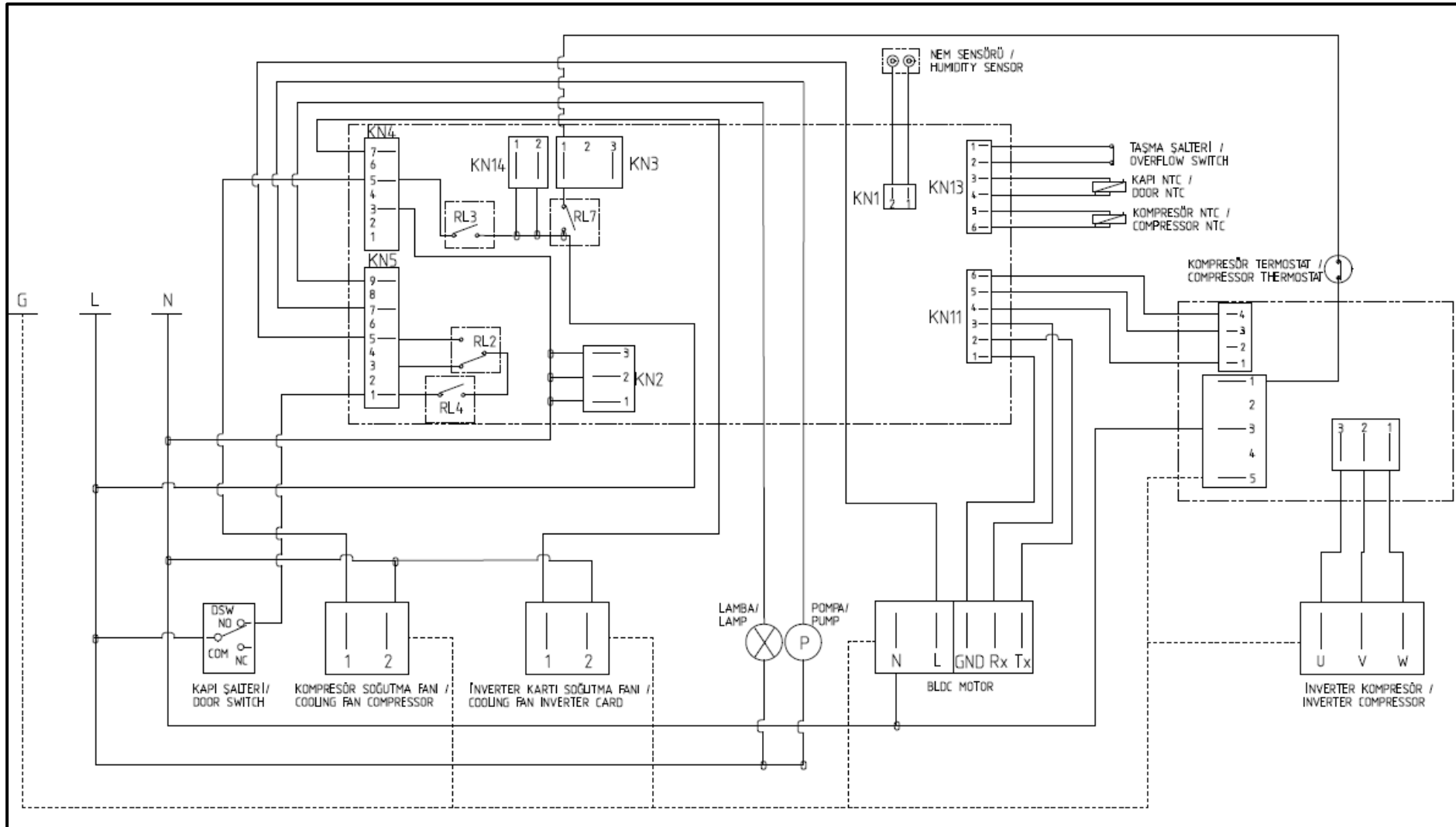


Figure 12-6: Wiring Schematics (2984100400) – Heat Pump Models with Energy Class A+++ (With Inverter Compressor)

13. Dismounting Details:

Figure 13.1. General View

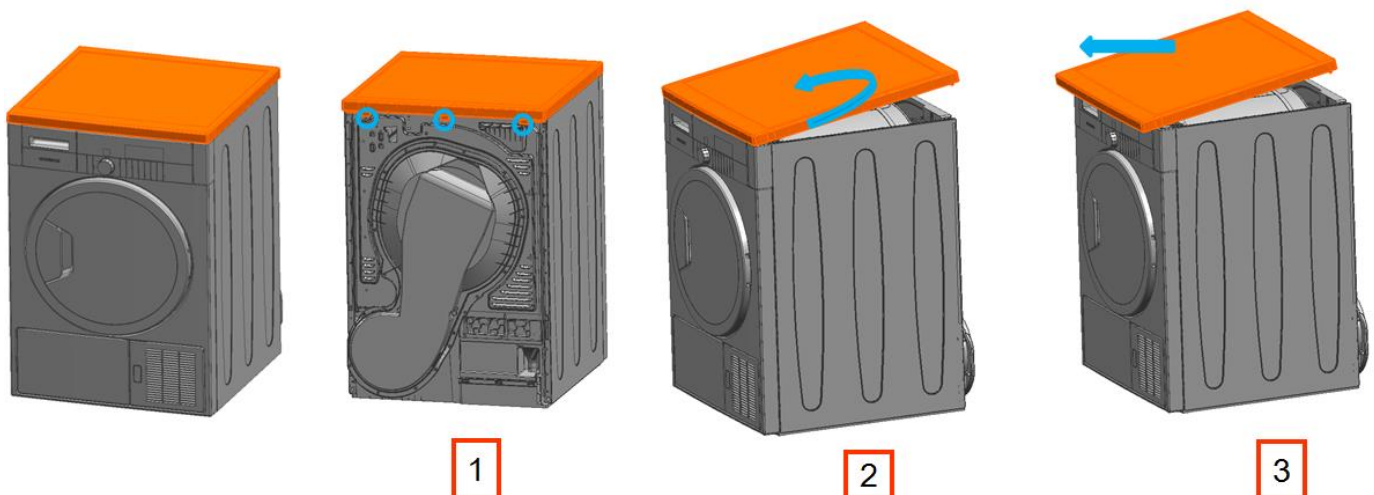
13.1. Top Plate:

Figure 13.2. Disassembling the top plate

- Unscrew the top plate.
- Remove the rear of the top plate from the rear wall.
- Push the top plate through the front of the machine.

13.2. Side Panel:

13.2.1. Side Panel / Side Support Bracket:

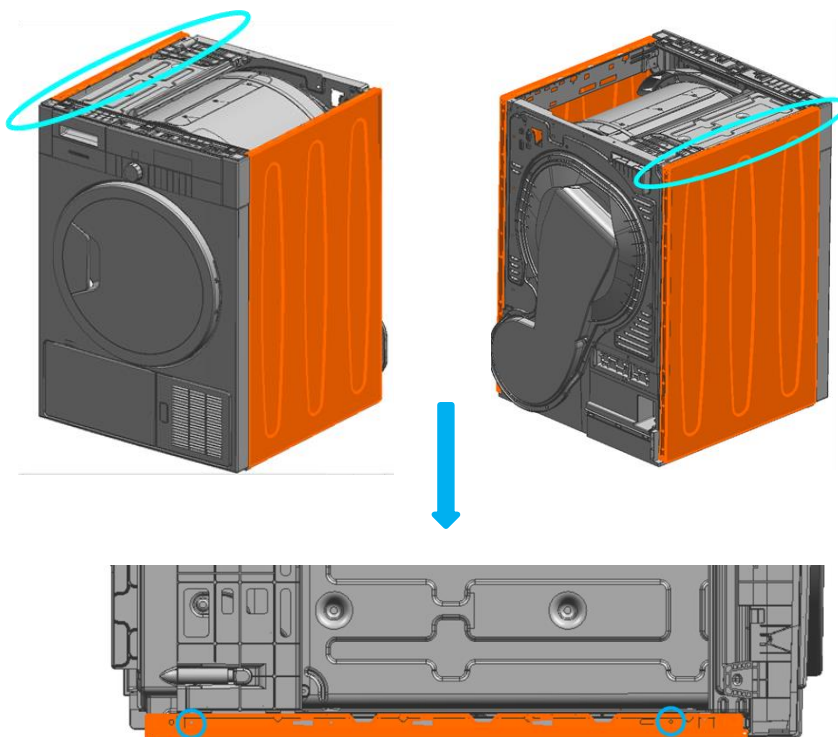


Figure 13.2. Screws between the side panel and side support bracket
(Water Tank Side)

- Remove the screws between the side panel and side support bracket.

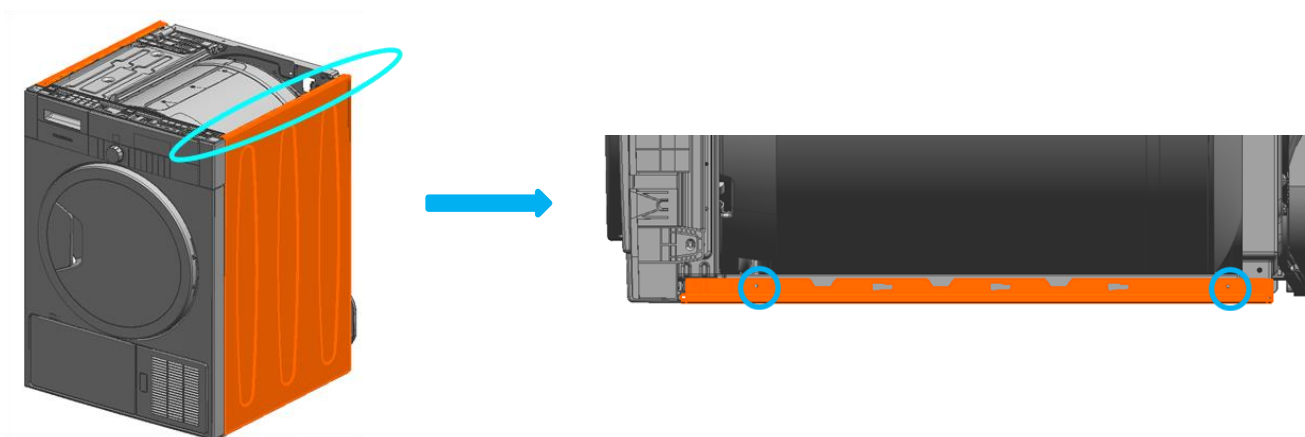


Figure 13.3. Screws between the side panel and side support bracket
(Drum Side)

- Remove the screws between the side panel and side support bracket.

13.2.2. Side Panel / Rear Panel:

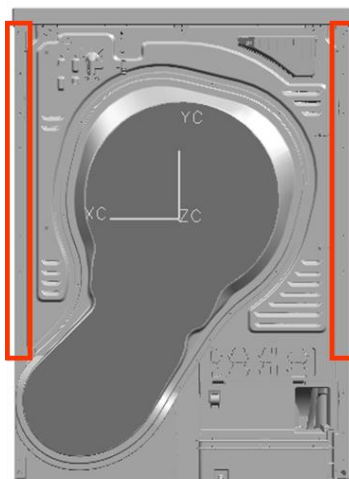


Figure 13.4. Connections between the side panel and the rear panel at the back side of the dryer

- Remove the screws as highlighted in the figure between the side panel and the rear panel.

13.2.3. Side Panel / Plastic Chassis Assembly:

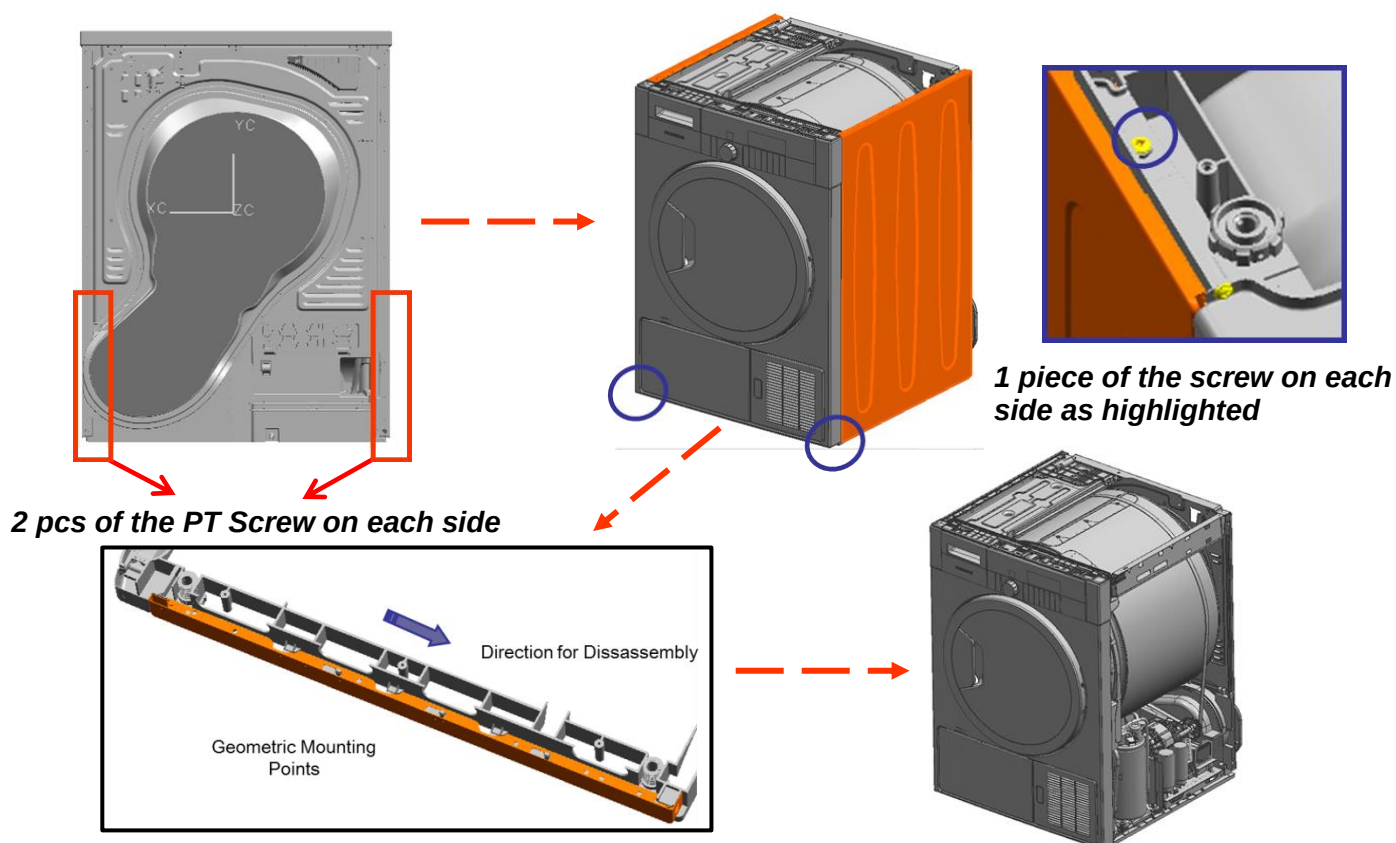


Figure 13.5. Connections between the side panel and the plastic chassis assembly

- Remove the 2 pieces of the PT screw on each side of the dryer as highlighted in the figure between the side panel and the plastic chassis.
- Remove the 1 piece of the screw on each bottom side of the dryer as highlighted in the figure.
- Disassemble the side panels from the geometric mounting points through the direction as shown in the figure.

13.2.4. Side Panel and Front Panel Connection:

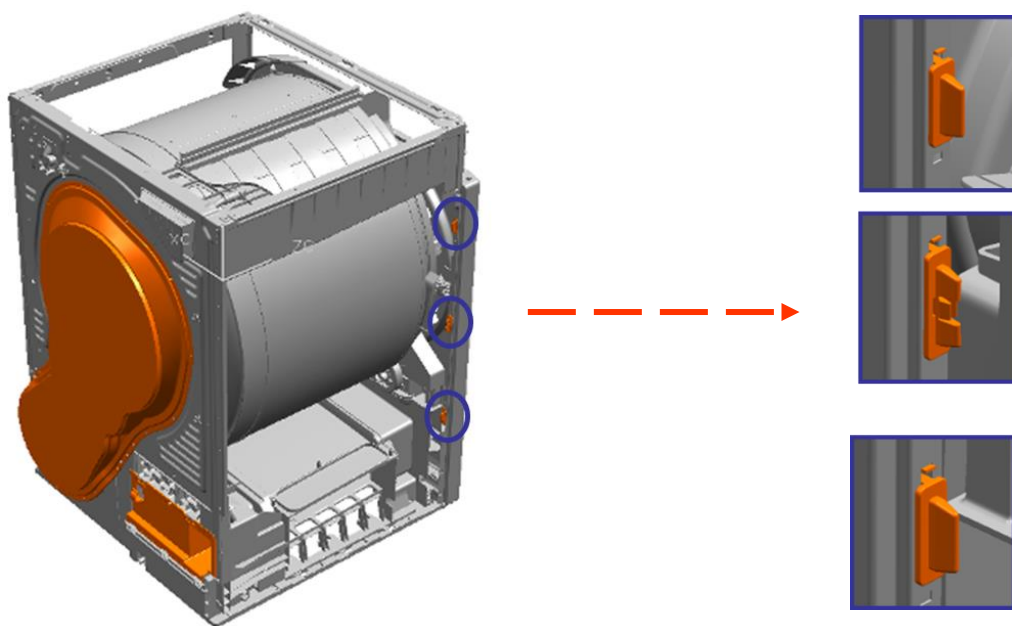


Figure 13.6. Coincident points between the front panel and side panel

- Dismount the coincident points between the front panel and the side panels.

13.3. Plastic Cover Mounting Points:



Figure 13.7. Connection points between the plastic cover - rear panel and plastic chassis

- Remove the 10 pieces of sheet screws between the plastic rear cover and the rear panel.
- Remove the 8 pieces of PT screws between the plastic rear cover and the plastic chassis.

13.4. Control Panel Assembly:

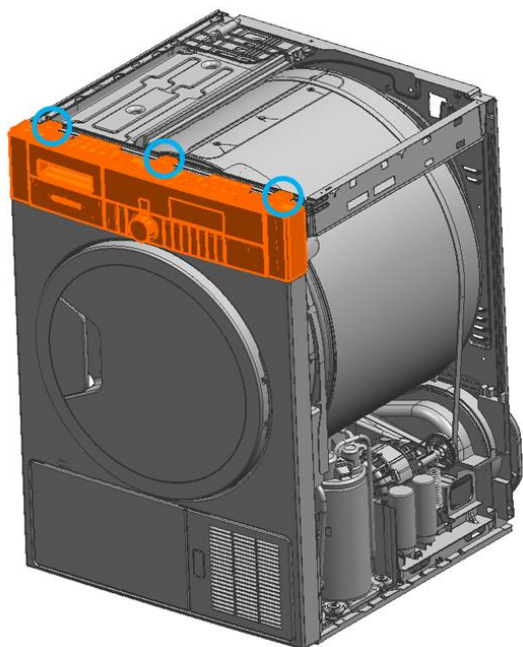


Figure 13.8. Connection points between Front Panel Assembly and Support Sheet of Front Panel

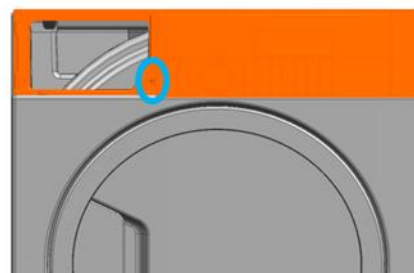


Figure 13.9. Connection point between Control Panel and Tank Housing

- Remove the 3 pieces of sheet screws between the front panel and support sheet of the front panel.
- Remove the one piece of PT screw between the control panel and tank housing.

13.5. Support Sheet Brackets:

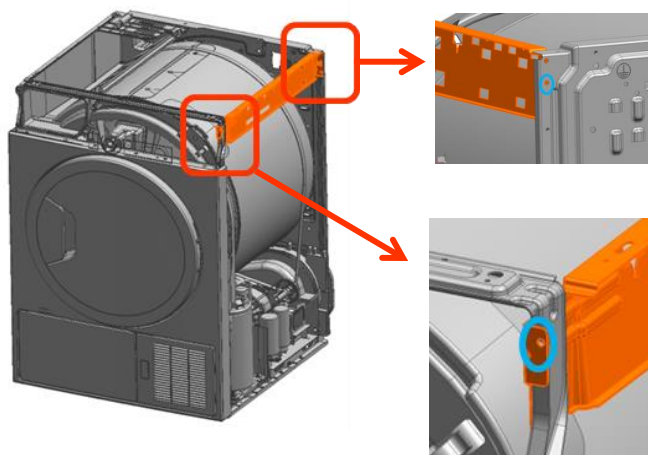


Figure 13.10. Connection points for Support Sheet Brackets on Right Hand Side (RHS)

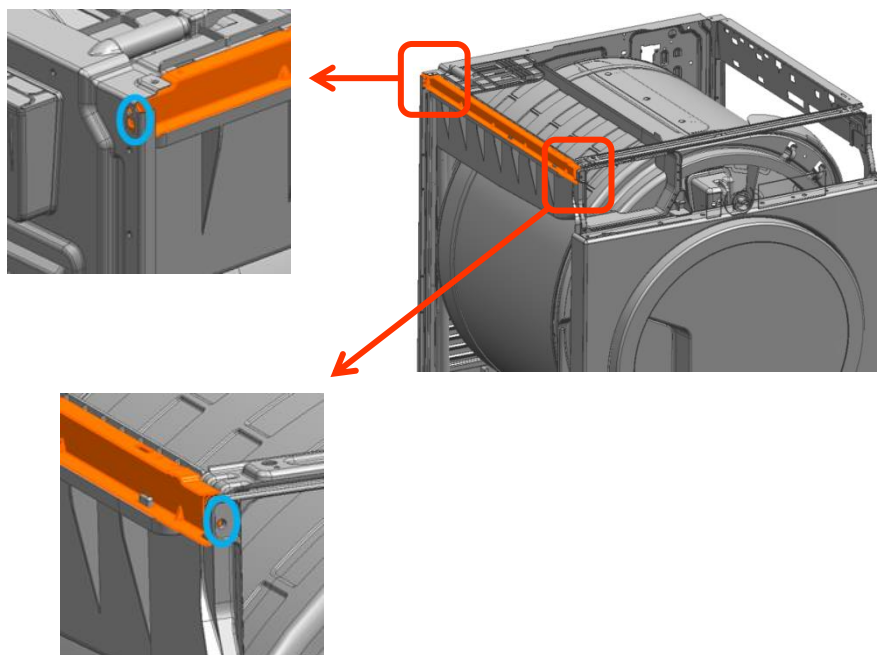


Figure 13.11. Connection points for Support Sheet Brackets on Left Hand Side (LHS)

- Remove the screws on the connection points of support sheet brackets on left and the right hand sides of the dryer.

13.6. Rear Panel Assembly

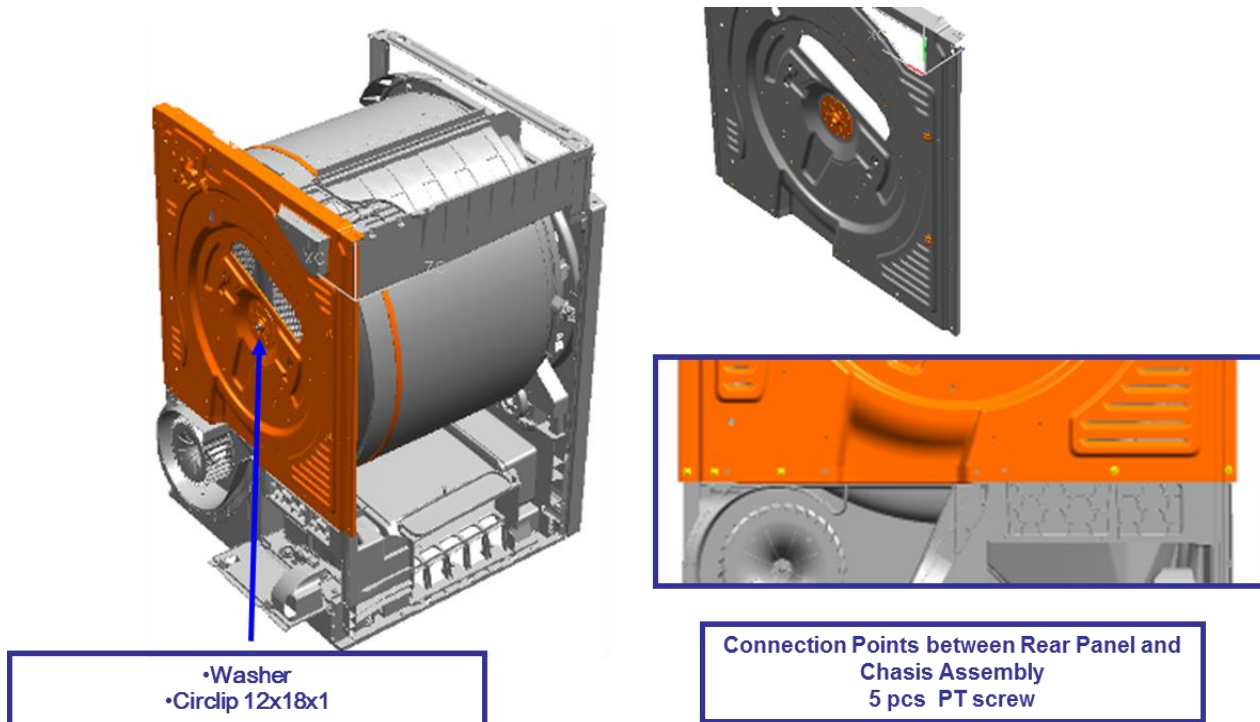


Figure 13.12. Connection points between Rear Panel and Chassis Assembly

- Remove 5 pieces PT screws between the rear panel and the chassis assembly.
- Disassemble the washer and the circlip shown in the figure by the aid of a screwdriver.

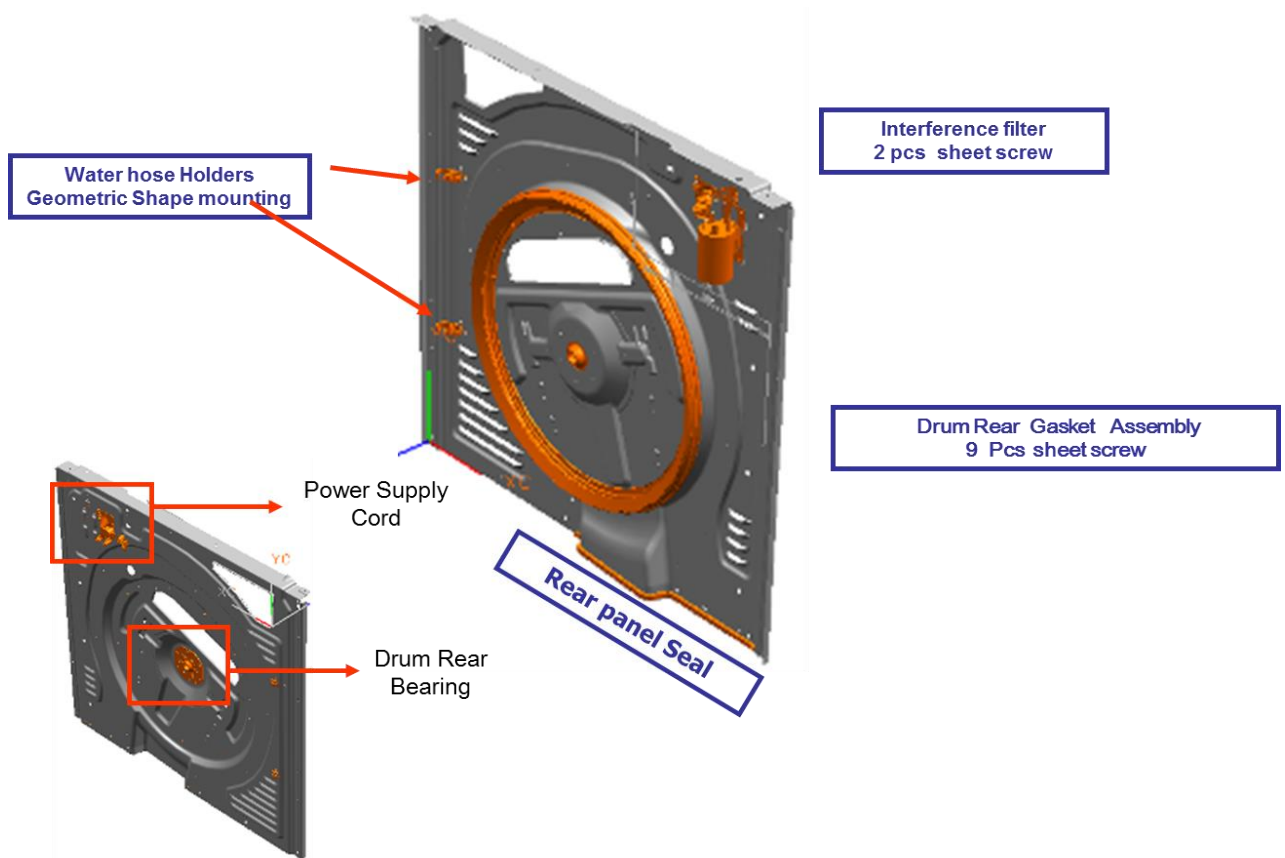


Figure 13.13. Sub-parts on the Rear Panel Assembly

- After removing the PT screws, washer and circlip, dismount the rear panel from the assembly by removing the hoses from the water hose holders located on the rear panel as shown in the figure. Sub-parts shown in the figure above are listed below:
 - Power Supply Cord
 - Drum Rear Bearing
 - Drum Rear Gasket Assembly
 - Interference Filter
 - Water Hose Holders

13.7. Drum Assembly:

- To disassemble the drum assembly:
 - Lift up the drum on the highlighted direction.
 - Pull towards the drum to the backside and remove from the dryer body.
 - By this movement, any interaction between the drum and the plastic chassis is prevented.
 - Remove the 3 PT screws for each of the drum pedals to dismount them.

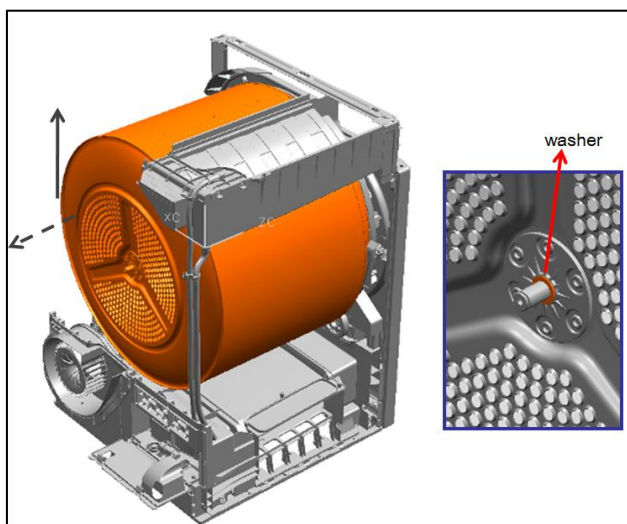


Figure 13.14. Drum Disassembly

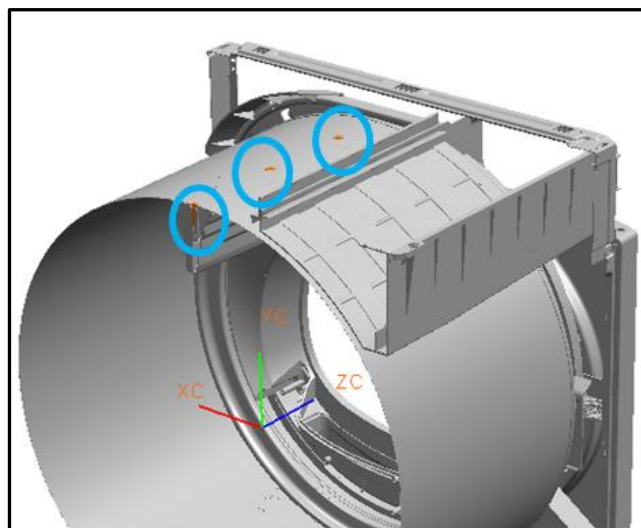


Figure 13.15. Drum Pedals

13.8. Control Panel Support Bracket:

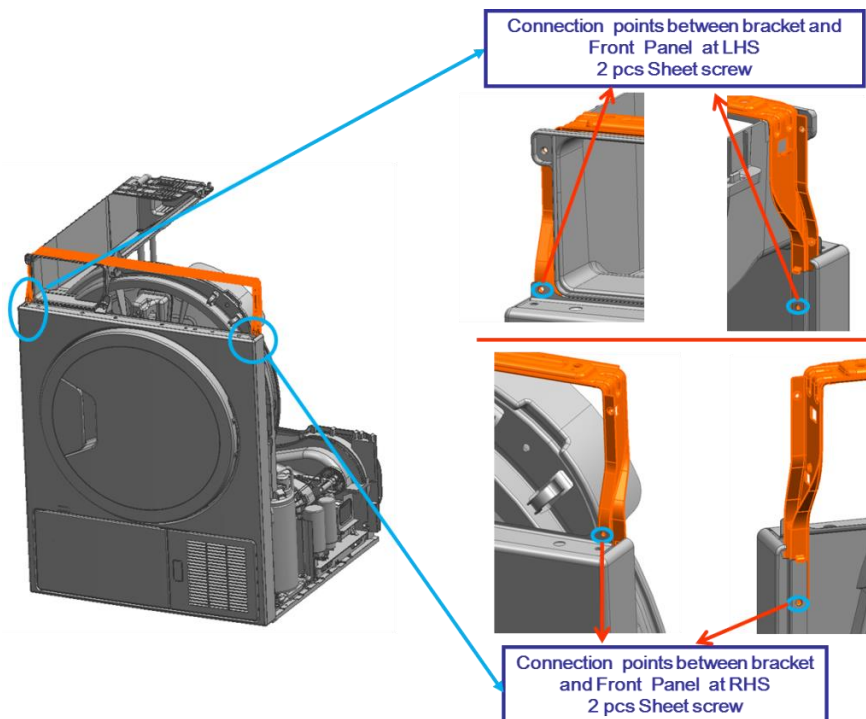


Figure 13.16. Control Panel Support Bracket Disassembly

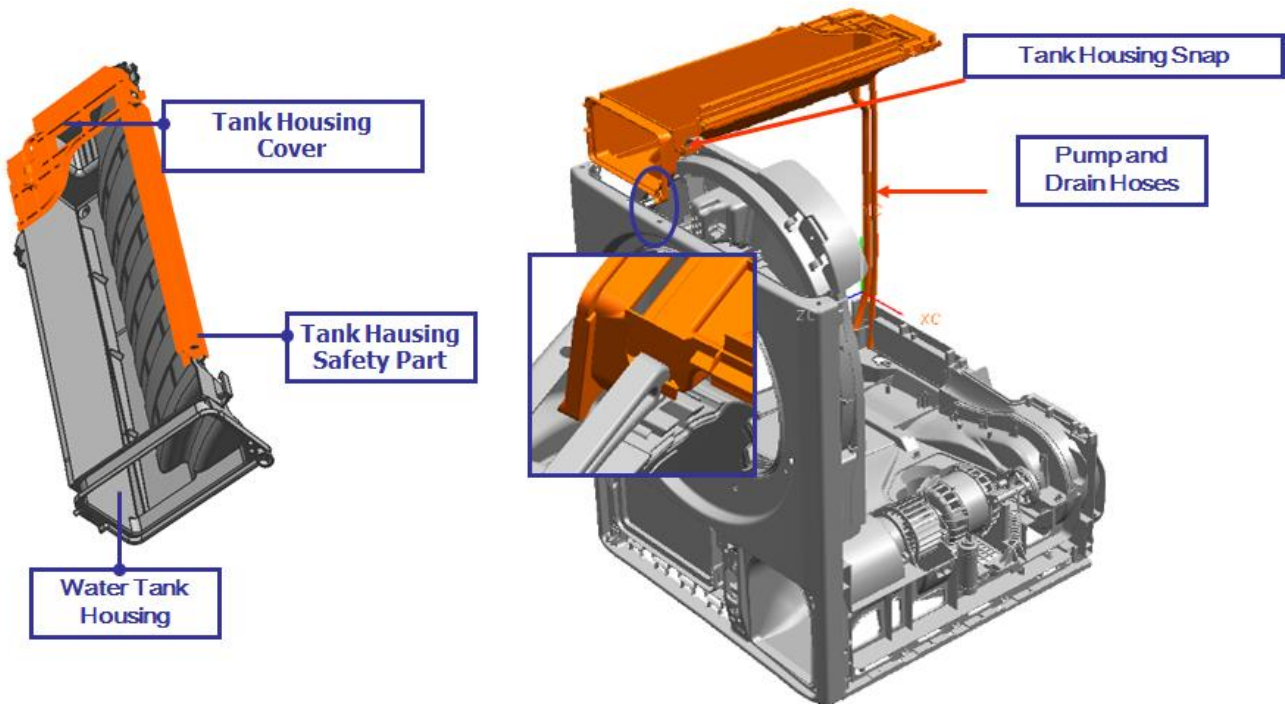
13.9. Water Tank Housing:

Figure 13.17. Water Tank Housing

- Disassemble the water tank housing due to the details mentioned above figure.
- Water tank housing consists of hose holders, tank housing safety part and the tank housing cover.

13.10. Door Group:

- Door group used in products is non-reversible.
- Door group can be disassembled by the below following instructions.
- First of all, open the door and unscrew the door group from the front panel.



Figure 13.18. Unscrewing the door group

- Then unscrew the rear plastic door from the front plastic door as shown below.



Figure 13.19. Unscrewing the rear plastic door

- After unscrewing, remove the rear plastic door group by pulling from the hinge side.



Figure 13.20. Removing the rear plastic door group

- The inner inlay part (in black colour) is connected by snapfits to rear plastic door. Pull the inner inlay to remove.



Figure 13.21. Removing the inner inlay

- To remove the sealing part with the rear plastic door from the glass, push the rear plastic door.

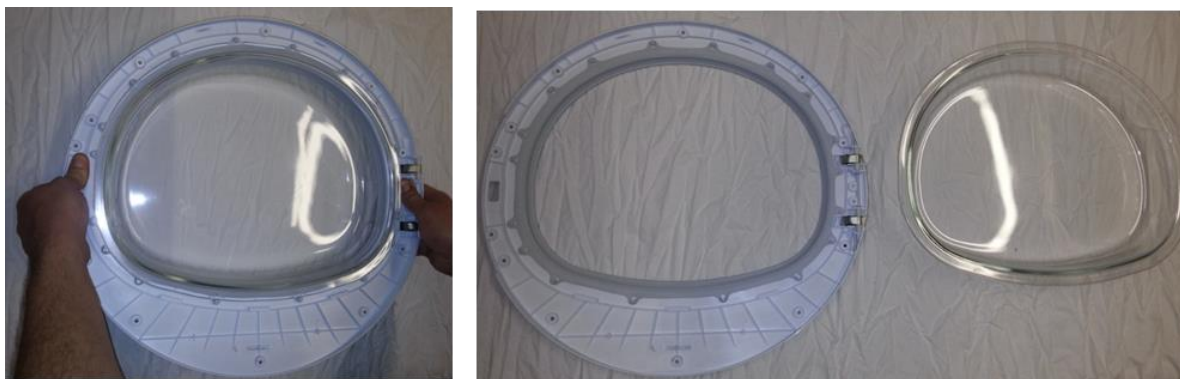


Figure 13.22. Removing the glass

- To assemble the glass back to the rear plastic door and sealing element put the plastic part with sealing element on a table, then put the glass at the middle of the sub group and push the plastic part. In this phase, check the sealing element if it is fully touching the glass and there should be no creasing.



Figure 13.23. Assembling the glass back

- The inner inlay part is fixed by the fixing figures on front plastic door. The fixing points are shown below.



Figure 13.24. Fixing Points for the inner inlay

- The front plastic door group disassembling details are shown below. Pull the protective door from the hinge side to remove.



Figure 13.25. Removing the protective door

- The inner handle part is fixed with two snap fits to the front plastic door. The snap fits are removed by a screwdriver as shown below.



Figure 13.26. Removing the snap fits

- Then pull the handle through the middle of the door group to remove.



Figure 13.27. Removing the inner handle

- To remove the lock hook, push the snap fit on the handle and take out the lock hook.



Figure 13.28. Removing the lock hook

- While assembling the door group, outer door sub-group and inner door sub-group should be referenced from hinge and lock hook. During this assembling process inner plastic door contour and outer plastic door contour should be following each other.



Figure 13.29. Assembling the door group

- Assembling across screws in a suitable order will help to ease of assembly. The screw in the angled area of the door group is different from the other screws. The angled area screw is 4x10. The rest of the screws is 4x18.



Figure 13.30. Screwing the door group

13.11. Microswitch and Pump:

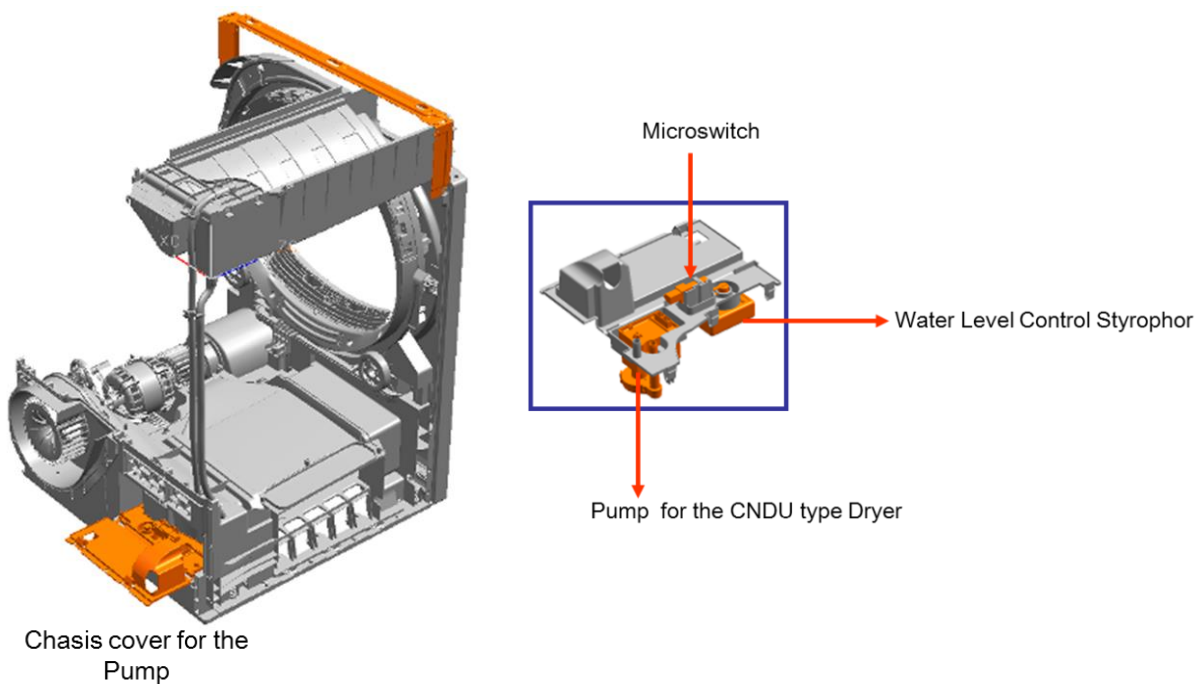


Figure 13.31. Disassembling the pump and the microswitch

13.12. Kickplates:

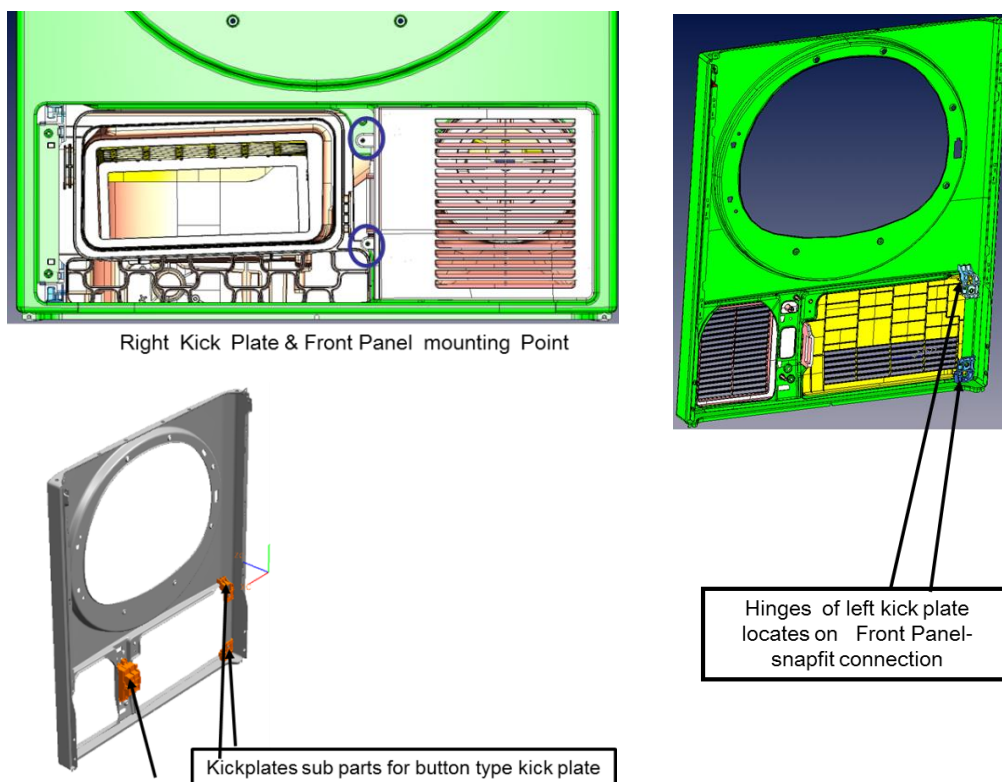


Figure 13.32. Disassembling the kickplate

13.13. Front Panel:

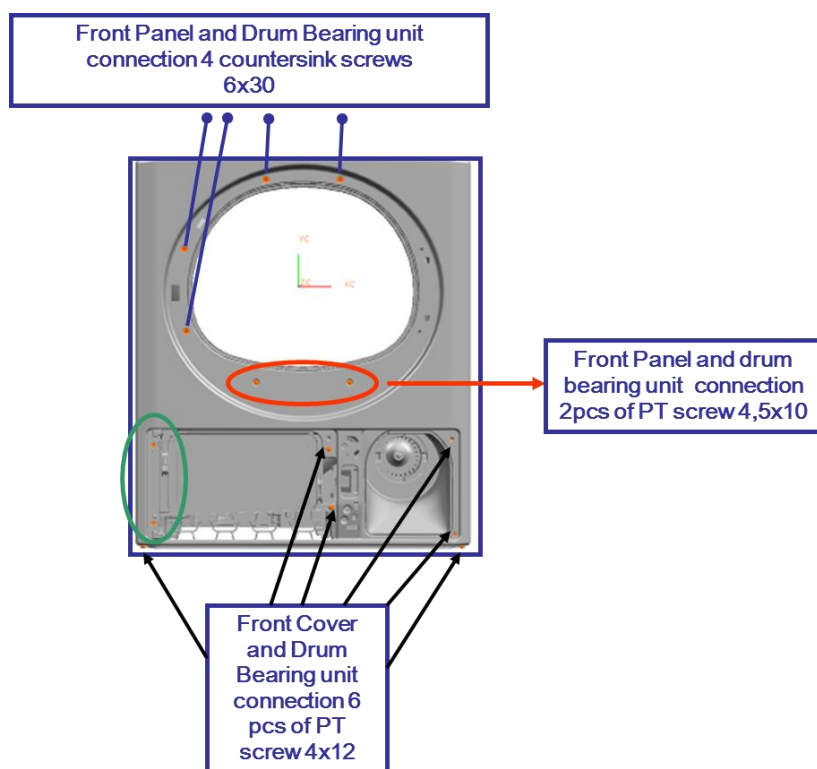


Figure 13.32. Disassembling the front panel

- After disassembling the kickplates, front panel can be dismounted from the dryer by removing the screws shown in the figure above.

13.14. Drum Front Bearing Unit:

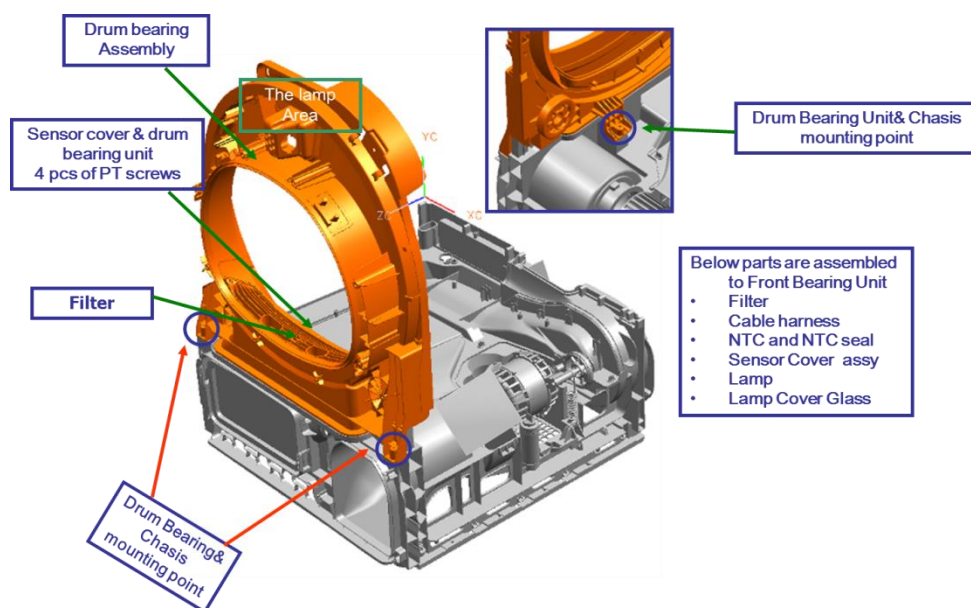
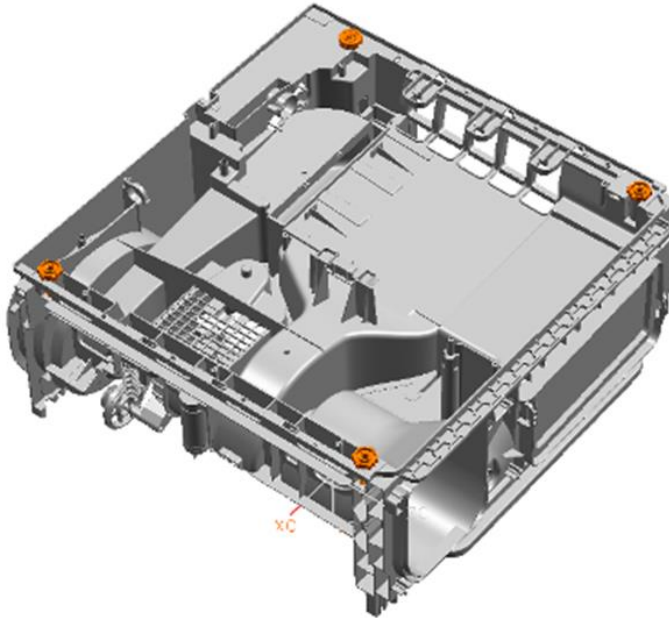


Figure 13.33. Connections of drum front bearing housing

- Disassemble the front bearing housing from the mounting points shown in the figure above.

13.15. Adjustable Feet:



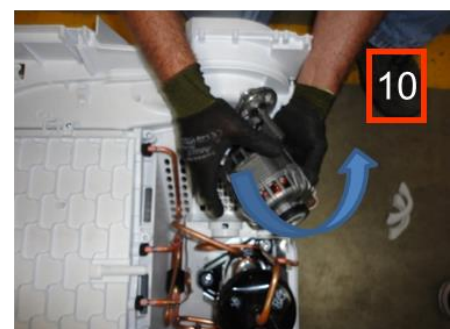
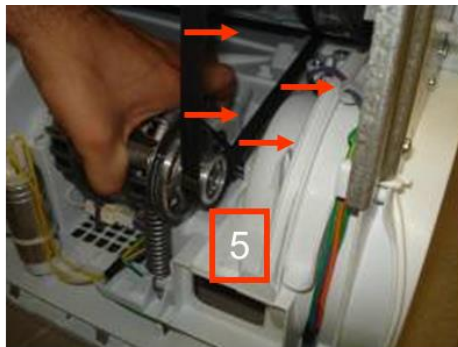
- 4 adjustable feet and their rubber parts are mounted underneath the plastic chassis as shown in the figure above.

14. Service Details for the Components:

14.1. Service Details of the Motor Unit:



- Remove the top plate.
- Remove the rear plastic cover (2).
- Remove the side panel on RHS (3).



- Force the motor assembly to turn it on clockwise direction to loose V-belt (5).
- Take out the tension spring (6).
- Unscrew the 4 pcs of the PT screw as shown on the picture and take out the plastic brackets (7).
- Dismount the motor socket (7).
- Dismount the both capacitors (8).
- Take out the process fan dismounting the mounted nut (9).
- Take out the motor as shown on the picture (10). It is important to take out motor assy through highlighted direction. This will prevent Heat Pump Tube assembly from any impact and damage.

14.2. Service Details of Drum Assembly:



- Remove the top plate (1).
- Remove the side panels on each side (2).
- Remove the rear Plastic Cover (3).
- Remove the plugs and the cables of interference filter (5).



- Take out the bracelets on the main cable harness path (6).
- Remove the drum bearing prevention part (8).
- Remove the circlip and nut as highlighted on picture (9).
- Disassemble hoses (10).
- Drum assembly lifted up direction and pull back slightly (11).



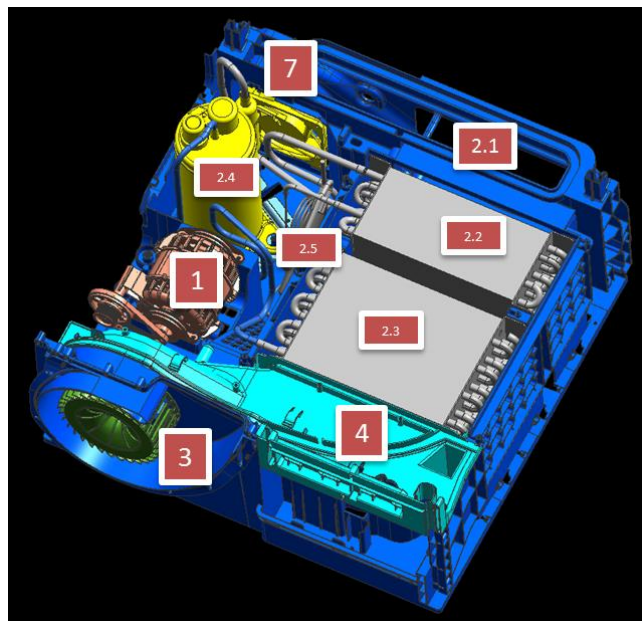
- To re-assemble the drum assy. to the dryer properly, the above pictures should be taken into account.

14.3. Service Details of Door NTC:



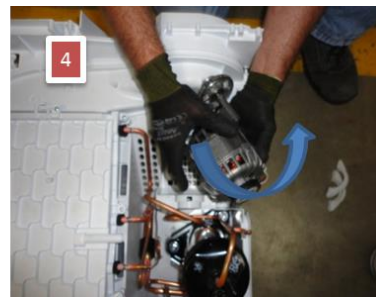
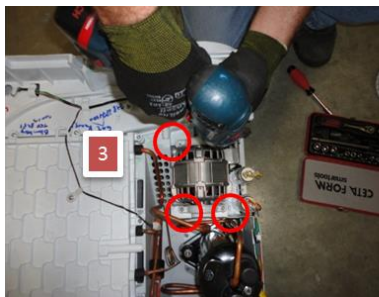
- Open left kickplate with or without button.
- Remove the screw on the right kickplate.
- Take out the filter.
- Take out the NTC as shown on picture.

14.4. Base Parts Inside the Plastic Chassis:

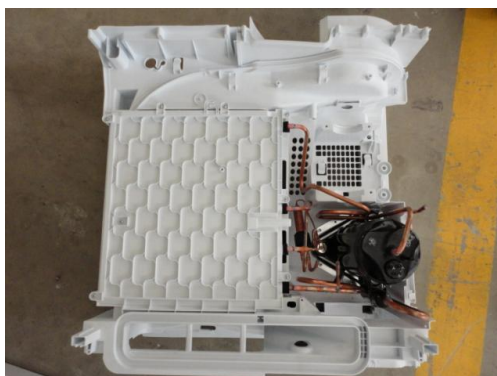
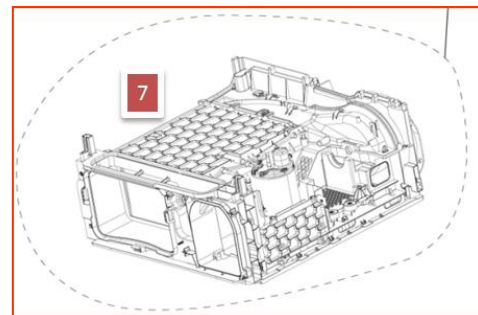


1. Motor Assembly
2. Assembly of HP System with Plastic Chassis
 1. Bottom plastic Chasis
 2. Heat Exchanger-Evaporator
 3. Heat Exchanger-Condenser
 4. Compresor Assy.
 5. Tube Assy.
 6. Plastic Cover
3. Process Fan
4. Plastic Air Guiding Part
5. Capacitors
6. Cable Harness
7. Cooling fan of the compressor

14.5. Service Details of Heat Pump System with Plastic Chassis:



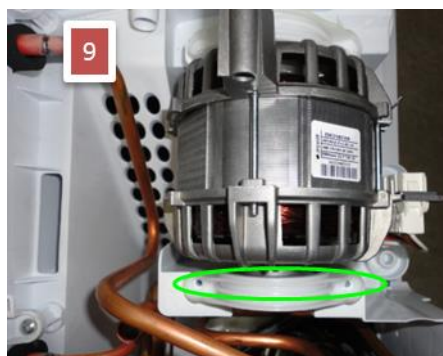
- Take out the process fan dismantling the nut and bolt (1)
- Dismount both capacitors unplugging of their sockets (2)
- Unscrew 4 pcs of the PT screws and dismount the plastic brackets (3)
- Disassembly of motor part towards to highlighted direction avoiding any damage possibility on welded tube assembly. Disassembly direction of motor assy. is important in terms of preventing tube assembly from any impact (4)



- Remove the highlighted parts respectively which are located in front of the compressor cooling fan (5).
- Unscrew the 2 pcs of PT screw which mounts the compressor cooling fan to the plastic chassis (6).
- Unplug the socket connection of the cooling fan to dismount it from the assembly of HP System (6).
- Change the new assembly of HP system with plastic chassis (7).
- Service user should check the packed assembly of HP system with plastic chassis in terms of including all parts referencing spare part list.
- Assemble each part reversibly as ordered below:
 - Compressor cooling fan (pay attention to assembly direction of part, see picture 6)
 - Highlighted parts (see picture 5)
 - Motor assembly
 - Pay attention to direction of the positioning on Plastic Chassis (Assembly direction of motor assy. is important in terms of preventing tube assembly from any impact (8))



- Assemble plastic brackets (mounting direction of the bracelets is important, see pictures (9)(10))



This side should be at motor side



- Capacitors:
 - Pay attention types of the capacitors (Bigger capacitive capacitor should be at compressor side)
 - Harness



- Cable connection of compressor (Grey cable is at S; red cable is at R; cable of thermic is at C)



Compressor Cable Connection of HP with Energy Classes of A+/A++ (A-50%)



Compressor Cable Connection of HP with Energy Classes of A++ (A-60%)

- Assemble each part & Assembly reversibly as ordered below:
- Process Fan
 - Front Bearing Assembly
 - Pay attention to the harness
 - Front panel
 - Door NTC
 - Pump & Microswitch
 - Kick plates
 - Control Panel
 - Front Door Assembly

14.6. Service Details of Pump and Microswitch:



- Remove the highlighted screw.
- Open the cover with pushing snap-fit.
- Remove the highlighted hose.
- It is possible to apply service on microswitch parts on this level.
- It needs to completely remove pump cover to service the pump and water level part.

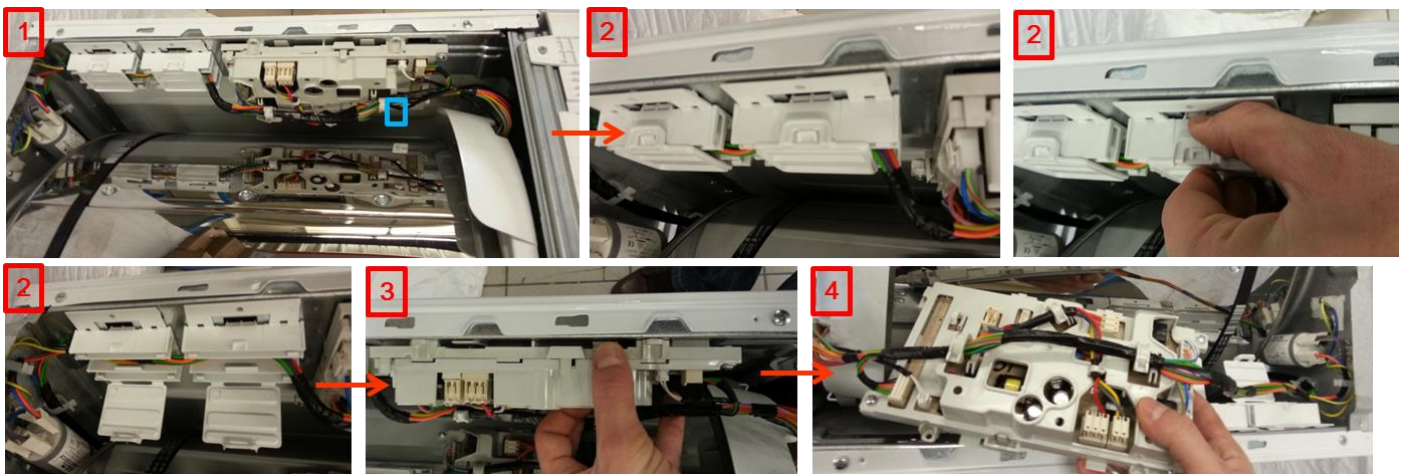
14.7. Service Details of Control Panel and Drum Lamp:



- Remove the top plate.
- Remove the 3 pcs of the screw that highlighted on picture.
- Remove the additional screw if the dryer is CNDU type.
- Control panel assembly is available to apply service action on this level.

14.8. Service Details of Door Lock System:

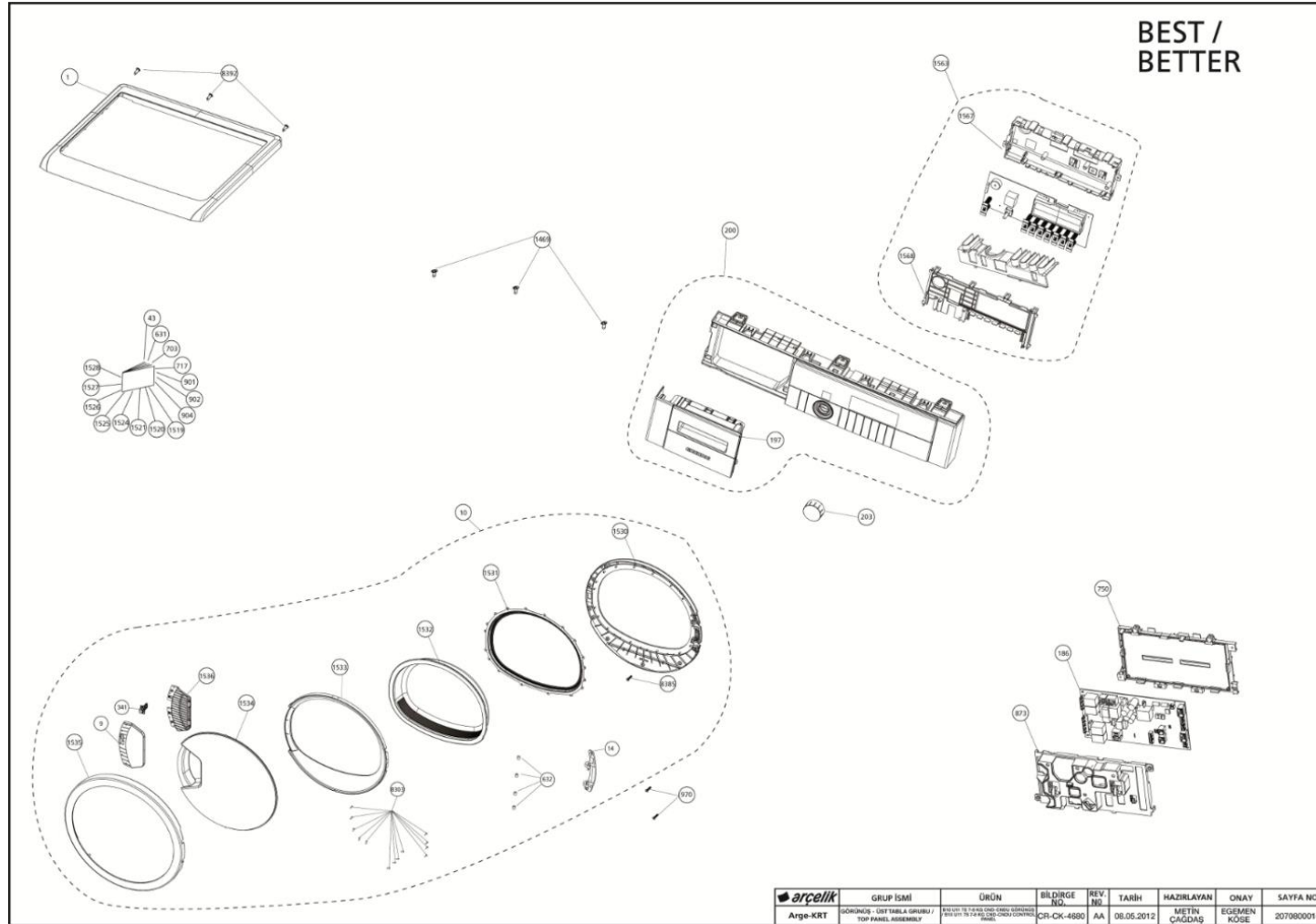
- Remove the top plate.
- Remove side panel on LHS.
- Disassemble the plastic housing as shown on the pictures.
- Take out the locking assembly working on inner side as highlighted on the picture.

14.9. Service Details of Emperor Main Board:

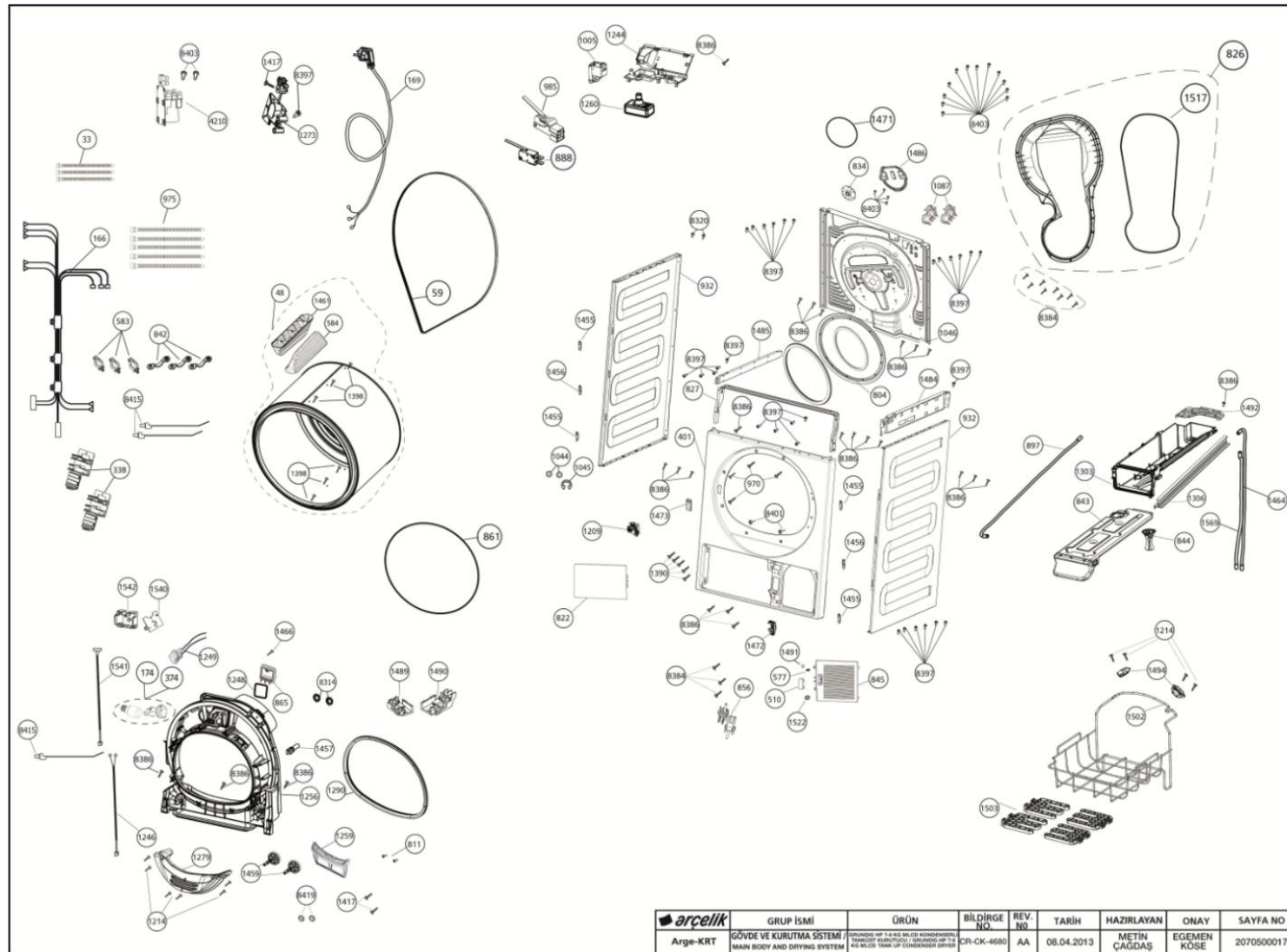
- Remove connection cable with display board. (1)
- Remove cable from channels. (2)
- Remove main board from side support bracket by snap fits and pull. (3)
- Remove the connectors. (4)
- Emperor main board is available to apply service action on this level.

15. Exploded Views:

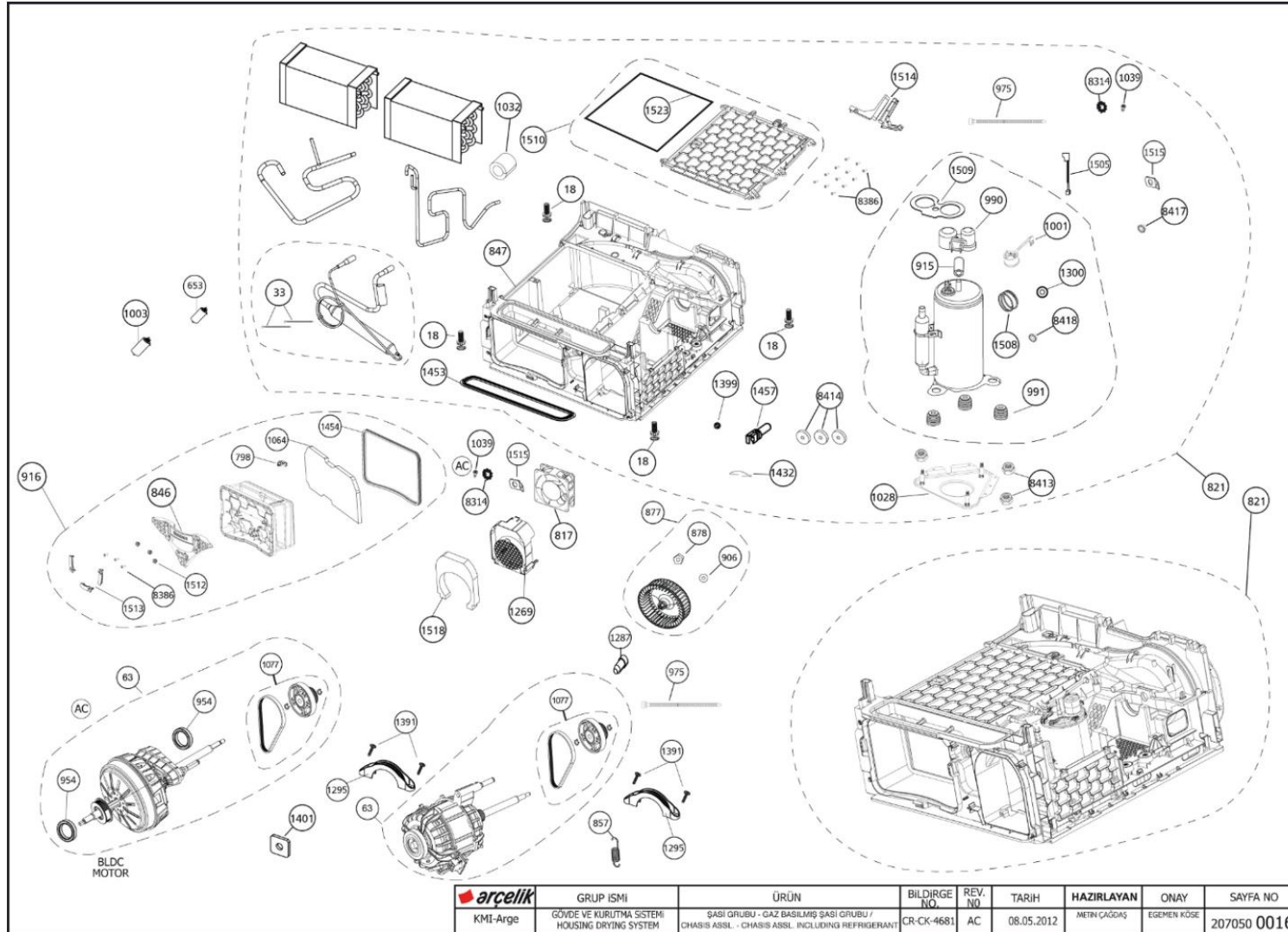
15.1. Front Panel – Top Panel – Door Group Assembly:



15.2. Main Body and Drying System:



15.3. Chassis Assembly:



Note: The exploded views are given as a reference and the updated versions should be followed from Teamcenter.

16.Revision History:

Revision	Date	Summary
00	30.04.2013	Service Handbook
01	30.10.2014	The compressor details of the 62 dBA A++ energy class product are added.
02	12.06.2018	Error codes updated.