NIMO▸PRO

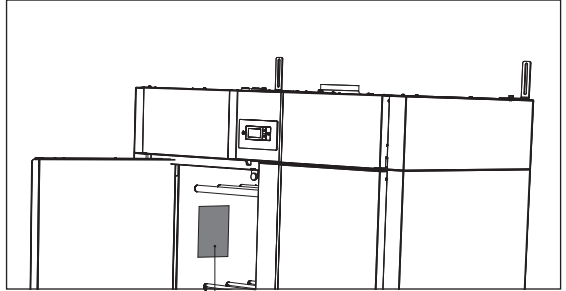
427001088

Store this manual so that it is always available for future reference.

ENG   Drying Cabinet   Service Manual

Drying Cabinet FT120FL

Article No.: 61910001
Serial No.: 74712345
Model.: FT120 FL

7 330095 606829

Volt	Hz	Watt	A
400 3N	50	6175	10

CE IP X4

MADE IN SWEDEN
NIMO▸
548 22 HOVA

Type plate (inside)

Designation of the drying cabinet
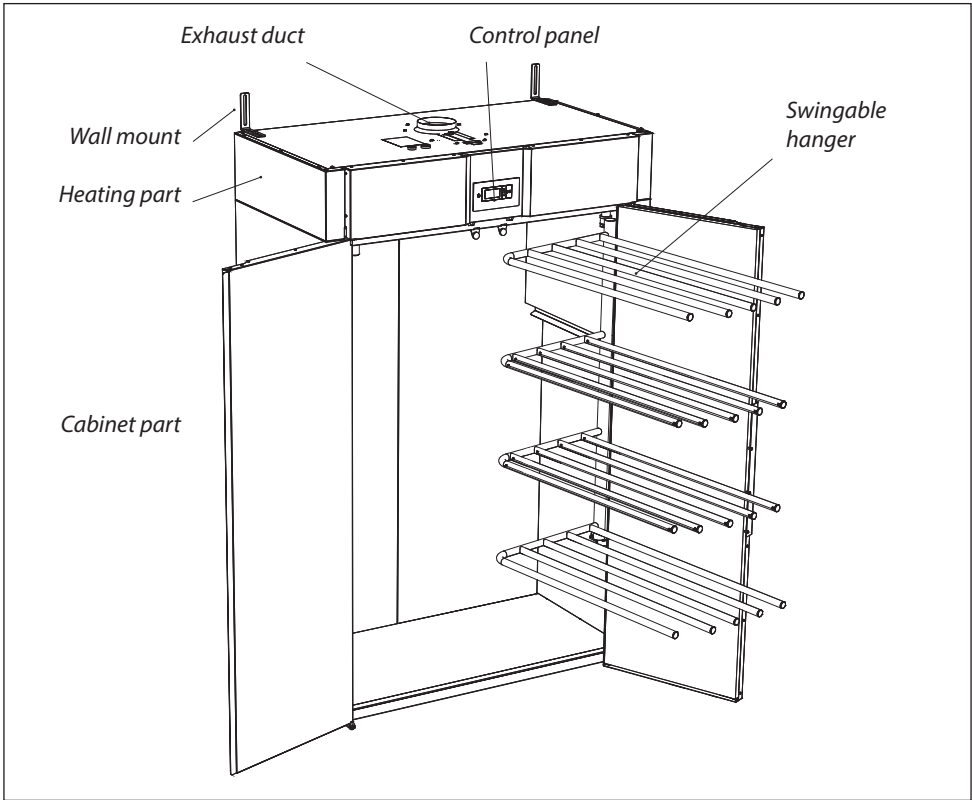*Part number*
Serial number (8 digits)

CE

We reserve the right to make changes to this documentation.

Printed on eco-paper that meets the requirements of Miljöförbundet and Naturskyddsföreningen.

Contents

1   Drying cabinet FT120FL

Exhaust duct   Control panel

Wall mount

Heating part   Swingable
                                                hanger

Cabinet part

2 Electrical circuit diagram

Pos.	Ant.	Beteckning		
17	1	Cable kit		423000959
16	1	Door switch cable		423000945
15	1	Thermostat	80°	
14	1	Contactor		
13	1	Sensor "Outlet" (Plac. Hot air duct right side)	KTY 1,5-5V	423000713
12	1	Ground Screw		
11	1	User Interface		423000960
10	2	Door Switch		
9	1	Lamp		
8	2	Thermistat Cut-out	95°	
7	1	Sensor "Cabinet" (Plac. Hot air duct left side)	KTY 1,5-5V	423000568
6	1	PowerBoard D13C		423000568
5	1	Thermital Block 12-pol		
4	2	Capacitor	3,5uf 450V	423000673
3	2	Thermostat	110°	
2	6	Element	1000W	
1	1	Fan motor		423000871

Wiring Diagram FT120FL
400V 3N AC 50Hz
427000916

108804   108804-1

Material

Datum 2015-01-08

SS-ISO 2768-1 SS-ISO 2768-1m

Skala 1:1

Rev. 1

A2

1-Lamp
2-Fan
3-NC
4-Heater

Green/Yellow
Brown
Black
Blue

Ext. Fan
230V 50Hz

Temp Cut-out
3-ph Motor

Red
Brown
Black
Green

3 Moving the hanger

The hanger can be mounted on the left or the right side. To move the rack from the right to the left side, please do the following:

1 Remove the drying rack by lifting it up and pulling it outwards.

2 Loosen the lower bracket **(A)** by removing the screws **(B)** from the inside.

3 Turn the lower bracket upside down and mount it on the other side. Loosen the screw **(C)** and mount the bushing **(D)** and the washer **(E) on the other side.** Be very careful not to damage the surface of the bushing when you turn it.

4 Mount and fit the hanger bracket on the left side. There are pre-drilled holes in place.

5 Loosen the spring bracket **(F)** according to the figure and move it to the other side. There are pre-drilled holes in place.
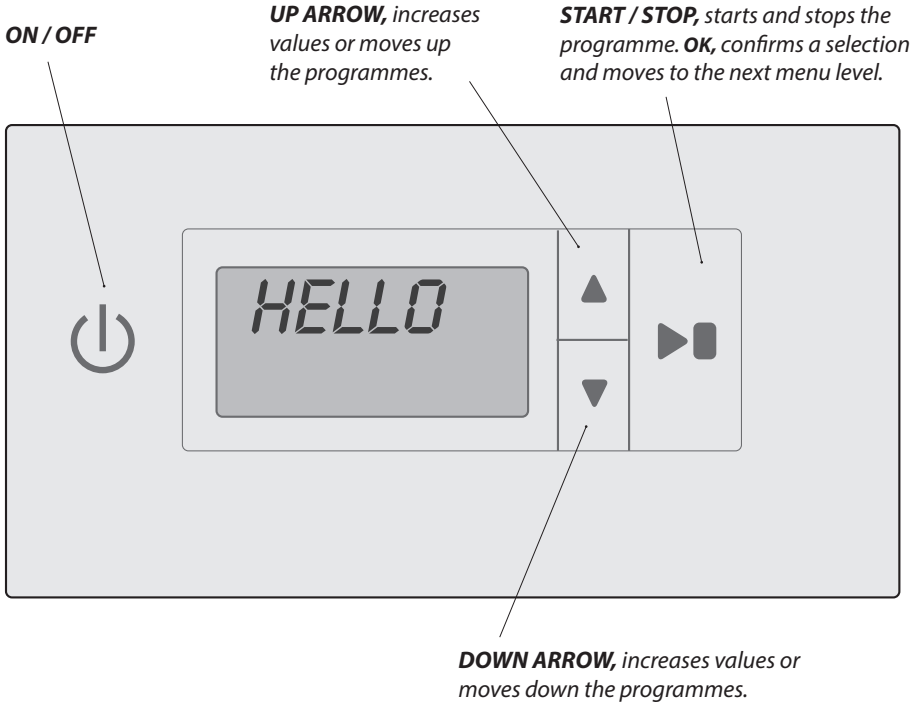
6 Rotate the drying rack and push it into position.
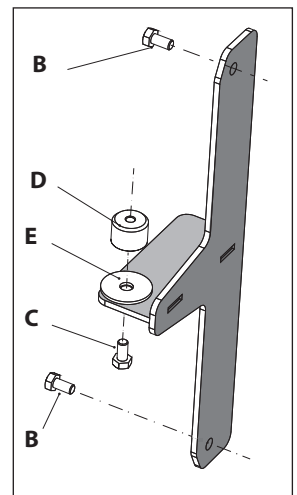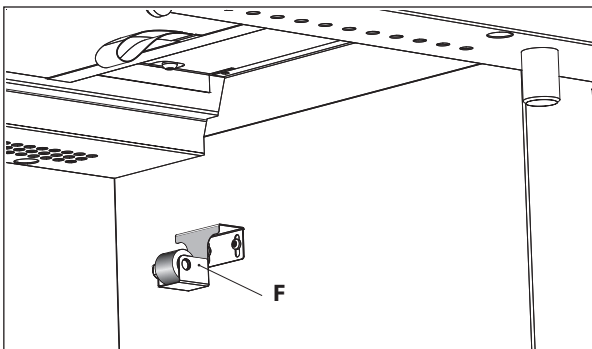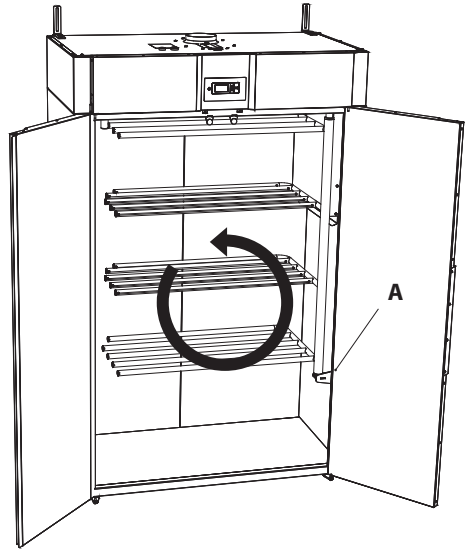
4 Programming

4.1 Control panel

4.1.1 Buttons

The user interface consists of four touch buttons. The buttons have two functions.

ON / OFF

UP ARROW, *increases values or moves up the programmes.*

START / STOP, *starts and stops the programme.* **OK,** *confirms a selection and moves to the next menu level.*

HELLO

DOWN ARROW, *increases values or moves down the programmes.*

4.1.2 Display

Animated symbol that shows that the drying process is in progress.

Top line.	Shows informational text *during the drying process*, e.g. *AUT.* *In programming mode*, it shows the actual parameter, e.g. **P2122.**
Bottom line.	Shows informational text *during the drying process*, e.g. *NORMAL*. *In programming mode* it shows the value set for the parameter.
Clock symbol for CHILD LOCK.	This is lit during the entire drying process if it is in child lock mode.

4.2 Language setting

The following languages are available: English, Swedish, Norwegian, Danish, Finnish, French. and German.

1 Make sure that the main power switch **ON/OFF** on the cabinet is in the OFF position. The display will be black.

2 Press and hold the **UP** and **DOWN ARROW** buttons and then press the main power switch **ON/OFF** to the 'ON' position. The display will be lit and flash **'P105'** in the top row, which is the parameter for the language setting. If any other value is shown, use the **UP** or **DOWN ARROW** button to move to the correct parameter.

3 Press the **START/STOP** button to confirm.

The line will flash with the current language. The languages have a digit symbol in accordance with the list below.

4 Move to the preferred language with the **UP** or **DOWN ARROW** button.

5 Press **START/STOP**, to save the set value.

6 Press the **UP ARROW** and **START/STOP** to return to the operational value.

Language symbol	Display language
0	English
1	Swedish
2	Norwegian
3	Danish
4	Finnish
5	-
6	French
7	German

4.3 Drying programmes

The drying cabinet has four drying programmes:

- ☐ **Aut 40° Normal**
- ☐ **Aut 40° Extra**
- ☐ **Aut 60° Normal**
- ☐ **Aut 60° Extra**

The programmes will turn off the drying process automatically when the textiles are dry.

SELECTING A DRYING PROGRAMME

- ☐ **Normal** - Used for drying garments of normal thickness.
- ☐ **Extra** - Used for drying thick garments, deep drying.

60° or 40° is selected depending on the washing recommendation for the garment.

4.4 Optimizing the drying programme

4.4.1 Introduction

The automatic programme of the drying cabinet can be optimized with the control panel buttons, when the drying cabinet is in programming mode.

Only make adjustments, if:

- ☐ the laundry is not dry enough
- ☐ the laundry is being dried for too long - long drying time

4.4.2 Parameter list

Parameter	Name	Value	Meaning
P105	Language	0 1 2 3 4 5 6 7	English Swedish Norwegian Danish Finnish - French German
P114	Filter alarm On/Off	0 1	Off On
P115	Child lock On/Off	0 1	Off On
P2011	Min. drying time Aut 40°	35 min.	The drying process will run for min. 35 min. regardless of the humidity level.
P2012	Max. drying time Aut 40°	180 min.	The drying process will run for max. 180 min. regardless of the humidity level.
P2013	Max. temp. Aut 40°	51°	The heating elements will be turned off if this value is exceeded.
P2014	Outlet temp. process finished. Aut40°	44°	The Normal programme will end the drying process with a cooling period. For the Extra programme, the extra drying time will start.
P2015	Extra drying time Aut40°	30 min.	Drying time for the Extra programme when the outlet temp. has been reached.
P2021	Min. drying time Aut 60°	35 min.	The drying process will run for min. 35 min. regardless of the humidity level.
P2022	Max. drying time Aut 60°	180 min.	The drying process will run for max. 180 min. regardless of the humidity level.
P2023	Max. temp. Aut60°	76°	The heating elements will be turned off, if this value is exceeded.
P2024	Outlet temp. process finished. Aut 60°	60°	The Normal programme will end the drying process with a cooling period. For the Extra programme, the extra drying time will start.
P2025	Extra drying time Aut 60°	30 min.	Drying time for the Extra programmewhen the outlet temp. has been reached.

4.4.3   Adjustment

Programme **Aut 40° Normal** is controlled by the **temp. sensor for exhaust air.**

Programme **Aut 40° Extra** is controlled by the **temp. sensor for exhaust air** and a **time factor.**

Programme **Aut 60° Normal** is controlled by the **temp. sensor for exhaust air.**

Programme **Aut 60° Extra** is controlled by the **temp. sensor for exhaust air** and a **time factor.**

The automatic programmes will end automatically when the laundry is dry.

To decide when the laundry is dry, the temperature of the exhaust air is compared against a parameter, **P2014 for the 40° programme** and **P2024 for the 60° programme.**

For **Aut 40° Extra**, extra drying time is added in accordance with the parameter **P2015.**

For **Aut 60° Extra**, extra drying time is added in accordance with the parameter **P2025.**

These are the four main parameters that are adjusted to optimize the drying process of the automatic programmes.

If the laundry is not dry enough when using:

Aut 40° Normal,	**increase** the parameter value for **P2014.**
Aut 40° Extra,	**increase** the parameter value for **P2015.**
Aut 60° Normal,	**increase** the parameter value for **P2024.**
Aut 60° Extra,	**increase** the parameter value for **P2025.**

If the laundry is too dry or takes too long to dry when using:

Aut 40° Normal,	**decrease** the parameter value for **P2014.**
Aut 40° Extra,	**decrease** the parameter value for **P2015.**
Aut 60° Normal,	**decrease** the parameter value for **P2024.**
Aut 60° Extra,	**decrease** the parameter value for **P2025.**

The optimization of drying processes should always be done in small steps, start by adjusting the current parameter 1-2 units up or down. Then check to see the result after the next drying process and make any additional adjustments, if needed.

4.4.4 Programming

The *optimization of the automatic drying programs for the drying cabinet* and the *activation/deacti-vation of the child lock* is performed in the programming mode.

1   Make sure that the main power switch **ON/OFF** on the cabinet is in the OFF position. The display will be black.

2   Press and hold the **UP** and **DOWN ARROW** buttons and then move the main power switch **ON/ OFF** to the 'ON' position.

   The display will be lit and show the parameter *'P105'* and the factory default value for **P 105.**

   The line with the current parameter will flash in the display.

3   Move to the preferred parameter by pressing the **UP** or **DOWN ARROW** repeatedly. If you go too far, you can continue until the display shows the correct parameter.

4   When the display shows the correct parameter, e.g. *'P2011'*, press **START/STOP** to confirm the parameter selection. The line will now flash with the set value for the parameter.

5   Increase or decrease the parameter value with the **UP** or **DOWN ARROW** button.

6   Press **START/STOP** to save the set value.

7   Press the **UP ARROW** and **START/STOP** to return to the operational value.

4.4.5   Reset to factory default

1   Enter parameter display mode in accordance with *section 4.4.4.*

2   Press and hold the **UP** or **DOWN ARROW** and then press **START/STOP.**
   The factory defaults will be saved and the display will show the last programme used.

4.5 Child lock

4.5.1 Introduction

The child lock mode is a safety feature to prevent the drying process from being started or stopped accidentally. This functionality means that all the buttons must be pressed for at least 3 seconds for the

required activity.

This mode can be suitable for nurseries, etc.

N.B. If the door is opened during operation and closed within 5 min., the drying process will continue. If the door is open for more than 5 min. the drying process will end.

4.5.2 Activation

1   Enter the programming mode. **See section 4.4.4.**

2   Move to the parameter '*P115*' with the **UP** or **DOWN ARROW.**

3   Press **START/STOP** to save.

4   Change the parameter to the **value 1.**

5   Press **START/STOP** to save.

6   Exit the programming mode with the **DOWN ARROW** and **START/STOP**. The child lock mode has now been activated and is indicated in the display with a lit 'clock' symbol.

4.5.3 Deactivation

1   Enter the programming mode.

2   Move to the parameter '*P115*' with the **UP** or **DOWN ARROW.**

3   Press **START/STOP** to save.

4   Change the parameter to the **value 0.**

5   Press **START/STOP** to save.

6   Exit the programming mode with the **DOWN ARROW** and **START/STOP.**

The clock symbol turns off.

5 Protection against overheating

The cabinet has double protection against overheating.

Overheating protection - reset by the user.

Main regulation - reset by the service personnel.

5.1 Overheating protection

If the cabinet overheats during operation, the electric elements turn off and the fan continues to run.

The display will flash with *'ERR 05'*.

When the temperature in the cabinet is down to an acceptable level (within approx. 4 min.), the display will show *'ERR 05'* with a fixed display and the text *'OH PROTECTION'* will be rolling on the lower line.

The overheating protection can then be reset by pressing and holding the **START/STOPP** button for approx. 4 seconds.
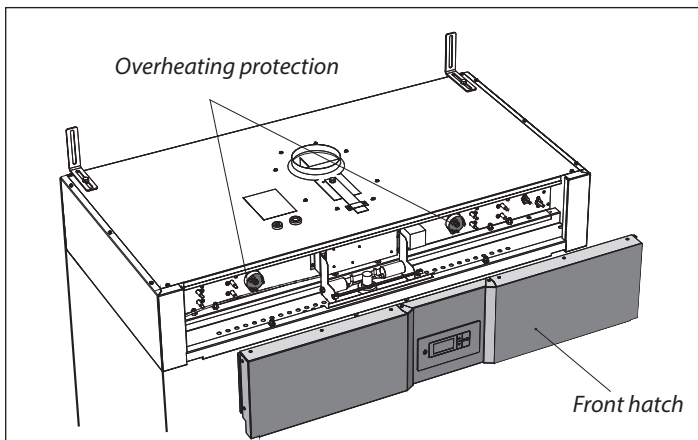
5.2 Main regulation

If the drying cabinet should overheat for some reason during the drying process, the main regulation will be triggered. The main regulation has to be reset manually.

5.2.1 Reset

A reset is performed with the button directly on the overheating protections. See figure and look for the cause when performing the reset. Are both fans functional? Has the filter been cleaned?

1 Remove the front hatch by loosening the two screws on the lower edge. **See chapter 8.**

2 Push in the button on the overheating protection that has been pushed out. Examine both protections.

Overheating protection

Front hatch

6   Troubleshooting

6.1 General

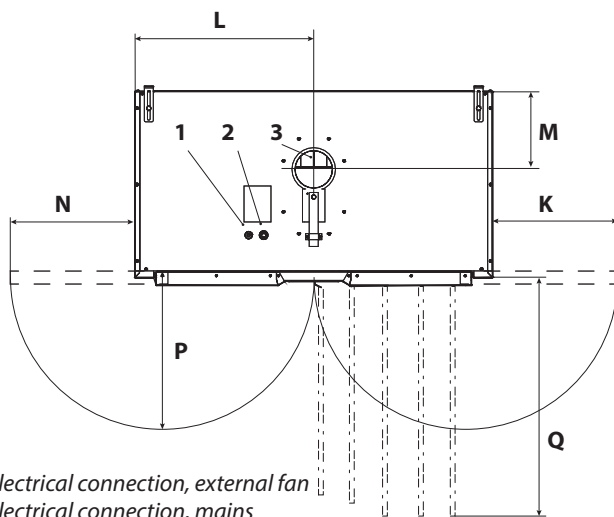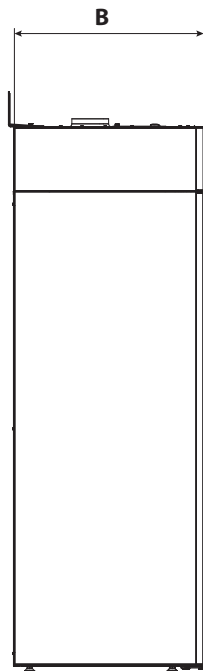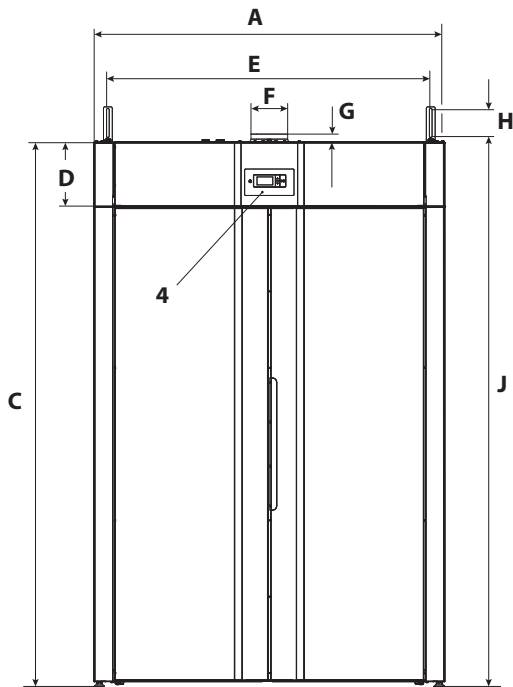| Questions	What you can do
The drying cabinet is not working	1. Check the mains connection and that there is power. 2. Check that none of the fuses has blown. 3. Have you pushed the start button? 4. Are the doors closed? 5. Is an error code displayed, for instance ERR 08? *See section 6.2*
Drying takes a long time	1. Clean the lint filter (must be performed after each drying session). 2. Make sure that the right programme has been selected for the laundry items. 3. Make sure that the laundry items are not very wet (not spun enough). 4. Make sure that there are not too many laundry items hanging in the cabinet. 5. *See section 4.4,* Optimization of the drying programme.
The laundry never gets dry	1. Make sure that the right program has been selected for the laundry items. 2. Make sure that there are not too many laundry items hanging in the cabinet. 3. *See section 4.4,* Optimization of drying program.

6.2 Error codes

No.	Name.	Description / Action
ERR 01	Temp. sensor malfunction, cabinet	Replace the temp. sensor. *See Spare Parts, pos. 303.*
ERR 02	Temp. sensor malfunction, exhaust air	Replace the temp. sensor. *See Spare Parts pos 306*
ERR 04	Max. time for the drying process has been exceeded	Possible cause - Broken heating elements.
ERR 05	Overheating	Reset. See section 'Overheating protection'
ERR 08	Clean filter 100 hours	Reset with **START/STOP** for 5 seconds. Clean filter.
ERR 12	Communication timeout	Communication error between control panel and circuit board.

Press the Stop button for 5 seconds to reset an error code.

7 Technical data

Capacity:	max 6 - 8 kg laundry
Drainage capacity:	72 g/min (6.5 kg 50% residual moisture)
Electrical connection:	400V 3N AC 50Hz, 10A slow, 10A automatic fuse
Effect:	6,2 kW
Hanging length:	18 metres
Dimensions:	Height 1860 mm Width 1200 mm Depth 650 mm
Weight:	145 kg
Sound level:	Airborne noise during full load 57dB (A)

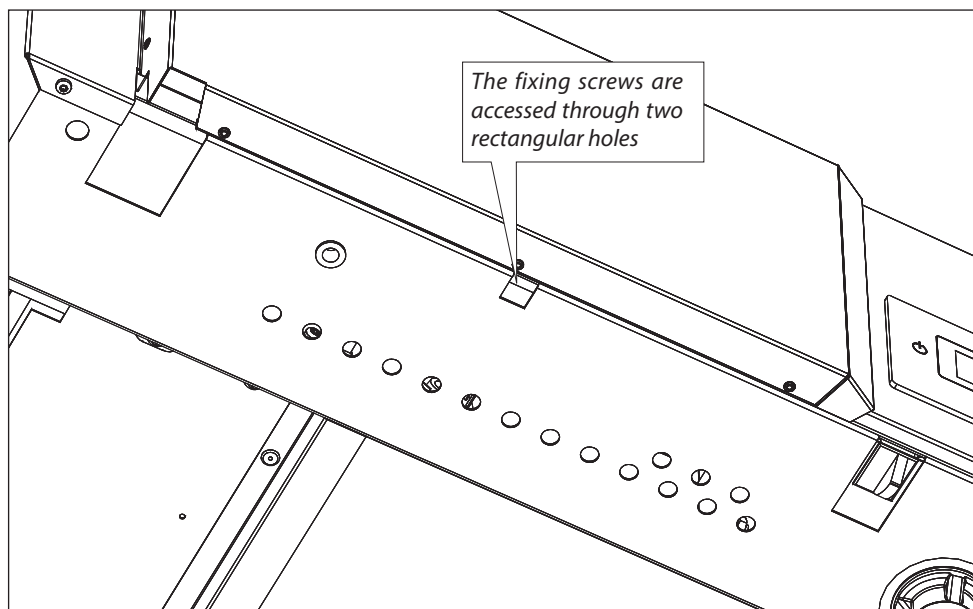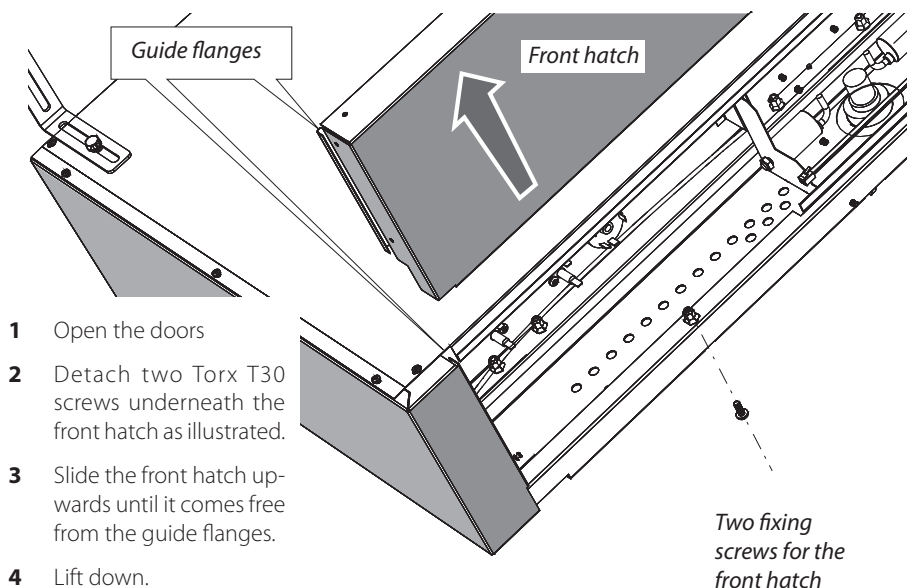|	mm
A	1200
B	650
C	1860
D	220
E	1100
F diam.	125
G	27
H	100
J	1880
K	434
L	600
M	262
N	471
P	551
Q	807

1 Electrical connection, external fan
2 Electrical connection, mains
3 Exhaust air connection
4 Control panel

8   Removal of front hatch

Guide flanges

Front hatch

1 Open the doors

2 Detach two Torx T30 screws underneath the front hatch as illustrated.

3 Slide the front hatch upwards until it comes free from the guide flanges.

4 Lift down.

Two fixing screws for the front hatch

The fixing screws are accessed through two rectangular holes

9 Spare parts

9.1 Upper part

9.1.1 Components

Se 6.1.2
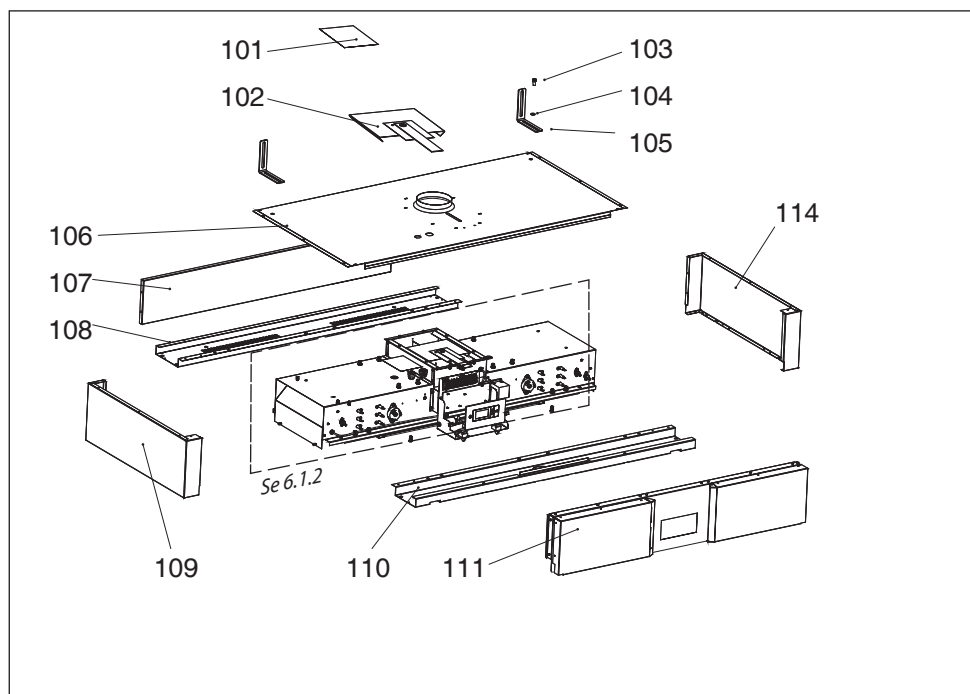
101	Label kit
102	Damper
103	Mounting screw
104	Washer
105	Wall mount
106	Cover
107	Back piece
108	Back rail
109	Side, left
110	Front rail
111	Front Alt. Front adapted for use by disabled persons
114	Side, right

9.1.2 Components
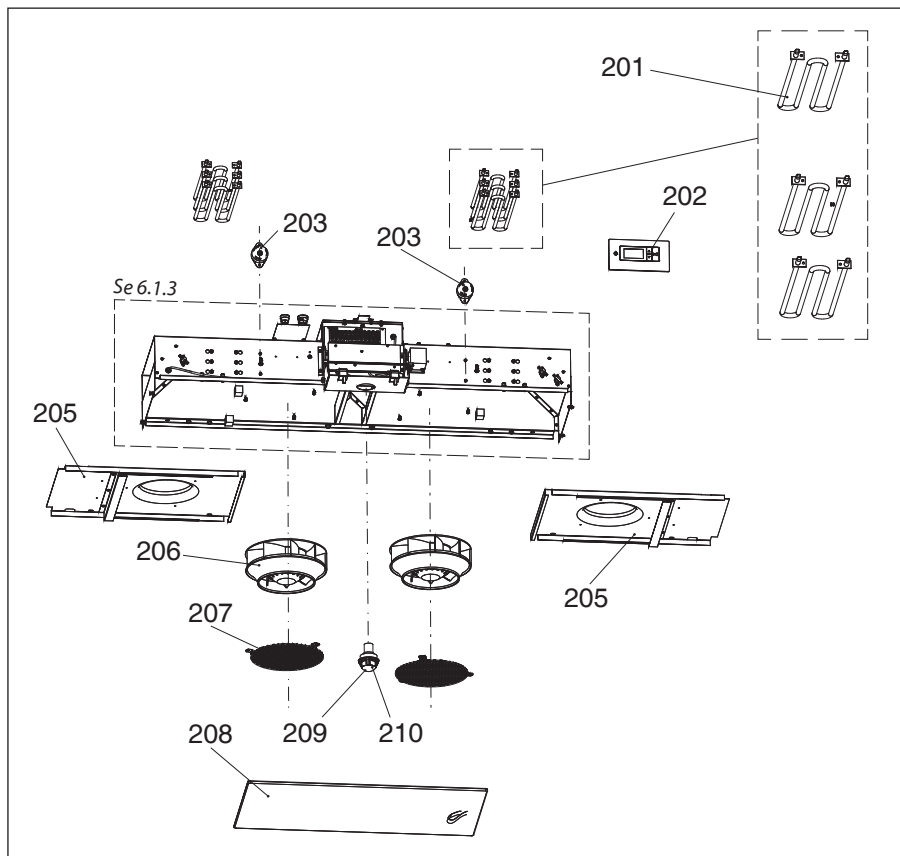
201	Heating element
202	Control panel
203	Overheating protection
205	Service hatch
206	Fan motor
207	Touch protection
208	Filter
209	Lamp
210	Lamp glass

9.1.3 Components
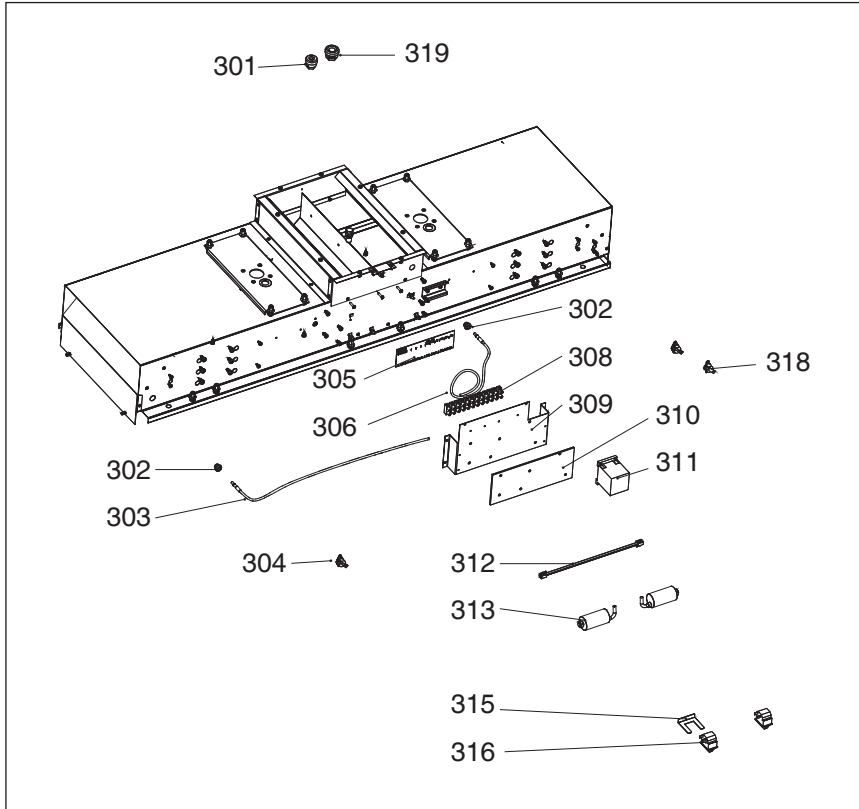
301	Grommet
302	Grommet
303	Temp. sensor, cabinet
304	Thermostat
305	Label
306	Temp. sensor, exhaust air
308	Terminal block
309	Mounting bracket
310	Circuit board
311	Contactor
312	Cable, Circuit board Control panel

313	Condenser
315	Clips
316	Door switch
318	Thermostat
319	Grommet

9.2 Lower part
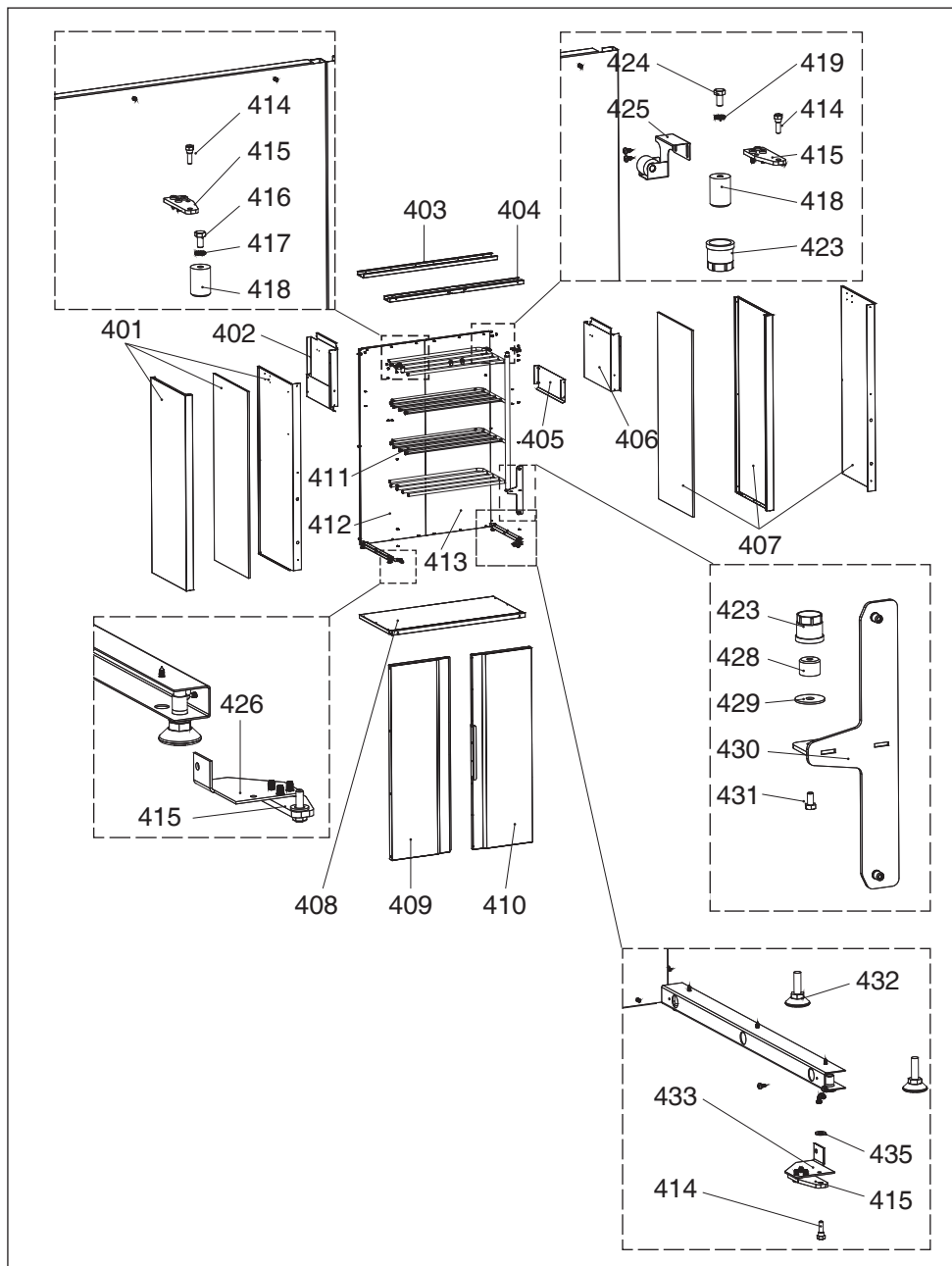
401	Side, left
402	Drum, left
403	Rear beam
404	Front beam
405	Spoiler
406	Drum, right
407	Side, right
408	Bottom
409	Door L
410	Door R alt. Door R, adapted for use by disabled persons
411	Hanger
412	Back piece, left
413	Back piece, right
414	Hinge spindle
415	Hinge
416	Bolt for upper hanger bracket
417	Washer
418	Spindle for upper hanger
419	Washer
423	Hanger bushing
424	Bolt for upper hinge spindle
425	Locking for hanger
426	Hinge bracket, left
428	Spindle for lower hinge
429	Washer
430	Bracket for lower hanger
431	Bolt for lower hinge spindle
432	Adjustable foot
433	Hinge bracket, right
435	Washer