SVEBA DAHLEN

860009-02

Rev.13

D-series

Double depth deck oven

Type: D-2ED

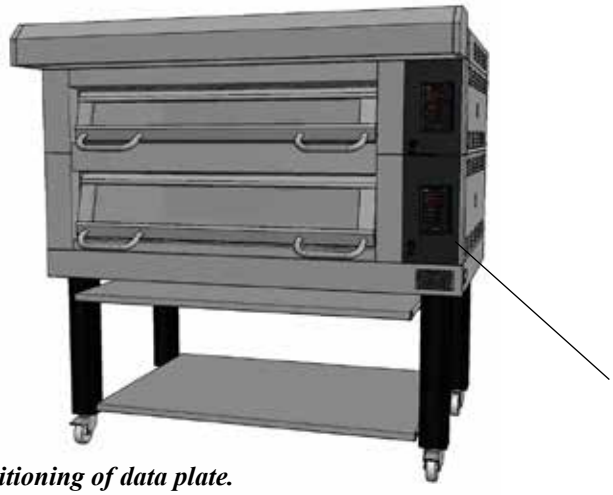
CE

Model No		
Serial No		
Volts		Hz
Total kW		
Elem.		V

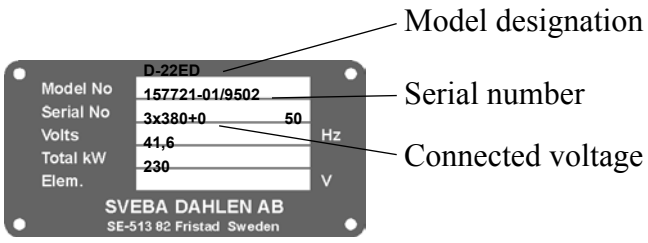
SVEBA DAHLEN AB
SE-513 82 Fristad, Sweden

Operating
Maintenance
Installation

Data plate.



Positioning of data plate.



Data plate for Deck Oven

To obtain assistance with installation or service of the oven the oven serial number and model designation must be given.
Note the serial number, model designation and voltage so that they are readily available when contacting us.

Please direct all your questions, comments or technical problems regarding this product to the SVEBA DAHLEN dealer or directly to

SVEBA DAHLEN AB
SE-513 82 Fristad
Sweden
Tel. +46 33 15 15 00
Fax +46 33 15 15 99
Web: www.sveba-dahlen.com
Mail: info@sveba-dahlen.se

Subject to changes without notice

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Tecnical data

Oven chamber interior dimensions are: width 1265 mm, depth 1660 mm and height at door opening 220 mm.
Fig. 1 shows an oven with two oven chambers, one above the other. The oven can be supplied with one to four oven chambers in height. A smaller oven can have further oven chambers added later on. The oven should not, however, contain more than four sections in height.
Leg length L can vary from 0 to 900 mm.
Standard leg lengths are 100, 200, 300 mm etc, but other lengths can be obtained on request.
At 0 mm leg length, the oven feet are fitted directly to the oven base. The oven is only delivered with adjustable feet.

Fig. 1 Height of D-series in mm.

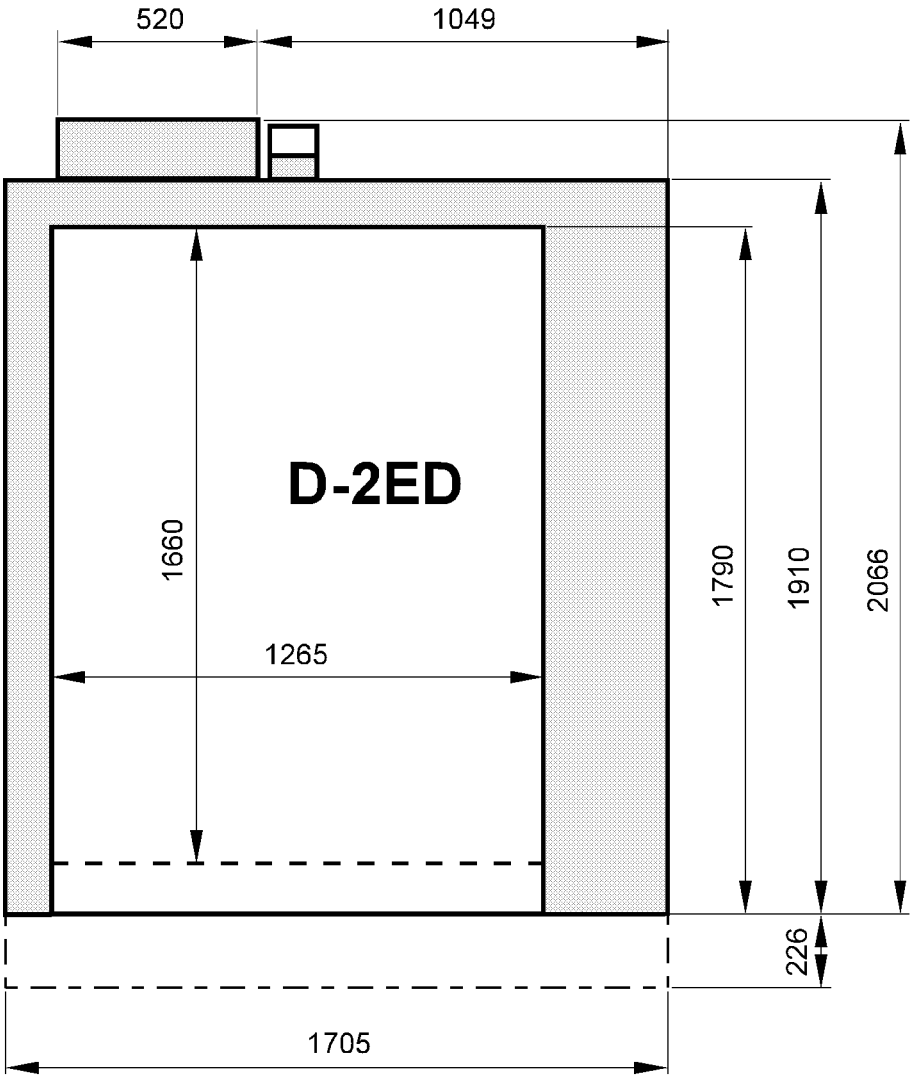


Fig. 2 Dimensional drawing

Design principle

The deckoven is CE-approved according to EMC, LVD

The deck oven is made from separate sections. The advantage of this means of construction is that the oven can easily be dismantled for installation in bakeries with narrow entrances.

One or up to four oven sections in height can be installed between the base and the top.

Legs are then installed on the base, which are provided with adjustable feet. These can easily be adjusted for height, to compensate for uneven floors.

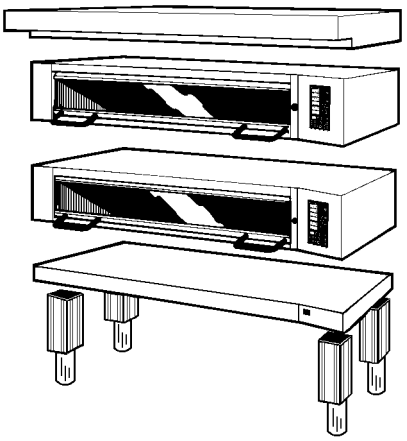


Fig. 3 The modules

Accessories for Deck Oven

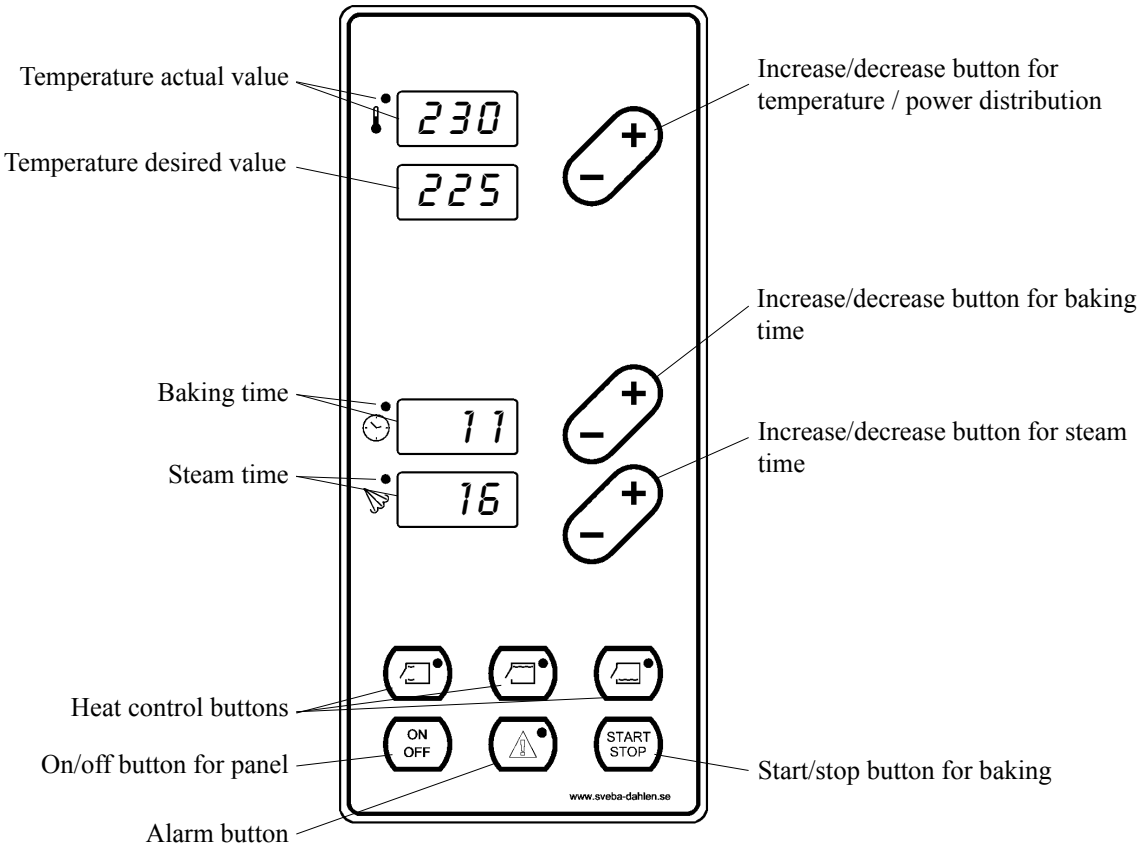
Fig. 4 Accessories

1 Canopy
The canopy collects and removes steam and smoke from the oven chamber.

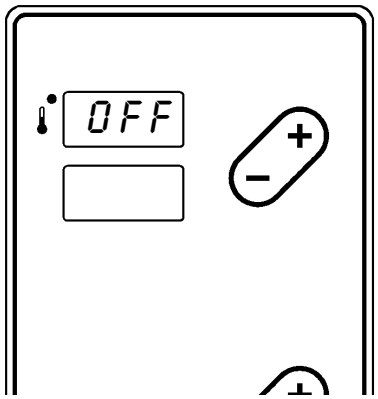
2 Turbo-start
Gives quicker heating at the simple press of a button when starting the oven, and reduced reheating times when baking, irrespective of heat control setting.

3 Heat distribution plate (Option)
Distributes the heat from the upper element. Used in baking of extremely sensitive products.

General description

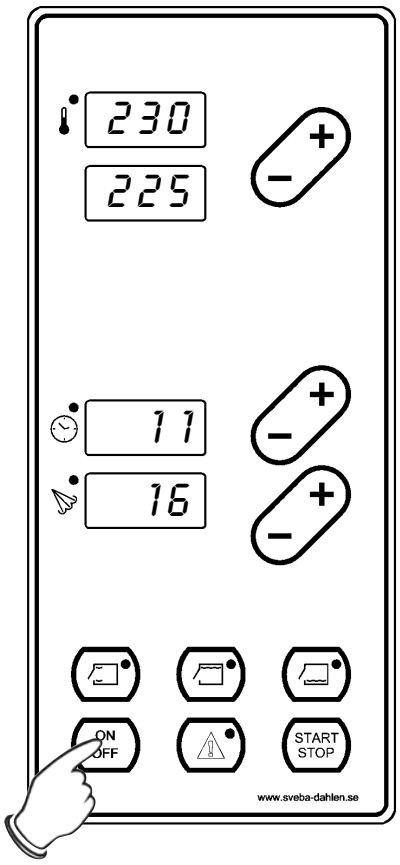


Oven turned off



The panel displays OFF and all of its functions are off.

Start of oven



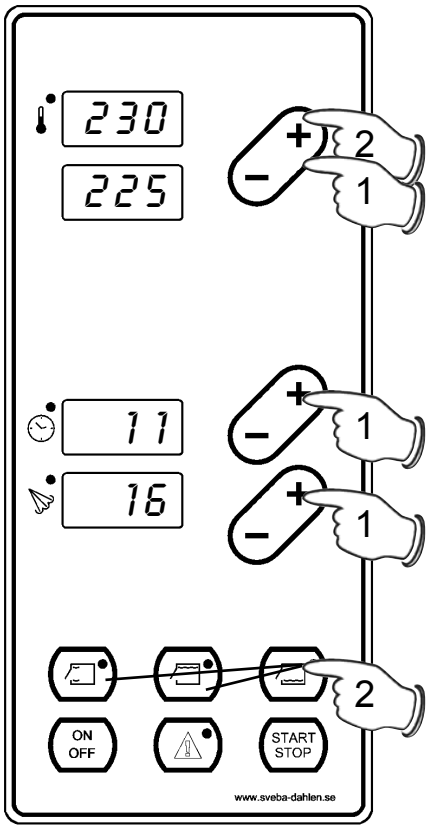
Start oven by pressing ON/OFF button.

The displays illuminate.

The oven light illuminates.

The oven section is heated to the set value.

Baking



1. Enter the desired temperature, baking time and steam time.

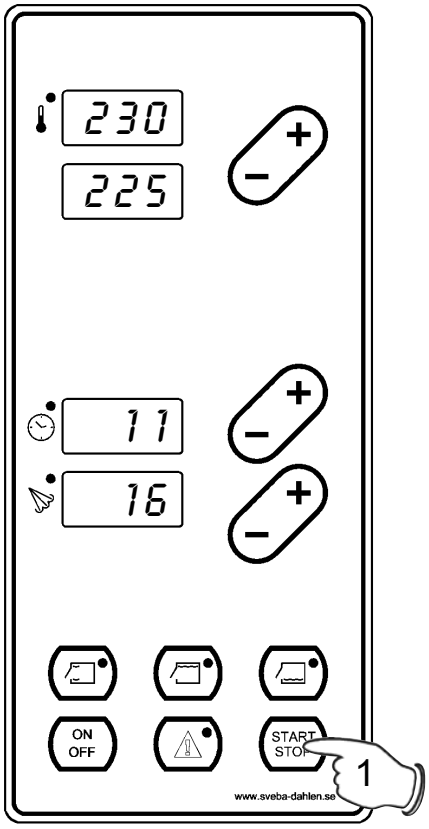
The steam generator can be turned off by pressing ”minus” until the steam display shows OFF.

If the oven does not have a steam generator this display will not illuminate.

2. To divide the power between front, top and bottom heat, enter the desired value by pressing the respective button. Settings 0-10 correspond to 0-100% power.

The display "Temperature set value" is used to show the set temperature. Change the value with the +/- button for temperature. The display returns to the set values after a couple of seconds.

Baking in progress



1. When the oven has reached the set temperature and the steam display diode stops flashing (the steam generator is at a sufficient temperature) begin baking by pressing the start button.

The steam display counts down second by second.

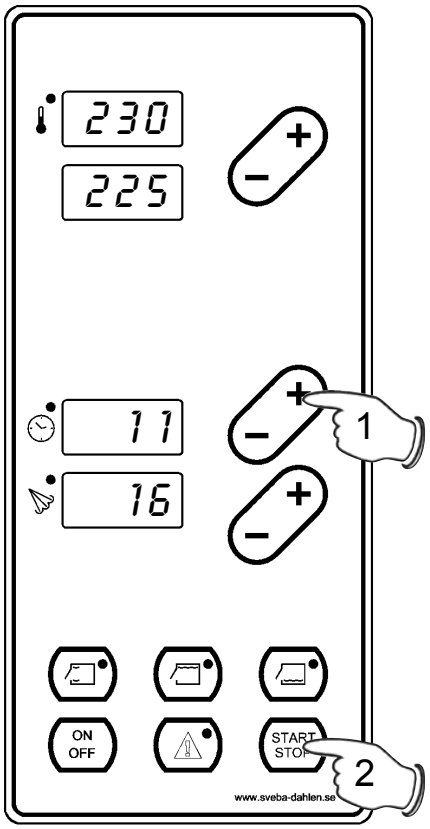
The steam display is illuminated during steaming in progress.

When the steam display diode is not flashing extra steam can be added by pressing the + button on the steam display, which counts up second by second so long as the button is depressed.

The baking time display counts down minute by minute. For times of less than 10 minutes the seconds will also be shown.

The baking time symbol is illuminated during baking.

Baking completed



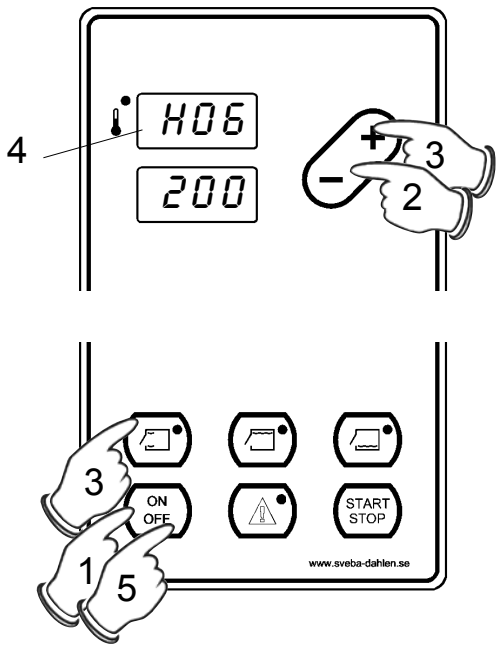
When the baking time has counted down to zero the buzzer will sound and the displays will flash.

1. If baking is not considered to be completed, the baking time can be extended by pressing the + button whereupon baking will continue.

2. If baking is considered to be completed, exit by pressing stop. The displays stop flashing.

The oven can be started with a timer that counts down the set time, according to the description "Start timer", or be programmed to start and stop and fixed times every day, according to the description "Weekly timer",

Start Timer



1. Hold the ON/OFF button pressed in for 10 seconds. The temperature display changes to the desired start temperature and the number of hours remaining to the start.

2. Set the desired start temperature with +/-.

3. Set the hours until the start by holding the front heat button pressed in and change with +/-.

4. The display counts down ´hour by hour, when H00 is reached, the oven starts and heats up to the set temperature.

5. The start timer can be deactivated, by holding once again the ON/OFF button pressed in for 10 seconds.

Weekly Timer

In the event of a power cut, the time must be reset.

In order for the weekly timer must be activated first in the service menu, parameter P02.

The settings are made with the panel in the Off position.

1. Panel indicates stb.

2. Change between Stb SEt and rtc, by holding the front heat button pressed in, and change mode with +/-.

Stb = Standby, oven ready to be started by start timer, See fig. 1

SEt = Setting for the start and stop times. See fig. 2

rtc = Settings for the real time clock. See fig 3

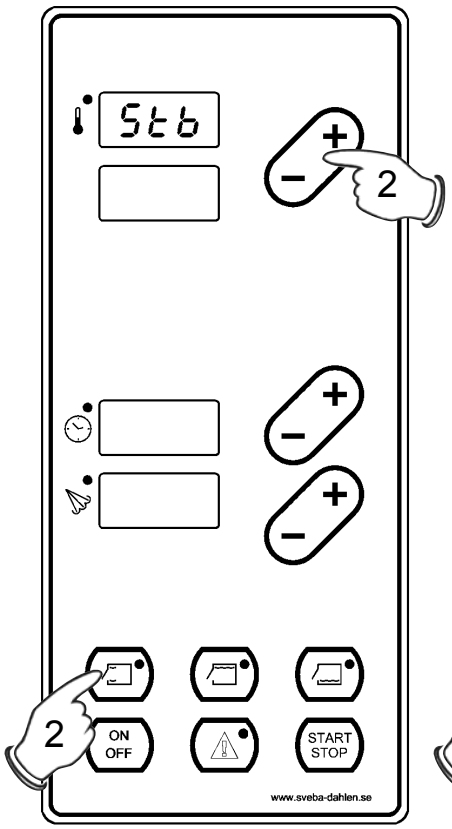


Fig 1

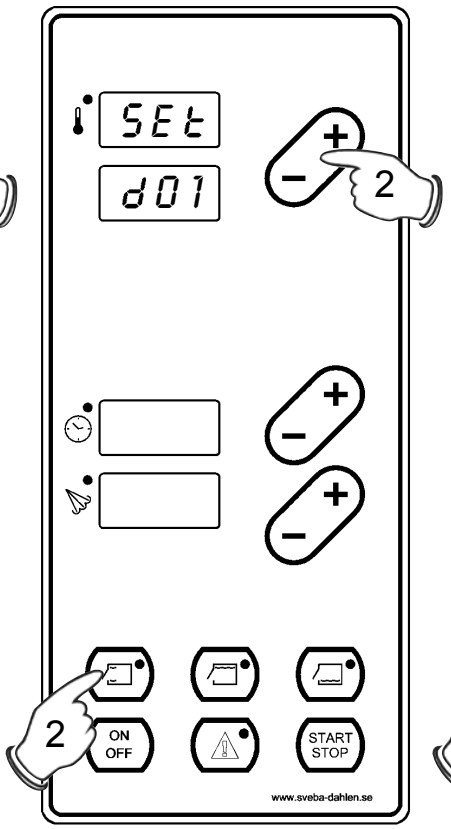


Fig 2

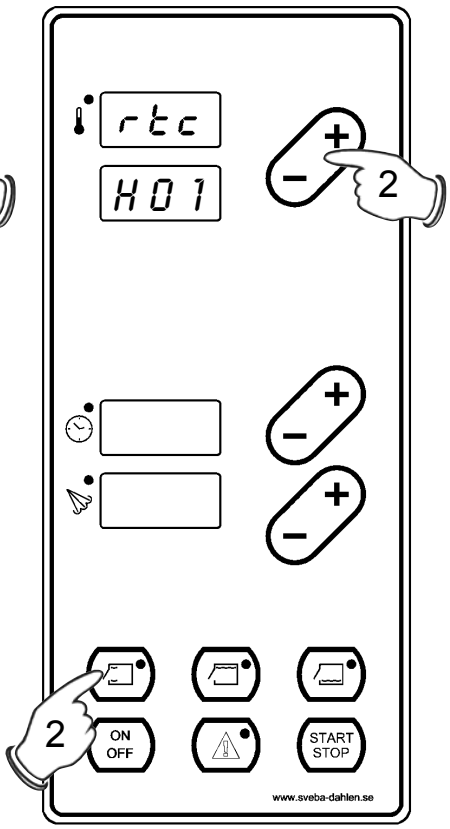


Fig 3

Setting the real time clock, rtc.

1. Change to "rtc".

2, Change between day, hours and minutes, by holding the bottom heat bottom pressed in and change with +/-.

3. Set the weekday (day 1 = Monday) with +/-. See fig. 1

4. Set the hours with +/-. See fig. 2

5. Set the minutes with +/-. See fig. 3

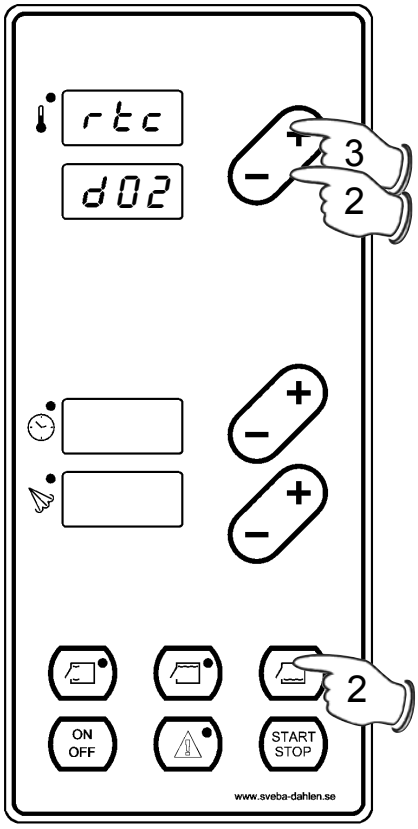


Fig 1

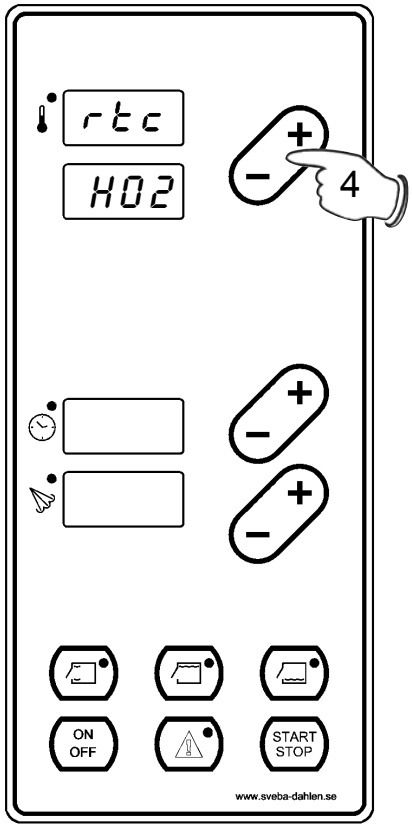


Fig 2

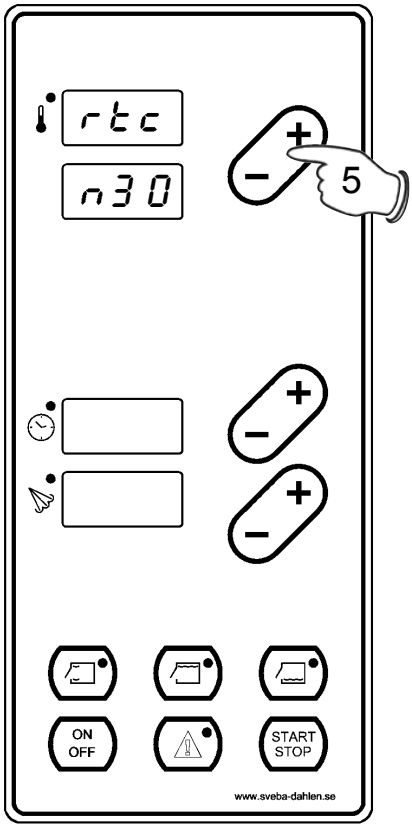


Fig 3

Setting the start and stop times, set.

1. Change to "SEt".

2. When the +/- button is pressed, the top display changes from SEt to show the start day and hour, the lower display shows the stop day and hour.

3. Set the start hour with +/-.

4. Set the stop hour, by holding the top heat button pressed in, and change with +/-.

5. Change to next day be holding the lower heat button pressed in and change with +/-.

To inactivate a start/stop time: increase the time until "--" is shown in the display.

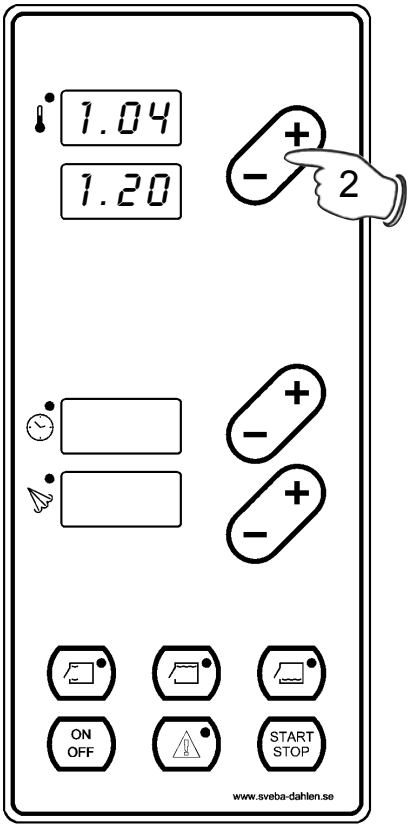


Fig 1

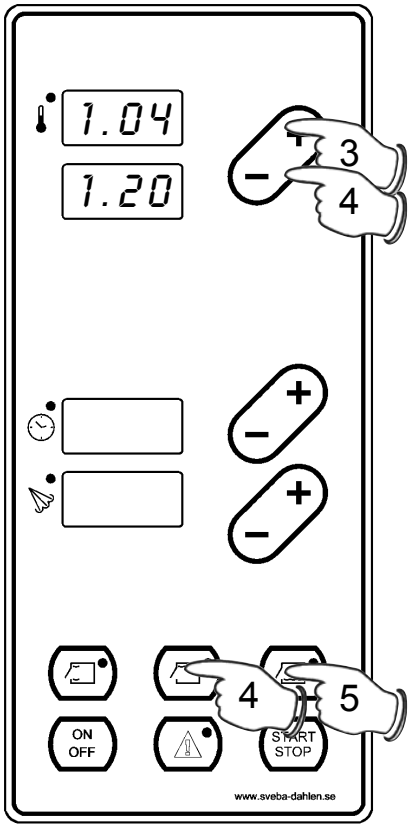
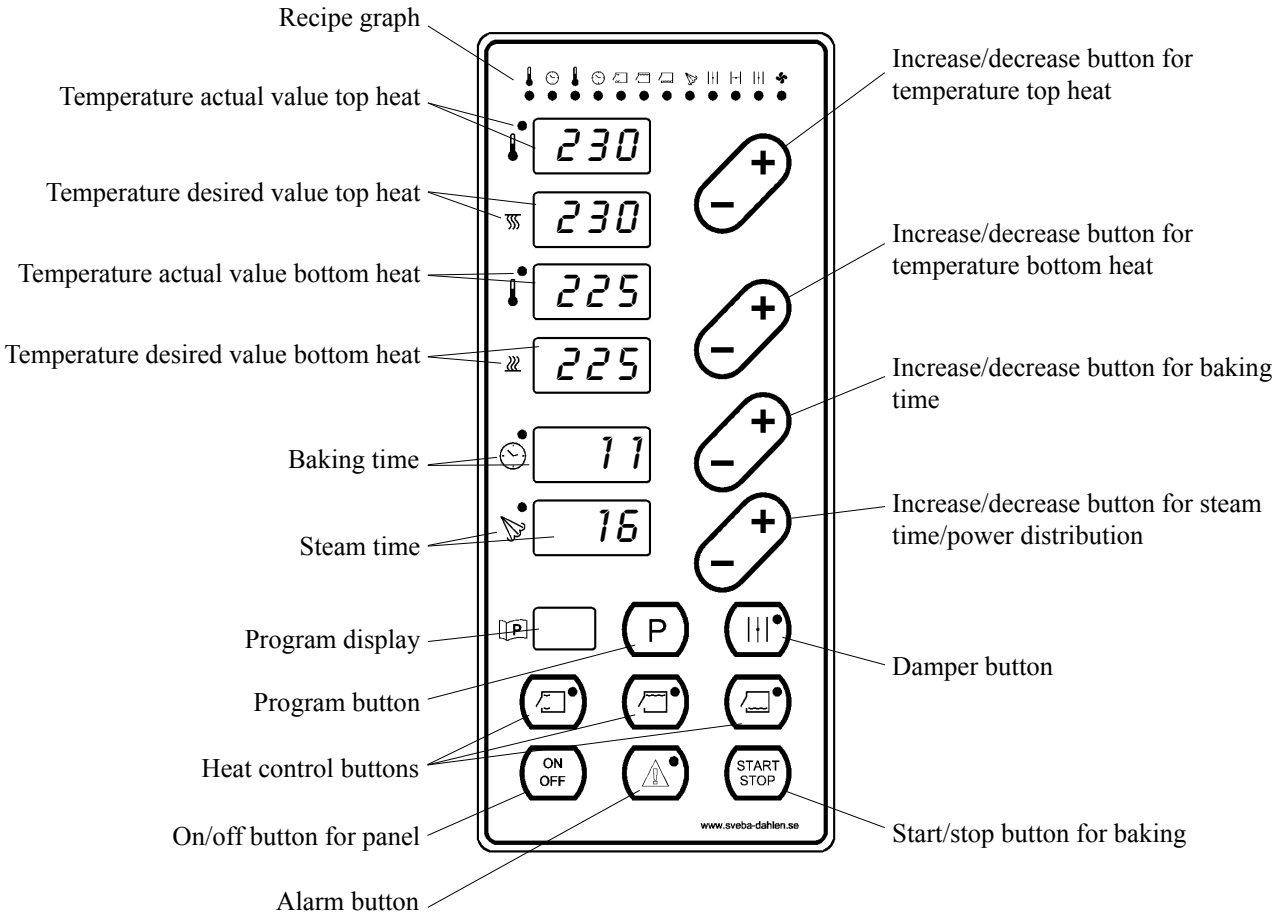
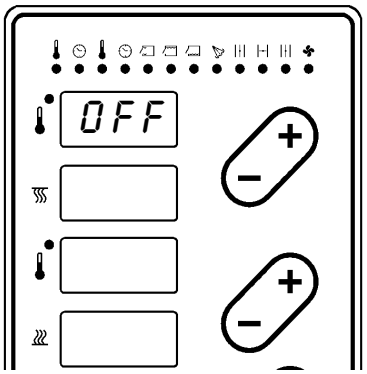


Fig 2

General description

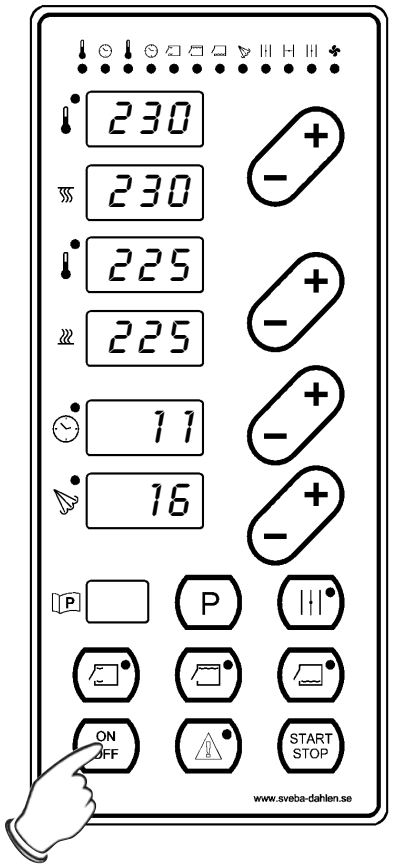


Oven turned off



The panel displays OFF and all of its functions are turned off.

Starting oven



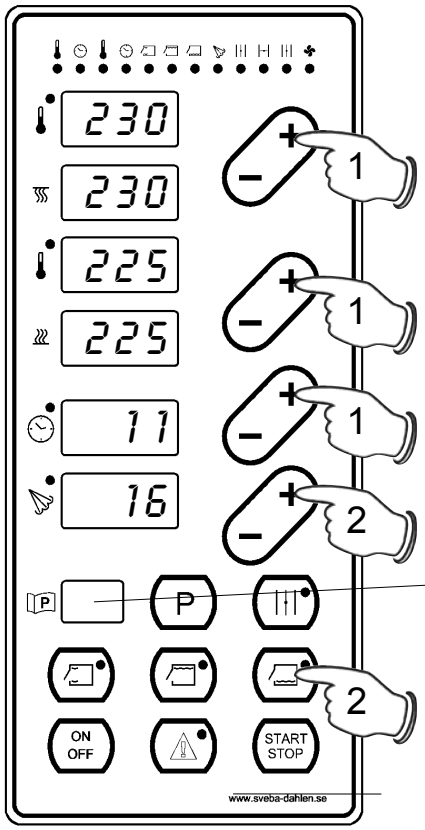
Start oven by pressing the ON/OFF button.

The displays illuminate.

The oven light illuminates.

The oven section is heated to the set value.

Manual baking



The program display is off, indicating manual baking.

1. Set the desired temperature, baking time and steam time.

The steam generator can be turned off by pressing ”minus” until the steam display shows OFF.

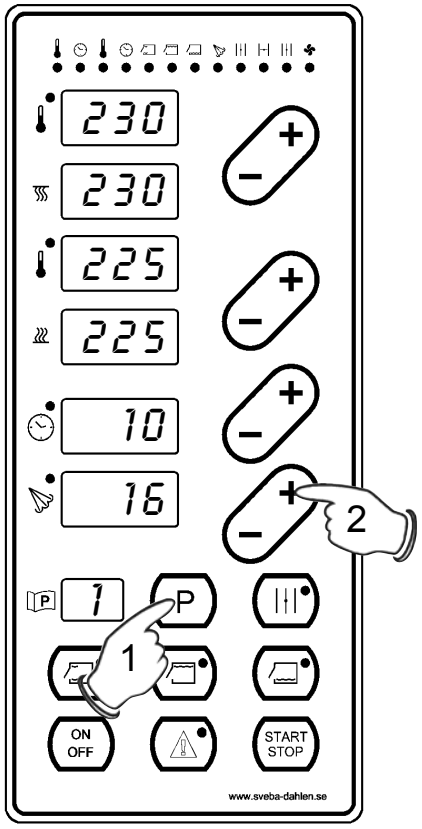
If the oven does not have a steam generator this display will be off.

2. To divide the power between front, top and bottom heat, enter the desired value by pressing the respective button. Settings 0-10 correspond to 0-100% power. The steam display is used to show the set value. Change the value using the steam display increase/decrease button. The display returns to the set steam time after a few seconds.

Goes from automatic mode to manual mode.

Simultaneously hold in the ”+” and ”-” buttons of the steam display until the program number display goes out.

Baking according to built-in recipe



1. Select the desired recipe number by keeping the program button depressed. The program display now illuminates.

2. Select the recipe number, then release the program button. The program display indicates the selected recipe number.

When selecting different recipe numbers the desired value of the recipe is shown in the respective display.

Temperature 1: top heat

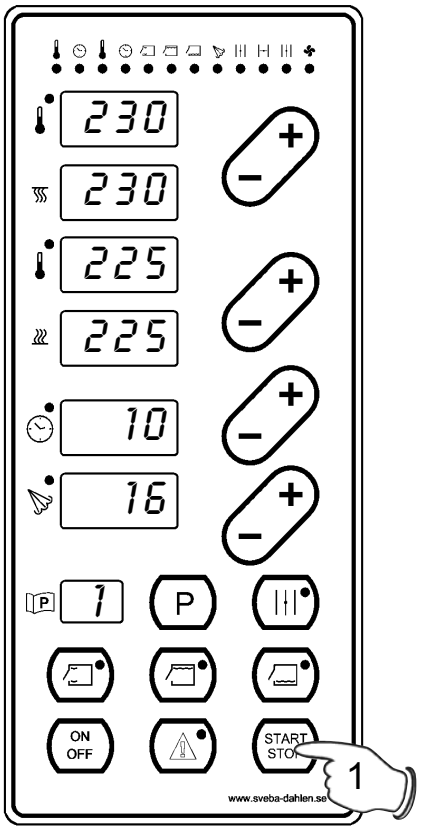
Temperature 1: bottom heat

Baking time

Steam time

When the program button is released the actual value of the temperature is now shown again.

Baking in progress



1. When the oven has reached the set temperature and the steam display diode stops flashing (the steam generator is at a sufficient temperature) begin baking by pressing the start button.

The steam display counts down second by second.

The steam display is illuminated during steaming in progress.

When the steam display diode is not flashing extra steam can be added by pressing the + button on the steam display, which counts up second by second so long as the button is depressed.

The baking time display counts down minute by minute. For times of less than 10 minutes the seconds will also be shown.

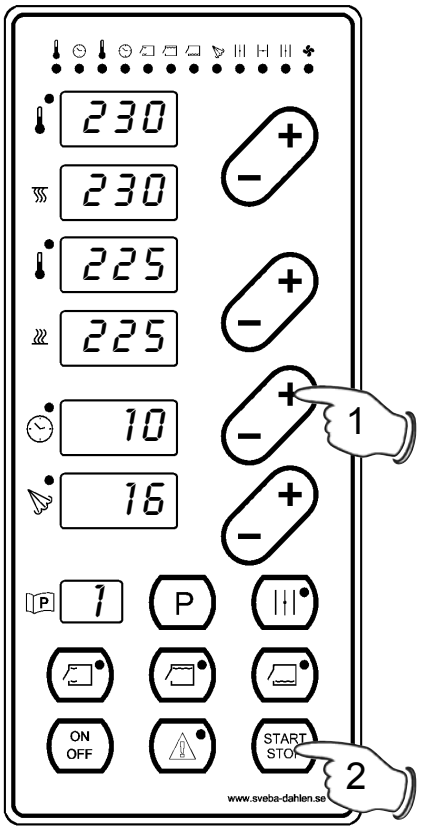
The baking time symbol is illuminated during baking.

The damper can be opened or closed manually by pressing the damper button.

The damper button is illuminated when the damper is open and off when the damper is closed.

During baking in progress all of the values can be temporarily changed. At the end of the baking time there will be a return to the settings for the recipe.

Baking completed

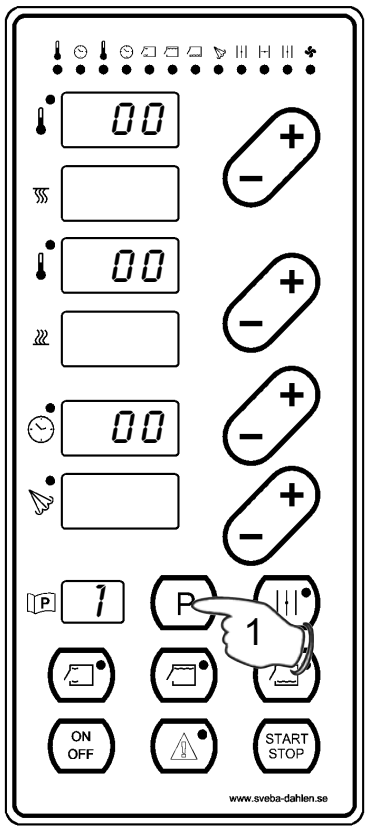


When the baking time has counted down to zero the buzzer will sound and the displays will flash.

1. If baking is not considered to be completed, the baking time can be extended by pressing the + button whereupon baking will continue.

2. If baking is considered to be completed, exit by pressing stop. The displays stop flashing and the baking time display now shows the desired value once again.

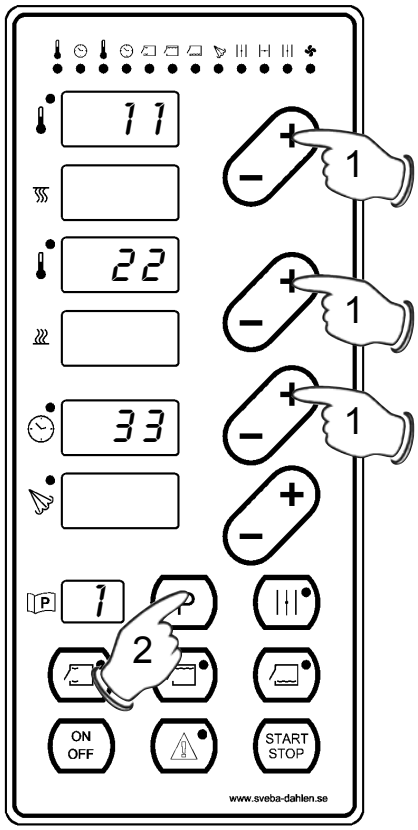
Programming new recipe



It is possible to program up to 40 recipes.

1. Keep the program button depressed for 4 seconds.

After 4 seconds the displays for temperature top heat, bottom heat and baking time will flash with the value zero.



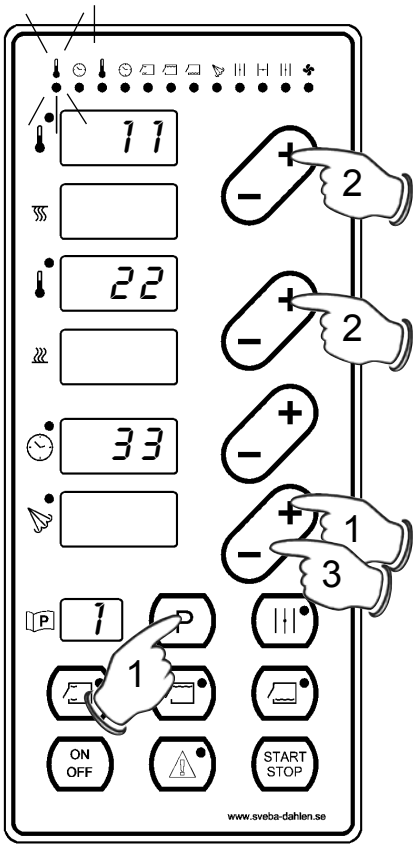
1. Enter a pass code (11 22 33) into the respective display.

When the display receives a value greater than zero the value is displayed with permanent illumination.

2. Confirm the pass code by pressing the program button.

If the pass code is correct the initial symbol of the recipe graph will flash.

Programming recipe



1. Select the desired recipe number to program by keeping the P button depressed at the same time as selecting using the increase/ decrease button for the steam display.

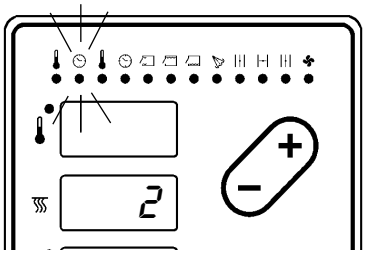
If the recipe number is available the temperature display will show desired value 0.

2. The temperature symbol 1 flashes.

Enter the value for temperature 1 in the desired value displays for top and bottom heat.

3. Press the ”+” button to access the next parameter.

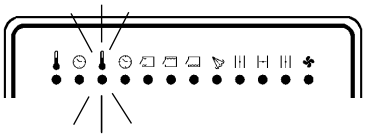
The temperature symbol 1 returns to a permanent illumination.



All recipe value are displayed and entered into the top heat display.

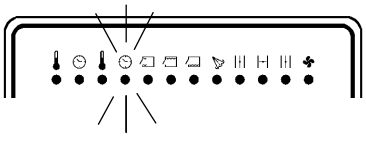
The start time temperature 2 symbol flashes.

Enter the value and proceed to next parameter.



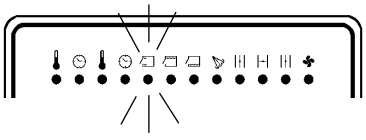
The temperature 2 symbol flashes.

Enter the value and proceed to next parameter.



The total baking time symbol flashes.

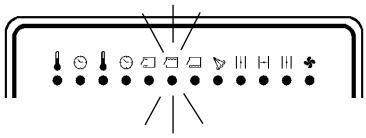
Enter the value and proceed to next parameter.



The front heat symbol flashes.

Enter the value and proceed to next parameter.

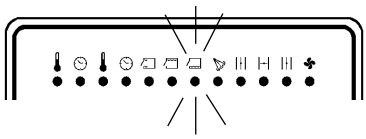
0-10 corresponds to 0-100% power.



The top heat symbol flashes.

Enter the value and proceed to next parameter.

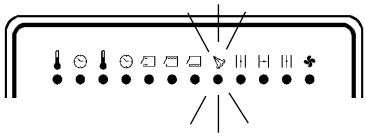
0-10 corresponds to 0-100% power.



The bottom heat symbol flashes.

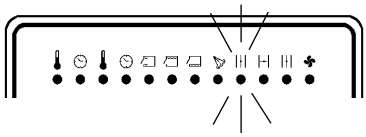
Enter the value and proceed to next parameter.

0-10 corresponds to 0-100% power.



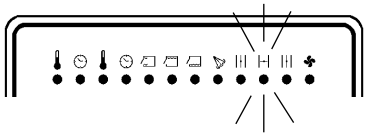
The steam time symbol flashes.

Enter the value and proceed to next parameter.



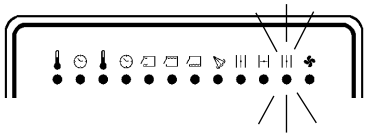
The open damper symbol flashes.

Enter the value and proceed to next parameter.



The close damper symbol flashes.

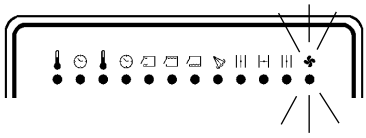
Enter the value and proceed to next parameter.



The open damper symbol flashes.

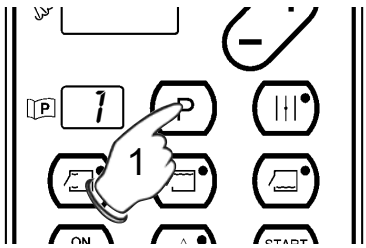
Enter the value and proceed to next parameter.

The damper is closed automatically at the end of the baking time.



The fan symbol flashes (option, not yet available).

Enter the value and proceed to next parameter.



If any value needs to be changed it is possible to move backwards in the recipe graph by pressing the ”-” button on the steam display.

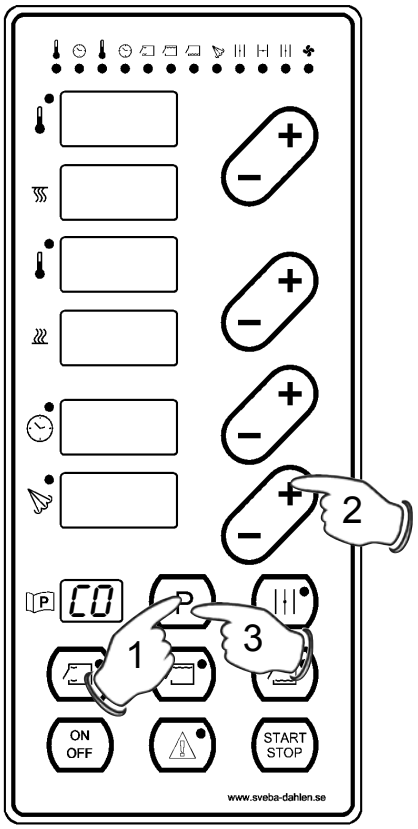
When all values have been set, confirm by keeping the program button depressed for 4 seconds.

The displays return to baking mode and the recipe graph goes out.

Changing stored recipe

Changes are made to an existing recipe by selecting a stored recipe. The procedure is the same as for new recipes.

Copying recipe



When a number of recipes are stored in the lower panel, which is the master panel, it is possible to copy to the other panels.

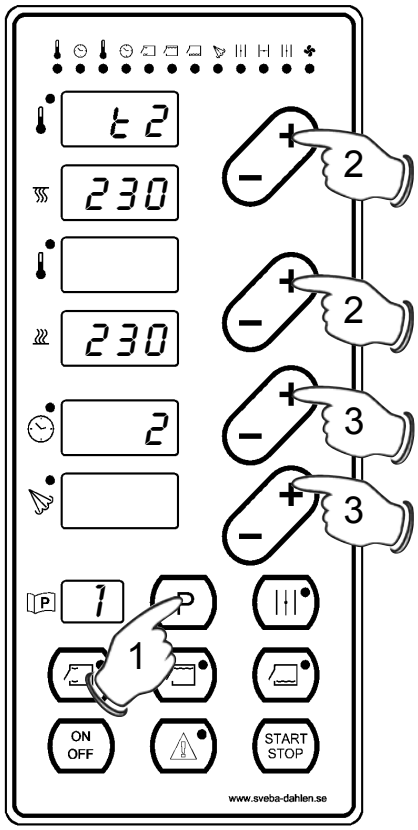
To copy recipes from the master panel to a panel:

1. Keep the P button depressed for 4 seconds on the panel to which the recipe is to be copied. Enter pass code 11, 22, 33 and confirm using the P button.

2. Select a recipe number greater than 40, the program display then shows C0 which means that all recipes are being copied. If individual recipes are to be copied select C1 for recipe no. 1, C2 for recipe no. 2, etc.

3. Press the P button to perform the copying.

Number of temperature steps



Parameter 23 in the service menu can be changed from 2 – 4 for an increased number of temperature steps. Two steps is standard and this is usually displayed in the programming graph. If P23 is changed to 4 temperature steps this is programmed as follows.

1. Go to programming recipes as per the earlier description using the P button and pass code.

The first 3 program symbols flash and the uppermost display indicates ”t 1” for temperature step 1 (temperature immediately after start).

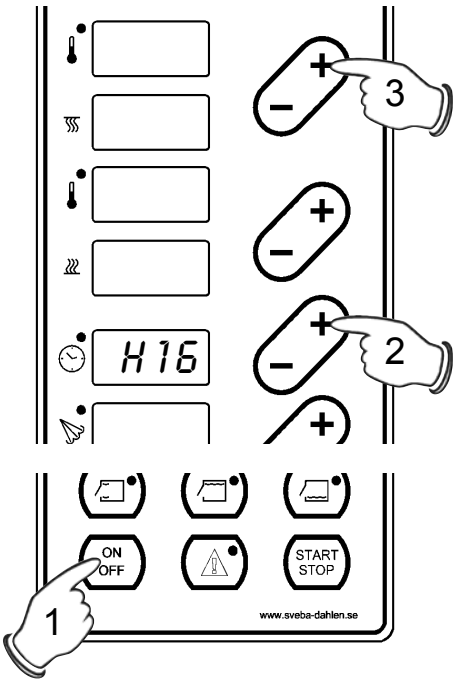
2. Enter temperatures for top and bottom heat in the respective displays.

3. Go to the next temperature step using the ”+” button for the steam display. ”t 2” is indicated, enter temperature step 2 in the respective display and its start time in the baking time display. Precede to temperature steps 3 and 4.

When step 4 has been set programming will continue in the usual manner as per the earlier description.

The oven can be started with a timer that counts down the set time, according to the description "Start timer", or be programmed to start and stop and fixed times every day, according to the description "Weekly timer",

Start clock



1. Press ON/OFF button for 10 seconds.

The baking time display shows H00.

2. Enter hours to next start using ”+” and ”-”.

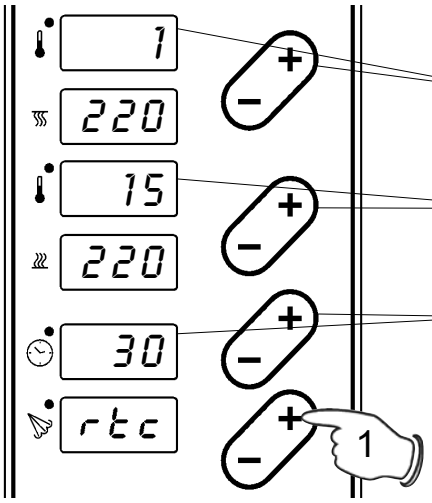
The oven heats up to the last set temperature.

Example:

H16, the oven starts after 16 hours (the display counts down hour by hour) and heats up to the set temperature.

The start clock can be deactivated by pressing the ON/OFF button for 10 seconds.

Setting real time



1. Switch to real time mode (rtc) by pressing the ”+” button.

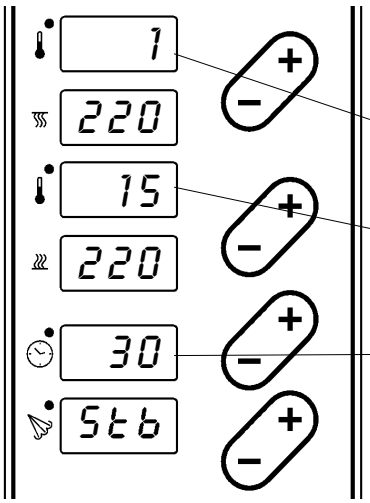
Real day (day 1 = Monday)

Real time hour

rtc = real time clock

In the event of power failure the real time clock must be re-set

Weekly clock



When the panel is turned off the real time and heating temperature are displayed.

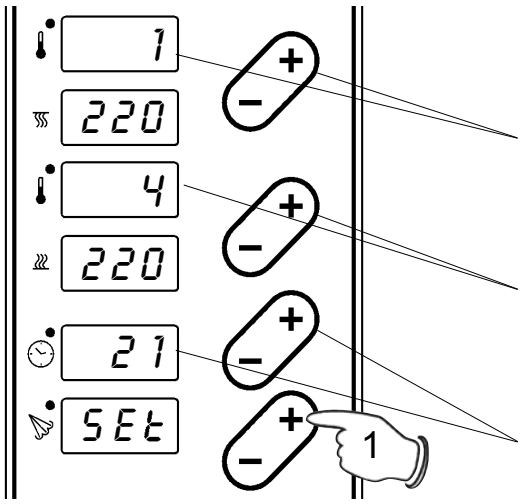
Week day (day 1 = Monday)

Real time hour

Real time minute

Stb = stand by, oven ready to be started by weekly clock

Setting start and stop times



1. Switch to setting mode (SEt) by pressing the + button.

Enter week day (day 1 = Monday)

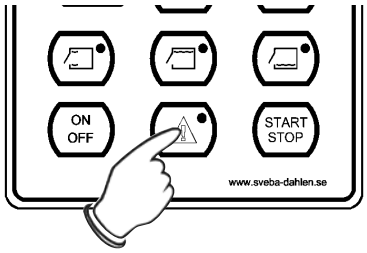
Enter start hour for oven

Enter stop hour for oven

SEt = setmode

To remove start or stop times increase the time until OFF is shown in the display.

Alarm management



When an alarm occurs, the alarm symbol is illuminated and the buzzer sounds with a pulsating tone (to differentiate it from the signal at the end of baking).

The sound signal is ended by pressing the alarm symbol.

When ending the alarm the display returns to the preceding display.

As long as the alarm has not been activated new readings can be taken from the steam display for as long as the alarm symbol is kept depressed.

INDICATION	FIELD TYPE	ACTION
E1	Fault in temperature sensor, top heat	Inspect sensor and its connections
E2	Fault in temperature sensor, bottom heat	Inspect sensor and its connections
E3	Fault in cold compensation	Replace panel
E4	Power failure	Set the clock.
E5	External alarm	Inspect fuses and overheating protection.
E90	Network fault, serial interface	Test pipelines.Inspect communi-cation settings (given on wiring diagram). Call in authorised service engineer.
E91	Energy supply not energised in one of the slave panels.	Call in authorised service engineer. Inspect parameter ”AC guard” in all slave panels.
SEr	Alarm, time for service	Call in authorised service engineer.
EP	Fault in parameter memory	Replace panel
Pr	Internal test not OK	Replace panel

Turbo start

The oven is fitted with automatic turbo function. If the difference between the desired and actual temperatures exceeds a value set in the service menu, all temperature outputs are switched to 100% for fast heating.

The turbo function is deactivated when a baking program is started or if the difference between the desired and actual temperatures is less than the set value.

AC guard

The oven calculates the present current consumption.

”Max. permitted current” is set in the service menu. The current consumption is not permitted to exceed this value. If a deck is turned off because of excessive current consumption, the temperature symbol will flash.

INSTRUMENT PANEL (Option)

Heat indicator, yellow
The lamp lights when the temperature falls below set temperature. The lamp goes off when the set temperature is reached.

Thermostat
Regulates the temperature in the oven to the temperature which is set on the thermostat.

Steam indicator, red
When the lamp goes off the steam generator is ready for use. When the lamp lights the steam generator is heating up and cannot be used.

Damper Control
Pushed-in - Closed
Pulled-out - Open

Control switch for steam generator
O - Steam generator switched off
I - Steam generator switched on
- Steam sprayed in for time fixed by relay in distribution box.

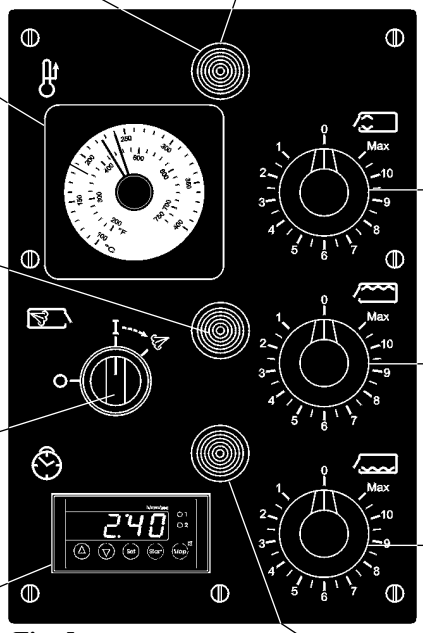


Fig. 5

Turbo knob
Max. load on top- and bottom elements until the thermostat breaks the first time.

Control for front heat
Regulates the heat at the front of the oven. (Over and under the door). Turn the control to the O position when this section is not used.

Control for top heat
Regulates the heat from the top elements. Turn the control to the O position when this section is not used.

Control for bottom heat
Regulates the heat from the bottom elements. Turn the control to the O position when this section is not used.

Baking time indicator, green
The lamp lights when the baking time has expired and indicates which section of the oven is ready. An audio signal is given while the lamp is on.

Digital baking timer
The baking time is set by holding in the SET button and pressing on the up arrow to increase the time and the down arrow to reduce the time. The timer starts when you press START and can be cancelled using STOP. If the timer is allowed to go down to 0 minutes, the audio signal will start. This can be cancelled by pressing STOP.

To show the most recently set time, press SET quickly.

All times are measured in minutes.

The set time will remain until it is changed.

Control switch
O - Off
I - On
Breaks the control current to all oven sections. The current must be broken with the main oven switch before carrying out service work.

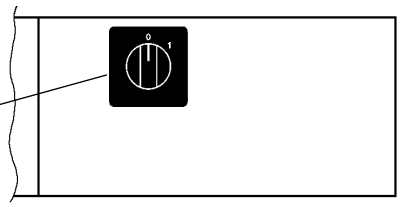


Fig. 6 Standard control panel

Control switch
O - Off
HAND - On
AUTOM - Automatic
Breaks the control current to all oven sections. In pos. AUTO the oven is stopped and started at the times prog-rammed in the week timer.
The current must be broken with the main oven switch before carrying out service work.

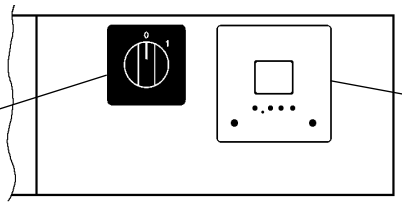


Fig. 7 Control panel with week timer

Week timer (option)
Two-channel timer for automatic start and stop of oven. As an option also for underbuilt prover. The oven and prover can be programmed for different start and stop times. The start and stop times can also be varied for all days in the week.

Heat controls

The Deck Oven is fitted with three groups of elements which can be regulated separately. These groups are called TOP HEATING, BOTTOM HEATING, and FRONT HEATING.

Top and bottom heating are used to influence the properties of the baked product. The main purpose of the front heating is to compensate for the heat losses at the oven door.
Certain commissioning time can be expected before you find your own settings for your products.
To start with you can use the values in the table below, and then adjust to your own settings.

Product	Front heat	Top heat	Bottom heat	Top heat Temp ºC	Bottom heat Temp ºC	Bake time min.	Steam
Bread loaf	8	8	6	250/220	250/220	20	Yes
Tin bread	3	3	7	220	220	30	Yes
Round flat bread	8,5	7,5	7	240	240	12	
French loaf	8	8	6	270/235	270/235	20	Yes
Baguettes	8	8	6	270/250	270/250	20	Yes
Rolls	8,5	8,5	7	250/240	250/240	8	Yes
Wheat bread	6	6	2	200	200	20	
Plain buns	9	9	2	240	240	8	
Danish pastries	9	9	2	240	240	8	
Macaroon	6	6	3	180	180	18	
Sponge cake	3	3	7	180	180	50	
Cake	6	6	6	200	200	25	

Table 1 Setting for common products.
Where double temperatures are given (Temp. 1/Temp. 2) these refer to initial temperature and final baking temperature.

Product	Front heat	Top heat	Bottom heat	Top heat Temp. ºC	Bottom-heat Temp. ºC	Bake time min.	Steam

Table 2 Personal settings

Stainless Steel Can Rust!

It is a common misapprehension that stainless steel cannot rust. Stainless steel is called ”passive steel” because it contains metals such as chromium, or both chromium and nickel, which protect the metal against corrosion. However, stainless steel also contains 70-80% iron which can rust.

The element which normally makes steel stainless is the metal chromium, which oxidizes in the air and forms a thin protective oxide layer on the steel’s surface. If the oxide layer is damaged, a new protective oxide layer is rapidly formed in the damaged area.

However, if some dirt on the sheet iron hinders the acid from forming an oxide layer, the otherwise stainless sheet iron is no longer stainless and begins to rust.

There are mainly three things that can break down and destroy the protective oxide layer.

- **Dirt** such as food remains, dough, chemicals, and water can damage the surface, if they are left to dry on the sheet.
- There are, among other things, **chlorides** in water, food and salt and they are very aggressive if they are not washed away. There can also be chlorides in detergents and these should not be used for cleaning stainless materials.
- The m**echanical wearing down** of iron objects such as knives, scrapers and wire brushes.

What should I do to avoid corrosion attacks?

A principal rule is: **Clean and dry surfaces do not rust!**

Wipe off dough, food remains and other dirt with a wet sponge or rag. Dried-in dirt can be carefully scraped away with a nylon brush or a plastic scraper. Immediately wash and dry all surfaces. A rubber scraper can be used to dry large smooth surfaces.

Iron objects, such as wagons of steel, which scrape against the surface of stainless sheet iron, damage the oxide layer and cause the sheet iron to begin to rust. The damage can only be repaired by smoothing the damaged area with stainless grinding tools or by cleaning with special liquids (10-20% Nitric acid).

- **Do not use steel wool!** Use Scotch-Brite or stainless wool.
- **Do not use a steel scraper!** Use a plastic or stainless steel scraper.
- **Do not use a wire brush!** Use a nylon brush or a stainless steel brush.

If the stainless sheet iron has a smoothed-over surface structure, you should always wash and dry it in the direction of the cutting and not in the opposite direction.

Use alkaline detergents but **not chloride-based** ones**.** If chloride-based detergents are used, you must immediately rinse the surface several times with plenty of water and then dry the surface clean. **Soda**, **borax** and **natrium perborate** are other excellent cleaning agents.

Do not use disinfectants which contain **hypochlorites**, because these agents cause spot corrosion on the stainless sheet iron.

Hard water is one of the enemies of stainless sheet iron. A softening filter makes the water softer and less corrosive.

If you follow these simple cleaning rules, the life time of your machines will increase significantly. A clean surface maintains its protective oxide layer, a dirty surface destroys it!

Cleaning glass

Wipe the door glass with a moist cloth. If you like, use a little washing up liquid or other detergent specifically for use with glass. Sveba Dahlen recommends **BRITE GLACE**, article number **91430-005**.

Option: if the oven is equipped with double glass, the outer glass must be installed with the marker in the lower right-hand corner.

The electrical box

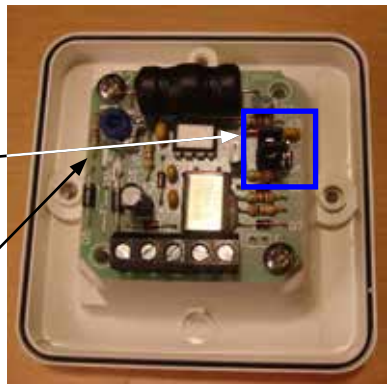
Before any work is carried out, the main current of the oven has to be switched off.

Clean all the cables, wires and electrical components with a soft brush or by means of a vacuum cleaner once a year.

Close the box before switching on the main switch.

1. Loosen the screws

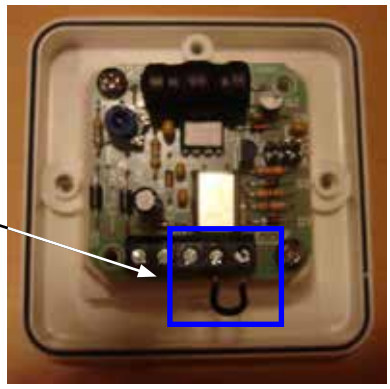
2nd Use jumper / jumpers according to Table to adjust tone selection.

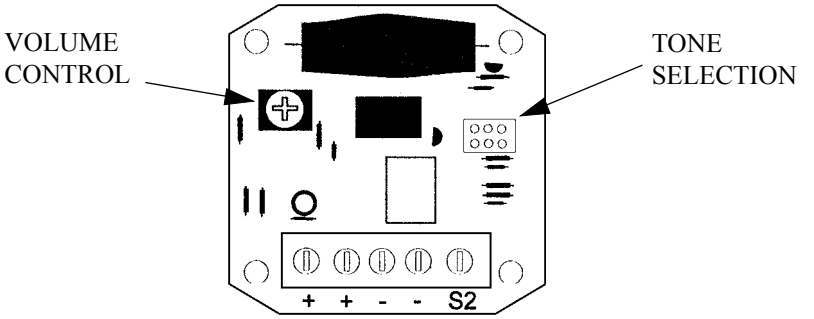


3rd Adjust volume by Gently twist the volume control.

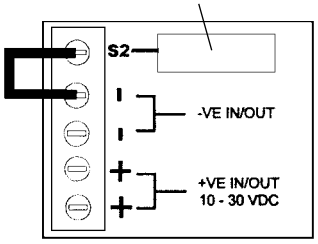
Standard = Tone 5

4. To use touchtone 8-10 Set terminal "-" and "S2" bridged.





Link S2 and -VE connectors for the tones 8 to 10



TONE LINK SELECTION									
Tone 1	Tone 2	Tone 3	Tone 4	Tone 5	Tone 6	Tone 7	Tone 8	Tone 9	Tone 10

STAGE 1 TONE DESCRIPTION

Tone 1 Alternating 800/1000Hz at 0,25 Sec Intervals
Tone 2 Slow Whoop 500/1200Hz at 0,3Hz with 0,5 Sec Gap Pepeated
Tone 3 Sawtooth 1200/500Hz at 1Hz
Tone 4 Alternating 554Hz (100mS)/440Hz (400mS) - (NFS 32-001)
Tone 5 Simulated Bell Sound
Tone 6 Sweeping 800/1000Hz at 7Hz
Tone 7 Australian Evacuation Signal

STAGE 2 TONE DESCRIPTION

Tone 8 Continuous at 1000Hz
Tone 9 Continuous at 554Hz
Tone 10 Australian Alert signal

Trouble shooting

In the event of a problem you should first look through the trouble shooting list below to see if you can correct the fault yourself. If this does not help contact Sveba Dahlen's service department.
NOTE! Work on electrical components must be carried out by an authorized electrician.

Fault	Reason	Procedure
The oven does not start.	• Oven fuse blown. • Main fuse blown.	• Reset fuse in the oven distribution box. • Replace fuse in the main distribution box.
The oven drops in temperature or has long recovery time.	• Damper open. • A fuse/overheating protection has blown. • Defective element.	• Close damper fully or partially. • Reset fuse/overheating protection in the oven distribution box. • Replace defective element.
The top of the product is too dark.	• Too much top heat	• Reduce top heat.
The bottom of the product is too dark.	• Too much bottom heat.	• Reduce bottom heat.
Both the top and bottom of the product are too dark.	• Too high baking temperature. • Too long baking time.	• Reduce baking temperature slightly. • Reduce baking time slightly.
The product is lighter at the front of the oven.	• Too little front heat. • Too much top heat.	• Increase front heat 1 step. • Reduce top heat 1 step.
The product is darker at the front of the oven.	• Too much front heat. • Too little top heat.	• Reduce front heat 1 step. • Increase front heat 1 step.
The oven bakes unevenly on certain surfaces.	• Static relay broken	• Change the static relay Får endast göras av behörig fackman.
No steam in the oven chamber.	• Steam generator is switched off. • Water in steam generator is turned off. • Dirt in steam generator nozzle. • Steam generator fuse blown. • Steam generator element defective. • The steam regulator LED is flashing	• Start steam generator with steam control. • Open water tap. • Remove and clean nozzle. • Reset steam generator fuse. • Replace defective element. • Wait until the LED stops flashing
Too little steam in the oven.	• Steam time too short. • Dirt in steam generator nozzle. • Oven damper open.	• Increase the steam time • Remove and clean nozzle. • Close damper fully or partially.
Too much steam in the oven.	• Steam time too long. • Water pressure too high.	• Reduce time on steam generator time relay. • Reduce time on steam generator time relay or replace with small nozzle.
The bread lacks lustre despite adequate steam.	• Oven damper is open. • Steam applied too late.	• Close damper fully or partially. • Put products more quickly into oven and start steam immediately.

Table 3 Trouble shooting.

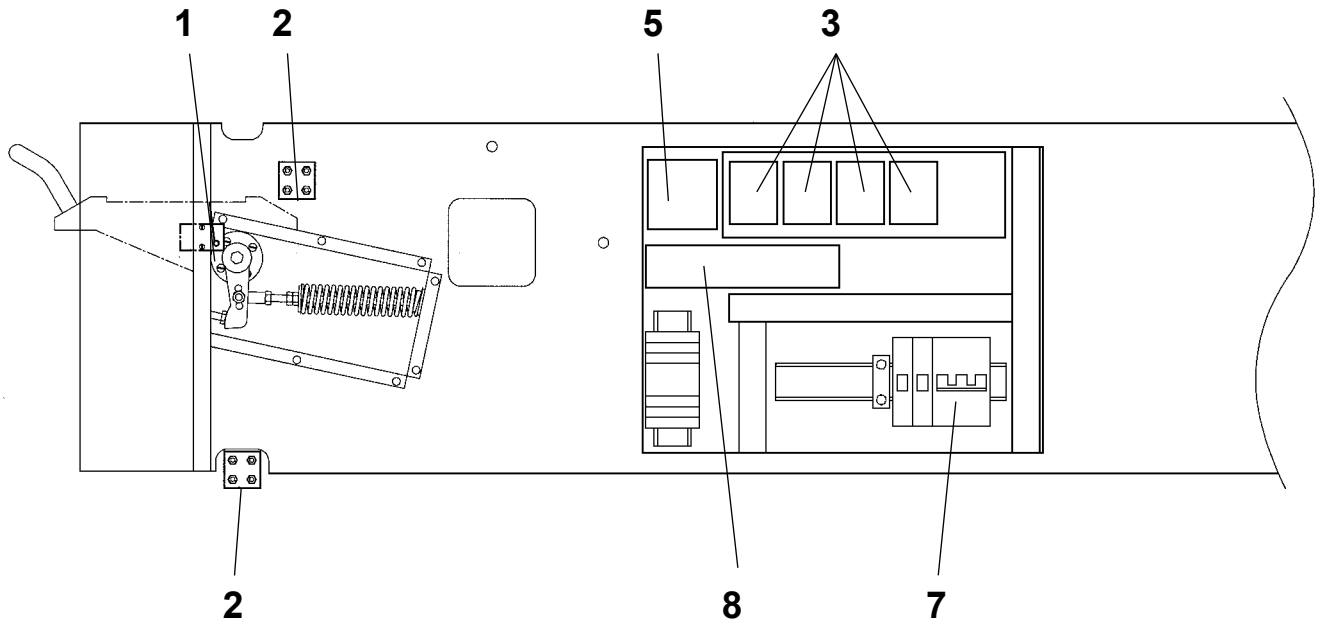


Fig. 7 Distribution box

1 Overheating protection

If the overheating protection has tripped, it will rest itself automatically once the oven space has cooled. To obtain complete protection, the element's fuse, F1, is also tripped (see also point 7)

Call a repairer if the protection trips repeatedly.

2 Element

Upper and lower front heat elements.

3 Static relay

There is a static relay for every group of heater elements, the upper, lower and front heaters. If the oven is supplied with a built-in steam generator, there is a fourth static relay for this one too.

5 Buzzer

This is connected to the baking timer and gives a signal when the baking time has expired. At the same time as the buzzer is activated the green pilot lamp on the instrument panel lights.

7 Circuit breakers

The oven is equipped with three circuit breakers. One operation circuit breaker, one circuit breaker for the oven elements and one circuit breaker for the two steam generators. The oven element circuit breaker is connected to a shunt tripper which cuts the element current if the overheating protection trips.

During service work in the oven the power supply to the oven must be switched off. It is not sufficient to switch off the built-in automatic fuses.

8 Light transformer

Transformer for the halogen light.
Both right-hand and left-hand oven lamps are connected to this transformer.

Read carefully this manual through before unpacking the oven. Incorrect handling can damage the oven during transport and installation.

Open the packing materials carefully so that the oven is not damaged. Inside the oven chamber there are several parts which must be used during assembly. Take these out and check with the enclosed packing list. They should include the oven legs, feet, heat distribution plate, distance bumper, washers for cable inlets, screws and nuts.

Assembly of oven parts.

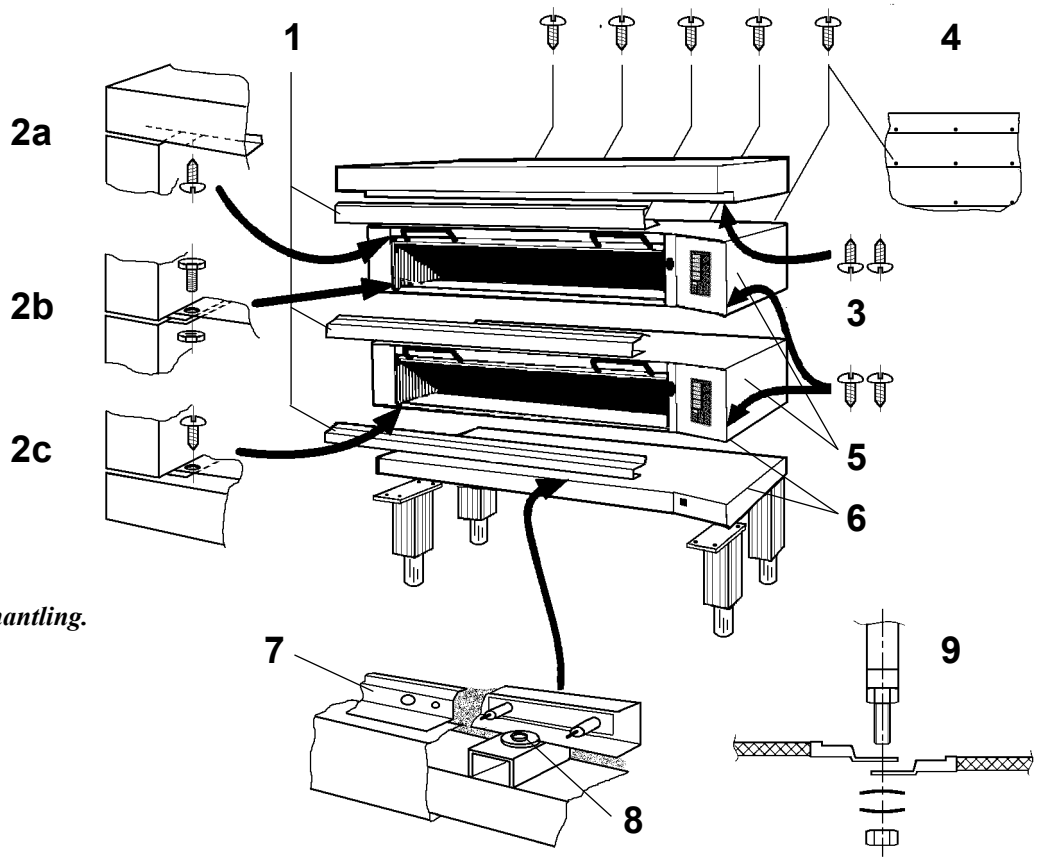


Fig. 8 Dismantling.

1 Unscrew the cover plates at the front of the oven. On ovens with one oven section there are two cover plates, and on other ovens three or more.

2 Loosen the screws which connect the top section with the top (**2a**) and the screws between the sections (**2b**). If necessary the screws which connect the bottom section with the bottom (**2c**) can also be loosened. Read more about this in item 6.

3 Loosen the screws which connect the right-hand front panel with the top, and the screws between the front panels, and if necessary also the screws between the front panel and the bottom.

4 Loosen the screws at the back of the oven along the joint between the section and the top, between the sections, and if necessary between the bottom section and the bottom.

5 Mark up and loosen the cables in the distribution box which are drawn between the sections and shall be separated. The thick power cables (4-5 pcs) are appropriately loosened at the automatic fuses, the thinner cables (2 pcs) are loosened at the terminal blocks.

6 The bottom section and the oven bottom should not be separated. If it is necessary to separate the oven also here, do as follows:

Begin by marking up where and how all the element cables are positioned, and then loosen these.

7 Loosen the cover plate behind the cables and lift this off the insulation material behind.

8 Loosen the three screws with their clamp washers so that the underlying plate strip releases. The oven section can now be lifted off.

When the oven is to be assembled again it is important that the plate strip is clamped again under the washers. Now replace the insulation material, fit the cover plate (**7**) and connect up the element cables again.

9 It is very important that the cables are correctly located, and that both cup washers are turned towards each other before they are screwed together.

- When the oven sections are separated from each other they can be carefully lifted down and moved to the place of assembly.

- Use the accompanying lifting frame specially made for this purpose.
  Check that the frame is exactly beneath the support on the oven chamber roof. (fig. 9).
  The spray pipes and equalisation plates must not be fitted if the sections are lifted in this way (see section "Installation - equalisation plates").

- Only lift one section at a time.

- The sections can also be lifted by their lifting hooks, which are partly concealed by the insulation. The hooks should be folded up 90° before use (Fig. 10).

- Do not put down or carry an oven section with the short side down (Fig. 11). The oven has no reinforcements for this type of strain, and there is a risk for deformation. If the section is put down on the back-piece, make sure that the underlayer is flat. A spot load such as a door threshold can easily crack the back-piece. Observe care with protruding parts such as the solenoid valve or the connection head of the element in the distribution box.

- When all parts are lifted into position the assembly of the oven can begin.

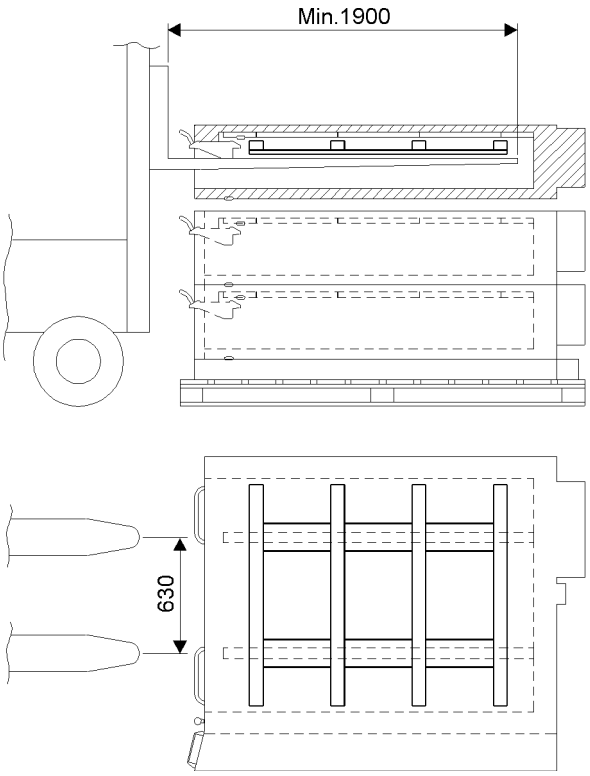


Fig. 9 Lifting an oven section.
Use the accompanying lifting frame. Check that it is correctly aligned and only lift one section at a time.

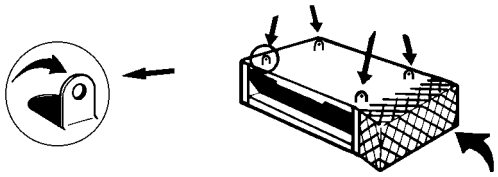


Fig. 10 Lifting of section in lifting hooks.
Never lift or pull on the area of the oven which is marked!

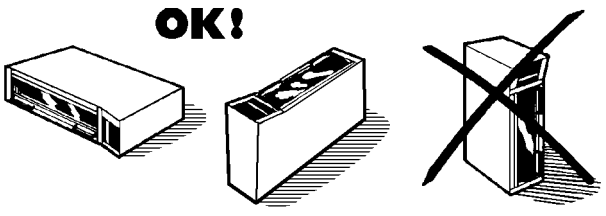


Fig. 11 Never put an oven section down on its side!
Watch out for extruding parts such as the damper or solenoid valve.

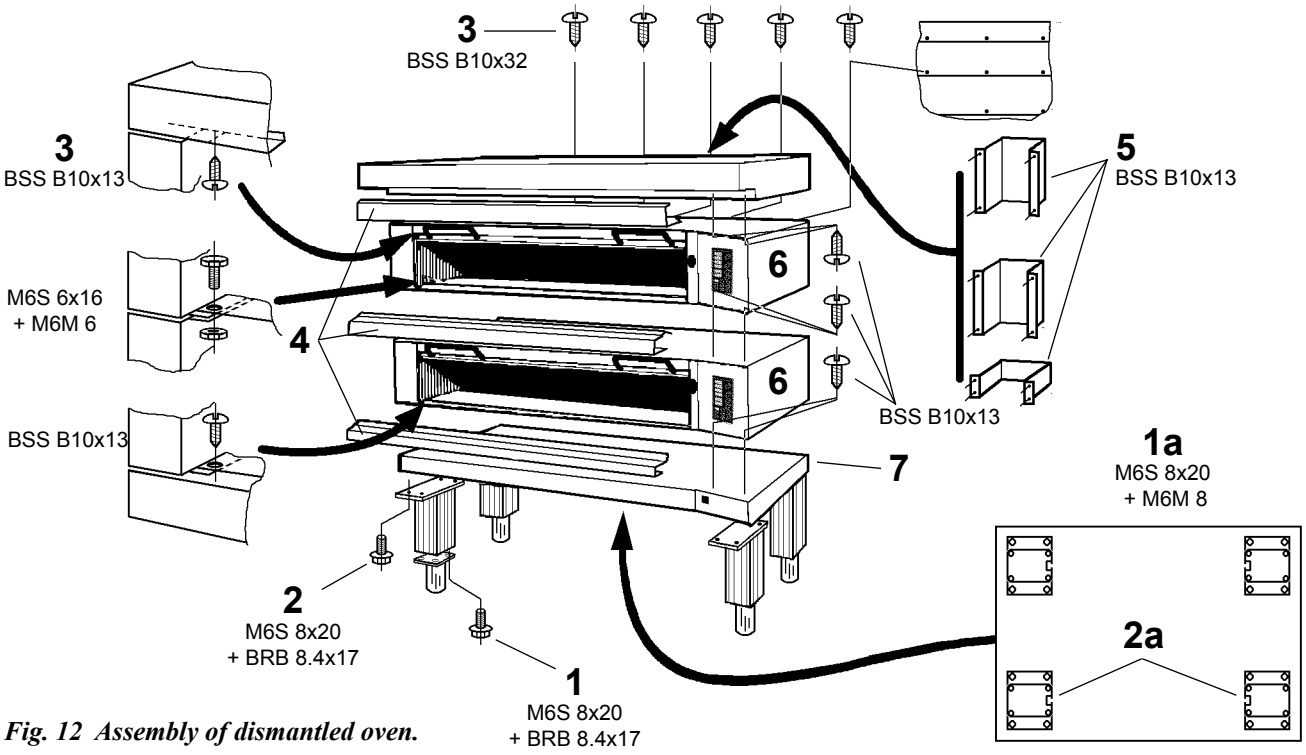


Fig. 12 Assembly of dismantled oven.

Electrical work, the connection of water and ventilation, must be executed by an authorized technician.

1 Start by screwing the adjustable feet to the oven legs.

2 Screw on the legs in the bottom section. The helicoidal grooves in the legs must be turned towards each other (**2a**).

3 Lift up all the oven sections incl. the top on the bottom section, and screw together.

4 Fit the cover plates which protect the element cables in the front of the oven. Check that all the closed oven doors fit tightly to the cover plates.

5 Screw on the exhaust ducts at the back of the oven. The thin end must face downwards. Now screw on the distance bumper down on the bottom section. The distance bumper protects the wall behind from the hot exhaust duct.

6 Connect up all loose cables and make extra sure that they are connected correctly again.

7 Connect the incoming electric cable to the terminal in the bottom section. A number of flat washers to fit the cable screw unions are enclosed on delivery. Finally, check that no screws or cables are loose.

Assembly of a complete oven

The figures in the text refer to the text above, "Assembly of a dismantled oven".

- Open the packing materials carefully so as not to damage the oven.
- Fit the oven legs as per items 1 and 2.
- Carefully lift up the oven from the transport pallet and pull this out of the way. Screw on the oven legs in the oven bottom, see item 2. Put the oven down again.
- Fit the exhaust ducts and distance bumper, see item 5.
- Connect the incoming electric cable, see item 7.

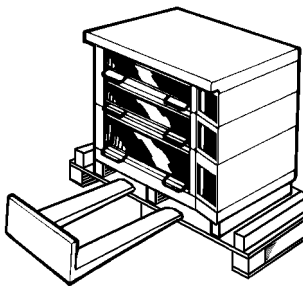


Fig. 13 Lifting of a complete oven.

Equalisation plates (option)

The equalisation plates allocate the heat from the top elements so that sensitive products are also baked perfectly.

If the equalisation plates have to be dismanteld (e.g. when an oven section needs to be lifted) this is done in the following way:

1. Release the screws in the front edge of the spray pipes.
2. Lift down the spray pipes and equalisation plates (the equalisation plates rest on the spray pipes).
3. Lift out the equalisation plates and pull out the spray pipes from the rear supports.

Fitting of the equalisation plates is done in the reverse order.

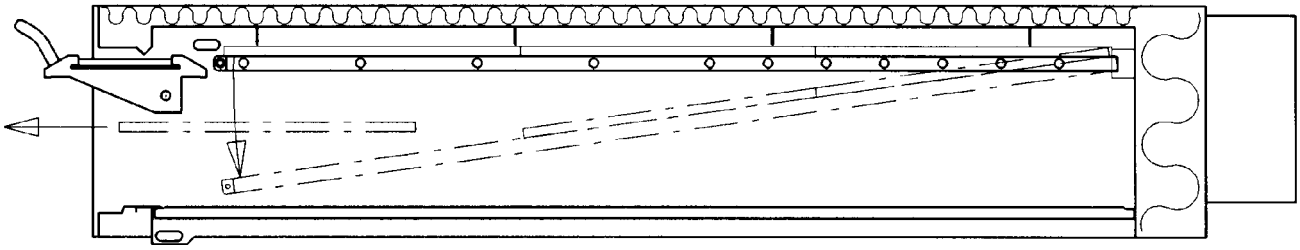


Fig. 14 Dismantling of equalisation plates.

Location

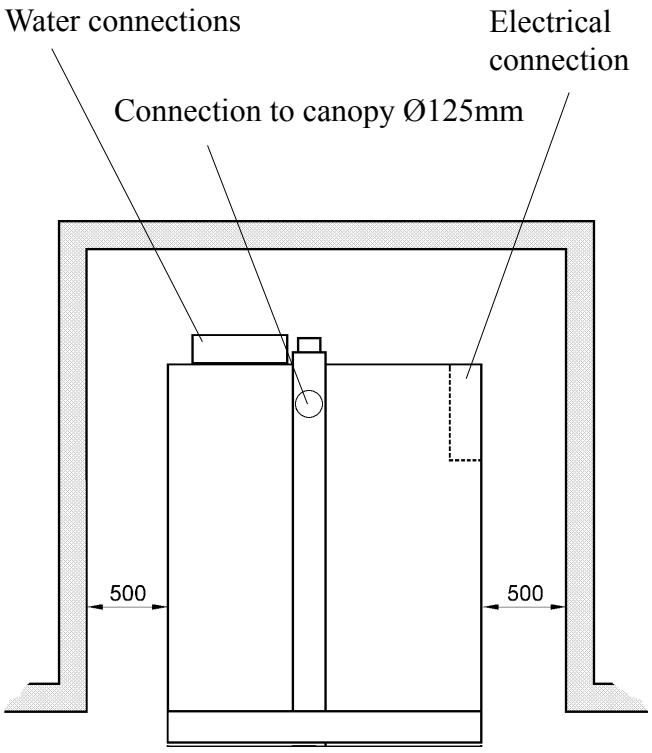


Fig. 15a Positioning of the oven with canopy

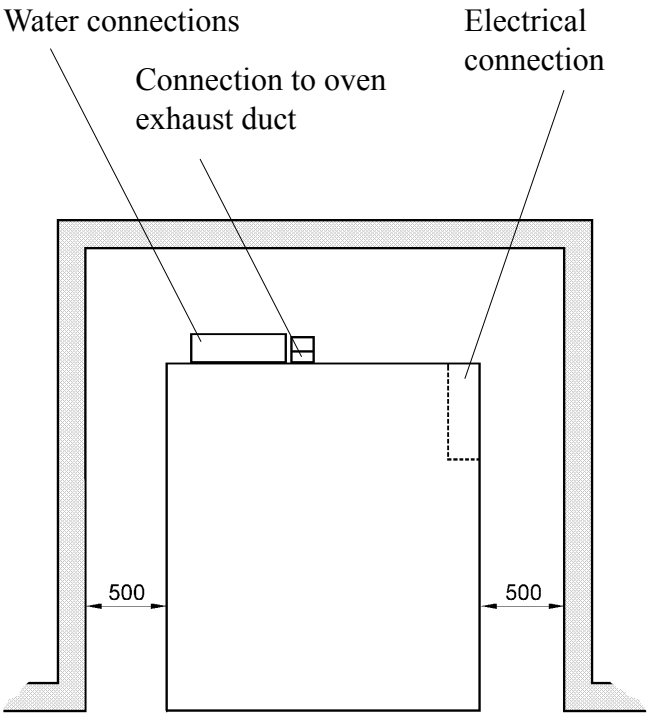


Fig. 15b Positioning of the oven without canopy

Leave a 500 mm clear space all round the oven. The space on the right-hand side of the oven is needed for access to the distribution box during installation and service.

The space at the rear and to the left of the oven is needed for maintenance and for cleaning the steam generator nozzles.

Connection to ventilation duct.

Ventilation and suction ducts are fire classed, and must therefore be insulated and fire classed as per current regulations.

The air which is led off via the ducts has a temperature of approx. 50-80°C if the installation is executed as per Fig. 16 or 17. The air volume which is led off it approx. 150-200 m³/h.

Exhaust ducts Fig.16
To ensure that smoke and hot air from the oven do not come into the room a ventilation duct must be fitted over the oven exhaust duct.

The ventilation duct must under no circumstances be connected directly to the oven exhaust ducts, if there is no canopy installed in the oven.
There must always be some form of draught interruption as shown in Fig.16b.

Exhaust hood Fig.17
If a hood is fitted over the entire oven it is not necessary to fit separate exhaust ducts on the oven.
The hood should be approx. 0.5 metres larger than the external contours of the oven to be able to trap smoke and hot air.

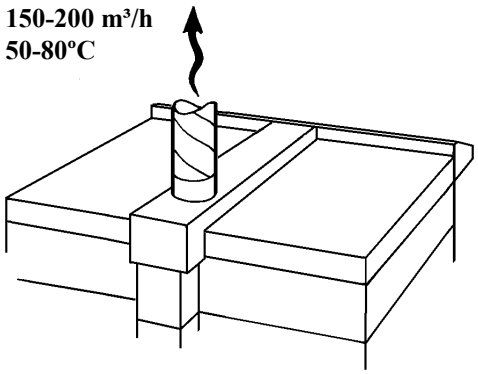


Fig. 16a Connection to exhaust duct / canopy.

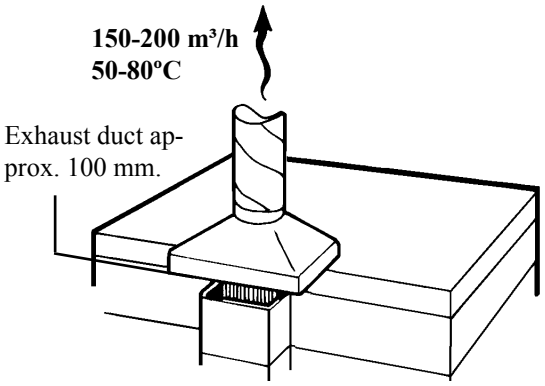


Fig. 16b Connection to exhaust duct.

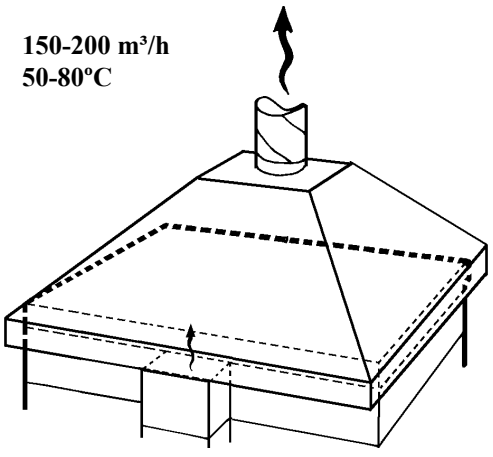


Fig. 17 Exhaust hood over the oven.

Connection of water.

The oven is equipped with two steam generators on each oven section. These are connected to cold water.
Connection is made to the solenoid valves (figs. 18, 19) on the rear of the oven.
Water pressure should be 4-6 bar (60-85 psi). Lower water pressure gives lower steam capacity.

To avoid malfunction, it is important that the pipe is flushed carefully, so that any rubbish left inside does not block valves and nozzles.

If the water contains dirt particles, e.g. rust, a filter should be installed upstream of the valves. This reduces the risk of malfunctions.

If the water is very hard, a water softener should be installed upstream of the valves to prevent lime deposits from forming in the valves and nozzles. Contact your local supplier if necessary.

The nozzle pipe seals to the steam generator with a conical seal, and therefore no thread tape is needed between the inlet pipe and the hexagonal cap.

Connection of drain.

Under the pipe there is a pipe which on delivery is fitted with a 3/8" hexagonal cap. This pipe is a drain pipe from the steam generator, and is used to empty the steam generator of surplus water.
The drainage tube must be connected to a steam trap so that the steam generator is drained automatically after each steam cycle. (Fig. 18).

Connect steam trap no. 1 in accordance with the assembly instructions supplied with the steam trap (323834-01). Connect steam trap no. 2 in the desired position.

WARNING! Steam and hot water will spray out through the drainage tube!
This can cause severe burns if you are careless.

Data: steam generator. (2 pcs. per oven section)
Output: 2x1800 W.
Water consumption: approx. 0.9 ltr/ steam cycle.
(Max. flow at 5 bar = 2.8 ltr/min.)

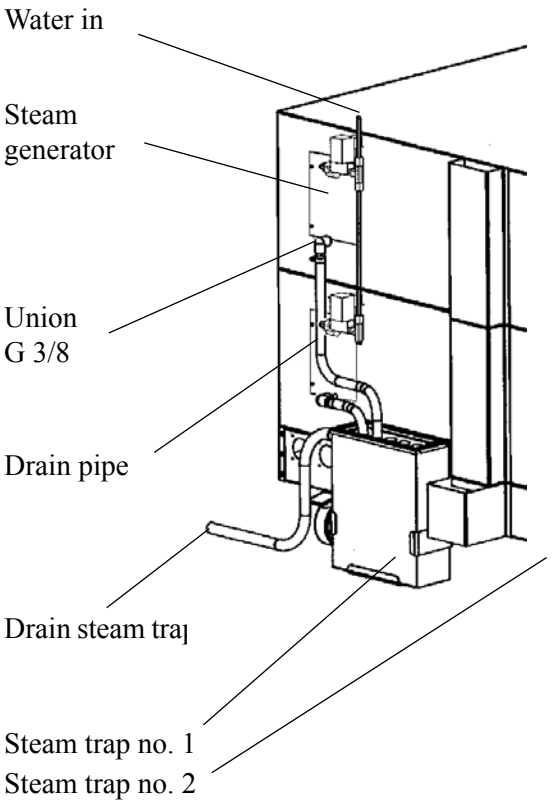


Fig. 18 Connection of water and drainage

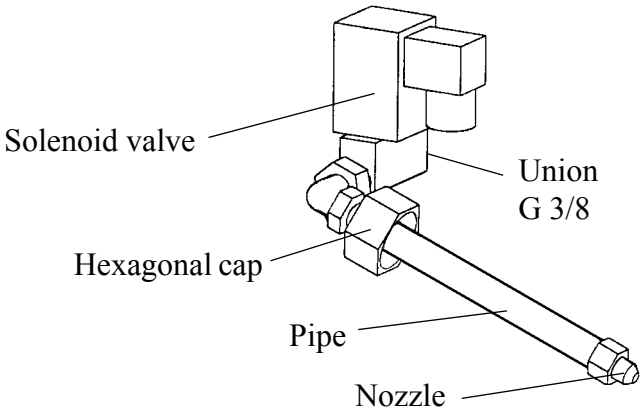


Fig. 19 Nozzle pipe

First start of the oven.

Before the oven is first used it must be burned out so that residual protective oil in the oven chamber and moisture in the stone soles disappears.

During this procedure there will be a certain amount of smoke from the oven, but this is quite normal. Make sure that the ventilation system in the premise is in operation, and can get rid of the smoke.

All oven sections can be burned out at the same time.

- Close all doors, open all dampers and set the temperature to approx. 120C°..
- Start the oven with the main switch.
- When the oven has reached 120°C allow to stand for about 30 minutes. Afterwards wipe off the inside of the door glass with a dry cloth or paper. Make sure you don't burn yourself.
- Increase the temperature to approx. 200C°. Let the oven stay like this for about 15 minutes after reaching the temperature.
- Increase the temperature to 240-250C°, and let the oven stay at this temperature for about 2 hours. Your oven is now ready to be used.
- When the oven has been switched off and has cooled, wipe the inside of the door glass with a moist cloth. The coating on the glass which developed during the burn-out will otherwise stick tight and will be very difficult to remove.

The above procedure also applies to installation of new stone soles in old ovens.

The user is responsible for cleaning the appliance thoroughly before taking it into use. Please use mild detergent on surfaces that come in contact with food to make sure they are not contaminated. It is the user's own responsibility to ensure that the appliance is not taken into use before the cleaning procedure is fully completed."

If the oven is furnished with a stone sole on delivery or if the stone sole is subsequently replaced, it is very important to follow the above instructions on warming up.

If the stone sole is warmed up too quickly, it is going to crack and be ruined.

In small premises with poor ventilation it is possible that smoke detectors are activated during the burn-out.
Use maximum ventilation by opening doors and windows.

SVEBA DAHLEN

DOCUMENT

EU- Declaration of conformity

TRANSLATION
(according to 2006/42/EC Annex 2A)

Manufacturer

Sveba Dahlen AB
Company name

Industrivägen 8
SE-513 82 FRISTAD
Address

Autorised person

Robert Bjursten
Name

Sveba Dahlen AB
Company name

Industrivägen 8
SE-513 82 FRISTAD
Address

Declare under sole responsibilty that:
Generic denomination: Deck oven
Model: D-Series D-1, D-2, D-2E, D-3, D-4, D-2ED:

is in conformity with all relevant provisions of ordinances of the Machine directive 2006/42/EC

Furthermore is declared that the machinery is in conformity with all relevant provisions of ordinances in:
EMC-directive 2004/108/EC, including applicable supplements and corrections
Low voltage directive 2006/95/EC, including applicable supplements and corrections

The following standards have been applied:

EN 60335-2-36**,** EN 12100:2010 including applicable supplements and corrections

Fristad — Place
2015-10-05 — Date

Signature

Peter Larsson — Name
CEO — Title