

# **CONVECTION OVEN**

CHEF 4 CHEF 5 CHEF 24

# **Installation and Operation Manual**



S/N: 035332/08 Rev.: 2.2

1.3.2006 Rev. 2.2

Dear Customer,

Congratulations on deciding to choose our appliance for your kitchen activities. You made an excellent choice. We will do our best to make you a satisfied customer like thousands of customers we have around the world.

Please read this manual carefully. You will learn correct, safe and efficient working methods in order to get the best possible benefit from the appliance. The instructions and hints in this manual will give you a quick and easy start, and you will soon note how nice it is to use this equipment.

All rights are reserved for technical changes.

You will find the main technical data on the rating plate fixed to the equipment. When you need service or technical help, please let us know the serial number shown on the rating plate. This will make it easier to provide you with correct service.

For your convenience, space is provided below for you to record your local service contact information.

Service phone number:
Contact person:





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1.3.2006 Rev. 2.2 General

## 1. General

Carefully read the instructions in this manual as they contain important information regarding proper, efficient and safe installation, use and maintenance of the appliance.

Keep this manual in a safe place for eventual use by other operators of the appliance.

The installation of this appliance must be carried out in accordance with the manufacturer's instructions and following local regulations. The connection of the appliance to the electric and water supply must be carried out by qualified persons only.

Persons using this appliance should be specifically trained in its operation.

Switch off the appliance in case of failure or malfunction. The periodical function checks requested in the manual must be carried out according to the instructions. Have the appliance serviced by a technically qualified person authorized by the manufacturer and using original spare parts.

Not complying with the above may put the safety of the appliance in danger.

### 1.1 Symbols used in the manual



This symbol informs about a situation where a safety risk might be at hand. Given instructions are mandatory in order to prevent injury.



This symbol informs about the right way to perform in order to prevent bad results, appliance damage or hazardous situations.



This symbol informs about recommendations and hints that help to get the best performance out of the appliance.

# 1.2 Symbols used on the appliance



This symbol on a part informs about electrical terminals behind the part. The removal of the part must be carried out by qualified persons only.

# 1.3 Checking the relationship of the appliance and the manual

The rating plate of the appliance indicates the serial number of the appliance. If the manuals are missing, it is possible to order new ones from the manufacturer or the local representative. When ordering new manuals it is essential to quote the serial number shown on the rating plate.



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1.3.2006 Rev. 2.2 **Safety** 

# 2. Safety

# 2.1 Safe use of the appliance



An oven is a warming device which heats up when used. For this reason, please observe the following instructions to avoid the risk of burns.

The glass and edges of the door also become hot when the oven is used for longer periods.

Use oven gloves when handling hot ovenware and baking plates.

Beware of hot steam escaping from inside the oven when opening the oven door.

Containers filled with liquid or substances that turn into liquid during cooking must be put at such a level that the user can see inside the inserted container (DIN: IEC 60335-2-42).

Do not leave the oven on completely unattended for long periods.



The air distribution plate in front of the fan inside the oven must be kept in the proper position when the oven is in use.

# 2.2 Disposal of the appliance

Once the appliance has reached the end of its useful life, it must be disposed of in compliance with local rules and regulations. The appliance may contain substances/materials which potentially have an adverse impact on the environment as well as recyclable materials. The best way of dealing with such substances is to dispose of them through a proper waste company.



# 3. Functional description

## 3.1 Intended use of the appliance

Chef 4 is intended for baking buns, bread, rolls and other similar products. Chef 4 can also be used for cooking food.

Chef 5 is intended for baking buns, bread, rolls and other similar products. Chef 5 can also be used for cooking food.

Chef 24 is intended for cooking and browning food, baking and for heating convenience meals and keeping food warm.

#### 3.1.1 Use for other purposes



Use of the appliance for any other purposes than that mentioned above is prohibited.

The manufacturer shall not be held liable for any situations which may arise from failure to comply with the warnings and instructions given in this manual.

#### 3.2 Construction

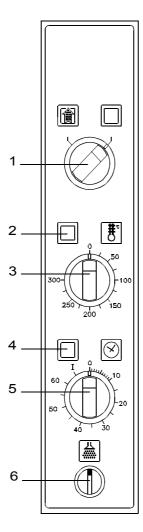
In addition to a single oven, two or three ovens can be stacked on top of another on a stand forming a roasting and baking station. One or two convection ovens can also be replaced by a Chef 22 oven or a Chef 20 proving cabinet.

This manual covers the Chef 4, Chef 5 and Chef 24 convection ovens, while Chef 22 and Chef 20 have their own manuals

# 3.3 Operating principle

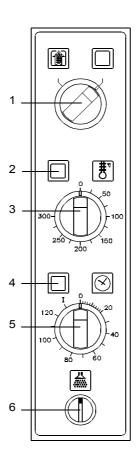
In convection ovens, cooking takes place by hot air circulating around the food. Rapidly circulating air is fanned around the food from all sides to cook effectively and evenly. Moisture can be used to further boost cooking of certain products (see "Cooking tips"). This also affects food quality and reduces weight loss. The oven is also fitted with a steam outlet valve for removing superfluous steam from the oven chamber.

#### 3.3.1 Control panel switches



#### Control panel switches Chef 4 and 5

- 1. Steam exhaust valve. The valve can be used to remove excess steam and moisture from inside the oven.
- 2. Thermostat lamp. The yellow lamp is always on when the heating elements are on.
- 3. Thermostat switch. To set the temperature between +50°C and +300°C.
- 4. Oven-on lamp. The green lamp is on when the oven is switched on.
- 5. Timer. Stepless control 0-60 minutes or continuous use I. The timer has a sound feature which rings when the timer is in position 0.
- 6. Moisturing device. Moisture is added when the switch is turned clockwise and temperature has been set at the thermostat switch.



#### Control panel switches Chef 24

- 1. Steam exhaust valve. The valve can be used to remove excess steam and moisture from inside the oven.
- 2.. Thermostat lamp. The yellow lamp is on when the heating elements are on.
- 3. Thermostat switch. To set the temperature between +50°C and +300°C.
- 4. Oven-on lamp. The green lamp is on when the oven is switched on.
- 5. Timer. Stepless control 0-120 minutes or continuous use I. The timer has a sound feature which rings when the timer is in position 0.
- 6. Moistening device. Moisture is added when the switch is turned clockwise and the pilot light is on.

# 4. Operation instructions

## 4.1 Before using the appliance



There is a slight smell of metal and thermal insulation when the oven is heated for the first time. This is completely normal and disappears by heating the oven. Before using the oven for the first time, heat it to a temperature of +250°C until the smell disappears.

### 4.1.1 Choice of the ovenware, Chef 4

It is possible to use five baking sheets (GN1/1) at the same time.

#### 4.1.2 Choice of the ovenware, Chef 5

It is possible to use five baking sheets (600 x 450 mm) at the same time.

#### 4.1.3 Choice of the ovenware, Chef 24

Choose the ovenware according to the type of food to be cooked:

Casseroles: GN1/1-65 mm (RST 18/8). Avoid 100 mm deep containers as these may give an uneven result Pancakes: GN1/1-40 mm, aluminium Pasties, buns, rolls: GN2/1 baking plate, aluminium Convenience meals: GN2/1 grid, RST 18/8

#### 4.1.4 How to fill the oven, Chef 4 and 5



Fill the guide rails leaving a sufficient gap between the ovenware, so the products will bake evenly. When filling the baking plate, leave a generous space between the products. These two points are essential to achieve a good baking result.

#### 4.1.5 How to fill the oven, Chef 24

Correct filling of the oven and the right choice of ovenware ensure the best possible cooking result.



Fill the guide rails leaving a sufficient gap between the ovenware, so the products will cook evenly. If you use grids or baking plates, leave a generous space between the products you are cooking. These two points are essential to achieve a good cooking result.



### 4.2 Operation procedures

### 4.2.1 Before cooking, Chef 4 and 5

The oven must be preheated to cooking temperature before actual cooking begins. This is to heat the whole oven to the correct temperature so as to ensure the best possible cooking results.

- Put the guide rails in place.
- Set the timer (see Figure "Control panel switches") at 20 minutes. When setting the time, first turn the timer past the desired setting value and then back to the desired value.
- Set the temperature about 50°C above the cooking temperature, if the oven is loaded to max. capacity with cold products. (After loading the oven, required roasting temperature is set.) If smaller amounts of products are roasted, the preheating can be done using a smaller temperature difference.
- The oven is ready for use when the timer signals to tell you that time is up.
- When the door is closed, the oven will remain hot for a long time, even though it is not switched on.

#### 4.2.2 Before cooking, Chef 24

The oven must be preheated to cooking temperature before actual cooking begins. This is to heat the whole oven to the correct temperature so as to ensure the best possible cooking results.

- Choose the right guide rails: 2 pairs of rails for baking, roasting and browning, 3 pairs of rails for baking small and light products.
- Set the timer (see Figure "Control panel switches") at 20 minutes. When setting the time, first turn the timer past the desired setting value and then back to the desired value.
- Set the temperature about 50°C above the cooking temperature, if the oven is loaded to max. capacity with cold products. (After loading the oven, required roasting temperature is set.) If smaller amounts of products are roasted, the preheating can be done with the roasting temperature.
- The oven is ready for use when the timer signals to tell you that time is up.
- When the door is closed, the oven will remain hot for a long time, even though it is not switched on.

#### 4.2.3 How to select cooking temperature, Chef 4 and 5



Because a convection oven is so effective, cooking temperatures should be around 20°C lower than they would in a conventional oven.

Cooking time depends on food quality, weight and thickness. The shallower the food to be cooked is, the shorter the cooking time. See "Cooking tips" later in this chapter.

#### 4.2.4 How to select cooking temperature, Chef 24



Because a convection oven is so effective, cooking temperatures should be around 20°C lower than they would in a conventional oven.

Cooking time depends on food quality, weight and thickness. The shallower the food to be cooked is, the shorter the cooking time. See "Cooking tips" later in this chapter.

#### 4.2.5 Using the oven



If the oven is used on board a ship, the oven guide rails must be positioned inside the oven so that the clip which prevents the ovenware from sliding out of the guide is on the door side. Should the clip be against the rear wall inside the oven, remove the rails and swap them around.

There may be a main supply disconnection switch fitted near the oven (usually on the wall) when the oven was installed. Ensure that this switch is in the ON position.

Oven functions are operated from the control panel (see Figure "Control panel switches" in Chapter "Functional description/Operating principle").

#### 4.2.6 Cooking, Chef 4 and 5

- Carefully preheat the oven as instructed in "Before cooking".
- Pull the handle to open the oven door. To close the door, push the handle until you hear a distinct click.
- Put the food in the oven.
- Set the timer (see Figure "Control panel switches") at the required cooking time and the thermostat switch at the required cooking temperature.
- When the set cooking time is over, the heating and the fan will switch off automatically and a signal will tell you that you can take the food out of the oven.
- Switch the power off at the thermostat, whereupon the buzzer also stops sounding.
- Open the door. Beware of escaping steam.

In the event of uneven cooking check that

- the oven has been installed horizontally
- the oven has been preheated as instructed
- the cooking temperature is correct
- the oven has been correctly filled.



In the event of longish interruptions in the electricity supply when the oven is in use, turn all switches to the 0 position to prevent the oven from coming on unexpectedly when the power cut has ended.



#### **4.2.7** Cooking, Chef **24**

- Carefully preheat the oven as instructed in "Before cooking".
- Pull the handle to open the oven door. To close the door, push the handle until you hear a distinct click.
- Put the food in the oven.
- Set the timer (see Figure "Control panel switches") at the required cooking time and the thermostat switch at the required cooking temperature.
- When the set cooking time is over, the heating and the fan will switch off automatically and a signal will tell you that you can take the food out of the oven.
- Switch the power off at the thermostat, whereupon the buzzer also stops sounding.
- Open the door. Beware of escaping steam.



In the event of longish interruptions in the electricity supply when the oven is in use, turn all switches to the 0 position to prevent the oven from coming on unexpectedly when the power cut has ended.

#### 4.2.8 Moisture function

In the moisture function, water passes through the nozzle to the hot air of the fan where it vaporises and is distributed evenly inside the oven by currents of air.

Moisturing varies a little depending on network pressure. The effect of pressure on the amount of moisturing water is given in the table below.

Moisturing /	Chef 4, 5	Chef 24		
pressure		adjustment range	factory setting	
≥ 3 bar	500 ml/min	10-220 ml/min	45 ml/min	
2 bar	455 ml/min	8-180 ml/min	35 ml/min	
1 bar	230 ml/min	5-80 ml/min	20 ml/min	



It is not allowed to use the moisture function at temperatures below 150°C, because part of the water does not then vaporise.

Unvaporised water will splash in droplets onto the surfaces of the oven chamber, keeping them moist and finally gathering into pools on the chamber bottom. If water is very calcareous (hard), calcareous deposits will form onto the oven surfaces.

As to corrosion, the most harmful substances present in the water are chloride-ions. When unvaporised water gradually vaporises, the chloride content of water will increase, intensifying the corrosive effect. Corrosion caused by chlorides is a chemical process, which only occurs in humid conditions. The longer the surfaces remain moist, the greater is the corrosive effect.

To avoid corrosion, do not use the moisture function at low temperatures (below 150°C) and make sure that the moisturing water vaporises immediately so that the oven's interior surfaces remain as dry as possible.

#### 4.2.9 Use of the moisture function, Chef 4 and 5

Switch the moisture function on by turning the switch in a clockwise direction and keep it there (see Figure "Control panel switches").

If moisturing is needed for a longer time, it is recommended to divide it into short moisturing and break periods to prevent water from gathering on the oven bottom when the moisture function is on.

Use of the moisture function in the early stage of baking reduces weight loss and drying out and produces a crusty surface.



Open the oven door cautiously, because hot steam can easily cause scalding.

#### 4.2.10 Use of the moisture function, Chef 24

Switch the moisture function on by turning the switch in a clockwise direction (see Figure "Control panel switches").

If needed, the factory setting of the moisture device can be adjusted by authorised service personnel.

If water gathers on the oven bottom during moisturing, it is advisable to reduce the factory setting so that all the water vaporises immediately.

Use of the moisture function reduces weight loss and drying out and heats the food faster.

We recommend the moisture function be used as follows:

- When heating food throughout the heating process. Remove lids from individually packed foods such as meatballs. Heating times will be reduced by 1/3-1/2 of those given.
- To cook joints and meat loaf, but not browning.
- To cook fish (not breaded products).
- To cook casseroles (steam panel closed).
- When baking, because moisture promotes rising. Use in the early stage of baking.



Open the oven door cautiously, because hot steam can easily cause scalding.

#### 4.2.11 Steam removal

The steam exhaust valve (see Figure "Control panel switches") is normally closed to prevent moisture from being lost from inside the oven.

If there is too much steam inside the oven (water droplets on the bottom of cake tins), open the steam exhaust valve to remove the moisture.

The steam exhaust valve should be fully open when roasting and cooking gratin dishes.



# 4.2.12 Cooking tips

Type of	Ovenware	Pre-	Cooking	Cooking time	Tips
food		heat-	tempera-		
		ing	ture		
Joints, fillets	GN2/1 stain- less grid	125°C	125℃	Depends on size	Put the meat on the grid, the grid on the guide rails and a pan to collect meat juices on the lower guide rails
Roast beef		125°C	125℃	Depends on size, until inner tem- perature +60°C	125°C right from the beginning, throughout roasting
Escalopes, steaks, chops	GN 2/1 stain- less grid or al- um. pan	300°C	300°C	Approx. 10 min.	Cook food quickly and braise in covered pan at lower temperature as required
Slices of meat (browning)	GN 1/1-40 mm alum.	225°C	200°C	10 min.	Max. 1,5 kg meat per dish
Minced meat (browning)	GN 1/1-40 mm alum.	225°C	200°C	10 min.	Max. 1,5 kg meat per dish
Hamburger patty (frozen)	GN 1/1-40 mm alum.	250°C	220°C	8 min.	Keep moisture function on throughout cooking
Mixed casse- role of beef and pork	GN 65	250°C	130°C	2 h	
Rainbow trout fillet (whole)	GN 40	250°C	250°C	15-20 min.	
Rainbow trout fillet (100 g portion)	GN 40	250°C	250°C	10-15 min.	
Casseroles	GN 1/1-65 mm	175°C	150-175°C	Approx. 1,5 h	We suggest a lower cooking temperature for egg-based casseroles than for other casseroles Volume: about 5 kg per dish Keep moisture function on throughout cooking
Macaroni and beef casse- role (beef-a- roni)	GN 1/1-65 mm	175°C	150°C	1 h (on lower guide rails + 10 min.)	Keep steam exhaust valve open for 10 min. to begin with
Convenience meals	GN 2/1 stain- less grid		Depends on product	Follow instructions	Put the meal straight onto the grid to ensure maximum heating efficiency Keep moisture function on throughout cooking
Vegetable cutlet (frozen)		250°C	225°C	20 min.	Keep moisture function on throughout cooking
Feta and veg- etable pie (ready-made base, frozen)		250°C	200°C	40 min.	
GN pan pizza		250°C	225°C or 200°C	12 min. or 15 min.	
Pancakes	GN 1/1-40 mm alum.	220°C	190°C	30 min.	Volume, abt 1,5 l per dish Keep steam exhaust valve open about 10 min. to begin with
Meat pasty (frozen)		225°C	200°C	20 min.	



Type of food	Ovenware	Pre- heat- ing	Cooking tempera- ture	Cooking time	Tips
Roll	GN 2/1 alum. baking plate	225°C	200°C	17 min.	Use moisture function for about 2 min. to begin with (in cycles)  Max. 12 rolls / GN1/1 plate on every other rail
Croissant		200°C	175°C	20 min.	Use moisture function for about 2 min. to begin with (in cycles)
Bun	GN 2/1 alu- minium baking plate	200°C	175°C	15 min.	Max. 12-15 buns / GN1/1 plate Keep steam exhaust valve closed, no moistur- ing
Cinnamon bun (frozen)		190°C	165°C	16 min.	Max. 12 buns / GN1/1 plate on every other rail
Danish pastry (frozen)	GN 2/1 aluminium baking plate	190°C	165°C	18 min.	
Tart filled with curd and berries	GN 1/1-40 mm aluminium pan	200°C	175°C	45 min.	Short crust pastry: 300 g butter, 225 g sugar, 4 eggs, 300 g wheat flower, baking powder Filling: 1000 g curd, 11 eggs 200 g sugar, 3 dl cream, 600 g frozen berries, vanilla sugar Bake on the lower rails in the centre
Sponge cake		175°C	150°C	40 min.	4 eggs/tin, 4 tins on the lower guide rails

In the event of uneven cooking check that

- the oven has been installed horizontally
- the oven has been preheated as instructed
- the cooking temperature is correct
- the cooking pan is correct
- the oven has been correctly filled.

#### 4.3 After use

#### 4.3.1 Cleaning



Use of a hose or pressure washer to clean the appliance is forbidden.

Before cleaning the oven, please remember that it remains hot for a long time after use.

Ovens are electrical appliances, which means that there are restrictions regarding cleaning them with water. Use of water is permitted when cleaning the oven inside. Clean the outside of the oven with a damp cloth only to avoid water getting into the air inlets. Depending on how dirty the oven is, use an alkaline substance which can be diluted in a spray bottle to loosen grease.

It is of utmost importance to keep the interior surfaces of an oven clean. A thin passive layer will form on stainless steel surfaces, giving a protective layer to the steel. A dirty oven and chlorides crystallized on the surface, combined with a humid and warm environment, break the protective passive layer, not allowing it to regenerate and thus exposing the interior surfaces to corrosion. Regular cleaning decreases the collection of chloride



ions on the oven's interior surfaces. The more you use the moisture function in food preparation, the more important it is to clean the oven daily and regularly to prevent corrosion.

#### **Daily cleaning**

Spray diluted detergent solution into the inside of the cold (below +50°C) oven, and on the inside surface of the door. Heat the oven to about +50°C (not essential), switch off at the mains and let the detergent work for about 15 minutes. Use a brush or cleaning pad to scrub the burned places. Avoid the use of steel wool and abrasive pads and use chemical cleaners instead of mechanical ones. Once a surface is scratched, dirt sticks to it much more easily.

Wipe the loosened dirt and detergent carefully with a damp cloth. After washing, first dry the oven with a cloth and then by heating at +150°C for 5 minutes. Check that the steam exhaust valve is in the open position.

After cleaning the inside of the oven, wipe the outside surfaces, knobs and handrail.

#### Cleaning the guide rails and the air distribution panel

When cleaning the oven thoroughly, loosen, soak and wash the guide rails and the air distribution panel. The guide rails and the air distribution panel can be easily removed and conveniently washed in a dishwasher.

To remove the guide rails/air distribution panel:

- Lift the guide rails/air distribution panel upwards.
- Pull the guide rails/air distribution panel towards the centre of the inside of the oven.
- Lift the guide rails/air distribution panel out of the oven.
- Replace the guide rails/air distribution panel in the reverse order.

#### 4.3.2 How to change the oven bulb

Should the oven lamp go out or fail to light up during use, replace the bulb as follows:

- Let the oven cool so that you can put your bare hand inside the oven without burning it.
- Ensure that the oven is switched off at the mains. All controls should be in the 0 position.
- Remove the protective glass cover of the lamp by unscrewing the four screws. Be careful not to damage the seal. In case the seal has become stiff or is otherwise damaged, also replace the seal.
- Carefully unscrew the bulb.
- Screw the replacement bulb into place. Lamp type: 15 W, 220-230 V, 300°C, E14. Spare part code: 3339313.
- Press the protective glass and seal back into place. Fasten the four screws.



Use of the appliance is strictly prohibited unless the protective glass of the lamp is properly in place.

#### 4.3.3 Other service measures



This appliance does not contain parts which can be serviced by the user. Maintenance must be carried out by an authorised agent.



In the event of fault or malfunction, switch the appliance off at the mains. Use an agent authorised by the manufacturer and original spare parts.



# 5. Installation

### 5.1 General

The installation of this appliance must be carried out in accordance with the manufacturer's instructions and in compliance with local rules and regulations. These instructions must be used together with the installation drawing.



This appliance may be connected to the mains electricity by qualified persons only.

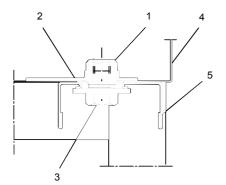
### 5.2 Transporting and unpacking the appliance

The appliance is best transported in its own package, which protects it from outside damage. Should it be necessary to remove the appliance from its package, the appliance, which is on a support base, must be moved by lifting by the intermediate bearers of the base. To prevent damage, the top of the appliance must not be used as a worktop during installation.

#### 5.2.1 Fastening the appliance to the stand

Standard ovens/proving cabinets delivered separately are fastened to the stand with the help of the installation kit supplied with the appliance.

Prior to fastening the stand, remove the adjustment screws (4 pcs.) located on the appliance bottom. The screws come loose by turning by hand. Fasten the stand as shown in the illustration below, using the components 1, 2 and 3.



- 1. Fixing screw, 4 pcs
- 2. Washer, 4 pcs
- 3. Hexagon screw, 4 pcs
- 4. Chef oven/proving cabinet
- 5. Stand

#### 5.2.2 Assembly of a Chef oven group

The appliances can also be assembled to form combinations of two or three units by stacking them on top of each other. The stand height for two units is 660 mm and for three units 200 mm.

Rev. 2.2

- Fasten the lowermost appliance to the stand according Chapter "Fastening the appliance to the stand".
- Lift the unit to be stacked onto the previous one and push it into place by lightly tapping so that the front edges of the bottom plate and roof fit inside each other properly.
- Fasten the appliances to each other with the help of a connection piece (1) in Figure A, spare part code 3672195.
- Tighten the connection piece in place using the M4x10 slotted screws (2) provided on the upper oven rear panel (7) and the M5x20 fixing screws (3) located on the lower oven rear panel (8).

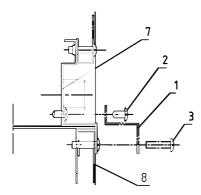


Figure A

In cases where Chef 4 is mounted e.g. on top of Chef 20, which has a greater depth dimension, it is not possible to use the connection piece shown in Figure A. The oven is then fastened with M8x16 hexagon bolts (2 pcs) from inside the rear section, see Figure B.

- Detach the rear panels (8) of both units.
- Move the oven in place and mark the positions of mounting holes on the lower unit's roof plate through the Ø 10 holes (2 pcs) located in the rear section of Chef 4's bottom plate.
- Move the oven so that the marks become visible and cautiously drill Ø 9 holes on the marked spots.
- Move the oven back in place and fasten the units to each other using M8 screws and nuts (items 4, 5, 6).
- Refit the rear panels (8) of the units.



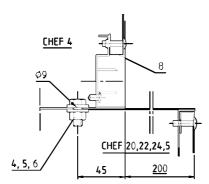


Figure B

### 5.3 Positioning the appliance

When installing the appliance, care should be given to ensure that there is a free passage of cooling air around the appliance and that there are no other sources of heat near the cooling vents.

Because of the heat and steam arising during cooking, it is recommended to place the oven under an exhaust hood.



It is important to install the appliance in a level, horizontal position. Tilting and unevenness, however slight, may have an adverse effect on the cooking result.

The appliance must be placed on a flat surface and levelled into a horizontal position by using the adjustment screws on the legs. For the best result, check horizontality by the guide rails inside the oven.

To achieve a horizontal position, adjust the screws on the legs of the stand.



When the appliance is in the right place and in a horizontal position, fix it firmly to the floor. Models for use on land are fixed by the plates on the back legs and ovens intended for use on ships by plates on each leg.

#### 5.4 Electrical connections



Should maintenance require the appliance to be tested before all the protective coverings are in place, please be particularly careful of the moving parts inside the casing as well as of live parts.



To facilitate future maintenance and to increase safety, install a separate disconnection switch for the oven in the immediate vicinity of the appliance. The switch should disconnect the appliance completely from the mains supply.

The supply cable inlet is in the back right-hand corner of the oven and the connection point inside the oven. The side casing needs to be open to connect the oven to the mains.

All information needed to connect the appliance is to be found on the name plate, the connection diagram and the installation drawing.

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#### 5.5 Water connections



Connection to the cold water supply must be made by a 12 mm thick pressure resistant hose fitted with an R3/4" connector. The water connection must be fitted with a shut-off valve and a non-return valve.

Rinse the water hose before making the water connection.

#### 5.5.1 Requirements for water quality

A general assumption is that the appliance material is defective when hard-to-clean deposits or corrosion appear on the surface. Usually this is, however, due to the aggressive nature of water and harmful components it contains as well as to neglicence of cleaning the appliance.

Quality criteria, both national and based on EU directives, exist for tap water. E.g. calcium and magnesium that cause water hardness are useful substances for health, but in appliances they cause harmful scale. Chlorides, on the other hand, provide a favourable soil for corrosion even in small contents when combined with a humid and warm environment. The smaller chloride content, the better is the situation. In order to guarantee a long service life for an appliance we recommend the following limit values for water quality.

Chloride content (Cl $^-$ ) < 25 mg/l Conductibility < 40mS/m pH 7-8,8

Hardness  $2-5^{\circ}dH = 0.4 - 0.7 - 0.9 \text{ mmol/l}$ 

Various kinds of filters and water softeners can be used if water quality deviates from normal

Particle filter, 5 µm water contains sludge and other impurities

Reverse osmosis  $C1^- \ge 25 \text{ mg/l}$ , softening of water, elimination of salts, does

not remove chlorides completely

H ion exchanger  $Cl^- \ge 25$  mg/l, softening of water, elimination of salts, pro-

duces completely chloride-free water

Na ion exchanger  $Cl^- < 25 \text{ mg/l}$ , softening of water, does not remove chlorides

from water

If you use water softeners, remember to take care of appropriate maintenance and service of the water softener as well as the appliance itself.



#### 5.6 Test-run



Please read the safety and operation instructions as well as the functional description before testing the oven. As for other appliances possibly included in the baking station, see separate manuals.

Test the oven once it has been connected to the mains electricity.

#### Check that

- the green oven-on lamp lights up when the oven is switched on
- the yellow thermostat lamp lights up when the thermostat is turned in a clockwise direction
- the yellow thermostat lamp goes out once the oven has heated up and reached the temperature set
- the green moisture device lamp lights up when the switch is turned in a clockwise direction and moisture enters the inside of the oven (200°C). In case the water does not vaporise completely and splashes in droplets onto the chamber walls collecting water on the oven bottom, the moisture device needs to be adjusted.
- the fan wheel is rotating and changes the rotation direction with approx. one minute intervals
- the door switch deactivates the fan and heating when the door is opened
- the guide rails and the air distribution panel are properly in place
- the drip tray is properly in place under the oven door.

Fasten the side casing.

# 6. Troubleshooting

If the appliance fails to work, check to ensure that

- it has been used according to instructions
- all removable parts are in place
- the disconnection switch (usually on a wall or in the immediate vicinity of the oven) is in the ON position

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• the fuses (overload protection) have not blown in the fuse box. Ask a qualified person to check overload protection.

Should the oven still not work, contact an authorised agent. Before phoning, make sure you have at hand the appliance type and serial number to be found on the name plate on the right front corner of the appliance.



This appliance does not contain parts which can be serviced by the user. Maintenance must be carried out by an authorised agent.



# 8. Technical specifications

Main and control circuit S00113 A3

Main and control circuit S00114 A3

**Connection diagram S00115 B3** 

**Connection diagram S00091 B3** 

**Installation drawing L00024A3** 

**Installation drawing L00025A3** 

**Installation drawing L00026A3** 

**Installation drawing L00027A3** 

**Installation drawing L00028A3** 

**Installation drawing L00029A3** 

**Installation drawing 84221-63** 

**Installation drawing 84222-63** 

**Installation drawing 84231-63** 

**Installation drawing 84232-63** 

**Installation drawing L00001A3** 

**Installation drawing 84233-63** 

**Installation drawing 83750-63** 

**Installation drawing 84131-63** 

**Installation drawing 84122-63** 

**Installation drawing 84121-63** 

**Installation drawing 84140-63** 

**Installation drawing 84129-63** 

**Installation drawing L00062B3** 

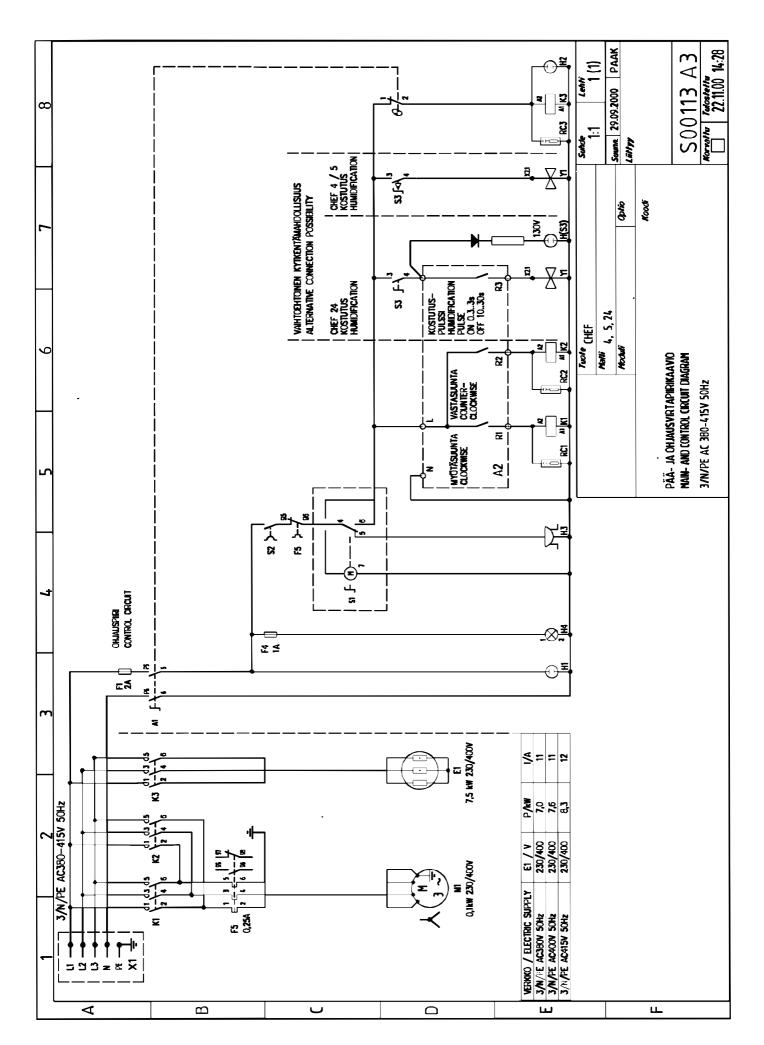
**Installation drawing L00003A3** 

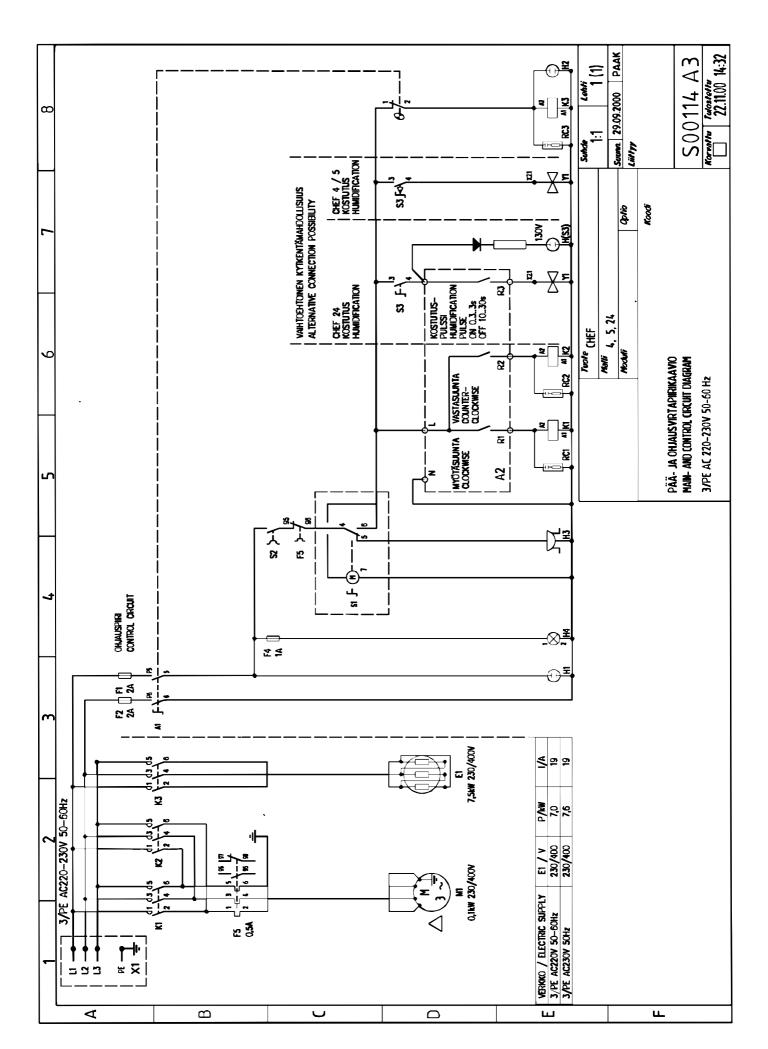
**Installation drawing L00009A3** 

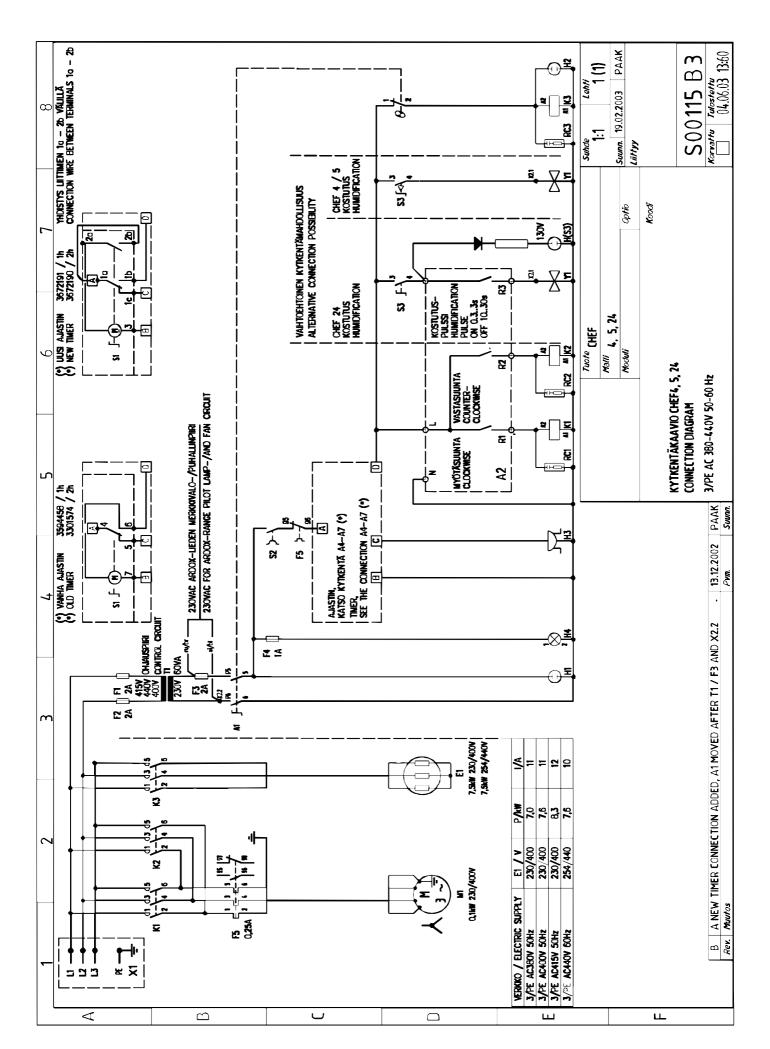
**Installation drawing L00005B3** 

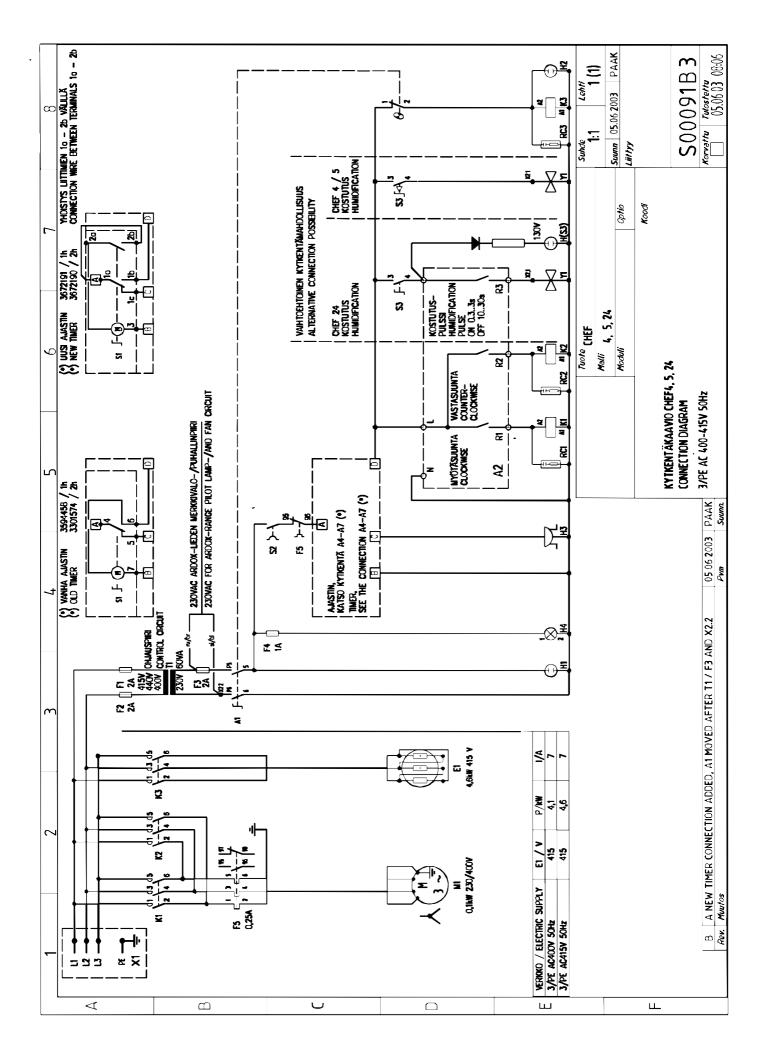
**Installation drawing L00112 A3** 

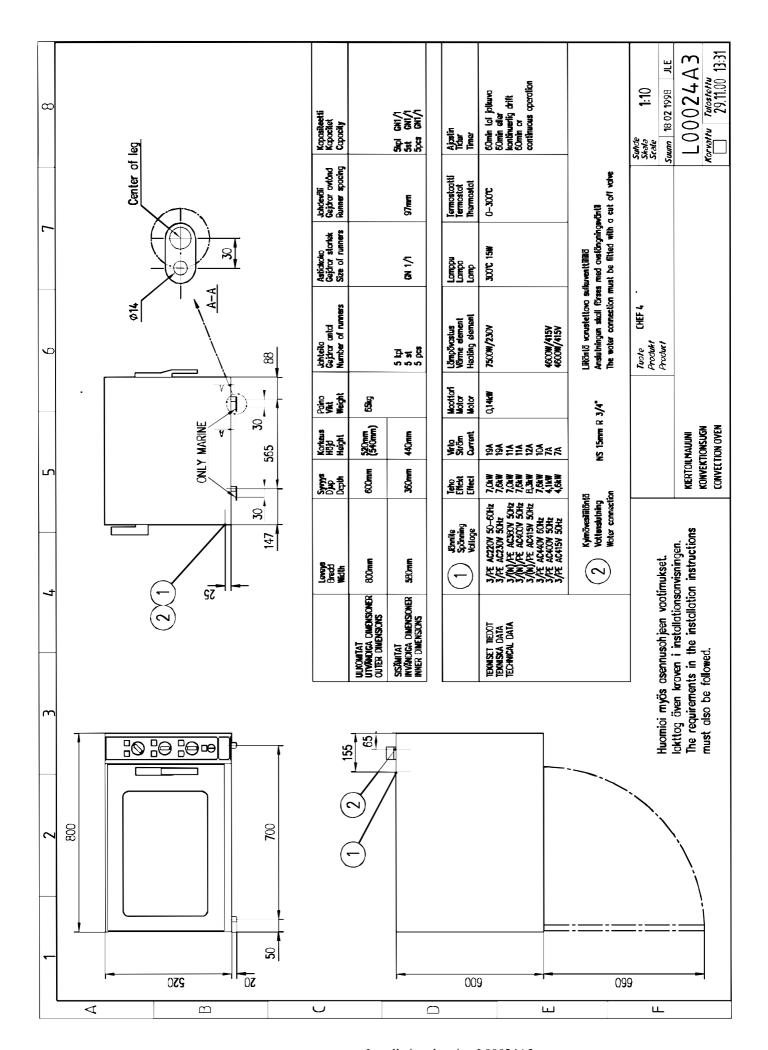


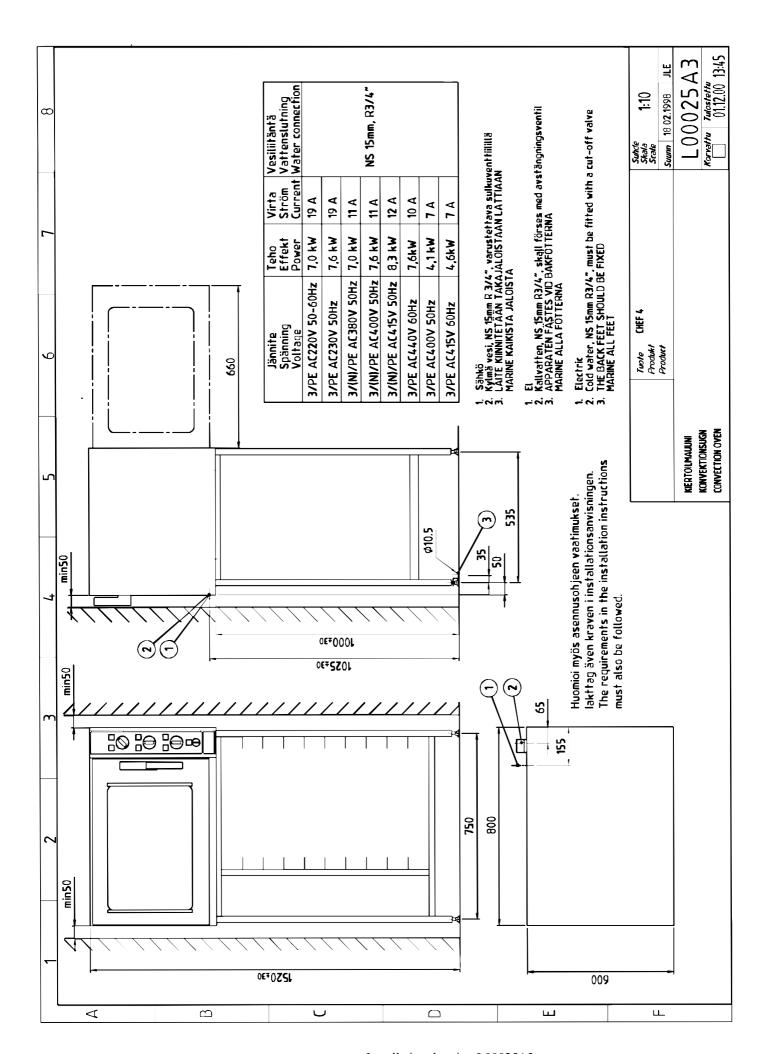


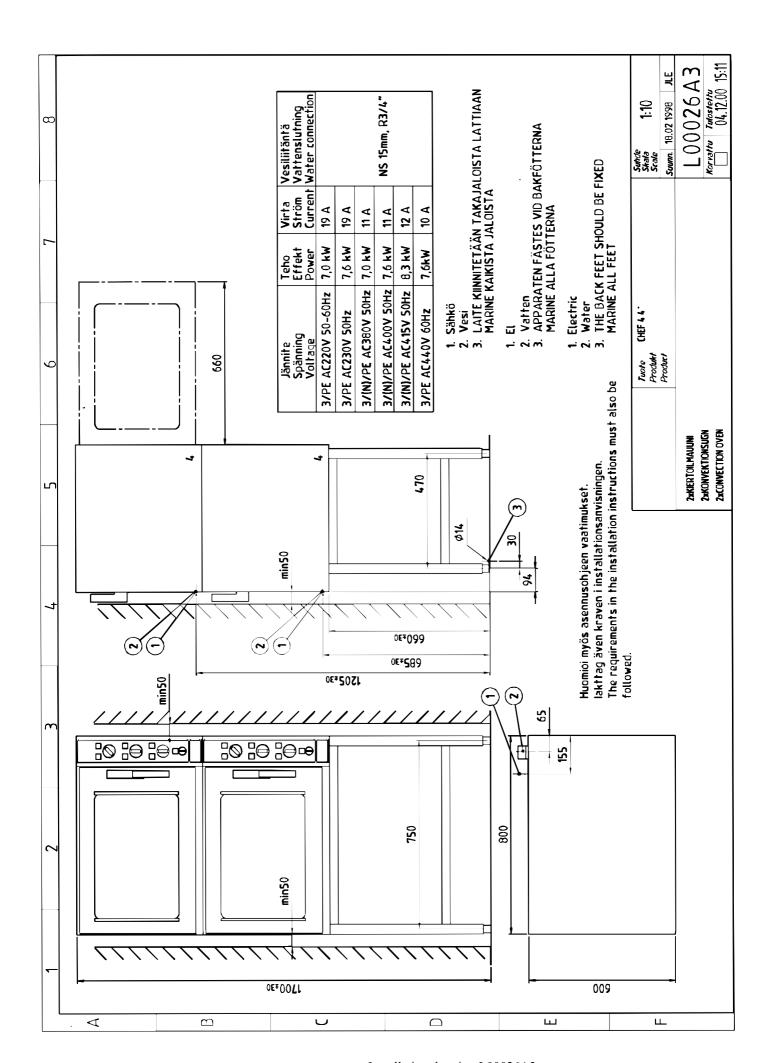


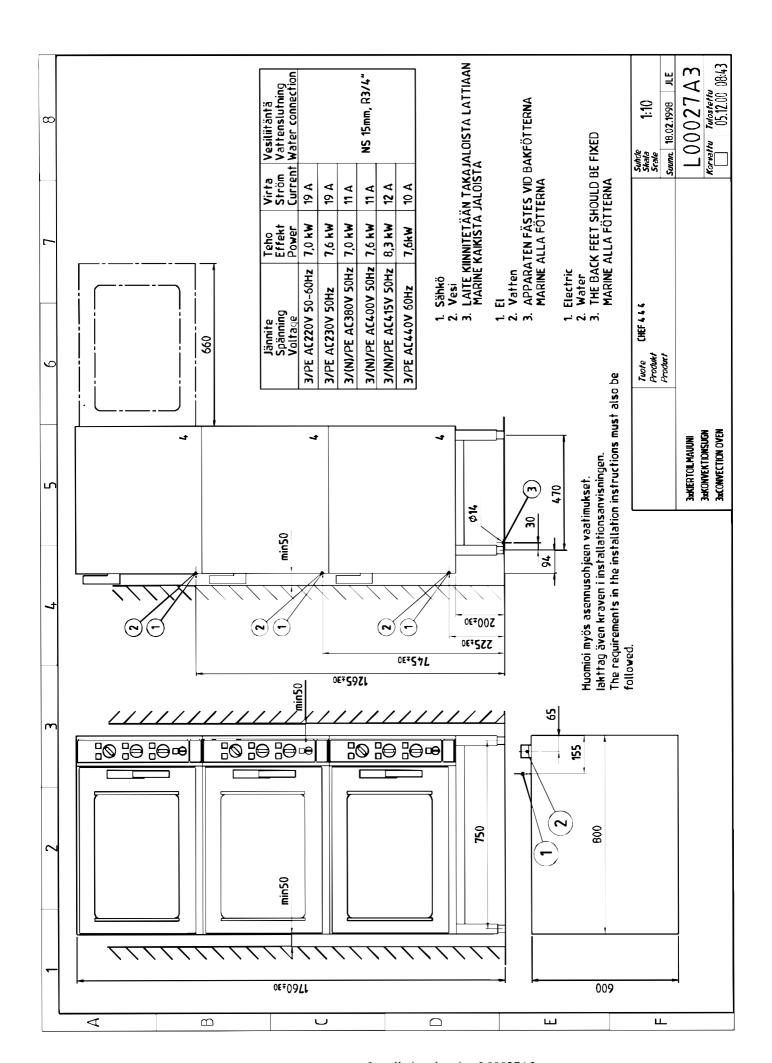


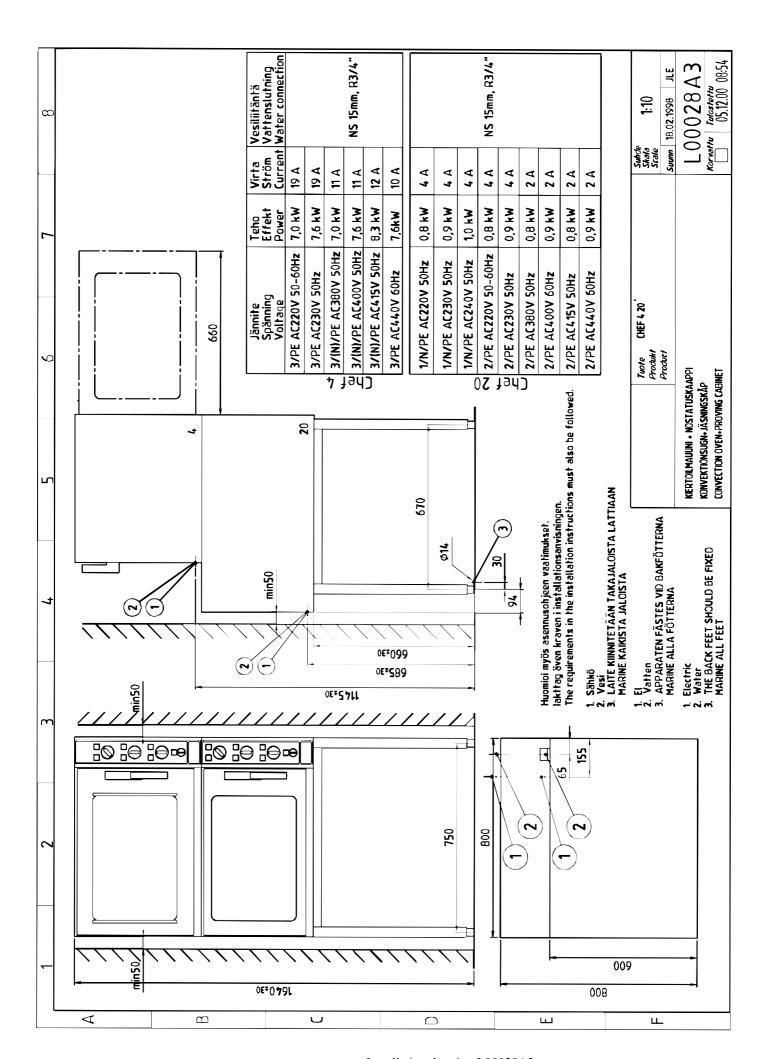


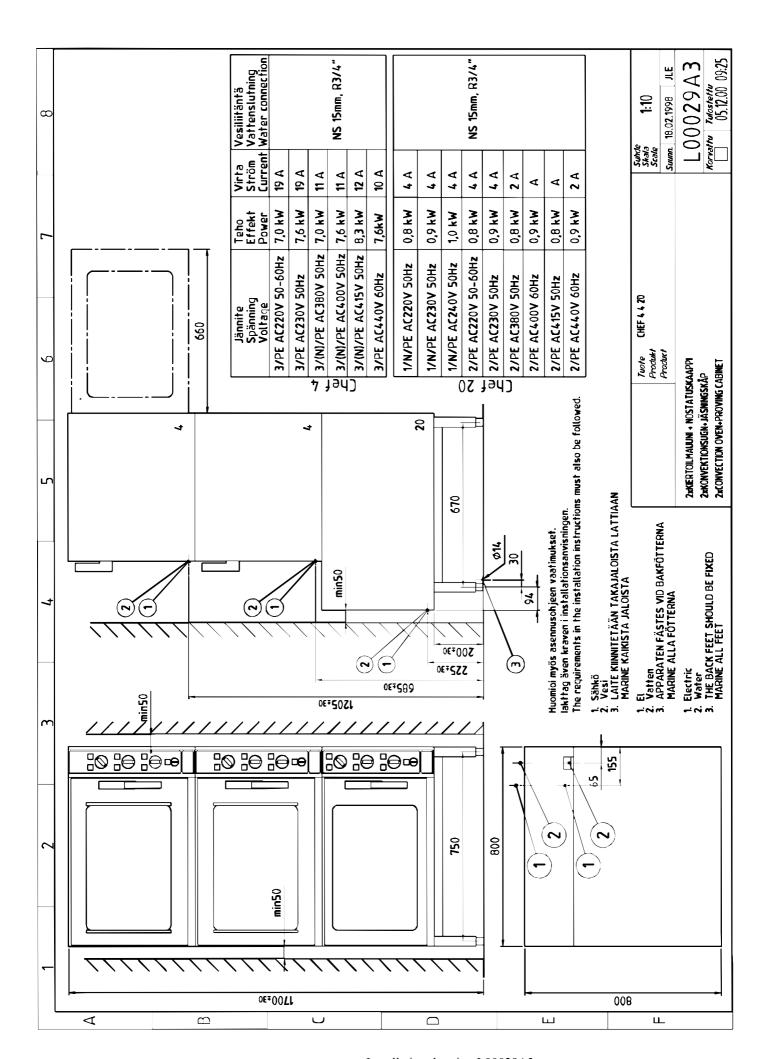


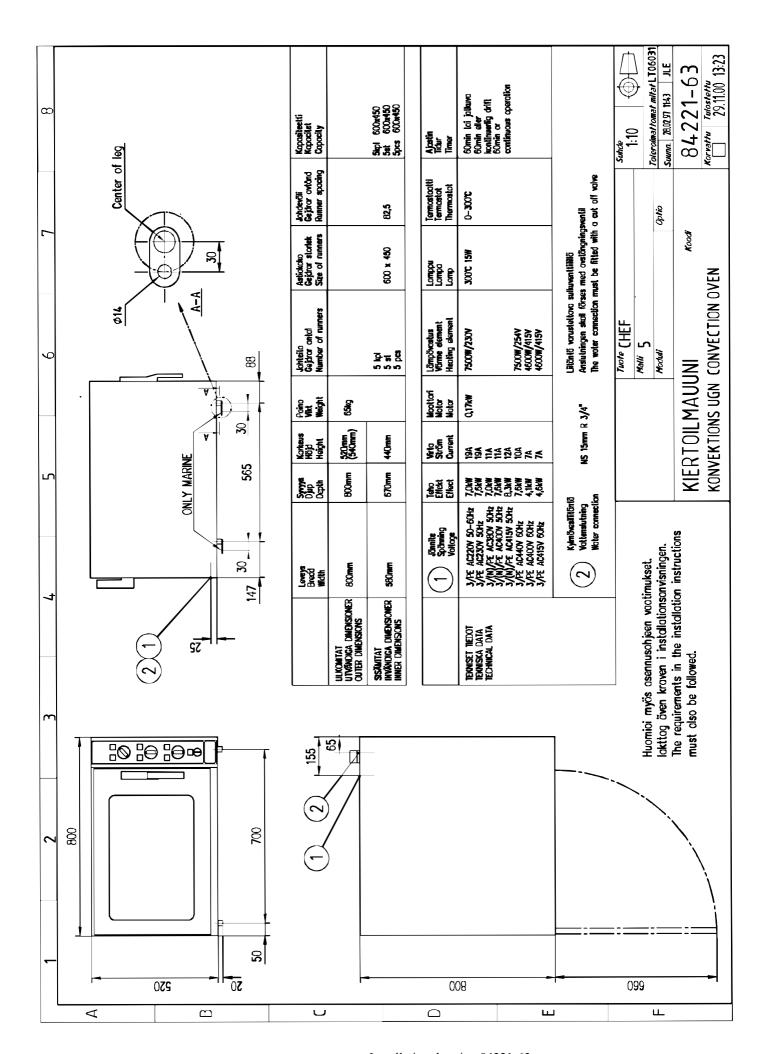


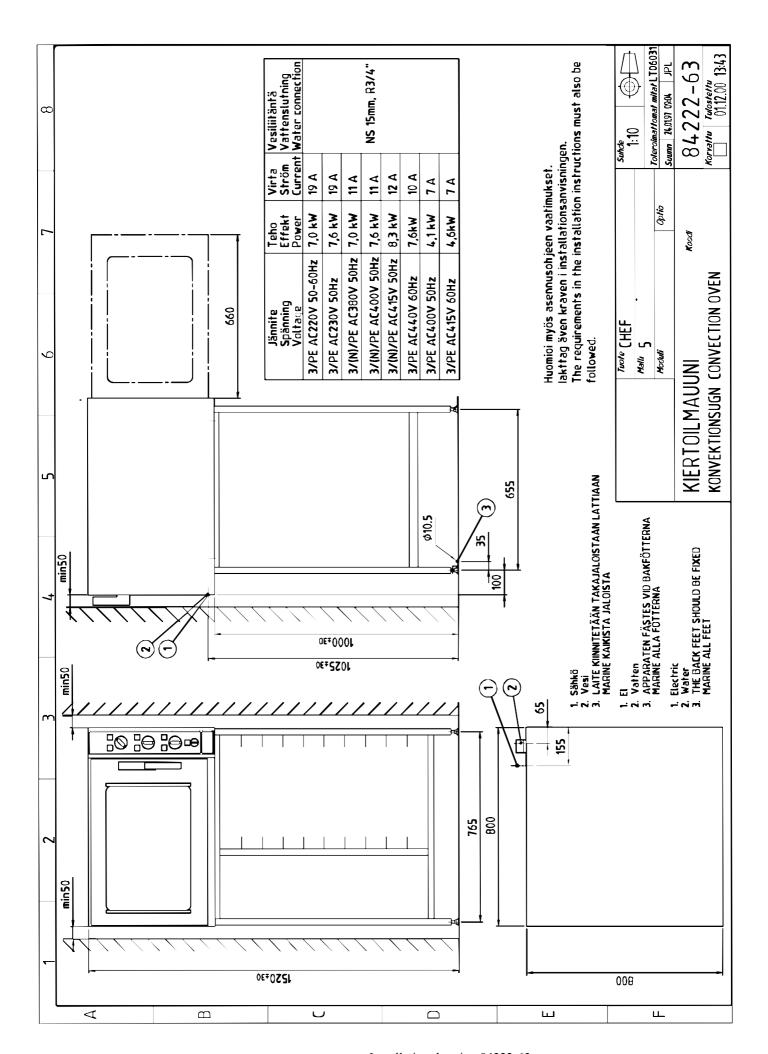


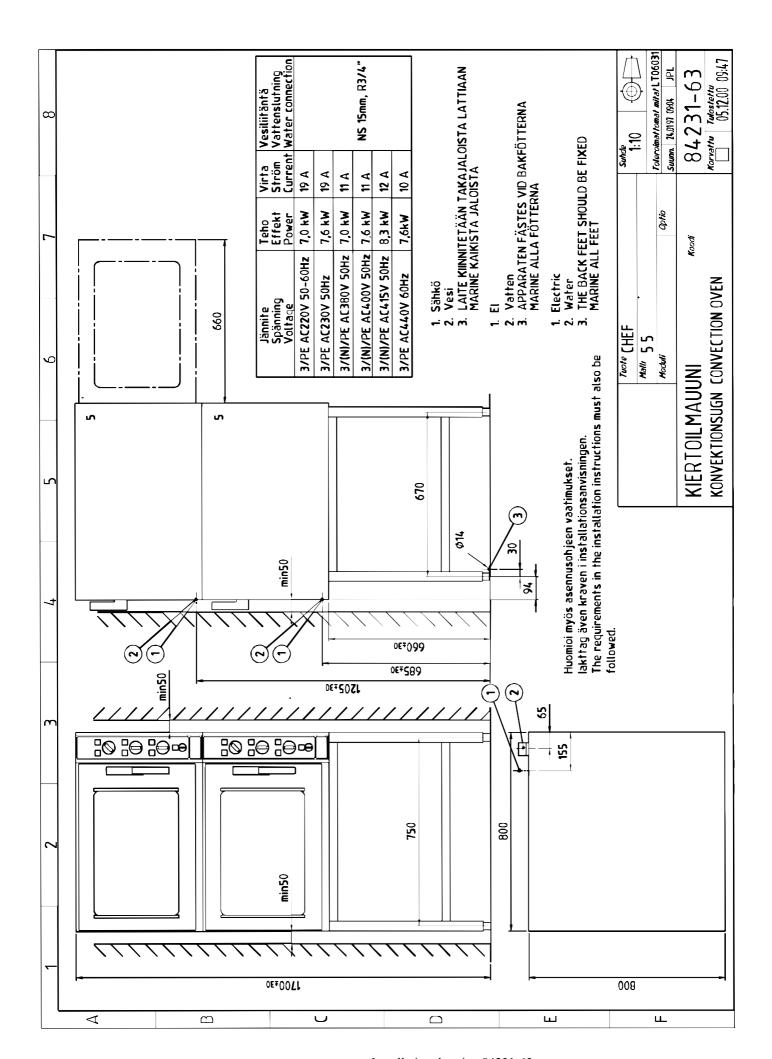


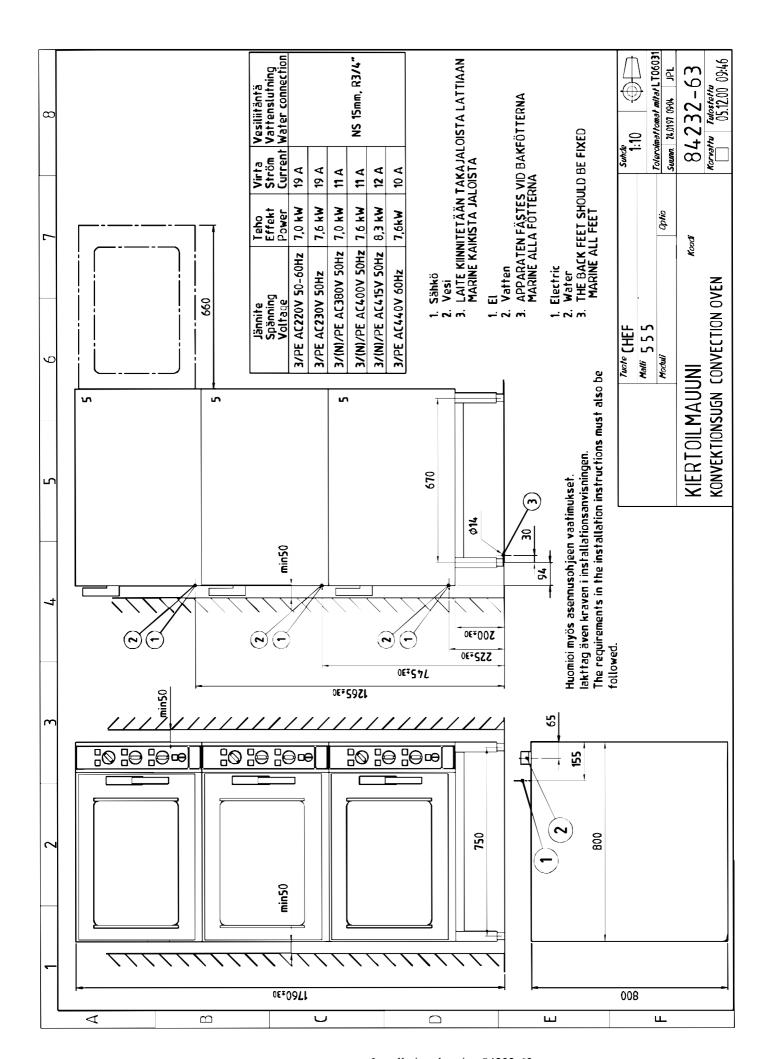


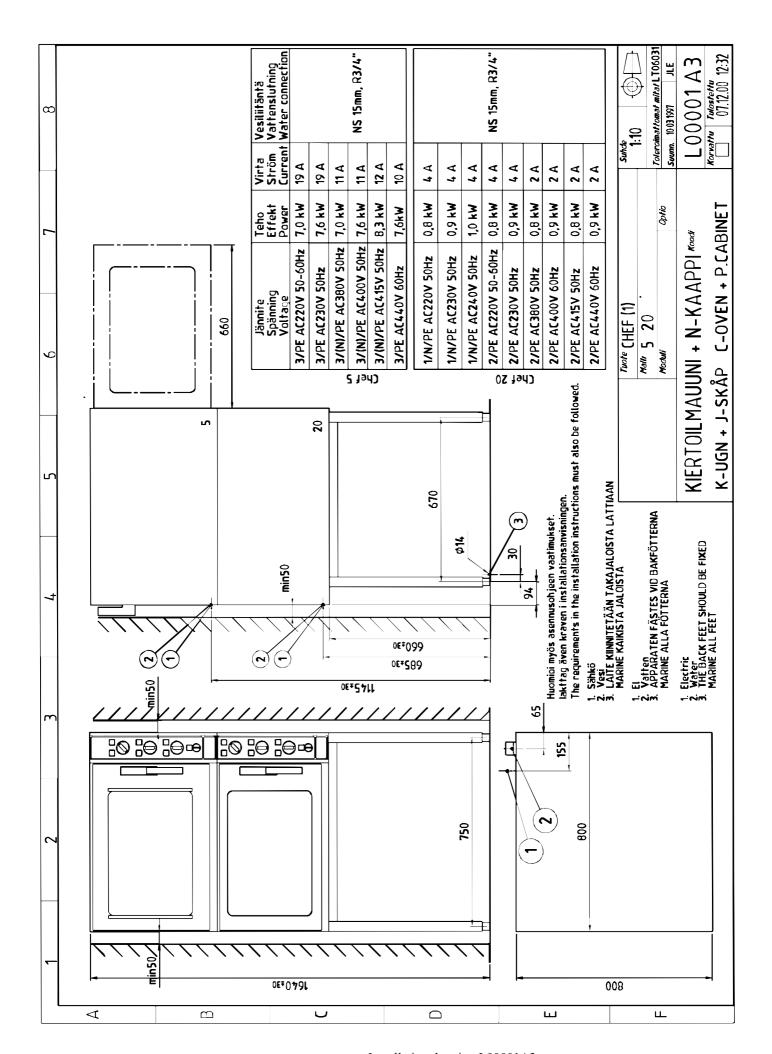


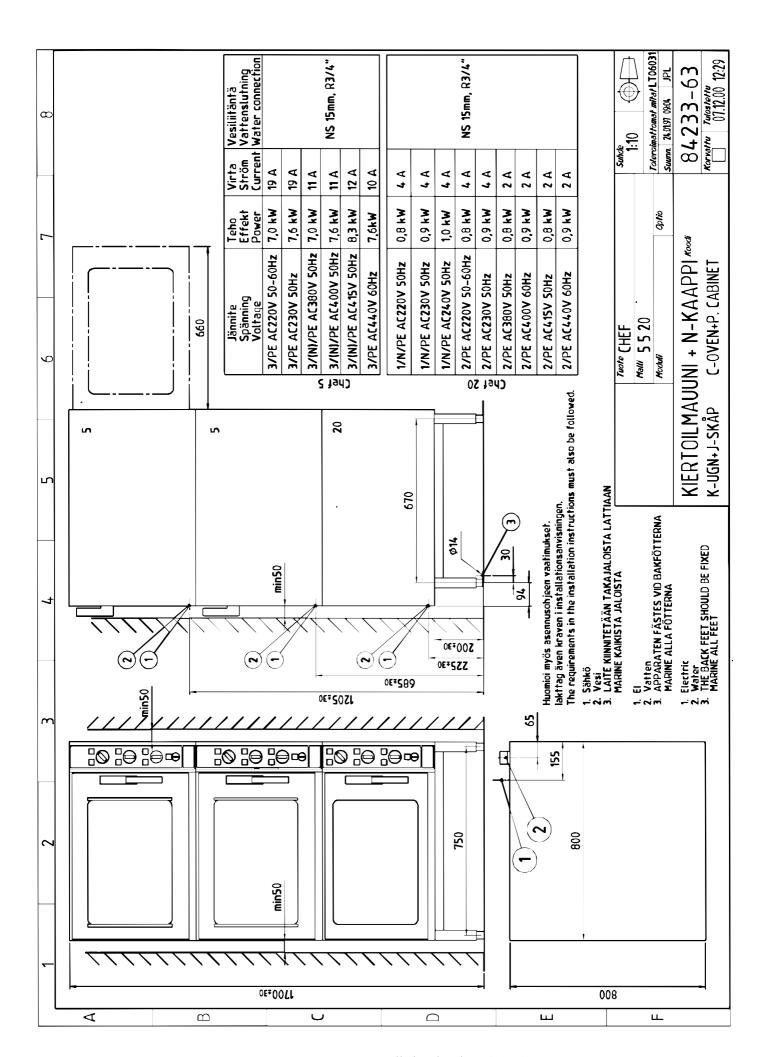


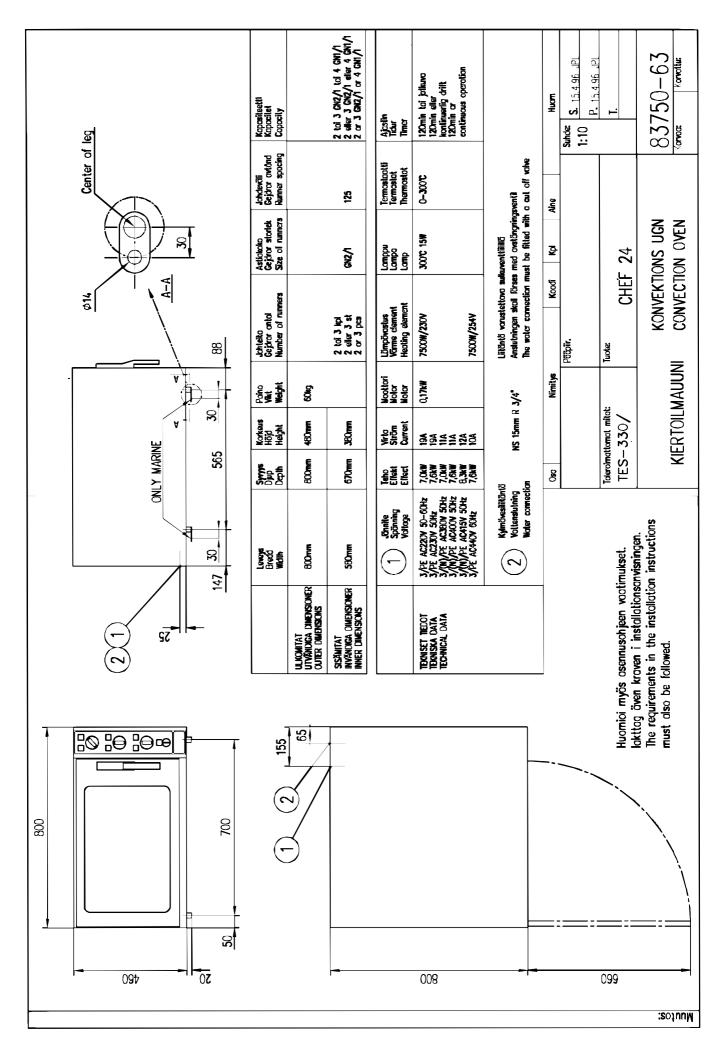


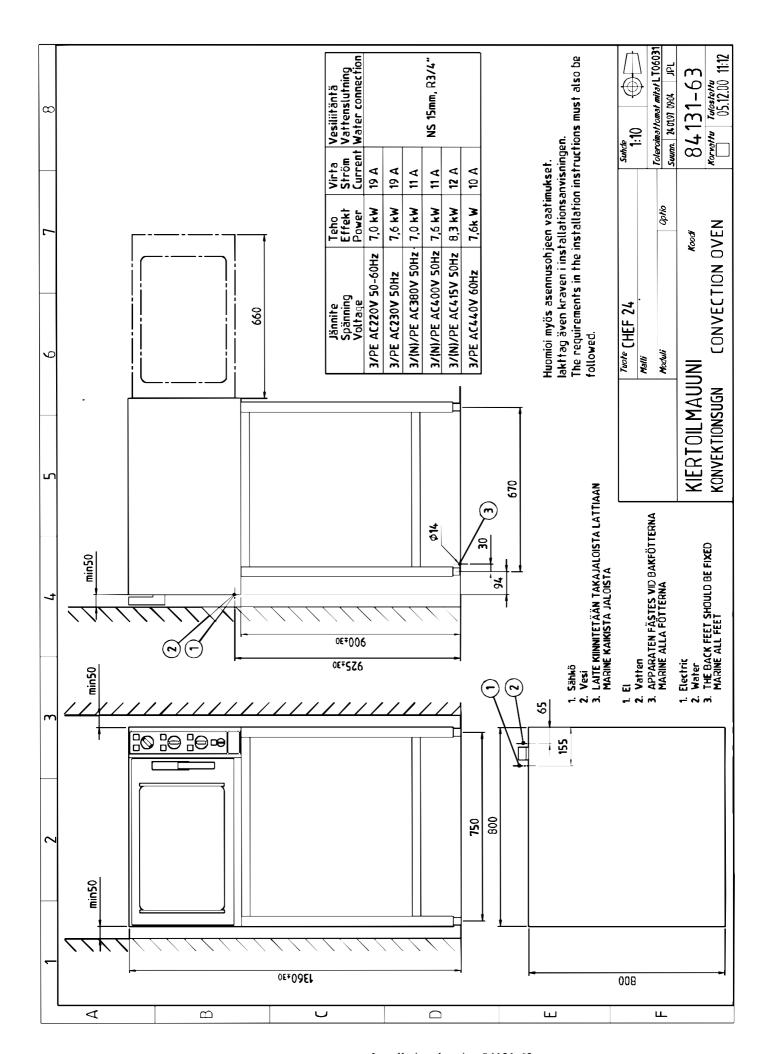


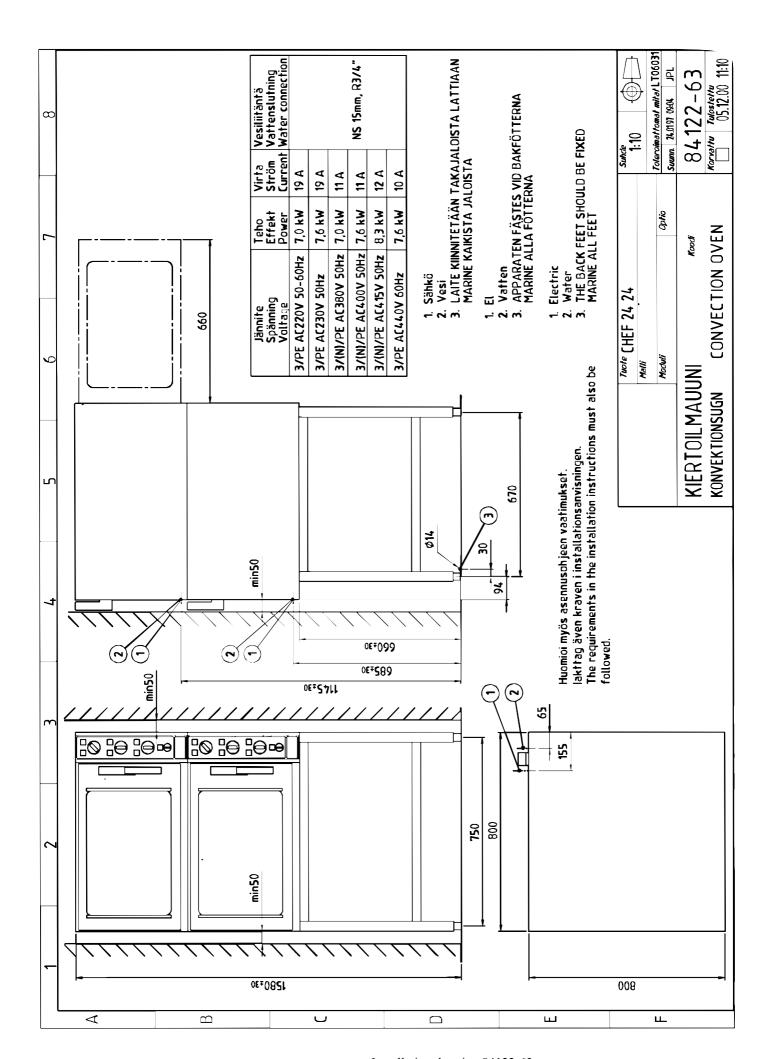


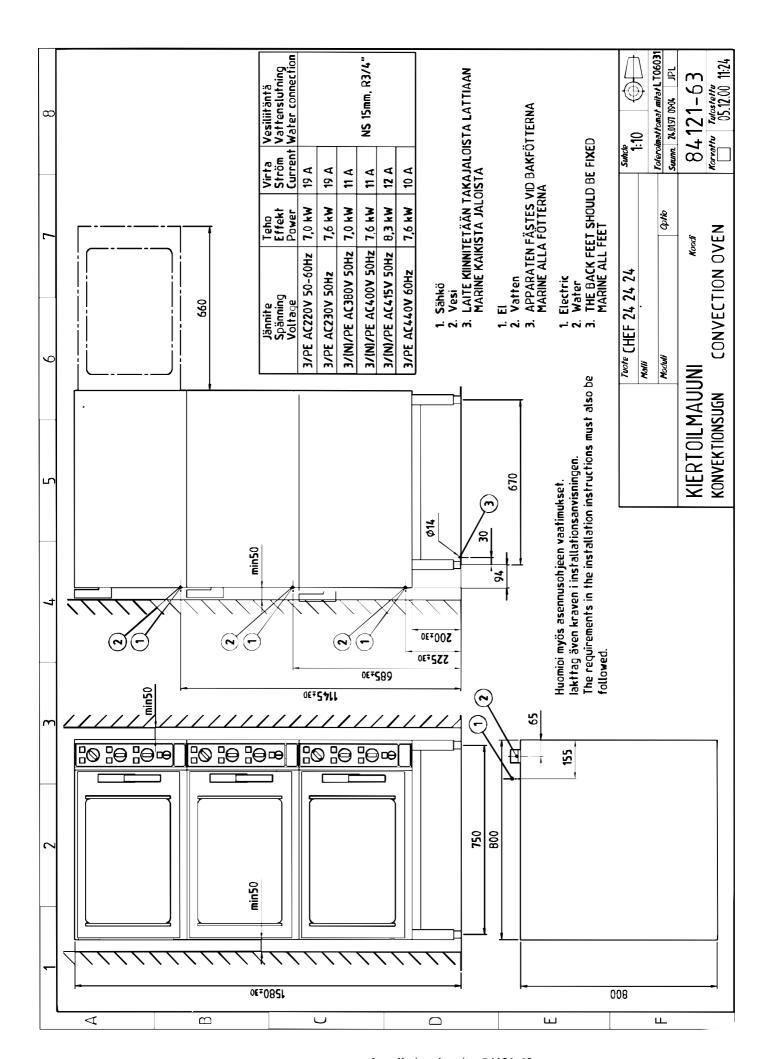


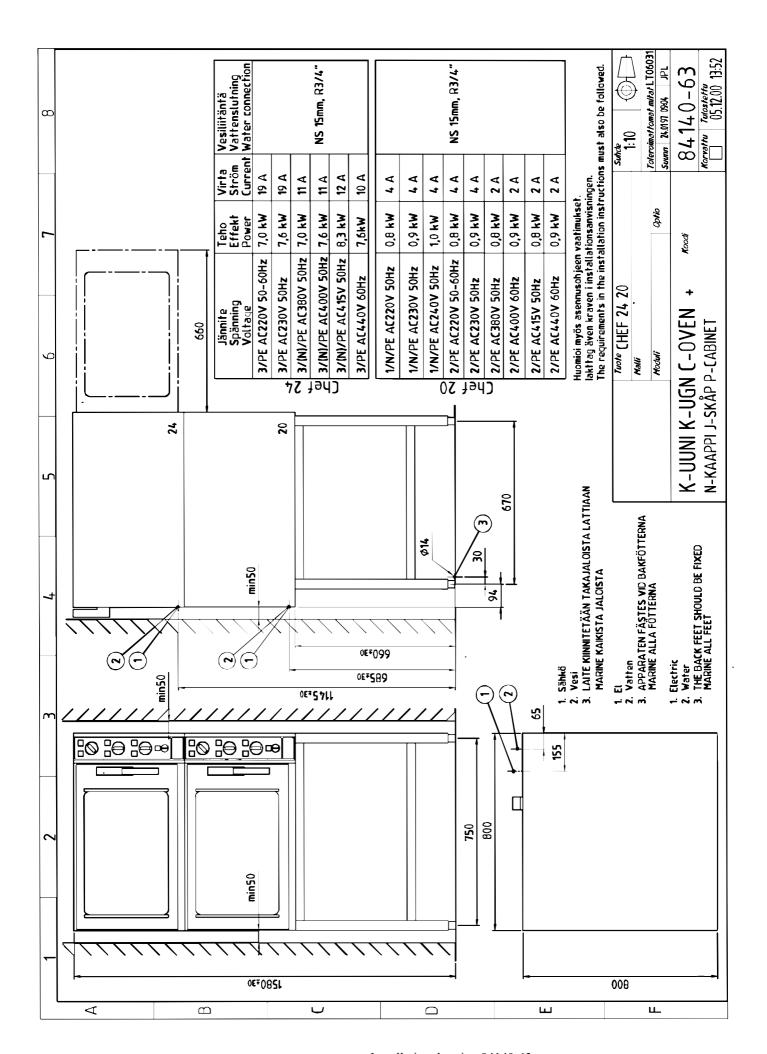


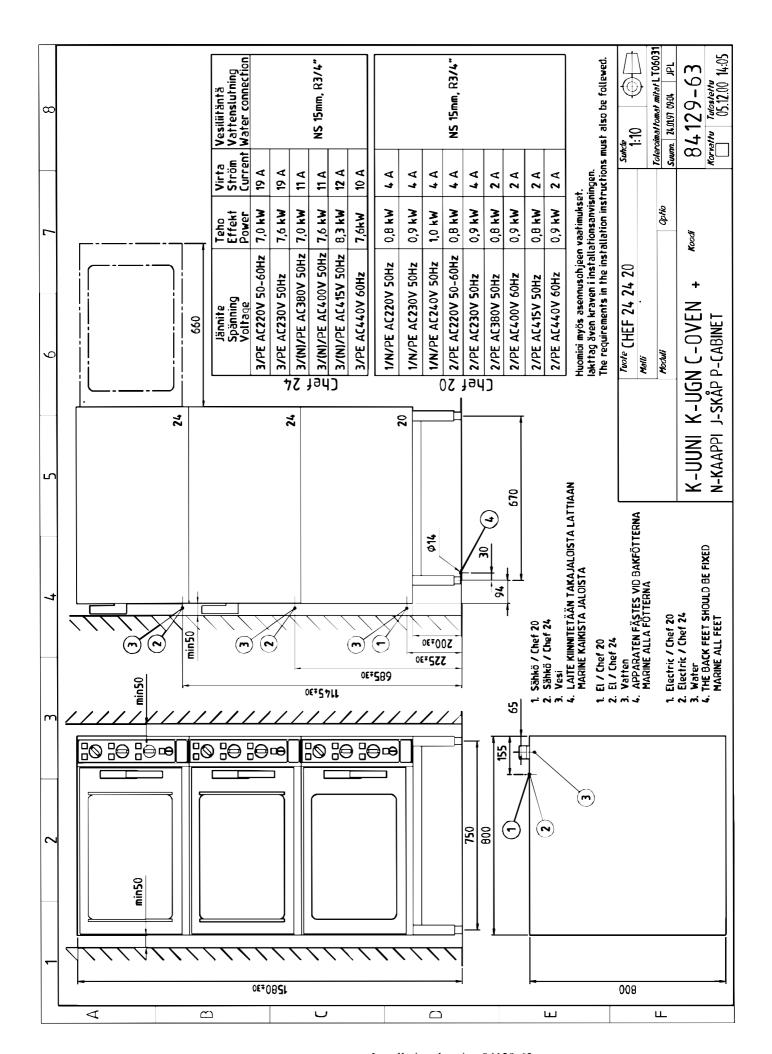


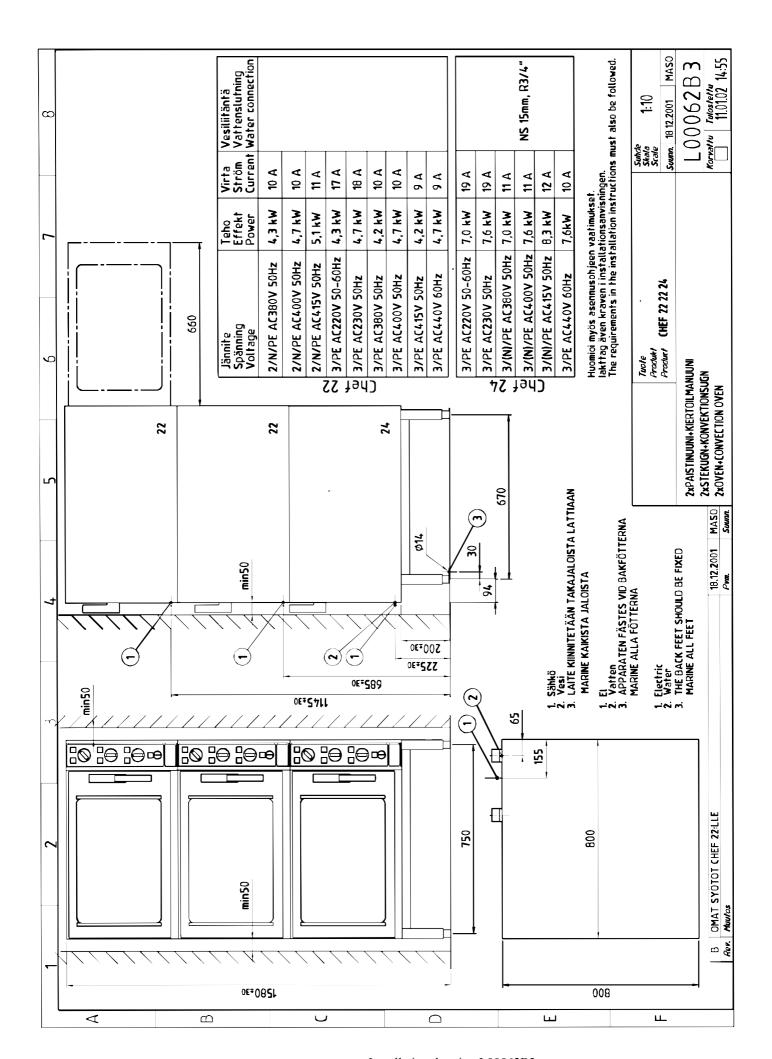


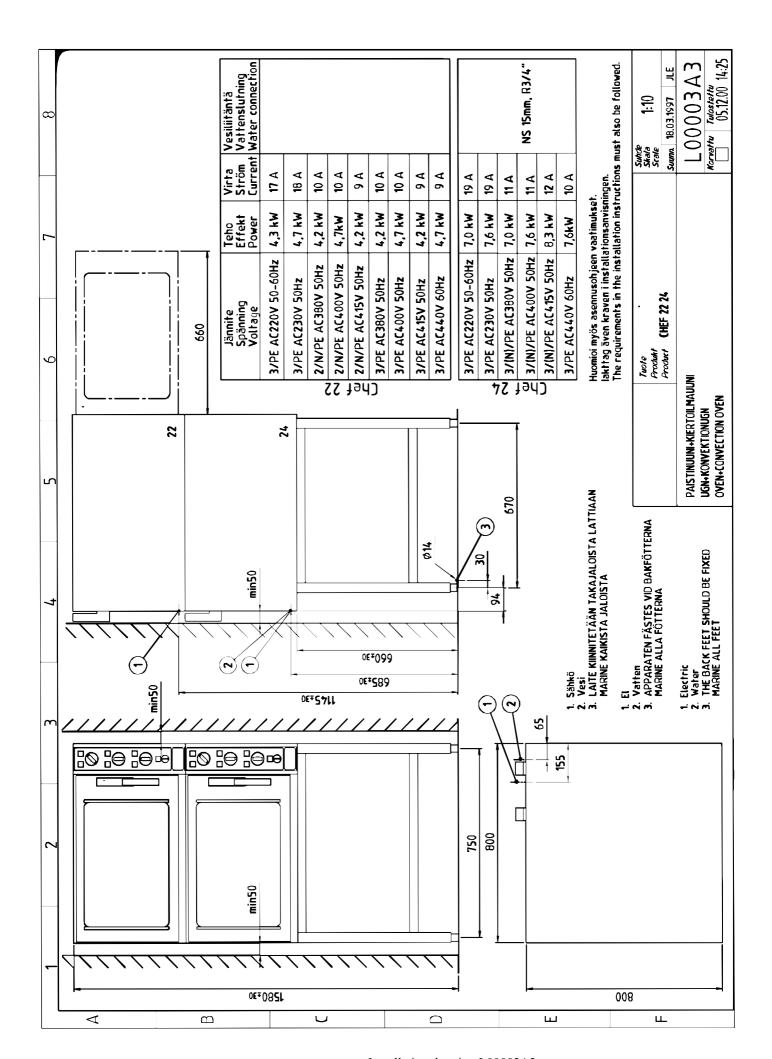


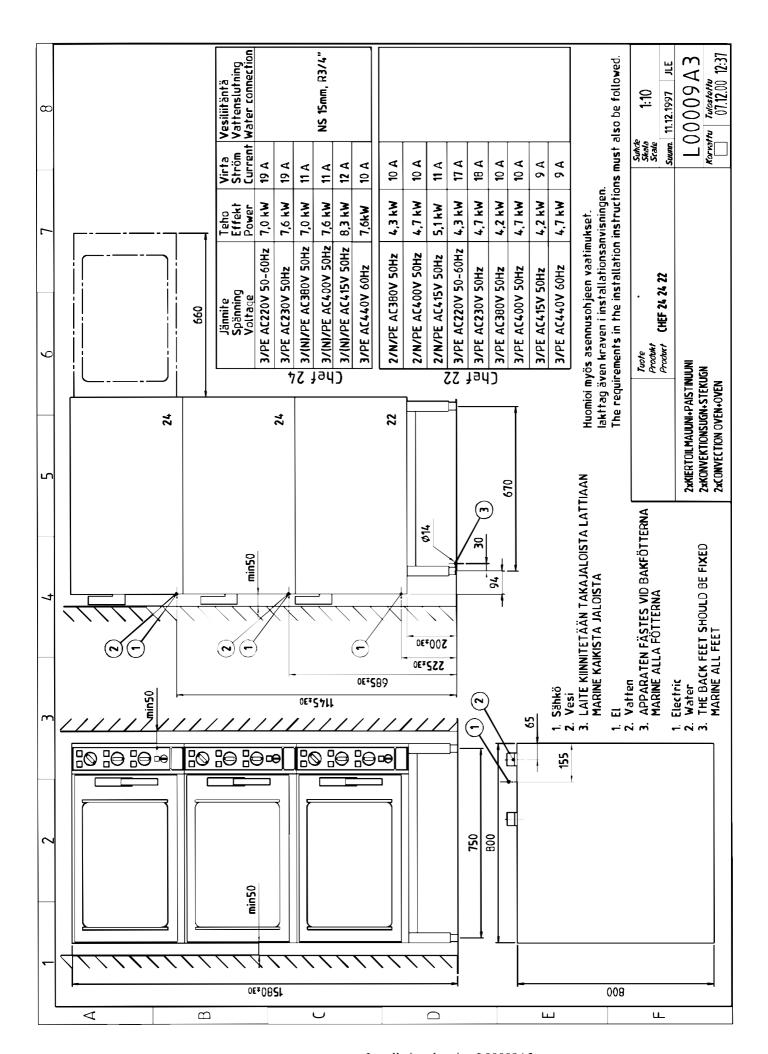


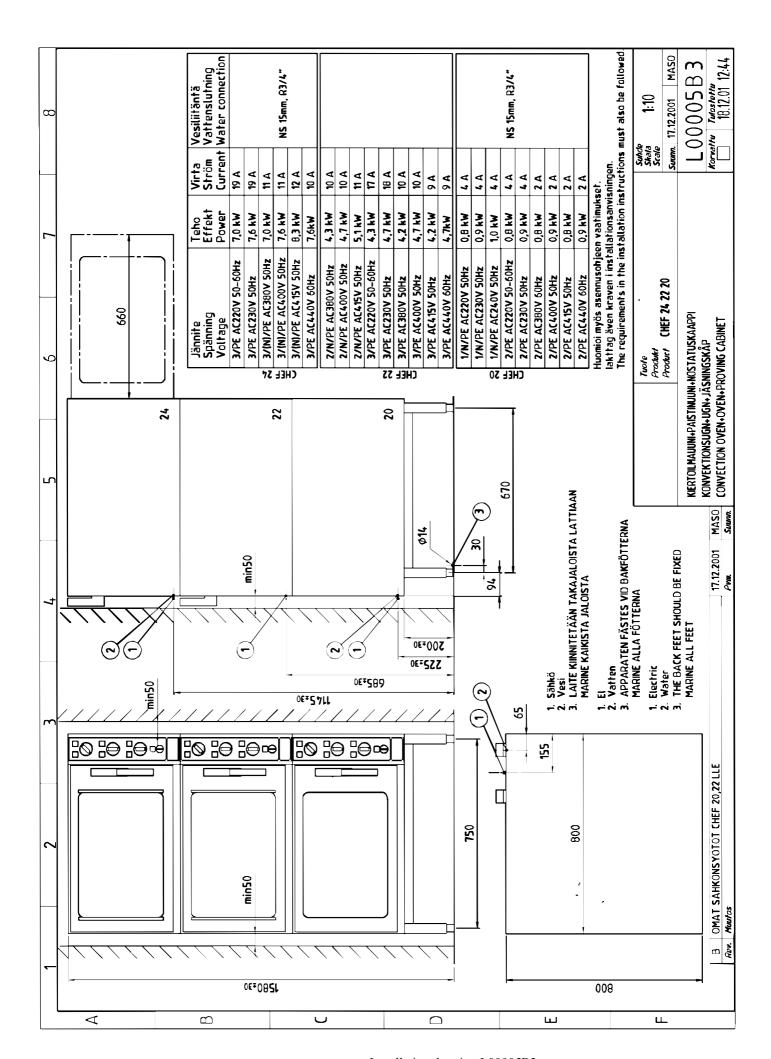


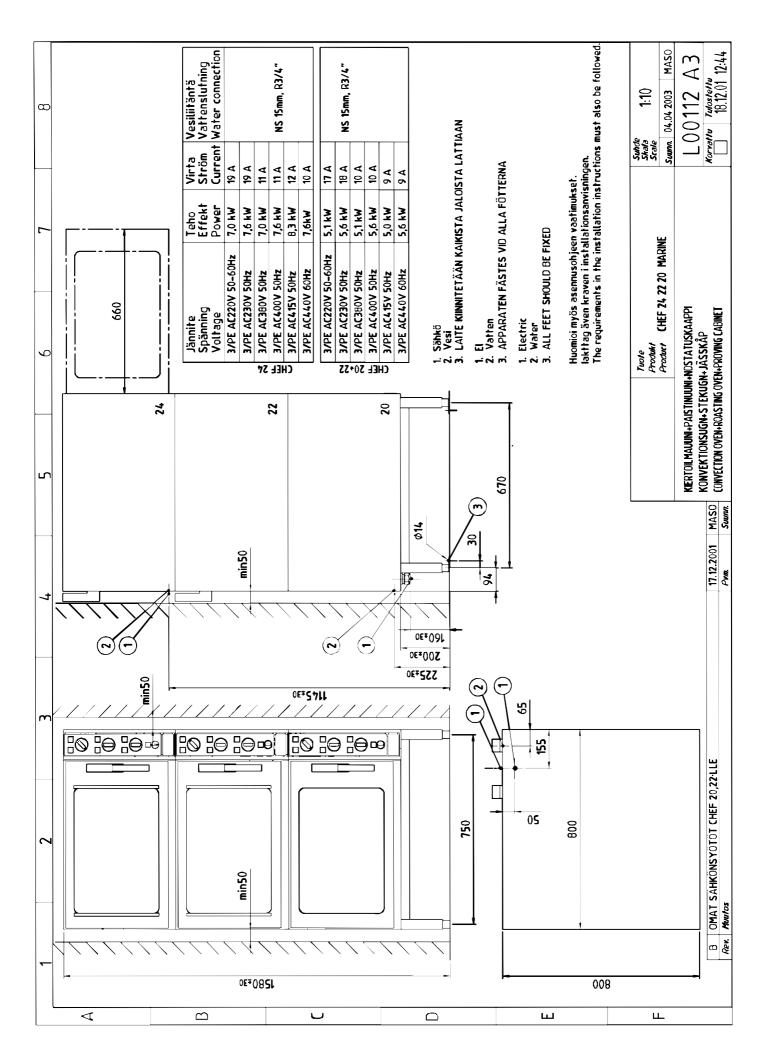












Item	Model	Specification
External dimensions WxDxH, oven	4	800 x 600 x 520 mm
External dimensions WxDxH, oven	5	800 x 800 x 520 mm
External dimensions WxDxH, oven	24	800 x 800 x 460 mm
External dimensions WxDxH, oven stand with guide rails	4	775 x 560 x 1000 mm
External dimensions WxDxH, oven stand	4	790 x 510 x 200,660 mm
External dimensions WxDxH, oven stand with guide rails	5	790 x 680 x 1000 mm
External dimensions WxDxH, oven stand	24,5	790 x 710 x 200,660,900 mm
External dimensions WxDxH, two ovens with stand	4	800 x 600 x 1700 mm
External dimensions WxDxH, two ovens with stand	5	800 x 800 x 1700 mm
External dimensions WxDxH, two ovens with stand	24	800 x 800 x 1580 mm
External dimensions WxDxH, three ovens with stand	4	800 x 600 x 1760 mm
External dimensions WxDxH, three ovens with stand	5	800 x 800 x 1760 mm
External dimensions WxDxH, three ovens with stand	24	800 x 800 x 1580 mm
Internal dimensions of oven WxDxH	4	580 x 360 x 440 mm
Internal dimensions of oven WxDxH	5	580 x 670 x 440 mm
Internal dimensions of oven WxDxH	24	580 x 670 x 380 mm
Capacity, 5 guide rails	4	5 pcs GN1/1 baking sheet
Capacity, 3 guide rails	4	3 pcs GN1/1 baking sheet
Capacity, 5 guide rails	5	5 pcs 450 x 600 baking sheet
Capacity, 2 guide rails	24	2 x GN2/1 or 4 x GN1/1-65 mm
Capacity, 3 guide rails (bake off)	24	6 x GN1/1 or 3 x GN2/1 (only for baking)
Thermostat control range	4,5,24	+50300°C
Material	4,5,24	Stainless steel oven interior, door and external casing. Door with double glass.
Timer	4,5	0-60 min. or continuous
Timer	24	0-120 min. or continuous
Pre-heating time (200°C)	4,5,24	20 min.
Moisture device	4,5	Moisturing is on when the switch has been turned clockwise.
Moisture device	24	Automatic, 1,5 dl/min. (if needed, the setting can be adjusted by authorised service personnel)
Weight including packing, oven	4	abt 68 kg
Weight including packing, oven	5	abt 83 kg
Weight including packing, oven	24	abt 77 kg
Weight including packing, oven with stand (1000mm)	4	abt 91 kg
Weight including packing, oven with stand (1000mm)	5	abt 102 kg
Weight including packing, oven with stand	24	abt 96 kg
Weight including packing, two ovens with stand	4	abt 145 kg
Weight including packing, two ovens with stand	5	abt 169 kg
Weight including packing, two ovens with stand	24	abt 157 kg
Weight including packing, three ovens with stand	4	abt 204 kg
Weight including packing, three ovens with stand	5	abt 240 kg
Weight including packing, three ovens with stand	24	abt 214 kg
Weight excluding packing, oven	4	abt 53 kg



## **Technical specifications**

Item	Model	Specification
Weight excluding packing, oven	5	abt 65 kg
Weight excluding packing, oven	24	abt 60 kg
Weight excluding packing, oven with stand (1000mm)	4	abt 71 kg
Weight excluding packing, oven with stand (1000mm)	5	abt 79 kg
Weight excluding packing, oven with stand	24	abt 74 kg
Weight excluding packing, two ovens with stand	4	abt 115 kg
Weight excluding packing, two ovens with stand	5	abt 137 kg
Weight excluding packing, two ovens with stand	24	abt 127 kg
Weight excluding packing, three ovens with stand	4	abt 165 kg
Weight excluding packing, three ovens with stand	5	abt 200 kg
Weight excluding packing, three ovens with stand	24	abt 185 kg
Package dimensions WxDxH, oven	4,5	886 x 944 x 684 mm
Package dimensions WxDxH, oven	24	886 x 944 x 624 mm
Package dimensions WxDxH, oven with stand (1000mm)	4,5	886 x 944 x 1705 mm
Package dimensions WxDxH, oven with stand	24	886 x 994 x1545 mm
Package dimensions WxDxH, two ovens with stand	4,5	886 x 944 x 1885 mm
Package dimensions WxDxH, two ovens with stand	24	886 x 944 x1765 mm
Package dimensions WxDxH, three ovens with stand	4,5	886 x 944 x 1945 mm
Package dimensions WxDxH, three ovens with stand	24	886 x 944 x1765 mm
Electricity connection		See installation drawing
Conditions of use		Normal kitchen conditions, temperature above 0°C
Accessories	4	Stand: height 1000 mm, 660 mm or 200 mm
Accessories	5	Stand: height 1000 mm, 900 mm, 660 mm or 200 mm
Accessories	24	Stand: height 900 mm, 660 mm or 200 mm

## **METOS AS**

## VAATIMUSTENMUKAISUUSVAKUUTUS FÖRSÄKRAN OM ÖVERENSSTÄMMELSE **DECLARATION OF CONFORMITY**

Päiväys / Datum / Date

13.02.2006

Valmistajan nimi / Tillverkarens namn / Manufacturer's name

METOS AS

Osoite / Adress / Adress

SUUR SÕJAMÄE 10 11415 TALLINN **ESTONIA** 

vakuutamme yksinomaan omalla vastuullamme, että seuraava tuote:

försäkrar helt på eget ansvar att följande produkt:

declare under our sole responsibility that the product:

Nimi, tyyppi tai malli / Namn, typ eller modell / Name, type or model

Chef 24, Chef 4, Chef 5, Classic 2, Classic 5, kiertoilmauuni, myös paistotornien sekä liesien osana. Chef 24, Chef 4, Chef 5, Classic 2, Classic 4, Classic 5 konvektionsugn, även som enhet i stektorn och spisarna.

Chef 24, Chef 4, Chef 5, Classic 2, Classic 4, Classic 5 convection oven, also in stacked units as well as in ranges.

johon tämä vakuutus liittyy, on (mikäli asiankuuluvaa) seuraavan standardin (seuraavien standardien) tai muun normatiivisen asiakirjan (muiden normatiivisten asiakirjojen) vaatimusten mukainen

till vilken denna försåkran hör, uppfyller (vid behov) kraven i följande standard (standarder) eller annat (andra) normativa dokument

to which this declaration relates is in conformity with (if necessary) the following standard(s) or other normative document(s)

Tunnus, vuosiluku tai julkaisupäivä / Beteckning, årtal eller publiceringsdatum / Designation or number, year or date of issue

; EN-SFS 292-2:1991 EN-SFS 292-1:1991 EN-SFS 60204-1:1993; (osittain / delvis / partly) EN-SFS 60335-1:2003; EN-SFS 60335-2-42:2003

ja noudattaa (mikäli asiankuuluvaa) seuraavan direktiivin (seuraavien direktiivien) määräyksiä och följer (vid krav) följande direktivs bestämmelser

and in conformity with (if necessary) orders of following directive(s)

98/37/EC LVD 73/23 EMC 89/336/EEC

Vakuutuksen antopaikka ja päivä / Utfärdad på ort och datum / Place and date of issue

**TALLINN** 

13.02.2006

Valtuutetun henkilön nimi, nimikirjoitus ja asema / Bemyndigad persons namn, namnteckning och befalttling / Name, signature and title of authorized person

Andres Kirstein, Managing Director

Jaan Muru, Production Manager

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