

metos

PROVING CABINET

CHEF 200

Installation and Operation Manual

Translation of the original documentation



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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.

2. Safety

2.1. Safe use of the appliance



Do not leave the proving cabinet on completely unattended for long periods.

The water basin in front of the fan inside the proving cabinet must be kept in the proper position when the proving cabinet is in use.

2.1.1. 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

The Chef 200 proving cabinet is intended for proving bakery products.

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

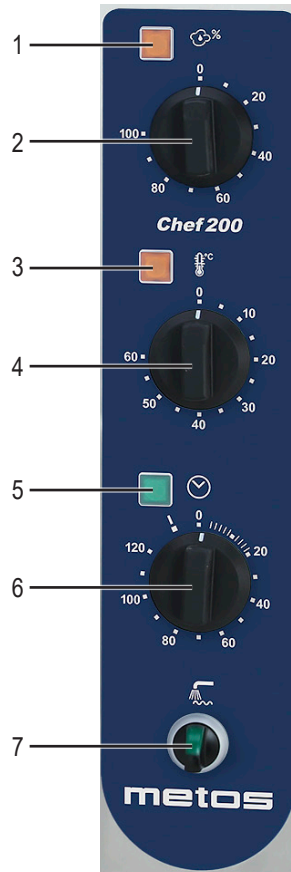
In addition to a single proving cabinet, two or three proving cabinets can be stacked on top of another on stands forming a proving station. One or two proving cabinets can also be replaced by a convection oven or a roasting-baking oven.

This manual covers the Chef 200 proving cabinet, while Chef 240 and Chef 220 have their own manuals.

3.3. Operating principle

In proving cabinets, proving takes place by hot moist air circulating around the food. Circulating air is fanned around the food from all sides to prove effectively and evenly. Moisture can also be used to further boost proving.

3.3.1. Control panel switches



Control panel switches Chef 200

1. Moistening lamp. The orange lamp is always on when the water basin's heating element is on. The lamp goes out when the temperature required by the humidity-% has been reached.
2. Moistening device. Moisture is continuously added when the desired moisture-% is selected by turning the switch knob clockwise.
3. Thermostat lamp. The orange lamp is on when the heating element is on.
4. Thermostat switch. To set the temperature between +20°C and +60°C.
5. Proving cabinet on lamp. The green lamp is on when the proving cabinet is switched on.
6. Timer. Stepless control 0-120 minutes or continuous use I.
7. Water basin filling switch. Water flows into the water basin as long as the switch is turned in a clockwise direction. The basin capacity is approx. 1,2 l.

4. Operation instructions

4.1. Before using the appliance



Using the appliance for the first time or when heating elements or cooking plates have been changed, turn on plates and ovens at MINIMUM temperature for SEVERAL hours or until the insulation resistance is OK. This allows remaining humidity in the heating elements and cooking plates to dry up. In fact, on first connection, the earth insulation can be relatively inadequate, but after the above-mentioned initialization run the insulation level will normally be re-established according to CEI 18-6 part 307 regulations.



Setting the power or temperature to maximum right away at first run may damage the heating elements or the cooking plates.



In unclear cases contact our technical support:
technical.support@metos.com

There is a slight smell of metal and thermal insulation when the proving cabinet is heated for the first time. This is completely normal and disappears by heating the proving cabinet. Before using the cabinet for the first time, heat it to a temperature of +60°C until the smell disappears.

4.2. Operation procedures

4.2.1. Before proving

The proving cabinet must be preheated to desired temperature before actual proving begins. This is to heat the whole proving cabinet to the correct temperature so as to ensure the best possible proving result.

- Put the guide rails in place.
- Set the timer (see Figure "Control panel switches") at 20 minutes. First turn the timer past the desired setting value and then back to the desired value.
- Set the thermostat at the desired temperature (usually 40°C) and the moisturing device at the desired moisture-% (usually 60-90%).
- The proving cabinet is ready for use when the timer signals to tell you that time is up.
- When the door is closed, the proving cabinet will remain hot for a long time, even though it is not switched on.

4.2.2. How to select cooking temperature

Proving time and temperature depends on food quality and weight.

4.2.3. Using the proving cabinet



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

Proving cabinet functions are operated from the control panel (see Figure “Control panel switches” in Chapter “Functional description/Operating principle”).

4.2.4. Proving

- Carefully preheat the proving cabinet as instructed in “Before proving”.
- Turn the handle to open the proving cabinet door. To close the door, push the handle until you hear a distinct click.
- Put the product in the proving cabinet.
- Set the timer (see Figure “Control panel switches”) at the required proving time, the thermostat switch at the required proving temperature and the moistening device at the desired moisture-%.
- When the set proving time is over, the heating, the fan and the moistening function will switch off automatically.
- Switch the power off at the thermostat switch, whereupon the buzzer also stops sounding.
- Open the door.



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

4.2.5. Use of the moistening function

Water used for generating moisture is led through a nozzle to the water basin. The water is vaporised by means of a heating element. The air flow distributes the steam evenly in the chamber.

Make sure before use that there is enough water in the basin. The basin capacity is about 1,2 l, so it takes about 1 minute to fill the basin. Avoid overfilling. Release the switch immediately if water begins to flow onto the chamber bottom.

Switch the moistening function on by turning the switch in a clockwise direction at the desired moisture-%, usually 60-90%.

Use of the moistening function will provide the best possible proving conditions.

4.3. After use

4.3.1. Cleaning



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

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

Daily cleaning

It is recommended to clean the water basin daily or as often as possible. The basin can be easily removed and conveniently washed in a dishwasher.

Weekly cleaning

Spray diluted detergent solution into the inside of the proving cabinet, and on the inside surface of the door. Heat the proving cabinet to about +50°C (not essential), switch off at the mains and let the detergent work for about 15 minutes. Use a brush or lint-free cloth to scrub the burnt 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, dry the proving cabinet by heating at +60°C for 5 minutes.

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

Cleaning the guide rails

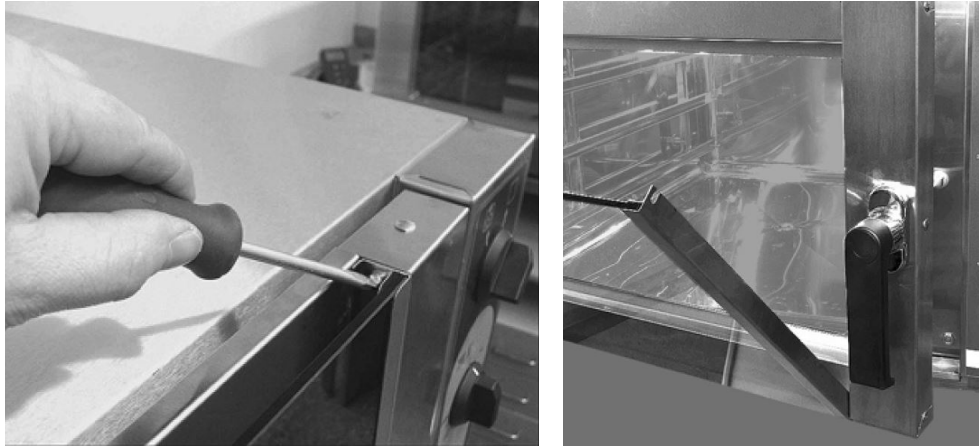
When cleaning the proving cabinet thoroughly, loosen, soak and wash the guide rails. The rails can be easily removed and conveniently washed in a dishwasher.

To remove the guide rails:

- Lift the guide rails upwards.
- Pull the guide rails towards the centre of the inside of the proving cabinet.
- Lift the guide rails out of the proving cabinet.

Replace the guide rails after cleaning.

Cleaning of external surfaces of the door



The external glass of the door can be opened for cleaning. Unscrew the two screws shown in the picture and turn the external glass carefully downward until it stays fully open. Spray diluted detergent solution onto the door's metal surfaces between the glasses and onto the glass surfaces. Let the detergent work for about 15 minutes. Wipe the loosened dirt and detergent carefully with a damp cloth. After cleaning, return the external glass to its former position. Fit the screws in place and tighten carefully.

4.3.2. How to change the oven bulb

To change the burnt lamp, do the following:

- 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. All controls should be in the 0 position.
- Unscrew the lens of the oven lamp using your fingers.
- Pull the lamp out of the socket.
- Put a new lamp into the socket. Lamp type: OSRAM Halogen lamp 300°C G9 230V 25W.
- Fit the lens in place and tighten slightly.



Use of the appliance is strictly prohibited if the lens of the oven lamp is broken or not properly in place.



Do not overtighten the lens after replacement of the lamp.

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 qualified persons only.



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..



The connection of the appliance to the electric and water supply must be carried out by qualified persons only.

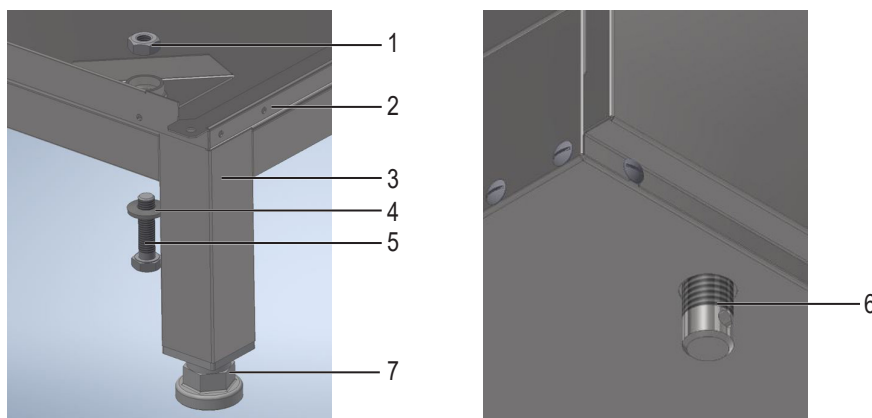
5.2. Transporting and unpacking the appliance

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 adjustable feet (4 pcs.) located on the appliance bottom. The feet come loose by turning by hand. Fasten the stand as shown in the illustration below, using the components 1, 4 and 5.



1. Nut, 4 pcs
2. Chef oven/proving cabinet
3. Stand
4. Washer, 4 pcs
5. Hexagon screw, 4 pcs
6. Adjustable foot in the bottom of the device, 4 pcs
7. The stand's adjustable foot, 4 pcs

5.2.2. Installation of a Chef oven group

The appliances can 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. For assembly of the oven group a special spare parts kit is necessary. The kit can be ordered separately. Code for the spare parts kit is 3752352. Refer to your local supplier for details.

Assembly of the oven group can be carried out by an agent authorized by the manufacturer.

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.



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

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



When the device is in the right place and in a horizontal position, it must be fixed to the floor, land models on the flanges of the rear legs and models intended for marine use on the flanges of 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.

The appliance is equipped with a plug for electrical connection. The appliance must be earthed. All information needed to connect the appliance is to be found on the name plate, the connection diagram and the installation drawing.

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" female 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 negligence 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° dH = 0,4 - 0,7 - 0,9 mmol/l

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

5.6. Test-run



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

Test the proving cabinet once it has been connected to the mains electricity.

Check that

- the guide rails and the water basin are in place
- the green proving cabinet on lamp lights up when the proving cabinet is switched on
- the orange thermostat lamp lights up when the thermostat is turned in a clockwise direction
- the orange thermostat lamp goes out once the proving cabinet has heated up and reached the temperature set
- water flows into the water basin when the water basin filling switch is turned in a clockwise direction
- the orange moistening lamp lights up when the moistening device switch is turned in a clockwise direction
- the fan wheel is rotating anticlockwise
- the door switch deactivates the fan and heating
- the drip tray is properly in place.

Attach the side panel.

6. Troubleshooting

If the appliance fails to work, check to ensure that

- make sure the plug is connected to the outlet
- 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
- the fuses (overload protection) have not blown in the fuse box. Ask a qualified person to check overload protection

Should the proving cabinet 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 qualified persons only.

7. Technical specifications

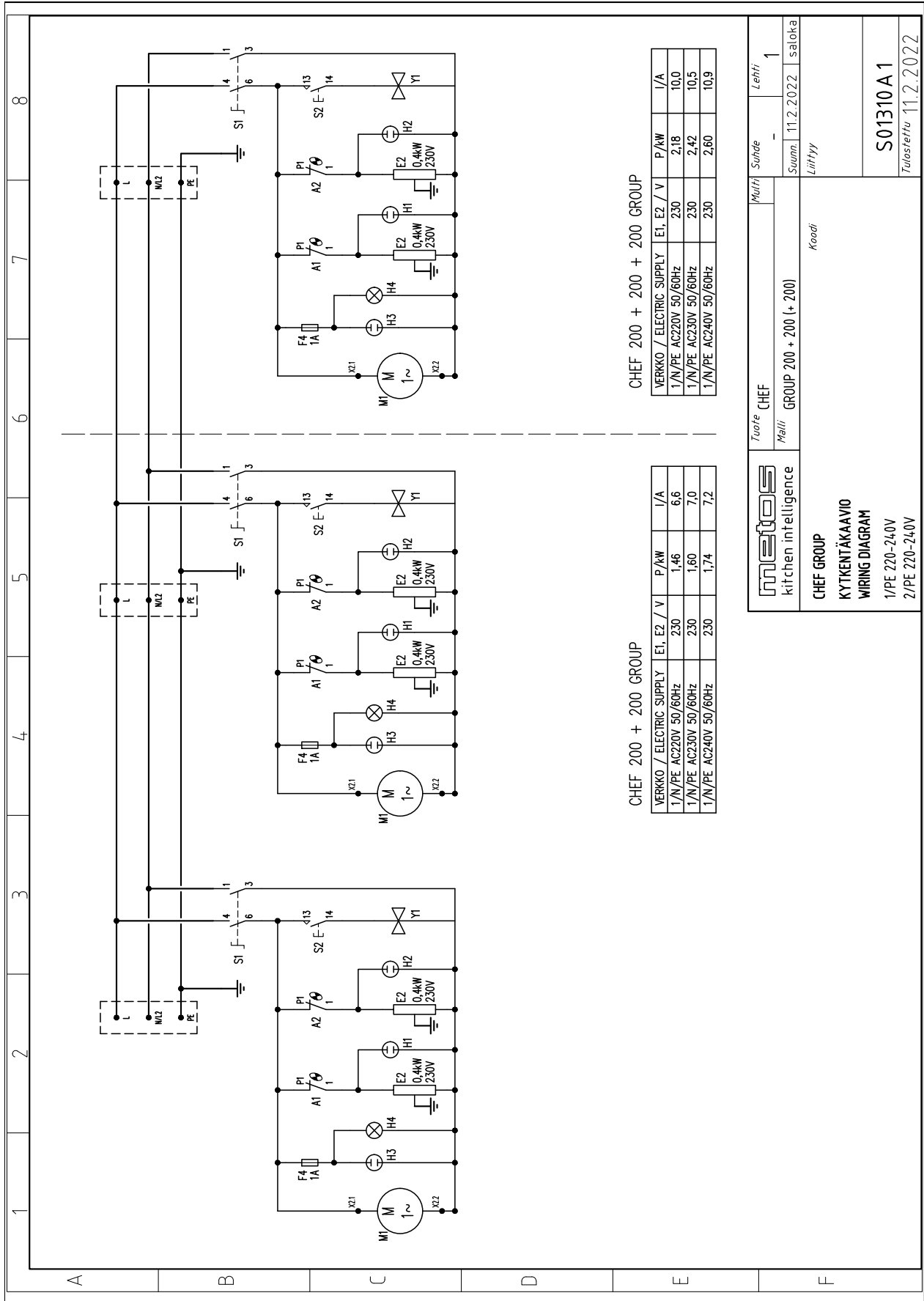
Main and control circuit 83690 H

Wiring diagram S01310 A1

Installation drawing T01580 C3

Installation drawing T01707 C3

Installation drawing T01879 D3



CHEF 200 + 200 + 200 GROUP

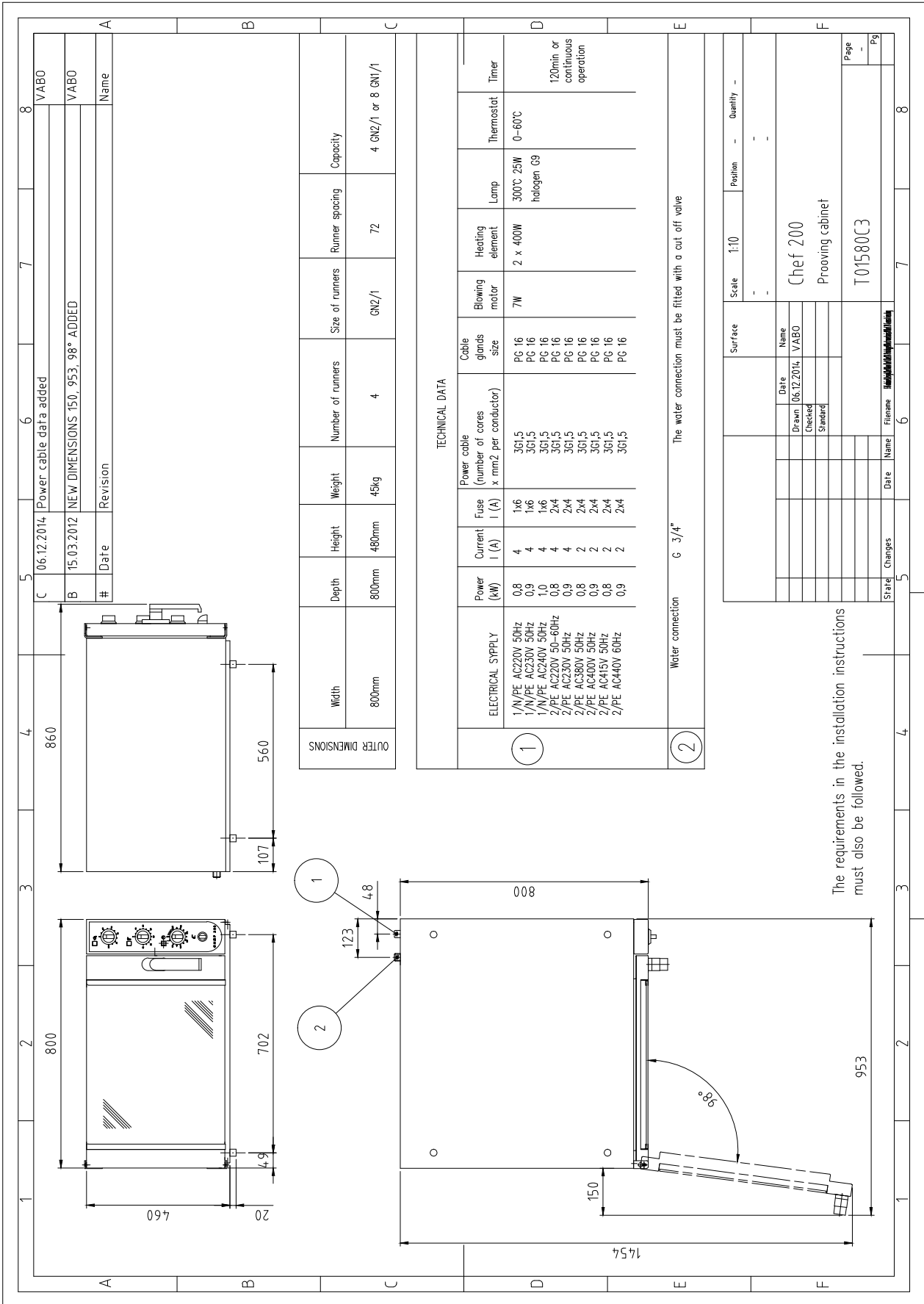
VERKKO / ELECTRIC SUPPLY	E1, E2 / V	P / kW	I / A
1/N/PE AC220V 50/60Hz	230	2,18	10,0
1/N/PE AC230V 50/60Hz	230	2,42	10,5
1/N/PE AC240V 50/60Hz	230	2,60	10,9

CHEF 200 + 200 GROUP

VERKKO / ELECTRIC SUPPLY	E1, E2 / V	P / kW	I / A
1/N/PE AC220V 50/60Hz	230	1,46	6,6
1/N/PE AC230V 50/60Hz	230	1,60	7,0
1/N/PE AC240V 50/60Hz	230	1,74	7,2

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	Malli	GROUP 200 + 200 (+ 200)	Saann.			
CHEF GROUP KYTKENTÄKAAVIO WIRING DIAGRAM		Koodi		Litty		
1/PE 220-240V 2/PE 220-240V		S01310A1		Tulostettu 11.2.2022		

Wiring diagram S01310 A1

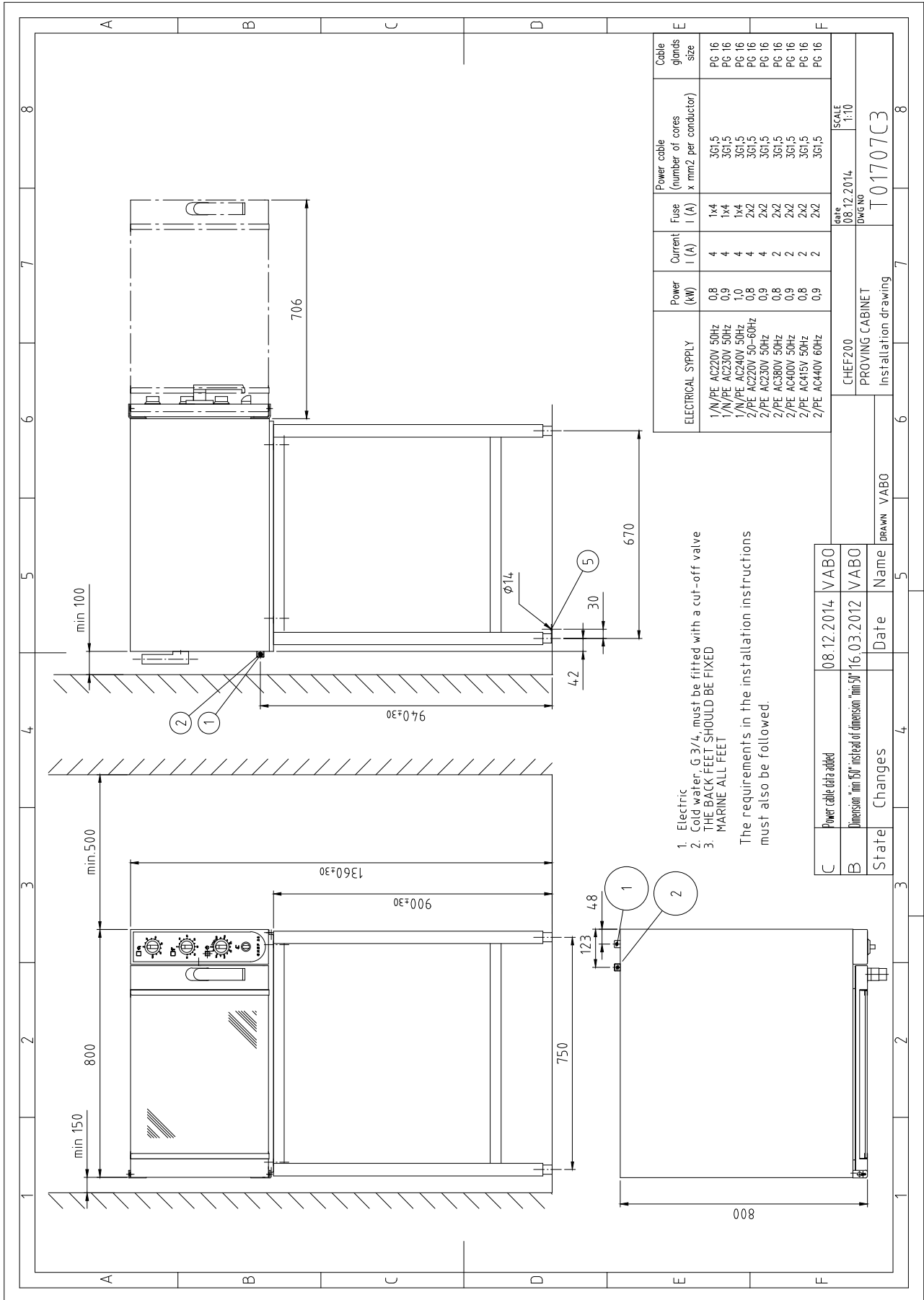


The requirements in the installation instructions must also be followed.

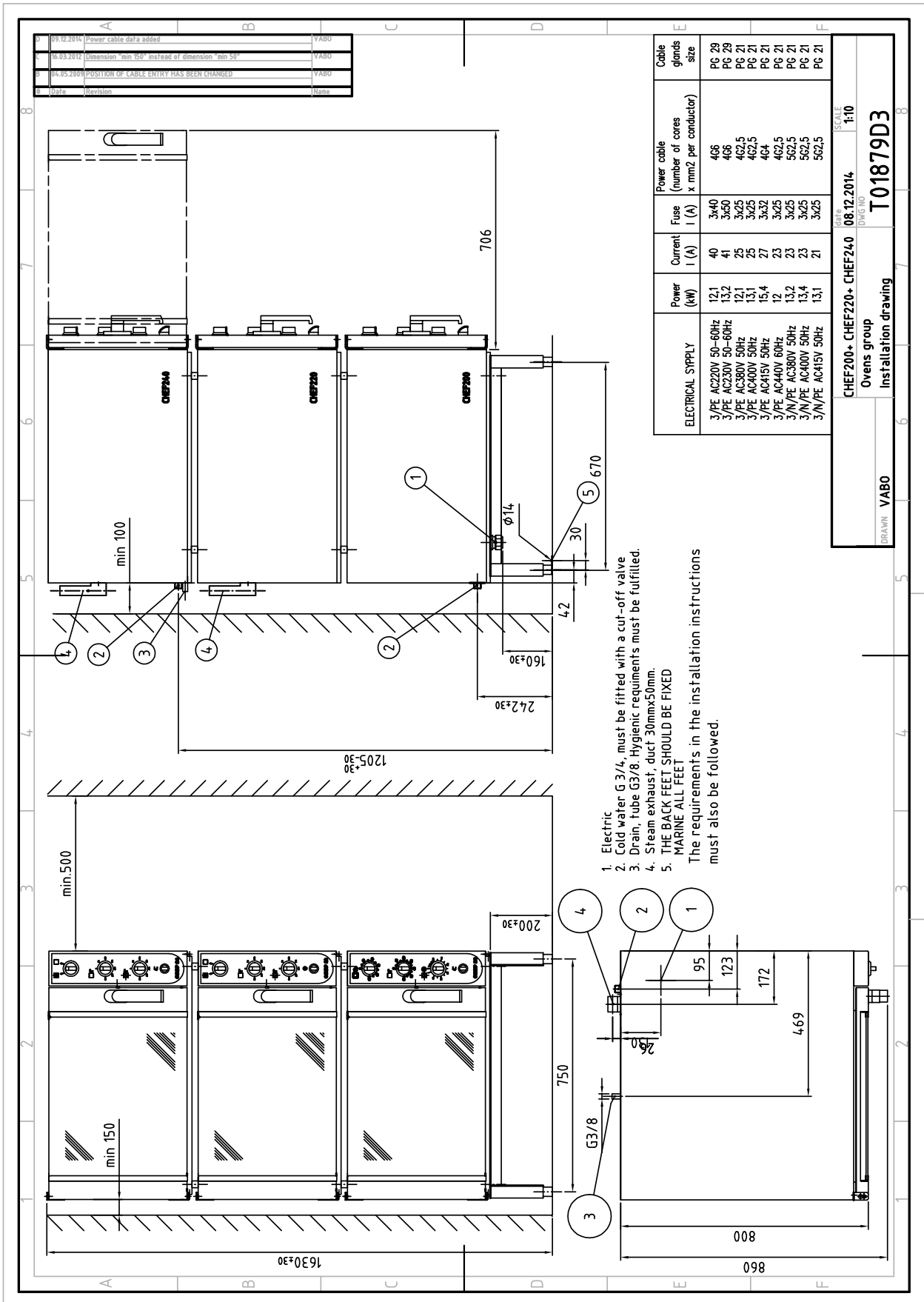
Chef 200
Proving cabinet

T01580C3

Installation drawing T01580 C3



Installation drawing T01707 C3



Installation drawing T01879 D3

Item	Model	Specification
External dimensions WxDxH, proving cabinet	200	800x900x460 mm
External dimensions WxDxH, proving cabinet+stand	200	800x900x1360 mm
Internal dimensions of proving cabinet WxDxH	200	580x670x380 mm
Capacity, 4 guide rails	200	4xGN2/1 tai 8xGN1/1
Capacity, 5 guide rails	200	5 pcs. 450x600 bakery plate
Thermostat control range	200	20°C...60°C
Main material	200	Stainless steel oven interior, door and external casing. Door with double glass.
Timer	200	0...120 min or continuous
Recommended pre-heating time (35°C)	200	20 min
Moistening device	200	Water basin is fitted with water and required moisture-% is set with the knob.
Weight including packing, proving cabinet	200	Approx. 64kg
Weight including packing, proving cabinet+stand	200	Approx. 83kg
Weight excluding packing, proving cabinet	200	Approx. 47kg
Weight excluding packing, proving cabinet+ stand	200	Approx. 61kg
Package dimensions WxDxH, proving cabinet	200	883x976x627 mm
Package dimensions WxDxH, proving cabinet+stand	200	883x976x1690 mm
Electricity connection	200	See installation drawing
Conditions of use	200	Normal kitchen conditions, temperature above 0°C
Accessories	200	Stand Metos 2948 (height 900 mm)
	200	Stand Metos 2948 Marine (height 900 mm)

200=CHEF 200

A=3/N/PE~400/230V 50Hz, C=3/N/PE~380/220V 50Hz, G=3/N/PE~415/240V 50Hz, H=3/PE~230V 50Hz, I=3/PE~220V 60Hz, J=3/PE~380 50Hz, K=3/PE~400V 50Hz, L=3/PE~415V 50Hz, M=3/PE~440V 60Hz, P=1/N/PE~220-240V 50Hz



The crossed-out wheeled bin means that within the European Union the product must be taken to separate collection at the product end-of life.

This applies to your device but also to any enhancements marked with this symbol. Do not dispose of these products as unsorted municipal waste.

Valmistajan nimi / Tillverkarens namn / Manufacturer's name

METOS OY AB

Osoite / Adress / Address

04220 KERAVA
FINLAND

Vakuuttaa, että seuraava tuote / Försäkrar att följande produkt / Declare that the following product

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

Uuni / Ugn / Oven series **METOS Chef**
Mallit / Modeller / Models : 200, 220, 240, 40T, 50T

on seuraavien direktiivien asiaankuuluvien säännösten mukainen / överensstämmer med tillämpliga bestämmelser i följande direktiv / is in conformity with the relevant provisions of the following directives

MD 2006/42/EC, LVD 2014/35/EU, EMC 2014/30/EU, RoHS 2011/65/EC, WEEE 2012/19/EU

ja lisäksi vakuuttaa, että seuraavia yhdenmukaistettuja standardeja (tai niiden osia/kohtia) on sovellettu / och försäkrar dessutom att följande harmoniserade standarder (eller delar/paragrafer) har använts / and furthermore declares that the following harmonised standards (or parts/clauses) have been used

EN ISO 12100:2010, EN ISO 13857:2019, EN 61000-6-1:2019, EN 61000-6-3,
EN 60204-1:2018

ja lisäksi vakuuttaa, että seuraavia muita standardeja (tai niiden osia/kohtia) on sovellettu / och försäkrar dessutom att följande andra standarder (eller delar/paragrafer) har använts / and furthermore we declare that the following other standards (or parts/clauses) have been used

EN 60335-1:2020, EN 60335-2-36:2017, EN 60335-2-42

Alla mainittu henkilö on valtuutettu kokoamaan teknisen tiedoston / Nedan nämada person är bemyndigad att sammanställa den tekniska dokumentfilen / The person mentioned below is authorized to compile the technical file

Risto Koskelainen

Metos Oy Ab, Ahjonkaarre, 04220 Kerava, Finland

Tämä vaatimustenmukaisuusvakuutus on annettu valmistajan yksinomaisella vastuulla. Edellä kuvattu vakuutuksen kohde on unionin asiaankuuluvan yhdenmukaistamislainsäädännön vaatimusten mukainen.

Denna EU-försäkran om överensstämmelse utfärdas på tillverkarens eget ansvar. Föremålet för försäkran ovan överensstämmer med den relevanta unionslagstiftningen om harmonisering.

This declaration of conformity is issued under the sole responsibility of the manufacturer. The object of the declaration described above is in conformity with the relevant Union harmonisation legislation

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

KERAVA

30.11.2021

Vakuutuksen antajan nimi ja asema / Namn och befattning av personen som försäkrar / Name and title of declaring person


Hannu Ahola – Director of Business Unit


Marko Immonen – R&D Manager

Manufacturer's name METOS OY AB
Address 04220 KERAVA FINLAND

Declare that the following product

Name, type or model Range series METOS Chef Models : 200, 220, 240
--

is in conformity with the essential requirements and other relevant requirements of the UK legislation. The products are in conformity with the relevant UK legislation

Electrical Equipment (Safety) Regulations 2016, Electromagnetic Compatibility (EMC) Regulations 2016, Machinery (Safety) Regulations 2008: Great Britain, The Restriction of the Use of Certain Hazardous Substances in Electrical and Electronic Equipment Regulations 2012, Regulations: Waste Electrical and Electronic Equipment (WEEE)
--

furthermore declares that the following harmonized standards (or parts/clauses) have been used

BS EN ISO 12100:2010, BS EN ISO 13857:2008, BS EN IEC 61000-6-1:2019, BS EN IEC 61000-6-3:2007, BS EN 60204-1:2018

and furthermore we declare that the following other standards (or parts/clauses) have been used

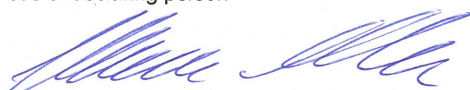
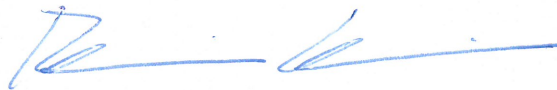
BS EN 60335-1:2012+A15:2021, BS EN 60335-2-42, BS EN 60335-2-36
--

The person mentioned below is authorized to compile the technical file

Otto Miettinen Metos Oy Ab, Ahjonkaarre, 04220 Kerava, Finland

This declaration of conformity is issued under the sole responsibility of the manufacturer. The object of the declaration described above is in conformity with the relevant UK legislation

Place and date of issue KERAVA 31.12.2022

Name and title of declaring person
 
Hannu Ahola – Director of Business Unit Risto Koskelainen – R&D Manager



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